

# **RAM Legacy Stock Assessment Database**

## **summary contents - Version 1.0**

**August 19 2011**

This document summarises 361 stock assessments included in the RAM Legacy database.

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| SEFSC-TILESATLC-1961-2002-STANTON        | 595 |
| SEFSC-VSNAPGM-1981-2004-JENSEN           | 597 |
| SEFSC-VSNAPSATLC-1946-2008-STANTON       | 599 |
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| SFI-WPOLLNSO-1985-1994-JENSEN            | 603 |
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| SPC-BIGEYEWPO-1952-2006-JENSEN           | 607 |
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| SPC-STMARLINSWPO-1950-2003-JENSEN        | 611 |
| SPC-YFINCWGPAC-1952-2005-JENSEN          | 613 |
| SPRFMO-CHTRACCH-1950-2010-RICARD         | 615 |
| SWFSC-CALSCORPSCAL-1990-2005-STANTON     | 617 |
| SWFSC-CMACKPCOAST-1929-2008-PINSKY       | 619 |
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| SWFSC-SARDPCOAST-1981-2007-PINSKY        | 625 |
| SWFSC-SBELLYROCKPCOAST-1950-2005-BRANCH  | 627 |
| SWFSC-STFLOUNNPSCOAST-1970-2005-STANTON  | 629 |
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| TAFI-TASGIANTCRABTAS-1990-2007-JENSEN    | 633 |
| VNIRO-WPOLLWBS-1994-2004-JENSEN          | 635 |
| WGBFAS-CODBA2224-1969-2007-JENNINGS      | 637 |
| WGBFAS-CODBA2532-1964-2007-JENNINGS      | 639 |
| WGBFAS-CODKAT-1970-2006-MINTO            | 641 |
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| WGBFAS-HERR30-1972-2007-JENNINGS         | 645 |
| WGBFAS-HERR31-1979-2006-JENNINGS         | 647 |
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| WGBFAS-HERRIGA-1976-2007-JENNINGS        | 651 |
| WGBFAS-SOLEIIIa-1982-2007-JENNINGS       | 653 |
| WGBFAS-SPRAT22-32-1973-2007-JENNINGS     | 655 |
| WGHMM-FMEG8c9a-1986-2006-JENNINGS        | 657 |
| WGHMM-HAKENRTN-1977-2007-JENNINGS        | 659 |
| WGHMM-HAKESOTH-1982-2007-JENNINGS        | 661 |
| WGHMM-MEG8c9a-1985-2007-JENNINGS         | 663 |
| WGHMM-SOLEVIII-1982-2006-JENNINGS        | 665 |
| WGMHSA-ANCHOBAYB-1986-2007-JENNINGS      | 667 |
| WGMHSA-MACKNEICES-1972-2007-JENNINGS     | 669 |
| WGMHSA-SARDPVIIIc-IXa-1978-2007-JENNINGS | 671 |
| WGNPBW-BWHITNEA-1980-2007-JENNINGS       | 673 |
| WGNSDS-CODIS-1968-2006-MINTO             | 675 |
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| WGNSDS-SOLEIS-1968-2006-MINTO            | 685 |
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| WGNSSK-CODNS-1962-2007-MINTO             | 689 |
| WGNSSK-HADNS-IIIa-1963-2006-MINTO        | 691 |
| WGNSSK-HADROCK-1990-2007-JENNINGS        | 693 |
| WGNSSK-NPOUTNS-1983-2007-MINTO           | 695 |
| WGNSSK-PLAIC7d-1979-2006-MINTO           | 697 |
| WGNSSK-PLAICIIIa-1976-2006-MINTO         | 699 |
| WGNSSK-PLAICNS-1956-2006-MINTO           | 701 |
| WGNSSK-POLLNS-VI-IIIa-1964-2006-MINTO    | 703 |
| WGNSSK-SEELNS-1983-2007-MINTO            | 705 |

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| WGNSSK-SOLENS-1956-2006-MINTO . . . . .                | 707 |
| WGNSSK-SOLEVII <sup>d</sup> -1981-2006-MINTO . . . . . | 709 |
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| WGSSDS-HADVIIb-k-1993-2006-JENNINGS . . . . .          | 713 |
| WGSSDS-PLAICCELT-1976-2006-JENNINGS . . . . .          | 715 |
| WGSSDS-PLAICECHW-1975-2006-JENNINGS . . . . .          | 717 |
| WGSSDS-SOLECS-1970-2006-JENNINGS . . . . .             | 719 |
| WGSSDS-SOLEVIIe-1968-2006-JENNINGS . . . . .           | 721 |
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# Assessment of Prince William Sound pacific herring (*Clupea pallasii*)

Assessment ID:ADFG-HERRPWS-1980-2006-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/294>

Area ID: USA-US State-PWS

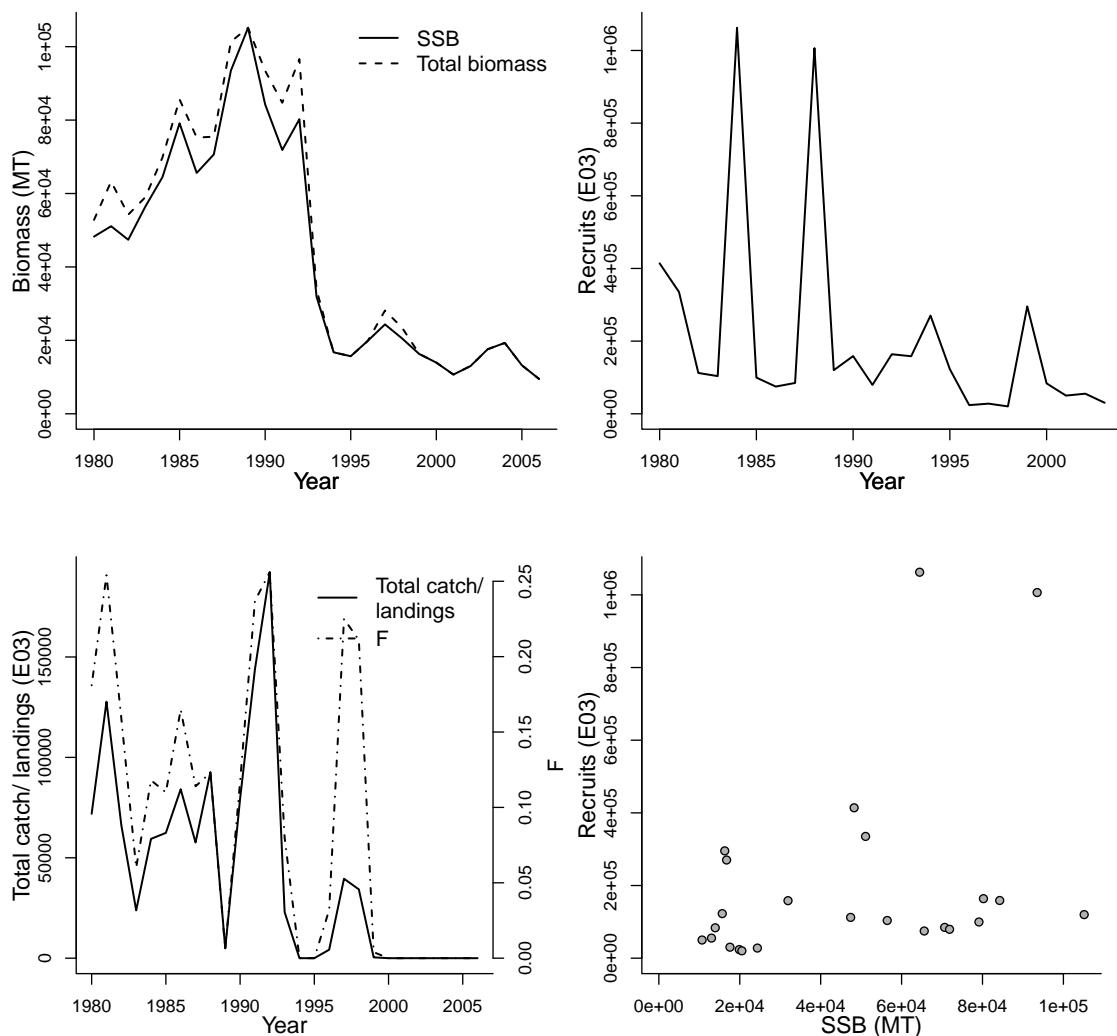
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Department of Fish and Game                 |
| Assessment authors | Hulson, Peter-John F.                              |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1980-2006  |
| Document           | Hulson-et-al-2008-ICESJM.pdf (pdf in database)     |
| Recorder           | COLLIE   |
| Date entered       | 2008-12-08   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| SSB-AGE-yr         | 3+            | yr           |
| SSB-SEX-sex        | 0             | sex          |
| REC-AGE-yr         | 3             | yr           |
| F-AGE-yr-yr        | 3+            | yr-yr        |
| TB-AGE-yr          | 3+            | yr           |
| M-1/yr             | 0.25          | 1/yr         |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |

| Time series minima and maxima |           |         |       |           |
|-------------------------------|-----------|---------|-------|-----------|
|                               | SSB       | R       | F     | TB        |
| Minimum year                  | 1980      | 1980    | 1980  | 1980      |
| Maximum year                  | 2006      | 2003    | 2006  | 2006      |
| Time series minimum           | 9499.56   | 20310   | 0     | 9499.56   |
| Time series maximum           | 105135.41 | 1062360 | 0.256 | 105135.41 |
| Units                         | MT        | E03     | 1/yr  | MT        |
|                               |           |         |       | E03       |



# Assessment of Sitka pacific herring (*Clupea pallasii*)

Assessment ID:ADFG-HERRSITKA-1978-2007-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/293>

Area ID: USA-US State-SITKA

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Department of Fish and Game                 |
| Assessment authors | Hulson, Peter-John F.                              |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1978-2007  |
| Document           | Hulson-et-al-2008-ICESJM.pdf (pdf in database)     |
| Recorder           | COLLIE   |
| Date entered       | 2008-12-08   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

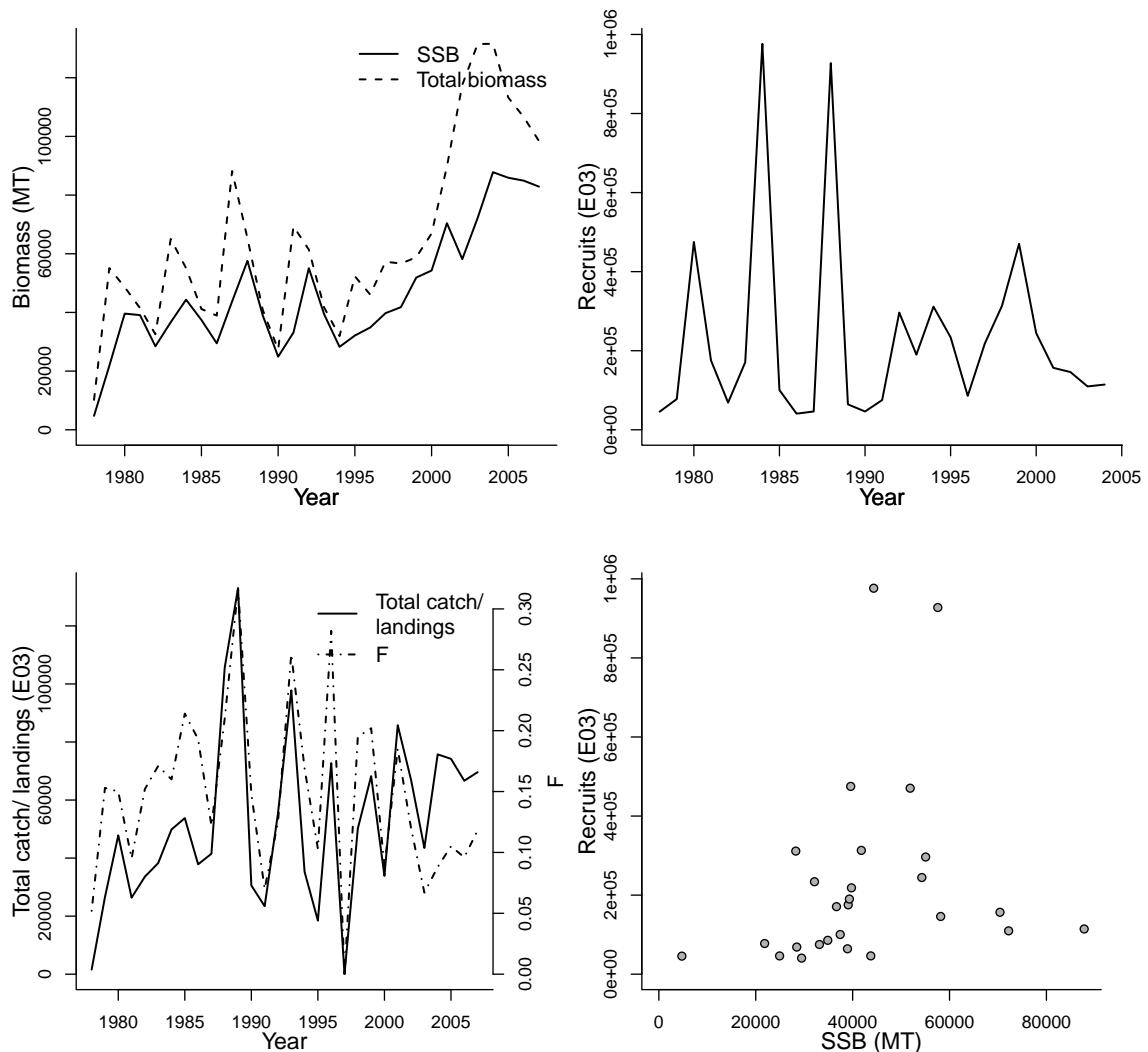
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| SSB-AGE-yr         | 3+            | yr           |
| SSB-SEX-sex        | 0             | sex          |
| REC-AGE-yr         | 3             | yr           |
| F-AGE-yr-yr        | 3+            | yr-yr        |
| TB-AGE-yr          | 3+            | yr           |
| A50-yr             | 3.4           | yr           |
| M-1/yr             | 0.3-0.1       | 1/yr         |
| M                  |               |              |
| L50-cm             |               |              |

| Parameter | Value | Units | Reference points      |
|-----------|-------|-------|-----------------------|
|           |       |       | Parameter Value Units |

| Time series minima and maxima |          |        |       |           |
|-------------------------------|----------|--------|-------|-----------|
|                               | SSB      | R      | F     | TB        |
| Minimum year                  | 1978     | 1978   | 1978  | 1978      |
| Maximum year                  | 2007     | 2004   | 2007  | 2007      |
| Time series minimum           | 4748.72  | 40750  | 0     | 10197.29  |
| Time series maximum           | 87794.21 | 976340 | 0.317 | 131565.34 |
| Units                         | MT       | E03    | 1/yr  | MT        |
|                               |          |        |       | E03       |



# Assessment of Bering Sea and Aleutian Islands alaska plaice (*Pleuronectes quadrituberculatus*)

Assessment ID:AFSC-ALPLAICBSAI-1972-2008-MELNYCHUK

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/269>

Area ID: USA-NMFS-BSAI

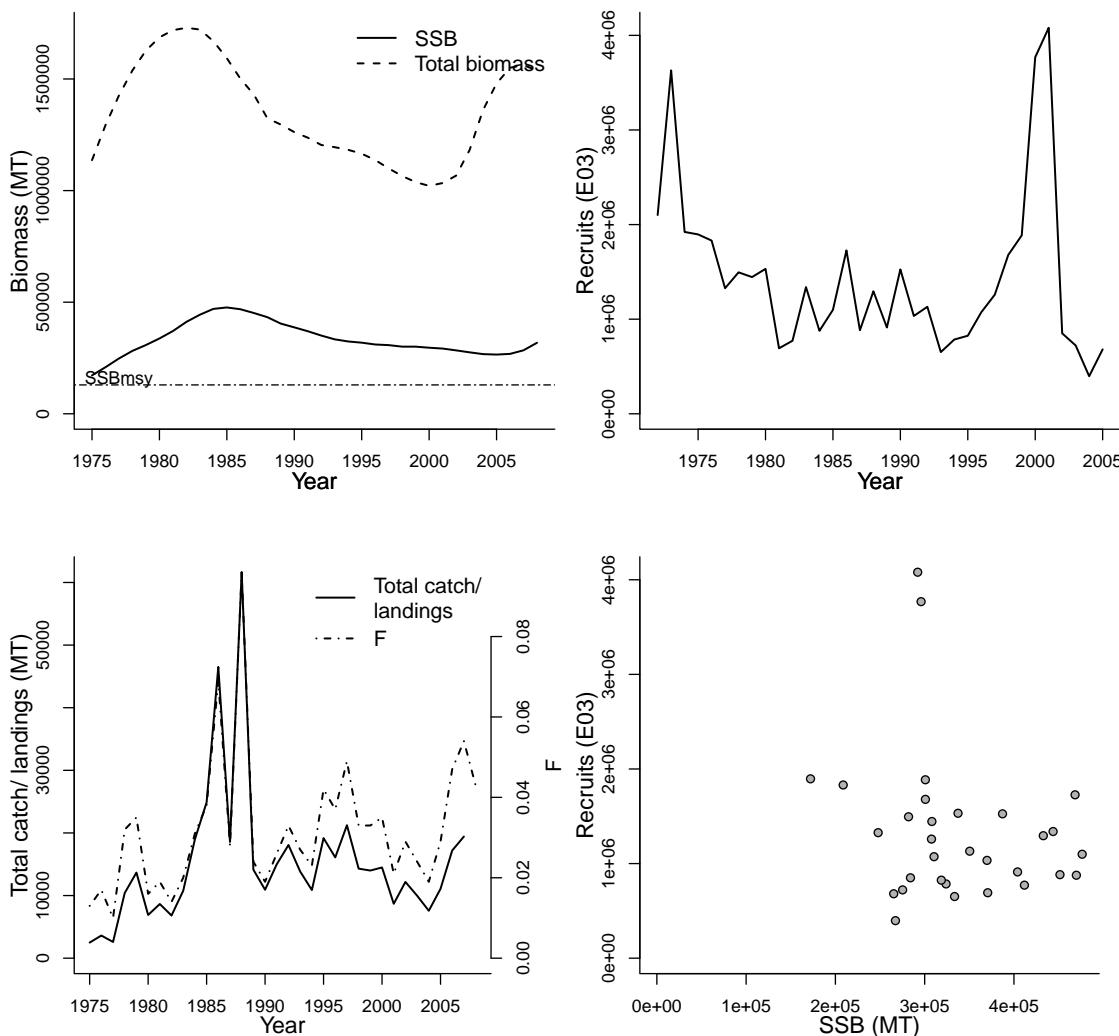
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                                |
| Assessment authors | Wilderbuer WT  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model             |
| Publication year   | 2008   |
| Timeseries span    | 1972-2008  |
| Document           | AFSC-ALPLAICBSAI-2008-Alaska plaice BSAI.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-14   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-05-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME          | tertiary LME |       |
|---------------------|-------|-------|------------------------|--------------|-------|
| 1 - East Bering Sea |       |       | na                     | na           |       |
| Parameter           | Value | Units | Reference points       |              |       |
| SSB-SEX-sex         | 1     | sex   | Parameter              | Value        | Units |
| REC-AGE-yr          | 3     | yr    | Fmsy-1/yr (F)          | 0.62         | 1/yr  |
| F-AGE-yr-yr         | 3+    | yr-yr | NATMORT-1/yr (M)       | 0.25         | 1/yr  |
| TB-AGE-yr           | 3+    | yr    | F40%-1/T               | 0.86         | 1/T   |
| M-1/yr              | 0.25  | 1/yr  | SSBmsy-MT (SSB)        | 129300       | MT    |
| NATMORT-1/yr        | 0.25  | 1/yr  | SSBF40%-MT             | 147850       | MT    |
| SSB-AGE-yr          |       |       | $F_{2008}/F_{msy}$     | 0.069        |       |
| M                   |       |       | $SSB_{2008}/SSB_{msy}$ | 2.461        |       |
| A50-yr              |       |       |                        |              |       |
| L50-cm              |       |       |                        |              |       |

| Time series minima and maxima |        |         |       |         |
|-------------------------------|--------|---------|-------|---------|
|                               | SSB    | R       | F     | TB      |
| Minimum year                  | 1975   | 1972    | 1975  | 1975    |
| Maximum year                  | 2008   | 2005    | 2008  | 2008    |
| Time series minimum           | 172125 | 397000  | 0.01  | 1021130 |
| Time series maximum           | 476423 | 4080000 | 0.096 | 1729330 |
| Units                         | MT     | E03     | 1/yr  | MT      |



# Assessment of Bering Sea and Aleutian Islands arrowtooth flounder (*Reinhardtius stomias*)

Assessment ID:AFSC-ARFLOUNDBSAI-1970-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/244>

Area ID: USA-NMFS-BSAI

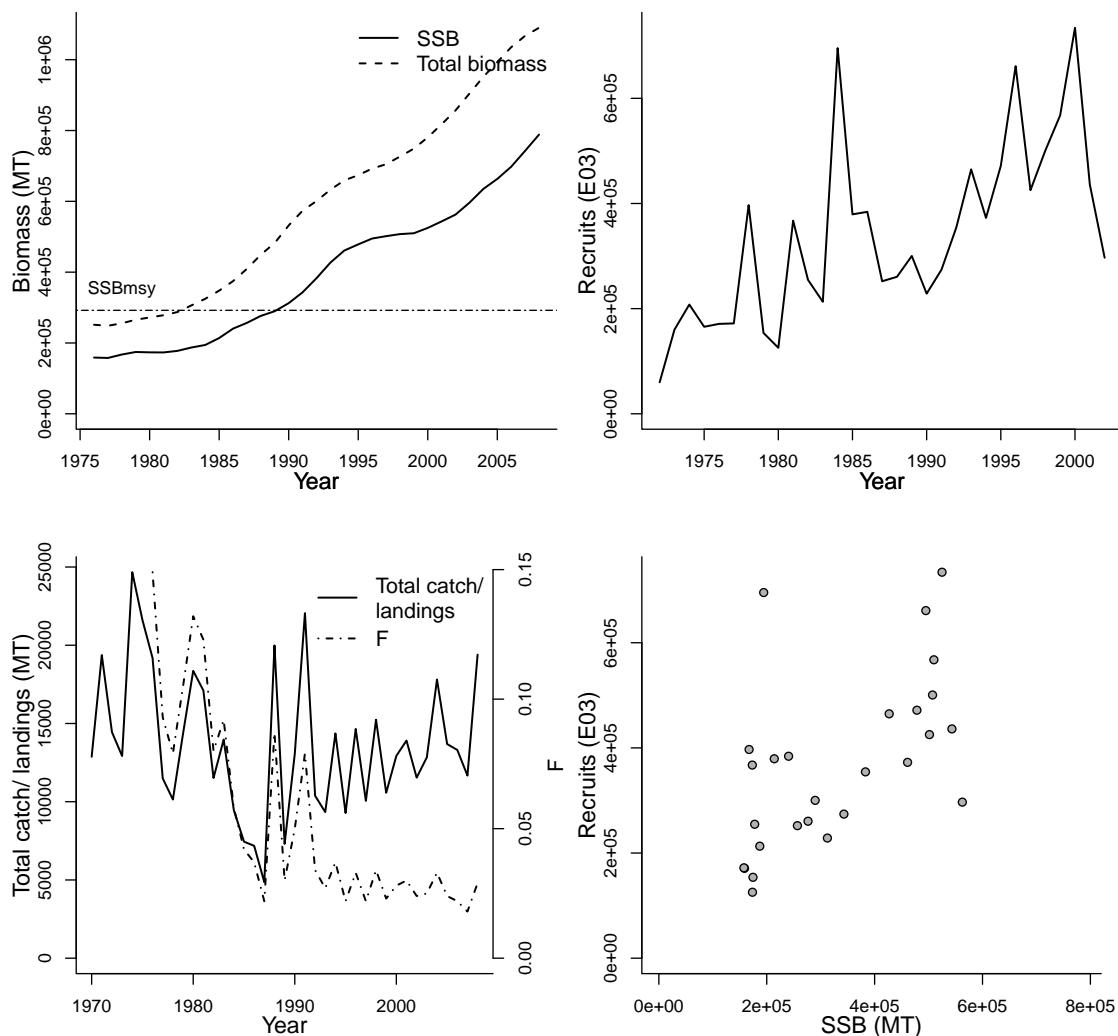
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center   |
| Assessment authors | Wilderbuer TK   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model                        |
| Publication year   | 2009  |
| Timeseries span    | 1970-2008   |
| Document           | AFSC-ARFLOUNDBSAI-2007-Arrowtooth flounder BSAI.pdf (pdf not in database) |
| Recorder           | STANTON   |
| Date entered       | 2009-04-03  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-02-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME          | tertiary LME |       |
|---------------------|-------|-------|------------------------|--------------|-------|
| 1 - East Bering Sea |       |       | na                     | na           |       |
| Parameter           | Value | Units | Reference points       |              |       |
| SSB-AGE-yr          | 1+    | yr    | Parameter              | Value        | Units |
| SSB-SEX-sex         | 1     | sex   | SSBmsy-MT (SSB)        | 292200.00    | MT    |
| REC-AGE-yr          | 2     | yr    | Flim-1/yr (F)          | 0.29         | 1/yr  |
| F-AGE-yr-yr         | 1+    | yr-yr | Fpa-1/yr (F)           | 0.235        | 1/yr  |
| TB-AGE-yr           | 1+    | yr    | $F_{2008}/F_{lim}$     | 0.100        |       |
| L50-cm              | 42.2  | cm    | $SSB_{2008}/SSB_{msy}$ | 2.698        |       |
| M                   |       |       |                        |              |       |
| A50-yr              |       |       |                        |              |       |

| Time series minima and maxima |        |        |       |         |
|-------------------------------|--------|--------|-------|---------|
|                               | SSB    | R      | F     | TB      |
| Minimum year                  | 1976   | 1972   | 1976  | 1976    |
| Maximum year                  | 2008   | 2002   | 2008  | 2008    |
| Time series minimum           | 157687 | 59880  | 0.018 | 248550  |
| Time series maximum           | 788485 | 734160 | 0.149 | 1090100 |
| Units                         | MT     | E03    | 1/yr  | MT      |



# Assessment of Gulf of Alaska arrowtooth flounder (*Atheresthes stomias*)

Assessment ID:AFSC-ARFLOUNDGA-1958-2010-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/281>

Area ID: USA-NMFS-GA

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Turnock, B.J.                                      |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1958-2010  |
| Document           | 2008-SAFE_GOAatf.pdf (pdf not in database)         |
| Recorder           | STANTON  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

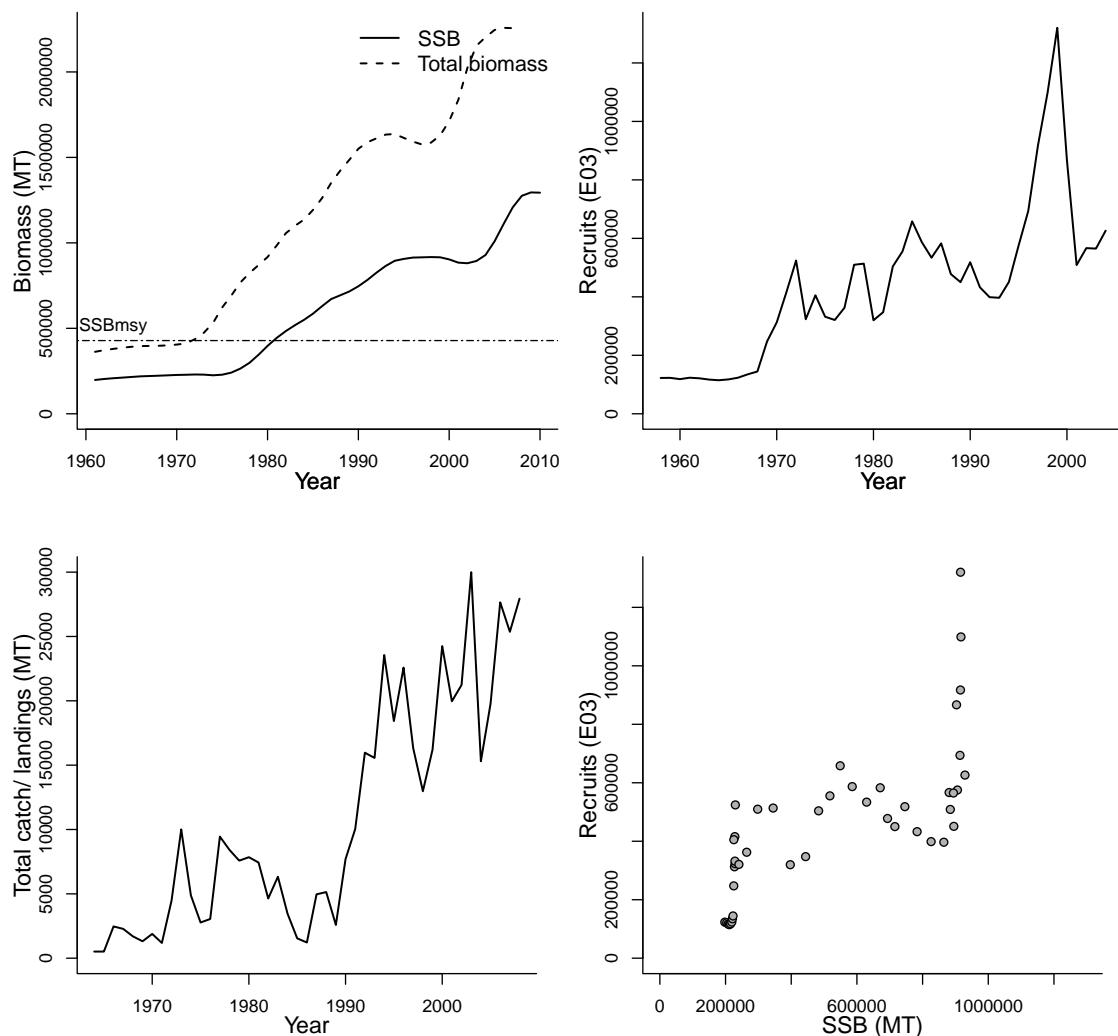
| Parameter    | Value | Units | primary LME        | secondary LME | tertiary LME |
|--------------|-------|-------|--------------------|---------------|--------------|
|              |       |       | 2 - Gulf of Alaska | na            | na           |
| SSB-AGE-yr   | 3+    | yr    |                    |               |              |
| SSB-SEX-sex  | 1     | sex   |                    |               |              |
| REC-AGE-yr   | 3     | yr    |                    |               |              |
| TB-AGE-yr    | 3+    | yr    |                    |               |              |
| L50-cm       | 47    | cm    |                    |               |              |
| M-1/yr       | 0.2   | 1/yr  |                    |               |              |
| NATMORT-1/yr | 0.2   | 1/yr  |                    |               |              |
| F-AGE-yr     |       |       |                    |               |              |
| M            |       |       |                    |               |              |
| A50-yr       |       |       |                    |               |              |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| NATMORT-1/yr (M)       | 0.2              | 1/yr  |       |
| F40%-1/T               | 0.186            | 1/T   |       |
| SSBmsy-MT (SSB)        | 428307           | MT    |       |
| SSBtarget-MT (SSB)     | 489493           | MT    |       |
| $SSB_{2010}/SSB_{msy}$ | 3.020            |       |       |

## Time series minima and maxima

|                     | SSB     | R       | F | TB      | Catch |
|---------------------|---------|---------|---|---------|-------|
| Minimum year        | 1961    | 1958    |   | 1961    | 1964  |
| Maximum year        | 2010    | 2004    |   | 2007    | 2008  |
| Time series minimum | 197773  | 114710  |   | 362688  | 514   |
| Time series maximum | 1295050 | 1320190 |   | 2258230 | 29994 |
| Units               | MT      | E03     |   | MT      | MT    |



# Assessment of Bering Sea and Aleutian Islands atka mackerel (*Pleurogrammus monopterygius*)

Assessment ID:AFSC-ATKABSAI-1976-2009-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/240>

Area ID: USA-NMFS-BSAI

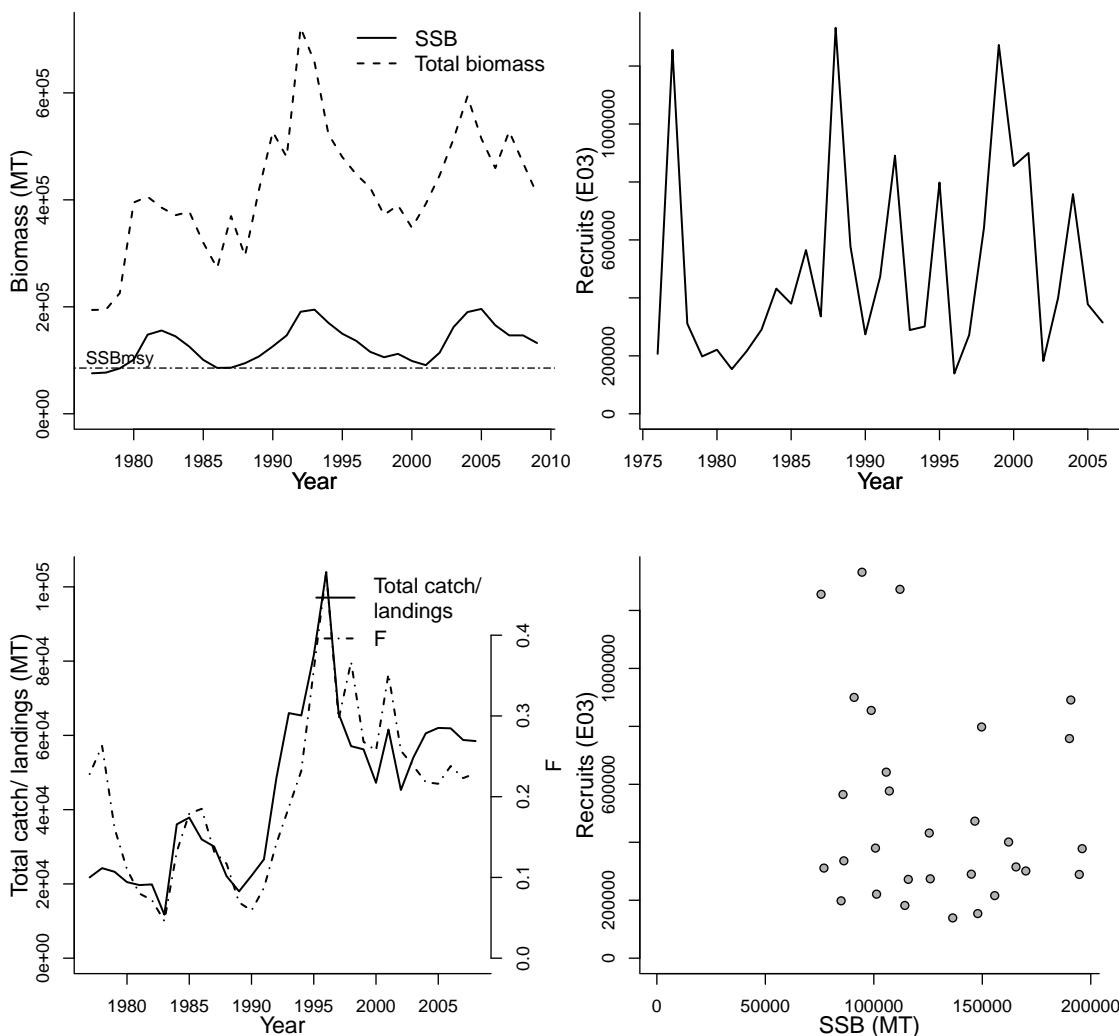
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Lowe, S  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1976-2009  |
| Document           | 2008-SAFE_BSAIatka.pdf (pdf not in database)       |
| Recorder           | STANTON  |
| Date entered       | 2009-04-08   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME            | secondary LME    | tertiary LME |
|--------------|-------|-------|------------------------|------------------|--------------|
|              |       |       | 1 - East Bering Sea    | na               | na           |
| SSB-AGE-yr   | 3+    | yr    |                        |                  |              |
| SSB-SEX-sex  | 1     | sex   |                        |                  |              |
| REC-AGE-yr   | 1     | yr    |                        |                  |              |
| F-AGE-yr-yr  | 1+    | yr-yr |                        |                  |              |
| TB-AGE-yr    | 3+    | yr    |                        |                  |              |
| A50-yr       | 3.6   | yr    |                        |                  |              |
| M-1/yr       | 0.3   | 1/yr  |                        |                  |              |
| NATMORT-1/yr | 0.3   | 1/yr  |                        |                  |              |
| M            |       |       |                        |                  |              |
| L50-cm       |       |       |                        |                  |              |
|              |       |       | Parameter              | Reference points |              |
|              |       |       |                        | Value            | Units        |
|              |       |       | Fref-1/T (F)           | 0.394            | 1/T          |
|              |       |       | NATMORT-1/yr (M)       | 0.3              | 1/yr         |
|              |       |       | F40%-1/T               | 0.394            | 1/T          |
|              |       |       | SSBmsy-MT (SSB)        | 85500.00         | MT           |
|              |       |       | BH-h-dimless           | 0.8              | dimless      |
|              |       |       | Bpa-MT (TB)            | 97800.00         | MT           |
|              |       |       | $SSB_{2009}/SSB_{msy}$ | 1.548            |              |

| Time series minima and maxima |        |         |       |        |
|-------------------------------|--------|---------|-------|--------|
|                               | SSB    | R       | F     | TB     |
| Minimum year                  | 1977   | 1976    | 1977  | 1977   |
| Maximum year                  | 2009   | 2006    | 2008  | 2009   |
| Time series minimum           | 75681  | 139000  | 0.046 | 194180 |
| Time series maximum           | 196040 | 1332000 | 0.478 | 721683 |
| Units                         | MT     | E03     | 1/yr  | MT     |



# Assessment of Pribilof Islands blue king crab (*Paralithodes platypus*)

Assessment ID:AFSC-BKINGCRABPI-1960-2008-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/261>

Area ID: USA-NMFS-PI

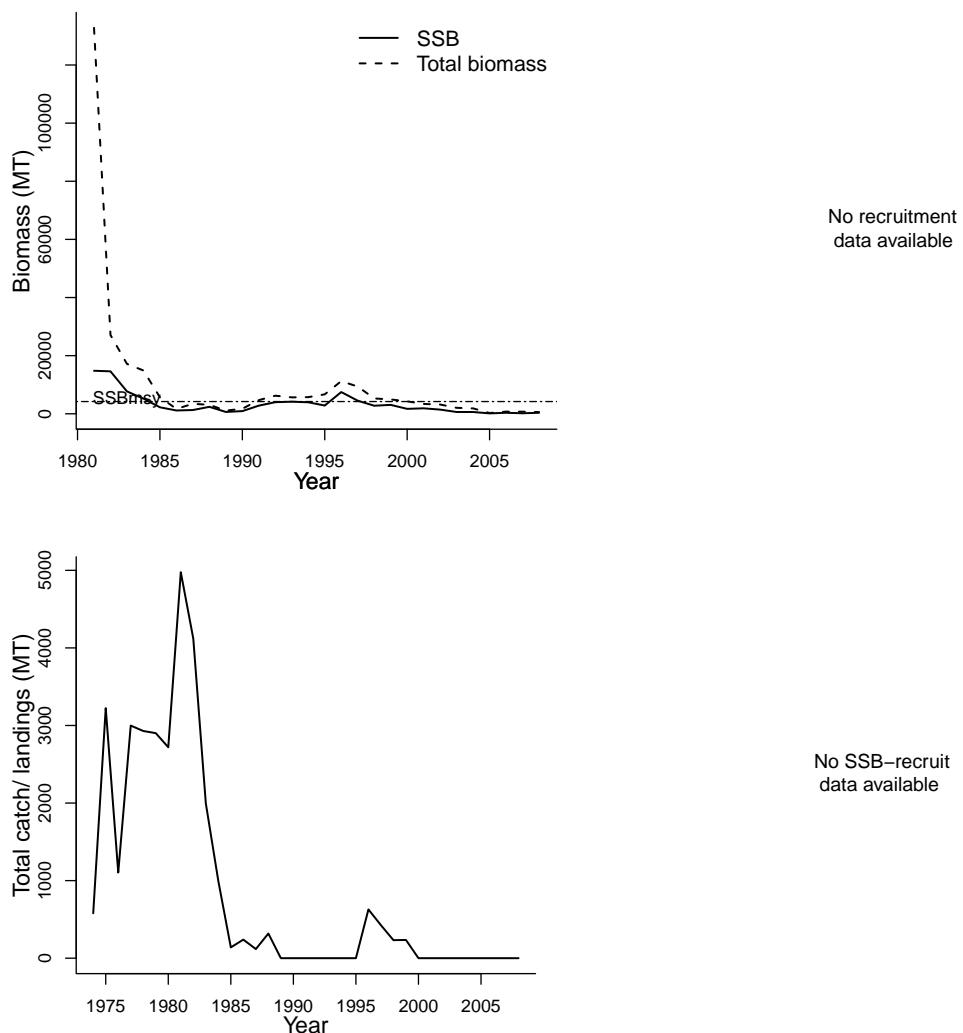
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                      |
| Assessment authors | Anonymous  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2008   |
| Timeseries span    | 1960-2008  |
| Document           | CRABSAFE2008.pdf (pdf in database)                   |
| Recorder           | JENSEN   |
| Date entered       | 2009-04-13   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-12   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                            |            | tertiary LME |  |
|---------------------|-------|-------|--|------------|--------------|--|
| 1 - East Bering Sea |       |       | na                                       |            | na           |  |
| Parameter           | Value | Units |  |            |              |  |
| SSB-SEX-sex         | 2     | sex   |  |            |              |  |
| REC-AGE             |       |       | Reference points                         |            |              |  |
| SSB-AGE-yr          |       |       | Parameter                                | Value      | Units        |  |
| TB-AGE-yr           |       |       | SSB <sub>m</sub> sy-MT (SSB)             | 4209.33376 | MT           |  |
| F-AGE-yr            |       |       | SSB <sub>2008</sub> /SSB <sub>m</sub> sy | 0.082      |              |  |
| M                   |       |       |  |            |              |  |
| A50-yr              |       |       |  |            |              |  |
| L50-cm              |       |       |  |            |              |  |

| Time series minima and maxima |          |   |   |           |
|-------------------------------|----------|---|---|-----------|
|                               | SSB      | R | F | TB        |
| Minimum year                  | 1981     |   |   | 1981      |
| Maximum year                  | 2008     |   |   | 2008      |
| Time series minimum           | 131.54   |   |   | 263.08    |
| Time series maximum           | 14800.71 |   |   | 132798.13 |
| Units                         | MT       |   |   | MT        |



# Assessment of Saint Matthews Island blue king crab (*Paralithodes platypus*)

Assessment ID:AFSC-BKINGCRABSMI-1960-2008-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/262>

Area ID: USA-NMFS-SMI

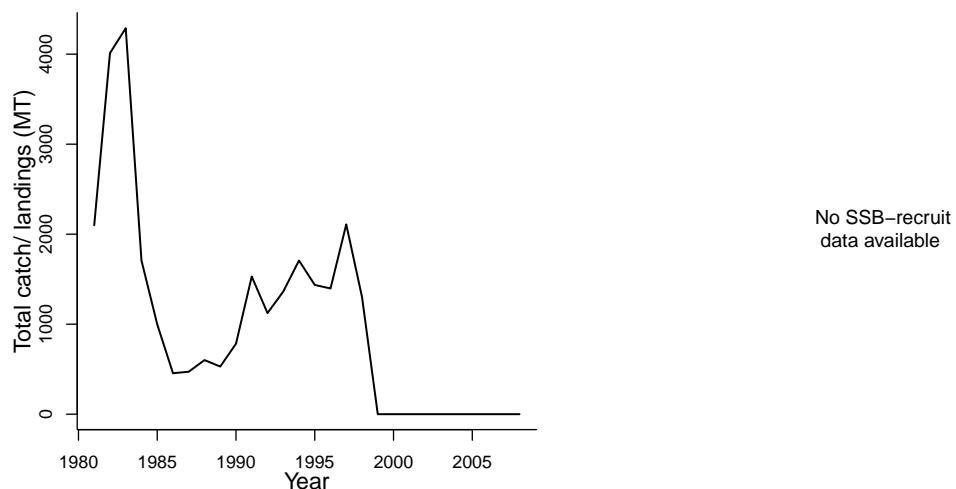
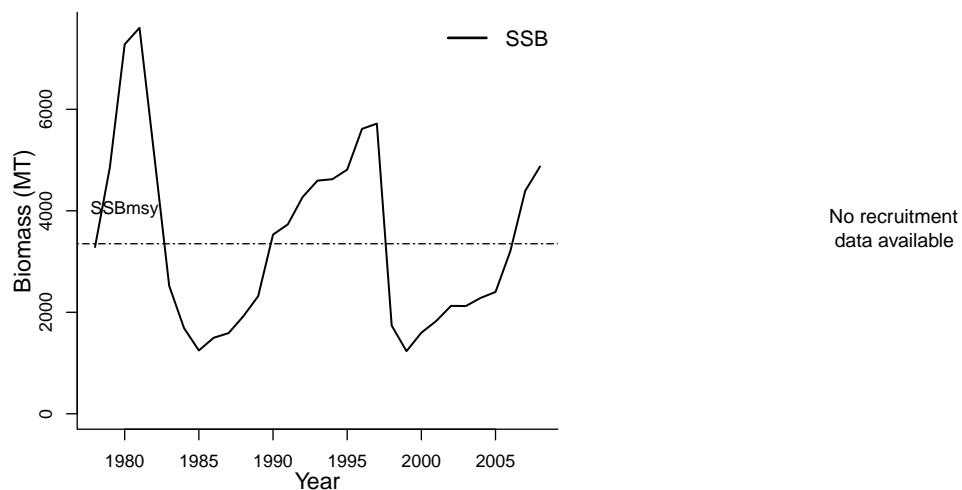
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                      |
| Assessment authors | Anonymous  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2008   |
| Timeseries span    | 1960-2008  |
| Document           | CRABSAFE2008.pdf (pdf in database)                   |
| Recorder           | JENSEN   |
| Date entered       | 2009-04-13   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-12   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                           |         | tertiary LME |  |  |  |
|---------------------|-------|-------|---|---------|--------------|--|--|--|
| 1 - East Bering Sea |       |       | na                                      |         | na           |  |  |  |
| Parameter           | Value | Units |   |         |              |  |  |  |
| SSB-SEX-sex         | 2     | sex   |   |         |              |  |  |  |
| REC-AGE             |       |       | Reference points                        |         |              |  |  |  |
| SSB-AGE-yr          |       |       | Parameter                               | Value   | Units        |  |  |  |
| TB-AGE-yr           |       |       | SSB <sub>msy</sub> -MT (SSB)            | 3350.68 | MT           |  |  |  |
| F-AGE-yr            |       |       | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 1.454   |              |  |  |  |
| M                   |       |       |   |         |              |  |  |  |
| A50-yr              |       |       |   |         |              |  |  |  |
| L50-cm              |       |       |   |         |              |  |  |  |

| Time series minima and maxima |         |   |   |    |         |
|-------------------------------|---------|---|---|----|---------|
|                               | SSB     | R | F | TB | Catch   |
| Minimum year                  | 1978    |   |   |    | 1981    |
| Maximum year                  | 2008    |   |   |    | 2008    |
| Time series minimum           | 1234.22 |   |   |    | 0       |
| Time series maximum           | 7606.28 |   |   |    | 4288.41 |
| Units                         | MT      |   |   |    | MT      |



# Assessment of Northern California cabezon (*Scorpaenichthys marmoratus*)

Assessment ID:AFSC-CABEZNCAL-1916-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/338>

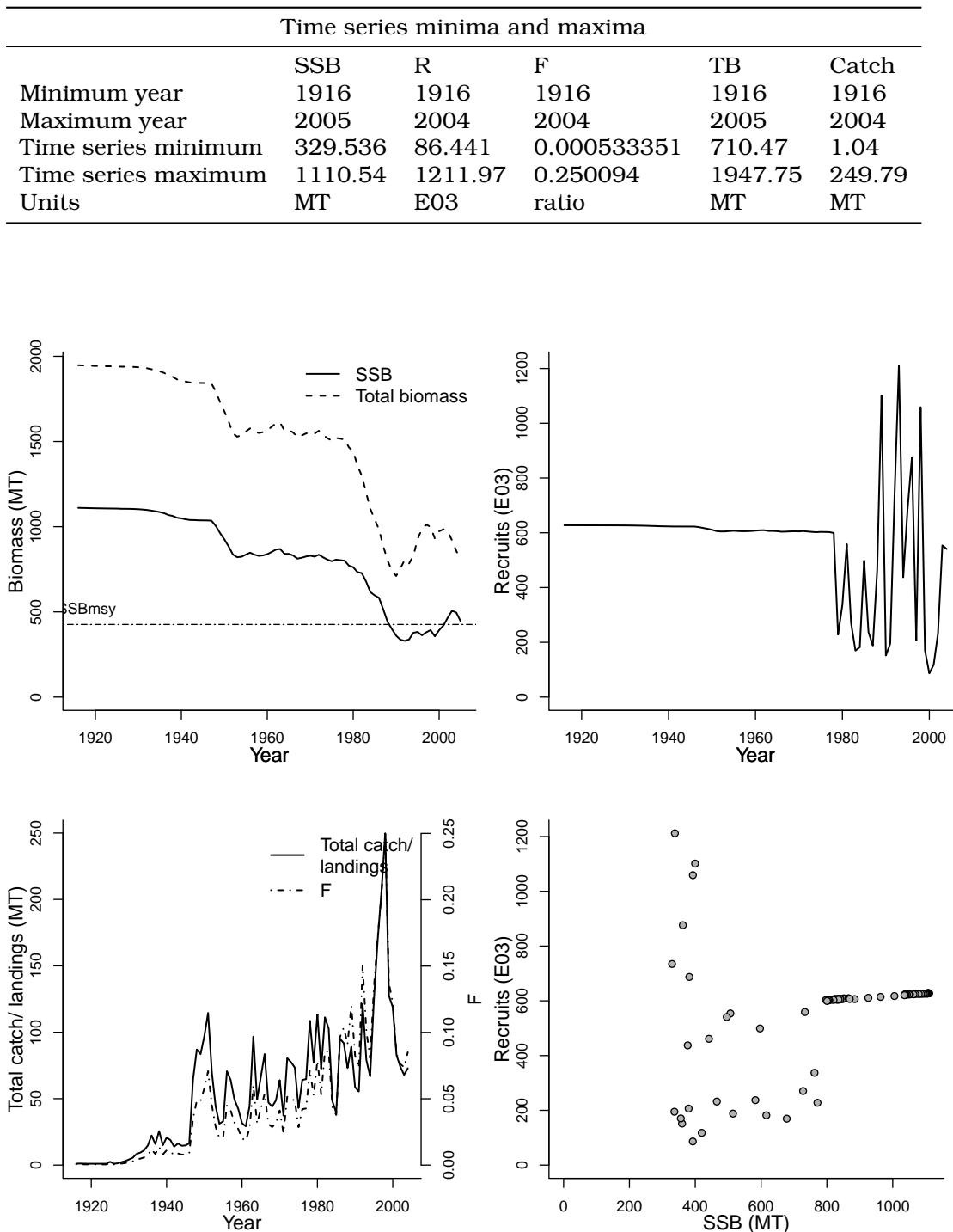
Area ID: USA-NMFS-NCAL

General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Alaska Fisheries Science Center           |
| Assessment authors | Cope, Jason                               |
| Assessment method  | Stock Synthesis v2.0 model                |
| Publication year   | 2005                                      |
| Timeseries span    | 1916-2005                                 |
| Document           | 2005-SAFE-WCcabezon.pdf (pdf in database) |
| Recorder           | STANTON                                   |
| Date entered       | 2009-05-19                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       | tertiary LME |  |
|------------------------|-------|-------|---|-------|--------------|--|
| 3 - California Current |       |       | na                                      |       | na           |  |
| Parameter              | Value | Units | Reference points                        |       |              |  |
| SSB-AGE-yr             | 4+    | yr    | Parameter                               | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)                        | 0.25  | 1/yr         |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)                         | 426   | MT           |  |
| F-AGE-yr-yr            | 0+    | yr-yr | MSY-MT (TB)                             | 119   | MT           |  |
| TB-AGE-yr              | 0+    | yr    | Umsy-ratio (U)                          | 0.13  | ratio        |  |
| M-1/yr                 | 0.25  | 1/yr  | SSB0-MT (SSB)                           | 1110  | MT           |  |
| NATMORT-1/yr           | 0.25  | 1/yr  | B0-MT                                   | 1858  | MT           |  |
| M                      |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.044 |              |  |
| A50-yr                 |       |       |   |       |              |  |
| L50-cm                 |       |       |   |       |              |  |



# Assessment of Southern California cabezon (*Scorpaenichthys marmoratus*)

Assessment ID:AFSC-CABEZSCAL-1932-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/337>

Area ID: USA-NMFS-SCAL

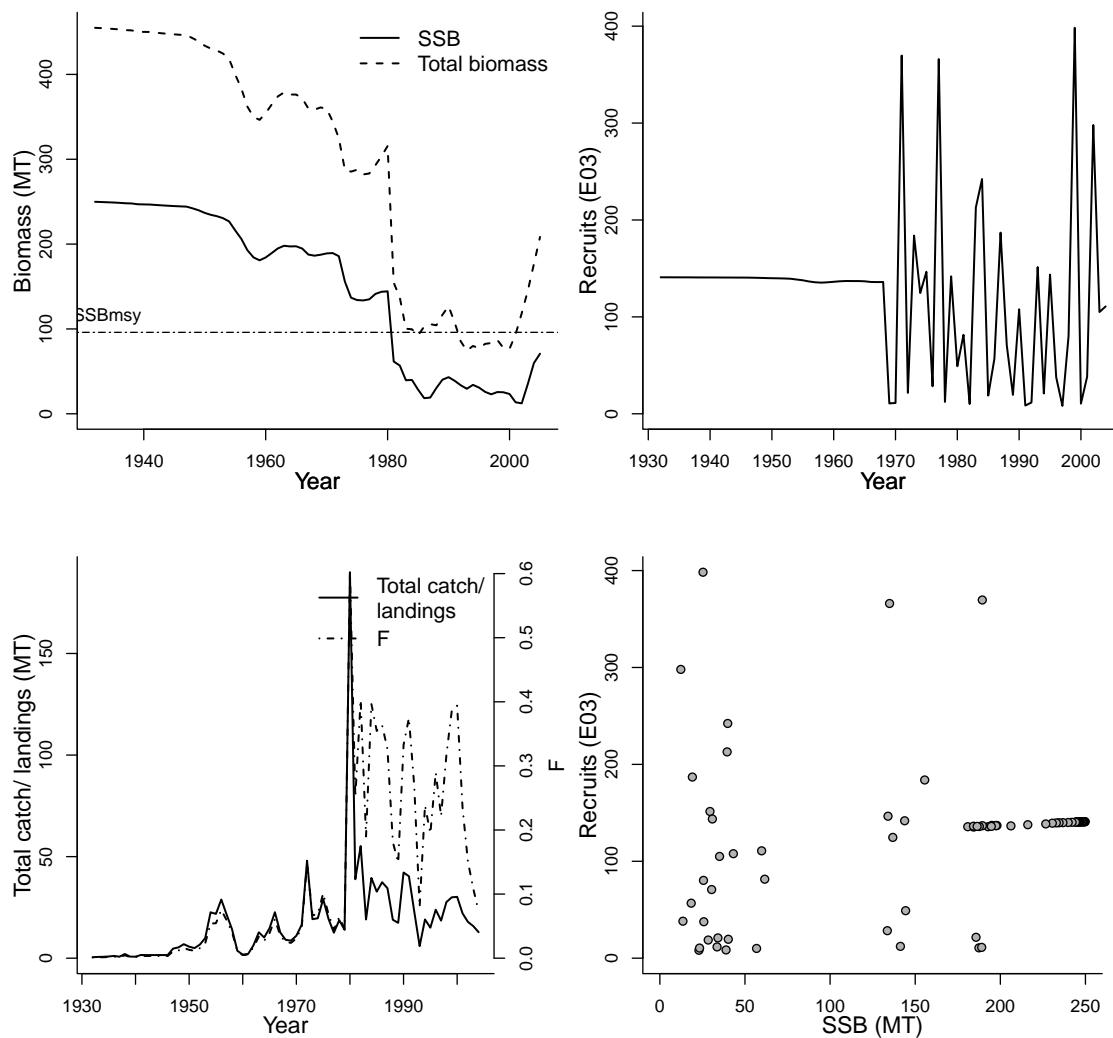
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center               |
| Assessment authors | Cope, Jason                                   |
| Assessment method  | Stock Synthesis v2.0 model                    |
| Publication year   | 2005  |
| Timeseries span    | 1932-2005                                     |
| Document           | 2005_SAFE_Wccabezon.pdf (pdf not in database) |
| Recorder           | STANTON                                       |
| Date entered       | 2009-05-19                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                    |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       | tertiary LME |  |
|------------------------|-------|-------|---|-------|--------------|--|
| 3 - California Current |       |       | na                                      |       | na           |  |
| Parameter              | Value | Units | Reference points                        |       |              |  |
| SSB-AGE-yr             | 4+    | yr    | Parameter                               | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)                        | 0.25  | 1/yr         |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)                         | 96    | MT           |  |
| F-AGE-yr-yr            | 0+    | yr-yr | MSY-MT (TB)                             | 26    | MT           |  |
| TB-AGE-yr              | 0+    | yr    | Umsy-ratio (U)                          | 0.13  | ratio        |  |
| M-1/yr                 | 0.25  | 1/yr  | SSB0-MT (SSB)                           | 251   | MT           |  |
| NATMORT-1/yr           | 0.25  | 1/yr  | B0-MT                                   | 433   | MT           |  |
| M                      |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 0.738 |              |  |
| A50-yr                 |       |       |   |       |              |  |
| L50-cm                 |       |       |   |       |              |  |

| Time series minima and maxima |         |         |           |        |
|-------------------------------|---------|---------|-----------|--------|
|                               | SSB     | R       | F         | TB     |
| Minimum year                  | 1932    | 1932    | 1932      | 1932   |
| Maximum year                  | 2005    | 2004    | 2004      | 2005   |
| Time series minimum           | 12.304  | 8.181   | 0.0010773 | 74.42  |
| Time series maximum           | 249.841 | 398.304 | 0.602182  | 454.93 |
| Units                         | MT      | E03     | ratio     | MT     |



# Assessment of Gulf of Alaska dover sole (*Microstomus pacificus*)

Assessment ID:AFSC-DSOLEGA-1978-2010-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/291>

Area ID: USA-NMFS-GA

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Stockhausen, W.T.                                  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1978-2010  |
| Document           | 2007_SAFE_GOAdeepflat.pdf (pdf not in database)    |
| Recorder           | STANTON  |
| Date entered       | 2009-04-27   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

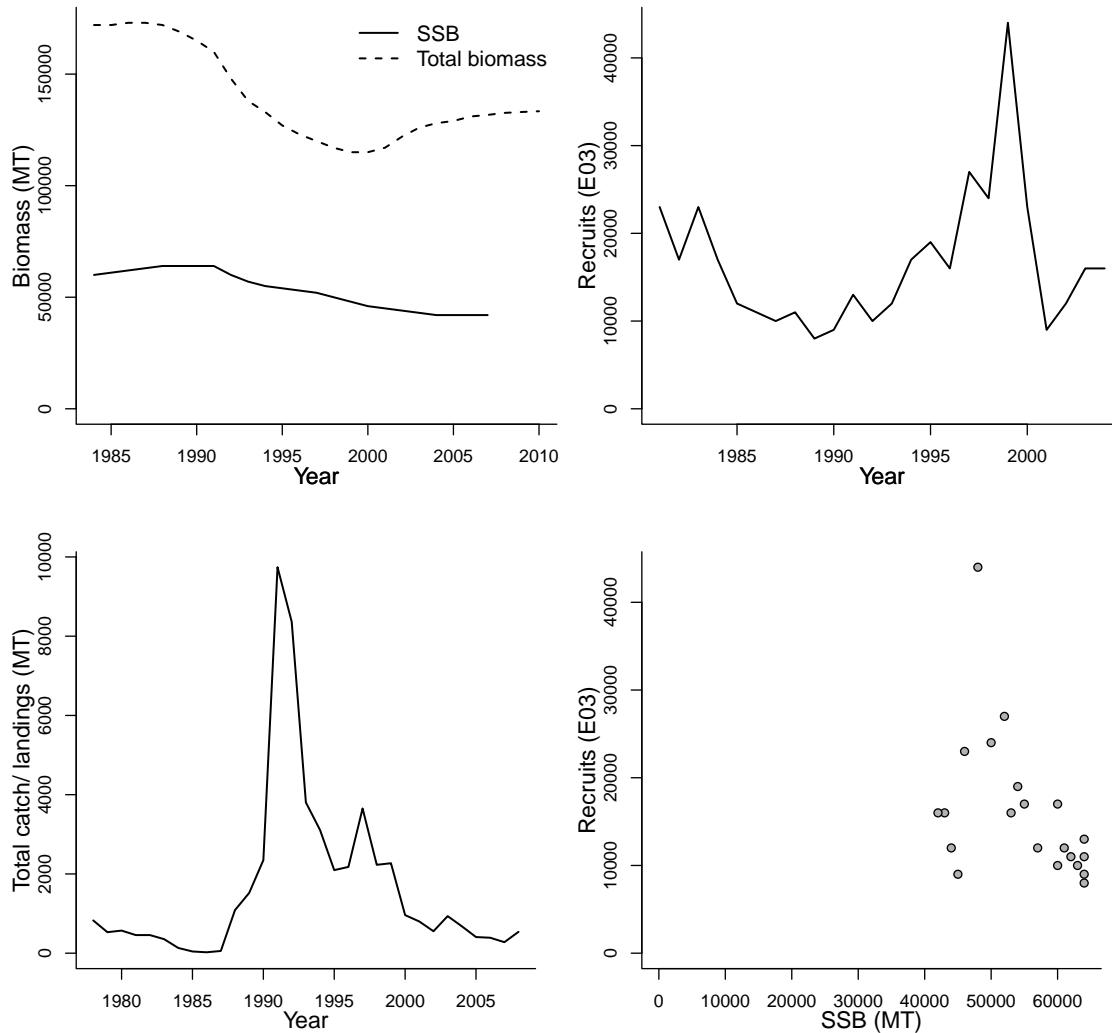
| Parameter    | Value | Units | primary LME        | secondary LME | tertiary LME |
|--------------|-------|-------|--------------------|---------------|--------------|
|              |       |       | 2 - Gulf of Alaska | na            | na           |
| SSB-AGE-yr   | 3+    | yr    |                    |               |              |
| SSB-SEX-sex  | 1     | sex   |                    |               |              |
| REC-AGE-yr   | 3     | yr    |                    |               |              |
| TB-AGE-yr    | 3+    | yr    |                    |               |              |
| A50-yr       | 6.7   | yr    |                    |               |              |
| L50-cm       | 43.9  | cm    |                    |               |              |
| M-1/yr       | 0.085 | 1/yr  |                    |               |              |
| NATMORT-1/yr | 0.085 | 1/yr  |                    |               |              |
| F-AGE-yr     |       |       |                    |               |              |
| M            |       |       |                    |               |              |

| Parameter        | Value | Units | Reference points |
|------------------|-------|-------|------------------|
| NATMORT-1/yr (M) | 0.085 | 1/yr  |                  |
| F40%-1/T         | 0.137 | 1/T   |                  |

## Time series minima and maxima

|                     | SSB   | R     | F | TB     | Catch |
|---------------------|-------|-------|---|--------|-------|
| Minimum year        | 1984  | 1981  |   | 1984   | 1978  |
| Maximum year        | 2007  | 2004  |   | 2010   | 2008  |
| Time series minimum | 42000 | 8000  |   | 115000 | 23    |
| Time series maximum | 64000 | 44000 |   | 173000 | 9741  |
| Units               | MT    | E03   |   | MT     | MT    |



# Assessment of Gulf of Alaska dusky rockfish (*Sebastodes variabilis*)

Assessment ID:AFSC-DUSROCKGA-1973-2008-MELNYCHUK

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/283>

Area ID: USA-NMFS-GA

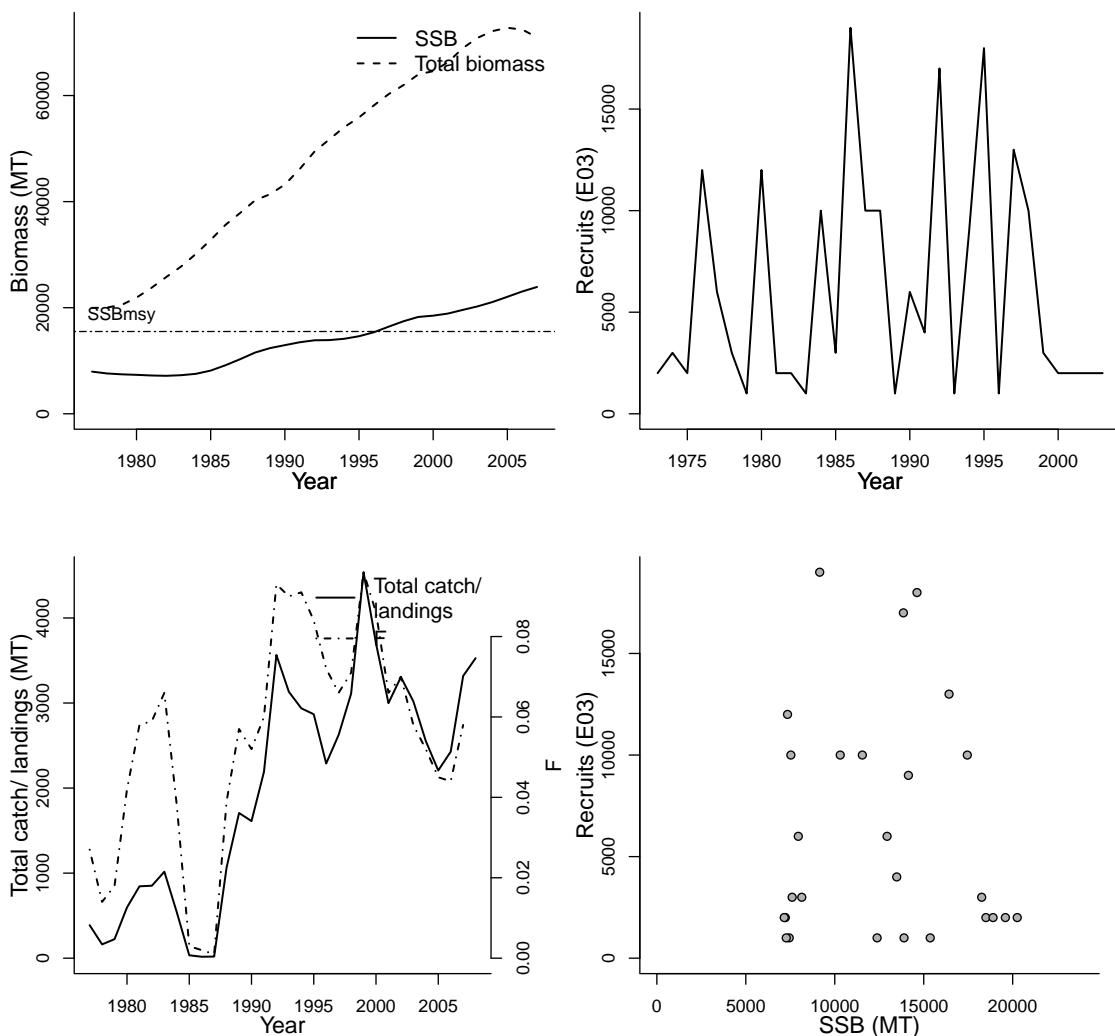
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center                             |
| Assessment authors | Lunsford, C.R.  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model          |
| Publication year   | 2008  |
| Timeseries span    | 1973-2008   |
| Document           | AFSC-DUSROCKGA-2008-Dusky rockfish GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK   |
| Date entered       | 2009-04-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | Reference points       |       |       |
|--------------|-------|-------|------------------------|-------|-------|
|              |       |       | Parameter              | Value | Units |
| SSB-AGE-yr   | 11.3  | yr    | Fmsy-1/yr (F)          | 0.107 | 1/yr  |
| SSB-SEX-sex  | 1     | sex   | NATMORT-1/yr (M)       | 0.07  | 1/yr  |
| REC-AGE-yr   | 4     | yr    | F40%-1/T               | 0.087 | 1/T   |
| TB-AGE-yr    | 4+    | yr    | SSBmsy-MT (SSB)        | 15511 | MT    |
| A50-yr       | 11.3  | yr    | SSBF40%-MT             | 17727 | MT    |
| L50-cm       | 42.8  | cm    | $F_{2007}/F_{msy}$     | 0.542 |       |
| M-1/yr       | 0.07  | 1/yr  | $SSB_{2007}/SSB_{msy}$ | 1.541 |       |
| NATMORT-1/yr | 0.07  | 1/yr  |                        |       |       |
| F-AGE-yr     |       |       |                        |       |       |
| M            |       |       |                        |       |       |

| Time series minima and maxima |       |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    | Catch |
| Minimum year                  | 1977  | 1973  | 1977  | 1977  | 1977  |
| Maximum year                  | 2007  | 2003  | 2007  | 2007  | 2008  |
| Time series minimum           | 7159  | 1000  | 0.001 | 19948 | 17    |
| Time series maximum           | 23907 | 19000 | 0.096 | 72771 | 4538  |
| Units                         | MT    | E03   | 1/yr  | MT    | MT    |



# Assessment of Bering Sea and Aleutian Islands flathead sole (*Hippoglossoides elassodon*)

Assessment ID:AFSC-FLSOLEBSAI-1977-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/232>

Area ID: USA-NMFS-BSAI

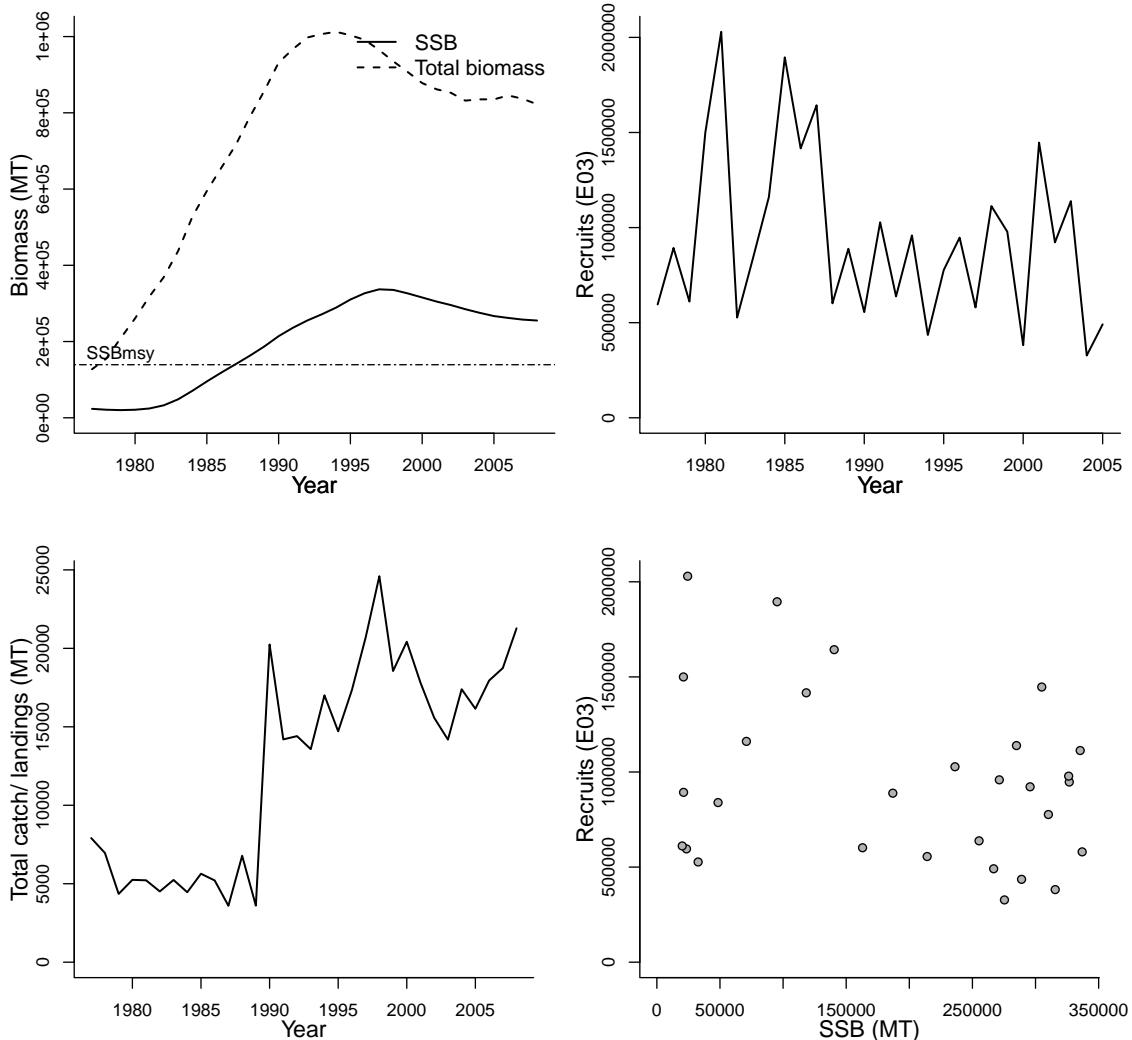
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Stockhausen WT                                     |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1977-2008  |
| Document           | 2008_SAFE_BSAIflathead.pdf (pdf not in database)   |
| Recorder           | STANTON  |
| Date entered       | 2009-04-06   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units | primary LME            | secondary LME    | tertiary LME |
|-------------|-------|-------|------------------------|------------------|--------------|
|             |       |       | 1 - East Bering Sea    | na               | na           |
| SSB-AGE-yr  | 3+    | yr    |                        |                  |              |
| SSB-SEX-sex | 1     | sex   | SSBmsy-MT (SSB)        | 139188           | MT           |
| REC-AGE-yr  | 3     | yr    | Fmsy-1/yr (F)          | 0.279            | 1/yr         |
| F-AGE-yr-yr |       | yr-yr | SSB0-MT (SSB)          | 347970           | MT           |
| TB-AGE-yr   | 3+    | yr    | SSBtarget-MT (SSB)     | 139188           | MT           |
| M-1/yr      | 0.2   | 1/yr  | SSBmin-ratio (SSB)     | 0.35000143690548 | ratio        |
| M           |       |       | Ftarget-1/yr (F)       | 0.279            | 1/yr         |
| A50-yr      |       |       | MSY-MT (TB)            | 121790           | MT           |
| L50-cm      |       |       | $SSB_{2008}/SSB_{msy}$ | 1.833            |              |

| Time series minima and maxima |        |         |    |         |
|-------------------------------|--------|---------|----|---------|
|                               | SSB    | R       | F  | TB      |
| Minimum year                  | 1977   | 1977    |    | 1977    |
| Maximum year                  | 2008   | 2005    |    | 2008    |
| Time series minimum           | 20088  | 327460  |    | 127340  |
| Time series maximum           | 336954 | 2029400 |    | 1012500 |
| Units                         | MT     | E03     | MT | MT      |



# Assessment of Gulf of Alaska flathead sole (*Hippoglossoides elassodon*)

Assessment ID:AFSC-FLSOLEGA-1978-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/280>

Area ID: USA-NMFS-GA

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Stockhausen, W.T.                                  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1978-2008  |
| Document           | 2008_SAFE_GOAflathead.pdf (pdf not in database)    |
| Recorder           | STANTON  |
| Date entered       | 2009-04-20   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      |  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       | secondary LME | tertiary LME |
|--------------------|-------|---------------|--------------|
| 2 - Gulf of Alaska |       | na            | na           |
| Parameter          | Value | Units         |              |
| SSB-AGE-yr         | 3+    | yr            |              |
| SSB-SEX-sex        | 1     | sex           |              |
| REC-AGE-yr         | 3     | yr            |              |
| F-AGE-yr-yr        | 3+    | yr-yr         |              |
| TB-AGE-yr          | 3+    | yr            |              |
| A50-yr             | 8.74  | yr            |              |
| L50-cm             | 33.3  | cm            |              |
| M-1/yr             | 0.2   | 1/yr          |              |
| NATMORT-1/yr       | 0.2   | 1/yr          |              |
| M                  |       |               |              |

| Parameter        | Value | Units | Reference points |
|------------------|-------|-------|------------------|
| NATMORT-1/yr (M) | 0.2   | 1/yr  | Parameter        |
| F40%-1/T         | 0.38  | 1/T   | Value            |
| SSBmsy-MT (SSB)  | 39663 | MT    | Units            |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Gulf of Alaska flathead sole (*Hippoglossoides elassodon*)

Assessment ID:AFSC-FLSOLEGA-1978-2010-Stachura

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/280>

Area ID: USA-NMFS-GA

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Stockhausen, W.T.                                  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2010   |
| Timeseries span    | 1978-2010  |
| Document           | AFSC-FLSOLEGA-2010.pdf (pdf in database)           |
| Recorder           | Stachura   |
| Date entered       | 2011-03-29   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

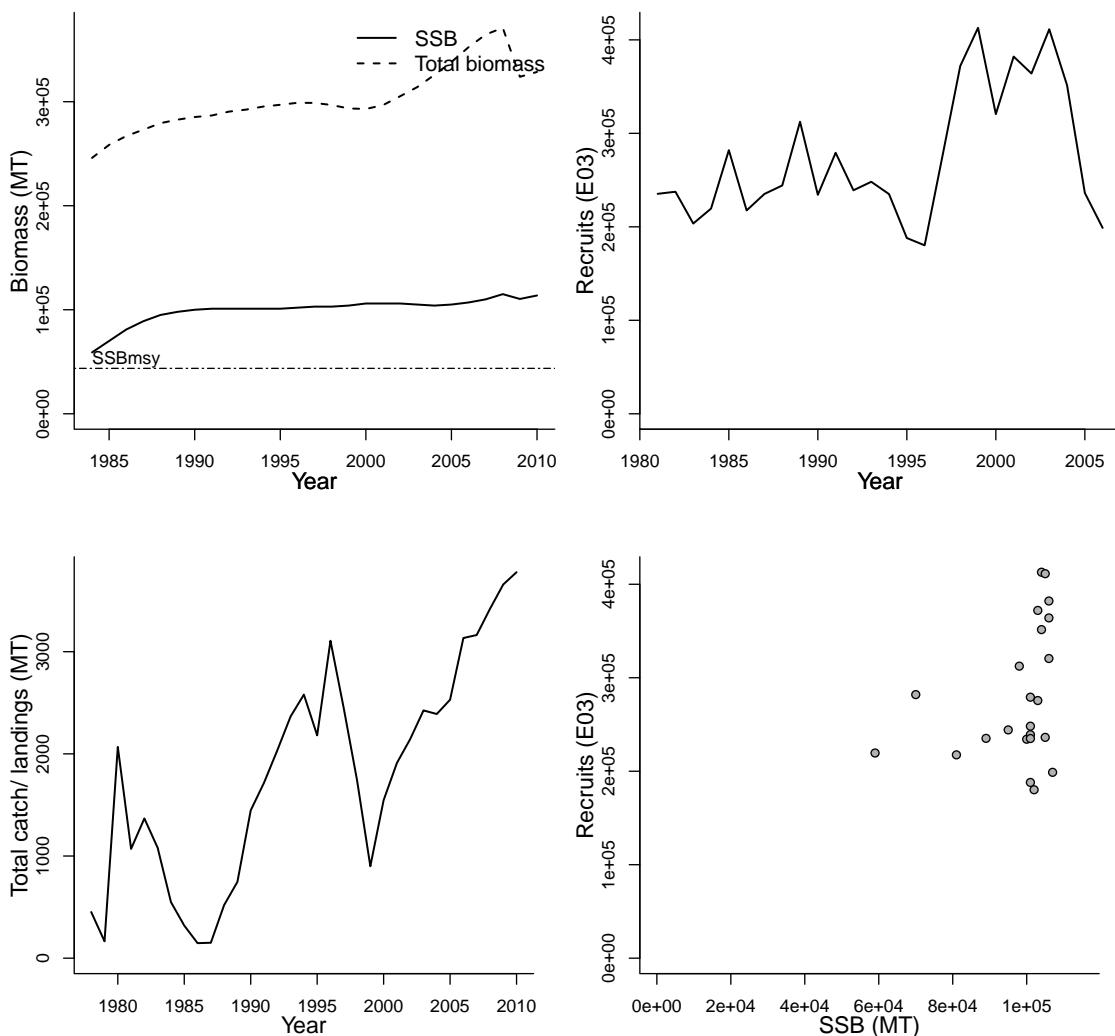
| Parameter    | Value | Units | primary LME        | secondary LME | tertiary LME |
|--------------|-------|-------|--------------------|---------------|--------------|
|              |       |       | 2 - Gulf of Alaska | na            | na           |
| SSB-AGE-yr   | 3+    | yr    |                    |               |              |
| SSB-SEX-sex  | 1     | sex   |                    |               |              |
| REC-AGE-yr   | 3     | yr    |                    |               |              |
| TB-AGE-yr    | 3+    | yr    |                    |               |              |
| A50-yr       | 8.74  | yr    |                    |               |              |
| L50-cm       | 33.33 | cm    |                    |               |              |
| M-1/yr       | 0.2   | 1/yr  |                    |               |              |
| NATMORT-1/yr | 0.2   | 1/yr  |                    |               |              |
| F-AGE-yr     |       |       |                    |               |              |
| M            |       |       |                    |               |              |

| Parameter    | Value | Units | Reference points                         | Value | Units |
|--------------|-------|-------|--|-------|-------|
| SSB-AGE-yr   | 3+    | yr    | Parameter                                |       |       |
| SSB-SEX-sex  | 1     | sex   |  |       |       |
| REC-AGE-yr   | 3     | yr    | Fmsy-1/yr (F)                            | 0.481 | 1/yr  |
| TB-AGE-yr    | 3+    | yr    | NATMORT-1/yr (M)                         | 0.2   | 1/yr  |
| A50-yr       | 8.74  | yr    | F40%-1/T                                 | 0.371 | 1/T   |
| L50-cm       | 33.33 | cm    | SSBmsy-MT (SSB)                          | 43661 | MT    |
| M-1/yr       | 0.2   | 1/yr  | SSB <sub>2010</sub> /SSB <sub>m sy</sub> | 2.605 |       |
| NATMORT-1/yr | 0.2   | 1/yr  |  |       |       |
| F-AGE-yr     |       |       |  |       |       |
| M            |       |       |  |       |       |

## Time series minima and maxima

|                     | SSB    | R      | F | TB     | Catch |
|---------------------|--------|--------|---|--------|-------|
| Minimum year        | 1984   | 1981   |   | 1984   | 1978  |
| Maximum year        | 2010   | 2006   |   | 2010   | 2010  |
| Time series minimum | 59000  | 180200 |   | 245970 | 147.3 |
| Time series maximum | 115000 | 412900 |   | 371040 | 3778  |
| Units               | MT     | E03    |   | MT     | MT    |



# Assessment of Bering Sea and Aleutian Islands greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID:AFSC-GHALBSAI-1960-2009-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/243>

Area ID: USA-NMFS-BSAI

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Ianelli, JN  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1960-2009  |
| Document           | 2008_SAFE_BSAIturbot.pdf (pdf not in database)     |
| Recorder           | STANTON  |
| Date entered       | 2009-04-07   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

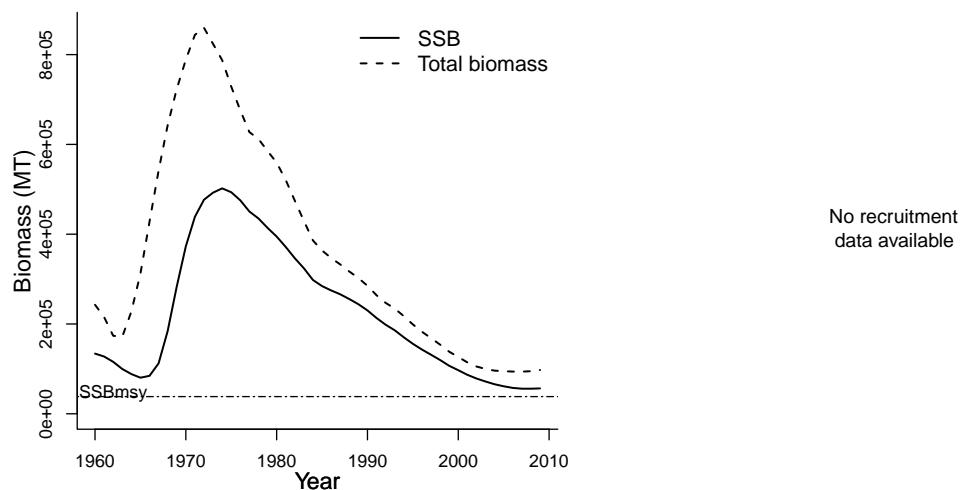
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME         | secondary LME | tertiary LME |
|--------------|-------|-------|---------------------|---------------|--------------|
|              |       |       | 1 - East Bering Sea | na            | na           |
| SSB-AGE-yr   | 1+    | yr    |                     |               |              |
| SSB-SEX-sex  | 1     | sex   |                     |               |              |
| REC-AGE-yr   | 0+    | yr    |                     |               |              |
| F-AGE-yr-yr  | 1+    | yr-yr |                     |               |              |
| TB-AGE-yr    | 1+    | yr    |                     |               |              |
| M-1/yr       | 0.112 | 1/yr  |                     |               |              |
| NATMORT-1/yr | 0.112 | 1/yr  |                     |               |              |
| M            |       |       |                     |               |              |
| A50-yr       |       |       |                     |               |              |
| L50-cm       |       |       |                     |               |              |

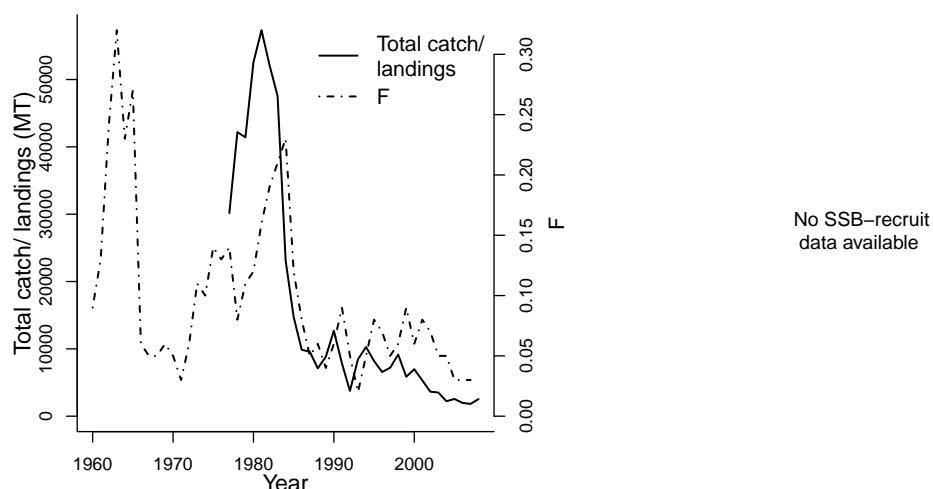
  

| Parameter    | Value | Units | Reference points | Parameter | Value | Units |
|--------------|-------|-------|------------------|-----------|-------|-------|
| SSB-AGE-yr   | 1+    | yr    |                  |           |       |       |
| SSB-SEX-sex  | 1     | sex   |                  |           |       |       |
| REC-AGE-yr   | 0+    | yr    |                  |           |       |       |
| F-AGE-yr-yr  | 1+    | yr-yr |                  |           |       |       |
| TB-AGE-yr    | 1+    | yr    |                  |           |       |       |
| M-1/yr       | 0.112 | 1/yr  |                  |           |       |       |
| NATMORT-1/yr | 0.112 | 1/yr  |                  |           |       |       |
| M            |       |       |                  |           |       |       |
| A50-yr       |       |       |                  |           |       |       |
| L50-cm       |       |       |                  |           |       |       |

| Time series minima and maxima |        |   |      |        |
|-------------------------------|--------|---|------|--------|
|                               | SSB    | R | F    | TB     |
| Minimum year                  | 1960   |   | 1960 | 1960   |
| Maximum year                  | 2009   |   | 2007 | 2009   |
| Time series minimum           | 55876  |   | 0.02 | 93914  |
| Time series maximum           | 502063 |   | 0.32 | 859695 |
| Units                         | MT     |   | 1/yr | MT     |



No recruitment data available



No SSB-recruit data available

# Assessment of Aleutian Islands Eastern segment golden king crab (*Lithodes aequispinus*)

Assessment ID:AFSC-GKINGCRABAIES-1990-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/264>

Area ID: USA-NMFS-AIES

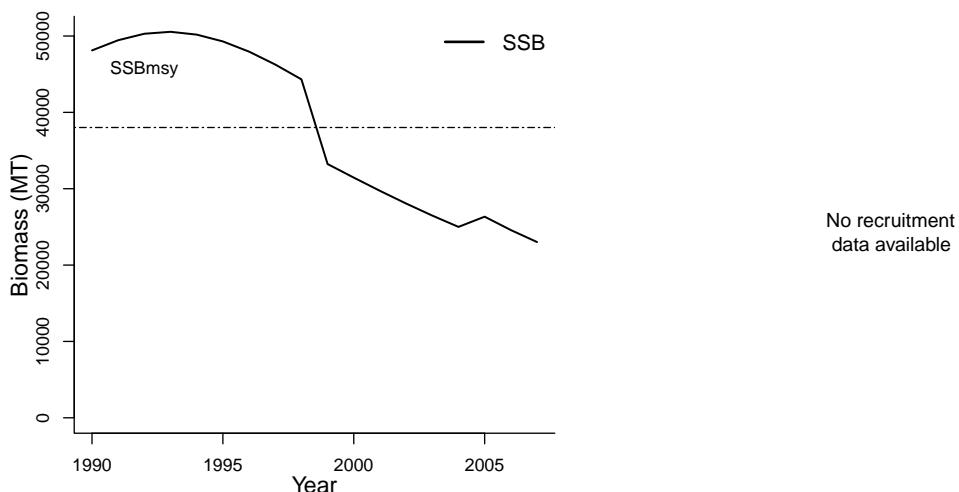
General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Alaska Fisheries Science Center           |
| Assessment authors | Anonymous                                 |
| Assessment method  | An AD-Model Builder catch at length model |
| Publication year   | 2008                                      |
| Timeseries span    | 1990-2007                                 |
| Document           | CRABSAFE2008.pdf (pdf in database)        |
| Recorder           | JENSEN                                    |
| Date entered       | 2009-04-13                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2010-07-28                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |        | secondary LME          | tertiary LME |
|---------------------|--------|------------------------|--------------|
| 1 - East Bering Sea |        | na                     | na           |
| Parameter           | Value  | Units                  |              |
| SSB-SEX-sex         | 2      | sex                    |              |
| M-1/yr              | 0.1442 | 1/yr                   |              |
| REC-AGE             |        | Reference points       |              |
| SSB-AGE-yr          |        | Parameter              | Value        |
| TB-AGE-yr           |        | SSBmsy-MT (SSB)        | 38018        |
| F-AGE-yr            |        | $SSB_{2007}/SSB_{msy}$ | 0.605        |
| M                   |        |                        |              |
| A50-yr              |        |                        |              |
| L50-cm              |        |                        |              |

| Time series minima and maxima |       |   |   |    |       |
|-------------------------------|-------|---|---|----|-------|
|                               | SSB   | R | F | TB | Catch |
| Minimum year                  | 1990  |   |   |    |       |
| Maximum year                  | 2007  |   |   |    |       |
| Time series minimum           | 23018 |   |   |    |       |
| Time series maximum           | 50552 |   |   |    |       |
| Units                         | MT    |   |   |    |       |



No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Aleutian Islands Western segment golden king crab (*Lithodes aequispinus*)

Assessment ID:AFSC-GKINGCRABAIWS-1989-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/265>

Area ID: USA-NMFS-AIWS

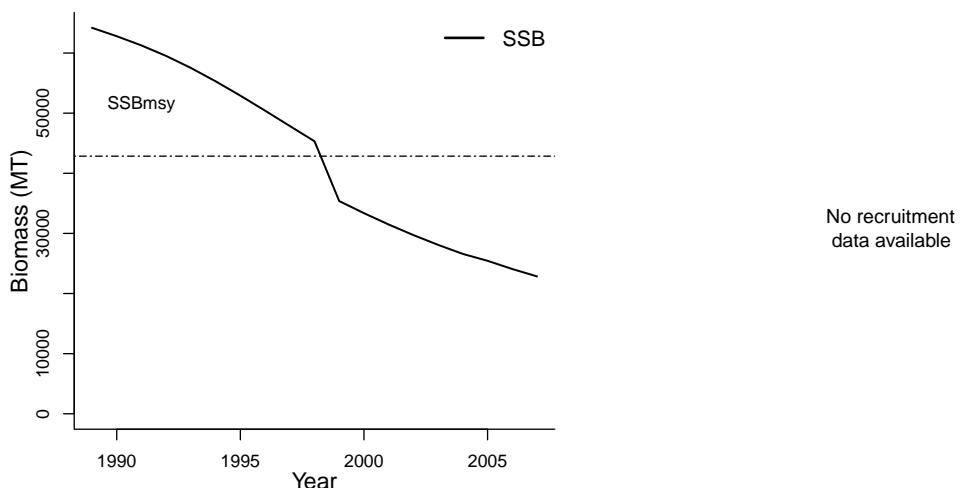
General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Alaska Fisheries Science Center           |
| Assessment authors | Anonymous                                 |
| Assessment method  | An AD-Model Builder catch at length model |
| Publication year   | 2008                                      |
| Timeseries span    | 1989-2007                                 |
| Document           | CRABSAFE2008.pdf (pdf in database)        |
| Recorder           | JENSEN                                    |
| Date entered       | 2009-04-13                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2010-07-28                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                           |       |       | tertiary LME |  |  |
|---------------------|-------|-------|---|-------|-------|--------------|--|--|
| 1 - East Bering Sea |       |       | na                                      |       |       | na           |  |  |
| Parameter           | Value | Units | Reference points                        |       |       |              |  |  |
| SSB-SEX-sex         | 2     | sex   | Parameter                               | Value | Units |              |  |  |
| REC-AGE             |       |       | SSBmsy-MT (SSB)                         | 42848 | MT    |              |  |  |
| SSB-AGE-yr          |       |       | SSB <sub>2007</sub> /SSB <sub>msy</sub> | 0.533 |       |              |  |  |
| TB-AGE-yr           |       |       |   |       |       |              |  |  |
| F-AGE-yr            |       |       |   |       |       |              |  |  |
| M                   |       |       |   |       |       |              |  |  |
| A50-yr              |       |       |   |       |       |              |  |  |
| L50-cm              |       |       |   |       |       |              |  |  |

| Time series minima and maxima |       |   |   |    |       |
|-------------------------------|-------|---|---|----|-------|
|                               | SSB   | R | F | TB | Catch |
| Minimum year                  | 1989  |   |   |    |       |
| Maximum year                  | 2007  |   |   |    |       |
| Time series minimum           | 22848 |   |   |    |       |
| Time series maximum           | 64198 |   |   |    |       |
| Units                         | MT    |   |   |    |       |



No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Bering Sea and Aleutian Islands northern rockfish (*Sebastodes polypinnis*)

Assessment ID:AFSC-NROCKBSAI-1974-2009-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/255>

Area ID: USA-NMFS-BSAI

General assessment details.

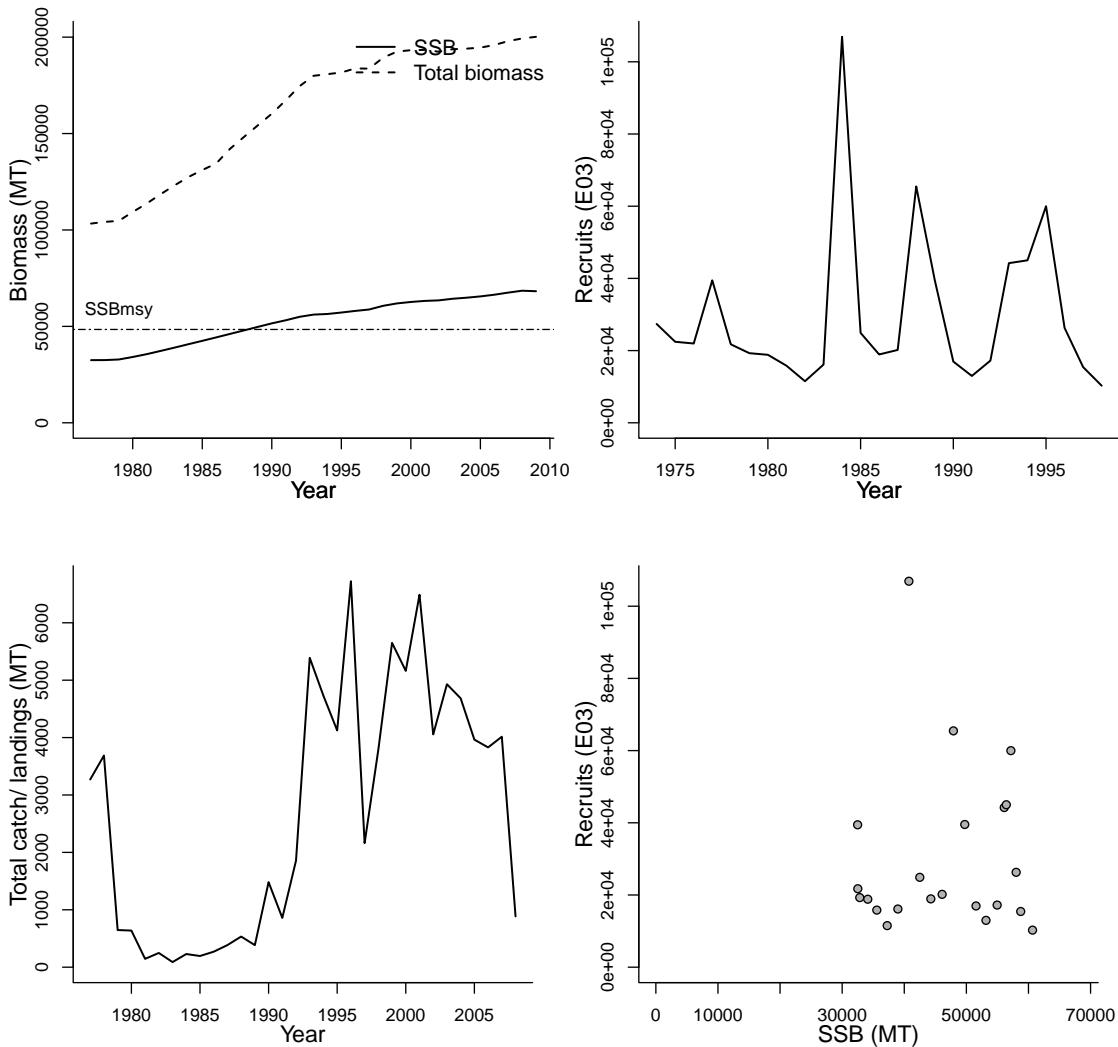
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Spencer, P.D.                                      |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1974-2009  |
| Document           | 2008-SAFE_BSAInorthern.pdf (pdf not in database)   |
| Recorder           | STANTON  |
| Date entered       | 2009-04-07   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME           |        | tertiary LME |  |
|---------------------|-------|-------|-------------------------|--------|--------------|--|
| 1 - East Bering Sea |       |       | na                      |        | na           |  |
| Parameter           | Value | Units | Reference points        |        |              |  |
| SSB-AGE-yr          | 3+    | yr    | Parameter               | Value  | Units        |  |
| SSB-SEX-sex         | 1     | sex   | Fmsy-1/yr (F)           | 0.0511 | 1/yr         |  |
| REC-AGE-yr          | 3     | yr    | SSBmsy-MT (SSB)         | 48399  | MT           |  |
| F-AGE-yr-yr         | 3+    | yr-yr | $SSB_{2009}/SSB_{m sy}$ | 1.410  |              |  |
| TB-AGE-yr           | 3+    | yr    |                         |        |              |  |
| M-1/yr              | 0.041 | 1/yr  |                         |        |              |  |
| M                   |       |       |                         |        |              |  |
| A50-yr              |       |       |                         |        |              |  |
| L50-cm              |       |       |                         |        |              |  |

Time series minima and maxima

|                     | SSB   | R      | F | TB     | Catch |
|---------------------|-------|--------|---|--------|-------|
| Minimum year        | 1977  | 1974   |   | 1977   | 1977  |
| Maximum year        | 2009  | 1998   |   | 2009   | 2008  |
| Time series minimum | 32488 | 10273  |   | 103319 | 89    |
| Time series maximum | 68488 | 106924 |   | 200179 | 6724  |
| Units               | MT    | E03    |   | MT     | MT    |



# Assessment of Gulf of Alaska northern rockfish (*Sebastodes polypinus*)

Assessment ID:AFSC-NROCKGA-1959-2008-MELNYCHUK

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/282>

Area ID: USA-NMFS-GA

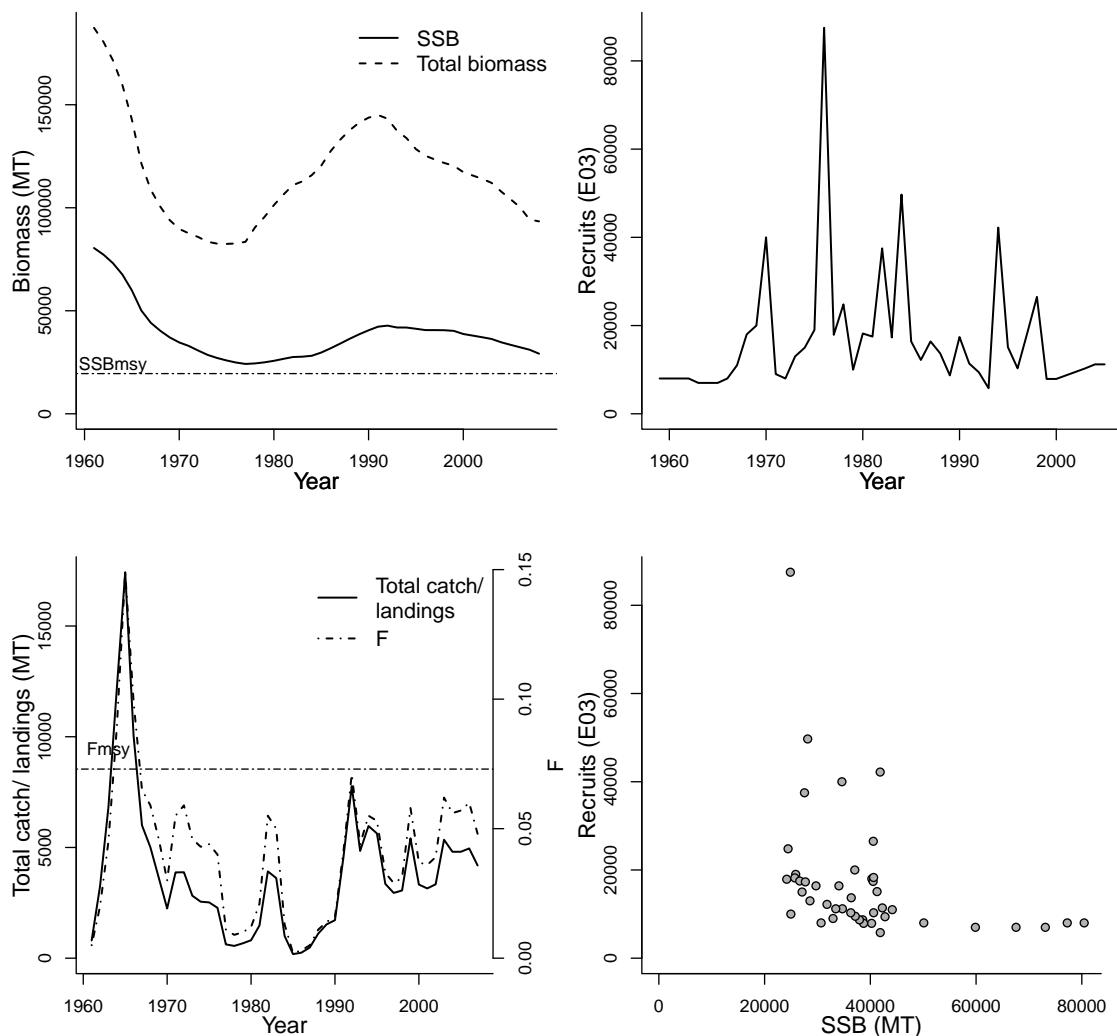
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                              |
| Assessment authors | Heifetz, J   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model           |
| Publication year   | 2008   |
| Timeseries span    | 1959-2008  |
| Document           | AFSC-NROCKGA-2008-Northern rockfish GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-17   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | Reference points       |       |       |
|--------------|-------|-------|------------------------|-------|-------|
|              |       |       | Parameter              | Value | Units |
| SSB-SEX-sex  | 1     | sex   |                        |       |       |
| REC-AGE-yr   | 2     | yr    |                        |       |       |
| F-AGE-yr-yr  | 2-22+ | yr-yr | Fmsy-1/yr (F)          | 0.073 | 1/yr  |
| TB-AGE-yr    | 2+    | yr    | NATMORT-1/yr (M)       | 0.06  | 1/yr  |
| A50-yr       | 13    | yr    | F40%-1/T               | 0.061 | 1/T   |
| L50-cm       | 36.1  | cm    | SSBmsy-MT (SSB)        | 19500 | MT    |
| M-1/yr       | 0.06  | 1/yr  | SSBF40%-MT             | 22300 | MT    |
| NATMORT-1/yr | 0.06  | 1/yr  | $F_{2007}/F_{msy}$     | 0.658 |       |
| SSB-AGE-yr   |       |       | $SSB_{2008}/SSB_{msy}$ | 1.496 |       |
| M            |       |       |                        |       |       |

| Time series minima and maxima |       |       |       |        |       |
|-------------------------------|-------|-------|-------|--------|-------|
|                               | SSB   | R     | F     | TB     | Catch |
| Minimum year                  | 1961  | 1959  | 1961  | 1961   | 1961  |
| Maximum year                  | 2008  | 2005  | 2007  | 2008   | 2007  |
| Time series minimum           | 24187 | 5800  | 0.002 | 82464  | 185   |
| Time series maximum           | 80449 | 87500 | 0.149 | 187340 | 17430 |
| Units                         | MT    | E03   | 1/yr  | MT     | MT    |



# Assessment of Eastern Bering Sea and Aleutian Islands northern rock sole (*Lepidopsetta polyxystra*)

Assessment ID:AFSC-NRSOLEEBSAI-1971-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/238>

Area ID: USA-NMFS-EBSAI

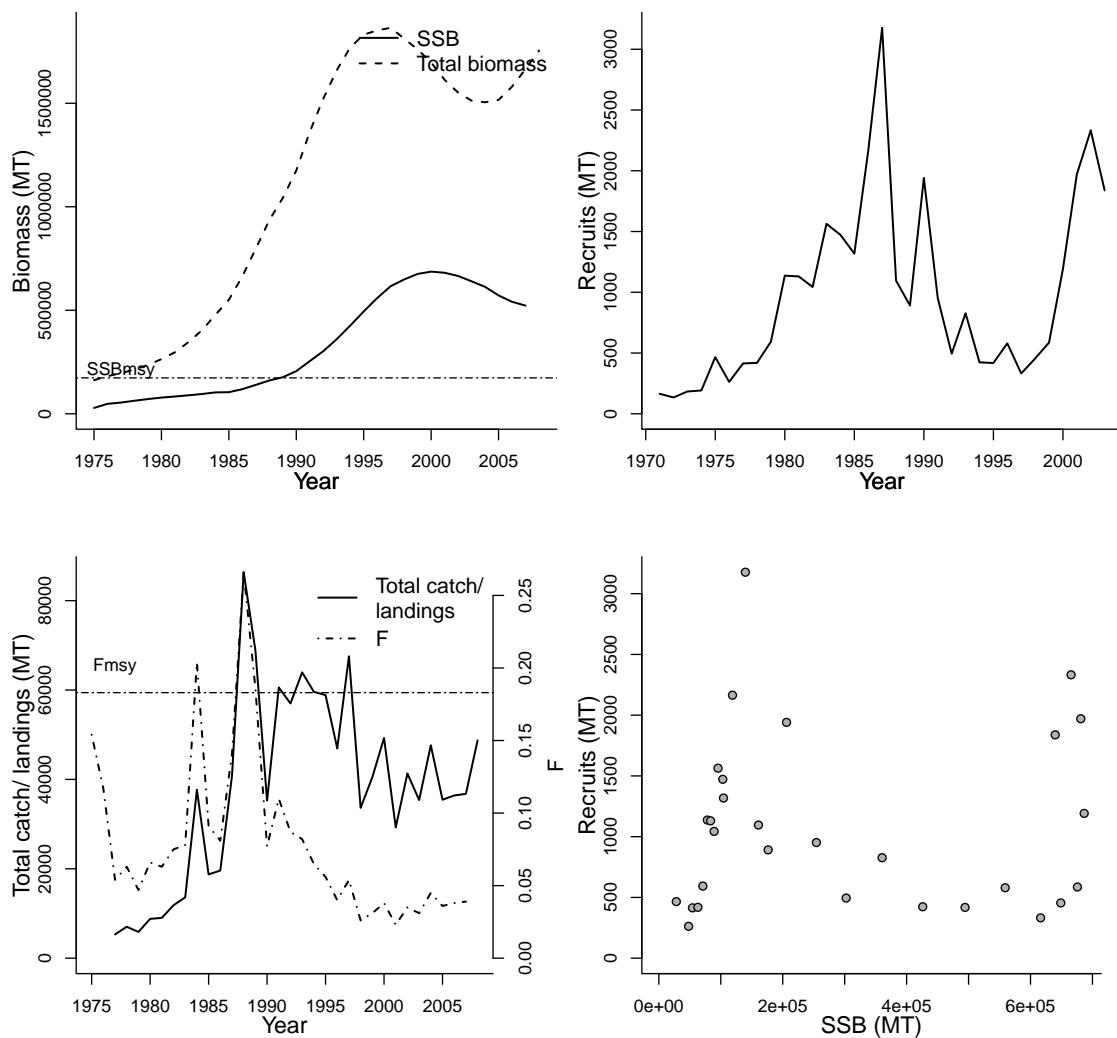
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Wliderbuer, TK                                     |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1971-2008  |
| Document           | 2008_SAFE_BSAIrocksole.pdf (pdf not in database)   |
| Recorder           | STANTON  |
| Date entered       | 2009-04-06   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME          | tertiary LME |       |
|---------------------|-------|-------|------------------------|--------------|-------|
| 1 - East Bering Sea |       |       | na                     | na           |       |
| Parameter           | Value | Units | Reference points       |              |       |
| SSB-AGE-yr          | 2+    | yr    | Parameter              | Value        | Units |
| SSB-SEX-sex         | 1     | sex   | Fmsy-1/yr (F)          | 0.183        | 1/yr  |
| REC-AGE-yr          | 4     | yr    | NATMORT-1/yr (M)       | 1.8          | 1/yr  |
| F-AGE-yr-yr         | 2+    | yr-yr | F40%-1/T               | 0.149        | 1/T   |
| TB-AGE-yr           | 2+    | yr    | SSBmsy-MT (SSB)        | 173320.00    | MT    |
| M-1/yr              | 1.8   | 1/yr  | MSY-MT (TB)            | 300500.00    | MT    |
| NATMORT-1/yr        | 1.8   | 1/yr  | NATMORT-1/yr (M)       | 0.15         | 1/yr  |
| M-1/yr              | 0.15  | 1/yr  | $F_{2007}/F_{msy}$     | 0.213        |       |
| NATMORT-1/yr        | 0.15  | 1/yr  | $SSB_{2007}/SSB_{msy}$ | 3.015        |       |
| M                   |       |       |                        |              |       |
| A50-yr              |       |       |                        |              |       |
| L50-cm              |       |       |                        |              |       |

| Time series minima and maxima |        |         |       |         |       |
|-------------------------------|--------|---------|-------|---------|-------|
|                               | SSB    | R       | F     | TB      | Catch |
| Minimum year                  | 1975   | 1971    | 1975  | 1975    | 1977  |
| Maximum year                  | 2007   | 2003    | 2007  | 2008    | 2008  |
| Time series minimum           | 28175  | 134.38  | 0.023 | 162245  | 5319  |
| Time series maximum           | 686653 | 3176.54 | 0.266 | 1864490 | 86366 |
| Units                         | MT     | MT      | 1/yr  | MT      | MT    |



# Assessment of Bering Sea and Aleutian Islands pacific cod (*Gadus macrocephalus*)

Assessment ID:AFSC-PCODBSAI-1964-2008-MELNYCHUK

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/268>

Area ID: USA-NMFS-BSAI

General assessment details.

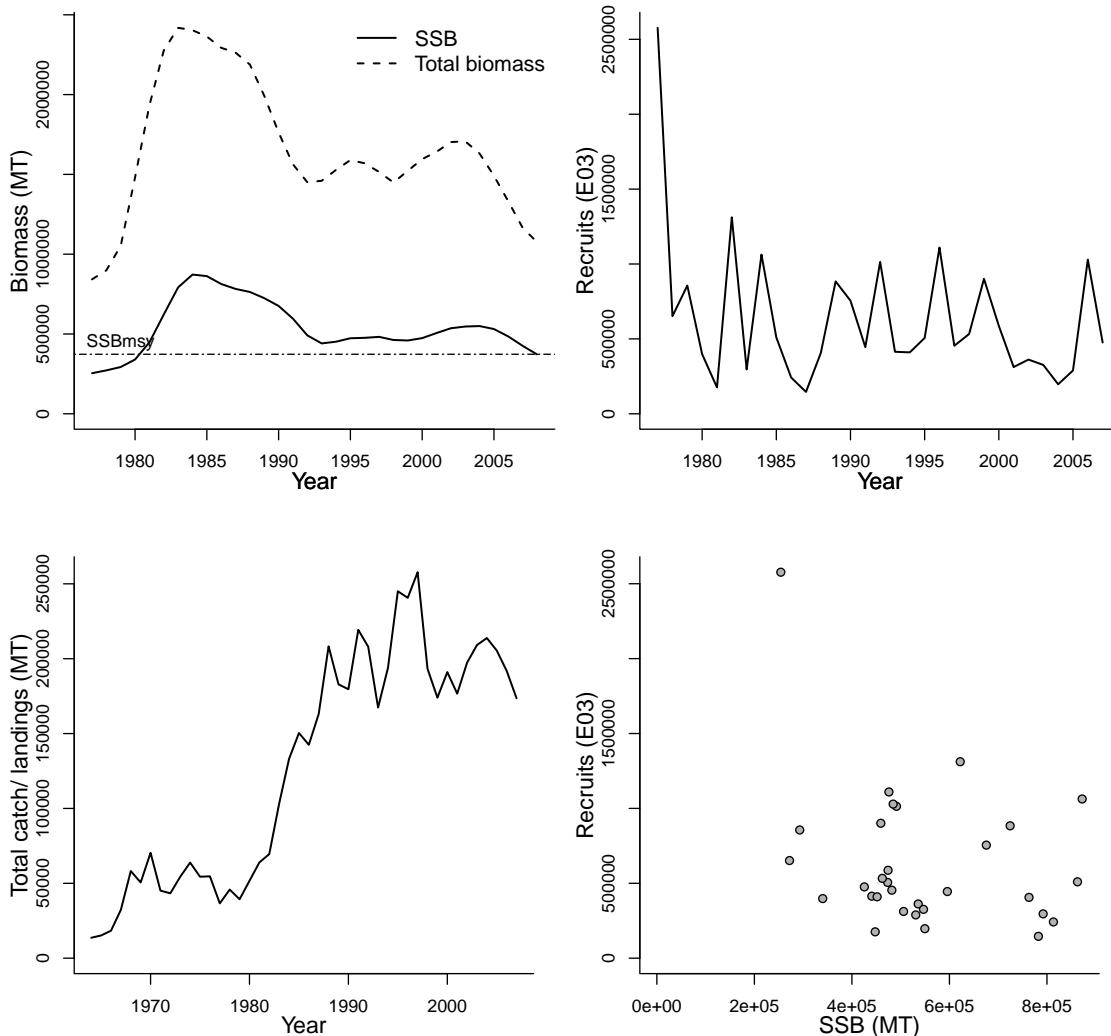
| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center                           |
| Assessment authors | Thompson, G.  |
| Assessment method  | Stock Synthesis v2.0 model                                |
| Publication year   | 2008  |
| Timeseries span    | 1964-2008   |
| Document           | AFSC-PCODBSAI-2008-Pacific-cod-BSAI.pdf (pdf in database) |
| Recorder           | MELNYCHUK   |
| Date entered       | 2009-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                           |            | tertiary LME |
|---------------------|-------|-------|---|------------|--------------|
| 1 - East Bering Sea |       |       | na                                      | na         |              |
| Parameter           | Value | Units | Reference points                        |            |              |
| SSB-SEX-sex         | 1     | sex   | Parameter                               | Value      | Units        |
| REC-AGE-yr          | 0     | yr    | Fmsy-1/yr (F)                           | 0.34       | 1/yr         |
| F-AGE-yr-yr         | 0+    | yr-yr | NATMORT-1/yr (M)                        | 0.34       | 1/yr         |
| TB-AGE-yr           | 0+    | yr    | F40%-1/T                                | 0.28       | 1/T          |
| A50-yr              | 4.9   | yr    | SSBmsy-MT (SSB)                         | 373000     | MT           |
| L50-cm              | 58    | cm    | SSBF40%-MT                              | 426000     | MT           |
| M-1/yr              | 0.34  | 1/yr  | SSBO-MT (SSB)                           | 1066000.00 | MT           |
| NATMORT-1/yr        | 0.34  | 1/yr  | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 0.997      |              |
| SSB-AGE-yr          |       |       |   |            |              |
| M                   |       |       |   |            |              |

## Time series minima and maxima

|                     | SSB    | R       | F | TB      | Catch  |
|---------------------|--------|---------|---|---------|--------|
| Minimum year        | 1977   | 1977    |   | 1977    | 1964   |
| Maximum year        | 2008   | 2007    |   | 2008    | 2007   |
| Time series minimum | 254248 | 146000  |   | 842241  | 13649  |
| Time series maximum | 872225 | 2577000 |   | 2418520 | 257762 |
| Units               | MT     | E03     |   | MT      | MT     |



# Assessment of Gulf of Alaska pacific cod (*Gadus macrocephalus*)

Assessment ID:AFSC-PCODGA-1964-2008-MELNYCHUK

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/271>

Area ID: USA-NMFS-GA

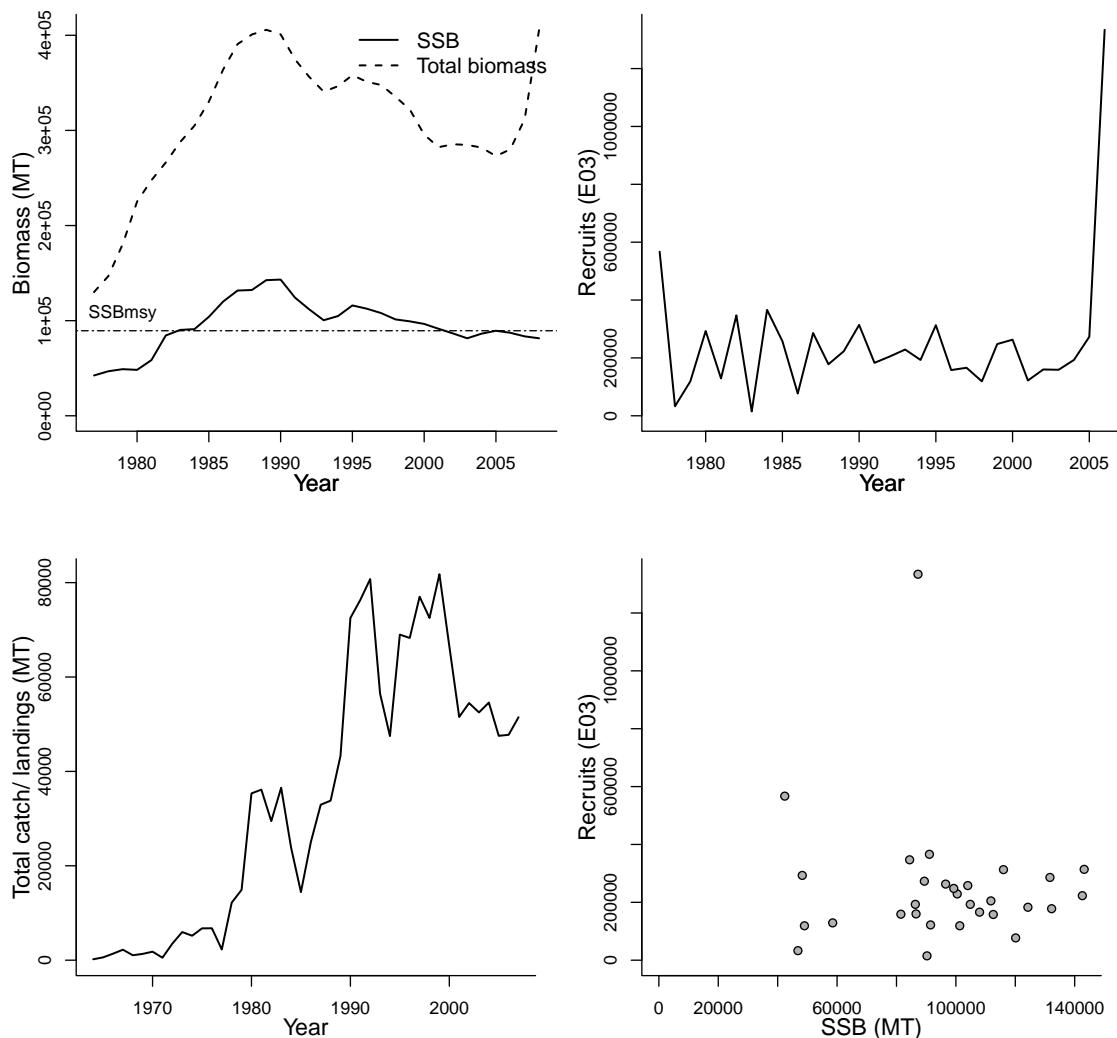
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                          |
| Assessment authors | Thompson, G.   |
| Assessment method  | Stock Synthesis v2.0 model                               |
| Publication year   | 2008   |
| Timeseries span    | 1964-2008  |
| Document           | AFSC-PCODGA-2008-Pacific-cod-GA.pdf<br>(pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-16   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME                            |        | tertiary LME |  |
|--------------------|-------|-------|--|--------|--------------|--|
| 2 - Gulf of Alaska |       |       | na                                       |        | na           |  |
| Parameter          | Value | Units | Reference points                         |        |              |  |
| SSB-AGE-yr         | 4.3   | yr    | Parameter                                | Value  | Units        |  |
| SSB-SEX-sex        | 1     | sex   | Fmsy-1/yr (F)                            | 0.64   | 1/yr         |  |
| REC-AGE-yr         | 0     | yr    | NATMORT-1/yr (M)                         | 0.38   | 1/yr         |  |
| TB-AGE-yr          | 0+    | yr    | F40%-1/T                                 | 0.52   | 1/T          |  |
| A50-yr             | 4.3   | yr    | SSBmsy-MT (SSB)                          | 89400  | MT           |  |
| L50-cm             | 58    | cm    | SSBF40%-MT                               | 102200 | MT           |  |
| M-1/yr             | 0.38  | 1/yr  | SSB <sub>2008</sub> /SSB <sub>m.sy</sub> | 0.911  |              |  |
| NATMORT-1/yr       | 0.38  | 1/yr  |  |        |              |  |
| F-AGE-yr           |       |       |  |        |              |  |
| M                  |       |       |  |        |              |  |

| Time series minima and maxima |        |         |   |        |       |
|-------------------------------|--------|---------|---|--------|-------|
|                               | SSB    | R       | F | TB     | Catch |
| Minimum year                  | 1977   | 1977    |   | 1977   | 1964  |
| Maximum year                  | 2008   | 2006    |   | 2008   | 2007  |
| Time series minimum           | 42383  | 15000   |   | 130021 | 196   |
| Time series maximum           | 143190 | 1334000 |   | 405770 | 81784 |
| Units                         | MT     | E03     |   | MT     | MT    |



# Assessment of Eastern Bering Sea and Aleutian Islands pacific ocean perch (*Sebastes alutus*)

Assessment ID:AFSC-PERCHEBSAI-1974-2009-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/256>

Area ID: USA-NMFS-EBSAI

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Spencer, PD  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1974-2009  |
| Document           | 2008-SAFE_BSAIpop.pdf (pdf not in database)        |
| Recorder           | STANTON  |
| Date entered       | 2009-04-13   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

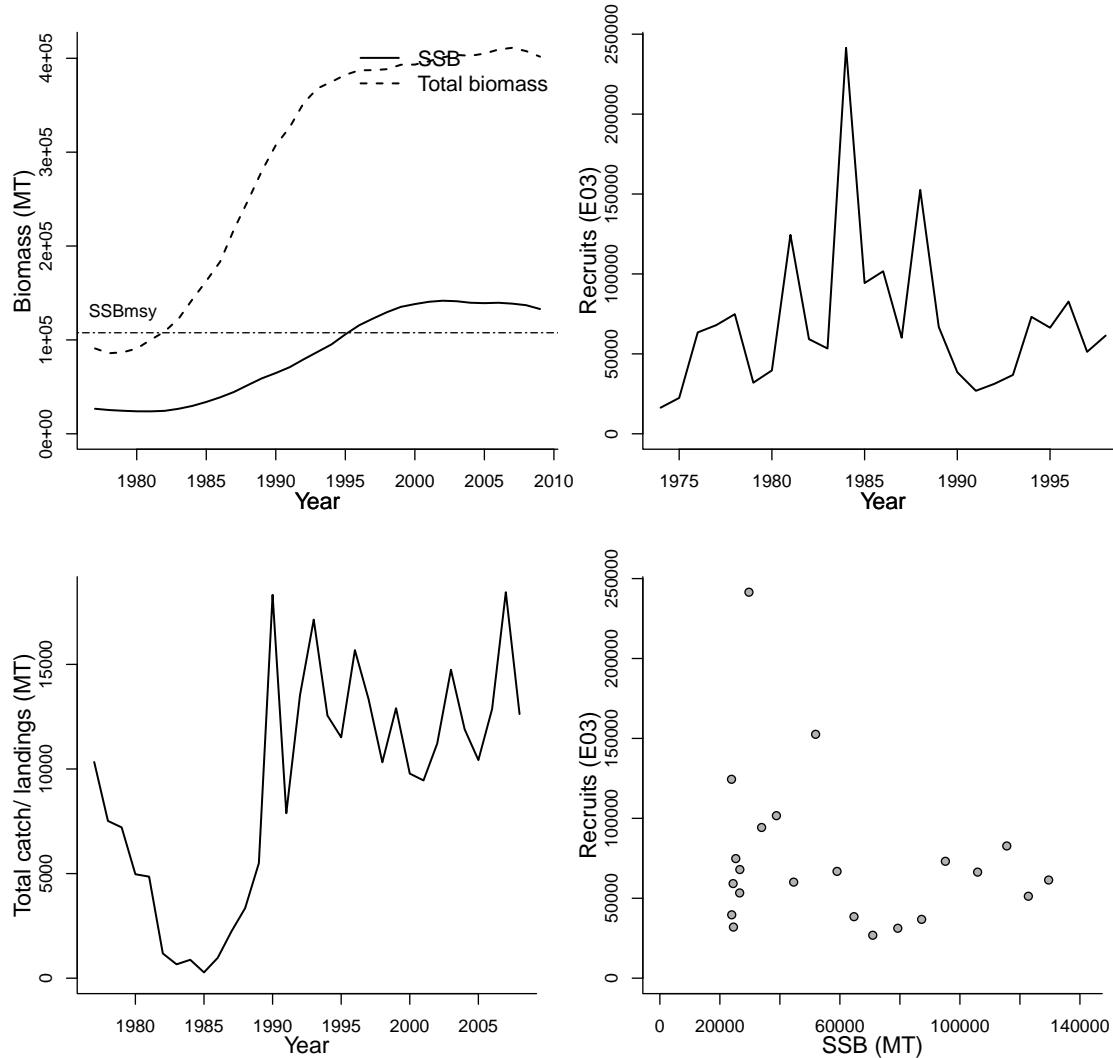
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME         | secondary LME | tertiary LME |
|--------------|-------|-------|---------------------|---------------|--------------|
|              |       |       | 1 - East Bering Sea | na            | na           |
| SSB-AGE-yr   | 3+    | yr    |                     |               |              |
| SSB-SEX-sex  | 1     | sex   |                     |               |              |
| REC-AGE-yr   | 3     | yr    |                     |               |              |
| F-AGE-yr-yr  | 3+    | yr-yr |                     |               |              |
| TB-AGE-yr    | 3+    | yr    |                     |               |              |
| M-1/yr       | 0.06  | 1/yr  |                     |               |              |
| NATMORT-1/yr | 0.06  | 1/yr  |                     |               |              |
| M            |       |       |                     |               |              |
| A50-yr       |       |       |                     |               |              |
| L50-cm       |       |       |                     |               |              |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| Fmsy-1/yr (F)          | 0.068            | 1/yr  |       |
| NATMORT-1/yr (M)       | 0.06             | 1/yr  |       |
| F40%-1/T               | 0.057            | 1/T   |       |
| SSBmsy-MT (SSB)        | 107627           | MT    |       |
| $SSB_{2009}/SSB_{msy}$ | 1.235            |       |       |

| Time series minima and maxima |        |        |   |        |
|-------------------------------|--------|--------|---|--------|
|                               | SSB    | R      | F | TB     |
| Minimum year                  | 1977   | 1974   |   | 1977   |
| Maximum year                  | 2009   | 1998   |   | 2009   |
| Time series minimum           | 23886  | 16346  |   | 85794  |
| Time series maximum           | 141752 | 241476 |   | 411164 |
| Units                         | MT     | E03    |   | MT     |



# Assessment of Gulf of Alaska pacific ocean perch (*Sebastes alutus*)

Assessment ID:AFSC-POPERCHGA-1959-2008-MELNYCHUK

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/289>

Area ID: USA-NMFS-GA

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                                  |
| Assessment authors | Hanselman, D.  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model               |
| Publication year   | 2008   |
| Timeseries span    | 1959-2008  |
| Document           | AFSC-POPERCHGA-2008-Pacific ocean perch GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-17   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME        | secondary LME | tertiary LME |
|--------------|-------|-------|--------------------|---------------|--------------|
|              |       |       | 2 - Gulf of Alaska | na            | na           |
| SSB-AGE-yr   | 10.5  | yr    |                    |               |              |
| SSB-SEX-sex  | 1     | sex   |                    |               |              |
| REC-AGE-yr   | 2     | yr    |                    |               |              |
| TB-AGE-yr    | 2+    | yr    |                    |               |              |
| A50-yr       | 10.5  | yr    |                    |               |              |
| M-1/yr       | 0.06  | 1/yr  |                    |               |              |
| NATMORT-1/yr | 0.06  | 1/yr  |                    |               |              |
| F-AGE-yr     |       |       |                    |               |              |
| M            |       |       |                    |               |              |
| L50-cm       |       |       |                    |               |              |

| Parameter        | Reference points | Value | Units |
|------------------|------------------|-------|-------|
| Fmsy-1/yr (F)    | 0.073            | 1/yr  |       |
| NATMORT-1/yr (M) | 0.06             | 1/yr  |       |
| F40%-1/T         | 0.061            | 1/T   |       |
| SSBmsy-MT (SSB)  | 78045            | MT    |       |
| SSBF40%-MT       | 89195            | MT    |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Gulf of Alaska pacific ocean perch (*Sebastes alutus*)

Assessment ID:AFSC-POPERCHGA-1959-2010-Stachura  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/289>

Area ID: USA-NMFS-GA

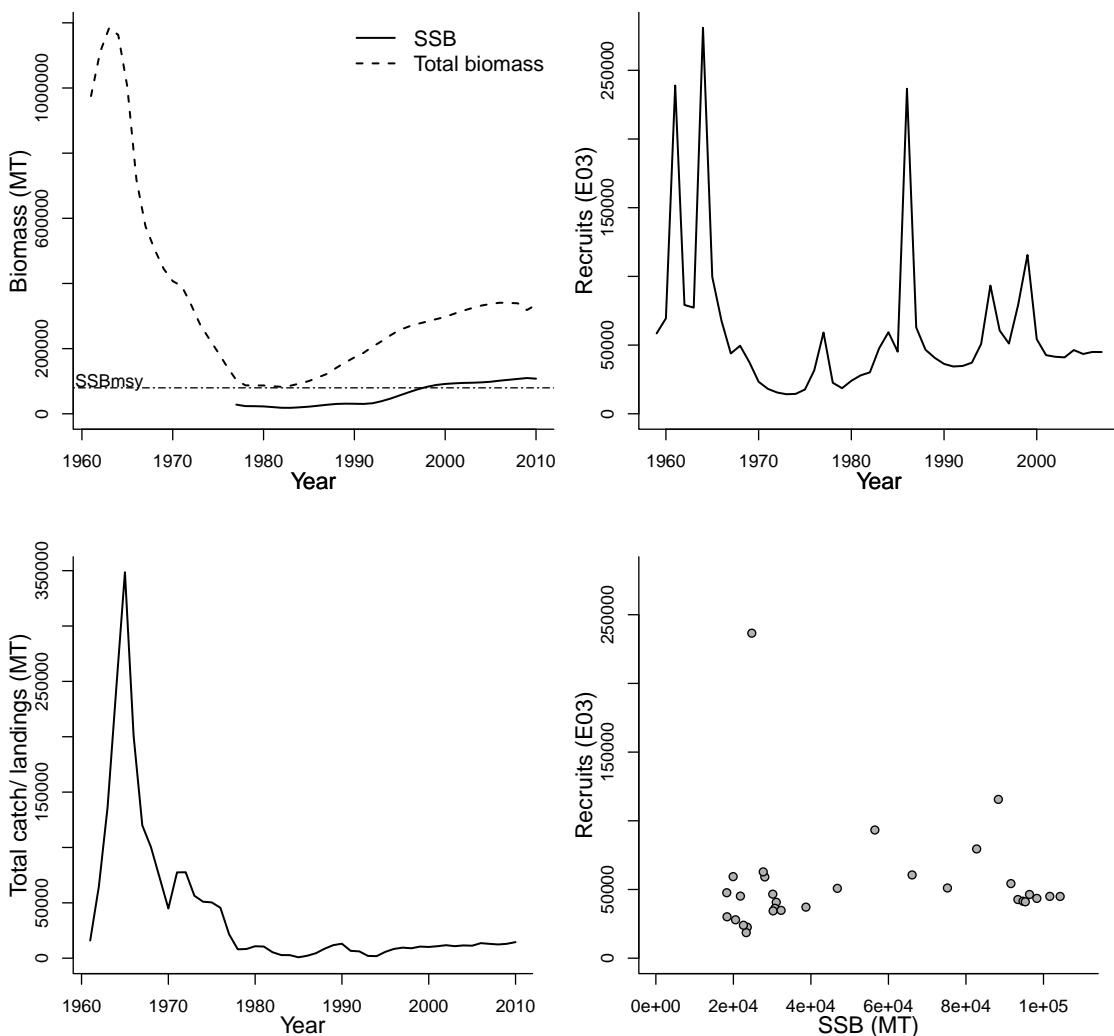
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Hanselman, D.                                      |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2010   |
| Timeseries span    | 1959-2010  |
| Document           | AFSC-POPERCHGA-2010.pdf (pdf in database)          |
| Recorder           | Stachura   |
| Date entered       | 2011-03-29   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | Reference points       |       |       |
|--------------|-------|-------|------------------------|-------|-------|
|              |       |       | Parameter              | Value | Units |
| SSB-AGE-yr   | 10.5  | yr    | Fmsy-1/yr (F)          | 0.142 | 1/yr  |
| SSB-SEX-sex  | 1     | sex   | NATMORT-1/yr (M)       | 0.06  | 1/yr  |
| REC-AGE-yr   | 2     | yr    | F40%-1/T               | 0.123 | 1/T   |
| A50-yr       | 10.5  | yr    | SSBmsy-MT (SSB)        | 79664 | MT    |
| L50-cm       | 35.7  | cm    | MSY-MT (TB)            | 20243 | MT    |
| M-1/T        | 0.06  | 1/T   | SSBF40%-MT             | 91044 | MT    |
| NATMORT-1/yr | 0.06  | 1/yr  | $SSB_{2010}/SSB_{msy}$ | 1.353 |       |
| TB-AGE-yr    |       |       |                        |       |       |
| F-AGE-yr     |       |       |                        |       |       |
| M            |       |       |                        |       |       |

| Time series minima and maxima |        |        |    |         |
|-------------------------------|--------|--------|----|---------|
|                               | SSB    | R      | F  | TB      |
| Minimum year                  | 1977   | 1959   |    | 1961    |
| Maximum year                  | 2010   | 2007   |    | 2010    |
| Time series minimum           | 18289  | 14230  |    | 82706.7 |
| Time series maximum           | 109724 | 280940 |    | 1184740 |
| Units                         | MT     | E03    | MT | MT      |



# Assessment of Gulf of Alaska rex sole (*Glyptocephalus zachirus*)

Assessment ID:AFSC-REXSOLEGA-1979-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/279>

Area ID: USA-NMFS-GA

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Stockhausen, W.T.                                  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1979-2008  |
| Document           | ref2008-SAFE-GOArex.pdf (pdf in database)          |
| Recorder           | STANTON  |
| Date entered       | 2009-04-20   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

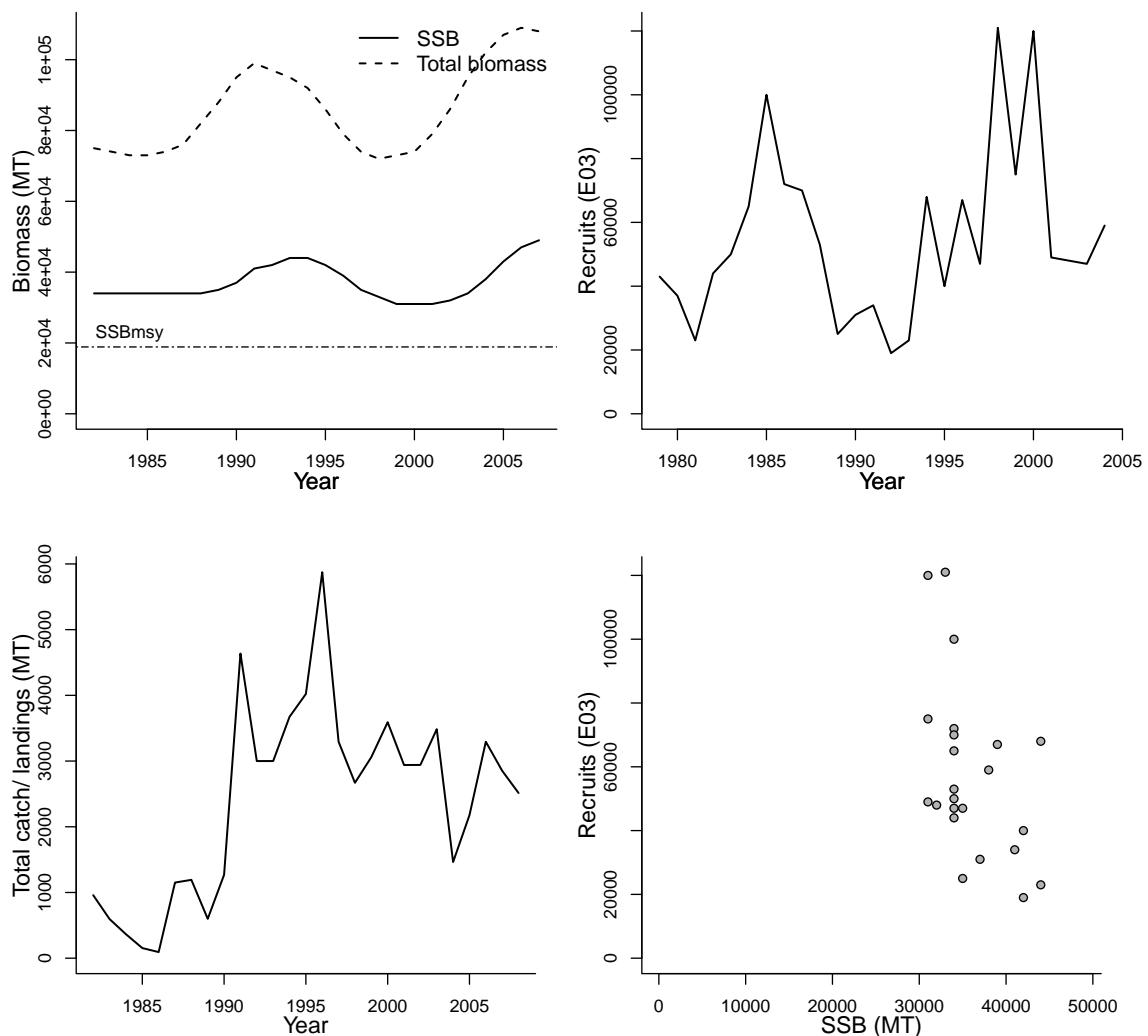
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME        | secondary LME | tertiary LME |
|--------------|-------|-------|--------------------|---------------|--------------|
|              |       |       | 2 - Gulf of Alaska | na            | na           |
| SSB-AGE-yr   | 3+    | yr    |                    |               |              |
| SSB-SEX-sex  | 1     | sex   |                    |               |              |
| REC-AGE-yr   | 3     | yr    |                    |               |              |
| TB-AGE-yr    | 3+    | yr    |                    |               |              |
| M-1/yr       | 0.17  | 1/yr  |                    |               |              |
| NATMORT-1/yr | 0.17  | 1/yr  |                    |               |              |
| F-AGE-yr     |       |       |                    |               |              |
| M            |       |       |                    |               |              |
| A50-yr       |       |       |                    |               |              |
| L50-cm       |       |       |                    |               |              |

| Parameter    | Value | Units | Reference points                         | Value | Units |
|--------------|-------|-------|--|-------|-------|
| SSB-AGE-yr   | 3+    | yr    | Parameter                                |       |       |
| SSB-SEX-sex  | 1     | sex   |  |       |       |
| REC-AGE-yr   | 3     | yr    | Fmsy-1/yr (F)                            | 10.23 | 1/yr  |
| TB-AGE-yr    | 3+    | yr    | NATMORT-1/yr (M)                         | 0.17  | 1/yr  |
| M-1/yr       | 0.17  | 1/yr  | F40%-1/T                                 | 4.78  | 1/T   |
| NATMORT-1/yr | 0.17  | 1/yr  | SSBmsy-MT (SSB)                          | 18877 | MT    |
| F-AGE-yr     |       |       | SSB <sub>2007</sub> /SSB <sub>m sy</sub> | 2.596 |       |
| M            |       |       |  |       |       |
| A50-yr       |       |       |  |       |       |
| L50-cm       |       |       |  |       |       |

| Time series minima and maxima |       |        |   |        |
|-------------------------------|-------|--------|---|--------|
|                               | SSB   | R      | F | TB     |
| Minimum year                  | 1982  | 1979   |   | 1982   |
| Maximum year                  | 2007  | 2004   |   | 2007   |
| Time series minimum           | 31000 | 19000  |   | 72000  |
| Time series maximum           | 49000 | 121000 |   | 109000 |
| Units                         | MT    | E03    |   | MT     |



# Assessment of Bering Sea and Aleutian Islands rougheye rockfish (*Sebastodes aleutianus*)

Assessment ID:AFSC-REYEROCKBSAI-1974-2009-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/234>

Area ID: USA-NMFS-BSAI

General assessment details.

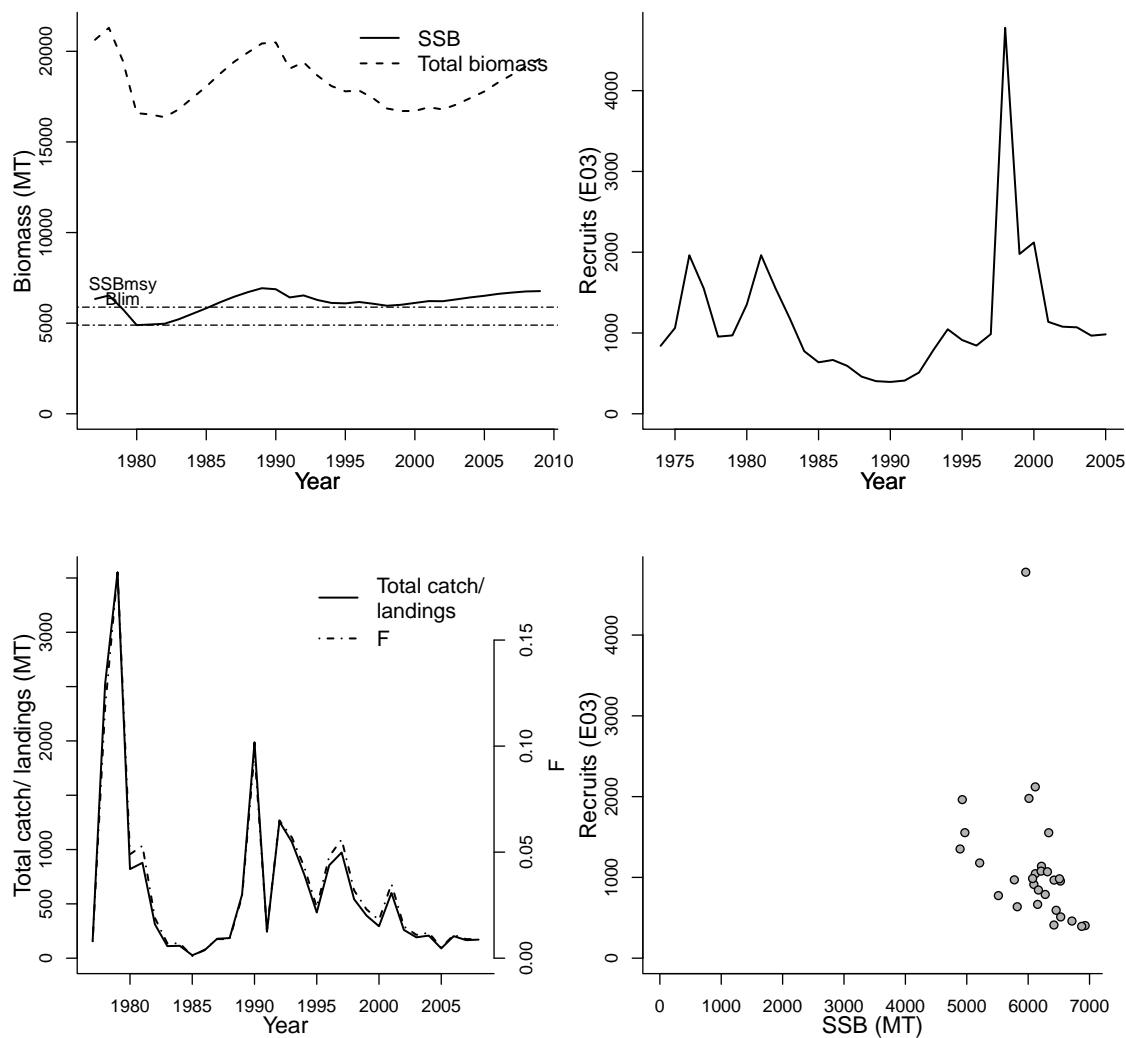
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Spencer PD   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1974-2009  |
| Document           | 2008 SAFE BSAIrougheye.pdf (pdf in database)       |
| Recorder           | STANTON  |
| Date entered       | 2009-03-31   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME          |       | tertiary LME |
|---------------------|-------|-------|------------------------|-------|--------------|
| 1 - East Bering Sea |       |       | na                     | na    |              |
| Parameter           | Value | Units | Reference points       |       |              |
| A50-yr              | 19    | yr    | Parameter              | Value | Units        |
| SSB-AGE-yr          | 3     | yr    | Blim-MT (TB)           | 4891  | MT           |
| SSB-SEX-sex         | 0     | sex   | SSBmsy-MT (SSB)        | 5883  | MT           |
| REC-AGE-yr          | 3     | yr    | SSB0-MT (SSB)          | 16808 | MT           |
| F-AGE-yr-yr         | 3+    | yr-yr | $SSB_{2009}/SSB_{msy}$ | 1.151 |              |
| TB-AGE-yr           | 3+    | yr    |                        |       |              |
| M                   |       |       |                        |       |              |
| L50-cm              |       |       |                        |       |              |

Time series minima and maxima

|                     | SSB  | R    | F     | TB    | Catch |
|---------------------|------|------|-------|-------|-------|
| Minimum year        | 1977 | 1974 | 1977  | 1977  | 1977  |
| Maximum year        | 2009 | 2005 | 2008  | 2009  | 2008  |
| Time series minimum | 4891 | 394  | 0.001 | 16364 | 27    |
| Time series maximum | 6929 | 4778 | 0.182 | 21297 | 3553  |
| Units               | MT   | E03  | 1/yr  | MT    | MT    |



# Assessment of Gulf of Alaska rougheye rockfish (*Sebastodes aleutianus*)

Assessment ID:AFSC-REYEROCKGA-1974-2007-MELNYCHUK  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/290>

Area ID: USA-NMFS-GA

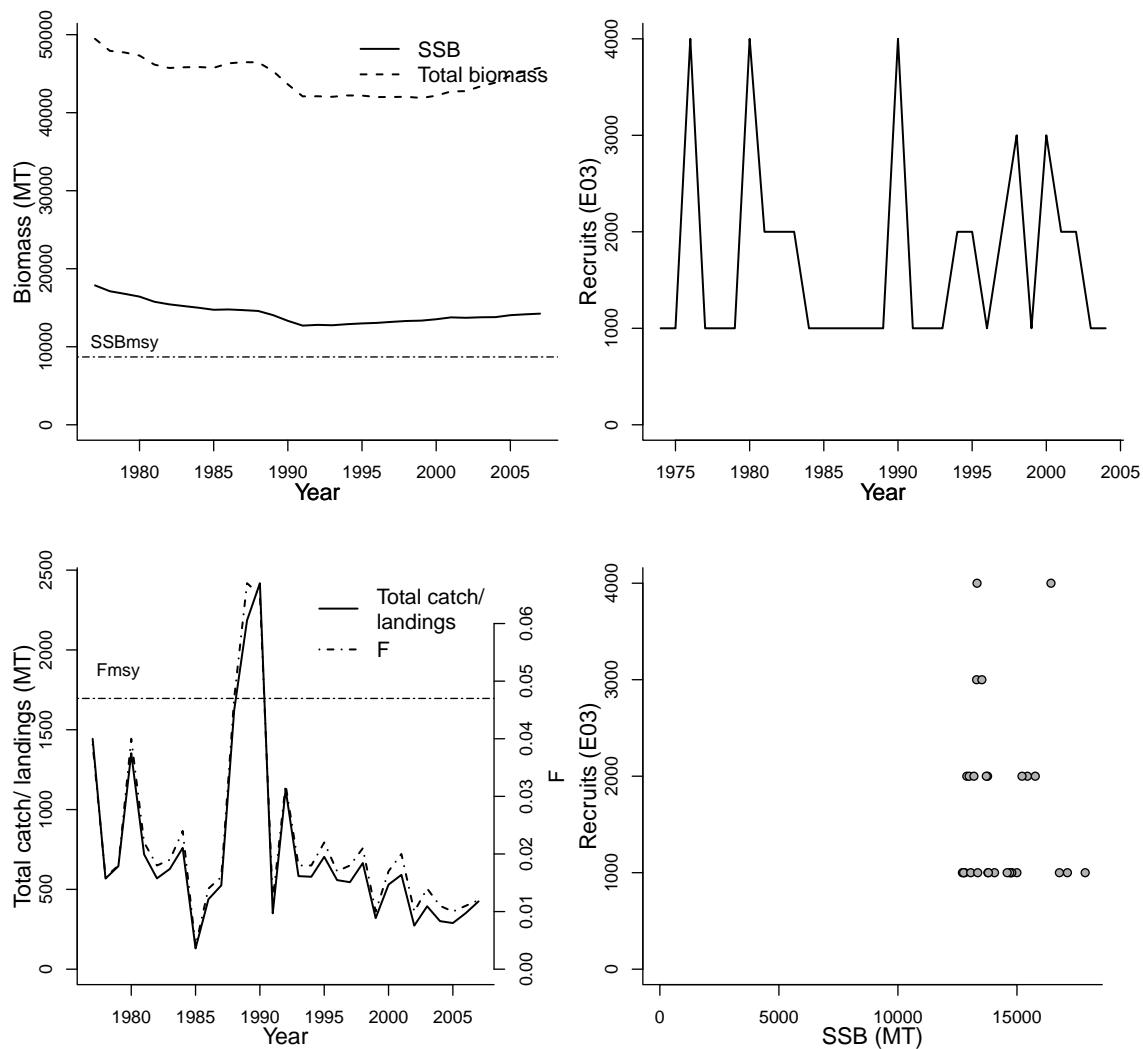
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                                |
| Assessment authors | Shotwell, S. Kalei   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model             |
| Publication year   | 2008   |
| Timeseries span    | 1974-2007  |
| Document           | AFSC-RYEROCKGA-2008-Rougheye rockfish GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-23   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | Reference points       |       |       |
|--------------|-------|-------|------------------------|-------|-------|
|              |       |       | Parameter              | Value | Units |
| SSB-AGE-yr   | 19    | yr    | Fmsy-1/T (F)           | 0.047 | 1/T   |
| SSB-SEX-sex  | 1     | sex   | NATMORT-1/yr (M)       | 0.034 | 1/yr  |
| REC-AGE-yr   | 3     | yr    | F40%-1/T               | 0.039 | 1/T   |
| TB-AGE-yr    | 3+    | yr    | SSBmsy-MT (SSB)        | 8694  | MT    |
| A50-yr       | 19    | yr    | SSBF40%-MT             | 9935  | MT    |
| L50-cm       | 43.9  | cm    | $F_{2007}/F_{msy}$     | 0.255 |       |
| M-1/yr       | 0.034 | 1/yr  | $SSB_{2007}/SSB_{msy}$ | 1.638 |       |
| NATMORT-1/yr | 0.034 | 1/yr  |                        |       |       |
| F-AGE-yr     |       |       |                        |       |       |
| M            |       |       |                        |       |       |

| Time series minima and maxima |       |      |       |       |
|-------------------------------|-------|------|-------|-------|
|                               | SSB   | R    | F     | TB    |
| Minimum year                  | 1977  | 1974 | 1977  | 1977  |
| Maximum year                  | 2007  | 2004 | 2007  | 2007  |
| Time series minimum           | 12709 | 1000 | 0.004 | 41889 |
| Time series maximum           | 17865 | 4000 | 0.067 | 49471 |
| Units                         | MT    | E03  | 1/yr  | MT    |



# Assessment of Bristol Bay red king crab (*Paralithodes camtschaticus*)

Assessment ID:AFSC-RKCRABB-1960-2008-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/258>

Area ID: USA-NMFS-BB

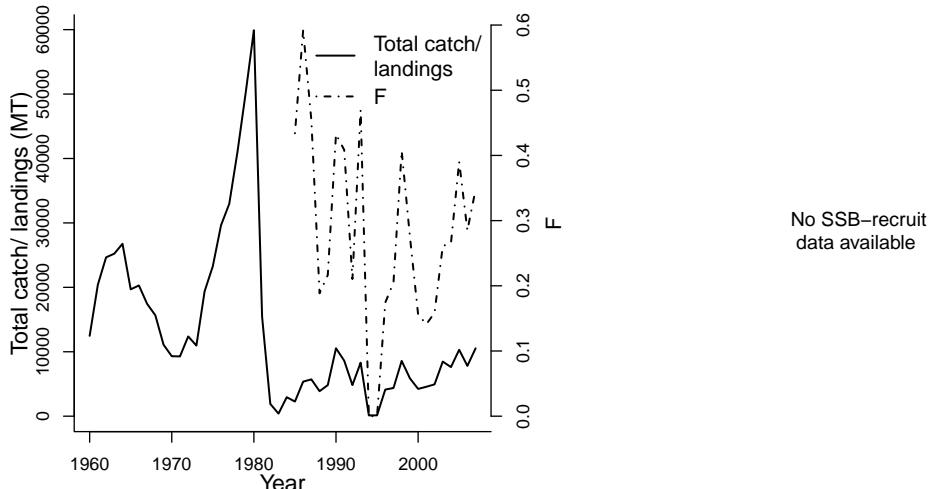
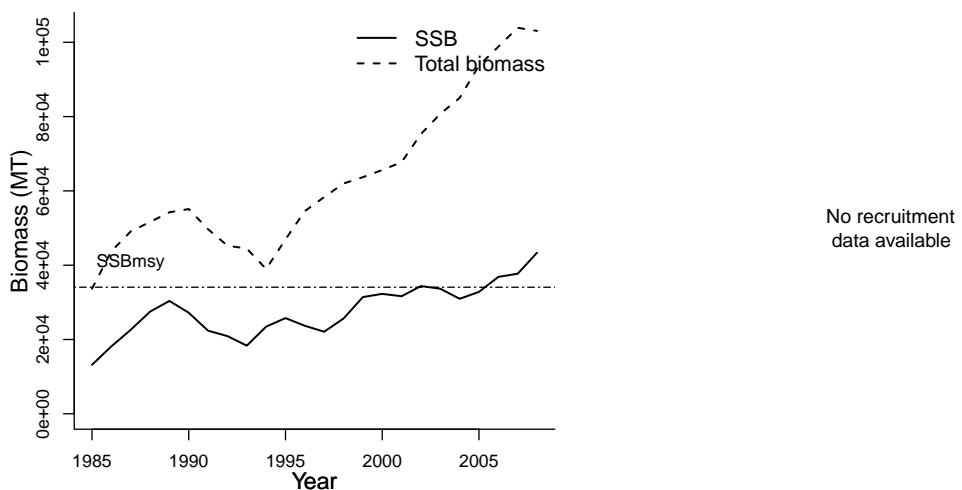
## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Alaska Fisheries Science Center    |
| Assessment authors | Anonymous                          |
| Assessment method  | Length-based analysis              |
| Publication year   | 2008                               |
| Timeseries span    | 1960-2008                          |
| Document           | CRABSAFE2008.pdf (pdf in database) |
| Recorder           | JENSEN                             |
| Date entered       | 2009-04-13                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2009-06-12                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                     | primary LME | secondary LME | tertiary LME           |       |
|---------------------|-------------|---------------|------------------------|-------|
| 1 - East Bering Sea | na          | na            |                        |       |
| Parameter           | Value       | Units         | Reference points       |       |
| REC-AGE             |             |               | Parameter              | Value |
| SSB-AGE-yr          |             |               |                        | ratio |
| SSB-SEX-sex         |             |               | Umsy-ratio (U)         | 0.33  |
| TB-AGE-yr           |             |               | SSBmsy-MT (SSB)        | 34070 |
| F-AGE-yr            |             |               | $SSB_{2008}/SSB_{msy}$ | MT    |
| M                   |             |               |                        | 1.273 |
| A50-yr              |             |               |                        |       |
| L50-cm              |             |               |                        |       |

| Time series minima and maxima |          |   |        |           |
|-------------------------------|----------|---|--------|-----------|
|                               | SSB      | R | F      | TB        |
| Minimum year                  | 1985     |   | 1985   | 1985      |
| Maximum year                  | 2008     |   | 2007   | 2008      |
| Time series minimum           | 13182.29 |   | 0      | 33675.58  |
| Time series maximum           | 43356.14 |   | 0.5921 | 103900.69 |
| Units                         | MT       |   | ratio  | MT        |



# Assessment of Norton Sound red king crab (*Paralithodes camtschaticus*)

Assessment ID:AFSC-RKCRABNS-1976-2008-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/263>

Area ID: USA-NMFS-NS

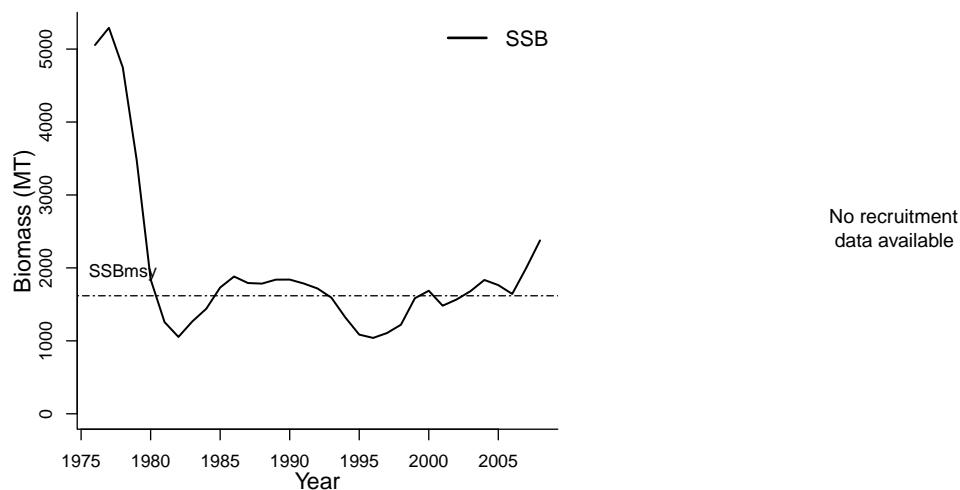
## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Alaska Fisheries Science Center    |
| Assessment authors | Anonymous                          |
| Assessment method  | Length-based analysis              |
| Publication year   | 2008                               |
| Timeseries span    | 1976-2008                          |
| Document           | CRABSAFE2008.pdf (pdf in database) |
| Recorder           | JENSEN                             |
| Date entered       | 2009-04-13                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2010-07-28                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                     | primary LME | secondary LME | tertiary LME   |
|---------------------|-------------|---------------|--|
| 1 - East Bering Sea | na          | na            | na   |
| Parameter           | Value       | Units         |  |
| SSB-SEX-sex         | 2           | sex           |  |
| REC-AGE             |             |               | Reference points   |
| SSB-AGE-yr          |             |               | Parameter  |
| TB-AGE-yr           |             |               | Value  |
| F-AGE-yr            |             |               | Units  |
| M                   |             |               |  |
| A50-yr              |             |               | SSB <sub>m</sub> s <sub>y</sub> -MT (SSB) 1617.96 MT       |
| L50-cm              |             |               | SSB <sub>2008</sub> /SSB <sub>m</sub> s <sub>y</sub> 1.469 |

| Time series minima and maxima |         |   |   |    |       |
|-------------------------------|---------|---|---|----|-------|
|                               | SSB     | R | F | TB | Catch |
| Minimum year                  | 1976    |   |   |    |       |
| Maximum year                  | 2008    |   |   |    |       |
| Time series minimum           | 1039.95 |   |   |    |       |
| Time series maximum           | 5291.83 |   |   |    |       |
| Units                         | MT      |   |   |    |       |



# Assessment of Pribilof Islands red king crab (*Paralithodes camtschaticus*)

Assessment ID:AFSC-RKCRABPI-1981-2009-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/260>

Area ID: USA-NMFS-PI

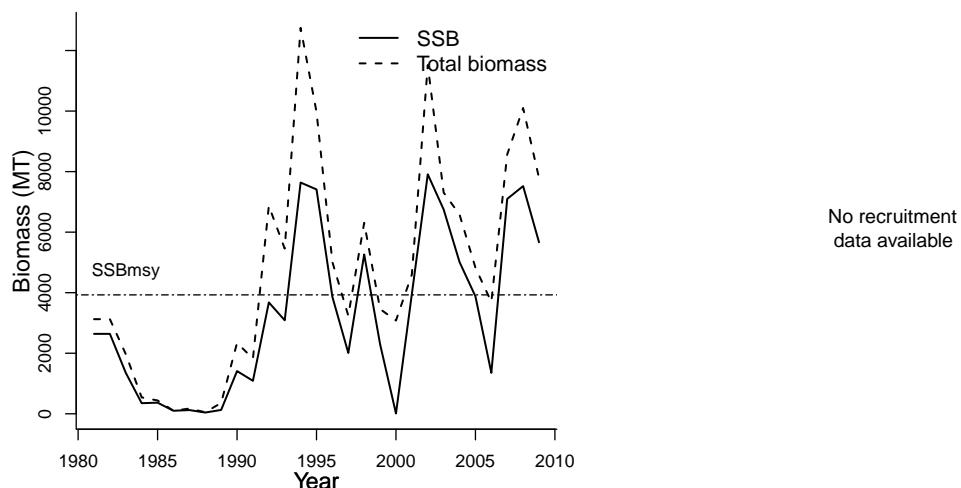
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                      |
| Assessment authors | Anonymous  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2008   |
| Timeseries span    | 1981-2009  |
| Document           | CRABSAFE2008.pdf (pdf in database)                   |
| Recorder           | JENSEN   |
| Date entered       | 2009-04-13   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-12   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME |                              | tertiary LME |       |  |
|---------------------|-------|-------|---------------|------------------------------|--------------|-------|--|
| 1 - East Bering Sea |       |       | na            |                              | na           |       |  |
| Parameter           | Value | Units |               |                              |              |       |  |
| SSB-SEX-sex         | 2     | sex   |               |                              |              |       |  |
| REC-AGE             |       |       |               | Reference points             |              |       |  |
| SSB-AGE-yr          |       |       |               | Parameter                    | Value        | Units |  |
| TB-AGE-yr           |       |       |               | SSB <sub>msy</sub> -MT (SSB) | 3928.11      | MT    |  |
| F-AGE-yr            |       |       |               | $SSB_{2009}/SSB_{msy}$       | 1.442        |       |  |
| M                   |       |       |               |                              |              |       |  |
| A50-yr              |       |       |               |                              |              |       |  |
| L50-cm              |       |       |               |                              |              |       |  |

| Time series minima and maxima |         |   |   |          |
|-------------------------------|---------|---|---|----------|
|                               | SSB     | R | F | TB       |
| Minimum year                  | 1981    |   |   | 1981     |
| Maximum year                  | 2009    |   |   | 2009     |
| Time series minimum           | 9.07    |   |   | 49.9     |
| Time series maximum           | 7910.64 |   |   | 12750.47 |
| Units                         | MT      |   |   | MT       |



# Assessment of Eastern Bering Sea / Aleutian Islands / Gulf of Alaska sablefish (*Anoplopoma fimbria*)

Assessment ID:AFSC-SABLEFEBSAIGA-1956-2008-MELNYCHUK  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/266>

Area ID: USA-NMFS-EBSAIGA

General assessment details.

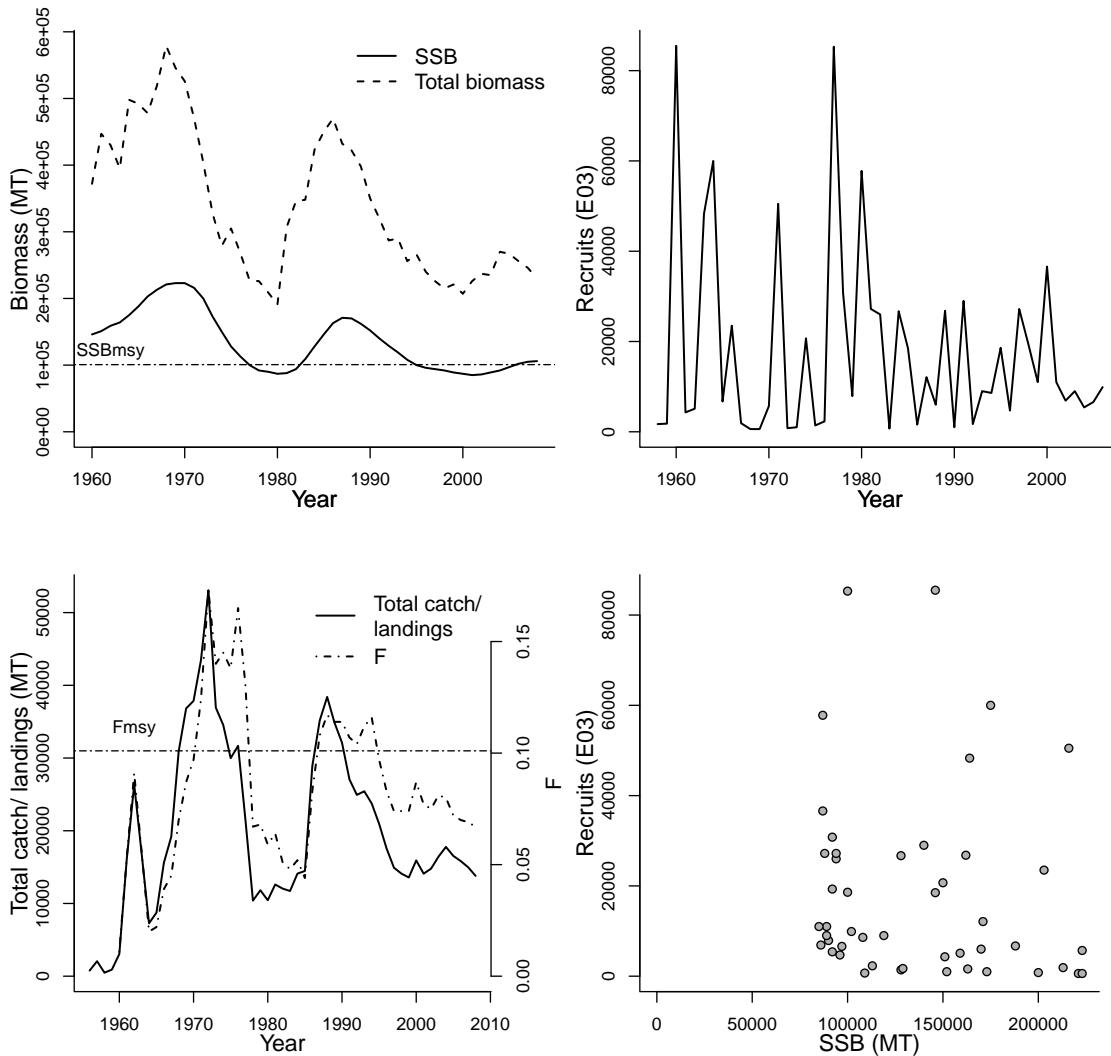
| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center                                   |
| Assessment authors | Hanselman, D.   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model                |
| Publication year   | 2008  |
| Timeseries span    | 1956-2008   |
| Document           | AFSC-SABLEFEBSAIGA-2008-Sablefish-EBS-AI-GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK   |
| Date entered       | 2009-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | Reference points       |        |       |
|--------------|-------|-------|------------------------|--------|-------|
|              |       |       | Parameter              | Value  | Units |
| SSB-AGE-yr   | 6.5   | yr    | Fmsy-1/yr (F)          | 0.101  | 1/yr  |
| SSB-SEX-sex  | 1     | sex   | NATMORT-1/yr (M)       | 0.1    | 1/yr  |
| REC-AGE-yr   | 2     | yr    | F40%-1/T               | 0.085  | 1/T   |
| TB-AGE-yr    | 4+    | yr    | MSY-MT (TB)            | 19000  | MT    |
| A50-yr       | 6.5   | yr    | SSBmsy-MT (SSB)        | 100730 | MT    |
| L50-cm       | 65    | cm    | SSB0-MT (SSB)          | 287800 | MT    |
| M-1/yr       | 0.1   | 1/yr  | SSBF40%-MT             | 115120 | MT    |
| NATMORT-1/yr | 0.1   | 1/yr  | $F_{2008}/F_{msy}$     | 0.663  |       |
| F-AGE-yr     |       |       | $SSB_{2008}/SSB_{msy}$ | 1.052  |       |
| M            |       |       |                        |        |       |

Time series minima and maxima

|                     | SSB    | R     | F     | TB     | Catch |
|---------------------|--------|-------|-------|--------|-------|
| Minimum year        | 1960   | 1958  | 1960  | 1960   | 1956  |
| Maximum year        | 2008   | 2006  | 2008  | 2008   | 2008  |
| Time series minimum | 85000  | 600   | 0.011 | 191000 | 477   |
| Time series maximum | 223000 | 85500 | 0.173 | 579000 | 53080 |
| Units               | MT     | E03   | 1/yr  | MT     | MT    |



# Assessment of Bering Sea snow crab (*Chionoecetes opilio*)

Assessment ID:AFSC-SNOWCRABBS-1979-2008-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/257>

Area ID: USA-NMFS-BS

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Alaska Fisheries Science Center           |
| Assessment authors | Anonymous                                 |
| Assessment method  | Size-structured population dynamics model |
| Publication year   | 2008                                      |
| Timeseries span    | 1979-2008                                 |
| Document           | CRABSAFE2008.pdf (pdf in database)        |
| Recorder           | JENSEN                                    |
| Date entered       | 2009-04-13                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2010-07-28                                |

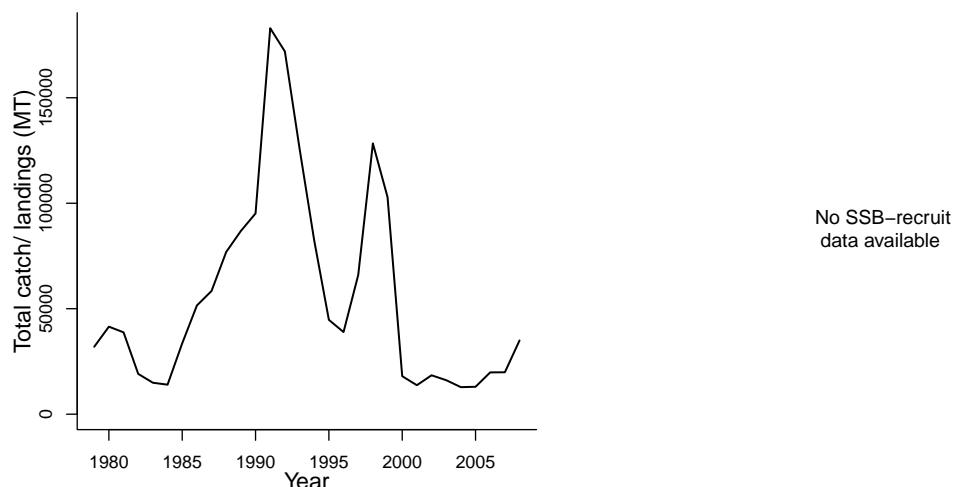
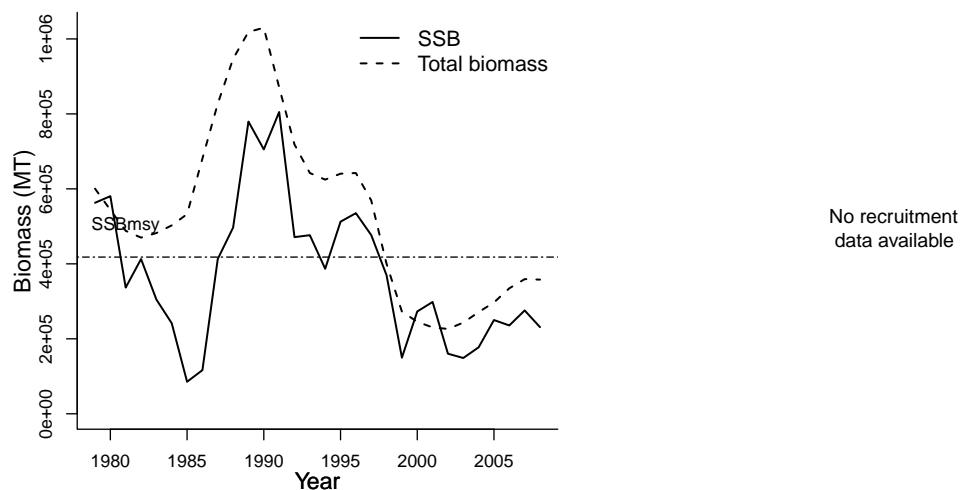
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         | secondary LME | tertiary LME |
|---------------------|---------------|--------------|
| 1 - East Bering Sea | na            | na           |
| Parameter           | Value         | Units        |
| REC-AGE             |               |              |
| SSB-AGE-yr          |               |              |
| SSB-SEX-sex         |               |              |
| TB-AGE-yr           |               |              |
| F-AGE-yr            |               |              |
| M                   |               |              |
| A50-yr              |               |              |
| L50-cm              |               |              |

| Reference points                         |            |       |
|--|------------|-------|
| Parameter                                | Value      | Units |
| SSB <sub>m</sub> sy-MT (SSB)             | 418030.728 | MT    |
| SSB <sub>2008</sub> /SSB <sub>m</sub> sy | 0.553      |       |

| Time series minima and maxima |           |   |   |            |
|-------------------------------|-----------|---|---|------------|
|                               | SSB       | R | F | TB         |
| Minimum year                  | 1979      |   |   | 1979       |
| Maximum year                  | 2008      |   |   | 2008       |
| Time series minimum           | 85456.8   |   |   | 226342.59  |
| Time series maximum           | 805035.74 |   |   | 1029654.68 |
| Units                         | MT        |   |   | MT         |
|                               |           |   |   | 12813.07   |
|                               |           |   |   | 182966.77  |



# Assessment of Bering Sea and Aleutian Islands shortraker rockfish (*Sebastes borealis*)

Assessment ID:AFSC-SRAKEROCKBSAI-1977-2008-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/236>

Area ID: USA-NMFS-BSAI

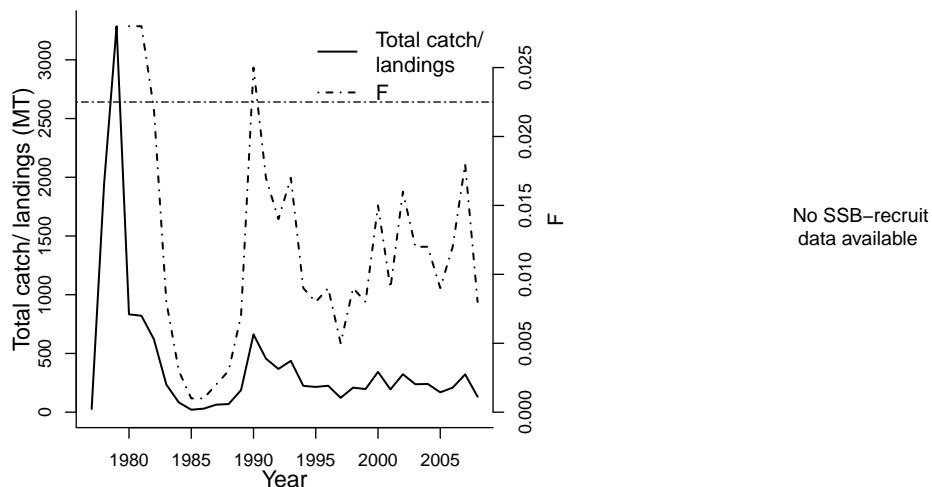
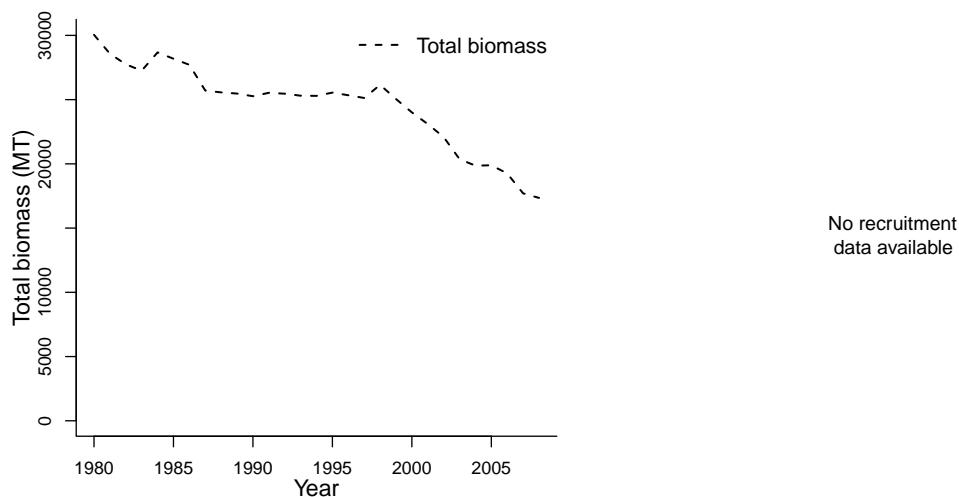
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                    |
| Assessment authors | Spencer PD   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1977-2008  |
| Document           | 2008_SAFE_BSAIshortraker.pdf (pdf not in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-04-01   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME      |        |       | tertiary LME |  |  |
|---------------------|-------|-------|--------------------|--------|-------|--------------|--|--|
| 1 - East Bering Sea |       |       | na                 |        |       | na           |  |  |
| Parameter           | Value | Units | Reference points   |        |       |              |  |  |
| SSB-SEX-sex         | 1     | sex   | Parameter          | Value  | Units |              |  |  |
| TB-AGE-yr           | 0+    | yr    | SSBmsy-MT (SSB)    | 139188 | MT    |              |  |  |
| M-1/yr              | 0.03  | 1/yr  | Flim-1/yr (F)      | 0.03   | 1/yr  |              |  |  |
| REC-AGE             |       |       | Fmsy-1/yr (F)      | 0.0225 | 1/yr  |              |  |  |
| SSB-AGE-yr          |       |       | Fpa-1/yr (F)       | 0.0225 | 1/yr  |              |  |  |
| F-AGE-yr            |       |       | $F_{2008}/F_{lim}$ | 0.267  |       |              |  |  |
| M                   |       |       | $F_{2008}/F_{msy}$ | 0.356  |       |              |  |  |
| A50-yr              |       |       |                    |        |       |              |  |  |
| L50-cm              |       |       |                    |        |       |              |  |  |

| Time series minima and maxima |     |   |       |       |       |
|-------------------------------|-----|---|-------|-------|-------|
|                               | SSB | R | F     | TB    | Catch |
| Minimum year                  |     |   | 1980  | 1980  | 1977  |
| Maximum year                  |     |   | 2008  | 2008  | 2008  |
| Time series minimum           |     |   | 0.001 | 17348 | 21    |
| Time series maximum           |     |   | 0.028 | 30045 | 3286  |
| Units                         |     |   | 1/yr  | MT    | MT    |



# Assessment of Bering Sea and Aleutian Islands tanner crab (*Chionoecetes bairdi*)

Assessment ID:AFSC-TANNERCRABBSAI-1965-2008-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/259>

Area ID: USA-NMFS-BSAI

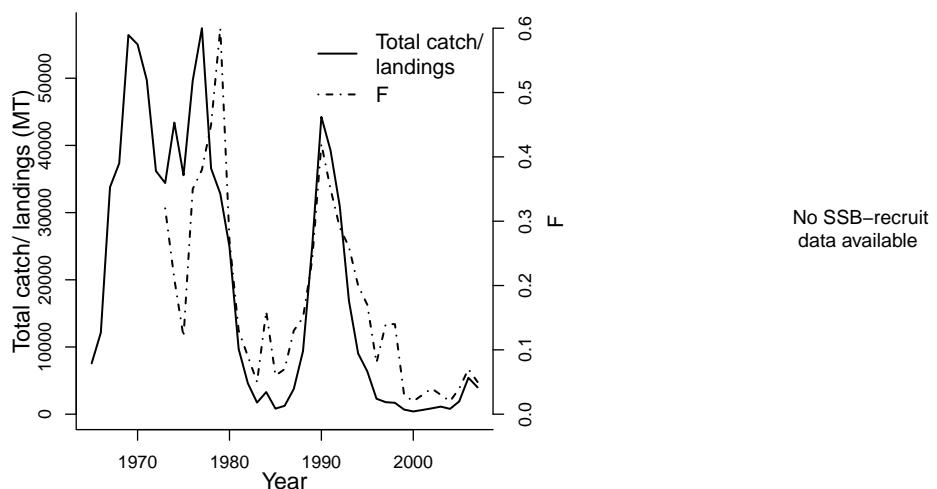
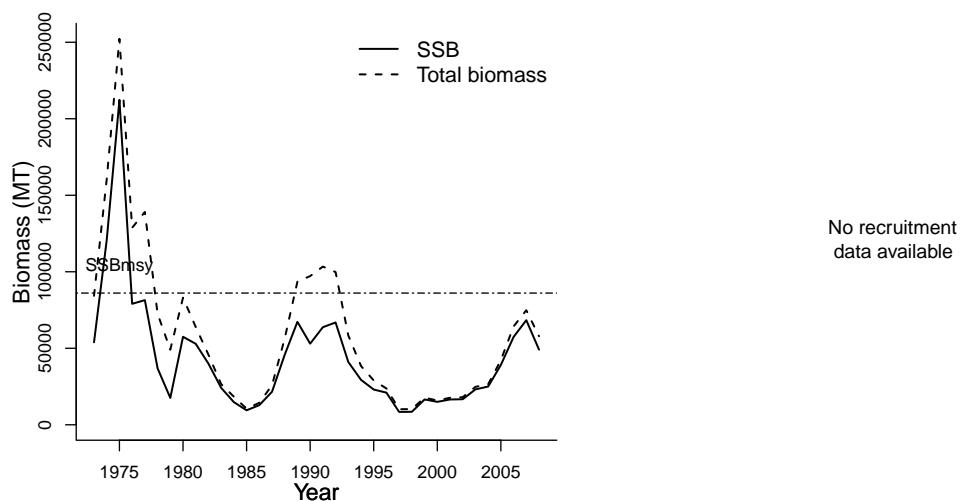
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                      |
| Assessment authors | Anonymous  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2008   |
| Timeseries span    | 1965-2008  |
| Document           | CRABSAFE2008.pdf (pdf in database)                   |
| Recorder           | JENSEN   |
| Date entered       | 2009-04-14   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-12   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                           |          | tertiary LME |  |  |  |
|---------------------|-------|-------|---|----------|--------------|--|--|--|
| 1 - East Bering Sea |       |       | na                                      |          | na           |  |  |  |
| Parameter           | Value | Units |   |          |              |  |  |  |
| SSB-SEX-sex         | 2     | sex   |   |          |              |  |  |  |
| REC-AGE             |       |       | Reference points                        |          |              |  |  |  |
| SSB-AGE-yr          |       |       | Parameter                               | Value    | Units        |  |  |  |
| TB-AGE-yr           |       |       | SSB <sub>msy</sub> -MT (SSB)            | 86073.62 | MT           |  |  |  |
| F-AGE-yr            |       |       | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 0.571    |              |  |  |  |
| M                   |       |       |   |          |              |  |  |  |
| A50-yr              |       |       |   |          |              |  |  |  |
| L50-cm              |       |       |   |          |              |  |  |  |

| Time series minima and maxima |           |   |       |           |
|-------------------------------|-----------|---|-------|-----------|
|                               | SSB       | R | F     | TB        |
| Minimum year                  | 1973      |   | 1973  | 1973      |
| Maximum year                  | 2008      |   | 2007  | 2008      |
| Time series minimum           | 8391.45   |   | 0.02  | 10160.46  |
| Time series maximum           | 212353.63 |   | 0.6   | 252247.05 |
| Units                         | MT        |   | ratio | MT        |
|                               |           |   |       | MT        |



# Assessment of Aleutian Islands walleye pollock

## *(Theragra chalcogramma)*

Assessment ID:AFSC-WPOLLAI-1976-2008-MELNYCHUK

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/284>

Area ID: USA-NMFS-AI

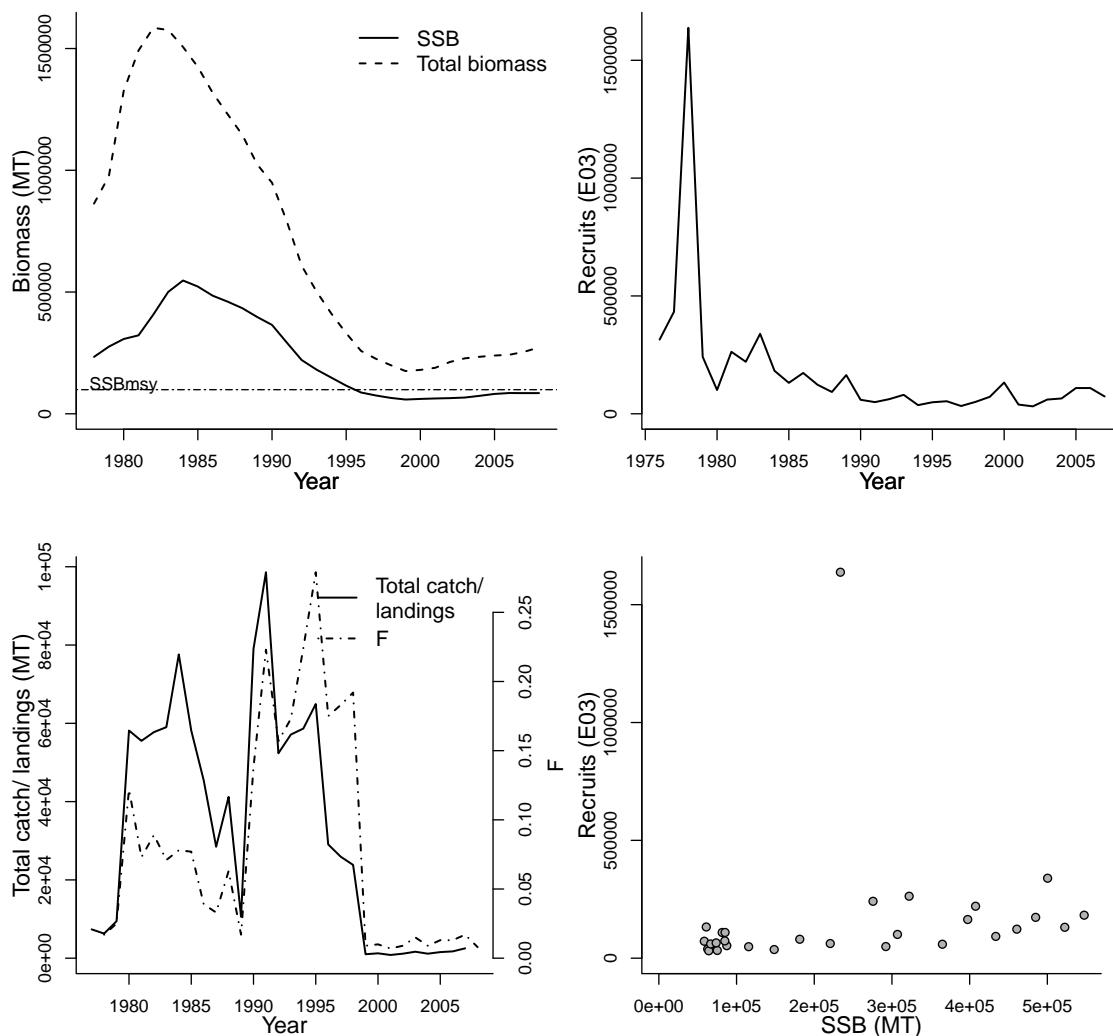
### General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                            |
| Assessment authors | Barbeaux, S.   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model         |
| Publication year   | 2008   |
| Timeseries span    | 1976-2008  |
| Document           | AFSC-WPOLLAI-2008-Walleye pollock AI.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-16   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME          |        | tertiary LME |  |
|---------------------|-------|-------|------------------------|--------|--------------|--|
| 1 - East Bering Sea |       |       | na                     |        | na           |  |
| Parameter           | Value | Units | Reference points       |        |              |  |
|                     |       |       | Parameter              | Value  | Units        |  |
| SSB-AGE-yr          | 4.5   | yr    | Fmsy-1/yr (F)          | 0.357  | 1/yr         |  |
| SSB-SEX-sex         | 1     | sex   | NATMORT-1/yr (M)       | 0.215  | 1/yr         |  |
| REC-AGE-yr          | 2     | yr    | F40%-1/T               | 0.288  | 1/T          |  |
| F-AGE-yr-yr         | 2-15+ | yr-yr | SSBmsy-MT (SSB)        | 98987  | MT           |  |
| TB-AGE-yr           | 2+    | yr    | SSBF40%-MT             | 113128 | MT           |  |
| A50-yr              | 4.5   | yr    | $F_{2008}/F_{msy}$     | 0.022  |              |  |
| M-1/yr              | 0.215 | 1/yr  | $SSB_{2008}/SSB_{msy}$ | 0.858  |              |  |
| NATMORT-1/yr        | 0.215 | 1/yr  |                        |        |              |  |
| M                   |       |       |                        |        |              |  |
| L50-cm              |       |       |                        |        |              |  |

| Time series minima and maxima |        |         |       |         |
|-------------------------------|--------|---------|-------|---------|
|                               | SSB    | R       | F     | TB      |
| Minimum year                  | 1978   | 1976    | 1978  | 1978    |
| Maximum year                  | 2008   | 2007    | 2008  | 2008    |
| Time series minimum           | 58489  | 31500   | 0.007 | 175420  |
| Time series maximum           | 547400 | 1637800 | 0.279 | 1585100 |
| Units                         | MT     | E03     | 1/yr  | MT      |



# Assessment of Eastern Bering Sea walleye pollock (*Theragra chalcogramma*)

Assessment ID:AFSC-WPOLLEBS-1963-2008-MELNYCHUK  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/267>

Area ID: USA-NMFS-EBS

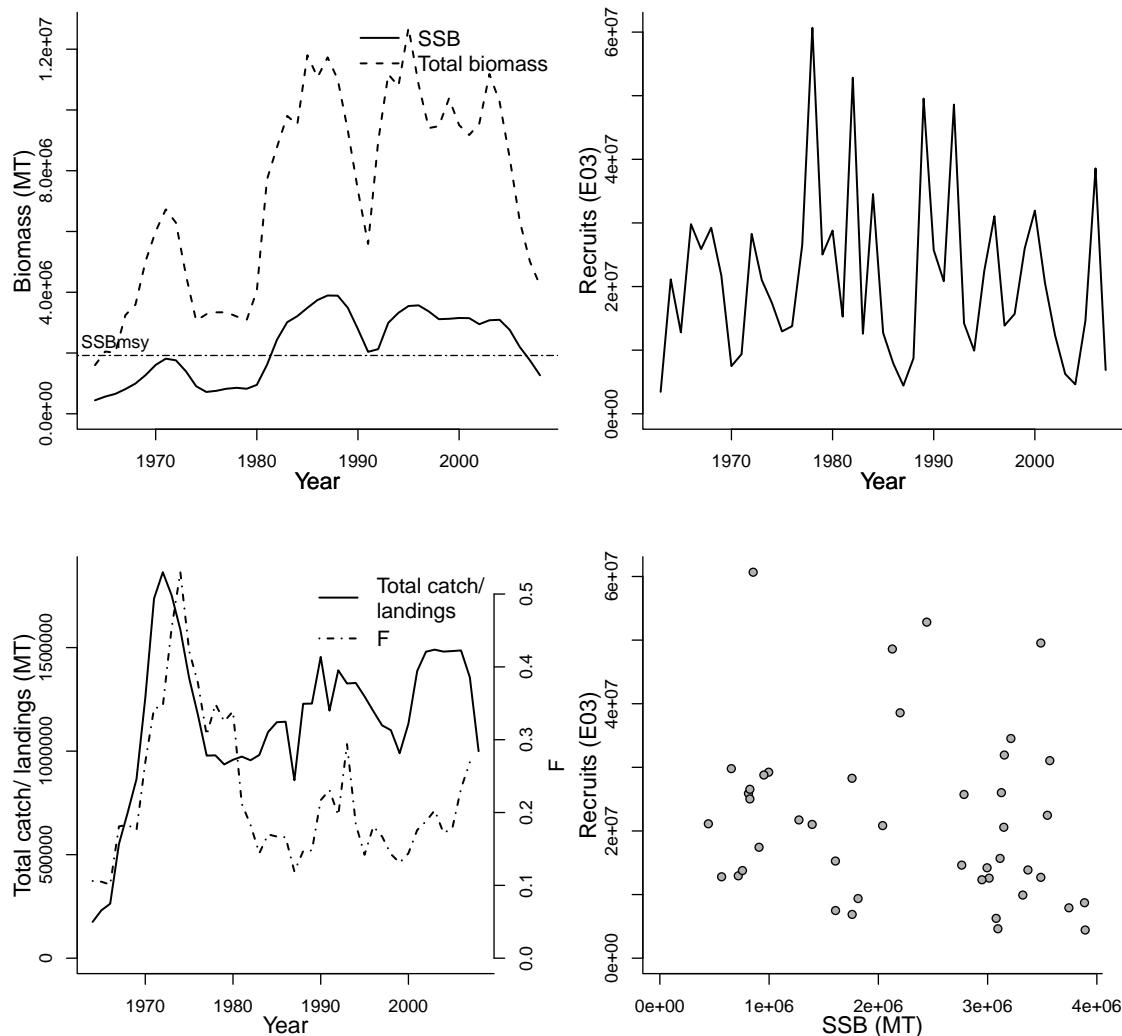
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                              |
| Assessment authors | Ianelli JN   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model           |
| Publication year   | 2008   |
| Timeseries span    | 1963-2008  |
| Document           | AFSC-WPOLLEBS-2008-Walleye pollock EBS.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-14   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-16   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME                             | secondary LME | tertiary LME |
|--------------|-------|-------|---|---------------|--------------|
|              |       |       | 1 - East Bering Sea                     | na            | na           |
| SSB-AGE-yr   | 3.5   | yr    |   |               |              |
| SSB-SEX-sex  | 1     | sex   | Fref-1/T (F)                            | 0.398         | 1/T          |
| REC-AGE-yr   | 1     | yr    | NATMORT-1/yr (M)                        | 0.3           | 1/yr         |
| F-AGE-yr-yr  | 1+    | yr-yr | F40%-1/T                                | 0.332         | 1/T          |
| TB-AGE-yr    | 3+    | yr    | SSBmsy-MT (SSB)                         | 1919000       | MT           |
| A50-yr       | 3.5   | yr    | MSY-MT (TB)                             | 977000        | MT           |
| M-1/yr       | 0.3   | 1/yr  | SSB0-MT (SSB)                           | 4980000       | MT           |
| NATMORT-1/yr | 0.3   | 1/yr  | SSBF40%-MT                              | 2427000       | MT           |
| M            |       |       | BH-h-dimless                            | 0.67          | dimless      |
| L50-cm       |       |       | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 0.660         |              |

| Time series minima and maxima |         |          |       |          |
|-------------------------------|---------|----------|-------|----------|
|                               | SSB     | R        | F     | TB       |
| Minimum year                  | 1964    | 1963     | 1964  | 1964     |
| Maximum year                  | 2008    | 2007     | 2007  | 2008     |
| Time series minimum           | 444000  | 3455000  | 0.101 | 1600000  |
| Time series maximum           | 3893000 | 60673000 | 0.53  | 12704000 |
| Units                         | MT      | E03      | 1/yr  | MT       |



# Assessment of Gulf of Alaska walleye pollock

## *(Theragra chalcogramma)*

Assessment ID:AFSC-WPOLLGA-1964-2008-MELNYCHUK

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/272>

Area ID: USA-NMFS-GA

### General assessment details.

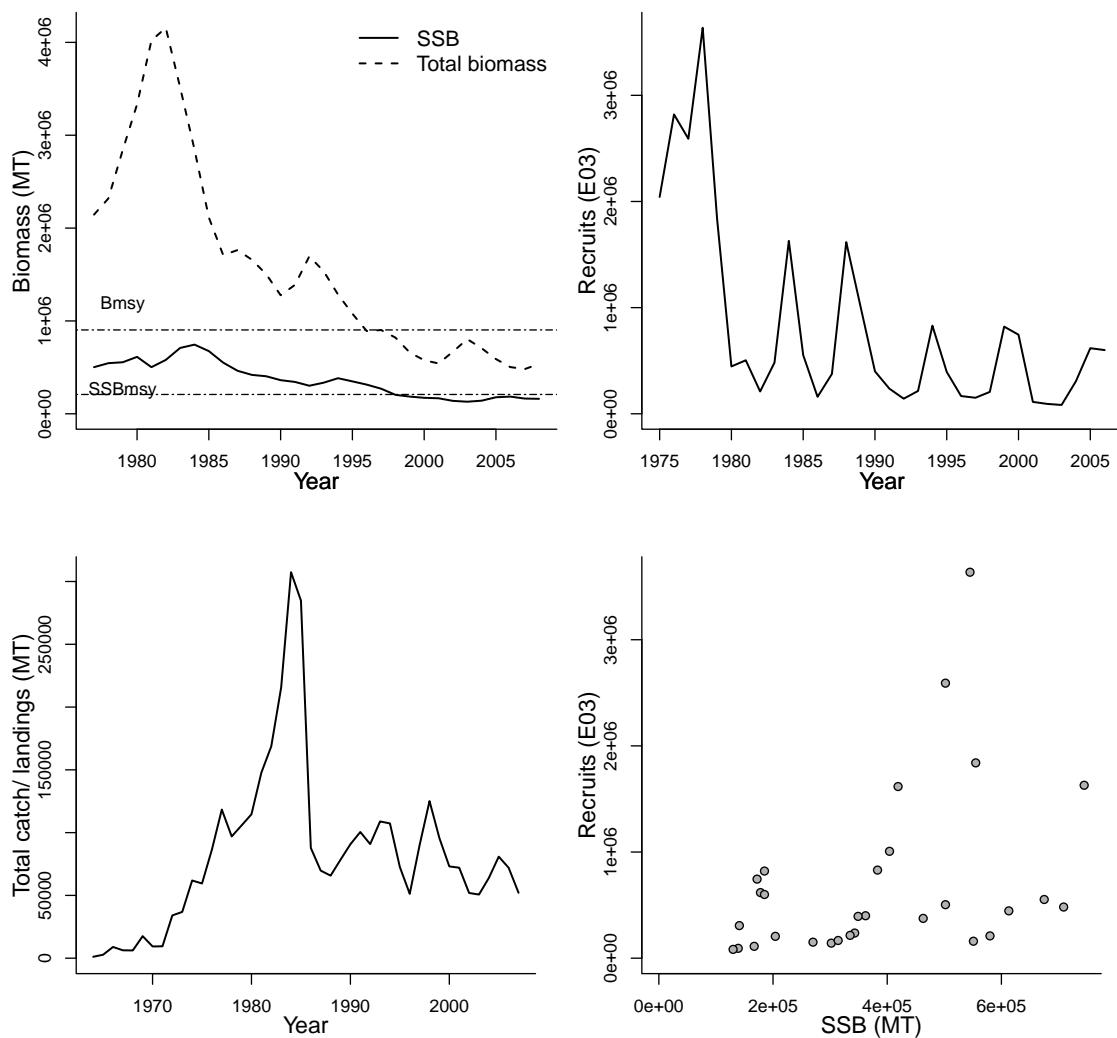
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Alaska Fisheries Science Center                            |
| Assessment authors | Dorn, Martin   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model         |
| Publication year   | 2008   |
| Timeseries span    | 1964-2008  |
| Document           | AFSC-WPOLLGA-2008-Walleye pollock GA.pdf (pdf in database) |
| Recorder           | MELNYCHUK  |
| Date entered       | 2009-04-16   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-27   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME          |        |       | tertiary LME |       |       |
|--------------------|-------|-------|------------------------|--------|-------|--------------|-------|-------|
| 2 - Gulf of Alaska |       |       | na                     |        |       | na           |       |       |
| Reference points   |       |       |                        |        |       |              |       |       |
| Parameter          | Value | Units | Parameter              | Value  | Units | Parameter    | Value | Units |
| SSB-AGE-yr         | 4.9   | yr    | Fmsy-1/yr (F)          | 0.286  | 1/yr  |              |       |       |
| SSB-SEX-sex        | 1     | sex   | NATMORT-1/yr (M)       | 0.3    | 1/yr  |              |       |       |
| REC-AGE-yr         | 2     | yr    | F40%-1/T               | 0.245  | 1/T   |              |       |       |
| TB-AGE-yr          | 3+    | yr    | SSBmsy-MT (SSB)        | 208000 | MT    |              |       |       |
| A50-yr             | 4.9   | yr    | MSY-MT (TB)            | 169000 | MT    |              |       |       |
| L50-cm             | 43    | cm    | Umsy-ratio (U)         | 0.187  | ratio |              |       |       |
| M-1/yr             | 0.3   | 1/yr  | Bmsy-MT (TB)           | 903000 | MT    |              |       |       |
| NATMORT-1/yr       | 0.3   | 1/yr  | SSBF40%-MT             | 237000 | MT    |              |       |       |
| F-AGE-yr           |       |       | BF40%-MT               | 975000 | MT    |              |       |       |
| M                  |       |       | U40%-ratio             | 0.161  | ratio |              |       |       |
|                    |       |       | $TB_{2008}/B_{msy}$    | 0.595  |       |              |       |       |
|                    |       |       | $SSB_{2008}/SSB_{msy}$ | 0.774  |       |              |       |       |

## Time series minima and maxima

|                     | SSB    | R       | F | TB      | Catch  |
|---------------------|--------|---------|---|---------|--------|
| Minimum year        | 1977   | 1975    |   | 1977    | 1964   |
| Maximum year        | 2008   | 2006    |   | 2008    | 2007   |
| Time series minimum | 130000 | 83000   |   | 481000  | 1126   |
| Time series maximum | 745000 | 3636000 |   | 4157000 | 307401 |
| Units               | MT     | E03     |   | MT      | MT     |



# Assessment of Bering Sea and Aleutian Islands yellowfin sole (*Limanda aspera*)

Assessment ID:AFSC-YSOLEBSAI-1959-2008-MELNYCHUK  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/270>

Area ID: USA-NMFS-BSAI

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Alaska Fisheries Science Center                               |
| Assessment authors | Wilderbuer T  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model            |
| Publication year   | 2008  |
| Timeseries span    | 1959-2008   |
| Document           | AFSC-YSOLEBSAI-2008-Yellowfin sole BSAI.pdf (pdf in database) |
| Recorder           | MELNYCHUK   |
| Date entered       | 2009-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-27  |

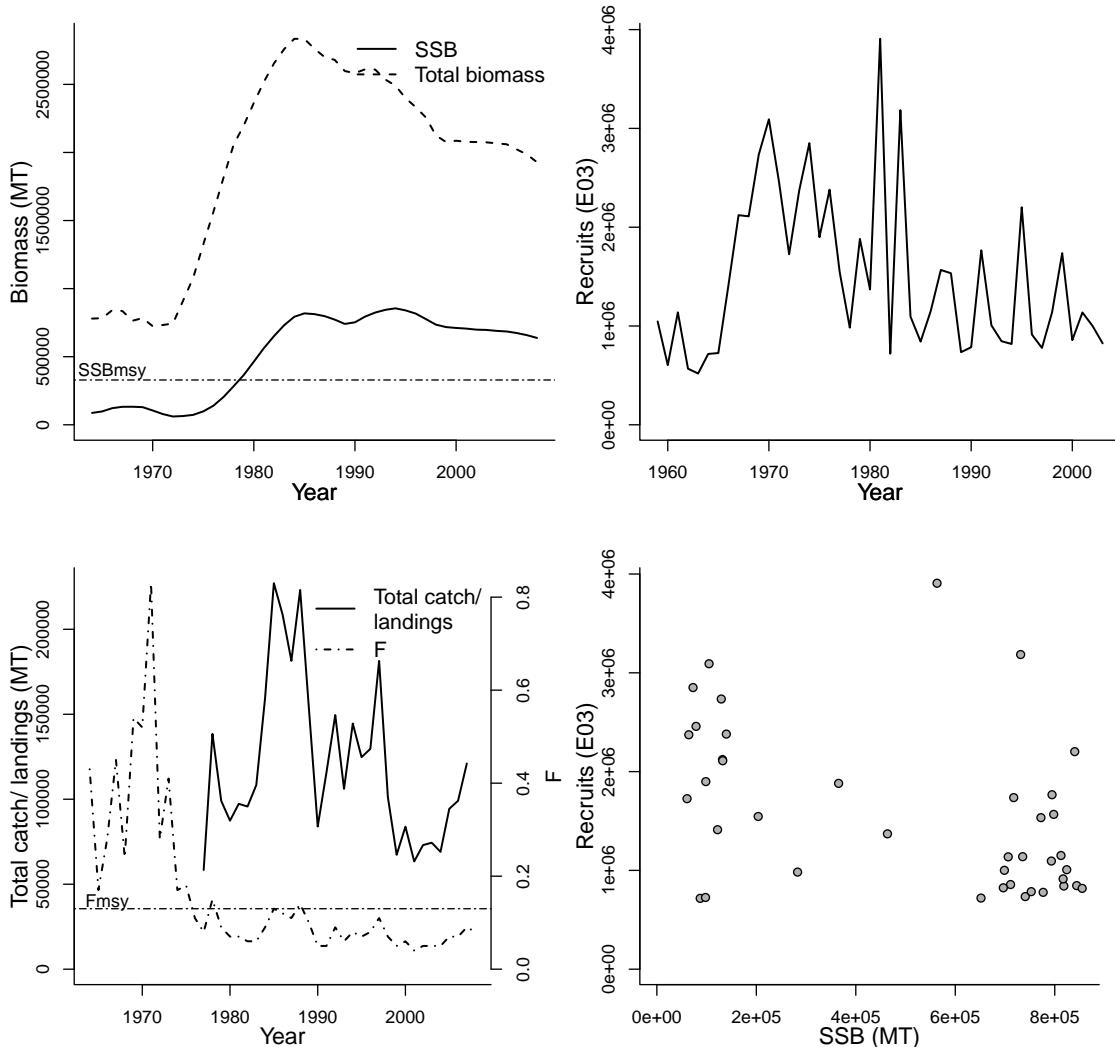
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME         | secondary LME | tertiary LME |
|--------------|-------|-------|---------------------|---------------|--------------|
|              |       |       | 1 - East Bering Sea | na            | na           |
| SSB-AGE-yr   | 10.5  | yr    |                     |               |              |
| SSB-SEX-sex  | 1     | sex   |                     |               |              |
| REC-AGE-yr   | 5     | yr    |                     |               |              |
| TB-AGE-yr    | 2+    | yr    |                     |               |              |
| A50-yr       | 10.5  | yr    |                     |               |              |
| M-1/yr       | 0.12  | 1/yr  |                     |               |              |
| NATMORT-1/yr | 0.12  | 1/yr  |                     |               |              |
| F-AGE-yr     |       |       |                     |               |              |
| M            |       |       |                     |               |              |
| L50-cm       |       |       |                     |               |              |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| Fmsy-1/yr (F)          | 0.13             | 1/yr  |       |
| NATMORT-1/yr (M)       | 0.12             | 1/yr  |       |
| SSBmsy-MT (SSB)        | 329000           | MT    |       |
| $F_{2008}/F_{msy}$     | 0.615            |       |       |
| $SSB_{2008}/SSB_{msy}$ | 1.939            |       |       |

| Time series minima and maxima |        |         |      |         |
|-------------------------------|--------|---------|------|---------|
|                               | SSB    | R       | F    | TB      |
| Minimum year                  | 1964   | 1959    | 1964 | 1964    |
| Maximum year                  | 2008   | 2003    | 2008 | 2008    |
| Time series minimum           | 60692  | 519000  | 0.04 | 724283  |
| Time series maximum           | 855155 | 3907000 | 0.83 | 2834670 |
| Units                         | MT     | E03     | 1/yr | MT      |



# Assessment of Barents Sea capelin (*Mallotus villosus*)

Assessment ID:AFWG-CAPENOR-1965-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/362>

Area ID: multinational-ICES-I

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Arctic Fisheries Working Group                |
| Assessment authors | Anonymous                                     |
| Assessment method  | Spreadsheet assessment model used for Capelin |
| Publication year   | 2007  |
| Timeseries span    | 1965-2007                                     |
| Document           | ICES-AFWG-2007.pdf (pdf in database)          |
| Recorder           | MINTO   |
| Date entered       | 2008-04-08                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-08                                    |

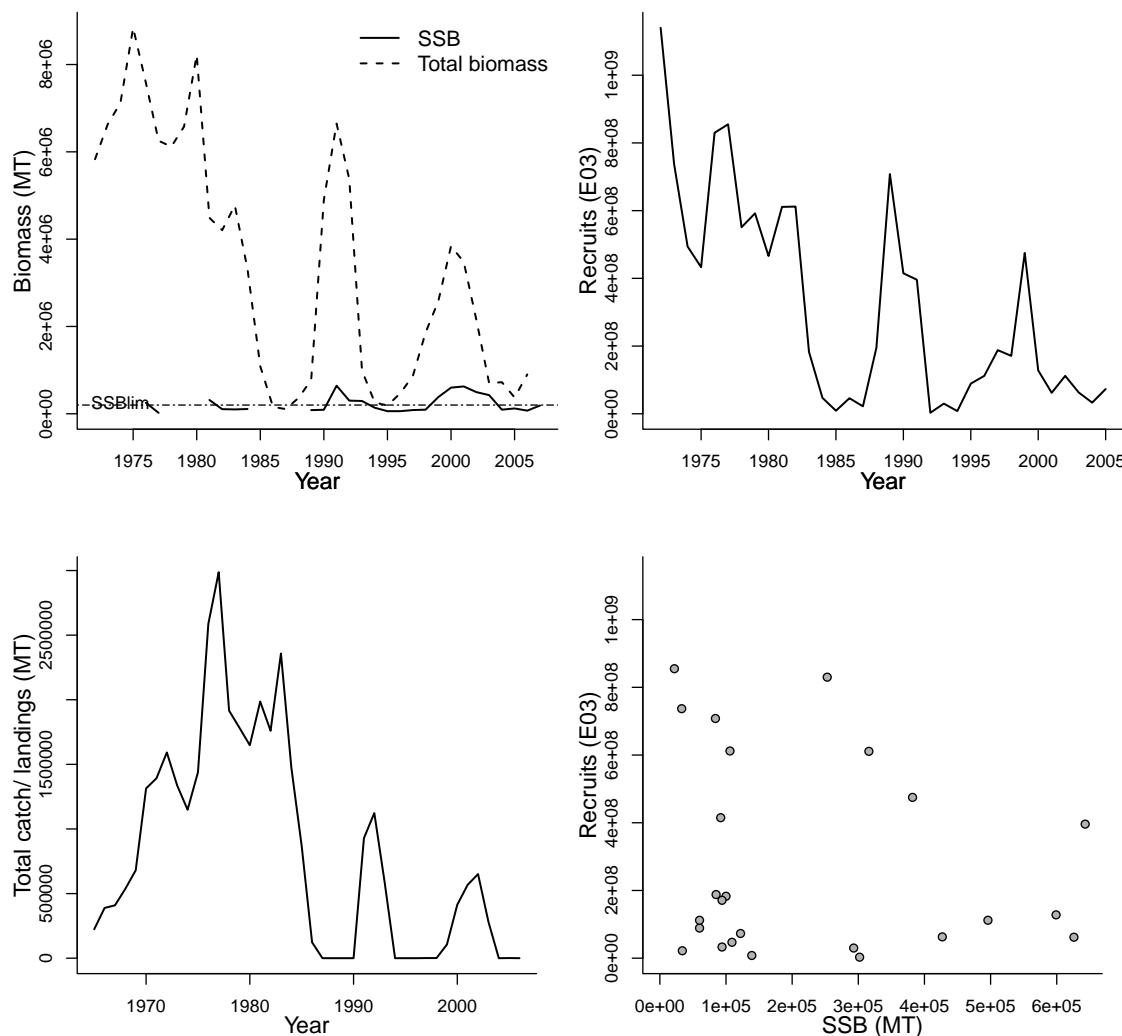
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME      | secondary LME | tertiary LME |
|-------------|-----------|-------|------------------|---------------|--------------|
|             |           |       | 20 - Barents Sea | na            | na           |
| SSB-AGE-yr  | 2+        | yr    |                  |               |              |
| REC-AGE-yr  | 1         | yr    |                  |               |              |
| TB-AGE-yr   | 1+        | yr    |                  |               |              |
| M-1/T       | AVAILABLE | 1/T   |                  |               |              |
| SSB-SEX-sex |           |       |                  |               |              |
| F-AGE-yr    |           |       |                  |               |              |
| M           |           |       |                  |               |              |
| A50-yr      |           |       |                  |               |              |
| L50-cm      |           |       |                  |               |              |

| Parameter              | Value     | Units | Reference points |
|------------------------|-----------|-------|------------------|
| SSBlim-MT (SSB)        | 200000    | MT    |                  |
| MORATOR-yr-yr          | 1986-1991 | yr-yr |                  |
| MORATOR-yr-yr          | 1993-1999 | yr-yr |                  |
| MORATOR-yr-yr          | 2004-2006 | yr-yr |                  |
| $SSB_{2007}/SSB_{lim}$ | 0.945     |       |                  |

| Time series minima and maxima |        |            |         |         |
|-------------------------------|--------|------------|---------|---------|
|                               | SSB    | R          | F       | TB      |
| Minimum year                  | 1973   | 1972       |         | 1972    |
| Maximum year                  | 2007   | 2005       |         | 2006    |
| Time series minimum           | 22000  | 3000000    | 107000  | 0       |
| Time series maximum           | 643000 | 1140000000 | 8841000 | 2987000 |
| Units                         | MT     | E03        | MT      | MT      |



# Assessment of North-East Arctic atlantic cod

## (*Gadus morhua*)

Assessment ID: AFWG-CODCOASTNOR-1982-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/363>

Area ID: multinational-ICES-I-II

### General assessment details.

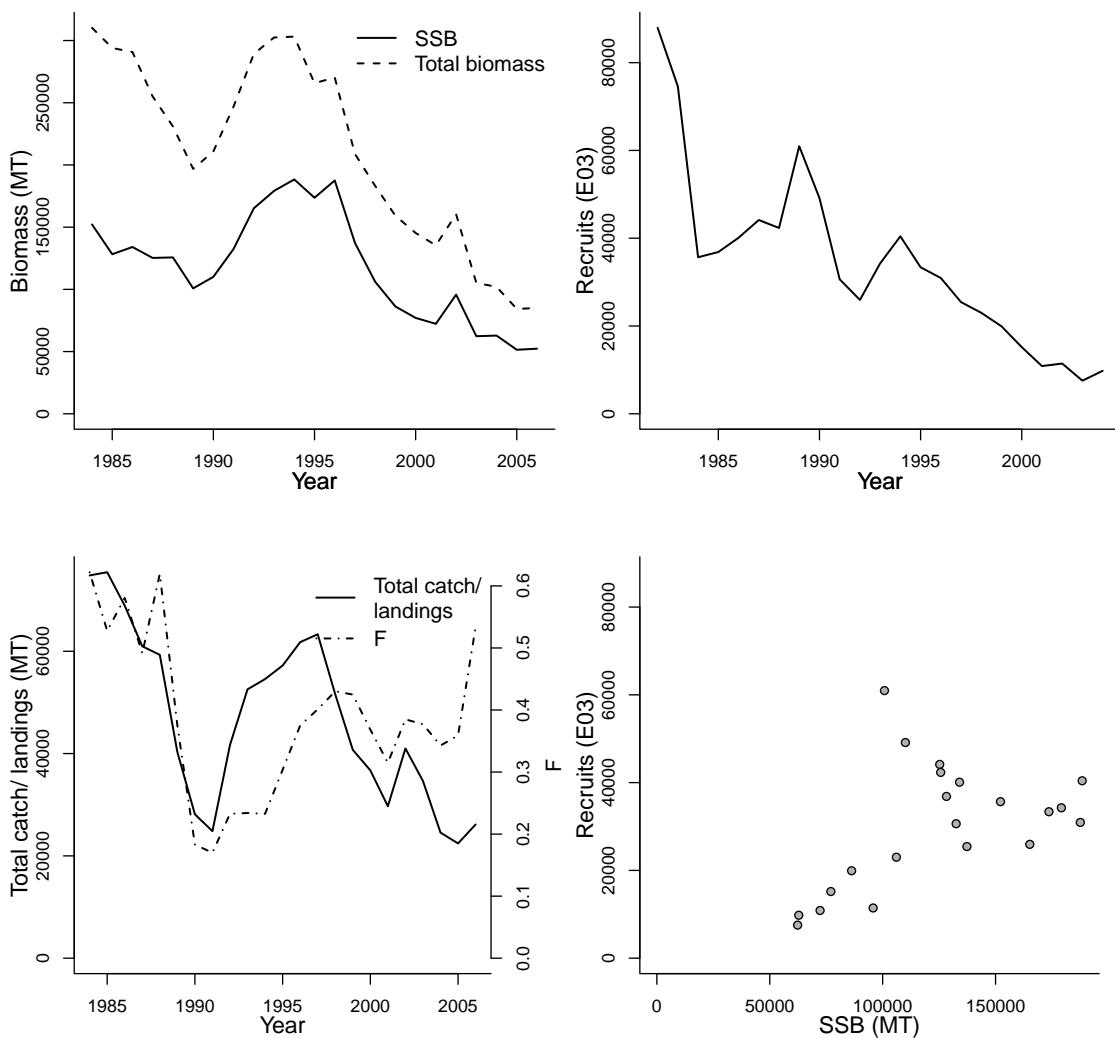
| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | Arctic Fisheries Working Group       |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1982-2006                            |
| Document           | ICES-AFWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-03-24                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME    | tertiary LME |
|--------------------|------------------|--------------|
| 21 - Norwegian Sea | 22 - North Sea   | na           |
| <hr/>              |                  |              |
| Parameter          | Value            | Units        |
| A50-yr             | 5                | yr           |
| SSB-AGE-yr         | 2+               | yr           |
| REC-AGE-yr         | 2                | yr           |
| F-AGE-yr-yr        | 4-7              | yr-yr        |
| M-1/T              | 0.2              | 1/T          |
| TB-AGE-yr          | 2+               | yr           |
| <hr/>              |                  |              |
| SSB-SEX-sex        | Reference points |              |
| M                  | Parameter        | Value        |
| L50-cm             |                  | Units        |

## Time series minima and maxima

|                     | SSB    | R     | F      | TB     | Catch |
|---------------------|--------|-------|--------|--------|-------|
| Minimum year        | 1984   | 1982  | 1984   | 1984   | 1984  |
| Maximum year        | 2006   | 2004  | 2006   | 2006   | 2006  |
| Time series minimum | 51445  | 7539  | 0.1699 | 84309  | 22432 |
| Time series maximum | 188357 | 87938 | 0.6221 | 310230 | 75451 |
| Units               | MT     | E03   | 1/T    | MT     | MT    |



# Assessment of North-East Arctic atlantic cod

## *(Gadus morhua)*

Assessment ID:AFWG-CODNEAR-1943-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/364>

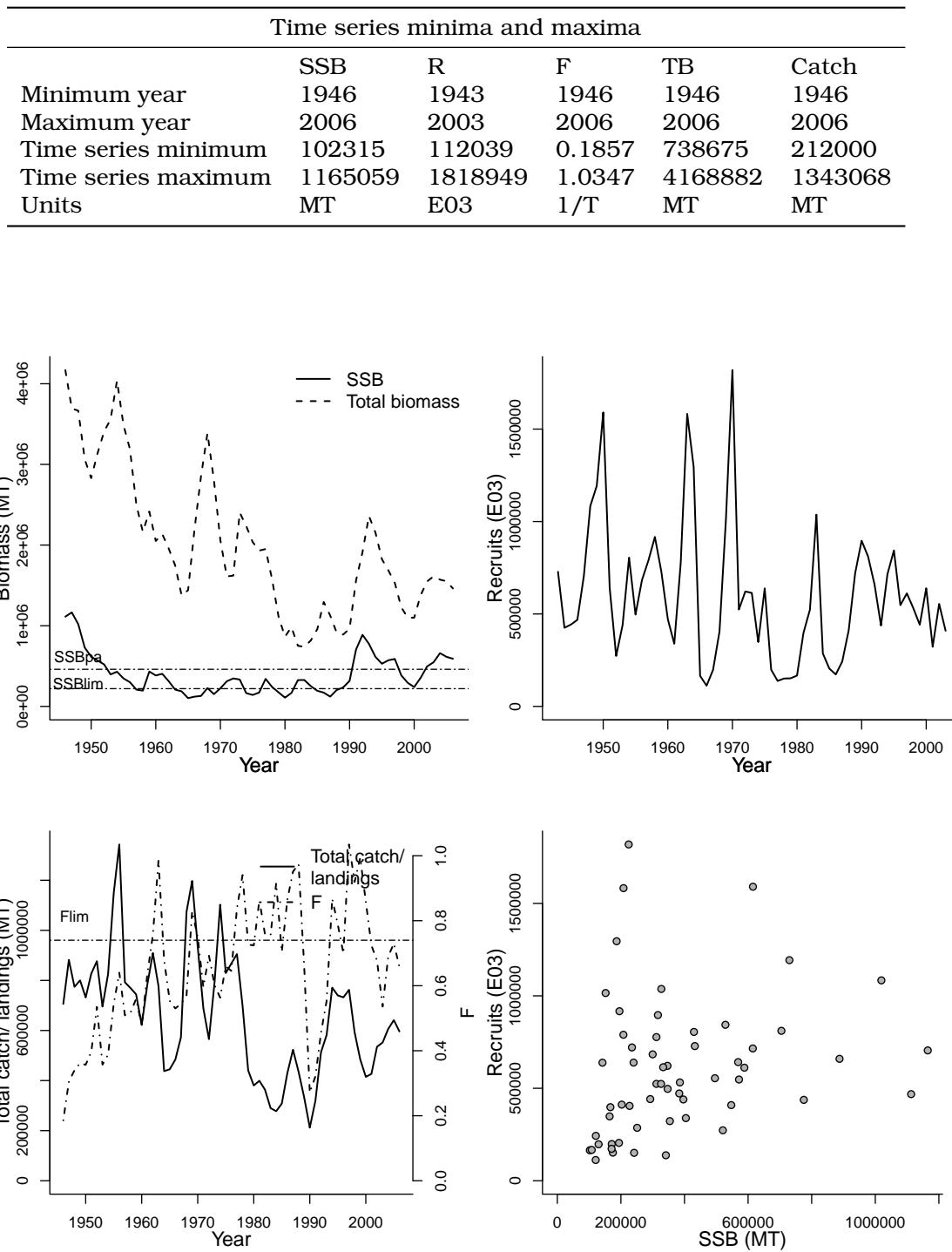
Area ID: multinational-ICES-I-II

General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | Arctic Fisheries Working Group       |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1943-2006                            |
| Document           | ICES-AFWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-02-15                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME      |       |       | secondary LME          |                        |        | tertiary LME |       |       |
|------------------|-------|-------|------------------------|------------------------|--------|--------------|-------|-------|
| 20 - Barents Sea |       |       | 21 - Norwegian Sea     |                        |        | na           |       |       |
| Parameter        | Value | Units | Parameter              | Reference points       | Value  | Parameter    | Value | Units |
| A50-yr           | 6.5   | yr    | SSBlim-MT (SSB)        | SSBlim-MT (SSB)        | 220000 | MT           |       |       |
| SSB-AGE-yr       | 3+    | yr    | SSBpa-MT (SSB)         | SSBpa-MT (SSB)         | 460000 | MT           |       |       |
| SSB-SEX-sex      | 0     | sex   | F0.1-1/T               | F0.1-1/T               | 0.15   | 1/T          |       |       |
| REC-AGE-yr       | 3     | yr    | Flim-1/T (F)           | Flim-1/T (F)           | 0.74   | 1/T          |       |       |
| F-AGE-yr-yr      | 5-10  | yr-yr | Fpa-1/T (F)            | Fpa-1/T (F)            | 0.4    | 1/T          |       |       |
| M-1/T            | 0.2   | 1/T   | Fmax-1/T               | Fmax-1/T               | 0.28   | 1/T          |       |       |
| TB-AGE-yr        | 3+    | yr    | $SSB_{2006}/SSB_{lim}$ | $SSB_{2006}/SSB_{lim}$ | 2.685  |              |       |       |
| M                |       |       | $F_{2006}/F_{lim}$     | $F_{2006}/F_{lim}$     | 0.889  |              |       |       |
| L50-cm           |       |       |                        |                        |        |              |       |       |



# Assessment of North-East Arctic greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID: AFWG-GHALNEAR-1959-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/76>

Area ID: multinational-ICES-I-II

General assessment details.

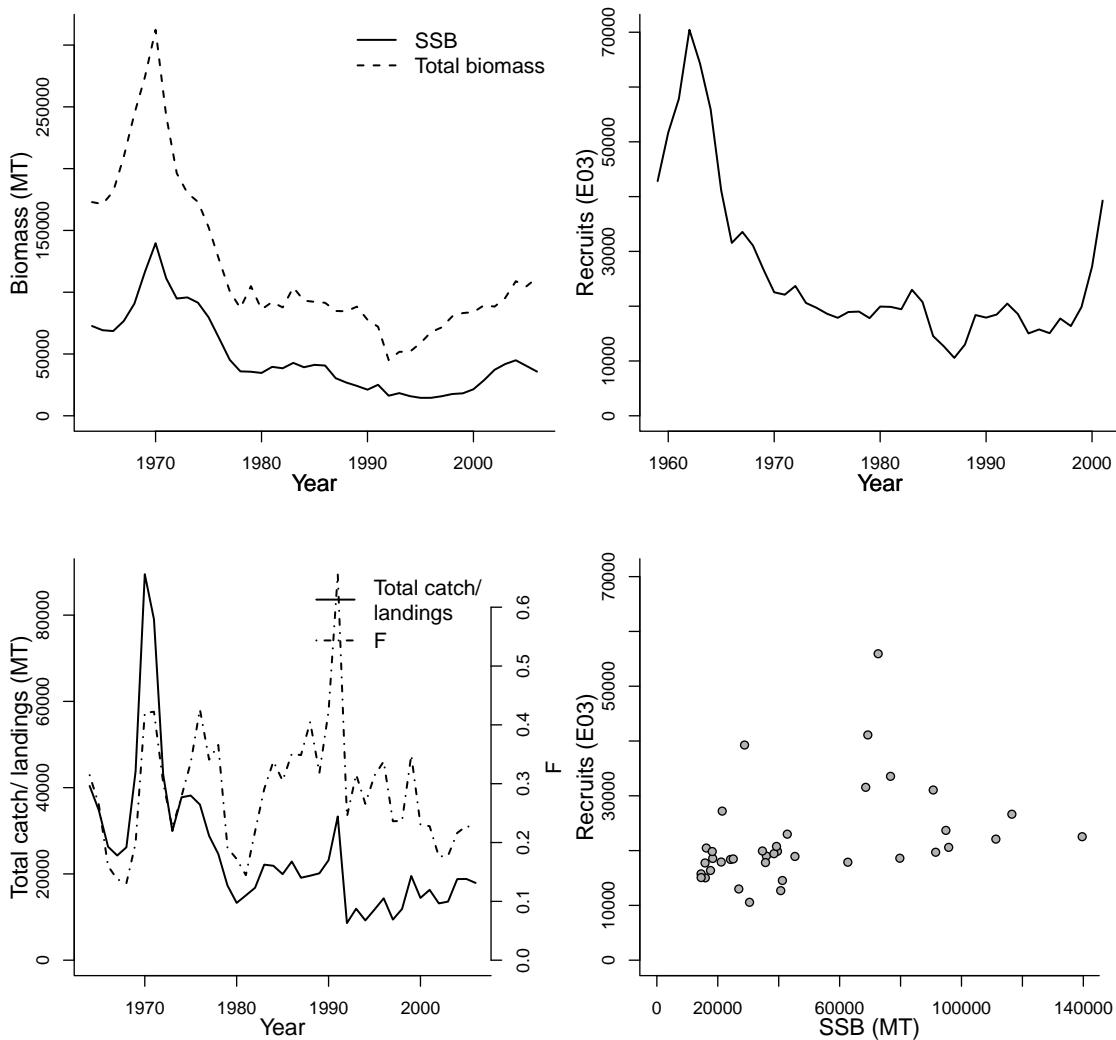
| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | Arctic Fisheries Working Group       |
| Assessment authors | Anonymous                            |
| Assessment method  | Extended Survivor Analysis           |
| Publication year   | 2007                                 |
| Timeseries span    | 1959-2007                            |
| Document           | ICES-AFWG-2007.pdf (pdf in database) |
| Recorder           | JENNINGS                             |
| Date entered       | 2008-11-26                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-05-29                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME      | secondary LME      | tertiary LME |
|------------------|--------------------|--------------|
| 20 - Barents Sea | 21 - Norwegian Sea | na           |
| <hr/>            |                    |              |
| Parameter        | Value              | Units        |
| SSB-AGE-yr       | AVAILABLE          | yr           |
| REC-AGE-yr       | 5                  | yr           |
| F-AGE-yr-yr      | 6 to 10            | yr-yr        |
| TB-AGE-yr        | 5+                 | yr           |
| A50-yr           | AVAILABLE          | yr           |
| M-1/T            | 0.15               | 1/T          |
| SSB-SEX-sex      |                    |              |
| M                |                    |              |
| L50-cm           |                    |              |
| <hr/>            |                    |              |
| Reference points |                    |              |
| Parameter        | Value              | Units        |

## Time series minima and maxima

|                     | SSB    | R     | F      | TB     | Catch |
|---------------------|--------|-------|--------|--------|-------|
| Minimum year        | 1964   | 1959  | 1964   | 1964   | 1964  |
| Maximum year        | 2006   | 2001  | 2006   | 2006   | 2006  |
| Time series minimum | 14516  | 10569 | 0.1309 | 45036  | 8602  |
| Time series maximum | 139620 | 70443 | 0.6561 | 312354 | 89484 |
| Units               | MT     | E03   | 1/T    | MT     | MT    |



# Assessment of North-East Arctic golden redfish (*Sebastes norvegicus*)

Assessment ID: AFWG-GOLDREDNEAR-1986-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/365>

Area ID: multinational-ICES-I-II

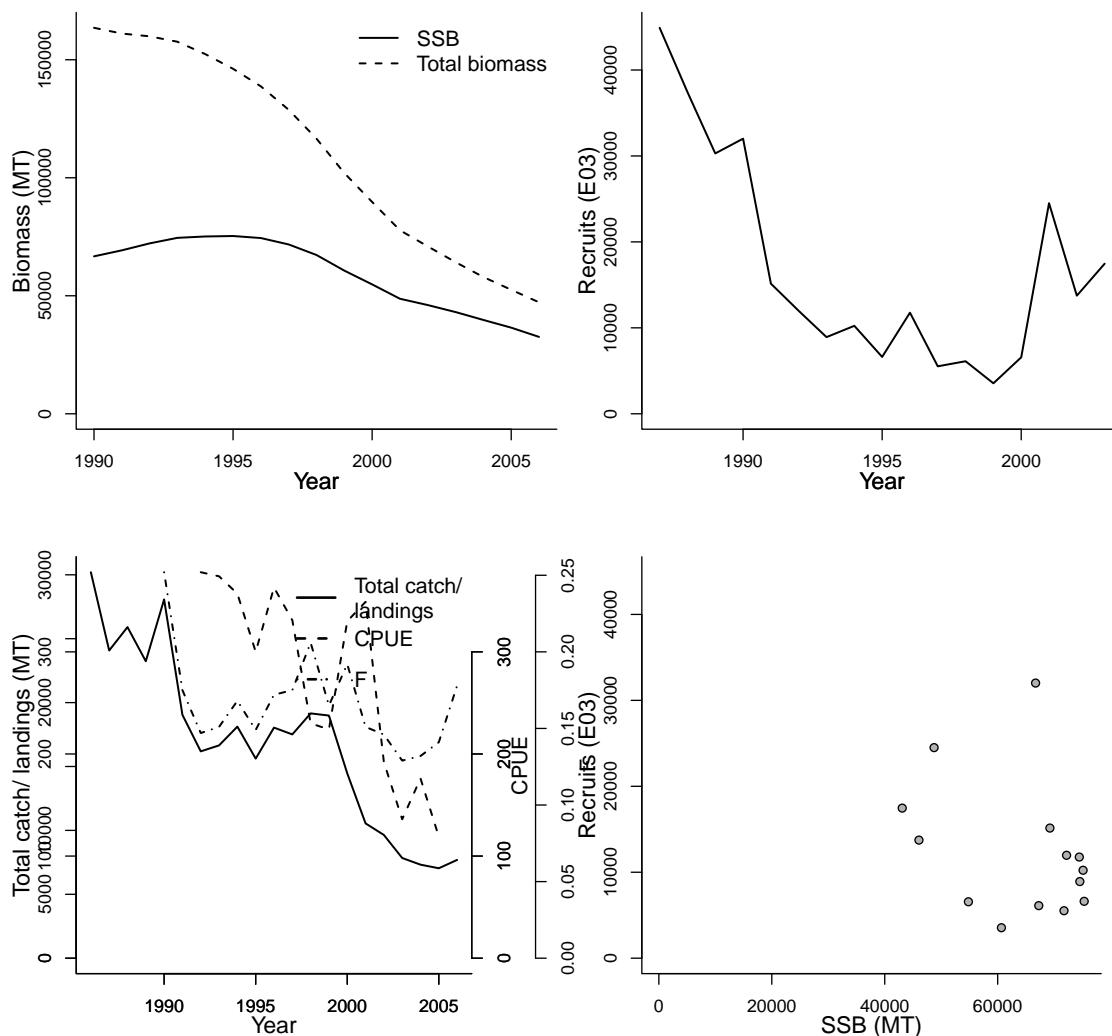
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Arctic Fisheries Working Group  |
| Assessment authors | Anonymous   |
| Assessment method  | Globally Applicable area-Disaggregated General Ecosystem Toolbox - An ecosystem-based management tool used for assessment |
| Publication year   | 2007  |
| Timeseries span    | 1986-2006   |
| Document           | ICES-AFWG-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-07  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-08  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units | primary LME      | secondary LME      | tertiary LME     |
|-------------|-------|-------|------------------|--------------------|------------------|
|             |       |       | 20 - Barents Sea | 21 - Norwegian Sea | na               |
| A50-yr      | 12    | yr    |                  |                    |                  |
| REC-AGE-yr  | 3     | yr    |                  |                    |                  |
| SSB-AGE-yr  | 4+    | yr    |                  |                    | Reference points |
| M-1/T       | 0.10  | 1/T   | Parameter        | Value              | Units            |
| TB-AGE-yr   | 3+    | yr    | MORATOR-yr-yr    | 2004-2007          | yr-yr            |
| F-AGE-yr-yr | 12-19 | yr-yr |                  |                    |                  |
| SSB-SEX-sex |       |       |                  |                    |                  |
| M           |       |       |                  |                    |                  |
| L50-cm      |       |       |                  |                    |                  |

| Time series minima and maxima |       |       |       |        |       |
|-------------------------------|-------|-------|-------|--------|-------|
|                               | SSB   | R     | F     | TB     | Catch |
| Minimum year                  | 1990  | 1987  | 1990  | 1990   | 1986  |
| Maximum year                  | 2006  | 2003  | 2006  | 2006   | 2006  |
| Time series minimum           | 32572 | 3547  | 0.129 | 47231  | 7037  |
| Time series maximum           | 75317 | 44912 | 0.252 | 163536 | 30203 |
| Units                         | MT    | E03   | 1/T   | MT     | MT    |



# Assessment of North-East Arctic haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:AFWG-HADNEAR-1947-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/366>

Area ID: multinational-ICES-I-II

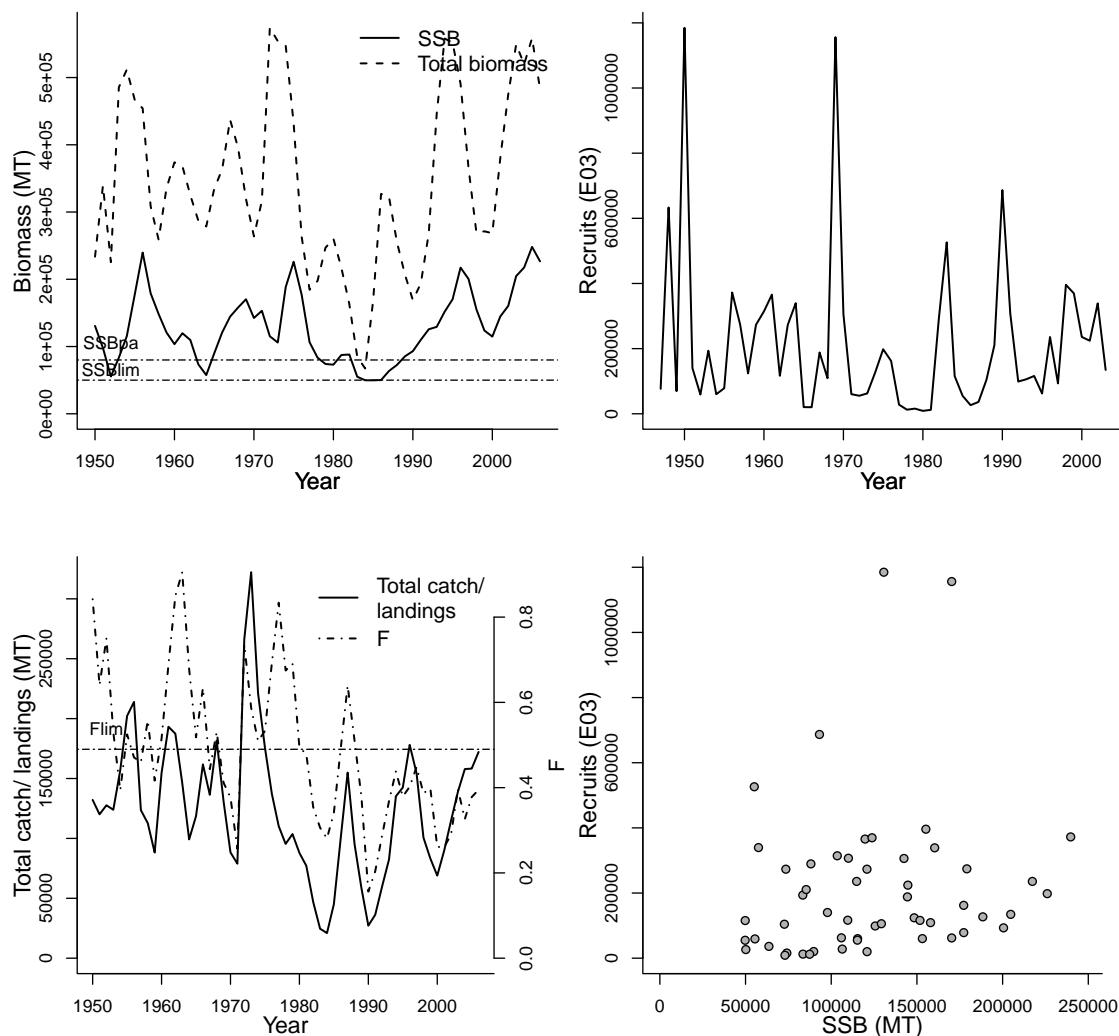
### General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | Arctic Fisheries Working Group       |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1947-2006                            |
| Document           | ICES-AFWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-03-31                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value             | Units | Reference points       |       |       |
|-------------|-------------------|-------|------------------------|-------|-------|
|             |                   |       | Parameter              | Value | Units |
| A50-yr      | 6                 | yr    | SSBlim-MT (SSB)        | 50000 | MT    |
| SSB-AGE-yr  | 3+                | yr    | SSBpa-MT (SSB)         | 80000 | MT    |
| REC-AGE-yr  | 3                 | yr    | Flim-1/T (F)           | 0.49  | 1/T   |
| F-AGE-yr-yr | 4-7               | yr-yr | Fpa-1/T (F)            | 0.35  | 1/T   |
| M-1/T       | 0.2+cod mortality | 1/T   | $SSB_{2006}/SSB_{lim}$ | 4.533 |       |
| TB-AGE-yr   | 3+                | yr    | $F_{2006}/F_{lim}$     | 0.806 |       |
| SSB-SEX-sex |                   |       |                        |       |       |
| M           |                   |       |                        |       |       |
| L50-cm      |                   |       |                        |       |       |

| Time series minima and maxima |        |         |        |        |
|-------------------------------|--------|---------|--------|--------|
|                               | SSB    | R       | F      | TB     |
| Minimum year                  | 1950   | 1947    | 1950   | 1950   |
| Maximum year                  | 2006   | 2003    | 2006   | 2006   |
| Time series minimum           | 49753  | 8961    | 0.1562 | 67367  |
| Time series maximum           | 248181 | 1184843 | 0.9053 | 573954 |
| Units                         | MT     | E03     | 1/T    | MT     |



# Assessment of North-East Arctic pollock

## *(Pollachius virens)*

Assessment ID: AFWG-POLLNEAR-1957-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/367>

Area ID: multinational-ICES-I-II

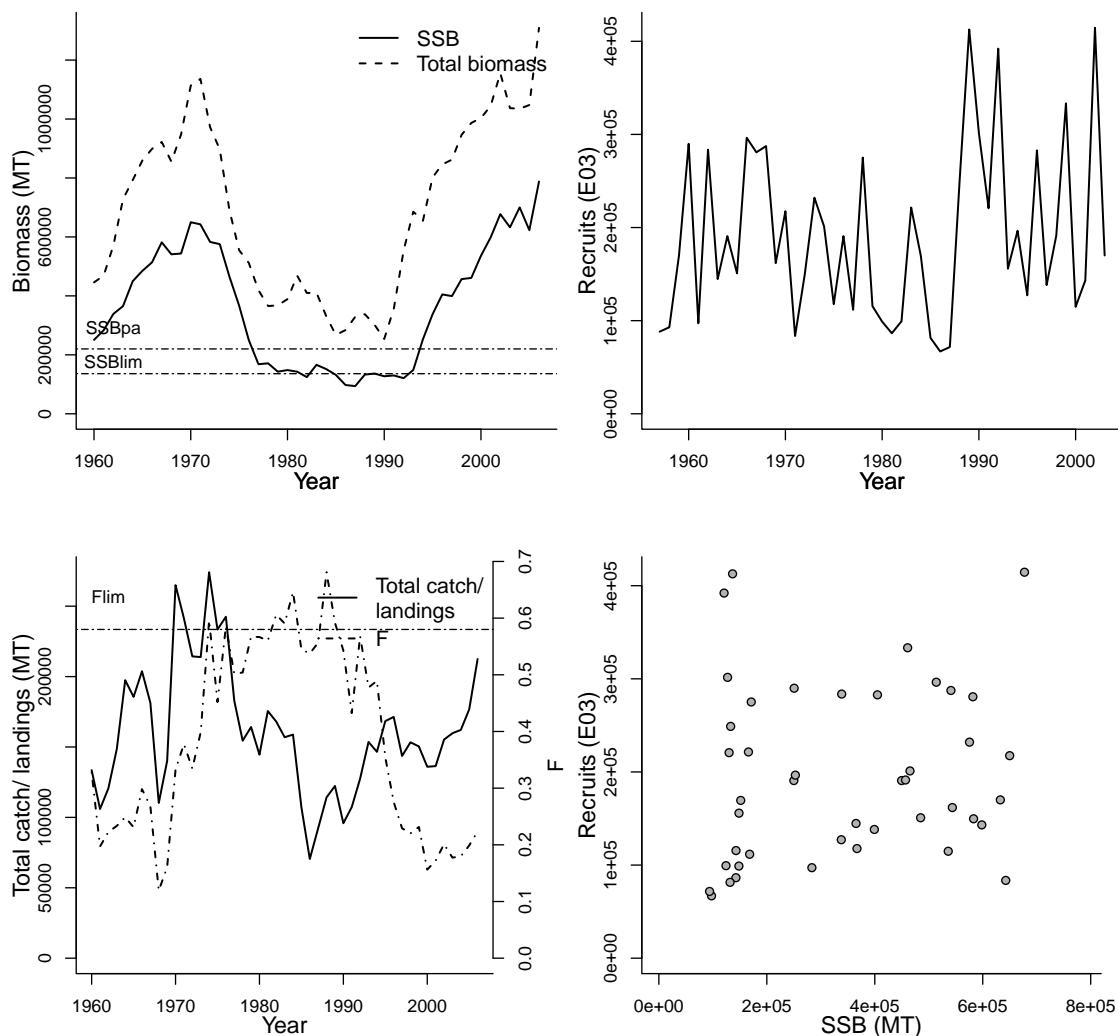
General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | Arctic Fisheries Working Group       |
| Assessment authors | Anonymous                            |
| Assessment method  | Extended Survivor Analysis           |
| Publication year   | 2007                                 |
| Timeseries span    | 1957-2006                            |
| Document           | ICES-AFWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-07                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME      |       |       | secondary LME                           |   | tertiary LME |       |
|------------------|-------|-------|---|---|--------------|-------|
| 20 - Barents Sea |       |       | 21 - Norwegian Sea                      |   | na           |       |
| Parameter        | Value | Units | Parameter                               | Reference points                        | Value        | Units |
| A50-yr           | 5     | yr    | SSBlim-MT (SSB)                         | SSBlim-MT (SSB)                         | 136000       | MT    |
| SSB-AGE-yr       | 4+    | yr    | SSBpa-MT (SSB)                          | SSBpa-MT (SSB)                          | 220000       | MT    |
| REC-AGE-yr       | 3     | yr    | F0.1-1/T                                | F0.1-1/T                                | 0.14         | 1/T   |
| F-AGE-yr-yr      | 4-7   | yr-yr | Fmax-1/T                                | Fmax-1/T                                | 0.32         | 1/T   |
| M-1/T            | 0.2   | 1/T   | Flim-1/T (F)                            | Flim-1/T (F)                            | 0.58         | 1/T   |
| TB-AGE-yr        | 3+    | yr    | Fpa-1/T (F)                             | Fpa-1/T (F)                             | 0.35         | 1/T   |
| SSB-SEX-sex      |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 5.793        |       |
| M                |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | F <sub>2006</sub> /F <sub>lim</sub>     | 0.386        |       |
| L50-cm           |       |       |   |   |              |       |

| Time series minima and maxima |        |        |        |         |        |
|-------------------------------|--------|--------|--------|---------|--------|
|                               | SSB    | R      | F      | TB      | Catch  |
| Minimum year                  | 1960   | 1957   | 1960   | 1960    | 1960   |
| Maximum year                  | 2006   | 2003   | 2006   | 2006    | 2006   |
| Time series minimum           | 93950  | 66951  | 0.1193 | 253730  | 70458  |
| Time series maximum           | 787915 | 414480 | 0.681  | 1309499 | 274121 |
| Units                         | MT     | E03    | 1/T    | MT      | MT     |



# Assessment of North-East Arctic deepwater redfish (*Sebastes mentella*)

Assessment ID:AFWG-REDDEPI-II-1985-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/368>

Area ID: multinational-ICES-I-II

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Arctic Fisheries Working Group                       |
| Assessment authors | Anonymous  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1985-2006  |
| Document           | ICES-AFWG-2007.pdf (pdf in database)                 |
| Recorder           | MINTO  |
| Date entered       | 2008-04-07   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME      | secondary LME      | tertiary LME |
|------------------|--------------------|--------------|
| 20 - Barents Sea | 21 - Norwegian Sea | na           |
| <hr/>            |                    |              |
| Parameter        | Value              | Units        |
| A50-yr           | 13                 | yr           |
| REC-AGE          |                    |              |
| SSB-AGE-yr       |                    |              |
| SSB-SEX-sex      |                    |              |
| TB-AGE-yr        |                    |              |
| F-AGE-yr         |                    |              |
| M                |                    |              |
| L50-cm           |                    |              |

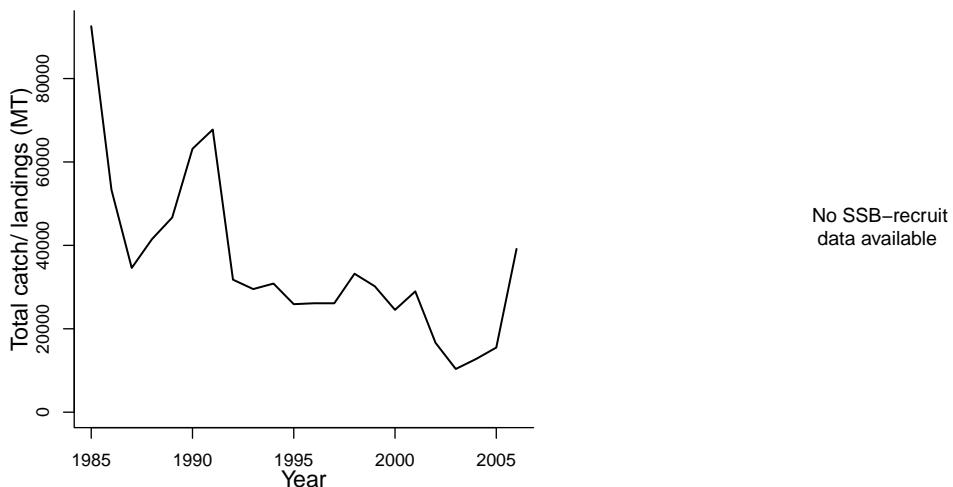
  

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
|                  |       |       |

| Time series minima and maxima |     |   |   |       |
|-------------------------------|-----|---|---|-------|
|                               | SSB | R | F | TB    |
| Minimum year                  |     |   |   | 1985  |
| Maximum year                  |     |   |   | 2006  |
| Time series minimum           |     |   |   | 10361 |
| Time series maximum           |     |   |   | 92552 |
| Units                         |     |   |   | MT    |

No biomass data available

No recruitment data available



# Assessment of Mid-Atlantic Coast atlantic croaker (*Micropogonias undulatus*)

Assessment ID:ASMFC-ATLCROAKMATLC-1973-2002-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/414>

Area ID: USA-NMFS-MATLC

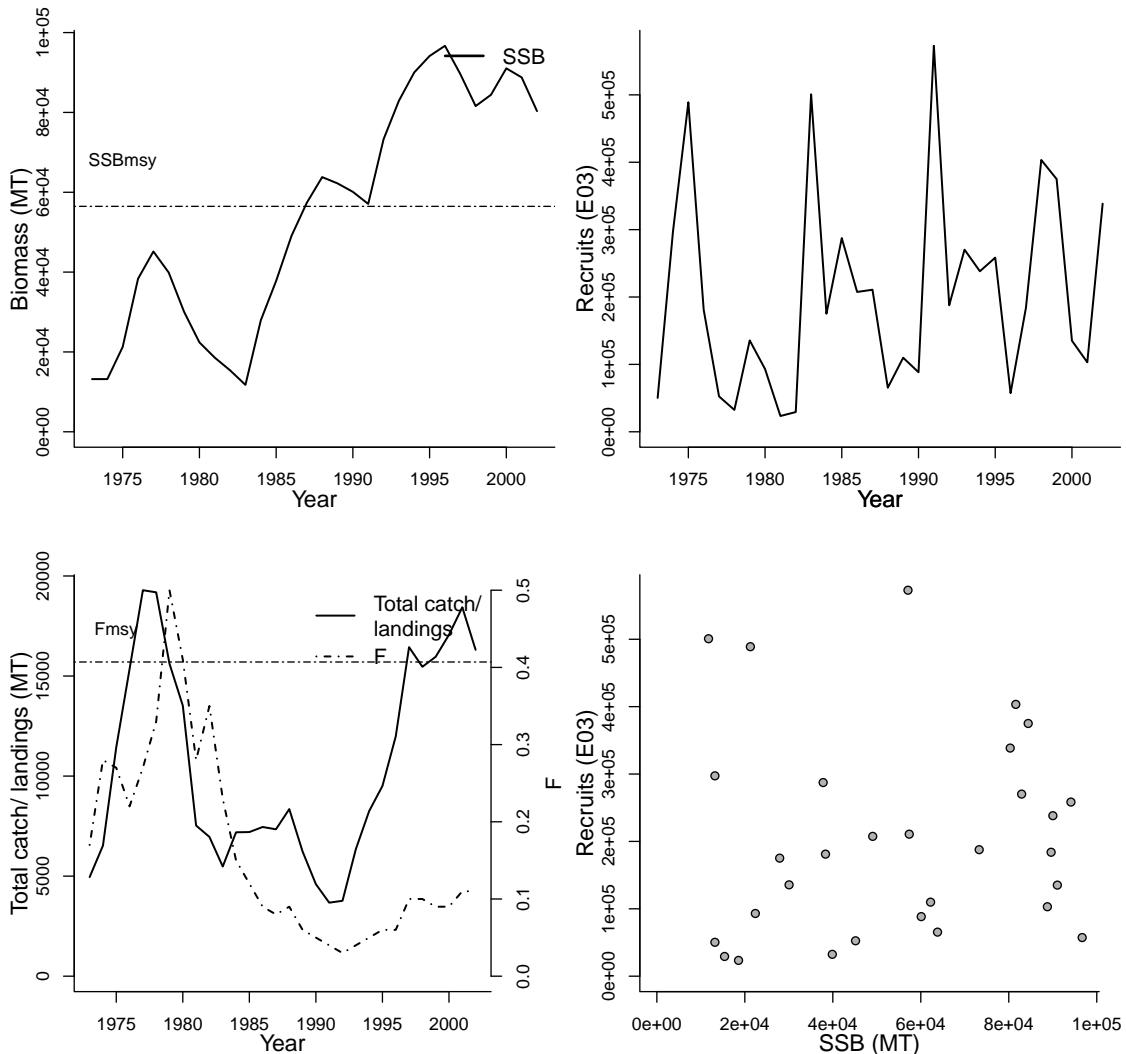
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Atlantic States Marine Fisheries Commission        |
| Assessment authors |  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2005   |
| Timeseries span    | 1973-2002  |
| Document           | 2004_ASMFC_AtlCroak.pdf (pdf not in database)      |
| Recorder           | STANTON  |
| Date entered       | 2009-08-13   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |         |
|--------------------------------------|-------|-------|------------------------|--------------|---------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |         |
| Parameter                            | Value | Units | Reference points       |              |         |
| SSB-SEX-sex                          | 1     | sex   | Parameter              | Value        | Units   |
| REC-AGE-yr                           | 0     | yr    | Fmsy-1/yr (F)          | 0.407        | 1/yr    |
| F-AGE-yr-yr                          | 1-10  | yr-yr | NATMORT-1/yr (M)       | 0.3          | 1/yr    |
| TB-AGE-yr                            | 0+    | yr    | SSBmsy-MT (SSB)        | 56467        | MT      |
| M-1/yr                               | 0.3   | 1/yr  | BH-h-dimless           | 0.76         | dimless |
| NATMORT-1/yr                         | 0.3   | 1/yr  | $F_{2002}/F_{msy}$     | 0.270        |         |
| SSB-AGE-yr                           |       |       | $SSB_{2002}/SSB_{msy}$ | 1.423        |         |
| M                                    |       |       |                        |              |         |
| A50-yr                               |       |       |                        |              |         |
| L50-cm                               |       |       |                        |              |         |

| Time series minima and maxima |       |        |      |       |
|-------------------------------|-------|--------|------|-------|
|                               | SSB   | R      | F    | TB    |
| Minimum year                  | 1973  | 1973   | 1973 | 1973  |
| Maximum year                  | 2002  | 2002   | 2002 | 2002  |
| Time series minimum           | 11746 | 23440  | 0.03 | 3674  |
| Time series maximum           | 96686 | 572800 | 0.5  | 19289 |
| Units                         | MT    | E03    | 1/yr | MT    |



# Assessment of Georges Bank american lobster (*Homarus americanus*)

Assessment ID:ASMFC-LOBSTERGB-1981-2007-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/412>

Area ID: USA-NMFS-5Z

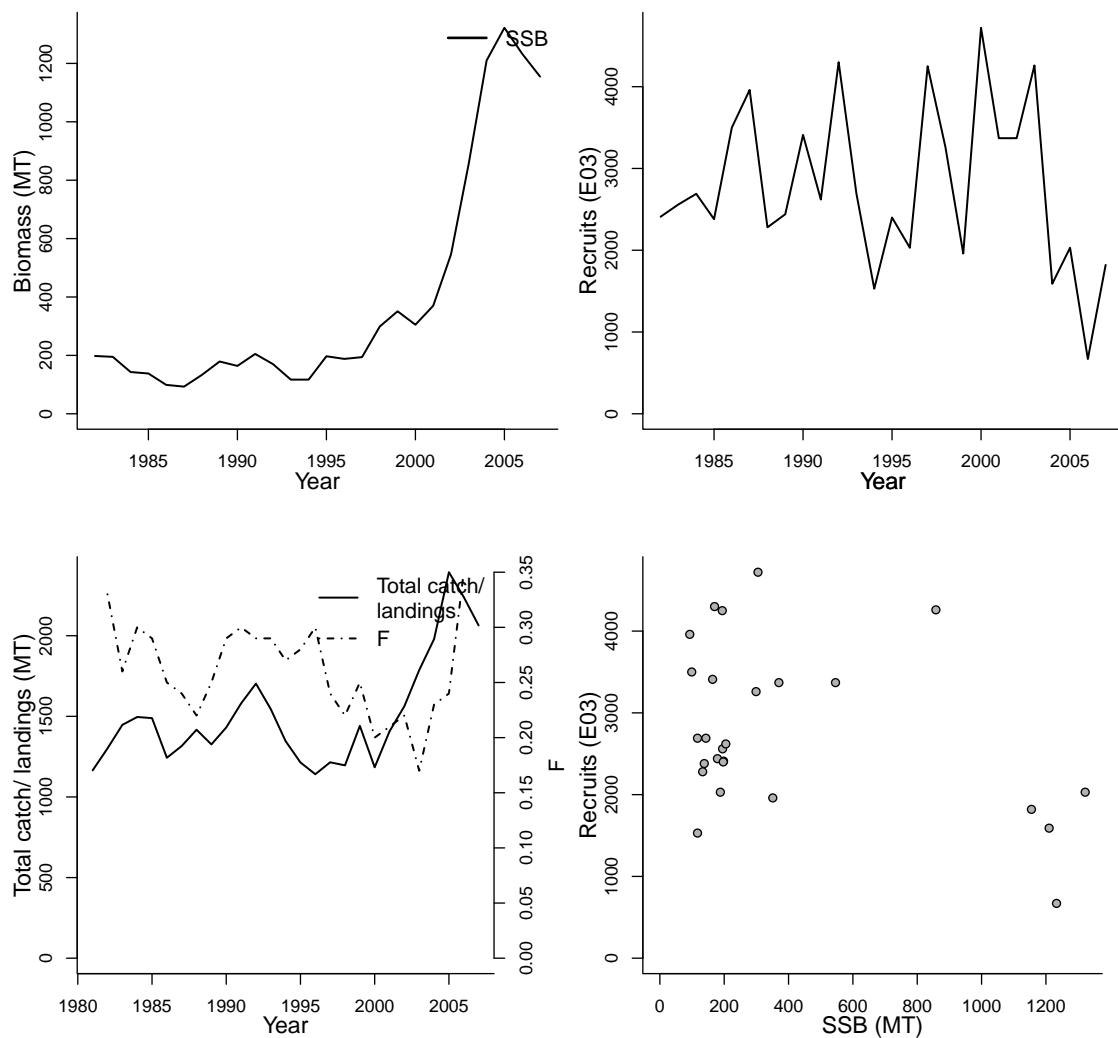
## General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Atlantic States Marine Fisheries Commission |
| Assessment authors | McKown, Kim                                 |
| Assessment method  | Collie-Sissenwine model                     |
| Publication year   |   |
| Timeseries span    | 1981-2007                                   |
| Document           | 2009-ASMFC-Am-Lob.pdf (pdf in database)     |
| Recorder           | STANTON                                     |
| Date entered       | 2009-08-12                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2011-02-16                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       | secondary LME | tertiary LME     |
|--------------------------------------|-------|---------------|------------------|
| 7 - Northeast U.S. Continental Shelf |       | na            | na               |
| Parameter                            | Value | Units         |                  |
| SSB-SEX-sex                          | 1     | sex           |                  |
| M-1/yr                               | 0.15  | 1/yr          |                  |
| NATMORT-1/yr                         | 0.15  | 1/yr          |                  |
| REC-AGE                              |       |               | Reference points |
| SSB-AGE-yr                           |       |               | Parameter        |
| TB-AGE-yr                            |       |               | Value            |
| F-AGE-yr                             |       |               | Units            |
| M                                    |       |               |                  |
| A50-yr                               |       |               |                  |
| L50-cm                               |       |               |                  |

| Time series minima and maxima |      |      |      |      |
|-------------------------------|------|------|------|------|
|                               | SSB  | R    | F    | TB   |
| Minimum year                  | 1982 | 1982 | 1982 | 1981 |
| Maximum year                  | 2007 | 2007 | 2006 | 2007 |
| Time series minimum           | 93   | 670  | 0.17 | 1141 |
| Time series maximum           | 1322 | 4720 | 0.35 | 2394 |
| Units                         | MT   | E03  | 1/yr | MT   |



# Assessment of Gulf of Maine american lobster (*Homarus americanus*)

Assessment ID:ASMFC-LOBSTERGOM-1981-2007-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/411>

Area ID: USA-NMFS-5Y

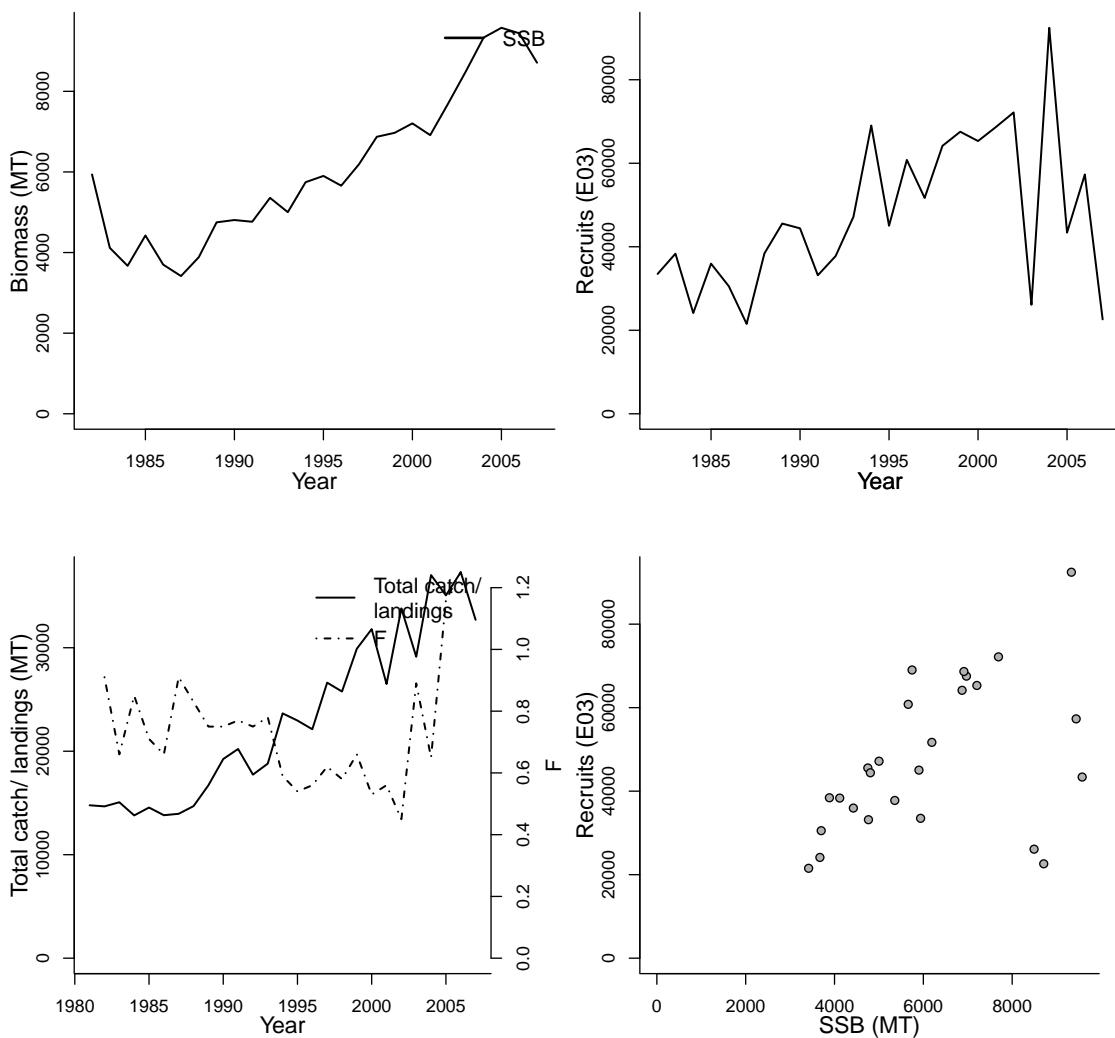
## General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Atlantic States Marine Fisheries Commission |
| Assessment authors | McKown, Kim                                 |
| Assessment method  | Collie-Sissenwine model                     |
| Publication year   |   |
| Timeseries span    | 1981-2007                                   |
| Document           | 2009-ASMFC-Am-Lob.pdf (pdf in database)     |
| Recorder           | STANTON                                     |
| Date entered       | 2009-08-12                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       | secondary LME | tertiary LME     |
|--------------------------------------|-------|---------------|------------------|
| 7 - Northeast U.S. Continental Shelf |       | na            | na               |
| Parameter                            | Value | Units         |                  |
| SSB-SEX-sex                          | 1     | sex           |                  |
| M-1/yr                               | 0.15  | 1/yr          |                  |
| NATMORT-1/yr                         | 0.15  | 1/yr          |                  |
| REC-AGE                              |       |               | Reference points |
| SSB-AGE-yr                           |       |               | Parameter        |
| TB-AGE-yr                            |       |               | Value            |
| F-AGE-yr                             |       |               | Units            |
| M                                    |       |               |                  |
| A50-yr                               |       |               |                  |
| L50-cm                               |       |               |                  |

| Time series minima and maxima |      |       |      |       |
|-------------------------------|------|-------|------|-------|
|                               | SSB  | R     | F    | TB    |
| Minimum year                  | 1982 | 1982  | 1982 | 1981  |
| Maximum year                  | 2007 | 2007  | 2006 | 2007  |
| Time series minimum           | 3417 | 21530 | 0.45 | 13797 |
| Time series maximum           | 9576 | 92440 | 1.25 | 37297 |
| Units                         | MT   | E03   | 1/yr | MT    |



# Assessment of Southern New England american lobster (*Homarus americanus*)

Assessment ID:ASMFC-LOBSTERSNE-1981-2007-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/413>

Area ID: USA-NMFS-SNE

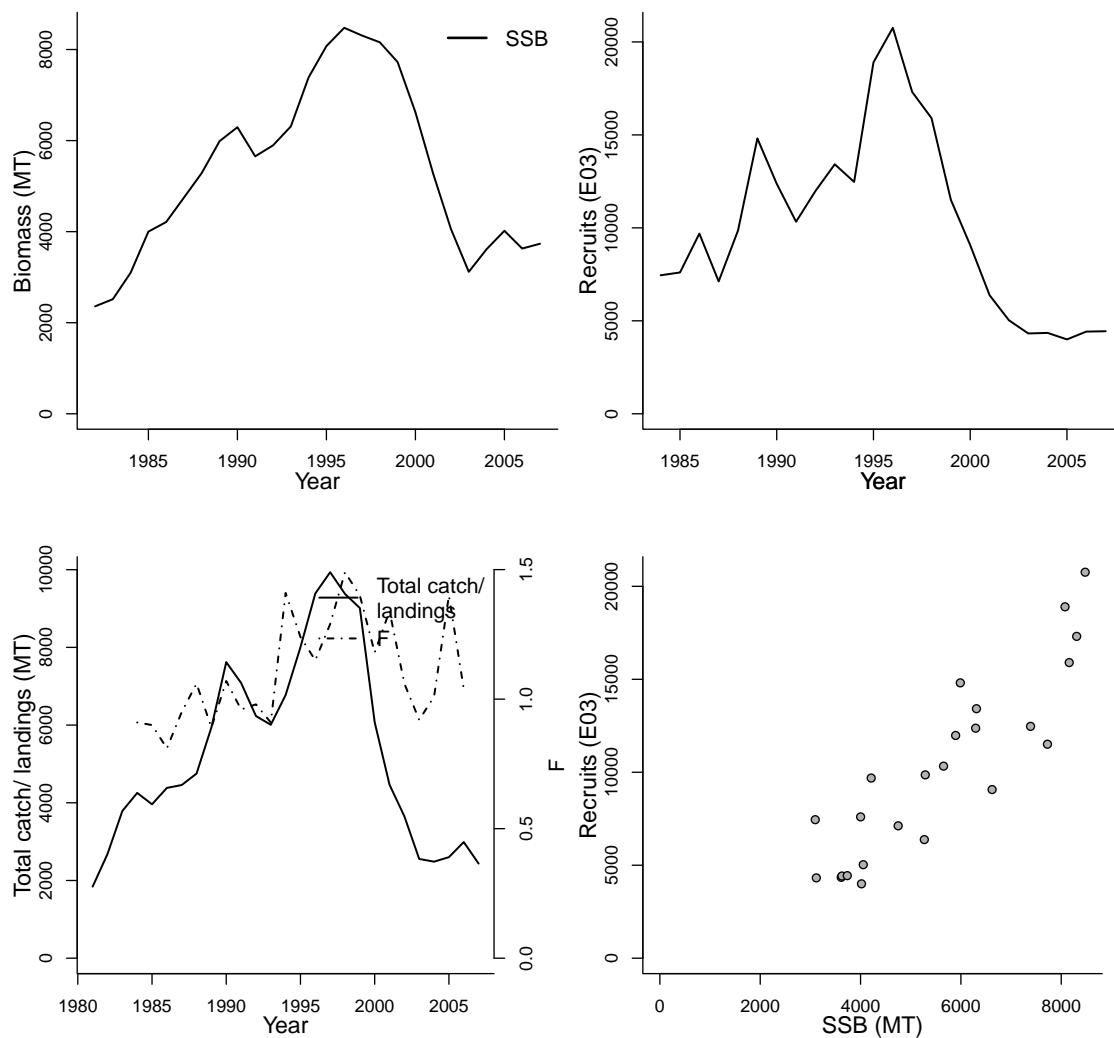
General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Atlantic States Marine Fisheries Commission |
| Assessment authors | McKown, Kim                                 |
| Assessment method  | Collie-Sissenwine model                     |
| Publication year   |   |
| Timeseries span    | 1981-2007                                   |
| Document           | 2009-ASMFC-Am-Lob.pdf (pdf in database)     |
| Recorder           | STANTON                                     |
| Date entered       | 2009-08-12                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       | secondary LME | tertiary LME     |
|--------------------------------------|-------|---------------|------------------|
| 7 - Northeast U.S. Continental Shelf |       | na            | na               |
| Parameter                            | Value | Units         |                  |
| SSB-SEX-sex                          | 1     | sex           |                  |
| M-1/yr                               | 0.15  | 1/yr          |                  |
| NATMORT-1/yr                         | 0.15  | 1/yr          |                  |
| REC-AGE                              |       |               | Reference points |
| SSB-AGE-yr                           |       |               | Parameter        |
| TB-AGE-yr                            |       |               | Value            |
| F-AGE-yr                             |       |               | Units            |
| M                                    |       |               |                  |
| A50-yr                               |       |               |                  |
| L50-cm                               |       |               |                  |

| Time series minima and maxima |      |       |      |      |
|-------------------------------|------|-------|------|------|
|                               | SSB  | R     | F    | TB   |
| Minimum year                  | 1982 | 1984  | 1984 | 1981 |
| Maximum year                  | 2007 | 2007  | 2006 | 2007 |
| Time series minimum           | 2359 | 4000  | 0.81 | 1842 |
| Time series maximum           | 8477 | 20760 | 1.49 | 9935 |
| Units                         | MT   | E03   | 1/yr | MT   |



# Assessment of Gulf of Maine northern shrimp (*Pandalus borealis*)

Assessment ID:ASMFC-PANDALGOM-1960-2009-IDOINE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/331>

Area ID: USA-NMFS-5Y

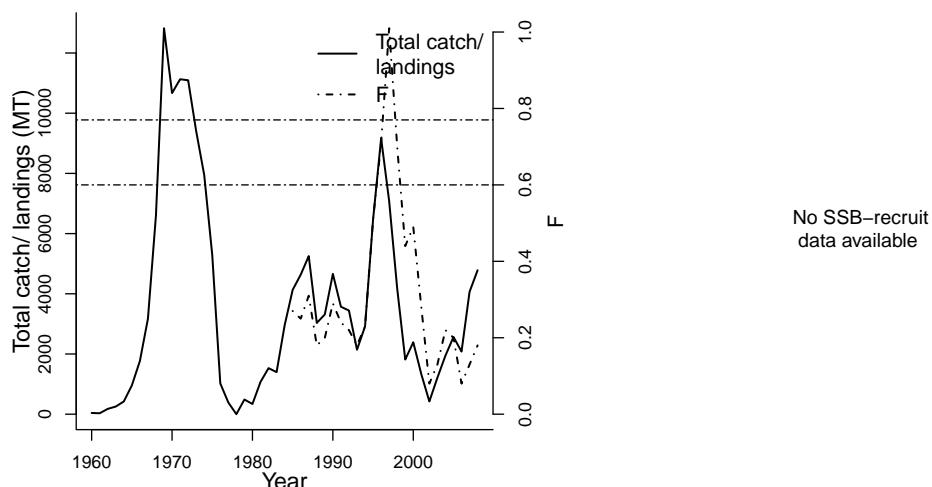
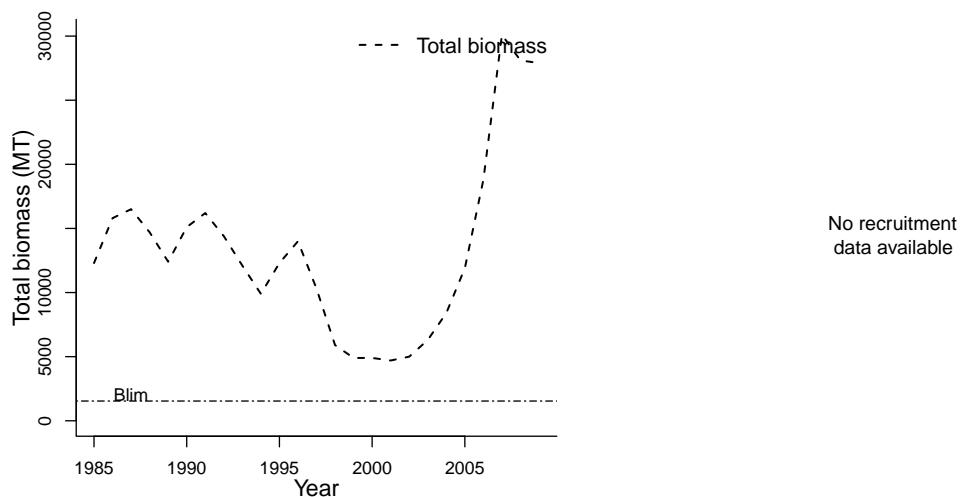
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Atlantic States Marine Fisheries Commission         |
| Assessment authors | Atlantic States Marine Fisheries Commission         |
| Assessment method  | Catch-Survey Analysis (like a state space approach) |
| Publication year   | 2008  |
| Timeseries span    | 1960-2009   |
| Document           | 2008ShrimpAssessment.pdf (pdf in database)          |
| Recorder           | IDOINE  |
| Date entered       | 2009-04-22  |
| Date last loaded   | 2011-07-27  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME      |       |       | tertiary LME |       |       |
|--------------------------------------|-------|-------|--------------------|-------|-------|--------------|-------|-------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                 | na    |       |              |       |       |
| Parameter                            | Value | Units | Reference points   |       |       | Parameter    | Value | Units |
| SSB-AGE-yr                           | 3.5   | yr    | Bpa-E03MT          | 9     | E03MT |              |       |       |
| SSB-SEX-sex                          | 1     | sex   | F0.1-1/yr (F)      | 0.46  | 1/yr  |              |       |       |
| F-AGE-yr-yr                          | 1.5-6 | yr-yr | Flim-1/T (F)       | 0.6   | 1/T   |              |       |       |
| TB-AGE-yr                            | 1.5+  | yr    | Fmsy-1/yr (F)      | 0.77  | 1/yr  |              |       |       |
| M-1/yr                               | 0.25  | 1/yr  | Fpa-1/T (F)        | 0.28  | 1/T   |              |       |       |
| REC-AGE                              |       |       | MORATOR-yr-yr      | 1978  | yr-yr |              |       |       |
| M                                    |       |       | F40%-1/T           | 0.34  | 1/T   |              |       |       |
| A50-yr                               |       |       | Blim-MT (TB)       | 1540  | MT    |              |       |       |
| L50-cm                               |       |       | $F_{2008}/F_{lim}$ | 0.300 |       |              |       |       |
|                                      |       |       | $F_{2008}/F_{msy}$ | 0.234 |       |              |       |       |

| Time series minima and maxima |     |   |      |       |         |
|-------------------------------|-----|---|------|-------|---------|
|                               | SSB | R | F    | TB    | Catch   |
| Minimum year                  |     |   | 1985 | 1985  | 1960    |
| Maximum year                  |     |   | 2008 | 2009  | 2008    |
| Time series minimum           |     |   | 0.08 | 4700  | 0       |
| Time series maximum           |     |   | 1.01 | 30100 | 12823.9 |
| Units                         |     |   | 1/T  | MT    | MT      |



# Assessment of Ross Sea antarctic toothfish

## *(Dissostichus mawsoni)*

Assessment ID:CCAMLR-ATOOTHFISHRS-1995-2007-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/420>

Area ID: multinational-CCAMLR-RS

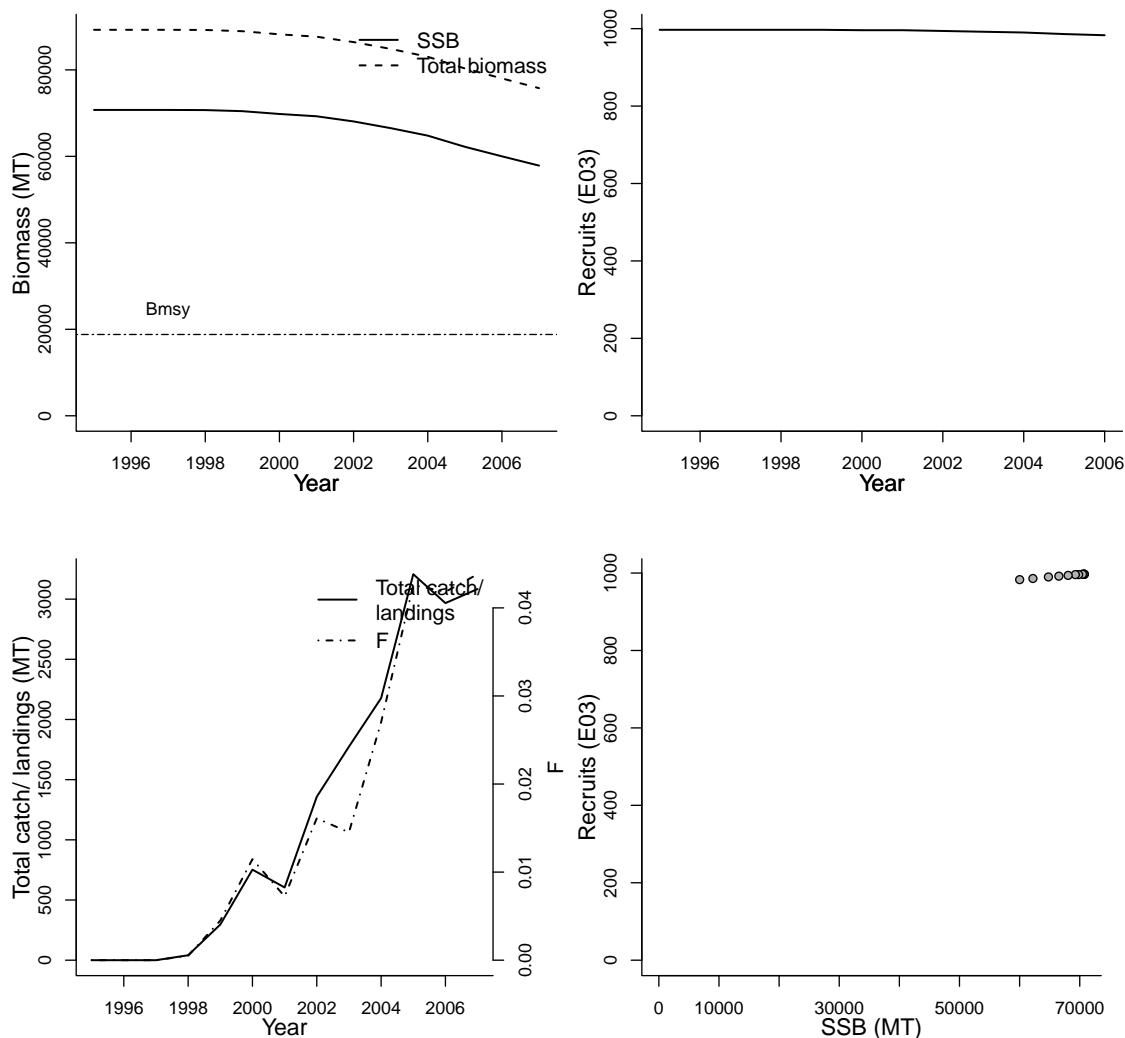
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | CCAMLR   |
| Assessment group   | Commission for the Conservation of Antarctic Marine Living Resources |
| Assessment authors | Dunn, A.   |
| Assessment method  | CASAL  |
| Publication year   | 2008   |
| Timeseries span    | 1995-2007  |
| Document           | ATOOTHFISHRS.pdf (pdf not in database)                               |
| Recorder           | JENSEN   |
| Date entered       | 2009-04-07   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                  |       |       | secondary LME                                   | tertiary LME |         |
|------------------------------|-------|-------|---|--------------|---------|
| -96 - Subantarctic High Seas |       |       | na  | na           |         |
| Parameter                    | Value | Units | Reference points                                |              |         |
| REC-AGE-yr                   | 1     | yr    | Parameter                                       | Value        | Units   |
| TB-AGE-yr                    | 1     | yr    | Fmsy-1/yr (F)                                   | 0.136        | 1/yr    |
| A50-yr                       | 9.25  | yr    | MSY-MT (TB)                                     | 3105.3982    | MT      |
| M-1/yr                       | 0.13  | 1/yr  | Bmsy-MT (TB)                                    | 18802.1604   | MT      |
| SSB-AGE-yr                   |       |       | SSB0-MT (SSB)                                   | 70738        | MT      |
| SSB-SEX-sex                  |       |       | BH-h-dimless                                    | 0.75         | dimless |
| F-AGE-yr                     |       |       | TB <sub>2007</sub> /B <sub>m<sub>sy</sub></sub> | 4.030        |         |
| M                            |       |       | F <sub>2007</sub> /F <sub>m<sub>sy</sub></sub>  | 0.322        |         |
| L50-cm                       |       |       |   |              |         |

| Time series minima and maxima |         |      |            |         |
|-------------------------------|---------|------|------------|---------|
|                               | SSB     | R    | F          | TB      |
| Minimum year                  | 1995    | 1995 | 1995       | 1995    |
| Maximum year                  | 2007    | 2006 | 2007       | 2007    |
| Time series minimum           | 57865.8 | 983  | 0          | 75776.5 |
| Time series maximum           | 70738   | 997  | 0.04382281 | 89269.9 |
| Units                         | MT      | E03  | 1/yr       | MT      |



# Assessment of Southern Oceans southern bluefin tuna (*Thunnus maccoyii*)

Assessment ID:CCSBT-SC-SBT-1931-2009-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/475>

Area ID: multinational-CCSBT-SO

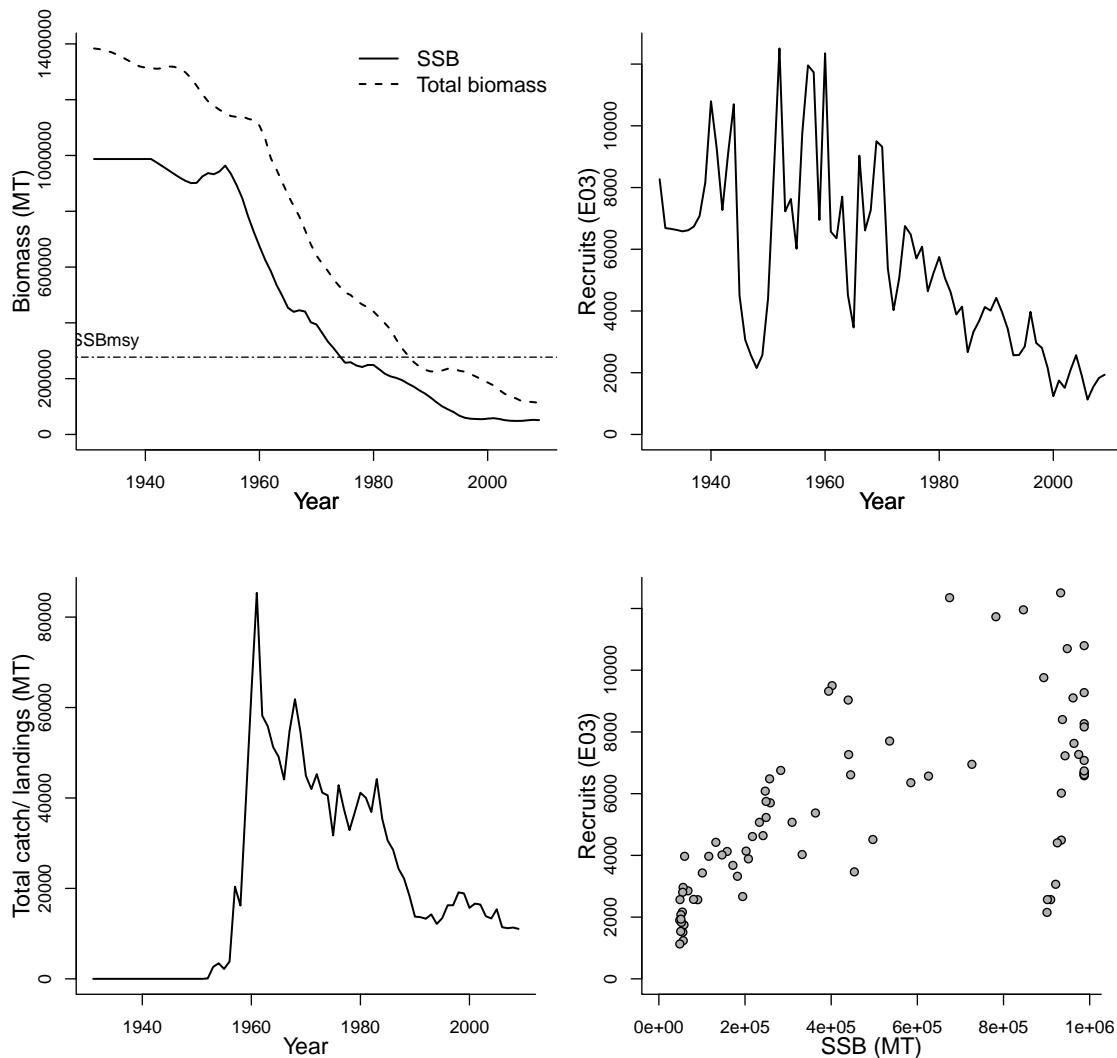
## General assessment details.

| Detail             | Value                                  |
|--------------------|--|
| Management body    | CCSBT                                  |
| Assessment group   | CCSBT Scientific Committee             |
| Assessment authors | Kurota, H.                             |
| Assessment method  | Integrated Analysis                    |
| Publication year   | 2010                                   |
| Timeseries span    | 1931-2009                              |
| Document           | Kurota-etal-2010.pdf (pdf in database) |
| Recorder           | Parma                                  |
| Date entered       | 2011-01-16                             |
| Date last loaded   | 2011-07-25                             |
| QA/QC complete     | YES                                    |
| Date approved      | 2011-06-10                             |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                   | secondary LME           | tertiary LME             |
|-------------------------------|-------------------------|--------------------------|
| -97 - Indian High Seas        | -99 - Pacific High Seas | -98 - Atlantic High Seas |
| Parameter Value Units         |                         |                          |
| SSB-AGE-yr                    | 10                      | yr                       |
| SSB-SEX-sex                   | 0                       | sex                      |
| REC-AGE-yr                    | 0                       | yr                       |
| TB-AGE-yr                     | 0                       | yr                       |
| F-AGE-yr                      |                         |                          |
| M                             |                         |                          |
| A50-yr                        |                         |                          |
| L50-cm                        |                         |                          |
| Reference points              |                         |                          |
| Parameter                     | Value                   | Units                    |
| SSB <sub>m</sub> sy-MT (SSB)  | 277047.081081081        | MT                       |
| SSB <sub>0</sub> -MT (SSB)    | 899187.894736842        | MT                       |
| $SSB_{2009}/SSB_{m\text{sy}}$ | 0.185                   |                          |

| Time series minima and maxima |             |             |   |             |          |
|-------------------------------|-------------|-------------|---|-------------|----------|
|                               | SSB         | R           | F | TB          | Catch    |
| Minimum year                  | 1931        | 1931        |   | 1931        | 1931     |
| Maximum year                  | 2009        | 2009        |   | 2009        | 2009     |
| Time series minimum           | 48470.10065 | 1130.471281 |   | 113766.4    | 0        |
| Time series maximum           | 987246.604  | 12506.18435 |   | 1383627.072 | 85355.76 |
| Units                         | MT          | E03         |   | MT          | MT       |



# Assessment of Iranian Caspian Sea anchovy *kilka* (*Clupeonella engrauliformis*)

Assessment ID:CSERG-ANCHOVYKILKACS-1991-2007-JENSEN  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/460>

Area ID: Iran-Iran-CS

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | Iran  |
| Assessment group   | Caspian Sea Ecology Research Center                 |
| Assessment authors | Hasan Fazli   |
| Assessment method  | Age-aggregated surplus production model             |
| Publication year   | 2009  |
| Timeseries span    | 1991-2007   |
| Document           | JENSEN-ANCHOVYKILKACS-2007.pdf<br>(pdf in database) |
| Recorder           | JENSEN  |
| Date entered       | 2011-01-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

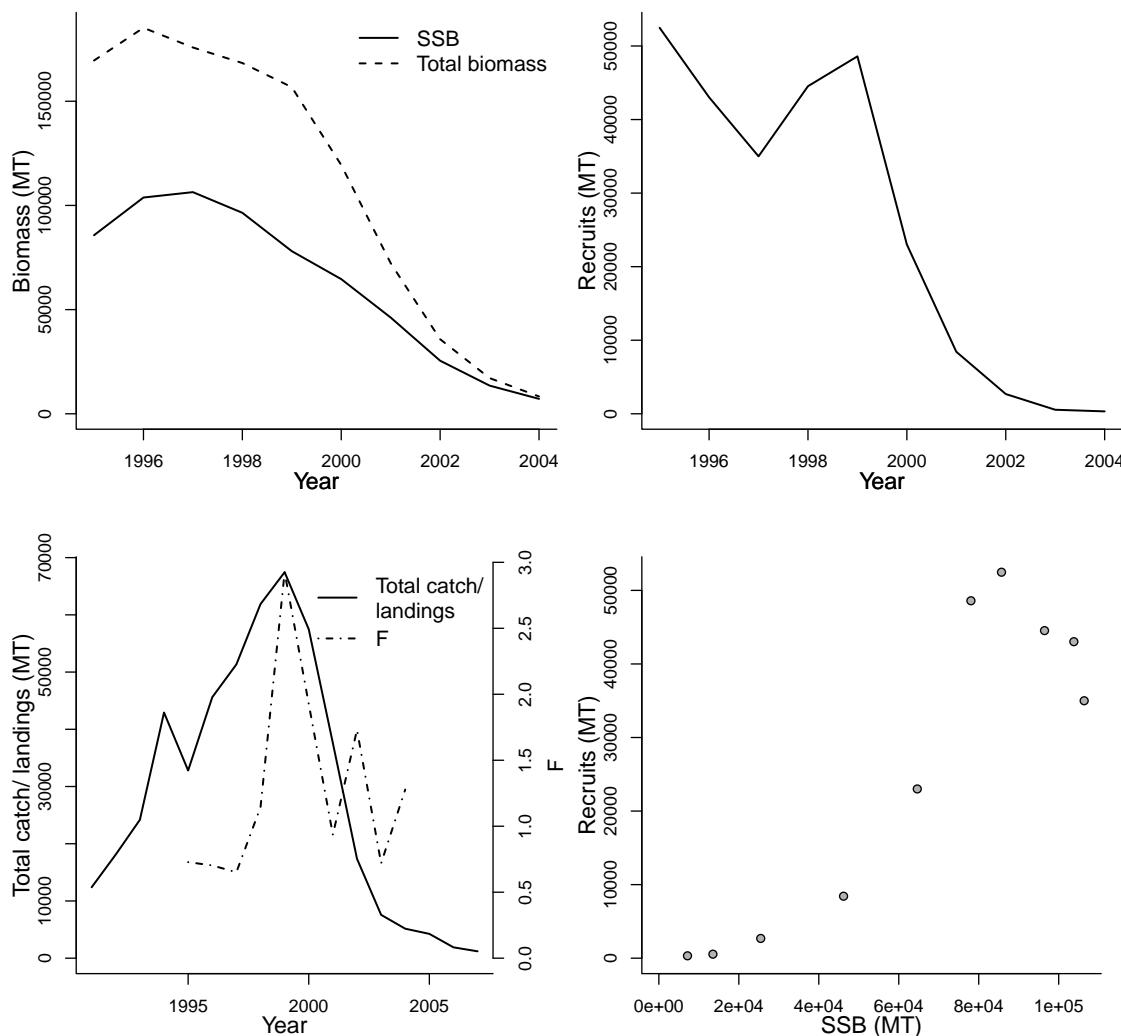
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME       | secondary LME | tertiary LME |
|-------------------|---------------|--------------|
| -95 - Caspian Sea | na            | na           |
| <hr/>             |               |              |
| Parameter         | Value         | Units        |
| REC-AGE-yr        | 0.18          | yr           |
| A50-yr            | 2.2           | yr           |
| M-1/T             | 0.473         | 1/T          |
| SSB-AGE-yr        |               |              |
| SSB-SEX-sex       |               |              |
| TB-AGE-yr         |               |              |
| F-AGE-yr          |               |              |
| M                 |               |              |
| L50-cm            |               |              |

| Parameter   | Value | Units |
|-------------|-------|-------|
| MSY-MT (TB) | 44652 | MT    |

| Time series minima and maxima |          |         |       |          |
|-------------------------------|----------|---------|-------|----------|
|                               | SSB      | R       | F     | TB       |
| Minimum year                  | 1995     | 1995    | 1995  | 1995     |
| Maximum year                  | 2004     | 2004    | 2004  | 2004     |
| Time series minimum           | 7161.1   | 325.9   | 0.651 | 8324.8   |
| Time series maximum           | 106374.9 | 52472.1 | 2.925 | 185249.4 |
| Units                         | MT       | MT      | 1/yr  | MT       |



# Assessment of Southeast Australia bight redfish (*Centroberyx gerrardi*)

Assessment ID: CSIRO-BIGHTREDSE-1958-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/100>

Area ID: Australia-AFMA-SE

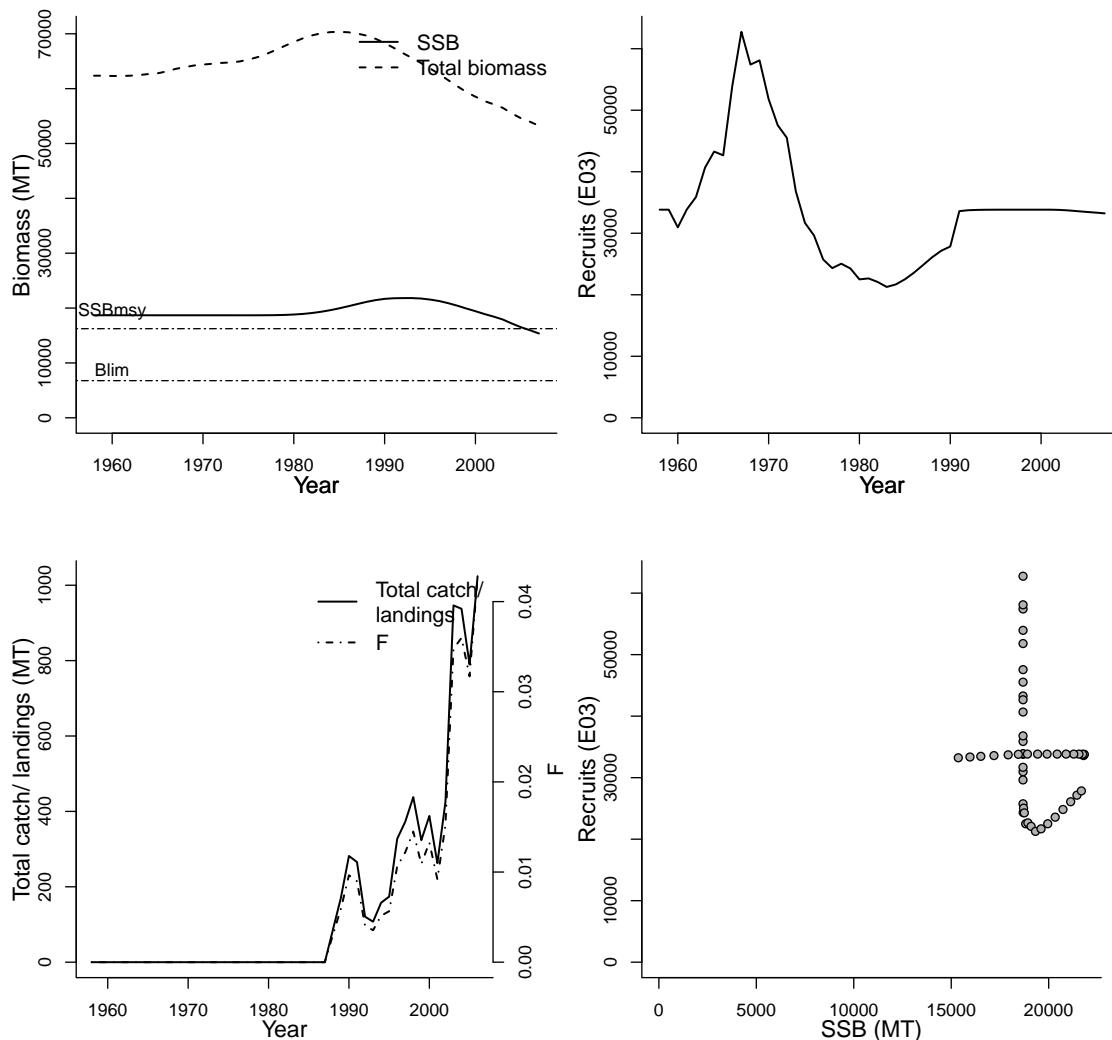
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Klaer, Neil  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1958-2007  |
| Document           | BIGHTREDDEEPFLATSE.pdf (pdf not in database)                 |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |     |      | secondary LME                            | tertiary LME |
|---------------------------------|-----|------|--|--------------|
| 43 - Southwest Australian Shelf |     |      | na                                       | na           |
| Parameter Value Units           |     |      |  |              |
| SSB-SEX-sex                     | 0   | sex  |  |              |
| REC-AGE-yr                      | 0   | yr   | Reference points                         |              |
| TB-AGE-yr                       | 0   | yr   | Parameter                                | Value        |
| L50-cm                          | 25  | cm   | Blim-MT (TB)                             | 6766.72      |
| M-1/yr                          | 0.1 | 1/yr | SSB <sub>m</sub> sy-MT (SSB)             | 16240.128    |
| SSB-AGE-yr                      |     |      | SSB <sub>2007</sub> /SSB <sub>m</sub> sy | 0.946        |
| F-AGE-yr                        |     |      |  |              |
| M                               |     |      |  |              |
| A50-yr                          |     |      |  |              |

|                     | Time series minima and maxima |         |           |         |         |
|---------------------|-------------------------------|---------|-----------|---------|---------|
|                     | SSB                           | R       | F         | TB      | Catch   |
| Minimum year        | 1958                          | 1958    | 1958      | 1958    | 1958    |
| Maximum year        | 2007                          | 2007    | 2006      | 2007    | 2006    |
| Time series minimum | 15362.4                       | 21270.1 | 0         | 53216.3 | 0       |
| Time series maximum | 21821.5                       | 62750.4 | 0.0428162 | 70359.9 | 1023.91 |
| Units               | MT                            | E03     | ratio     | MT      | MT      |



# Assessment of Northern Australia brown tiger shrimp (*Penaeus esculentus*)

Assessment ID:CSIRO-BTSHRIMPNAUST-1970-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/95>

Area ID: Australia-AFMA-NAUST

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Dichmont, Cathy  |
| Assessment method  | Delay difference model                                       |
| Publication year   | 2007   |
| Timeseries span    | 1970-2006  |
| Document           | NORTHPRAWNS.pdf (pdf not in database)                        |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

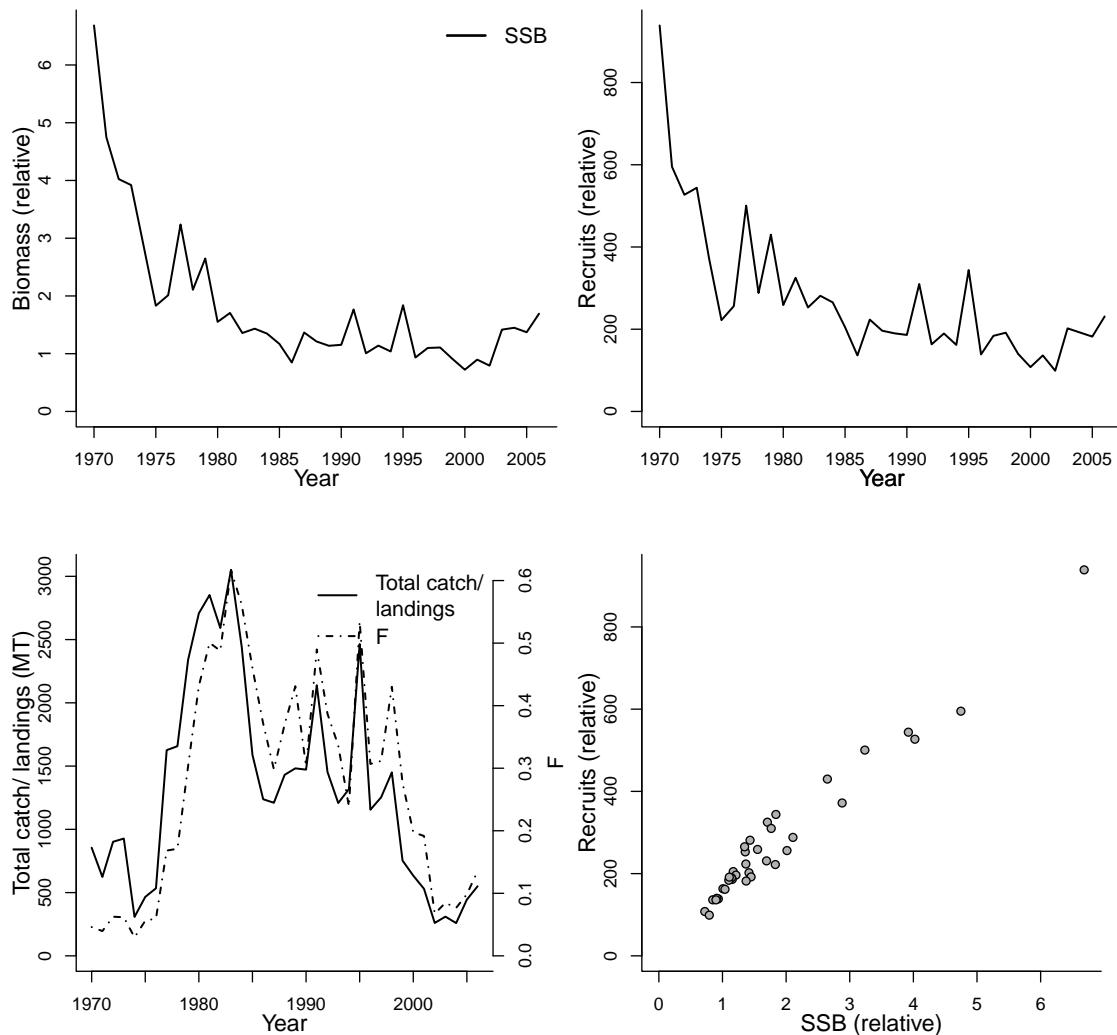
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                 | secondary LME | tertiary LME |
|-----------------------------|---------------|--------------|
| 39 - North Australian Shelf | na            | na           |
| <hr/>                       |               |              |
| Parameter                   | Value         | Units        |
| L50-cm                      | 3             | cm           |
| REC-AGE                     |               |              |
| SSB-AGE-yr                  |               |              |
| SSB-SEX-sex                 |               |              |
| TB-AGE-yr                   |               |              |
| F-AGE-yr                    |               |              |
| M                           |               |              |
| A50-yr                      |               |              |

| Parameter        | Value | Units |
|------------------|-------|-------|
| Reference points |       |       |

| Time series minima and maxima |          |          |                    |    |       |
|-------------------------------|----------|----------|--------------------|----|-------|
|                               | SSB      | R        | F                  | TB | Catch |
| Minimum year                  | 1970     | 1970     | 1970               |    | 1970  |
| Maximum year                  | 2006     | 2006     | 2006               |    | 2006  |
| Time series minimum           | 0.72243  | 98.99525 | 0.0295093220851858 |    | 259   |
| Time series maximum           | 6.6843   | 938.7785 | 0.61709282583037   |    | 3051  |
| Units                         | relative | relative | 1/yr               |    | MT    |



# Assessment of Southeast Australia deepwater flathead (*Platycephalus conatus*)

Assessment ID:CSIRO-DEEPFLATHEADSE-1978-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/99>

Area ID: Australia-AFMA-SE

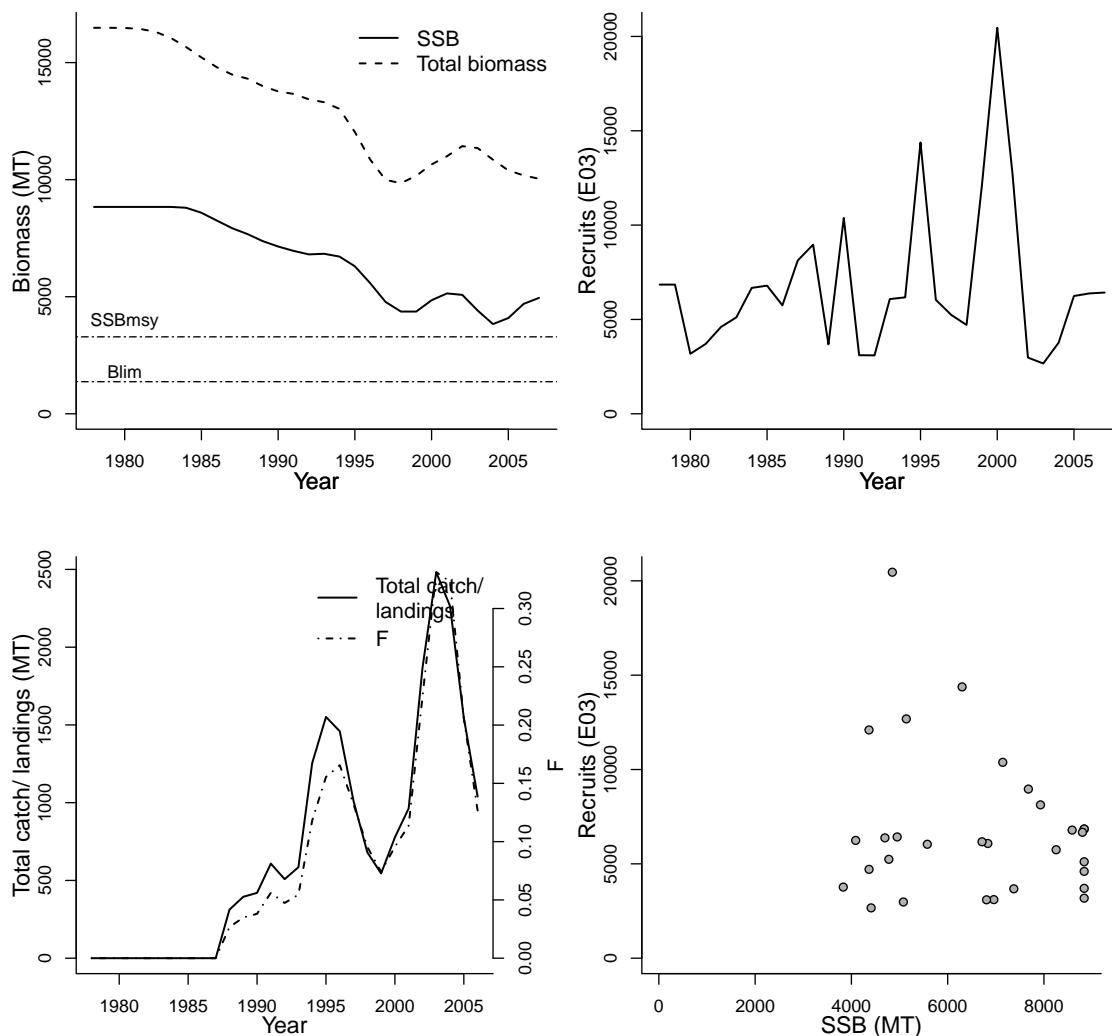
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Klaer, Neil  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1978-2007  |
| Document           | BIGHTREDDEEPFLATSE.pdf (pdf not in database)                 |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |        |       | secondary LME          | tertiary LME |         |
|---------------------------------|--------|-------|------------------------|--------------|---------|
| 43 - Southwest Australian Shelf |        |       | na                     | na           |         |
| Parameter                       | Value  | Units | Reference points       |              |         |
| SSB-SEX-sex                     | 0      | sex   | Parameter              | Value        | Units   |
| REC-AGE-yr                      | 0      | yr    | Blim-MT (TB)           | 1369.38      | MT      |
| TB-AGE-yr                       | 0      | yr    | SSBmsy-MT (SSB)        | 3286.512     | MT      |
| A50-yr                          | 5      | yr    | BH-h-dimless           | 0.85         | dimless |
| L50-cm                          | 40     | cm    | $SSB_{2007}/SSB_{msy}$ | 1.506        |         |
| M-1/T                           | 3.2494 | 1/T   |                        |              |         |
| M-1/yr                          | 0.2    | 1/yr  |                        |              |         |
| SSB-AGE-yr                      |        |       |                        |              |         |
| F-AGE-yr                        |        |       |                        |              |         |
| M                               |        |       |                        |              |         |

| Time series minima and maxima |         |         |          |         |
|-------------------------------|---------|---------|----------|---------|
|                               | SSB     | R       | F        | Catch   |
| Minimum year                  | 1978    | 1978    | 1978     | 1978    |
| Maximum year                  | 2007    | 2007    | 2006     | 2006    |
| Time series minimum           | 3831.04 | 2666.02 | 0        | 9848.87 |
| Time series maximum           | 8835.63 | 20457.5 | 0.331154 | 16486   |
| Units                         | MT      | E03     | ratio    | MT      |



# Assessment of Southeast Australia common gemfish (*Rexea solandri*)

Assessment ID: CSIRO-GEMFISHSE-1966-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/88>

Area ID: Australia-AFMA-SE

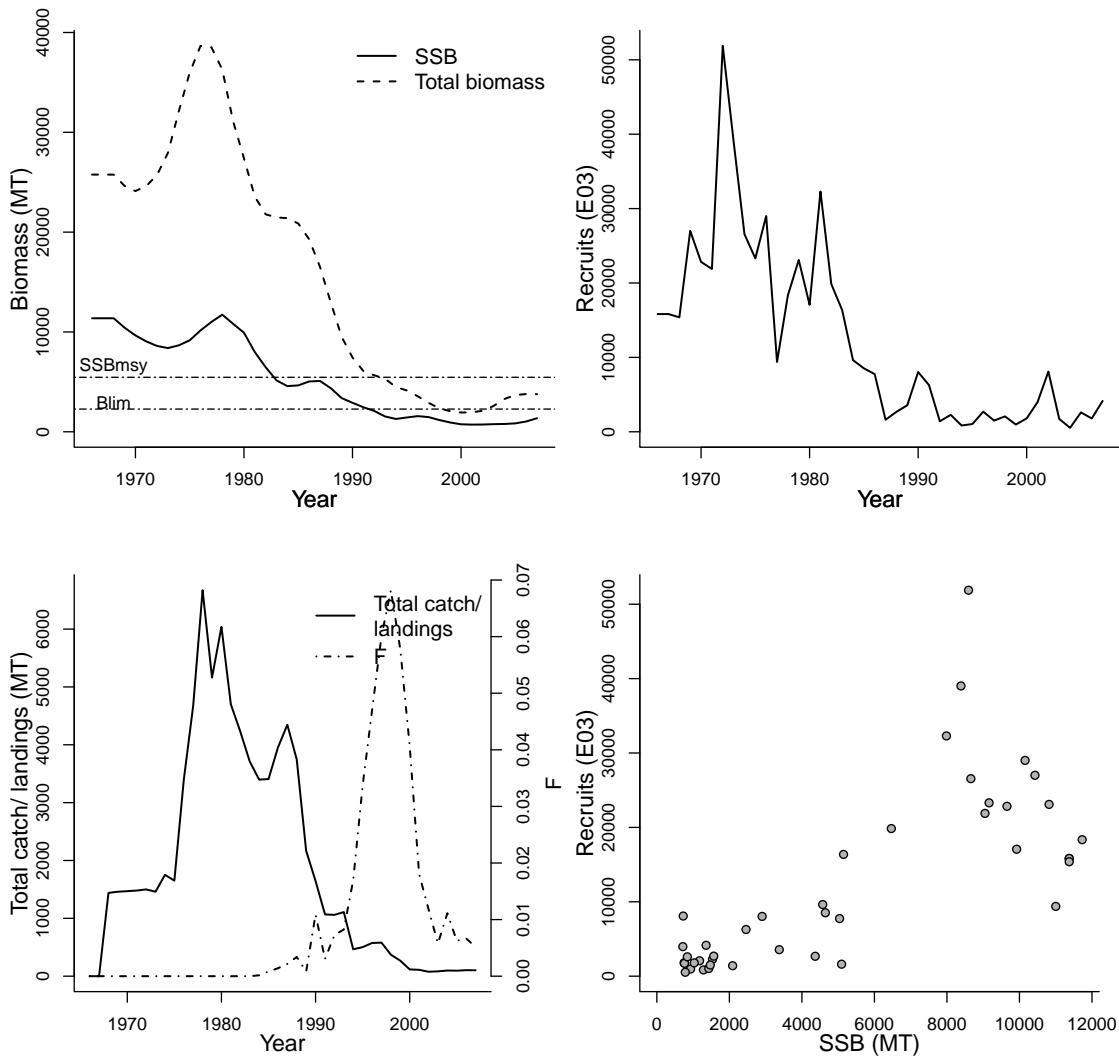
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Little, Richard L.   |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1966-2007  |
| Document Recorder  | GEMFISHSE.pdf (pdf not in database)                          |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-04-22   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME                | tertiary LME |         |
|---------------------------------|-------|-------|------------------------------|--------------|---------|
| 42 - Southeast Australian Shelf |       |       | na                           | na           |         |
| Parameter                       | Value | Units | Reference points             |              |         |
| SSB-AGE-yr                      | 3     | yr    | Parameter                    | Value        | Units   |
| SSB-SEX-sex                     | 1     | sex   | Blim-MT (TB)                 | 2274.3       | MT      |
| TB-AGE-yr                       | 0     | yr    | SSB <sub>m</sub> sy-MT (SSB) | 5458.32      | MT      |
| A50-yr                          | 3     | yr    | BH-h-dimless                 | 0.75         | dimless |
| L50-cm                          | 70    | cm    | $SSB_{2007}/SSB_{msy}$       | 0.249        |         |
| REC-AGE                         |       |       |                              |              |         |
| F-AGE-yr                        | M     |       |                              |              |         |

| Time series minima and maxima |         |         |          |         |       |
|-------------------------------|---------|---------|----------|---------|-------|
|                               | SSB     | R       | F        | TB      | Catch |
| Minimum year                  | 1966    | 1966    | 1966     | 1966    | 1966  |
| Maximum year                  | 2007    | 2007    | 2007     | 2007    | 2007  |
| Time series minimum           | 717.45  | 527.877 | 0        | 1929.18 | 0     |
| Time series maximum           | 11729.3 | 51881.3 | 0.068202 | 38665.4 | 6672  |
| Units                         | MT      | E03     |          | MT      | MT    |



# Assessment of Northern Australia grooved tiger prawn (*Penaeus semisulcatus*)

Assessment ID: CSIRO-GTPRAWNNAUST-1970-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/102>

Area ID: Australia-AFMA-NAUST

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Dichmont, Cathy  |
| Assessment method  | Delay difference model                                       |
| Publication year   | 2007   |
| Timeseries span    | 1970-2006  |
| Document           | tiger_prawn_stocks2006.pdf (pdf in database)                 |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-08-11   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

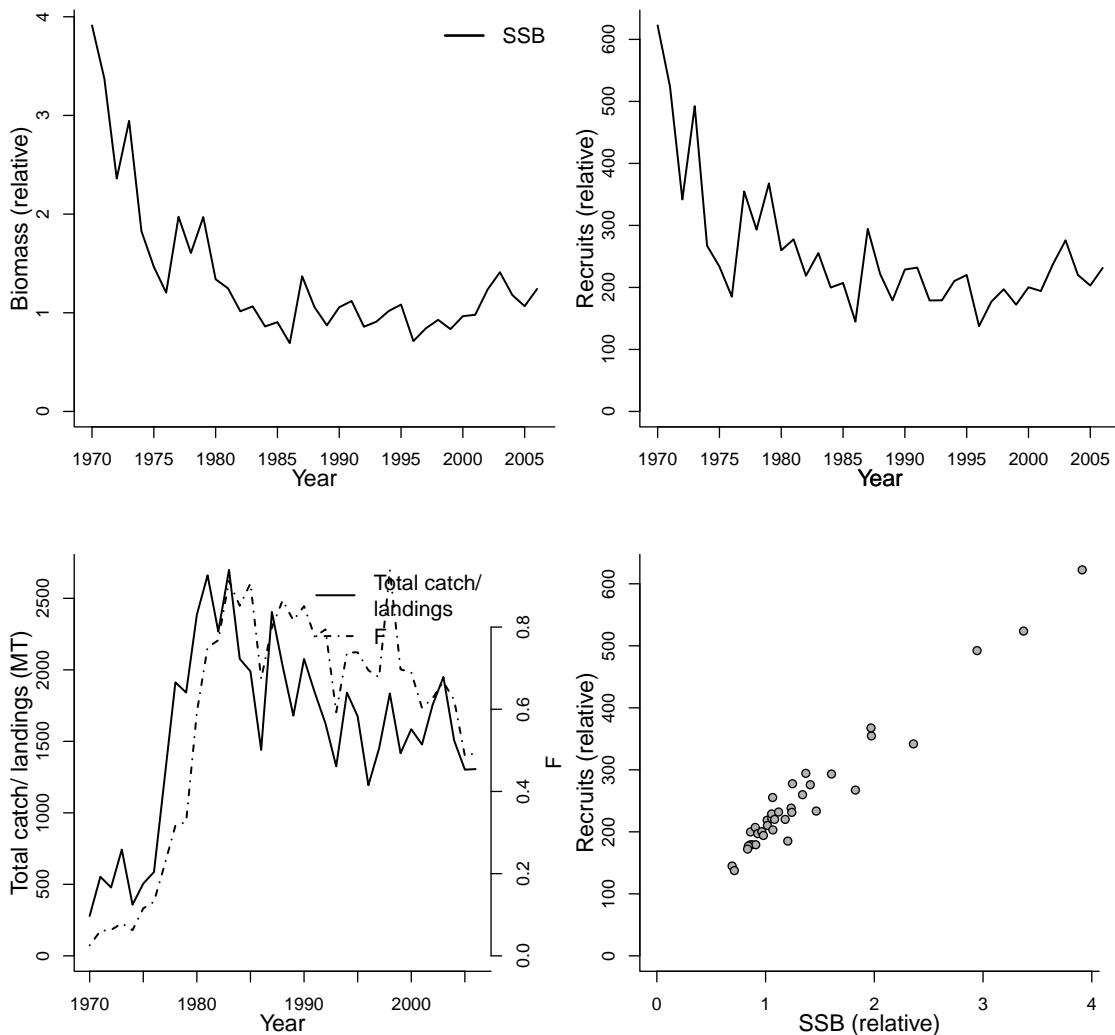
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                 | secondary LME | tertiary LME |
|-----------------------------|---------------|--------------|
| 39 - North Australian Shelf | na            | na           |
| <hr/>                       |               |              |
| Parameter                   | Value         | Units        |
| L50-cm                      | 3             | cm           |
| REC-AGE                     |               |              |
| SSB-AGE-yr                  |               |              |
| SSB-SEX-sex                 |               |              |
| TB-AGE-yr                   |               |              |
| F-AGE-yr                    |               |              |
| M                           |               |              |
| A50-yr                      |               |              |

| Parameter        | Value | Units |
|------------------|-------|-------|
| Reference points |       |       |

| Time series minima and maxima |          |           |                   |    |       |
|-------------------------------|----------|-----------|-------------------|----|-------|
|                               | SSB      | R         | F                 | TB | Catch |
| Minimum year                  | 1970     | 1970      | 1970              |    | 1970  |
| Maximum year                  | 2006     | 2006      | 2006              |    | 2006  |
| Time series minimum           | 0.69192  | 137.56821 | 0.025675770011084 |    | 279   |
| Time series maximum           | 3.91168  | 622.4707  | 0.939208000347344 |    | 2699  |
| Units                         | relative | relative  | 1/yr              |    | MT    |



# Assessment of Southeast Australia jackass morwong (*Nemadactylus macropterus*)

Assessment ID:CSIRO-MORWONGSE-1913-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/90>

Area ID: Australia-AFMA-SE

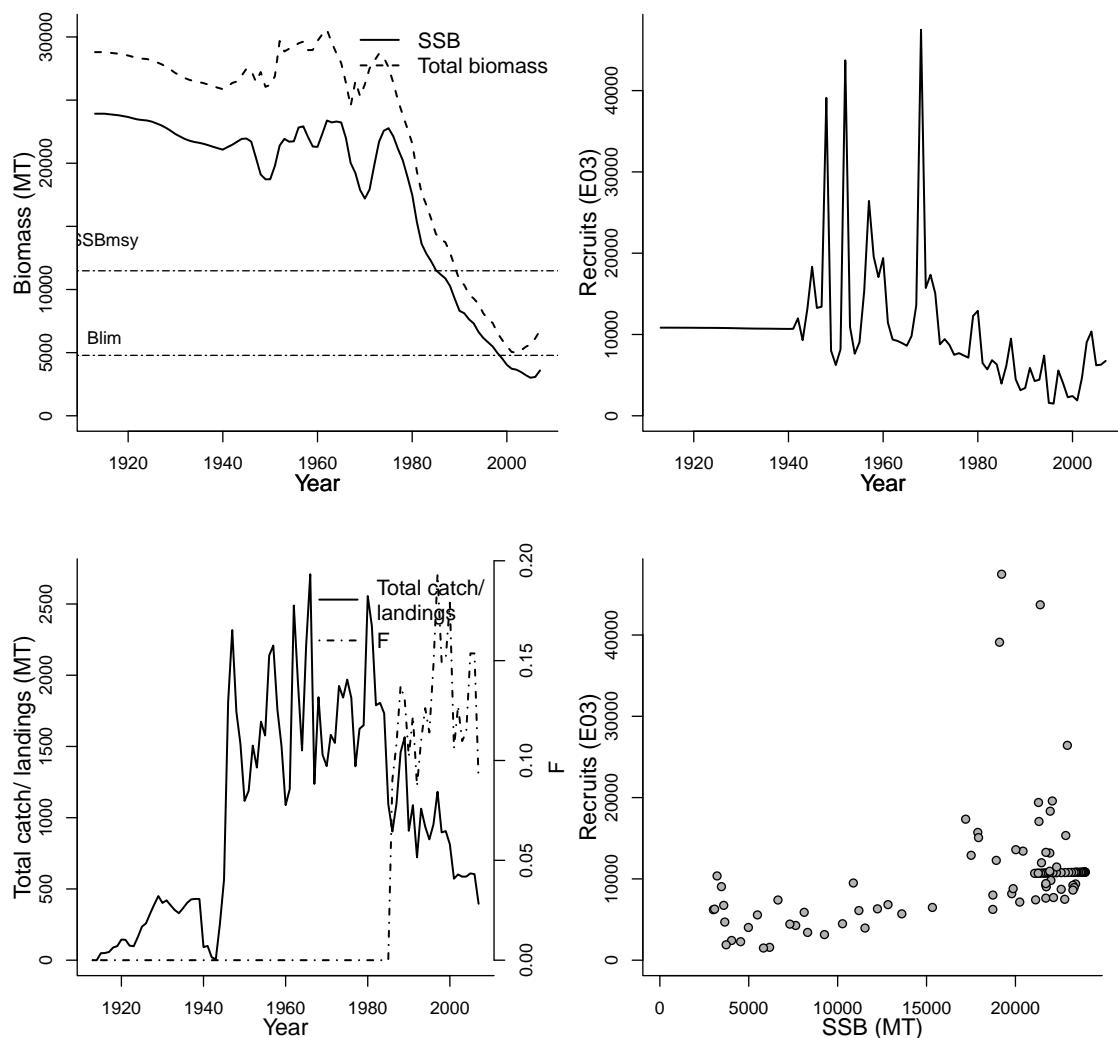
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Wayte, Sally   |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1913-2007  |
| Document           | MORWONGSE.pdf (pdf not in database)                          |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME  | secondary LME | tertiary LME |
|--|---------------|--------------|
| 42 - Southeast Australian Shelf                        | na            | na           |
| <hr/>  |               |              |
| Parameter  | Value         | Units        |
| SSB-SEX-sex  | 0             | sex          |
| REC-AGE-yr   | 0             | yr           |
| TB-AGE-yr  | 0             | yr           |
| A50-yr   | 3             | yr           |
| L50-cm   | 24.5          | cm           |
| M-1/yr   | 0.15          | 1/yr         |
| SSB-AGE-yr   |               |              |
| F-AGE-yr   |               |              |
| M  |               |              |
| <hr/>  |               |              |
| Reference points                                       |               |              |
| Parameter  | Value         | Units        |
| Blim-MT (TB)   | 4784.42       | MT           |
| SSB <sub>msy</sub> -MT (SSB)                           | 11482.608     | MT           |
| BH-h-dimless   | 0.7           | dimless      |
| <i>SSB</i> <sub>2007</sub> / <i>SSB</i> <sub>msy</sub> | 0.313         |              |

| Time series minima and maxima |         |         |          |         |       |
|-------------------------------|---------|---------|----------|---------|-------|
|                               | SSB     | R       | F        | TB      | Catch |
| Minimum year                  | 1913    | 1913    | 1913     | 1913    | 1913  |
| Maximum year                  | 2007    | 2007    | 2007     | 2007    | 2007  |
| Time series minimum           | 3011.69 | 1496.92 | 0        | 5002.88 | 0     |
| Time series maximum           | 23922.1 | 47480.1 | 0.193278 | 30566.5 | 2709  |
| Units                         | MT      | E03     |          | MT      | MT    |



# Assessment of Southeast Australia ling (*Genypterus blacodes*)

Assessment ID: CSIRO-NZLINGESE-1968-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/89>

Area ID: Australia-AFMA-SE

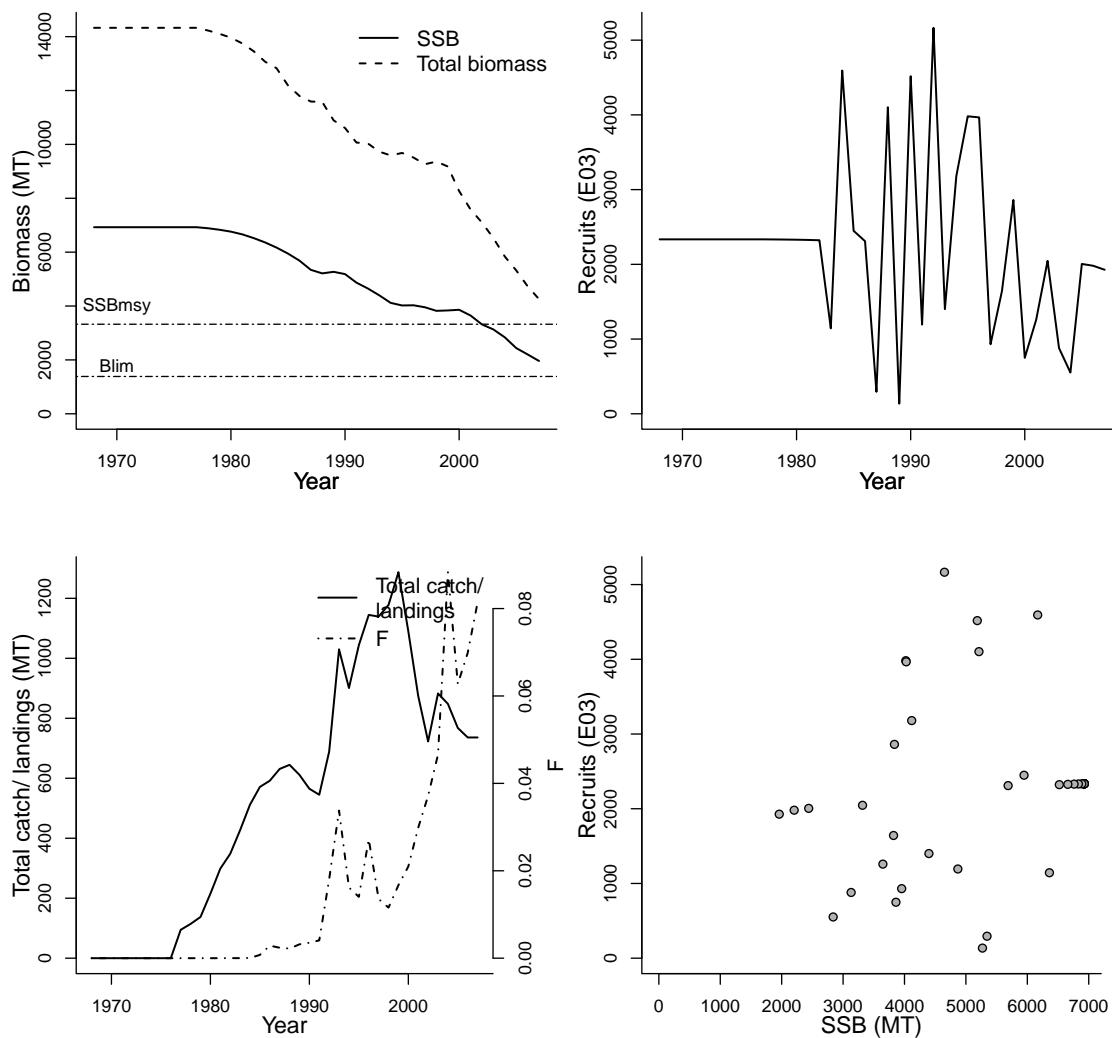
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Taylor, Bruce  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1968-2007  |
| Document           | NZLINGSE.pdf (pdf not in database)                           |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME   | secondary LME | tertiary LME |
|---|---------------|--------------|
| 42 - Southeast Australian Shelf                         | na            | na           |
| <hr/>   |               |              |
| Parameter   | Value         | Units        |
| SSB-SEX-sex   | 1             | sex          |
| REC-AGE-yr  | 0             | yr           |
| TB-AGE-yr   | 0             | yr           |
| A50-yr  | 3             | yr           |
| L50-cm  | 30            | cm           |
| M-1/yr  | 0.2           | 1/yr         |
| SSB-AGE-yr  |               |              |
| F-AGE-yr  |               |              |
| M   |               |              |
| <hr/>   |               |              |
| Reference points  |               |              |
| Parameter   | Value         | Units        |
| Blim-MT (TB)  | 1385.2        | MT           |
| SSB <sub>m</sub> sy-MT (SSB)                            | 3324.48       | MT           |
| BH-h-dimless  | 0.75          | dimless      |
| <i>SSB</i> <sub>2007</sub> / <i>SSB</i> <sub>m</sub> sy | 0.590         |              |

| Time series minima and maxima |         |         |           |         |
|-------------------------------|---------|---------|-----------|---------|
|                               | SSB     | R       | F         | TB      |
| Minimum year                  | 1968    | 1968    | 1968      | 1968    |
| Maximum year                  | 2007    | 2007    | 2007      | 2007    |
| Time series minimum           | 1960.12 | 135.309 | 0         | 4255.74 |
| Time series maximum           | 6926    | 5165.34 | 0.0883179 | 14328.6 |
| Units                         | MT      | E03     |           | MT      |



# Assessment of Western half of Southeast Australia ling (*Genypterus blacodes*)

Assessment ID: CSIRO-NZLINGWSE-1968-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/93>

Area ID: Australia-AFMA-WSE

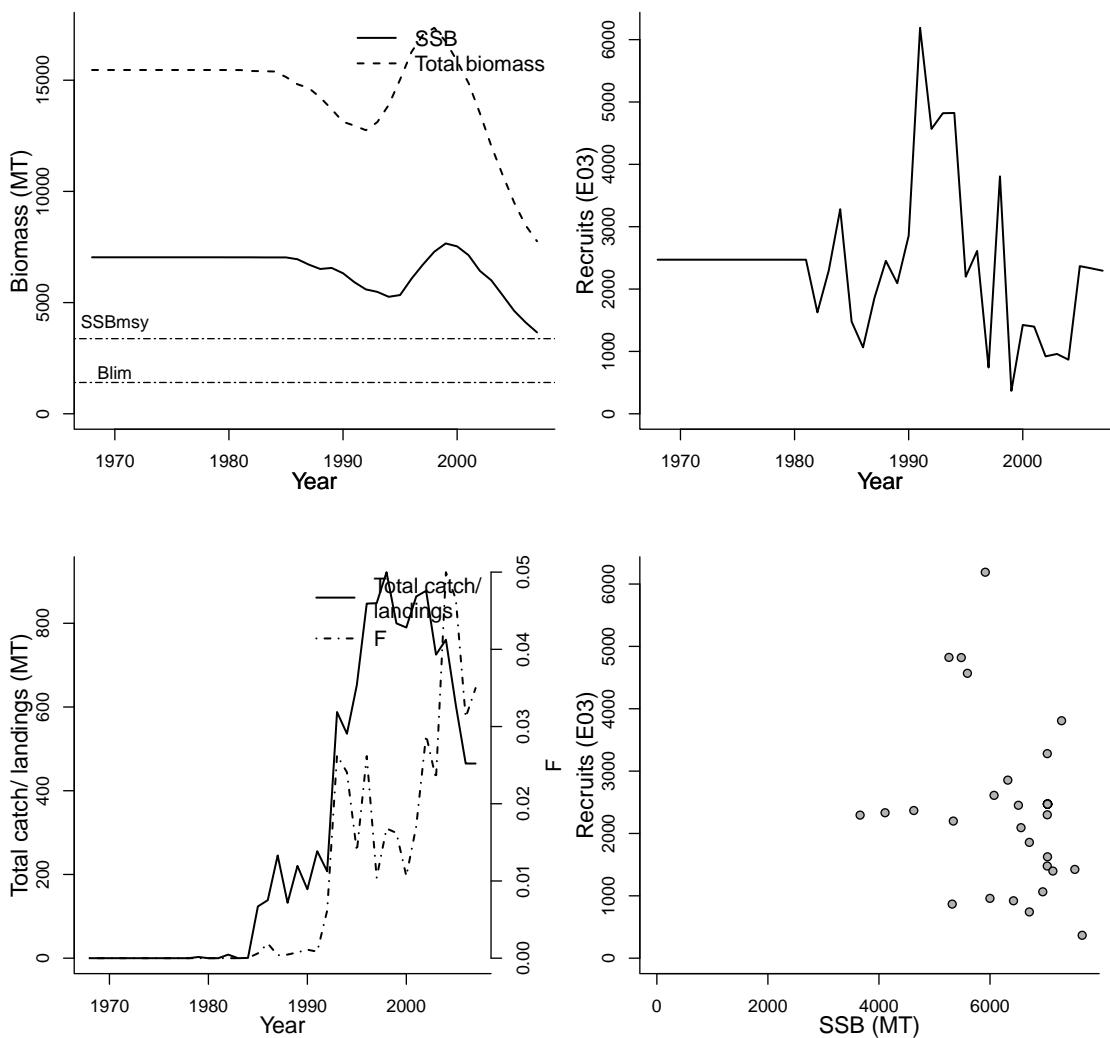
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Taylor, Bruce  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1968-2007  |
| Document           | NZLINGSE.pdf (pdf not in database)                           |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME                           | tertiary LME |
|---------------------------------|-------|-------|---|--------------|
| 43 - Southwest Australian Shelf |       |       | na                                      | na           |
| Parameter                       | Value | Units |   |              |
| SSB-SEX-sex                     | 1     | sex   |   |              |
| REC-AGE-yr                      | 0     | yr    | Reference points                        |              |
| TB-AGE-yr                       | 0     | yr    | Parameter                               | Value        |
| A50-yr                          | 3     | yr    | Blim-MT (TB)                            | 1407.318     |
| L50-cm                          | 30    | cm    | SSB <sub>msy</sub> -MT (SSB)            | 3377.5632    |
| M-1/yr                          | 0.2   | 1/yr  | BH-h-dimless                            | 0.75         |
| SSB-AGE-yr                      |       |       | SSB <sub>2007</sub> /SSB <sub>msy</sub> | 1.084        |
| F-AGE-yr                        |       |       |   |              |
| M                               |       |       |   |              |

| Time series minima and maxima |         |         |           |         |
|-------------------------------|---------|---------|-----------|---------|
|                               | SSB     | R       | F         | TB      |
| Minimum year                  | 1968    | 1968    | 1968      | 1968    |
| Maximum year                  | 2007    | 2007    | 2007      | 2007    |
| Time series minimum           | 3660.27 | 367.481 | 0         | 7758.25 |
| Time series maximum           | 7660.06 | 6189.74 | 0.0499884 | 17356.5 |
| Units                         | MT      | E03     |           | MT      |



# Assessment of Cascade Plateau orange roughy (*Hoplostethus atlanticus*)

Assessment ID: CSIRO-OROUGHYCASCADE-1987-2006-FULTON  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/96>

Area ID: Australia-AFMA-CASCADE

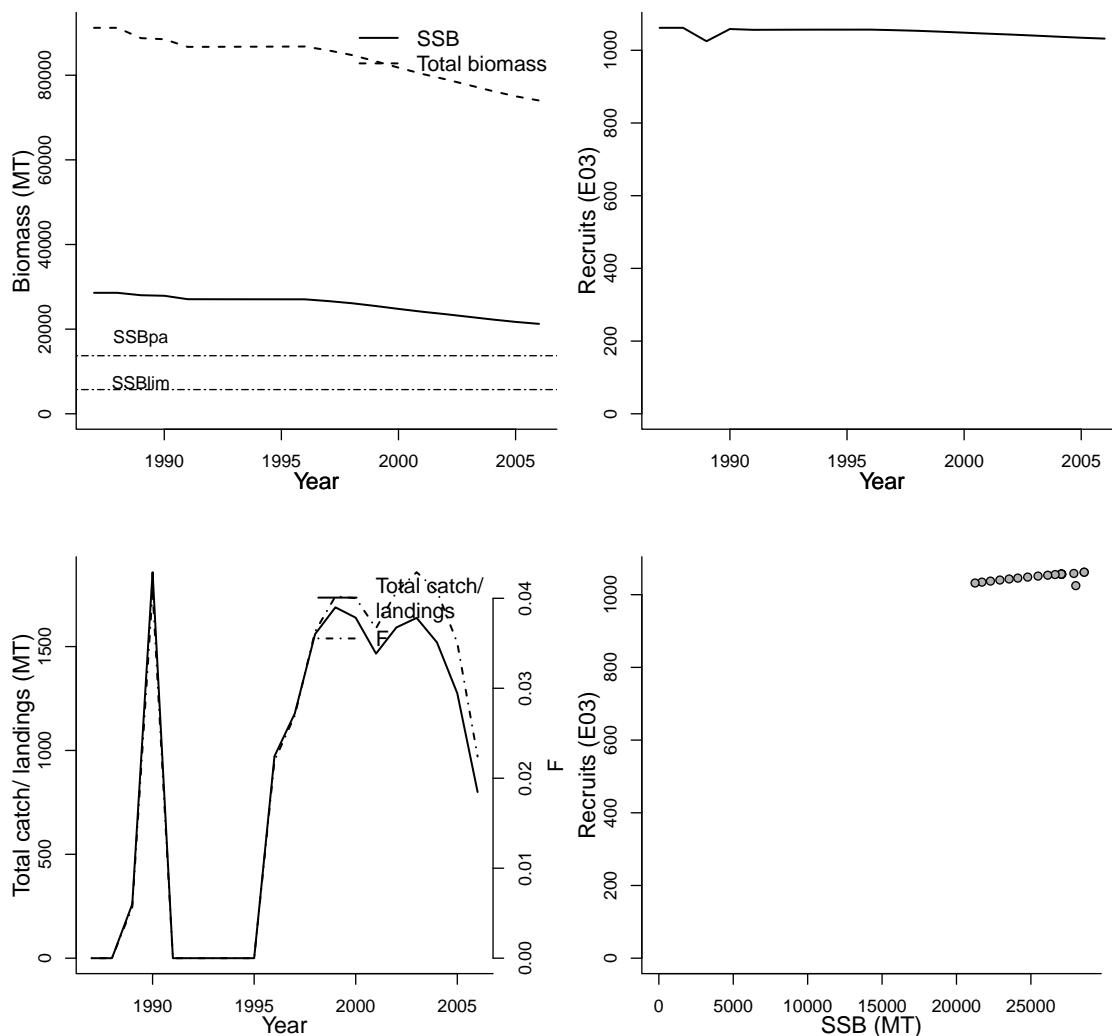
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | AFMA  |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization      |
| Assessment authors | Wayte, Sally  |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2007  |
| Timeseries span    | 1987-2006   |
| Document           | CSIRO-Cascade-Plateau-Stock-Assessment-2006.pdf (pdf in database) |
| Recorder           | FULTON  |
| Date entered       | 2008-04-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-11  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME          | tertiary LME |
|---------------------------------|-------|-------|------------------------|--------------|
| 42 - Southeast Australian Shelf |       |       | na                     | na           |
| Parameter                       | Value | Units | Reference points       |              |
| SSB-SEX-sex                     | 1     | sex   | SSBlim-MT (SSB)        | 5716.3 MT    |
| TB-AGE-yr                       | 0     | yr    | SSBpa-MT (SSB)         | 13719.12 MT  |
| A50-yr                          | 32    | yr    | $SSB_{2006}/SSB_{lim}$ | 3.717        |
| L50-cm                          | 32    | cm    |                        |              |
| REC-AGE                         |       |       |                        |              |
| SSB-AGE-yr                      |       |       |                        |              |
| F-AGE-yr                        |       |       |                        |              |
| M                               |       |       |                        |              |

| Time series minima and maxima |         |         |          |         |       |
|-------------------------------|---------|---------|----------|---------|-------|
|                               | SSB     | R       | F        | TB      | Catch |
| Minimum year                  | 1987    | 1987    | 1987     | 1987    | 1987  |
| Maximum year                  | 2006    | 2006    | 2006     | 2006    | 2006  |
| Time series minimum           | 21246.8 | 1024.93 | 0        | 74023.6 | 0     |
| Time series maximum           | 28581.5 | 1061.84 | 0.042899 | 91202.6 | 1858  |
| Units                         | MT      | E03     | ratio    | MT      | MT    |



# Assessment of Southeast Australia orange roughy (*Hoplostethus atlanticus*)

Assessment ID: CSIRO-OROUGHSE-1978-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/98>

Area ID: Australia-AFMA-SE

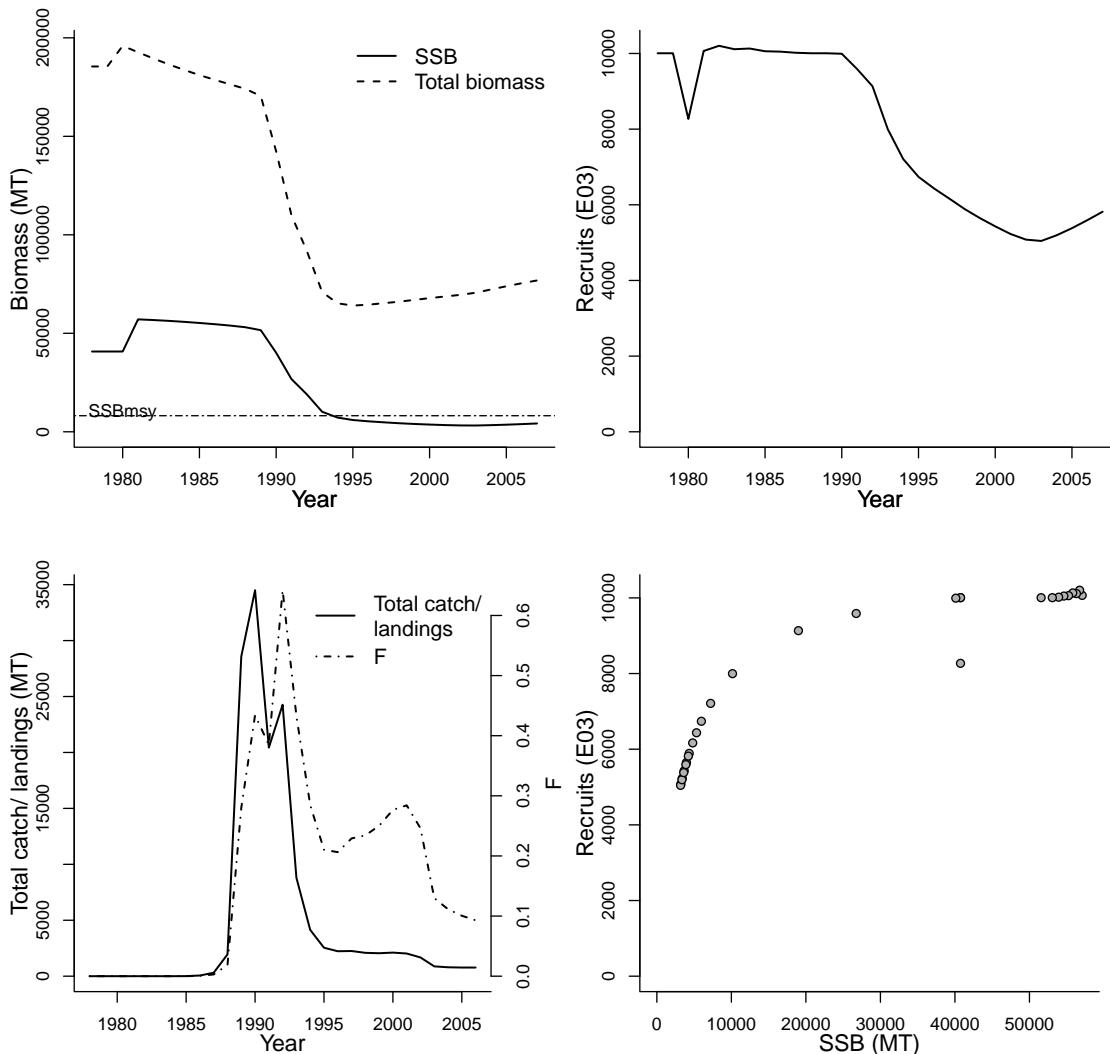
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Wayte, Sally   |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1978-2007  |
| Document           | OROUGHSE.pdf (pdf not in database)                           |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-04-21   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME | tertiary LME |
|---------------------------------|---------------|--------------|
| 42 - Southeast Australian Shelf | na            | na           |
| <hr/>                           |               |              |
| Parameter                       | Value         | Units        |
| SSB-AGE-yr                      | 2             | yr           |
| SSB-SEX-sex                     | 0             | sex          |
| TB-AGE-yr                       | 0             | yr           |
| A50-yr                          | 32            | yr           |
| L50-cm                          | 32            | cm           |
| REC-AGE                         |               |              |
| F-AGE-yr                        | M             |              |
| <hr/>                           |               |              |
| Reference points                |               |              |
| Parameter                       | Value         | Units        |
| SSB <sub>m</sub> sy-MT (SSB)    | 8149.26       | MT           |
| Bpa-MT (TB)                     | 19558.224     | MT           |
| $SSB_{2007}/SSB_{msy}$          | 0.519         |              |

| Time series minima and maxima |         |         |          |         |
|-------------------------------|---------|---------|----------|---------|
|                               | SSB     | R       | F        | TB      |
| Minimum year                  | 1978    | 1978    | 1978     | 1978    |
| Maximum year                  | 2007    | 2007    | 2006     | 2007    |
| Time series minimum           | 3182.91 | 5044.64 | 0        | 64072.5 |
| Time series maximum           | 57075.7 | 10202.8 | 0.642012 | 195951  |
| Units                         | MT      | E03     | ratio    | MT      |



# Assessment of Macquarie Island patagonian toothfish (*Dissostichus eleginoides*)

Assessment ID:CSIRO-PTOOTHFISHMI-1975-2010-FAY

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/472>

Area ID: Australia-AFMA-MI

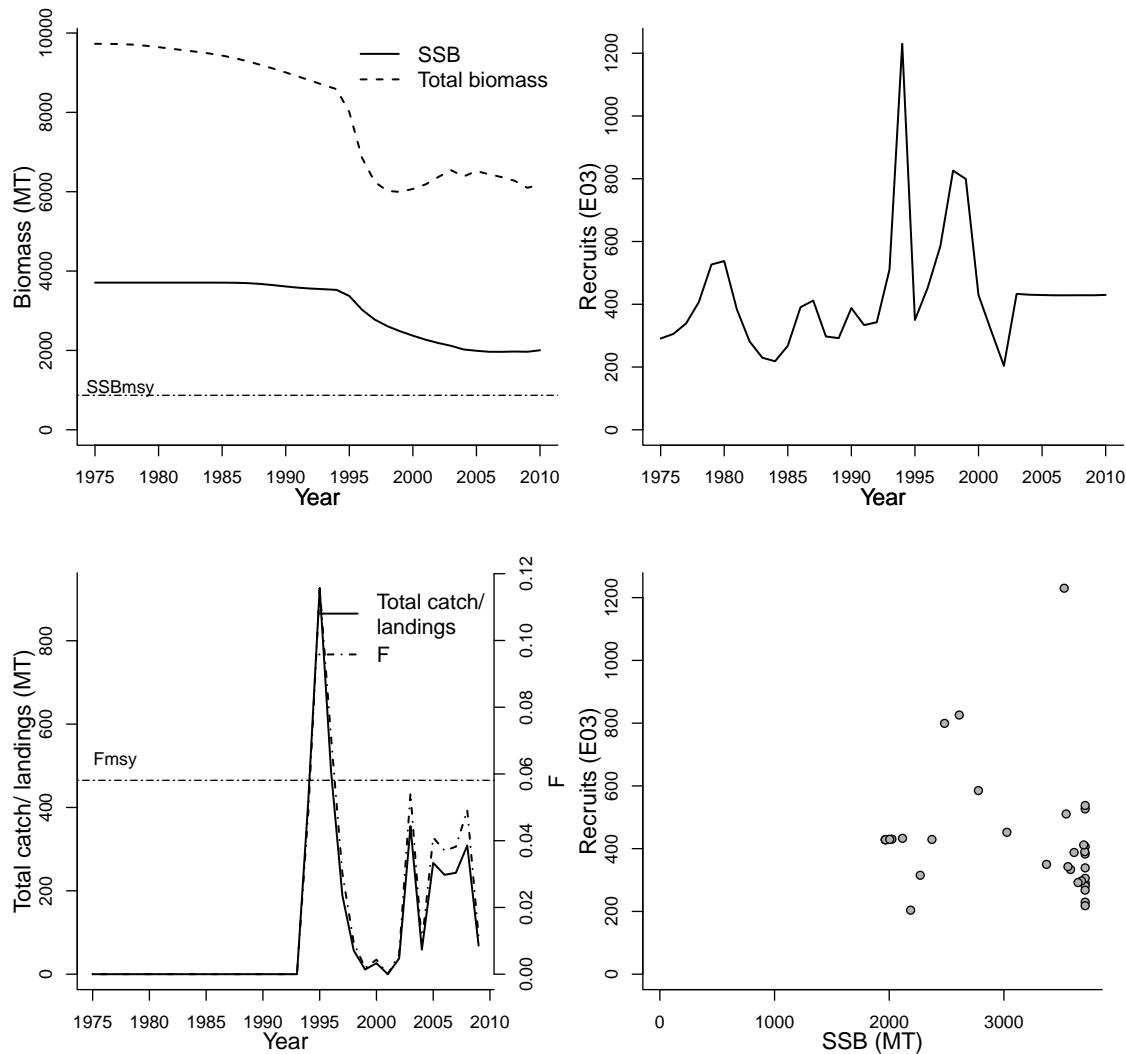
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Fay, G.  |
| Assessment method  | Stock Synthesis v3.0 model                                   |
| Publication year   | 2010   |
| Timeseries span    | 1975-2010  |
| Document           | FAY.PTOOTHFISHMACCA.2010.pdf (pdf in database)               |
| Recorder           | FAY  |
| Date entered       | 2011-01-18   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                  |       |       | secondary LME          | tertiary LME     |
|------------------------------|-------|-------|------------------------|------------------|
| -96 - Subantarctic High Seas |       |       | na                     | na               |
| Parameter                    | Value | Units | Parameter              | Reference points |
| REC-AGE-yr                   | 0     | yr    | Fmsy-1/yr (F)          | 0.0580997 1/yr   |
| SSB-AGE-yr                   | 14    | yr    | Fref-1/yr              | 0.0258653 1/yr   |
| SSB-SEX-sex                  | 1     | sex   | Fcurrent-1/yr          | 0.0112664 1/yr   |
| TB-AGE-yr                    | 1+    | yr    | NATMORT-1/yr (M)       | 0.13 1/yr        |
| L50-cm                       | 89    | cm    | SSBmsy-MT (SSB)        | 869.707 MT       |
| M-1/yr                       | 0.13  | 1/yr  | MSY-MT (TB)            | 184.369 MT       |
| NATMORT-1/yr                 | 0.13  | 1/yr  | BH-h-dimless           | 0.75 dimless     |
| F-AGE-yr                     |       |       | $F_{2009}/F_{msy}$     | 0.194            |
| M                            |       |       | $SSB_{2010}/SSB_{msy}$ | 2.305            |
| A50-yr                       |       |       |                        |                  |

| Time series minima and maxima |         |         |          |         |            |
|-------------------------------|---------|---------|----------|---------|------------|
|                               | SSB     | R       | F        | TB      | Catch      |
| Minimum year                  | 1975    | 1975    | 1975     | 1975    | 1975       |
| Maximum year                  | 2010    | 2010    | 2009     | 2010    | 2009       |
| Time series minimum           | 1964.96 | 204.02  | 0        | 5994.16 | 0          |
| Time series maximum           | 3708.59 | 1230.06 | 0.115663 | 9727.9  | 926.048767 |
| Units                         | MT      | E03     | 1/yr     | MT      | MT         |



# Assessment of Southeast Australia silverfish (*Seriolella punctata*)

Assessment ID: CSIRO-SILVERFISHSE-1978-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/91>

Area ID: Australia-AFMA-SE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Tuck, Geoff  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1978-2006  |
| Document Recorder  | SILVERFISHSE.pdf (pdf not in database)                       |
| Date entered       | FULTON   |
| Date last loaded   | 2008-04-30   |
| QA/QC complete     | 2011-07-25   |
| Date approved      | YES  |
|                    | 2009-06-11   |

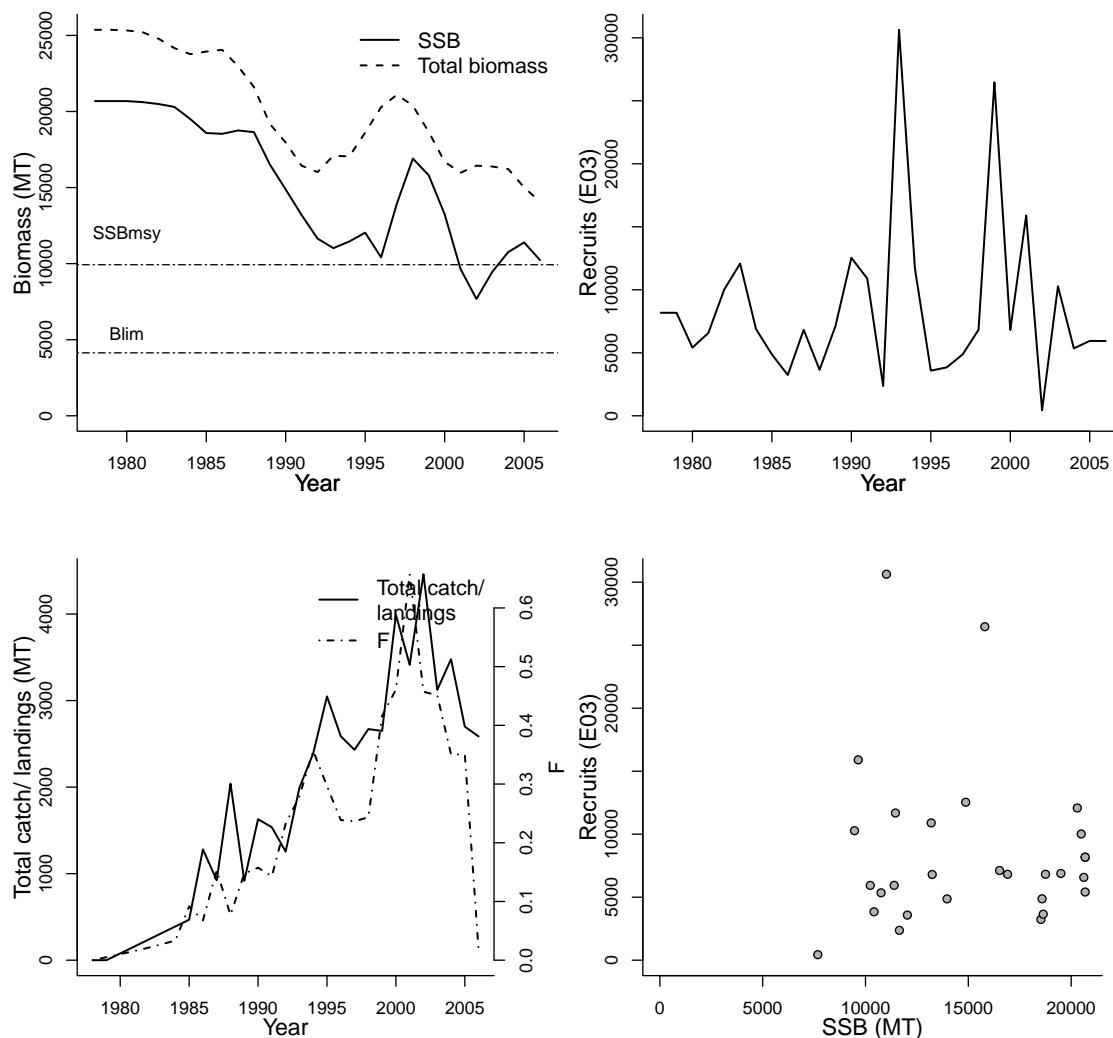
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME | tertiary LME |
|---------------------------------|---------------|--------------|
| 42 - Southeast Australian Shelf | na            | na           |
| Parameter Value Units           |               |              |
| SSB-SEX-sex                     | 0             | sex          |
| REC-AGE-yr                      | 0             | yr           |
| TB-AGE-yr                       | 0             | yr           |
| A50-yr                          | 3             | yr           |
| L50-cm                          | 37            | cm           |
| M-1/yr                          | 0.25          | 1/yr         |
| SSB-AGE-yr                      |               |              |
| F-AGE-yr                        |               |              |
| M                               |               |              |

| Parameter   | Value | Units | Reference points                        | Parameter | Value   | Units |
|-------------|-------|-------|---|-----------|---------|-------|
| SSB-SEX-sex | 0     | sex   |   |           |         |       |
| REC-AGE-yr  | 0     | yr    |   |           |         |       |
| TB-AGE-yr   | 0     | yr    |   |           |         |       |
| A50-yr      | 3     | yr    | Blim-MT (TB)                            | 4136.44   | MT      |       |
| L50-cm      | 37    | cm    | SSB <sub>msy</sub> -MT (SSB)            | 9927.456  | MT      |       |
| M-1/yr      | 0.25  | 1/yr  | BH-h-dimless                            | 0.75      | dimless |       |
| SSB-AGE-yr  |       |       | SSB <sub>2006</sub> /SSB <sub>msy</sub> | 1.031     |         |       |
| F-AGE-yr    |       |       |   |           |         |       |
| M           |       |       |   |           |         |       |

| Time series minima and maxima |         |         |         |         |
|-------------------------------|---------|---------|---------|---------|
|                               | SSB     | R       | F       | TB      |
| Minimum year                  | 1978    | 1978    | 1978    | 1978    |
| Maximum year                  | 2006    | 2006    | 2006    | 2006    |
| Time series minimum           | 7678.11 | 439.351 | 0       | 14062.8 |
| Time series maximum           | 20682.2 | 30634.4 | 0.65743 | 25368.6 |
| Units                         | MT      | E03     | ratio   | MT      |
|                               |         |         |         | MT      |



# Assessment of Southeast Australia school whiting (*Sillago flindersi*)

Assessment ID:CSIRO-SWHITSE-1945-2007-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/94>

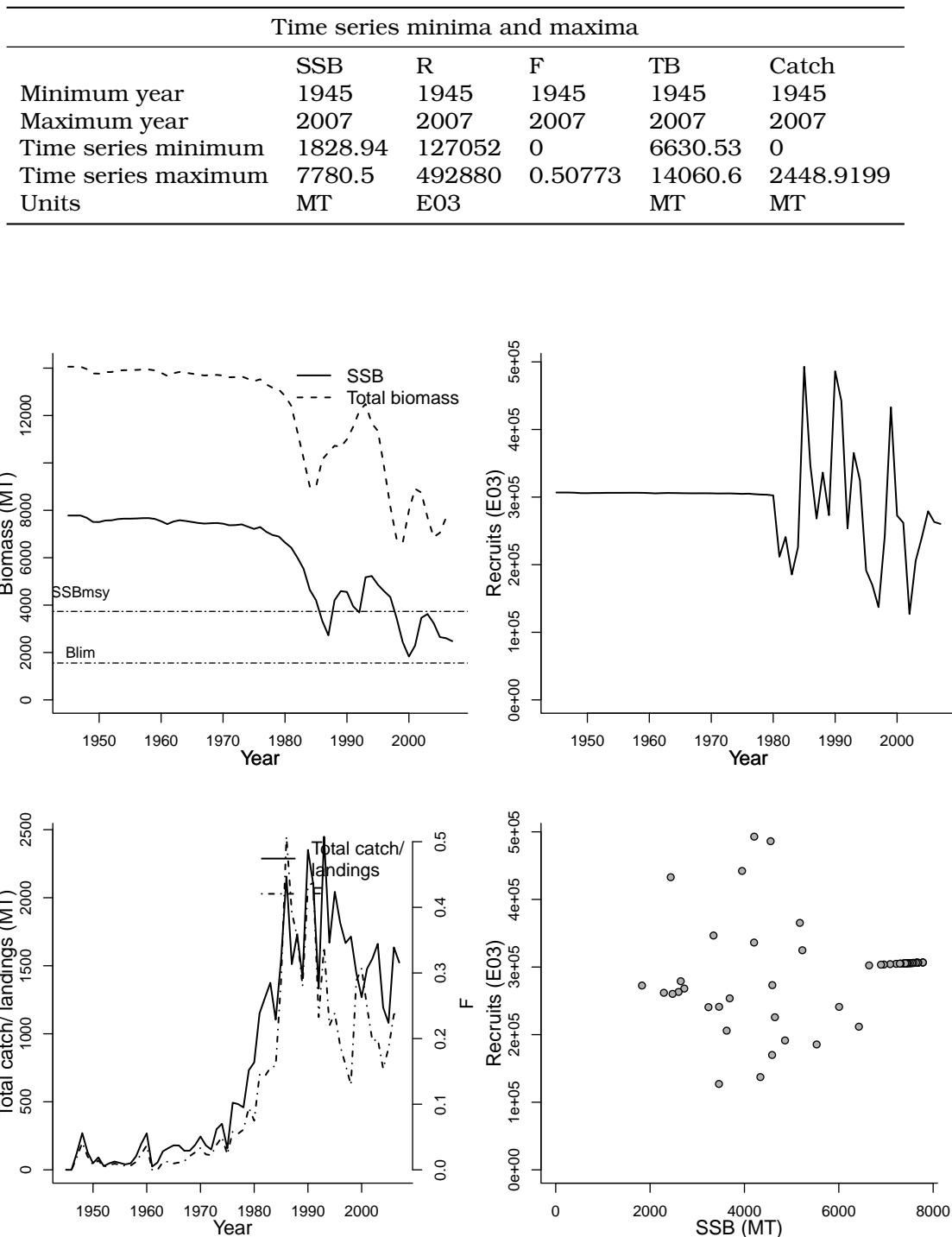
Area ID: Australia-AFMA-SE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Day, Jemery  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1945-2007  |
| Document           | SWHITSE.pdf (pdf not in database)                            |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME  | secondary LME | tertiary LME |
|--|---------------|--------------|
| 42 - Southeast Australian Shelf                        | na            | na           |
| <hr/>  |               |              |
| Parameter  | Value         | Units        |
| SSB-SEX-sex  | 0             | sex          |
| REC-AGE-yr   | 0             | yr           |
| TB-AGE-yr  | 0             | yr           |
| A50-yr   | 3             | yr           |
| L50-cm   | 16            | cm           |
| M-1/yr   | 0.5           | 1/yr         |
| SSB-AGE-yr   |               |              |
| F-AGE-yr   |               |              |
| M  |               |              |
| <hr/>  |               |              |
| Reference points                                       |               |              |
| Parameter  | Value         | Units        |
| Blim-MT (TB)   | 1555.962      | MT           |
| SSB <sub>msy</sub> -MT (SSB)                           | 3734.3088     | MT           |
| BH-h-dimless   | 0.95          | dimless      |
| <i>SSB</i> <sub>2007</sub> / <i>SSB</i> <sub>msy</sub> | 0.663         |              |



# Assessment of Southeast Australia tiger flathead (*Neoplatycephalus richardsoni*)

Assessment ID:CSIRO-TIGERFLATSE-1913-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/92>

Area ID: Australia-AFMA-SE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Klaer, Neil  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1913-2006  |
| Document Recorder  | TIGERFLATSE.pdf (pdf not in database)<br>FULTON              |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

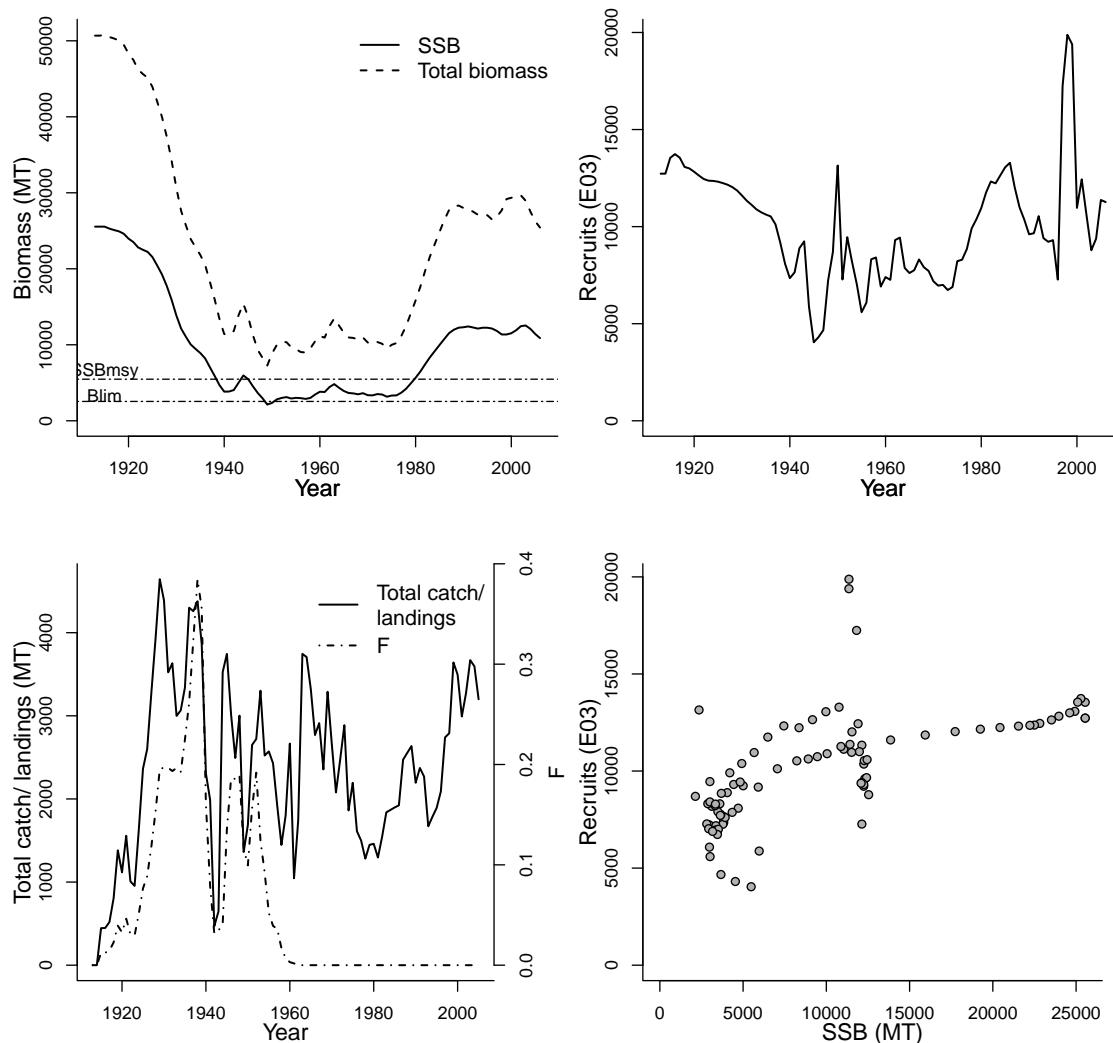
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME | tertiary LME |
|---------------------------------|---------------|--------------|
| 42 - Southeast Australian Shelf | na            | na           |
| <hr/>                           |               |              |
| Parameter                       | Value         | Units        |
| SSB-SEX-sex                     | 1             | sex          |
| REC-AGE-yr                      | 0             | yr           |
| TB-AGE-yr                       | 0             | yr           |
| A50-yr                          | 4             | yr           |
| L50-cm                          | 30            | cm           |
| M-1/T                           | 3.31          | 1/T          |
| M-1/yr                          | 0.2           | 1/yr         |
| SSB-AGE-yr                      |               |              |
| F-AGE-yr                        |               |              |
| M                               |               |              |

| Reference points                        |          |         |
|---|----------|---------|
| Parameter                               | Value    | Units   |
| Blim-MT (TB)                            | 2545.52  | MT      |
| SSB <sub>msy</sub> -MT (SSB)            | 5472.868 | MT      |
| BH-h-dimless                            | 0.85     | dimless |
| SSB <sub>2006</sub> /SSB <sub>msy</sub> | 1.988    |         |

|                     | Time series minima and maxima |         |          |         |        |
|---------------------|-------------------------------|---------|----------|---------|--------|
|                     | SSB                           | R       | F        | TB      | Catch  |
| Minimum year        | 1913                          | 1913    | 1913     | 1913    | 1913   |
| Maximum year        | 2006                          | 2006    | 2005     | 2006    | 2005   |
| Time series minimum | 2133.08                       | 4041.4  | 0        | 7266.84 | 0      |
| Time series maximum | 25546.5                       | 19879.9 | 0.384656 | 50789.9 | 4643.5 |
| Units               | MT                            | E03     |          | MT      | MT     |



# Assessment of Eastern half of Southeast Australia blue warehou (*Seriolella brama*)

Assessment ID:CSIRO-WAREHOU-ESE-1984-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/101>

Area ID: Australia-AFMA-ESE

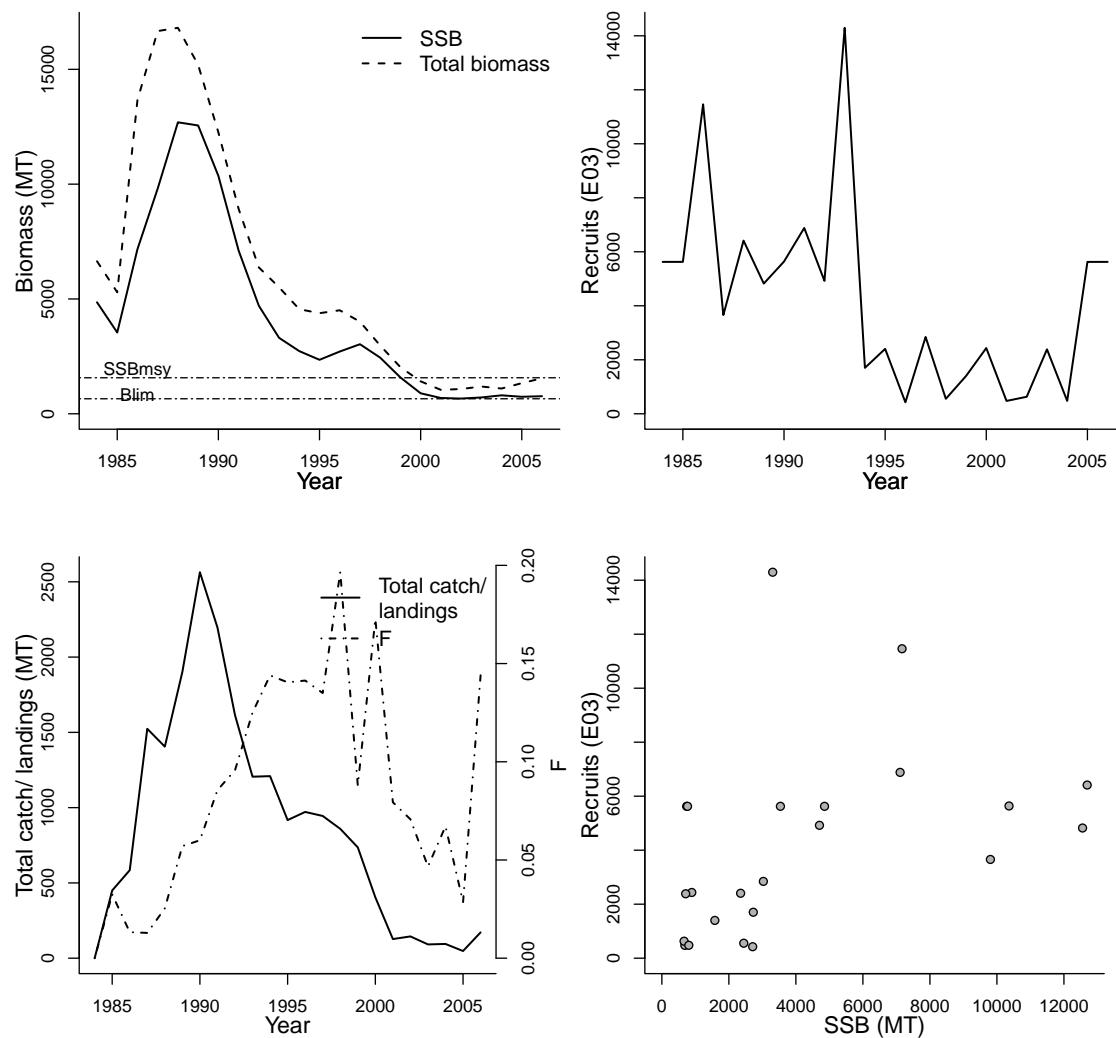
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Punt, Andre  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1984-2006  |
| Document           | WAREHOUSE.pdf (pdf not in database)                          |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME                           | tertiary LME |
|---------------------------------|-------|-------|---|--------------|
| 42 - Southeast Australian Shelf |       |       | na                                      | na           |
| Parameter                       | Value | Units |   |              |
| SSB-SEX-sex                     | 1     | sex   | Reference points                        |              |
| REC-AGE-yr                      | 0     | yr    | Parameter                               | Value        |
| TB-AGE-yr                       | 0     | yr    |   | Units        |
| A50-yr                          | 3     | yr    | Blim-MT (TB)                            | 653.4        |
| L50-cm                          | 33.4  | cm    | SSB <sub>msy</sub> -MT (SSB)            | 1568.16      |
| SSB-AGE-yr                      |       |       | SSB <sub>2006</sub> /SSB <sub>msy</sub> | 0.488        |
| F-AGE-yr                        |       |       |   |              |
| M                               |       |       |   |              |

| Time series minima and maxima |         |         |          |         |
|-------------------------------|---------|---------|----------|---------|
|                               | SSB     | R       | F        | TB      |
| Minimum year                  | 1984    | 1984    | 1984     | 1984    |
| Maximum year                  | 2006    | 2006    | 2006     | 2006    |
| Time series minimum           | 662.813 | 425.674 | 0        | 1040.75 |
| Time series maximum           | 12693.7 | 14295.7 | 0.196514 | 16808.9 |
| Units                         | MT      | E03     |          | MT      |



# Assessment of Western half of Southeast Australia blue warehou (*Seriolella brama*)

Assessment ID:CSIRO-WAREHOUWSE-1984-2006-FULTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/97>

Area ID: Australia-AFMA-WSE

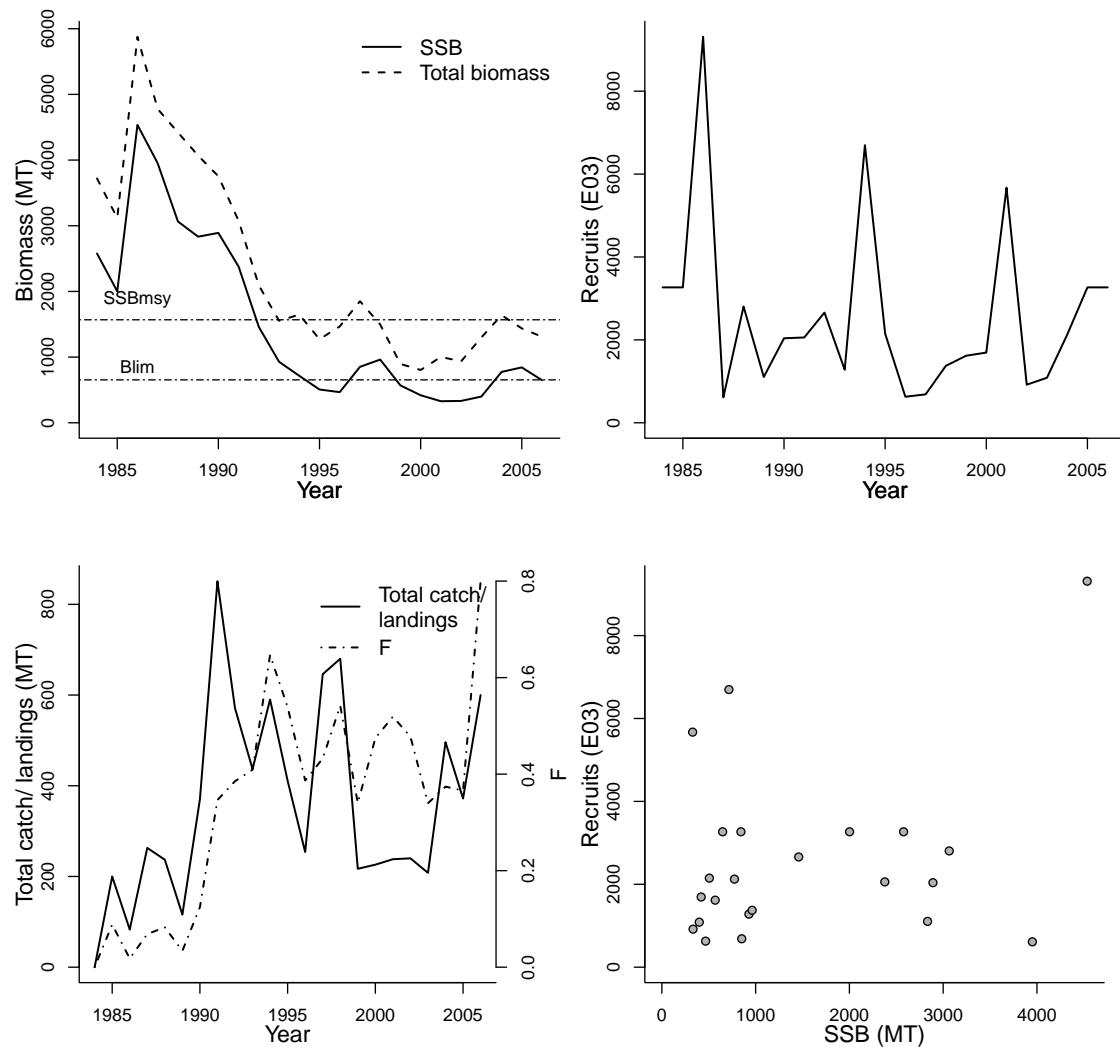
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Commonwealth Scientific and Industrial Research Organization |
| Assessment authors | Punt, Andre  |
| Assessment method  | Stock Synthesis v2.0 model                                   |
| Publication year   | 2007   |
| Timeseries span    | 1984-2006  |
| Document           | WAREHOUSE.pdf (pdf not in database)                          |
| Recorder           | FULTON   |
| Date entered       | 2008-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-11   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME                            | tertiary LME |
|---------------------------------|-------|-------|--|--------------|
| 43 - Southwest Australian Shelf |       |       | na                                       | na           |
| <hr/>                           |       |       |  |              |
| Parameter                       | Value | Units | Reference points                         |              |
| SSB-SEX-sex                     | 1     | sex   | Parameter                                | Value        |
| REC-AGE-yr                      | 0     | yr    |  | Units        |
| TB-AGE-yr                       | 0     | yr    | Blim-MT (TB)                             | 653.4        |
| A50-yr                          | 3     | yr    | SSB <sub>m</sub> sy-MT (SSB)             | 1568.16      |
| L50-cm                          | 33.4  | cm    | SSB <sub>2006</sub> /SSB <sub>m</sub> sy | 0.413        |
| SSB-AGE-yr                      |       |       |  |              |
| F-AGE-yr                        |       |       |  |              |
| M                               |       |       |  |              |

| Time series minima and maxima |        |         |          |         |
|-------------------------------|--------|---------|----------|---------|
|                               | SSB    | R       | F        | TB      |
| Minimum year                  | 1984   | 1984    | 1984     | 1984    |
| Maximum year                  | 2006   | 2006    | 2006     | 2006    |
| Time series minimum           | 328.04 | 612.336 | 0        | 803.621 |
| Time series maximum           | 4535.7 | 9311.87 | 0.799761 | 5876.7  |
| Units                         | MT     | E03     | ratio    | MT      |



# Assessment of Georges Bank atlantic cod (*Gadus morhua*)

Assessment ID:DFO-COD5Zjm-1978-2003-PREFONTAINE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/163>

Area ID: Canada-DFO-5Zjm

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans  |
| Assessment authors | Hunt, J.J.  |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2003  |
| Timeseries span    | 1978-2003   |
| Document           | NAFO-COD5Zjm-2003.pdf (pdf not in database)   |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-08  |

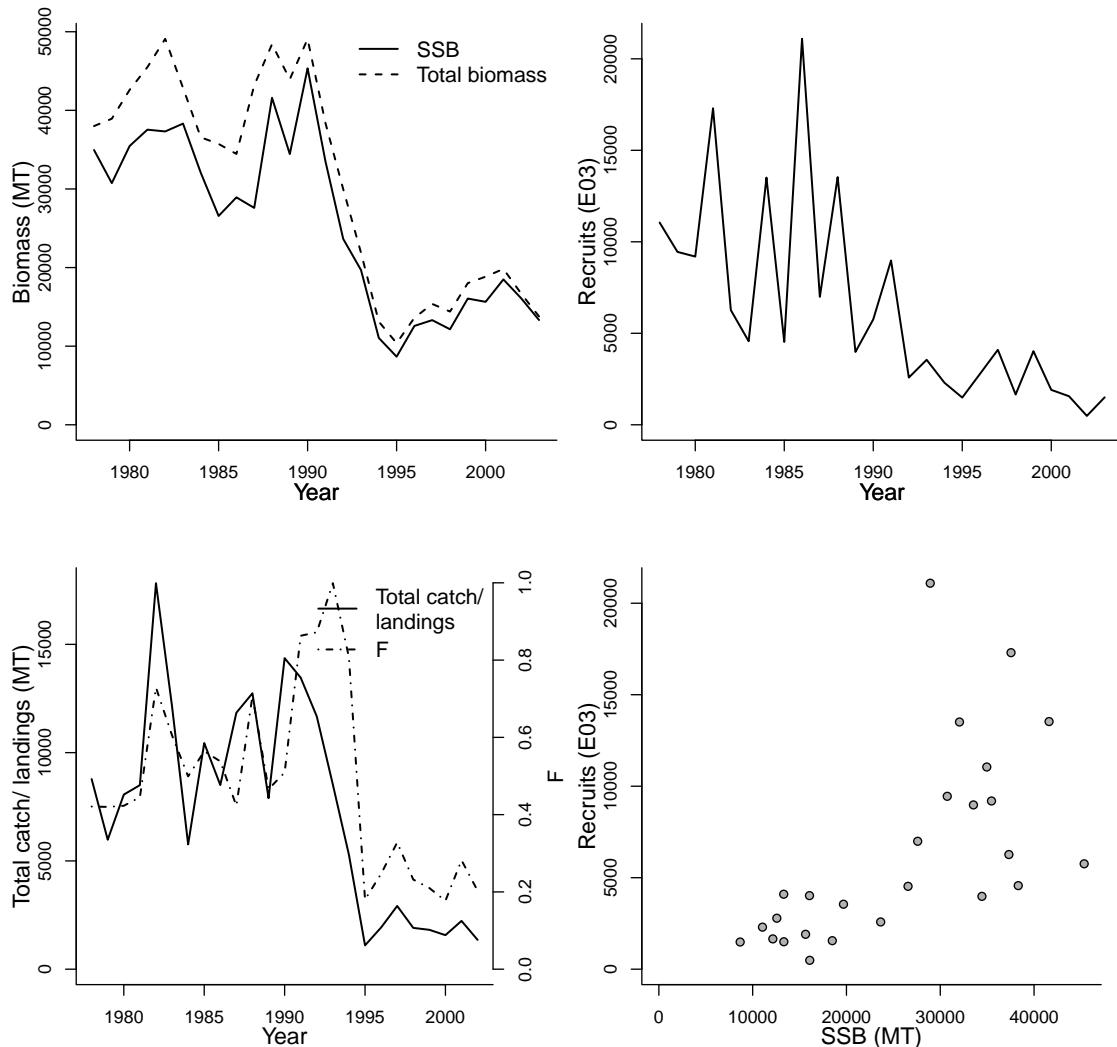
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| SSB-AGE-yr                           | 3+            | yr           |
| REC-AGE-yr                           | 1             | yr           |
| F-AGE-yr-yr                          | 4-9           | yr-yr        |
| TB-AGE-yr                            | 1-10          | yr           |
| M-1/T                                | 0.2           | 1/T          |
| SSB-SEX-sex                          |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

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| Parameter     | Value | Units | Reference points |
|---------------|-------|-------|------------------|
| F0.1-1/yr (F) | 0.18  | 1/yr  |                  |

| Time series minima and maxima |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    |
| Minimum year                  | 1978  | 1978  | 1978  | 1978  |
| Maximum year                  | 2003  | 2003  | 2002  | 2003  |
| Time series minimum           | 8667  | 485   | 0.177 | 10384 |
| Time series maximum           | 45343 | 21094 | 0.999 | 49102 |
| Units                         | MT    | E03   | 1/T   | MT    |



# Assessment of Georges Bank haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:DFO-HAD5Zejm-1968-2003-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/105>

Area ID: Canada-DFO-5Zejm

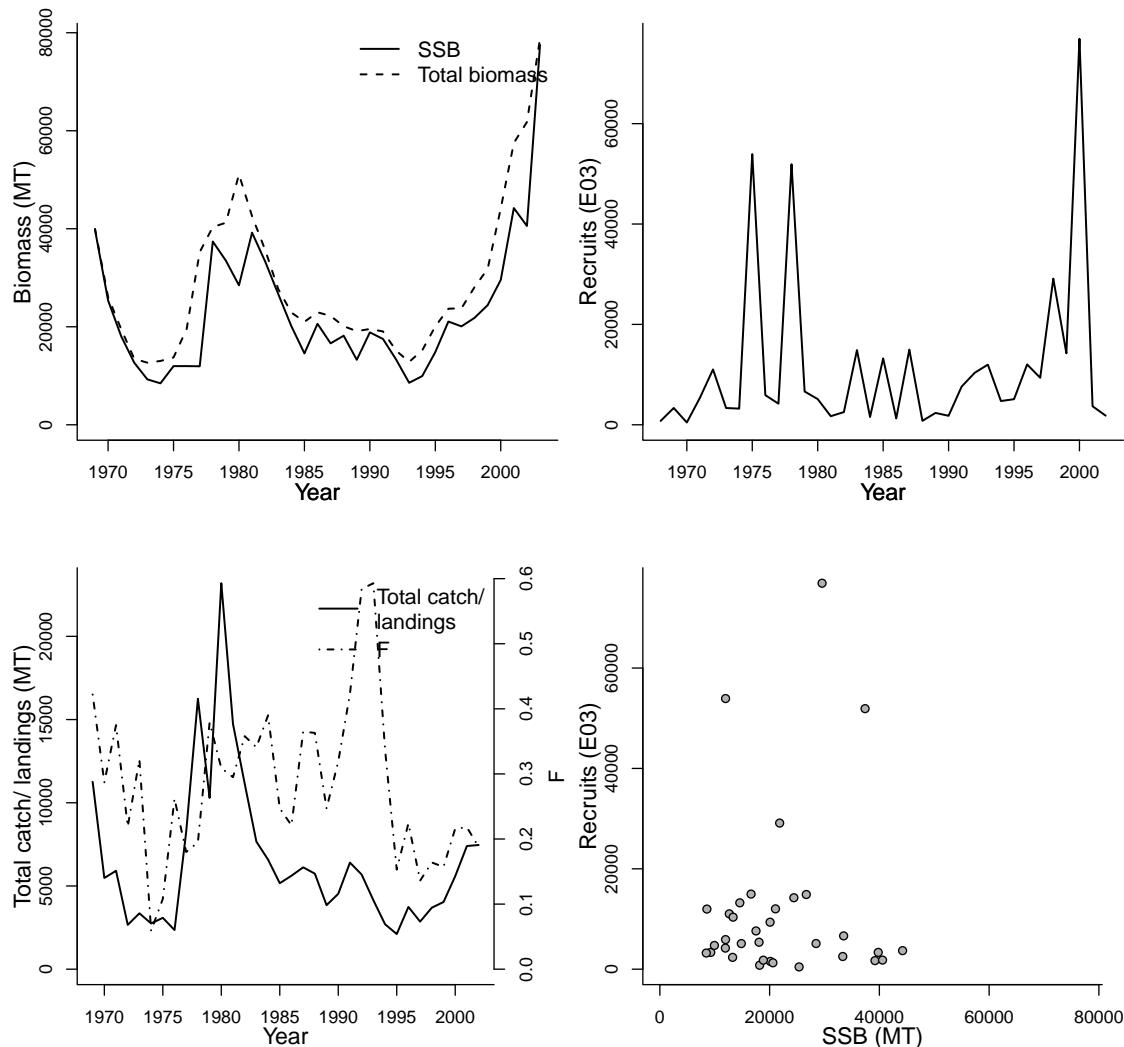
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans  |
| Assessment authors | Van Eeckhaute, L.   |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2003  |
| Timeseries span    | 1968-2003   |
| Document           | NAFO-HAD5Zejm-2003.pdf (pdf not in database)  |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-04  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME    | tertiary LME |
|--------------------------------------|-------|-------|------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na               | na           |
| Parameter                            | Value | Units |                  |              |
| SSB-AGE-yr                           | 3+    | yr    |                  |              |
| REC-AGE-yr                           | 1     | yr    |                  |              |
| F-AGE-yr-yr                          | 4+    | yr-yr | Reference points |              |
| TB-AGE-yr                            | 1-9+  | yr    | Parameter        | Value        |
| M-1/T                                | 0.2   | 1/T   |                  | Units        |
| SSB-SEX-sex                          |       |       | Fref-1/T (F)     | 0.26         |
| M                                    |       |       | Brebuild-MT (TB) | 65000        |
| A50-yr                               |       |       |                  | MT           |
| L50-cm                               |       |       |                  |              |

| Time series minima and maxima |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    |
| Minimum year                  | 1969  | 1968  | 1969  | 1969  |
| Maximum year                  | 2003  | 2002  | 2002  | 2003  |
| Time series minimum           | 8458  | 456   | 0.059 | 12672 |
| Time series maximum           | 77501 | 76905 | 0.593 | 78763 |
| Units                         | MT    | E03   | 1/T   | MT    |



# Assessment of Scotian Shelf and Bay of Fundy herring (*Clupea harengus*)

Assessment ID:DFO-HERR4VWX-1964-2006-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/171>

Area ID: Canada-DFO-4VWX

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans   |
| Assessment authors | Power, M.J.  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2006   |
| Timeseries span    | 1964-2006  |
| Document           | NAFO-HERR4VWX-2006.pdf (pdf not in database)   |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-06-02   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

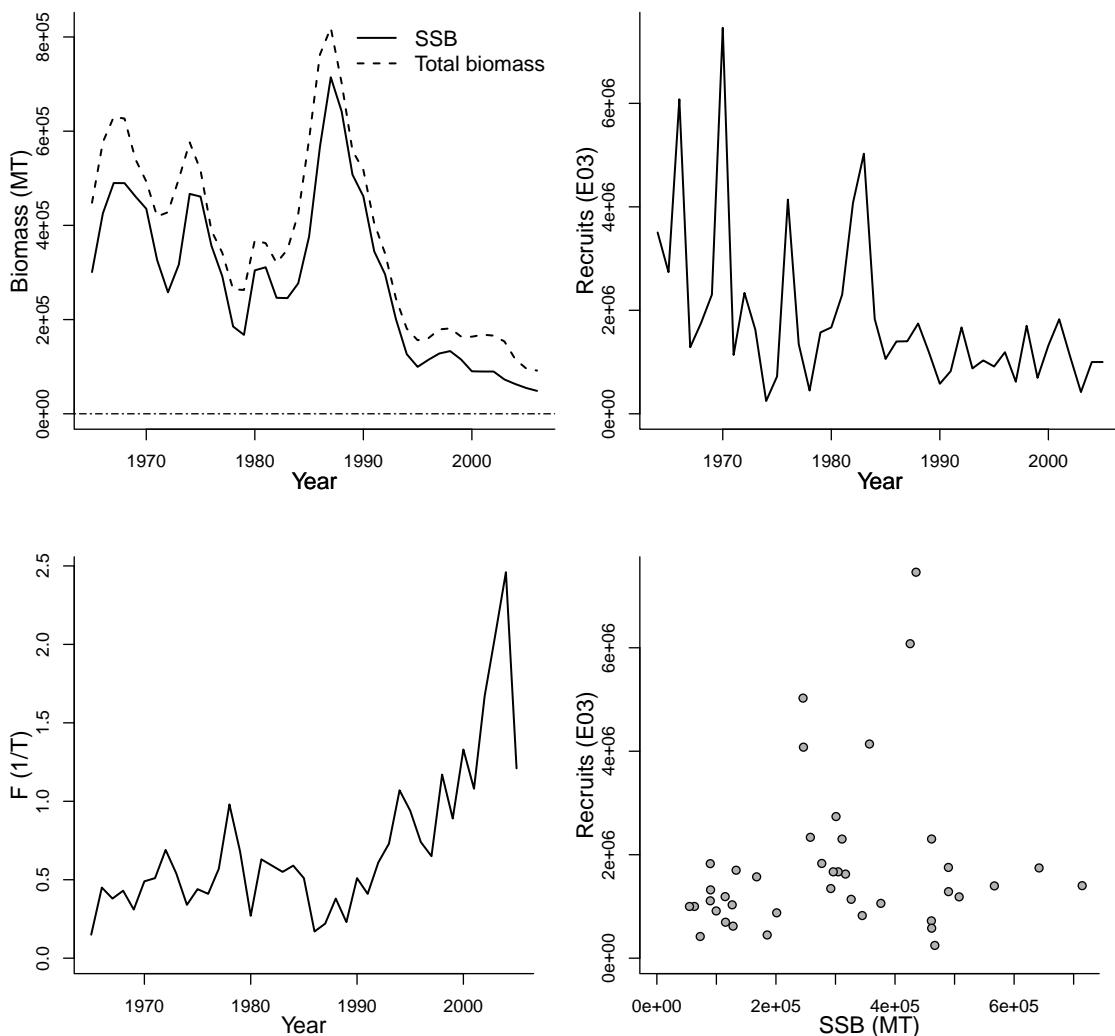
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| SSB-SEX-sex | NA    | sex   |
| REC-AGE-yr  | 1     | yr    |
| F-AGE-yr-yr | 5-8   | yr-yr |
| TB-AGE-yr   | NA    | yr    |
| A50-yr      | 3     | yr    |
| M-1/T       | 0.2   | 1/T   |
| SSB-AGE-yr  |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Parameter     | Value  | Reference points | Units   |
|---------------|--|------------------|---------|
| Bmsy-MT (TB)  | SEE NOTES  |                  |         |
| F0.1-1/yr (F) | 0.23   |                  | 1/yr    |
| Fmax-1/yr (F) | 0.57   |                  | 1/yr    |
| BH-h-dimless  | 4 to 8 compared with ages 5-9 the following year |                  | dimless |

## Time series minima and maxima

|                     | SSB    | R       | F    | TB     | Catch |
|---------------------|--------|---------|------|--------|-------|
| Minimum year        | 1965   | 1964    | 1965 | 1965   |       |
| Maximum year        | 2006   | 2005    | 2005 | 2006   |       |
| Time series minimum | 48646  | 247148  | 0.15 | 91734  |       |
| Time series maximum | 714331 | 7460417 | 2.46 | 819446 |       |
| Units               | MT     | E03     | 1/T  | MT     |       |



# Assessment of Canadian Atlantic Ocean barndoor skate (*Dipturus laevis*)

Assessment ID:DFO-MAR-BSKATCANATL-1970-1987-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/151>

Area ID: Canada-DFO-ATL

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Maritimes Region |
| Assessment authors | Simon, James E.                                       |
| Assessment method  | Temporal indices derived from scientific survey data  |
| Publication year   | 2002  |
| Timeseries span    | 1970-1987   |
| Document           | NAFO-BARNSK-2002.pdf (pdf not in database)            |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-07-09  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME       | secondary LME                        | tertiary LME                    |
|-------------------|--------------------------------------|---------------------------------|
| 8 - Scotian Shelf | 7 - Northeast U.S. Continental Shelf | 9 - Newfoundland-Labrador Shelf |
| <hr/>             |                                      |                                 |
| Parameter         | Value                                | Units                           |
| REC-AGE           |                                      |                                 |
| SSB-AGE-yr        |                                      |                                 |
| SSB-SEX-sex       |                                      |                                 |
| TB-AGE-yr         |                                      |                                 |
| F-AGE-yr          |                                      |                                 |
| M                 |                                      |                                 |
| A50-yr            |                                      |                                 |
| L50-cm            |                                      |                                 |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Eastern Scotian Shelf atlantic cod

## (*Gadus morhua*)

Assessment ID:DFO-MAR-COD4VsW-1958-2002-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/162>

Area ID: Canada-DFO-4VsW

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Maritimes Region |
| Assessment authors | Fanning, L.P.   |
| Assessment method  | Unknown   |
| Publication year   | 2003  |
| Timeseries span    | 1958-2002   |
| Document           | NAFO-COD4VsW-2003.pdf (pdf not in database)           |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-09  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-08  |

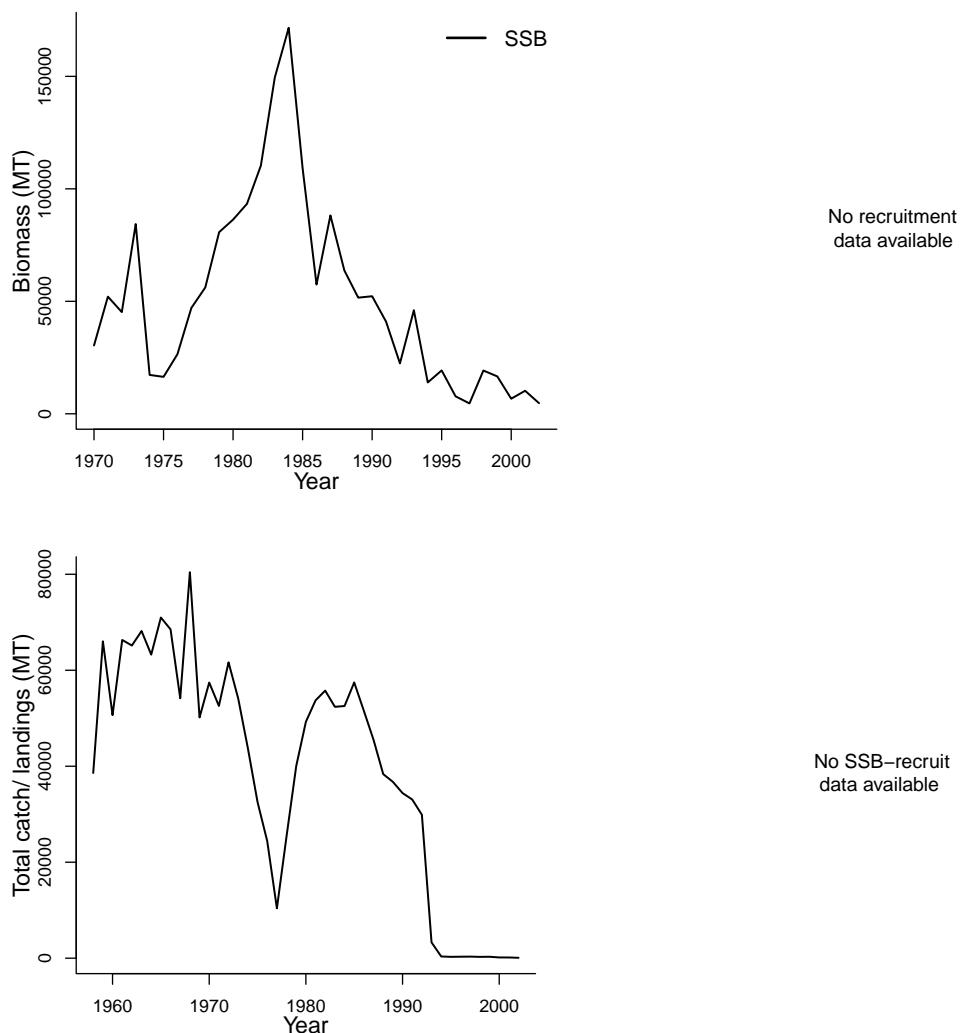
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value                                   | primary LME       | secondary LME | tertiary LME | Units |
|-------------|---|-------------------|---------------|--------------|-------|
|             |   | 8 - Scotian Shelf | na            | na           |       |
| A50-yr      | 3                                       |                   |               |              | yr    |
| L50-cm      | SEE FIGURES 15 AND 16 OF THE ASSESSMENT |                   |               |              | cm    |
| REC-AGE     |   |                   |               |              |       |
| SSB-AGE-yr  |   |                   |               |              |       |
| SSB-SEX-sex |   |                   |               |              |       |
| TB-AGE-yr   |   |                   |               |              |       |
| F-AGE-yr    |   |                   |               |              |       |
| M           |   |                   |               |              |       |

| Parameter       | Reference points |       |       |
|-----------------|------------------|-------|-------|
|                 |                  | Value | Units |
| MORATOR-yr-yr   | 1993-2008        | yr-yr |       |
| SSBreccovery-MT | 16420            | MT    |       |
| SSBnp50-MT      | 53990            | MT    |       |
| SSBrk50-MT      | 23940            | MT    |       |
| SSBbh50-MT      | 33670            | MT    |       |
| SSBs50/90-MT    | 12590            | MT    |       |

| Time series minima and maxima |          |   |   |    |       |
|-------------------------------|----------|---|---|----|-------|
|                               | SSB      | R | F | TB | Catch |
| Minimum year                  | 1970     |   |   |    | 1958  |
| Maximum year                  | 2002     |   |   |    | 2002  |
| Time series minimum           | 4607     |   |   |    | 83    |
| Time series maximum           | 171591.6 |   |   |    | 80428 |
| Units                         | MT       |   |   |    | MT    |



# Assessment of Western Scotian Shelf cusk (*Brosme brosme*)

Assessment ID:DFO-MAR-CUSK4X-1970-2007-RICARD

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/476>

Area ID: Canada-DFO-4X

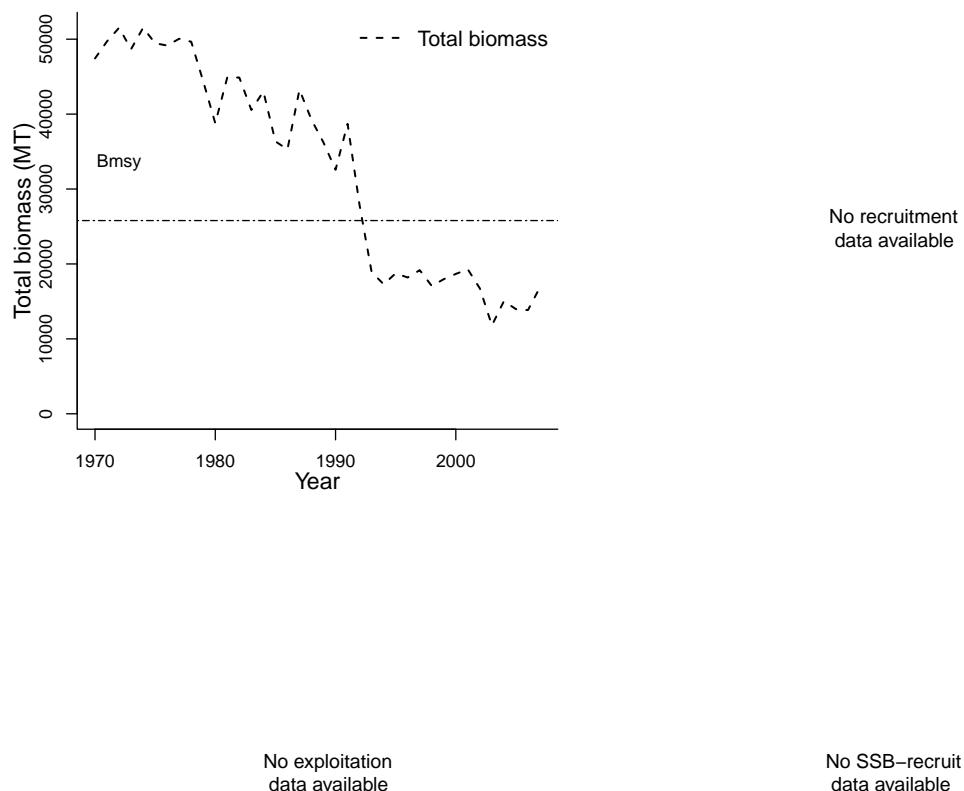
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Maritimes Region |
| Assessment authors | Davies, Trevor D.                                     |
| Assessment method  | Bayesian Surplus Production Model                     |
| Publication year   |   |
| Timeseries span    | 1970-2007   |
| Document           | Davies-Jonsen-CJFAS-2011.pdf (pdf in database)        |
| Recorder           | RICARD  |
| Date entered       | 2011-03-01  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |       |
|--------------------------------------|-------|-------|---------------------|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |       |
| Parameter                            | Value | Units | Reference points    |              |       |
| REC-AGE                              |       |       | Parameter           | Value        | Units |
| SSB-AGE-yr                           |       |       | K-MT                | 51580        | MT    |
| SSB-SEX-sex                          |       |       | MSY-MT (TB)         | 1482.925     | MT    |
| TB-AGE-yr                            |       |       | Bmsy-MT (TB)        | 25790        | MT    |
| F-AGE-yr                             |       |       | Umsy-ratio (U)      | 0.0575       | ratio |
| M                                    |       |       | BO-MT               | 47430        | MT    |
| A50-yr                               |       |       | $TB_{2007}/B_{msy}$ |              |       |
| L50-cm                               |       |       | 0.655               |              |       |

| Time series minima and maxima |     |   |   |       |       |
|-------------------------------|-----|---|---|-------|-------|
|                               | SSB | R | F | TB    | Catch |
| Minimum year                  |     |   |   | 1970  |       |
| Maximum year                  |     |   |   | 2007  |       |
| Time series minimum           |     |   |   | 11800 |       |
| Time series maximum           |     |   |   | 51520 |       |
| Units                         |     |   |   | MT    |       |



# Assessment of Western Scotian Shelf, Bay of Fundy and Gulf of Maine haddock

*(Melanogrammus aeglefinus)*

Assessment ID:DFO-MAR-HAD4X5Y-1960-2003-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/166>

Area ID: Canada-DFO-4X5Y

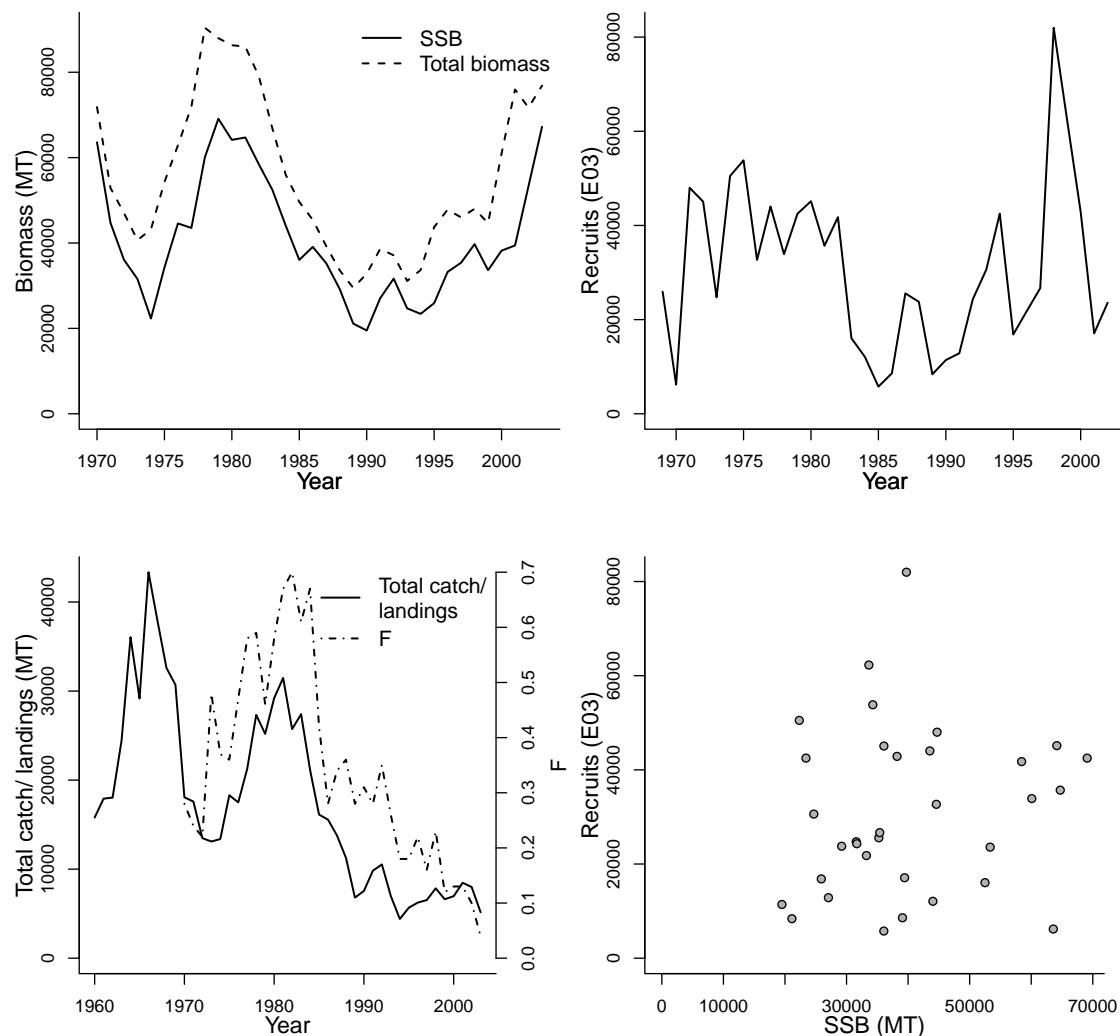
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Maritimes Region |
| Assessment authors | Hurley, P.C.F.  |
| Assessment method  | Sequential Population Analysis / ADAPT                |
| Publication year   | 2003  |
| Timeseries span    | 1960-2003   |
| Document           | NAFO-HAD4X5Y-2003.pdf (pdf in database)               |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-03  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       | secondary LME     |                  | tertiary LME |
|--------------------------------------|-------|-------------------|------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       | 8 - Scotian Shelf |                  | na           |
| <hr/>                                |       |                   |                  |              |
| Parameter                            | Value | Units             | <hr/>            |              |
| SSB-AGE-yr                           | 4+    | yr                | <hr/>            |              |
| REC-AGE-yr                           | 1     | yr                | <hr/>            |              |
| F-AGE-yr-yr                          | 5-7   | yr-yr             | Reference points |              |
| TB-AGE-yr                            | 1-10  | yr                | Parameter        | Value        |
| M-1/T                                | 0.2   | 1/T               |                  | Units        |
| SSB-SEX-sex                          |       |                   | F0.1-1/yr (F)    | 0.25 1/yr    |
| M                                    |       |                   |                  |              |
| A50-yr                               |       |                   |                  |              |
| L50-cm                               |       |                   |                  |              |

| Time series minima and maxima |       |       |      |       |
|-------------------------------|-------|-------|------|-------|
|                               | SSB   | R     | F    | TB    |
| Minimum year                  | 1970  | 1969  | 1970 | 1970  |
| Maximum year                  | 2003  | 2002  | 2003 | 2003  |
| Time series minimum           | 19506 | 5765  | 0.04 | 29495 |
| Time series maximum           | 69091 | 81978 | 0.7  | 90408 |
| Units                         | MT    | E03   | 1/T  | MT    |



# Assessment of Scotian Shelf, Bay of Fundy and Georges Bank white hake (*Urophycis tenuis*)

Assessment ID:DFO-MAR-WHAK4VWX5-1964-2005-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/6>

Area ID: Canada-DFO-4VWX5

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Maritimes Region |
| Assessment authors | Bundy, A.   |
| Assessment method  | Unknown   |
| Publication year   | 2005  |
| Timeseries span    | 1964-2005   |
| Document           | NAFO-WHAK4VWX5-2005.pdf (pdf in database)             |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-18  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-08  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME       | secondary LME                        | tertiary LME |
|-------------------|--------------------------------------|--------------|
| 8 - Scotian Shelf | 7 - Northeast U.S. Continental Shelf | na           |
| Parameter         | Value                                | Units        |
| F-AGE-yr-yr       | SEE NOTES                            | yr-yr        |
| REC-AGE           |                                      |              |
| SSB-AGE-yr        |                                      |              |
| SSB-SEX-sex       |                                      |              |
| TB-AGE-yr         |                                      |              |
| M                 |                                      |              |
| A50-yr            |                                      |              |
| L50-cm            |                                      |              |

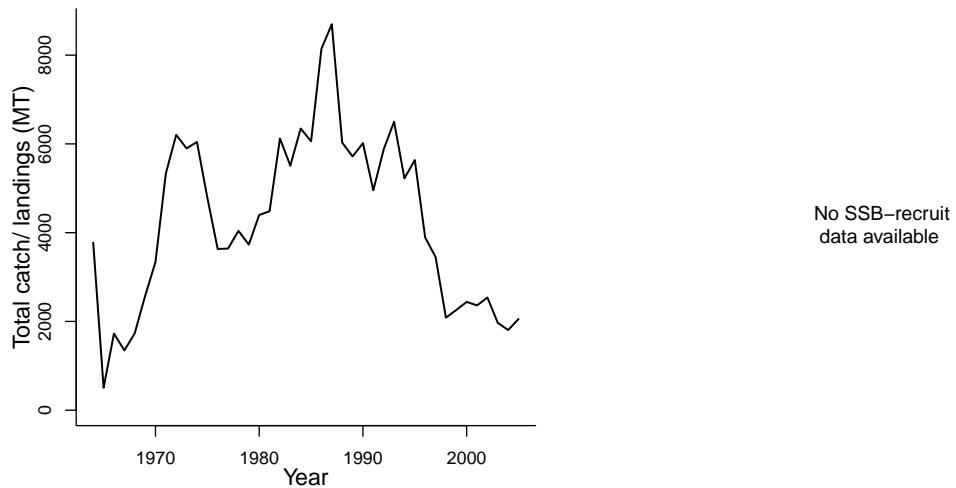
  

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    | 1964  |
| Maximum year                  |     |   |   |    | 2005  |
| Time series minimum           |     |   |   |    | 505   |
| Time series maximum           |     |   |   |    | 8697  |
| Units                         |     |   |   |    | MT    |

No biomass data available

No recruitment data available



# Assessment of Labrador - NE Newfoundland american plaice (*Hippoglossoides platessoides*)

Assessment ID:DFO-NFLD-AMPL23K-1960-2004-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/8>

Area ID: multinational-NAFO-23K

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region |
| Assessment authors | Dwyer, K.S.  |
| Assessment method  | Temporal indices derived from scientific survey data     |
| Publication year   | 2003   |
| Timeseries span    | 1960-2004  |
| Document           | NAFO-AMPL23K-2003.pdf (pdf in database)                  |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-06-03   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

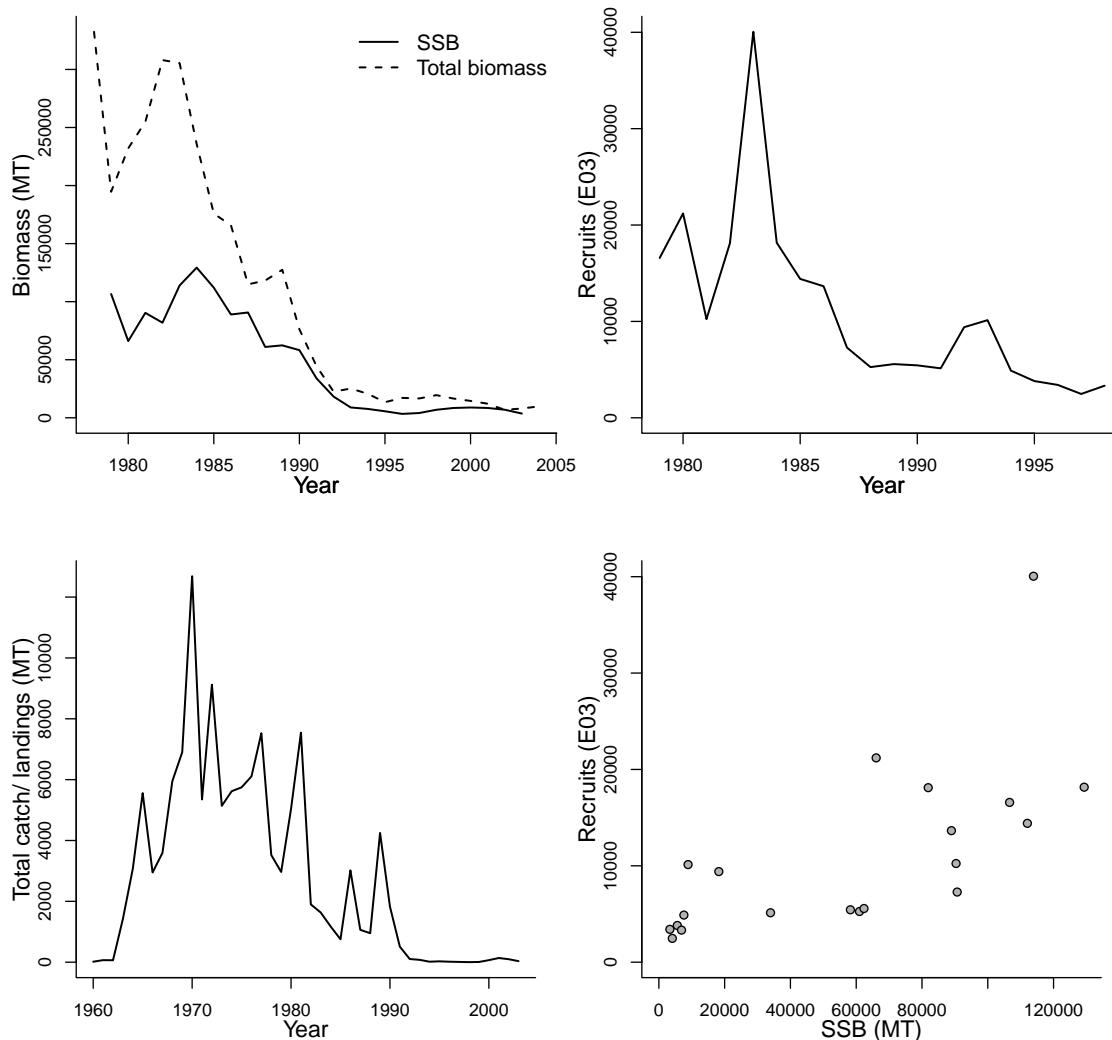
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME                       | tertiary LME |
|---------------------------------|-------------------------------------|--------------|
| 9 - Newfoundland-Labrador Shelf | na                                  | na           |
| Parameter                       | Value                               | Units        |
| SSB-SEX-sex                     | 1                                   | sex          |
| REC-AGE-yr                      | 3+                                  | yr           |
| TB-AGE-yr                       | 0-19                                | yr           |
| A50-yr                          | FOUND AS A TIME SERIES IN FIGURE 10 | yr           |
| L50-cm                          | FOUND AS A TIME SERIES IN FIGURE 11 | cm           |
| SSB-AGE-yr                      |                                     |              |
| F-AGE-yr                        |                                     |              |
| M                               |                                     |              |

| Reference points |           |       |
|------------------|-----------|-------|
| Parameter        | Value     | Units |
| MORATOR-yr-yr    | 1994-2003 | yr-yr |

| Time series minima and maxima |        |       |   |        |
|-------------------------------|--------|-------|---|--------|
|                               | SSB    | R     | F | TB     |
| Minimum year                  | 1979   | 1979  |   | 1978   |
| Maximum year                  | 2003   | 1998  |   | 2004   |
| Time series minimum           | 3350   | 2470  |   | 6820   |
| Time series maximum           | 129310 | 40050 |   | 332410 |
| Units                         | MT     | E03   |   | MT     |



# Assessment of St. Pierre Bank american plaice (*Hippoglossoides platessoides*)

Assessment ID:DFO-NFLD-AMPL3Ps-1960-2005-PREFONTAINE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/178>

Area ID: Canada-DFO-3Ps

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region |
| Assessment authors | Morgan, M.J.   |
| Assessment method  | Unknown  |
| Publication year   | 2005   |
| Timeseries span    | 1960-2005  |
| Document           | RES2005_069_e.pdf (pdf in database)                      |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-07-04   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

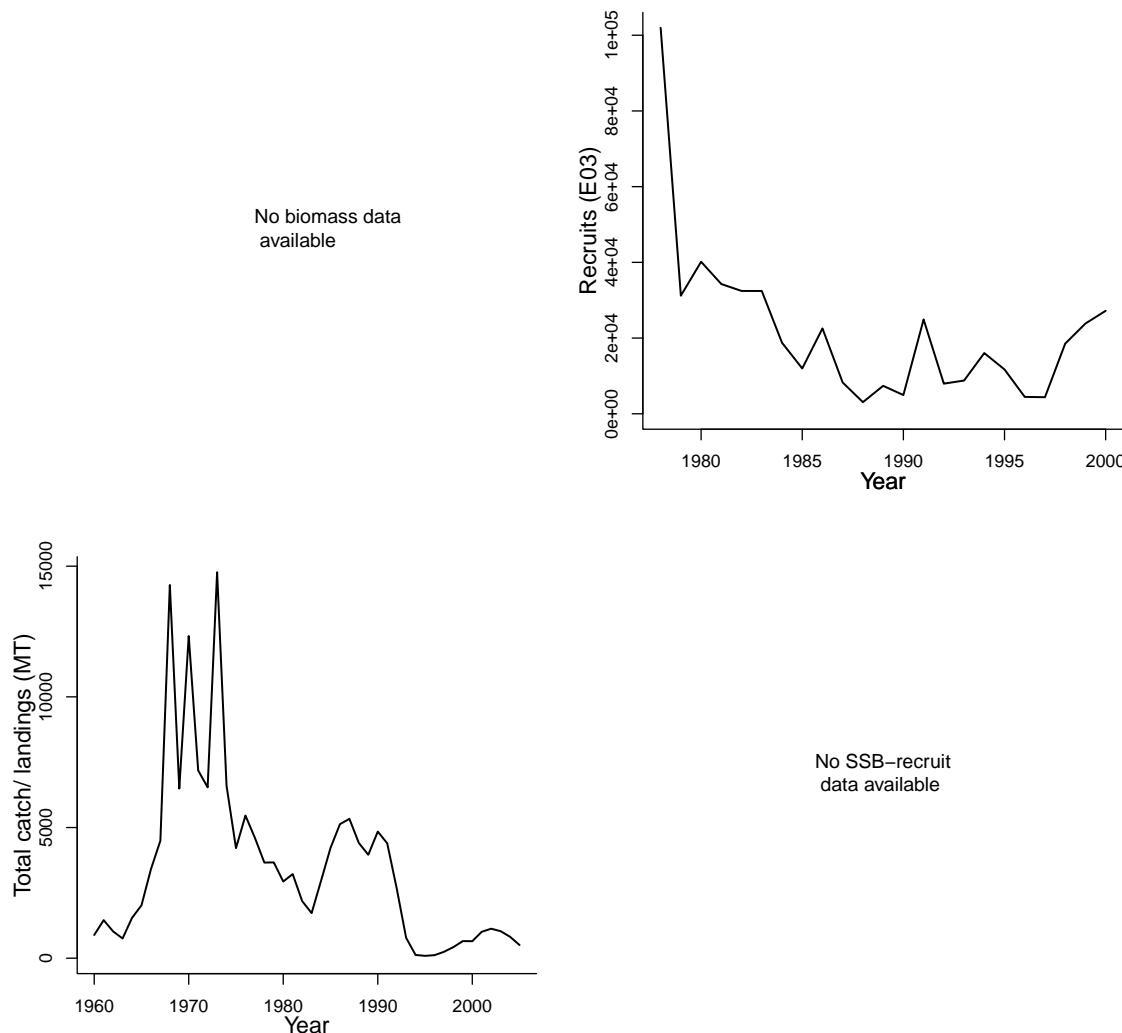
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME     | tertiary LME |
|---------------------------------|-------------------|--------------|
| 9 - Newfoundland-Labrador Shelf | 8 - Scotian Shelf | na           |
| <hr/>                           |                   |              |
| Parameter                       | Value             | Units        |
| REC-AGE-yr                      | 5                 | yr           |
| SSB-AGE-yr                      |                   |              |
| SSB-SEX-sex                     |                   |              |
| TB-AGE-yr                       |                   |              |
| F-AGE-yr                        |                   |              |
| M                               |                   |              |
| A50-yr                          |                   |              |
| L50-cm                          |                   |              |

| Reference points |              |       |
|------------------|--------------|-------|
| Parameter        | Value        | Units |
| Blim-MT (TB)     | 7.7-16.2     | MT    |
| MORATOR-yr-yr    | 1993-present | yr-yr |
| SSB50-MT         | 13.6         | MT    |

| Time series minima and maxima |        |      |   |       |
|-------------------------------|--------|------|---|-------|
|                               | SSB    | R    | F | TB    |
| Minimum year                  |        | 1978 |   | 1960  |
| Maximum year                  |        | 2000 |   | 2005  |
| Time series minimum           | 3070   |      |   | 90    |
| Time series maximum           | 101960 |      |   | 14769 |
| Units                         | E03    |      |   | MT    |



# Assessment of Southern Labrador-Eastern Newfoundland atlantic cod (*Gadus morhua*)

Assessment ID:DFO-NFLD-COD2J3KL-1850-2005-RICARD

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/474>

Area ID: Canada-DFO-2J3KL

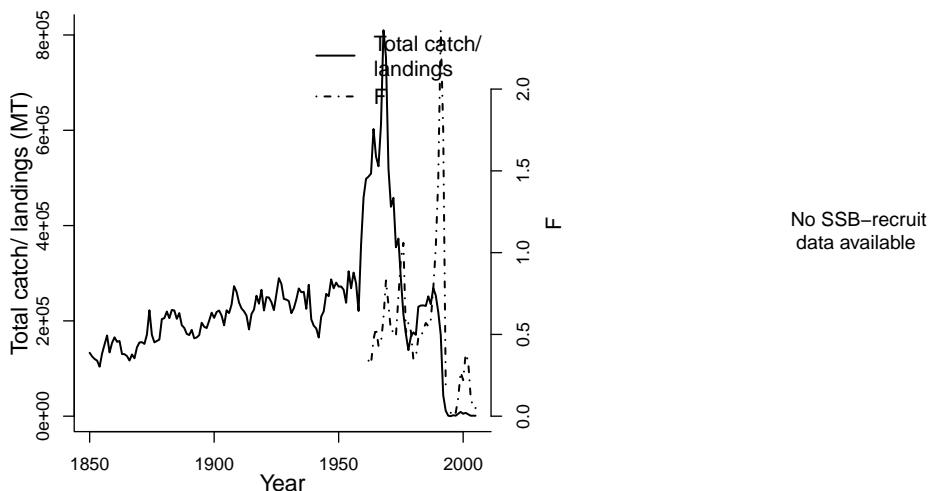
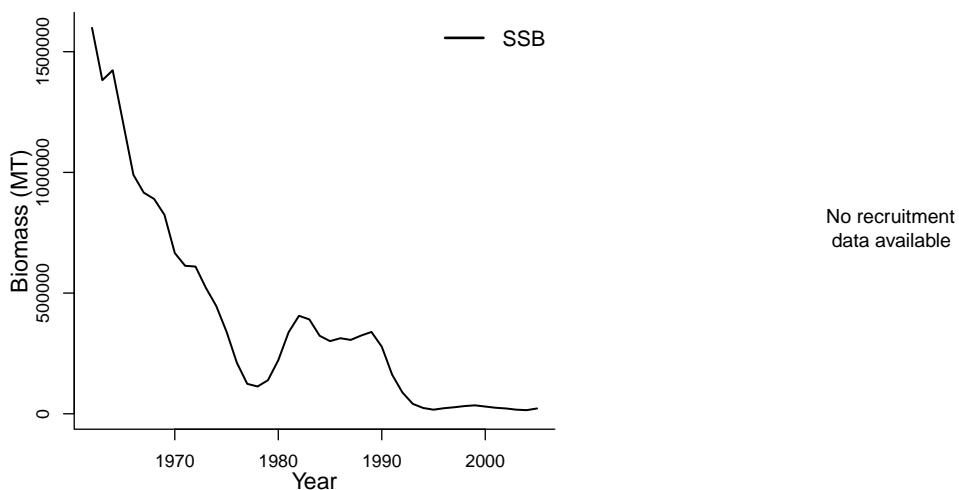
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region   |
| Assessment authors |  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   |  |
| Timeseries span    | 1850-2005  |
| Document           | DFO-COD2J3KL-2006.pdf (pdf not in database)  |
| Recorder           | RICARD   |
| Date entered       | 2011-02-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       | secondary LME | tertiary LME     |
|---------------------------------|-------|---------------|------------------|
| 9 - Newfoundland-Labrador Shelf |       | na            | na               |
| Parameter                       | Value | Units         |                  |
| REC-AGE-yr                      | 3     | yr            |                  |
| F-AGE-yr-yr                     | 2-10  | yr-yr         |                  |
| A50-yr                          | 6-7   | yr            | Reference points |
| M-1/T                           | 0.4   | 1/T           | Parameter        |
| SSB-AGE-yr                      |       |               | Value            |
| SSB-SEX-sex                     |       |               | Units            |
| TB-AGE-yr                       |       |               | MORATOR-yr-yr    |
| M                               |       |               | 1992-2005        |
| L50-cm                          |       |               | yr-yr            |

| Time series minima and maxima |         |   |      |        |
|-------------------------------|---------|---|------|--------|
|                               | SSB     | R | F    | TB     |
| Minimum year                  | 1962    |   | 1962 | 1850   |
| Maximum year                  | 2005    |   | 2005 | 2005   |
| Time series minimum           | 15000   |   | 0.02 | 0      |
| Time series maximum           | 1599000 |   | 2.36 | 810000 |
| Units                         | MT      |   | 1/T  | MT     |



# Assessment of Southern Labrador-Eastern Newfoundland atlantic cod (*Gadus morhua*)

Assessment ID:DFO-NFLD-COD2J3KLIS-1959-2006-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/152>

Area ID: Canada-DFO-2J3KL

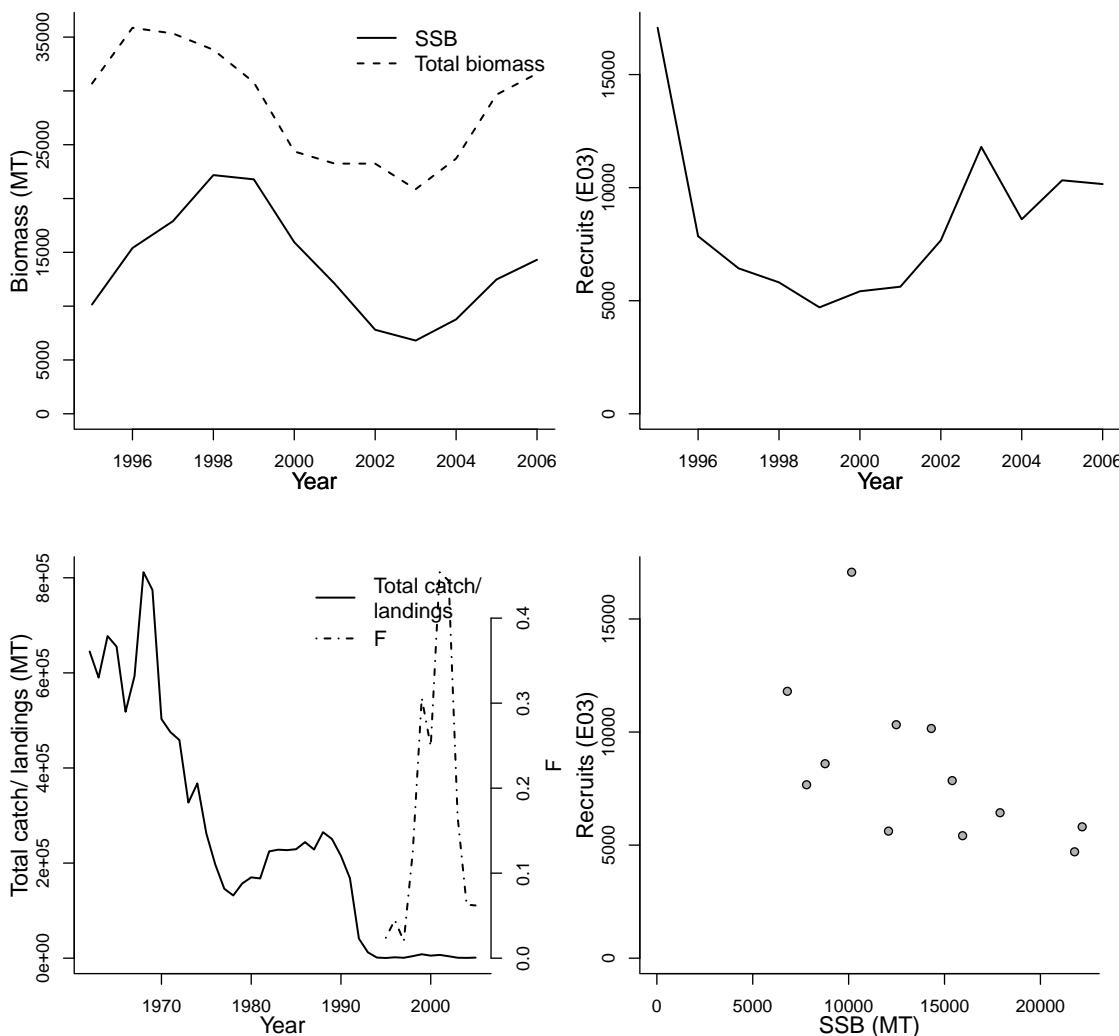
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region   |
| Assessment authors | Lilly, G.R.  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2006   |
| Timeseries span    | 1959-2006  |
| Document           | DFO-COD2J3KLIS-2006.pdf (pdf not in database)  |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-05-28   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       | secondary LME | tertiary LME     |
|---------------------------------|-------|---------------|------------------|
| 9 - Newfoundland-Labrador Shelf |       | na            | na               |
| Parameter                       | Value | Units         |                  |
| SSB-AGE-yr                      | 2+    | yr            |                  |
| REC-AGE-yr                      | 3     | yr            |                  |
| F-AGE-yr-yr                     | 2-10  | yr-yr         | Reference points |
| A50-yr                          | 6-7   | yr            | Parameter        |
| M-1/T                           | 0.4   | 1/T           | Value            |
| SSB-SEX-sex                     |       |               | Units            |
| TB-AGE-yr                       |       |               | MORATOR-yr-yr    |
| M                               |       |               | 1992-2005        |
| L50-cm                          |       |               | yr-yr            |

| Time series minima and maxima |       |       |       |       |        |
|-------------------------------|-------|-------|-------|-------|--------|
|                               | SSB   | R     | F     | TB    | Catch  |
| Minimum year                  | 1995  | 1995  | 1995  | 1995  | 1962   |
| Maximum year                  | 2006  | 2006  | 2005  | 2006  | 2005   |
| Time series minimum           | 6804  | 4705  | 0.02  | 20866 | 411    |
| Time series maximum           | 22178 | 17068 | 0.454 | 35864 | 811698 |
| Units                         | MT    | E03   | 1/T   | MT    | MT     |



# Assessment of St. Pierre Bank atlantic cod

## *(Gadus morhua)*

Assessment ID:DFO-NFLD-COD3Ps-1959-2004-PREFONTAINE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/155>

Area ID: Canada-DFO-3Ps

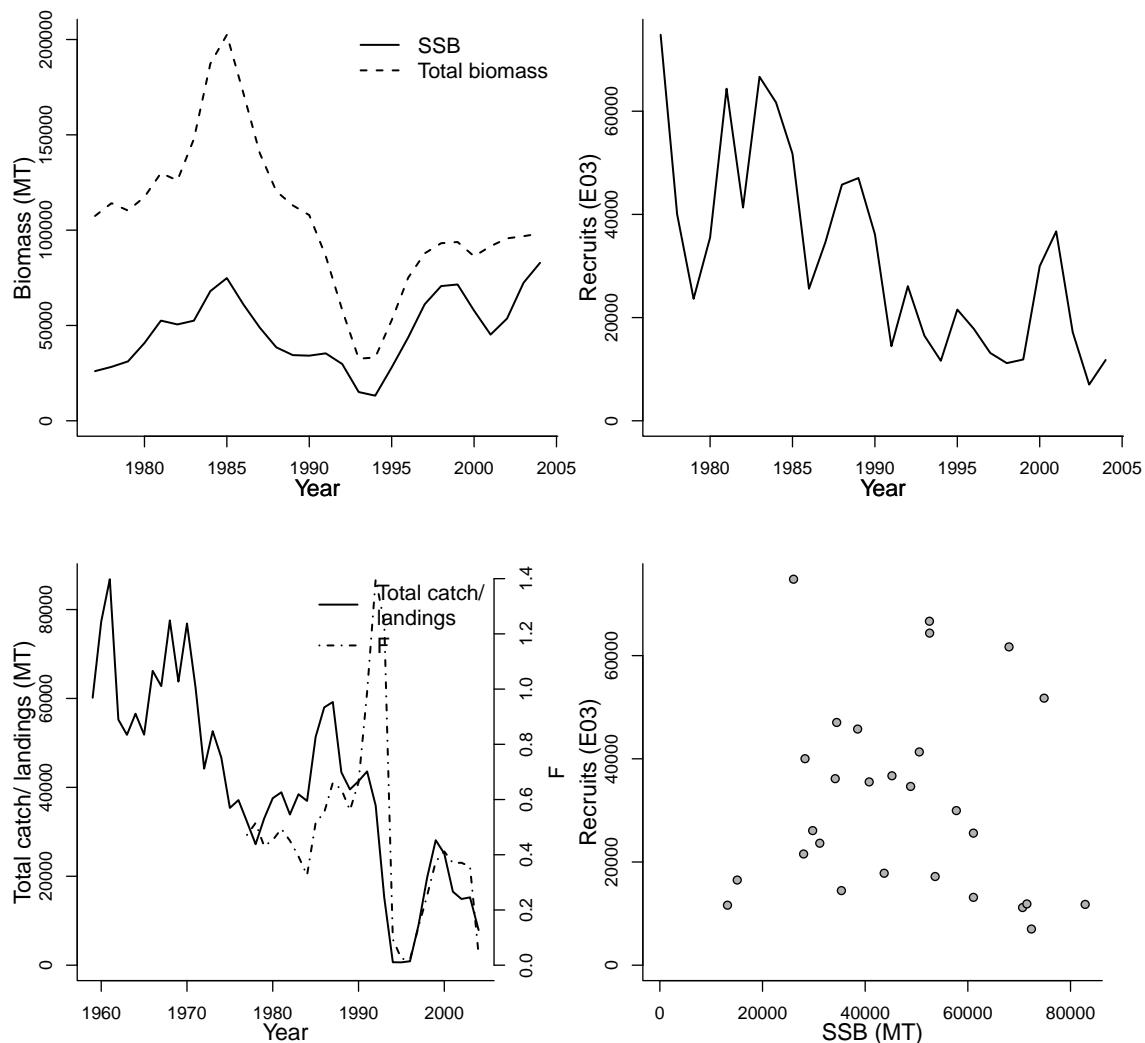
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region   |
| Assessment authors | Brattey, J.  |
| Assessment method  | The ADAPT approach with year effects in a catch multiplier |
| Publication year   | 2004   |
| Timeseries span    | 1959-2004  |
| Document           | DFO-COD3Ps-2004.pdf (pdf in database)                      |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-05-27   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |       |
|---------------------------------|-------|-------|------------------|--------------|-------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |       |
| Parameter                       | Value | Units |                  |              |       |
| A50-yr                          | 7-8   | yr    |                  |              |       |
| M-1/T                           | 0.2   | 1/T   |                  |              |       |
| REC-AGE                         |       |       | Reference points |              |       |
| SSB-AGE-yr                      |       |       | Parameter        | Value        | Units |
| SSB-SEX-sex                     |       |       | MORATOR-yr-yr    | 1994-1996    | yr-yr |
| TB-AGE-yr                       |       |       | SSBrecovery-1-MT | 36000        | MT    |
| F-AGE-yr                        |       |       | SSBrecovery-2-MT | 13000        | MT    |
| M                               |       |       |                  |              |       |
| L50-cm                          |       |       |                  |              |       |

| Time series minima and maxima |       |       |       |        |       |
|-------------------------------|-------|-------|-------|--------|-------|
|                               | SSB   | R     | F     | TB     | Catch |
| Minimum year                  | 1977  | 1977  | 1977  | 1977   | 1959  |
| Maximum year                  | 2004  | 2004  | 2004  | 2004   | 2004  |
| Time series minimum           | 13173 | 7014  | 0.021 | 32591  | 641   |
| Time series maximum           | 82857 | 74809 | 1.398 | 202478 | 86824 |
| Units                         | MT    | E03   | 1/T   | MT     | MT    |



# Assessment of Labrador Shelf-Grand Banks-S. Pierre Bank monkfish (*Lophius americanus*) Assessment

ID:DFO-NFLD-MONK2J3KLNOPs-1977-2000-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/5>

Area ID: Canada-DFO-2J3KLNOPs

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region |
| Assessment authors | Kulka, D.W.  |
| Assessment method  | Unknown  |
| Publication year   | 2001   |
| Timeseries span    | 1977-2000  |
| Document           | NAFO-MONK2J3KLNOPs-2001.pdf (pdf in database)            |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-06-26   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

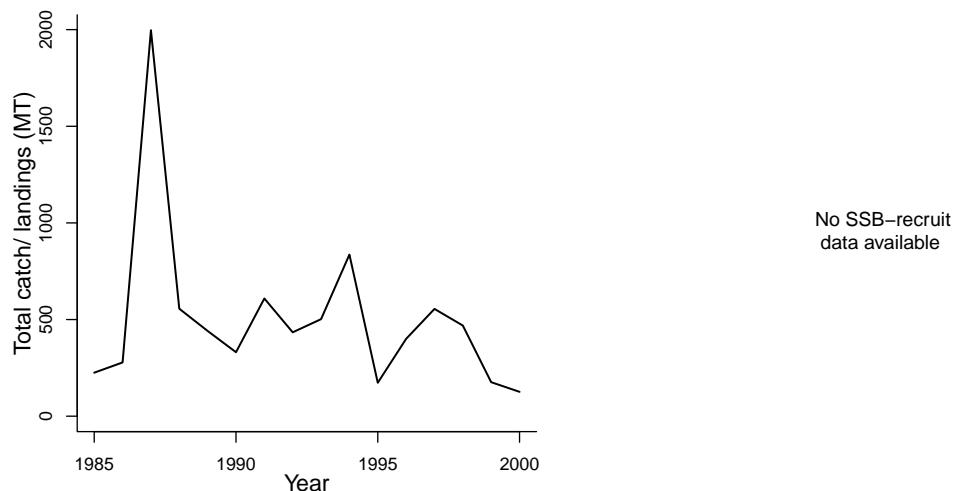
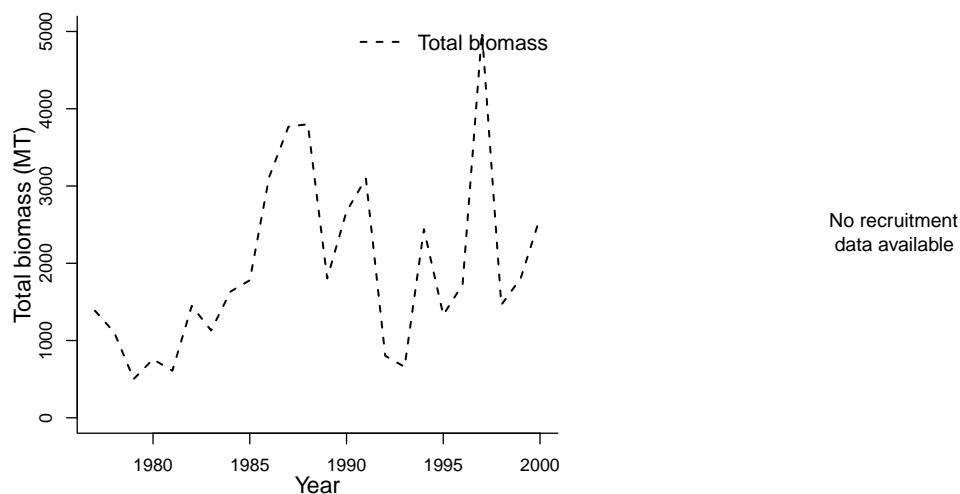
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME | tertiary LME |
|---------------------------------|---------------|--------------|
| 9 - Newfoundland-Labrador Shelf | na            | na           |
| <hr/>                           |               |              |
| Parameter                       | Value         | Units        |
| REC-AGE                         |               |              |
| SSB-AGE-yr                      |               |              |
| SSB-SEX-sex                     |               |              |
| TB-AGE-yr                       |               |              |
| F-AGE-yr                        |               |              |
| M                               |               |              |
| A50-yr                          |               |              |
| L50-cm                          |               |              |

| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |      |       |
|-------------------------------|-----|---|---|------|-------|
|                               | SSB | R | F | TB   | Catch |
| Minimum year                  |     |   |   | 1977 | 1985  |
| Maximum year                  |     |   |   | 2000 | 2000  |
| Time series minimum           |     |   |   | 501  | 126   |
| Time series maximum           |     |   |   | 4996 | 1997  |
| Units                         |     |   |   | MT   | MT    |



# Assessment of Labrador - NE Newfoundland redfish species (*Sebastes spp*)

## Assessment

ID:DFO-NFLD-REDFISHSPP23K-1959-2001-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/175>

Area ID: Canada-DFO-23K

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Newfoundland Region |
| Assessment authors | Power, D.  |
| Assessment method  | Unknown  |
| Publication year   | 2001   |
| Timeseries span    | 1959-2001  |
| Document           | NAFO-RED23K-2001.pdf (pdf not in database)               |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-08-19   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

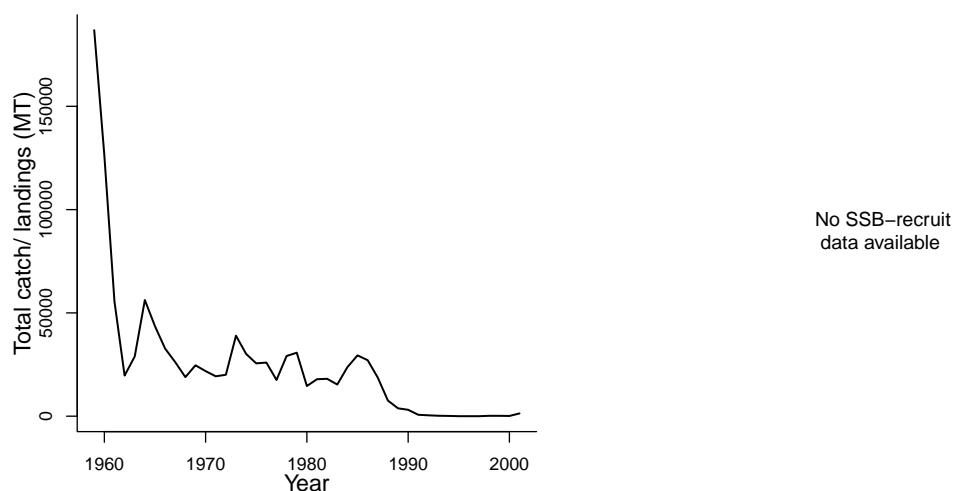
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |               | secondary LME | tertiary LME     |
|---------------------------------|---------------|---------------|------------------|
| Parameter                       | Value         | Units         |                  |
| 9 - Newfoundland-Labrador Shelf | na            | na            |                  |
| Parameter                       | Value         | Units         | Reference points |
| REC-AGE                         |               |               | Parameter        |
| SSB-AGE-yr                      |               |               | Value            |
| SSB-SEX-sex                     |               |               | Units            |
| TB-AGE-yr                       |               |               |                  |
| F-AGE-yr                        | F0.1-1/yr (F) | 0.12          | 1/yr             |
| M                               | MORATOR-yr-yr | 1997-2001     | yr-yr            |
| A50-yr                          |               |               |                  |
| L50-cm                          |               |               |                  |

| Time series minima and maxima |     |   |   |        |
|-------------------------------|-----|---|---|--------|
|                               | SSB | R | F | TB     |
| Minimum year                  |     |   |   | 1959   |
| Maximum year                  |     |   |   | 2001   |
| Time series minimum           |     |   |   | 3      |
| Time series maximum           |     |   |   | 186837 |
| Units                         |     |   |   | MT     |

No biomass data available

No recruitment data available



No SSB-recruit data available

# Assessment of Hecate Strait english sole (*Parophrys vetulus*)

Assessment ID:DFO-PAC-ESOLEHS-1944-2001-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/106>

Area ID: Canada-DFO-HS

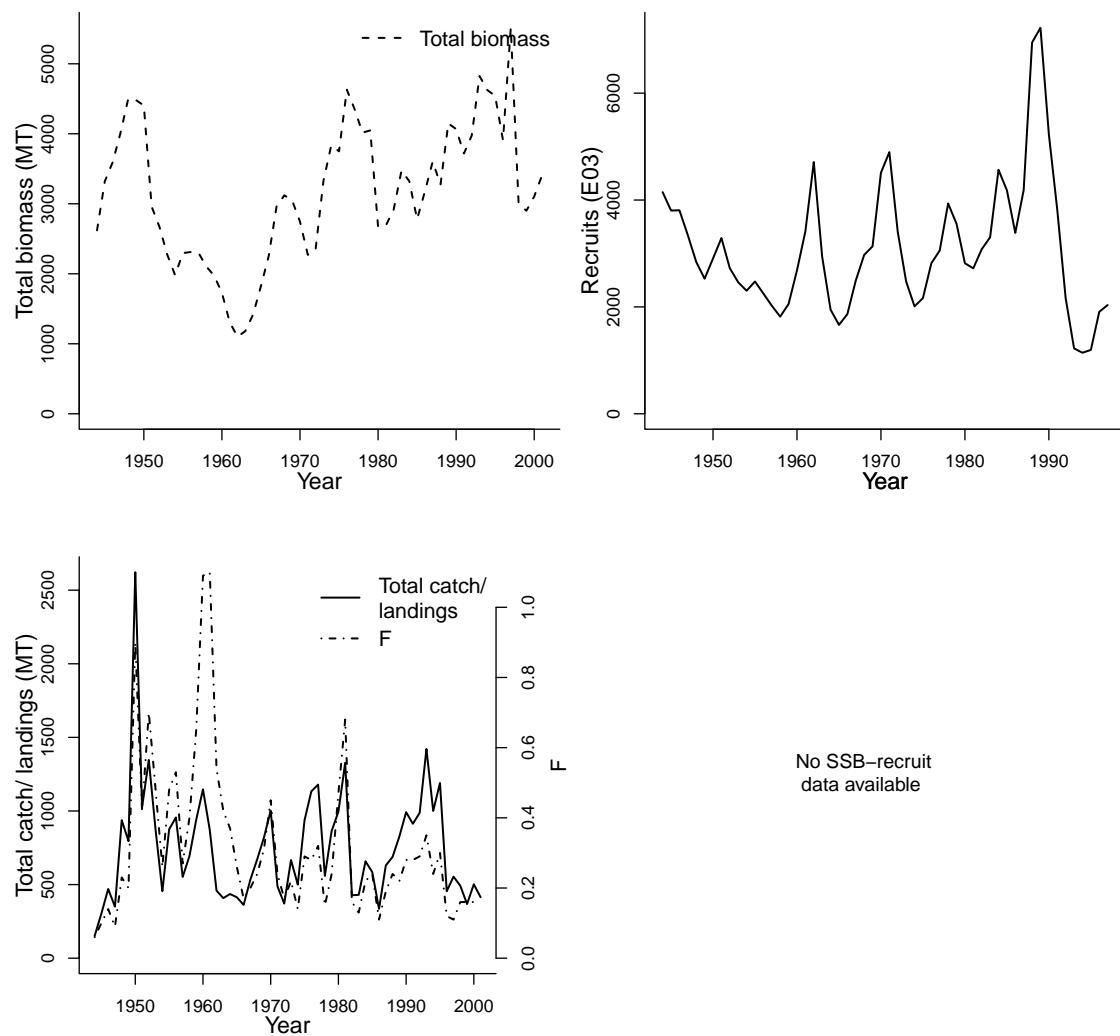
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Fargo, Jeff   |
| Assessment method  | State-space catch at age time series analysis       |
| Publication year   | 1999  |
| Timeseries span    | 1944-2001   |
| Document           | Flat99.pdf (pdf in database)                        |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| M-1/yr             | 0.2           | 1/yr         |
| SSB-SEX-sex        | 0             | sex          |
| TB-AGE-yr          | 4+            | yr           |
| REC-AGE-yr         | 4             | yr           |
| SSB-AGE-yr         |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |
| F0.1-1/yr (F)      | 0.25          | 1/yr         |

| Time series minima and maxima |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|
|                               | SSB  | R    | F    | TB   |      |
| Minimum year                  |      | 1944 | 1944 | 1944 | 1944 |
| Maximum year                  |      | 1997 | 2001 | 2001 | 2001 |
| Time series minimum           | 1142 | 0.06 | 1101 | 152  |      |
| Time series maximum           | 7223 | 1.1  | 5514 | 2622 |      |
| Units                         | E03  | 1/T  | MT   | MT   |      |



# Assessment of Central Coast pacific herring (*Clupea pallasii*)

Assessment ID:DFO-PAC-HERRCC-1951-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/305>

Area ID: Canada-DFO-CC

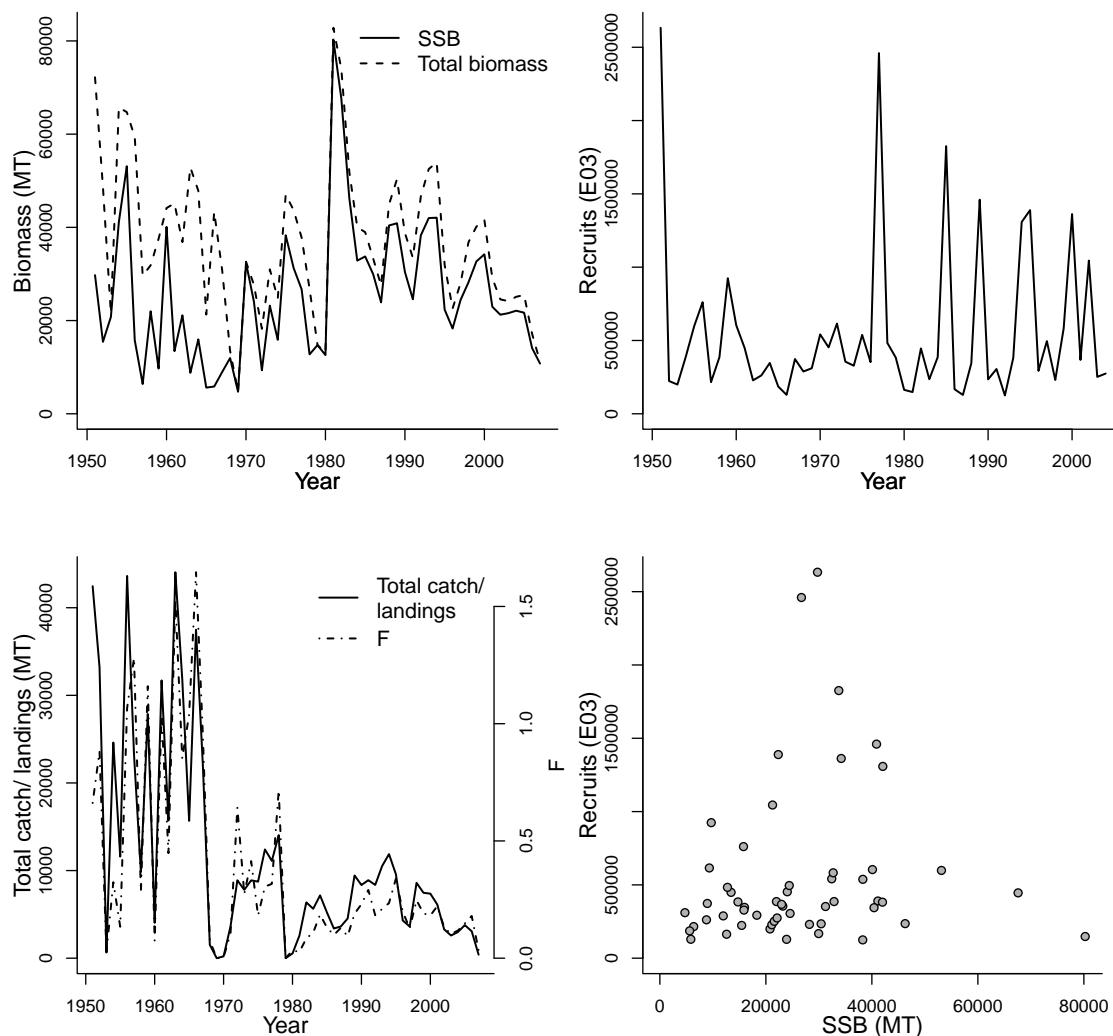
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Schweigert, Jake                                    |
| Assessment method  | an AD-Model builder statistical Catch at Age Model  |
| Publication year   | 2007  |
| Timeseries span    | 1951-2007   |
| Document           | RES2007_002.e.pdf (pdf in database)                 |
| Recorder           | COLLIE  |
| Date entered       | 2008-07-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| REC-AGE-yr         | 3             | yr           |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |

| Time series minima and maxima |          |         |       |          |
|-------------------------------|----------|---------|-------|----------|
|                               | SSB      | R       | F     | TB       |
| Minimum year                  | 1951     | 1951    | 1951  | 1951     |
| Maximum year                  | 2007     | 2004    | 2007  | 2007     |
| Time series minimum           | 4728     | 124900  | 0     | 4728     |
| Time series maximum           | 80245.06 | 2632700 | 1.646 | 82818.06 |
| Units                         | MT       | E03     | 1/yr  | MT       |



# Assessment of Prince Rupert District pacific herring (*Clupea pallasii*)

Assessment ID:DFO-PAC-HERRPRD-1951-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/306>

Area ID: Canada-DFO-PRD

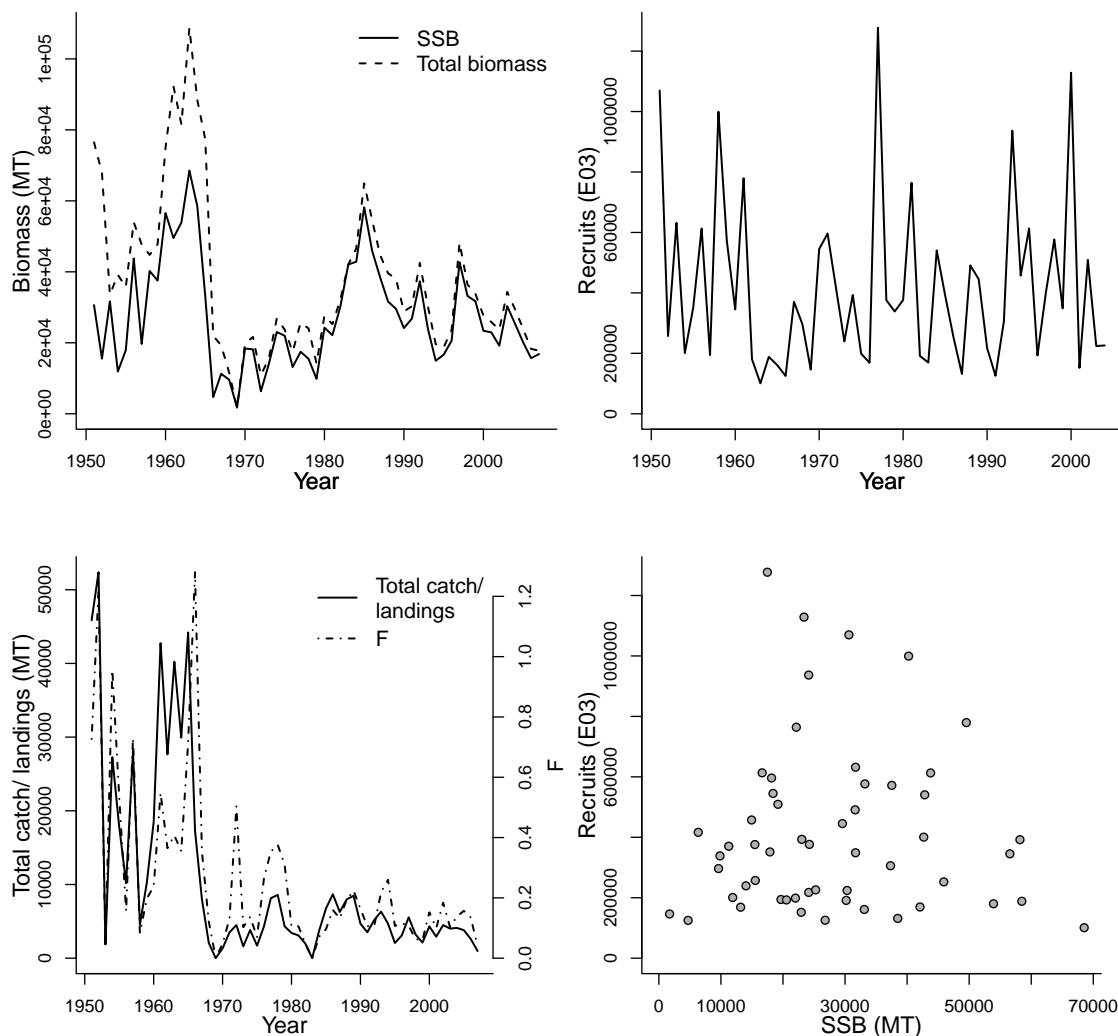
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Schweigert, Jake                                    |
| Assessment method  | an AD-Model builder statistical Catch at Age Model  |
| Publication year   | 2007  |
| Timeseries span    | 1951-2007   |
| Document           | RES2007_002.e.pdf (pdf in database)                 |
| Recorder           | COLLIE  |
| Date entered       | 2008-07-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| REC-AGE-yr         | 3             | yr           |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |

| Time series minima and maxima |          |         |      |           |
|-------------------------------|----------|---------|------|-----------|
|                               | SSB      | R       | F    | TB        |
| Minimum year                  | 1951     | 1951    | 1951 | 1951      |
| Maximum year                  | 2007     | 2004    | 2007 | 2007      |
| Time series minimum           | 1727.74  | 100900  | 0    | 1727.74   |
| Time series maximum           | 68535.03 | 1277100 | 1.28 | 108763.03 |
| Units                         | MT       | E03     | 1/yr | MT        |



# Assessment of Queen Charlotte Islands pacific herring (*Clupea pallasii*)

Assessment ID:DFO-PAC-HERRQCI-1951-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/307>

Area ID: Canada-DFO-QCI

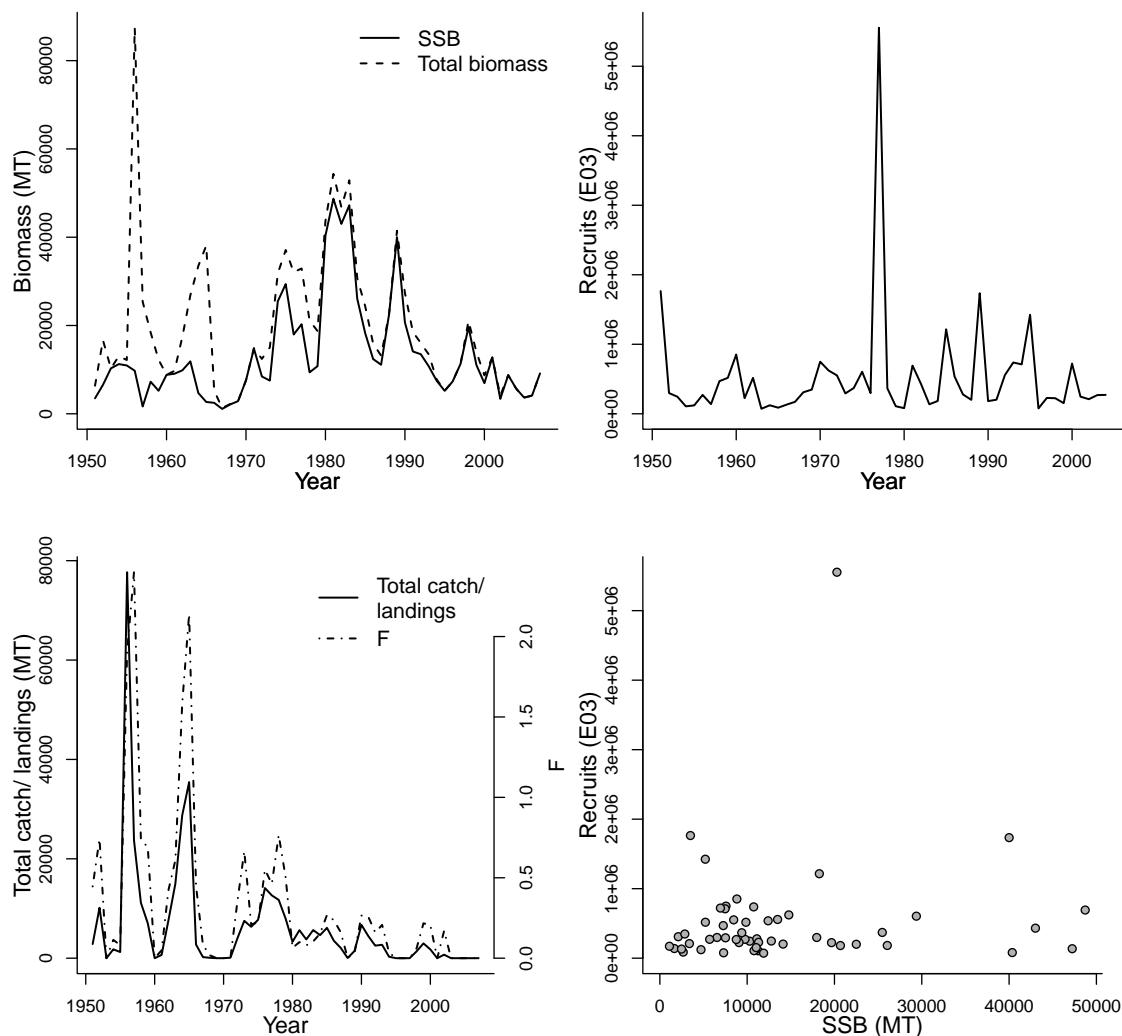
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Schweigert, Jake                                    |
| Assessment method  | an AD-Model builder statistical Catch at Age Model  |
| Publication year   | 2007  |
| Timeseries span    | 1951-2007   |
| Document           | RES2007_002.e.pdf (pdf in database)                 |
| Recorder           | COLLIE  |
| Date entered       | 2008-07-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| REC-AGE-yr         | 3             | yr           |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |

| Time series minima and maxima |          |         |      |          |
|-------------------------------|----------|---------|------|----------|
|                               | SSB      | R       | F    | Catch    |
| Minimum year                  | 1951     | 1951    | 1951 | 1951     |
| Maximum year                  | 2007     | 2004    | 2007 | 2007     |
| Time series minimum           | 1098.02  | 72400   | 0    | 1311.02  |
| Time series maximum           | 48715.62 | 5553000 | 2.4  | 87437.09 |
| Units                         | MT       | E03     | 1/yr | MT       |



# Assessment of Straight of Georgia pacific herring (*Clupea pallasii*)

Assessment ID:DFO-PAC-HERRSOG-1951-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/308>

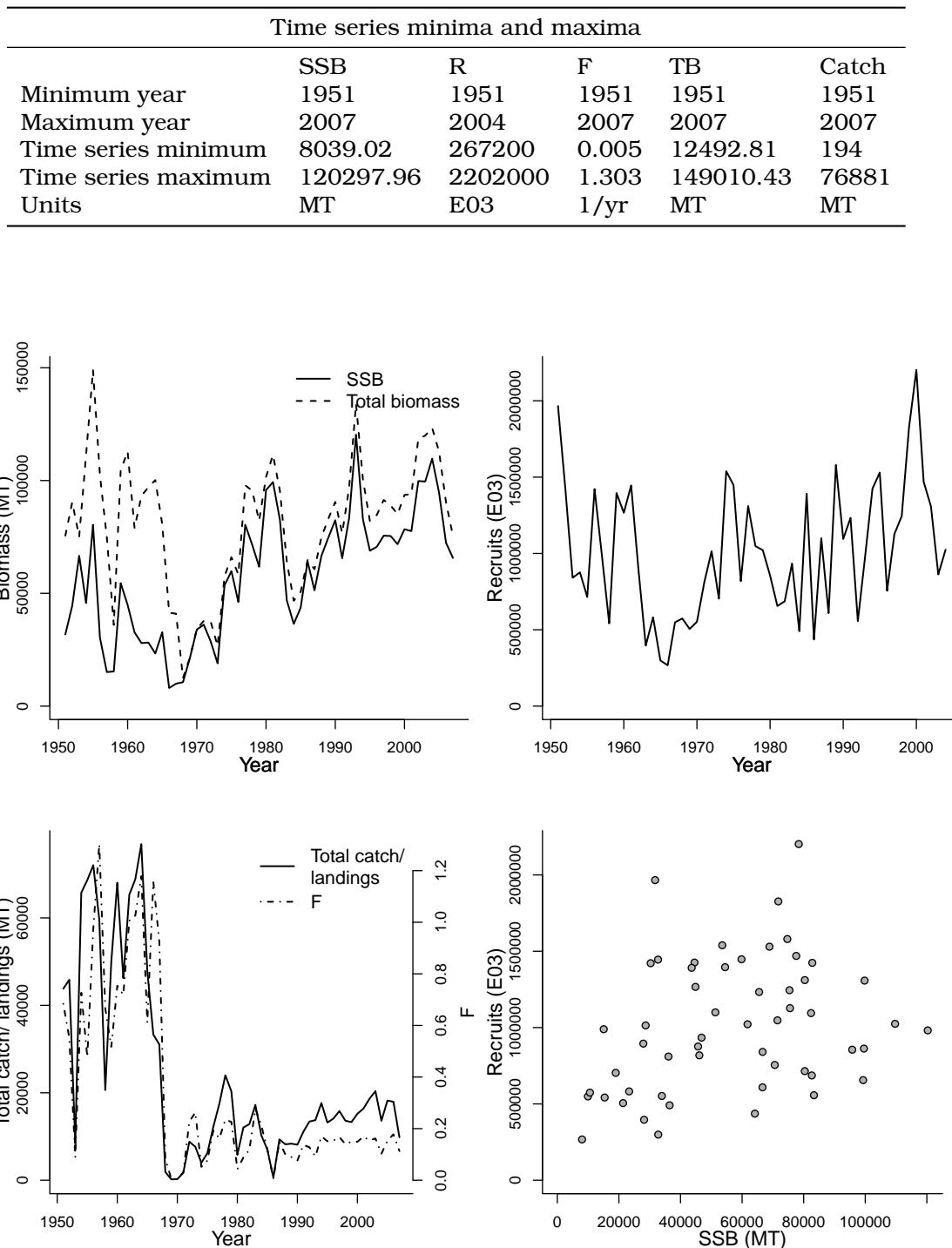
Area ID: Canada-DFO-SOG

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Schweigert, Jake                                    |
| Assessment method  | an AD-Model builder statistical Catch at Age Model  |
| Publication year   | 2007  |
| Timeseries span    | 1951-2007   |
| Document           | RES2007_002.e.pdf (pdf in database)                 |
| Recorder           | COLLIE  |
| Date entered       | 2008-07-29  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| REC-AGE-yr         | 3             | yr           |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |



# Assessment of West Coast of Vancouver Island pacific herring (*Clupea pallasii*)

Assessment ID:DFO-PAC-HERRWCVANI-1951-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/309>

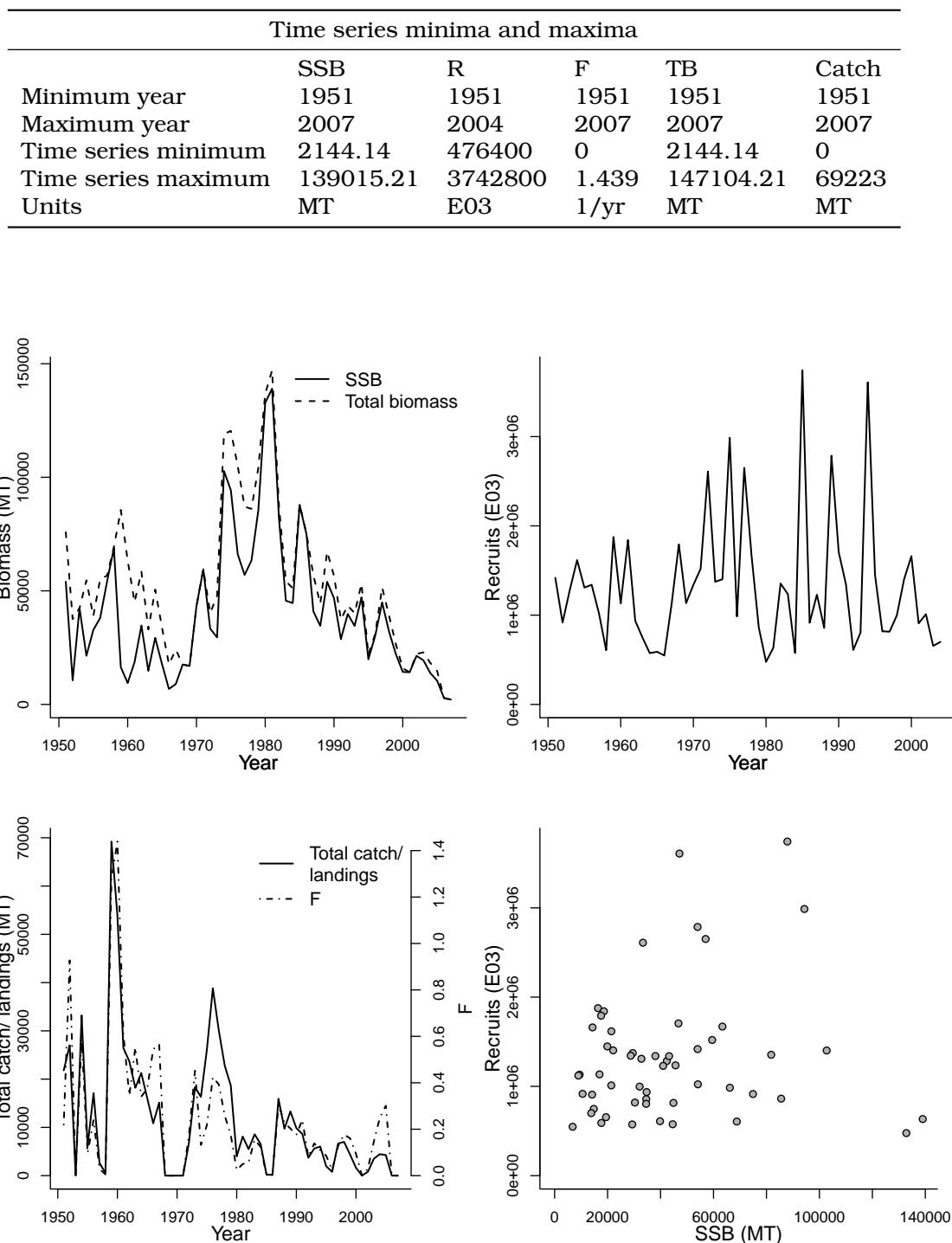
Area ID: Canada-DFO-WCVANI

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Schweigert, Jake                                    |
| Assessment method  | an AD-Model builder statistical Catch at Age Model  |
| Publication year   | 2007  |
| Timeseries span    | 1951-2007   |
| Document           | RES2007_002_e.pdf (pdf in database)                 |
| Recorder           | COLLIE  |
| Date entered       | 2008-07-29  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 2 - Gulf of Alaska | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| REC-AGE-yr         | 3             | yr           |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |
| <hr/>              |               |              |
| Reference points   |               |              |
| Parameter          | Value         | Units        |



# Assessment of Hecate Strait pacific cod (*Gadus macrocephalus*)

Assessment ID:DFO-PAC-PCODHS-1956-2005-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/310>

Area ID: Canada-DFO-HS

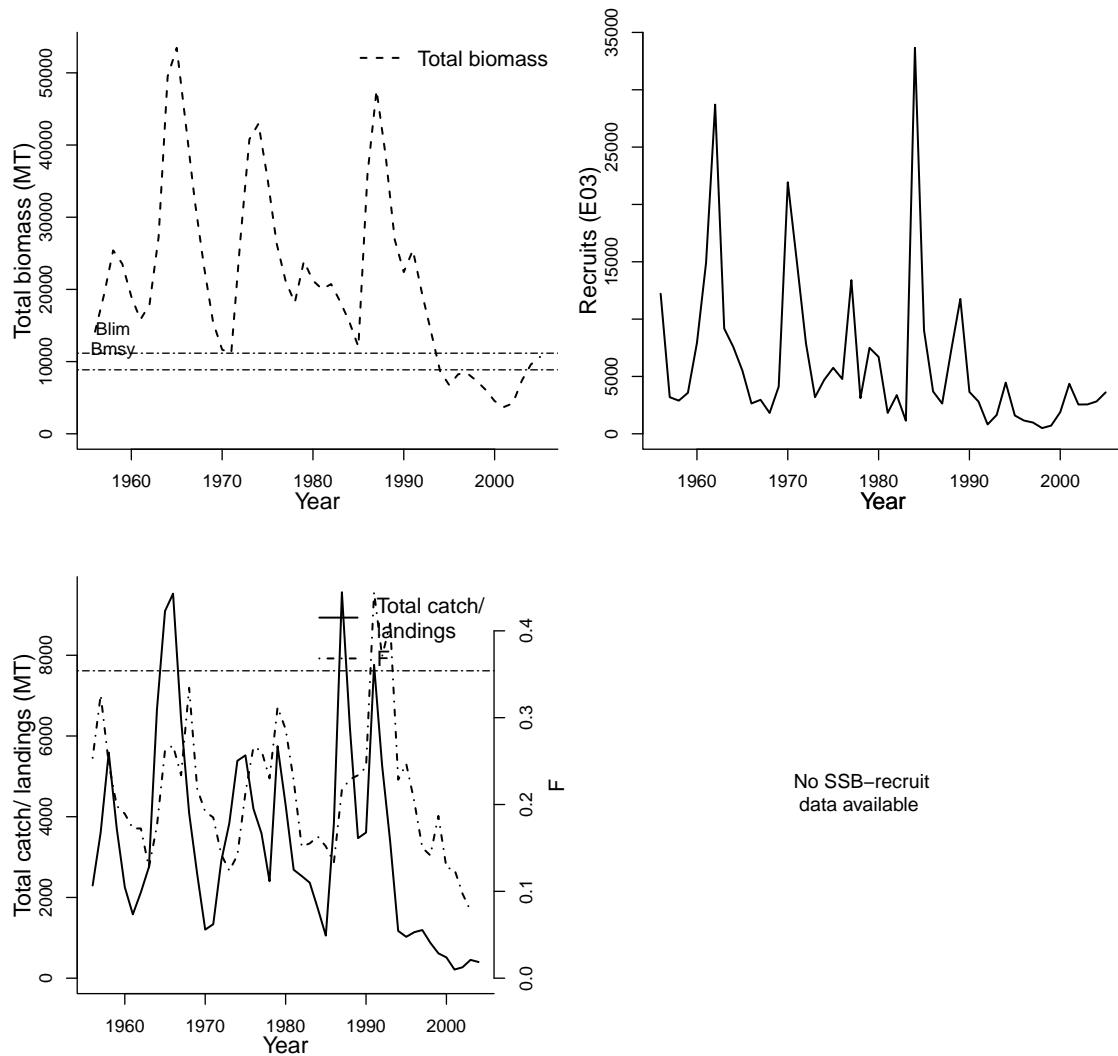
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Sinclair, A.F.                                      |
| Assessment method  | Delay difference model                              |
| Publication year   | 2005  |
| Timeseries span    | 1956-2005   |
| Document           | RES2005_026_Cod.pdf (pdf in database)               |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-08  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME        |       |      | tertiary LME |  |  |
|--------------------|-------|-------|----------------------|-------|------|--------------|--|--|
| 2 - Gulf of Alaska |       |       | na                   |       |      | na           |  |  |
| Parameter          | Value | Units | Reference points     |       |      |              |  |  |
| M-1/yr             | 0.567 | 1/yr  | Parameter            |       |      |              |  |  |
| SSB-AGE-yr         | 2+    | yr    | Blim-MT (TB)         | 11165 | MT   |              |  |  |
| SSB-SEX-sex        | 0     | sex   | Bmsy-MT (TB)         | 8861  | MT   |              |  |  |
| REC-AGE-yr         | 2     | yr    | Fmsy-1/yr (F)        | 0.354 | 1/yr |              |  |  |
| F-AGE-yr-yr        | 2+    | yr-yr | Fext-1/yr (F)        | 1.586 | 1/yr |              |  |  |
| TB-AGE-yr          | 2+    | yr    | $TB_{2005}/B_{m sy}$ | 1.202 |      |              |  |  |
| M                  |       |       | $F_{2003}/F_{m sy}$  | 0.219 |      |              |  |  |
| A50-yr             |       |       |                      |       |      |              |  |  |
| L50-cm             |       |       |                      |       |      |              |  |  |

| Time series minima and maxima |       |        |       |      |
|-------------------------------|-------|--------|-------|------|
|                               | SSB   | R      | F     | TB   |
| Minimum year                  |       | 1956   | 1956  | 1956 |
| Maximum year                  |       | 2005   | 2003  | 2005 |
| Time series minimum           | 498   | 0.0775 | 3695  | 214  |
| Time series maximum           | 33659 | 0.4445 | 53470 | 9562 |
| Units                         | E03   | 1/T    | MT    | MT   |



# Assessment of West Coast of Vancouver Island pacific cod (*Gadus macrocephalus*)

Assessment ID:DFO-PAC-PCODWCVANI-1956-2002-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/311>

Area ID: Canada-DFO-WCVANI

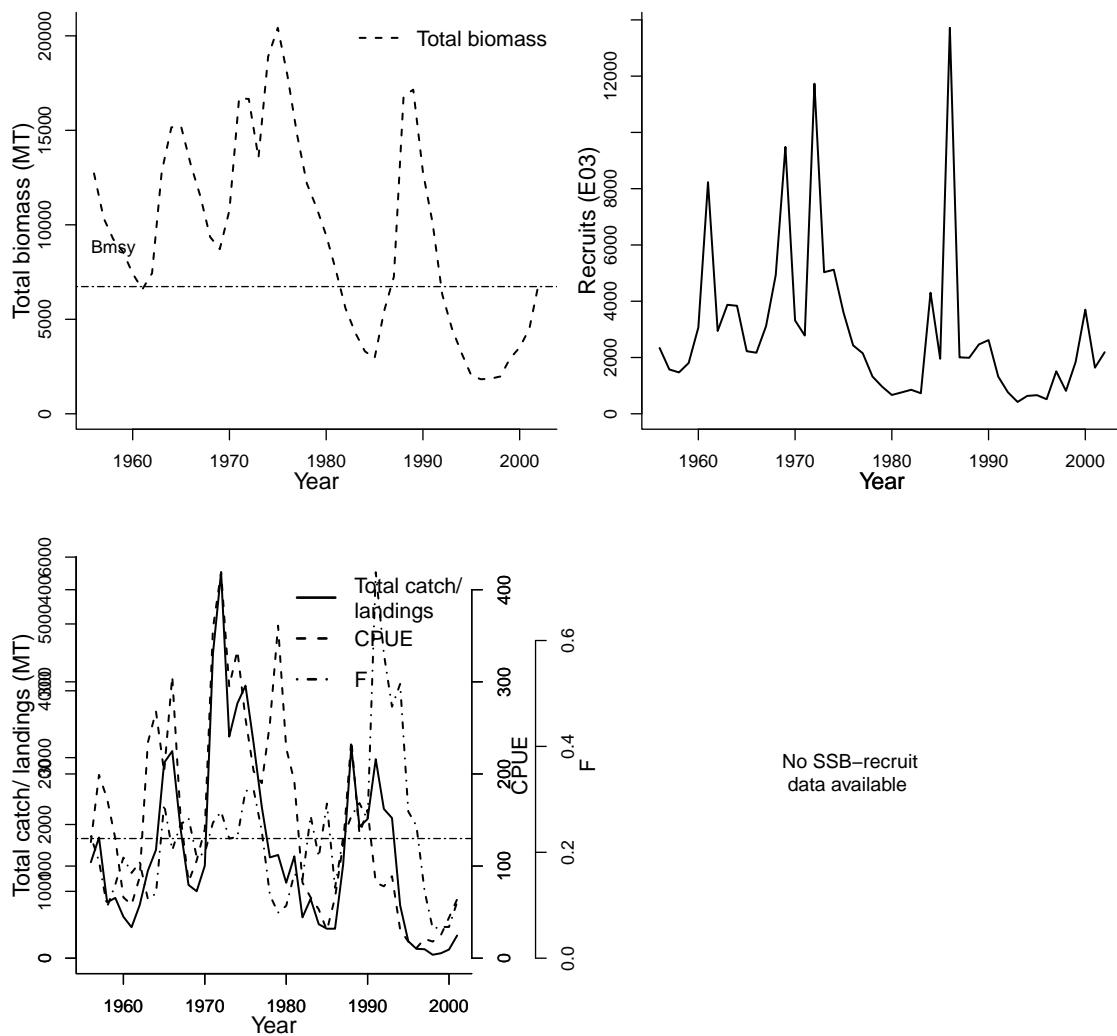
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Sinclair, A.F.                                      |
| Assessment method  | Delay difference model                              |
| Publication year   | 2002  |
| Timeseries span    | 1956-2002   |
| Document           | 2002-113.pdf (pdf not in database)                  |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME       |       |       | tertiary LME |  |  |
|--------------------|-------|-------|---------------------|-------|-------|--------------|--|--|
| 2 - Gulf of Alaska |       |       | na                  |       |       | na           |  |  |
| Parameter          | Value | Units | Reference points    |       |       |              |  |  |
| M-1/yr             | 0.579 | 1/yr  | Parameter           | Value | Units |              |  |  |
| SSB-AGE-yr         | 2+    | yr    | Bmsy-MT (TB)        | 6731  | MT    |              |  |  |
| SSB-SEX-sex        | 0     | sex   | Fmsy-1/yr (F)       | 0.226 | 1/yr  |              |  |  |
| REC-AGE-yr         | 2     | yr    | Fext-1/yr (F)       | 0.539 | 1/yr  |              |  |  |
| F-AGE-yr-yr        | 2+    | yr-yr | $TB_{2002}/B_{msy}$ | 1.037 |       |              |  |  |
| TB-AGE-yr          | 2+    | yr    | $F_{2001}/F_{msy}$  | 0.469 |       |              |  |  |
| M                  |       |       |                     |       |       |              |  |  |
| A50-yr             |       |       |                     |       |       |              |  |  |
| L50-cm             |       |       |                     |       |       |              |  |  |

| Time series minima and maxima |       |       |       |      |
|-------------------------------|-------|-------|-------|------|
|                               | SSB   | R     | F     | TB   |
| Minimum year                  |       | 1956  | 1956  | 1956 |
| Maximum year                  |       | 2002  | 2001  | 2002 |
| Time series minimum           | 420   | 0.056 | 1827  | 51   |
| Time series maximum           | 13718 | 0.729 | 20426 | 5774 |
| Units                         | E03   | 1/T   | MT    | MT   |



# Assessment of Hecate Strait rock sole

## (*Lepidopsetta bilineata*)

Assessment ID:DFO-PAC-RSOLEHSTR-1945-2001-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/107>

Area ID: Canada-DFO-HS

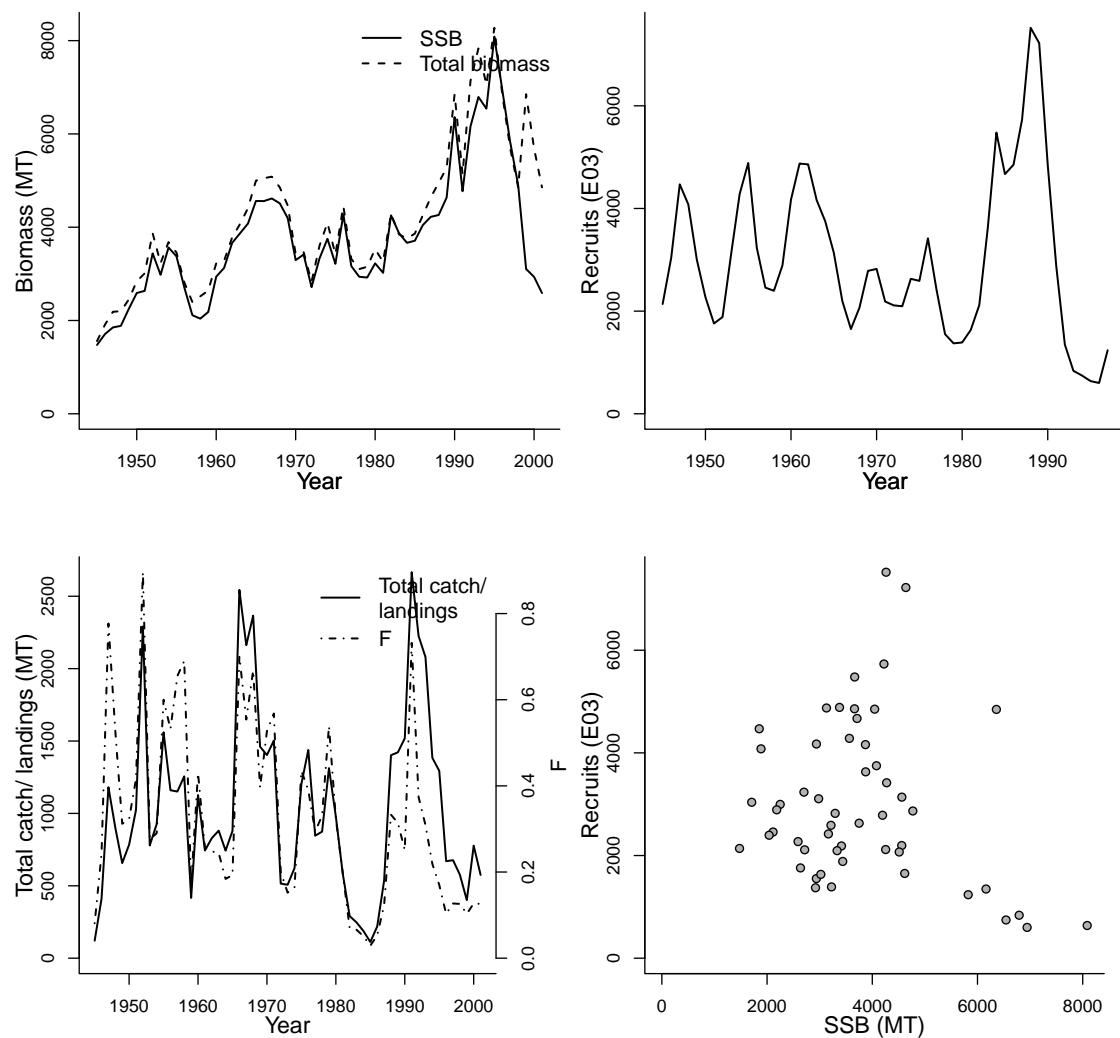
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Fargo, Jeff   |
| Assessment method  | State-space catch at age time series analysis       |
| Publication year   | 1999  |
| Timeseries span    | 1945-2001   |
| Document           | Flat99.pdf (pdf in database)                        |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           | secondary LME | tertiary LME |
|-----------------------|---------------|--------------|
| 2 - Gulf of Alaska    | na            | na           |
| Parameter Value Units |               |              |
| M-1/yr                | 0.2           | 1/yr         |
| SSB-SEX-sex           | 0             | sex          |
| TB-AGE-yr             | 4+            | yr           |
| REC-AGE-yr            | 4             | yr           |
| SSB-AGE-yr            |               |              |
| F-AGE-yr              |               |              |
| M                     |               |              |
| A50-yr                |               |              |
| L50-cm                |               |              |
| Reference points      |               |              |
| Parameter             | Value         | Units        |
| F0.1-1/yr (F)         | 0.22          | 1/yr         |

| Time series minima and maxima |      |      |       |      |       |
|-------------------------------|------|------|-------|------|-------|
|                               | SSB  | R    | F     | TB   | Catch |
| Minimum year                  | 1945 | 1945 | 1945  | 1945 | 1945  |
| Maximum year                  | 2001 | 1997 | 2001  | 2001 | 2001  |
| Time series minimum           | 1476 | 600  | 0.029 | 1559 | 112   |
| Time series maximum           | 8085 | 7520 | 0.896 | 8275 | 2666  |
| Units                         | MT   | E03  | 1/yr  | MT   | MT    |



# Assessment of Pacific Coast of Canada sablefish (*Anoplopoma fimbria*)

Assessment ID:DFO-PAC-SABLEFPCAN-1913-2004-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/454>

Area ID: Canada-DFO-PCOAST

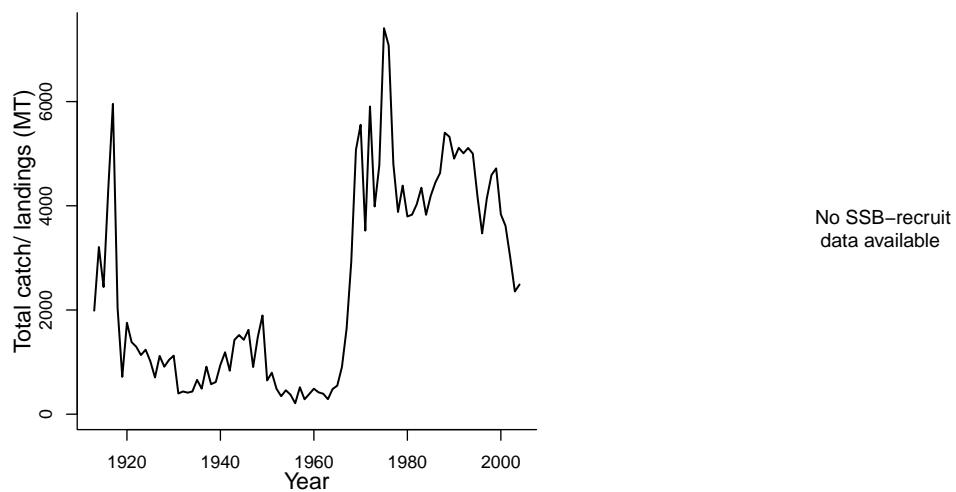
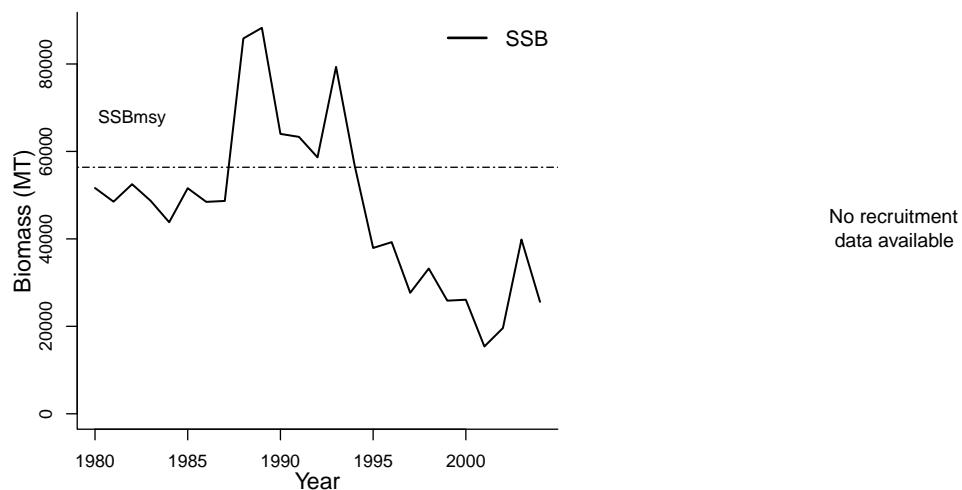
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Pacific Region |
| Assessment authors | Haist, V  |
| Assessment method  | Stock Synthesis v2.0 model                          |
| Publication year   | 2005  |
| Timeseries span    | 1913-2004   |
| Document           | BC-Sablefish.pdf (pdf in database)                  |
| Recorder           | STANTON   |
| Date entered       | 2010-05-06  |
| Date last loaded   | 2011-08-09  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME          |        | tertiary LME |  |
|--------------------|-------|-------|------------------------|--------|--------------|--|
| 2 - Gulf of Alaska |       |       | na                     |        | na           |  |
| Parameter          | Value | Units | Reference points       |        |              |  |
| SSB-SEX-sex        | 1     | sex   | Parameter              | Value  | Units        |  |
| REC-AGE            |       |       | Fmsy-1/yr (F)          | 0.047  | 1/yr         |  |
| SSB-AGE-yr         |       |       | SSBmsy-MT (SSB)        | 56381  | MT           |  |
| TB-AGE-yr          |       |       | SSB0-MT (SSB)          | 150534 | MT           |  |
| F-AGE-yr           |       |       | $SSB_{2004}/SSB_{msy}$ | 0.454  |              |  |
| M                  |       |       |                        |        |              |  |
| A50-yr             |       |       |                        |        |              |  |
| L50-cm             |       |       |                        |        |              |  |

| Time series minima and maxima |         |   |   |        |
|-------------------------------|---------|---|---|--------|
|                               | SSB     | R | F | TB     |
| Minimum year                  | 1980    |   |   | 1913   |
| Maximum year                  | 2004    |   |   | 2004   |
| Time series minimum           | 15392.2 |   |   | 209.3  |
| Time series maximum           | 88273.1 |   |   | 7408.3 |
| Units                         | MT      |   |   | MT     |



# Assessment of Western Scotian Shelf, Bay of Fundy, Gulf of Maine and Georges Bank pollock

## (*Pollachius virens*)

Assessment ID:DFO-POLL4X5YZ-1980-2006-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/179>

Area ID: Canada-DFO-4X5YZ

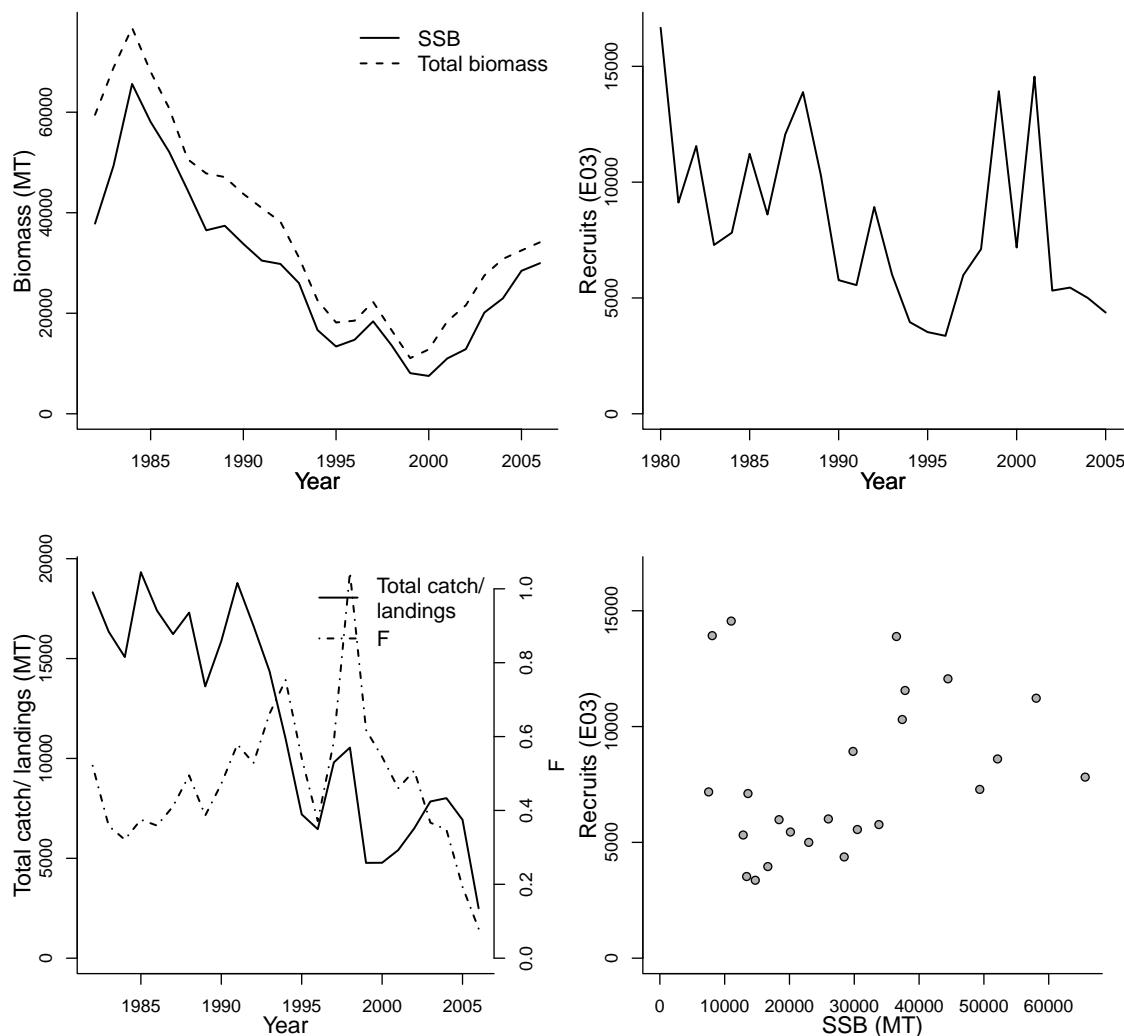
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans   |
| Assessment authors | Stone, Heath   |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2006   |
| Timeseries span    | 1980-2006  |
| Document           | NAFO-POLL4VWX5Zc-2006.pdf (pdf not in database)  |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-05-29   |
| Date last loaded   | 2011-08-02   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME     | tertiary LME |
|--------------------------------------|-------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 8 - Scotian Shelf | na           |
| <hr/>                                |                   |              |
| Parameter                            | Value             | Units        |
| REC-AGE-yr                           | 2                 | yr           |
| F-AGE-yr-yr                          | 4-9               | yr-yr        |
| M-1/T                                | 0.2               | 1/T          |
| TB-AGE-yr                            | 2+                | yr           |
| SSB-AGE-yr                           |                   |              |
| SSB-SEX-sex                          |                   |              |
| M                                    |                   |              |
| A50-yr                               |                   |              |
| L50-cm                               |                   |              |
| <hr/>                                |                   |              |
| Reference points                     |                   |              |
| Parameter                            | Value             | Units        |
| Fref-1/T (F)                         | 0.2               | 1/T          |

| Time series minima and maxima |       |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    | Catch |
| Minimum year                  | 1982  | 1980  | 1982  | 1982  | 1982  |
| Maximum year                  | 2006  | 2005  | 2006  | 2006  | 2006  |
| Time series minimum           | 7524  | 3365  | 0.08  | 11074 | 2504  |
| Time series maximum           | 65627 | 16664 | 1.045 | 76792 | 19323 |
| Units                         | MT    | E03   | 1/T   | MT    | MT    |



# Assessment of Northern Gulf of St. Lawrence atlantic cod (*Gadus morhua*)

Assessment ID:DFO-QUE-COD3Pn4RS-1964-2007-PREFONTAINE  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/154>

Area ID: Canada-DFO-3Pn4RS

## General assessment details.

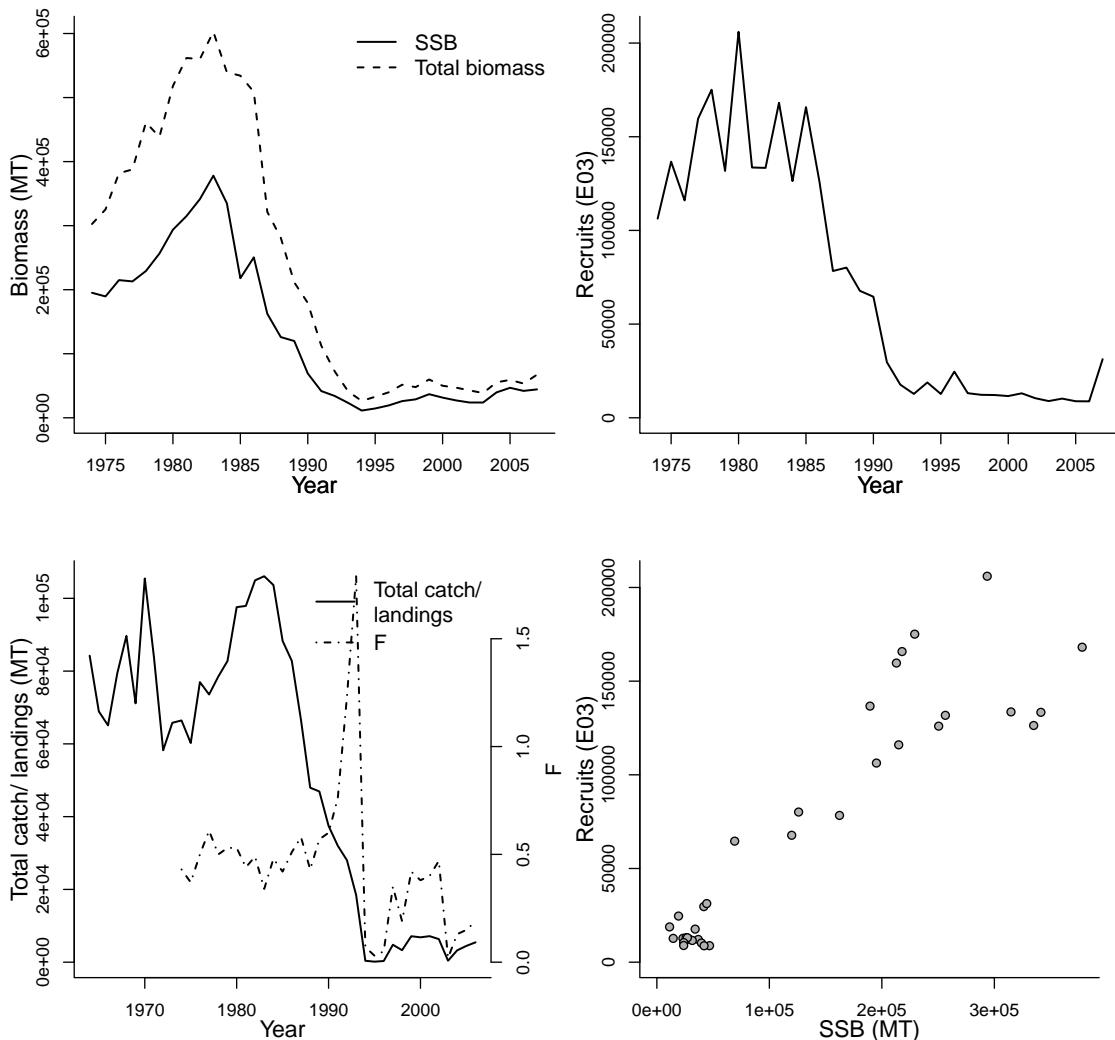
| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Quebec Region   |
| Assessment authors | Fréchet, Alain   |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2007   |
| Timeseries span    | 1964-2007  |
| Document           | DFO-COD3Pn4Rs-2007.pdf (pdf not in database)   |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-08-20   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME      | tertiary LME |
|---------------------------------|--------------------|--------------|
| 9 - Newfoundland-Labrador Shelf | na                 | na           |
| <hr/>                           |                    |              |
| Parameter                       | Value              | Units        |
| SSB-AGE-yr                      | 3+                 | yr           |
| REC-AGE-yr                      | 3                  | yr           |
| F-AGE-yr-yr                     | 7-10               | yr-yr        |
| A50-yr                          | 4-5                | yr           |
| M-1/T                           | timeseries         | 1/T          |
| SSB-SEX-sex                     |                    |              |
| TB-AGE-yr                       |                    |              |
| M                               |                    |              |
| L50-cm                          |                    |              |
| <hr/>                           |                    |              |
| Reference points                |                    |              |
| Parameter                       | Value              | Units        |
| MORATOR-yr-yr                   | 1994-1996 AND 2003 | yr-yr        |

## Time series minima and maxima

|                     | SSB    | R      | F    | TB     | Catch  |
|---------------------|--------|--------|------|--------|--------|
| Minimum year        | 1974   | 1974   | 1974 | 1974   | 1964   |
| Maximum year        | 2007   | 2007   | 2006 | 2007   | 2006   |
| Time series minimum | 11307  | 8769   | 0.02 | 26347  | 148    |
| Time series maximum | 378057 | 206009 | 1.79 | 602678 | 106080 |
| Units               | MT     | E03    | 1/T  | MT     | MT     |



# Assessment of Gulf of St. Lawrence greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID:DFO-QUE-GHAL4RST-1970-2002-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/165>

Area ID: Canada-DFO-4RST

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Quebec Region |
| Assessment authors | Bernier, B.  |
| Assessment method  | Unknown  |
| Publication year   | 2003   |
| Timeseries span    | 1970-2002  |
| Document           | NAFO-GHAL4RST-2003.pdf (pdf in database)           |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-07-03   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME     | tertiary LME |
|---------------------------------|-------------------|--------------|
| 9 - Newfoundland-Labrador Shelf | 8 - Scotian Shelf | na           |
| <hr/>                           |                   |              |
| Parameter                       | Value             | Units        |
| REC-AGE                         |                   |              |
| SSB-AGE-yr                      |                   |              |
| SSB-SEX-sex                     |                   |              |
| TB-AGE-yr                       |                   |              |
| F-AGE-yr                        |                   |              |
| M                               |                   |              |
| A50-yr                          |                   |              |
| L50-cm                          |                   |              |

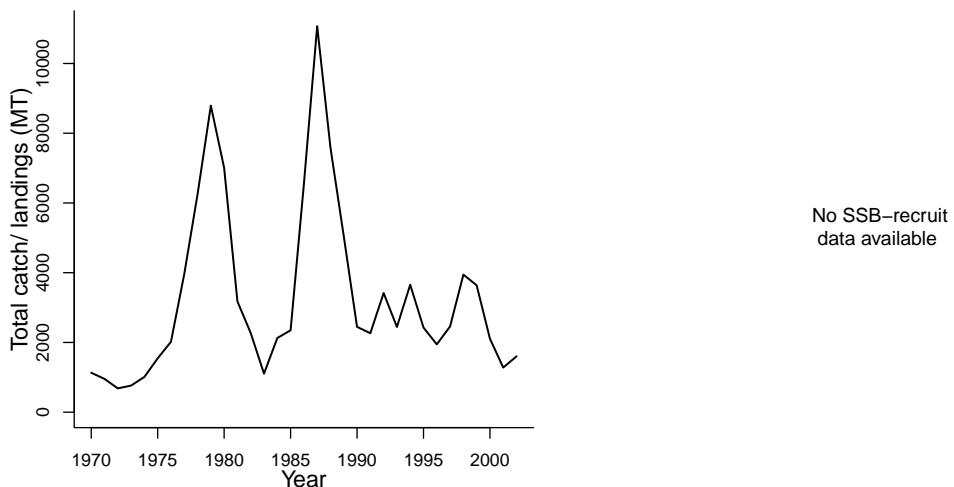
  

| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    | 1970  |
| Maximum year                  |     |   |   |    | 2002  |
| Time series minimum           |     |   |   |    | 683   |
| Time series maximum           |     |   |   |    | 11069 |
| Units                         |     |   |   |    | MT    |

No biomass data available

No recruitment data available



No SSB-recruit data available

# Assessment of NAFO division 4R herring (*Clupea harengus*)

Assessment ID:DFO-QUE-HERR4RFA-1971-2003-PREFONTAINE  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/167>

Area ID: Canada-DFO-4R

General assessment details.

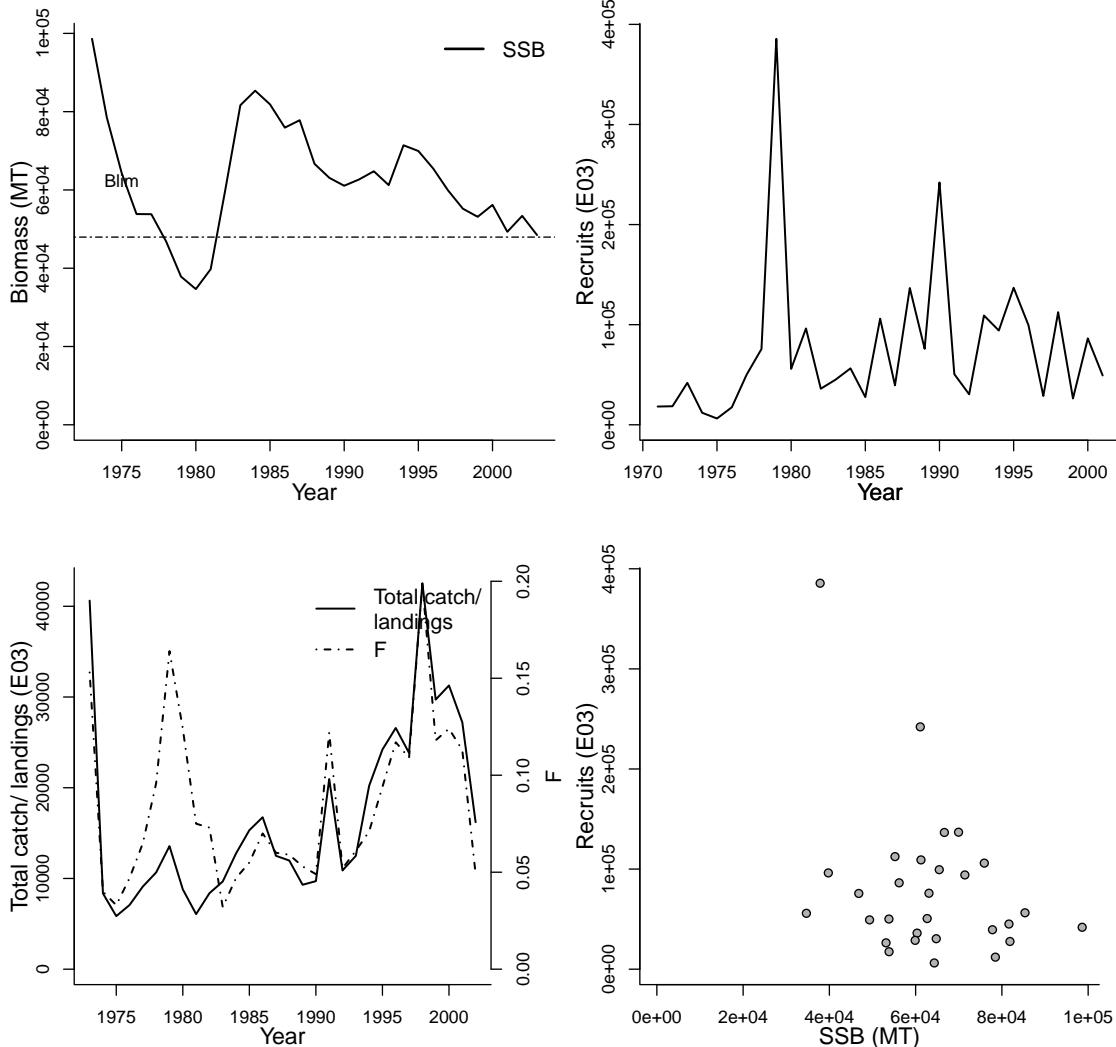
| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Quebec Region |
| Assessment authors | Grégoire, François                                 |
| Assessment method  | Sequential Population Analysis / ADAPT             |
| Publication year   | 2004   |
| Timeseries span    | 1971-2003  |
| Document           | NAFO-HERR4RSP-2004.pdf (pdf in database)           |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-06-05   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-14   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |        |       | secondary LME    | tertiary LME |
|---------------------------------|--------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |        |       | na               | na           |
| Parameter                       | Value  | Units | Parameter        | Value        |
| SSB-AGE-yr                      | 2+     | yr    | Reference points |              |
| REC-AGE-yr                      | 2      | yr    | Parameter        | Value        |
| F-AGE-yr-yr                     | 4+     | yr-yr |                  | Units        |
| A50-yr                          | 03-Apr | yr    | Blim-MT (TB)     | 47953        |
| M-1/T                           | 0.2    | 1/T   | F0.1-1/yr (F)    | 0.3          |
| SSB-SEX-sex                     |        |       | Fmax-1/yr (F)    | 0.55         |
| TB-AGE-yr                       |        |       | Bbuf-MT (TB)     | 57453        |
| M                               |        |       |                  | MT           |
| L50-cm                          |        |       |                  |              |

## Time series minima and maxima

|                     | SSB   | R      | F     | TB | Catch |
|---------------------|-------|--------|-------|----|-------|
| Minimum year        | 1973  | 1971   | 1973  |    | 1973  |
| Maximum year        | 2003  | 2001   | 2002  |    | 2002  |
| Time series minimum | 34671 | 6244   | 0.032 |    | 5849  |
| Time series maximum | 98616 | 385586 | 0.199 |    | 42543 |
| Units               | MT    | E03    | 1/T   |    | E03   |



# Assessment of NAFO division 4R herring (*Clupea harengus*)

Assessment ID:DFO-QUE-HERR4RSP-1963-2004-PREFONTAINE  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/168>

Area ID: Canada-DFO-4R

General assessment details.

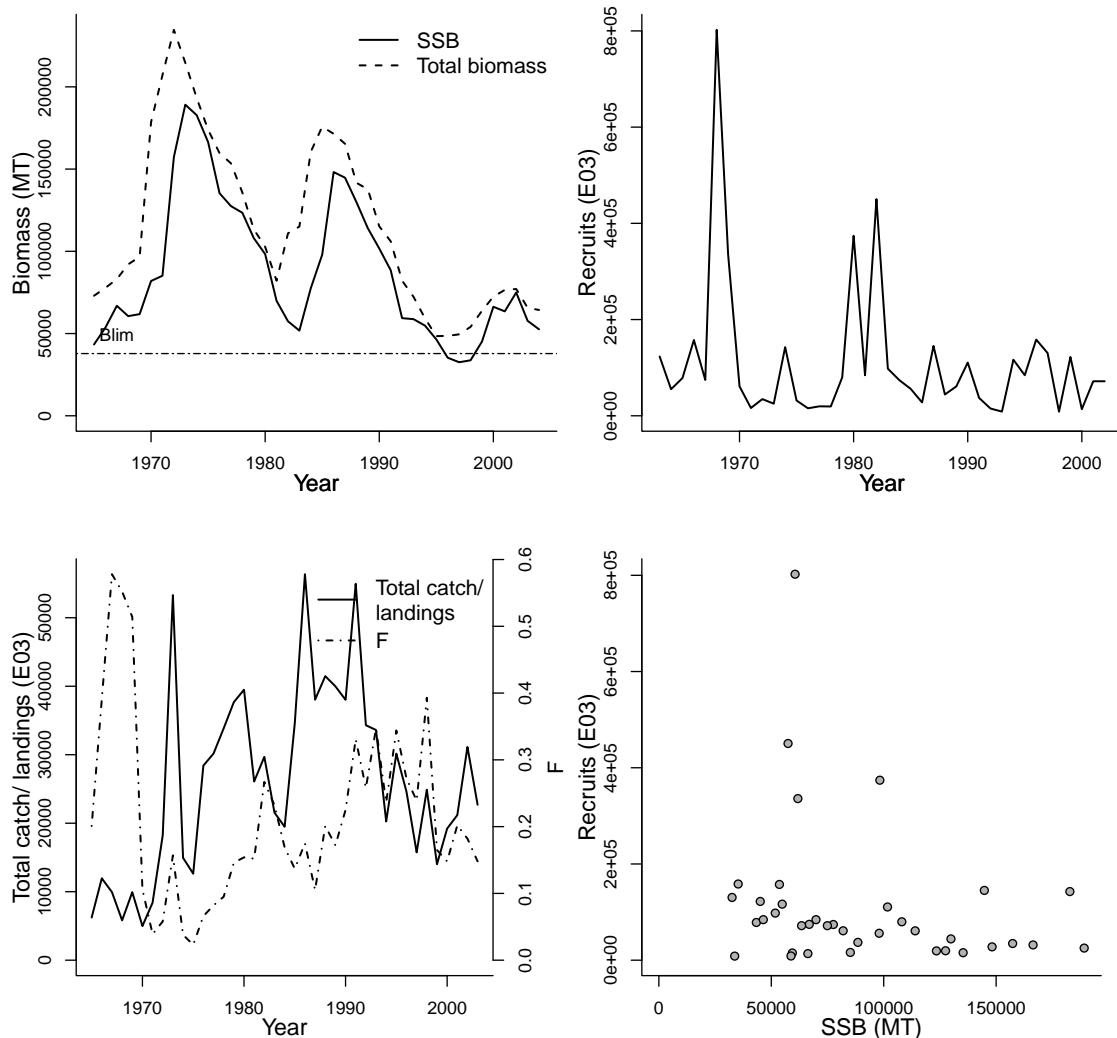
| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Quebec Region |
| Assessment authors | Grégoire, François                                 |
| Assessment method  | Sequential Population Analysis / ADAPT             |
| Publication year   | 2004   |
| Timeseries span    | 1963-2004  |
| Document           | NAFO-HERR4RSP-2004.pdf (pdf in database)           |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-05-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-14   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |
|---------------------------------|-------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |
| Parameter                       | Value | Units | Parameter        | Value        |
| SSB-AGE-yr                      | 2+    | yr    | Reference points |              |
| REC-AGE-yr                      | 2     | yr    | Parameter        | Value        |
| F-AGE-yr-yr                     | 4+    | yr-yr |                  | Units        |
| A50-yr                          | 3-4   | yr    | Blim-MT (TB)     | 37831        |
| M-1/T                           | 0.2   | 1/T   | F0.1-1/yr (F)    | 0.3          |
| SSB-SEX-sex                     |       |       | Fmax-1/yr (F)    | 0.55         |
| TB-AGE-yr                       |       |       | Bbuf-MT (TB)     | 57453        |
| M                               |       |       |                  | MT           |
| L50-cm                          |       |       |                  |              |

## Time series minima and maxima

|                     | SSB    | R      | F     | TB     | Catch |
|---------------------|--------|--------|-------|--------|-------|
| Minimum year        | 1965   | 1963   | 1965  | 1965   | 1965  |
| Maximum year        | 2004   | 2002   | 2003  | 2004   | 2003  |
| Time series minimum | 32559  | 8533   | 0.023 | 48431  | 4983  |
| Time series maximum | 189156 | 802298 | 0.578 | 234686 | 56356 |
| Units               | MT     | E03    | 1/T   | MT     | E03   |



# Assessment of Gulf of St. Lawrence and Cabot Strait redfish species (*Sebastes spp*)

## Assessment

ID:DFO-QUE-REDFISHSPP3Pn4RSTVn-1953-2000-PREFONTAINE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/176>

Area ID: Canada-DFO-3Pn4RSTVn

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Quebec Region   |
| Assessment authors | Morin, B.  |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2001   |
| Timeseries span    | 1953-2000  |
| Document           | NAFO-RED3Pn4RSTVn-2001.pdf (pdf not in database)     |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-07-25   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME     | tertiary LME |
|---------------------------------|-------------------|--------------|
| 9 - Newfoundland-Labrador Shelf | 8 - Scotian Shelf | na           |
| Parameter                       | Value             | Units        |
| REC-AGE                         |                   |              |
| SSB-AGE-yr                      |                   |              |
| SSB-SEX-sex                     |                   |              |
| TB-AGE-yr                       |                   |              |
| F-AGE-yr                        |                   |              |
| M                               |                   |              |
| A50-yr                          |                   |              |
| L50-cm                          |                   |              |

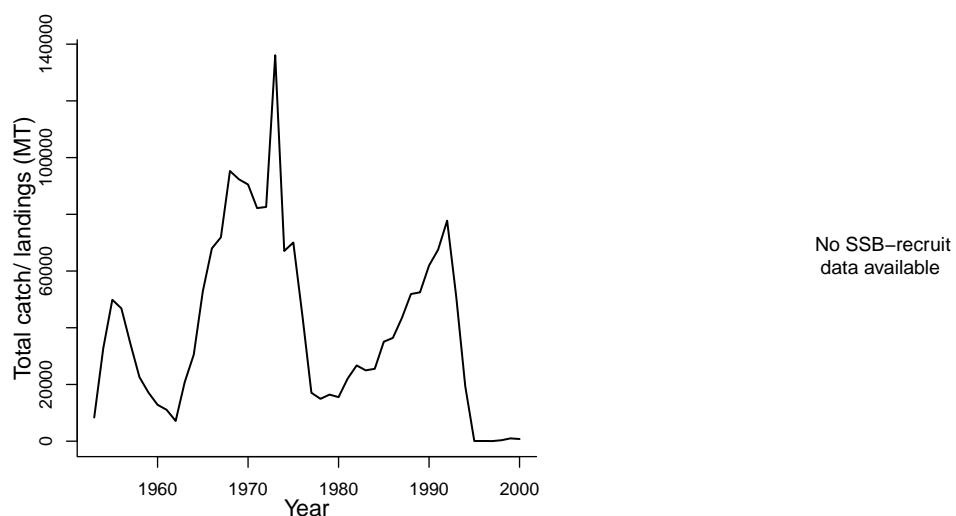
  

| Reference points |              |       |
|------------------|--------------|-------|
| Parameter        | Value        | Units |
| MORATOR-yr-yr    | 1995-PRESENT | yr-yr |

| Time series minima and maxima |     |   |   |        |
|-------------------------------|-----|---|---|--------|
|                               | SSB | R | F | TB     |
| Minimum year                  |     |   |   | 1953   |
| Maximum year                  |     |   |   | 2000   |
| Time series minimum           |     |   |   | 39     |
| Time series maximum           |     |   |   | 136101 |
| Units                         |     |   |   | MT     |

No biomass data available

No recruitment data available



# Assessment of 0

Assessment ID:DFO-SG-COD4TVn-1965-2007-PREFONTAINE

Issue URL:

Area ID:

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Southern Gulf Region  |
| Assessment authors | Swain, D.P.  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2007   |
| Timeseries span    | 1965-2007  |
| Document           | NAFO-COD4TVn-2007.pdf (pdf not in database)  |
| Recorder           |  |
| Date entered       |  |
| Date last loaded   |  |
| QA/QC complete     |  |
| Date approved      |  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                   | primary LME    | secondary LME | tertiary LME     |
|-------------------|----------------|---------------|------------------|
| Parameter         | Value          | Units         |                  |
| 8 - Scotian Shelf | na             | na            |                  |
| F-AGE-yr-yr       | 7+             | yr-yr         |                  |
| A50-yr            | 4-5            | yr            |                  |
| M-1/T             | SEE TIMESERIES | 1/T           | Reference points |
| REC-AGE           |                |               | Parameter        |
| SSB-AGE-yr        |                |               | Value            |
| SSB-SEX-sex       |                |               | Units            |
| TB-AGE-yr         |                |               | Bcrp-MT          |
| M                 |                |               | 80000            |
| L50-cm            |                |               | MT               |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Southern Gulf of St. Lawrence atlantic cod (*Gadus morhua*)

Assessment ID:DFO-SG-COD4TVn-1965-2009-RICARD

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/156>

Area ID: Canada-DFO-4T

## General assessment details.

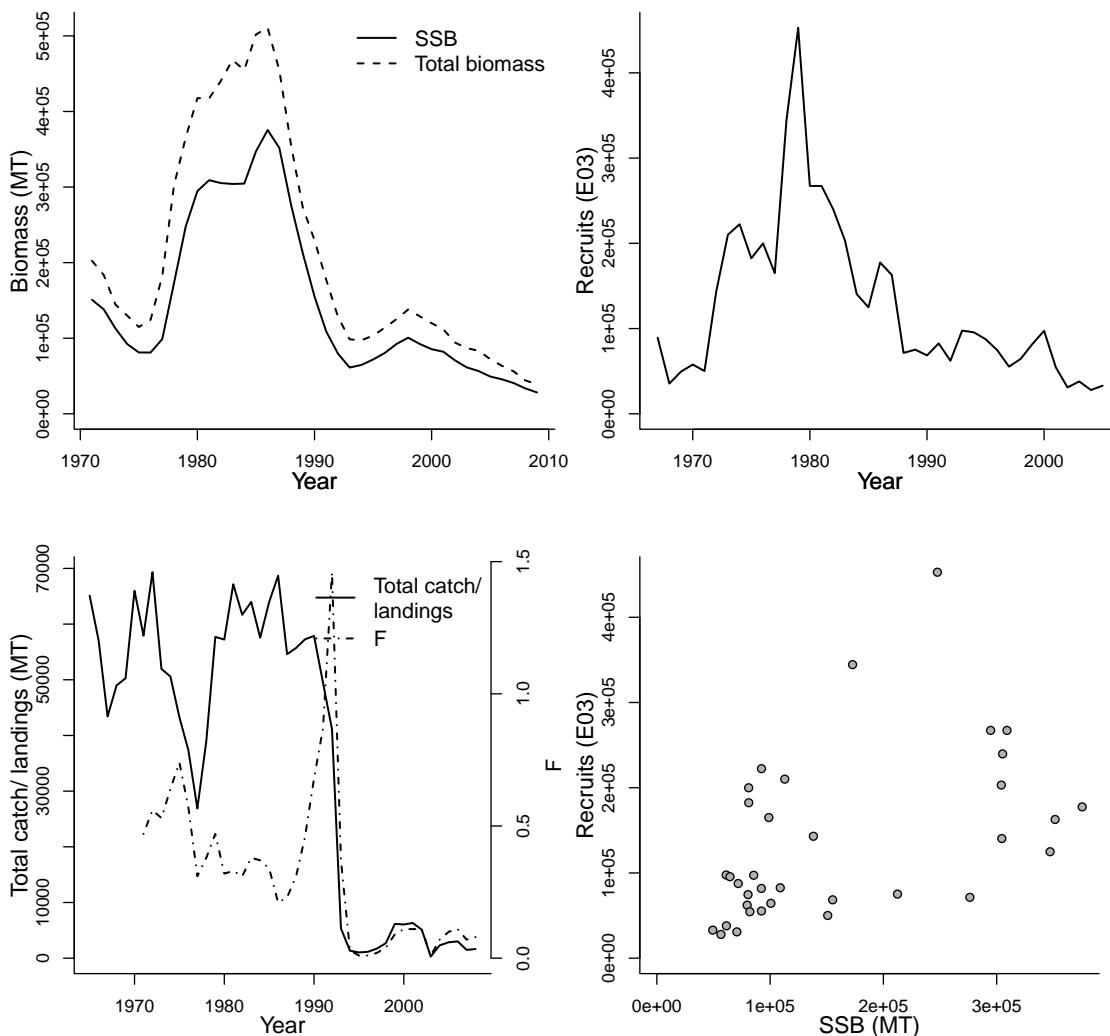
| Detail             | Value  |
|--------------------|--|
| Management body    | DFO  |
| Assessment group   | Department of Fisheries and Oceans - Southern Gulf Region  |
| Assessment authors | Swain, D.P.  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2009   |
| Timeseries span    | 1965-2009  |
| Document           | Swain2009-Assessment-of-Southern-Gulf-Cod.pdf (pdf in database)  |
| Recorder           | RICARD   |
| Date entered       | 2011-03-01   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-03-01   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value          | Units | primary LME       | secondary LME | tertiary LME |
|-------------|----------------|-------|-------------------|---------------|--------------|
|             |                |       | 8 - Scotian Shelf | na            | na           |
| F-AGE-yr-yr | 7+             | yr-yr |                   |               |              |
| A50-yr      | 4-5            | yr    |                   |               |              |
| M-1/T       | SEE TIMESERIES | 1/T   |                   |               |              |
| REC-AGE     |                |       | Reference points  |               |              |
| SSB-AGE-yr  |                |       | Parameter         | Value         | Units        |
| SSB-SEX-sex |                |       | Bcrp-MT           | 80000         | MT           |
| TB-AGE-yr   |                |       |                   |               |              |
| M           |                |       |                   |               |              |
| L50-cm      |                |       |                   |               |              |

## Time series minima and maxima

|                     | SSB    | R      | F    | TB     | Catch |
|---------------------|--------|--------|------|--------|-------|
| Minimum year        | 1971   | 1967   | 1971 | 1971   | 1965  |
| Maximum year        | 2009   | 2005   | 2008 | 2009   | 2008  |
| Time series minimum | 28235  | 27883  | 0.01 | 38776  | 289   |
| Time series maximum | 375498 | 452876 | 1.46 | 510714 | 69317 |
| Units               | MT     | E03    | 1/T  | MT     | MT    |



# Assessment of Southern Gulf of St. Lawrence herring (*Clupea harengus*)

Assessment ID:DFO-SG-HERR4TFA-1974-2007-PREFONTAINE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/169>

Area ID: Canada-DFO-4T

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Southern Gulf Region |
| Assessment authors | LeBlanc, C.H.   |
| Assessment method  | Sequential Population Analysis / ADAPT                    |
| Publication year   | 2007  |
| Timeseries span    | 1974-2007   |
| Document           | NAFO-HERR4TFA-2007.pdf (pdf not in database)              |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-05  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-14  |

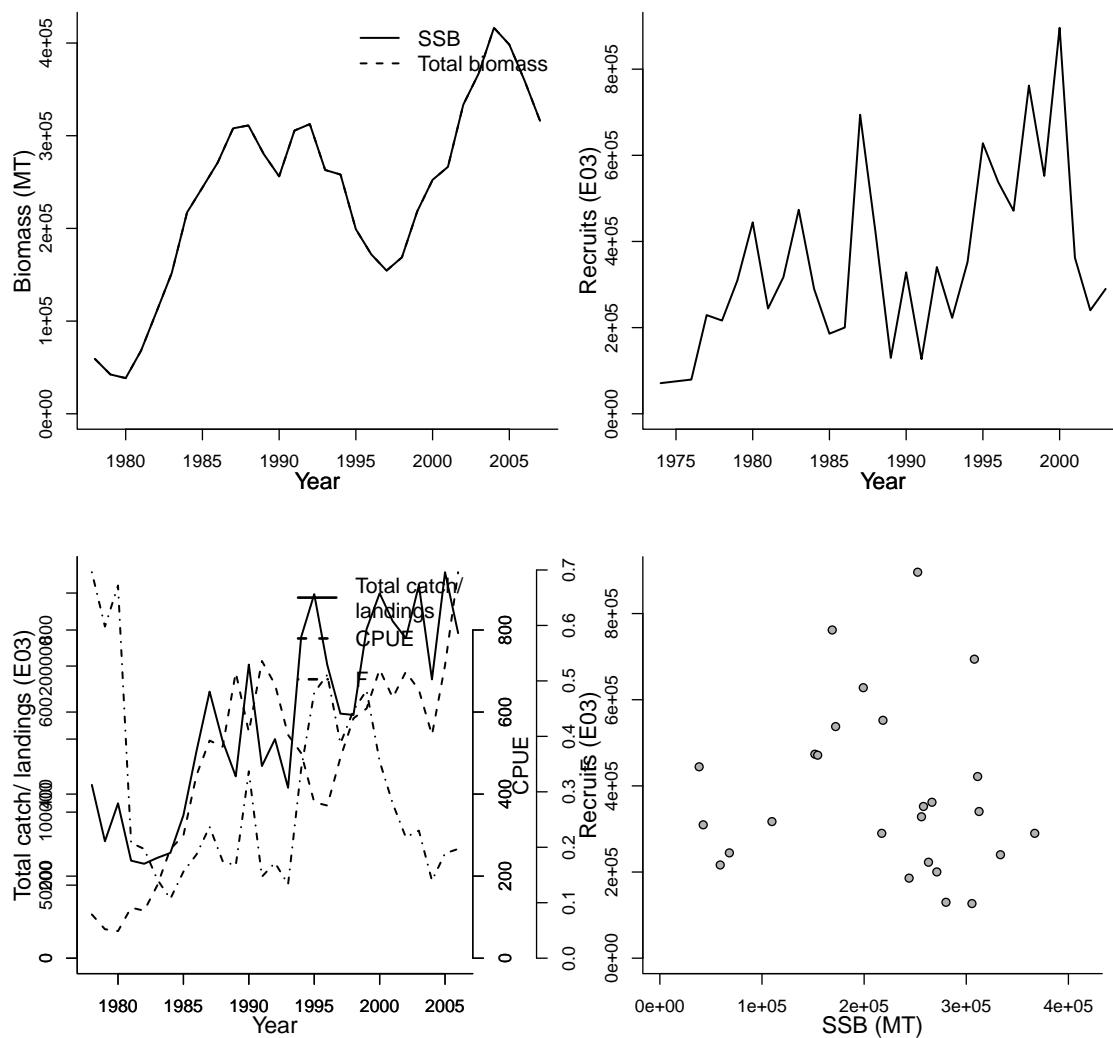
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| SSB-AGE-yr  | 4+    | yr    |
| REC-AGE-yr  | 4     | yr    |
| F-AGE-yr-yr | 5-10  | yr-yr |
| TB-AGE-yr   | 4+    | yr    |
| M-1/T       | 0.2   | 1/T   |
| SSB-SEX-sex |       |       |
| M           |       |       |
| A50-yr      |       |       |
| L50-cm      |       |       |

| Parameter   | Value  | Units |
|-------------|--------|-------|
| Busr-MT     | 172000 | MT    |
| Blrp-MT     | 51000  | MT    |
| SSBrecov-MT | 37000  | MT    |

| Time series minima and maxima |           |        |       |        |
|-------------------------------|-----------|--------|-------|--------|
|                               | SSB       | R      | F     | TB     |
| Minimum year                  | 1978      | 1974   | 1978  | 1978   |
| Maximum year                  | 2007      | 2003   | 2006  | 2007   |
| Time series minimum           | 38470.25  | 71101  | 0.107 | 38470  |
| Time series maximum           | 416422.04 | 896001 | 0.696 | 416422 |
| Units                         | MT        | E03    | 1/T   | MT     |
|                               |           |        |       | E03    |



# Assessment of Southern Gulf of St. Lawrence herring (*Clupea harengus*)

Assessment ID:DFO-SG-HERR4TSP-1974-2007-PREFONTAINE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/170>

Area ID: Canada-DFO-4T

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Southern Gulf Region |
| Assessment authors | LeBlanc, C.H.   |
| Assessment method  | Sequential Population Analysis / ADAPT                    |
| Publication year   | 2007  |
| Timeseries span    | 1974-2007   |
| Document           | NAFO-HERR4TFA-2007.pdf (pdf not in database)              |
| Recorder           | PREFONTAINE   |
| Date entered       | 2008-06-05  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-14  |

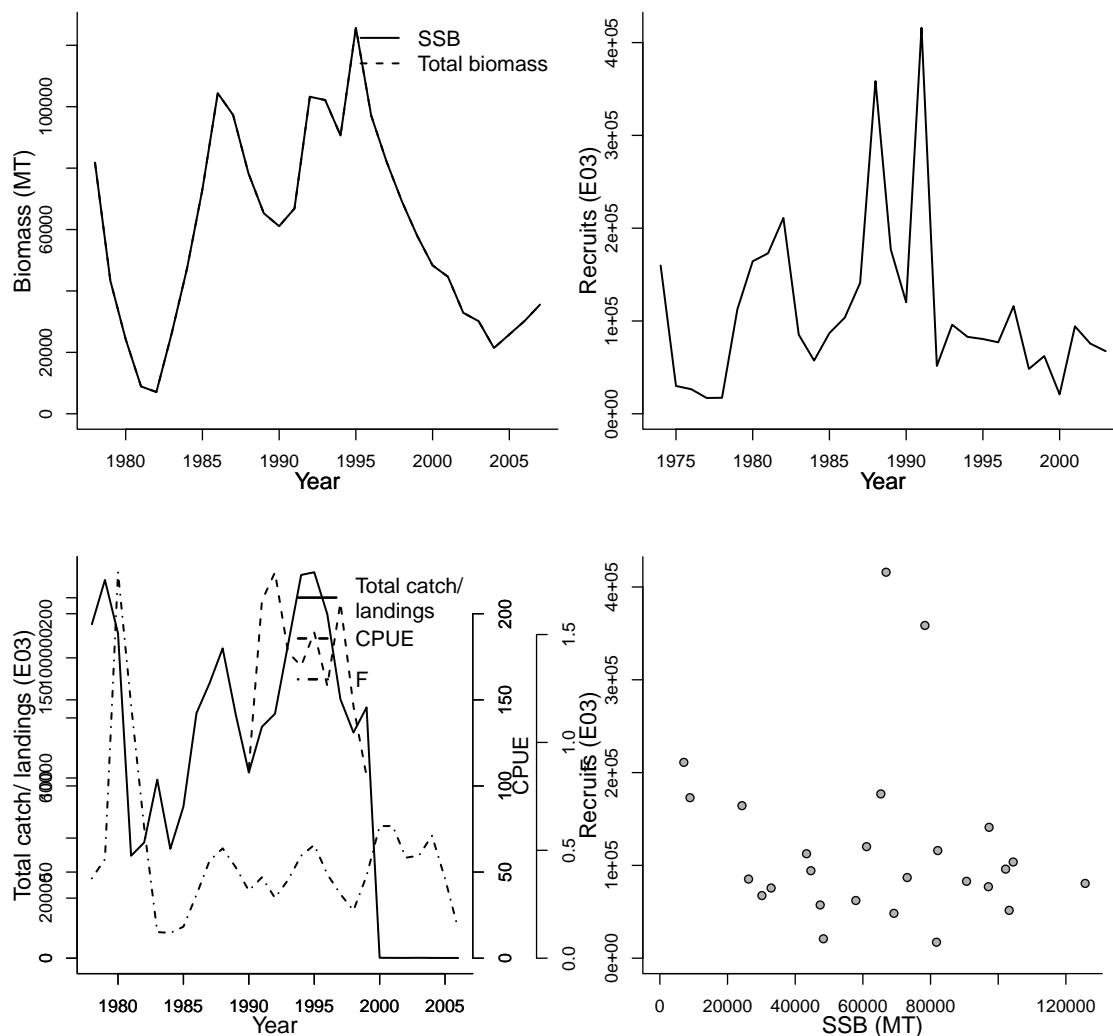
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| SSB-AGE-yr  | 4+    | yr    |
| REC-AGE-yr  | 4     | yr    |
| F-AGE-yr-yr | 6-8   | yr-yr |
| TB-AGE-yr   | 4-10  | yr    |
| M-1/T       | 0.2   | 1/T   |
| SSB-SEX-sex |       |       |
| M           |       |       |
| A50-yr      |       |       |
| L50-cm      |       |       |

| Parameter     | Value | Units |
|---------------|-------|-------|
| F0.1-1/yr (F) | 0.35  | 1/yr  |
| Busr-MT       | 54000 | MT    |
| Blrp-MT       | 22000 | MT    |
| SSBrecovre-MT | 11500 | MT    |

| Time series minima and maxima |           |        |       |        |
|-------------------------------|-----------|--------|-------|--------|
|                               | SSB       | R      | F     | TB     |
| Minimum year                  | 1978      | 1974   | 1978  | 1978   |
| Maximum year                  | 2007      | 2003   | 2006  | 2007   |
| Time series minimum           | 7084.78   | 17034  | 0.117 | 7085   |
| Time series maximum           | 125697.55 | 415931 | 1.789 | 125698 |
| Units                         | MT        | E03    | 1/T   | MT     |
|                               |           |        |       | E03    |



# Assessment of Southern Gulf of St. Lawrence snow crab (*Chionoecetes opilio*)

Assessment ID:DFO-SG-SNOWCRABSGSL-1984-2007-ANDERSON  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/327>

Area ID: Canada-DFO-4T

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DFO   |
| Assessment group   | Department of Fisheries and Oceans - Southern Gulf Region |
| Assessment authors | Hbert, M  |
| Assessment method  | Temporal indices derived from scientific survey data      |
| Publication year   | 2008  |
| Timeseries span    | 1984-2007   |
| Document           | 2008_040_b.pdf (pdf not in database)                      |
| Recorder           | ANDERSON  |
| Date entered       | 2009-05-06  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

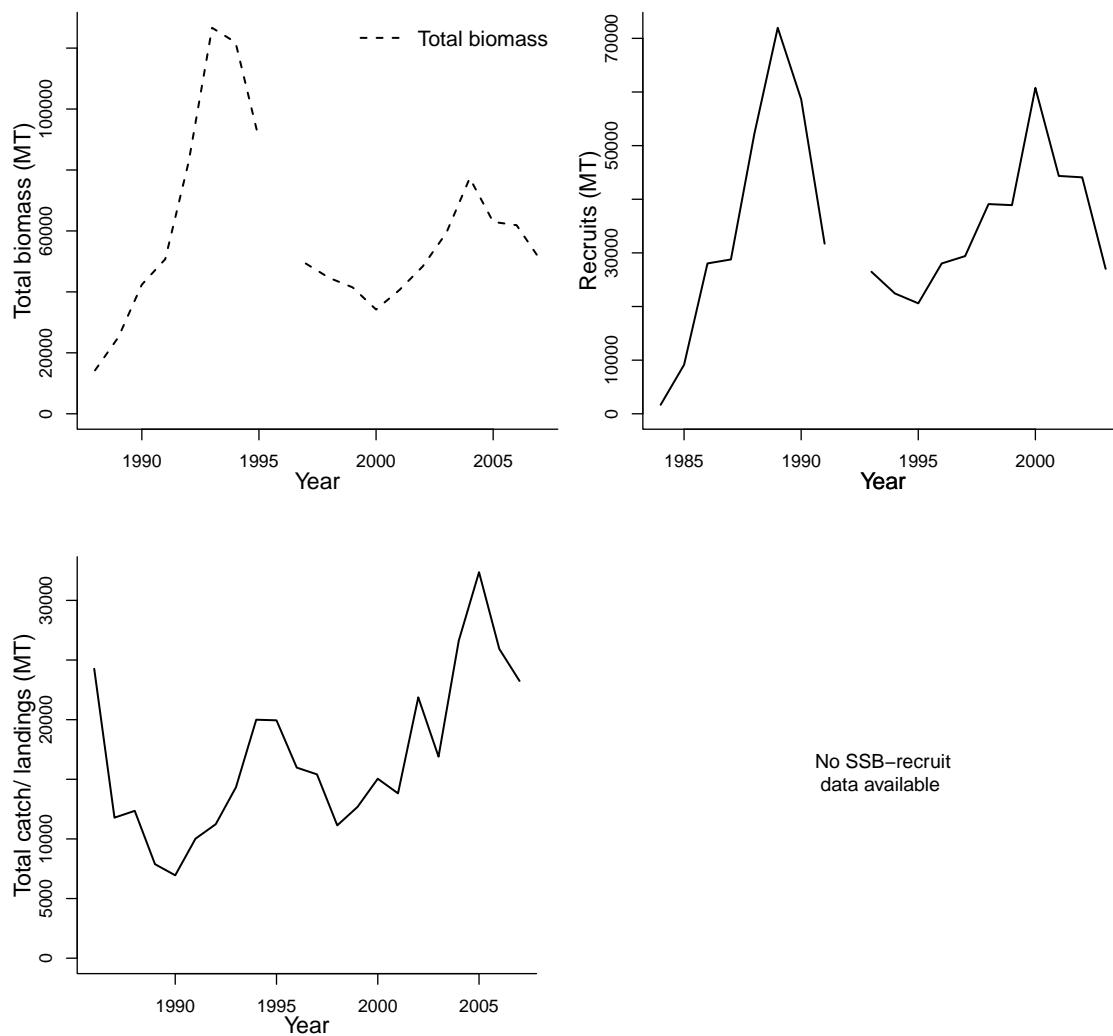
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME       | secondary LME | tertiary LME |
|-------------------|---------------|--------------|
| 8 - Scotian Shelf | na            | na           |
| Parameter         | Value         | Units        |
| TB-AGE-yr         | 4+            | yr           |
| M-1/T             | 0.28-0.48     | 1/T          |
| REC-AGE           |               |              |
| SSB-AGE-yr        |               |              |
| SSB-SEX-sex       |               |              |
| F-AGE-yr          |               |              |
| M                 |               |              |
| A50-yr            |               |              |
| L50-cm            |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |       |      |        |       |
|-------------------------------|-------|------|--------|-------|
|                               | SSB   | R    | F      | TB    |
| Minimum year                  |       | 1984 |        | 1988  |
| Maximum year                  |       | 2003 |        | 2007  |
| Time series minimum           | 1676  |      | 14244  | 6950  |
| Time series maximum           | 71969 |      | 126660 | 32363 |
| Units                         | MT    |      | MT     | MT    |



# Assessment of 22-24-IIIa herring (*Clupea harengus*)

Assessment ID:HAWG-HERR2224IIIa-1991-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/369>

Area ID: multinational-ICES-22-24-IIIa

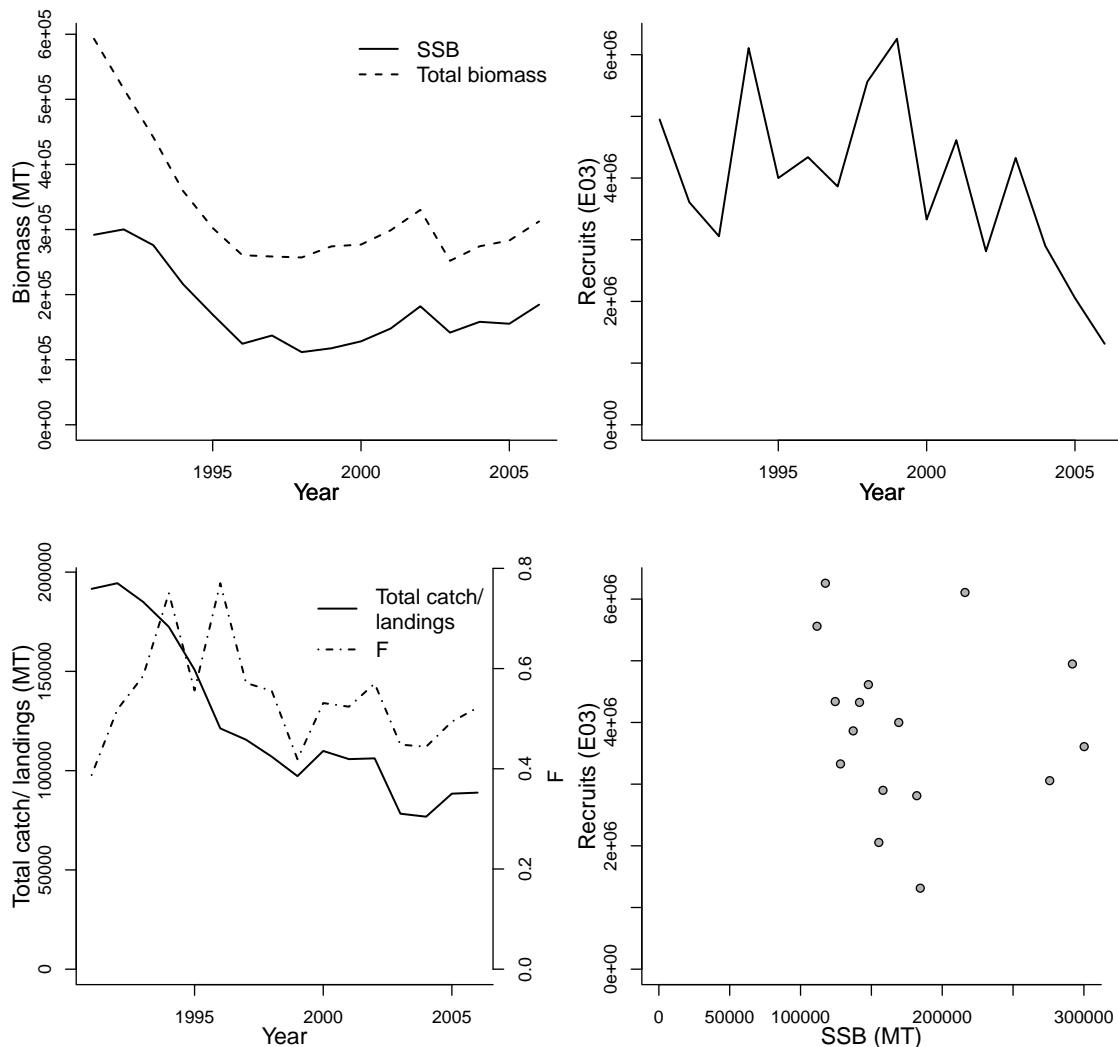
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Integrated Catch-at-age Analysis                           |
| Publication year   | 2007   |
| Timeseries span    | 1991-2006  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                | primary LME    | secondary LME   | tertiary LME     |       |       |
|----------------|----------------|-----------------|------------------|-------|-------|
| 22 - North Sea | 22 - North Sea | 23 - Baltic Sea | na               |       |       |
| <hr/>          |                |                 |                  |       |       |
| Parameter      | Value          | Units           |                  |       |       |
| A50-yr         | 2-3            | yr              |                  |       |       |
| SSB-AGE-yr     | 2+             | yr              |                  |       |       |
| REC-AGE-yr     | 0              | yr              | Reference points |       |       |
| TB-AGE-yr      | 0+             | yr              | Parameter        | Value | Units |
| F-AGE-yr-yr    | 3-6            | yr-yr           | F0.1-1/T         | 0.22  | 1/T   |
| M-1/T          | 0.2 for 2+     | 1/T             | Fmax-1/T         | 0.53  | 1/T   |
| SSB-SEX-sex    |                |                 | <hr/>            |       |       |
| M              |                |                 |                  |       |       |
| L50-cm         |                |                 |                  |       |       |

| Time series minima and maxima |        |         |        |        |        |
|-------------------------------|--------|---------|--------|--------|--------|
|                               | SSB    | R       | F      | TB     | Catch  |
| Minimum year                  | 1991   | 1991    | 1991   | 1991   | 1991   |
| Maximum year                  | 2006   | 2006    | 2006   | 2006   | 2006   |
| Time series minimum           | 111615 | 1313450 | 0.3875 | 251938 | 76815  |
| Time series maximum           | 300193 | 6257570 | 0.7704 | 592997 | 194411 |
| Units                         | MT     | E03     | 1/yr   | MT     | MT     |



# Assessment of Irish Sea herring (*Clupea harengus*)

Assessment ID:HAWG-HERRNIRS-1960-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/77>

Area ID: multinational-ICES-VIIa

## General assessment details.

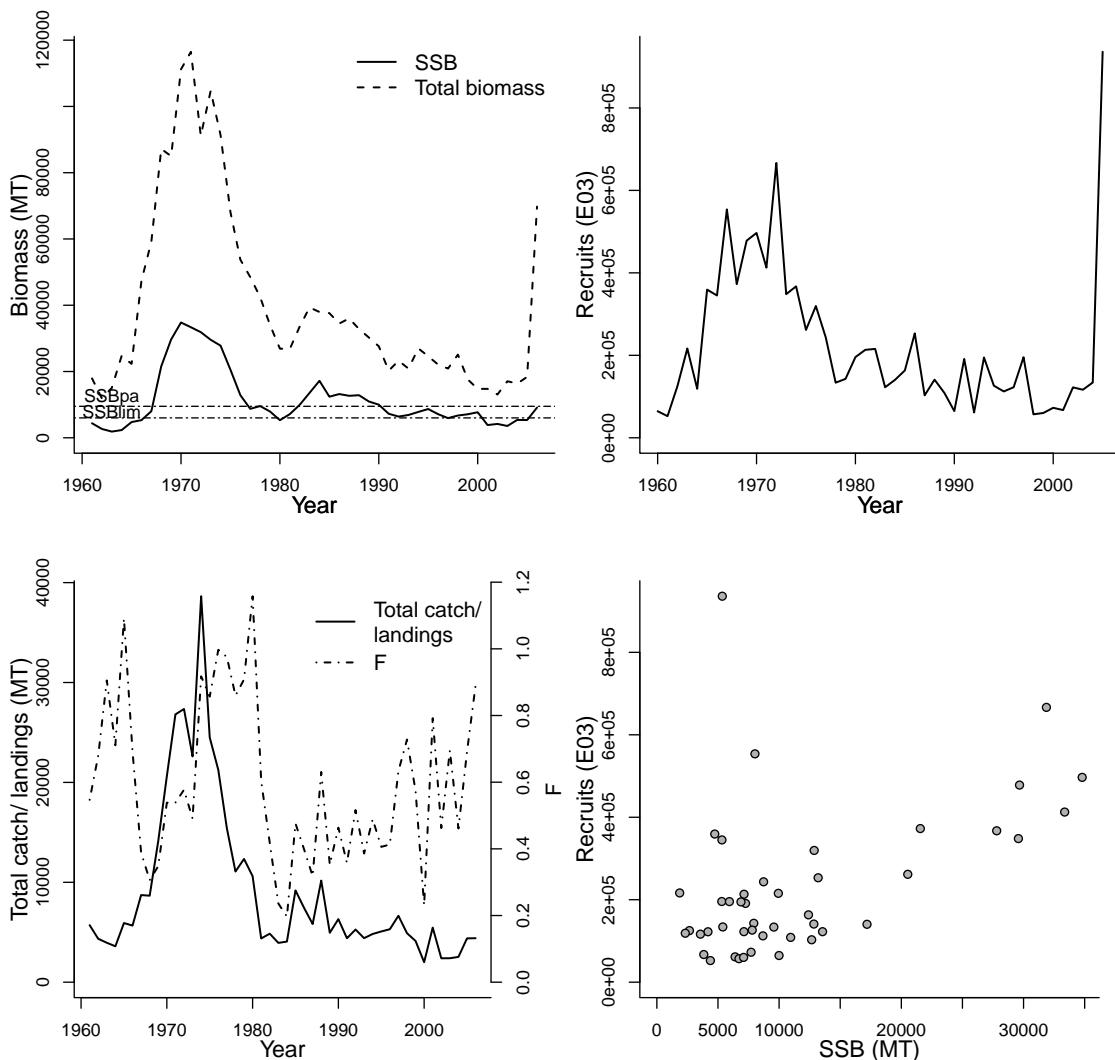
| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Integrated Catch-at-age Analysis                           |
| Publication year   | 2007   |
| Timeseries span    | 1960-2006  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | JENNINGS   |
| Date entered       | 2008-11-26   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-05-29   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME           |
|--------------------------|-----------|---------------|------------------------|
| 24 - Celtic-Biscay Shelf |           | na            | na                     |
| Parameter                | Value     | Units         |                        |
| SSB-AGE-yr               | AVAILABLE | yr            |                        |
| REC-AGE-yr               | 1         | yr            | Reference points       |
| F-AGE-yr-yr              | 2 to 6    | yr-yr         | Parameter              |
| TB-AGE-yr                | 1+        | yr            | Value                  |
| A50-yr                   | AVAILABLE | yr            | Units                  |
| M-1/T                    | AVAILABLE | 1/T           | SSBlim-MT (SSB)        |
| SSB-SEX-sex              |           |               | 6000 MT                |
| M                        |           |               | SSBpa-MT (SSB)         |
| L50-cm                   |           |               | 9500 MT                |
|                          |           |               | $SSB_{2006}/SSB_{lim}$ |
|                          |           |               | 1.519                  |

## Time series minima and maxima

|                     | SSB   | R      | F      | TB     | Catch |
|---------------------|-------|--------|--------|--------|-------|
| Minimum year        | 1961  | 1960   | 1961   | 1961   | 1961  |
| Maximum year        | 2006  | 2005   | 2006   | 2006   | 2006  |
| Time series minimum | 1866  | 52490  | 0.1966 | 11871  | 2002  |
| Time series maximum | 34796 | 936160 | 1.1579 | 116486 | 38640 |
| Units               | MT    | E03    | 1/T    | MT     | MT    |



# Assessment of North Sea herring (*Clupea harengus*)

Assessment ID:HAWG-HERRNS-1960-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/370>

Area ID: multinational-ICES-IV

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Integrated Catch-at-age Analysis                           |
| Publication year   | 2007   |
| Timeseries span    | 1960-2007  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

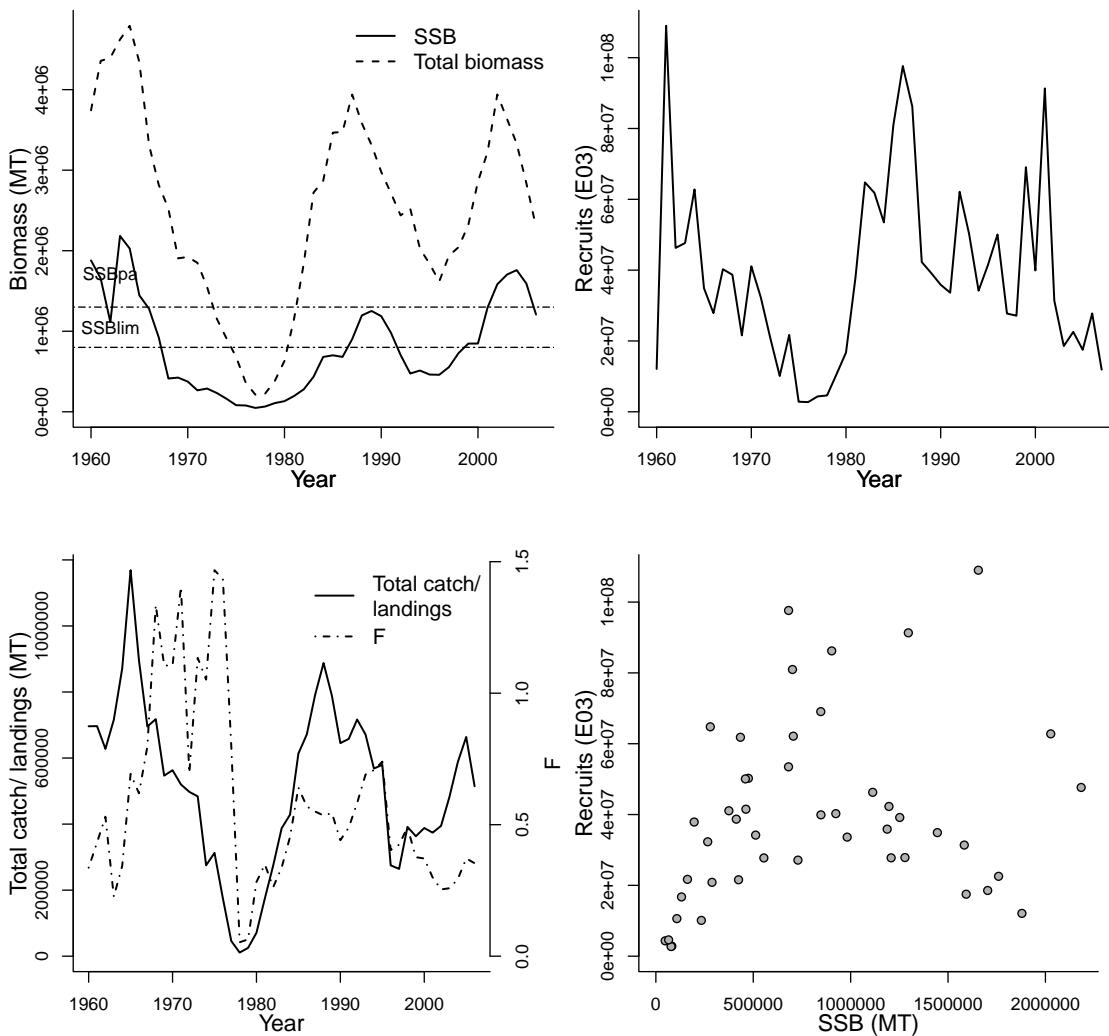
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value      | Units | primary LME    | secondary LME | tertiary LME |
|-------------|------------|-------|----------------|---------------|--------------|
|             |            |       | 22 - North Sea | na            | na           |
| A50-yr      | 2          | yr    |                |               |              |
| SSB-AGE-yr  | 2+         | yr    |                |               |              |
| REC-AGE-yr  | 0          | yr    |                |               |              |
| TB-AGE-yr   | 0+         | yr    |                |               |              |
| F-AGE-yr-yr | 2-6        | yr-yr |                |               |              |
| M-1/T       | 0.1 for 4+ | 1/T   |                |               |              |
| SSB-SEX-sex |            |       |                |               |              |
| M           |            |       |                |               |              |
| L50-cm      |            |       |                |               |              |

| Parameter              | Value   | Units | Reference points |
|------------------------|---------|-------|------------------|
|                        |         |       | Parameter        |
|                        |         |       | Value            |
|                        |         |       | Units            |
| F0.1-1/T               | 0.22    | 1/T   |                  |
| Fpa-1/T (F)            | 0.25    | 1/T   |                  |
| SSBpa-MT (SSB)         | 1300000 | MT    |                  |
| SSBlim-MT (SSB)        | 800000  | MT    |                  |
| $SSB_{2006}/SSB_{lim}$ | 1.510   |       |                  |

| Time series minima and maxima |         |           |        |         |
|-------------------------------|---------|-----------|--------|---------|
|                               | SSB     | R         | F      | TB      |
| Minimum year                  | 1960    | 1960      | 1960   | 1960    |
| Maximum year                  | 2006    | 2007      | 2006   | 2006    |
| Time series minimum           | 47975   | 2732610   | 0.053  | 211261  |
| Time series maximum           | 2183501 | 109000000 | 1.4676 | 4792818 |
| Units                         | MT      | E03       | 1/T    | MT      |



# Assessment of West of Scotland herring (*Clupea harengus*)

Assessment ID:HAWG-HERRVIa-1957-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/371>

Area ID: multinational-ICES-VIa

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Integrated Catch-at-age Analysis                           |
| Publication year   | 2007   |
| Timeseries span    | 1957-2006  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

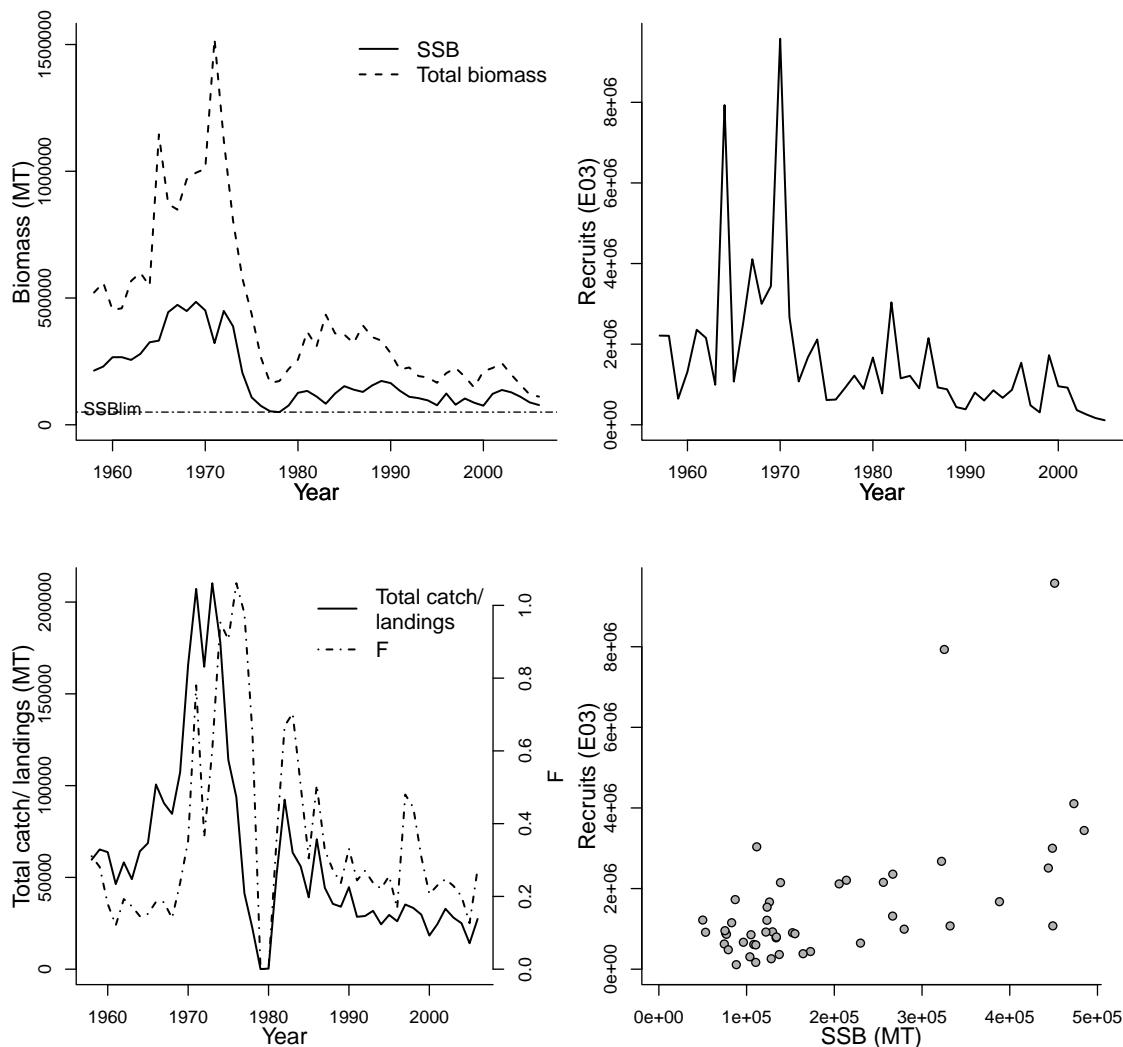
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |            | secondary LME | tertiary LME |
|--------------------------|------------|---------------|--------------|
| 24 - Celtic-Biscay Shelf |            | na            | na           |
| Parameter                | Value      | Units         |              |
| A50-yr                   | 1-2        | yr            |              |
| SSB-AGE-yr               | 2+         | yr            |              |
| REC-AGE-yr               | 1          | yr            |              |
| TB-AGE-yr                | 1+         | yr            |              |
| F-AGE-yr-yr              | 3-6        | yr-yr         |              |
| M-1/T                    | 0.1 for 4+ | 1/T           |              |
| SSB-SEX-sex              |            |               |              |
| M                        |            |               |              |
| L50-cm                   |            |               |              |

| Reference points       |       |       |
|------------------------|-------|-------|
| Parameter              | Value | Units |
| F0.1-1/T               | 0.17  | 1/T   |
| SSBlim-MT (SSB)        | 50000 | MT    |
| $SSB_{2006}/SSB_{lim}$ | 1.556 |       |

| Time series minima and maxima |        |         |        |         |
|-------------------------------|--------|---------|--------|---------|
|                               | SSB    | R       | F      | TB      |
| Minimum year                  | 1958   | 1957    | 1958   | 1958    |
| Maximum year                  | 2006   | 2005    | 2006   | 2006    |
| Time series minimum           | 50015  | 112240  | 0.0004 | 111054  |
| Time series maximum           | 484835 | 9575740 | 1.0609 | 1522522 |
| Units                         | MT     | E03     | 1/T    | MT      |



# Assessment of VIa, VIIb and VIIc herring (*Clupea harengus*)

Assessment ID:HAWG-HERRVIaVIIbc-1969-2000-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/372>

Area ID: multinational-ICES-VIa-VIIb-VIIc

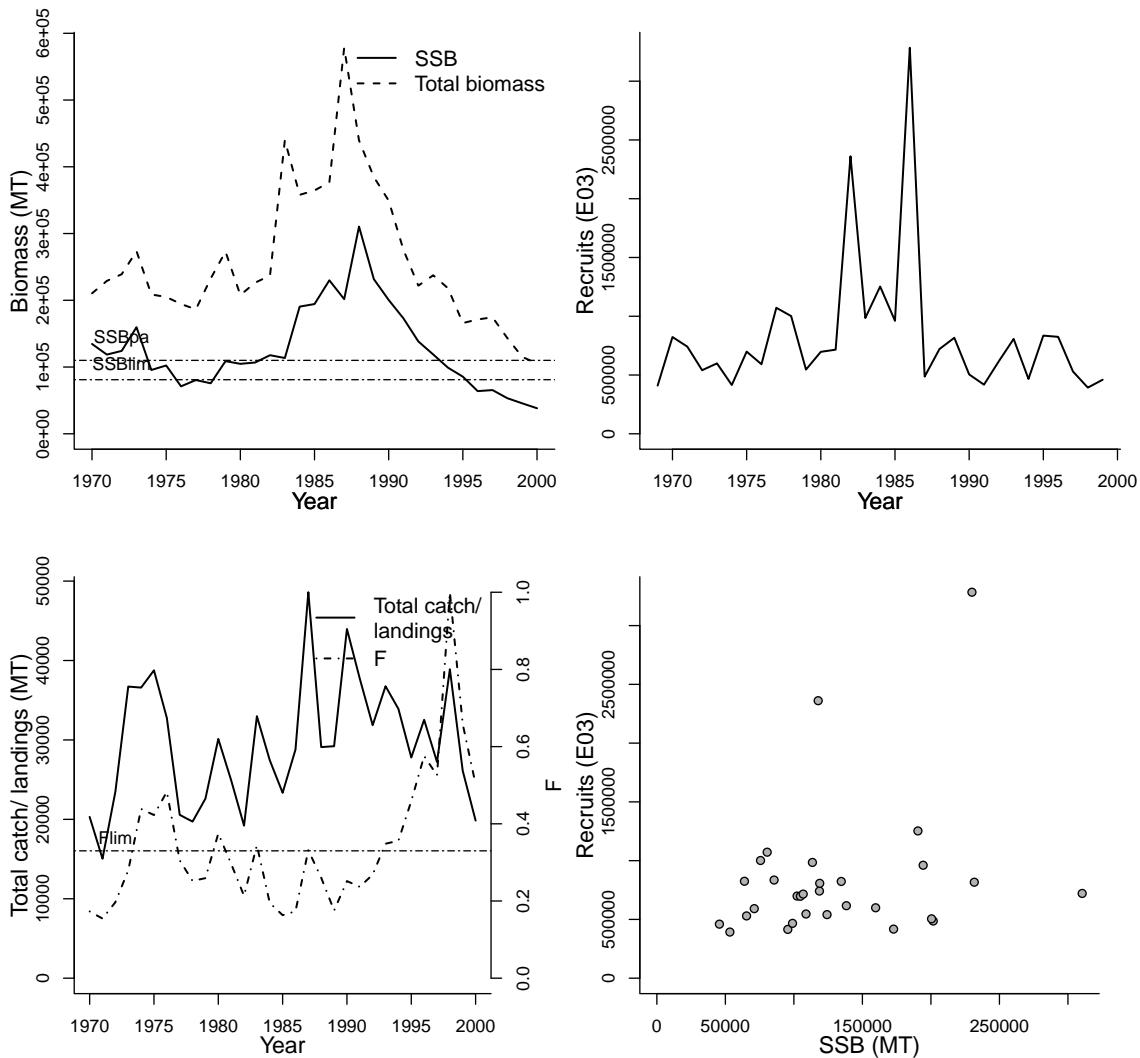
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Virtual Population Analysis                                |
| Publication year   | 2007   |
| Timeseries span    | 1969-2000  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME          |        | tertiary LME |
|--------------------------|-------|-------|------------------------|--------|--------------|
| 24 - Celtic-Biscay Shelf |       |       | na                     | na     |              |
| Parameter                | Value | Units | Reference points       |        |              |
| A50-yr                   | 1     | yr    | Parameter              | Value  | Units        |
| SSB-AGE-yr               | 1+    | yr    | SSBlim-MT (SSB)        | 81000  | MT           |
| REC-AGE-yr               | 1     | yr    | SSBpa-MT (SSB)         | 110000 | MT           |
| TB-AGE-yr                | 1+    | yr    | Flim-1/T (F)           | 0.33   | 1/T          |
| F-AGE-yr-yr              | 3-6   | yr-yr | Fpa-1/T (F)            | 0.22   | 1/T          |
| SSB-SEX-sex              |       |       | $SSB_{2000}/SSB_{lim}$ | 0.472  |              |
| M                        |       |       | $F_{2000}/F_{lim}$     | 1.522  |              |
| L50-cm                   |       |       |                        |        |              |

| Time series minima and maxima |        |         |        |        |
|-------------------------------|--------|---------|--------|--------|
|                               | SSB    | R       | F      | TB     |
| Minimum year                  | 1970   | 1969    | 1970   | 1970   |
| Maximum year                  | 2000   | 1999    | 2000   | 2000   |
| Time series minimum           | 38246  | 392621  | 0.1545 | 105417 |
| Time series maximum           | 310384 | 3284004 | 1.0001 | 578250 |
| Units                         | MT     | E03     | 1/T    | MT     |



# Assessment of North Sea sprat (*Sprattus sprattus*)

Assessment ID:HAWG-SPRATNS-1995-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/373>

Area ID: multinational-ICES-IV

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous  |
| Assessment method  | Catch-Survey Analysis (like a state space approach)        |
| Publication year   | 2007   |
| Timeseries span    | 1995-2007  |
| Document           | ICES-HAWG-2007.pdf (pdf in database)                       |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

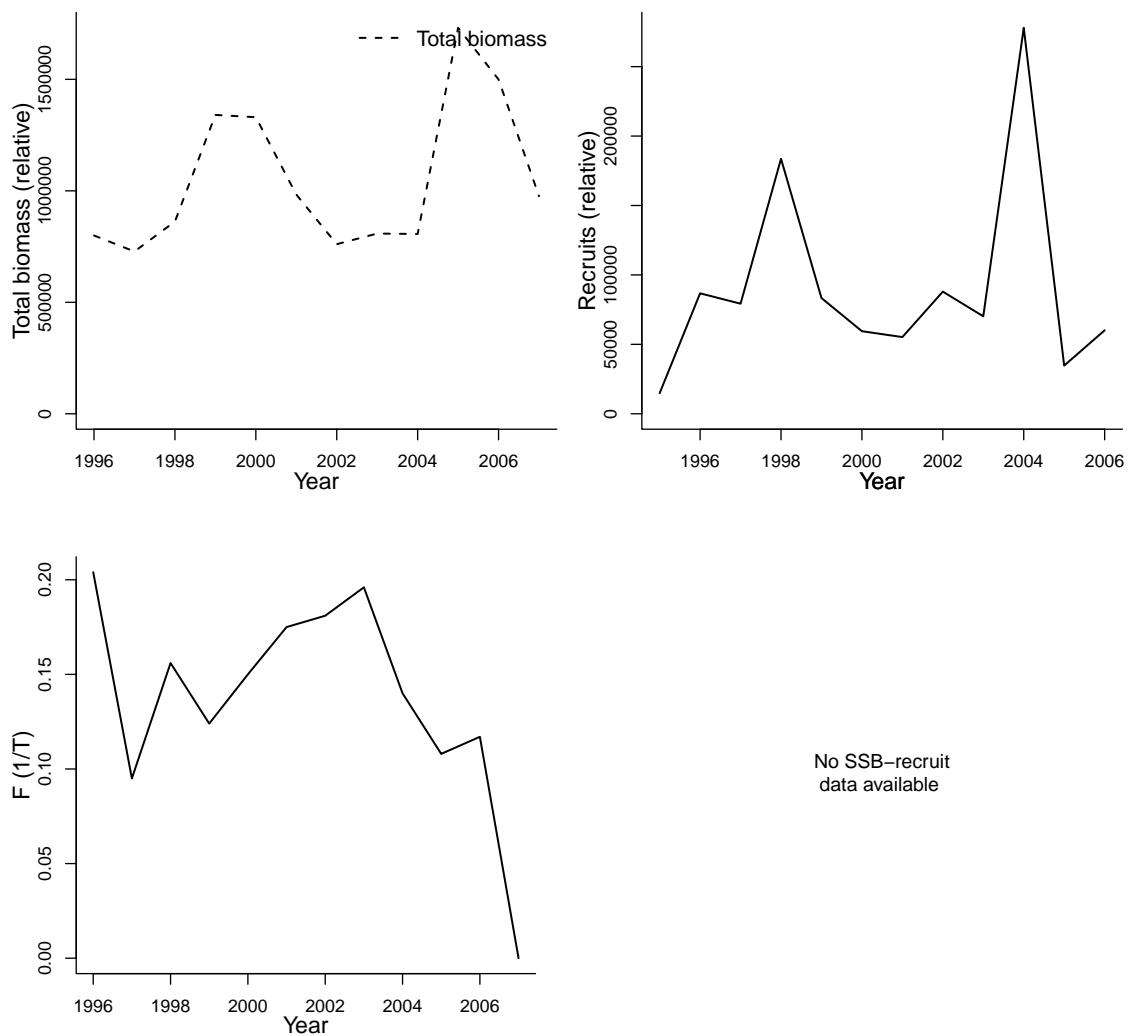
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| SSB-AGE-yr  | 1+    | yr    |
| REC-AGE-yr  | 1     | yr    |
| TB-AGE-yr   | 1+    | yr    |
| M-1/T       | 0.75  | 1/T   |
| A50-yr      | 0-1   | yr    |
| SSB-SEX-sex |       |       |
| F-AGE-yr    |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

## Time series minima and maxima

|                     | SSB      | R     | F    | TB       | Catch |
|---------------------|----------|-------|------|----------|-------|
| Minimum year        |          | 1995  | 1996 | 1996     |       |
| Maximum year        |          | 2006  | 2007 | 2007     |       |
| Time series minimum | 14821.9  | 0     |      | 727854   |       |
| Time series maximum | 277968.1 | 0.204 |      | 1731263  |       |
| Units               | relative |       | 1/T  | relative |       |



# Assessment of Eastern Pacific bigeye tuna (*Thunnus obesus*)

Assessment ID:IATTC-BIGEYEPAC-1975-2007-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/87>

Area ID: multinational-IATTC-EPAC

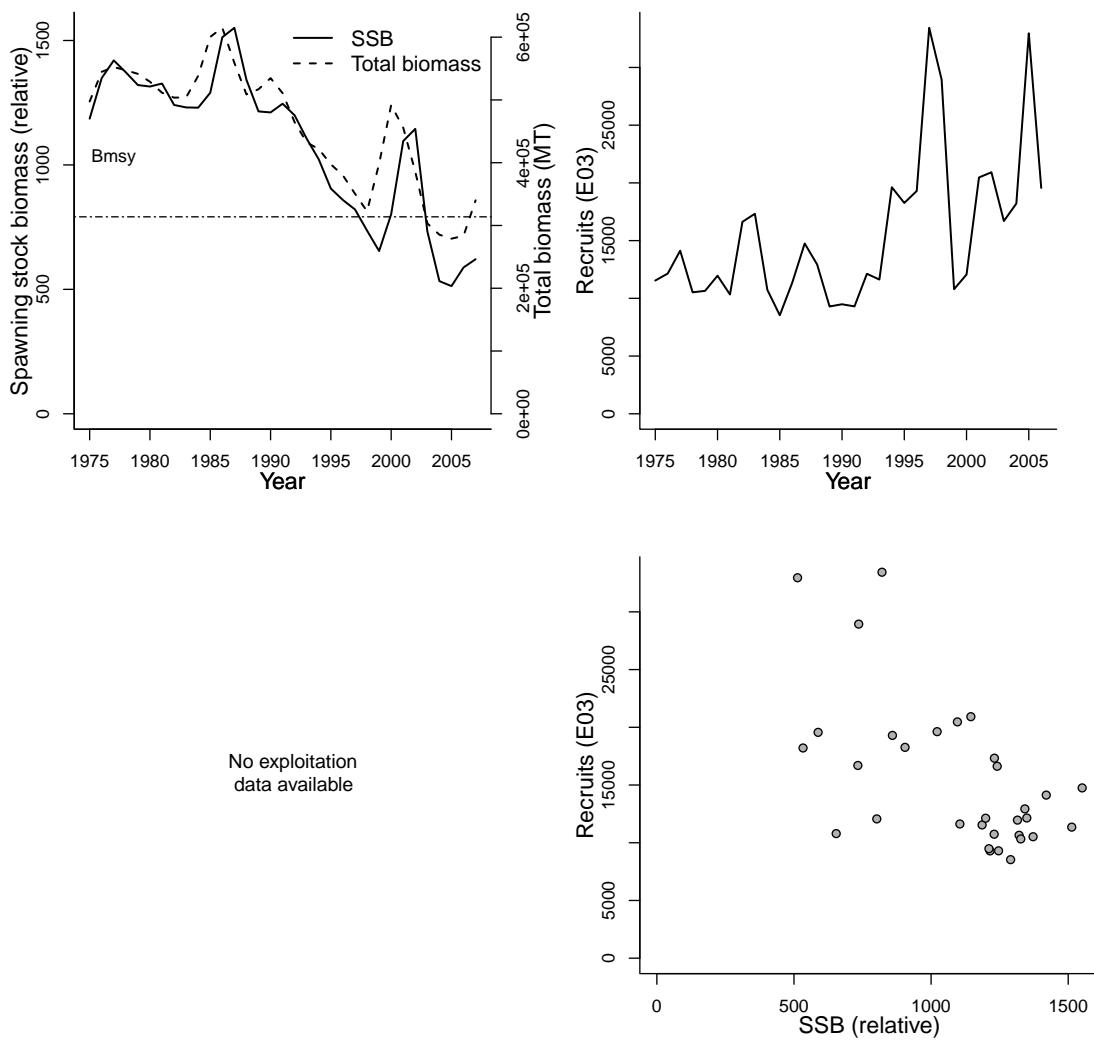
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | IATTC   |
| Assessment group   | Inter-American Tropical Tuna Commission       |
| Assessment authors | Aires-da-Silva, Alexandre                     |
| Assessment method  | Stock Synthesis v2.0 model                    |
| Publication year   | 2007  |
| Timeseries span    | 1975-2007                                     |
| Document           | JENSEN_BETEPAC_2008.pdf (pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-30                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                    |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             |           |       | secondary LME          |           | tertiary LME |
|-------------------------|-----------|-------|------------------------|-----------|--------------|
| -99 - Pacific High Seas |           |       | na                     |           | na           |
| Parameter               | Value     | Units |                        |           |              |
| M-1/T                   | AVAILABLE | 1/T   |                        |           |              |
| REC-AGE                 |           |       | Reference points       |           |              |
| SSB-AGE-yr              |           |       | Parameter              | Value     | Units        |
| SSB-SEX-sex             |           |       | Bmsy-MT (TB)           | 313767.00 | MT           |
| TB-AGE-yr               |           |       | MSY-MT (TB)            | 92758.00  | MT           |
| F-AGE-yr                |           |       | SSBmsy-relative        | 688       | relative     |
| M                       |           |       | $TB_{2007}/B_{msy}$    | 1.084     |              |
| A50-yr                  |           |       | $SSB_{2007}/SSB_{msy}$ | 0.903     |              |
| L50-cm                  |           |       |                        |           |              |

| Time series minima and maxima |          |       |        |    |
|-------------------------------|----------|-------|--------|----|
|                               | SSB      | R     | F      | TB |
| Minimum year                  | 1975     | 1975  | 1975   |    |
| Maximum year                  | 2007     | 2006  | 2007   |    |
| Time series minimum           | 513      | 8536  | 278962 |    |
| Time series maximum           | 1551     | 33434 | 614898 |    |
| Units                         | relative | E03   | MT     |    |



# Assessment of Northeast Pacific yellowfin tuna (*Thunnus albacares*)

Assessment ID:IATTC-YFINEPAC-1975-2007-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/56>

Area ID: multinational-IATTC-NEPAC

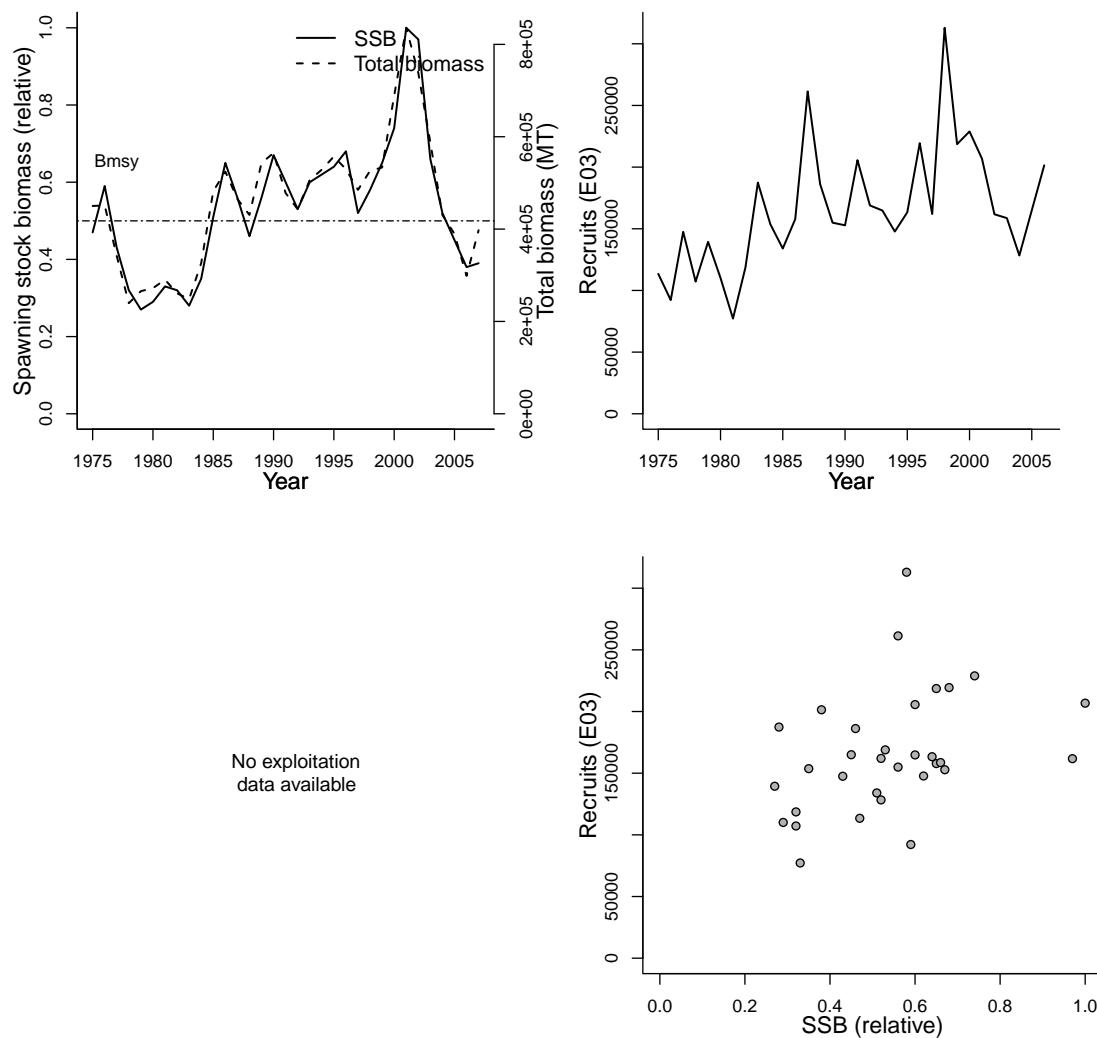
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | IATTC  |
| Assessment group   | Inter-American Tropical Tuna Commission              |
| Assessment authors | Maunder, Mark  |
| Assessment method  | IATTC Statistical Catch at Age and Length Assessment |
| Publication year   | 2007   |
| Timeseries span    | 1975-2007  |
| Document           | SAR8-YFT-ENG.pdf (pdf in database)                   |
| Recorder           | JENSEN   |
| Date entered       | 2008-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             |       |       | secondary LME              | tertiary LME |
|-------------------------|-------|-------|----------------------------|--------------|
| -99 - Pacific High Seas |       |       | na                         | na           |
| Parameter               | Value | Units |                            |              |
| REC-AGE-yr              | 0.50  | yr    |                            |              |
| TB-AGE-yr               | 1.50  | yr    | Reference points           |              |
| M-1/yr                  | 0.25  | 1/yr  | Parameter                  | Value        |
| SSB-AGE-yr              |       |       | Bmsy-MT (TB)               | 417813.00    |
| SSB-SEX-sex             |       |       | MSY-MT (TB)                | 289140.00    |
| F-AGE-yr                |       |       | $TB_{2007}/B_{m\text{sy}}$ | 0.951        |
| M                       |       |       |                            |              |
| A50-yr                  |       |       |                            |              |
| L50-cm                  |       |       |                            |              |

| Time series minima and maxima |          |        |   |        |
|-------------------------------|----------|--------|---|--------|
|                               | SSB      | R      | F | TB     |
| Minimum year                  | 1975     | 1975   |   | 1975   |
| Maximum year                  | 2007     | 2006   |   | 2007   |
| Time series minimum           | 0.27     | 77206  |   | 239493 |
| Time series maximum           | 1        | 312948 |   | 835924 |
| Units                         | relative | E03    |   | MT     |



# Assessment of Northern Atlantic albacore tuna (*Thunnus alalunga*)

Assessment ID: ICCAT-ALBANATL-1929-2005-WORM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/24>

Area ID: multinational-ICCAT-NATL

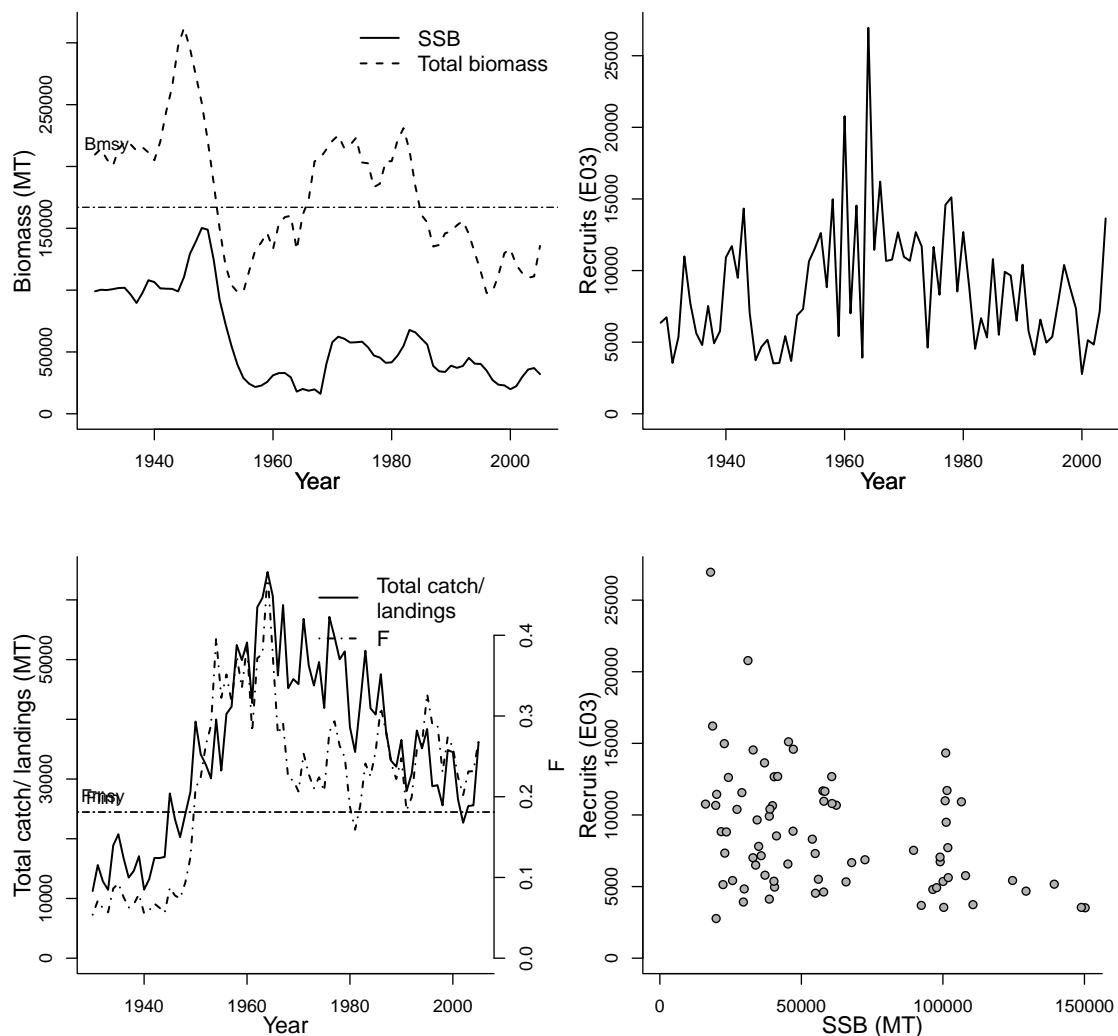
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Virtual Population Analysis                                     |
| Publication year   | 2007  |
| Timeseries span    | 1929-2005   |
| Document           | ref2007-ALB-STOCK-ASSESS-REP.pdf<br>(pdf not in database)       |
| Recorder           | WORM  |
| Date entered       | 2008-11-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME       |        | tertiary LME |
|--------------------------|-------|-------|---------------------|--------|--------------|
| -98 - Atlantic High Seas |       |       | na                  | na     |              |
| Parameter                | Value | Units | Parameter           | Value  | Units        |
| SSB-AGE-yr               | 5     | yr    | Flim-1/T (F)        | 0.181  | 1/T          |
| SSB-SEX-sex              | 0     | sex   | Fmsy-1/T (F)        | 0.181  | 1/T          |
| A50-yr                   | 5     | yr    | Fcurrent-1/T (F)    | 0.272  | 1/T          |
| L50-cm                   | 90    | cm    | NATMORT-1/yr (M)    | 0.3    | 1/yr         |
| NATMORT-1/yr             | 0.3   | 1/yr  | MSY-MT (TB)         | 30230  | MT           |
| REC-AGE                  |       |       | Bmsy-MT (TB)        | 167000 | MT           |
| TB-AGE-yr                |       |       | Brebuild-MT (TB)    | 167000 | MT           |
| F-AGE-yr                 |       |       | $F_{2005}/F_{lim}$  | 1.490  |              |
| M                        |       |       | $TB_{2005}/B_{msy}$ | 0.813  |              |
|                          |       |       | $F_{2005}/F_{msy}$  | 1.490  |              |

| Time series minima and maxima |        |       |         |        |           |
|-------------------------------|--------|-------|---------|--------|-----------|
|                               | SSB    | R     | F       | TB     | Catch     |
| Minimum year                  | 1930   | 1929  | 1930    | 1930   | 1930      |
| Maximum year                  | 2005   | 2004  | 2005    | 2005   | 2005      |
| Time series minimum           | 16138  | 2770  | 0.05382 | 97677  | 11250     |
| Time series maximum           | 150260 | 26950 | 0.4781  | 312140 | 64633.908 |
| Units                         | MT     | E03   | 1/T     | MT     | MT        |



# Assessment of Eastern Atlantic atlantic bluefin tuna (*Thunnus thynnus*)

Assessment ID: ICCAT-ATBTUNAEATL-1969-2007-WORM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/128>

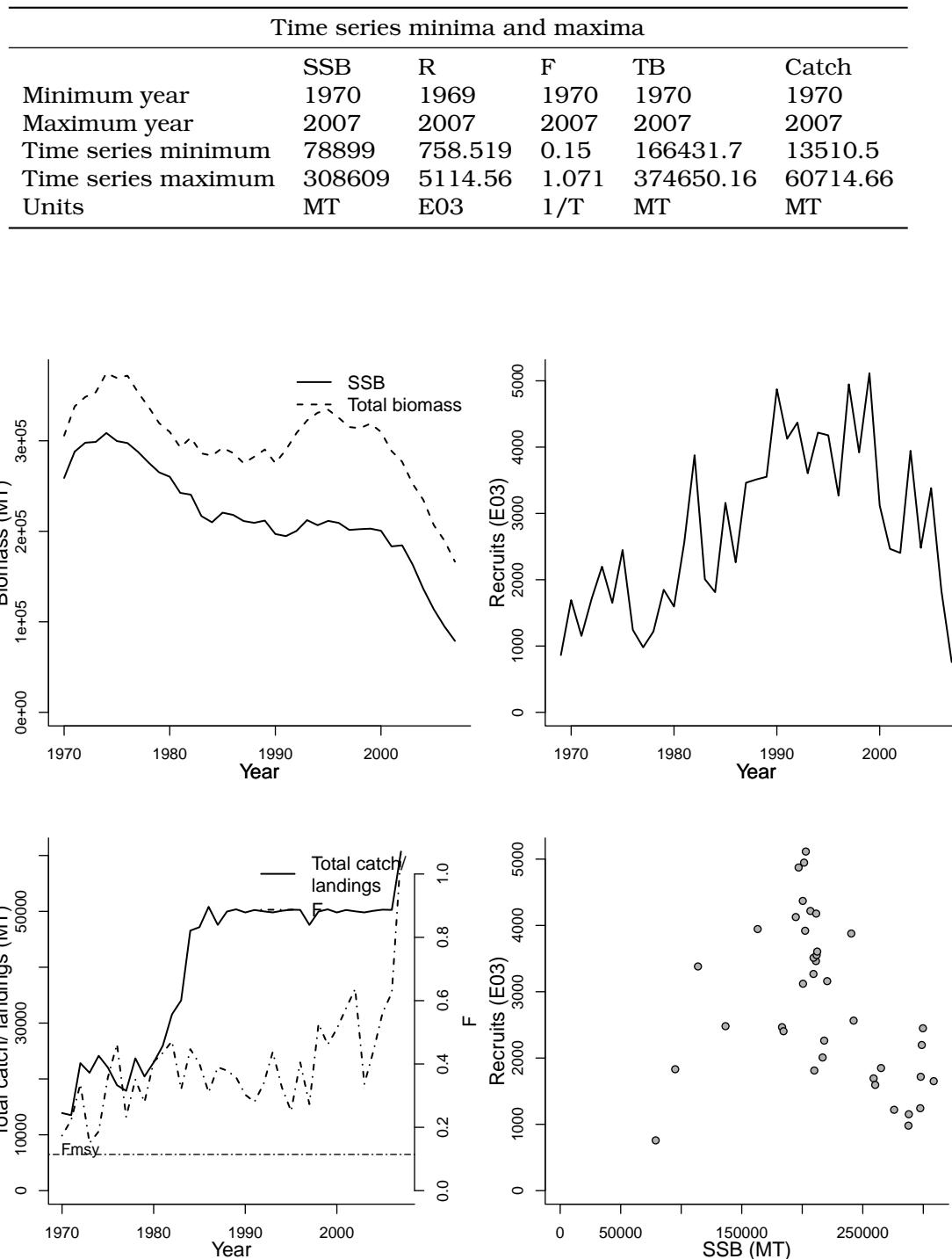
Area ID: multinational-ICCAT-EATL

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Virtual Population Analysis                                     |
| Publication year   | 2008  |
| Timeseries span    | 1969-2007   |
| Document           | ref2008-BFT-STOCK-ASSESS-REP.pdf<br>(pdf in database)           |
| Recorder           | WORM  |
| Date entered       | 2009-01-22  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME          |                                      | tertiary LME |       |
|--------------------------|-----------|------------------------|--------------------------------------|--------------|-------|
| -98 - Atlantic High Seas |           | 26 - Mediterranean Sea |                                      | na           |       |
| Parameter                | Value     | Units                  | Parameter                            | Value        | Units |
| SSB-AGE-yr               | 4         | yr                     | Fmsy-1/T (F)                         | 0.1141685    | 1/T   |
| SSB-SEX-sex              | 0         | sex                    | Fcurrent-1/T (F)                     | 1.071        | 1/T   |
| REC-AGE-yr               | 1         | yr                     | MSY-MT (TB)                          | 49313.8      | MT    |
| F-AGE-yr-yr              | 1-10      | yr-yr                  | Bmsy-MT (TB)                         | 495914.5     | MT    |
| A50-yr                   | 4         | yr                     | TB <sub>2007</sub> /B <sub>msy</sub> | 0.336        |       |
| L50-cm                   | 115       | cm                     | F <sub>2007</sub> /F <sub>msy</sub>  | 9.381        |       |
| M-1/yr                   | AVAILABLE | 1/yr                   |                                      |              |       |
| TB-AGE-yr                |           |                        |                                      |              |       |
| M                        |           |                        |                                      |              |       |



# Assessment of Western Atlantic atlantic bluefin tuna (*Thunnus thynnus*)

Assessment ID: ICCAT-ATBTUNAWATL-1969-2007-WORM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/23>

Area ID: multinational-ICCAT-WATL

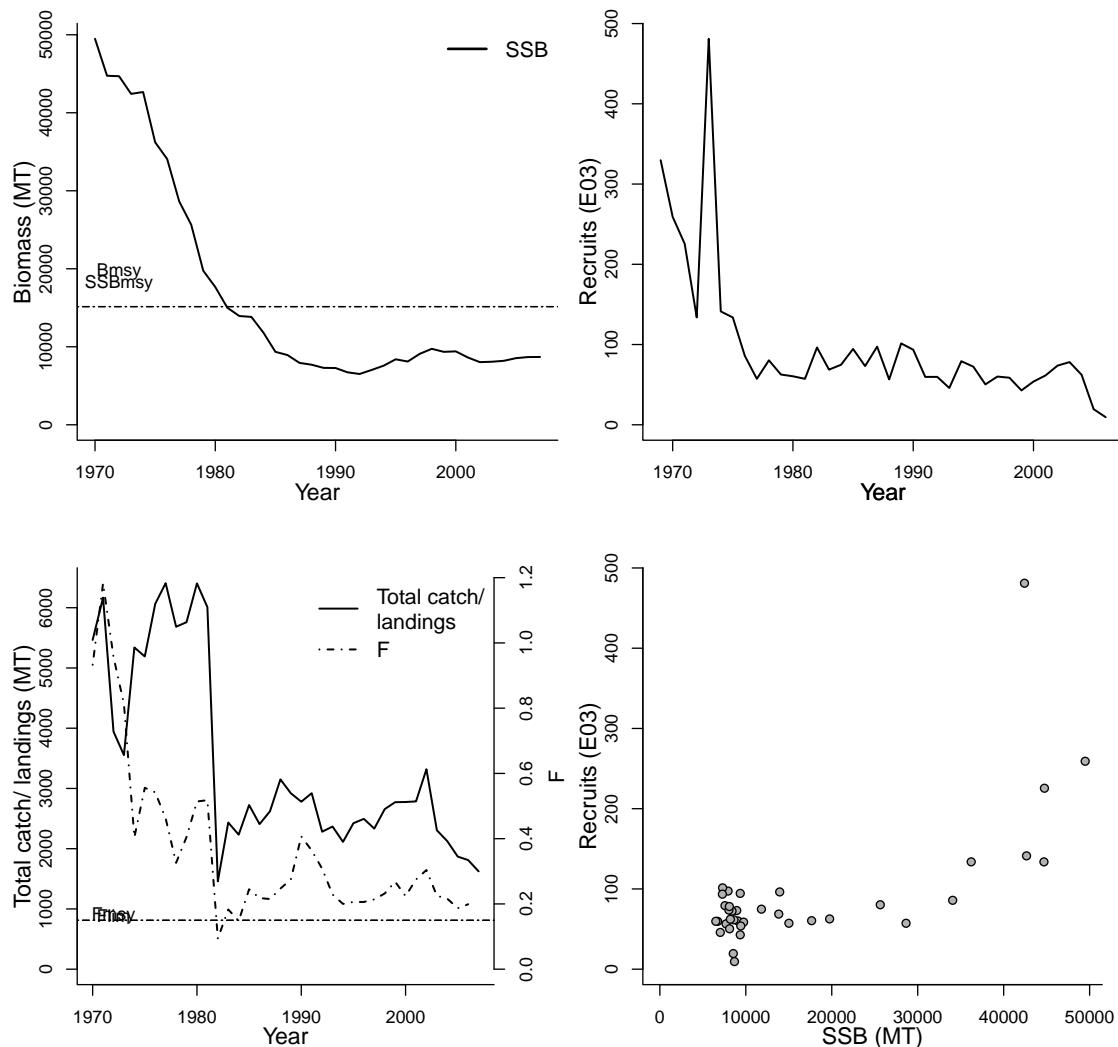
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Virtual Population Analysis                                     |
| Publication year   | 2008  |
| Timeseries span    | 1969-2007   |
| Document           | ref2008-BFT-STOCK-ASSESS-REP.pdf<br>(pdf in database)           |
| Recorder           | WORM  |
| Date entered       | 2008-11-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME          |        | tertiary LME |       |
|--------------------------|-------|-------|------------------------|--------|--------------|-------|
| -98 - Atlantic High Seas |       |       | na                     | na     |              |       |
| Parameter                | Value | Units | Reference points       |        |              | Units |
|                          |       |       | Parameter              | Value  | Value        |       |
| SSB-AGE-yr               | 8     | yr    | Flim-1/T (F)           | 0.15   | 1/T          |       |
| SSB-SEX-sex              | 0     | sex   | Fmax-1/yr (F)          | 0.19   | 1/yr         |       |
| REC-AGE-yr               | 1     | yr    | Fmsy-1/T (F)           | 0.15   | 1/T          |       |
| F-AGE-yr-yr              | 1-10  | yr-yr | Fcurrent-1/T (F)       | 0.19   | 1/T          |       |
| A50-yr                   | 8     | yr    | NATMORT-1/yr (M)       | 0.14   | 1/yr         |       |
| L50-cm                   | 190   | cm    | SSBmsy-MT (SSB)        | 15148  | MT           |       |
| M-1/yr                   | 0.14  | 1/yr  | MSY-MT (TB)            | 2851.9 | MT           |       |
| NATMORT-1/yr             | 0.14  | 1/yr  | Bmsy-MT (TB)           | 15148  | MT           |       |
| TB-AGE-yr                |       |       | Brebuild-MT (TB)       | 15148  | MT           |       |
| M                        |       |       | F0.1-1/yr (F)          | 0.08   | 1/yr         |       |
|                          |       |       | $F_{2006}/F_{lim}$     | 1.327  |              |       |
|                          |       |       | $F_{2006}/F_{msy}$     | 1.327  |              |       |
|                          |       |       | $SSB_{2007}/SSB_{msy}$ | 0.574  |              |       |

| Time series minima and maxima |       |         |       |      |       |
|-------------------------------|-------|---------|-------|------|-------|
|                               | SSB   | R       | F     | TB   | Catch |
| Minimum year                  | 1970  | 1969    | 1970  | 1970 | 1970  |
| Maximum year                  | 2007  | 2006    | 2006  | 2007 | 2007  |
| Time series minimum           | 6511  | 9.486   | 0.094 | 1458 |       |
| Time series maximum           | 49482 | 481.004 | 1.183 | 6407 |       |
| Units                         | MT    | E03     | 1/T   | MT   |       |



# Assessment of Atlantic bigeye tuna (*Thunnus obesus*)

Assessment ID: ICCAT-BIGEYEATL-1950-2005-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/245>

Area ID: USA-NMFS-ATL

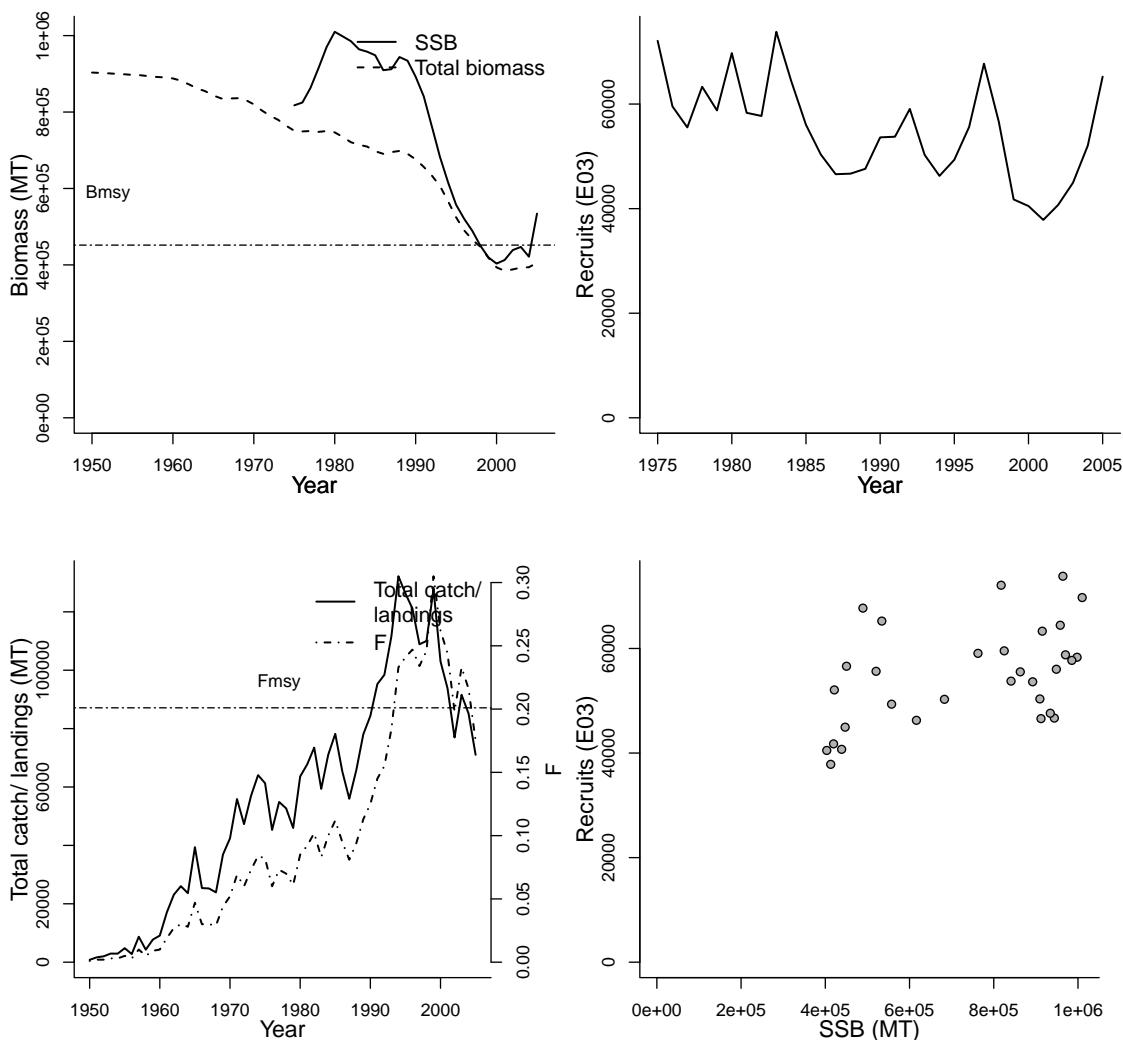
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Surplus production model  |
| Publication year   | 2008  |
| Timeseries span    | 1950-2005   |
| Document           | JENSEN-BIGEYEATL-2008.pdf (pdf in database)                     |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME       |        |       | tertiary LME |  |  |
|--------------------------|-------|-------|---------------------|--------|-------|--------------|--|--|
| -98 - Atlantic High Seas |       |       | na                  |        |       | na           |  |  |
| Parameter                | Value | Units | Reference points    |        |       |              |  |  |
| REC-AGE-yr               | 0     | yr    | Parameter           | Value  | Units |              |  |  |
| M-1/yr                   | 0.4   | 1/yr  | Fmsy-1/T (F)        | 0.201  | 1/T   |              |  |  |
| SSB-AGE-yr               |       |       | MSY-MT (TB)         | 90820  | MT    |              |  |  |
| SSB-SEX-sex              |       |       | Bmsy-MT (TB)        | 451800 | MT    |              |  |  |
| TB-AGE-yr                |       |       | $TB_{2005}/B_{msy}$ | 0.898  |       |              |  |  |
| F-AGE-yr                 |       |       | $F_{2005}/F_{msy}$  | 0.871  |       |              |  |  |
| M                        |       |       |                     |        |       |              |  |  |
| A50-yr                   |       |       |                     |        |       |              |  |  |
| L50-cm                   |       |       |                     |        |       |              |  |  |

| Time series minima and maxima |         |           |       |        |
|-------------------------------|---------|-----------|-------|--------|
|                               | SSB     | R         | F     | TB     |
| Minimum year                  | 1975    | 1975      | 1950  | 1950   |
| Maximum year                  | 2005    | 2005      | 2005  | 2005   |
| Time series minimum           | 403425  | 37844.186 | 0.001 | 384400 |
| Time series maximum           | 1009957 | 73820.329 | 0.305 | 903300 |
| Units                         | MT      | E03       | 1/T   | MT     |



# Assessment of Eastern Atlantic skipjack tuna (*Katsuwonus pelamis*)

Assessment ID: ICCAT-SKJEATL-1950-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/254>

Area ID: multinational-ICCAT-EATL

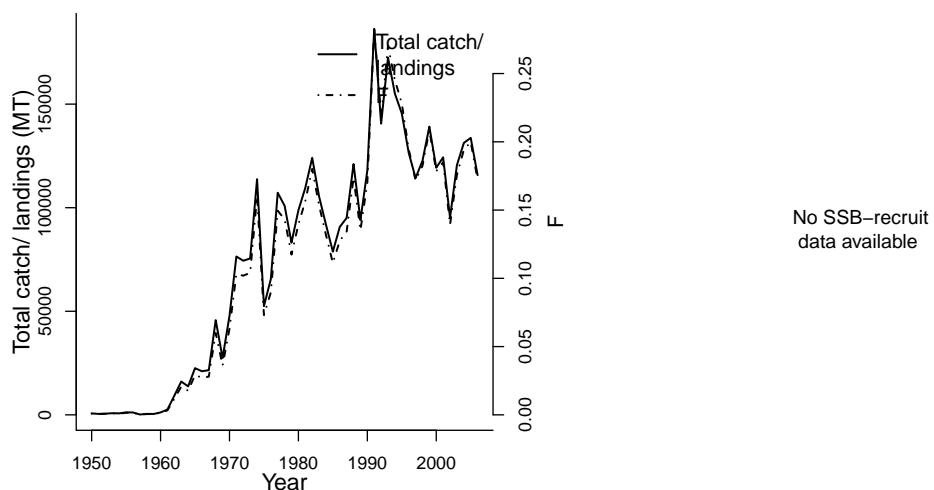
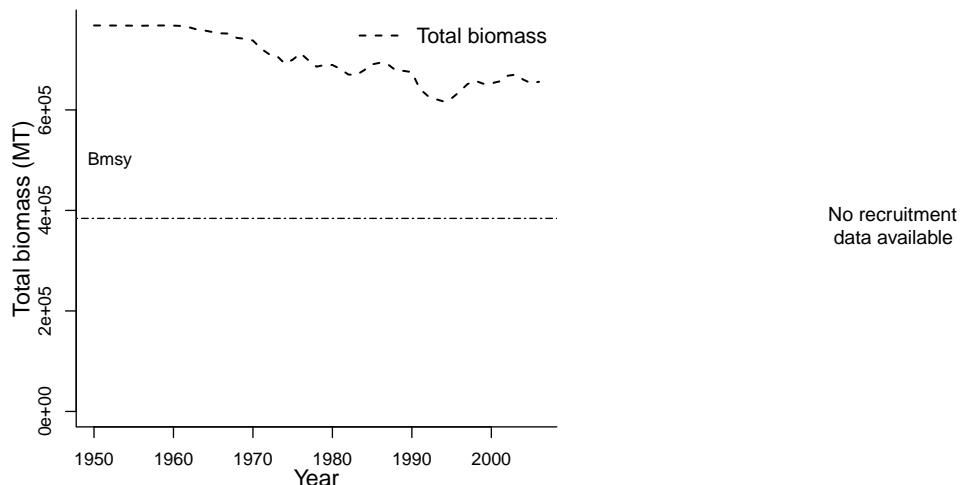
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Bayesian Surplus Production Model                               |
| Publication year   | 2008  |
| Timeseries span    | 1950-2006   |
| Document           | JENSEN-YFINATL-2008.pdf (pdf in database)                       |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-11  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME |                          |       | secondary LME        |                   | tertiary LME |
|-------------|--------------------------|-------|----------------------|-------------------|--------------|
|             | -98 - Atlantic High Seas | na    | na                   | na                |              |
| Parameter   | Value                    | Units | Reference points     |                   |              |
| REC-AGE     |                          |       | Parameter            | Value             | Units        |
| SSB-AGE-yr  |                          |       | Fmsy-1/T (F)         | 0.636753571828511 | 1/T          |
| SSB-SEX-sex |                          |       | MSY-MT (TB)          | 225796            | MT           |
| TB-AGE-yr   |                          |       | Bmsy-MT (TB)         | 384159            | MT           |
| F-AGE-yr    |                          |       | B0-MT                | 768318            | MT           |
| M           |                          |       | $TB_{2006}/B_{m sy}$ | 1.708             |              |
| A50-yr      |                          |       | $F_{2006}/F_{m sy}$  | 0.270             |              |
| L50-cm      |                          |       |                      |                   |              |

| Time series minima and maxima |     |   |                      |           |           |
|-------------------------------|-----|---|----------------------|-----------|-----------|
|                               | SSB | R | F                    | TB        | Catch     |
| Minimum year                  |     |   | 1950                 | 1950      | 1950      |
| Maximum year                  |     |   | 2006                 | 2006      | 2006      |
| Time series minimum           |     |   | 0.000223689689387923 | 616733.53 | 176       |
| Time series maximum           |     |   | 0.282733661203231    | 768026.51 | 186329.21 |
| Units                         |     |   | 1/T                  | MT        | MT        |



# Assessment of Western Atlantic skipjack tuna (*Katsuwonus pelamis*)

Assessment ID: ICCAT-SKJWATL-1952-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/253>

Area ID: multinational-ICCAT-WATL

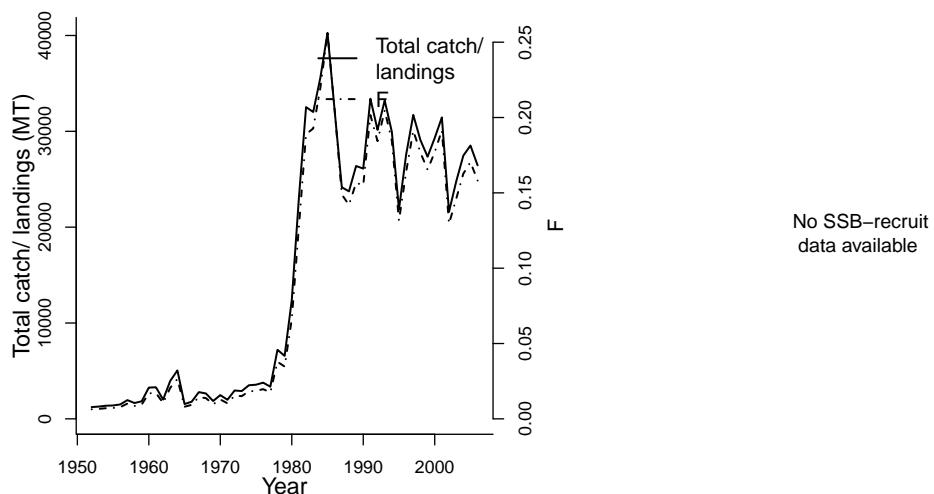
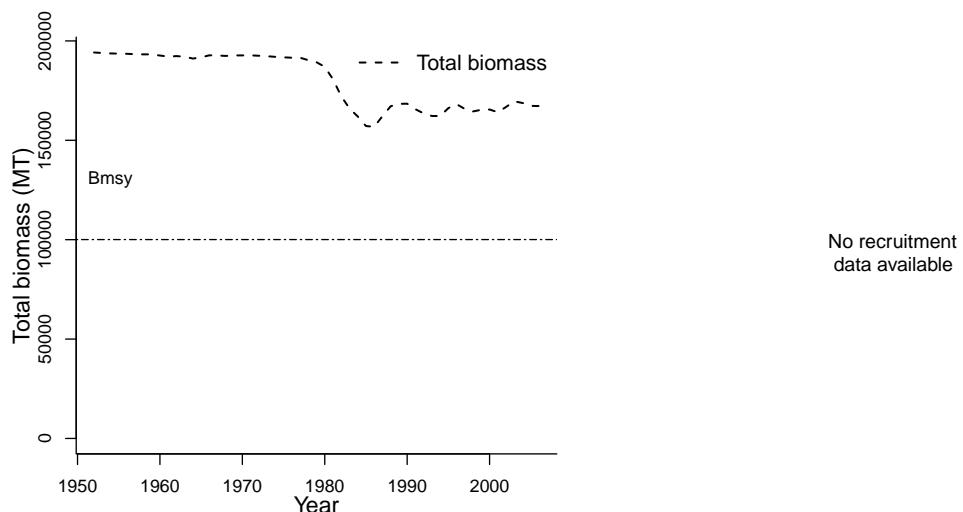
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Bayesian Surplus Production Model                               |
| Publication year   | 2008  |
| Timeseries span    | 1952-2006   |
| Document           | JENSEN-YFINATL-2008.pdf (pdf in database)                       |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-11  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME |                          |       | secondary LME        |                   | tertiary LME |
|-------------|--------------------------|-------|----------------------|-------------------|--------------|
|             | -98 - Atlantic High Seas | na    | na                   | na                |              |
| Parameter   | Value                    | Units | Reference points     |                   |              |
| REC-AGE     |                          |       | Parameter            | Value             | Units        |
| SSB-AGE-yr  |                          |       | Fmsy-1/T (F)         | 0.489367075307683 | 1/T          |
| SSB-SEX-sex |                          |       | MSY-MT (TB)          | 57815             | MT           |
| TB-AGE-yr   |                          |       | Bmsy-MT (TB)         | 100052            | MT           |
| F-AGE-yr    |                          |       | B0-MT                | 200104            | MT           |
| M           |                          |       | $TB_{2006}/B_{m sy}$ | 1.671             |              |
| A50-yr      |                          |       | $F_{2006}/F_{m sy}$  | 0.323             |              |
| L50-cm      |                          |       |                      |                   |              |

| Time series minima and maxima |                    |   |      |           |          |
|-------------------------------|--------------------|---|------|-----------|----------|
|                               | SSB                | R | F    | TB        | Catch    |
| Minimum year                  |                    |   | 1952 | 1952      | 1952     |
| Maximum year                  |                    |   | 2006 | 2006      | 2006     |
| Time series minimum           | 0.0063272611699945 |   |      | 156798.05 | 1229     |
| Time series maximum           | 0.256188321434316  |   |      | 194191.85 | 40272.31 |
| Units                         | 1/T                |   |      | MT        | MT       |



# Assessment of Mediterranean Sea swordfish (*Xiphias gladius*)

Assessment ID: ICCAT-SWORDMED-1968-2006-JENSEN  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/58>

Area ID: multinational-ICCAT-MED

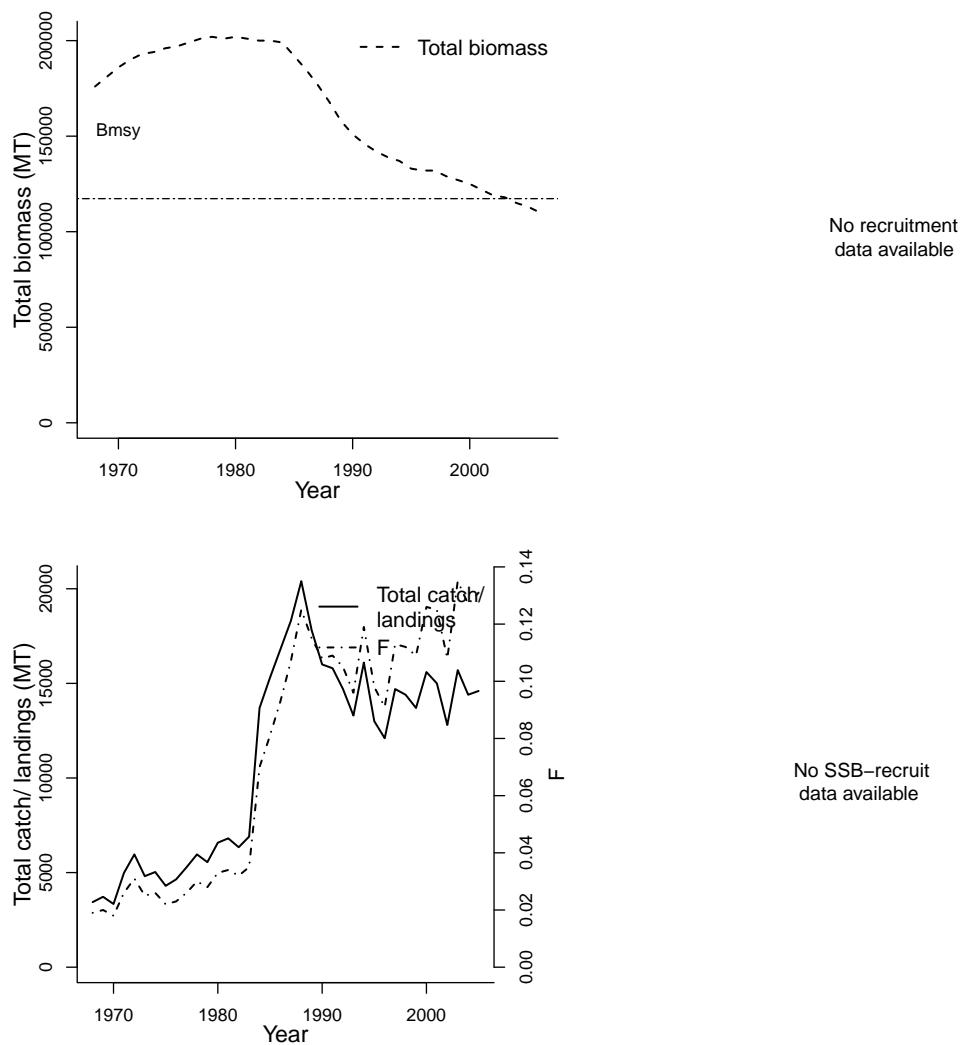
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Surplus production model  |
| Publication year   | 2007  |
| Timeseries span    | 1968-2006   |
| Document           | ICCAT-Mediterranean-Xiphiasgladius-2007.pdf (pdf in database)   |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-17  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME       |        | tertiary LME |
|------------------------|-------|-------|---------------------|--------|--------------|
| 26 - Mediterranean Sea |       |       | na                  | na     | na           |
| Parameter              | Value | Units | Reference points    |        |              |
| L50-cm                 | 142   | cm    | Bmsy-MT (TB)        | 117300 | MT           |
| M-1/yr                 | 0.2   | 1/yr  | Umsy-ratio (U)      | 0.1035 | ratio        |
| REC-AGE                |       |       | MSY-MT (TB)         | 12140  | MT           |
| SSB-AGE-yr             |       |       | $TB_{2006}/B_{msy}$ | 0.938  |              |
| SSB-SEX-sex            |       |       |                     |        |              |
| TB-AGE-yr              |       |       |                     |        |              |
| F-AGE-yr               |       |       |                     |        |              |
| M                      |       |       |                     |        |              |
| A50-yr                 |       |       |                     |        |              |

| Time series minima and maxima |     |   |       |        |       |
|-------------------------------|-----|---|-------|--------|-------|
|                               | SSB | R | F     | TB     | Catch |
| Minimum year                  |     |   | 1968  | 1968   | 1968  |
| Maximum year                  |     |   | 2005  | 2006   | 2005  |
| Time series minimum           |     |   | 0.018 | 110000 | 3340  |
| Time series maximum           |     |   | 0.135 | 202000 | 20400 |
| Units                         |     |   | ratio | MT     | MT    |



# Assessment of Northern Atlantic swordfish

## (*Xiphias gladius*)

Assessment ID: ICCAT-SWORDNATL-1978-2007-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/249>

Area ID: multinational-ICCAT-NATL

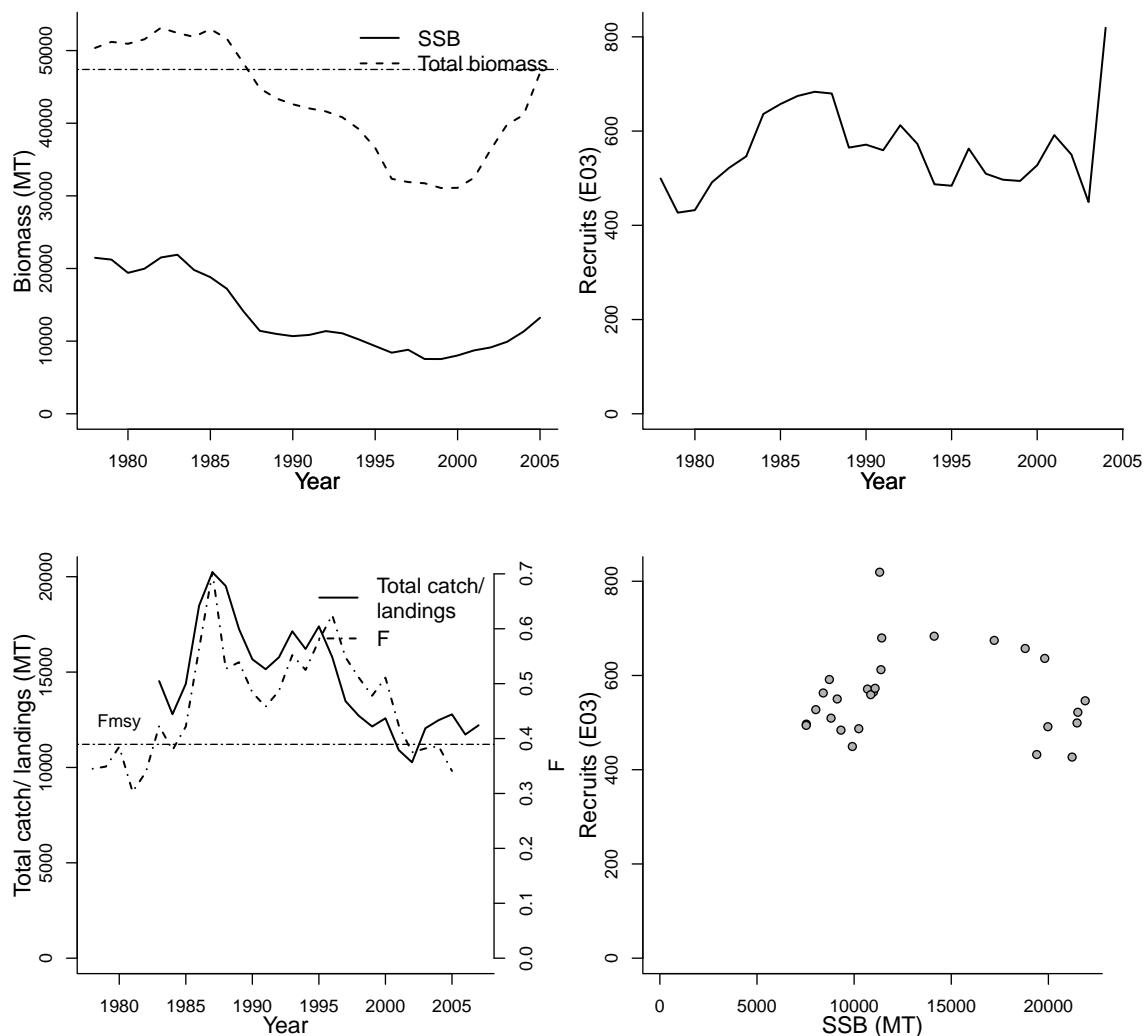
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Surplus production model  |
| Publication year   | 2007  |
| Timeseries span    | 1978-2007   |
| Document           | JENSEN-SWORDSATL-2007.pdf (pdf in database)                     |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME       |        |       | tertiary LME |  |  |
|--------------------------|-------|-------|---------------------|--------|-------|--------------|--|--|
| -98 - Atlantic High Seas |       |       | na                  |        |       | na           |  |  |
| Parameter                | Value | Units | Reference points    |        |       |              |  |  |
| REC-AGE-yr               | 1     | yr    | Parameter           | Value  | Units |              |  |  |
| SSB-AGE-yr               |       |       | Fmsy-1/T (F)        | 0.3895 | 1/T   |              |  |  |
| SSB-SEX-sex              |       |       | MSY-MT (TB)         | 14879  | MT    |              |  |  |
| TB-AGE-yr                |       |       | Bmsy-MT (TB)        | 47399  | MT    |              |  |  |
| F-AGE-yr                 |       |       | $TB_{2005}/B_{msy}$ | 0.990  |       |              |  |  |
| M                        |       |       | $F_{2005}/F_{msy}$  | 0.875  |       |              |  |  |
| A50-yr                   |       |       |                     |        |       |              |  |  |
| L50-cm                   |       |       |                     |        |       |              |  |  |

| Time series minima and maxima |       |         |       |          |
|-------------------------------|-------|---------|-------|----------|
|                               | SSB   | R       | F     | TB       |
| Minimum year                  | 1978  | 1978    | 1978  | 1978     |
| Maximum year                  | 2005  | 2004    | 2005  | 2005     |
| Time series minimum           | 7533  | 426.861 | 0.303 | 31077.76 |
| Time series maximum           | 21893 | 819.176 | 0.703 | 53133.48 |
| Units                         | MT    | E03     | 1/T   | MT       |



# Assessment of South Atlantic swordfish (*Xiphias gladius*)

Assessment ID: ICCAT-SWORDSATL-1970-2005-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/247>

Area ID: multinational-ICCAT-SATL

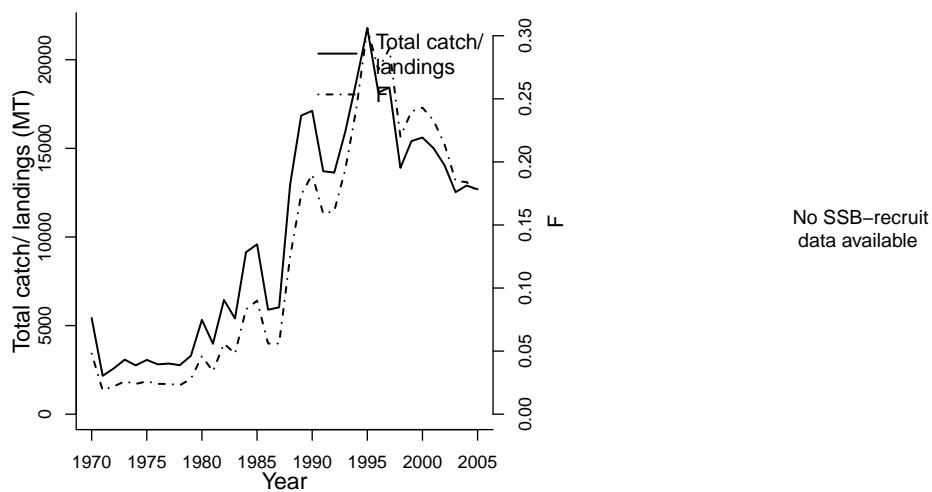
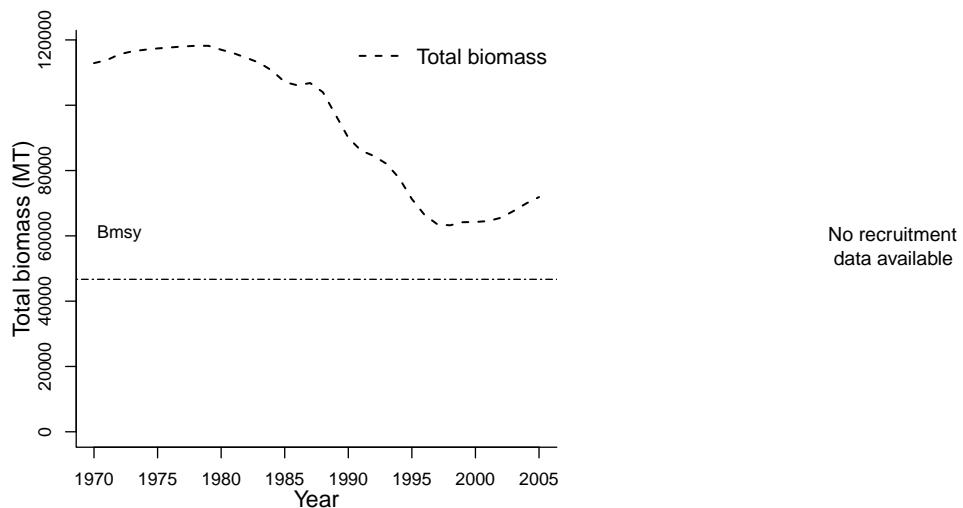
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Surplus production model  |
| Publication year   | 2007  |
| Timeseries span    | 1970-2005   |
| Document           | JENSEN-SWORDSATL-2007.pdf (pdf in database)                     |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-07-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME        |       |       | tertiary LME |  |  |
|--------------------------|-------|-------|----------------------|-------|-------|--------------|--|--|
| -98 - Atlantic High Seas |       |       | na                   |       |       | na           |  |  |
| Parameter                | Value | Units | Reference points     |       |       |              |  |  |
| REC-AGE                  |       |       | Parameter            | Value | Units |              |  |  |
| SSB-AGE-yr               |       |       | Fmsy-1/T (F)         | 0.356 | 1/T   |              |  |  |
| SSB-SEX-sex              |       |       | MSY-MT (TB)          | 16640 | MT    |              |  |  |
| TB-AGE-yr                |       |       | Bmsy-MT (TB)         | 46690 | MT    |              |  |  |
| F-AGE-yr                 |       |       | $TB_{2005}/B_{m sy}$ | 1.540 |       |              |  |  |
| M                        |       |       | $F_{2005}/F_{m sy}$  | 0.494 |       |              |  |  |
| A50-yr                   |       |       |                      |       |       |              |  |  |
| L50-cm                   |       |       |                      |       |       |              |  |  |

| Time series minima and maxima |     |   |       |        |
|-------------------------------|-----|---|-------|--------|
|                               | SSB | R | F     | TB     |
| Minimum year                  |     |   | 1970  | 1970   |
| Maximum year                  |     |   | 2005  | 2005   |
| Time series minimum           |     |   | 0.019 | 63220  |
| Time series maximum           |     |   | 0.306 | 118200 |
| Units                         |     |   | 1/T   | MT     |
|                               |     |   |       | MT     |



# Assessment of Atlantic yellowfin tuna (*Thunnus albacares*)

Assessment ID: ICCAT-YFINATL-1970-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/252>

Area ID: USA-NMFS-ATL

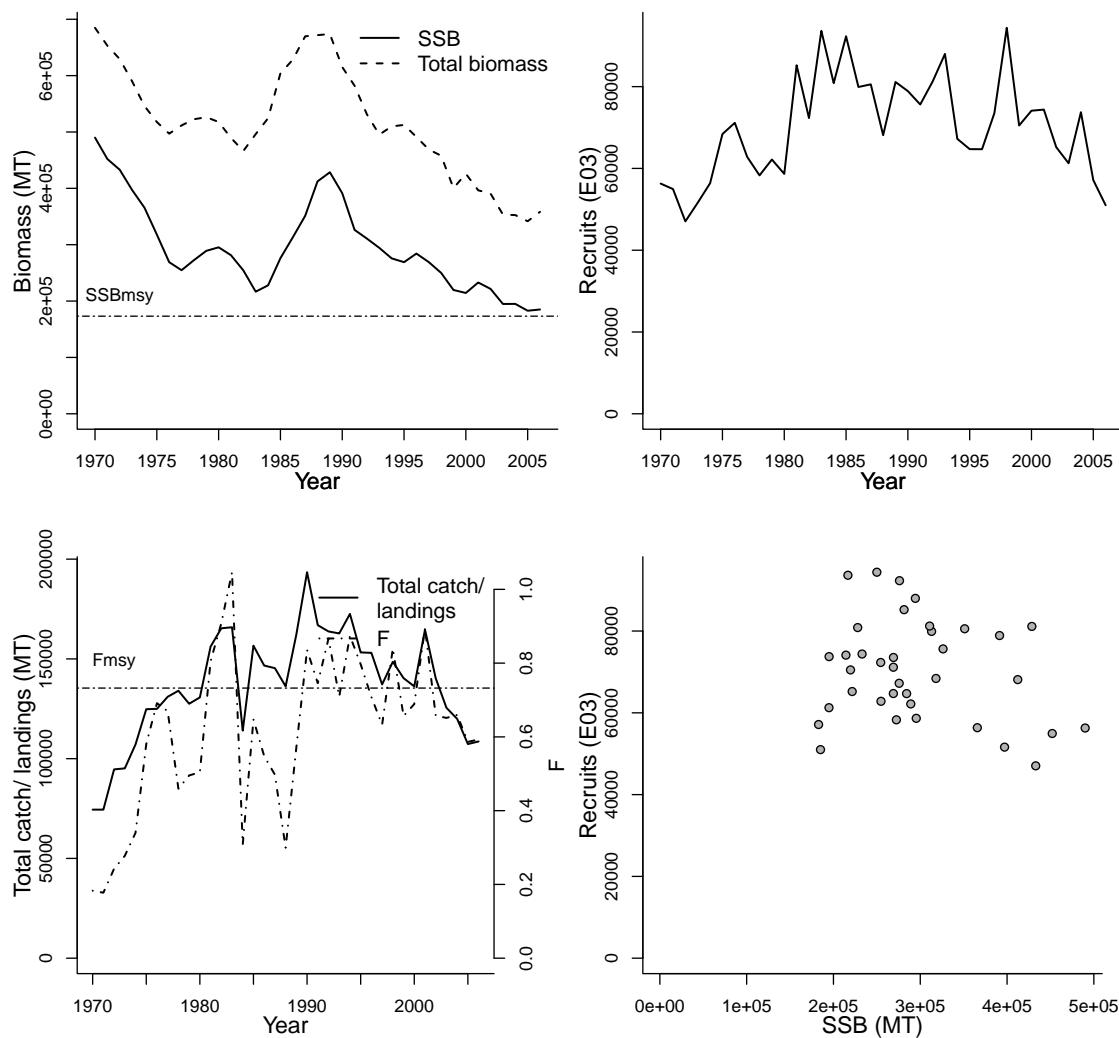
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICCAT   |
| Assessment group   | International Commission for the Conservation of Atlantic Tunas |
| Assessment authors | Anonymous   |
| Assessment method  | Virtual Population Analysis                                     |
| Publication year   | 2008  |
| Timeseries span    | 1970-2006   |
| Document           | JENSEN-YFINATL-2008.pdf (pdf in database)                       |
| Recorder           | JENSEN  |
| Date entered       | 2009-04-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME          | tertiary LME    |       |
|--------------------------|-------|-------|------------------------|-----------------|-------|
| -98 - Atlantic High Seas |       |       | na                     | na              |       |
| Parameter                | Value | Units | Reference points       |                 |       |
| REC-AGE-yr               | 0     | yr    | Parameter              | Value           | Units |
| SSB-AGE-yr               |       |       | Fmsy-1/T (F)           | 0.73235         | 1/T   |
| SSB-SEX-sex              |       |       | SSBmsy-MT (SSB)        | 173191.00788815 | MT    |
| TB-AGE-yr                |       |       | MSY-MT (TB)            | 129800          | MT    |
| F-AGE-yr                 |       |       | $F_{2006}/F_{msy}$     | 0.810           |       |
| M                        |       |       | $SSB_{2006}/SSB_{msy}$ | 1.069           |       |
| A50-yr                   |       |       |                        |                 |       |
| L50-cm                   |       |       |                        |                 |       |

| Time series minima and maxima |          |           |        |        |           |
|-------------------------------|----------|-----------|--------|--------|-----------|
|                               | SSB      | R         | F      | TB     | Catch     |
| Minimum year                  | 1970     | 1970      | 1970   | 1970   | 1970      |
| Maximum year                  | 2006     | 2006      | 2006   | 2006   | 2006      |
| Time series minimum           | 182867.5 | 47043.438 | 0.1775 | 341600 | 74447.748 |
| Time series maximum           | 489994   | 94386.279 | 1.0465 | 684850 | 193448.27 |
| Units                         | MT       | E03       | 1/T    | MT     | MT        |



# Assessment of 0

Assessment ID: IFOP-CHTRACCH-1975-2007-JENSEN  
 Issue URL:

Area ID:

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | SPRFMO  |
| Assessment group   | Instituto de Fomento Pesquero - Chilean Fisheries Development Institute |
| Assessment authors | Canales, Cristian   |
| Assessment method  | Unknown   |
| Publication year   | 2008  |
| Timeseries span    | 1975-2007   |
| Document           | JENSEN-JACKMACKCH-2008.pdf (pdf in database)                            |
| Recorder           |   |
| Date entered       |   |
| Date last loaded   |   |
| QA/QC complete     |   |
| Date approved      |   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           | secondary LME | tertiary LME |
|-----------------------|---------------|--------------|
| 13 - Humboldt Current | na            | na           |
| <hr/>                 |               |              |
| Parameter             | Value         | Units        |
| A50-yr                | 5             | yr           |
| M-1/yr                | 0.23          | 1/yr         |
| REC-AGE               |               |              |
| SSB-AGE-yr            |               |              |
| SSB-SEX-sex           |               |              |
| TB-AGE-yr             |               |              |
| F-AGE-yr              |               |              |
| M                     |               |              |
| L50-cm                |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
|                  |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Northwest Pacific Ocean shortfin mako (*Isurus oxyrinchus*)

Assessment ID:IMARM-SFMAKONWPAC-1990-2003-FAUCONNET  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/400>

Area ID: multinational-UNKNOWN-NWPAC

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | UNKNOWN  |
| Assessment group   | Institute of Marine Affairs and Resource Management - National Taiwan Ocean University, 2 Pei-Ning Road, Keelung 20224, Taiwan |
| Assessment authors | Chang, Jui-Han   |
| Assessment method  | Virtual Population Analysis  |
| Publication year   | 2009   |
| Timeseries span    | 1990-2003  |
| Document           | Chang-Liu-2009-Shortfin-mako-NWPAC.pdf (pdf in database)   |
| Recorder           | FAUCONNET  |
| Date entered       | 2009-06-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-03-03   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             | secondary LME            | tertiary LME           |
|-------------------------|--------------------------|------------------------|
| -99 - Pacific High Seas | -98 - Atlantic High Seas | -97 - Indian High Seas |
| <hr/>                   |                          |                        |
| Parameter               | Value                    | Units                  |
| SSB-AGE-yr              | 17-21                    | yr                     |
| F-AGE-yr-yr             | 0-22                     | yr-yr                  |
| F-AGE-yr-yr             | 0-18                     | yr-yr                  |
| REC-AGE                 |                          |                        |
| SSB-SEX-sex             |                          |                        |
| TB-AGE-yr               |                          |                        |
| M                       |                          |                        |
| A50-yr                  |                          |                        |
| L50-cm                  |                          |                        |

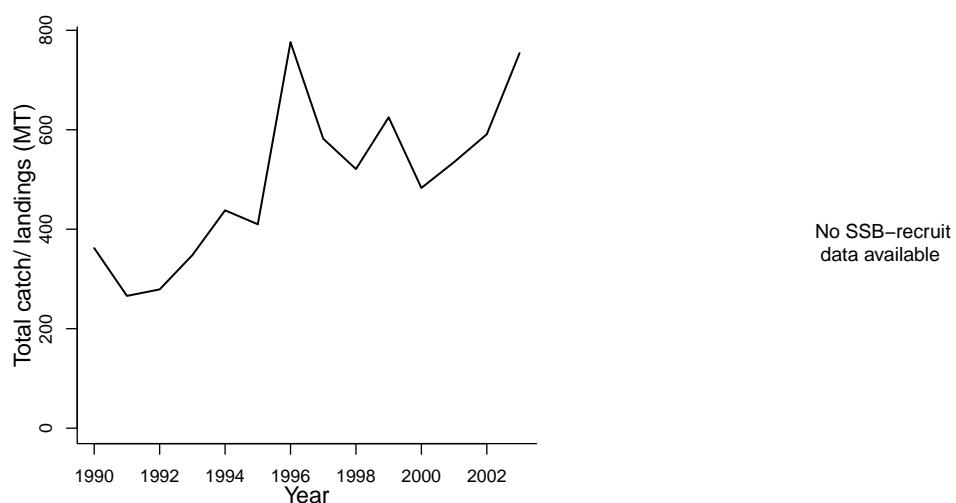
  

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
| F30%-1/yr        | 0.052 | 1/yr  |
| F35%-1/yr        | 0.045 | 1/yr  |
| F40%-1/yr        | 0.04  | 1/yr  |
| F0.1-1/yr (F)    | 0.063 | 1/yr  |

| Time series minima and maxima |     |   |   |      |
|-------------------------------|-----|---|---|------|
|                               | SSB | R | F | TB   |
| Minimum year                  |     |   |   | 1990 |
| Maximum year                  |     |   |   | 2003 |
| Time series minimum           |     |   |   | 266  |
| Time series maximum           |     |   |   | 776  |
| Units                         |     |   |   | MT   |

No biomass data available

No recruitment data available



# Assessment of North-Central Peruvian coast peruvian anchoveta (*Engraulis ringens*)

Assessment ID:IMARPE-PANCHPERUNC-1963-2004-RICARD

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/458>

Area ID: Peru-IMARPE-NC

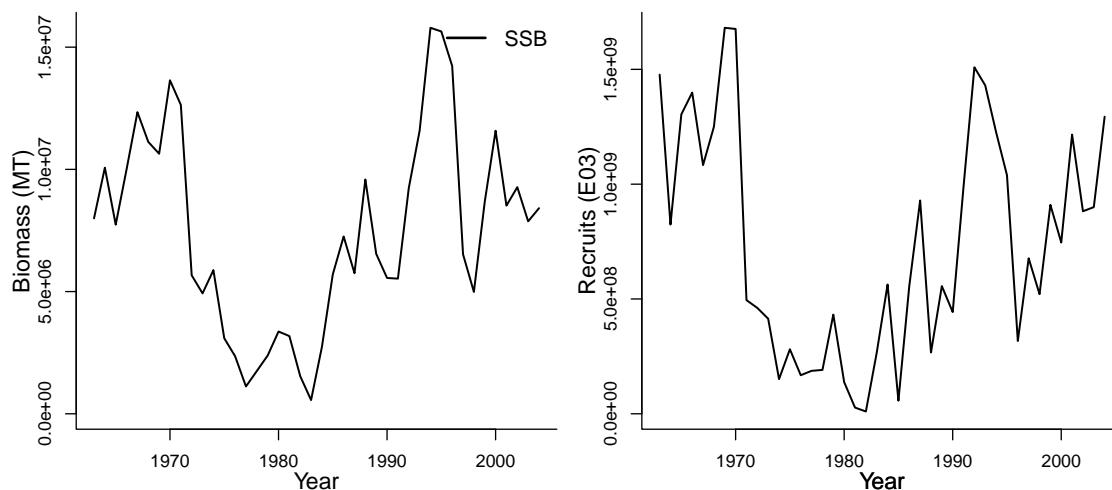
## General assessment details.

| Detail             | Value                                  |
|--------------------|--|
| Management body    | IMARPE                                 |
| Assessment group   | Instituto del Mar del Peru             |
| Assessment authors | Cahuin, Sandra M.                      |
| Assessment method  | Virtual Population Analysis            |
| Publication year   | 2009                                   |
| Timeseries span    | 1963-2004                              |
| Document           | Cahuin_etal_2009.pdf (pdf in database) |
| Recorder           | RICARD                                 |
| Date entered       | 2010-07-21                             |
| Date last loaded   | 2011-07-25                             |
| QA/QC complete     | YES                                    |
| Date approved      | 2010-07-21                             |

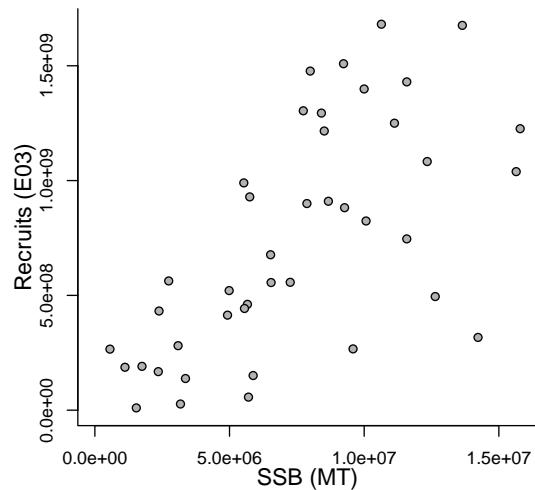
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       | secondary LME |                  | tertiary LME |       |
|-----------------------|-------|---------------|------------------|--------------|-------|
| 13 - Humboldt Current |       | na            |                  | na           |       |
| Parameter             | Value | Units         |                  |              |       |
| REC-AGE-yr            | 0     | yr            |                  |              |       |
| SSB-AGE-yr            |       |               |                  |              |       |
| SSB-SEX-sex           |       |               |                  |              |       |
| TB-AGE-yr             |       |               | Reference points |              |       |
| F-AGE-yr              |       |               | Parameter        | Value        | Units |
| M                     |       |               |                  |              |       |
| A50-yr                |       |               |                  |              |       |
| L50-cm                |       |               |                  |              |       |

| Time series minima and maxima |          |            |   |    |       |
|-------------------------------|----------|------------|---|----|-------|
|                               | SSB      | R          | F | TB | Catch |
| Minimum year                  | 1963     | 1963       |   |    |       |
| Maximum year                  | 2004     | 2004       |   |    |       |
| Time series minimum           | 561000   | 10000000   |   |    |       |
| Time series maximum           | 15792000 | 1681000000 |   |    |       |
| Units                         | MT       | E03        |   |    |       |



No exploitation  
data available



# Assessment of Northern Argentina argentine anchoita (*Engraulis anchoita*)

Assessment ID:INIDEP-ARGANCHONARG-1989-2007-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/122>

Area ID: Argentina-CFP-ARG-N

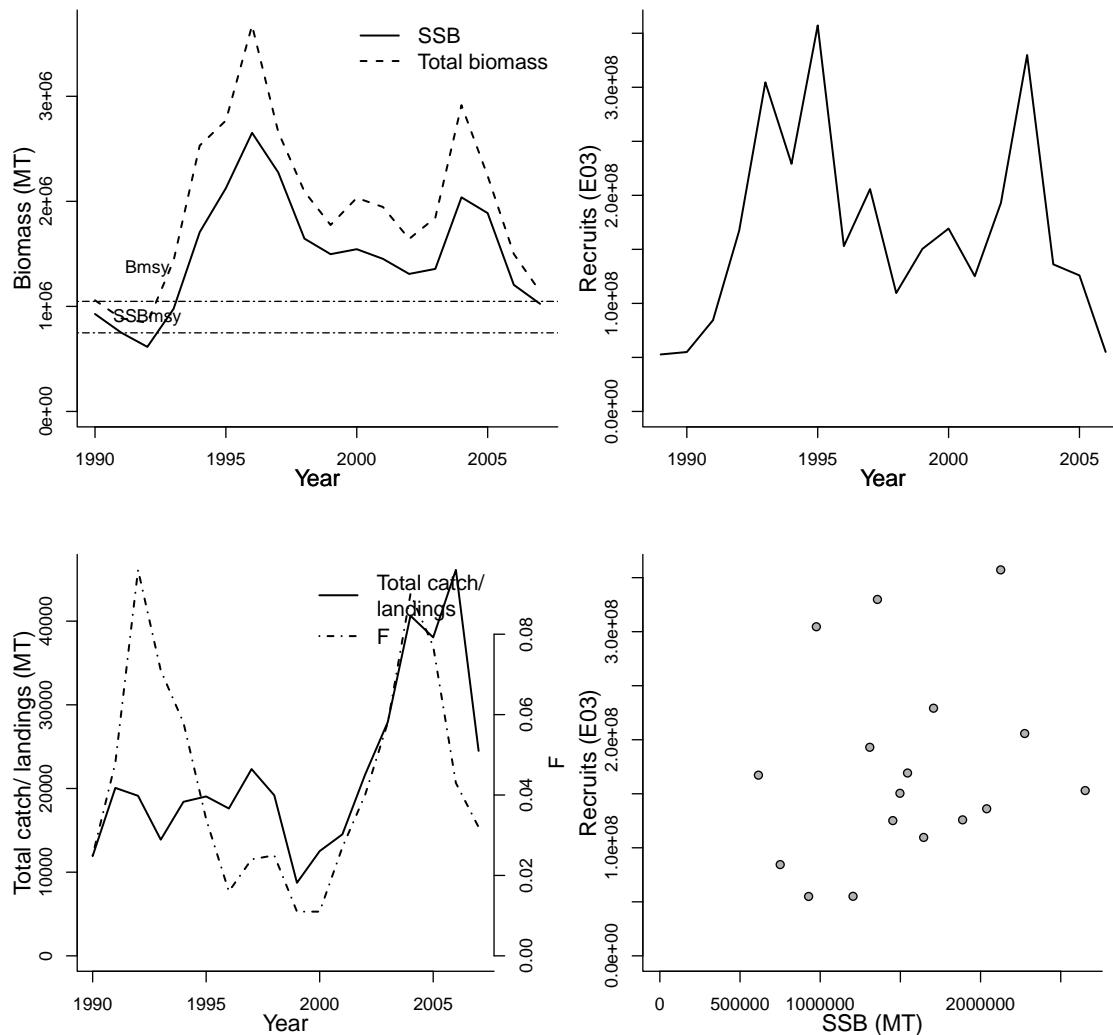
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | CFP  |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero  |
| Assessment authors | Hansen, Jorge  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2008   |
| Timeseries span    | 1989-2007  |
| Document           | Hansen-ANCHOVY-N-2007.pdf (pdf in database)  |
| Recorder           | Parma  |
| Date entered       | 2008-12-20   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-04-23   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME                           |            |         | tertiary LME     |       |       |
|-----------------------|-------|-------|---|------------|---------|------------------|-------|-------|
| 14 - Patagonian Shelf |       |       | na                                      |            |         | na               |       |       |
|                       |       |       |   |            |         | Reference points |       |       |
| Parameter             | Value | Units | Parameter                               | Value      | Units   | Parameter        | Value | Units |
| SSB-AGE-yr            | 1.2   | yr    | Fmsy-1/yr (F)                           | 0.1898     | 1/yr    |                  |       |       |
| SSB-SEX-sex           | 0     | sex   | Fpa-1/yr (F)                            | 0.18       | 1/yr    |                  |       |       |
| REC-AGE-yr            | 1     | yr    | Fcurrent-1/T (F)                        | 0.04       | 1/T     |                  |       |       |
| F-AGE-yr-yr           | 1-6   | yr-yr | NATMORT-1/yr (M)                        | 1.02       | 1/yr    |                  |       |       |
| TB-AGE-yr             | 1+    | yr    | F40%-1/T                                | 0.4722     | 1/T     |                  |       |       |
| A50-yr                | 1     | yr    | SSBmsy-MT (SSB)                         | 748152     | MT      |                  |       |       |
| L50-cm                | 10    | cm    | MSY-MT (TB)                             | 424027.80  | MT      |                  |       |       |
| M-1/yr                | 1.02  | 1/yr  | BH-h-dimless                            | 0.90       | dimless |                  |       |       |
| NATMORT-1/yr          | 1.02  | 1/yr  | Bmsy-MT (TB)                            | 1047948.41 | MT      |                  |       |       |
| M                     |       |       | TB <sub>2007</sub> /B <sub>msy</sub>    | 1.089      |         |                  |       |       |
|                       |       |       | F <sub>2007</sub> /F <sub>msy</sub>     | 0.169      |         |                  |       |       |
|                       |       |       | SSB <sub>2007</sub> /SSB <sub>msy</sub> | 1.370      |         |                  |       |       |

| Time series minima and maxima |           |           |       |            |          |
|-------------------------------|-----------|-----------|-------|------------|----------|
|                               | SSB       | R         | F     | TB         | Catch    |
| Minimum year                  | 1990      | 1989      | 1990  | 1990       | 1990     |
| Maximum year                  | 2007      | 2006      | 2007  | 2007       | 2007     |
| Time series minimum           | 614617.83 | 52734570  | 0.011 | 843773.89  | 8727.7   |
| Time series maximum           | 2652436.6 | 357208920 | 0.096 | 3674349.79 | 46128.48 |
| Units                         | MT        | E03       | 1/yr  | MT         | MT       |



# Assessment of Southern Argentina argentine anchoita (*Engraulis anchoita*)

Assessment ID:INIDEP-ARGANCHOSARG-1992-2007-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/121>

Area ID: Argentina-CFP-ARG-S

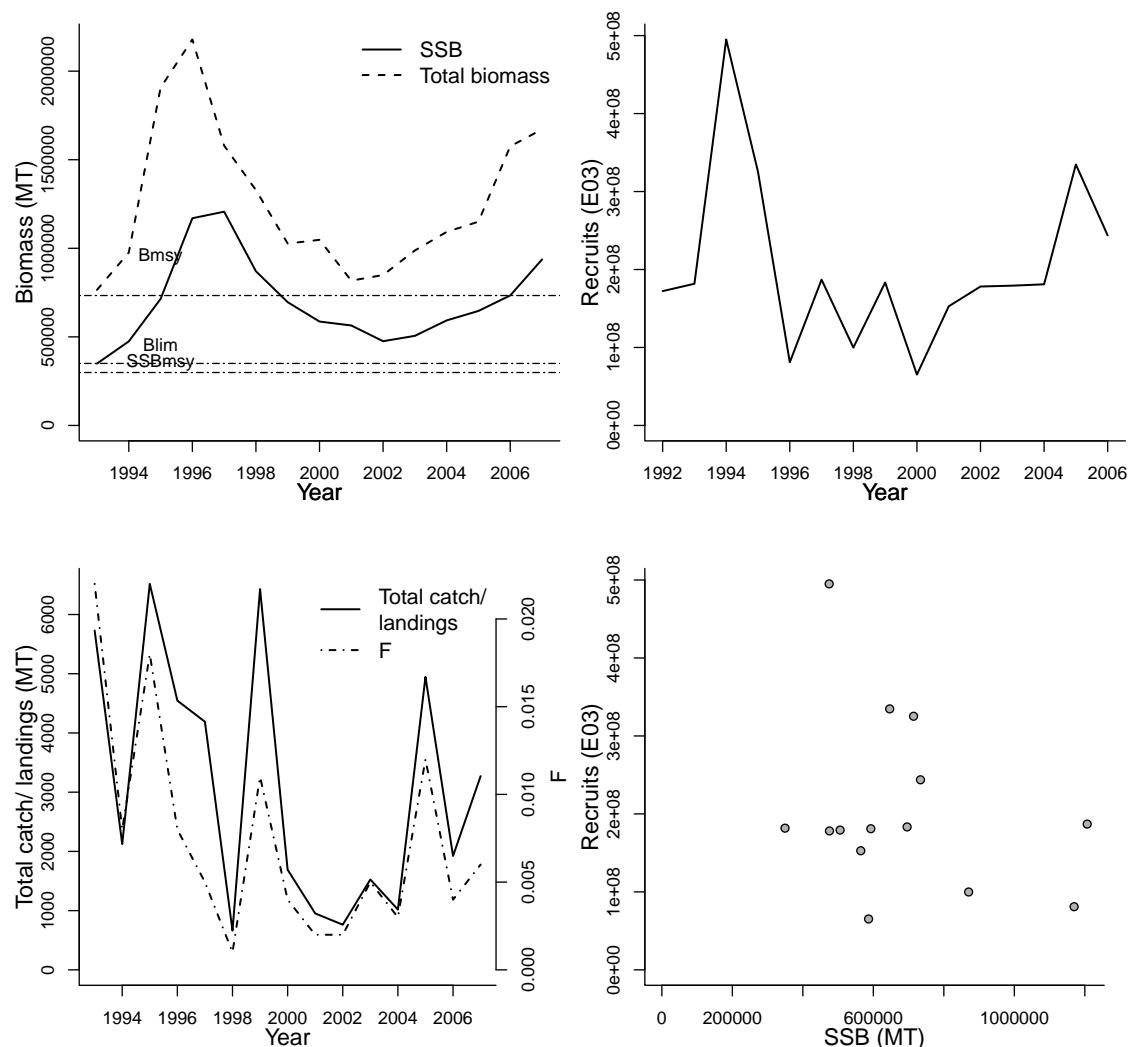
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | CFP   |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero |
| Assessment authors | Hansen, Jorge   |
| Assessment method  | Age-structured surplus production model                   |
| Publication year   | 2008  |
| Timeseries span    | 1992-2007   |
| Document           | Hansen-ANCHOVY-S-2007.pdf (pdf in database)               |
| Recorder           | Parma   |
| Date entered       | 2008-12-20  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-23  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter    | Value | Units | primary LME            | secondary LME | tertiary LME |
|--------------|-------|-------|------------------------|---------------|--------------|
|              |       |       | 14 - Patagonian Shelf  | na            | na           |
| SSB-AGE-yr   | 1.7   | yr    | Fmax-1/yr (F)          | 1.89330       | 1/yr         |
| SSB-SEX-sex  | 0     | sex   | Fmsy-1/yr (F)          | 0.1700        | 1/yr         |
| REC-AGE-yr   | 1     | yr    | Fpa-1/yr (F)           | 0.17          | 1/yr         |
| F-AGE-yr-yr  | 1-6   | yr-yr | Fcurrent-1/T (F)       | 0.006         | 1/T          |
| TB-AGE-yr    | 1+    | yr    | NATMORT-1/yr (M)       | 1.05          | 1/yr         |
| A50-yr       | 1     | yr    | F40%-1/T               | 0.2052        | 1/T          |
| L50-cm       | 13.2  | cm    | SSBmsy-MT (SSB)        | 298839        | MT           |
| M-1/yr       | 1.05  | 1/yr  | MSY-MT (TB)            | 289825.38     | MT           |
| NATMORT-1/yr | 1.05  | 1/yr  | BH-h-dimless           | 0.73          | dimless      |
| M            |       |       | Blim-MT (TB)           | 350000        | MT           |
|              |       |       | Bmsy-MT (TB)           | 733418.85     | MT           |
|              |       |       | Bpa-MT (TB)            | 1260000       | MT           |
|              |       |       | $TB_{2007}/B_{msy}$    | 2.279         |              |
|              |       |       | $F_{2007}/F_{msy}$     | 0.035         |              |
|              |       |       | $SSB_{2007}/SSB_{msy}$ | 3.135         |              |

| Time series minima and maxima |            |           |       |            |
|-------------------------------|------------|-----------|-------|------------|
|                               | SSB        | R         | F     | TB         |
| Minimum year                  | 1993       | 1992      | 1993  | 1993       |
| Maximum year                  | 2007       | 2006      | 2007  | 2007       |
| Time series minimum           | 349381.69  | 65263840  | 0.001 | 765224.53  |
| Time series maximum           | 1206672.22 | 495050030 | 0.022 | 2178898.56 |
| Units                         | MT         | E03       | 1/yr  | MT         |



# Assessment of Northern Argentina argentine hake (*Merluccius hubbsi*)

Assessment ID:INIDEP-ARGHAKENARG-1985-2007-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/104>

Area ID: Argentina-CFP-ARG-N

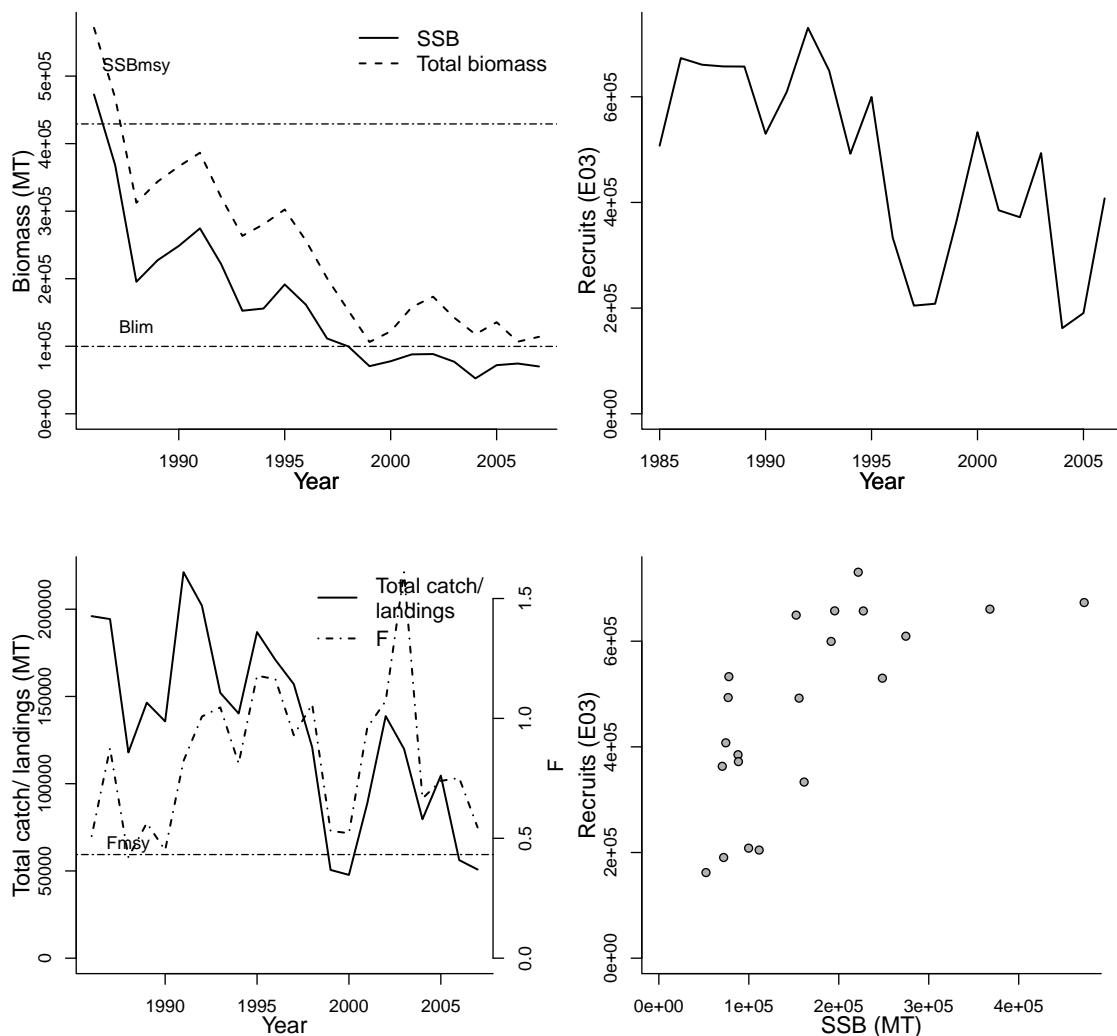
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | CFP   |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero |
| Assessment authors | Irusta, Gabriela  |
| Assessment method  | Virtual Population Analysis                               |
| Publication year   | 2007  |
| Timeseries span    | 1985-2007   |
| Document Recorder  | Irusta-hake-N-2007.pdf (pdf in database)                  |
| Date entered       | Parma   |
| Date last loaded   | 2008-12-11  |
| QA/QC complete     | 2011-07-25  |
| Date approved      | YES   |
|                    | 2009-04-23  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME          |           | tertiary LME |       |
|-----------------------|-------|-------|------------------------|-----------|--------------|-------|
| 14 - Patagonian Shelf |       |       | na                     | na        |              |       |
| Parameter             | Value | Units | Reference points       |           |              | Units |
|                       |       |       | Parameter              | Value     | Units        |       |
| SSB-SEX-sex           | 0     | sex   | Fmax-1/yr (F)          | 0.2978    | 1/yr         |       |
| REC-AGE-yr            | 1     | yr    | Fmsy-1/yr (F)          | 0.4322    | 1/yr         |       |
| F-AGE-yr-yr           | 3-6   | yr-yr | NATMORT-1/yr (M)       | 0.3       | 1/yr         |       |
| TB-AGE-yr             | 1+    | yr    | F40%-1/T               | 0.18791   | 1/T          |       |
| A50-yr                | 2.62  | yr    | SSBmsy-MT (SSB)        | 429200    | MT           |       |
| M-1/yr                | 0.3   | 1/yr  | MSY-MT (TB)            | 169416    | MT           |       |
| NATMORT-1/yr          | 0.3   | 1/yr  | Umsy-ratio (U)         | 0.28133   | ratio        |       |
| SSB-AGE-yr            |       |       | Blim-MT (TB)           | 99764     | MT           |       |
| M                     |       |       | Bmsy-MT (TB)           | 602198.00 | MT           |       |
| L50-cm                |       |       | Brebuild-MT (TB)       | 200000.00 | MT           |       |
|                       |       |       | Bbuf-MT (TB)           | 99764     | MT           |       |
|                       |       |       | $TB_{2007}/B_{msy}$    | 0.189     |              |       |
|                       |       |       | $F_{2007}/F_{msy}$     | 1.261     |              |       |
|                       |       |       | $SSB_{2007}/SSB_{msy}$ | 0.163     |              |       |

| Time series minima and maxima |        |        |        |        |
|-------------------------------|--------|--------|--------|--------|
|                               | SSB    | R      | F      | TB     |
| Minimum year                  | 1986   | 1985   | 1986   | 1986   |
| Maximum year                  | 2007   | 2006   | 2007   | 2007   |
| Time series minimum           | 52371  | 162065 | 0.4208 | 106288 |
| Time series maximum           | 472775 | 730545 | 1.6097 | 571523 |
| Units                         | MT     | E03    | 1/yr   | MT     |



# Assessment of Southern Argentina argentine hake (*Merluccius hubbsi*)

Assessment ID:INIDEP-ARGHAKESARG-1985-2008-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/103>

Area ID: Argentina-CFP-ARG-S

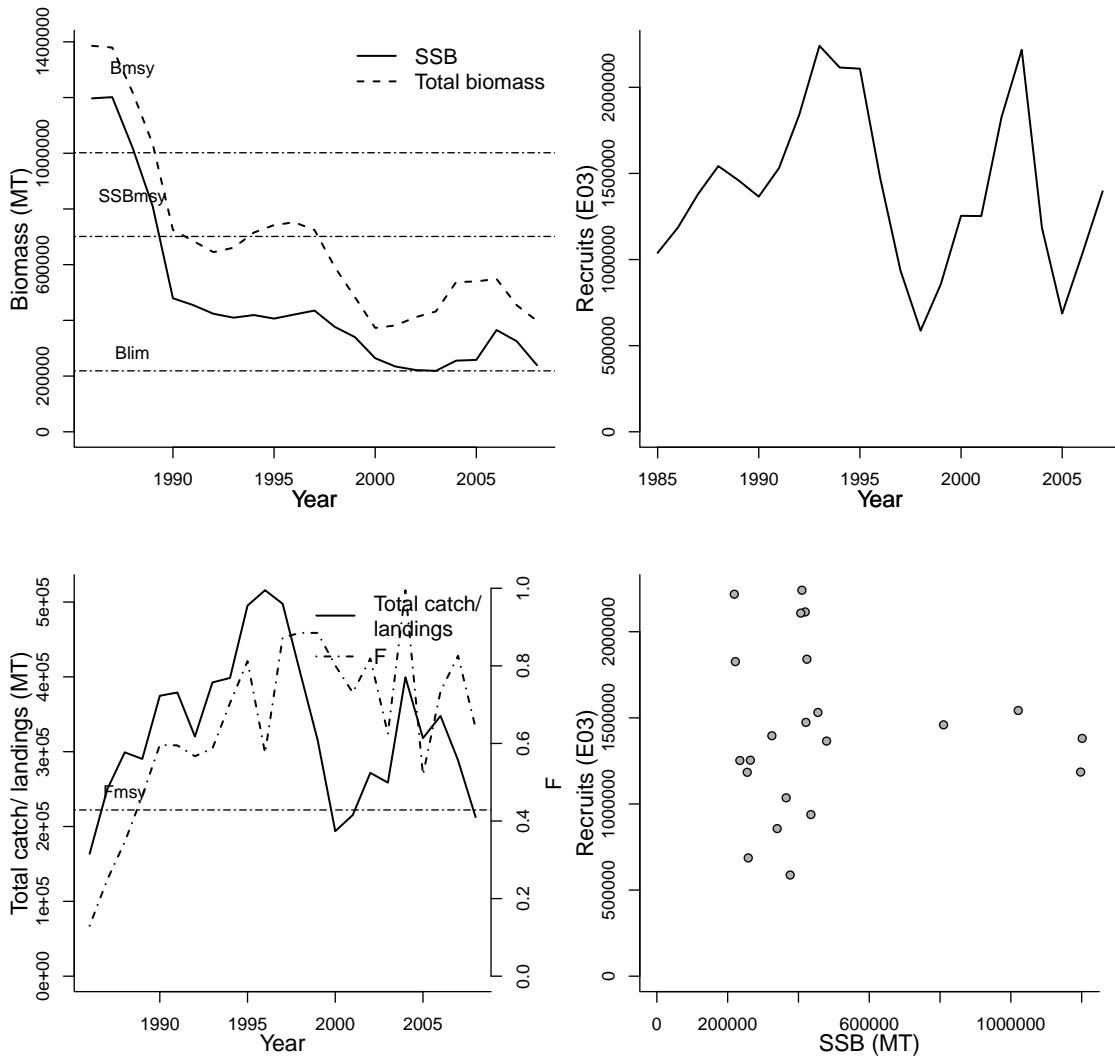
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | CFP   |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero |
| Assessment authors | Renzi, Marta  |
| Assessment method  | Virtual Population Analysis                               |
| Publication year   | 2009  |
| Timeseries span    | 1985-2008   |
| Document           | Renzi-hake-S-2009.pdf (pdf in database)                   |
| Recorder           | Parma   |
| Date entered       | 2010-01-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-23  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME          |            | tertiary LME |
|-----------------------|-------|-------|------------------------|------------|--------------|
| 14 - Patagonian Shelf |       |       | na                     | na         |              |
| Parameter             | Value | Units | Reference points       |            |              |
|                       |       |       | Parameter              | Value      | Units        |
| SSB-SEX-sex           | 0     | sex   | Fmax-1/yr (F)          | 0.3117     | 1/yr         |
| REC-AGE-yr            | 1     | yr    | Fmsy-1/yr (F)          | 0.4285     | 1/yr         |
| F-AGE-yr-yr           | 3-6   | yr-yr | NATMORT-1/yr (M)       | 0.3        | 1/yr         |
| TB-AGE-yr             | 1+    | yr    | F40%-1/T               | 0.19080    | 1/T          |
| A50-yr                | 2.62  | yr    | SSBmsy-MT (SSB)        | 701328.02  | MT           |
| M-1/yr                | 0.3   | 1/yr  | MSY-MT (TB)            | 277675.26  | MT           |
| NATMORT-1/yr          | 0.3   | 1/yr  | Umsy-ratio (U)         | 0.27718    | ratio        |
| SSB-AGE-yr            |       |       | Blim-MT (TB)           | 218713     | MT           |
| M                     |       |       | Bmsy-MT (TB)           | 1001788.06 | MT           |
| L50-cm                |       |       | Brebuild-MT (TB)       | 500000     | MT           |
|                       |       |       | Bbuf-MT (TB)           | 376680     | MT           |
|                       |       |       | $TB_{2008}/B_{msy}$    | 0.397      |              |
|                       |       |       | $F_{2008}/F_{msy}$     | 1.494      |              |
|                       |       |       | $SSB_{2008}/SSB_{msy}$ | 0.341      |              |

| Time series minima and maxima |         |         |       |         |
|-------------------------------|---------|---------|-------|---------|
|                               | SSB     | R       | F     | TB      |
| Minimum year                  | 1986    | 1985    | 1986  | 1986    |
| Maximum year                  | 2008    | 2007    | 2008  | 2008    |
| Time series minimum           | 218713  | 587405  | 0.13  | 372877  |
| Time series maximum           | 1201451 | 2241059 | 0.995 | 1385781 |
| Units                         | MT      | E03     | 1/yr  | MT      |



# Assessment of Southern Argentina patagonian grenadier (*Macruronus magellanicus*)

Assessment ID:INIDEP-PATGRENADERSARG-1983-2006-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/148>

Area ID: Argentina-CFP-ARG-S

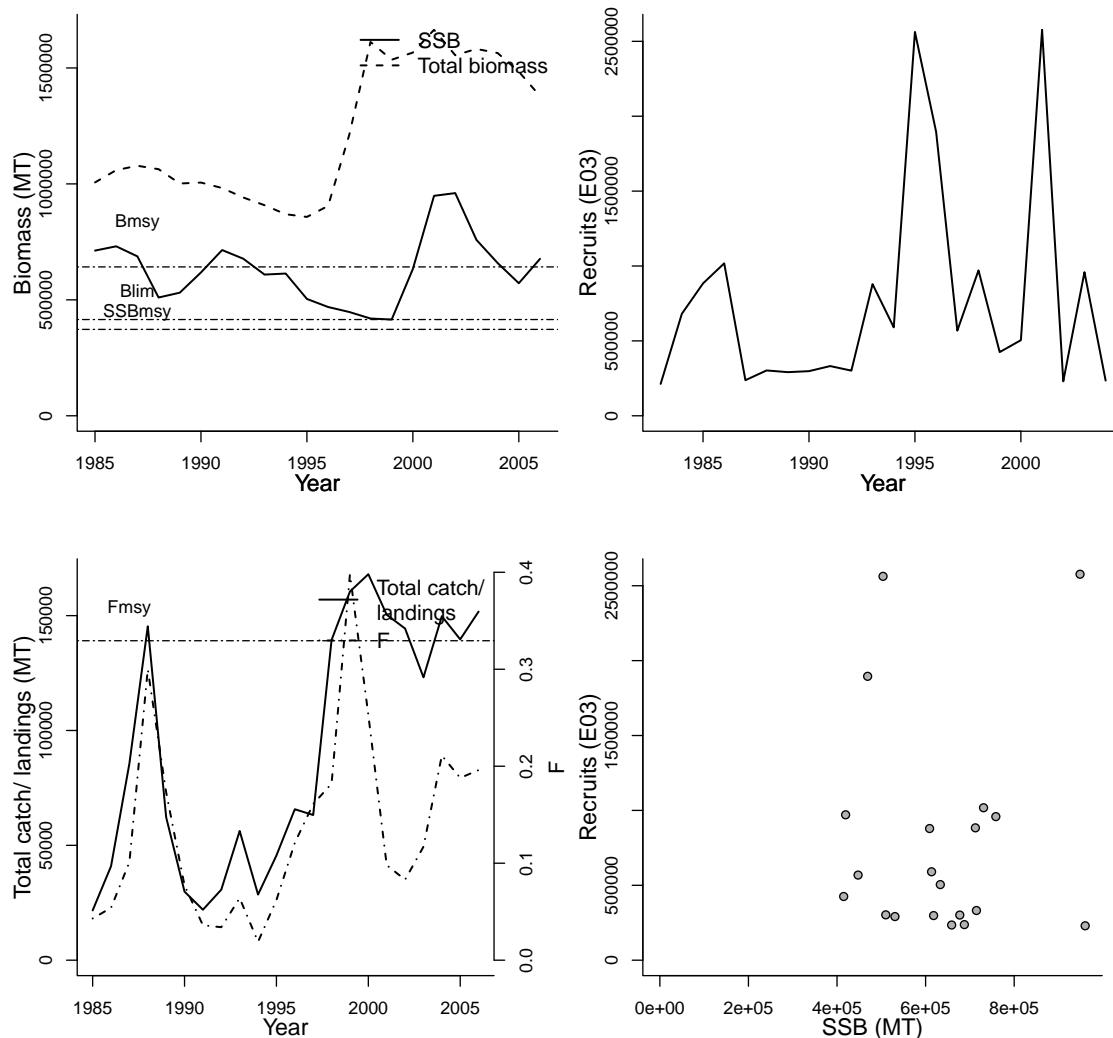
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | CFP   |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero |
| Assessment authors | Giussi, Analia  |
| Assessment method  | Virtual Population Analysis                               |
| Publication year   | 2007  |
| Timeseries span    | 1983-2006   |
| Document           | Giussi-hoki-2007.pdf (pdf in database)                    |
| Recorder           | Parma   |
| Date entered       | 2008-12-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-23  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME          | tertiary LME |
|-----------------------|-------|-------|------------------------|--------------|
| 14 - Patagonian Shelf |       |       | na                     | na           |
| Parameter             | Value | Units | Reference points       |              |
|                       |       |       | Parameter              | Value        |
| SSB-AGE-yr            | 3+    | yr    | Fmax-1/yr (F)          | 0.3630       |
| SSB-SEX-sex           | 0     | sex   | Fmsy-1/yr (F)          | 0.3294       |
| REC-AGE-yr            | 1     | yr    | NATMORT-1/yr (M)       | 0.3          |
| F-AGE-yr-yr           | 5- 12 | yr-yr | F40%-1/T               | 0.1842       |
| TB-AGE-yr             | 1+    | yr    | SSBmsy-MT (SSB)        | 372542.00    |
| A50-yr                | 3.59  | yr    | MSY-MT (TB)            | 132131.00    |
| L50-cm                | 57.79 | cm    | Umsy-ratio (U)         | 0.2058       |
| M-1/yr                | 0.3   | 1/yr  | Blim-MT (TB)           | 415041.00    |
| NATMORT-1/yr          | 0.3   | 1/yr  | Bmsy-MT (TB)           | 642031.00    |
| M                     |       |       | Brebuild-MT (TB)       | 500000.00    |
|                       |       |       | Bbuf-MT (TB)           | 712405.00    |
|                       |       |       | $TB_{2006}/B_{msy}$    | 2.147        |
|                       |       |       | $F_{2006}/F_{msy}$     | 0.595        |
|                       |       |       | $SSB_{2006}/SSB_{msy}$ | 1.817        |

| Time series minima and maxima |        |         |       |         |        |
|-------------------------------|--------|---------|-------|---------|--------|
|                               | SSB    | R       | F     | TB      | Catch  |
| Minimum year                  | 1985   | 1983    | 1985  | 1985    | 1985   |
| Maximum year                  | 2006   | 2004    | 2006  | 2006    | 2006   |
| Time series minimum           | 415041 | 212795  | 0.019 | 857676  | 21663  |
| Time series maximum           | 960291 | 2576934 | 0.398 | 1664567 | 168031 |
| Units                         | MT     | E03     | 1/yr  | MT      | MT     |



# Assessment of Southern Argentina southern blue whiting (*Micromesistius australis*)

Assessment ID:INIDEP-SBWHITARGS-1985-2007-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/119>

Area ID: Argentina-CFP-ARG-S

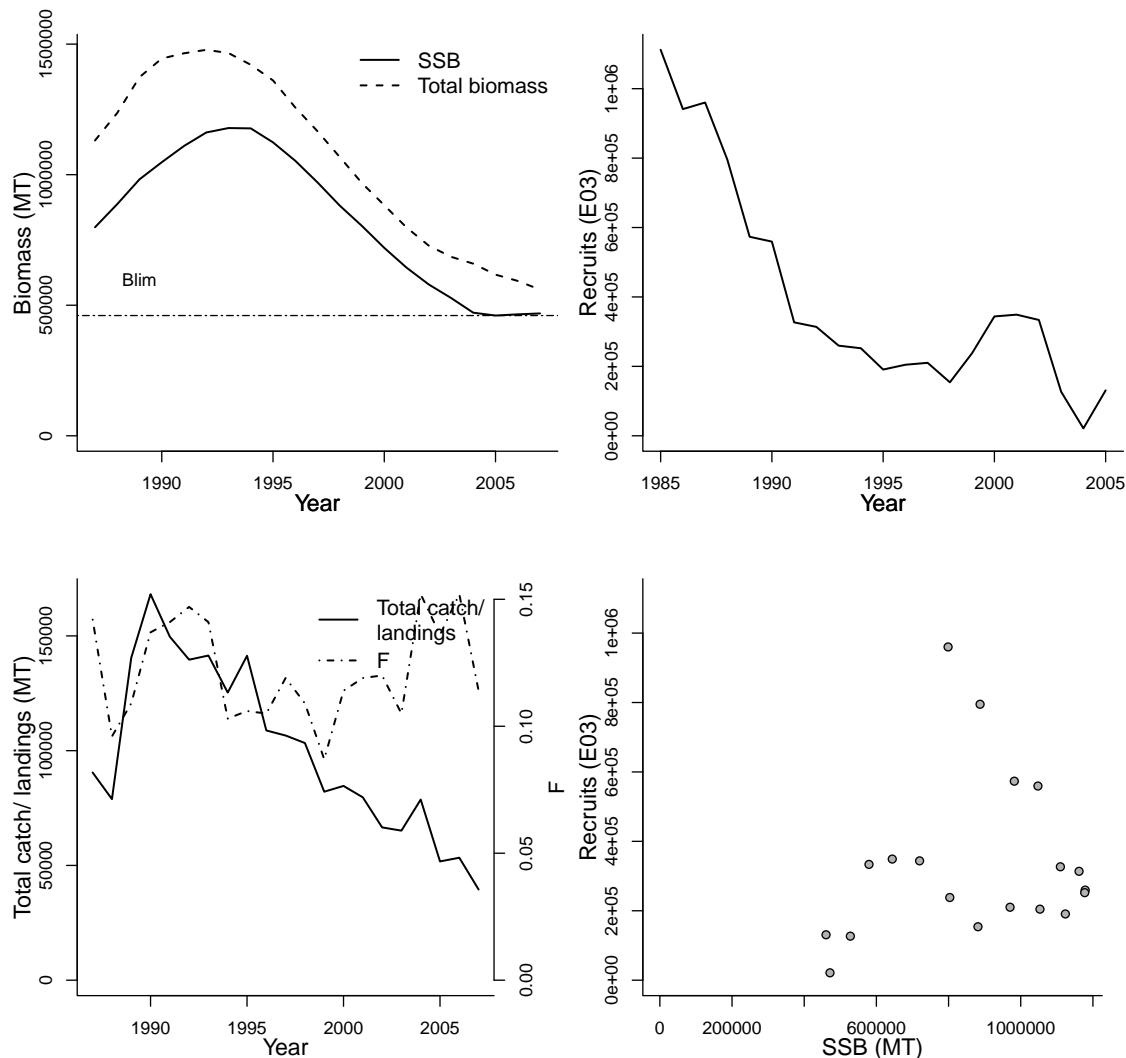
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | CFP   |
| Assessment group   | Instituto Nacional de Investigacion y Desarrollo Pesquero |
| Assessment authors | Giussi, Analia  |
| Assessment method  | Virtual Population Analysis                               |
| Publication year   | 2008  |
| Timeseries span    | 1985-2007   |
| Document Recorder  | Giussi-polaca-2007.pdf (pdf in database)<br>Parma         |
| Date entered       | 2008-12-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-23  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter      | Value  | Units | Reference points |        |       |
|----------------|--------|-------|------------------|--------|-------|
|                |        |       | Parameter        | Value  | Units |
| SSB-AGE-yr     | 3+     | yr    | Fmax-1/yr (F)    | 0.566  | 1/yr  |
| SSB-SEX-sex    | 0      | sex   | Fpa-1/yr (F)     | 0.05   | 1/yr  |
| REC-AGE-yr     | 1      | yr    | NATMORT-1/yr (M) | 0.15   | 1/yr  |
| F-AGE-yr-yr    | 7 - 21 | yr-yr | F40%-1/T         | 0.1930 | 1/T   |
| TB-AGE-yr      | 1+     | yr    | Blim-MT (TB)     | 460473 | MT    |
| A50-yr         | 3.3    | yr    | Brebuild-MT (TB) | 600000 | MT    |
| L50-cm         | 35.5   | cm    | Bbuf-MT (TB)     | 471387 | MT    |
| M-1/T          | 0.15   | 1/T   |                  |        |       |
| NATMORT-1/yr M | 0.15   | 1/yr  |                  |        |       |

| Time series minima and maxima |         |         |       |         |
|-------------------------------|---------|---------|-------|---------|
|                               | SSB     | R       | F     | TB      |
| Minimum year                  | 1987    | 1985    | 1987  | 1987    |
| Maximum year                  | 2007    | 2005    | 2007  | 2007    |
| Time series minimum           | 460473  | 21293   | 0.087 | 559839  |
| Time series maximum           | 1178558 | 1112030 | 0.152 | 1478240 |
| Units                         | MT      | E03     | 1/yr  | MT      |



# Assessment of Indian Ocean bigeye tuna (*Thunnus obesus*)

Assessment ID:IOTC-BIGEYEIO-1957-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/241>

Area ID: multinational-IOTC-IO

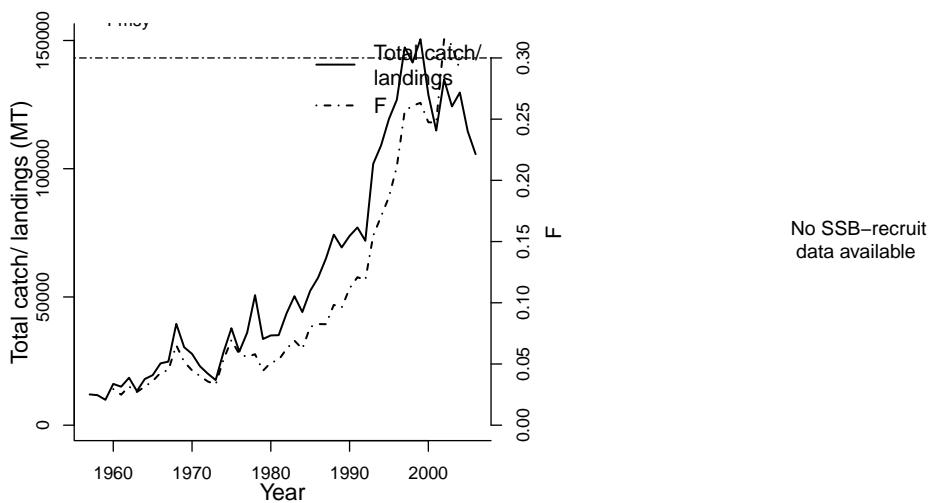
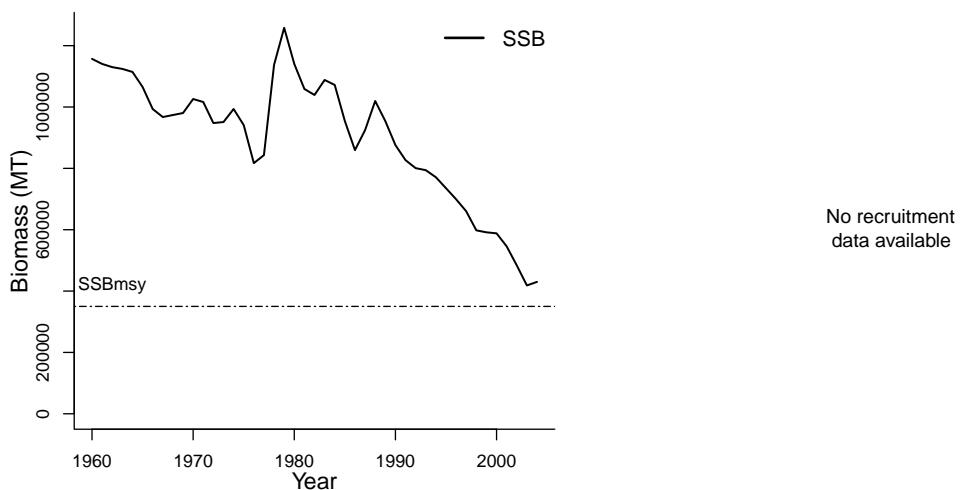
## General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | IOTC                                       |
| Assessment group   | Indian Ocean Tuna Commission               |
| Assessment authors | Anonymous                                  |
| Assessment method  | Age-structured surplus production model    |
| Publication year   | 2007                                       |
| Timeseries span    | 1957-2006                                  |
| Document           | JENSEN-BIGEYEIO-2007.pdf (pdf in database) |
| Recorder           | JENSEN                                     |
| Date entered       | 2009-04-08                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |         | tertiary LME |
|------------------------|-------|-------|------------------------|---------|--------------|
| -97 - Indian High Seas |       |       | na                     | na      |              |
| Parameter              | Value | Units | Reference points       |         |              |
| REC-AGE                |       |       | Parameter              | Value   | Units        |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.3     | 1/yr         |
| SSB-SEX-sex            |       |       | SSBmsy-MT (SSB)        | 350000  | MT           |
| TB-AGE-yr              |       |       | MSY-MT (TB)            | 111200  | MT           |
| F-AGE-yr               |       |       | B0-MT                  | 1380000 | MT           |
| M                      |       |       | SSB0-MT (SSB)          | 1150000 | MT           |
| A50-yr                 |       |       | $F_{2004}/F_{msy}$     | 0.967   |              |
| L50-cm                 |       |       | $SSB_{2004}/SSB_{msy}$ | 1.229   |              |

| Time series minima and maxima |         |   |        |        |
|-------------------------------|---------|---|--------|--------|
|                               | SSB     | R | F      | TB     |
| Minimum year                  | 1960    |   | 1960   | 1957   |
| Maximum year                  | 2004    |   | 2004   | 2006   |
| Time series minimum           | 418300  |   | 0.0249 | 9900   |
| Time series maximum           | 1258200 |   | 0.3153 | 150500 |
| Units                         | MT      |   | 1/yr   | MT     |



# Assessment of North Pacific pacific halibut (*Hippoglossus stenolepis*)

Assessment ID:IPHC-PHALNPAC-1988-2009-Parma

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/187>

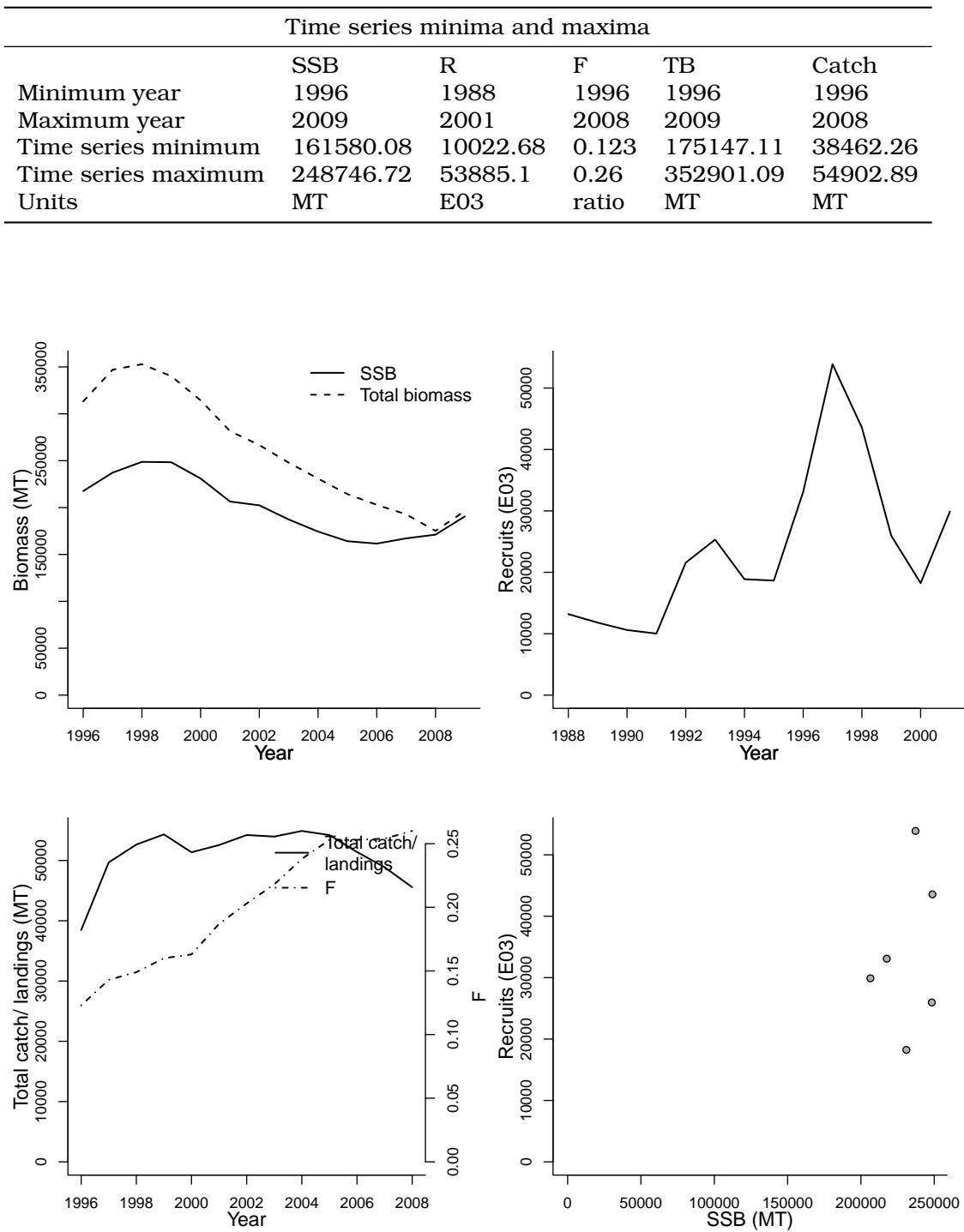
Area ID: multinational-IPHC-NPAC

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | IPHC   |
| Assessment group   | International Pacific Halibut Commission           |
| Assessment authors | Hare, Steven                                       |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2009   |
| Timeseries span    | 1988-2009  |
| Document           | hare-clark08.pdf (pdf in database)                 |
| Recorder           | Parma  |
| Date entered       | 2009-03-12   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-04-23   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME       |           | tertiary LME |  |
|--------------------|-------|-------|---------------------|-----------|--------------|--|
| 2 - Gulf of Alaska |       |       | 1 - East Bering Sea |           | na           |  |
| Parameter          | Value | Units | Reference points    |           |              |  |
|                    |       |       | Parameter           | Value     | Units        |  |
| SSB-AGE-yr         | 11.59 | yr    | Flim-1/yr (F)       | available | 1/yr         |  |
| SSB-SEX-sex        | 1     | sex   | SSBlimit30%-MT      | 142758.76 | MT           |  |
| REC-AGE-yr         | 8     | yr    | SSBlimit20%-MT      | 106464.16 | MT           |  |
| F-AGE-yr-yr        | 6+    | yr-yr | SSB0-MT (SSB)       | 531110.98 | MT           |  |
| TB-AGE-yr          | 6     | yr    | ERtarget-ratio      | 0.2       | ratio        |  |
| A50-yr             | 11.59 | yr    | ERcurrent-ratio     | 0.26      | ratio        |  |
| L50-cm             | 97.63 | cm    | NATMORT-1/yr (M)    | 0.15      | 1/yr         |  |
| M-1/yr             | 0.15  | 1/yr  | SPRF0-E01 (SPR)     | 29.82     | E01          |  |
| NATMORT-1/yr       | 0.15  | 1/yr  | F40%-1/T            | 0.17      | 1/T          |  |
| M                  |       |       | F0.1-1/yr (F)       | 0.26      | 1/yr         |  |



# Assessment of South Africa anchovy (*Engraulis encrasicolus*)

Assessment ID: MARAM-ANCHOSA-1984-2006-deMoor

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/126>

Area ID: South Africa-DETMCM-SA

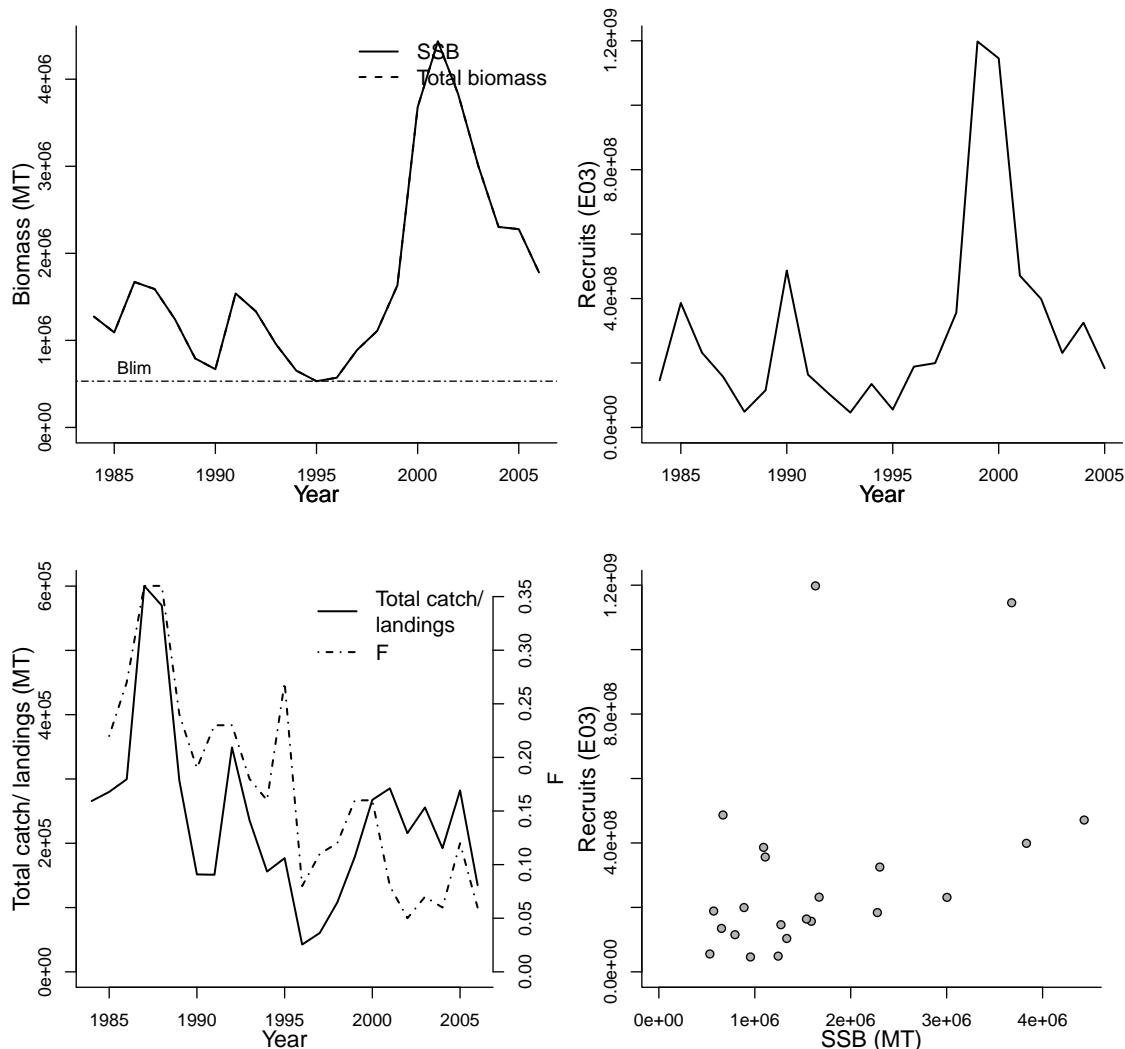
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | deMoor, Carryn L.   |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   |   |
| Timeseries span    | 1984-2006   |
| Document           | ANCHOSA.pdf (pdf not in database)   |
| Recorder           | deMoor  |
| Date entered       | 2009-01-16  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-06-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       | secondary LME        | tertiary LME                      |
|-----------------------|-------|----------------------|-----------------------------------|
| 29 - Benguela Current |       | 30 - Agulhas Current | na                                |
| Parameter             | Value | Units                |                                   |
| SSB-AGE-yr            | 1-4+  | yr                   |                                   |
| SSB-SEX-sex           | 0     | sex                  | Reference points                  |
| REC-AGE-yr            | 0     | yr                   | Parameter                         |
| F-AGE-yr-yr           | 1+    | yr-yr                | Value                             |
| TB-AGE-yr             | 1+    | yr                   | Units                             |
| M-1/yr                | 0.9   | 1/yr                 | Blim-MT (TB) 531400 MT            |
| M                     |       |                      | SSB0-MT (SSB) 1838900 MT          |
| A50-yr                |       |                      | SSBtarget-MT (SSB) 109600 MT      |
| L50-cm                |       |                      | SSBexceptional-MT (SSB) 400000 MT |

| Time series minima and maxima |            |            |      |            |        |
|-------------------------------|------------|------------|------|------------|--------|
|                               | SSB        | R          | F    | TB         | Catch  |
| Minimum year                  | 1984       | 1984       | 1985 | 1984       | 1984   |
| Maximum year                  | 2006       | 2005       | 2006 | 2006       | 2006   |
| Time series minimum           | 531441.84  | 46246000   | 0.05 | 531441.84  | 42475  |
| Time series maximum           | 4433416.93 | 1197855000 | 0.36 | 4433416.93 | 600376 |
| Units                         | MT         | E03        | 1/yr | MT         | MT     |



# Assessment of South Africa shallow-water cape hake (*Merluccius capensis*)

Assessment ID: MARAM-CHAKESA-1917-2008-DEDECKER

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/195>

Area ID: South Africa-DETMCM-SA

## General assessment details.

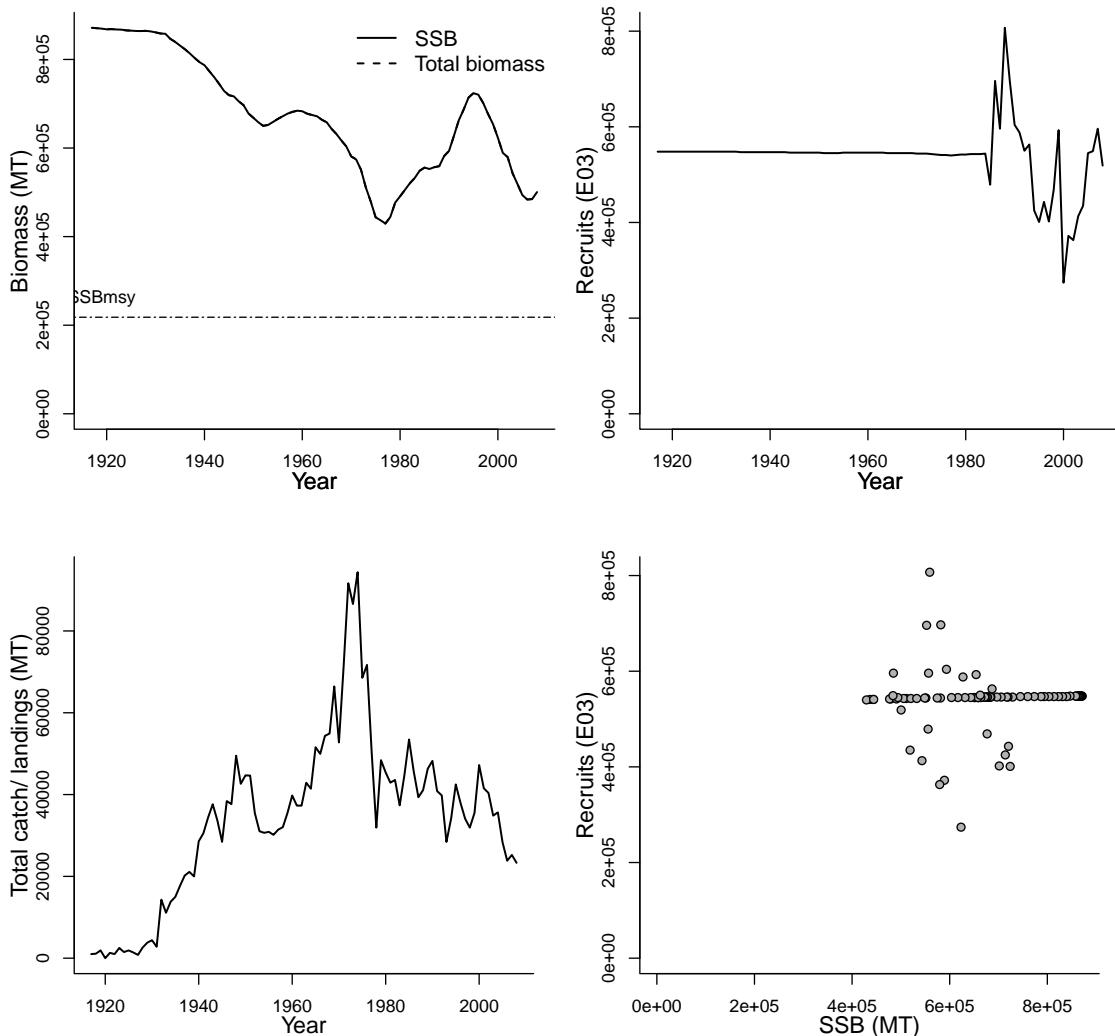
| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Rademeyer, R.A.   |
| Assessment method  | Age-structured surplus production model   |
| Publication year   | 2008  |
| Timeseries span    | 1917-2008   |
| Document           | SA-Mparadoxus-2008-IWS-DEC08-H-5.pdf (pdf in database)  |
| Recorder           | DEDECKER  |
| Date entered       | 2009-02-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME                           |        |         | tertiary LME |  |  |
|-----------------------|-------|-------|---|--------|---------|--------------|--|--|
| 29 - Benguela Current |       |       | 30 - Agulhas Current                    |        |         | na           |  |  |
| Parameter             | Value | Units | Reference points                        |        |         |              |  |  |
| SSB-AGE-yr            | 3+    | yr    | Parameter                               | Value  | Units   |              |  |  |
| SSB-SEX-sex           | 0     | sex   | SSBmsy-MT (SSB)                         | 218000 | MT      |              |  |  |
| REC-AGE-yr            | 0     | yr    | SSB0-MT (SSB)                           | 871000 | MT      |              |  |  |
| F-AGE-yr-yr           | 0-7+  | yr-yr | R0-E09 (R)                              | 0.548  | E09     |              |  |  |
| TB-AGE-yr             | 3     | yr    | MSY-MT (TB)                             | 86000  | MT      |              |  |  |
| A50-yr                | 3     | yr    | BH-h-dimless                            | 0.95   | dimless |              |  |  |
| M-1/yr                | 0.4   | 1/yr  | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 2.296  |         |              |  |  |
| M                     |       |       |   |        |         |              |  |  |
| L50-cm                |       |       |   |        |         |              |  |  |

## Time series minima and maxima

|                     | SSB      | R      | F | TB       | Catch |
|---------------------|----------|--------|---|----------|-------|
| Minimum year        | 1917     | 1917   |   | 1917     | 1917  |
| Maximum year        | 2008     | 2008   |   | 2008     | 2008  |
| Time series minimum | 429458.4 | 274000 |   | 429458.4 | 0     |
| Time series maximum | 871443.8 | 807000 |   | 871443.8 | 94359 |
| Units               | MT       | E03    |   | MT       | MT    |



# Assessment of South Africa Areas 1-2 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID:MARAM-CRLOBSTERSA12-1910-2008-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/135>

Area ID: South Africa-DETMCM-1-2

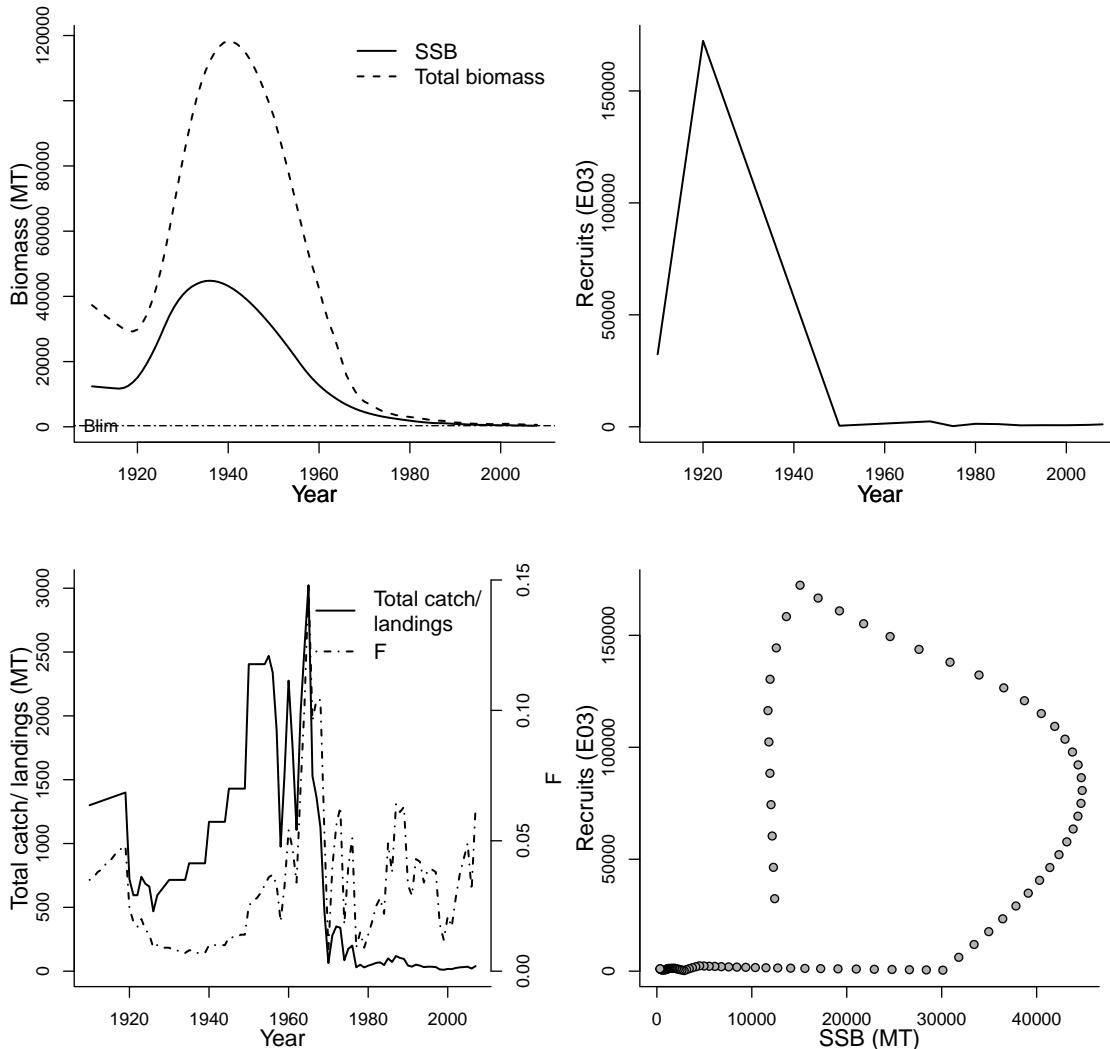
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1910-2008   |
| Document           | Johnston-SAWestRockLobster-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    | tertiary LME |       |
|-----------------------|-------|-------|------------------|--------------|-------|
| 29 - Benguela Current |       |       | na               | na           |       |
| Parameter             | Value | Units | Reference points |              |       |
| SSB-SEX-sex           | 1     | sex   |                  |              |       |
| REC-AGE-yr            | 0     | yr    |                  |              |       |
| L50-cm                | 6.5   | cm    | Parameter        | Value        | Units |
| M-1/yr                | 0.1   | 1/yr  | Blim-MT (TB)     | 326          | MT    |
| SSB-AGE-yr            |       |       | SSB0-MT (SSB)    | 12407        | MT    |
| TB-AGE-yr             |       |       | R0-E00           | 32386294     | E00   |
| F-AGE-yr              |       |       |                  |              |       |
| M                     |       |       |                  |              |       |
| A50-yr                |       |       |                  |              |       |

| Time series minima and maxima |          |           |       |           |
|-------------------------------|----------|-----------|-------|-----------|
|                               | SSB      | R         | F     | TB        |
| Minimum year                  | 1910     | 1910      | 1910  | 1910      |
| Maximum year                  | 2008     | 2008      | 2007  | 2008      |
| Time series minimum           | 326.94   | 289.43869 | 0.007 | 593.17    |
| Time series maximum           | 44795.87 | 172388.67 | 0.148 | 118382.77 |
| Units                         | MT       | E03       | 1/yr  | MT        |



# Assessment of South Africa Areas 3-4 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA34-1910-2008-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/136>

Area ID: South Africa-DETMCM-3-4

## General assessment details.

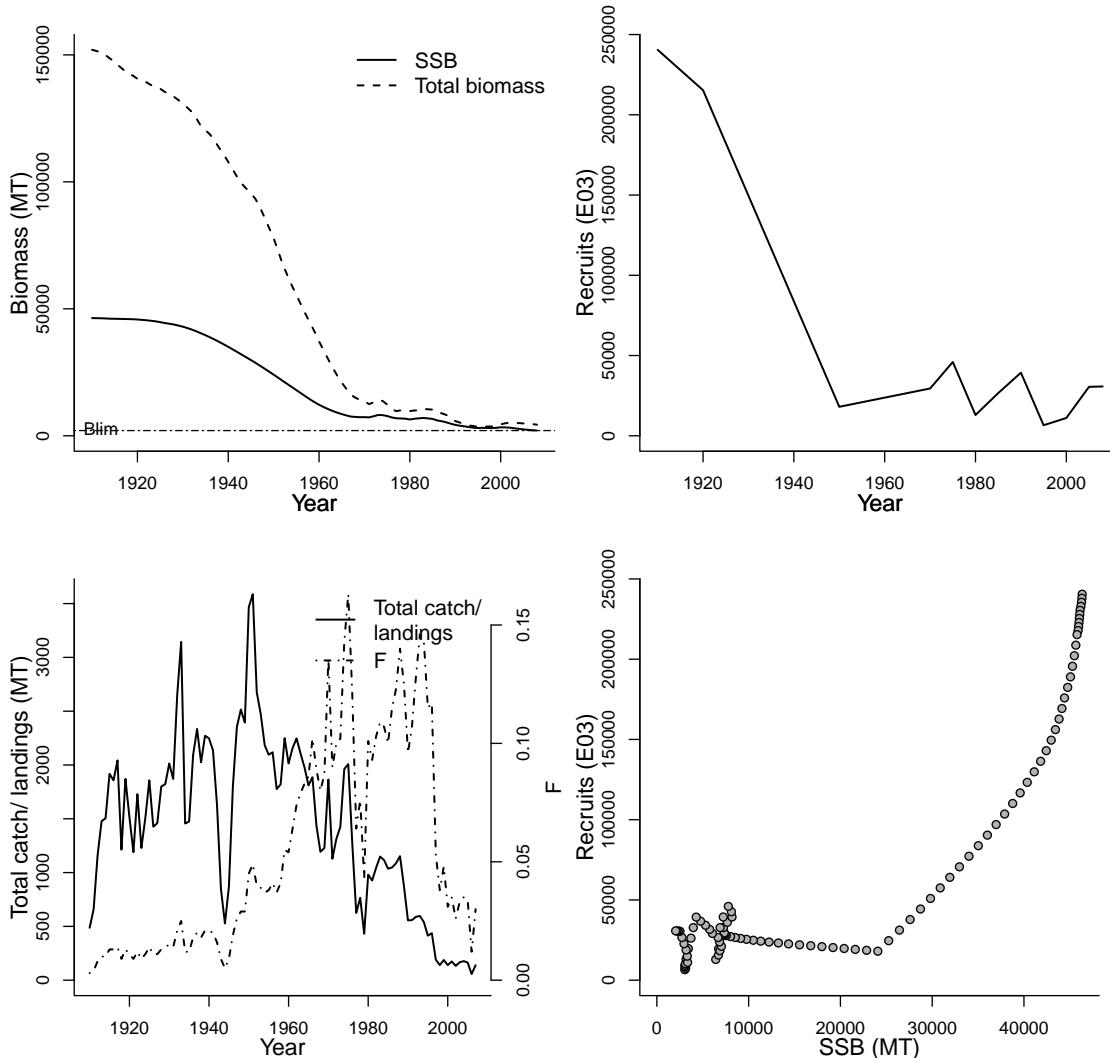
| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1910-2008   |
| Document           | Johnston-SAWestRockLobster-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    |           | tertiary LME |
|-----------------------|-------|-------|------------------|-----------|--------------|
| 29 - Benguela Current |       |       | na               | na        |              |
| Parameter             | Value | Units | Reference points |           |              |
| SSB-SEX-sex           | 1     | sex   |                  |           |              |
| REC-AGE-yr            | 0     | yr    |                  |           |              |
| L50-cm                | 6.5   | cm    | Parameter        | Value     | Units        |
| M-1/yr                | 0.1   | 1/yr  | Blim-MT (TB)     | 2048      | MT           |
| SSB-AGE-yr            |       |       | SSB0-MT (SSB)    | 46342     | MT           |
| TB-AGE-yr             |       |       | RO-E00           | 240492130 | E00          |
| F-AGE-yr              |       |       |                  |           |              |
| M                     |       |       |                  |           |              |
| A50-yr                |       |       |                  |           |              |

Time series minima and maxima

|                     | SSB      | R         | F     | TB        | Catch   |
|---------------------|----------|-----------|-------|-----------|---------|
| Minimum year        | 1910     | 1910      | 1910  | 1910      | 1910    |
| Maximum year        | 2008     | 2008      | 2007  | 2008      | 2007    |
| Time series minimum | 2047.91  | 6554.977  | 0.003 | 3589.86   | 57.53   |
| Time series maximum | 46342.25 | 240492.13 | 0.163 | 151997.41 | 3587.07 |
| Units               | MT       | E03       | 1/yr  | MT        | MT      |



# Assessment of South Africa Areas 5-6 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA56-1910-2008-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/137>

Area ID: South Africa-DETMCM-5-6

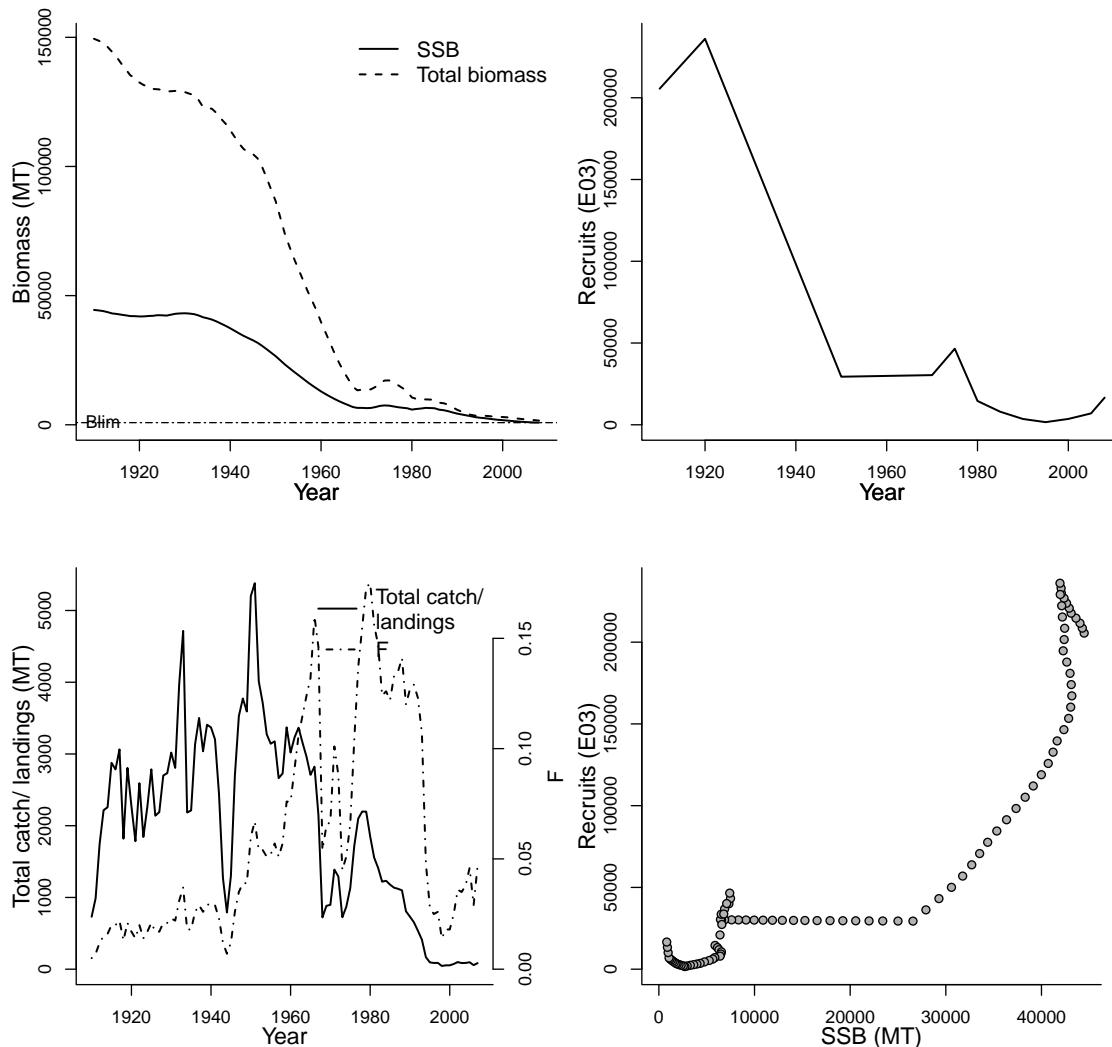
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1910-2008   |
| Document           | Johnston-SAWestRockLobster-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    |           | tertiary LME |
|-----------------------|-------|-------|------------------|-----------|--------------|
| 29 - Benguela Current |       |       | na               | na        |              |
| Parameter             | Value | Units | Reference points |           |              |
| SSB-SEX-sex           | 1     | sex   |                  |           |              |
| REC-AGE-yr            | 0     | yr    |                  |           |              |
| F-AGE-yr-yr           |       | yr-yr | Parameter        | Value     | Units        |
| L50-cm                | 6.5   | cm    | Blim-MT (TB)     | 822       | MT           |
| M-1/yr                | 0.1   | 1/yr  | SSBO-MT (SSB)    | 44464     | MT           |
| SSB-AGE-yr            |       |       | RO-E00           | 205531950 | E00          |
| TB-AGE-yr             |       |       |                  |           |              |
| M                     |       |       |                  |           |              |
| A50-yr                |       |       |                  |           |              |

| Time series minima and maxima |          |            |       |           |
|-------------------------------|----------|------------|-------|-----------|
|                               | SSB      | R          | F     | TB        |
| Minimum year                  | 1910     | 1910       | 1910  | 1910      |
| Maximum year                  | 2008     | 2008       | 2007  | 2008      |
| Time series minimum           | 822.13   | 1611.32375 | 0.005 | 1617.85   |
| Time series maximum           | 44464.08 | 236047.94  | 0.175 | 149419.94 |
| Units                         | MT       | E03        | 1/yr  | MT        |
|                               |          |            |       | MT        |



# Assessment of South Africa Area 7 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA7-1910-2008-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/138>

Area ID: South Africa-DETMCM-7

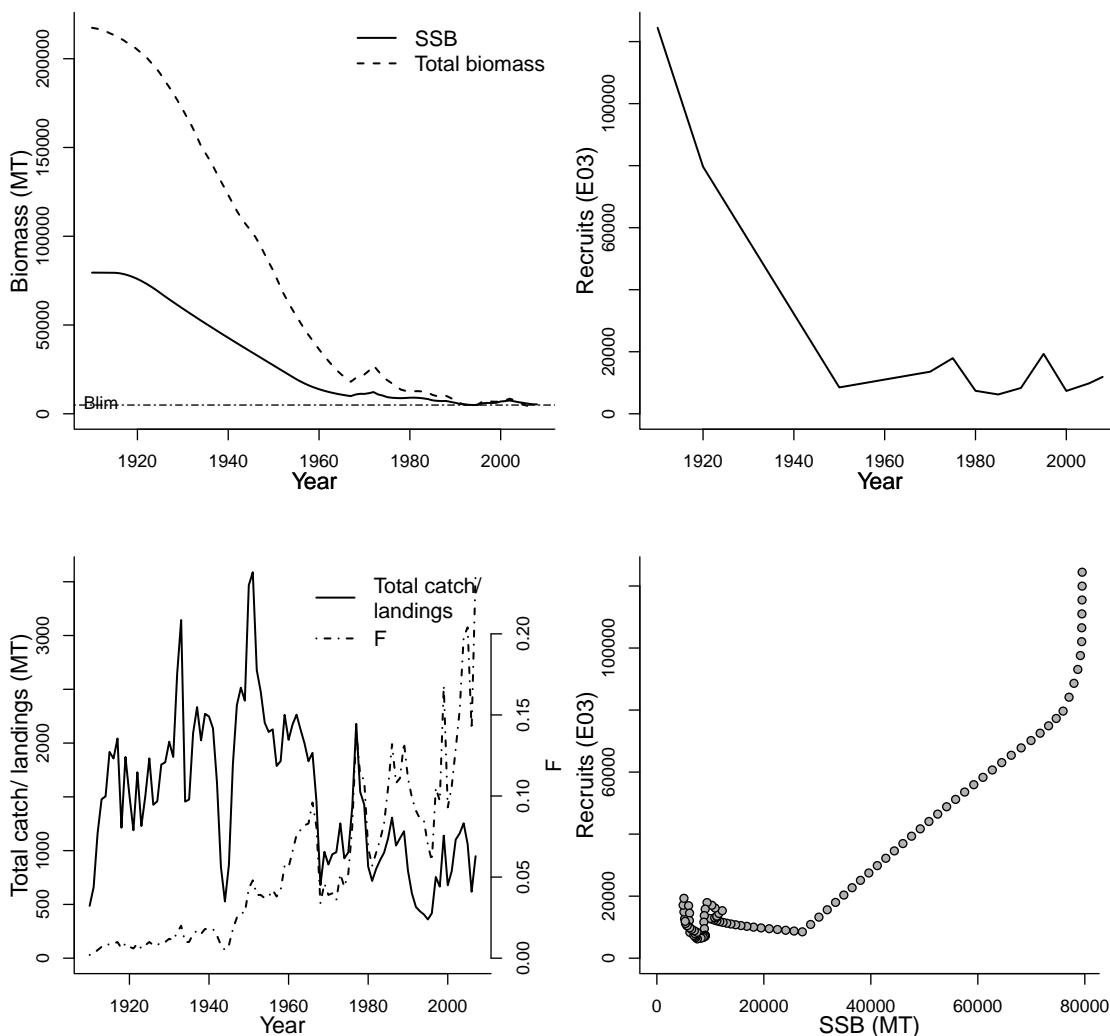
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1910-2008   |
| Document           | Johnston-SAWestRockLobster-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    |           | tertiary LME |
|-----------------------|-------|-------|------------------|-----------|--------------|
| 29 - Benguela Current |       |       | na               | na        |              |
| Parameter             | Value | Units | Reference points |           |              |
| SSB-SEX-sex           | 1     | sex   |                  |           |              |
| REC-AGE-yr            | 0     | yr    |                  |           |              |
| L50-cm                | 6.5   | cm    | Parameter        | Value     | Units        |
| M-1/yr                | 0.1   | 1/yr  | Blim-MT (TB)     | 4913      | MT           |
| SSB-AGE-yr            |       |       | SSB0-MT (SSB)    | 79509     | MT           |
| TB-AGE-yr             |       |       | RO-E00           | 124447910 | E00          |
| F-AGE-yr              |       |       |                  |           |              |
| M                     |       |       |                  |           |              |
| A50-yr                |       |       |                  |           |              |

| Time series minima and maxima |          |           |       |           |
|-------------------------------|----------|-----------|-------|-----------|
|                               | SSB      | R         | F     | TB        |
| Minimum year                  | 1910     | 1910      | 1910  | 1910      |
| Maximum year                  | 2008     | 2008      | 2007  | 2008      |
| Time series minimum           | 4912.78  | 6224.131  | 0.002 | 3476.71   |
| Time series maximum           | 79508.87 | 124447.91 | 0.238 | 217412.98 |
| Units                         | MT       | E03       | 1/yr  | MT        |



# Assessment of South Africa Area 8 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA8-1910-2008-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/139>

Area ID: South Africa-DETMCM-8

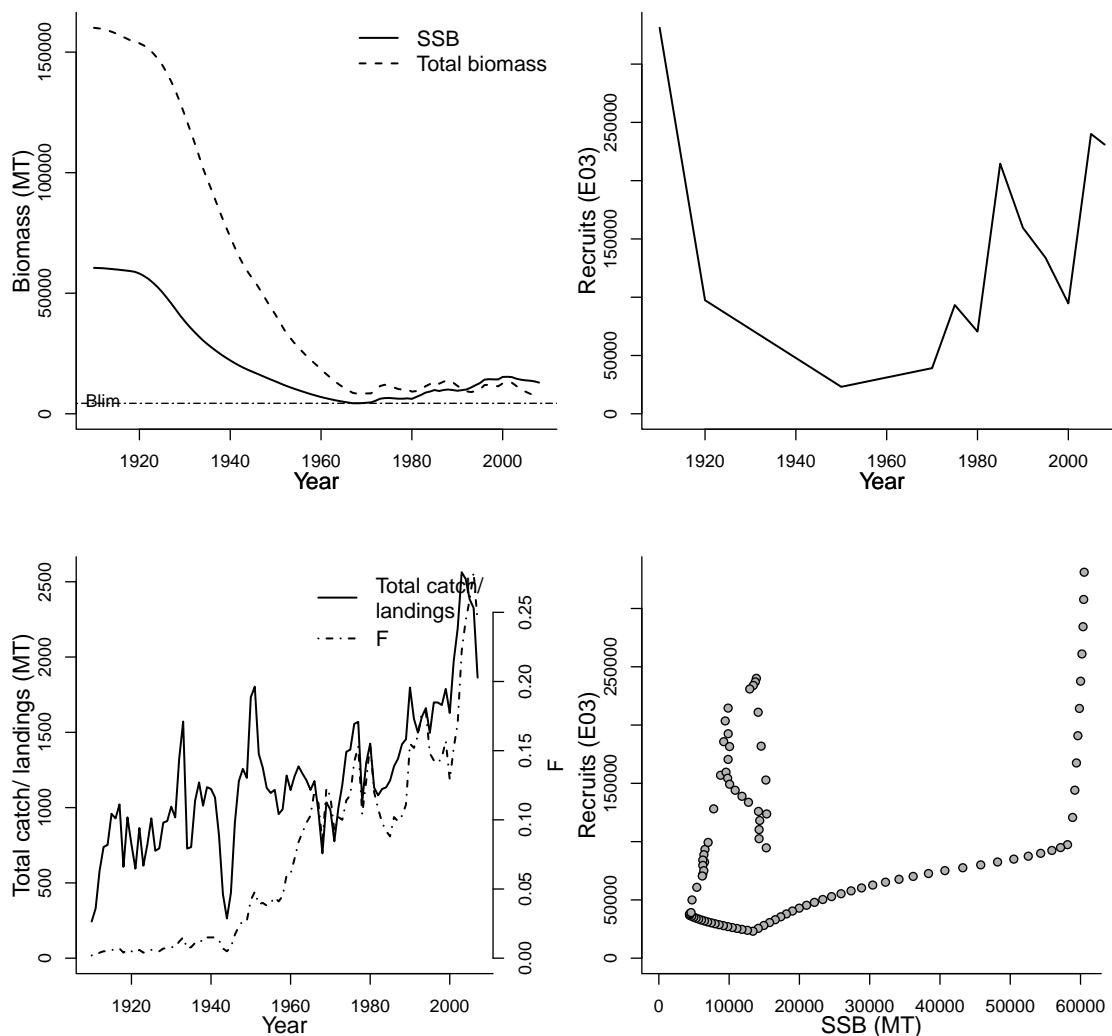
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1910-2008   |
| Document           | Johnston-SAWestRockLobster-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    |           | tertiary LME |
|-----------------------|-------|-------|------------------|-----------|--------------|
| 29 - Benguela Current |       |       | na               | na        |              |
| Parameter             | Value | Units | Reference points |           |              |
| SSB-SEX-sex           | 1     | sex   |                  |           |              |
| REC-AGE-yr            | 0     | yr    |                  |           |              |
| L50-cm                | 6.5   | cm    | Parameter        | Value     | Units        |
| M-1/yr                | 0.1   | 1/yr  | Blim-MT (TB)     | 4350      | MT           |
| SSB-AGE-yr            |       |       | SSB0-MT (SSB)    | 60521     | MT           |
| TB-AGE-yr             |       |       | RO-E00           | 331132540 | E00          |
| F-AGE-yr              |       |       |                  |           |              |
| M                     |       |       |                  |           |              |
| A50-yr                |       |       |                  |           |              |

|                     | Time series minima and maxima |           |       |           |        |
|---------------------|-------------------------------|-----------|-------|-----------|--------|
|                     | SSB                           | R         | F     | TB        | Catch  |
| Minimum year        | 1910                          | 1910      | 1910  | 1910      | 1910   |
| Maximum year        | 2008                          | 2008      | 2007  | 2008      | 2007   |
| Time series minimum | 4350.07                       | 23132.88  | 0.002 | 7157.77   | 243.61 |
| Time series maximum | 60520.58                      | 331132.54 | 0.279 | 160088.06 | 2563.4 |
| Units               | MT                            | E03       | 1/yr  | MT        | MT     |



# Assessment of South Africa South coast cape horse mackerel (*Trachurus capensis*)

Assessment ID:MARAM-CTRACSA-1950-2007-Johnston

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/134>

Area ID: South Africa-DETMCM-SASC

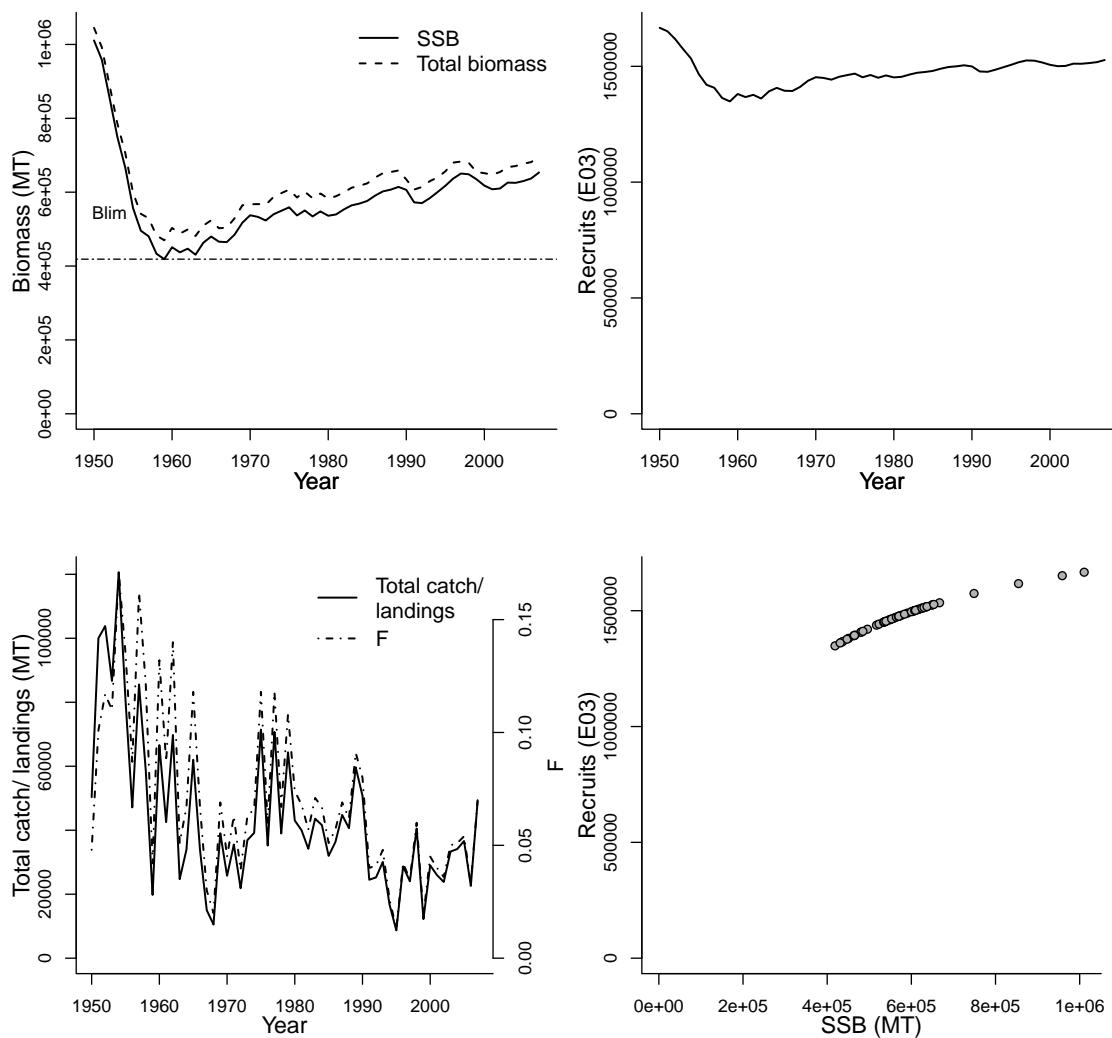
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Age-structured surplus production model   |
| Publication year   | 2007  |
| Timeseries span    | 1950-2007   |
| Document           | Johnston-SAHouseMackerel-2007.pdf<br>(pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-27  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          |       |       | secondary LME    | tertiary LME |
|----------------------|-------|-------|------------------|--------------|
| 30 - Agulhas Current |       |       | na               | na           |
| Parameter            | Value | Units | Reference points |              |
| SSB-SEX-sex          | 0     | sex   | Parameter        | Value        |
| REC-AGE-yr           | 0     | yr    | Blim-MT (TB)     | 418631       |
| F-AGE-yr-yr          | 0+    | yr-yr | SSB0-MT (SSB)    | 1010700      |
| A50-yr               | 3     | yr    | R0-E00           | 166623000    |
| M-1/yr               | 0.3   | 1/yr  | BH-h-dimless     | 0.6          |
| TB-AGE-yr            | 0+    | yr    |                  | dimless      |
| SSB-AGE-yr           |       |       |                  |              |
| M                    |       |       |                  |              |
| L50-cm               |       |       |                  |              |

| Time series minima and maxima |         |         |       |         |
|-------------------------------|---------|---------|-------|---------|
|                               | SSB     | R       | F     | TB      |
| Minimum year                  | 1950    | 1950    | 1950  | 1950    |
| Maximum year                  | 2007    | 2007    | 2007  | 2007    |
| Time series minimum           | 418631  | 1348400 | 0.013 | 469844  |
| Time series maximum           | 1010700 | 1666230 | 0.171 | 1045060 |
| Units                         | MT      | E03     | 1/yr  | MT      |



# Assessment of South Africa deep-water cape hake (*Merluccius paradoxus*)

Assessment ID:MARAM-DEEPCHAKESA-1917-2008-DEDECKER

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/196>

Area ID: South Africa-DETMCM-SA

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Rademeyer, R.A.   |
| Assessment method  | Age-structured surplus production model   |
| Publication year   | 2008  |
| Timeseries span    | 1917-2008   |
| Document           | SA-Mparadoxus-2008-IWS-DEC08-H-5.pdf (pdf in database)  |
| Recorder           | DEDECKER  |
| Date entered       | 2009-02-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

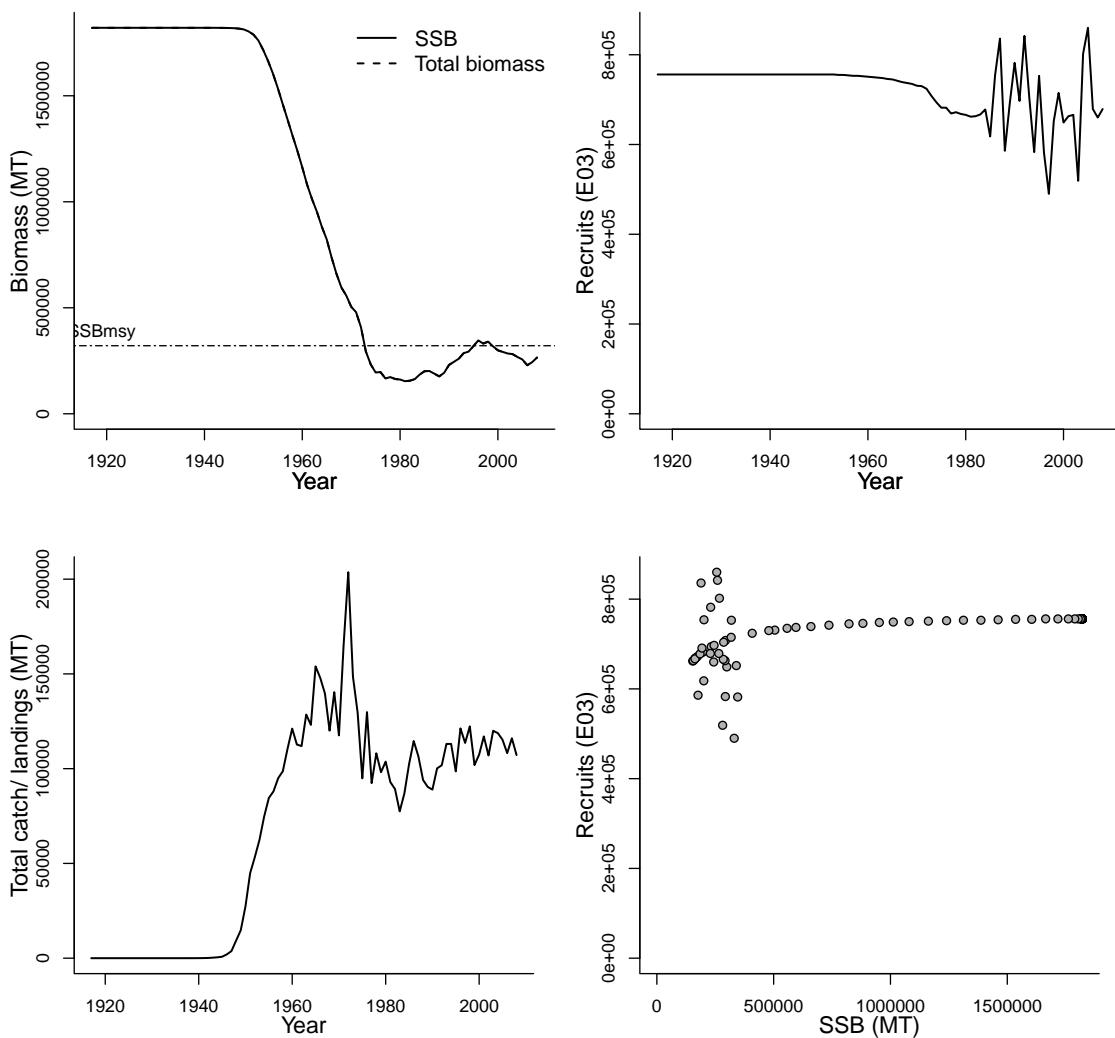
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |           | secondary LME        | tertiary LME |
|-----------------------|-----------|----------------------|--------------|
| 29 - Benguela Current |           | 30 - Agulhas Current | na           |
| Parameter             | Value     | Units                |              |
| SSB-AGE-yr            | 3+        | yr                   |              |
| SSB-SEX-sex           | 0         | sex                  |              |
| REC-AGE-yr            | 0         | yr                   |              |
| F-AGE-yr-yr           | 0-5+      | yr-yr                |              |
| TB-AGE-yr             | 3         | yr                   |              |
| A50-yr                | 3         | yr                   |              |
| M-1/T                 | AVAILABLE | 1/T                  |              |
| M-1/yr                | AVAILABLE | 1/yr                 |              |
| M                     |           |                      |              |
| L50-cm                |           |                      |              |

| Parameter              | Value   | Units   | Reference points |
|------------------------|---------|---------|------------------|
| SSBmsy-MT (SSB)        | 321000  | MT      | Parameter        |
| SSB0-MT (SSB)          | 1821000 | MT      | Value            |
| R0-E09 (R )            | 0.756   | E09     | Units            |
| MSY-MT (TB)            | 113500  | MT      |                  |
| BH-h-dimless           | 0.95    | dimless |                  |
| $SSB_{2008}/SSB_{msy}$ | 0.826   |         |                  |

| Time series minima and maxima |           |        |           |        |
|-------------------------------|-----------|--------|-----------|--------|
|                               | SSB       | R      | F         | TB     |
| Minimum year                  | 1917      | 1917   |           | 1917   |
| Maximum year                  | 2008      | 2008   |           | 2008   |
| Time series minimum           | 153751.4  | 490000 | 153751.4  | 0      |
| Time series maximum           | 1820629.2 | 860000 | 1820629.2 | 203658 |
| Units                         | MT        | E03    | MT        | MT     |



# Assessment of South Africa kingklip (*Genypterus capensis*)

Assessment ID:MARAM-KINGKLIPSA-1932-2008-DEDECKER

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/201>

Area ID: South Africa-DETMCM-SA

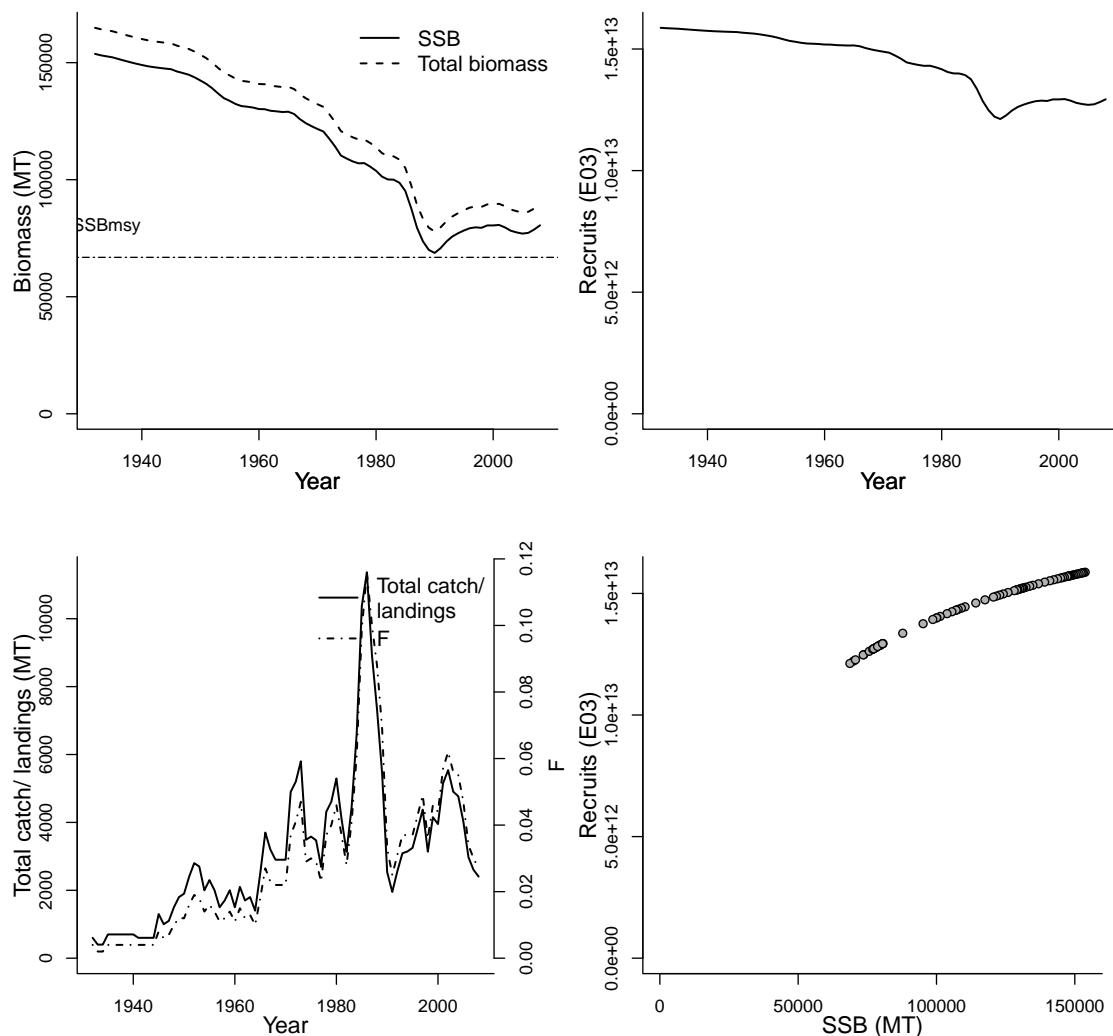
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Brandao, A.   |
| Assessment method  | Age-structured surplus production model   |
| Publication year   | 2008  |
| Timeseries span    | 1932-2008   |
| Document           | Branch-SA-Kingklip-2008.pdf (pdf in database)   |
| Recorder           | DEDECKER  |
| Date entered       | 2009-03-29  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME        |  |        | tertiary LME |  |  |
|-----------------------|-------|-------|----------------------|--|--------|--------------|--|--|
| 29 - Benguela Current |       |       | 30 - Agulhas Current |  |        | na           |  |  |
| Parameter             | Value | Units | Reference points     |  |        |              |  |  |
| SSB-AGE-yr            | 5+    | yr    | Parameter            | SSB <sub>m</sub> s <sub>y</sub> -MT (SSB)            | 66828  | MT           |  |  |
| SSB-SEX-sex           | 1     | sex   |                      | SSB <sub>0</sub> -MT (SSB)                           | 153752 | MT           |  |  |
| REC-AGE-yr            | 0     | yr    |                      | MSY-MT (TB)  | 66882  | MT           |  |  |
| F-AGE-yr-yr           | 0+    | yr-yr |                      | BH-h-dimless   | 0.5    | dimless      |  |  |
| TB-AGE-yr             | 0+    | yr    |                      | SSB <sub>2008</sub> /SSB <sub>m</sub> s <sub>y</sub> | 1.205  |              |  |  |
| A50-yr                | 5     | yr    |                      |  |        |              |  |  |
| M-1/yr                | 0.2   | 1/yr  |                      |  |        |              |  |  |
| M                     |       |       |                      |  |        |              |  |  |
| L50-cm                |       |       |                      |  |        |              |  |  |

| Time series minima and maxima |         |                |       |         |       |
|-------------------------------|---------|----------------|-------|---------|-------|
|                               | SSB     | R              | F     | TB      | Catch |
| Minimum year                  | 1932    | 1932           | 1932  | 1932    | 1932  |
| Maximum year                  | 2008    | 2008           | 2008  | 2008    | 2008  |
| Time series minimum           | 68700.1 | 12120900000000 | 0.002 | 77875.9 | 400   |
| Time series maximum           | 153752  | 15872300000000 | 0.116 | 164889  | 11370 |
| Units                         | MT      | E03            | 1/yr  | MT      | MT    |



# Assessment of South Africa Subantarctic Prince Edward Islands patagonian toothfish

*(Dissostichus eleginoides)*

Assessment ID: MARAM-PTOOTHFISHPEI-1960-2008-DEDECKER  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/199>

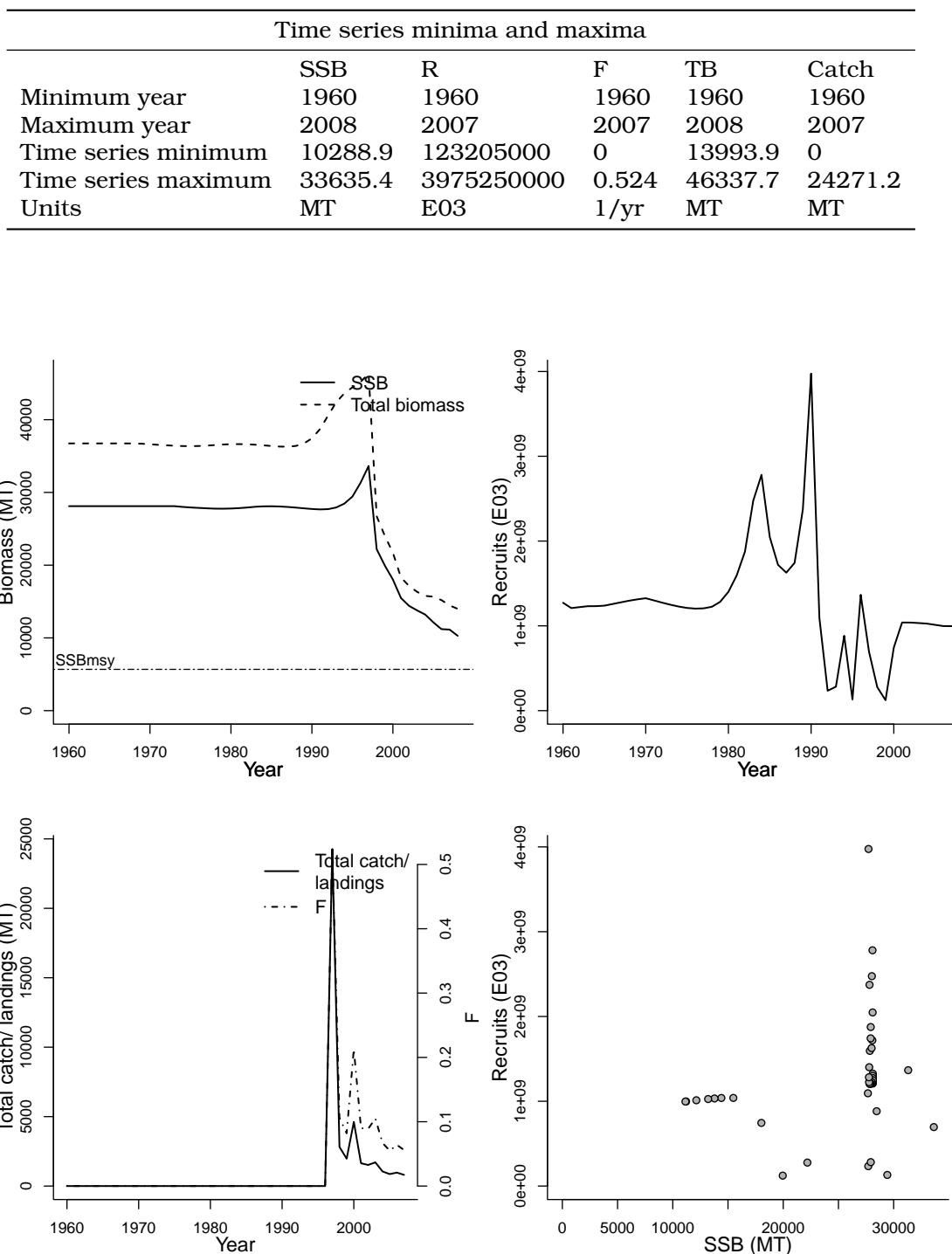
Area ID: South Africa-DETMCM-PEI

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Brandao, A  |
| Assessment method  | Age-structured surplus production model   |
| Publication year   | 2007  |
| Timeseries span    | 1960-2008   |
| Document           | Branch-SA-Toothfish-2007.pdf (pdf in database)  |
| Recorder           | DEDECKER  |
| Date entered       | 2009-03-05  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                  |       |       | secondary LME          |       | tertiary LME |  |  |  |
|------------------------------|-------|-------|------------------------|-------|--------------|--|--|--|
| -96 - Subantarctic High Seas |       |       | na                     | na    |              |  |  |  |
| Parameter                    | Value | Units | Reference points       |       |              |  |  |  |
| SSB-AGE-yr                   | 13+   | yr    | Parameter              | Value | Units        |  |  |  |
| SSB-SEX-sex                  | 1     | sex   | SSBmsy-MT (SSB)        | 5678  | MT           |  |  |  |
| REC-AGE-yr                   | 0     | yr    | SSB0-MT (SSB)          | 28111 | MT           |  |  |  |
| TB-AGE-yr                    | 6+    | yr    | MSY-MT (TB)            | 2366  | MT           |  |  |  |
| A50-yr                       | 13    | yr    | BH-h-dimless           | 0.75  | dimless      |  |  |  |
| M-1/yr                       | 0.13  | 1/yr  | $SSB_{2008}/SSB_{msy}$ | 1.812 |              |  |  |  |
| F-AGE-yr                     |       |       |                        |       |              |  |  |  |
| M                            |       |       |                        |       |              |  |  |  |
| L50-cm                       |       |       |                        |       |              |  |  |  |



# Assessment of South Africa south african abalone (*Haliotis midae*)

Assessment ID: MARAM-SAABALONESA-1951-2008-PLAGANYI  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/198>

Area ID: South Africa-DETMCM-SA

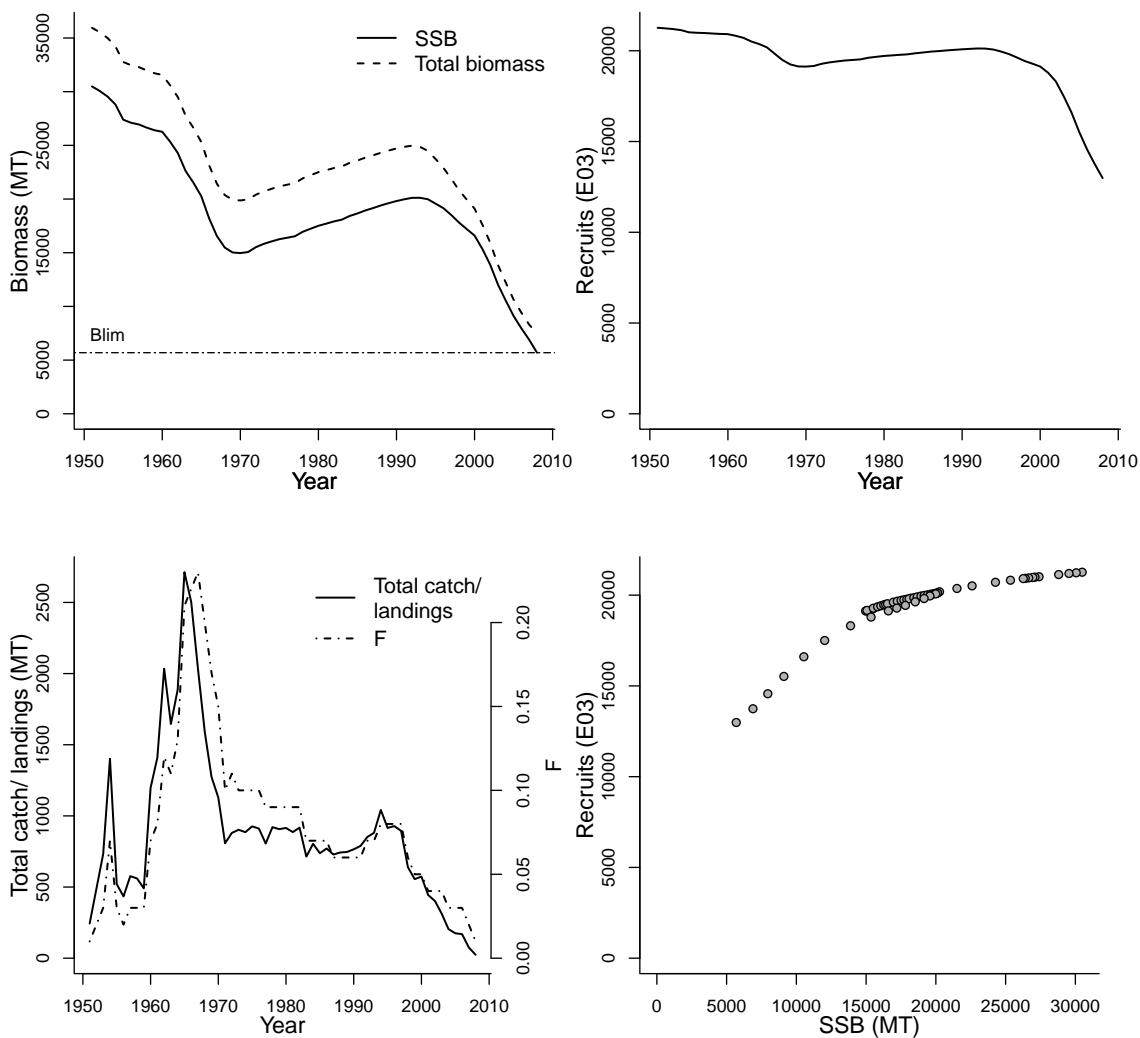
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Plaganyi, E.E.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2008  |
| Timeseries span    | 1951-2008   |
| Document           | Plaganyi-SA-abalone-2008NOVSWG-AB21.pdf (pdf in database)   |
| Recorder           | PLAGANYI  |
| Date entered       | 2009-03-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME    |       | tertiary LME |
|-----------------------|-------|-------|------------------|-------|--------------|
| 29 - Benguela Current |       |       | na               | na    |              |
| Parameter             | Value | Units | Reference points |       |              |
| SSB-AGE-yr            | 7+    | yr    | Parameter        | Value | Units        |
| SSB-SEX-sex           | 0     | sex   | Blim-MT (TB)     | 5689  | MT           |
| REC-AGE-yr            | 0     | yr    | SSB0-MT (SSB)    | 30489 | MT           |
| F-AGE-yr-yr           | 3+    | yr-yr |                  |       |              |
| TB-AGE-yr             | 1+    | yr    |                  |       |              |
| A50-yr                | 5     | yr    |                  |       |              |
| M-1/yr                | 0.326 | 1/yr  |                  |       |              |
| M                     |       |       |                  |       |              |
| L50-cm                |       |       |                  |       |              |

| Time series minima and maxima |          |         |      |         |
|-------------------------------|----------|---------|------|---------|
|                               | SSB      | R       | F    | TB      |
| Minimum year                  | 1951     | 1951    | 1951 | 1951    |
| Maximum year                  | 2008     | 2008    | 2008 | 2008    |
| Time series minimum           | 5689.03  | 12985   | 0.01 | 7467.76 |
| Time series maximum           | 30488.96 | 21263.9 | 0.23 | 35949.1 |
| Units                         | MT       | E03     | 1/yr | MT      |



# Assessment of South Africa sardine (*Sardinops sagax*)

Assessment ID:MARAM-SARDSA-1984-2006-deMoor

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/127>

Area ID: South Africa-DETMCM-SA

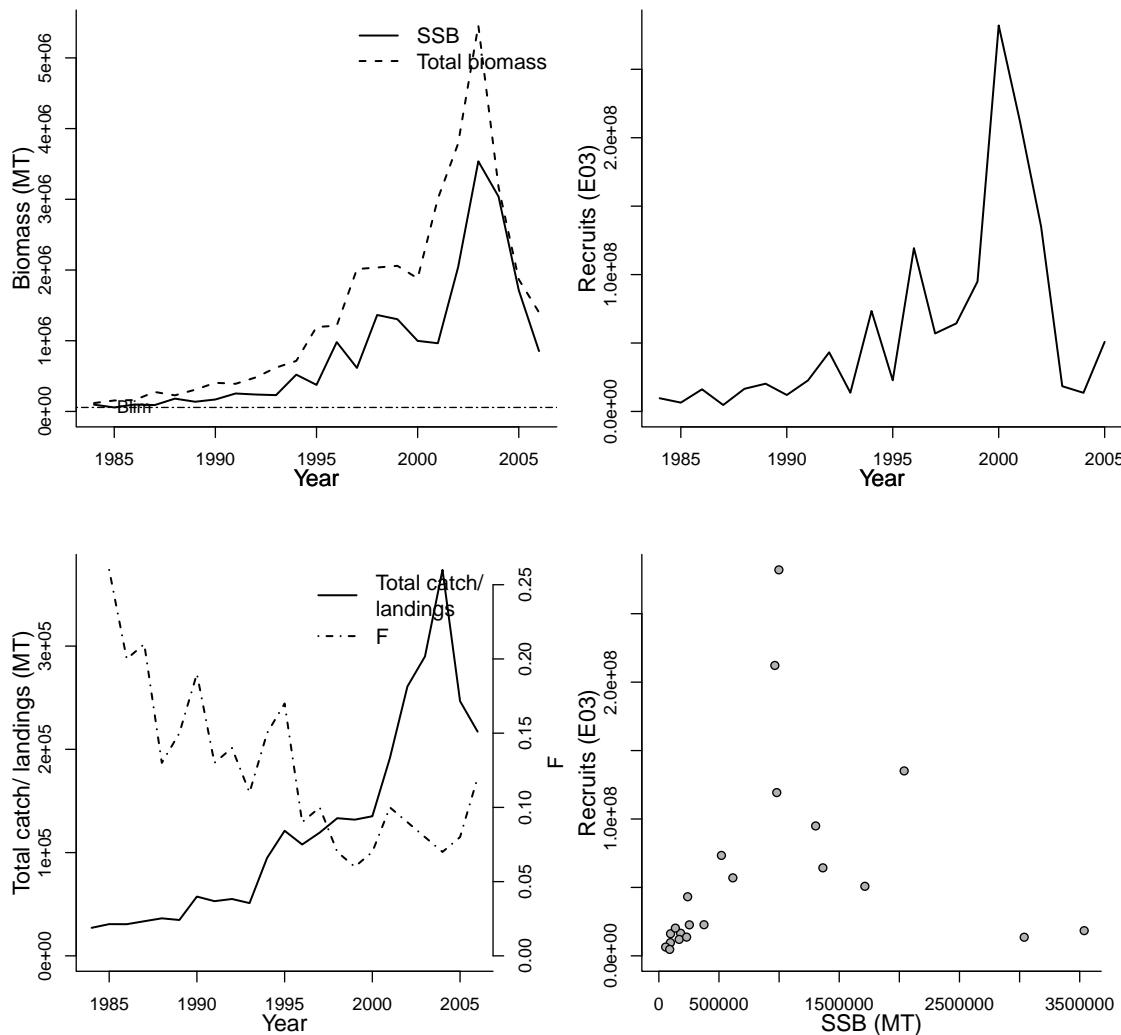
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Cunningham, C.L.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2007  |
| Timeseries span    | 1984-2006   |
| Document           | deMoorSASardineAssessment-Sep07.pdf<br>(pdf not in database)  |
| Recorder           | deMoor  |
| Date entered       | 2009-01-16  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       |       | secondary LME           |         |       | tertiary LME |  |  |
|-----------------------|-------|-------|-------------------------|---------|-------|--------------|--|--|
| 29 - Benguela Current |       |       | 30 - Agulhas Current    |         |       | na           |  |  |
| Parameter             | Value | Units | Reference points        |         |       |              |  |  |
| SSB-AGE-yr            | 2-5+  | yr    | Parameter               | Value   | Units |              |  |  |
| SSB-SEX-sex           | 0     | sex   | Blim-MT (TB)            | 56500   | MT    |              |  |  |
| REC-AGE-yr            | 0     | yr    | SSB0-MT (SSB)           | 3446300 | MT    |              |  |  |
| F-AGE-yr-yr           |       | yr-yr | SSBtarget-MT (SSB)      | 594700  | MT    |              |  |  |
| TB-AGE-yr             | 1+    | yr    | SSBexceptional-MT (SSB) | 300000  | MT    |              |  |  |
| A50-yr                | 2     | yr    |                         |         |       |              |  |  |
| M-1/yr                | 0.8   | 1/yr  |                         |         |       |              |  |  |
| M                     |       |       |                         |         |       |              |  |  |
| L50-cm                |       |       |                         |         |       |              |  |  |

| Time series minima and maxima |             |           |      |             |        |
|-------------------------------|-------------|-----------|------|-------------|--------|
|                               | SSB         | R         | F    | TB          | Catch  |
| Minimum year                  | 1984        | 1984      | 1985 | 1984        | 1984   |
| Maximum year                  | 2006        | 2005      | 2006 | 2006        | 2006   |
| Time series minimum           | 56511.907   | 4696000   | 0.06 | 118365.989  | 27154  |
| Time series maximum           | 3537069.855 | 282029000 | 0.26 | 5458516.579 | 373811 |
| Units                         | MT          | E03       | 1/yr | MT          | MT     |



# Assessment of South Africa South coast southern spiny lobster (*Palinurus gilchristi*)

Assessment ID: MARAM-SSLOBSTERSASC-1973-2008-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/133>

Area ID: South Africa-DETMCM-SASC

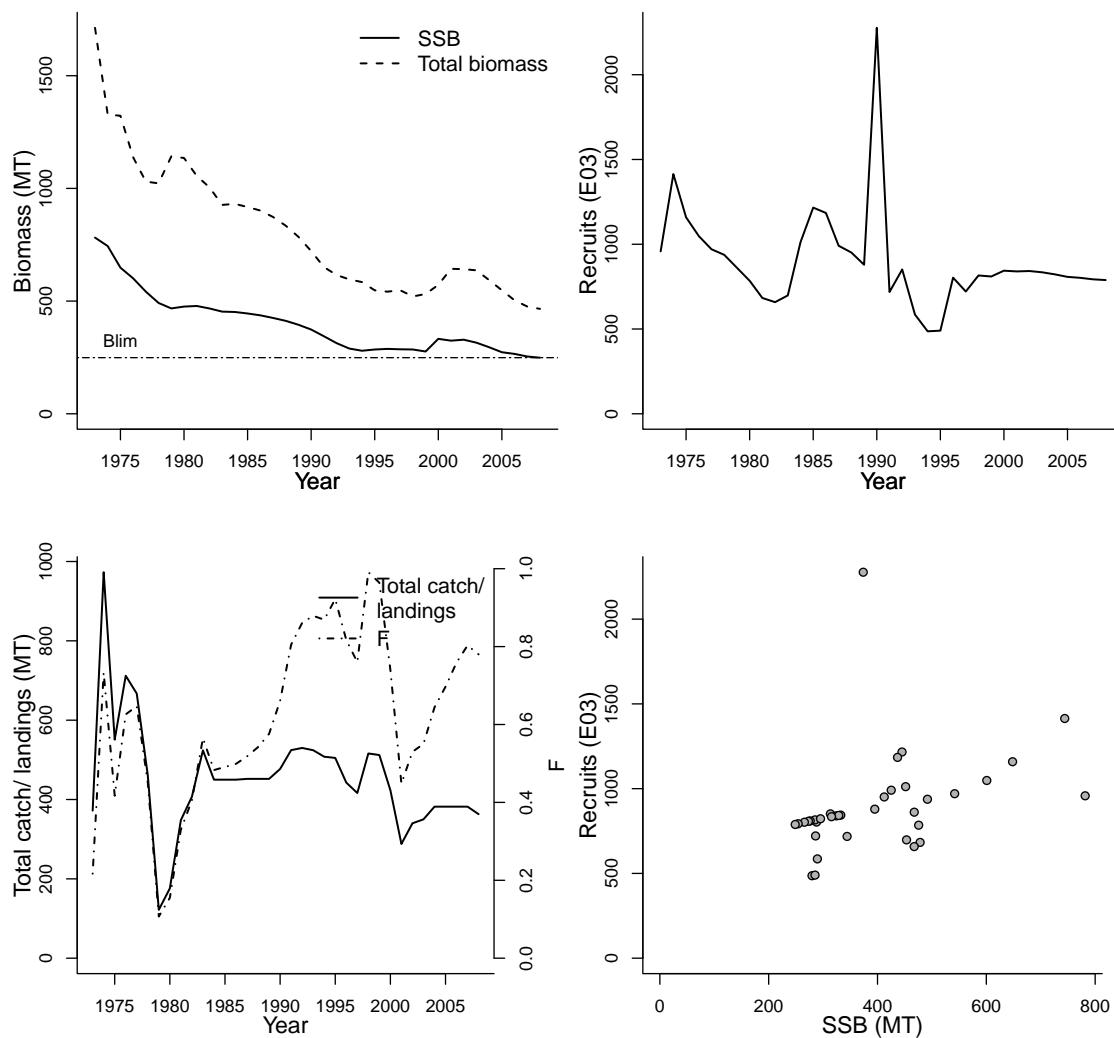
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | DETMCM  |
| Assessment group   | Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa |
| Assessment authors | Johnston, S.J.  |
| Assessment method  | Statistical catch-at-age model  |
| Publication year   | 2008  |
| Timeseries span    | 1973-2008   |
| Document           | Johnston-SASouthRockLobster-2008.pdf (pdf in database)  |
| Recorder           | Johnston  |
| Date entered       | 2009-02-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          |       |       | secondary LME    |       |         | tertiary LME |  |  |
|----------------------|-------|-------|------------------|-------|---------|--------------|--|--|
| 30 - Agulhas Current |       |       | na               |       |         | na           |  |  |
| Parameter            | Value | Units | Reference points |       |         |              |  |  |
| SSB-SEX-sex          | 1     | sex   | Parameter        | Value | Units   |              |  |  |
| REC-AGE-yr           | 0     | yr    | Blim-MT (TB)     | 249   | MT      |              |  |  |
| F-AGE-yr-yr          | 0+    | yr-yr | SSB0-MT (SSB)    | 782   | MT      |              |  |  |
| A50-yr               | 10    | yr    | R0-E00           | 958   | E00     |              |  |  |
| M-1/yr               | 0.1   | 1/yr  | BH-h-dimless     | 0.713 | dimless |              |  |  |
| TB-AGE-yr            | 0+    | yr    |                  |       |         |              |  |  |
| SSB-AGE-yr           |       |       |                  |       |         |              |  |  |
| M                    |       |       |                  |       |         |              |  |  |
| L50-cm               |       |       |                  |       |         |              |  |  |

| Time series minima and maxima |        |         |       |         |       |
|-------------------------------|--------|---------|-------|---------|-------|
|                               | SSB    | R       | F     | TB      | Catch |
| Minimum year                  | 1973   | 1973    | 1973  | 1973    | 1973  |
| Maximum year                  | 2008   | 2008    | 2008  | 2008    | 2008  |
| Time series minimum           | 248.77 | 486.42  | 0.107 | 465.44  | 122   |
| Time series maximum           | 781.67 | 2276.74 | 0.991 | 1712.58 | 973   |
| Units                         | MT     | E03     | 1/yr  | MT      | MT    |



# Assessment of Grand Banks american plaice (*Hippoglossoides platessoides*)

Assessment ID:NAFO-SC-AMPL3LNO-1955-2007-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/7>

Area ID: multinational-NAFO-3LNO

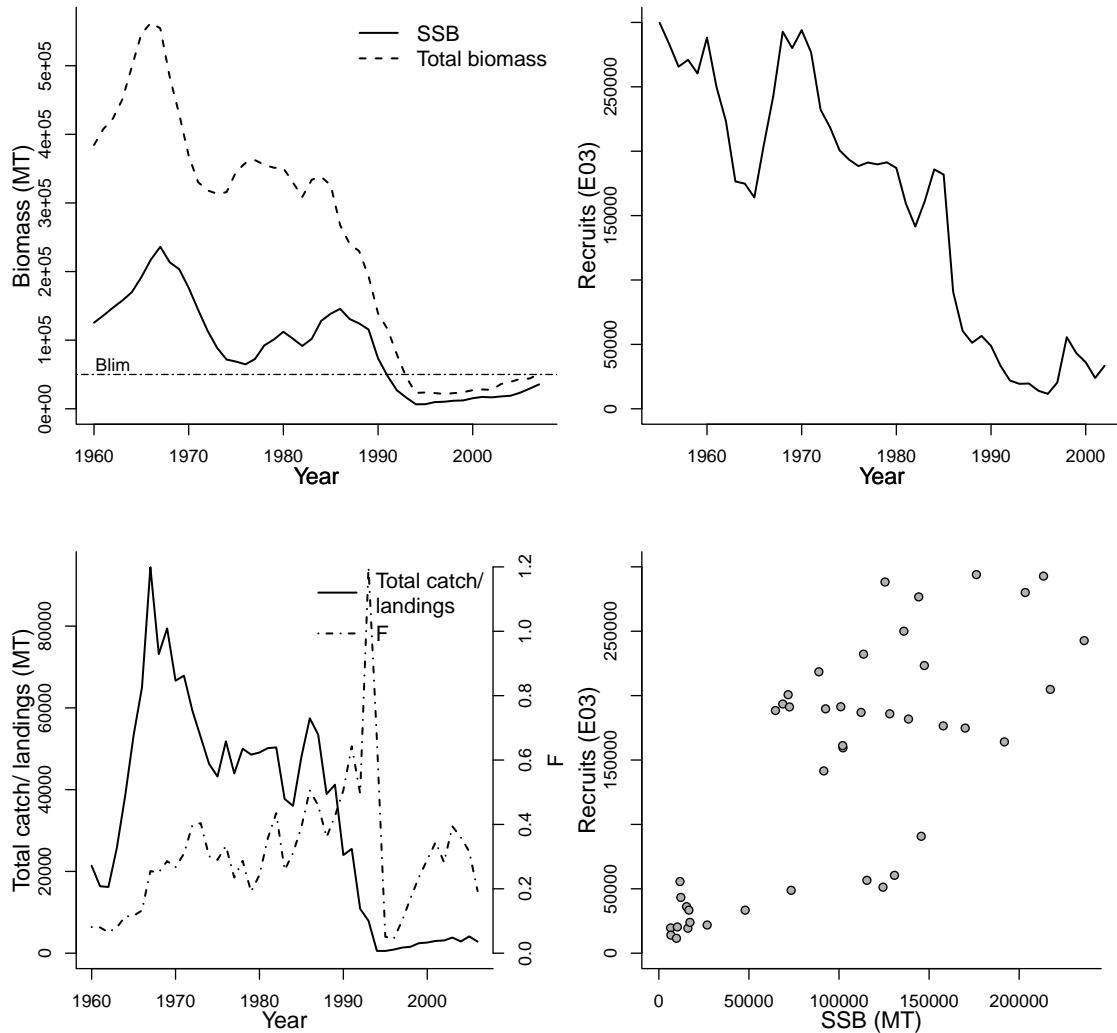
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NAFO  |
| Assessment group   | NAFO Scientific Council                             |
| Assessment authors | Dwyer, K.S.   |
| Assessment method  | Virtual Population Analysis                         |
| Publication year   | 2007  |
| Timeseries span    | 1955-2007   |
| Document           | NAFO-GrandBanks-AmPlaice-2007.pdf (pdf in database) |
| Recorder           | BAUM  |
| Date entered       | 2008-04-07  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |
|---------------------------------|-------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |
| Parameter                       | Value | Units | Reference points |              |
| SSB-AGE-yr                      |       | yr    |                  |              |
| SSB-SEX-sex                     | 0     | sex   |                  |              |
| REC-AGE-yr                      | 5     | yr    | Parameter        |              |
| F-AGE-yr-yr                     | 9-14  | yr-yr | Value            |              |
| TB-AGE-yr                       | 5+    | yr    | MORATOR-yr-yr    | 1995-2007    |
| M-1/T                           | 0.2   | 1/T   | Blim-MT (TB)     | 50000        |
| M-1/T                           | 0.53  | 1/T   | F0.1-1/yr (F)    | MT           |
| M-1/T                           | 0.2   | 1/T   |                  | 0.19         |
| M                               |       |       |                  | 1/yr         |
| A50-yr                          |       |       |                  |              |
| L50-cm                          |       |       |                  |              |

| Time series minima and maxima |        |        |       |           |
|-------------------------------|--------|--------|-------|-----------|
|                               | SSB    | R      | F     | TB        |
| Minimum year                  | 1960   | 1955   | 1960  | 1960      |
| Maximum year                  | 2007   | 2002   | 2006  | 2007      |
| Time series minimum           | 6526   | 11570  | 0.044 | 21499.54  |
| Time series maximum           | 236083 | 299711 | 1.199 | 562561.92 |
| Units                         | MT     | E03    | 1/T   | MT        |



# Assessment of Flemish Cap american plaice (*Hippoglossoides platessoides*)

Assessment ID:NAFO-SC-AMPL3M-1960-2007-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/352>

Area ID: multinational-NAFO-3M

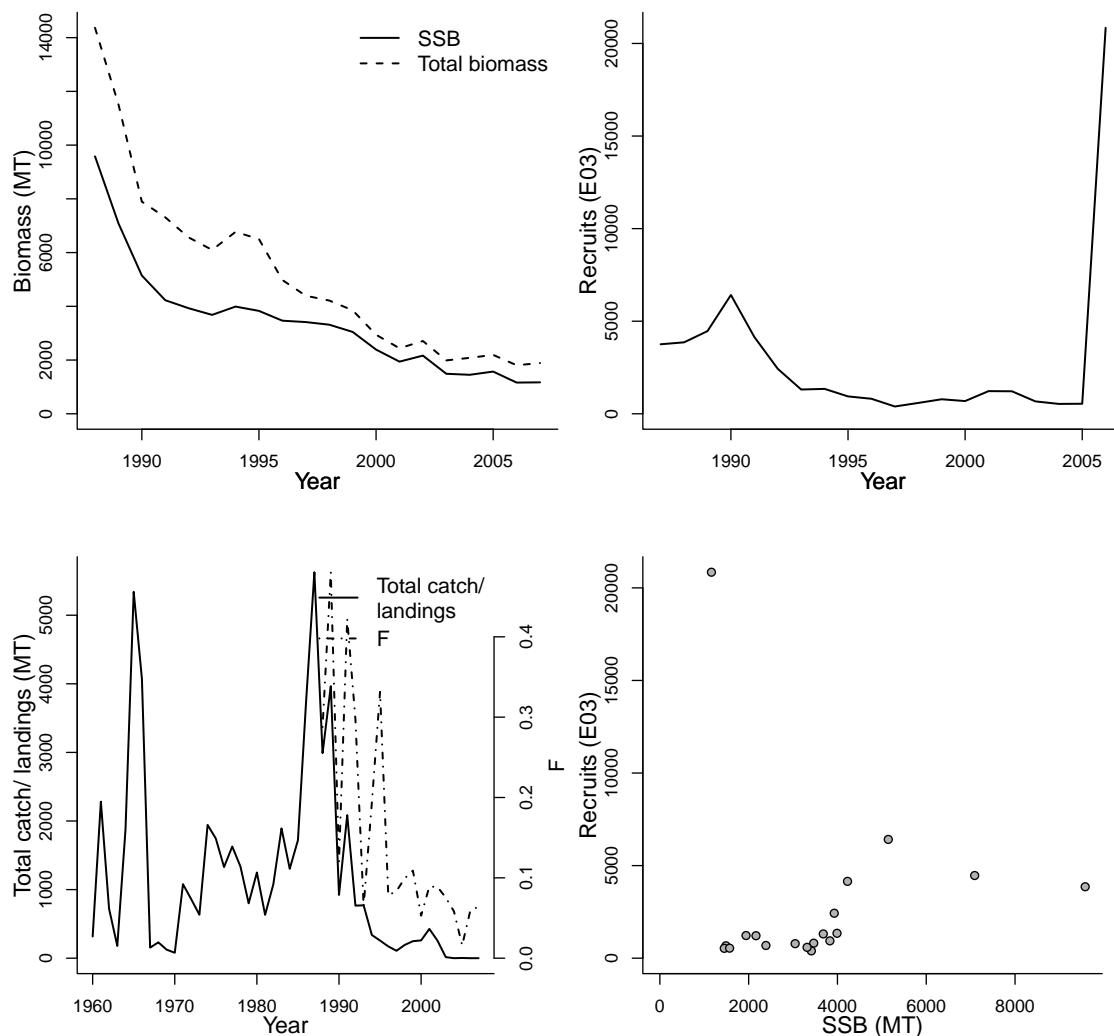
## General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | NAFO                                       |
| Assessment group   | NAFO Scientific Council                    |
| Assessment authors | Alpoim, R.                                 |
| Assessment method  | Extended Survivor Analysis                 |
| Publication year   | 2008                                       |
| Timeseries span    | 1960-2007                                  |
| Document           | NAFO-AMPL3M-2008.pdf (pdf not in database) |
| Recorder           | BAUM                                       |
| Date entered       | 2009-05-28                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |
|---------------------------------|-------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |
| Parameter                       | Value | Units |                  |              |
| SSB-AGE-yr                      | 5+    | yr    |                  |              |
| SSB-SEX-sex                     | NA    | sex   | Reference points |              |
| REC-AGE-yr                      | 1     | yr    | Parameter        | Value        |
| F-AGE-yr-yr                     | 3-13  | yr-yr |                  | Units        |
| TB-AGE-yr                       | NA    | yr    | Fmax-1/yr (F)    | 0.346        |
| M-1/T                           | 0.2   | 1/T   | MORATOR-yr-yr    | 1996-2008    |
| M                               |       |       | F0.1-1/yr (F)    | 0.162        |
| A50-yr                          |       |       |                  | 1/yr         |
| L50-cm                          |       |       |                  |              |

| Time series minima and maxima |      |       |        |       |       |
|-------------------------------|------|-------|--------|-------|-------|
|                               | SSB  | R     | F      | TB    | Catch |
| Minimum year                  | 1988 | 1987  | 1988   | 1988  | 1960  |
| Maximum year                  | 2007 | 2006  | 2007   | 2007  | 2007  |
| Time series minimum           | 1162 | 394   | 0.0159 | 1807  | 0     |
| Time series maximum           | 9580 | 20846 | 0.4804 | 14366 | 5627  |
| Units                         | MT   | E03   | 1/T    | MT    | MT    |



# Assessment of Flemish Cap atlantic cod (*Gadus morhua*)

Assessment ID:NAFO-SC-COD3M-1959-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/350>

Area ID: multinational-NAFO-3M

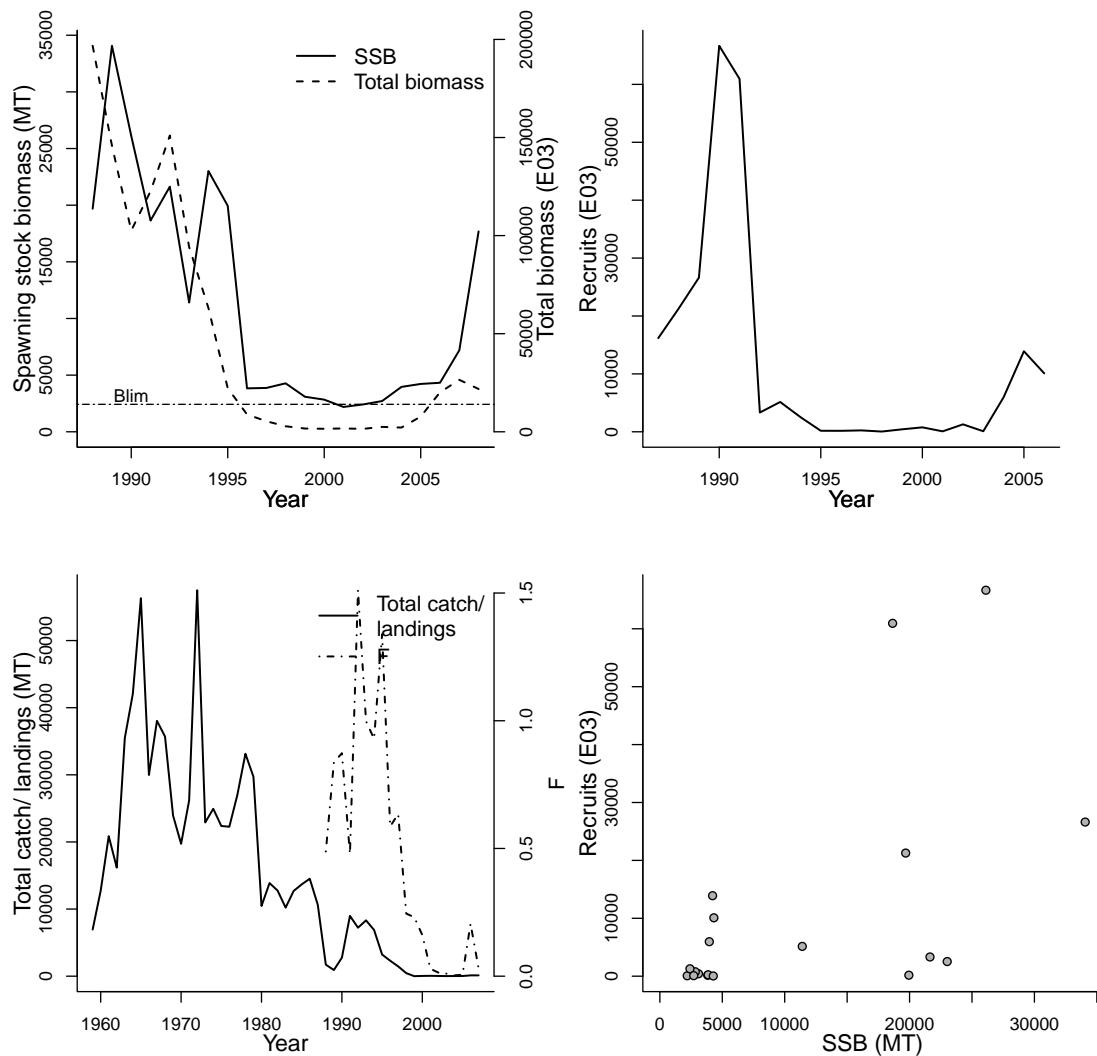
## General assessment details.

| Detail             | Value                                  |
|--------------------|--|
| Management body    | NAFO                                   |
| Assessment group   | NAFO Scientific Council                |
| Assessment authors | Fernandez, C.                          |
| Assessment method  | Bayesian VPA hybrid                    |
| Publication year   | 2008                                   |
| Timeseries span    | 1959-2008                              |
| Document           | NAFO-3M-COD-2008.pdf (pdf in database) |
| Recorder           | BAUM                                   |
| Date entered       | 2009-05-28                             |
| Date last loaded   | 2011-07-25                             |
| QA/QC complete     | YES                                    |
| Date approved      | 2011-06-10                             |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |
|---------------------------------|-------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |
| Parameter                       | Value | Units |                  |              |
| SSB-AGE-yr                      | 3.5   | yr    |                  |              |
| SSB-SEX-sex                     | NA    | sex   | Reference points |              |
| REC-AGE-yr                      | 1     | yr    | Parameter        | Value        |
| F-AGE-yr-yr                     | 3-5   | yr-yr | MORATOR-yr-yr    | 1999-2008    |
| TB-AGE-yr                       | 2+    | yr    | Blim-MT (TB)     | 14000        |
| M                               |       |       |                  | yr-yr        |
| A50-yr                          |       |       |                  | MT           |
| L50-cm                          |       |       |                  |              |

| Time series minima and maxima |       |       |       |        |
|-------------------------------|-------|-------|-------|--------|
|                               | SSB   | R     | F     | TB     |
| Minimum year                  | 1988  | 1987  | 1988  | 1988   |
| Maximum year                  | 2008  | 2006  | 2007  | 2008   |
| Time series minimum           | 2191  | 39    | 0.003 | 1472   |
| Time series maximum           | 34066 | 66664 | 1.511 | 196748 |
| Units                         | MT    | E03   | 1/T   | E03    |
|                               |       |       |       | MT     |



# Assessment of Southern Grand Banks atlantic cod (*Gadus morhua*)

Assessment ID:NAFO-SC-COD3NO-1953-2007-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/153>

Area ID: multinational-NAFO-3NO

## General assessment details.

| Detail             | Value                                   |
|--------------------|---|
| Management body    | NAFO                                    |
| Assessment group   | NAFO Scientific Council                 |
| Assessment authors | Morgan, M.J.                            |
| Assessment method  | Sequential Population Analysis          |
| Publication year   | 2007                                    |
| Timeseries span    | 1953-2007                               |
| Document           | NAFO-3NO-COD-2007.pdf (pdf in database) |
| Recorder           | BAUM                                    |
| Date entered       | 2008-04-07                              |
| Date last loaded   | 2011-07-25                              |
| QA/QC complete     | YES                                     |
| Date approved      | 2009-06-08                              |

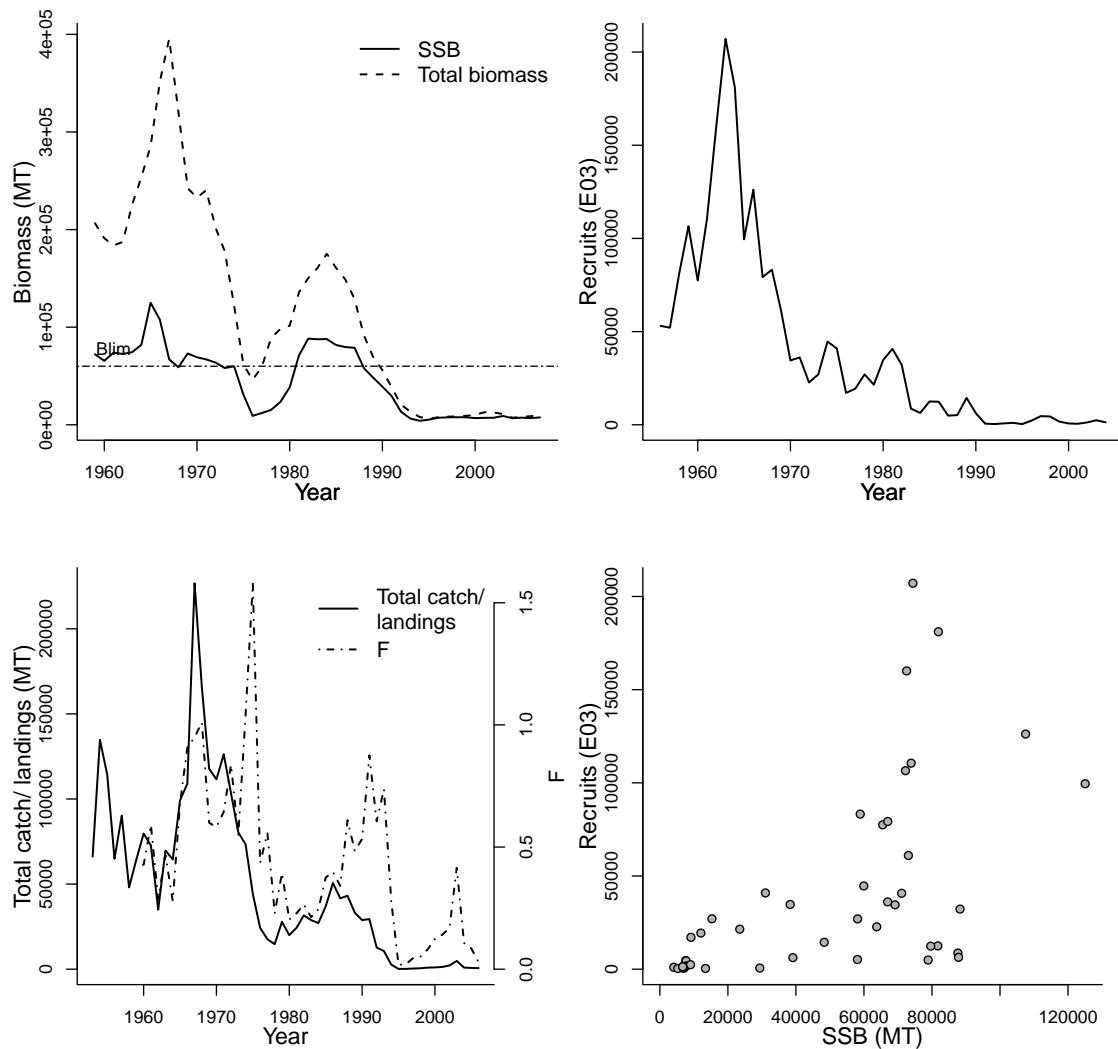
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       | secondary LME | tertiary LME |
|---------------------------------|-------|---------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       | na            | na           |
| <hr/>                           |       |               |              |
| Parameter                       | Value | Units         |              |
| M-1/T                           | 0.2   | 1/T           |              |
| SSB-AGE-yr                      | 3-12  | yr            |              |
| SSB-SEX-sex                     | 0     | sex           |              |
| REC-AGE-yr                      | 3     | yr            |              |
| F-AGE-yr-yr                     | 6-9   | yr-yr         |              |
| TB-AGE-yr                       | 3+    | yr            |              |
| M                               |       |               |              |
| A50-yr                          |       |               |              |
| L50-cm                          |       |               |              |

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| Reference points |           |       |
|------------------|-----------|-------|
| Parameter        | Value     | Units |
| MORATOR-yr-yr    | 1994-2007 | yr-yr |
| Blim-MT (TB)     | 60000     | MT    |

| Time series minima and maxima |        |        |       |        |
|-------------------------------|--------|--------|-------|--------|
|                               | SSB    | R      | F     | TB     |
| Minimum year                  | 1959   | 1956   | 1959  | 1959   |
| Maximum year                  | 2007   | 2004   | 2006  | 2007   |
| Time series minimum           | 4097   | 369    | 0.018 | 6066   |
| Time series maximum           | 125043 | 207114 | 1.58  | 395437 |
| Units                         | MT     | E03    | 1/T   | MT     |



**Assessment of NAFO divisions 01ABCDEF**  
**greenland halibut (*Reinhardtius hippoglossoides*)**  
 Assessment ID:NAFO-SC-GHAL01ABCDEF-1987-2006-PREFONTAINE  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/4>

Area ID: multinational-NAFO-01ABCDEF

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NAFO   |
| Assessment group   | NAFO Scientific Council                              |
| Assessment authors | Jrgensen, O.A.                                       |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1987-2006  |
| Document           | NAFO-GHAL01ABCDEF-2007.pdf (pdf not in database)     |
| Recorder           | PREFONTAINE  |
| Date entered       | 2008-02-13   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-08   |

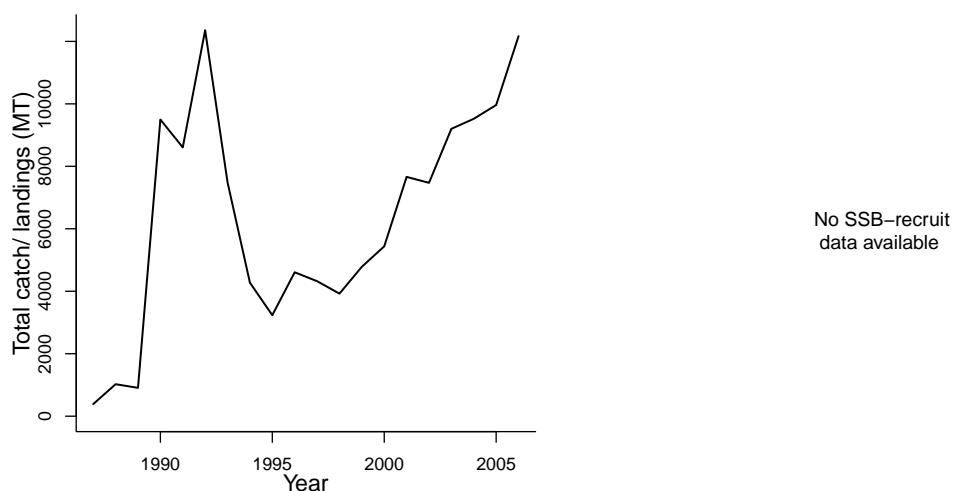
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME               |       | secondary LME |                  | tertiary LME |
|---------------------------|-------|---------------|------------------|--------------|
| 18 - West Greenland Shelf |       | na            | na               | na           |
| Parameter                 | Value | Units         |                  |              |
| REC-AGE-yr                | 1     | yr            |                  |              |
| SSB-AGE-yr                |       |               |                  |              |
| SSB-SEX-sex               |       |               |                  |              |
| TB-AGE-yr                 |       |               | Reference points |              |
| F-AGE-yr                  |       |               | Parameter        | Value        |
| M                         |       |               |                  | Units        |
| A50-yr                    |       |               | Fmsy-1/yr (F)    | 0.22         |
| L50-cm                    |       |               |                  | 1/yr         |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    | 1987  |
| Maximum year                  |     |   |   |    | 2006  |
| Time series minimum           |     |   |   |    | 388   |
| Time series maximum           |     |   |   |    | 12358 |
| Units                         |     |   |   |    | MT    |

No biomass data available

No recruitment data available



**Assessment of Labrador Shelf - Grand Banks  
greenland halibut (*Reinhardtius hippoglossoides*)**  
 Assessment ID:NAFO-SC-GHAL23KLMNO-1960-2006-PREFONTAINE  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/164>

Area ID: multinational-NAFO-23KLMNO

General assessment details.

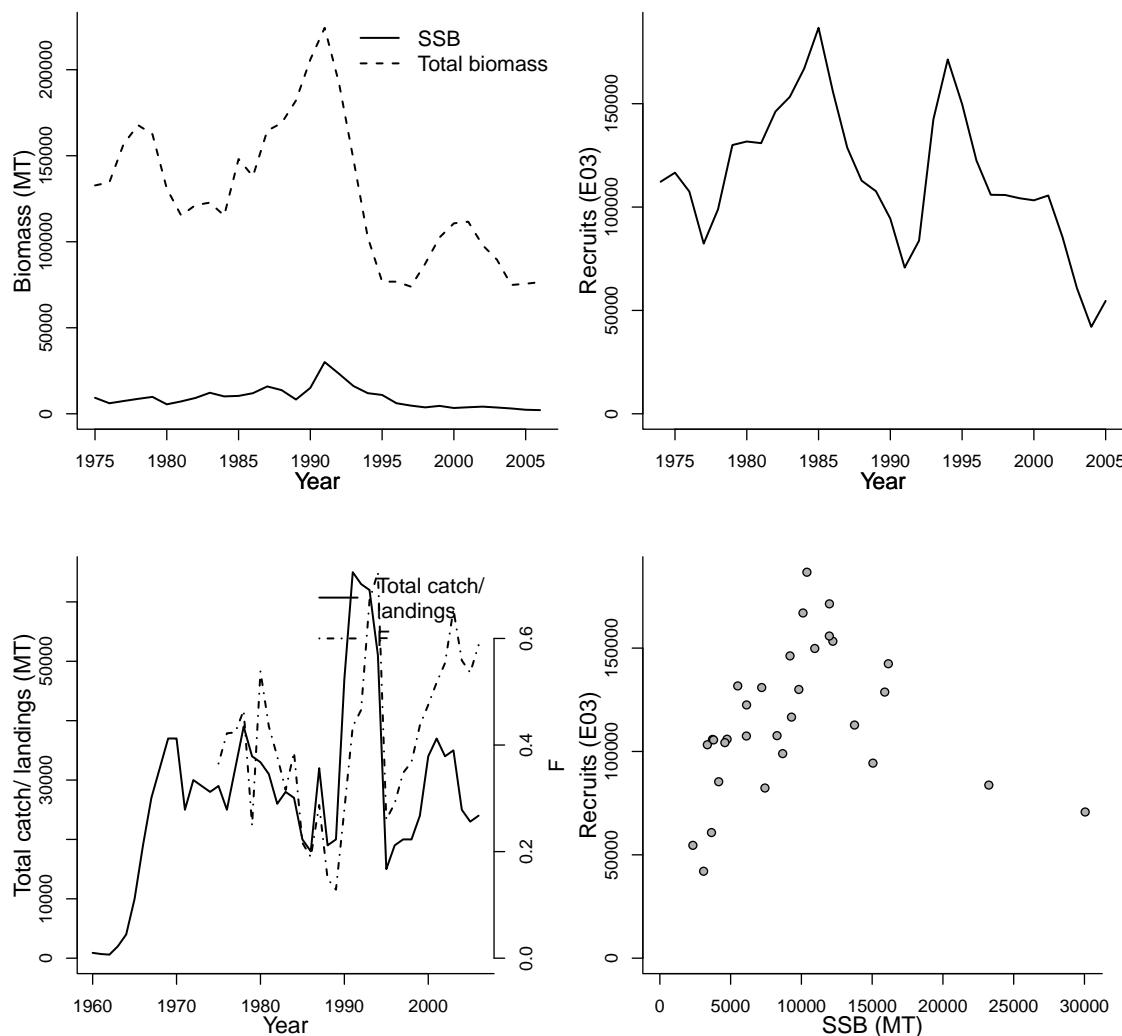
| Detail             | Value   |
|--------------------|---|
| Management body    | NAFO  |
| Assessment group   | NAFO Scientific Council                         |
| Assessment authors | Healey, B.P.                                    |
| Assessment method  | Extended Survivor Analysis                      |
| Publication year   | 2007  |
| Timeseries span    | 1960-2006                                       |
| Document           | NAFO-GHAL23KLMNO-2007.pdf (pdf not in database) |
| Recorder           | PREFONTAINE                                     |
| Date entered       | 2008-07-02                                      |
| Date last loaded   | 2011-07-27                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |       |       | secondary LME    | tertiary LME |
|---------------------------------|-------|-------|------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |       |       | na               | na           |
| Parameter                       | Value | Units |                  |              |
| M-1/T                           | 0.2   | 1/T   |                  |              |
| SSB-AGE-yr                      | 10+   | yr    |                  |              |
| F-AGE-yr-yr                     | 5-10  | yr-yr | Reference points |              |
| TB-AGE-yr                       | 5+    | yr    | Parameter        | Value        |
| REC-AGE                         |       |       |                  | Units        |
| SSB-SEX-sex                     |       |       | F0.1-1/T         | 0.14         |
| M                               |       |       | Fmax-1/T         | 1/T          |
| A50-yr                          |       |       |                  |              |
| L50-cm                          |       |       |                  |              |

Time series minima and maxima

|                     | SSB   | R      | F      | TB     | Catch |
|---------------------|-------|--------|--------|--------|-------|
| Minimum year        | 1975  | 1974   | 1975   | 1975   | 1960  |
| Maximum year        | 2006  | 2005   | 2006   | 2006   | 2006  |
| Time series minimum | 2129  | 42064  | 0.1285 | 73913  | 600   |
| Time series maximum | 30050 | 186714 | 0.7243 | 224362 | 65000 |
| Units               | MT    | E03    | 1/T    | MT     | MT    |



# Assessment of West Greenland redfish species (*Sebastes spp*)

Assessment ID:NAFO-SC-REDFISHSPP1-1965-2004-PREFONTAINE  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/172>

Area ID: multinational-NAFO-1

## General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | NAFO                                     |
| Assessment group   | NAFO Scientific Council                  |
| Assessment authors | Siegstad, Helle                          |
| Assessment method  | Unknown                                  |
| Publication year   | 2005                                     |
| Timeseries span    | 1965-2004                                |
| Document           | NAFO-RED1-2005.pdf (pdf not in database) |
| Recorder           | PREFONTAINE                              |
| Date entered       | 2008-07-29                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME               | secondary LME | tertiary LME |
|---------------------------|---------------|--------------|
| 18 - West Greenland Shelf | na            | na           |
| Parameter                 | Value         | Units        |
| REC-AGE                   |               |              |
| SSB-AGE-yr                |               |              |
| SSB-SEX-sex               |               |              |
| TB-AGE-yr                 |               |              |
| F-AGE-yr                  |               |              |
| M                         |               |              |
| A50-yr                    |               |              |
| L50-cm                    |               |              |

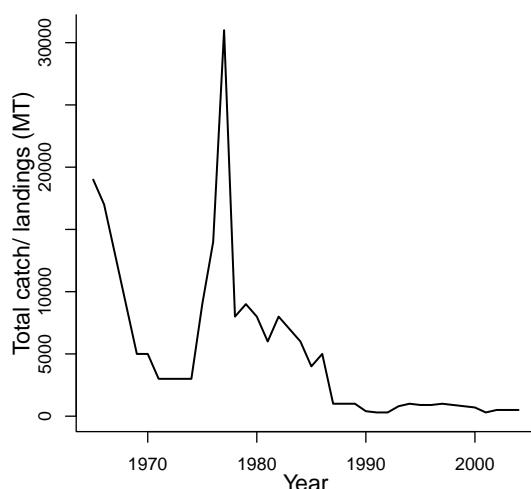
| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |       |
|-------------------------------|-----|---|---|-------|
|                               | SSB | R | F | TB    |
| Minimum year                  |     |   |   | Catch |
| Maximum year                  |     |   |   | 1965  |
| Time series minimum           |     |   |   | 2004  |
| Time series maximum           |     |   |   | 300   |
| Units                         |     |   |   | 31000 |
|                               |     |   |   | MT    |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of N and SW Grand Banks redfish species (*Sebastes spp*)

Assessment ID:NAFO-SC-REDFISHSPP3LN-1959-2008-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/351>

Area ID: multinational-NAFO-3LN

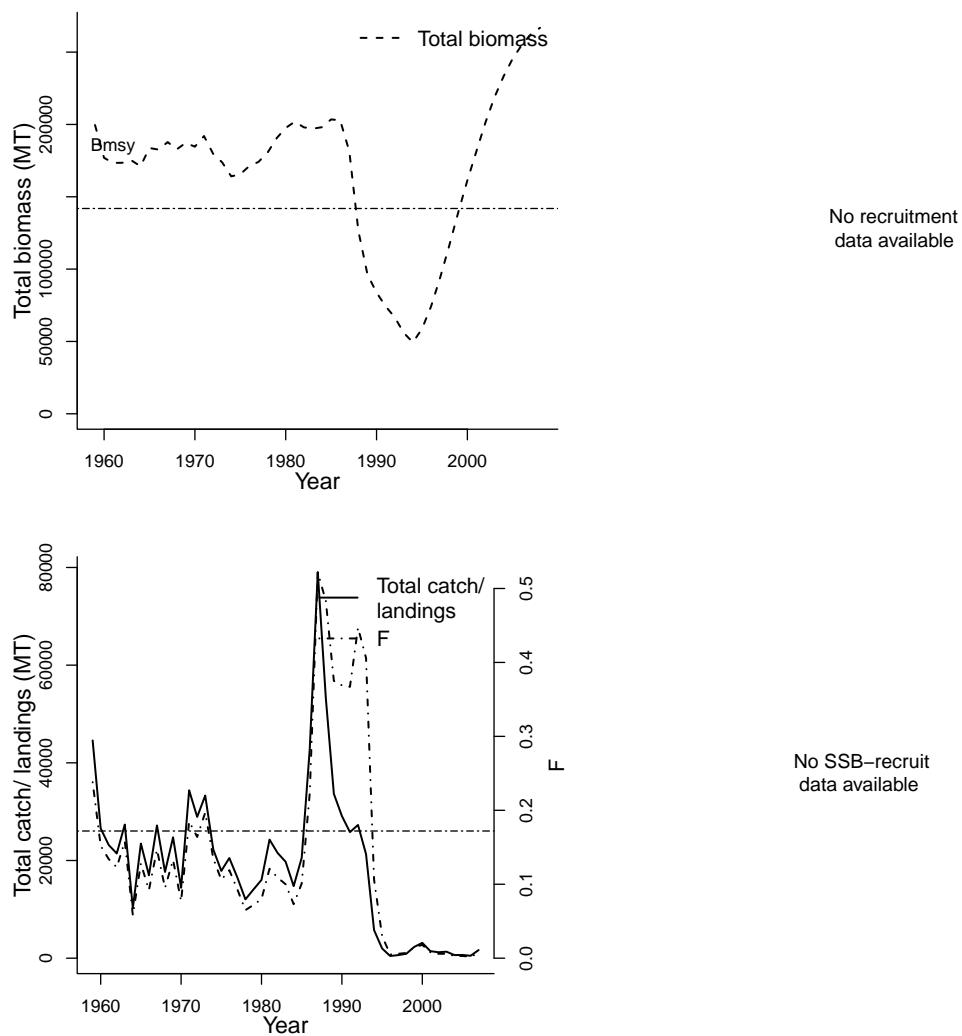
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NAFO   |
| Assessment group   | NAFO Scientific Council                        |
| Assessment authors | vila de Melo, A. M.                            |
| Assessment method  | Surplus production model                       |
| Publication year   | 2008   |
| Timeseries span    | 1959-2008                                      |
| Document           | NAFO-3LN-Redfishspp-2008.pdf (pdf in database) |
| Recorder           | BAUM   |
| Date entered       | 2009-05-28                                     |
| Date last loaded   | 2011-07-25                                     |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                     |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |          |       | secondary LME       | tertiary LME |
|---------------------------------|----------|-------|---------------------|--------------|
| 9 - Newfoundland-Labrador Shelf |          |       | na                  | na           |
| Parameter                       | Value    | Units | Reference points    |              |
| TB-AGE-yr                       | ALL AGES | yr    | Parameter           | Value        |
| L50-cm                          | 30-34    | cm    | Fmsy-1/T (F)        | 0.172        |
| REC-AGE                         |          |       | MORATOR-yr-yr       | 1998-2008    |
| SSB-AGE-yr                      |          |       | MSY-MT (TB)         | 24440        |
| SSB-SEX-sex                     |          |       | Bmsy-MT (TB)        | 141900       |
| F-AGE-yr                        |          |       | $TB_{2008}/B_{msy}$ | 1.880        |
| M                               |          |       | $F_{2007}/F_{msy}$  | 0.041        |
| A50-yr                          |          |       |                     |              |

| Time series minima and maxima |       |   |        |       |
|-------------------------------|-------|---|--------|-------|
|                               | SSB   | R | F      | TB    |
| Minimum year                  |       |   | 1959   | 1959  |
| Maximum year                  |       |   | 2007   | 2008  |
| Time series minimum           | 0.002 |   | 49370  | 451   |
| Time series maximum           | 0.522 |   | 266800 | 79031 |
| Units                         | 1/T   |   | MT     | MT    |



# Assessment of Flemish Cap redfish species (*Sebastes spp*)

Assessment ID:NAFO-SC-REDFISHSPP3M-1985-2006-PREFONTAINE  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/173>

Area ID: multinational-NAFO-3M

## General assessment details.

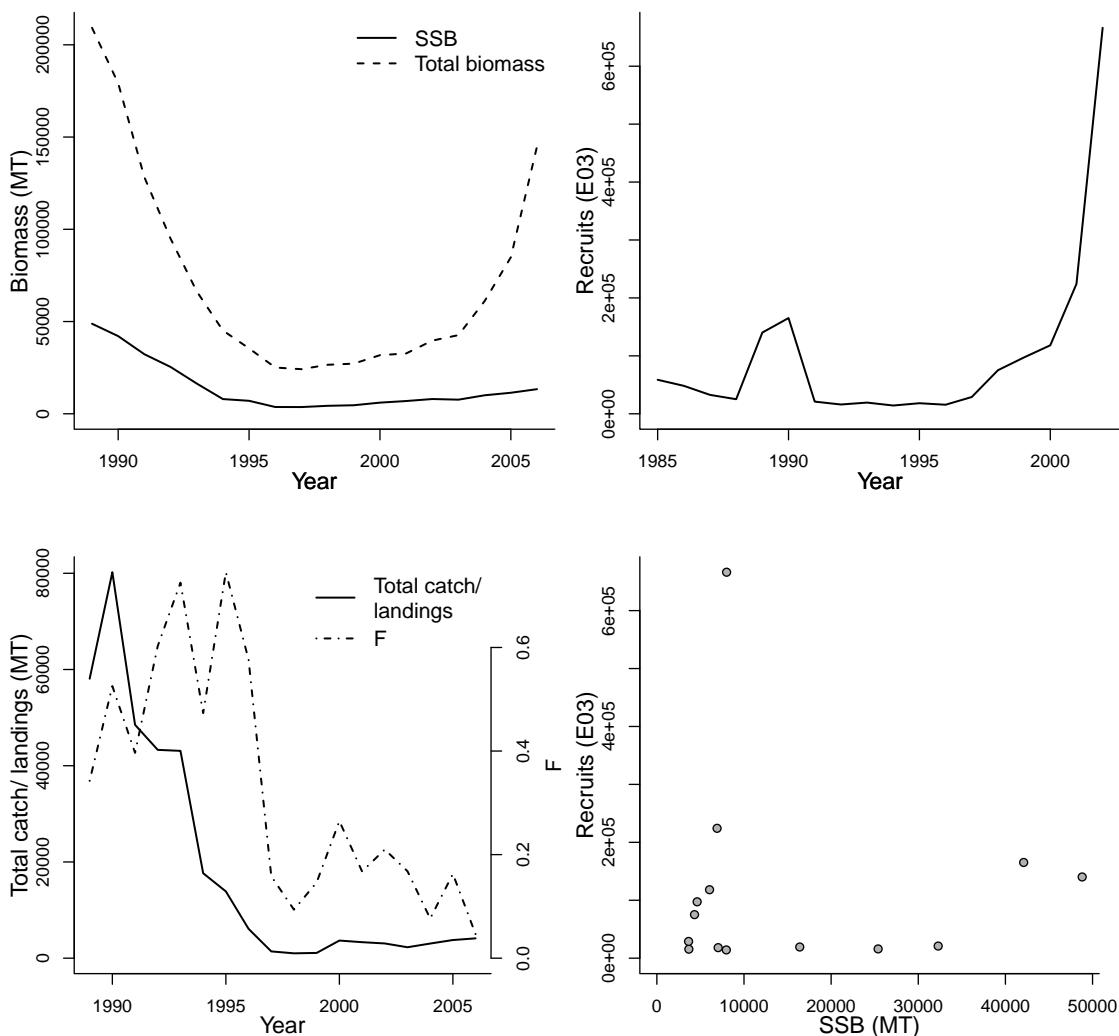
| Detail             | Value                                     |
|--------------------|---|
| Management body    | NAFO                                      |
| Assessment group   | NAFO Scientific Council                   |
| Assessment authors | vila de Melo, A. M.                       |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1985-2006                                 |
| Document           | NAFO-RED3M-2007.pdf (pdf not in database) |
| Recorder           | PREFONTAINE                               |
| Date entered       | 2008-07-28                                |
| Date last loaded   | 2011-07-27                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     |           | secondary LME | tertiary LME     |
|---------------------------------|-----------|---------------|------------------|
| 9 - Newfoundland-Labrador Shelf |           | na            | na               |
| Parameter                       | Value     | Units         |                  |
| SSB-SEX-sex                     | 1         | sex           |                  |
| REC-AGE-yr                      | 4         | yr            |                  |
| F-AGE-yr-yr                     | 6-16      | yr-yr         |                  |
| TB-AGE-yr                       | 4+        | yr            | Reference points |
| A50-yr                          | 14.5      | yr            | Parameter        |
| M-1/T                           | 0.1       | 1/T           | Value            |
| SSB-AGE-yr                      | AVAILABLE | yr            | Units            |
| M                               |           |               |                  |
| L50-cm                          |           |               |                  |

## Time series minima and maxima

|                     | SSB   | R      | F      | TB     | Catch |
|---------------------|-------|--------|--------|--------|-------|
| Minimum year        | 1989  | 1985   | 1989   | 1989   | 1989  |
| Maximum year        | 2006  | 2002   | 2006   | 2006   | 2006  |
| Time series minimum | 3640  | 14280  | 0.0463 | 24168  | 1011  |
| Time series maximum | 48810 | 666290 | 0.7453 | 209223 | 80223 |
| Units               | MT    | E03    | 1/T    | MT     | MT    |



# Assessment of Grand Banks yellowtail flounder (*Limanda ferruginea*)

Assessment ID:NAFO-SC-YELL3LNO-1960-2009-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/353>

Area ID: multinational-NAFO-3LNO

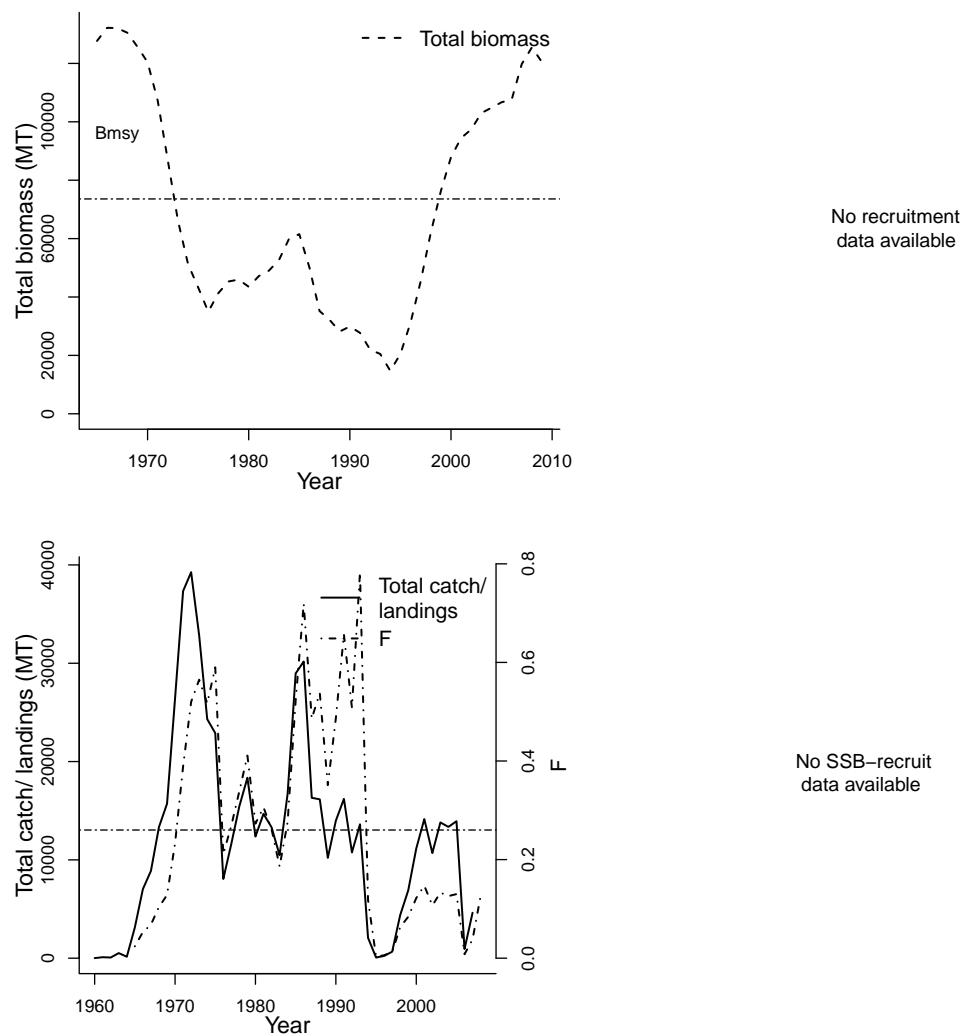
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NAFO   |
| Assessment group   | NAFO Scientific Council                      |
| Assessment authors | Parsons, D.M.                                |
| Assessment method  | Surplus production model                     |
| Publication year   | 2008   |
| Timeseries span    | 1960-2009                                    |
| Document           | NAFO-YELL3LNO-2008.pdf (pdf not in database) |
| Recorder           | BAUM   |
| Date entered       | 2009-05-28                                   |
| Date last loaded   | 2011-07-25                                   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME       |           | tertiary LME |
|--------------------------------------|-----------|-------|---------------------|-----------|--------------|
| 7 - Northeast U.S. Continental Shelf |           |       | 8 - Scotian Shelf   | na        |              |
| Parameter                            | Value     | Units | Reference points    |           |              |
| A50-yr                               | AVAILABLE | yr    | Fmsy-1/yr (F)       | 0.26      | 1/yr         |
| L50-cm                               | AVAILABLE | cm    | MORATOR-yr-yr       | 1994-1997 | yr-yr        |
| REC-AGE                              |           |       | MSY-MT (TB)         | 18820     | MT           |
| SSB-AGE-yr                           |           |       | Bmsy-MT (TB)        | 73580     | MT           |
| SSB-SEX-sex                          |           |       | $TB_{2009}/B_{msy}$ | 1.636     |              |
| TB-AGE-yr                            |           |       | $F_{2008}/F_{msy}$  | 0.485     |              |
| F-AGE-yr                             |           |       |                     |           |              |
| M                                    |           |       |                     |           |              |

| Time series minima and maxima |     |   |       |        |       |
|-------------------------------|-----|---|-------|--------|-------|
|                               | SSB | R | F     | TB     | Catch |
| Minimum year                  |     |   | 1965  | 1965   | 1960  |
| Maximum year                  |     |   | 2008  | 2009   | 2007  |
| Time series minimum           |     |   | 0.003 | 14700  | 7     |
| Time series maximum           |     |   | 0.783 | 132200 | 39259 |
| Units                         |     |   | ratio | MT     | MT    |



# Assessment of Gulf of Maine / Georges Bank acadian redfish (*Sebastes fasciatus*)

Assessment ID:NEFSC-ACADREDGOMGB-1913-2007-MILLER

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/317>

Area ID: USA-NMFS-5YZ

## General assessment details.

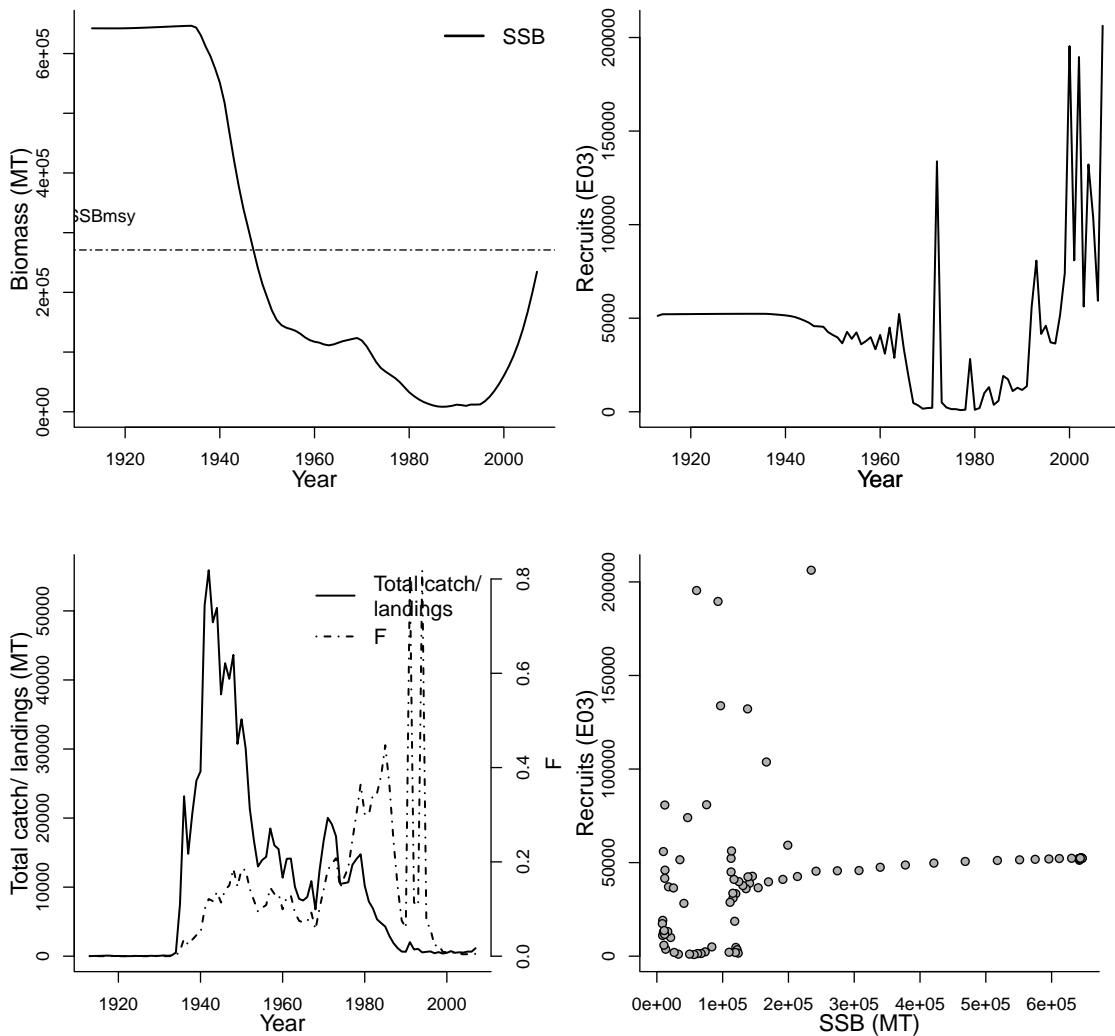
| Detail             | Value                                    |
|--------------------|--|
| Management body    | NMFS                                     |
| Assessment group   | Northeast Fisheries Science Center       |
| Assessment authors | Northeast Fisheries Science Center       |
| Assessment method  | Age Structured Assessment Program        |
| Publication year   | 2008                                     |
| Timeseries span    | 1913-2007                                |
| Document           | AcadianRedfish2008.pdf (pdf in database) |
| Recorder           | MILLER                                   |
| Date entered       | 2009-04-16                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                            | tertiary LME |
|--------------------------------------|-------|-------|--|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                                       | na           |
| Parameter                            | Value | Units |  |              |
| F-AGE-yr-yr                          | 10+   | yr-yr |  |              |
| A50-yr                               | 5     | yr    |  |              |
| M-1/yr                               | 0.05  | 1/yr  |  |              |
|                                      |       |       | Reference points                         |              |
| Parameter                            |       |       | Value                                    | Units        |
| REC-AGE                              |       |       | F40%-1/T                                 | 1/T          |
| SSB-AGE-yr                           |       |       | SSB <sub>m</sub> sy-MT (SSB)             | MT           |
| SSB-SEX-sex                          |       |       | MSY-MT (TB)                              | MT           |
| TB-AGE-yr                            |       |       | SSB <sub>2007</sub> /SSB <sub>m</sub> sy | 0.866        |
| M                                    |       |       |  |              |
| L50-cm                               |       |       |  |              |

## Time series minima and maxima

|                     | SSB     | R       | F        | TB | Catch |
|---------------------|---------|---------|----------|----|-------|
| Minimum year        | 1913    | 1913    | 1913     |    | 1913  |
| Maximum year        | 2007    | 2007    | 2007     |    | 2007  |
| Time series minimum | 8350.72 | 879.565 | 1.08e-05 |    | 7     |
| Time series maximum | 646477  | 206252  | 0.818588 |    | 55892 |
| Units               | MT      | E03     | 1/yr     |    | MT    |



# Assessment of Gulf of Maine / Georges Bank american plaice (*Hippoglossoides platessoides*)

Assessment ID:NEFSC-AMPL5YZ-1960-2008-OBRIEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/112>

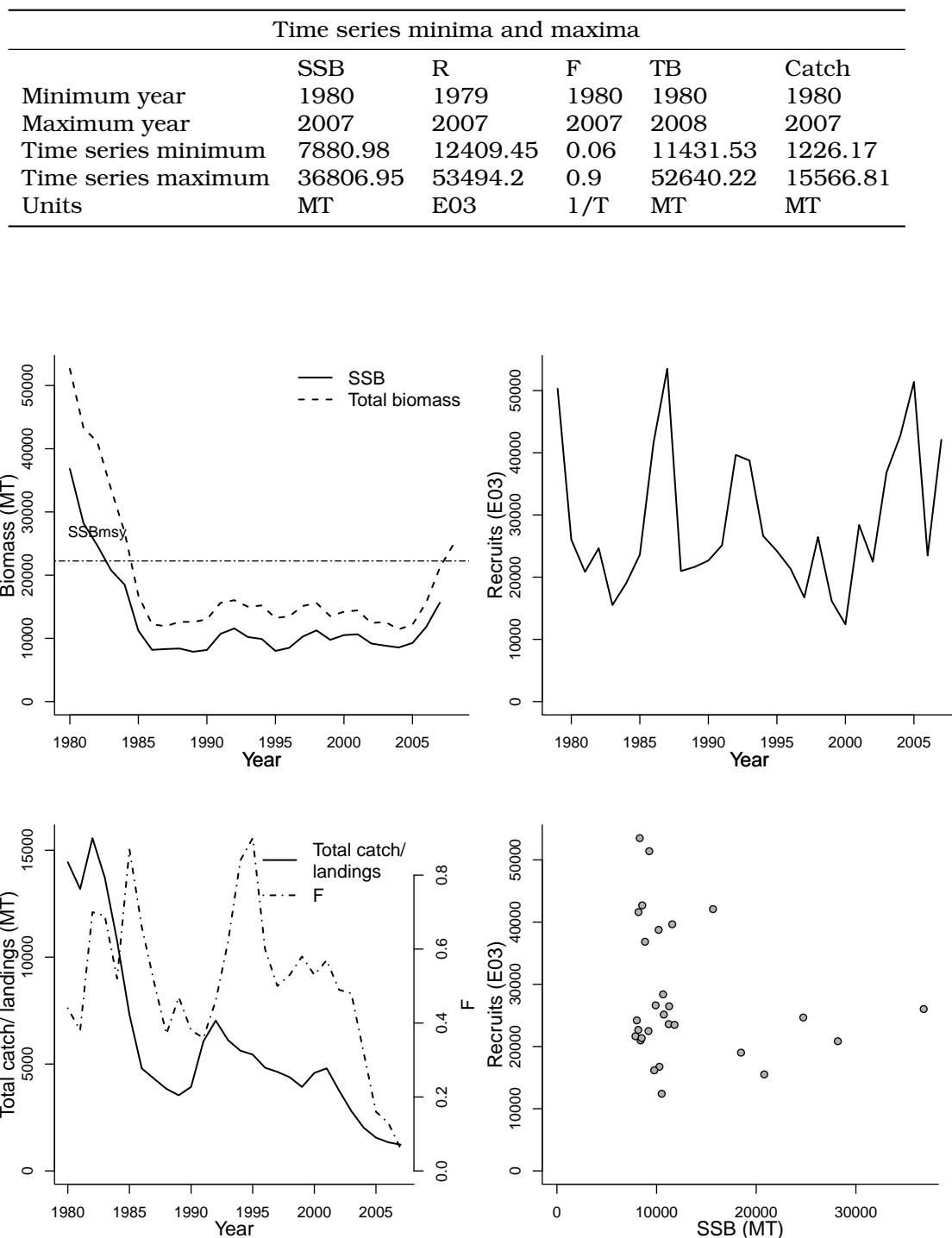
Area ID: USA-NMFS-5YZ

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northeast Fisheries Science Center  |
| Assessment authors | Northeast Fisheries Science Center  |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2008  |
| Timeseries span    | 1960-2008   |
| Document           | .pdf (pdf not in database)  |
| Recorder           | OBRIEN  |
| Date entered       | 2008-12-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           | secondary LME | tertiary LME     |
|--------------------------------------|-----------|---------------|------------------|
| 7 - Northeast U.S. Continental Shelf |           | na            | na               |
| Parameter                            | Value     | Units         |                  |
| SSB-AGE-yr                           | 1+        | yr            |                  |
| SSB-SEX-sex                          | NA        | sex           |                  |
| REC-AGE-yr                           | 1         | yr            |                  |
| F-AGE-yr-yr                          | 6-9       | yr-yr         | Reference points |
| TB-AGE-yr                            | 1+        | yr            | Parameter        |
| A50-yr                               | AVAILABLE | yr            | Value            |
| M-1/T                                | 0.2       | 1/T           | Units            |
| M                                    |           |               |                  |
| L50-cm                               |           |               |                  |



# Assessment of Gulf of Maine / Georges Bank atlantic halibut (*Hippoglossus hippoglossus*)

Assessment ID:NEFSC-ATHAL5YZ-1800-2007-COL

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/274>

Area ID: USA-NMFS-5YZ

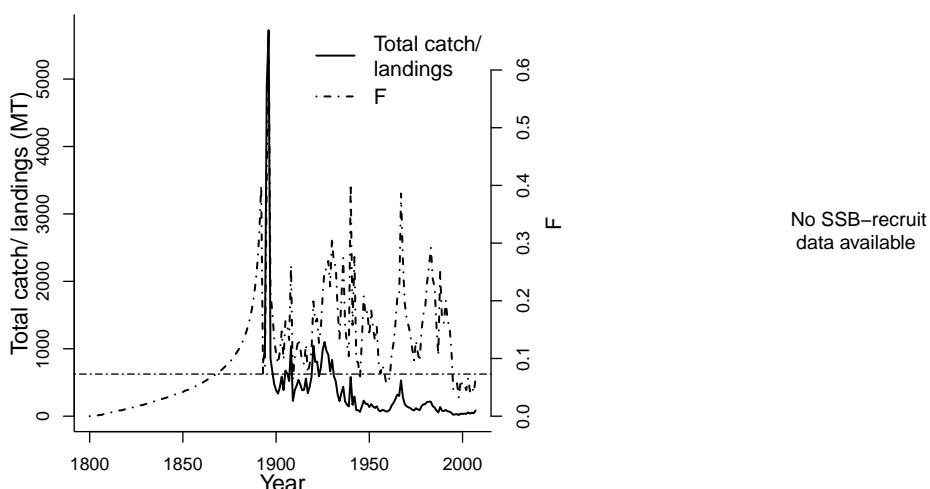
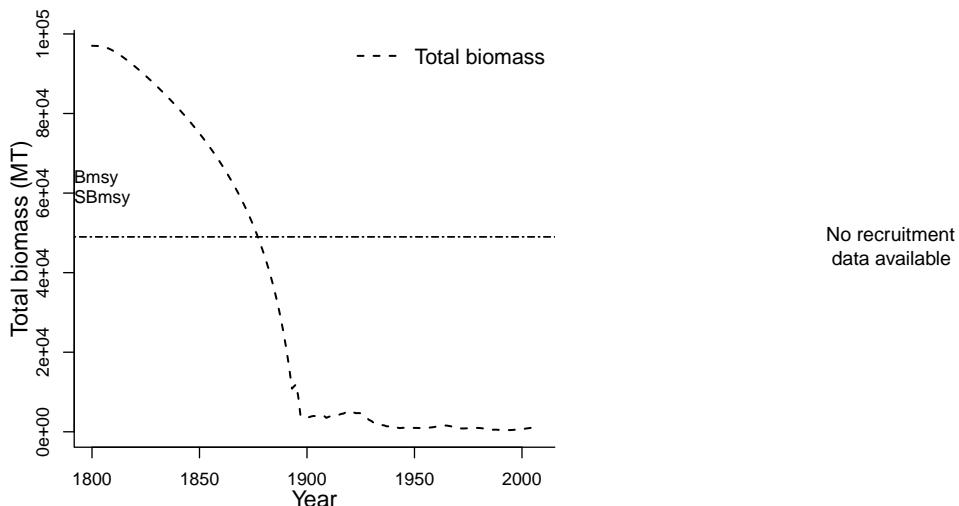
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northeast Fisheries Science Center                    |
| Assessment authors | Northeast Fisheries Science Center                    |
| Assessment method  | Unknown   |
| Publication year   | 2008  |
| Timeseries span    | 1800-2007   |
| Document           | AtlanticHalibut5YZ2008.pdf .pdf (pdf not in database) |
| Recorder           | COL   |
| Date entered       | 2009-04-15  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |       |
|--------------------------------------|-------|-------|---------------------|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |       |
| Parameter                            | Value | Units | Reference points    |              |       |
| Parameter                            | Value | Units | Parameter           | Value        | Units |
| A50-yr                               | 7     | yr    | Bmsy-MT (TB)        | 49000        | MT    |
| L50-cm                               | 103   | cm    | Bpa-MT (TB)         | 24000        | MT    |
| M-1/yr                               | 0.15  | 1/yr  | F0.1-1/yr (F)       | 0.073        | 1/yr  |
| REC-AGE                              |       |       | Fmax-1/yr (F)       | 0.114        | 1/yr  |
| SSB-AGE-yr                           |       |       | Fmsy-1/yr (F)       | 0.073        | 1/yr  |
| SSB-SEX-sex                          |       |       | SPRF0-E01 (SPR)     | 109          | E01   |
| TB-AGE-yr                            |       |       | F40%-1/T            | 0.064        | 1/T   |
| F-AGE-yr                             |       |       | SSBmsy-MT (SSB)     | 49000        | MT    |
| M                                    |       |       | MSY-MT (TB)         | 3500         | MT    |
|                                      |       |       | Frebuild-1/T (F)    | 0.044        | 1/T   |
|                                      |       |       | $TB_{2007}/B_{msy}$ | 0.026        |       |
|                                      |       |       | $F_{2007}/F_{msy}$  | 0.890        |       |

| Time series minima and maxima |       |   |          |         |       |
|-------------------------------|-------|---|----------|---------|-------|
|                               | SSB   | R | F        | TB      | Catch |
| Minimum year                  |       |   | 1800     | 1800    | 1893  |
| Maximum year                  |       |   | 2007     | 2007    | 2007  |
| Time series minimum           | 0     |   | 426.61   | 18.33   |       |
| Time series maximum           | 0.669 |   | 97018.46 | 5724.72 |       |
| Units                         | 1/T   |   | MT       | MT      |       |



# Assessment of Atlantic Coast bluefish (*Pomatomus saltatrix*)

Assessment ID:NEFSC-BLUEFISHATLC-1981-2007-SHEPHERD

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/303>

Area ID: USA-NMFS-ATLC

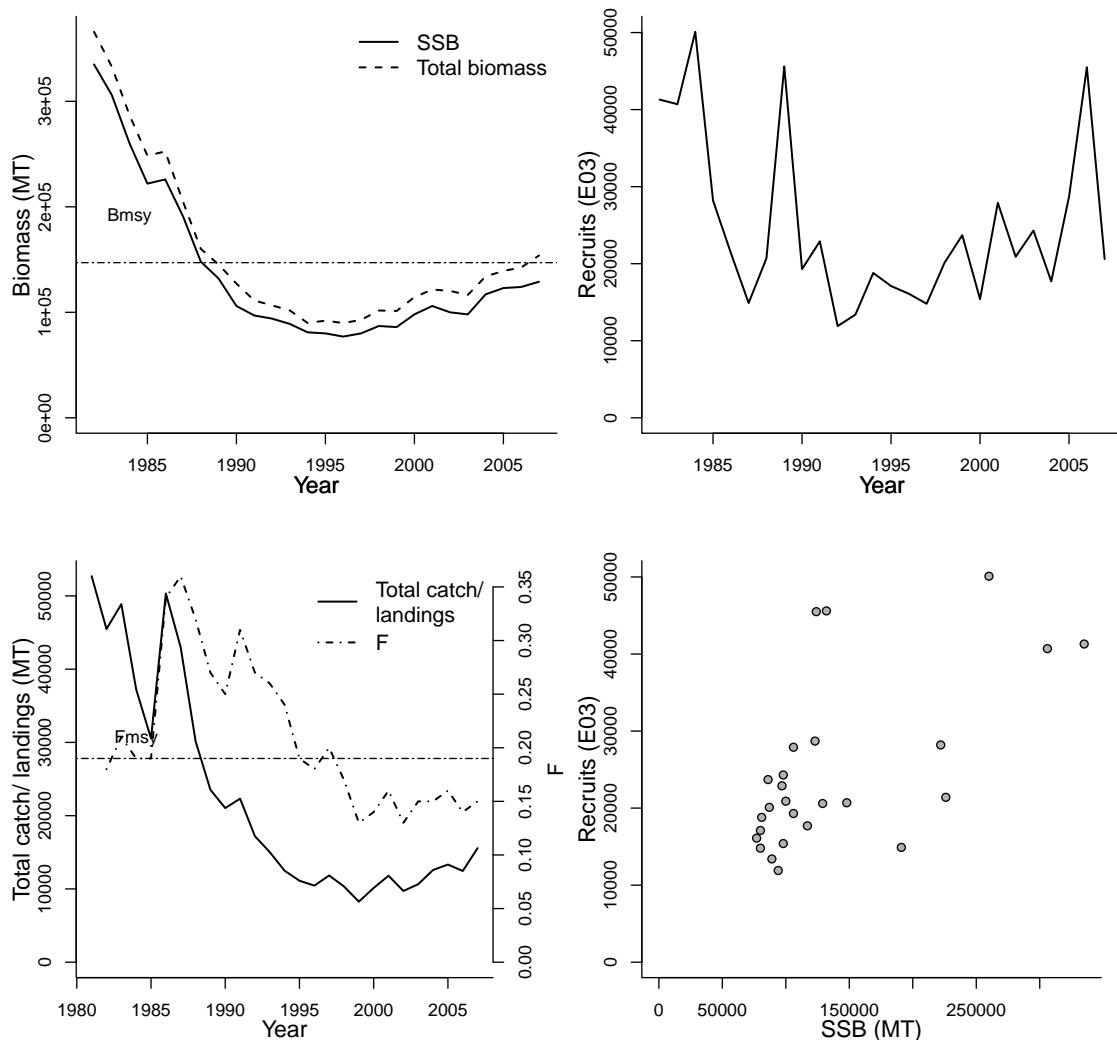
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                 |
| Assessment authors | Northeast Fisheries Science Center                 |
| Assessment method  | Age Structured Assessment Program                  |
| Publication year   | 2006   |
| Timeseries span    | 1981-2007  |
| Document           | final-2005-SAW-41-assessment.pdf (pdf in database) |
| Recorder           | SHEPHERD   |
| Date entered       | 2009-04-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-03-02   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |        |       | secondary LME       | tertiary LME |
|--------------------------------------|--------|-------|---------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |        |       | na                  | na           |
| Parameter                            | Value  | Units | Parameter           | Value        |
| SSB-AGE-yr                           | 2+     | yr    | Reference points    |              |
| SSB-SEX-sex                          | 0      | sex   | Parameter           | Value        |
| REC-AGE-yr                           | 0      | yr    | Bmsy-MT (TB)        | 147052       |
| F-AGE-yr-yr                          | 01-Jan | yr-yr | Fmsy-1/T (F)        | 0.19         |
| TB-AGE-yr                            | 0+     | yr    | MSY-MT (TB)         | 15565        |
| A50-yr                               | 2      | yr    | $TB_{2007}/B_{msy}$ | 1.046        |
| M-1/T                                | 0.2    | 1/T   | $F_{2007}/F_{msy}$  | 0.789        |
| M                                    |        |       |                     |              |
| L50-cm                               |        |       |                     |              |

| Time series minima and maxima |        |       |      |        |
|-------------------------------|--------|-------|------|--------|
|                               | SSB    | R     | F    | TB     |
| Minimum year                  | 1982   | 1982  | 1982 | 1982   |
| Maximum year                  | 2007   | 2007  | 2007 | 2007   |
| Time series minimum           | 77000  | 11900 | 0.13 | 89812  |
| Time series maximum           | 335000 | 50100 | 0.36 | 365924 |
| Units                         | MT     | E03   | 1/T  | MT     |



# Assessment of Mid-Atlantic Coast black sea bass (*Centropristes striata*)

Assessment ID:NEFSC-BSBASSMATLC-1968-2007-SHEPHERD  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/292>

Area ID: USA-NMFS-MATLC

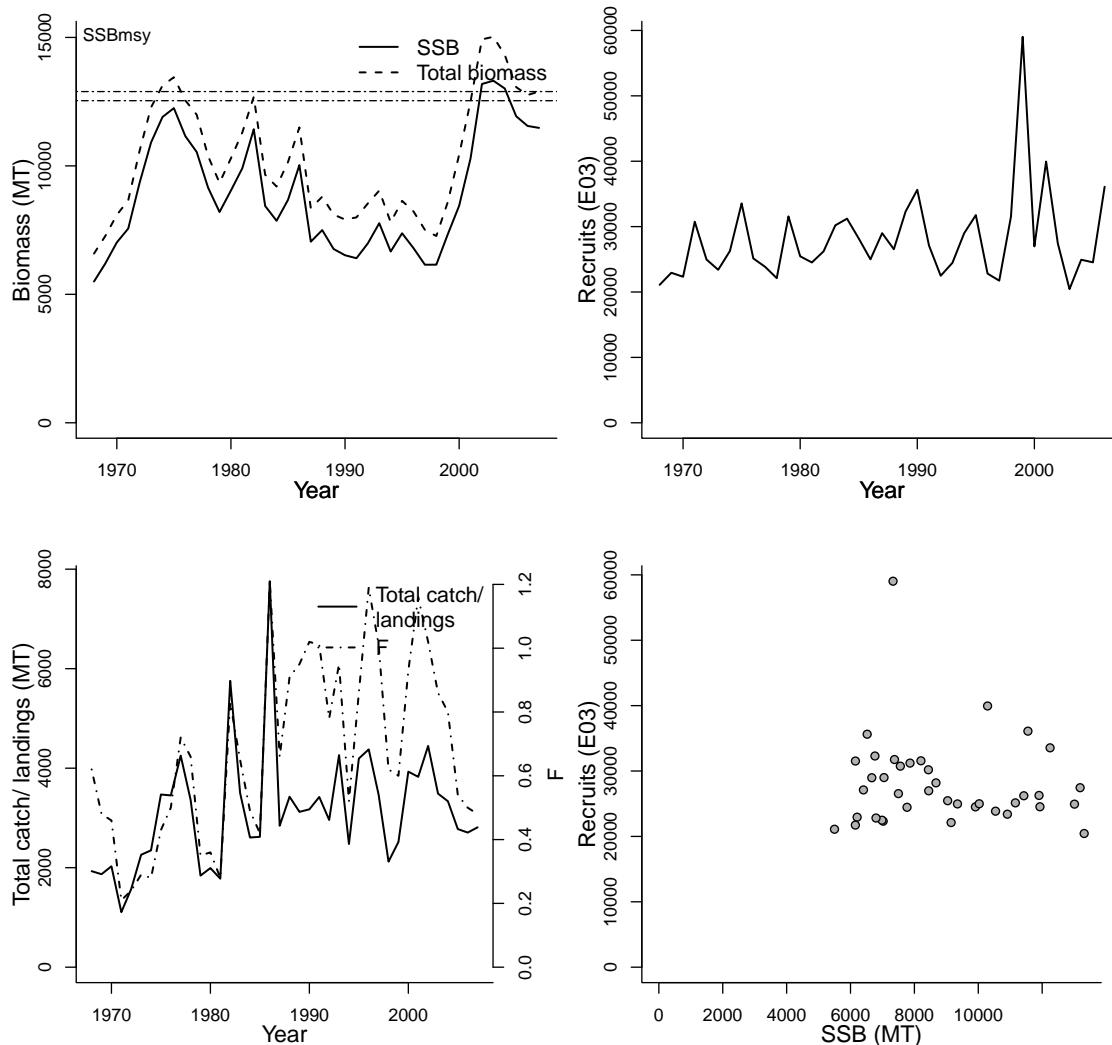
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                           |
| Assessment authors | ,Northeast Data Poor Working Group                           |
| Assessment method  | A statistical catch-at-length model                          |
| Publication year   | 2009   |
| Timeseries span    | 1968-2007  |
| Document           | DataPoorReviewPanelReportFinal-1-20-09.pdf (pdf in database) |
| Recorder           | SHEPHERD   |
| Date entered       | 2009-04-29   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |       |
|--------------------------------------|-------|-------|------------------------|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |       |
| Parameter                            | Value | Units | Reference points       |              |       |
| SSB-SEX-sex                          | 0     | sex   | Parameter              | Value        | Units |
| REC-AGE-yr                           | 1     | yr    | Bmsy-MT (TB)           | 12892.30     | MT    |
| F-AGE-yr-yr                          | 0     | yr-yr | F0.1-1/yr (F)          | 0.368        | 1/yr  |
| L50-cm                               | 21 cm | cm    | F40%-1/T               | 0.419        | 1/T   |
| M-1/T                                | 0.4   | 1/T   | SSBmsy-MT (SSB)        | 12537        | MT    |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)            | 3903         | MT    |
| TB-AGE-yr                            |       |       | $TB_{2007}/B_{msy}$    | 1.000        |       |
| M                                    |       |       | $SSB_{2007}/SSB_{msy}$ | 0.916        |       |
| A50-yr                               |       |       |                        |              |       |

| Time series minima and maxima |          |         |      |         |
|-------------------------------|----------|---------|------|---------|
|                               | SSB      | R       | F    | TB      |
| Minimum year                  | 1968     | 1968    | 1968 | 1968    |
| Maximum year                  | 2007     | 2006    | 2007 | 2007    |
| Time series minimum           | 5498.58  | 20444.6 | 0.21 | 6586.79 |
| Time series maximum           | 13315.11 | 59027.7 | 1.21 | 15024.1 |
| Units                         | MT       | E03     | 1/T  | MT      |



# Assessment of Gulf of Maine / Georges Bank-Southern New England barndoor skate

*(Dipturus laevis)*

Assessment ID:NEFSC-BSKAT5YZSNE-1963-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/428>

Area ID: USA-NMFS-5YZSNE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1963-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

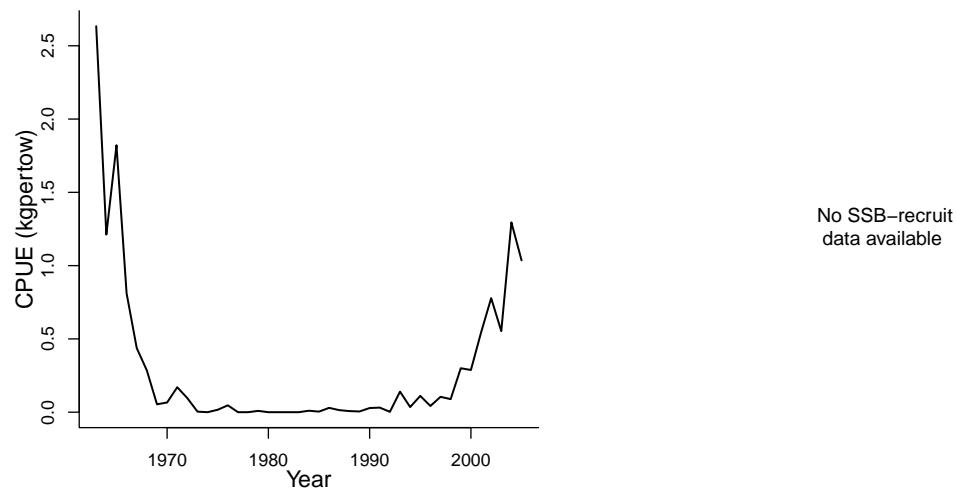
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| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available



# Assessment of Gulf of Maine / Cape Hatteras atlantic butterfish (*Peprilus triacanthus*)

Assessment ID:NEFSC-BUTTERGOMCHATT-1965-2005-OVERHOLTZ  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/300>

Area ID: USA-NMFS-5YCHATT

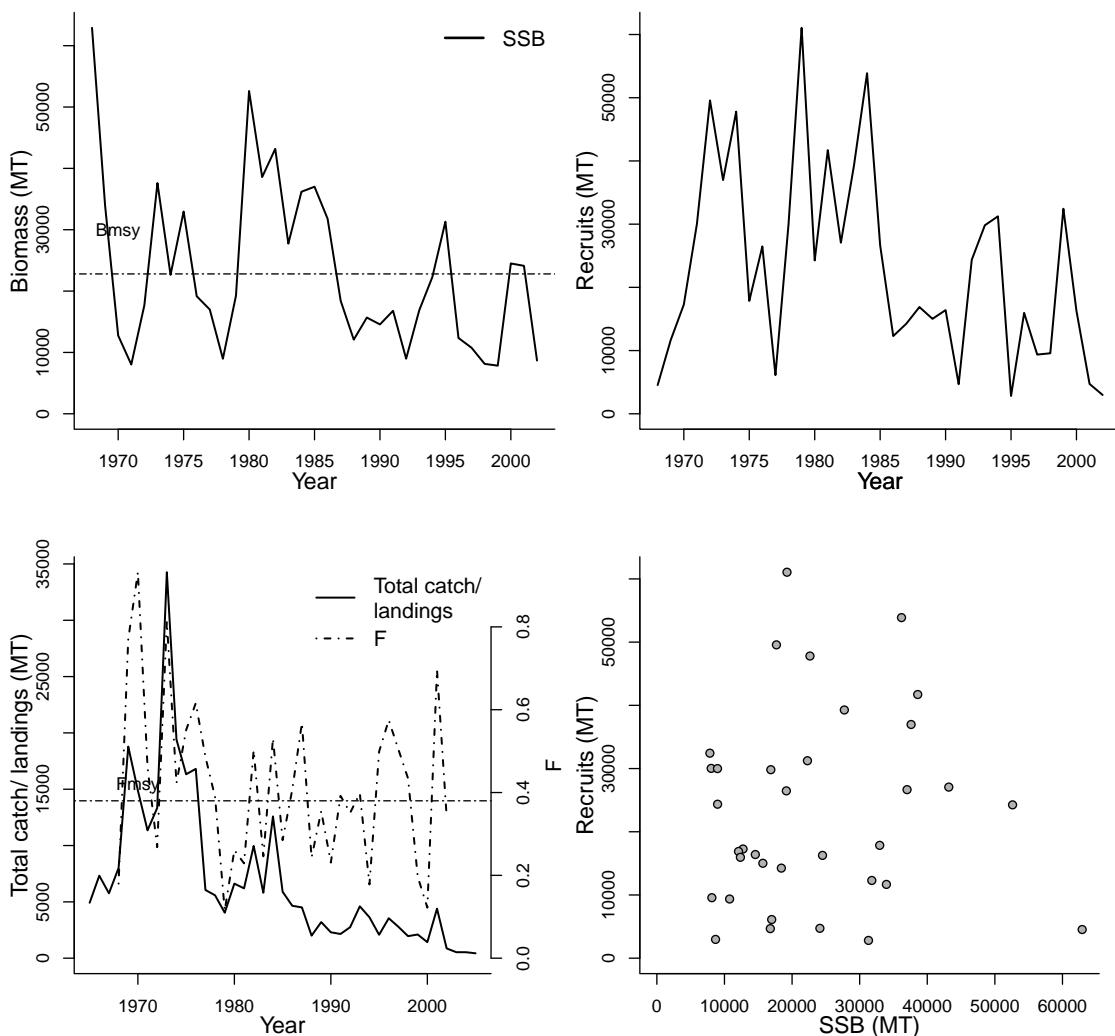
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center               |
| Assessment authors | Northeast Fisheries Science Center               |
| Assessment method  | Unknown  |
| Publication year   | 2004   |
| Timeseries span    | 1965-2005  |
| Document           | butterfish-assessment-2004.pdf (pdf in database) |
| Recorder           | OVERHOLTZ  |
| Date entered       | 2009-04-17                                       |
| Date last loaded   | 2011-07-25                                       |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                       |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| SSB-AGE-yr                           | 1+            | yr           |
| REC-AGE-yr                           | 0             | yr           |
| L50-cm                               | 11.7          | cm           |
| M-1/yr                               | 0.8           | 1/yr         |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| <hr/>                                |               |              |
| Reference points                     |               |              |
| Parameter                            | Value         | Units        |
| Bmsy-MT (TB)                         | 22798         | MT           |
| F0.1-1/yr (F)                        | 1.6           | 1/yr         |
| Fmsy-1/T (F)                         | 0.38          | 1/T          |
| MSY-MT (TB)                          | 12.175        | MT           |
| $F_{2002}/F_{msy}$                   | 0.900         |              |

| Time series minima and maxima |         |         |       |       |
|-------------------------------|---------|---------|-------|-------|
|                               | SSB     | R       | F     | TB    |
| Minimum year                  | 1968    | 1968    | 1968  | 1965  |
| Maximum year                  | 2002    | 2002    | 2002  | 2005  |
| Time series minimum           | 7843.34 | 2812.32 | 0.115 | 432   |
| Time series maximum           | 62914.7 | 61062   | 0.932 | 34266 |
| Units                         | MT      | MT      | 1/T   | MT    |



# Assessment of Georges Bank atlantic cod (*Gadus morhua*)

Assessment ID:NEFSC-CODGB-1960-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/109>

Area ID: USA-NMFS-5Z

## General assessment details.

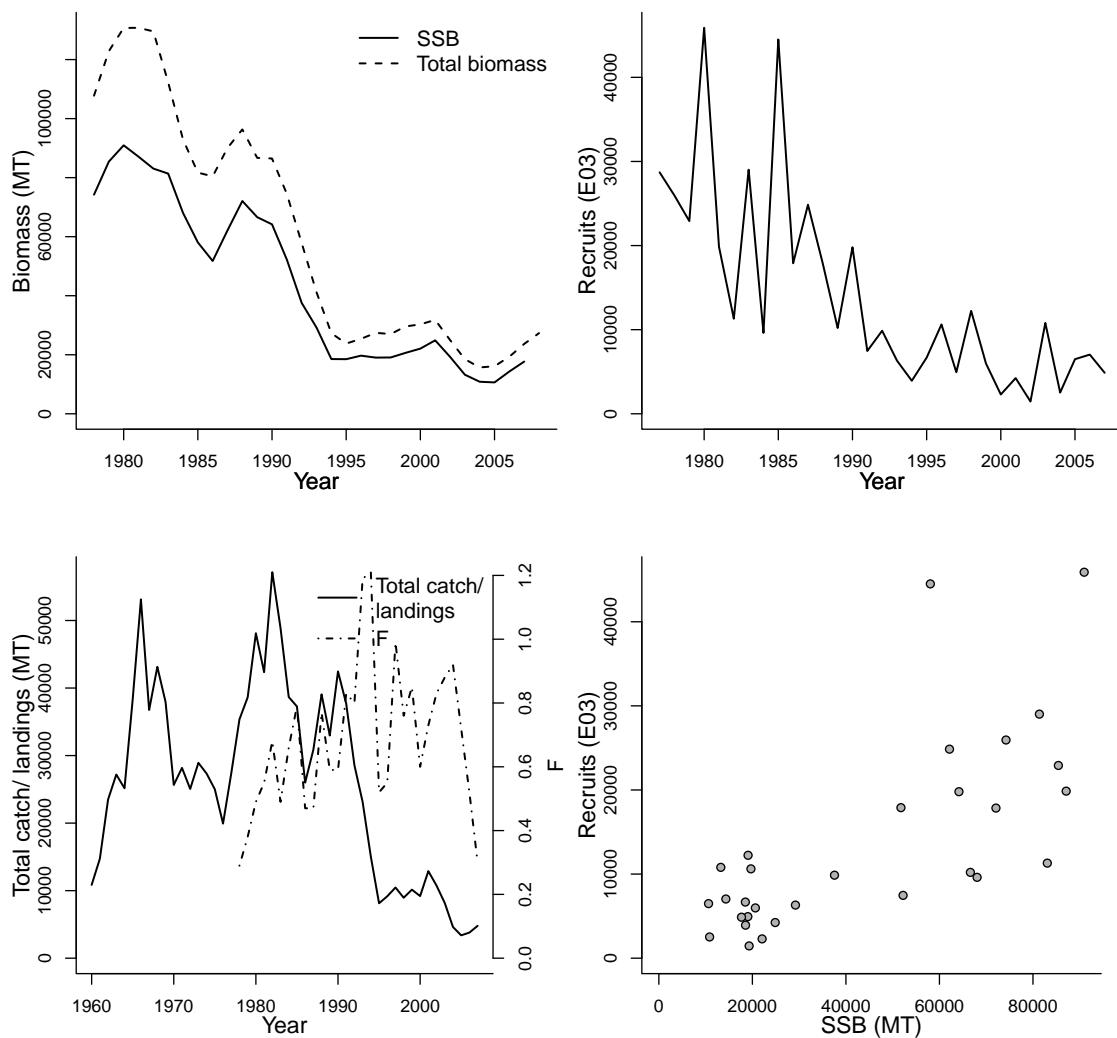
| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northeast Fisheries Science Center  |
| Assessment authors | Northeast Fisheries Science Center  |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2008  |
| Timeseries span    | 1960-2008   |
| Document           | NMFS-GB-Gadusmorhua-2008.pdf (pdf not in database)  |
| Recorder           | BAUM  |
| Date entered       | 2008-10-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME   | tertiary LME |       |
|--------------------------------------|-----------|-------|---|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |           |       | na  | na           |       |
| Parameter                            | Value     | Units | Reference points  |              |       |
| SSB-AGE-yr                           | 1+        | yr    | Parameter   | Value        | Units |
| SSB-SEX-sex                          | NA        | sex   | F40%-1/T  | 0.25         | 1/T   |
| REC-AGE-yr                           | 1         | yr    | SSB <sub>m</sub> sy-MT (SSB)                                  | 148084       | MT    |
| F-AGE-yr-yr                          | 5-8       | yr-yr | MSY-MT (TB)   | 31159        | MT    |
| TB-AGE-yr                            | 1+        | yr    | <i>SSB</i> <sub>2007</sub> / <i>SSB</i> <sub><i>m</i>sy</sub> | 0.119        |       |
| A50-yr                               | AVAILABLE | yr    |   |              |       |
| M-1/T                                | 0.2       | 1/T   |   |              |       |
| M                                    |           |       |   |              |       |
| L50-cm                               |           |       |   |              |       |

## Time series minima and maxima

|                     | SSB   | R     | F    | TB        | Catch |
|---------------------|-------|-------|------|-----------|-------|
| Minimum year        | 1978  | 1977  | 1978 | 1978      | 1960  |
| Maximum year        | 2007  | 2007  | 2007 | 2008      | 2007  |
| Time series minimum | 10627 | 1461  | 0.29 | 15703.8   | 3384  |
| Time series maximum | 90951 | 45891 | 1.21 | 130763.19 | 57149 |
| Units               | MT    | E03   | 1/T  | MT        | MT    |



# Assessment of Gulf of Maine atlantic cod (*Gadus morhua*)

Assessment ID:NEFSC-CODGOM-1893-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/110>

Area ID: USA-NMFS-5Y

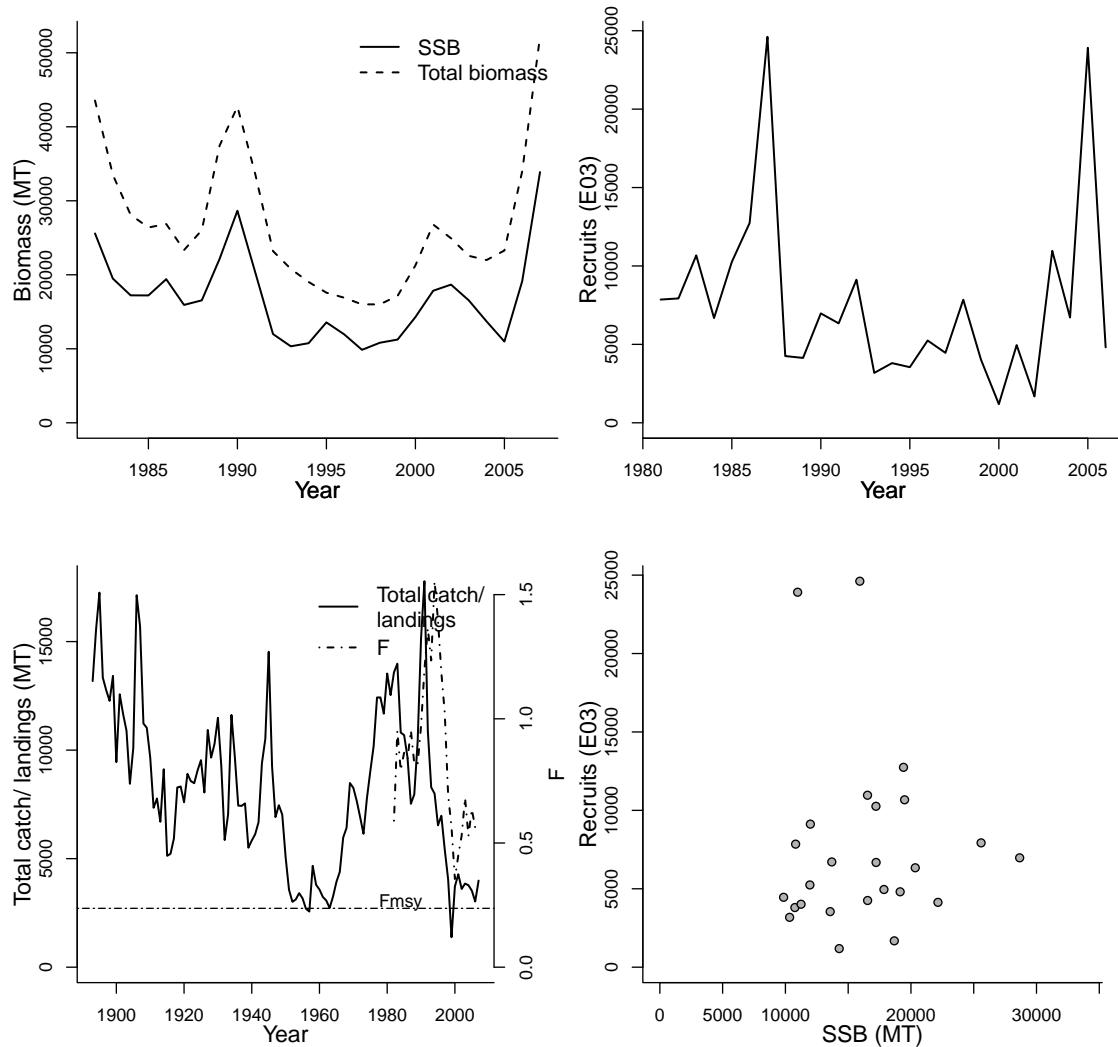
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northeast Fisheries Science Center  |
| Assessment authors | Northeast Fisheries Science Center  |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2008  |
| Timeseries span    | 1893-2008   |
| Document           | NMFS-GOM-Gadusmorhua-2008.pdf<br>(pdf not in database)  |
| Recorder           | BAUM  |
| Date entered       | 2008-11-04  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME       |       |       | tertiary LME |  |  |
|--------------------------------------|-----------|-------|---------------------|-------|-------|--------------|--|--|
| 7 - Northeast U.S. Continental Shelf |           |       | na                  |       |       | na           |  |  |
| Parameter                            | Value     | Units | Reference points    |       |       |              |  |  |
| SSB-SEX-sex                          | NA        | sex   | Parameter           | Value | Units |              |  |  |
| REC-AGE-yr                           | 1         | yr    | Bmsy-MT (TB)        | 82830 | MT    |              |  |  |
| F-AGE-yr-yr                          | 5-7       | yr-yr | Fmsy-1/T (F)        | 0.237 | 1/T   |              |  |  |
| A50-yr                               | AVAILABLE | yr    | MSY-MT (TB)         | 16600 | MT    |              |  |  |
| M-1/T                                | 0.2       | 1/T   | Frebuild-1/T (F)    | 0.281 | 1/T   |              |  |  |
| SSB-AGE-yr                           |           |       | $TB_{2007}/B_{msy}$ | 0.630 |       |              |  |  |
| TB-AGE-yr                            |           |       | $F_{2007}/F_{msy}$  | 2.399 |       |              |  |  |
| M                                    |           |       |                     |       |       |              |  |  |
| L50-cm                               |           |       |                     |       |       |              |  |  |

| Time series minima and maxima |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    |
| Minimum year                  | 1982  | 1981  | 1982  | 1982  |
| Maximum year                  | 2007  | 2006  | 2007  | 2007  |
| Time series minimum           | 9856  | 1187  | 0.355 | 15998 |
| Time series maximum           | 33877 | 24612 | 1.554 | 52160 |
| Units                         | MT    | E03   | 1/T   | MT    |



# Assessment of Mid-Atlantic Coast clearnose skate (*Raja eglanteria*)

Assessment ID:NEFSC-CSKATMATLC-1975-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/429>

Area ID: USA-NMFS-MATLC

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1975-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        | tertiary LME |
|--------------------------------------|--------------------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 6 - Southeast U.S. Continental Shelf | na           |
| <hr/>                                |                                      |              |
| Parameter                            | Value                                | Units        |
| REC-AGE                              |                                      |              |
| SSB-AGE-yr                           |                                      |              |
| SSB-SEX-sex                          |                                      |              |
| TB-AGE-yr                            |                                      |              |
| F-AGE-yr                             |                                      |              |
| M                                    |                                      |              |
| A50-yr                               |                                      |              |
| L50-cm                               |                                      |              |

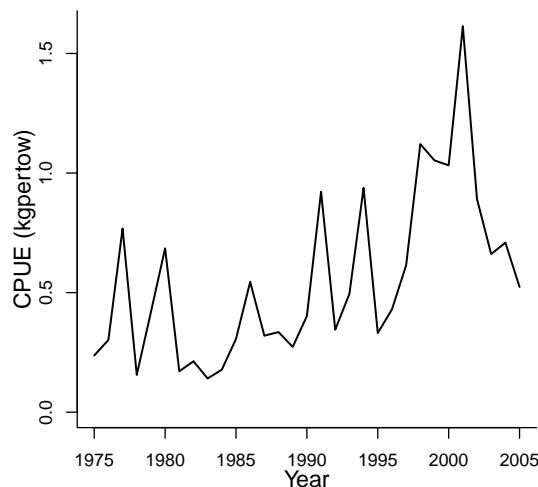
| Parameter | Value | Units | Reference points |
|-----------|-------|-------|------------------|
|           |       |       |                  |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Gulf of Maine haddock (*Melanogrammus aeglefinus*)

Assessment ID:NEFSC-HAD5Y-1956-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/116>

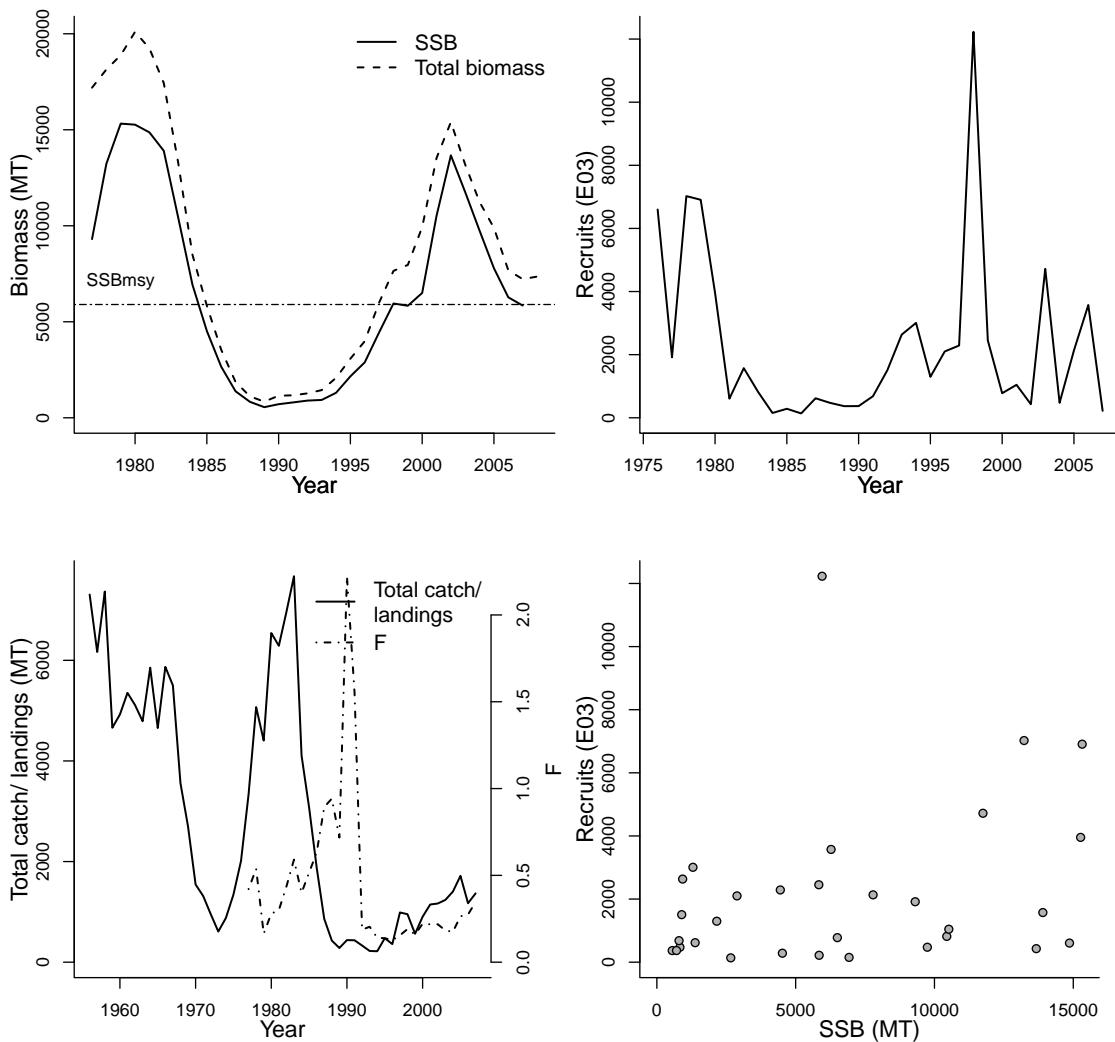
Area ID: USA-NMFS-5Y

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                           |
| Assessment authors | Northeast Fisheries Science Center                           |
| Assessment method  | VPA/ADPAT version 2.3.2 NOAA Fisheries                       |
| Publication year   | 2008   |
| Timeseries span    | 1956-2008  |
| Document           | NMFS-GOM-Melanogrammusaeaglefinus-2008.pdf (pdf in database) |
| Recorder           | BAUM   |
| Date entered       | 2008-11-24   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Time series minima and maxima |       |       |        |       |        |
|-------------------------------|-------|-------|--------|-------|--------|
|                               | SSB   | R     | F      | TB    | Catch  |
| Minimum year                  | 1977  | 1976  | 1977   | 1977  | 1956   |
| Maximum year                  | 2007  | 2007  | 2007   | 2008  | 2007   |
| Time series minimum           | 553   | 138   | 0.1267 | 839   | 217.4  |
| Time series maximum           | 15321 | 12230 | 2.2231 | 20102 | 7671.9 |
| Units                         | MT    | E03   | 1/T    | MT    | MT     |



# Assessment of Georges Bank haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:NEFSC-HADGB-1930-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/82>

Area ID: USA-NMFS-5Z

### General assessment details.

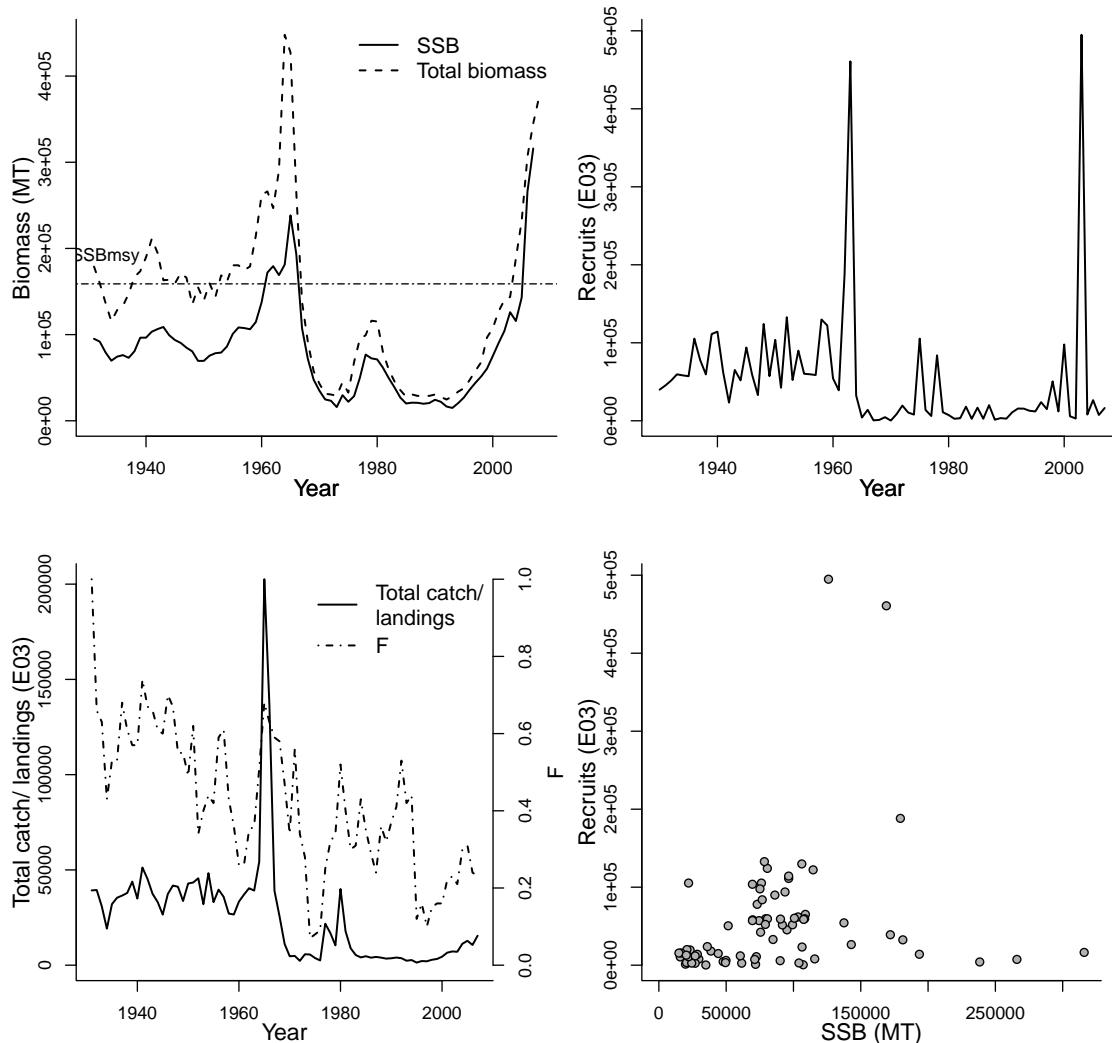
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                             |
| Assessment authors | Northeast Fisheries Science Center                             |
| Assessment method  | VPA/ADPAT version 2.3.2 NOAA Fisheries                         |
| Publication year   | 2008   |
| Timeseries span    | 1930-2008  |
| Document           | NMFS-5Z-Melanogrammusaelegfinus-2008.pdf (pdf not in database) |
| Recorder           | BAUM   |
| Date entered       | 2008-10-30   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME                           | tertiary LME |
|--------------------------------------|-----------|-------|---|--------------|
| 7 - Northeast U.S. Continental Shelf |           |       | na                                      | na           |
| Parameter                            | Value     | Units |   |              |
| SSB-SEX-sex                          | NA        | sex   |   |              |
| REC-AGE-yr                           | 1         | yr    |   |              |
| F-AGE-yr-yr                          | 5-7       | yr-yr |   |              |
| A50-yr                               | AVAILABLE | yr    | F40%-1/T                                | 0.35 1/T     |
| L50-cm                               | AVAILABLE | cm    | SSB <sub>msy</sub> -MT (SSB)            | 158873 MT    |
| M-1/T                                | 0.2       | 1/T   | MSY-MT (TB)                             | 32746 MT     |
| SSB-AGE-yr                           |           |       | SSB <sub>2007</sub> /SSB <sub>msy</sub> | 1.989        |
| TB-AGE-yr                            |           |       |   |              |
| M                                    |           |       |   |              |

## Time series minima and maxima

|                     | SSB    | R      | F    | TB     | Catch  |
|---------------------|--------|--------|------|--------|--------|
| Minimum year        | 1931   | 1930   | 1931 | 1931   | 1931   |
| Maximum year        | 2007   | 2007   | 2007 | 2008   | 2007   |
| Time series minimum | 14907  | 267    | 0.07 | 24608  | 1370   |
| Time series maximum | 315975 | 494868 | 1    | 447882 | 202584 |
| Units               | MT     | E03    | 1/T  | MT     | E03    |



# Assessment of Northwestern Atlantic Coast herring (*Clupea harengus*)

Assessment ID:NEFSC-HERRNWATLC-1960-2005-OVERHOLTZ

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/295>

Area ID: USA-NMFS-NWATLC

General assessment details.

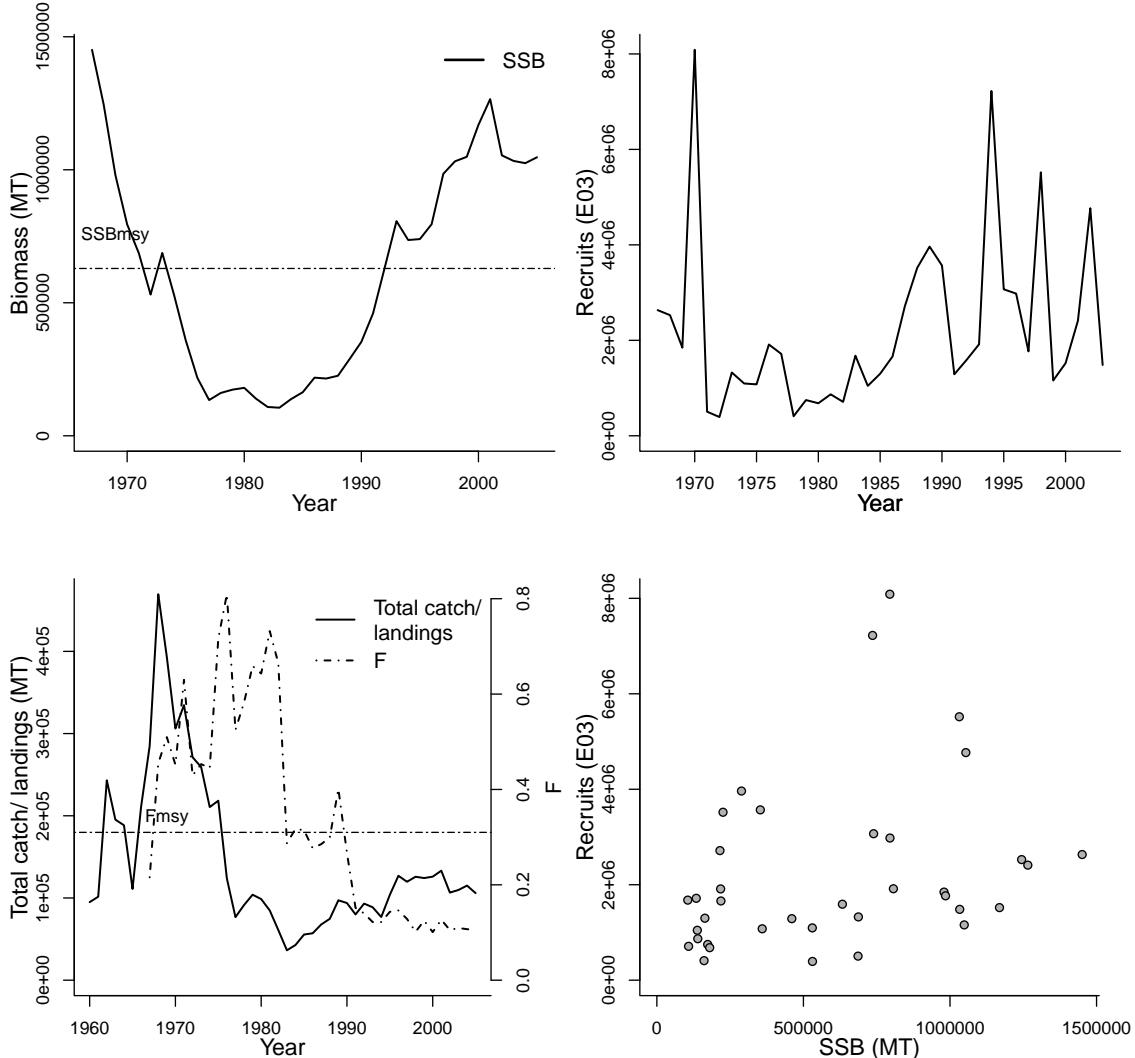
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                 |
| Assessment authors | Anonymous  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2006   |
| Timeseries span    | 1960-2005  |
| Document           | Herring2006.pdf (pdf in database)                  |
| Recorder           | OVERHOLTZ  |
| Date entered       | 2009-04-29   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |     |
|--------------------------------------|-------|-------|------------------------|--------------|-----|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |     |
| Parameter                            | Value | Units | Reference points       |              |     |
| SSB-AGE-yr                           | 3+    | yr    | SSBmsy-MT (SSB)        | 629000       | MT  |
| SSB-SEX-sex                          | 0     | sex   | F0.1-1/T               | 0.21         | 1/T |
| REC-AGE-yr                           | 2     | yr    | Fmsy-1/T (F)           | 0.31         | 1/T |
| A50-yr                               | 2.95  | yr    | F40%-1/T               | 0.2          | 1/T |
| L50-cm                               | 25.35 | cm    | MSY-MT (TB)            | 194000       | MT  |
| M-1/T                                | 0.2   | 1/T   | $F_{2005}/F_{msy}$     | 0.339        |     |
| TB-AGE-yr                            |       |       | $SSB_{2005}/SSB_{msy}$ | 1.665        |     |
| F-AGE-yr                             |       |       |                        |              |     |
| M                                    |       |       |                        |              |     |

## Time series minima and maxima

|                     | SSB     | R       | F        | TB | Catch  |
|---------------------|---------|---------|----------|----|--------|
| Minimum year        | 1967    | 1967    | 1967     |    | 1960   |
| Maximum year        | 2005    | 2003    | 2005     |    | 2005   |
| Time series minimum | 105470  | 393002  | 0.10082  |    | 36358  |
| Time series maximum | 1450950 | 8086560 | 0.809456 |    | 469535 |
| Units               | MT      | E03     | 1/T      |    | MT     |



# Assessment of Northwestern Atlantic Coast northern shortfin squid (*Illex illecebrosus*)

Assessment ID:NEFSC-ILLEXNWATLC-1967-2005-HENDRICKSON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/332>

Area ID: USA-NMFS-NWATLC

General assessment details.

| Detail             | Value                                   |
|--------------------|---|
| Management body    | NMFS                                    |
| Assessment group   | Northeast Fisheries Science Center      |
| Assessment authors | Hendrickson and Showell                 |
| Assessment method  | Age-aggregated surplus production model |
| Publication year   | 2006                                    |
| Timeseries span    | 1967-2005                               |
| Document           | scr06-46.pdf (pdf in database)          |
| Recorder           | HENDRICKSON                             |
| Date entered       | 2009-04-20                              |
| Date last loaded   | 2011-07-25                              |
| QA/QC complete     | YES                                     |
| Date approved      | 2011-06-10                              |

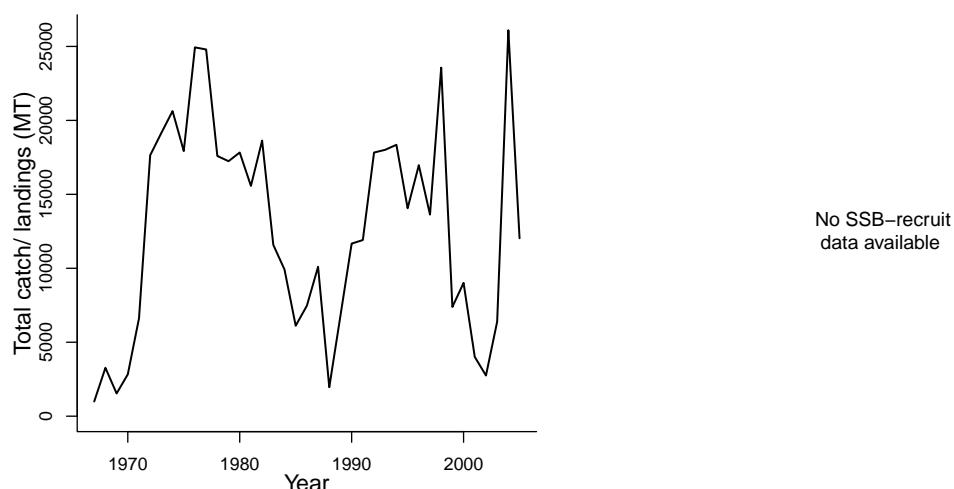
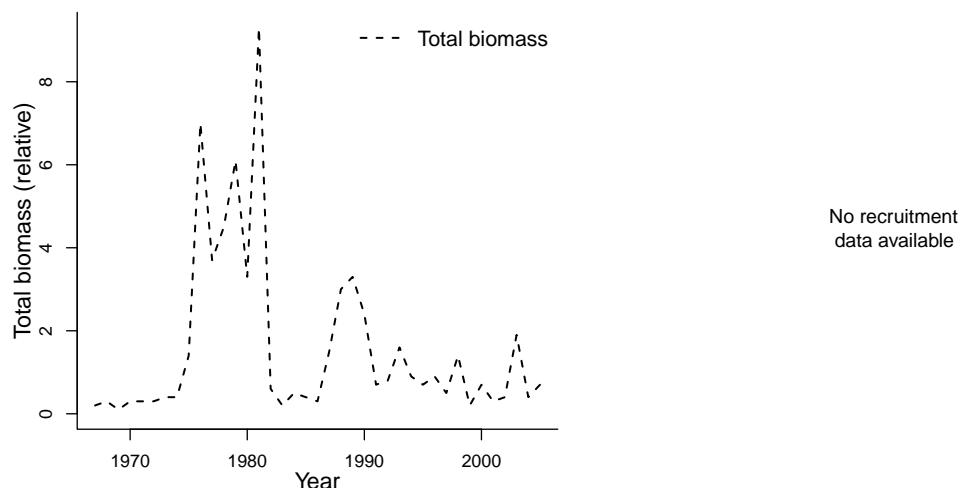
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME     | tertiary LME                    |
|--------------------------------------|-------------------|---------------------------------|
| 7 - Northeast U.S. Continental Shelf | 8 - Scotian Shelf | 9 - Newfoundland-Labrador Shelf |
| <hr/>                                |                   |                                 |
| Parameter                            | Value             | Units                           |
| REC-AGE                              |                   |                                 |
| SSB-AGE-yr                           |                   |                                 |
| SSB-SEX-sex                          |                   |                                 |
| TB-AGE-yr                            |                   |                                 |
| F-AGE-yr                             |                   |                                 |
| M                                    |                   |                                 |
| A50-yr                               |                   |                                 |
| L50-cm                               |                   |                                 |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
|                  |       |       |

| Time series minima and maxima |     |   |   |          |       |
|-------------------------------|-----|---|---|----------|-------|
|                               | SSB | R | F | TB       | Catch |
| Minimum year                  |     |   |   | 1967     | 1967  |
| Maximum year                  |     |   |   | 2005     | 2005  |
| Time series minimum           |     |   |   | 0.1      | 995   |
| Time series maximum           |     |   |   | 9.3      | 26097 |
| Units                         |     |   |   | relative | MT    |



# Assessment of Gulf of Maine / Cape Hatteras little skate (*Leucoraja erinacea*)

Assessment ID:NEFSC-LSKAT5YCHATT-1968-2006-SOSEBEE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/430>

Area ID: USA-NMFS-5YCHATT

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1968-2006  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

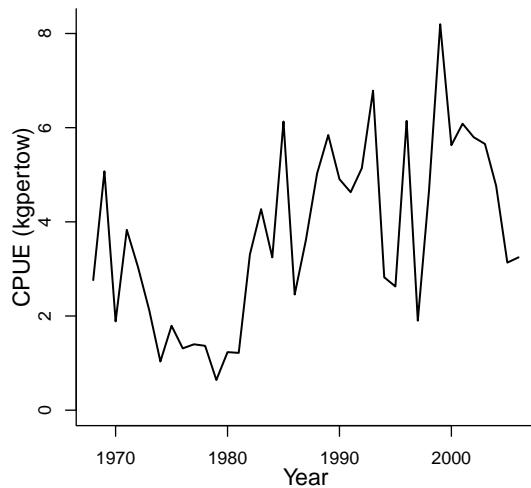
| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Gulf of Maine / Cape Hatteras mackerel (*Scomber scombrus*)

Assessment ID:NEFSC-MACKGOMCHATT-1960-2005-OVERHOLTZ  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/299>

Area ID: USA-NMFS-5YCHATT

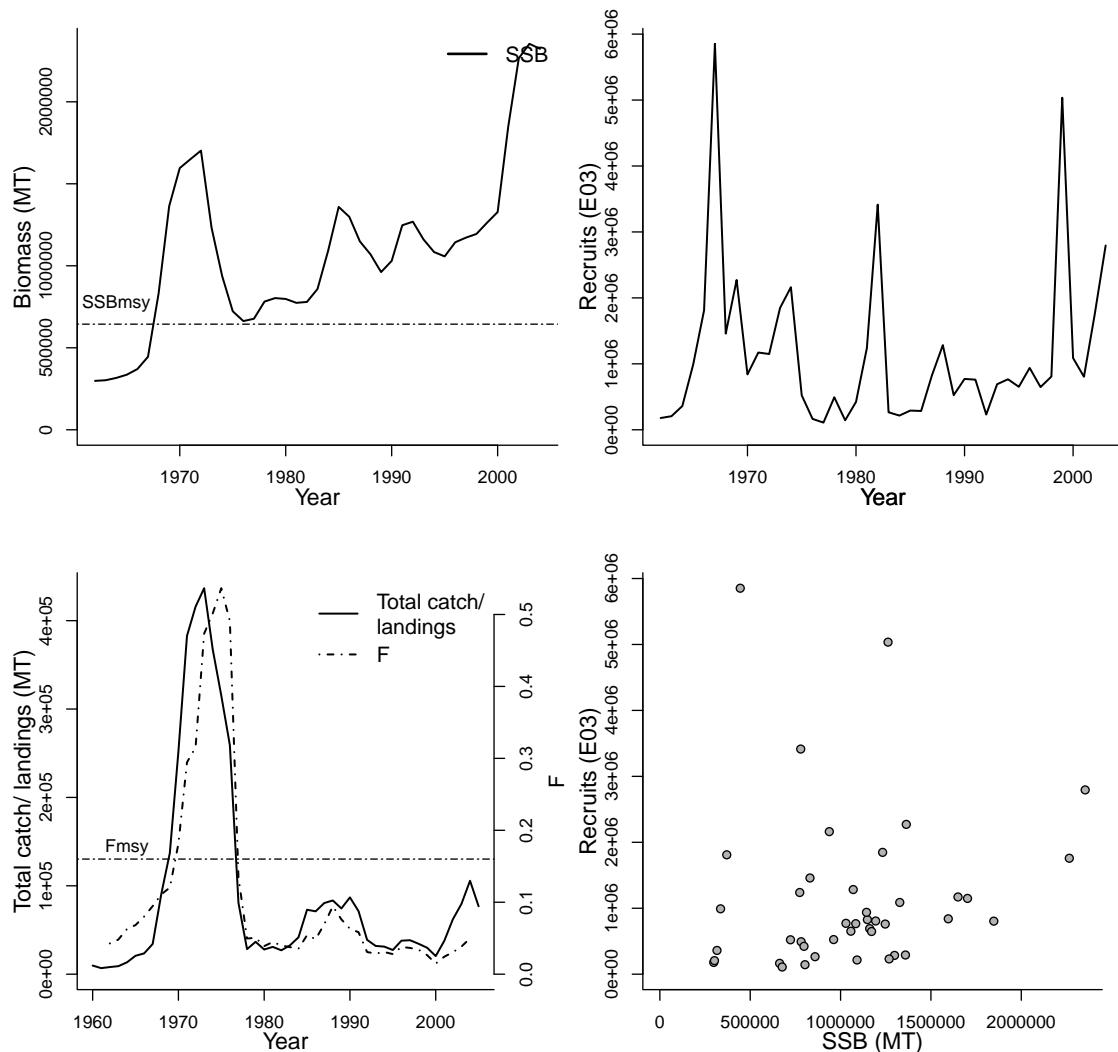
General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | NMFS                                       |
| Assessment group   | Northeast Fisheries Science Center         |
| Assessment authors | Northeast Fisheries Science Center         |
| Assessment method  | Virtual Population Analysis                |
| Publication year   | 2006                                       |
| Timeseries span    | 1960-2005                                  |
| Document           | AtlanticMackerel2005.pdf (pdf in database) |
| Recorder           | OVERHOLTZ                                  |
| Date entered       | 2009-04-29                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |       |
|--------------------------------------|-------|-------|------------------------|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |       |
| Parameter                            | Value | Units | Reference points       |              |       |
| SSB-AGE-yr                           | 2+    | yr    | Parameter              | Value        | Units |
| SSB-SEX-sex                          | 0     | sex   | F0.1-1/yr (F)          | 0.25         | 1/yr  |
| REC-AGE-yr                           | 1     | yr    | Fmsy-1/yr (F)          | 0.16         | 1/yr  |
| A50-yr                               | 1.9   | yr    | F40%-1/T               | 0.24         | 1/T   |
| L50-cm                               | 25.85 | cm    | SSBmsy-MT (SSB)        | 644000       | MT    |
| M-1/yr                               | 0.2   | 1/yr  | MSY-MT (TB)            | 89000        | MT    |
| TB-AGE-yr                            |       |       | $F_{2004}/F_{msy}$     | 0.311        |       |
| F-AGE-yr                             |       |       | $SSB_{2004}/SSB_{msy}$ | 3.607        |       |
| M                                    |       |       |                        |              |       |

| Time series minima and maxima |         |         |           |        |
|-------------------------------|---------|---------|-----------|--------|
|                               | SSB     | R       | F         | TB     |
| Minimum year                  | 1962    | 1962    | 1962      | 1960   |
| Maximum year                  | 2004    | 2003    | 2004      | 2005   |
| Time series minimum           | 298218  | 108962  | 0.0147906 | 6841   |
| Time series maximum           | 2353680 | 5853030 | 0.536505  | 436698 |
| Units                         | MT      | E03     | 1/T       | MT     |



# Assessment of Gulf of Maine / Northern Georges Bank monkfish (*Lophius americanus*)

Assessment ID:NEFSC-MONKGOMNGB-1964-2006-RICHARDS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/319>

Area ID: USA-NMFS-GOMNGB

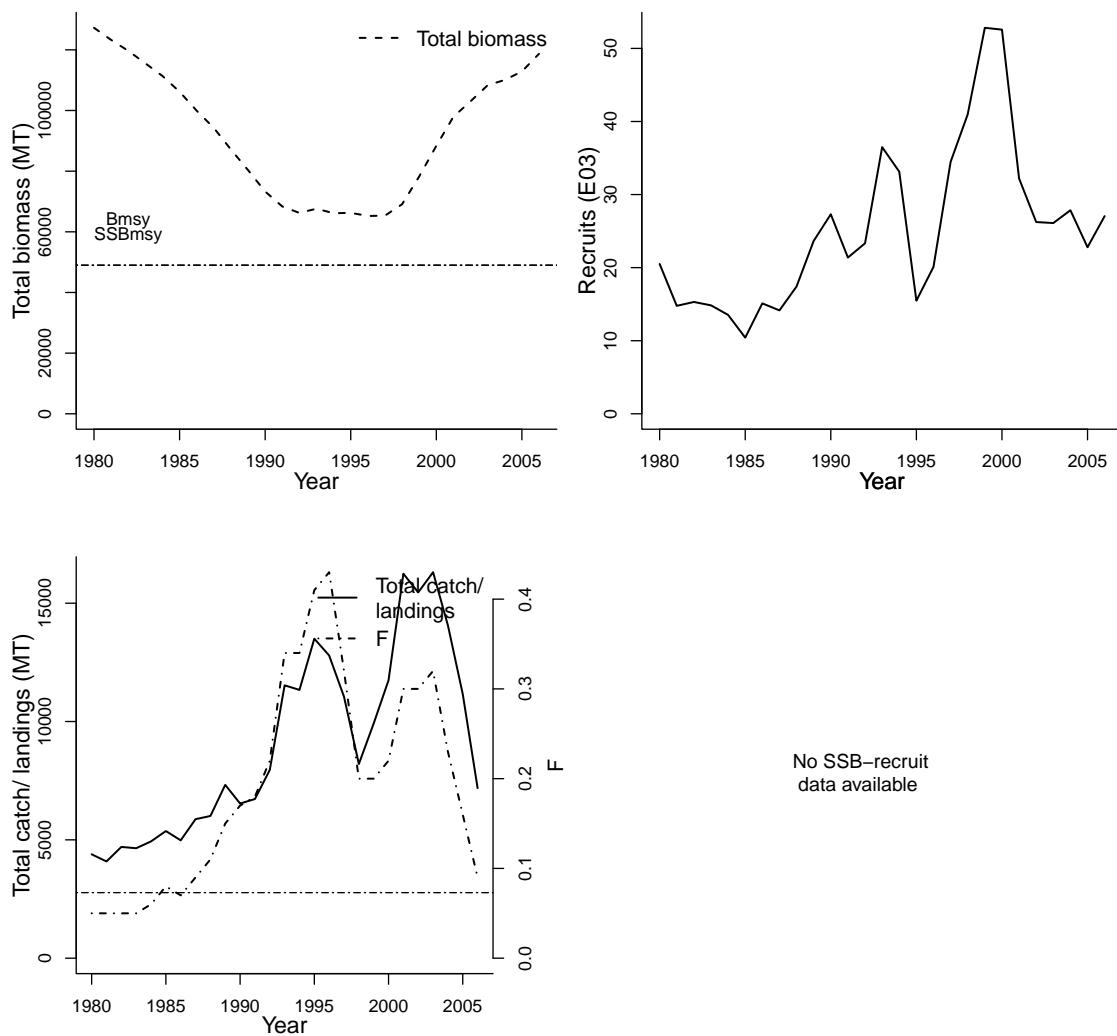
General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Unknown                            |
| Publication year   | 2007                               |
| Timeseries span    | 1964-2006                          |
| Document           | crd0721.pdf (pdf in database)      |
| Recorder           | RICHARDS                           |
| Date entered       | 2009-04-22                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |
| Parameter                            | Value | Units | Reference points    |              |
| Parameter                            | Value | Units | Parameter           | Value        |
| A50-yr                               | 7     | yr    | Bmsy-MT (TB)        | 49000        |
| L50-cm                               | 103   | cm    | Bpa-MT (TB)         | 24000        |
| M-1/yr                               | 0.15  | 1/yr  | F0.1-1/yr (F)       | 0.073        |
| REC-AGE                              |       |       | Fmax-1/yr (F)       | 0.114        |
| SSB-AGE-yr                           |       |       | Fmsy-1/yr (F)       | 0.073        |
| SSB-SEX-sex                          |       |       | SPRF0-E01 (SPR)     | 109          |
| TB-AGE-yr                            |       |       | F40%-1/T            | 0.064        |
| F-AGE-yr                             |       |       | SSBmsy-MT (SSB)     | 49000        |
| M                                    |       |       | MSY-MT (TB)         | 3500         |
|                                      |       |       | Frebuild-1/T (F)    | 0.044        |
|                                      |       |       | $TB_{2006}/B_{msy}$ | 2.422        |
|                                      |       |       | $F_{2006}/F_{msy}$  | 1.233        |

| Time series minima and maxima |       |      |        |       |
|-------------------------------|-------|------|--------|-------|
|                               | SSB   | R    | F      | TB    |
| Minimum year                  |       | 1980 | 1980   | 1980  |
| Maximum year                  |       | 2006 | 2006   | 2006  |
| Time series minimum           | 10.42 | 0.05 | 65230  | 4087  |
| Time series maximum           | 52.82 | 0.43 | 127270 | 16309 |
| Units                         | E03   | 1/T  | MT     | MT    |



**Assessment of Southern Georges Bank /**  
**Mid-Atlantic monkfish (*Lophius americanus*)**  
 Assessment ID:NEFSC-MONKSGBMATL-1964-2006-RICHARDS  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/320>

Area ID: USA-NMFS-SGBMATL

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Size-based model                                     |
| Publication year   | 2007   |
| Timeseries span    | 1964-2006  |
| Document           | Monkfish2007NEFSCAssessment.pdf<br>(pdf in database) |
| Recorder           | RICHARDS   |
| Date entered       | 2009-05-01   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

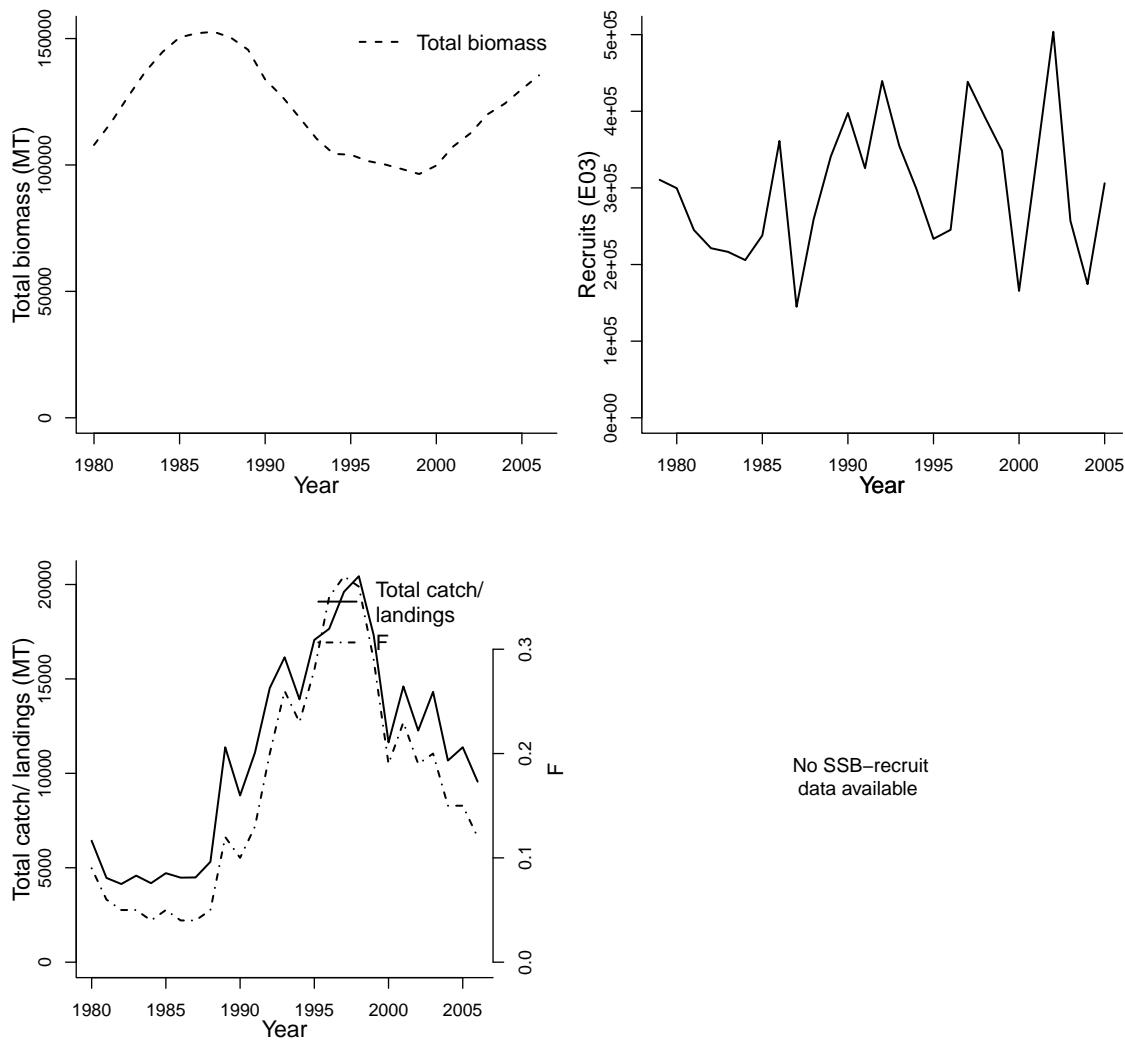
| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| SSB-AGE-yr                           | 4+            | yr           |
| SSB-SEX-sex                          | 1             | sex          |
| REC-AGE-yr                           | 1             | yr           |
| F-AGE-yr-yr                          | 3+            | yr-yr        |
| L50-cm                               | 43.8          | cm           |
| M-1/yr                               | 0.3           | 1/yr         |
| TB-AGE-yr                            |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |

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| Reference points | Parameter | Value  | Units |
|------------------|-----------|--------|-------|
| Bpa-MT (TB)      |           | 122500 | MT    |
| F0.1-1/yr (F)    |           | 0.25   | 1/yr  |
| Fmax-1/yr (F)    |           | 0.4    | 1/yr  |
| F40%-1/T         |           | 0.31   | 1/T   |

## Time series minima and maxima

|                     | SSB    | R    | F       | TB       | Catch |
|---------------------|--------|------|---------|----------|-------|
| Minimum year        |        | 1979 | 1980    | 1980     | 1980  |
| Maximum year        |        | 2005 | 2006    | 2006     | 2006  |
| Time series minimum | 144900 | 0.04 | 96415.3 | 4139.13  |       |
| Time series maximum | 503700 | 0.37 | 152672  | 20438.44 |       |
| Units               | E03    | 1/yr | MT      | MT       |       |



# Assessment of Northwestern Atlantic Coast ocean pout (*Zoarces americanus*)

Assessment ID:NEFSC-OPOUTNWATLC-1962-2008-WIGLEY

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/113>

Area ID: USA-NMFS-NWATLC

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2008   |
| Timeseries span    | 1962-2008  |
| Document           | .pdf (pdf not in database)                           |
| Recorder           | WIGLEY   |
| Date entered       | 2008-12-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| M-1/T                                | 0.2           | 1/T          |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

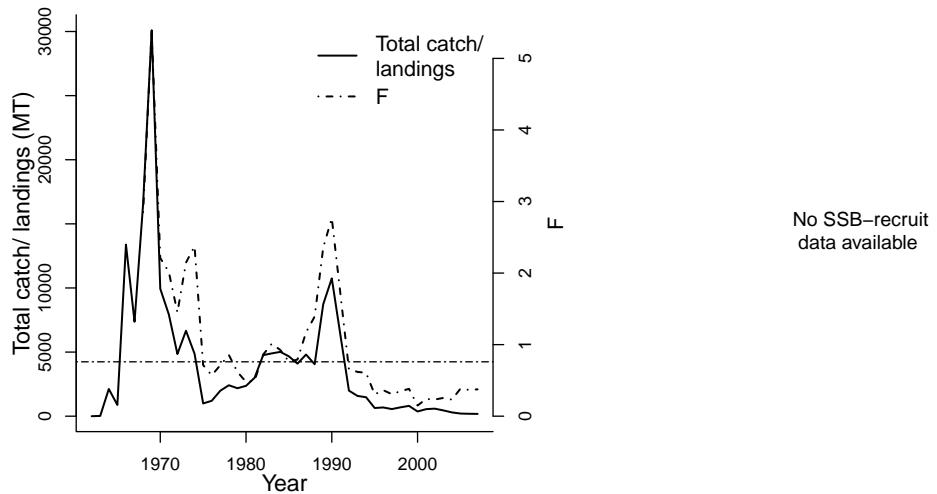
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| Reference points   | Parameter | Value | Units |
|--------------------|-----------|-------|-------|
| Bmsy-MT (TB)       | 4.94      | MT    |       |
| Fmsy-1/T (F)       | 0.76      | 1/T   |       |
| MSY-MT (TB)        | 3754      | MT    |       |
| $F_{2007}/F_{msy}$ | 0.493     |       |       |

| Time series minima and maxima |     |   |       |    |          |
|-------------------------------|-----|---|-------|----|----------|
|                               | SSB | R | F     | TB | Catch    |
| Minimum year                  |     |   | 1968  |    | 1962     |
| Maximum year                  |     |   | 2007  |    | 2007     |
| Time series minimum           |     |   | 0.149 |    | 0        |
| Time series maximum           |     |   | 5.394 |    | 30101.46 |
| Units                         |     |   | ratio |    | MT       |

No biomass data available

No recruitment data available



No SSB-recruit data available

# Assessment of Gulf of Maine / Georges Bank pollock (*Pollachius virens*)

Assessment ID:NEFSC-POLL5YZ-1963-2007-MAYO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/275>

Area ID: USA-NMFS-5YZ

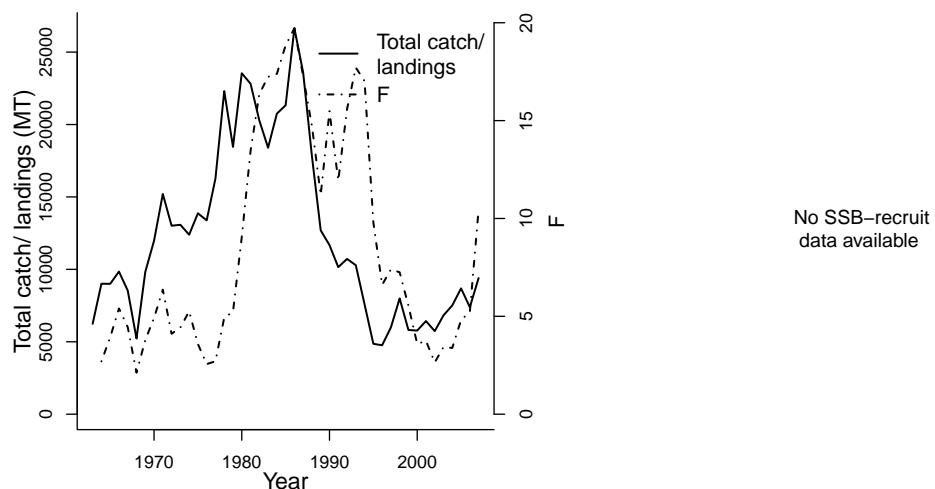
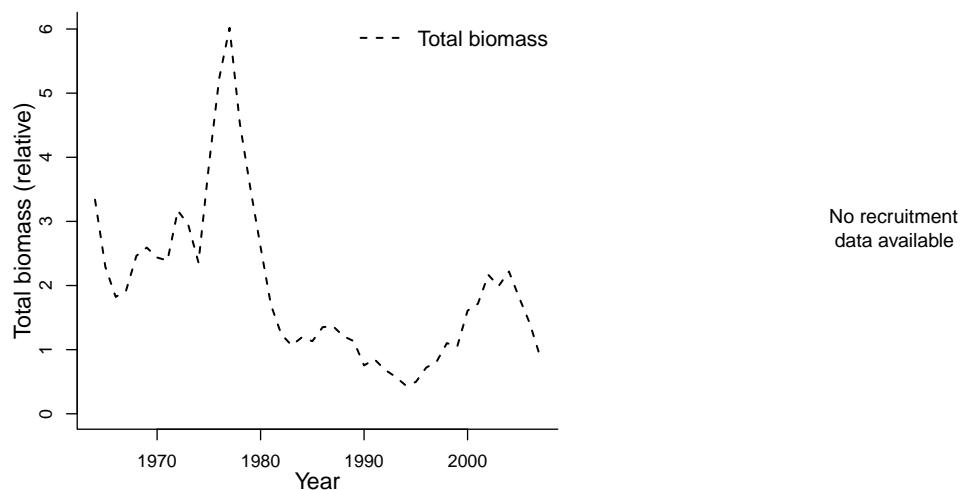
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center   |
| Assessment authors | Northeast Fisheries Science Center   |
| Assessment method  | An Index Model (AIM); Fmsy proxy based on log-log regression of replacement ratio on relative F (catch/survey biomass index) |
| Publication year   | 2008   |
| Timeseries span    | 1963-2007  |
| Document           | crd0815.pdf (pdf in database)  |
| Recorder           | MAYO   |
| Date entered       | 2009-04-20   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       |       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|-------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  |       | na           |
| Parameter                            | Value | Units | Reference points    |       |              |
| A50-yr                               | 3.4   | yr    | Parameter           | Value | Units        |
| L50-cm                               | 49.5  | cm    | Blim-relative       | 1     | relative     |
| M-1/yr                               | 0.2   | 1/yr  | Bmsy-relative       | 2     | relative     |
| REC-AGE                              |       |       | Umsy-ratio (U)      | 5.65  | ratio        |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)         | 11320 | MT           |
| SSB-SEX-sex                          |       |       | $TB_{2007}/B_{msy}$ | 0.449 |              |
| TB-AGE-yr                            |       |       |                     |       |              |
| F-AGE-yr                             |       |       |                     |       |              |
| M                                    |       |       |                     |       |              |

| Time series minima and maxima |     |       |        |          |
|-------------------------------|-----|-------|--------|----------|
|                               | SSB | R     | F      | TB       |
| Minimum year                  |     |       | 1964   | 1964     |
| Maximum year                  |     |       | 2007   | 2007     |
| Time series minimum           |     |       | 2.12   | 0.446    |
| Time series maximum           |     |       | 19.721 | 6.019    |
| Units                         |     | ratio |        | relative |
|                               |     |       |        | MT       |



# Assessment of Atlantic Coast ocean quahog (*Arctica islandica*)

Assessment ID:NEFSC-QUAHATLC-1978-2008-CHUTE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/437>

Area ID: USA-NMFS-ATLC

## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Anonymous                          |
| Assessment method  | Delay difference model             |
| Publication year   | 2009                               |
| Timeseries span    | 1978-2008                          |
| Document           | quahog.pdf (pdf in database)       |
| Recorder           | CHUTE                              |
| Date entered       | 2009-12-29                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

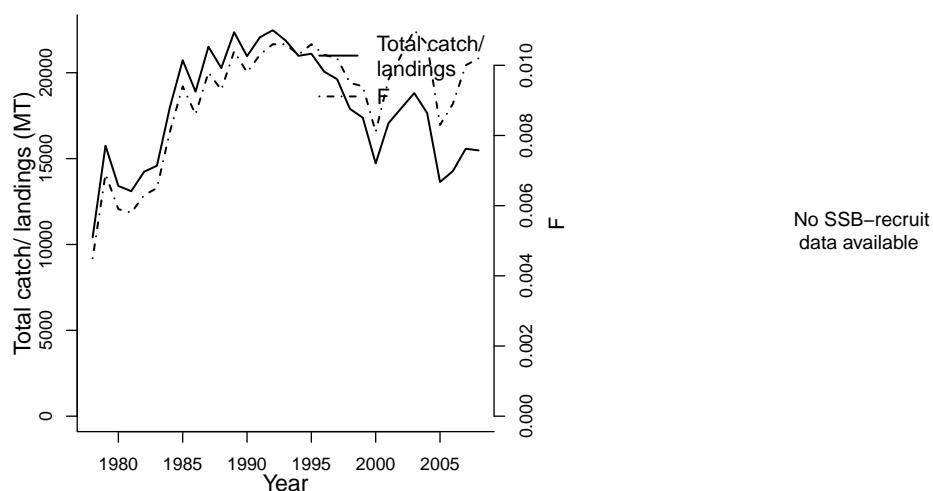
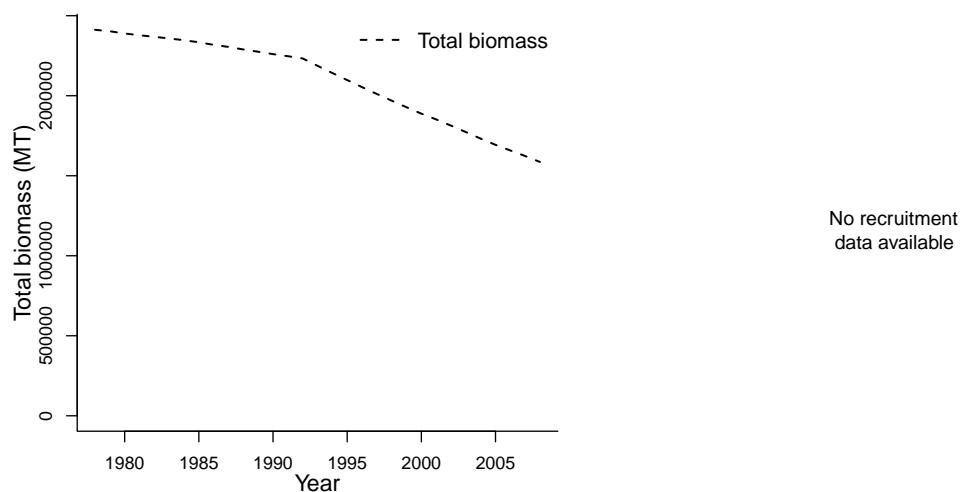
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                                     | tertiary LME |
|--------------------------------------|---|--------------|
| 7 - Northeast U.S. Continental Shelf | na  | na           |
| Parameter                            | Value   | Units        |
| SSB-AGE-yr                           | variable  | yr           |
| SSB-SEX-sex                          | Lengths and ages at maturity are based on females | sex          |
| REC-AGE-yr                           | 13-28 years to 50% commercial selectivity         | yr           |
| A50-yr                               | 19  | yr           |
| L50-cm                               | 6.4   | cm           |
| M-1/yr                               | 0.02  | 1/yr         |
| TB-AGE-yr                            |   |              |
| F-AGE-yr                             |   |              |
| M                                    |   |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |        |         |
|-------------------------------|-----|---|--------|---------|
|                               | SSB | R | F      | TB      |
| Minimum year                  |     |   | 1978   | 1978    |
| Maximum year                  |     |   | 2008   | 2008    |
| Time series minimum           |     |   | 0.0045 | 1586000 |
| Time series maximum           |     |   | 0.011  | 2412000 |
| Units                         |     |   | 1/T    | MT      |
|                               |     |   |        | MT      |



# Assessment of Northwestern Atlantic red deepsea crab (*Chaceon quinquedens*)

Assessment ID:NEFSC-RDEEPCRABNWATL-1982-2008-CHUTE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/349>

Area ID: USA-NMFS-NWATL

General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Count                              |
| Publication year   | 2006                               |
| Timeseries span    | 1982-2008                          |
| Document           | RedCrab2006.pdf (pdf in database)  |
| Recorder           | CHUTE                              |
| Date entered       | 2009-05-27                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

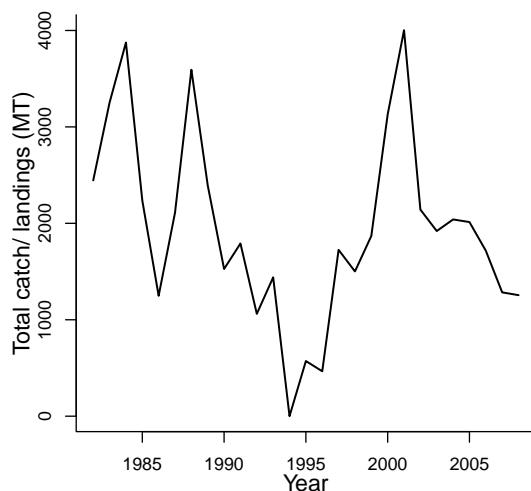
| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |    |         |
|-------------------------------|-----|---|---|----|---------|
|                               | SSB | R | F | TB | Catch   |
| Minimum year                  |     |   |   |    | 1982    |
| Maximum year                  |     |   |   |    | 2008    |
| Time series minimum           |     |   |   |    | 0.25    |
| Time series maximum           |     |   |   |    | 4002.72 |
| Units                         |     |   |   |    | MT      |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Mid-Atlantic Coast rosette skate (*Leucoraja garmani*)

Assessment ID:NEFSC-RSKATMATLC-1967-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/431>

Area ID: USA-NMFS-MATLC

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1967-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        | tertiary LME |
|--------------------------------------|--------------------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 6 - Southeast U.S. Continental Shelf | na           |
| <hr/>                                |                                      |              |
| Parameter                            | Value                                | Units        |
| REC-AGE                              |                                      |              |
| SSB-AGE-yr                           |                                      |              |
| SSB-SEX-sex                          |                                      |              |
| TB-AGE-yr                            |                                      |              |
| F-AGE-yr                             |                                      |              |
| M                                    |                                      |              |
| A50-yr                               |                                      |              |
| L50-cm                               |                                      |              |

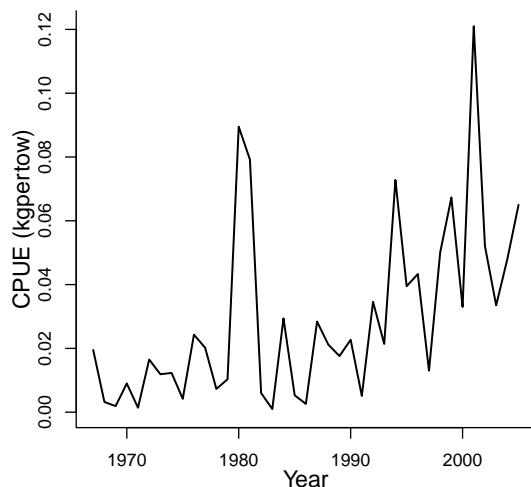
| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Georges Bank sea scallop (*Placopecten magellanicus*)

Assessment ID:NEFSC-SCALLGB-1964-2006-HART

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/417>

Area ID: USA-NMFS-5Z

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Northeast Fisheries Science Center        |
| Assessment authors | Northeast Fisheries Science Center        |
| Assessment method  | An AD-Model Builder catch at length model |
| Publication year   | 2007                                      |
| Timeseries span    | 1964-2006                                 |
| Document           | SeaScallop2007.pdf (pdf in database)      |
| Recorder           | HART                                      |
| Date entered       | 2009-04-22                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

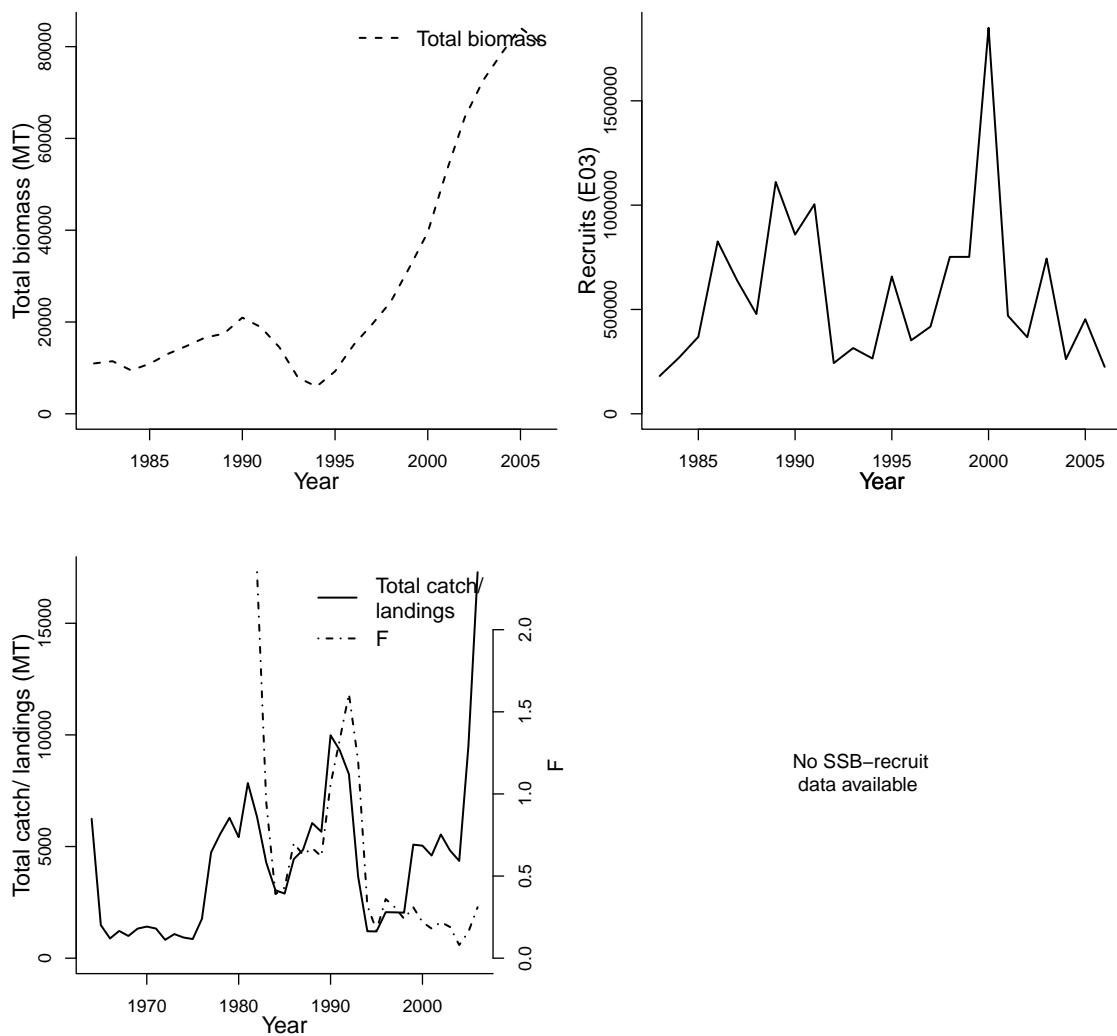
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |         |      |       |       |
|-------------------------------|---------|------|-------|-------|
|                               | SSB     | R    | F     | TB    |
| Minimum year                  |         | 1983 | 1982  | 1982  |
| Maximum year                  |         | 2006 | 2006  | 2006  |
| Time series minimum           | 181000  | 0.08 | 5923  | 821   |
| Time series maximum           | 1850000 | 2.35 | 84106 | 17286 |
| Units                         | E03     | 1/T  | MT    | MT    |



# Assessment of Mid-Atlantic Coast sea scallop (*Placopecten magellanicus*)

Assessment ID:NEFSC-SCALLMATLC-1964-2006-HART

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/418>

Area ID: USA-NMFS-MATLC

General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Northeast Fisheries Science Center        |
| Assessment authors | Northeast Fisheries Science Center        |
| Assessment method  | An AD-Model Builder catch at length model |
| Publication year   | 2007                                      |
| Timeseries span    | 1964-2006                                 |
| Document           | SeaScallop2007.pdf (pdf in database)      |
| Recorder           | HART                                      |
| Date entered       | 2009-04-22                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

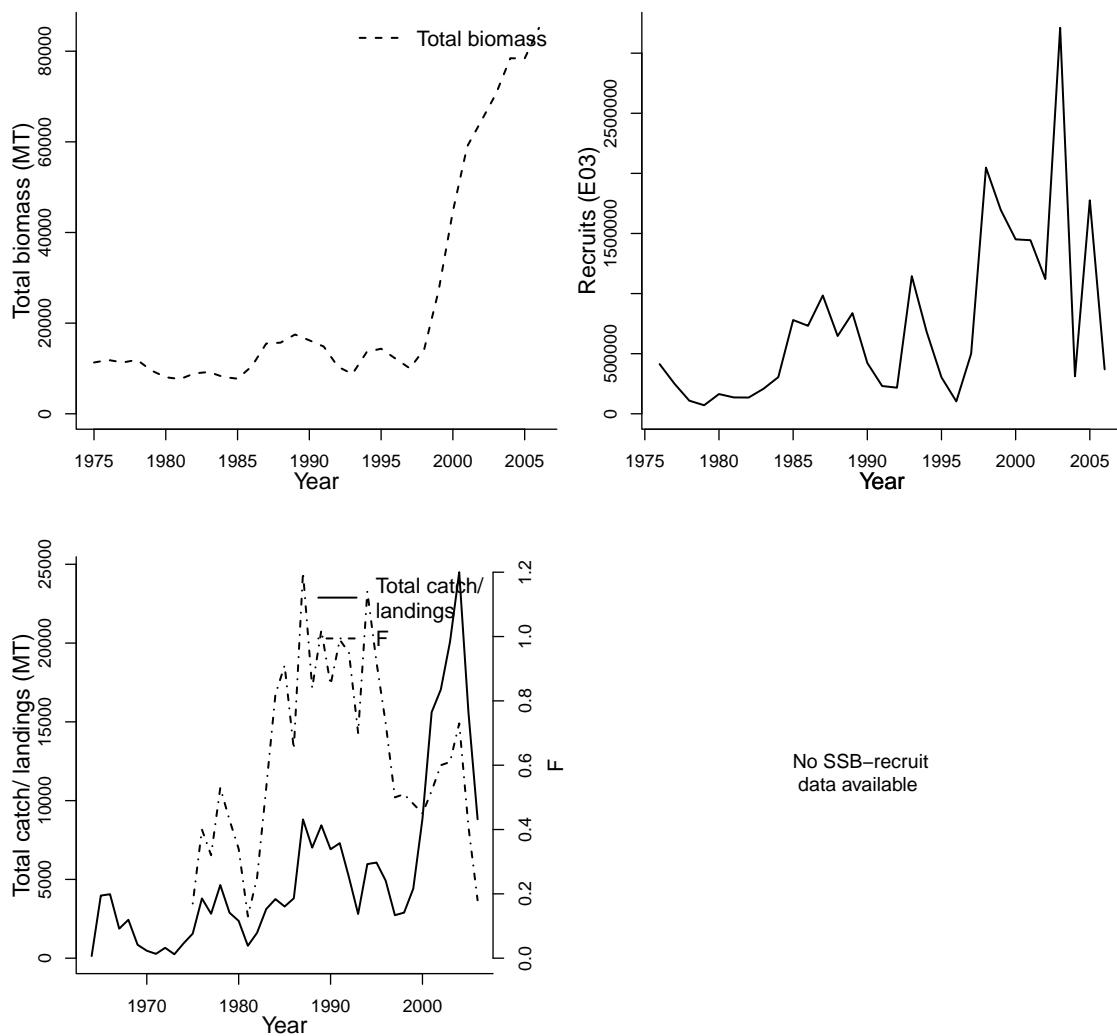
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |         |      |       |       |
|-------------------------------|---------|------|-------|-------|
|                               | SSB     | R    | F     | TB    |
| Minimum year                  |         | 1976 | 1975  | 1975  |
| Maximum year                  |         | 2006 | 2006  | 2006  |
| Time series minimum           | 71000   | 0.13 | 7664  | 137   |
| Time series maximum           | 3211000 | 1.2  | 85161 | 24497 |
| Units                         | E03     | 1/T  | MT    | MT    |



# Assessment of Northwestern Atlantic Coast scup (*Stenotomus chrysops*)

Assessment ID:NEFSC-SCUPNWATLC-1960-2007-TERCEIRO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/296>

Area ID: USA-NMFS-NWATLC

General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Age Structured Assessment Program  |
| Publication year   | 2009                               |
| Timeseries span    | 1960-2007                          |
| Document           | crd0902.pdf (pdf in database)      |
| Recorder           | TERCEIRO                           |
| Date entered       | 2009-04-29                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

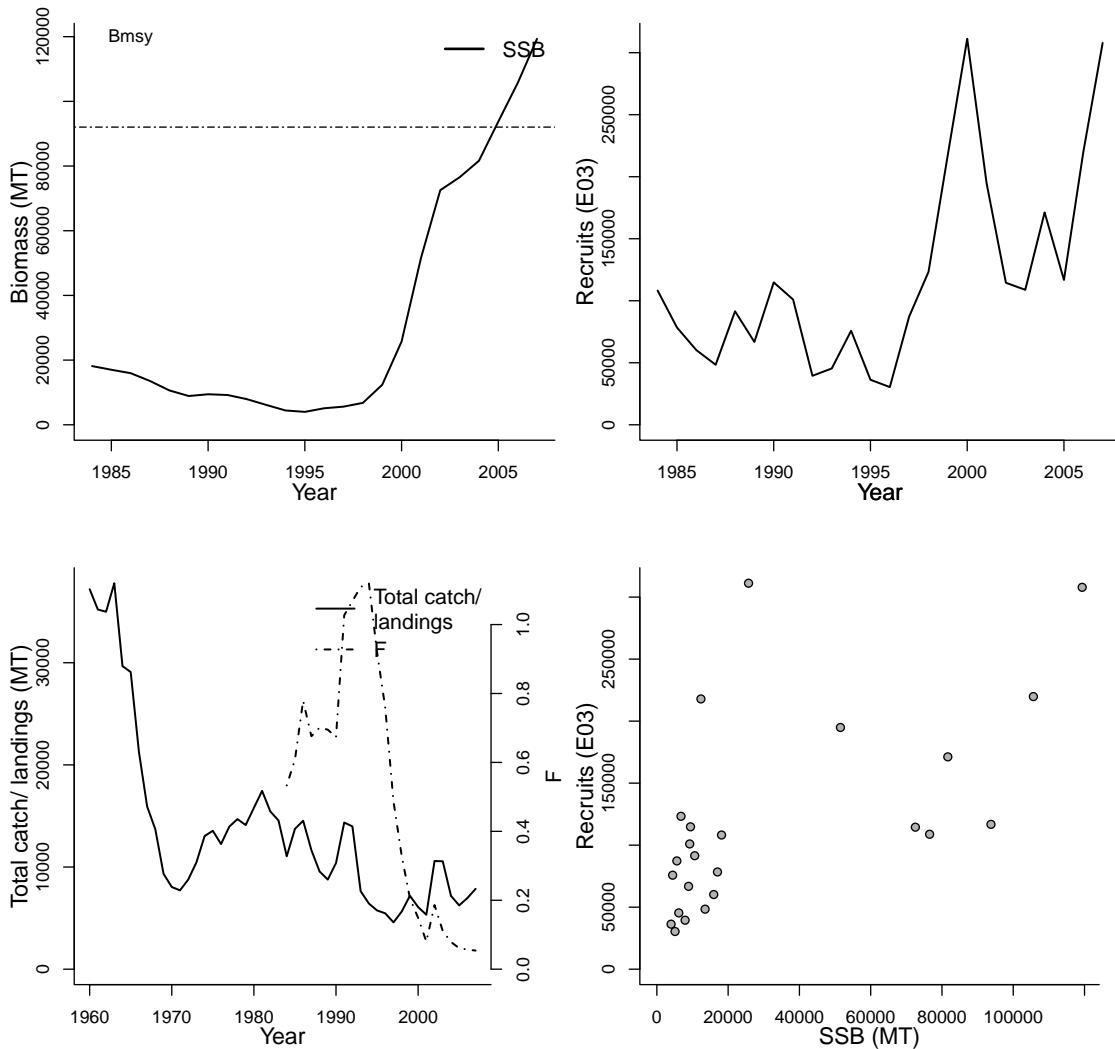
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| SSB-AGE-yr                           | 2+            | yr           |
| REC-AGE-yr                           | 0             | yr           |
| F-AGE-yr-yr                          | 2-7+          | yr-yr        |
| A50-yr                               | 2             | yr           |
| M-1/yr                               | 0.2           | 1/yr         |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| M                                    |               |              |
| L50-cm                               |               |              |

Reference points

| Parameter     | Value | Units |
|---------------|-------|-------|
| Bmsy-MT (TB)  | 92044 | MT    |
| Bpa-MT (TB)   | 46022 | MT    |
| F0.1-1/yr (F) | 0.177 | 1/yr  |

| Time series minima and maxima |         |        |       |       |
|-------------------------------|---------|--------|-------|-------|
|                               | SSB     | R      | F     | TB    |
| Minimum year                  | 1984    | 1984   | 1984  | 1960  |
| Maximum year                  | 2007    | 2007   | 2007  | 2007  |
| Time series minimum           | 3992.54 | 30400  | 0.054 | 4582  |
| Time series maximum           | 119343  | 311200 | 1.12  | 37785 |
| Units                         | MT      | E03    | 1/T   | MT    |



# Assessment of Atlantic Coast spiny dogfish (*Squalus acanthias*)

Assessment ID:NEFSC-SDOGATLC-1962-2006-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/427>

Area ID: USA-NMFS-ATLC

General assessment details.

| Detail             | Value                                  |
|--------------------|--|
| Management body    | NMFS                                   |
| Assessment group   | Northeast Fisheries Science Center     |
| Assessment authors | Northeast Fisheries Science Center     |
| Assessment method  | Unknown                                |
| Publication year   | 2006                                   |
| Timeseries span    | 1962-2006                              |
| Document           | spinydogfish2006.pdf (pdf in database) |
| Recorder           | SOSEBEE                                |
| Date entered       | 2009-04-21                             |
| Date last loaded   | 2011-07-25                             |
| QA/QC complete     | YES                                    |
| Date approved      | 2011-06-10                             |

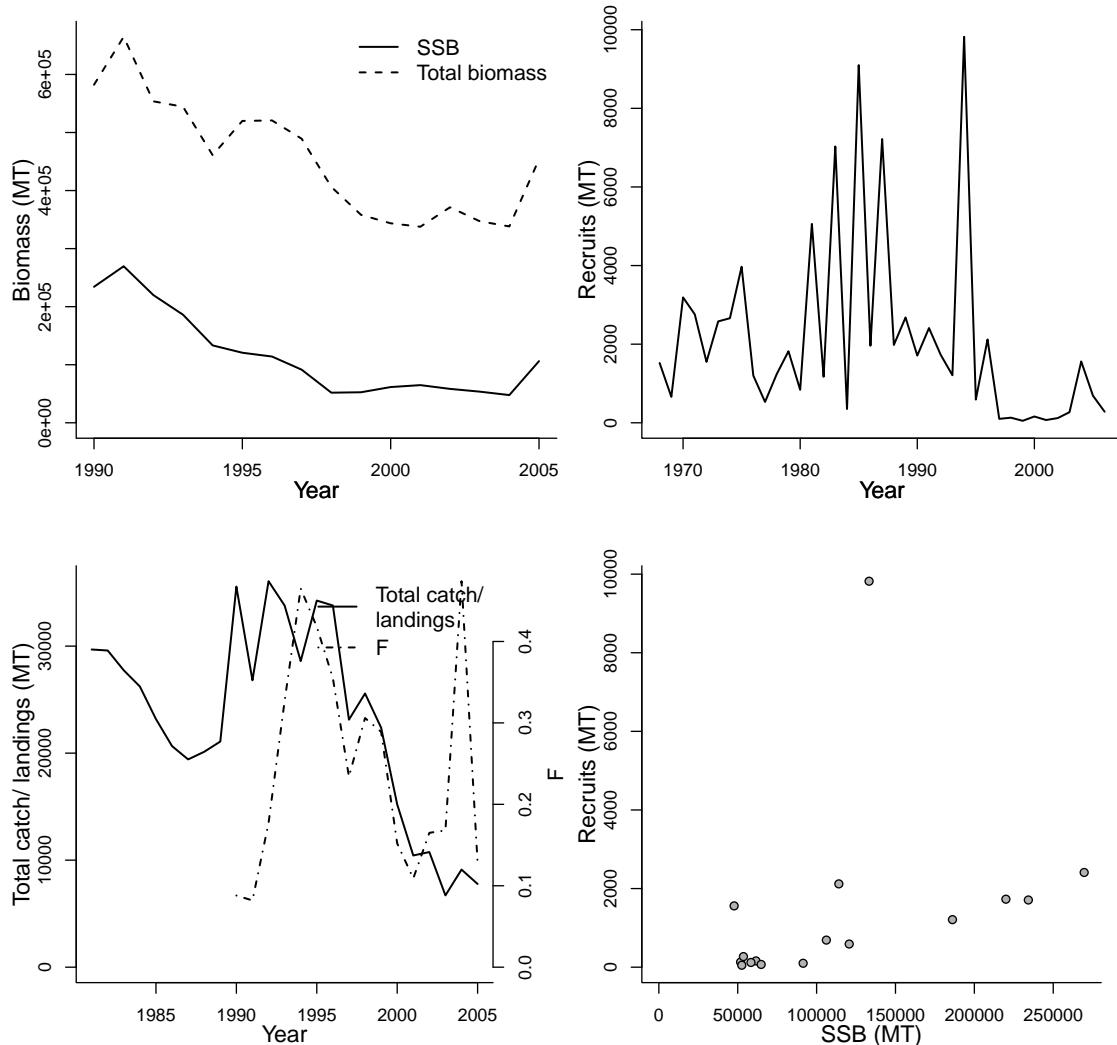
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        | tertiary LME |
|--------------------------------------|--------------------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 6 - Southeast U.S. Continental Shelf | na           |
| <hr/>                                |                                      |              |
| Parameter                            | Value                                | Units        |
| SSB-SEX-sex                          | 1                                    | sex          |
| REC-AGE                              |                                      |              |
| SSB-AGE-yr                           |                                      |              |
| TB-AGE-yr                            |                                      |              |
| F-AGE-yr                             |                                      |              |
| M                                    |                                      |              |
| A50-yr                               |                                      |              |
| L50-cm                               |                                      |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
|                  |       |       |

| Time series minima and maxima |        |      |       |        |
|-------------------------------|--------|------|-------|--------|
|                               | SSB    | R    | F     | TB     |
| Minimum year                  | 1990   | 1968 | 1990  | 1990   |
| Maximum year                  | 2005   | 2006 | 2005  | 2005   |
| Time series minimum           | 47720  | 50   | 0.082 | 337690 |
| Time series maximum           | 269620 | 9820 | 0.474 | 664850 |
| Units                         | MT     | MT   | 1/T   | MT     |



# Assessment of Mid-Atlantic Coast summer flounder (*Paralichthys dentatus*)

Assessment ID:NEFSC-SFLOUNMATLC-1940-2007-BAUM

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/9>

Area ID: USA-NMFS-MATLC

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                         |
| Assessment authors | Northeast Fisheries Science Center                         |
| Assessment method  | Age Structured Assessment Program                          |
| Publication year   | 2008   |
| Timeseries span    | 1940-2007  |
| Document           | NMFS-MATLC-Paralichthysdentatus-2008.pdf (pdf in database) |
| Recorder           | BAUM   |
| Date entered       | 2008-11-03   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

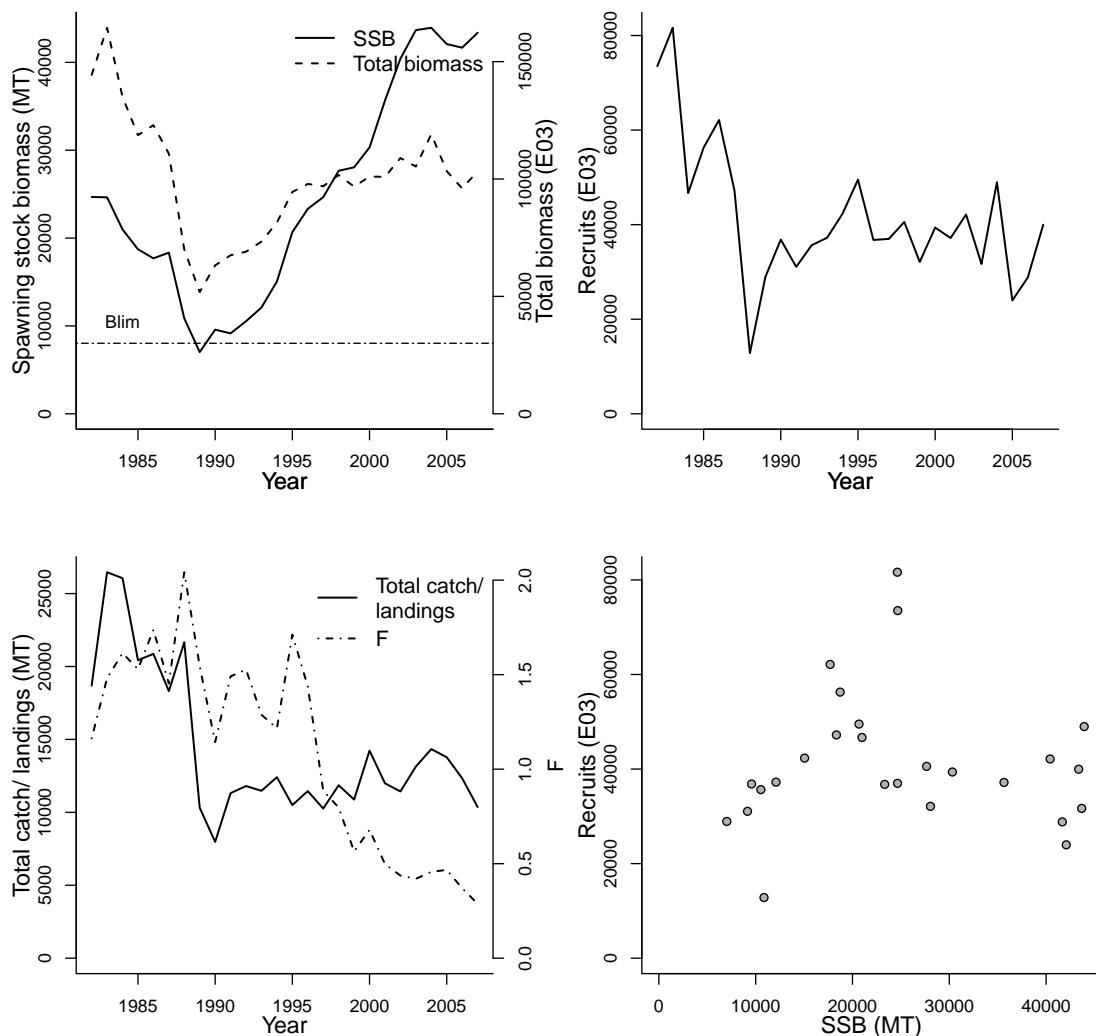
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        | tertiary LME |
|--------------------------------------|--------------------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 6 - Southeast U.S. Continental Shelf | na           |
| Parameter                            | Value                                | Units        |
| SSB-SEX-sex                          | NA                                   | sex          |
| REC-AGE-yr                           | 0                                    | yr           |
| F-AGE-yr-yr                          | 3-7+                                 | yr-yr        |
| A50-yr                               | AVAILABLE                            | yr           |
| L50-cm                               | AVAILABLE                            | cm           |
| M-1/T                                | 0.25                                 | 1/T          |
| SSB-AGE-yr                           |                                      |              |
| TB-AGE-yr                            |                                      |              |
| M                                    |                                      |              |

| Parameter   | Value     | Units | Reference points | Parameter | Value | Units |
|-------------|-----------|-------|------------------|-----------|-------|-------|
| SSB-SEX-sex | NA        | sex   |                  |           |       |       |
| REC-AGE-yr  | 0         | yr    |                  |           |       |       |
| F-AGE-yr-yr | 3-7+      | yr-yr |                  |           |       |       |
| A50-yr      | AVAILABLE | yr    |                  |           |       |       |
| L50-cm      | AVAILABLE | cm    |                  |           |       |       |
| M-1/T       | 0.25      | 1/T   |                  |           |       |       |
| SSB-AGE-yr  |           |       |                  |           |       |       |
| TB-AGE-yr   |           |       |                  |           |       |       |
| M           |           |       |                  |           |       |       |

| Time series minima and maxima |       |       |       |        |       |
|-------------------------------|-------|-------|-------|--------|-------|
|                               | SSB   | R     | F     | TB     | Catch |
| Minimum year                  | 1982  | 1982  | 1982  | 1982   | 1982  |
| Maximum year                  | 2007  | 2007  | 2007  | 2007   | 2007  |
| Time series minimum           | 7017  | 12831 | 0.288 | 51853  | 7976  |
| Time series maximum           | 43932 | 81631 | 2.042 | 164410 | 26466 |
| Units                         | MT    | E03   | 1/T   | E03    | MT    |



# Assessment of Gulf of Maine / Georges Bank silver hake (*Merluccius bilinearis*)

Assessment ID:NEFSC-SHAKEGOMNGB-1955-2005-COL

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/287>

Area ID: USA-NMFS-5YZ

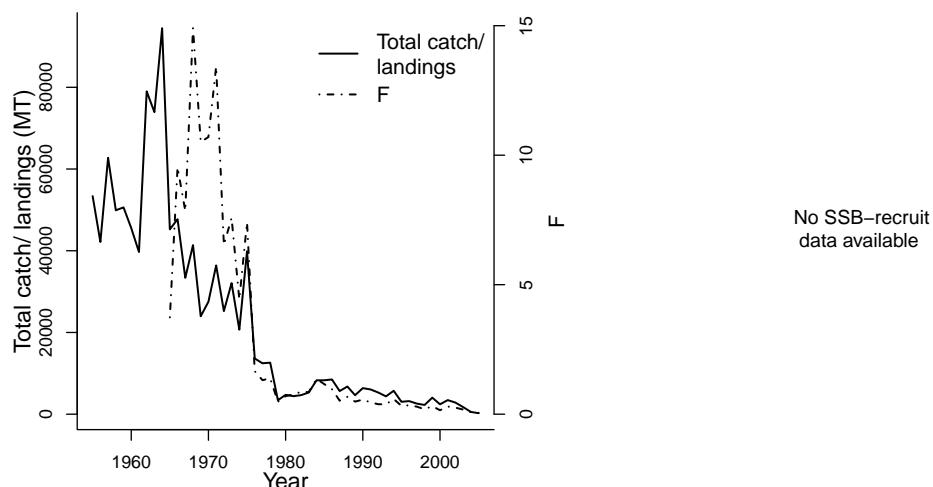
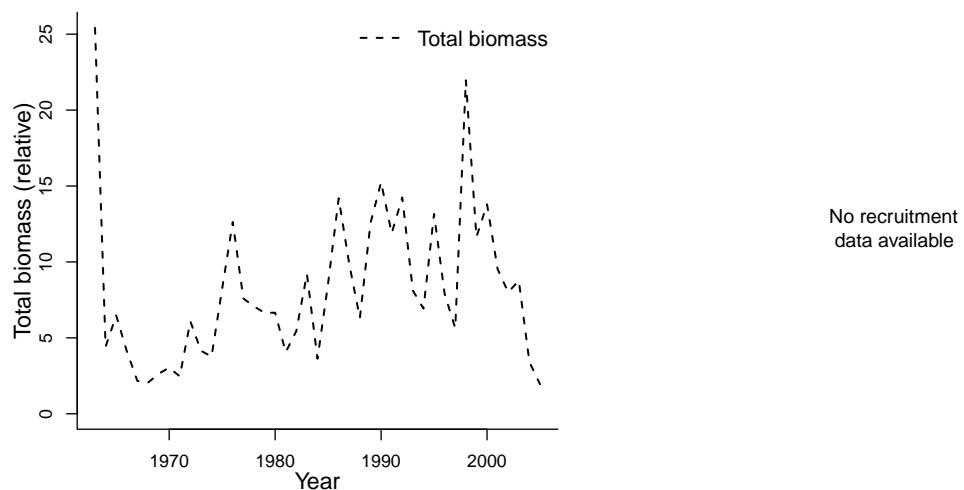
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                     |
| Assessment authors | Northeast Fisheries Science Center                     |
| Assessment method  | Temporal indices derived from scientific survey data   |
| Publication year   | 2005   |
| Timeseries span    | 1955-2005  |
| Document           | SilverHake-2005-NEFSC-Assessment.pdf (pdf in database) |
| Recorder           | COL  |
| Date entered       | 2009-04-24   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |
| Parameter                            | Value | Units | Reference points    |              |
| A50-yr                               | 2     | yr    | Parameter           | Value        |
| REC-AGE                              |       |       | Bmsy-relative       | 6.63         |
| SSB-AGE-yr                           |       |       | Bpa-relative        | 3.31         |
| SSB-SEX-sex                          |       |       | Umsy-ratio (U)      | 2.57         |
| TB-AGE-yr                            |       |       | $TB_{2005}/B_{msy}$ | 0.294        |
| F-AGE-yr                             |       |       |                     |              |
| M                                    |       |       |                     |              |
| L50-cm                               |       |       |                     |              |

| Time series minima and maxima |     |   |             |          |        |
|-------------------------------|-----|---|-------------|----------|--------|
|                               | SSB | R | F           | TB       | Catch  |
| Minimum year                  |     |   | 1965        | 1963     | 1955   |
| Maximum year                  |     |   | 2005        | 2005     | 2005   |
| Time series minimum           |     |   | 0.050337    | 1.947    | 240.98 |
| Time series maximum           |     |   | 14.90240096 | 25.418   | 94462  |
| Units                         |     |   | ratio       | relative | MT     |



# Assessment of Southern Georges Bank / Mid-Atlantic silver hake (*Merluccius bilinearis*)

Assessment ID:NEFSC-SHAESGBMATL-1955-2005-COL

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/288>

Area ID: USA-NMFS-SGBMATL

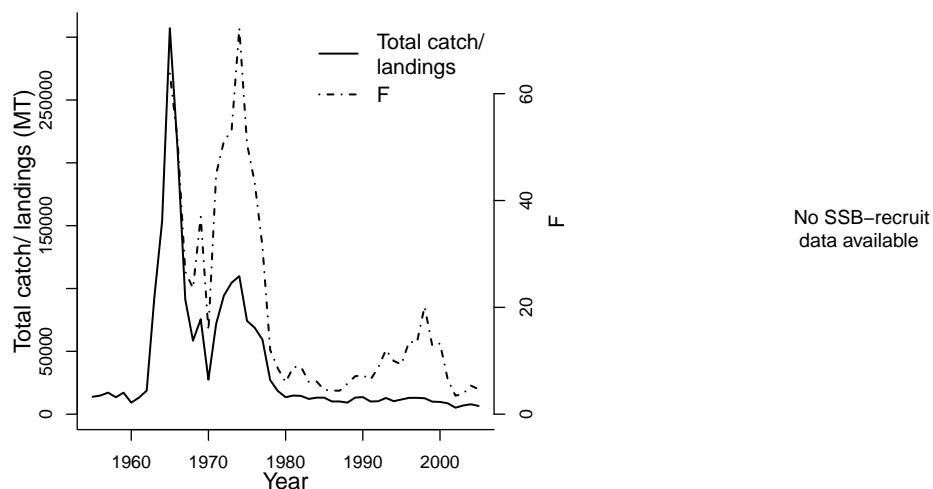
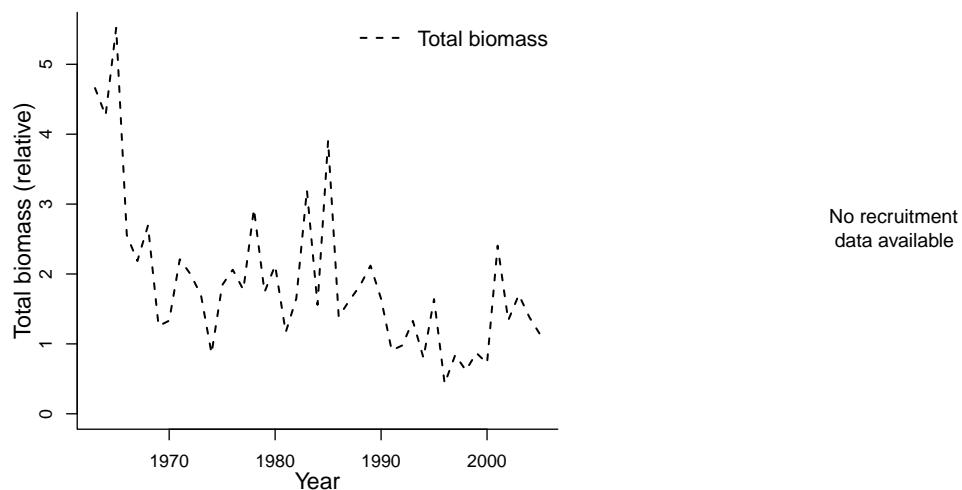
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                     |
| Assessment authors | Northeast Fisheries Science Center                     |
| Assessment method  | Temporal indices derived from scientific survey data   |
| Publication year   | 2005   |
| Timeseries span    | 1955-2005  |
| Document           | SilverHake-2005-NEFSC-Assessment.pdf (pdf in database) |
| Recorder           | COL  |
| Date entered       | 2009-04-24   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME        | tertiary LME |
|--------------------------------------|-------|-------|----------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                   | na           |
| Parameter                            | Value | Units | Reference points     |              |
| A50-yr                               | 2     | yr    | Parameter            | Value        |
| REC-AGE                              |       |       | Bmsy-relative        | 1.78         |
| SSB-AGE-yr                           |       |       | Bpa-relative         | 0.89         |
| SSB-SEX-sex                          |       |       | Umsy-ratio (U)       | 34.39        |
| TB-AGE-yr                            |       |       | Upa-ratio            | 20.63        |
| F-AGE-yr                             |       |       | $TB_{2005}/B_{m sy}$ | 0.638        |
| M                                    |       |       |                      |              |
| L50-cm                               |       |       |                      |              |

| Time series minima and maxima |     |   |             |          |             |
|-------------------------------|-----|---|-------------|----------|-------------|
|                               | SSB | R | F           | TB       | Catch       |
| Minimum year                  |     |   | 1965        | 1963     | 1955        |
| Maximum year                  |     |   | 2005        | 2005     | 2005        |
| Time series minimum           |     |   | 3.463264991 | 0.431    | 5153.338306 |
| Time series maximum           |     |   | 72.26244245 | 5.522    | 307131      |
| Units                         |     |   | ratio       | relative | MT          |



# Assessment of Gulf of Maine / Georges Bank-Southern New England smooth skate

*(Malacoraja senta)*

Assessment ID:NEFSC-SSKAT5YZSNE-1963-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/432>

Area ID: USA-NMFS-5YZSNE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1963-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

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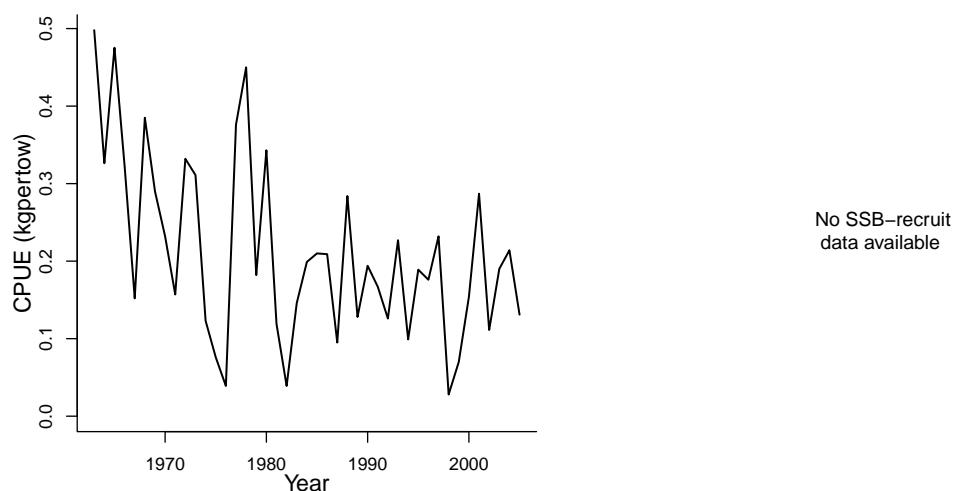
| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Gulf of Maine / Cape Hatteras striped bass (*Morone saxatilis*)

## Assessment

ID:NEFSC-STRIPEDBASSGOMCHATT-1982-2006-SHEPHERD

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/298>

Area ID: USA-NMFS-5YCHATT

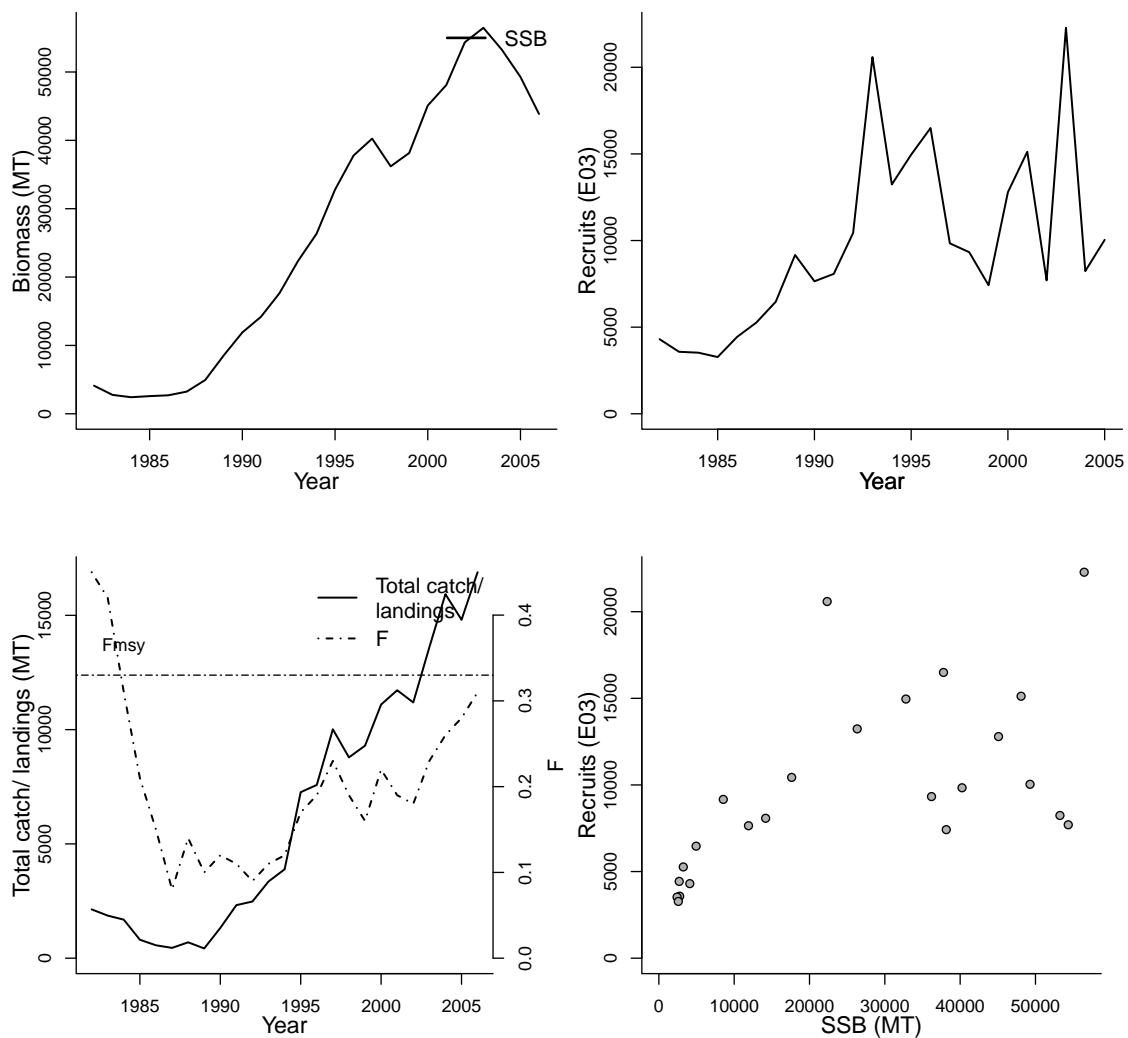
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                 |
| Assessment authors | Northeast Fisheries Science Center                 |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2008   |
| Timeseries span    | 1982-2006  |
| Document           | 07AssessmentReport.pdf (pdf in database)           |
| Recorder           | SHEPHERD   |
| Date entered       | 2009-04-29   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME             | tertiary LME |
|--------------------------------------|-------|-------|---------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                        | na           |
| Parameter                            | Value | Units |                           |              |
| SSB-AGE-yr                           | 6+    | yr    |                           |              |
| SSB-SEX-sex                          | 1     | sex   | Reference points          |              |
| REC-AGE-yr                           | 1     | yr    | Parameter                 | Value        |
| F-AGE-yr-yr                          | 8-11  | yr-yr |                           | Units        |
| TB-AGE-yr                            | 0+    | yr    | F <sub>msy</sub> -1/T (F) | 0.33 1/T     |
| A50-yr                               | 6     | yr    | MSY-MT (TB)               | 17823 MT     |
| M-1/T                                | 0.15  | 1/T   | $F_{2006}/F_{msy}$        | 0.939        |
| M                                    |       |       |                           |              |
| L50-cm                               |       |       |                           |              |

| Time series minima and maxima |         |         |      |          |
|-------------------------------|---------|---------|------|----------|
|                               | SSB     | R       | F    | TB       |
| Minimum year                  | 1982    | 1982    | 1982 | 1982     |
| Maximum year                  | 2006    | 2005    | 2006 | 2006     |
| Time series minimum           | 2420.67 | 3275.23 | 0.08 | 426.8    |
| Time series maximum           | 56464   | 22279.1 | 0.45 | 16887.34 |
| Units                         | MT      | E03     | 1/T  | MT       |



# Assessment of Mid-Atlantic Coast atlantic surfclam (*Spisula solidissima*)

Assessment ID:NEFSC-SURFMATLC-1965-2008-JACOBSON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/436>

Area ID: USA-NMFS-MATLC

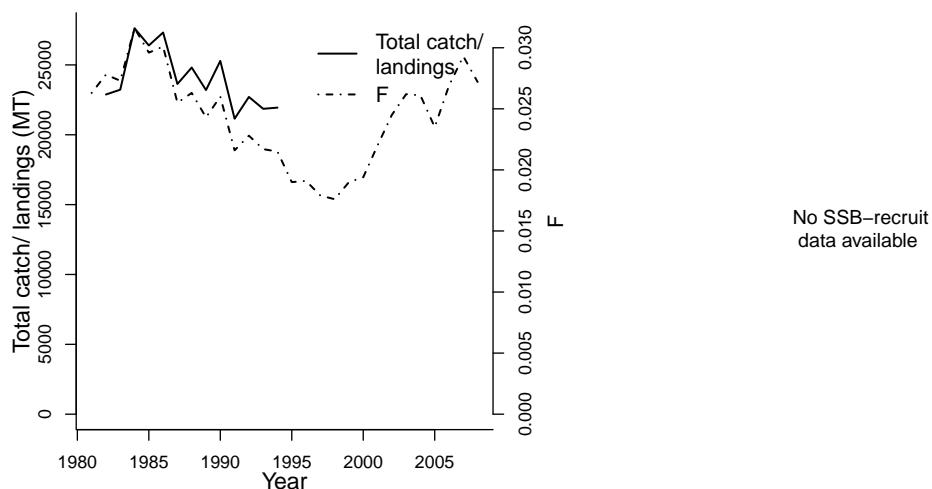
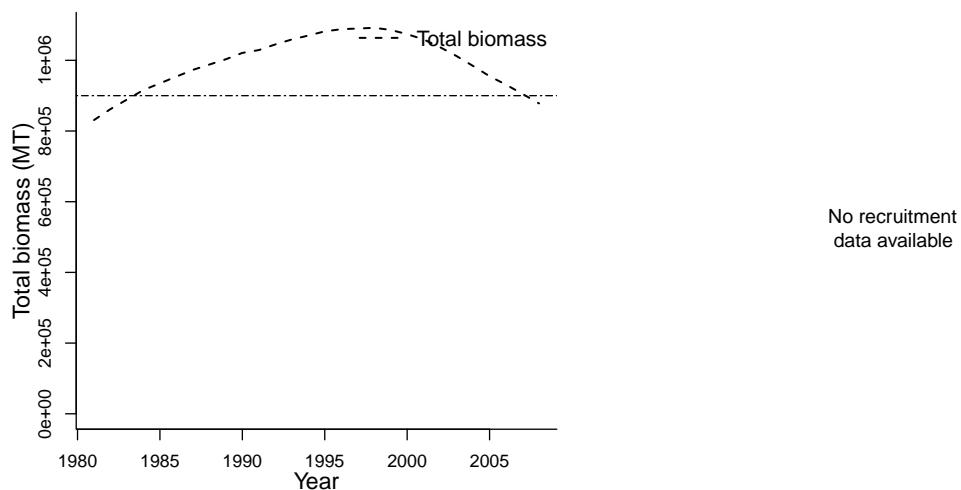
General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Delay difference model             |
| Publication year   | 2007                               |
| Timeseries span    | 1965-2008                          |
| Document           | Surfclam2007.pdf (pdf in database) |
| Recorder           | JACOBSON                           |
| Date entered       | 2009-04-22                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME     |
|--------------------------------------|-------|-------|---------------------|------------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na               |
| Parameter                            | Value | Units | Parameter           | Reference points |
| SSB-AGE-yr                           | 0.25  | yr    | Fmsy-1/yr (F)       | 0.15             |
| SSB-SEX-sex                          | 0     | sex   | Fmsy-1/T (F)        | 0.15             |
| REC-AGE-yr                           | 5.936 | yr    | Bmsy-MT (TB)        | 1/yr             |
| F-AGE-yr-yr                          | 5.9+  | yr-yr | $TB_{2008}/B_{msy}$ | 1/T              |
| TB-AGE-yr                            | 5.9+  | yr    | $F_{2008}/F_{msy}$  | 900000           |
| M-1/yr                               | 0.15  | 1/yr  |                     | MT               |
| M                                    |       |       |                     | 0.976            |
| A50-yr                               |       |       |                     | 0.181            |
| L50-cm                               |       |       |                     |                  |

| Time series minima and maxima |     |   |        |         |
|-------------------------------|-----|---|--------|---------|
|                               | SSB | R | F      | TB      |
| Minimum year                  |     |   | 1981   | 1981    |
| Maximum year                  |     |   | 2008   | 2008    |
| Time series minimum           |     |   | 0.0176 | 831000  |
| Time series maximum           |     |   | 0.0316 | 1092000 |
| Units                         |     |   | 1/T    | MT      |
|                               |     |   |        | MT      |



# Assessment of Mid-Atlantic Coast tilefish (*Lopholatilus chamaeleonticeps*)

Assessment ID:NEFSC-TILEMATLC-1973-2008-NITSCHKE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/315>

Area ID: USA-NMFS-MATLC

General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Surplus production model           |
| Publication year   | 2005                               |
| Timeseries span    | 1973-2008                          |
| Document           | Tilefish2005.pdf (pdf in database) |
| Recorder           | NITSCHKE                           |
| Date entered       | 2009-04-22                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

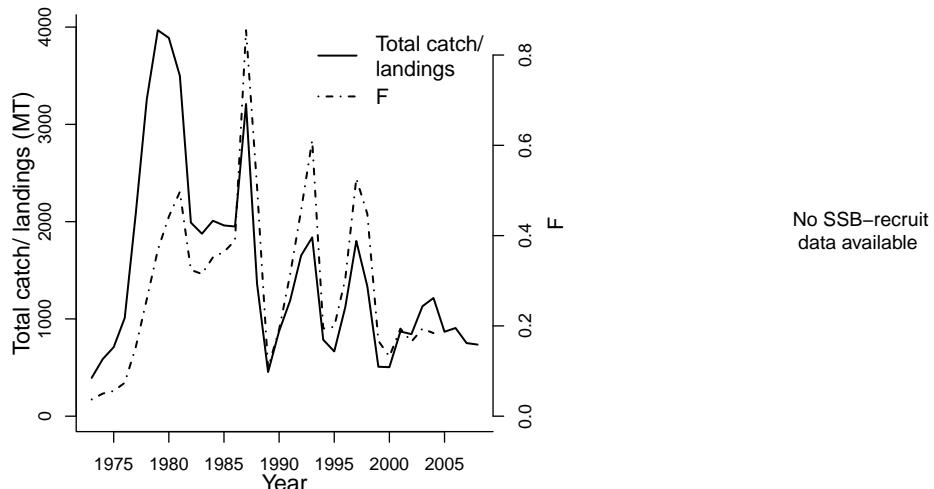
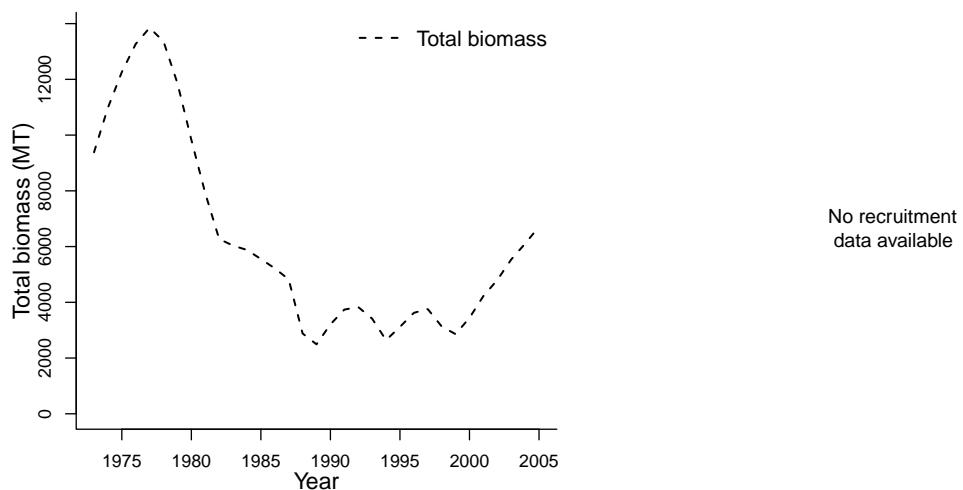
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        | tertiary LME |
|--------------------------------------|--------------------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf | 6 - Southeast U.S. Continental Shelf | na           |
| <hr/>                                |                                      |              |
| Parameter                            | Value                                | Units        |
| A50-yr                               | 4.5                                  | yr           |
| L50-cm                               | 46                                   | cm           |
| REC-AGE                              |                                      |              |
| SSB-AGE-yr                           |                                      |              |
| SSB-SEX-sex                          |                                      |              |
| TB-AGE-yr                            |                                      |              |
| F-AGE-yr                             |                                      |              |
| M                                    |                                      |              |

Reference points

| Parameter     | Value | Units |
|---------------|-------|-------|
| Fmax-1/yr (F) | 0.138 | 1/yr  |
| F40%-1/T      | 0.08  | 1/T   |

| Time series minima and maxima |     |   |       |       |       |
|-------------------------------|-----|---|-------|-------|-------|
|                               | SSB | R | F     | TB    | Catch |
| Minimum year                  |     |   |       | 1973  | 1973  |
| Maximum year                  |     |   |       | 2005  | 2008  |
| Time series minimum           |     |   | 0.037 | 2492  | 394   |
| Time series maximum           |     |   | 0.855 | 13850 | 3968  |
| Units                         |     |   | 1/T   | MT    | MT    |



# Assessment of Gulf of Maine / Georges Bank-Southern New England thorny skate

*(Amblyraja radiata)*

Assessment ID:NEFSC-TSKAT5YZSNE-1963-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/433>

Area ID: USA-NMFS-5YZSNE

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1963-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

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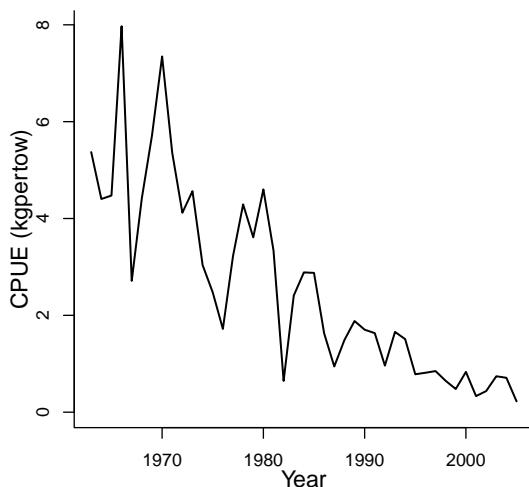
| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Atlantic Coast weakfish (*Cynoscion regalis*)

Assessment ID:NEFSC-WEAKFISHATLC-1981-2008-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/449>

Area ID: USA-NMFS-ATLC

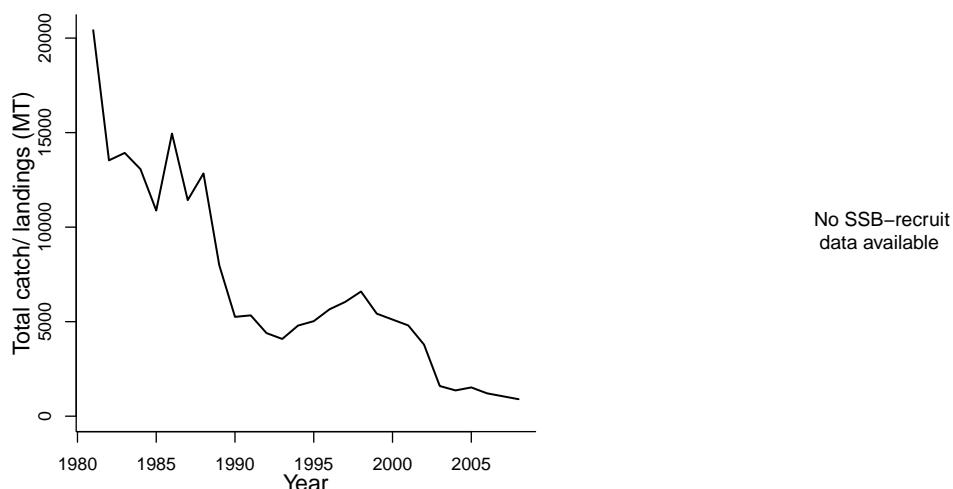
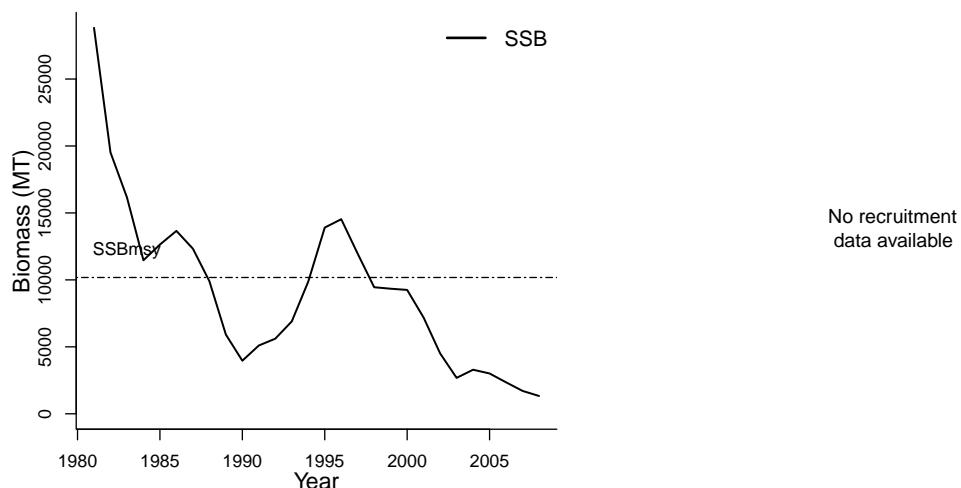
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center   |
| Assessment authors | Anonymous  |
| Assessment method  | A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2009   |
| Timeseries span    | 1981-2008  |
| Document           | NEFSC-Weakfish-2009.pdf (pdf in database)  |
| Recorder           | STANTON  |
| Date entered       | 2010-04-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-07-28   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                            | tertiary LME |
|--------------------------------------|-------|-------|--|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                                       | na           |
| Parameter                            | Value | Units |  |              |
| SSB-SEX-sex                          | NA    | sex   |  |              |
| TB-AGE-yr                            | 1+    | yr    |  |              |
| M-1/yr                               | 0.25  | 1/yr  | Reference points                         |              |
| REC-AGE                              |       |       | Parameter                                | Value        |
| SSB-AGE-yr                           |       |       | SSB <sub>m</sub> sy-MT (SSB)             | 10179 MT     |
| F-AGE-yr                             |       |       | SSB <sub>2008</sub> /SSB <sub>m</sub> sy | 0.131        |
| M                                    |       |       |  |              |
| A50-yr                               |       |       |  |              |
| L50-cm                               |       |       |  |              |

| Time series minima and maxima |       |      |   |    |       |
|-------------------------------|-------|------|---|----|-------|
|                               | SSB   | R    | F | TB | Catch |
| Minimum year                  | 1981  |      |   |    | 1981  |
| Maximum year                  |       | 2008 |   |    | 2008  |
| Time series minimum           | 1330  |      |   |    | 899   |
| Time series maximum           | 28826 |      |   |    | 20417 |
| Units                         | MT    |      |   |    | MT    |



# Assessment of Gulf of Maine / Georges Bank white hake (*Urophycis tenuis*)

Assessment ID:NEFSC-WHAKEGBGOM-1963-2007-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/415>

Area ID: USA-NMFS-5YZ

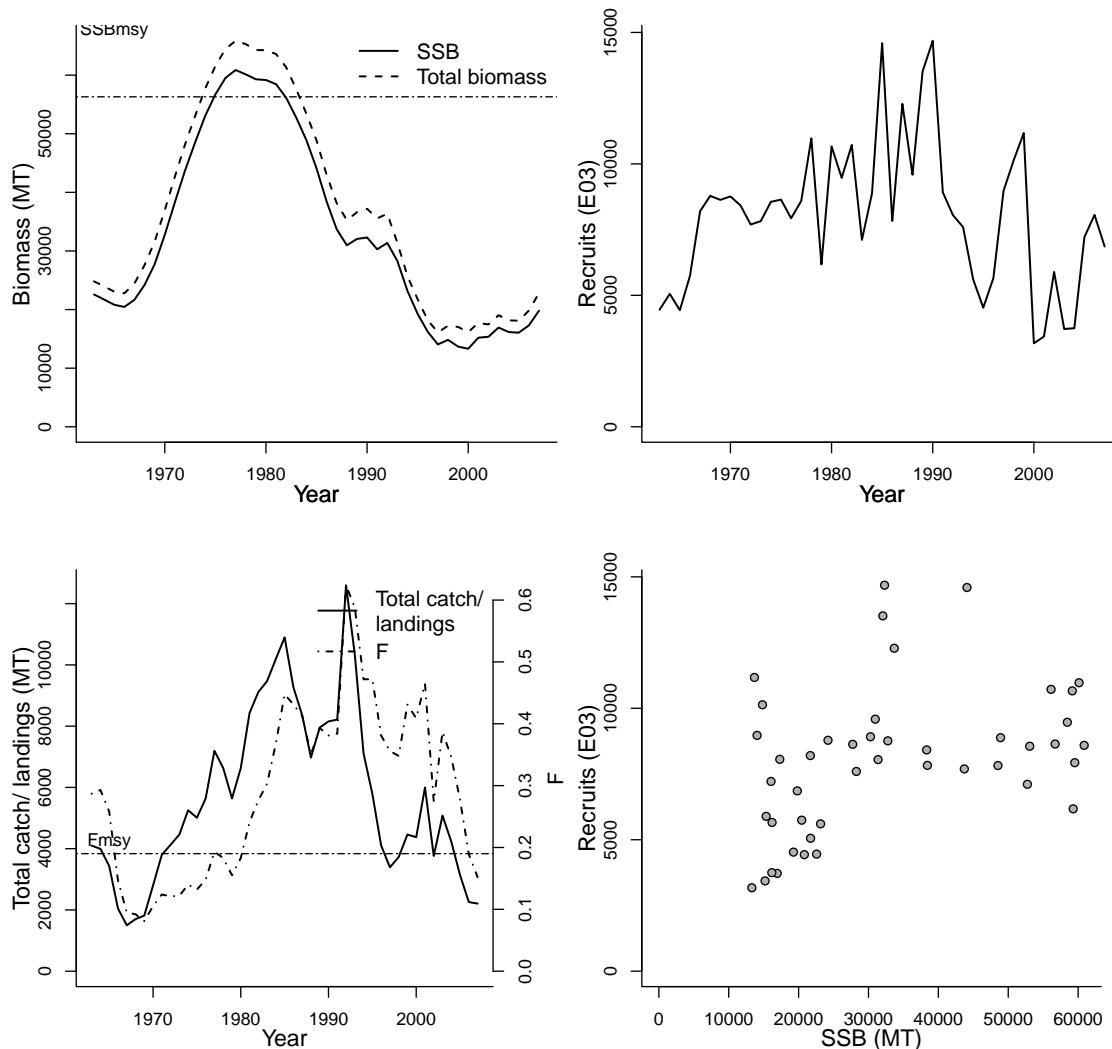
## General assessment details.

| Detail             | Value                                   |
|--------------------|---|
| Management body    | NMFS                                    |
| Assessment group   | Northeast Fisheries Science Center      |
| Assessment authors | Northeast Fisheries Science Center      |
| Assessment method  | Age-structured surplus production model |
| Publication year   | 2008                                    |
| Timeseries span    | 1963-2007                               |
| Document           | WhiteHake2008.pdf (pdf in database)     |
| Recorder           | SOSEBEE                                 |
| Date entered       | 2009-04-20                              |
| Date last loaded   | 2011-07-25                              |
| QA/QC complete     | YES                                     |
| Date approved      | 2011-06-10                              |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |
| Parameter                            | Value | Units | Reference points       |              |
| SSB-SEX-sex                          | 0     | sex   | Parameter              |              |
| REC-AGE-yr                           | 1     | yr    | Fmsy-1/T (F)           | 0.19         |
| F-AGE-yr-yr                          | 1-9   | yr-yr | SPRF0-E01 (SPR)        | 17.5788      |
| TB-AGE-yr                            | 1     | yr    | F40%-1/T               | 0.13         |
| A50-yr                               | 2.568 | yr    | SSBmsy-MT (SSB)        | 56300        |
| M-1/T                                | 0.2   | 1/T   | MSY-MT (TB)            | 5800         |
| SSB-AGE-yr                           |       |       | Frebuild-1/T (F)       | 0.13         |
| M                                    |       |       | $F_{2007}/F_{msy}$     | 0.800        |
| L50-cm                               |       |       | $SSB_{2007}/SSB_{msy}$ | 0.352        |

| Time series minima and maxima |       |         |       |          |          |
|-------------------------------|-------|---------|-------|----------|----------|
|                               | SSB   | R       | F     | TB       | Catch    |
| Minimum year                  | 1963  | 1963    | 1963  | 1963     | 1963     |
| Maximum year                  | 2007  | 2007    | 2007  | 2007     | 2007     |
| Time series minimum           | 13304 | 3173.77 | 0.081 | 16102.01 | 1498.41  |
| Time series maximum           | 60869 | 14681.7 | 0.624 | 65856.89 | 12602.02 |
| Units                         | MT    | E03     | 1/T   | MT       | MT       |



# Assessment of Gulf of Maine / Georges Bank windowpane (*Scophthalmus aquosus*)

Assessment ID:NEFSC-WINDOWGOMGB-1975-2007-HENDRICKSON  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/329>

Area ID: USA-NMFS-5YZ

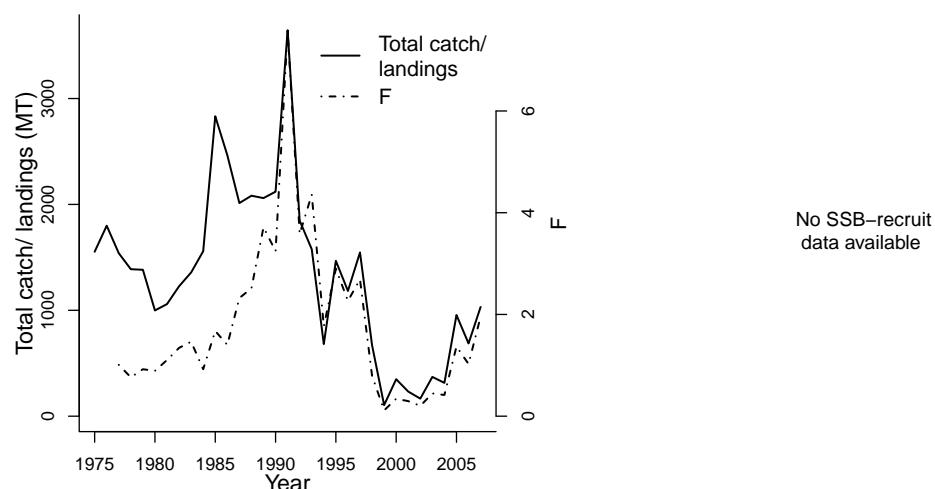
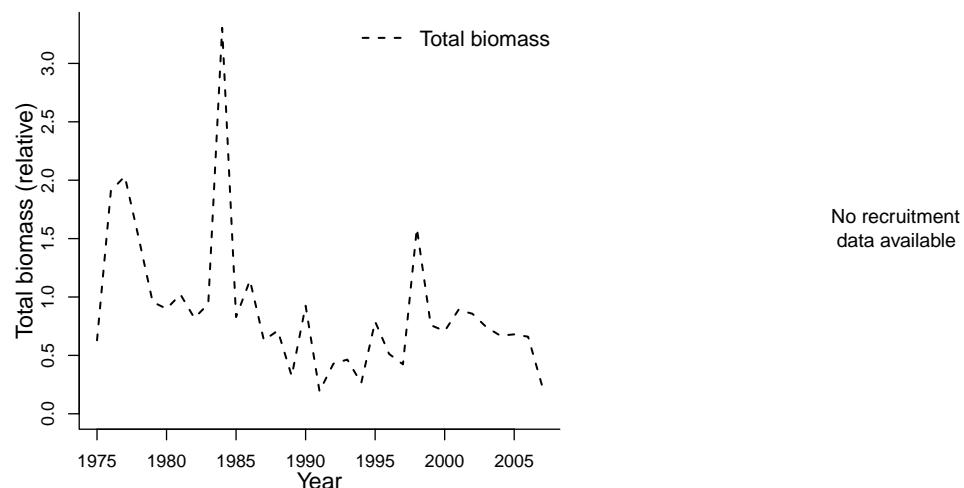
General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | NMFS                                 |
| Assessment group   | Northeast Fisheries Science Center   |
| Assessment authors | Northeast Fisheries Science Center   |
| Assessment method  | Survey based stock assessment method |
| Publication year   | 2008                                 |
| Timeseries span    | 1975-2007                            |
| Document           | garm3p.pdf (pdf in database)         |
| Recorder           | HENDRICKSON                          |
| Date entered       | 2009-04-20                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2011-06-10                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |
| Parameter                            | Value | Units | Reference points    |              |
| L50-cm                               | 22.5  | cm    | Parameter           | Value        |
| M-1/yr                               | 0.2   | 1/yr  |                     | Units        |
| REC-AGE                              |       |       | Bmsy-relative       | 1.40         |
| SSB-AGE-yr                           |       |       | Bpa-relative        | 0.70         |
| SSB-SEX-sex                          |       |       | Umsy-ratio (U)      | 0.50         |
| TB-AGE-yr                            |       |       | MSY-MT (TB)         | 700          |
| F-AGE-yr                             |       |       | $TB_{2007}/B_{msy}$ | 0.173        |
| M                                    |       |       |                     |              |
| A50-yr                               |       |       |                     |              |

| Time series minima and maxima |     |   |       |          |         |
|-------------------------------|-----|---|-------|----------|---------|
|                               | SSB | R | F     | TB       |         |
| Minimum year                  |     |   | 1977  | 1975     | 1975    |
| Maximum year                  |     |   | 2007  | 2007     | 2007    |
| Time series minimum           |     |   | 0.114 | 0.193    | 104.76  |
| Time series maximum           |     |   | 7.588 | 3.305    | 3645.29 |
| Units                         |     |   | ratio | relative | MT      |



# Assessment of Southern New England /Mid Atlantic windowpane (*Scophthalmus aquosus*) Assessment

ID:NEFSC-WINDOWSNEMATL-1975-2007-HENDRICKSON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/328>

Area ID: USA-NMFS-SNEMATL

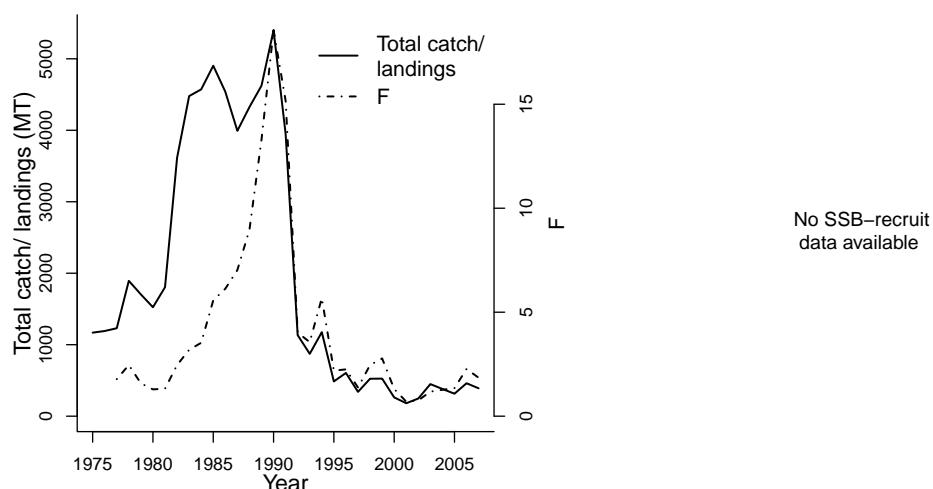
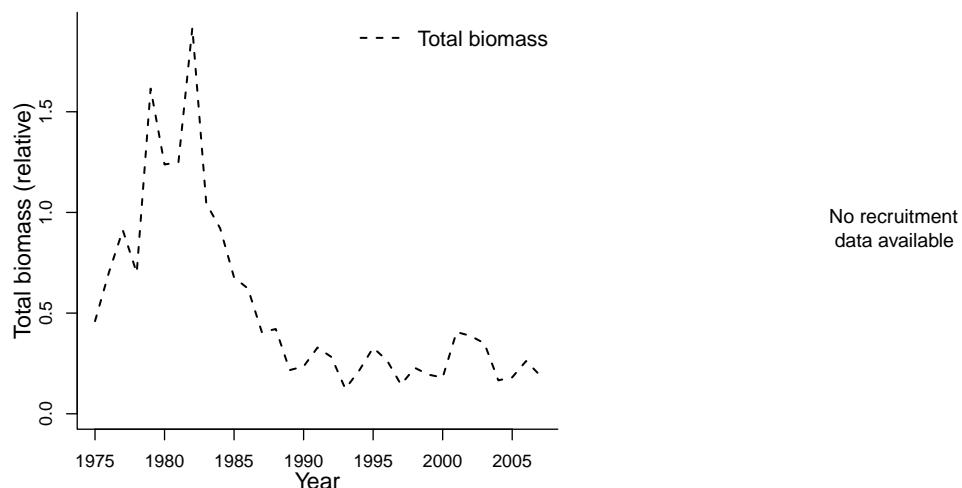
General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | NMFS                                 |
| Assessment group   | Northeast Fisheries Science Center   |
| Assessment authors | Northeast Fisheries Science Center   |
| Assessment method  | Survey based stock assessment method |
| Publication year   | 2008                                 |
| Timeseries span    | 1975-2007                            |
| Document           | garm3q.pdf (pdf in database)         |
| Recorder           | HENDRICKSON                          |
| Date entered       | 2009-04-20                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2011-06-10                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na           |
| Parameter                            | Value | Units | Reference points    |              |
| L50-cm                               | 21.2  | cm    | Parameter           | Value        |
| M-1/yr                               | 0.2   | 1/yr  |                     | Units        |
| REC-AGE                              |       |       | Bmsy-relative       | 0.34         |
| SSB-AGE-yr                           |       |       | Bpa-MT (TB)         | 0.17         |
| SSB-SEX-sex                          |       |       | Umsy-ratio (U)      | 1.47         |
| TB-AGE-yr                            |       |       | MSY-MT (TB)         | 500          |
| F-AGE-yr                             |       |       | $TB_{2007}/B_{msy}$ | 0.562        |
| M                                    |       |       |                     |              |
| A50-yr                               |       |       |                     |              |

| Time series minima and maxima |     |   |       |          |         |
|-------------------------------|-----|---|-------|----------|---------|
|                               | SSB | R | F     | TB       |         |
| Minimum year                  |     |   | 1977  | 1975     | 1975    |
| Maximum year                  |     |   | 2007  | 2007     | 2007    |
| Time series minimum           |     |   | 0.7   | 0.124    | 181.22  |
| Time series maximum           |     |   | 18.56 | 1.917    | 5399.87 |
| Units                         |     |   | ratio | relative | MT      |



# Assessment of Georges Bank winter flounder (*Pseudopleuronectes americanus*)

Assessment ID:NEFSC-WINFLOUN5Z-1982-2007-HENDRICKSON  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/330>

Area ID: USA-NMFS-5Z

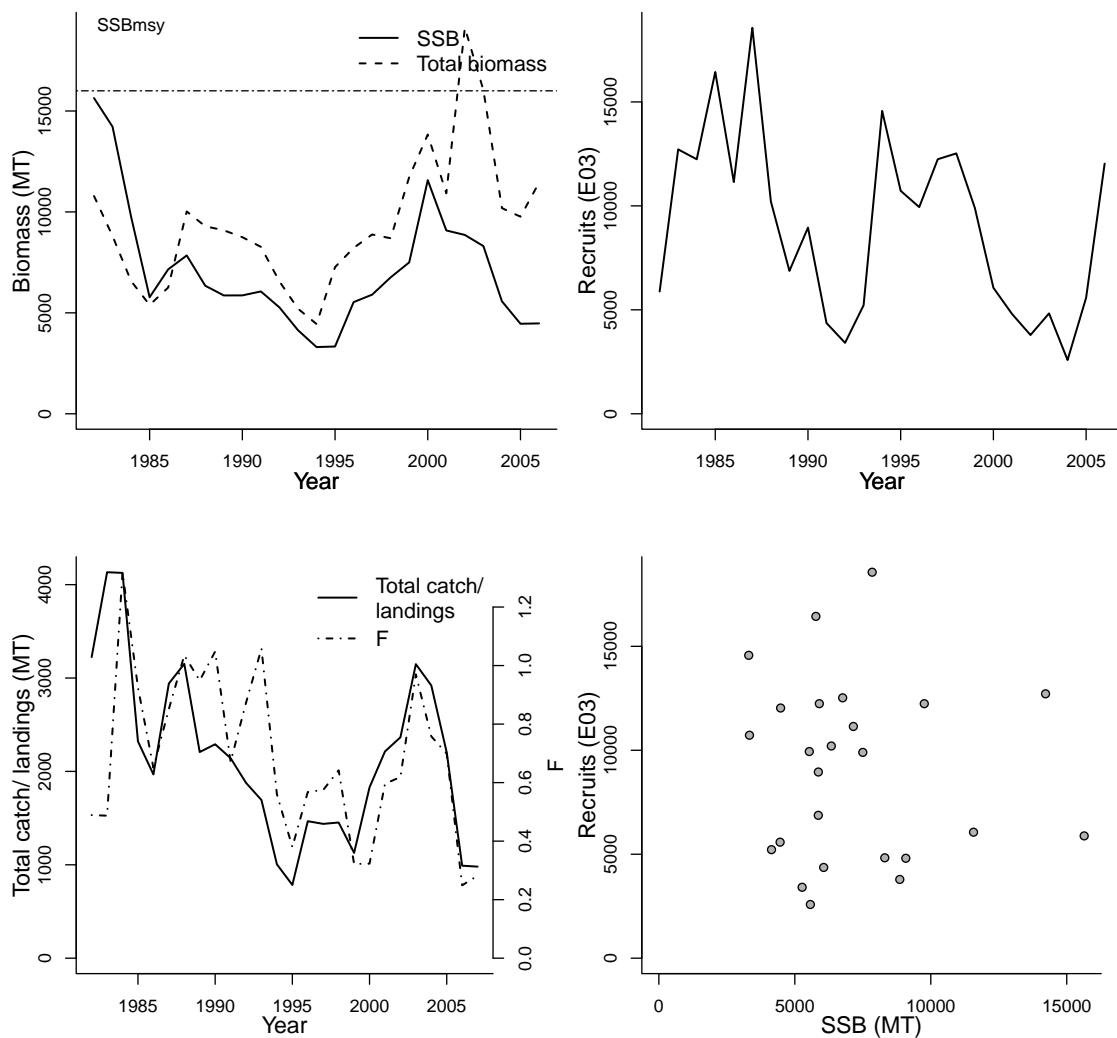
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northeast Fisheries Science Center  |
| Assessment authors | Lisa Hendrickson  |
| Assessment method  | A general approach to fitting VPA models.<br>ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters. |
| Publication year   | 2008  |
| Timeseries span    | 1982-2007   |
| Document           | garm3k.pdf (pdf in database)  |
| Recorder           | HENDRICKSON   |
| Date entered       | 2009-04-20  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                            | tertiary LME |
|--------------------------------------|-------|-------|--|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                                       | na           |
| Parameter                            | Value | Units | Reference points                         |              |
| REC-AGE-yr                           | 1     | yr    | Parameter                                | Value        |
| F-AGE-yr-yr                          | 4-6   | yr-yr |  | Units        |
| A50-yr                               | 1.9   | yr    | F40%-1/T                                 | 0.26         |
| L50-cm                               | 24.9  | cm    | SSB <sub>m</sub> sy-MT (SSB)             | 16000        |
| M-1/yr                               | 0.2   | 1/yr  | MSY-MT (TB)                              | 3500         |
| SSB-AGE-yr                           |       |       | Frebuild-1/T (F)                         | 0.254        |
| SSB-SEX-sex                          |       |       | SSB <sub>2006</sub> /SSB <sub>m</sub> sy | 0.280        |
| TB-AGE-yr                            |       |       |  |              |
| M                                    |       |       |  |              |

| Time series minima and maxima |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
|                               | SSB   | R     | F     | TB    |
| Minimum year                  | 1982  | 1982  | 1982  | 1982  |
| Maximum year                  | 2006  | 2006  | 2007  | 2006  |
| Time series minimum           | 3305  | 2584  | 0.249 | 4447  |
| Time series maximum           | 15641 | 18565 | 1.319 | 19121 |
| Units                         | MT    | E03   | 1/T   | MT    |



# Assessment of Gulf of Maine winter flounder (*Pseudopleuronectes americanus*)

Assessment ID:NEFSC-WINFLOUND5Y-1982-2008-NITSCHKE  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/316>

Area ID: USA-NMFS-5Y

General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Unknown                            |
| Publication year   | 2008                               |
| Timeseries span    | 1982-2008                          |
| Document           | crd0815.pdf (pdf in database)      |
| Recorder           | NITSCHKE                           |
| Date entered       | 2009-04-22                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

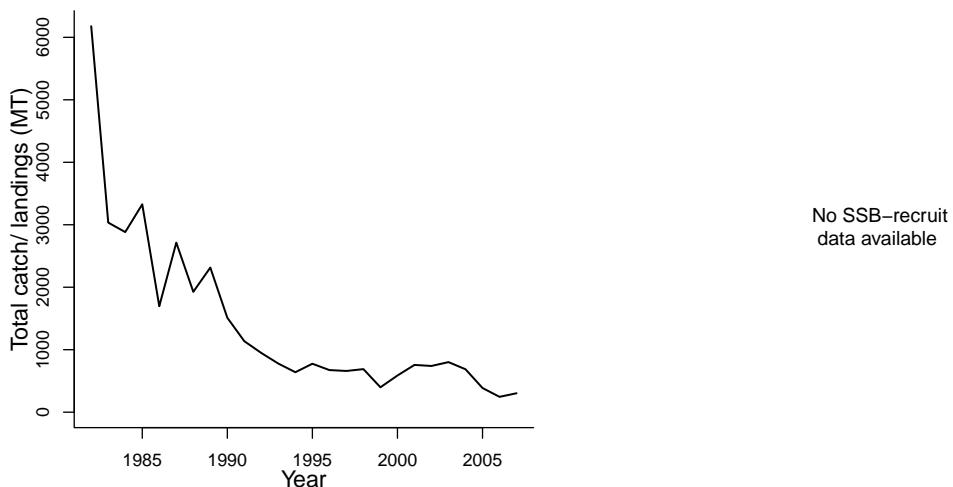
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |  |  |
|--------------------------------------|---------------|--------------|--|--|
| 7 - Northeast U.S. Continental Shelf | na            | na           |  |  |
| <hr/>                                |               |              |  |  |
| Parameter                            | Value         | Units        |  |  |
| A50-yr                               | 3.5           | yr           |  |  |
| L50-cm                               | 29            | cm           |  |  |
| M-1/yr                               | 0.2           | 1/yr         |  |  |
| REC-AGE                              | <hr/>         |              |  |  |
| SSB-AGE-yr                           | <hr/>         |              |  |  |
| SSB-SEX-sex                          | <hr/>         |              |  |  |
| TB-AGE-yr                            | <hr/>         |              |  |  |
| F-AGE-yr                             | <hr/>         |              |  |  |
| M                                    | <hr/>         |              |  |  |
| <hr/>                                |               |              |  |  |
| Reference points                     |               |              |  |  |
| Parameter                            | Value         | Units        |  |  |

| Time series minima and maxima |     |   |   |    |         |
|-------------------------------|-----|---|---|----|---------|
|                               | SSB | R | F | TB | Catch   |
| Minimum year                  |     |   |   |    | 1982    |
| Maximum year                  |     |   |   |    | 2007    |
| Time series minimum           |     |   |   |    | 245.63  |
| Time series maximum           |     |   |   |    | 6177.82 |
| Units                         |     |   |   |    | MT      |

No biomass data available

No recruitment data available



# Assessment of Southern New England /Mid Atlantic winter flounder (*Pseudopleuronectes americanus*)

Assessment ID:NEFSC-WINFLOUNSNEMATL-1940-2007-TERCEIRO  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/117>

Area ID: USA-NMFS-SNEMATL

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                                       |
| Assessment authors | Northeast Fisheries Science Center                                       |
| Assessment method  | VPA/ADPAT version 2.3.2 NOAA Fisheries                                   |
| Publication year   | 2008   |
| Timeseries span    | 1940-2007  |
| Document           | NMFS-SNEMATL-Pseudopleuronectesamericanus-2008.pdf (pdf not in database) |
| Recorder           | TERCEIRO   |
| Date entered       | 2008-12-03   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

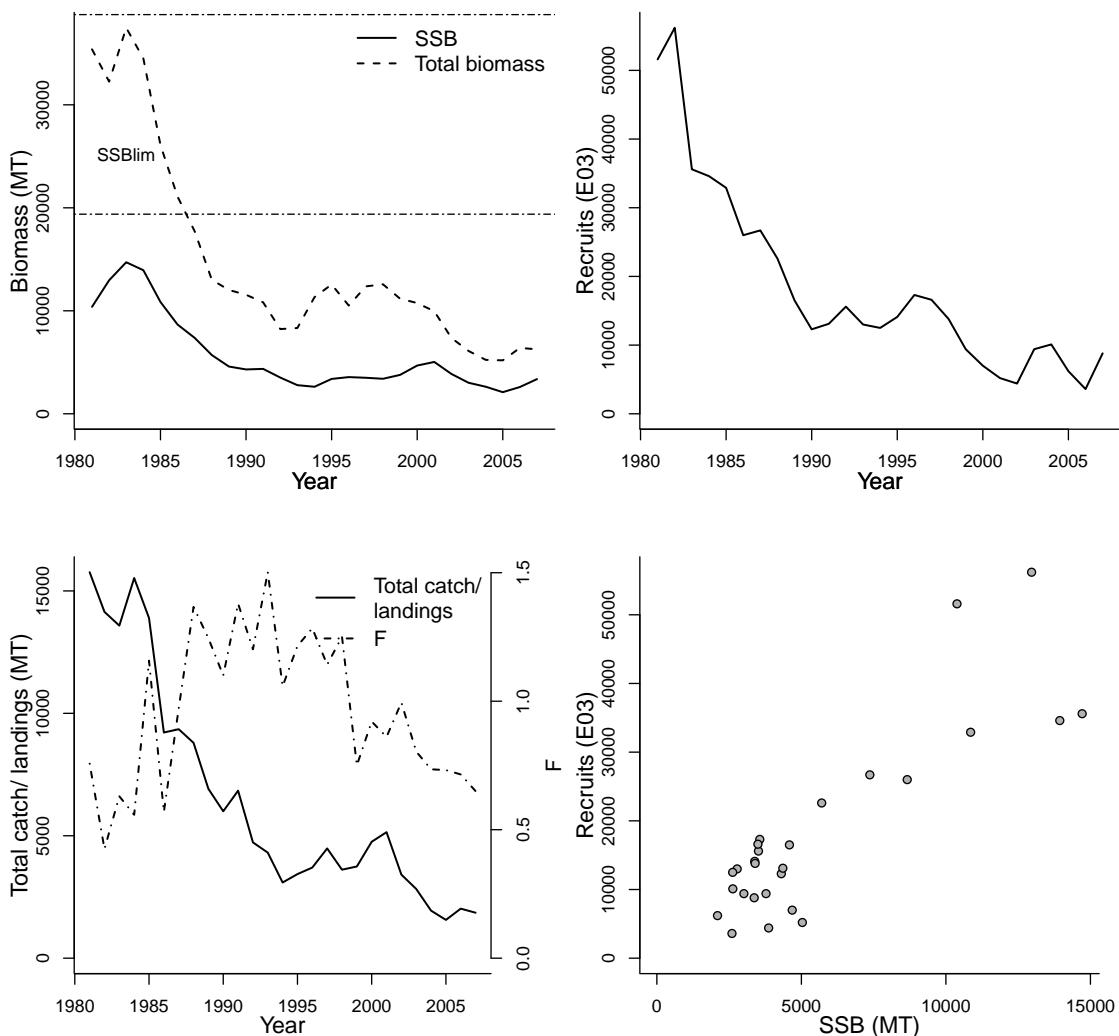
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME                           |       | tertiary LME |
|--------------------------------------|-----------|-------|---|-------|--------------|
| 7 - Northeast U.S. Continental Shelf |           |       | na                                      | na    |              |
| Parameter                            | Value     | Units | Reference points                        |       |              |
|                                      |           |       | Parameter                               | Value | Units        |
| SSB-SEX-sex                          | 0         | sex   | F40%-1/T                                | 0.248 | 1/T          |
| REC-AGE-yr                           | 1         | yr    | SSB <sub>msy</sub> -MT (SSB)            | 38761 | MT           |
| F-AGE-yr-yr                          | 4-5       | yr-yr | MSY-MT (TB)                             | 9742  | MT           |
| TB-AGE-yr                            | 1+        | yr    | SSBlim-MT (SSB)                         | 19381 | MT           |
| A50-yr                               | 3         | yr    | SSB <sub>2007</sub> /SSB <sub>lim</sub> | 0.174 |              |
| L50-cm                               | AVAILABLE | cm    | SSB <sub>2007</sub> /SSB <sub>msy</sub> | 0.087 |              |
| M-1/T                                | 0.2       | 1/T   |   |       |              |
| SSB-AGE-yr                           |           |       |   |       |              |
| M                                    |           |       |   |       |              |

Assessment of Southern New England /Mid Atlantic winter flounder  
*(Pseudopleuronectes americanus)*

Time series minima and maxima

|                     | SSB      | R     | F     | TB    | Catch |
|---------------------|----------|-------|-------|-------|-------|
| Minimum year        | 1981     | 1981  | 1981  | 1981  | 1981  |
| Maximum year        | 2007     | 2007  | 2007  | 2007  | 2007  |
| Time series minimum | 2098.34  | 3600  | 0.425 | 5188  | 1563  |
| Time series maximum | 14714.39 | 56200 | 1.502 | 37479 | 15764 |
| Units               | MT       | E03   | 1/T   | MT    | MT    |



# Assessment of Gulf of Maine witch flounder (*Glyptocephalus cynoglossus*)

Assessment ID:NEFSC-WITFLOUN5Y-1982-2008-WIGLEY

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/114>

Area ID: USA-NMFS-5Y

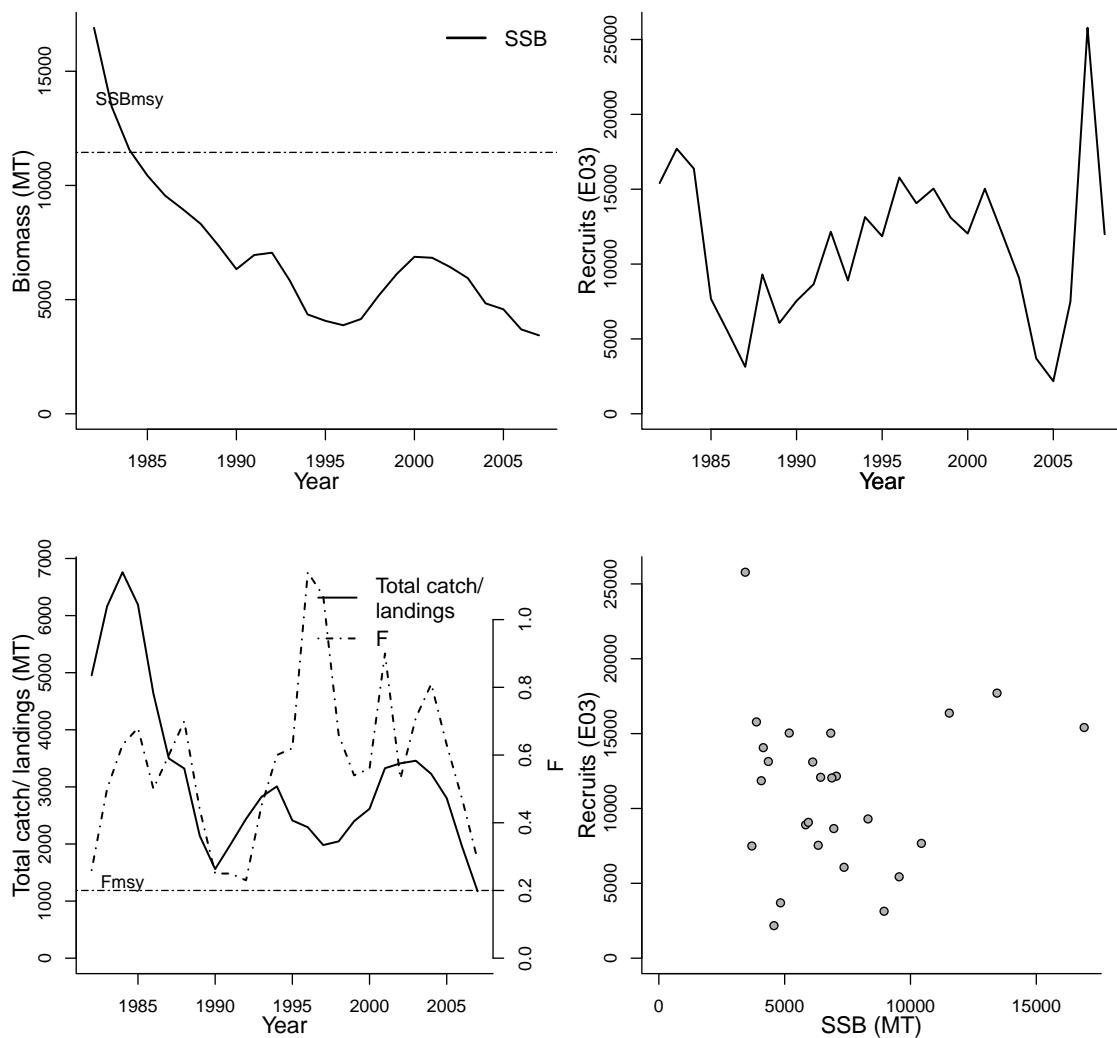
## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | NMFS                               |
| Assessment group   | Northeast Fisheries Science Center |
| Assessment authors | Northeast Fisheries Science Center |
| Assessment method  | Virtual Population Analysis        |
| Publication year   | 2008                               |
| Timeseries span    | 1982-2008                          |
| Document           | crd0815.pdf (pdf in database)      |
| Recorder           | WIGLEY                             |
| Date entered       | 2008-12-10                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |           |       | secondary LME          | tertiary LME |       |
|--------------------------------------|-----------|-------|------------------------|--------------|-------|
| 7 - Northeast U.S. Continental Shelf |           |       | na                     | na           |       |
| Parameter                            | Value     | Units | Reference points       |              |       |
| SSB-AGE-yr                           | AVAILABLE | yr    | Parameter              | Value        | Units |
| SSB-SEX-sex                          | NA        | sex   | Fmsy-1/T (F)           | 0.20         | 1/T   |
| REC-AGE-yr                           | 3         | yr    | F40%-1/T               | 0.20         | 1/T   |
| F-AGE-yr-yr                          | AVAILABLE | yr-yr | SSBmsy-MT (SSB)        | 11447        | MT    |
| M-1/T                                | 0.15      | 1/T   | MSY-MT (TB)            | 2352         | MT    |
| TB-AGE-yr                            |           |       | Frebuild-1/T (F)       | 0.194        | 1/T   |
| M                                    |           |       | $F_{2007}/F_{msy}$     | 1.450        |       |
| A50-yr                               |           |       | $SSB_{2007}/SSB_{msy}$ | 0.300        |       |
| L50-cm                               |           |       |                        |              |       |

| Time series minima and maxima |       |       |      |         |
|-------------------------------|-------|-------|------|---------|
|                               | SSB   | R     | F    | TB      |
| Minimum year                  | 1982  | 1982  | 1982 | 1982    |
| Maximum year                  | 2007  | 2008  | 2007 | 2007    |
| Time series minimum           | 3434  | 2175  | 0.23 | 1171.56 |
| Time series maximum           | 16903 | 25781 | 1.14 | 6759.74 |
| Units                         | MT    | E03   | 1/T  | MT      |



# Assessment of Gulf of Maine / Cape Hatteras winter skate (*Leucoraja ocellata*)

Assessment ID:NEFSC-WSKAT5YCHATT-1967-2005-SOSEBEE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/434>

Area ID: USA-NMFS-5YCHATT

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                   |
| Assessment authors | Northeast Fisheries Science Center                   |
| Assessment method  | Temporal indices derived from scientific survey data |
| Publication year   | 2007   |
| Timeseries span    | 1967-2005  |
| Document           | skates2007.pdf (pdf in database)                     |
| Recorder           | SOSEBEE  |
| Date entered       | 2009-04-21   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| <hr/>                                |               |              |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

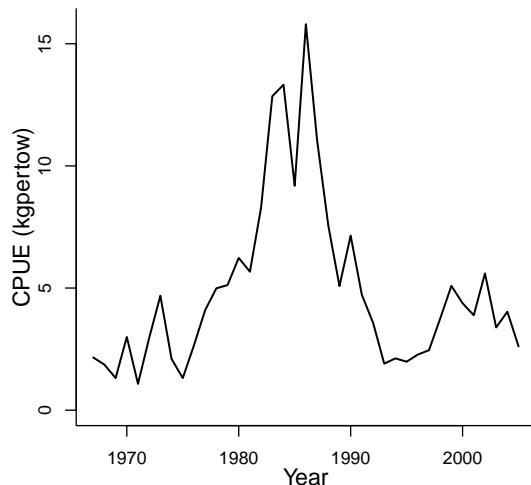
| Reference points | Parameter | Value | Units |
|------------------|-----------|-------|-------|
|                  |           |       |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data available

No recruitment data available

No SSB-recruit data available



# Assessment of Cape Cod / Gulf of Maine yellowtail flounder (*Limanda ferruginea*)

Assessment ID:NEFSC-YELLCCODGOM-1935-2008-LEGAULT

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/115>

Area ID: USA-NMFS-CCOD5Y

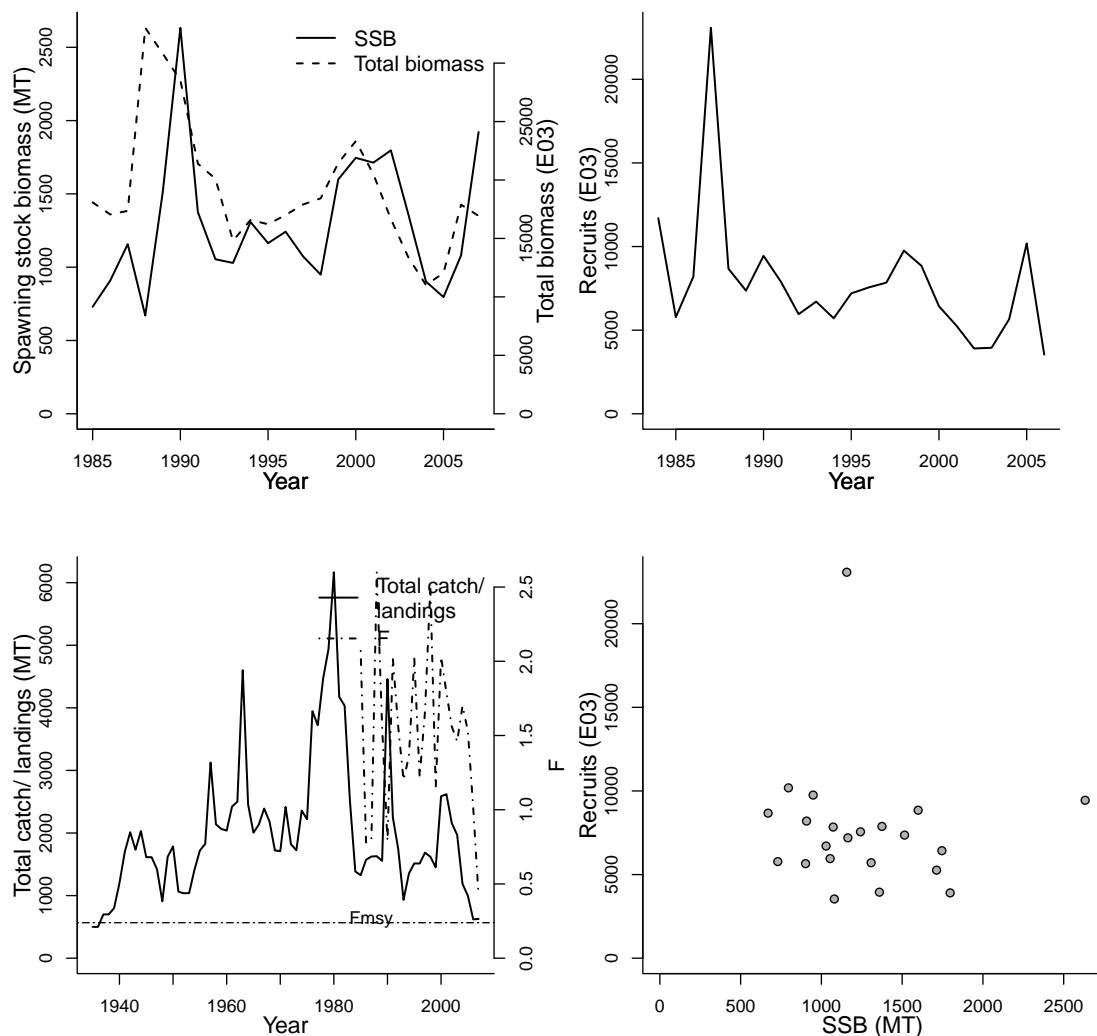
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                         |
| Assessment authors | Northeast Fisheries Science Center                         |
| Assessment method  | Virtual Population Analysis                                |
| Publication year   | 2008   |
| Timeseries span    | 1935-2008  |
| Document           | NMFS-CCGOM-Limandaferuginea-2008.pdf (pdf not in database) |
| Recorder           | LEGAULT  |
| Date entered       | 2008-11-26   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |
| Parameter                            | Value | Units | Reference points       |              |
| SSB-SEX-sex                          | NA    | sex   | Parameter              | Value        |
| REC-AGE-yr                           | 1     | yr    | Fmsy-1/T (F)           | 0.239        |
| F-AGE-yr-yr                          | 4+    | yr-yr | F40%-1/T               | 0.239        |
| A50-yr                               | 2     | yr    | SSBmsy-MT (SSB)        | 7790         |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)            | 1720         |
| TB-AGE-yr                            |       |       | Frebuild-1/T (F)       | 0.238        |
| M                                    |       |       | $F_{2007}/F_{msy}$     | 1.732        |
| L50-cm                               |       |       | $SSB_{2007}/SSB_{msy}$ | 0.247        |

| Time series minima and maxima |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
|                               | SSB  | R     | F     | TB    | Catch |
| Minimum year                  | 1985 | 1984  | 1985  | 1985  | 1935  |
| Maximum year                  | 2007 | 2006  | 2007  | 2007  | 2007  |
| Time series minimum           | 670  | 3540  | 0.414 | 11018 | 500   |
| Time series maximum           | 2633 | 23080 | 2.6   | 33021 | 6167  |
| Units                         | MT   | E03   | 1/T   | E03   | MT    |



# Assessment of Georges Bank yellowtail flounder (*Limanda ferruginea*)

Assessment ID:NEFSC-YELLGB-1935-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/12>

Area ID: USA-NMFS-5Z

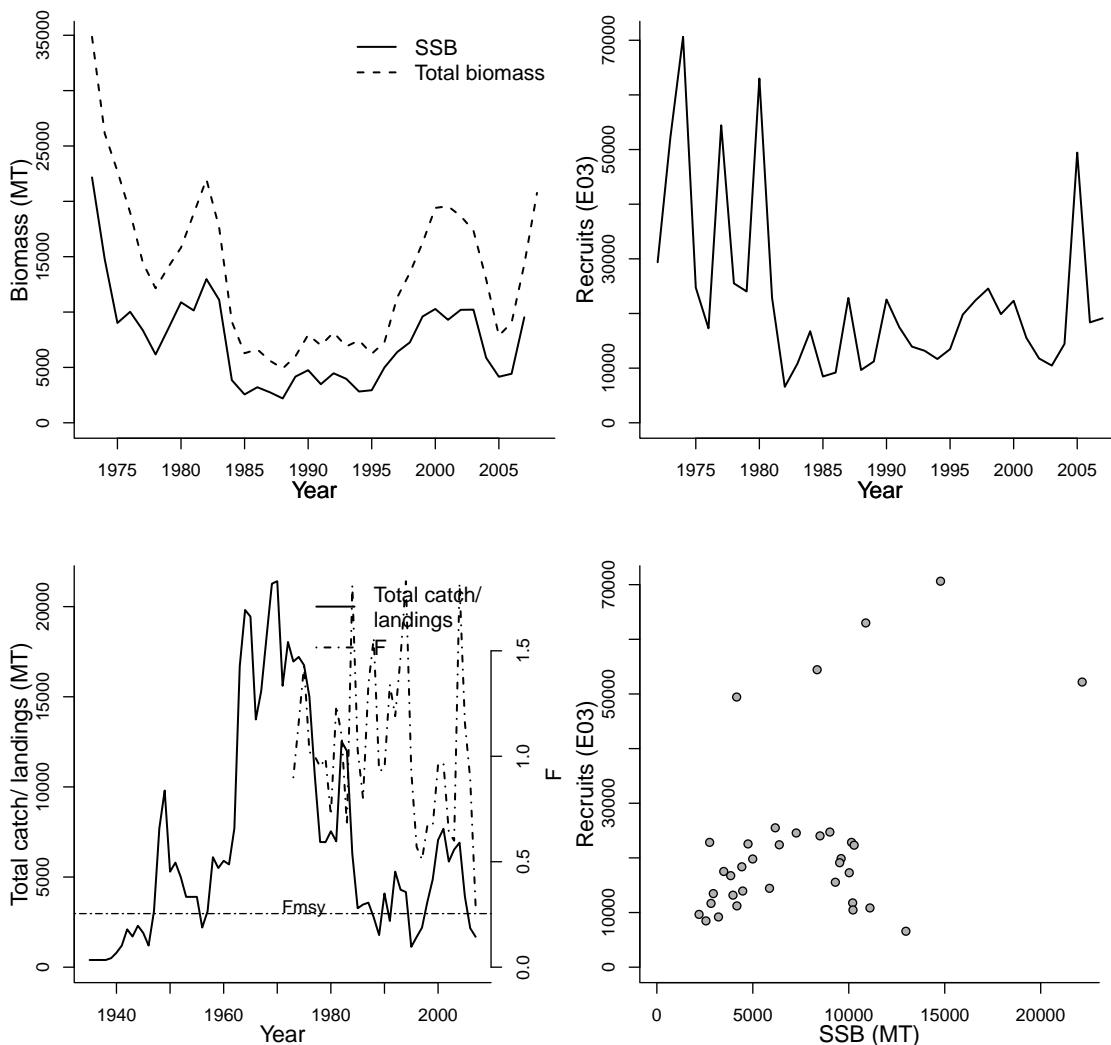
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                     |
| Assessment authors | Northeast Fisheries Science Center                     |
| Assessment method  | Virtual Population Analysis                            |
| Publication year   | 2008   |
| Timeseries span    | 1935-2008  |
| Document           | NMFS-GB-Limandaferuginea-2008.pdf<br>(pdf in database) |
| Recorder           | BAUM   |
| Date entered       | 2008-11-04   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |
| Parameter                            | Value | Units | Reference points       |              |
| SSB-SEX-sex                          | NA    | sex   | Parameter              | Value        |
| REC-AGE-yr                           | 1     | yr    | Fmsy-1/T (F)           | 0.254        |
| F-AGE-yr-yr                          | 4+    | yr-yr | F40%-1/T               | 0.254        |
| A50-yr                               | 2     | yr    | SSBmsy-MT (SSB)        | 43200        |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)            | 9400         |
| TB-AGE-yr                            |       |       | Frebuild-1/T (F)       | 0.202        |
| M                                    |       |       | $F_{2007}/F_{msy}$     | 1.142        |
| L50-cm                               |       |       | $SSB_{2007}/SSB_{msy}$ | 0.221        |

| Time series minima and maxima |       |       |      |       |       |
|-------------------------------|-------|-------|------|-------|-------|
|                               | SSB   | R     | F    | TB    | Catch |
| Minimum year                  | 1973  | 1972  | 1973 | 1973  | 1935  |
| Maximum year                  | 2007  | 2007  | 2007 | 2008  | 2007  |
| Time series minimum           | 2198  | 6581  | 0.29 | 4904  | 400   |
| Time series maximum           | 22161 | 70632 | 1.83 | 34860 | 21410 |
| Units                         | MT    | E03   | 1/T  | MT    | MT    |



# Assessment of Southern New England /Mid Atlantic yellowtail flounder (*Limanda ferruginea*)

Assessment ID:NEFSC-YELLSNEMATL-1935-2008-BAUM

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/14>

Area ID: USA-NMFS-SNEMATL

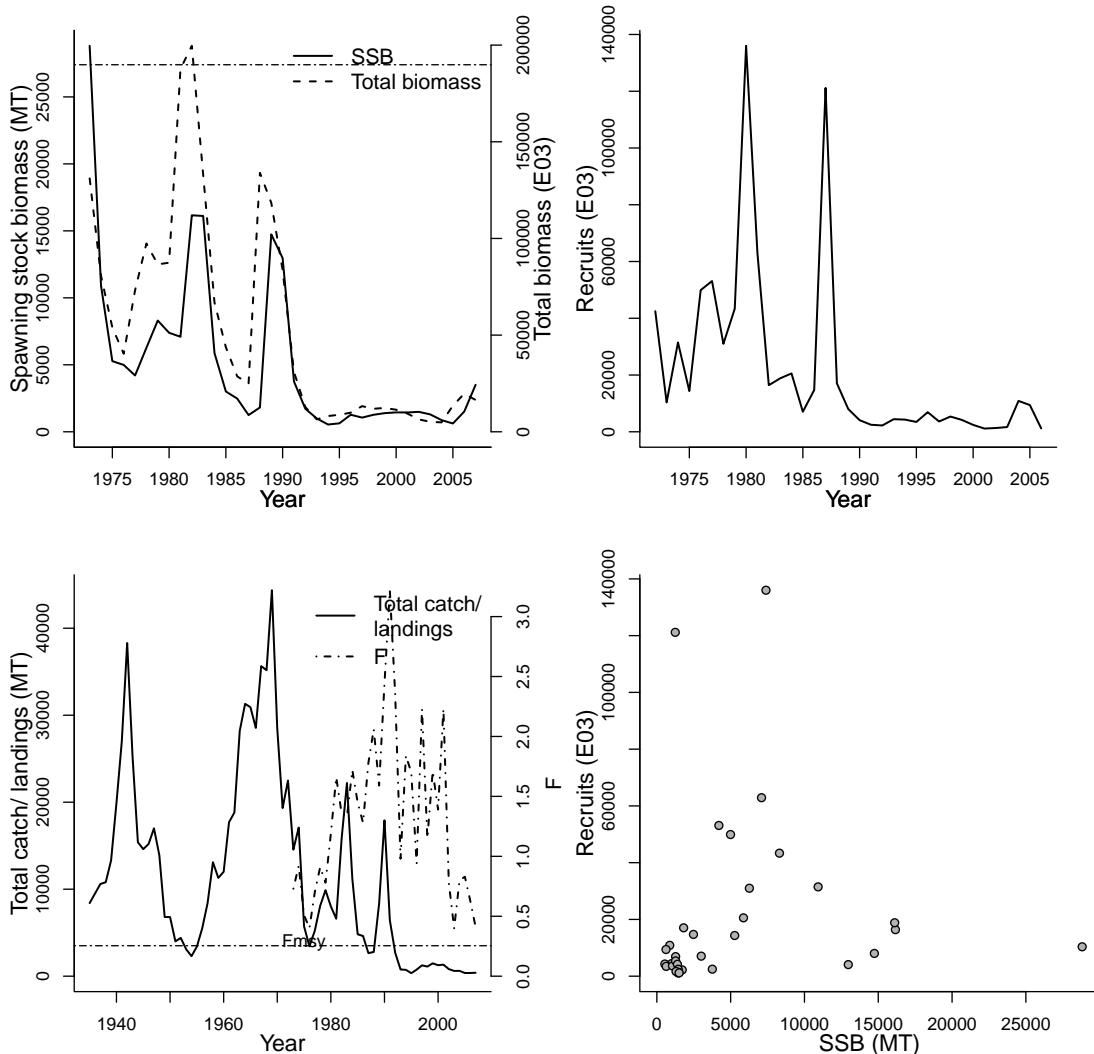
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northeast Fisheries Science Center                       |
| Assessment authors | Northeast Fisheries Science Center                       |
| Assessment method  | Virtual Population Analysis                              |
| Publication year   | 2008   |
| Timeseries span    | 1935-2008  |
| Document           | NMFS-SNEMATL-Limandaferuginea-2008.pdf (pdf in database) |
| Recorder           | BAUM   |
| Date entered       | 2008-11-04   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                     | na           |
| Parameter                            | Value | Units | Reference points       |              |
| SSB-SEX-sex                          | NA    | sex   | Parameter              | Value        |
| REC-AGE-yr                           | 1     | yr    | Fmsy-1/T (F)           | 0.254        |
| F-AGE-yr-yr                          | 4-6+  | yr-yr | F40%-1/T               | 0.254        |
| A50-yr                               | 2     | yr    | SSBmsy-MT (SSB)        | 27400        |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)            | 6100         |
| TB-AGE-yr                            |       |       | Frebuild-1/T (F)       | 0.08         |
| M                                    |       |       | $F_{2007}/F_{msy}$     | 1.614        |
| L50-cm                               |       |       | $SSB_{2007}/SSB_{msy}$ | 0.128        |

| Time series minima and maxima |       |        |      |        |
|-------------------------------|-------|--------|------|--------|
|                               | SSB   | R      | F    | TB     |
| Minimum year                  | 1973  | 1972   | 1973 | 1973   |
| Maximum year                  | 2007  | 2006   | 2007 | 2007   |
| Time series minimum           | 542   | 1133   | 0.4  | 4853   |
| Time series maximum           | 28815 | 136011 | 3.22 | 199647 |
| Units                         | MT    | E03    | 1/T  | E03    |



# Assessment of New Zealand australian salmon

## (*Arripis trutta*)

Assessment ID:NIWA-AUSSALMONNZ-1975-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/419>

Area ID: New Zealand-MFish-NZ

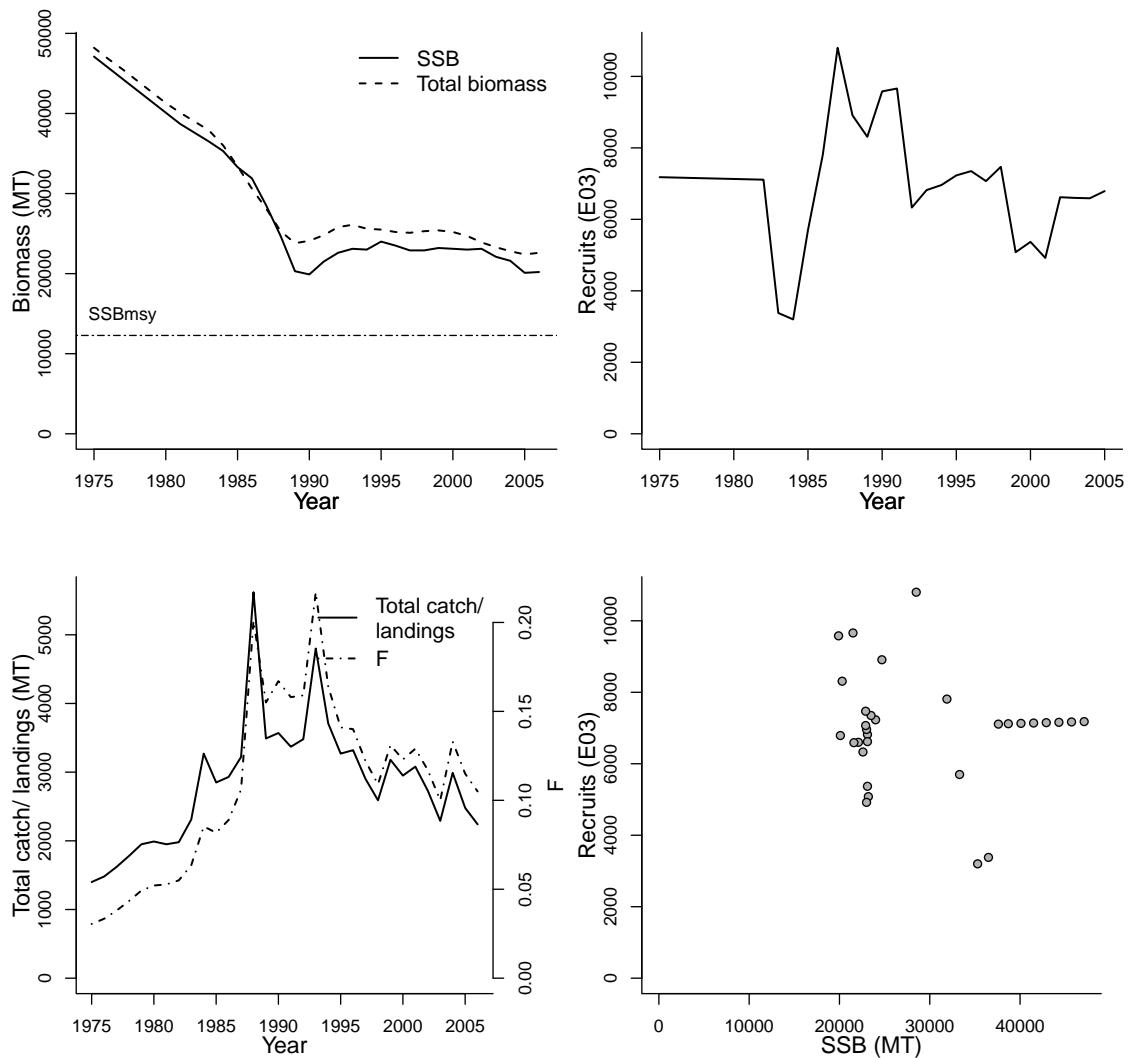
### General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | MFish  |
| Assessment group   | National Institute of Water and Atmospheric Research |
| Assessment authors | Cordue, PatrickL.                                    |
| Assessment method  | CASAL  |
| Publication year   |  |
| Timeseries span    | 1975-2006  |
| Document           | CORDUEperscomm.pdf (pdf not in database)             |
| Recorder           | JENSEN   |
| Date entered       | 2009-03-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units | primary LME            | secondary LME | tertiary LME |
|-------------|-------|-------|------------------------|---------------|--------------|
|             |       |       | 46 - New Zealand Shelf | na            | na           |
| REC-AGE-yr  | 1     | yr    |                        |               |              |
| TB-AGE-yr   | 1+    | yr    |                        |               |              |
| A50-yr      | 4     | yr    |                        |               |              |
| M-1/yr      | 0.18  | 1/yr  |                        |               |              |
| SSB-AGE-yr  |       |       |                        |               |              |
| SSB-SEX-sex |       |       |                        |               |              |
| F-AGE-yr    |       |       |                        |               |              |
| M           |       |       |                        |               |              |
| L50-cm      |       |       |                        |               |              |
|             |       |       | Reference points       |               |              |
| Parameter   |       |       | Parameter              | Value         | Units        |
|             |       |       | Fmsy-1/yr (F)          | 0.32          | 1/yr         |
|             |       |       | SSBmsy-MT (SSB)        | 12280.7293248 | MT           |
|             |       |       | MSY-MT (TB)            | 3371.82       | MT           |
|             |       |       | SSB0-MT (SSB)          | 47128.15      | MT           |
|             |       |       | BH-h-dimless           | 0.875         | dimless      |
|             |       |       | $F_{2006}/F_{msy}$     | 0.328         |              |
|             |       |       | $SSB_{2006}/SSB_{msy}$ | 1.645         |              |

| Time series minima and maxima |       |       |        |       |       |
|-------------------------------|-------|-------|--------|-------|-------|
|                               | SSB   | R     | F      | TB    | Catch |
| Minimum year                  | 1975  | 1975  | 1975   | 1975  | 1975  |
| Maximum year                  | 2006  | 2005  | 2006   | 2006  | 2006  |
| Time series minimum           | 19900 | 3200  | 0.0305 | 22400 | 1400  |
| Time series maximum           | 47100 | 10800 | 0.217  | 48200 | 5620  |
| Units                         | MT    | E03   | 1/yr   | MT    | MT    |



# Assessment of New Zealand Mid East Coast orange roughy (*Hoplostethus atlanticus*)

Assessment ID:NIWA-OROUGHYNZMEC-1981-2004-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/219>

Area ID: New Zealand-MFish-NZMEC

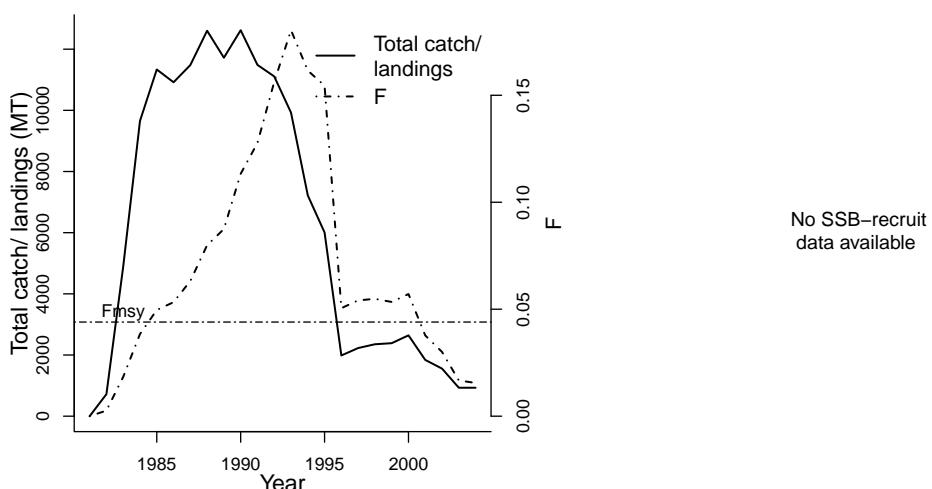
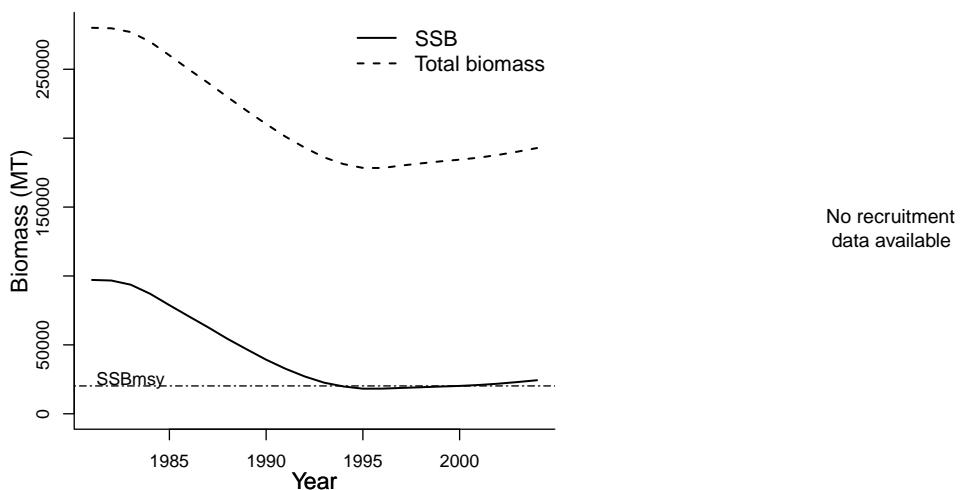
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | MFish  |
| Assessment group   | National Institute of Water and Atmospheric Research |
| Assessment authors | Cordue, PatrickL.                                    |
| Assessment method  | CASAL  |
| Publication year   |  |
| Timeseries span    | 1981-2004  |
| Document           | CORDUEperscomm.pdf (pdf not in database)             |
| Recorder           | JENSEN   |
| Date entered       | 2009-03-24   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |
|------------------------|-------|-------|------------------------|--------------|
| 46 - New Zealand Shelf |       |       | na                     | na           |
| Parameter              | Value | Units | Reference points       |              |
| REC-AGE-yr             | 1     | yr    | Parameter              | Value        |
| TB-AGE-yr              | 1     | yr    | Fmsy-1/yr (F)          | 0.044        |
| A50-yr                 | 31.3  | yr    | SSBmsy-MT (SSB)        | 20213.00407  |
| M-1/yr                 | 0.045 | 1/yr  | MSY-MT (TB)            | 2598.07907   |
| SSB-AGE-yr             |       |       | SSBO-MT (SSB)          | 97126.1      |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.75         |
| F-AGE-yr               |       |       | $F_{2004}/F_{msy}$     | 0.353        |
| M                      |       |       | $SSB_{2004}/SSB_{msy}$ | 1.204        |
| L50-cm                 |       |       |                        |              |

| Time series minima and maxima |         |   |             |        |       |
|-------------------------------|---------|---|-------------|--------|-------|
|                               | SSB     | R | F           | TB     | Catch |
| Minimum year                  | 1981    |   | 1981        | 1981   | 1981  |
| Maximum year                  | 2004    |   | 2004        | 2004   | 2004  |
| Time series minimum           | 18208   |   | 0           | 178351 | 0     |
| Time series maximum           | 97126.3 |   | 0.180408935 | 280089 | 12620 |
| Units                         | MT      |   | 1/yr        | MT     | MT    |



# Assessment of Atlantic atlantic menhaden (*Brevoortia tyrannus*)

Assessment ID:NMFS-MENATLAN-1940-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/399>

Area ID: USA-NMFS-ATL

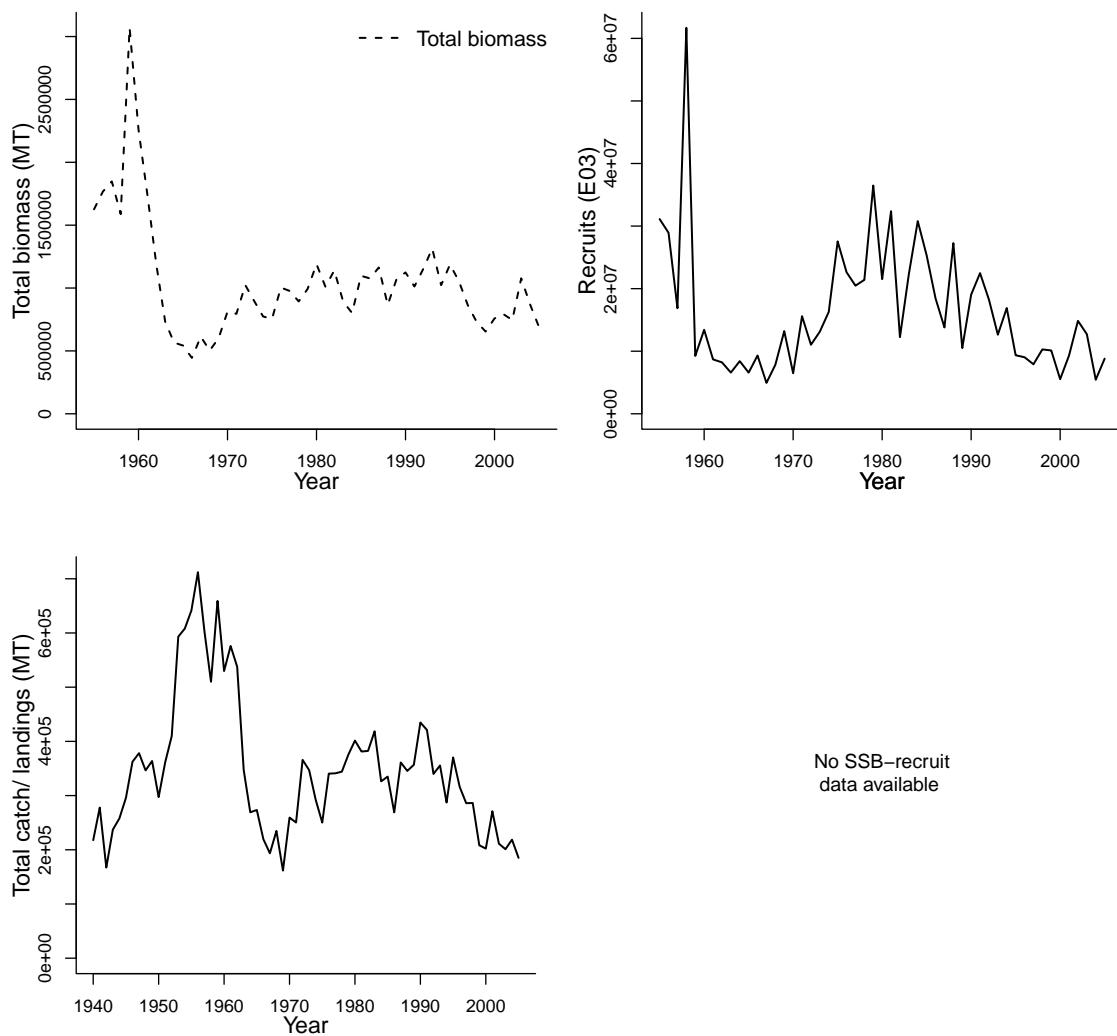
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | NOAA Fisheries - National Marine Fisheries Service |
| Assessment authors | NA   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2006   |
| Timeseries span    | 1940-2005  |
| Document           | Atl.Menhaden-ASMFC-2006.pdf (pdf in database)      |
| Recorder           | STANTON  |
| Date entered       | 2009-06-10   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       | secondary LME                        |                  | tertiary LME      |
|--------------------------------------|-------|--------------------------------------|------------------|-------------------|
| 7 - Northeast U.S. Continental Shelf |       | 6 - Southeast U.S. Continental Shelf |                  | 8 - Scotian Shelf |
| Parameter                            | Value | Units                                |                  |                   |
| REC-AGE-yr                           | 0     | yr                                   |                  |                   |
| F-AGE-yr-yr                          | 2+    | yr-yr                                |                  |                   |
| TB-AGE-yr                            | 2+    | yr                                   | Reference points |                   |
| M-1/yr                               | 0.5   | 1/yr                                 | Parameter        | Value             |
| NATMORT-1/yr                         | 0.5   | 1/yr                                 | Fref-1/T (F)     | 0.5               |
| SSB-AGE-yr                           |       |                                      | NATMORT-1/yr (M) | 1/yr              |
| SSB-SEX-sex                          |       |                                      |                  |                   |
| M                                    |       |                                      |                  |                   |
| A50-yr                               |       |                                      |                  |                   |
| L50-cm                               |       |                                      |                  |                   |

| Time series minima and maxima |          |      |            |        |
|-------------------------------|----------|------|------------|--------|
|                               | SSB      | R    | F          | TB     |
| Minimum year                  |          | 1955 |            | 1955   |
| Maximum year                  |          | 2005 |            | 2005   |
| Time series minimum           | 4940000  |      | 444184.46  | 161600 |
| Time series maximum           | 61690000 |      | 3069552.86 | 712100 |
| Units                         | E03      |      | MT         | MT     |



# Assessment of Pacific Coast arrowtooth flounder (*Reinhardtius stomias*)

Assessment ID:NWFSC-ARFLOUNDPCOAST-1916-2007-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/22>

Area ID: USA-NMFS-PCOAST

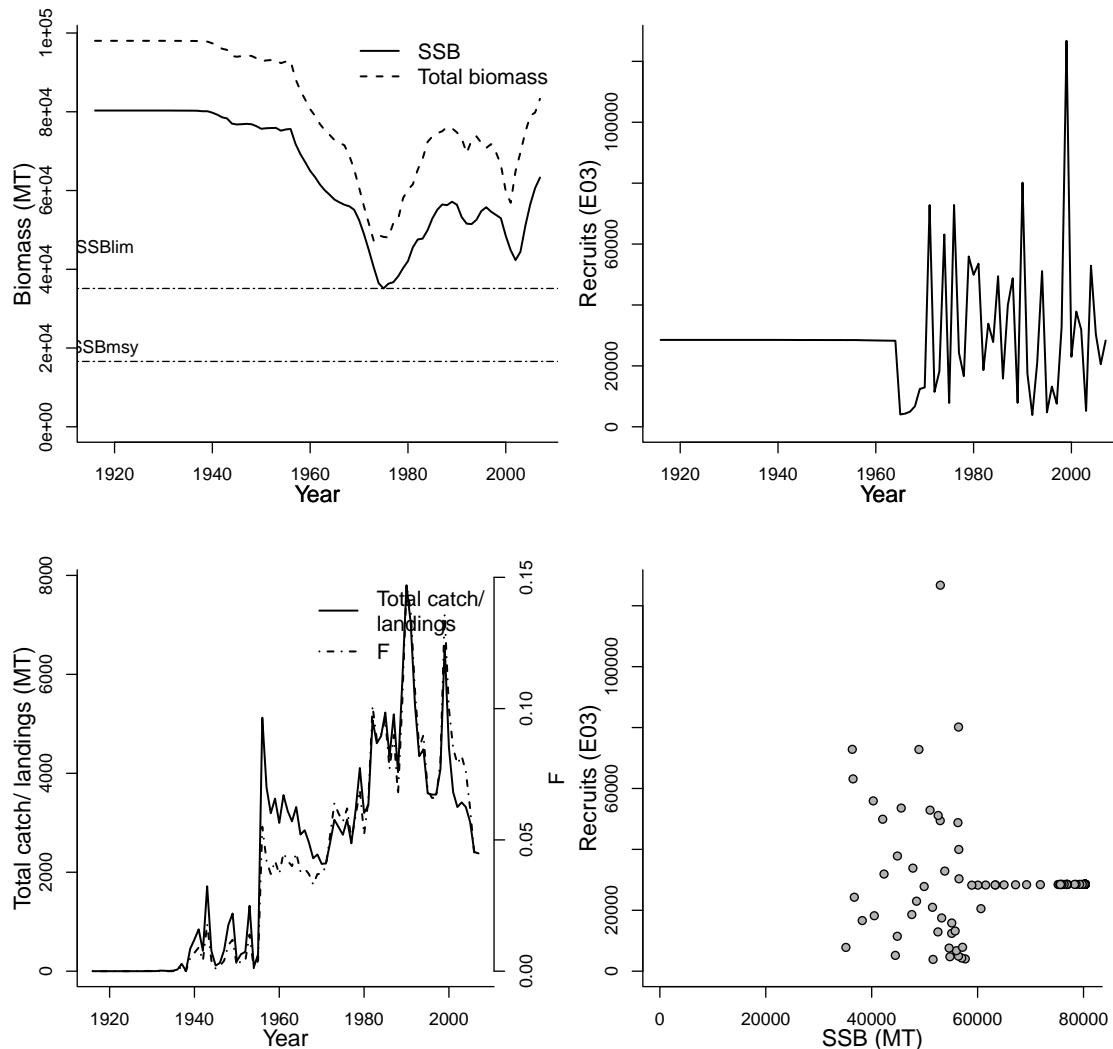
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                                  |
| Assessment authors | Kaplan, I.C.  |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2007  |
| Timeseries span    | 1916-2007   |
| Document           | NWFSC-ARFLOUNDPCOAST-2007-Arrowtooth flounder.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-19  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME      | tertiary LME |
|------------------------|--------------------|--------------|
| 3 - California Current | 2 - Gulf of Alaska | na           |
| Reference points       |                    |              |
| Parameter              | Parameter          | Value        |
| Parameter              | Value              | Units        |
| BH-h-dimless           | 0.902              | dimless      |
| SSBlim-MT (SSB)        | 35129              | MT           |
| SSBmsy-MT (SSB)        | 16593              | MT           |
| Fmsy-1/yr (F)          | 0.21               | 1/yr         |
| SSB0-MT (SSB)          | 80313              | MT           |
| R0-E03 (R )            | 28528              | E03          |
| SSBtarget-MT (SSB)     | 30780              | MT           |
| SSBmin-ratio (SSB)     | 0.25               | ratio        |
| Ftarget-1/yr (F)       | 0.11               | 1/yr         |
| SPRtarget-ratio (SPR)  | 0.4                | ratio        |
| MSY-MT (TB)            | 5844               | MT           |
| $SSB_{2007}/SSB_{lim}$ | 1.802              |              |
| $F_{2006}/F_{msy}$     | 0.210              |              |
| $SSB_{2007}/SSB_{msy}$ | 3.815              |              |

| Time series minima and maxima |         |         |       |         |
|-------------------------------|---------|---------|-------|---------|
|                               | SSB     | R       | F     | TB      |
| Minimum year                  | 1916    | 1916    | 1916  | 1916    |
| Maximum year                  | 2007    | 2007    | 2006  | 2007    |
| Time series minimum           | 35128.8 | 3867.56 | 0     | 47228.2 |
| Time series maximum           | 80313.5 | 126747  | 0.147 | 98022.2 |
| Units                         | MT      | E03     | 1/yr  | MT      |



# Assessment of Pacific Coast blackgill rockfish (*Sebastodes melanostomus*)

Assessment ID:NWFSC-BGROCKPCOAST-1950-2005-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/336>

Area ID: USA-NMFS-PCOAST

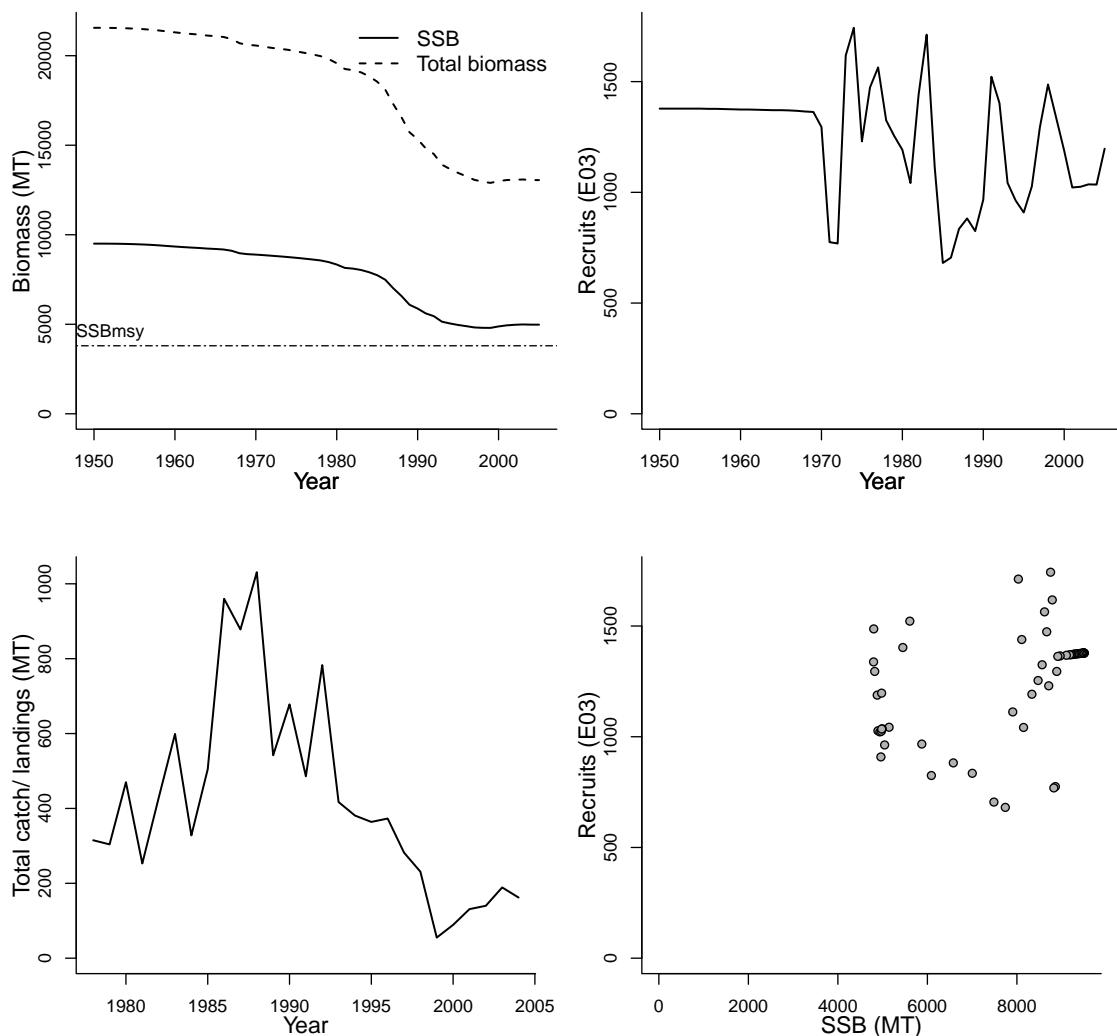
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center              |
| Assessment authors | Hesler, Thomas                                  |
| Assessment method  | Stock Synthesis v2.0 model                      |
| Publication year   | 2005  |
| Timeseries span    | 1950-2005                                       |
| Document           | 2005-SAFE-Wcblackgill.pdf (pdf not in database) |
| Recorder           | STANTON   |
| Date entered       | 2009-05-19                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |       | tertiary LME |
|------------------------|-------|-------|------------------------|-------|--------------|
| 3 - California Current |       |       | na                     | na    |              |
| Parameter              | Value | Units | Reference points       |       |              |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)        | 3799  | MT           |
| REC-AGE-yr             | 0     | yr    | MSY-MT (TB)            | 223   | MT           |
| F-AGE-yr-yr            | 0+    | yr-yr | Umsy-ratio (U)         | 0.029 | ratio        |
| TB-AGE-yr              | 0+    | yr    | SSB0-MT (SSB)          | 9503  | MT           |
| A50-yr                 | 20    | yr    | B0-MT                  | 21558 | MT           |
| SSB-AGE-yr             |       |       | $SSB_{2005}/SSB_{msy}$ | 1.310 |              |
| M                      |       |       |                        |       |              |
| L50-cm                 |       |       |                        |       |              |

| Time series minima and maxima |      |      |    |       |
|-------------------------------|------|------|----|-------|
|                               | SSB  | R    | F  | TB    |
| Minimum year                  | 1950 | 1950 |    | 1950  |
| Maximum year                  | 2005 | 2005 |    | 2005  |
| Time series minimum           | 4797 | 681  |    | 12896 |
| Time series maximum           | 9503 | 1743 |    | 21558 |
| Units                         | MT   | E03  | MT | MT    |



# Assessment of Northern Pacific Coast black rockfish (*Sebastodes melanops*)

Assessment ID:NWFSC-BLACKROCKNPCOAST-1914-2006-BRANCH  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/38>

Area ID: USA-NMFS-NPCOAST

General assessment details.

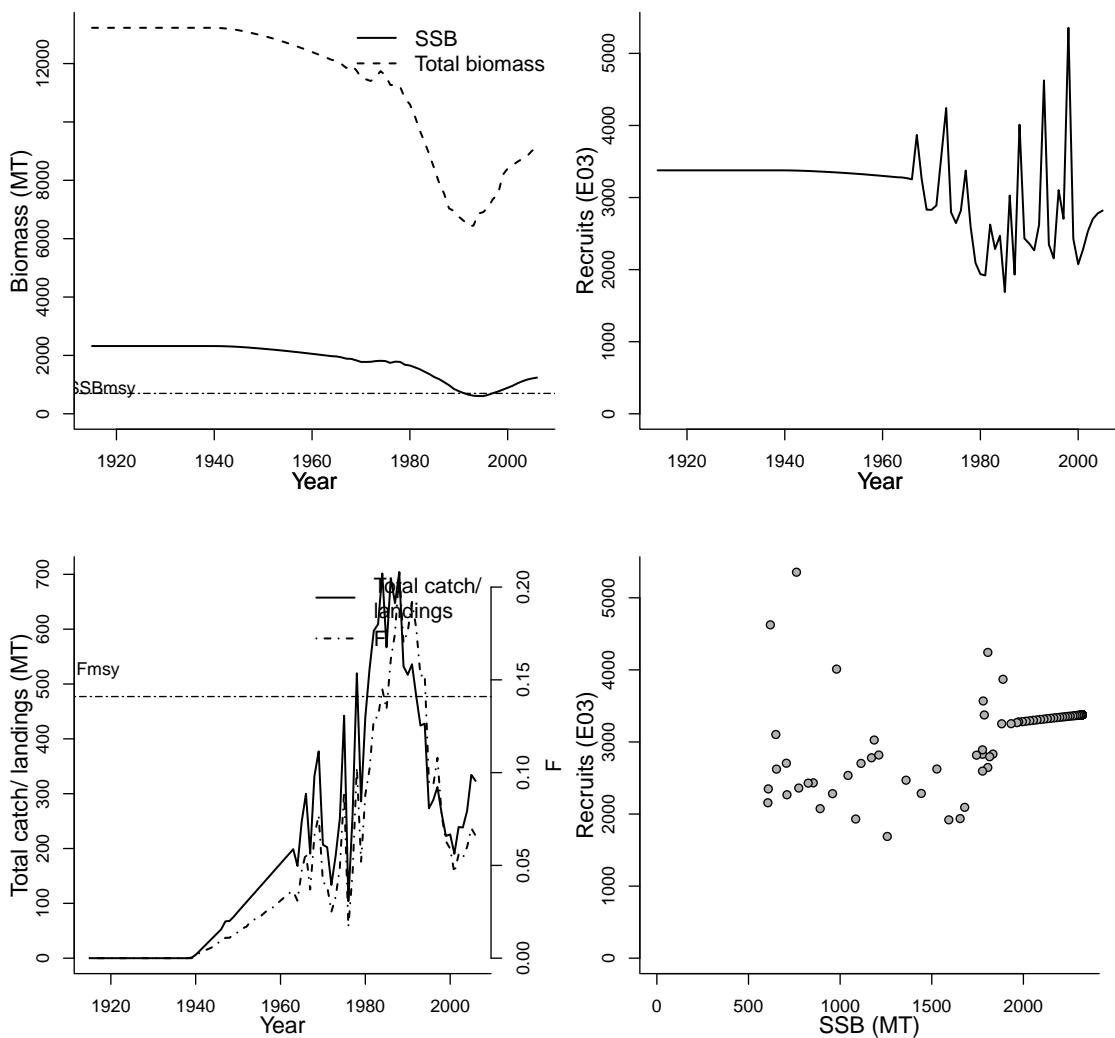
| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                                      |
| Assessment authors | Wallace F.R.  |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2008  |
| Timeseries span    | 1914-2006   |
| Document           | NWFSC-BLACKROCKNPCOAST-2007-Black rockfish NOR WA.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-20  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |        |           | secondary LME    | tertiary LME |
|------------------------|--------|-----------|------------------|--------------|
| 3 - California Current |        |           | na               | na           |
|                        |        |           | Reference points |              |
| Parameter              | Value  | Units     | Parameter        | Value        |
| BH-h-dimless           | 0.6    | dimless   |                  |              |
| SSBlim-E06larvae       | 606    | E06larvae |                  |              |
| SSBmsy-E06lar (SSB)    | 698.62 | E06larvae |                  |              |
| Fmsy-1/yr (F)          | 0.141  | 1/yr      |                  |              |
| SSBO-MT (SSB)          | 2321   | MT        |                  |              |
| R0-E03 (R )            | 3377   | E03       |                  |              |
| SSBtarget-MT (SSB)     | 928.4  | MT        |                  |              |
| SSBmin-ratio (SSB)     | 0.25   | ratio     |                  |              |
| Ftarget-1/yr (F)       | 0.065  | 1/yr      |                  |              |
| SPRtarget-ratio (SPR)  | 0.4    | ratio     |                  |              |
| MSY-MT (TB)            | 700    | MT        |                  |              |
| $SSB_{2006}/SSB_{lim}$ | 2.045  |           |                  |              |
| $F_{2006}/F_{msy}$     | 0.468  |           |                  |              |
| $SSB_{2006}/SSB_{msy}$ | 1.774  |           |                  |              |

## Time series minima and maxima

|                     | SSB     | R       | F     | TB    | Catch |
|---------------------|---------|---------|-------|-------|-------|
| Minimum year        | 1915    | 1914    | 1915  | 1915  | 1915  |
| Maximum year        | 2006    | 2005    | 2006  | 2006  | 2006  |
| Time series minimum | 605.66  | 1688.87 | 0     | 6437  | 0     |
| Time series maximum | 2320.71 | 5354.79 | 0.208 | 13226 | 703.9 |
| Units               | MT      | E03     | 1/yr  | MT    | MT    |



# Assessment of Southern Pacific Coast black rockfish (*Sebastodes melanops*)

Assessment ID:NWFSC-BLACKROCKSPCOAST-1915-2007-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/37>

Area ID: USA-NMFS-SPCOAST

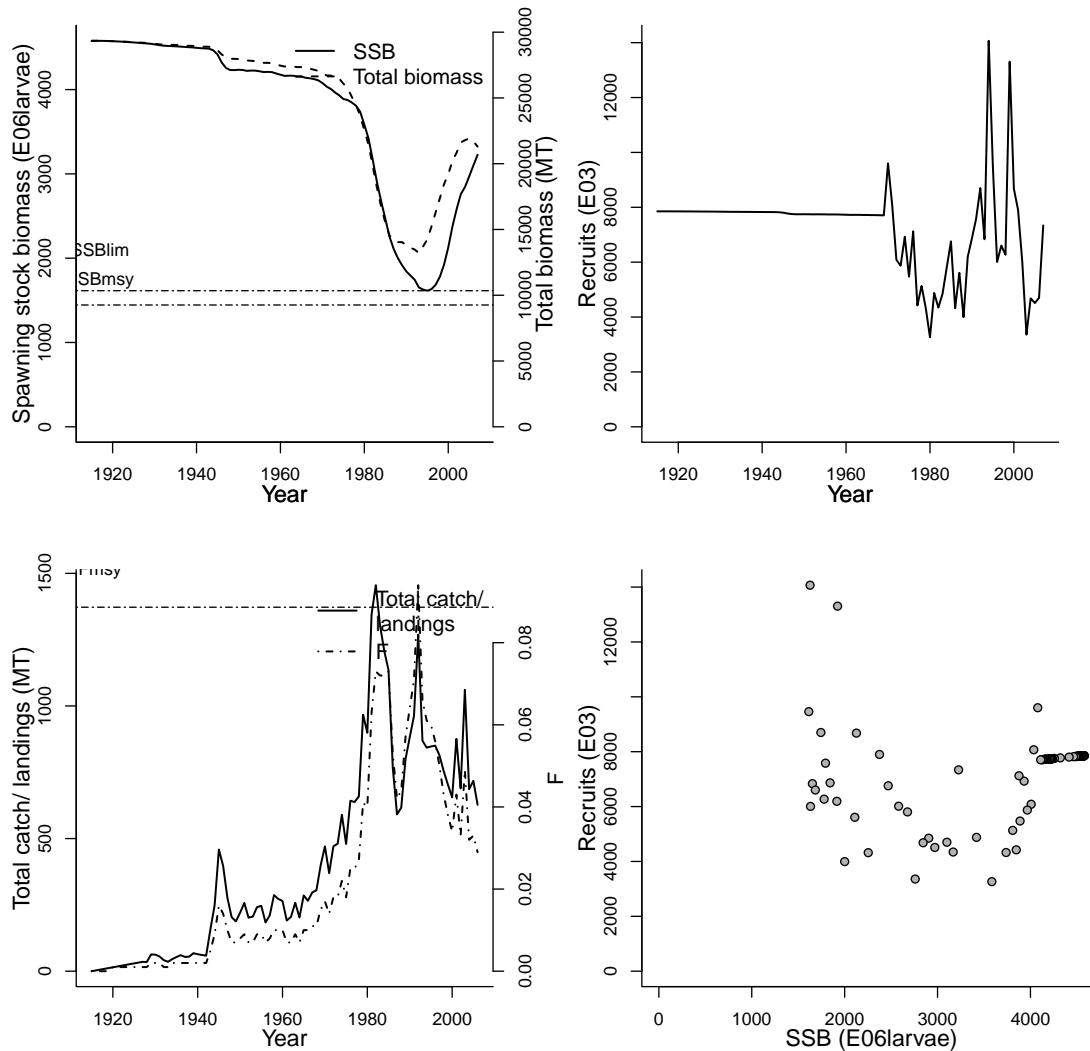
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                                     |
| Assessment authors | Sampson, D.B.  |
| Assessment method  | Stock Synthesis v2.0 model   |
| Publication year   | 2007   |
| Timeseries span    | 1915-2007  |
| Document           | NWFSC-BLACKROCKSPCOAST-2007-Black rockfish OR CA.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-19   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-05-01   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |         |           | secondary LME    | tertiary LME |
|------------------------|---------|-----------|------------------|--------------|
| 3 - California Current |         |           | na               | na           |
|                        |         |           | Reference points |              |
| Parameter              | Value   | Units     | Parameter        | Value        |
| BH-h-dimless           | 0.6     | dimless   |                  |              |
| SSBlim-MT (SSB)        | 1614    | MT        |                  |              |
| SSBmsy-E06lar (SSB)    | 1444.6  | E06larvae |                  |              |
| Fmsy-1/yr (F)          | 0.08864 | 1/yr      |                  |              |
| SSB0-E06lar (SSB)      | 4578    | E06larvae |                  |              |
| RO-E03 (R )            | 7852    | E03       |                  |              |
| SSBtarget-MT (SSB)     | 1831.4  | MT        |                  |              |
| SSBmin-ratio (SSB)     | 0.25    | ratio     |                  |              |
| Ftarget-1/yr (F)       | 0.07227 | 1/yr      |                  |              |
| SPRtarget-ratio (SPR)  | 0.5     | ratio     |                  |              |
| MSY-MT (TB)            | 1064.6  | MT        |                  |              |
| $SSB_{2007}/SSB_{lim}$ | 1.999   |           |                  |              |
| $F_{2006}/F_{msy}$     | 0.327   |           |                  |              |
| $SSB_{2007}/SSB_{msy}$ | 2.233   |           |                  |              |

| Time series minima and maxima |           |       |       |       |        |
|-------------------------------|-----------|-------|-------|-------|--------|
|                               | SSB       | R     | F     | TB    | Catch  |
| Minimum year                  | 1915      | 1915  | 1915  | 1915  | 1915   |
| Maximum year                  | 2007      | 2007  | 2006  | 2007  | 2006   |
| Time series minimum           | 1614.2    | 3264  | 0     | 13206 | 0      |
| Time series maximum           | 4578.5    | 14068 | 0.094 | 29344 | 1455.3 |
| Units                         | E06larvae | E03   | 1/yr  | MT    | MT     |



# Assessment of California blue rockfish (*Sebastes mystinus*)

Assessment ID:NWFSC-BLUEROCKCAL-1916-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/39>

Area ID: USA-NMFS-CAL

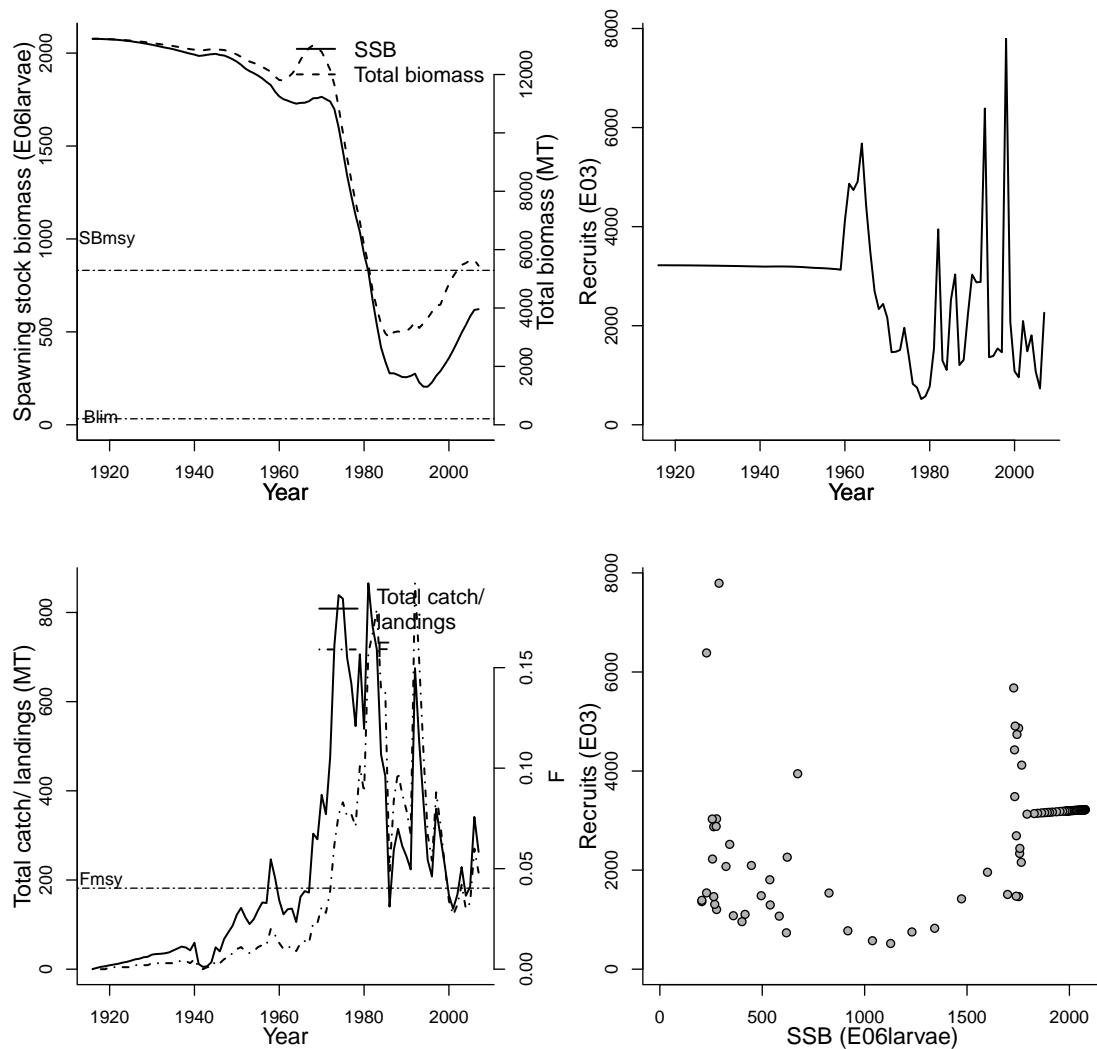
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                            |
| Assessment authors | Key, M  |
| Assessment method  | Stock Synthesis v2.0 model                                    |
| Publication year   | 2008  |
| Timeseries span    | 1916-2007   |
| Document           | NWFSC-BLUEROCKCAL-2007-Blue rockfish CA.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |                  | tertiary LME |  |  |  |
|------------------------|-------|-------|------------------------|------------------|--------------|--|--|--|
| 3 - California Current |       |       | na                     | na               |              |  |  |  |
| Parameter              | Value | Units | Parameter              | Reference points |              |  |  |  |
|                        |       |       |                        | Value            | Units        |  |  |  |
| SSB-AGE-yr             | 6+    | yr    | BH-h-dimless           | 0.58             | dimless      |  |  |  |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)           | 205              | MT           |  |  |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-E06lar (SSB)    | 831              | E06larvae    |  |  |  |
| F-AGE-yr-yr            | 1+    | yr-yr | Fmsy-1/yr (F)          | 0.0403           | 1/yr         |  |  |  |
| TB-AGE-yr              | 1+    | yr    | SSB0-MT (SSB)          | 2077             | MT           |  |  |  |
| L50-cm                 | 29    | cm    | R0-E03 (R )            | 3220             | E03          |  |  |  |
| M-1/yr                 | 0.12  | 1/yr  | SSBtarget-E06lar (SSB) | 831              | E06larvae    |  |  |  |
| A50-yr                 | 6     | yr    | SSBmin-ratio (SSB)     | 0.25             | ratio        |  |  |  |
| M                      |       |       | Ftarget-1/yr (F)       | 0.0403           | 1/yr         |  |  |  |
|                        |       |       | SPRtarget-ratio (SPR)  | 0.5              | ratio        |  |  |  |
|                        |       |       | MSY-MT (TB)            | 275              | MT           |  |  |  |
|                        |       |       | B0-MT                  | 13223            | MT           |  |  |  |
|                        |       |       | $F_{2007}/F_{msy}$     | 1.191            |              |  |  |  |
|                        |       |       | $SSB_{2007}/SSB_{msy}$ | 0.748            |              |  |  |  |

| Time series minima and maxima |           |      |       |       |       |
|-------------------------------|-----------|------|-------|-------|-------|
|                               | SSB       | R    | F     | TB    | Catch |
| Minimum year                  | 1916      | 1916 | 1916  | 1916  | 1916  |
| Maximum year                  | 2007      | 2007 | 2007  | 2007  | 2007  |
| Time series minimum           | 205       | 519  | 0     | 2979  | 0.4   |
| Time series maximum           | 2077      | 7792 | 0.192 | 13223 | 865.6 |
| Units                         | E06larvae | E03  | 1/yr  | MT    | MT    |



# Assessment of Southern Pacific Coast bocaccio (*Sebastes paucispinis*)

Assessment ID:NWFSC-BOCACCSPOAST-1951-2006-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/61>

Area ID: USA-NMFS-SPCOAST

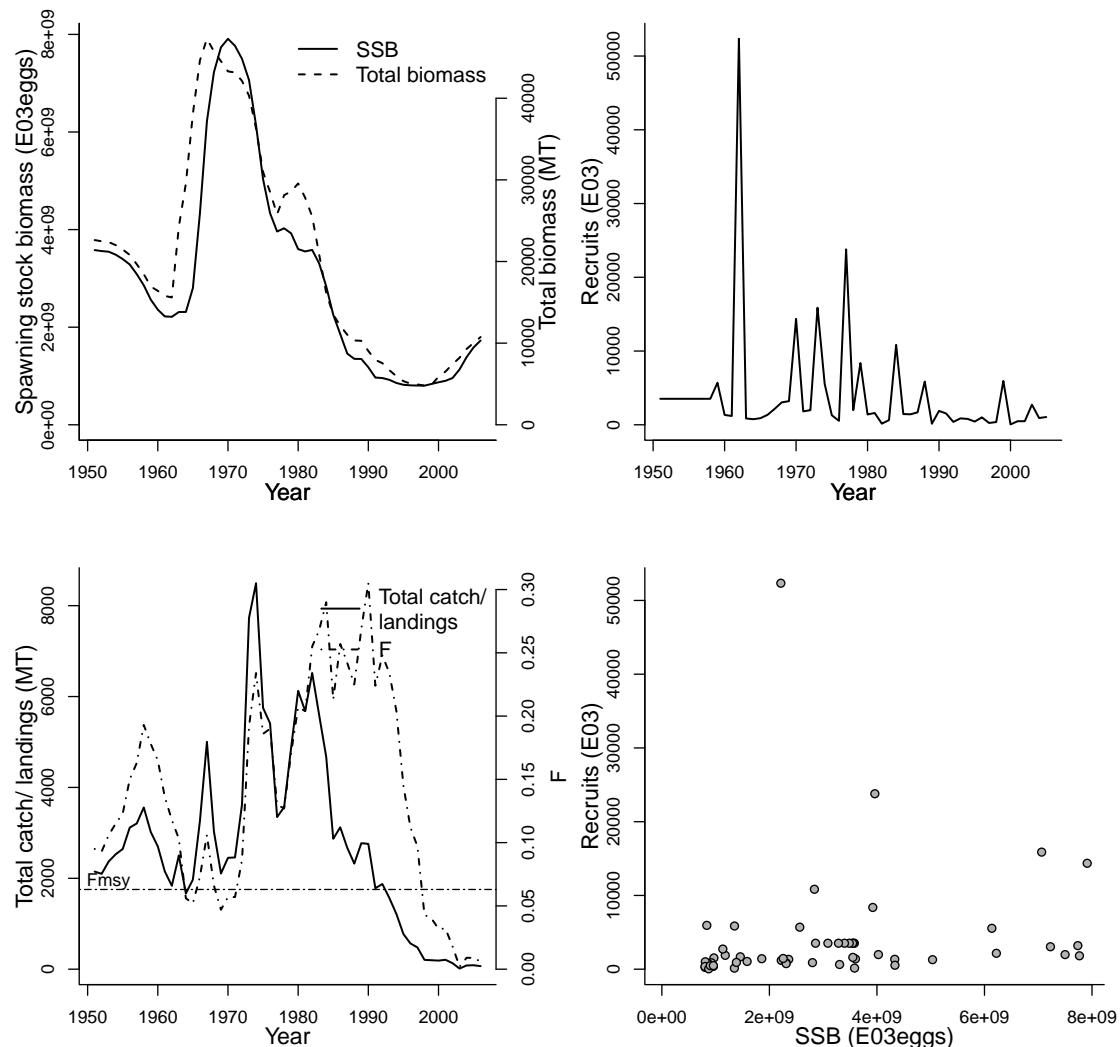
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                     |
| Assessment authors | MacCall AD   |
| Assessment method  | Stock Synthesis v1.0 model                             |
| Publication year   | 2008   |
| Timeseries span    | 1951-2006  |
| Document           | NWFSC-BOCACCSPOAST-2007 Bocaccio.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-23   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-19   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |
|------------------------|-------|-------|------------------------|--------------|
| 3 - California Current |       |       | na                     | na           |
| Parameter              | Value | Units | Reference points       |              |
|                        |       |       | Parameter              | Value        |
| SSB-SEX-sex            | 1     | sex   | Fmsy-1/yr (F)          | 0.063        |
| REC-AGE-yr             | 1     | yr    | R0-E03 (R )            | 5449         |
| F-AGE-yr-yr            | 1+    | yr-yr | SSBmin-ratio (SSB)     | 0.25         |
| TB-AGE-yr              | 1+    | yr    | Ftarget-1/yr (F)       | 0.063        |
| M-1/yr                 | 0.15  | 1/yr  | SPRtarget-ratio (SPR)  | 0.5          |
| SSB-AGE-yr             |       |       | MSY-MT (TB)            | 1974         |
| M                      |       |       | SSBmsy-E03eggs         | 5429000000   |
| A50-yr                 |       |       | SSB0-E03eggs           | 13572000000  |
| L50-cm                 |       |       | SSBtarget-E03eggs      | 5429000000   |
|                        |       |       | BH-h-dimless           | 0.44         |
|                        |       |       | SSBlim-E03eggs         | 802000000    |
|                        |       |       | $SSB_{2006}/SSB_{lim}$ | 2.153        |
|                        |       |       | $F_{2006}/F_{msy}$     | 0.095        |
|                        |       |       | $SSB_{2006}/SSB_{msy}$ | 0.318        |

| Time series minima and maxima |            |       |       |       |       |
|-------------------------------|------------|-------|-------|-------|-------|
|                               | SSB        | R     | F     | TB    | Catch |
| Minimum year                  | 1951       | 1951  | 1951  | 1951  | 1951  |
| Maximum year                  | 2006       | 2005  | 2006  | 2006  | 2006  |
| Time series minimum           | 802000000  | 50    | 0.002 | 4796  | 14    |
| Time series maximum           | 7910000000 | 52337 | 0.305 | 47280 | 8494  |
| Units                         | E03eggs    | E03   | 1/yr  | MT    | MT    |



# Assessment of Southern Pacific Coast chilipepper (*Sebastodes goodei*)

Assessment ID:NWFSC-CHILISPCOAST-1892-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/83>

Area ID: USA-NMFS-SPCOAST

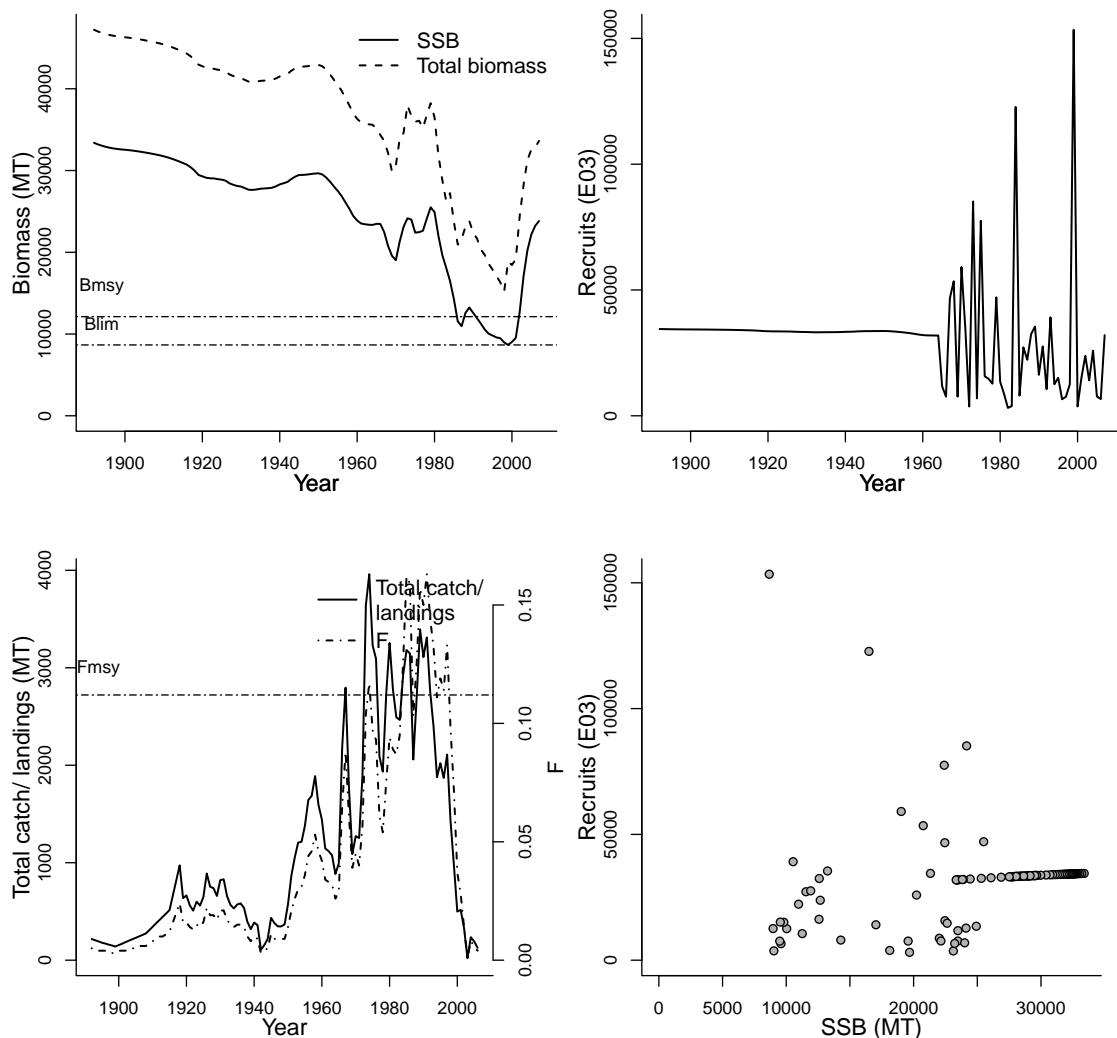
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                              |
| Assessment authors | Field JG  |
| Assessment method  | Stock Synthesis v2.0 model                                      |
| Publication year   | 2007  |
| Timeseries span    | 1892-2007   |
| Document           | NWFSC-CHILISPCOAST-2007-Chilipepper CA OR.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-21  |
| Date last loaded   | 2011-07-26  |
| QA/QC complete     | NO  |
| Date approved      |   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |        |       | secondary LME         |       | tertiary LME |  |
|------------------------|--------|-------|-----------------------|-------|--------------|--|
| 3 - California Current |        |       | na                    |       | na           |  |
|                        |        |       | Reference points      |       |              |  |
| Parameter              | Value  | Units | Parameter             | Value | Units        |  |
| SSB-SEX-sex            | 1      | sex   | Blim-MT (TB)          | 8666  | MT           |  |
| REC-AGE-yr             | 0      | yr    | Bmsy-MT (TB)          | 12126 | MT           |  |
| F-AGE-yr-yr            | 1+     | yr-yr | Fmsy-1/yr (F)         | 0.112 | 1/yr         |  |
| TB-AGE-yr              | 1+     | yr    | SSB0-MT (SSB)         | 33390 | MT           |  |
| M-1/yr                 | 0.16   | 1/yr  | R0-E03 (R )           | 34490 | E03          |  |
| A50-yr                 | 2.5 yr | yr    | SSBtarget-MT (SSB)    | 21034 | MT           |  |
| L50-cm                 | 25     | cm    | SSBmin-ratio (SSB)    | 0.25  | ratio        |  |
| SSB-AGE-yr             |        |       | Ftarget-1/yr (F)      | 0.102 | 1/yr         |  |
| M                      |        |       | SPRtarget-ratio (SPR) | 0.5   | ratio        |  |
|                        |        |       | MSY-MT (TB)           | 2164  | MT           |  |
|                        |        |       | B0-MT                 | 45057 | MT           |  |
|                        |        |       | BH-h-dimless          | 0.57  | dimless      |  |
|                        |        |       | $TB_{2007}/B_{msy}$   | 2.772 |              |  |
|                        |        |       | $F_{2006}/F_{msy}$    | 0.036 |              |  |

| Time series minima and maxima |       |        |       |       |       |
|-------------------------------|-------|--------|-------|-------|-------|
|                               | SSB   | R      | F     | TB    | Catch |
| Minimum year                  | 1892  | 1892   | 1892  | 1892  | 1892  |
| Maximum year                  | 2007  | 2007   | 2006  | 2007  | 2006  |
| Time series minimum           | 8666  | 3130   | 0.001 | 15209 | 21    |
| Time series maximum           | 33391 | 153415 | 0.163 | 47214 | 3960  |
| Units                         | MT    | E03    | 1/yr  | MT    | MT    |



# Assessment of Southern California cowcod (*Sebastodes levis*)

Assessment ID:NWFSC-COWCODSCAL-1900-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/40>

Area ID: USA-NMFS-SCAL

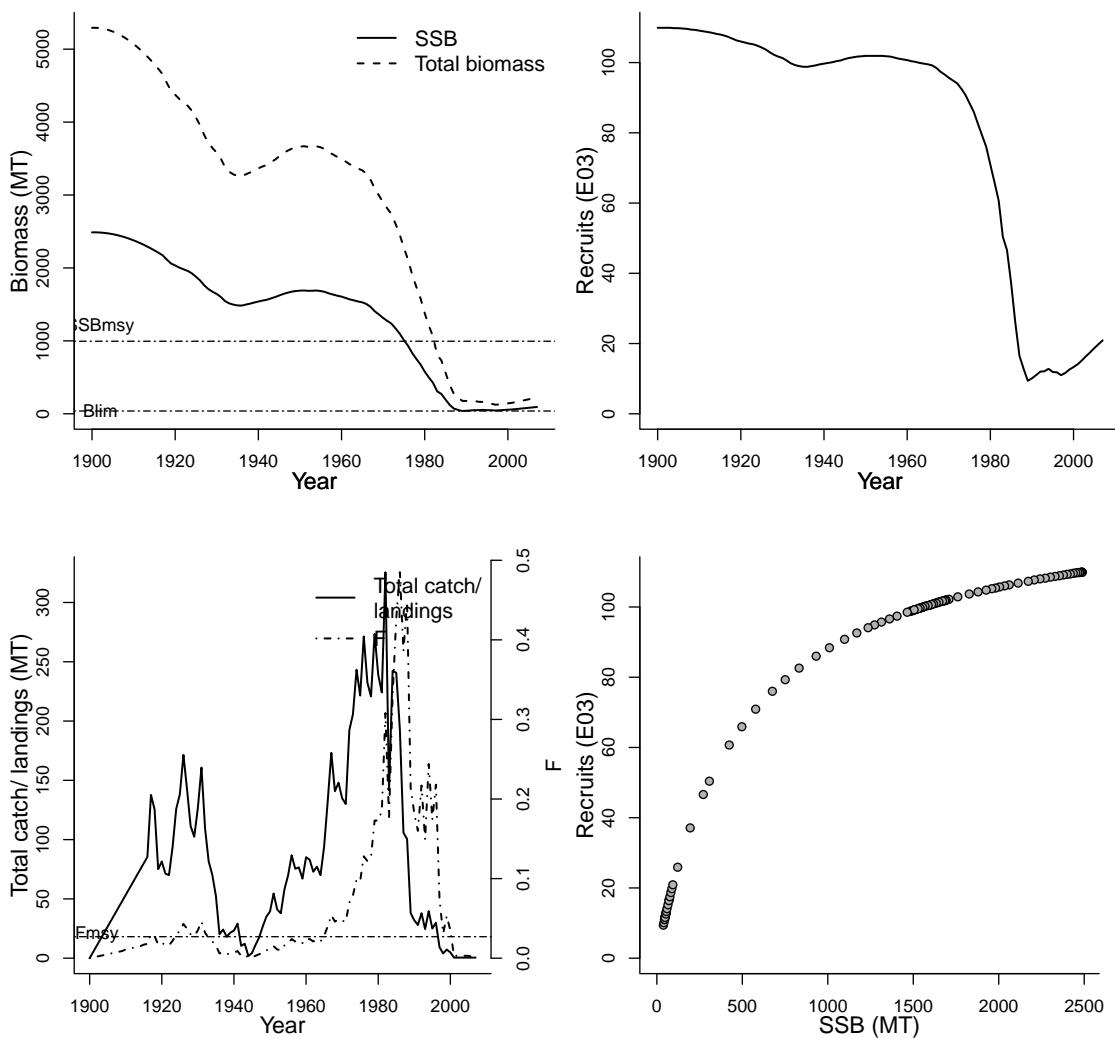
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                    |
| Assessment authors | Dick EJ   |
| Assessment method  | Stock Synthesis v2.0 model                            |
| Publication year   | 2007  |
| Timeseries span    | 1900-2007   |
| Document           | NWFSC-COWCODSCAL-2007-Cowcod CA.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-21  |
| Date last loaded   | 2011-07-26  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |
|------------------------|-------|-------|------------------------|--------------|
| 3 - California Current |       |       | na                     | na           |
| Parameter              | Value | Units | Reference points       |              |
|                        |       |       | Parameter              | Value        |
| SSB-AGE-yr             | 11+   | yr    | Blim-MT (TB)           | 38           |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)        | 995          |
| REC-AGE-yr             | 0     | yr    | Fmsy-1/yr (F)          | 0.027        |
| F-AGE-yr-yr            | 1+    | yr-yr | SSB0-MT (SSB)          | 2488         |
| TB-AGE-yr              | 1+    | yr    | R0-E03 (R )            | 109.9        |
| M-1/yr                 | 0.055 | 1/yr  | SSBtarget-MT (SSB)     | 995          |
| A50-yr                 | 11    | yr    | SSBmin-ratio (SSB)     | 0.25         |
| L50-cm                 | 43    | cm    | Ftarget-1/yr (F)       | 0.027        |
| M                      |       |       | SPRtarget-ratio (SPR)  | 0.4          |
|                        |       |       | MORATOR-yr-yr          | 2001-present |
|                        |       |       | B0-MT                  | 5291         |
|                        |       |       | BH-h-dimless           | 0.6          |
|                        |       |       | $F_{2007}/F_{msy}$     | 0.074        |
|                        |       |       | $SSB_{2007}/SSB_{msy}$ | 0.094        |

| Time series minima and maxima |        |       |       |        |        |
|-------------------------------|--------|-------|-------|--------|--------|
|                               | SSB    | R     | F     | TB     | Catch  |
| Minimum year                  | 1900   | 1900  | 1900  | 1900   | 1900   |
| Maximum year                  | 2007   | 2007  | 2007  | 2007   | 2007   |
| Time series minimum           | 38.3   | 9.4   | 0     | 124.6  | 0.01   |
| Time series maximum           | 2488.1 | 109.9 | 0.485 | 5293.1 | 325.54 |
| Units                         | MT     | E03   | 1/yr  | MT     | MT     |



# Assessment of Pacific Coast canary rockfish (*Sebastes pinniger*)

Assessment ID:NWFSC-CROCKPCOAST-1916-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/84>

Area ID: USA-NMFS-PCOAST

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                  |
| Assessment authors | Stewart, Ian J.                                     |
| Assessment method  | Stock Synthesis v2.0 model                          |
| Publication year   | 2007  |
| Timeseries span    | 1916-2007   |
| Document           | NWFSC-CROCKPCOAST-2007-Canary.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-10  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | NO  |
| Date approved      |   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME         |       | tertiary LME |       |
|------------------------|-------|-------|-----------------------|-------|--------------|-------|
| 3 - California Current |       |       | na                    |       | na           |       |
| Parameter              | Value | Units | Reference points      |       |              | Units |
|                        |       |       | Parameter             | Value | Value        |       |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)          | 4202  | MT           |       |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)       | 12394 | MT           |       |
| F-AGE-yr-yr            | 5-35  | yr-yr | Flim-1/yr (F)         | 0.04  | 1/yr         |       |
| TB-AGE-yr              | 0     | yr    | Fmsy-1/yr (F)         | 0.094 | 1/yr         |       |
| L50-cm                 | 40.5  | cm    | SSB0-MT (SSB)         | 32561 | MT           |       |
| M-1/T                  | 0.06  | 1/T   | R0-E03 (R )           | 4210  | E03          |       |
| SSB-AGE-yr             |       |       | SSBtarget-MT (SSB)    | 13041 | MT           |       |
| M                      |       |       | SSBmin-ratio (SSB)    | 0.25  | ratio        |       |
| A50-yr                 |       |       | Ftarget-1/yr (F)      | 0.04  | 1/yr         |       |
|                        |       |       | SPRtarget-ratio (SPR) | 0.5   | ratio        |       |
|                        |       |       | MSY-MT (TB)           | 1169  | MT           |       |
|                        |       |       | BH-h-dimless          | 0.511 | dimless      |       |

| Time series minima and maxima |     |   |   |    |       |
|-------------------------------|-----|---|---|----|-------|
|                               | SSB | R | F | TB | Catch |
| Minimum year                  |     |   |   |    |       |
| Maximum year                  |     |   |   |    |       |
| Time series minimum           |     |   |   |    |       |
| Time series maximum           |     |   |   |    |       |
| Units                         |     |   |   |    |       |

No biomass data  
available

No recruitment  
data available

No exploitation  
data available

No SSB–recruit  
data available

# Assessment of Pacific Coast canary rockfish (*Sebastes pinniger*)

Assessment ID:NWFSC-CROCKCOAST-1916-2009-Stachura

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/84>

Area ID: USA-NMFS-PCOAST

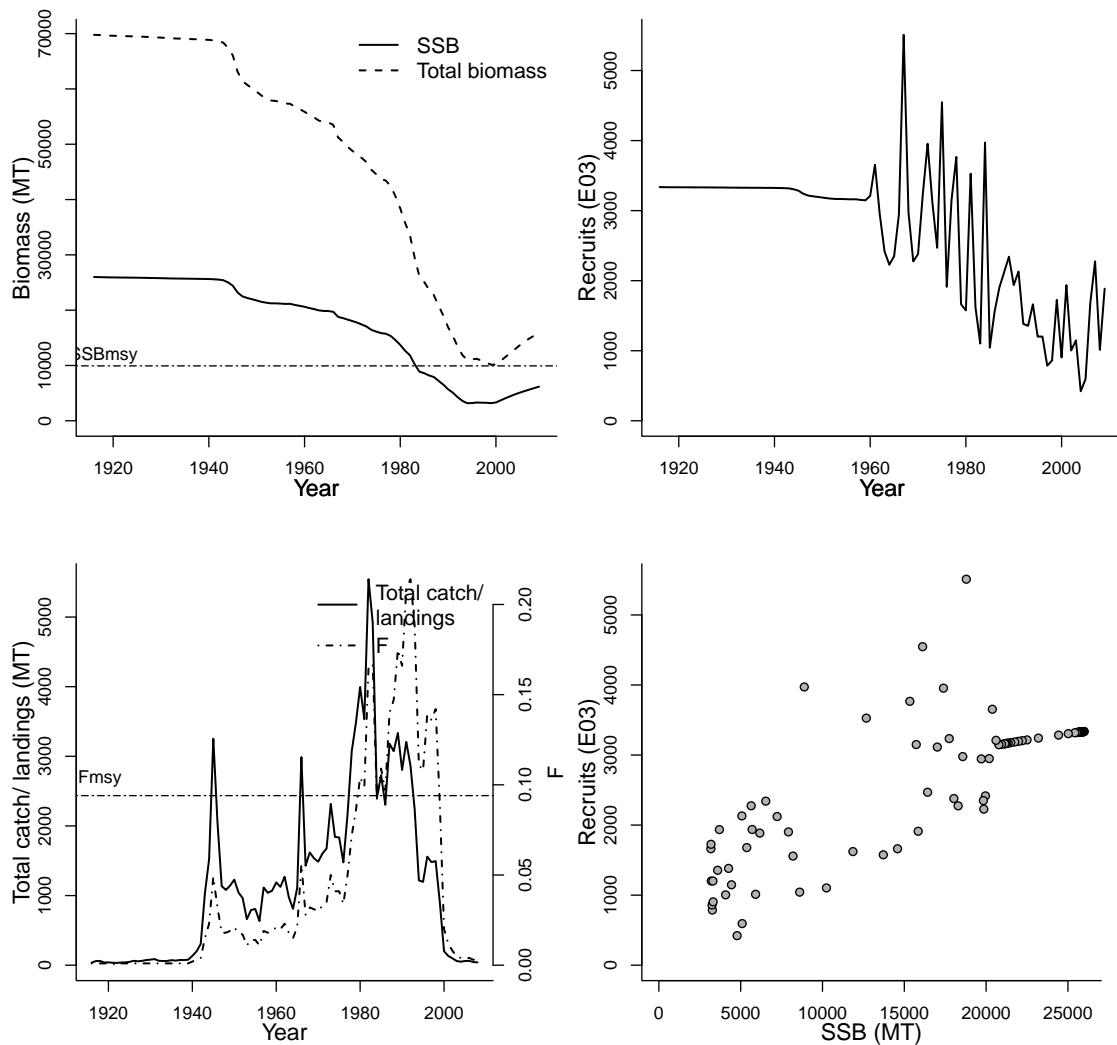
General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center          |
| Assessment authors | Stewart, Ian J.                             |
| Assessment method  | Stock Synthesis v2.0 model                  |
| Publication year   | 2009  |
| Timeseries span    | 1916-2009                                   |
| Document           | NWFSC-CROCKCOAST-2009.pdf (pdf in database) |
| Recorder           | Stachura                                    |
| Date entered       | 2011-03-15                                  |
| Date last loaded   | 2011-07-26                                  |
| QA/QC complete     | NO  |
| Date approved      |   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |                  | tertiary LME |
|------------------------|-------|-------|------------------------|------------------|--------------|
| 3 - California Current |       |       | na                     | na               |              |
| Parameter              | Value | Units | Parameter              | Reference points |              |
| SSB-AGE-yr             | 7.688 | yr    | Fmsy-1/yr (F)          | 0.094            | 1/yr         |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)        | 9928             | MT           |
| REC-AGE-yr             | 0     | yr    | MSY-MT (TB)            | 937              | MT           |
| F-AGE-yr-yr            | 5-35  | yr-yr | SSB0-MT (SSB)          | 25993            | MT           |
| TB-AGE-yr              | 0     | yr    | SSBtarget-MT (SSB)     | 10397            | MT           |
| L50-cm                 | 40.5  | cm    | BH-h-dimless           | 0.511            | dimless      |
| M-1/T                  | 0.06  | 1/T   | $F_{2008}/F_{msy}$     | 0.032            |              |
| M                      |       |       | $SSB_{2009}/SSB_{msy}$ | 0.621            |              |
| A50-yr                 |       |       |                        |                  |              |

| Time series minima and maxima |       |      |       |       |         |
|-------------------------------|-------|------|-------|-------|---------|
|                               | SSB   | R    | F     | TB    | Catch   |
| Minimum year                  | 1916  | 1916 | 1916  | 1916  | 1916    |
| Maximum year                  | 2009  | 2009 | 2008  | 2009  | 2008    |
| Time series minimum           | 3178  | 422  | 0     | 10122 | 32.2    |
| Time series maximum           | 25993 | 5510 | 0.214 | 69785 | 5543.56 |
| Units                         | MT    | E03  | 1/yr  | MT    | MT      |



# Assessment of Pacific Coast darkblotched rockfish (*Sebastodes crameri*)

Assessment ID:NWFSC-DKROCKPCOAST-1928-2007-BRANCH  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/43>

Area ID: USA-NMFS-PCOAST

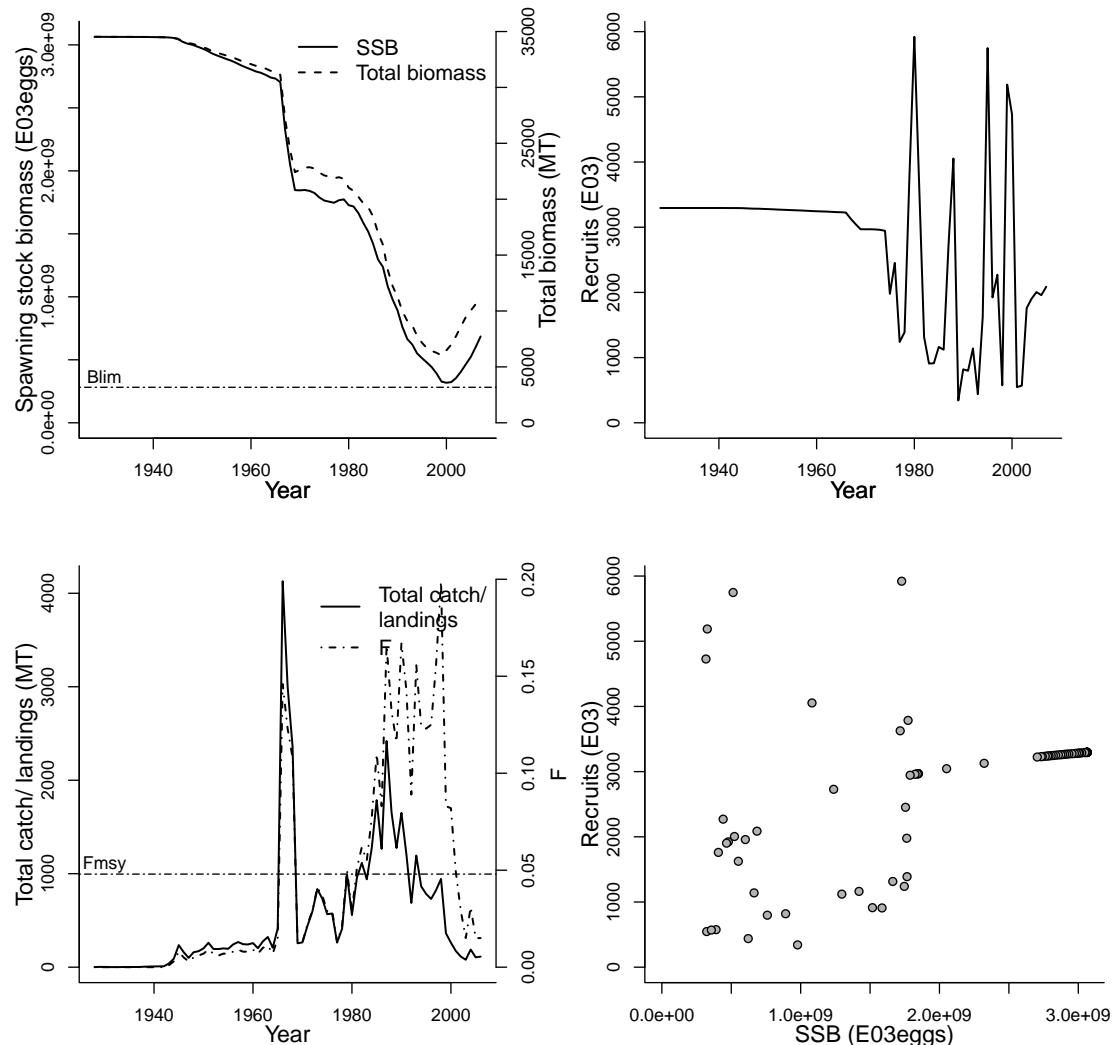
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                                  |
| Assessment authors | Hamel OS  |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2008  |
| Timeseries span    | 1928-2007   |
| Document           | NWFSC-DKROCKPCOAST-2008-Darkblotched rockfish.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-26  |
| QA/QC complete     | YES   |
| Date approved      | 2009-04-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |
|------------------------|-------|-------|------------------------|--------------|
| 3 - California Current |       |       | na                     | na           |
|                        |       |       | Reference points       |              |
| Parameter              | Value | Units | Parameter              | Value        |
| SSB-AGE-yr             | 7.7   | yr    | BH-h-dimless           | 0.6          |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)           | 3176         |
| REC-AGE-yr             | 0     | yr    | Fmsy-1/yr (F)          | 0.048        |
| F-AGE-yr-yr            | 1+    | yr-yr | SSB0-E03eggs           | 3064000000   |
| TB-AGE-yr              | 0+    | yr    | R0-E03 (R )            | 3295         |
| L50-cm                 | 34.5  | cm    | SSBmin-ratio (SSB)     | 0.25         |
| M-1/yr                 | 0.07  | 1/yr  | Ftarget-1/yr (F)       | 0.041        |
| A50-yr                 | 7.7   | yr    | SPRtarget-ratio (SPR)  | 0.5          |
| M                      |       |       | MSY-MT (TB)            | 644          |
|                        |       |       | SSBmsy-E03eggs         | 937600000    |
|                        |       |       | SSBtarget-E03eggs      | 1225600000   |
|                        |       |       | $F_{2006}/F_{msy}$     | 0.312        |
|                        |       |       | $SSB_{2007}/SSB_{msy}$ | 0.731        |

| Time series minima and maxima |            |      |       |       |       |
|-------------------------------|------------|------|-------|-------|-------|
|                               | SSB        | R    | F     | TB    | Catch |
| Minimum year                  | 1928       | 1928 | 1928  | 1928  | 1928  |
| Maximum year                  | 2007       | 2007 | 2006  | 2007  | 2006  |
| Time series minimum           | 317600000  | 342  | 0     | 6031  | 1     |
| Time series maximum           | 3064100000 | 5921 | 0.199 | 34527 | 4129  |
| Units                         | E03eggs    | E03  | 1/yr  | MT    | MT    |



# Assessment of Pacific Coast english sole

## *(Parophrys vetulus)*

Assessment ID:NWFSC-ESOLEPCOAST-1876-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/21>

Area ID: USA-NMFS-PCOAST

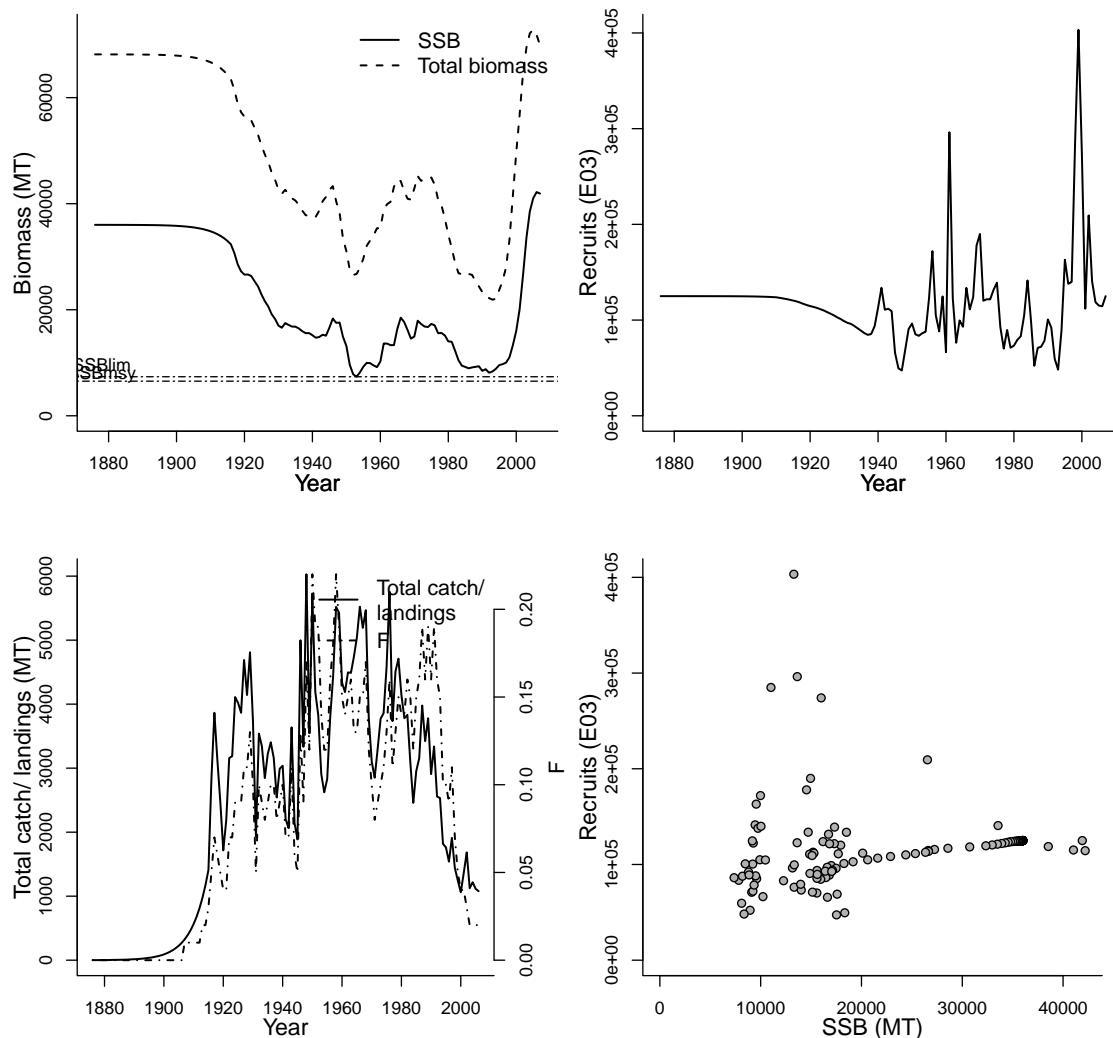
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                       |
| Assessment authors | Stewart, Ian J.  |
| Assessment method  | Stock Synthesis v2.0 model                               |
| Publication year   | 2007   |
| Timeseries span    | 1876-2007  |
| Document           | NWFSC-ESOLEPCOAST-2007-EnglishSole.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-18   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-16   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |        | tertiary LME |
|------------------------|-------|-------|------------------------|--------|--------------|
| 3 - California Current |       |       | na                     | na     |              |
| Parameter              | Value | Units | Reference points       |        |              |
|                        |       |       | Parameter              | Value  | Units        |
| SSB-AGE-yr             | 3+    | yr    | SSBlim-MT (SSB)        | 7364   | MT           |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)        | 6526   | MT           |
| REC-AGE-yr             | 0     | yr    | Fmsy-1/yr (F)          | 0.27   | 1/yr         |
| F-AGE-yr-yr            | 1+    | yr-yr | SSB0-MT (SSB)          | 36012  | MT           |
| L50-cm                 | 23.3  | cm    | R0-E03 (R )            | 124990 | E03          |
| TB-AGE-yr              | 7.7+  | yr    | SSBtarget-MT (SSB)     | 14405  | MT           |
| A50-yr                 | 7.7+  | yr    | SSBmin-ratio (SSB)     | 0.25   | ratio        |
| M                      |       |       | Ftarget-1/yr (F)       | 0.13   | 1/yr         |
|                        |       |       | SPRtarget-ratio (SPR)  | 0.49   | ratio        |
|                        |       |       | MSY-MT (TB)            | 4252   | MT           |
|                        |       |       | BH-h-dimless           | 0.798  | dimless      |
|                        |       |       | $SSB_{2007}/SSB_{lim}$ | 5.691  |              |
|                        |       |       | $F_{2006}/F_{msy}$     | 0.074  |              |
|                        |       |       | $SSB_{2007}/SSB_{msy}$ | 6.422  |              |

| Time series minima and maxima |       |        |      |       |       |
|-------------------------------|-------|--------|------|-------|-------|
|                               | SSB   | R      | F    | TB    | Catch |
| Minimum year                  | 1876  | 1876   | 1876 | 1876  | 1876  |
| Maximum year                  | 2007  | 2007   | 2006 | 2007  | 2006  |
| Time series minimum           | 7364  | 47349  | 0    | 21903 | 1     |
| Time series maximum           | 42193 | 403289 | 0.22 | 72795 | 6030  |
| Units                         | MT    | E03    | 1/T  | MT    | MT    |



# Assessment of Oregon Coast kelp greenling (*Hexagrammos decagrammus*)

## Assessment

ID:NWFSC-KELPGREENLINGORECOAST-1979-2005-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/347>

Area ID: USA-NMFS-ORECOAST

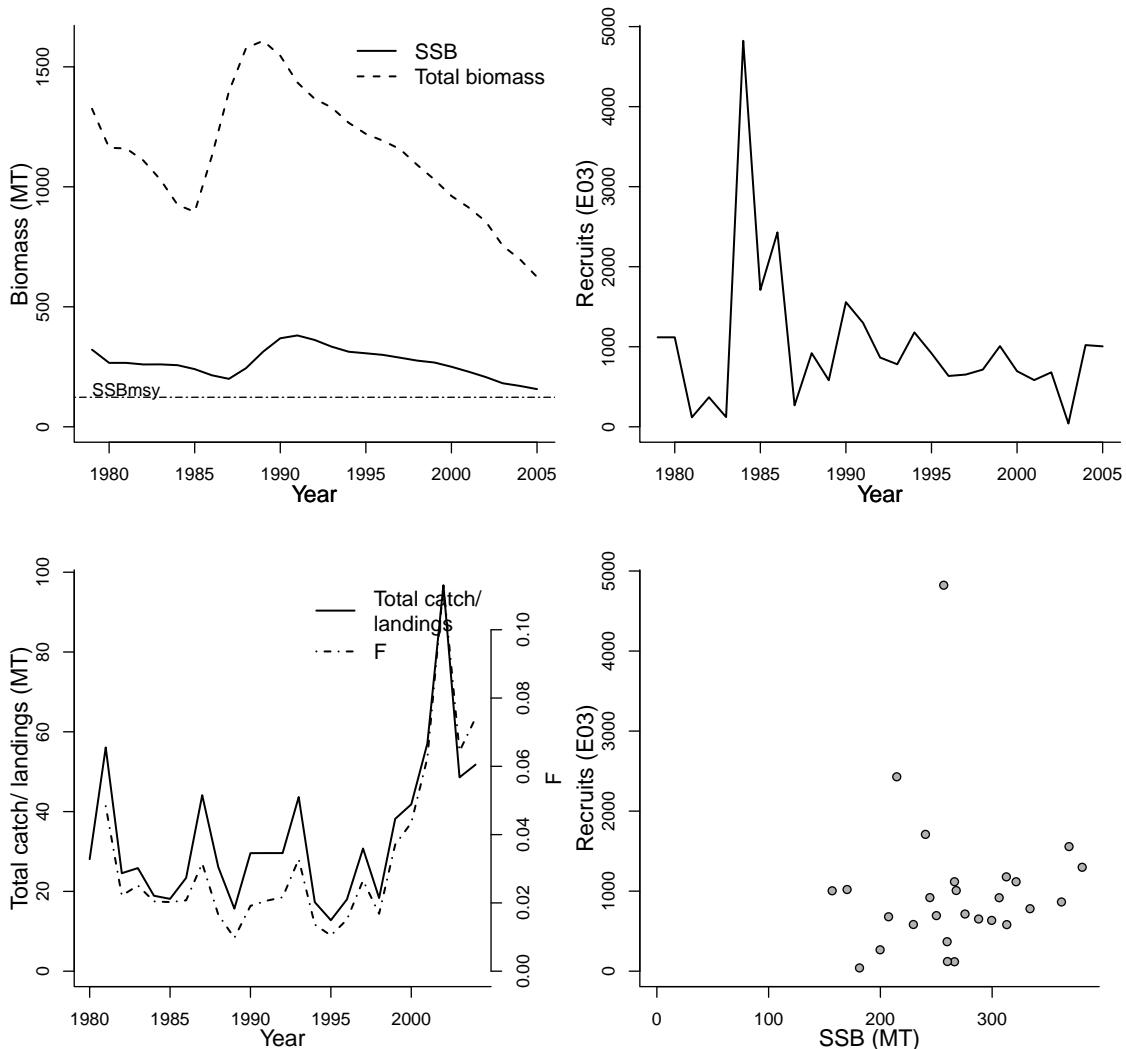
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center           |
| Assessment authors | Cope, Jason                                  |
| Assessment method  | Stock Synthesis v2.0 model                   |
| Publication year   | 2005   |
| Timeseries span    | 1979-2005                                    |
| Document           | KelpGreenling_2005.pdf (pdf not in database) |
| Recorder           | STANTON                                      |
| Date entered       | 2009-05-22                                   |
| Date last loaded   | 2011-07-25                                   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |       |       | tertiary LME |  |  |
|------------------------|-------|-------|------------------------|-------|-------|--------------|--|--|
| 3 - California Current |       |       | na                     |       |       | na           |  |  |
| Parameter              | Value | Units | Reference points       |       |       |              |  |  |
| SSB-AGE-yr             | 4+    | yr    | Parameter              | Value | Units |              |  |  |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)       | 0.26  | 1/yr  |              |  |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)        | 123   | MT    |              |  |  |
| F-AGE-yr-yr            | 0+    | yr-yr | MSY-MT (TB)            | 82    | MT    |              |  |  |
| TB-AGE-yr              | 0+    | yr    | Umsy-ratio (U)         | 0.125 | ratio |              |  |  |
| M-1/yr                 | 0.26  | 1/yr  | SSB0-MT (SSB)          | 321   | MT    |              |  |  |
| NATMORT-1/yr           | 0.26  | 1/yr  | B0-MT                  | 1295  | MT    |              |  |  |
| M                      |       |       | $SSB_{2005}/SSB_{msy}$ | 1.275 |       |              |  |  |
| A50-yr                 |       |       |                        |       |       |              |  |  |
| L50-cm                 |       |       |                        |       |       |              |  |  |

| Time series minima and maxima |         |         |            |         |
|-------------------------------|---------|---------|------------|---------|
|                               | SSB     | R       | F          | TB      |
| Minimum year                  | 1979    | 1979    | 1981       | 1979    |
| Maximum year                  | 2005    | 2005    | 2004       | 2005    |
| Time series minimum           | 156.873 | 40.7389 | 0.00974561 | 624.32  |
| Time series maximum           | 380.566 | 4822.71 | 0.113046   | 1608.43 |
| Units                         | MT      | E03     | ratio      | MT      |
|                               |         |         |            | MT      |



# Assessment of Pacific Coast longnose skate (*Raja rhina*)

Assessment ID:NWFSC-LNOSESKAPCOAST-1915-2007-BRANCH

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/41>

Area ID: USA-NMFS-PCOAST

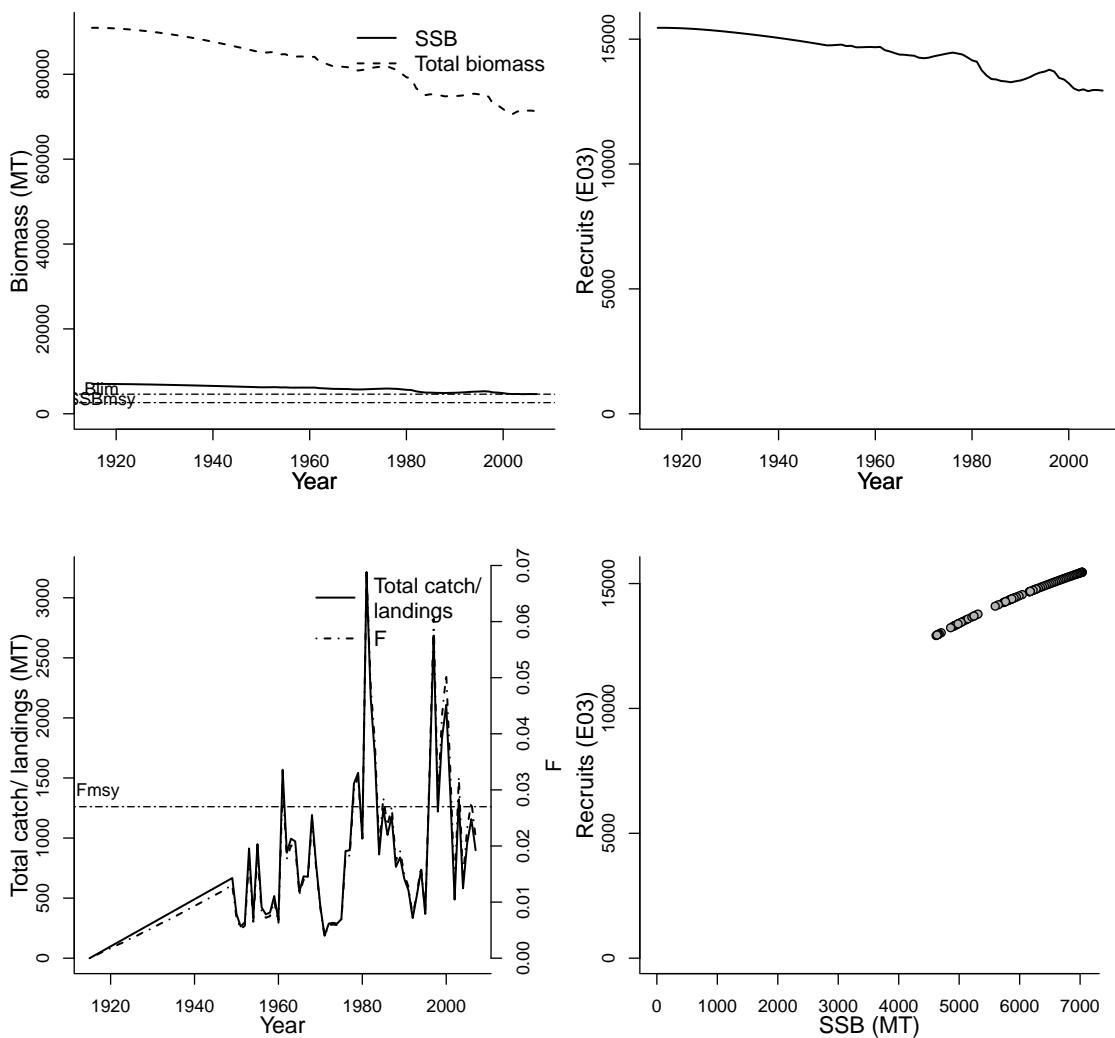
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                             |
| Assessment authors | Gertseva VV  |
| Assessment method  | Stock Synthesis v2.0 model                                     |
| Publication year   | 2008   |
| Timeseries span    | 1915-2007  |
| Document           | NWFSC-LNOSESKAPCOAST-2008-Longnose skate.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-23   |
| Date last loaded   | 2011-07-26   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-02   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |        | tertiary LME |       |
|------------------------|-------|-------|------------------------|--------|--------------|-------|
| 3 - California Current |       |       | na                     |        | na           |       |
| Parameter              | Value | Units | Reference points       |        |              | Units |
|                        |       |       | Parameter              | Value  | Value        |       |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)           | 4617   | MT           |       |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)        | 2626   | MT           |       |
| F-AGE-yr-yr            | 2+    | yr-yr | Fmsy-1/yr (F)          | 0.027  | 1/yr         |       |
| TB-AGE-yr              | 0+    | yr    | SSB0-MT (SSB)          | 7034   | MT           |       |
| L50-cm                 | 120   | cm    | R0-E03 (R)             | 15454  | E03          |       |
| M-1/yr                 | 0.2   | 1/yr  | SSBtarget-MT (SSB)     | 2814   | MT           |       |
| SSB-AGE-yr             |       |       | SSBmin-ratio (SSB)     | 0.25   | ratio        |       |
| M                      |       |       | Ftarget-1/yr (F)       | 0.0257 | 1/yr         |       |
| A50-yr                 |       |       | SPRtarget-ratio (SPR)  | 0.4    | ratio        |       |
|                        |       |       | MSY-MT (TB)            | 1268   | MT           |       |
|                        |       |       | BH-h-dimless           | 0.4    | dimless      |       |
|                        |       |       | $F_{2007}/F_{msy}$     | 0.800  |              |       |
|                        |       |       | $SSB_{2007}/SSB_{msy}$ | 1.765  |              |       |

| Time series minima and maxima |         |         |        |         |
|-------------------------------|---------|---------|--------|---------|
|                               | SSB     | R       | F      | TB      |
| Minimum year                  | 1915    | 1915    | 1915   | 1915    |
| Maximum year                  | 2007    | 2007    | 2007   | 2007    |
| Time series minimum           | 4617.13 | 12918.1 | 0      | 70670.6 |
| Time series maximum           | 7034.32 | 15454.2 | 0.0688 | 90955.2 |
| Units                         | MT      | E03     | ratio  | MT      |



# Assessment of Pacific Coast longspine thornyhead (*Sebastolobus altivelis*)

Assessment ID:NWFSC-LSTHORNHPCOAST-1962-2005-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/348>

Area ID: USA-NMFS-PCOAST

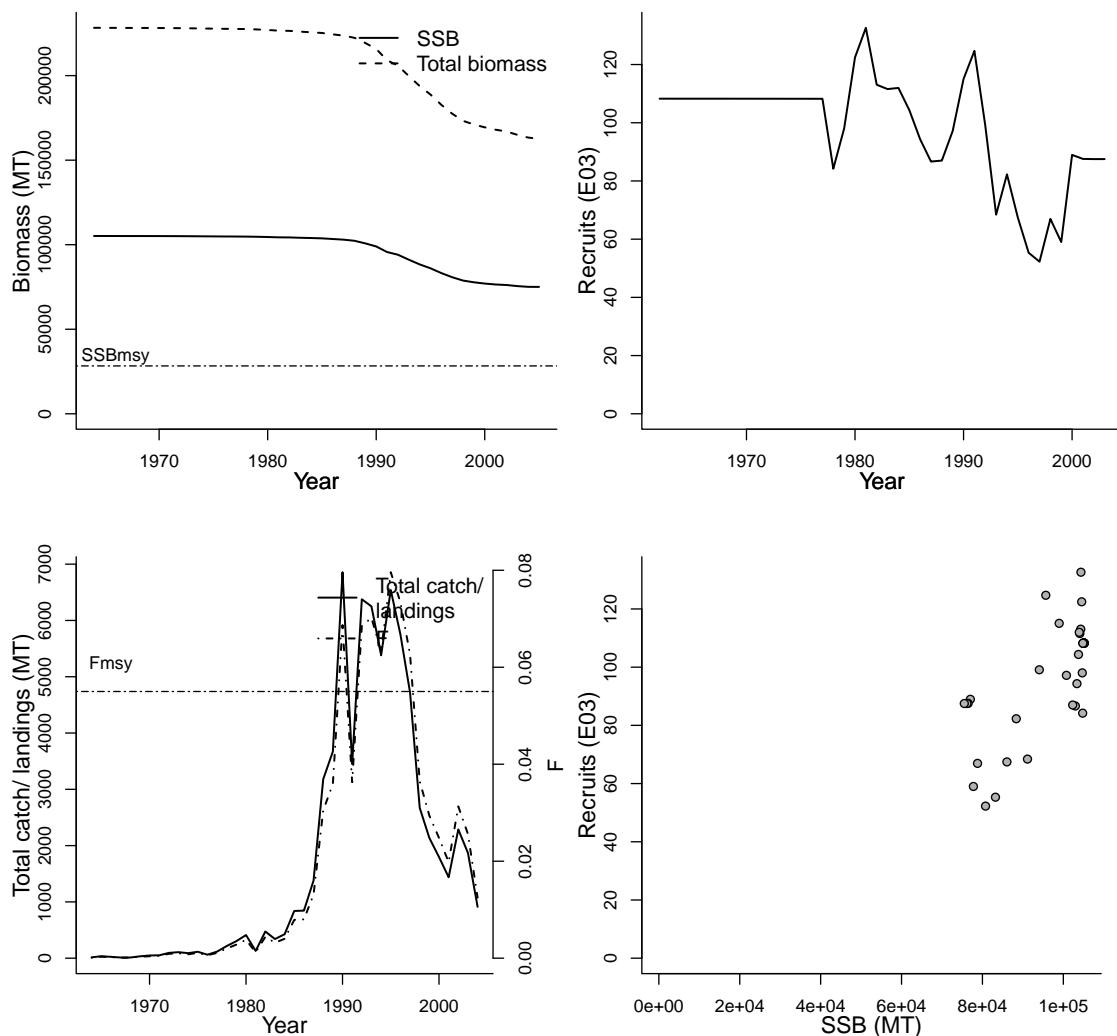
General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Northwest Fisheries Science Center        |
| Assessment authors | Fay, Gavin                                |
| Assessment method  | Stock Synthesis v2.0 model                |
| Publication year   | 2005                                      |
| Timeseries span    | 1962-2005                                 |
| Document           | 2005-SAFE-Longspine.pdf (pdf in database) |
| Recorder           | STANTON                                   |
| Date entered       | 2009-05-22                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |                  | tertiary LME |
|------------------------|-------|-------|------------------------|------------------|--------------|
| 3 - California Current |       |       | na                     | na               |              |
| Parameter              | Value | Units | Parameter              | Reference points |              |
| SSB-SEX-sex            | 1     | sex   | Fmsy-1/yr (F)          | 0.055            | 1/yr         |
| REC-AGE-yr             | 2     | yr    | SSBmsy-MT (SSB)        | 28305            | MT           |
| F-AGE-yr-yr            | 0+    | yr-yr | MSY-MT (TB)            | 3687             | MT           |
| TB-AGE-yr              | 0+    | yr    | SSB0-MT (SSB)          | 105157           | MT           |
| SSB-AGE-yr             |       |       | BO-MT                  | 227972           | MT           |
| M                      |       |       | BH-h-dimless           | 0.75             | dimless      |
| A50-yr                 |       |       | $F_{2004}/F_{msy}$     | 0.227            |              |
| L50-cm                 |       |       | $SSB_{2005}/SSB_{msy}$ | 2.651            |              |

| Time series minima and maxima |        |         |        |        |
|-------------------------------|--------|---------|--------|--------|
|                               | SSB    | R       | F      | TB     |
| Minimum year                  | 1964   | 1962    | 1964   | 1964   |
| Maximum year                  | 2005   | 2003    | 2004   | 2005   |
| Time series minimum           | 75049  | 52.265  | 0.0001 | 162642 |
| Time series maximum           | 105157 | 132.625 | 0.0796 | 228275 |
| Units                         | MT     | E03     | 1/yr   | MT     |



# Assessment of Pacific Coast pacific hake (*Merluccius productus*)

Assessment ID:NWFSC-PHAKEPCOAST-1966-2008-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/74>

Area ID: USA-NMFS-PCOAST

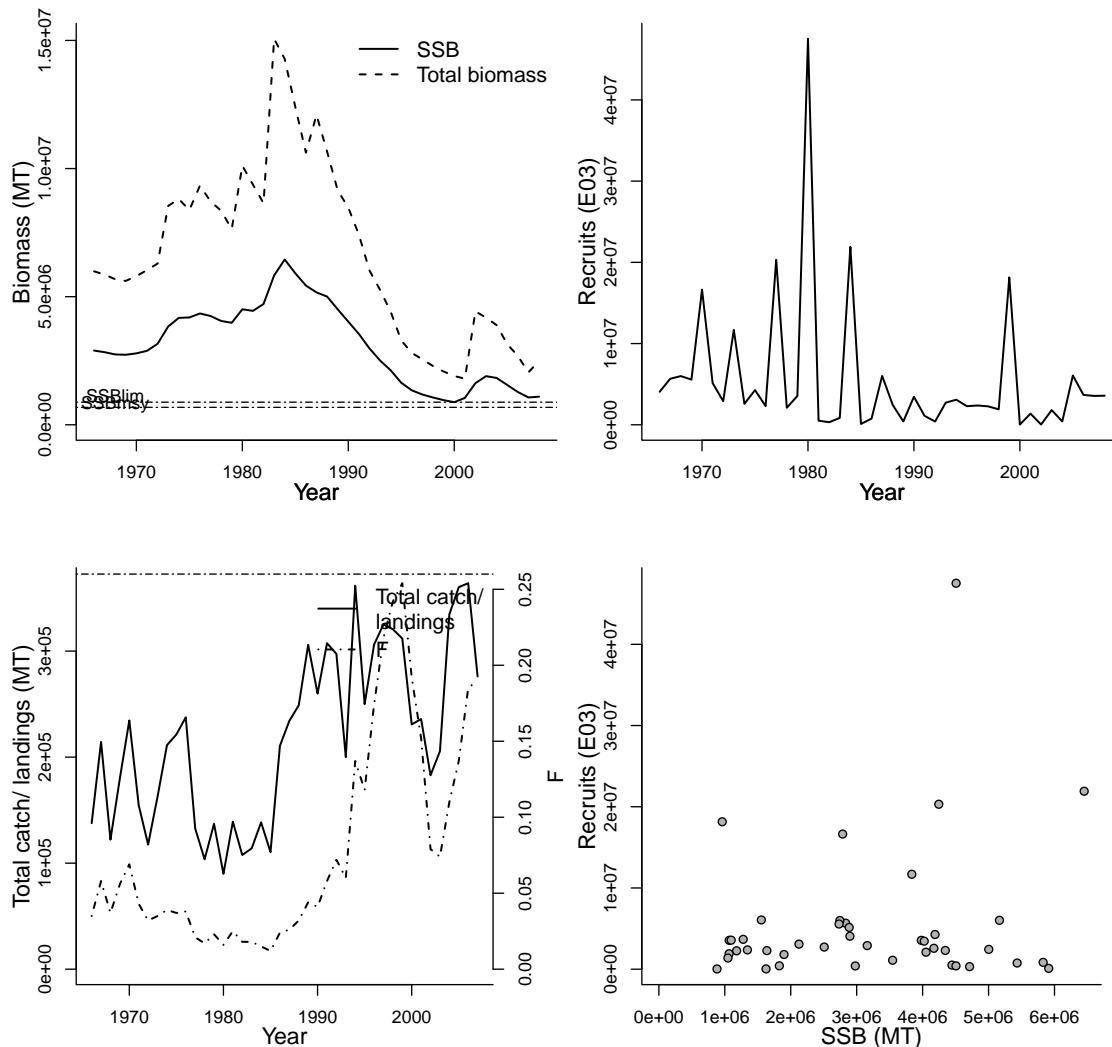
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                                  |
| Assessment authors | Helser, Thomas E.   |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2008  |
| Timeseries span    | 1966-2008   |
| Document           | NWFSC-PHAKEPCOAST-2008-Pacific-Hake-US-Canada.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-27  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |         | tertiary LME |       |
|------------------------|-------|-------|------------------------|---------|--------------|-------|
| 3 - California Current |       |       | 2 - Gulf of Alaska     |         | na           |       |
| Parameter              | Value | Units | Reference points       |         |              | Units |
|                        |       |       | Parameter              | Value   | Units        |       |
| SSB-AGE-yr             | 3+    | yr    | SSBlim-MT (SSB)        | 882000  | MT           |       |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)        | 680000  | MT           |       |
| REC-AGE-yr             | 0     | yr    | Fmsy-1/yr (F)          | 0.26    | 1/yr         |       |
| F-AGE-yr-yr            | 3+    | yr-yr | SSB0-MT (SSB)          | 2890000 | MT           |       |
| TB-AGE-yr              | 3+    | yr    | R0-E09 (R )            | 4.06    | E09          |       |
| L50-cm                 | 36    | cm    | SSBtarget-MT (SSB)     | 1170000 | MT           |       |
| M-1/yr                 | 0.23  | 1/yr  | SSBmin-ratio (SSB)     | 0.25    | ratio        |       |
| M                      |       |       | Ftarget-1/yr (F)       | 0.16    | 1/yr         |       |
| A50-yr                 |       |       | SPRtarget-ratio (SPR)  | 0.4     | ratio        |       |
|                        |       |       | MSY-MT (TB)            | 476750  | MT           |       |
|                        |       |       | BH-h-dimless           | 0.744   | dimless      |       |
|                        |       |       | $SSB_{2008}/SSB_{lim}$ | 1.244   |              |       |
|                        |       |       | $F_{2007}/F_{msy}$     | 0.731   |              |       |
|                        |       |       | $SSB_{2008}/SSB_{msy}$ | 1.613   |              |       |

| Time series minima and maxima |         |          |       |          |
|-------------------------------|---------|----------|-------|----------|
|                               | SSB     | R        | F     | TB       |
| Minimum year                  | 1966    | 1966     | 1966  | 1966     |
| Maximum year                  | 2008    | 2008     | 2007  | 2008     |
| Time series minimum           | 882000  | 30000    | 0.012 | 1798000  |
| Time series maximum           | 6450000 | 47524000 | 0.254 | 15063000 |
| Units                         | MT      | E03      | 1/yr  | MT       |



# Assessment of Pacific Coast pacific ocean perch (*Sebastes alutus*)

Assessment ID:NWFSC-POPERCHPCOAST-1953-2007-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/63>

Area ID: USA-NMFS-PCOAST

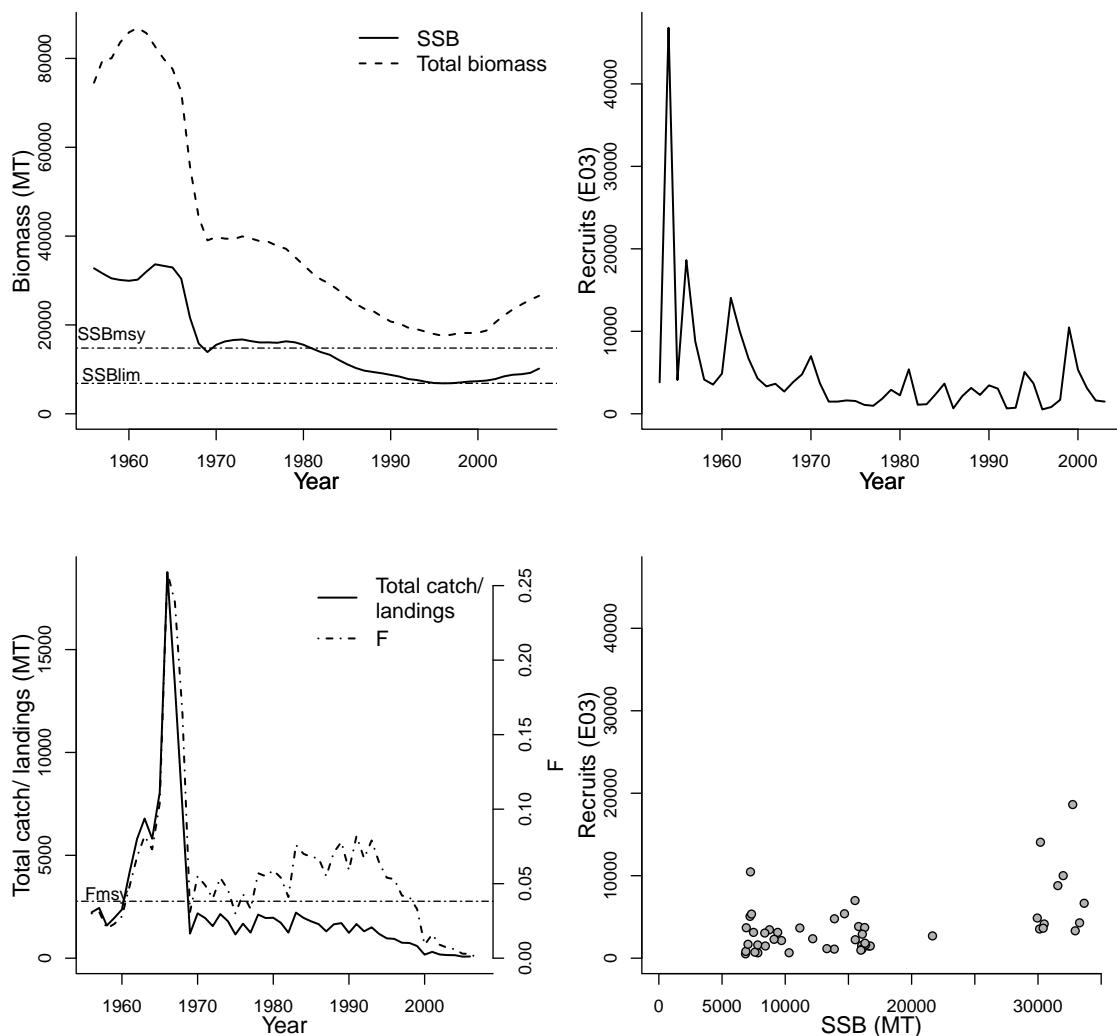
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                                 |
| Assessment authors | Hamel OS   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model                 |
| Publication year   | 2007   |
| Timeseries span    | 1953-2007  |
| Document           | NWFSC-POPERCHPCOAST-2007-Pacific ocean perch.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-24   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-19   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |        |         | secondary LME    | tertiary LME |
|------------------------|--------|---------|------------------|--------------|
| 3 - California Current |        |         | na               | na           |
|                        |        |         | Reference points |              |
| Parameter              | Value  | Units   | Parameter        | Value        |
| SSBlim-MT (SSB)        | 6856   | MT      |                  |              |
| SSBmsy-MT (SSB)        | 14793  | MT      |                  |              |
| Fmsy-1/yr (F)          | 0.0382 | 1/yr    |                  |              |
| SSB0-MT (SSB)          | 36983  | MT      |                  |              |
| R0-E06 (R )            | 4.97   | E06     |                  |              |
| SSBtarget-MT (SSB)     | 14793  | MT      |                  |              |
| SSBmin-ratio (SSB)     | 0.25   | ratio   |                  |              |
| Ftarget-1/yr (F)       | 0.0388 | 1/yr    |                  |              |
| SPRtarget-ratio (SPR)  | 0.4    | ratio   |                  |              |
| MSY-MT (TB)            | 1411   | MT      |                  |              |
| BH-h-dimless           | 0.652  | dimless |                  |              |
| $SSB_{2007}/SSB_{lim}$ | 1.483  |         |                  |              |
| $SSB_{2007}/SSB_{msy}$ | 0.687  |         |                  |              |

| Time series minima and maxima |       |       |       |         |
|-------------------------------|-------|-------|-------|---------|
|                               | SSB   | R     | F     | TB      |
| Minimum year                  | 1956  | 1953  | 1956  | 1956    |
| Maximum year                  | 2007  | 2003  | 2007  | 2007    |
| Time series minimum           | 6856  | 530   | 0     | 17543.8 |
| Time series maximum           | 33654 | 46800 | 0.259 | 86898.1 |
| Units                         | MT    | E03   | 1/yr  | MT      |



# Assessment of Northern Pacific Coast petrale sole (*Eopsetta jordani*)

Assessment ID:NWFSC-PSOLENPCOAST-1910-2005-STANTON  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/342>

Area ID: USA-NMFS-NPCOAST

General assessment details.

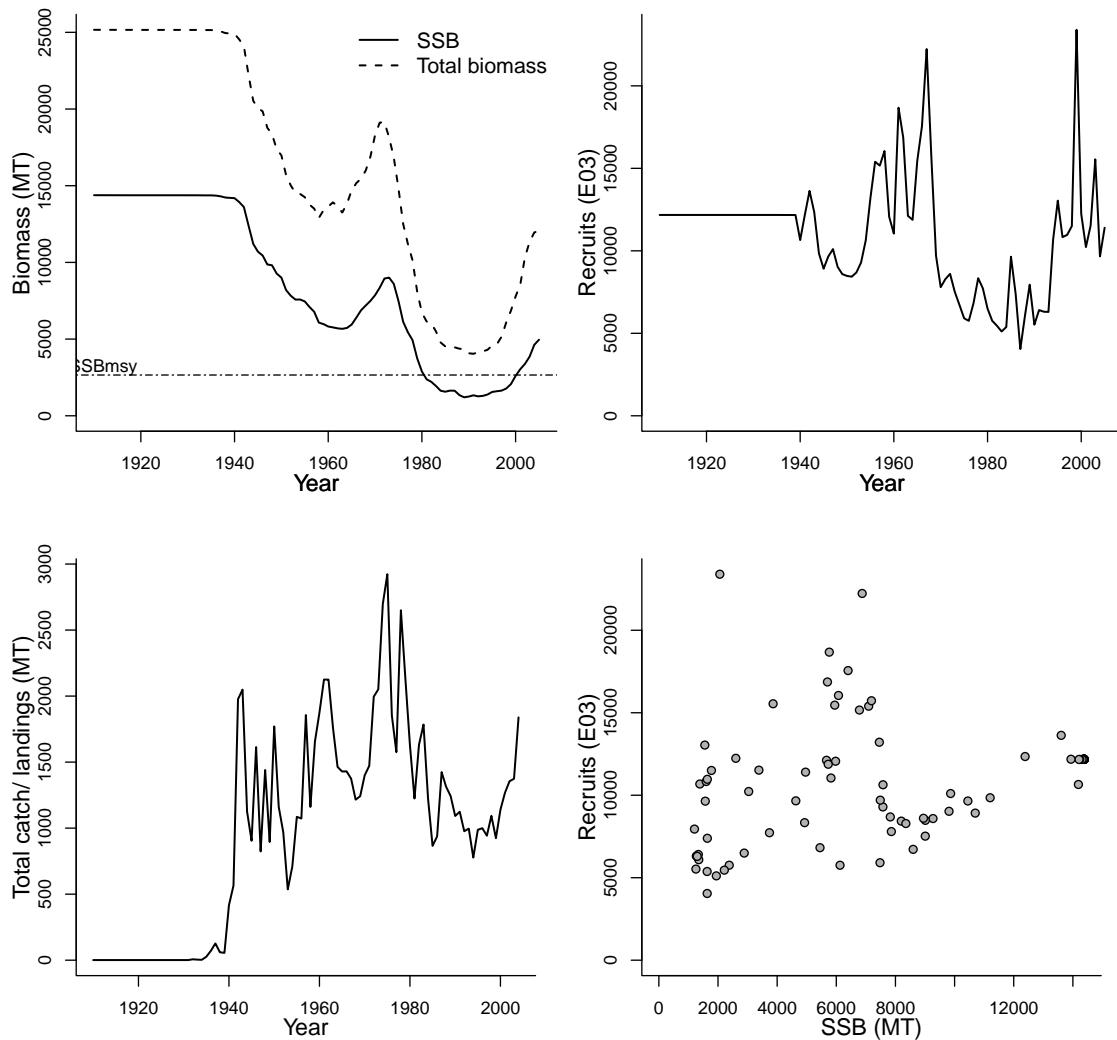
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center               |
| Assessment authors | Lai, Han-Lin                                     |
| Assessment method  | Stock Synthesis v2.0 model                       |
| Publication year   | 2005   |
| Timeseries span    | 1910-2005  |
| Document           | ref2004-SAFE-WCpetralesole.pdf (pdf in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-05-20                                       |
| Date last loaded   | 2011-07-25                                       |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                       |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       | tertiary LME |  |
|------------------------|-------|-------|---|-------|--------------|--|
| 3 - California Current |       |       | na                                      |       | na           |  |
| Parameter              | Value | Units | Reference points                        |       |              |  |
| SSB-AGE-yr             | 3+    | yr    | Parameter                               | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)                        | 0.2   | 1/yr         |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)                         | 2658  | MT           |  |
| F-AGE-yr-yr            | 3+    | yr-yr | MSY-MT (TB)                             | 1760  | MT           |  |
| TB-AGE-yr              | 3+    | yr    | Umsy-ratio (U)                          | 0.12  | ratio        |  |
| M-1/yr                 | 0.2   | 1/yr  | SSB0-MT (SSB)                           | 14382 | MT           |  |
| NATMORT-1/yr           | 0.2   | 1/yr  | B0-MT                                   | 25165 | MT           |  |
| M                      |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.866 |              |  |
| A50-yr                 |       |       |   |       |              |  |
| L50-cm                 |       |       |   |       |              |  |

## Time series minima and maxima

|                     | SSB   | R     | F | TB    | Catch  |
|---------------------|-------|-------|---|-------|--------|
| Minimum year        | 1910  | 1910  |   | 1910  | 1910   |
| Maximum year        | 2005  | 2005  |   | 2005  | 2004   |
| Time series minimum | 1204  | 4045  |   | 4041  | 1      |
| Time series maximum | 14382 | 23398 |   | 25165 | 2922.9 |
| Units               | MT    | E03   |   | MT    | MT     |



# Assessment of Southern Pacific Coast petrale sole (*Eopsetta jordani*)

Assessment ID:NWFSC-PSOLESPCOAST-1874-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/341>

Area ID: USA-NMFS-SPCOAST

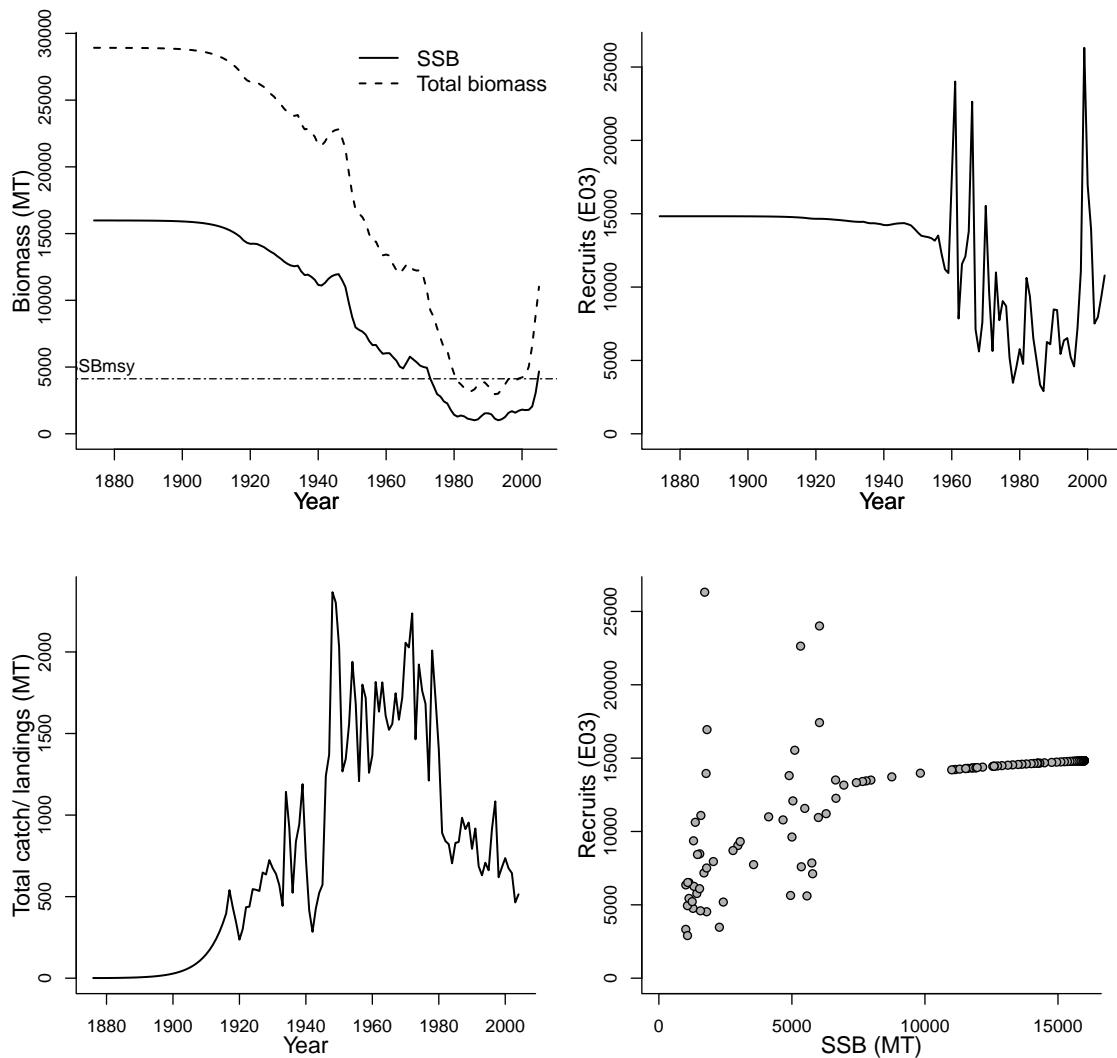
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center               |
| Assessment authors | Lai, Han-Lin                                     |
| Assessment method  | Stock Synthesis v2.0 model                       |
| Publication year   | 2005   |
| Timeseries span    | 1874-2005  |
| Document           | ref2004-SAFE-WCpetralesole.pdf (pdf in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-05-20                                       |
| Date last loaded   | 2011-07-25                                       |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                       |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |       | tertiary LME |  |
|------------------------|-------|-------|------------------------|-------|--------------|--|
| 3 - California Current |       |       | na                     |       | na           |  |
| Parameter              | Value | Units | Reference points       |       |              |  |
| SSB-AGE-yr             | 3+    | yr    | Parameter              | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)       | 0.2   | 1/yr         |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)        | 4121  | MT           |  |
| F-AGE-yr-yr            | 3+    | yr-yr | MSY-MT (TB)            | 1404  | MT           |  |
| TB-AGE-yr              | 3+    | yr    | Umsy-ratio (U)         | 0.14  | ratio        |  |
| M-1/yr                 | 0.2   | 1/yr  | SSB0-MT (SSB)          | 15985 | MT           |  |
| NATMORT-1/yr           | 0.2   | 1/yr  | B0-MT                  | 28920 | MT           |  |
| M                      |       |       | $SSB_{2005}/SSB_{msy}$ | 1.132 |              |  |
| A50-yr                 |       |       |                        |       |              |  |
| L50-cm                 |       |       |                        |       |              |  |

| Time series minima and maxima |       |       |       |        |
|-------------------------------|-------|-------|-------|--------|
|                               | SSB   | R     | F     | TB     |
| Minimum year                  | 1874  | 1874  | 1874  | 1876   |
| Maximum year                  | 2005  | 2005  | 2005  | 2004   |
| Time series minimum           | 1012  | 2906  | 2963  | 1      |
| Time series maximum           | 15985 | 26311 | 28920 | 2366.3 |
| Units                         | MT    | E03   | MT    | MT     |



# Assessment of Pacific Coast sablefish

## *(Anoplopoma fimbria)*

Assessment ID:NWFSC-SABLEFPCOAST-1900-2007-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/42>

Area ID: USA-NMFS-PCOAST

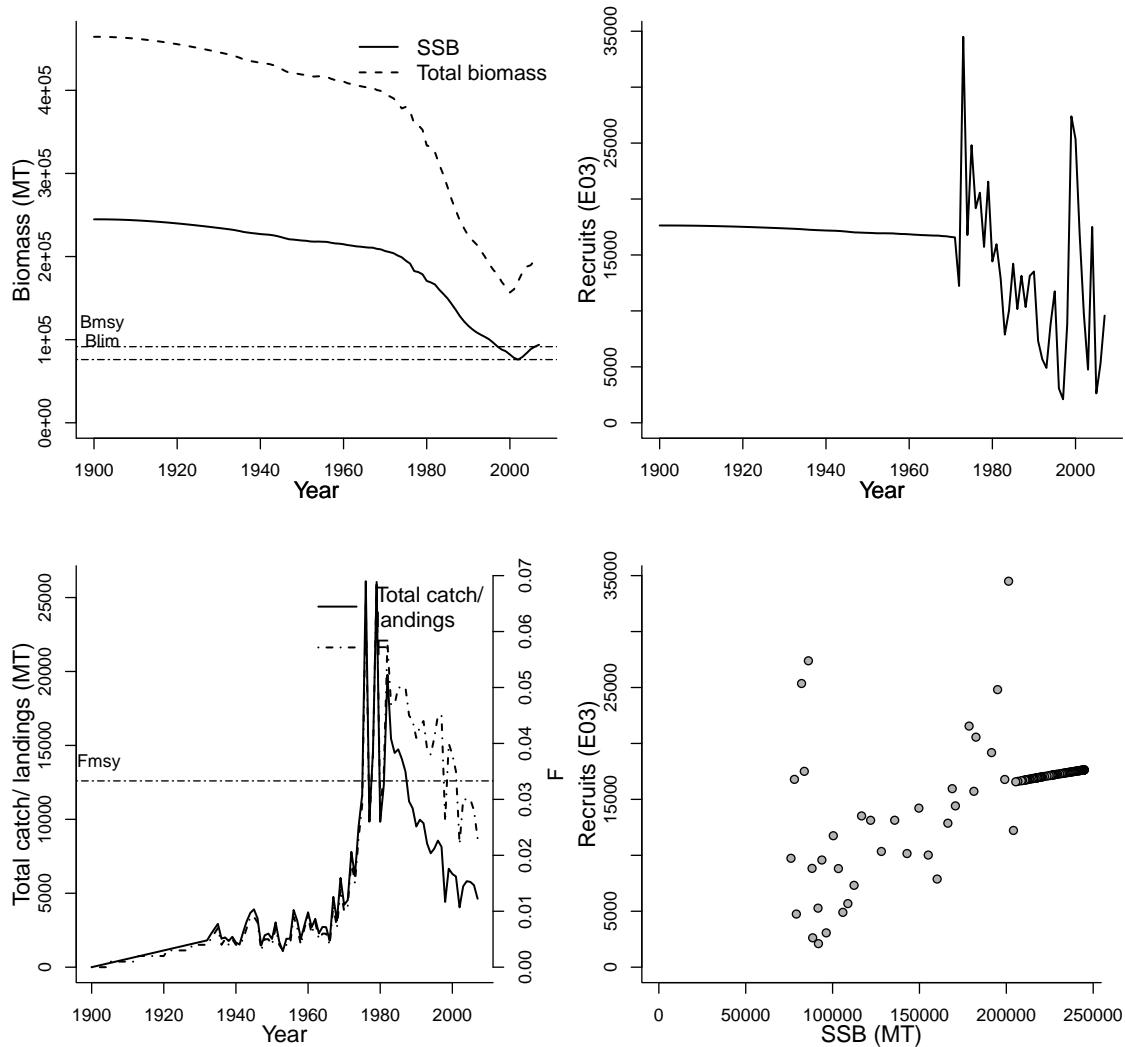
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Northwest Fisheries Science Center                      |
| Assessment authors | Schirripa, M.J.   |
| Assessment method  | Stock Synthesis v2.0 model                              |
| Publication year   | 2007  |
| Timeseries span    | 1900-2007   |
| Document           | NWFSC-SABLEFPCOAST-2007-Sablefish.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME         |        | tertiary LME |
|------------------------|-------|-------|-----------------------|--------|--------------|
| 3 - California Current |       |       | na                    | na     |              |
|                        |       |       | Reference points      |        |              |
| Parameter              | Value | Units | Parameter             | Value  | Units        |
| F-AGE-yr-yr            | 2+    | yr-yr | BH-h-dimless          | 0.48   | dimless      |
| SSB-AGE-yr             | 5.5   | yr    | Blim-MT (TB)          | 76036  | MT           |
| SSB-SEX-sex            | 1     | sex   | Bmsy-MT (TB)          | 91559  | MT           |
| REC-AGE-yr             | 0     | yr    | Fmsy-1/yr (F)         | 0.0333 | 1/yr         |
| TB-AGE-yr              | 2+    | yr    | SSB0-MT (SSB)         | 244797 | MT           |
| L50-cm                 | 55.3  | cm    | R0-E03 (R)            | 17635  | E03          |
| M-1/yr                 | 0.07  | 1/yr  | SSBtarget-MT (SSB)    | 97919  | MT           |
| M                      |       |       | SSBmin-ratio (SSB)    | 0.25   | ratio        |
| A50-yr                 |       |       | Ftarget-1/yr (F)      | 0.0313 | 1/yr         |
|                        |       |       | SPRtarget-ratio (SPR) | 0.4    | ratio        |
|                        |       |       | MSY-MT (TB)           | 6303   | MT           |
|                        |       |       | $TB_{2007}/B_{msy}$   | 2.126  |              |
|                        |       |       | $F_{2007}/F_{msy}$    | 0.691  |              |

| Time series minima and maxima |         |         |       |        |
|-------------------------------|---------|---------|-------|--------|
|                               | SSB     | R       | F     | TB     |
| Minimum year                  | 1900    | 1900    | 1900  | 1900   |
| Maximum year                  | 2007    | 2007    | 2007  | 2007   |
| Time series minimum           | 76036.2 | 2103.55 | 0     | 156707 |
| Time series maximum           | 244809  | 34500.6 | 0.069 | 464403 |
| Units                         | MT      | E03     | 1/yr  | MT     |



# Assessment of Pacific Coast shortspine thornyhead (*Sebastolobus alascanus*)

Assessment ID:NWFSC-SSTHORNHPCOAST-1901-2005-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/334>

Area ID: USA-NMFS-PCOAST

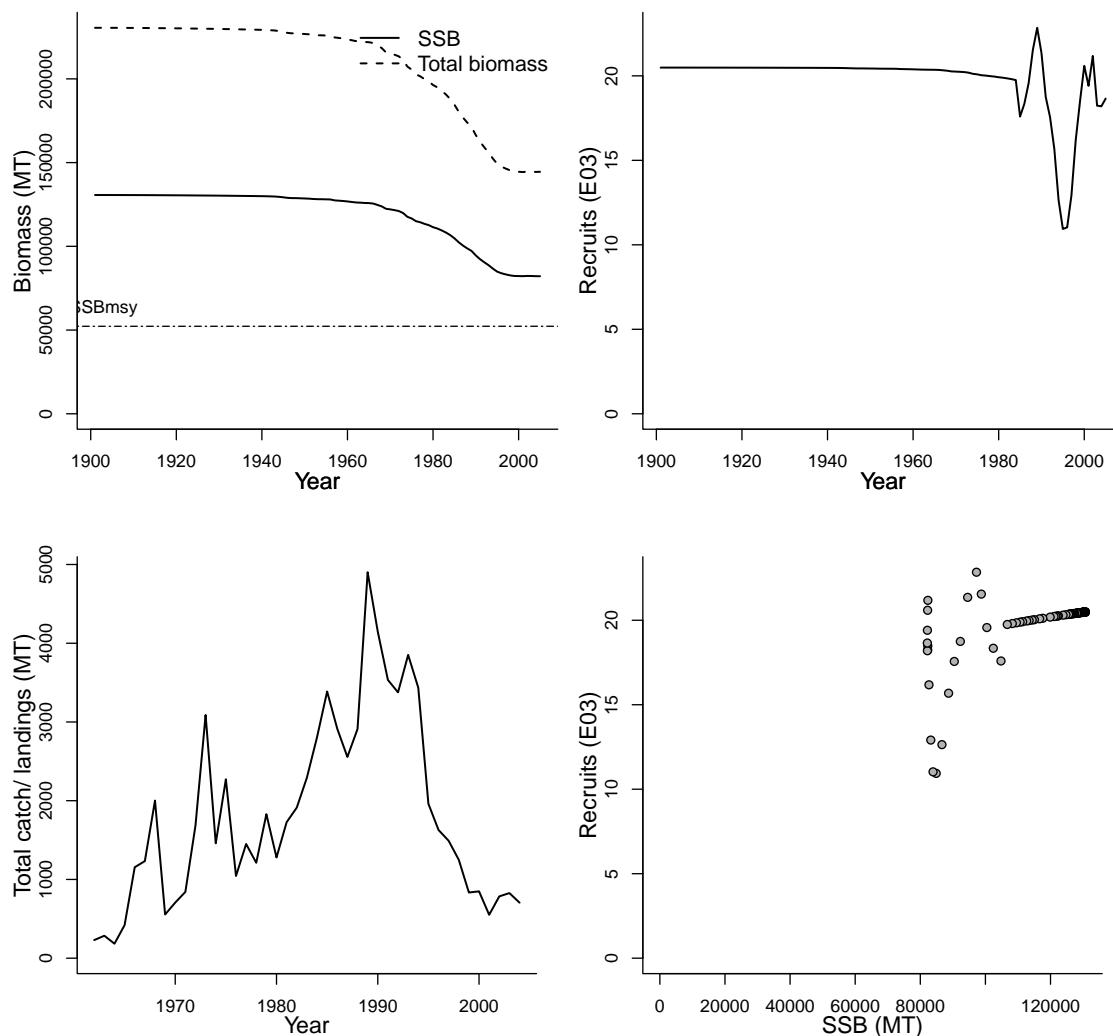
General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | NMFS                                      |
| Assessment group   | Northwest Fisheries Science Center        |
| Assessment authors | Hamel, Owen                               |
| Assessment method  | Stock Synthesis v2.0 model                |
| Publication year   | 2006                                      |
| Timeseries span    | 1901-2005                                 |
| Document           | 2005-SST-assessment.pdf (pdf in database) |
| Recorder           | STANTON                                   |
| Date entered       | 2009-05-18                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2011-06-10                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |        | tertiary LME |
|------------------------|-------|-------|---|--------|--------------|
| 3 - California Current |       |       | na                                      | na     |              |
| Parameter              | Value | Units | Reference points                        |        |              |
| SSB-AGE-yr             | 9+    | yr    | Parameter                               | Value  | Units        |
| SSB-SEX-sex            | 1     | sex   | Fmsy-1/yr (F)                           | 0.0238 | 1/yr         |
| REC-AGE-yr             | 1     | yr    | NATMORT-1/yr (M)                        | 0.05   | 1/yr         |
| F-AGE-yr-yr            | 2+    | yr-yr | SSBmsy-MT (SSB)                         | 52258  | MT           |
| TB-AGE-yr              | 2+    | yr    | MSY-MT (TB)                             | 1720   | MT           |
| M-1/yr                 | 0.05  | 1/yr  | Umsy-ratio (U)                          | 0.0184 | ratio        |
| NATMORT-1/yr           | 0.05  | 1/yr  | SSB0-MT (SSB)                           | 130646 | MT           |
| M                      |       |       | B0-MT                                   | 230500 | MT           |
| A50-yr                 |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.572  |              |
| L50-cm                 |       |       |   |        |              |

| Time series minima and maxima |         |         |    |        |
|-------------------------------|---------|---------|----|--------|
|                               | SSB     | R       | F  | TB     |
| Minimum year                  | 1901    | 1901    |    | 1901   |
| Maximum year                  | 2005    | 2005    |    | 2005   |
| Time series minimum           | 82150.9 | 10.939  |    | 144357 |
| Time series maximum           | 130646  | 22.8433 |    | 230500 |
| Units                         | MT      | E03     | MT | MT     |



# Assessment of Pacific Coast widow rockfish (*Sebastodes entomelas*)

Assessment ID:NWFSC-WROCKCOAST-1955-2006-BRANCH

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/62>

Area ID: USA-NMFS-PCOAST

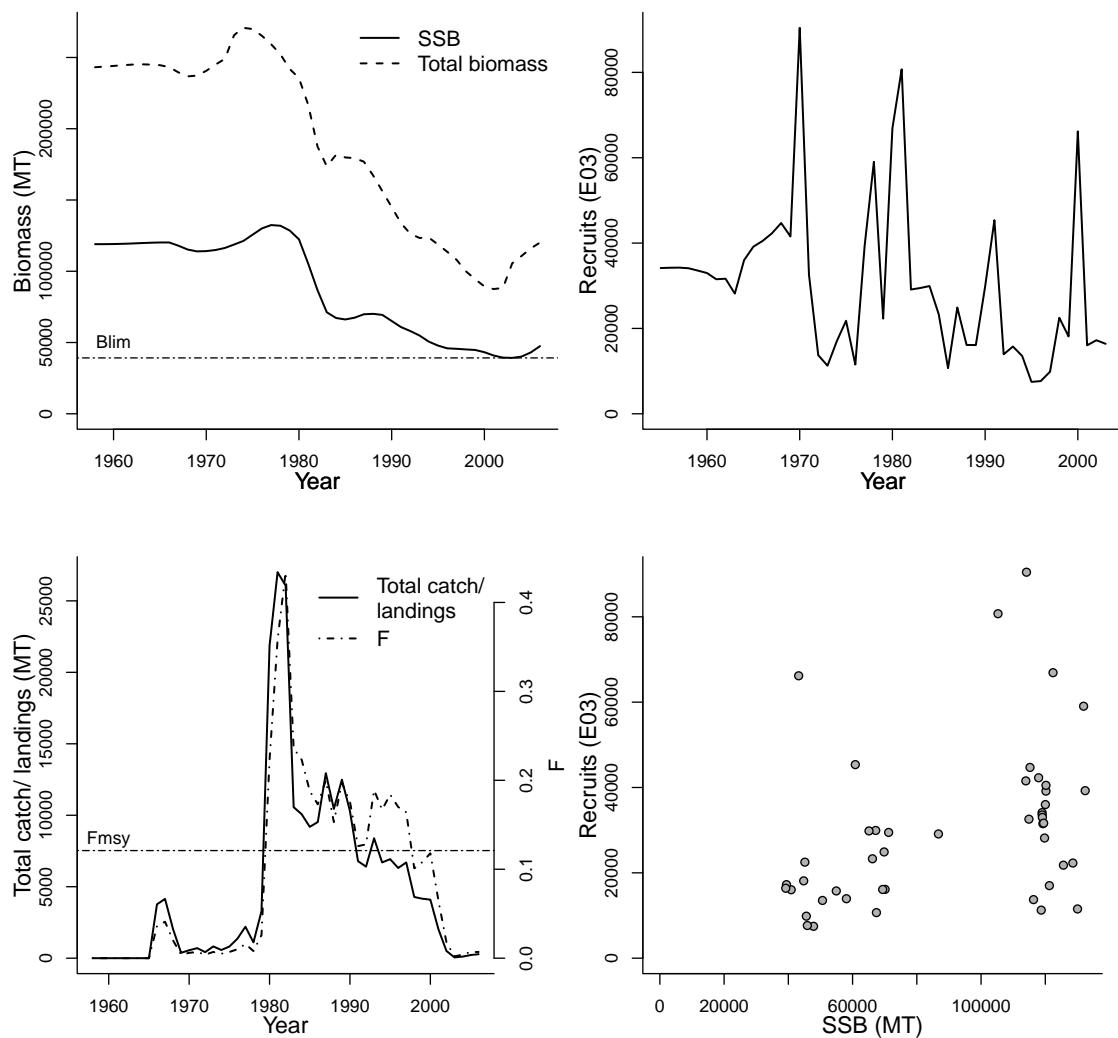
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                 |
| Assessment authors | He X   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2007   |
| Timeseries span    | 1955-2006  |
| Document           | NWFSC-WROCKCOAST-2007-widow.pdf (pdf in database)  |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-23   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-08   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME           |       | tertiary LME |  |
|------------------------|-------|-------|-------------------------|-------|--------------|--|
| 3 - California Current |       |       | na                      | na    |              |  |
| Reference points       |       |       |                         |       |              |  |
| Parameter              | Value | Units | Parameter               | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)            | 39194 | MT           |  |
| REC-AGE-yr             | 3     | yr    | SSBmsy-E06eggs (SSB)    | 20298 | E06eggs      |  |
| F-AGE-yr-yr            | 3+    | yr-yr | Fmsy-1/yr (F)           | 0.121 | 1/yr         |  |
| TB-AGE-yr              | 3+    | yr    | SSB0-E06eggs (SSB)      | 50746 | E06eggs      |  |
| M-1/yr                 | 0.125 | 1/yr  | SSBtarget-E06eggs (SSB) | 20298 | E06eggs      |  |
| SSB-AGE-yr             |       |       | SSBmin-ratio (SSB)      | 0.25  | ratio        |  |
| M                      |       |       | Ftarget-1/yr (F)        | 0.121 | 1/yr         |  |
| A50-yr                 |       |       | SPRtarget-ratio (SPR)   | 0.4   | ratio        |  |
| L50-cm                 |       |       | BH-h-dimless            | 0.29  | dimless      |  |
|                        |       |       | $F_{2006}/F_{msy}$      | 0.058 |              |  |
|                        |       |       | $SSB_{2006}/SSB_{msy}$  | 2.339 |              |  |

| Time series minima and maxima |        |       |       |        |
|-------------------------------|--------|-------|-------|--------|
|                               | SSB    | R     | F     | TB     |
| Minimum year                  | 1958   | 1955  | 1958  | 1958   |
| Maximum year                  | 2006   | 2003  | 2006  | 2006   |
| Time series minimum           | 39194  | 7470  | 0     | 87514  |
| Time series maximum           | 132416 | 90448 | 0.434 | 270818 |
| Units                         | MT     | E03   | 1/yr  | MT     |



# Assessment of Pacific Coast yelloweye rockfish (*Sebastodes ruberrimus*)

Assessment ID:NWFSC-YEYEROCKCOAST-1923-2006-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/65>

Area ID: USA-NMFS-PCOAST

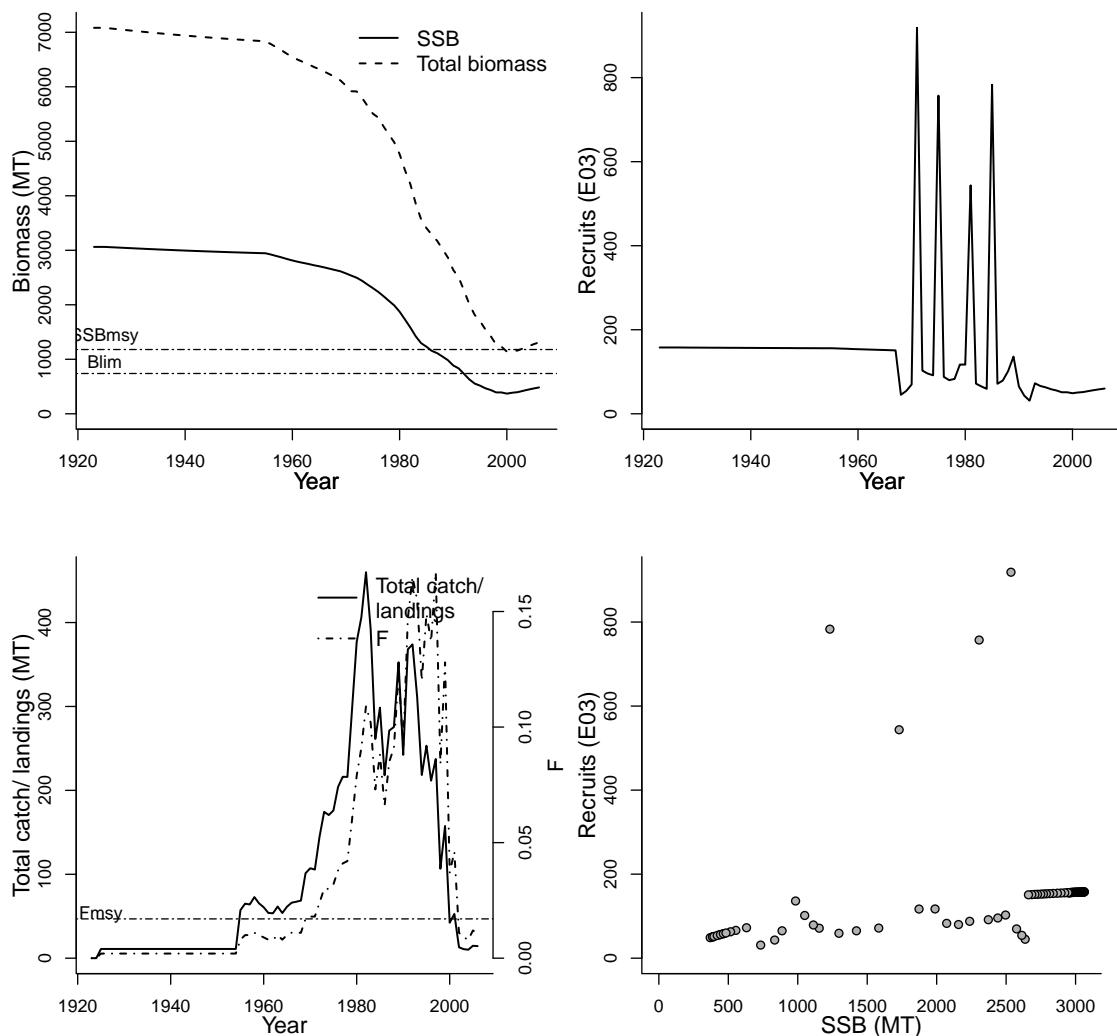
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center                       |
| Assessment authors | Wallace GR   |
| Assessment method  | Stock Synthesis v2.0 model                               |
| Publication year   | 2007   |
| Timeseries span    | 1923-2006  |
| Document           | NWFSC-YEYEROCKCOAST-2007-yelloweye.pdf (pdf in database) |
| Recorder           | BRANCH   |
| Date entered       | 2008-11-23   |
| Date last loaded   | 2011-07-26   |
| QA/QC complete     | NO   |
| Date approved      |  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |       | tertiary LME |  |
|------------------------|-------|-------|------------------------|-------|--------------|--|
| 3 - California Current |       |       | na                     |       | na           |  |
|                        |       |       | Reference points       |       |              |  |
| Parameter              | Value | Units | Parameter              | Value | Units        |  |
| SSB-SEX-sex            | 1     | sex   | Blim-MT (TB)           | 739   | MT           |  |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)        | 1179  | MT           |  |
| F-AGE-yr-yr            | 3+    | yr-yr | Fmsy-1/yr (F)          | 0.017 | 1/yr         |  |
| TB-AGE-yr              | 1+    | yr    | SSB0-MT (SSB)          | 3062  | MT           |  |
| L50-cm                 | 36    | cm    | RO-E03 (R)             | 157.8 | E03          |  |
| M-1/yr                 | 0.036 | 1/yr  | SSBtarget-MT (SSB)     | 1225  | MT           |  |
| SSB-AGE-yr             |       |       | SSBmin-ratio (SSB)     | 0.25  | ratio        |  |
| M                      |       |       | Ftarget-1/yr (F)       | 0.018 | 1/yr         |  |
| A50-yr                 |       |       | SPRtarget-ratio (SPR)  | 0.4   | ratio        |  |
|                        |       |       | MSY-MT (TB)            | 51.4  | MT           |  |
|                        |       |       | BH-h-dimless           | 0.45  | dimless      |  |
|                        |       |       | $F_{2006}/F_{msy}$     | 0.647 |              |  |
|                        |       |       | $SSB_{2006}/SSB_{msy}$ | 0.410 |              |  |

| Time series minima and maxima |       |       |       |        |       |
|-------------------------------|-------|-------|-------|--------|-------|
|                               | SSB   | R     | F     | TB     | Catch |
| Minimum year                  | 1923  | 1923  | 1923  | 1923   | 1923  |
| Maximum year                  | 2006  | 2006  | 2006  | 2006   | 2006  |
| Time series minimum           | 369.6 | 31.2  | 0     | 1141   | 0     |
| Time series maximum           | 3062  | 918.6 | 0.167 | 7082.2 | 460   |
| Units                         | MT    | E03   | 1/yr  | MT     | MT    |



# Assessment of Northern Pacific Coast yellowtail rockfish (*Sebastodes flavidus*)

Assessment ID:NWFSC-YTROCKNPOAST-1967-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/335>

Area ID: USA-NMFS-NPCOAST

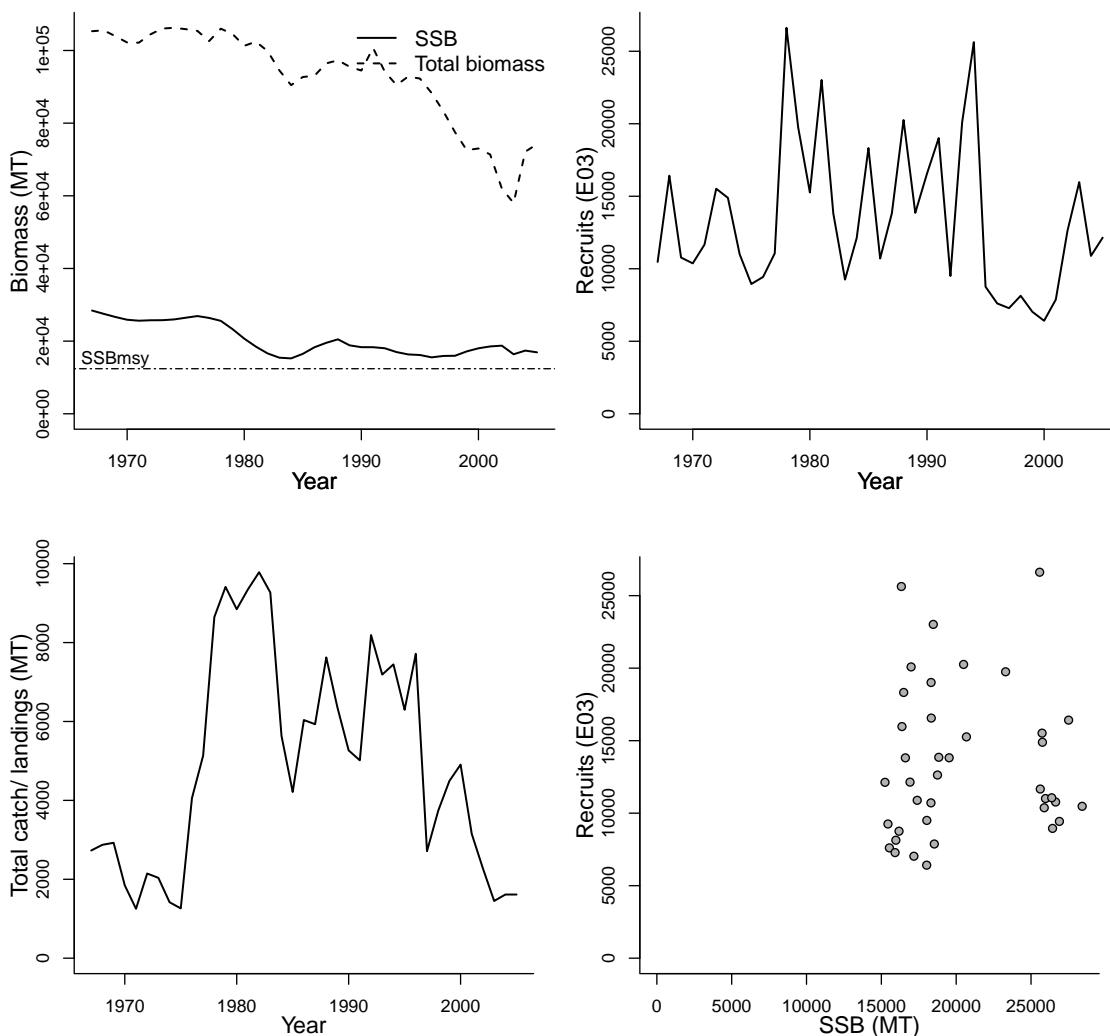
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Northwest Fisheries Science Center             |
| Assessment authors | Wallace, John                                  |
| Assessment method  | Stock Synthesis v1.0 model                     |
| Publication year   | 2005   |
| Timeseries span    | 1967-2005                                      |
| Document           | 2005_SAFE_yellowtail.pdf (pdf not in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-05-19                                     |
| Date last loaded   | 2011-07-25                                     |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-19                                     |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |        | tertiary LME |  |
|------------------------|-------|-------|---|--------|--------------|--|
| 3 - California Current |       |       | na                                      |        | na           |  |
| Parameter              | Value | Units | Reference points                        |        |              |  |
| SSB-AGE-yr             | 4+    | yr    | NATMORT-1/yr (M)                        | 0.11   | 1/yr         |  |
| SSB-SEX-sex            | NA    | sex   | SSBmsy-MT (SSB)                         | 12407  | MT           |  |
| REC-AGE-yr             | 4     | yr    | MSY-MT (TB)                             | 4680   | MT           |  |
| F-AGE-yr-yr            | 4     | yr-yr | SSB0-MT (SSB)                           | 31016  | MT           |  |
| TB-AGE-yr              | 4+    | yr    | B0-MT                                   | 120024 | MT           |  |
| M-1/yr                 | 0.11  | 1/yr  | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.363  |              |  |
| NATMORT-1/yr           | 0.11  | 1/yr  |   |        |              |  |
| M                      |       |       |   |        |              |  |
| A50-yr                 |       |       |   |        |              |  |
| L50-cm                 |       |       |   |        |              |  |

| Time series minima and maxima |          |         |   |        |
|-------------------------------|----------|---------|---|--------|
|                               | SSB      | R       | F | TB     |
| Minimum year                  | 1967     | 1967    |   | 1967   |
| Maximum year                  | 2005     | 2005    |   | 2005   |
| Time series minimum           | 15243.01 | 6414.92 |   | 58025  |
| Time series maximum           | 28418.41 | 26616.3 |   | 106243 |
| Units                         | MT       | E03     |   | MT     |



# Assessment of Iceland Grounds capelin (*Mallotus villosus*)

Assessment ID:NWWG-CAPEICE-1977-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/374>

Area ID: multinational-ICES-Va

## General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | acoustic surveys                     |
| Publication year   | 2007                                 |
| Timeseries span    | 1977-2007                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-10                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

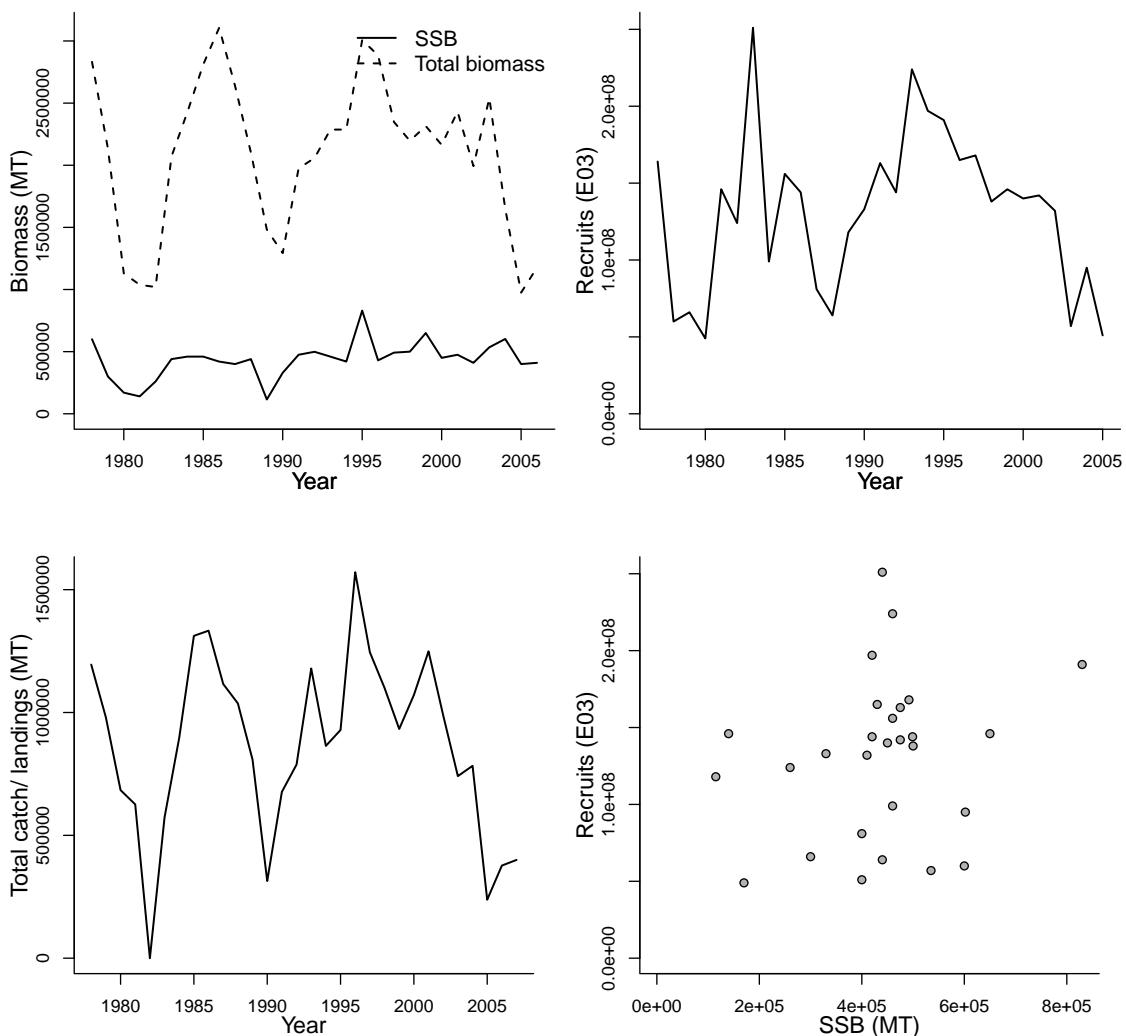
| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 59 - Iceland Shelf | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| A50-yr             | 2             | yr           |
| SSB-AGE-yr         | 2+            | yr           |
| REC-AGE-yr         | 1             | yr           |
| TB-AGE-yr          | 1+            | yr           |
| SSB-SEX-sex        |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| L50-cm             |               |              |

Reference points

---

| Parameter | Value | Units |
|-----------|-------|-------|
|-----------|-------|-------|

| Time series minima and maxima |        |           |    |         |
|-------------------------------|--------|-----------|----|---------|
|                               | SSB    | R         | F  | TB      |
| Minimum year                  | 1978   | 1977      |    | 1978    |
| Maximum year                  | 2006   | 2005      |    | 2006    |
| Time series minimum           | 115000 | 49000000  |    | 975000  |
| Time series maximum           | 830000 | 251000000 |    | 3106000 |
| Units                         | MT     | E03       | MT | MT      |



# Assessment of Faroe Plateau atlantic cod (*Gadus morhua*)

Assessment ID:NWWG-CODFAPL-1959-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/375>

Area ID: multinational-ICES-Vb1

General assessment details.

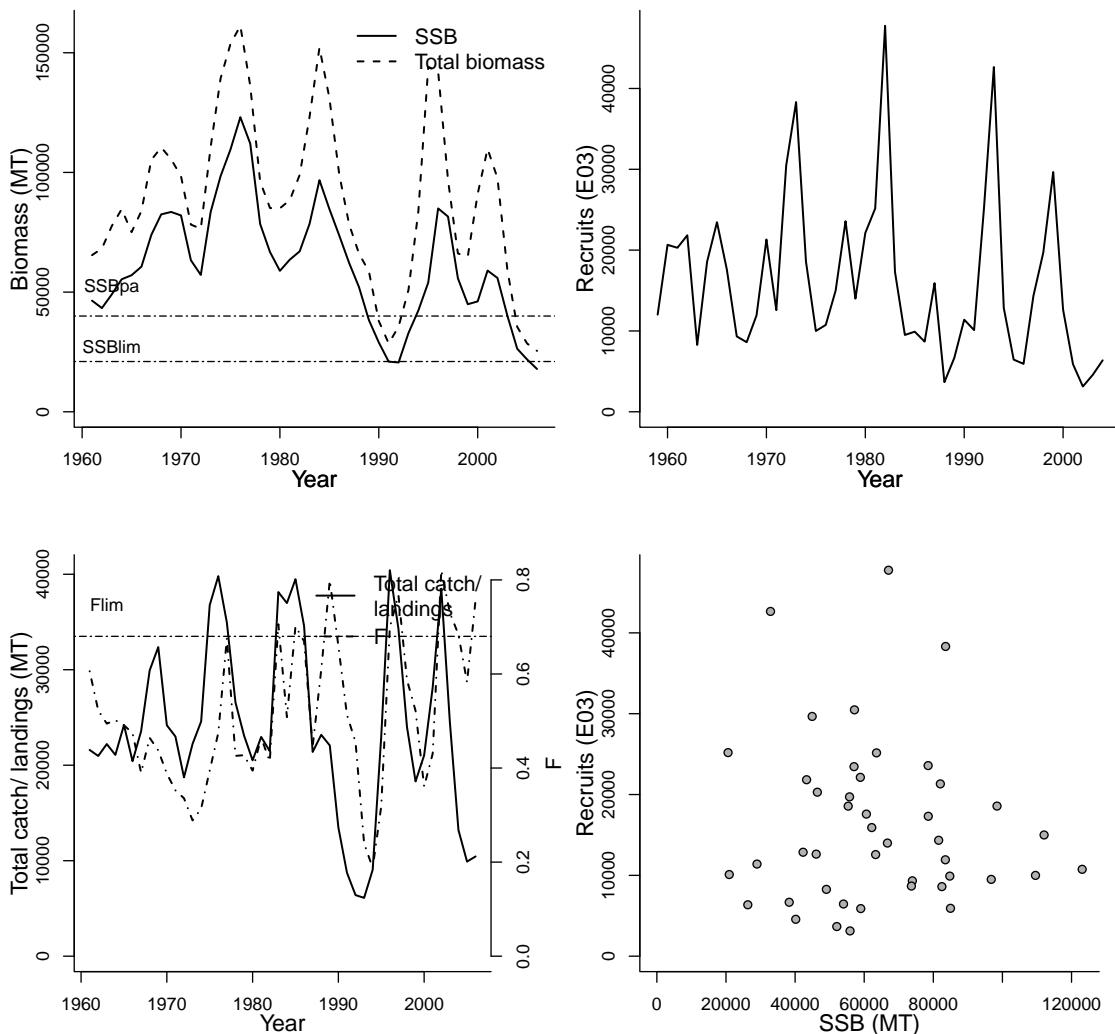
| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1959-2006                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-08                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME                           | tertiary LME     |
|--------------------|-------|-------|---|------------------|
| 60 - Faroe Plateau |       |       | na                                      | na               |
| Parameter          | Value | Units | Parameter                               | Reference points |
| A50-yr             | 3     | yr    | SSBlim-MT (SSB)                         | 21000 MT         |
| SSB-AGE-yr         | 2+    | yr    | SSBpa-MT (SSB)                          | 40000 MT         |
| REC-AGE-yr         | 2     | yr    | F0.1-1/yr (F)                           | 0.12 1/yr        |
| F-AGE-yr-yr        | 3-7   | yr-yr | Fmax-1/T                                | 0.25 1/T         |
| TB-AGE-yr          | 1+    | yr    | Flim-1/T (F)                            | 0.68 1/T         |
| SSB-SEX-sex        |       |       | Fpa-1/T (F)                             | 0.35 1/T         |
| M                  |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 0.851            |
| L50-cm             |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | 1.115            |

## Time series minima and maxima

|                     | SSB    | R     | F      | TB     | Catch |
|---------------------|--------|-------|--------|--------|-------|
| Minimum year        | 1961   | 1959  | 1961   | 1961   | 1961  |
| Maximum year        | 2006   | 2004  | 2006   | 2006   | 2006  |
| Time series minimum | 17878  | 3128  | 0.1877 | 25436  | 6107  |
| Time series maximum | 123077 | 47753 | 0.8206 | 161260 | 40422 |
| Units               | MT     | E03   | 1/T    | MT     | MT    |



# Assessment of Iceland Grounds atlantic cod

## *(Gadus morhua)*

Assessment ID:NWWG-CODICE-1952-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/376>

Area ID: multinational-ICES-Va

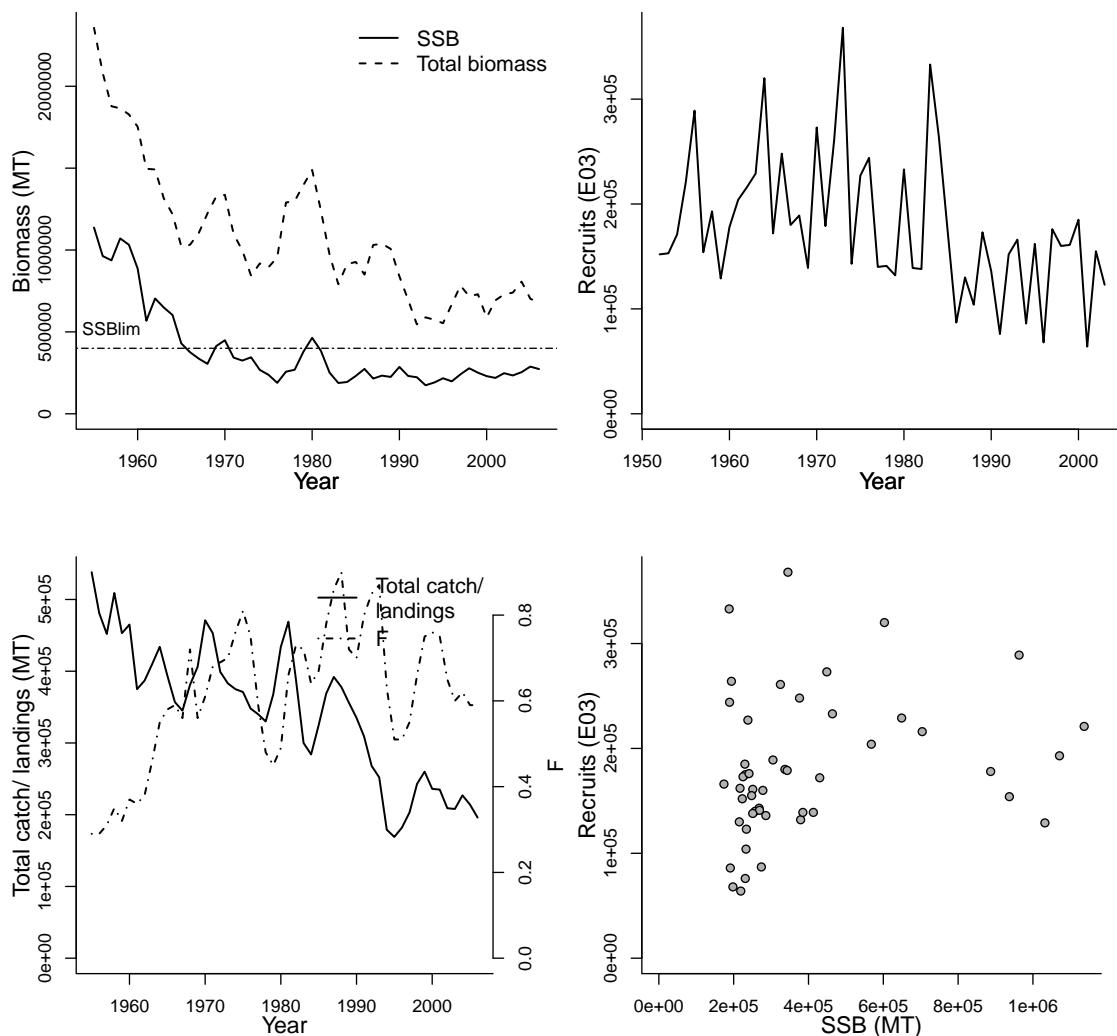
### General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | Statistical catch-at-age model       |
| Publication year   | 2007                                 |
| Timeseries span    | 1952-2006                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-10                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME          |        |       | tertiary LME |  |  |
|--------------------|-------|-------|------------------------|--------|-------|--------------|--|--|
| 59 - Iceland Shelf |       |       | na                     |        |       | na           |  |  |
| Parameter          | Value | Units | Reference points       |        |       |              |  |  |
|                    |       |       | Parameter              | Value  | Units |              |  |  |
| A50-yr             | 6.5   | yr    | SSBlim-MT (SSB)        | 400000 | MT    |              |  |  |
| SSB-AGE-yr         | 3+    | yr    | F0.1-1/T               | 0.15   | 1/T   |              |  |  |
| REC-AGE-yr         | 3     | yr    | Fmax-1/T               | 0.34   | 1/T   |              |  |  |
| TB-AGE-yr          | 4+    | yr    | $SSB_{2006}/SSB_{lim}$ | 0.682  |       |              |  |  |
| M-1/T              | 0.25  | 1/T   |                        |        |       |              |  |  |
| F-AGE-yr-yr        | 5-10  | yr-yr |                        |        |       |              |  |  |
| SSB-SEX-sex        |       |       |                        |        |       |              |  |  |
| M                  |       |       |                        |        |       |              |  |  |
| L50-cm             |       |       |                        |        |       |              |  |  |

| Time series minima and maxima |         |        |      |         |
|-------------------------------|---------|--------|------|---------|
|                               | SSB     | R      | F    | TB      |
| Minimum year                  | 1955    | 1952   | 1955 | 1955    |
| Maximum year                  | 2006    | 2003   | 2006 | 2006    |
| Time series minimum           | 174000  | 64000  | 0.29 | 546000  |
| Time series maximum           | 1137000 | 368000 | 0.9  | 2357000 |
| Units                         | MT      | E03    | 1/T  | MT      |



# Assessment of Faroe Plateau haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:NWWG-HADFAPL-1955-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/377>

Area ID: multinational-ICES-Vb1

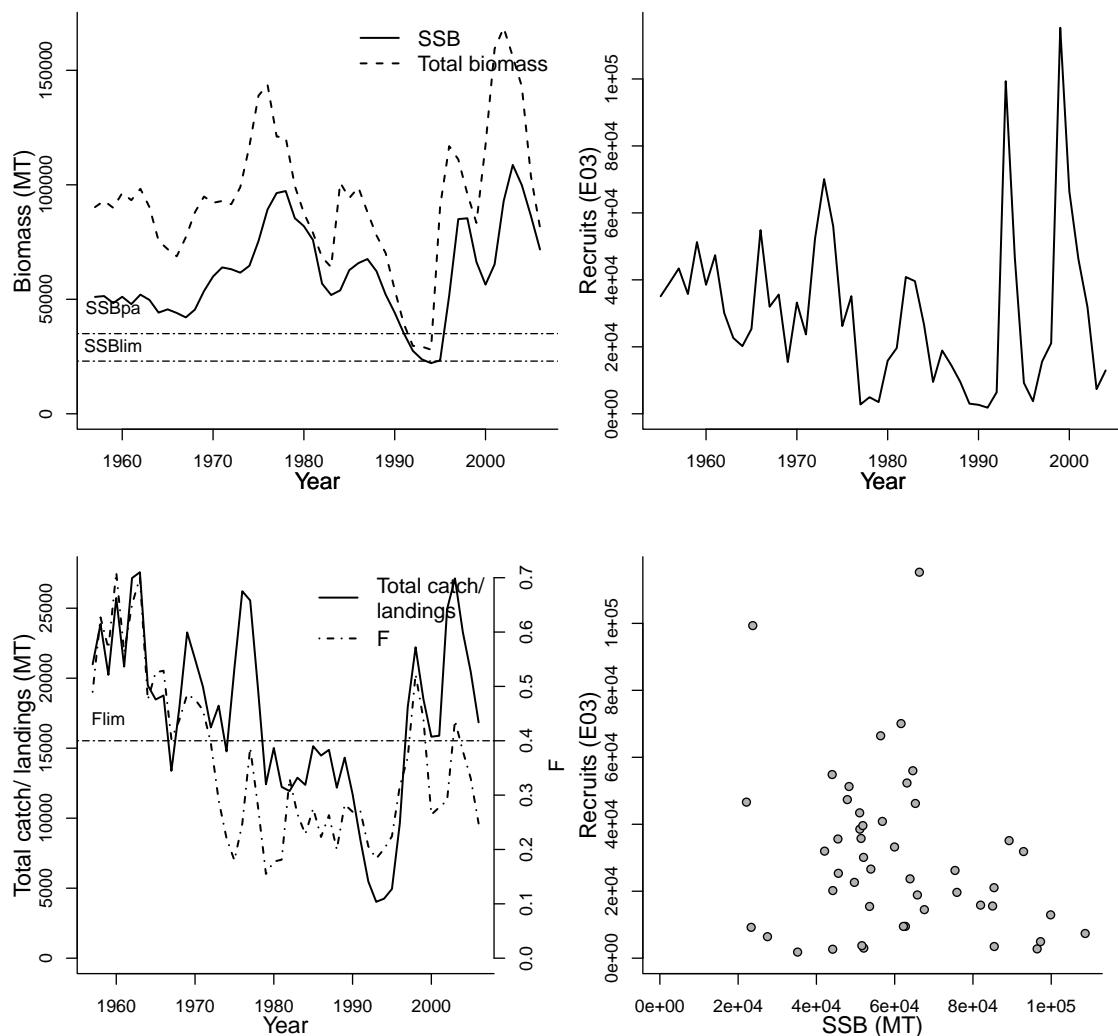
### General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1955-2006                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-08                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME                           |   | tertiary LME |       |
|--------------------|-------|-------|---|---|--------------|-------|
| 60 - Faroe Plateau |       |       | na                                      |   | na           |       |
| Parameter          | Value | Units | Parameter                               | Reference points                        | Value        | Units |
| A50-yr             | 3     | yr    | SSBlim-MT (SSB)                         | SSBlim-MT (SSB)                         | 23000        | MT    |
| SSB-AGE-yr         | 2+    | yr    | SSBpa-MT (SSB)                          | SSBpa-MT (SSB)                          | 35000        | MT    |
| REC-AGE-yr         | 2     | yr    | F0.1-1/T                                | F0.1-1/T                                | 0.15         | 1/T   |
| F-AGE-yr-yr        | 3-7   | yr-yr | Fmax-1/T                                | Fmax-1/T                                | 0.61         | 1/T   |
| TB-AGE-yr          | 0+    | yr    | Flim-1/T (F)                            | Flim-1/T (F)                            | 0.4          | 1/T   |
| M-1/T              | 0.2   | 1/T   | Fpa-1/T (F)                             | Fpa-1/T (F)                             | 0.25         | 1/T   |
| SSB-SEX-sex        |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 3.121        |       |
| M                  |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | F <sub>2006</sub> /F <sub>lim</sub>     | 0.619        |       |
| L50-cm             |       |       |   |   |              |       |

| Time series minima and maxima |        |        |        |        |
|-------------------------------|--------|--------|--------|--------|
|                               | SSB    | R      | F      | TB     |
| Minimum year                  | 1957   | 1955   | 1957   | 1957   |
| Maximum year                  | 2006   | 2004   | 2006   | 2006   |
| Time series minimum           | 22125  | 1826   | 0.155  | 27998  |
| Time series maximum           | 108674 | 115282 | 0.7101 | 168570 |
| Units                         | MT     | E03    | 1/T    | MT     |



# Assessment of Iceland Grounds haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:NWWG-HADICE-1977-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/378>

Area ID: multinational-ICES-Va

### General assessment details.

| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1977-2007                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-10                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

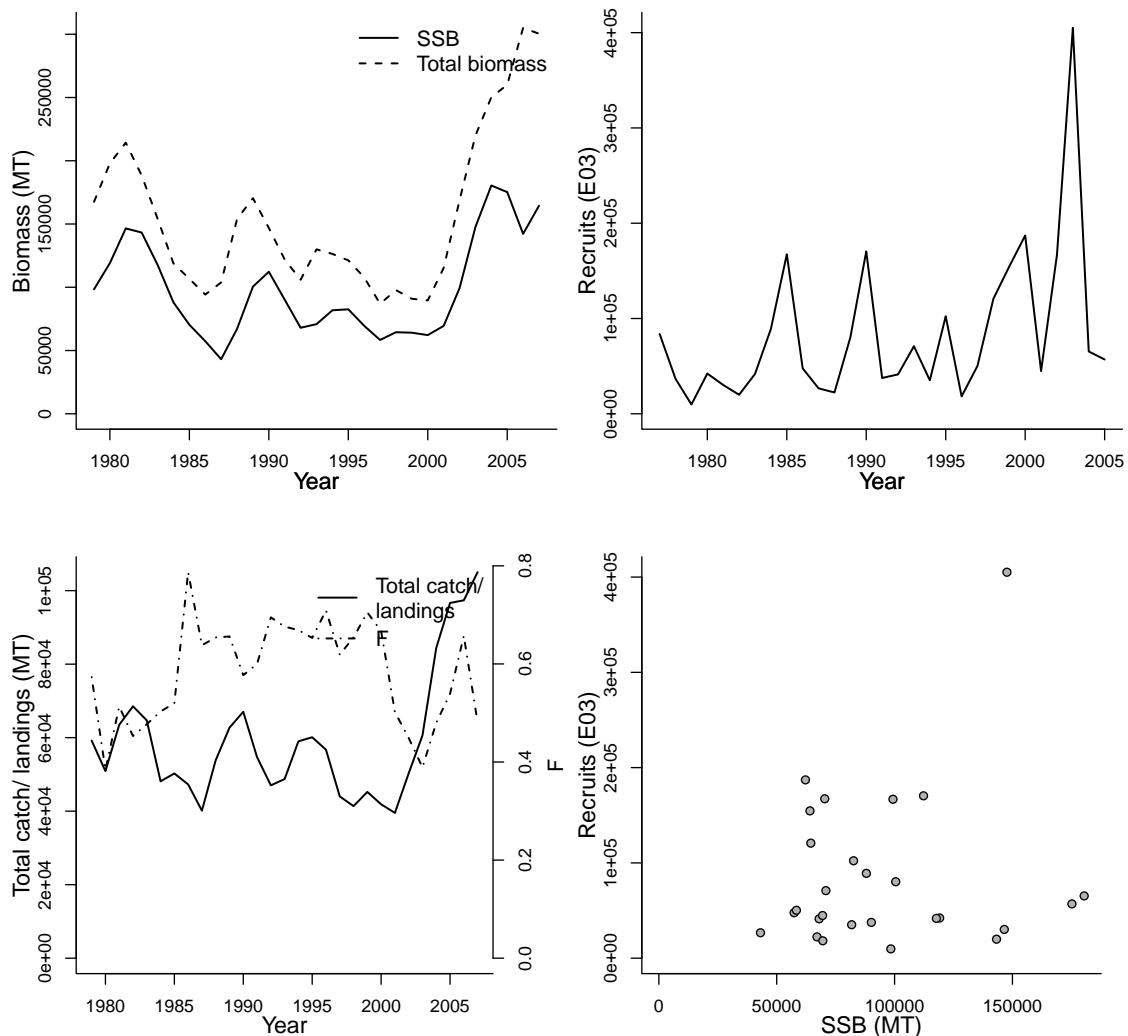
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 59 - Iceland Shelf | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| A50-yr             | 4             | yr           |
| SSB-AGE-yr         | 1+            | yr           |
| REC-AGE-yr         | 2             | yr           |
| TB-AGE-yr          | 3+            | yr           |
| M-1/T              | 0.2           | 1/T          |
| F-AGE-yr-yr        | 4-7           | yr-yr        |
| SSB-SEX-sex        |               |              |
| M                  |               |              |
| L50-cm             |               |              |

Reference points

| Parameter   | Value | Units |
|-------------|-------|-------|
| F0.1-1/T    | 0.16  | 1/T   |
| Fmax-1/T    | 0.44  | 1/T   |
| Fpa-1/T (F) | 0.47  | 1/T   |

| Time series minima and maxima |        |        |       |        |
|-------------------------------|--------|--------|-------|--------|
|                               | SSB    | R      | F     | TB     |
| Minimum year                  | 1979   | 1977   | 1979  | 1979   |
| Maximum year                  | 2007   | 2005   | 2007  | 2007   |
| Time series minimum           | 43116  | 9758   | 0.384 | 86966  |
| Time series maximum           | 180435 | 405094 | 0.787 | 305098 |
| Units                         | MT     | E03    | 1/T   | MT     |



# Assessment of Faroe Plateau pollock (*Pollachius virens*)

Assessment ID:NWWG-POLLFAPL-1958-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/379>

Area ID: multinational-ICES-Vb1

## General assessment details.

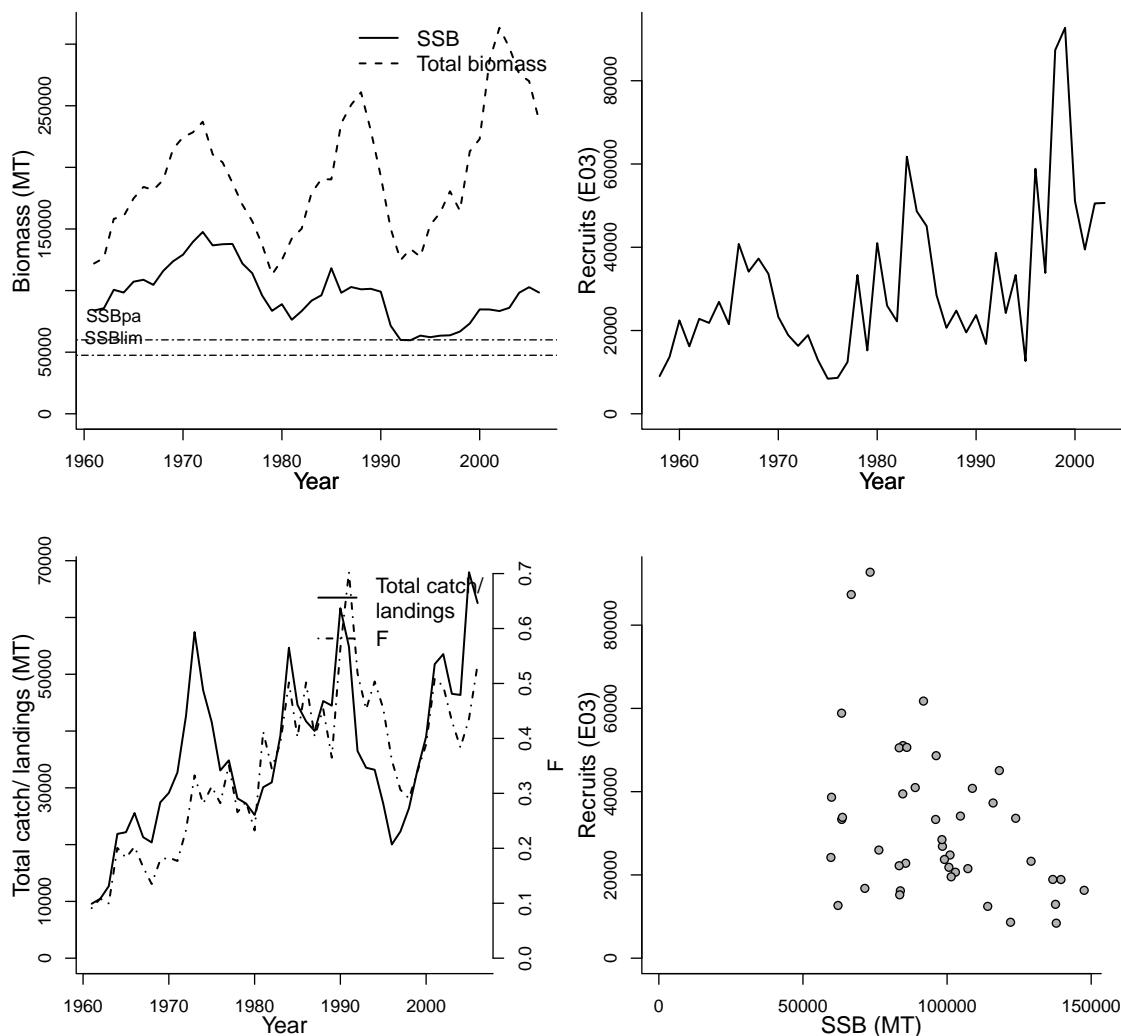
| Detail             | Value                                |
|--------------------|--------------------------------------|
| Management body    | ICES                                 |
| Assessment group   | North-Western Working Group          |
| Assessment authors | Anonymous                            |
| Assessment method  | Virtual Population Analysis          |
| Publication year   | 2007                                 |
| Timeseries span    | 1958-2006                            |
| Document           | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder           | MINTO                                |
| Date entered       | 2008-04-09                           |
| Date last loaded   | 2011-07-25                           |
| QA/QC complete     | YES                                  |
| Date approved      | 2009-06-08                           |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME                           |       | tertiary LME |       |
|--------------------|-------|-------|---|-------|--------------|-------|
| 60 - Faroe Plateau |       |       | na                                      |       | na           |       |
| Parameter          | Value | Units | Reference points                        |       |              |       |
| A50-yr             | 5     | yr    | Parameter                               |       | Value        | Units |
| SSB-AGE-yr         | 3+    | yr    | SSBlim-MT (SSB)                         | 47500 | MT           |       |
| REC-AGE-yr         | 3     | yr    | SSBpa-MT (SSB)                          | 60000 | MT           |       |
| F-AGE-yr-yr        | 4-8   | yr-yr | F0.1-1/T                                | 0.14  | 1/T          |       |
| TB-AGE-yr          | 3+    | yr    | Fmax-1/T                                | 0.45  | 1/T          |       |
| M-1/T              | 0.2   | 1/T   | Fpa-1/T (F)                             | 0.5   | 1/T          |       |
| SSB-SEX-sex        |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 2.072 |              |       |
| M                  |       |       |   |       |              |       |
| L50-cm             |       |       |   |       |              |       |

## Time series minima and maxima

|                     | SSB    | R     | F      | TB     | Catch |
|---------------------|--------|-------|--------|--------|-------|
| Minimum year        | 1961   | 1958  | 1961   | 1961   | 1961  |
| Maximum year        | 2006   | 2003  | 2006   | 2006   | 2006  |
| Time series minimum | 59693  | 8415  | 0.0911 | 113051 | 9592  |
| Time series maximum | 147569 | 92717 | 0.7025 | 313275 | 67972 |
| Units               | MT     | E03   | 1/T    | MT     | MT    |



# Assessment of West end of Chatham Rise black oreo (*Allocyttus niger*)

## Assessment

ID:NZMFishDEEPWATER-BLACKOREOWECR-1973-2007-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/220>

Area ID: New Zealand-MFish-WEGR

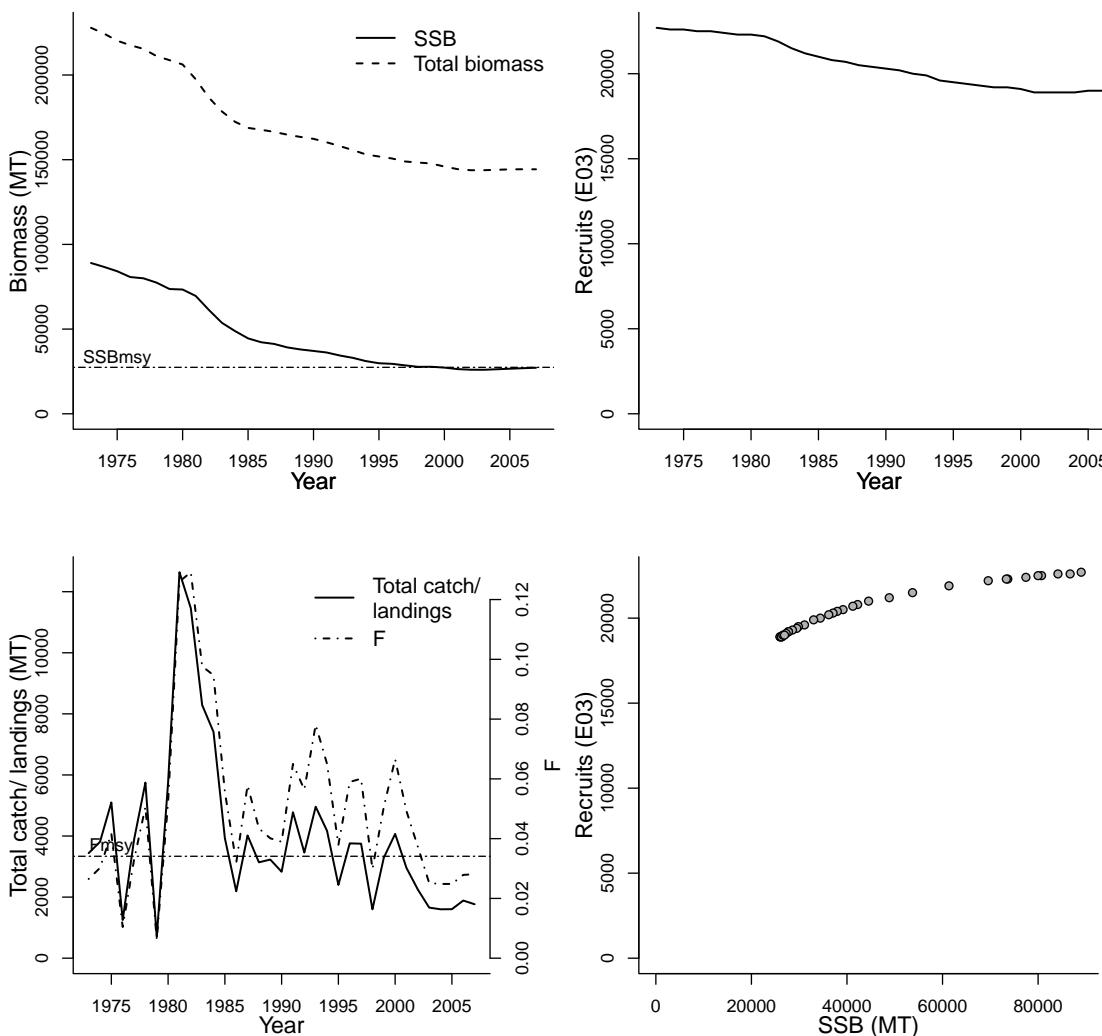
### General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Deepwater Working Group                  |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1973-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-04-07                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 1     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 1     | yr    | SSB0-MT (SSB)          | 88923        | MT      |
| A50-yr                 | 38    | yr    | MSY-MT (TB)            | 1947         | MT      |
| M-1/yr                 | 0.044 | 1/yr  | SSBmsy-MT (SSB)        | 27427        | MT      |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.0341       | 1/yr    |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.75         | dimless |
| F-AGE-yr               |       |       | $F_{2007}/F_{msy}$     | 0.825        |         |
| M                      |       |       | $SSB_{2007}/SSB_{msy}$ | 0.991        |         |
| L50-cm                 |       |       |                        |              |         |

| Time series minima and maxima |         |       |             |        |          |
|-------------------------------|---------|-------|-------------|--------|----------|
|                               | SSB     | R     | F           | TB     | Catch    |
| Minimum year                  | 1973    | 1973  | 1973        | 1973   | 1973     |
| Maximum year                  | 2007    | 2006  | 2007        | 2007   | 2007     |
| Time series minimum           | 25981.7 | 18900 | 0.006334863 | 143796 | 709.97   |
| Time series maximum           | 89015.2 | 22700 | 0.1291476   | 227865 | 12638.29 |
| Units                         | MT      | E03   | 1/yr        | MT     | MT       |



# Assessment of Chatham Rise smooth oreo (*Pseudocyttus maculatus*)

## Assessment

ID:NZMFishDEEPWATER-SMOOTHOREOCR-1979-2006-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/423>

Area ID: New Zealand-MFish-CR

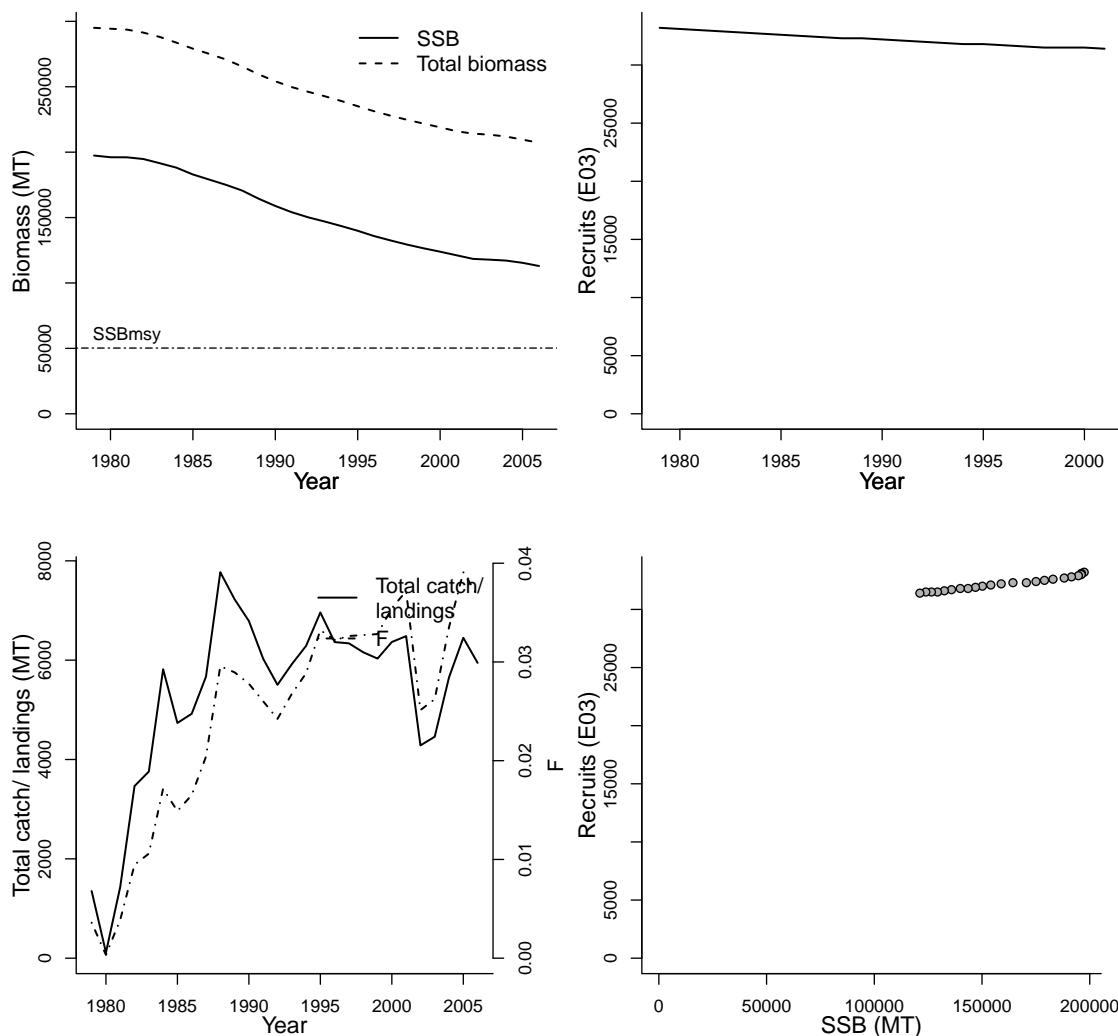
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Deepwater Working Group                  |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1979-2006                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-11-05                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 5     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 5     | yr    | Fmsy-1/yr (F)          | 0.0955       | 1/yr    |
| A50-yr                 | 30.5  | yr    | MSY-MT (TB)            | 5132.855     | MT      |
| M-1/yr                 | 0.063 | 1/yr  | SSBmsy-MT (SSB)        | 50242.75375  | MT      |
| SSB-AGE-yr             |       |       | SSBO-MT (SSB)          | 197417.5     | MT      |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.75         | dimless |
| F-AGE-yr               |       |       | $F_{2006}/F_{msy}$     | 0.385        |         |
| M                      |       |       | $SSB_{2006}/SSB_{msy}$ | 2.249        |         |
| L50-cm                 |       |       |                        |              |         |

| Time series minima and maxima |          |       |              |        |       |
|-------------------------------|----------|-------|--------------|--------|-------|
|                               | SSB      | R     | F            | TB     | Catch |
| Minimum year                  | 1979     | 1979  | 1979         | 1979   | 1979  |
| Maximum year                  | 2006     | 2001  | 2006         | 2006   | 2006  |
| Time series minimum           | 112982.4 | 31400 | 0.0003339579 | 207166 | 114   |
| Time series maximum           | 197417.5 | 33200 | 0.03908979   | 295065 | 7771  |
| Units                         | MT       | E03   | 1/yr         | MT     | MT    |



# Assessment of West end of Chatham Rise smooth oreo (*Pseudocyttus maculatus*)

## Assessment

ID:NZMFishDEEPWATER-SMOOTHOREOWECR-1973-2004-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/221>

Area ID: New Zealand-MFish-WEGR

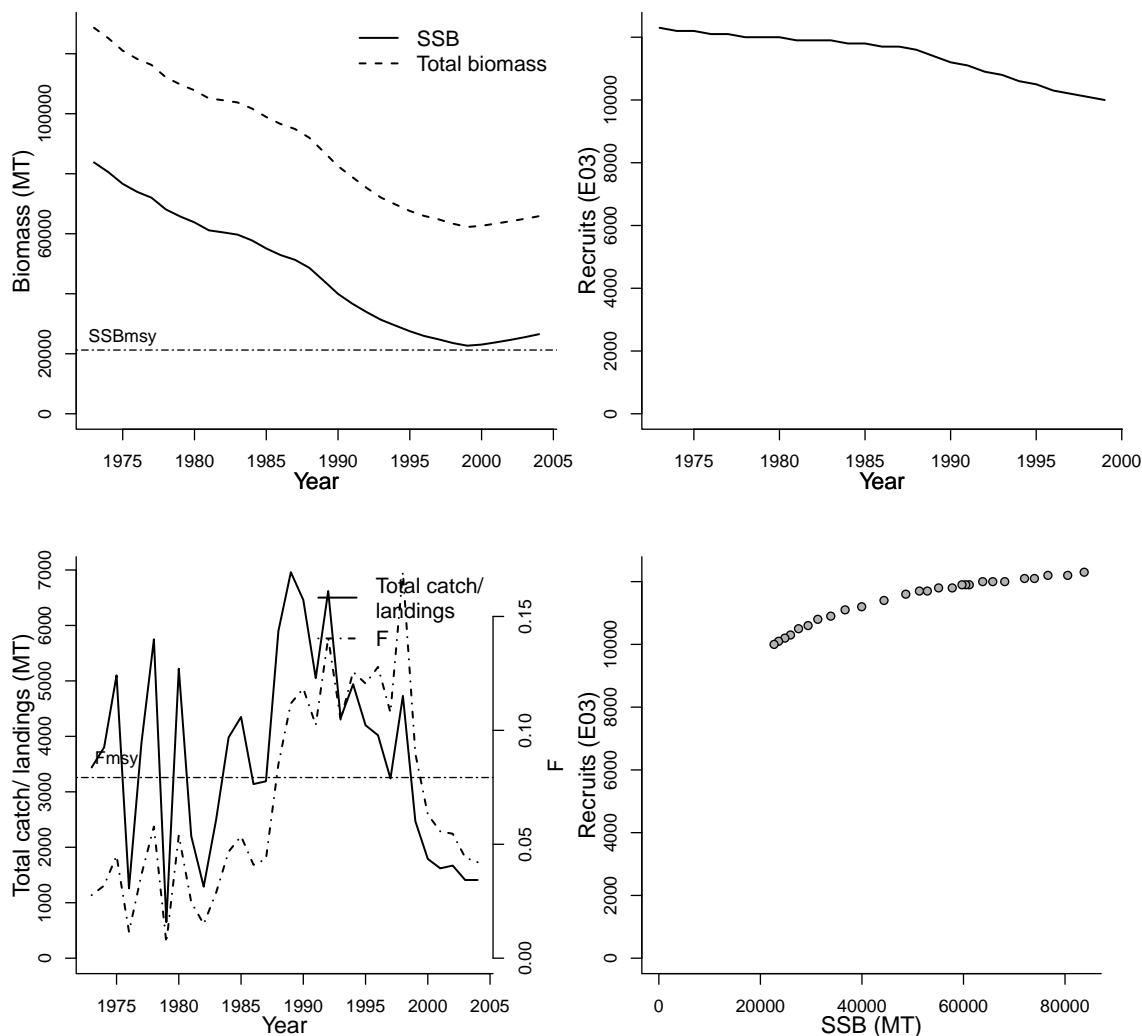
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Deepwater Working Group                  |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1973-2004                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-04-07                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 5     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 5     | yr    | Fmsy-1/yr (F)          | 0.0793       | 1/yr    |
| A50-yr                 | 25.5  | yr    | MSY-MT (TB)            | 2218.0808    | MT      |
| M-1/yr                 | 0.063 | 1/yr  | SSBmsy-MT (SSB)        | 21242.3892   | MT      |
| SSB-AGE-yr             |       |       | SSB0-MT (SSB)          | 85310.8      | MT      |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.75         | dimless |
| F-AGE-yr               |       |       | $F_{2004}/F_{msy}$     | 0.531        |         |
| M                      |       |       | $SSB_{2004}/SSB_{msy}$ | 1.249        |         |
| L50-cm                 |       |       |                        |              |         |

| Time series minima and maxima |         |       |             |        |
|-------------------------------|---------|-------|-------------|--------|
|                               | SSB     | R     | F           | TB     |
| Minimum year                  | 1973    | 1973  | 1973        | 1973   |
| Maximum year                  | 2004    | 1999  | 2004        | 2004   |
| Time series minimum           | 22693.3 | 10000 | 0.006769455 | 62262  |
| Time series maximum           | 83773.4 | 12300 | 0.1694174   | 128639 |
| Units                         | MT      | E03   | 1/yr        | MT     |



# Assessment of Eastern New Zealand hoki (*Macruronus novaezelandiae*)

Assessment ID:NZMFishHOKIWG-HOKIENZ-1972-2007-FRANCIS  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/360>

Area ID: New Zealand-MFish-ENZ

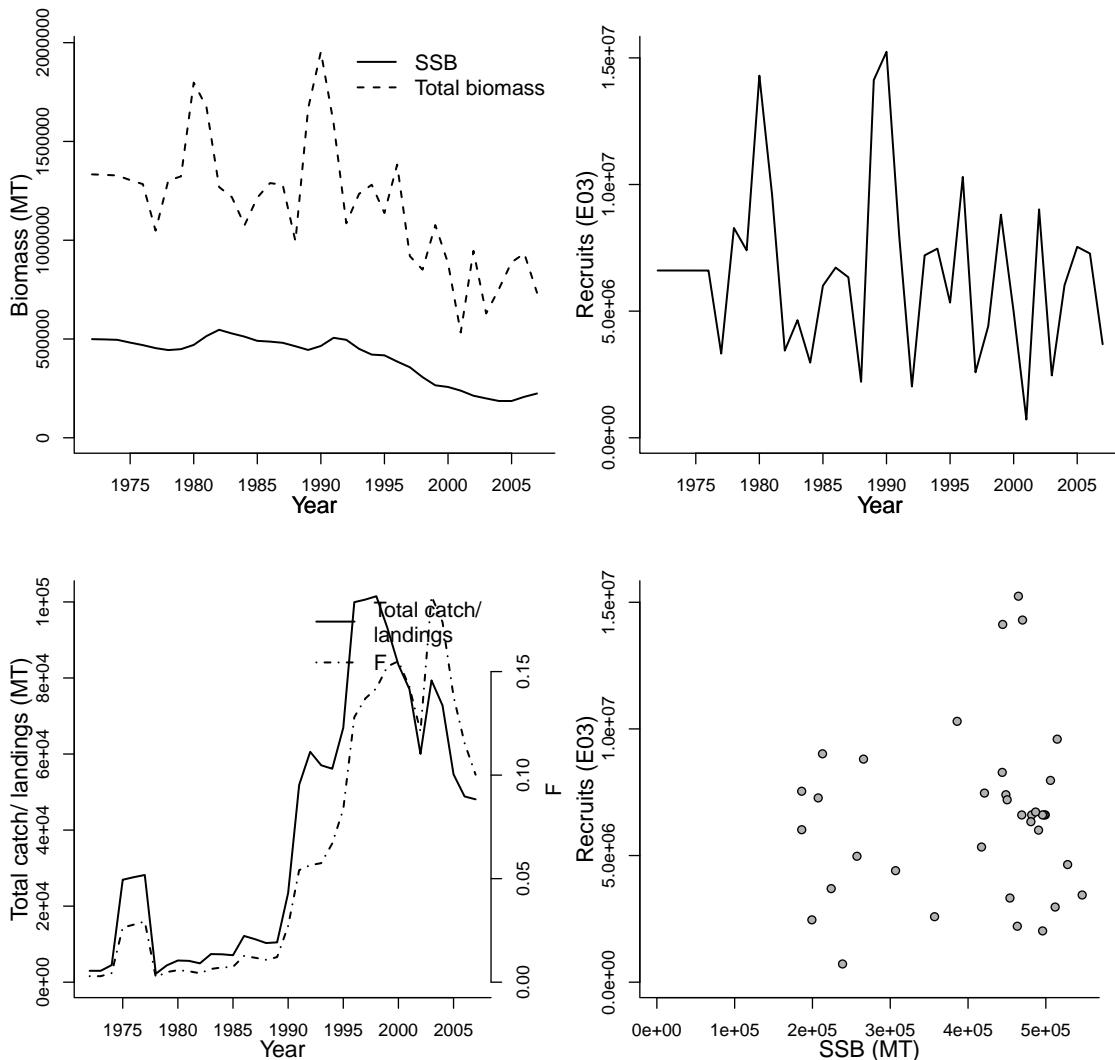
## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Hoki Working Group                 |
| Assessment authors | Francis, R.I.C.C.                  |
| Assessment method  | CASAL                              |
| Publication year   | 2008                               |
| Timeseries span    | 1972-2007                          |
| Document           | FAR0804hok07.pdf (pdf in database) |
| Recorder           | FRANCIS                            |
| Date entered       | 2008-09-18                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       | secondary LME |                  | tertiary LME |
|------------------------|-------|---------------|------------------|--------------|
| 46 - New Zealand Shelf |       | na            | na               |              |
| Parameter              | Value | Units         |                  |              |
| SSB-AGE-yr             |       | yr            |                  |              |
| SSB-SEX-sex            | 0     | sex           |                  |              |
| REC-AGE-yr             | 2     | yr            | Reference points |              |
| F-AGE-yr-yr            |       | yr-yr         | Parameter        | Value        |
| TB-AGE-yr              | 1     | yr            | BH-h-dimless     | 0.75         |
| A50-yr                 |       | yr            |                  | dimless      |
| M-1/yr                 |       | 1/yr          |                  |              |
| M                      |       |               |                  |              |
| L50-cm                 |       |               |                  |              |

| Time series minima and maxima |        |          |        |         |
|-------------------------------|--------|----------|--------|---------|
|                               | SSB    | R        | F      | TB      |
| Minimum year                  | 1972   | 1972     | 1972   | 1972    |
| Maximum year                  | 2007   | 2007     | 2007   | 2007    |
| Time series minimum           | 186148 | 720110   | 0.0024 | 532901  |
| Time series maximum           | 546701 | 15239500 | 0.1864 | 1953697 |
| Units                         | MT     | E03      | none   | MT      |



# Assessment of Western New Zealand hoki (*Macruronus novaezelandiae*)

Assessment ID:NZMFishHOKIWG-HOKIWNZ-1972-2007-FRANCIS  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/359>

Area ID: New Zealand-MFish-WNZ

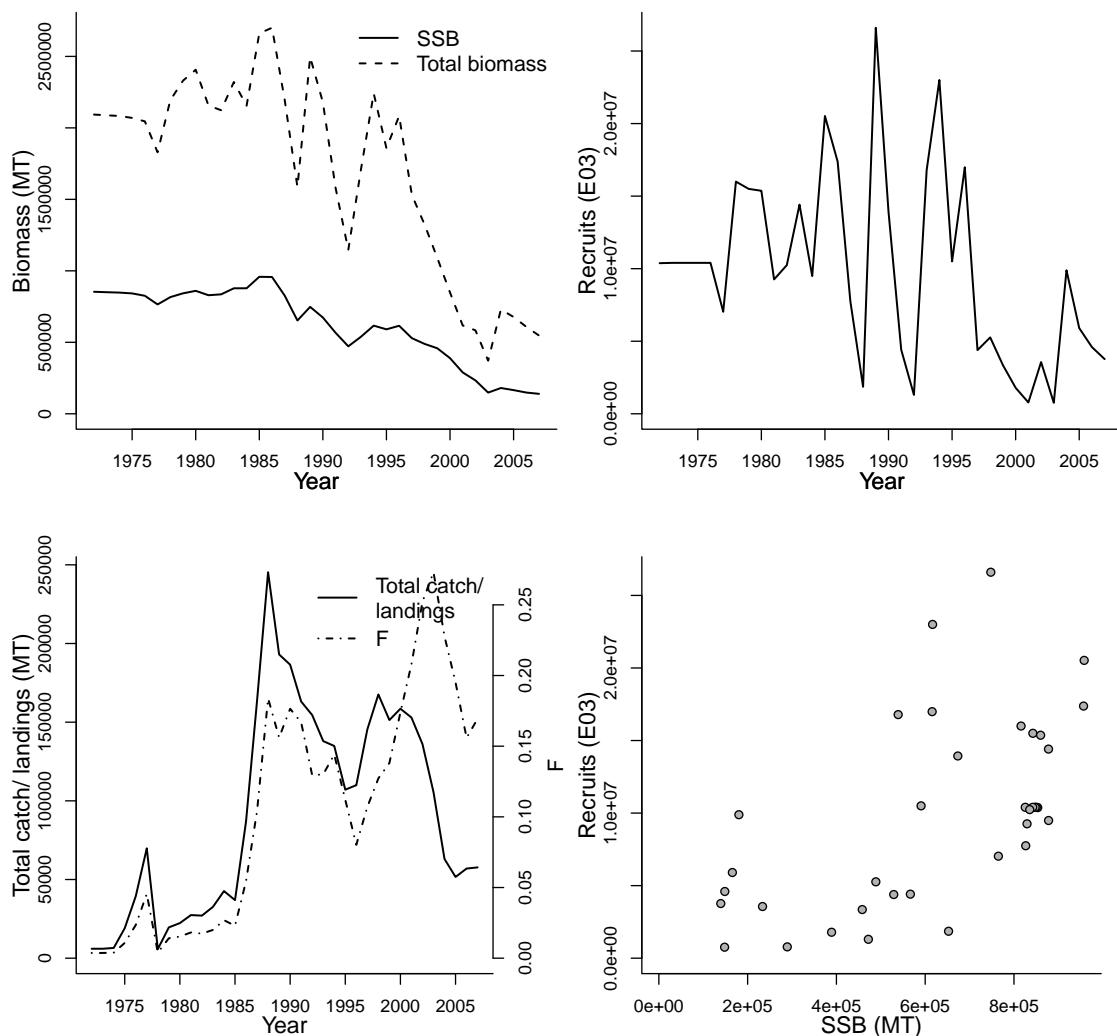
## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Hoki Working Group                 |
| Assessment authors | Francis, R.I.C.C.                  |
| Assessment method  | CASAL                              |
| Publication year   | 2008                               |
| Timeseries span    | 1972-2007                          |
| Document           | FAR0804hok07.pdf (pdf in database) |
| Recorder           | FRANCIS                            |
| Date entered       | 2008-09-18                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       | secondary LME |                  | tertiary LME |
|------------------------|-------|---------------|------------------|--------------|
| 46 - New Zealand Shelf |       | na            | na               |              |
| Parameter              | Value | Units         |                  |              |
| SSB-AGE-yr             |       | yr            |                  |              |
| SSB-SEX-sex            | 0     | sex           |                  |              |
| REC-AGE-yr             | 2     | yr            | Reference points |              |
| F-AGE-yr-yr            |       | yr-yr         | Parameter        | Value        |
| TB-AGE-yr              | 1     | yr            | BH-h-dimless     | 0.75         |
| A50-yr                 |       | yr            |                  | dimless      |
| M-1/yr                 |       | 1/yr          |                  |              |
| M                      |       |               |                  |              |
| L50-cm                 |       |               |                  |              |

| Time series minima and maxima |        |          |        |         |
|-------------------------------|--------|----------|--------|---------|
|                               | SSB    | R        | F      | TB      |
| Minimum year                  | 1972   | 1972     | 1972   | 1972    |
| Maximum year                  | 2007   | 2007     | 2007   | 2007    |
| Time series minimum           | 139515 | 758594   | 0.0037 | 371333  |
| Time series maximum           | 958163 | 26599700 | 0.2731 | 2700076 |
| Units                         | MT     | E03      | none   | MT      |



# Assessment of New Zealand Area 8 (Auckland and Central West) new zealand snapper (*Chrysophrys auratus*)

## Assessment

ID:NZMFishINSHOREWG-NZSNAPNZ8-1931-2005-JENSEN  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/193>

Area ID: New Zealand-MFish-8

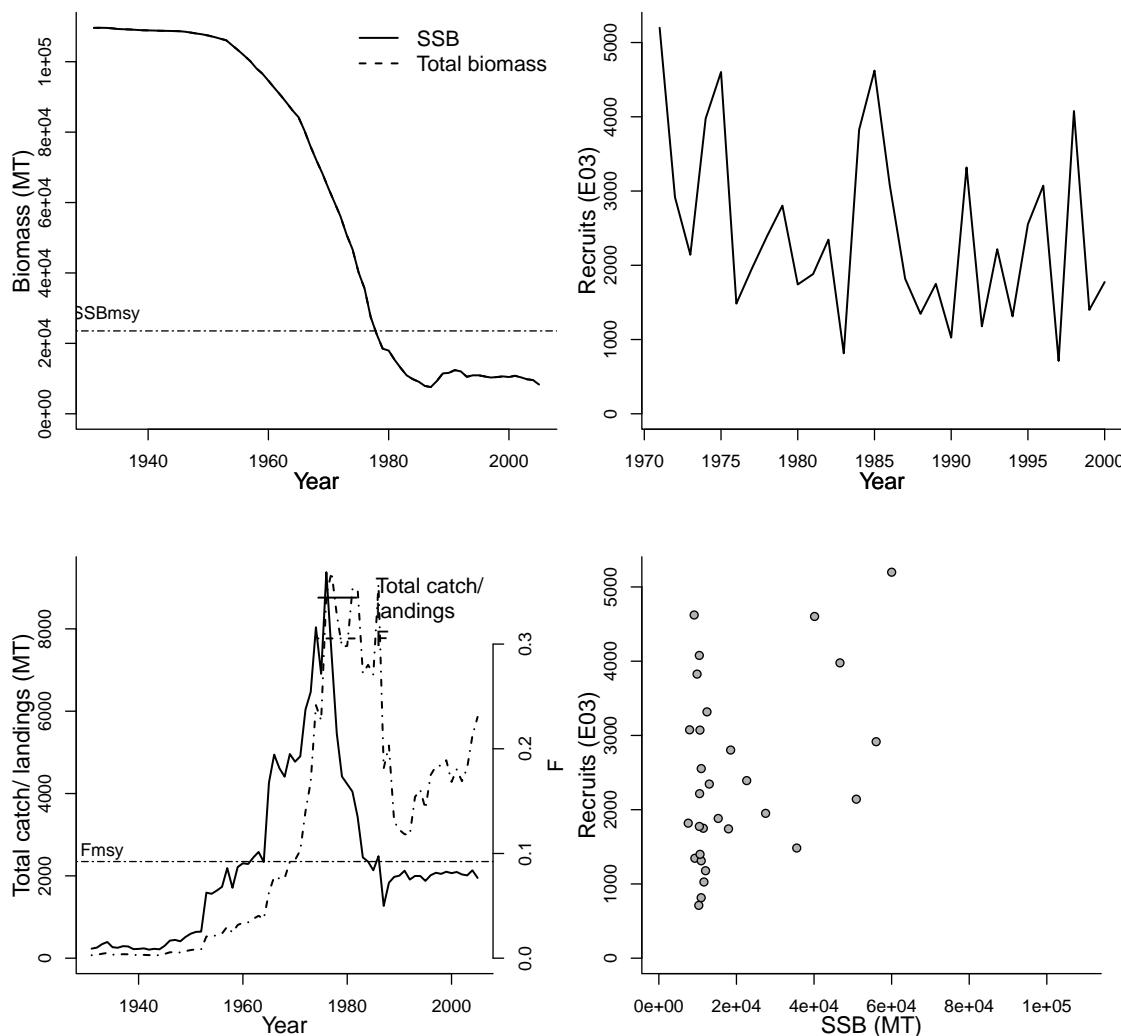
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Inshore Working Group                    |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1931-2005                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-24                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |           |       | secondary LME          | tertiary LME |
|------------------------|-----------|-------|------------------------|--------------|
| 46 - New Zealand Shelf |           |       | na                     | na           |
| Parameter              | Value     | Units | Reference points       |              |
| REC-AGE-yr             | 3         | yr    | Parameter              | Value        |
| TB-AGE-yr              | 3         | yr    | Fmsy-1/yr (F)          | 0.0923       |
| A50-yr                 | 3         | yr    | MSY-MT (TB)            | 2284.7076    |
| M-1/yr                 | 0.0507649 | 1/yr  | SSBmsy-MT (SSB)        | 23536.1148   |
| SSB-AGE-yr             |           |       | SSB0-MT (SSB)          | 120884       |
| SSB-SEX-sex            |           |       | BH-h-dimless           | 1            |
| F-AGE-yr               |           |       | $F_{2005}/F_{msy}$     | 2.497        |
| M                      |           |       | $SSB_{2005}/SSB_{msy}$ | 0.353        |
| L50-cm                 |           |       |                        |              |

| Time series minima and maxima |         |         |             |         |         |
|-------------------------------|---------|---------|-------------|---------|---------|
|                               | SSB     | R       | F           | TB      | Catch   |
| Minimum year                  | 1931    | 1971    | 1931        | 1931    | 1931    |
| Maximum year                  | 2005    | 2000    | 2005        | 2005    | 2005    |
| Time series minimum           | 7570.19 | 711.922 | 0.002787383 | 7570.19 | 207.95  |
| Time series maximum           | 109631  | 5198.47 | 0.3686518   | 109631  | 9376.26 |
| Units                         | MT      | E03     | 1/yr        | MT      | MT      |



# Assessment of New Zealand Areas TRE 7 trevally (*Pseudocaranx dentex*)

## Assessment

ID:NZMFishINSHOREWG-TREVALLYTRE7-1944-2005-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/189>

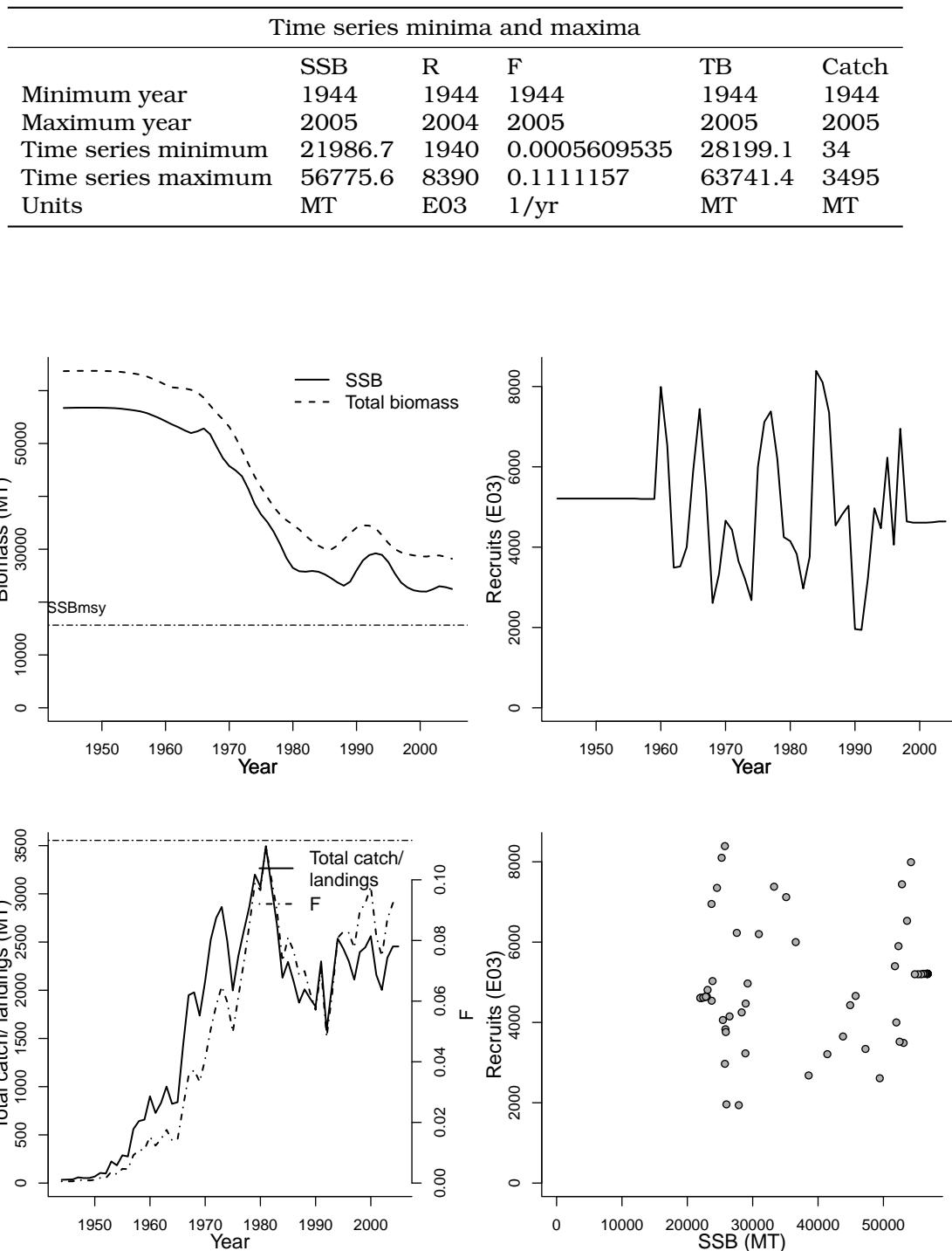
Area ID: New Zealand-MFish-TRE7

General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Inshore Working Group                    |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1944-2005                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |             | tertiary LME |
|------------------------|-------|-------|------------------------|-------------|--------------|
| 46 - New Zealand Shelf |       |       | na                     | na          |              |
| Parameter              | Value | Units | Reference points       |             |              |
| REC-AGE-yr             | 1     | yr    | Parameter              | Value       | Units        |
| TB-AGE-yr              | 1     | yr    | Fmsy-1/yr (F)          | 0.113       | 1/yr         |
| A50-yr                 | 5     | yr    | MSY-MT (TB)            | 2170.41121  | MT           |
| M-1/yr                 | 0.1   | 1/yr  | SSBmsy-MT (SSB)        | 15634.89433 | MT           |
| SSB-AGE-yr             |       |       | SSB0-MT (SSB)          | 56668.7     | MT           |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.75        | dimless      |
| F-AGE-yr               |       |       | $F_{2005}/F_{msy}$     | 0.830       |              |
| M                      |       |       | $SSB_{2005}/SSB_{msy}$ | 1.437       |              |
| L50-cm                 |       |       |                        |             |              |



# Assessment of New Zealand Area CRA1 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA1-1945-2001-JENSEN  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/223>

Area ID: New Zealand-MFish-CRA1

### General assessment details.

| Detail             | Value                           |
|--------------------|---------------------------------|
| Management body    | MFish                           |
| Assessment group   | Lobster Working Group           |
| Assessment authors | Starr, Pall                     |
| Assessment method  | Multi-stock length-based model  |
| Publication year   |                                 |
| Timeseries span    | 1945-2001                       |
| Document           | 03_41_FAR.pdf (pdf in database) |
| Recorder           | JENSEN                          |
| Date entered       | 2009-04-07                      |
| Date last loaded   | 2011-07-29                      |
| QA/QC complete     | YES                             |
| Date approved      | 2011-06-10                      |

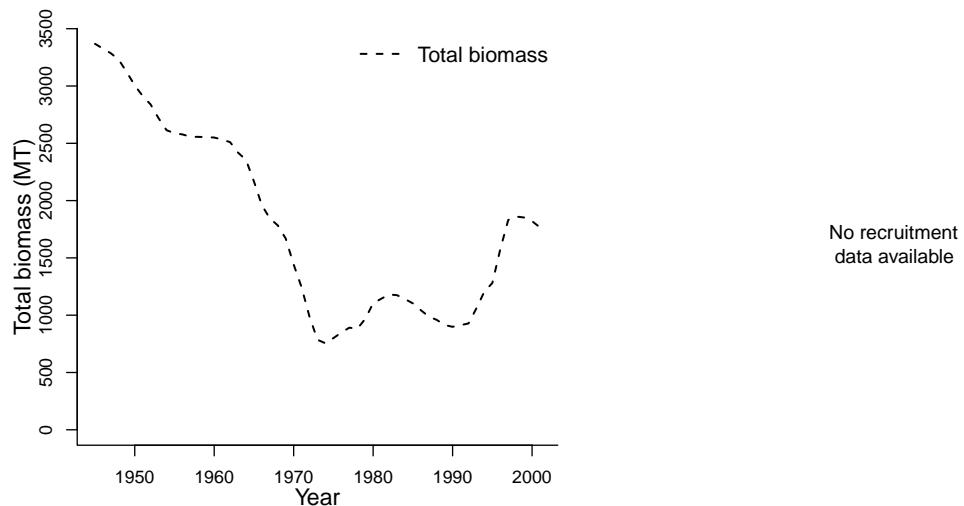
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |         |
|-------------------------------|-----|---|---|---------|
|                               | SSB | R | F | TB      |
| Minimum year                  |     |   |   | 1945    |
| Maximum year                  |     |   |   | 2001    |
| Time series minimum           |     |   |   | 754.296 |
| Time series maximum           |     |   |   | 3368.26 |
| Units                         |     |   |   | MT      |



# Assessment of New Zealand Area CRA2 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA2-1945-2001-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/224>

Area ID: New Zealand-MFish-CRA2

General assessment details.

| Detail             | Value                           |
|--------------------|---------------------------------|
| Management body    | MFish                           |
| Assessment group   | Lobster Working Group           |
| Assessment authors | Starr, Pall                     |
| Assessment method  | Multi-stock length-based model  |
| Publication year   |                                 |
| Timeseries span    | 1945-2001                       |
| Document           | 03_41_FAR.pdf (pdf in database) |
| Recorder           | JENSEN                          |
| Date entered       | 2009-04-07                      |
| Date last loaded   | 2011-07-29                      |
| QA/QC complete     | YES                             |
| Date approved      | 2011-06-10                      |

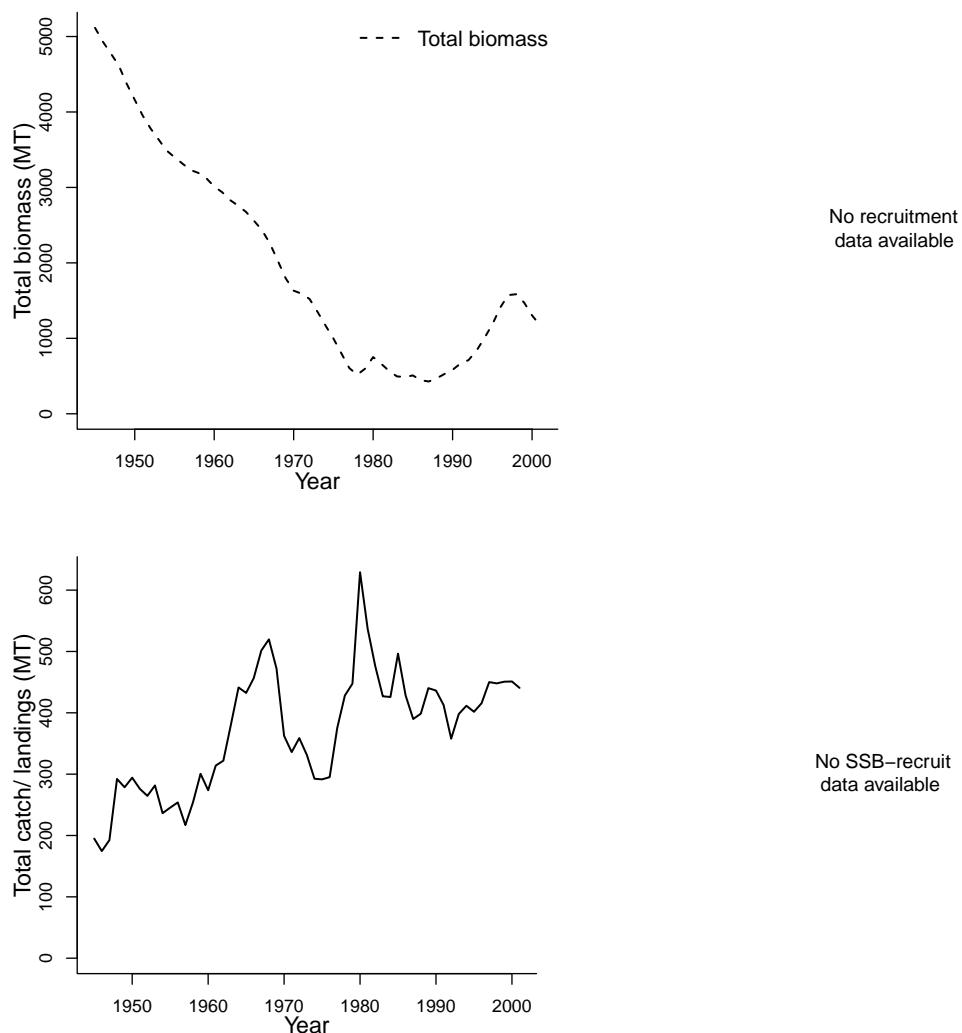
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |         |
|-------------------------------|-----|---|---|---------|
|                               | SSB | R | F | TB      |
| Minimum year                  |     |   |   | 1945    |
| Maximum year                  |     |   |   | 2001    |
| Time series minimum           |     |   |   | 427.88  |
| Time series maximum           |     |   |   | 5115.49 |
| Units                         |     |   |   | MT      |



# Assessment of New Zealand Area CRA3 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA3-1945-2007-JENSEN  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/225>

Area ID: New Zealand-MFish-CRA3

General assessment details.

| Detail             | Value                           |
|--------------------|---------------------------------|
| Management body    | MFish                           |
| Assessment group   | Lobster Working Group           |
| Assessment authors | Breen, P.A.                     |
| Assessment method  | Multi-stock length-based model  |
| Publication year   |                                 |
| Timeseries span    | 1945-2007                       |
| Document           | 09.23.FAR.pdf (pdf in database) |
| Recorder           | JENSEN                          |
| Date entered       | 2009-04-07                      |
| Date last loaded   | 2011-07-29                      |
| QA/QC complete     | YES                             |
| Date approved      | 2011-06-10                      |

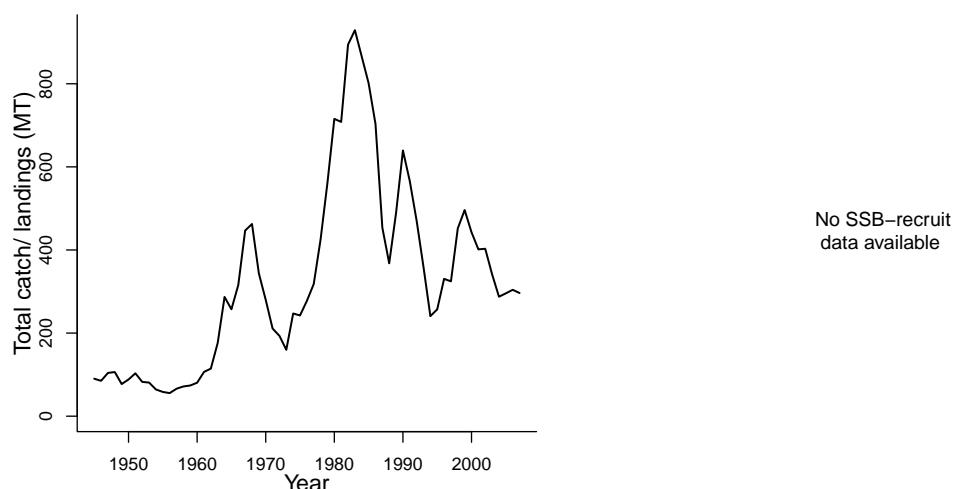
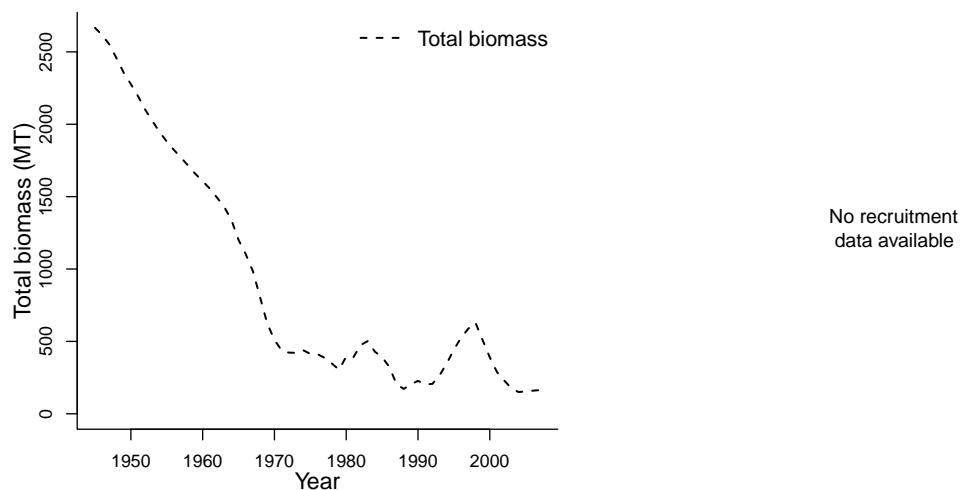
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |          |
|-------------------------------|-----|---|---|----------|
|                               | SSB | R | F | TB       |
| Minimum year                  |     |   |   | 1945     |
| Maximum year                  |     |   |   | 2007     |
| Time series minimum           |     |   |   | 150.126  |
| Time series maximum           |     |   |   | 2666.275 |
| Units                         |     |   |   | MT       |



# Assessment of New Zealand Area CRA4 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA4-1945-2005-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/226>

Area ID: New Zealand-MFish-CRA4

General assessment details.

| Detail             | Value                           |
|--------------------|---------------------------------|
| Management body    | MFish                           |
| Assessment group   | Lobster Working Group           |
| Assessment authors | Breen, P.A.                     |
| Assessment method  | Multi-stock length-based model  |
| Publication year   |                                 |
| Timeseries span    | 1945-2005                       |
| Document           | 06_17.FAR.pdf (pdf in database) |
| Recorder           | JENSEN                          |
| Date entered       | 2009-04-07                      |
| Date last loaded   | 2011-07-29                      |
| QA/QC complete     | YES                             |
| Date approved      | 2011-06-10                      |

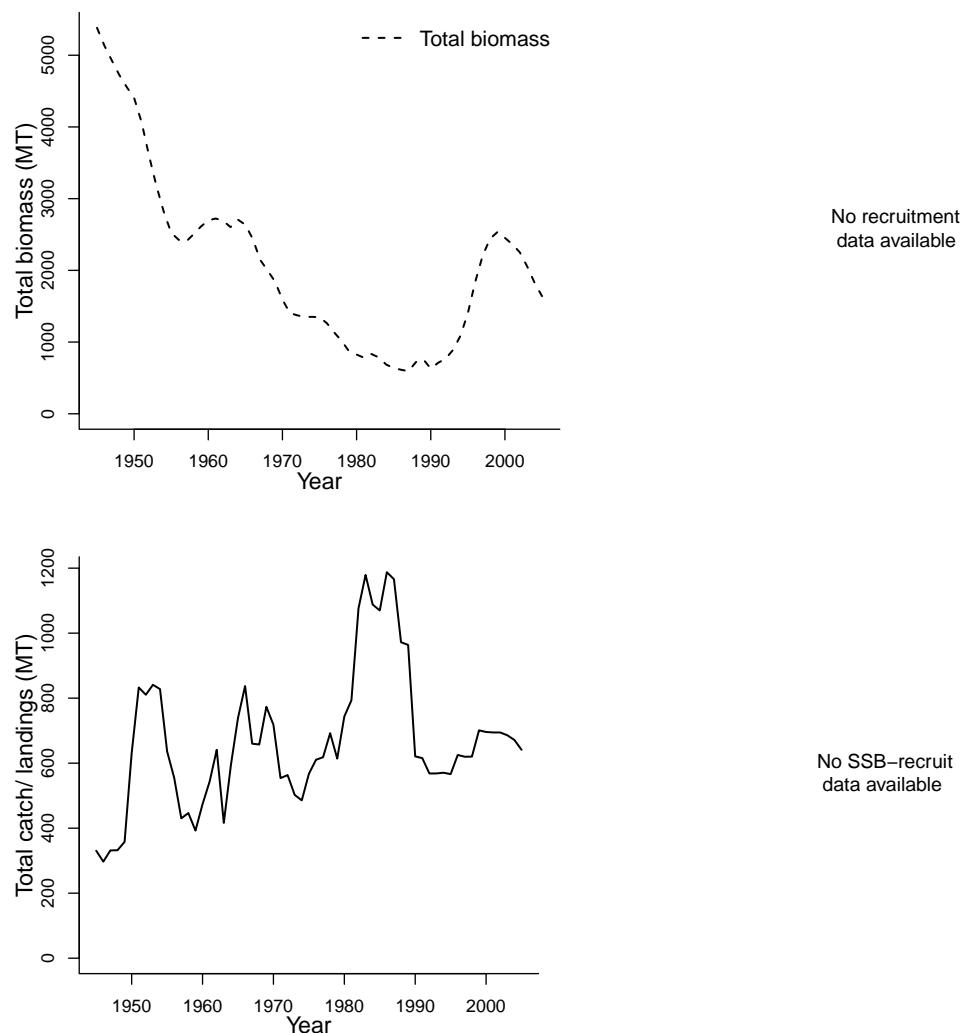
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |          |
|-------------------------------|-----|---|---|----------|
|                               | SSB | R | F | TB       |
| Minimum year                  |     |   |   | 1945     |
| Maximum year                  |     |   |   | 2005     |
| Time series minimum           |     |   |   | 593.7095 |
| Time series maximum           |     |   |   | 5382.51  |
| Units                         |     |   |   | MT       |
| Catch                         |     |   |   | 297.03   |
|                               |     |   |   | 1187.51  |



# Assessment of New Zealand Area CRA5 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA5-1945-2002-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/227>

Area ID: New Zealand-MFish-CRA5

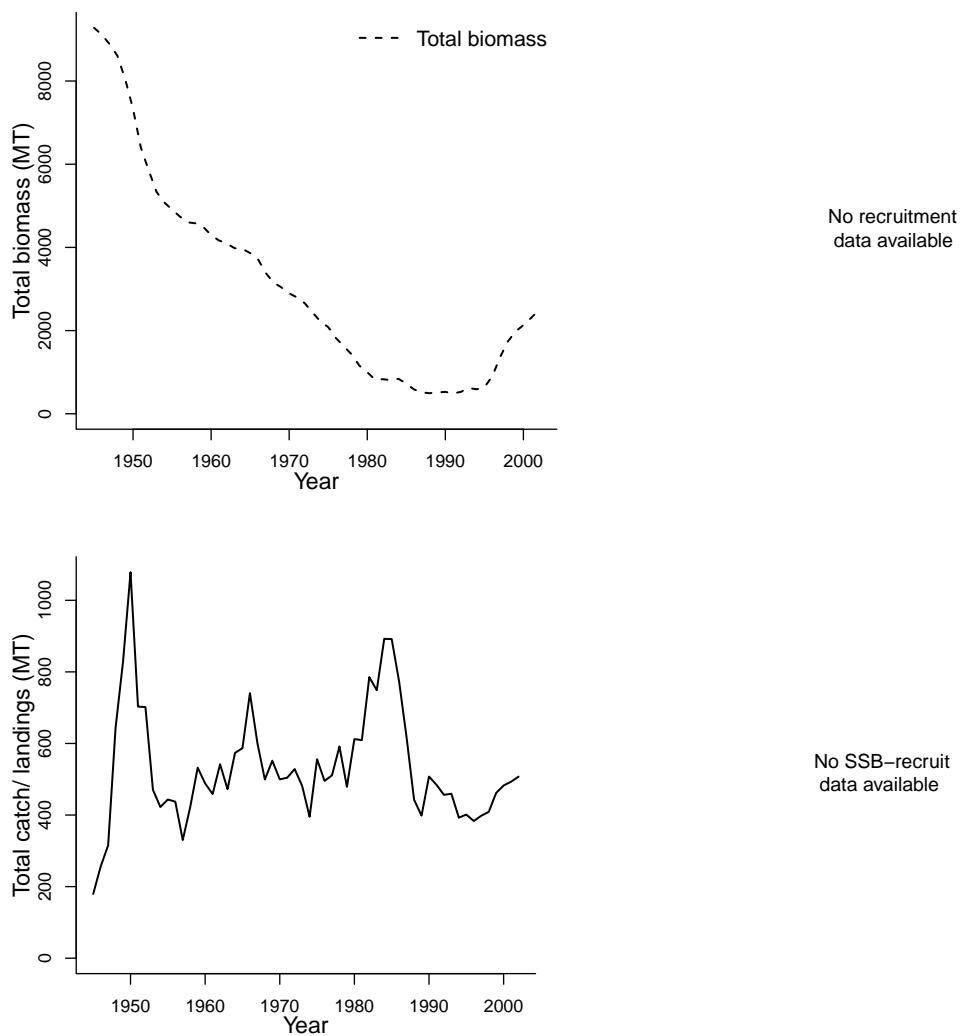
General assessment details.

| Detail             | Value                           |
|--------------------|---------------------------------|
| Management body    | MFish                           |
| Assessment group   | Lobster Working Group           |
| Assessment authors | Kim, S.W.                       |
| Assessment method  | Multi-stock length-based model  |
| Publication year   |                                 |
| Timeseries span    | 1945-2002                       |
| Document           | 04_08_FAR.pdf (pdf in database) |
| Recorder           | JENSEN                          |
| Date entered       | 2009-04-07                      |
| Date last loaded   | 2011-07-29                      |
| QA/QC complete     | YES                             |
| Date approved      | 2011-06-10                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |                  |           |       |       |
|------------------------|---------------|--------------|------------------|-----------|-------|-------|
| 46 - New Zealand Shelf | na            | na           |                  |           |       |       |
| Parameter              | Value         | Units        | Reference points | Parameter | Value | Units |
| REC-AGE                |               |              |                  |           |       |       |
| SSB-AGE-yr             |               |              |                  |           |       |       |
| SSB-SEX-sex            |               |              |                  |           |       |       |
| TB-AGE-yr              |               |              |                  |           |       |       |
| F-AGE-yr               |               |              |                  |           |       |       |
| M                      |               |              |                  |           |       |       |
| A50-yr                 |               |              |                  |           |       |       |
| L50-cm                 |               |              |                  |           |       |       |

| Time series minima and maxima |     |   |   |          |
|-------------------------------|-----|---|---|----------|
|                               | SSB | R | F | TB       |
| Minimum year                  |     |   |   | 1945     |
| Maximum year                  |     |   |   | 2002     |
| Time series minimum           |     |   |   | 488.143  |
| Time series maximum           |     |   |   | 9279.575 |
| Units                         |     |   |   | MT       |



# Assessment of New Zealand Area CRA7 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA7-1976-2005-JENSEN  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/228>

Area ID: New Zealand-MFish-CRA7

General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | MFish                                      |
| Assessment group   | Lobster Working Group                      |
| Assessment authors | Breen, P.A.                                |
| Assessment method  | Multi-stock length-based model             |
| Publication year   |  |
| Timeseries span    | 1976-2005                                  |
| Document           | PALLSTARperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                     |
| Date entered       | 2009-04-07                                 |
| Date last loaded   | 2011-07-29                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

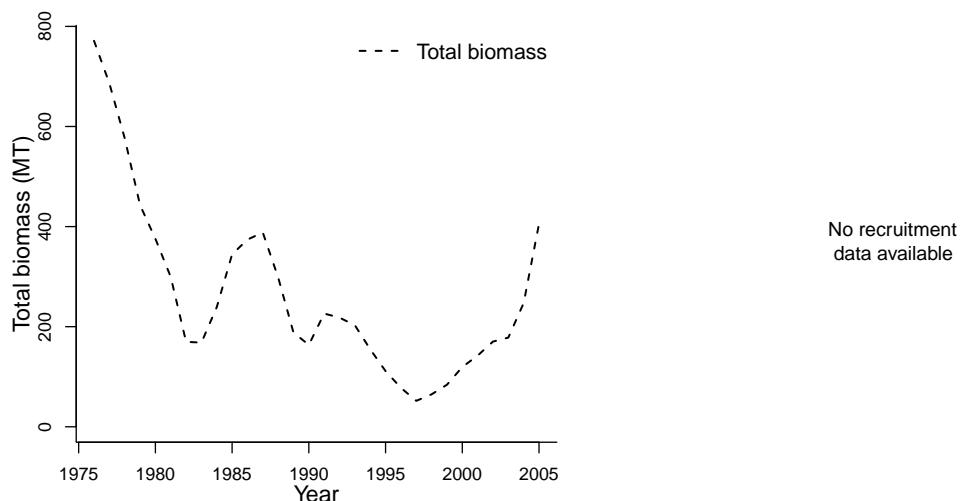
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |     |   |   |          |
|-------------------------------|-----|---|---|----------|
|                               | SSB | R | F | TB       |
| Minimum year                  |     |   |   | 1976     |
| Maximum year                  |     |   |   | 2005     |
| Time series minimum           |     |   |   | 51.77465 |
| Time series maximum           |     |   |   | 771.2135 |
| Units                         |     |   |   | MT       |



# Assessment of New Zealand Area CRA8 red rock lobster (*Jasus edwardsii*)

## Assessment

ID:NZMFishLOBSTERWG-RROCKLOBSTERCRA8-1976-2005-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/229>

Area ID: New Zealand-MFish-CRA8

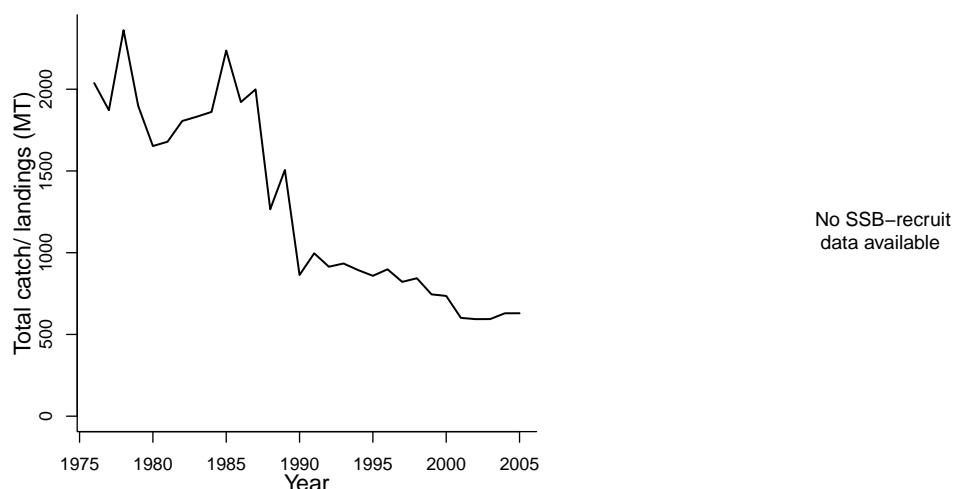
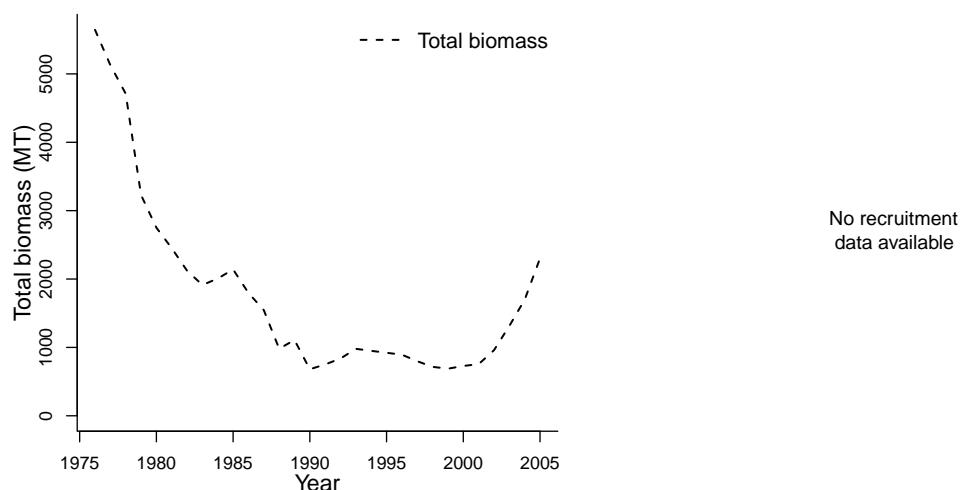
General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | MFish                                      |
| Assessment group   | Lobster Working Group                      |
| Assessment authors | Breen, P.A.                                |
| Assessment method  | Multi-stock length-based model             |
| Publication year   |  |
| Timeseries span    | 1976-2005                                  |
| Document           | PALLSTARperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                     |
| Date entered       | 2009-04-07                                 |
| Date last loaded   | 2011-07-29                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |                  |           |       |       |
|------------------------|---------------|--------------|------------------|-----------|-------|-------|
| 46 - New Zealand Shelf | na            | na           |                  |           |       |       |
| Parameter              | Value         | Units        | Reference points | Parameter | Value | Units |
| REC-AGE                |               |              |                  |           |       |       |
| SSB-AGE-yr             |               |              |                  |           |       |       |
| SSB-SEX-sex            |               |              |                  |           |       |       |
| TB-AGE-yr              |               |              |                  |           |       |       |
| F-AGE-yr               |               |              |                  |           |       |       |
| M                      |               |              |                  |           |       |       |
| A50-yr                 |               |              |                  |           |       |       |
| L50-cm                 |               |              |                  |           |       |       |

| Time series minima and maxima |     |   |   |         |
|-------------------------------|-----|---|---|---------|
|                               | SSB | R | F | TB      |
| Minimum year                  |     |   |   | 1976    |
| Maximum year                  |     |   |   | 2005    |
| Time series minimum           |     |   |   | 680.624 |
| Time series maximum           |     |   |   | 5645    |
| Units                         |     |   |   | MT      |



# Assessment of New Zealand common gemfish (*Rexea solandri*)

## Assessment

ID:NZMFishMIDDEPTHSWG-GEMFISHNZ-1952-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/182>

Area ID: New Zealand-MFish-NZ

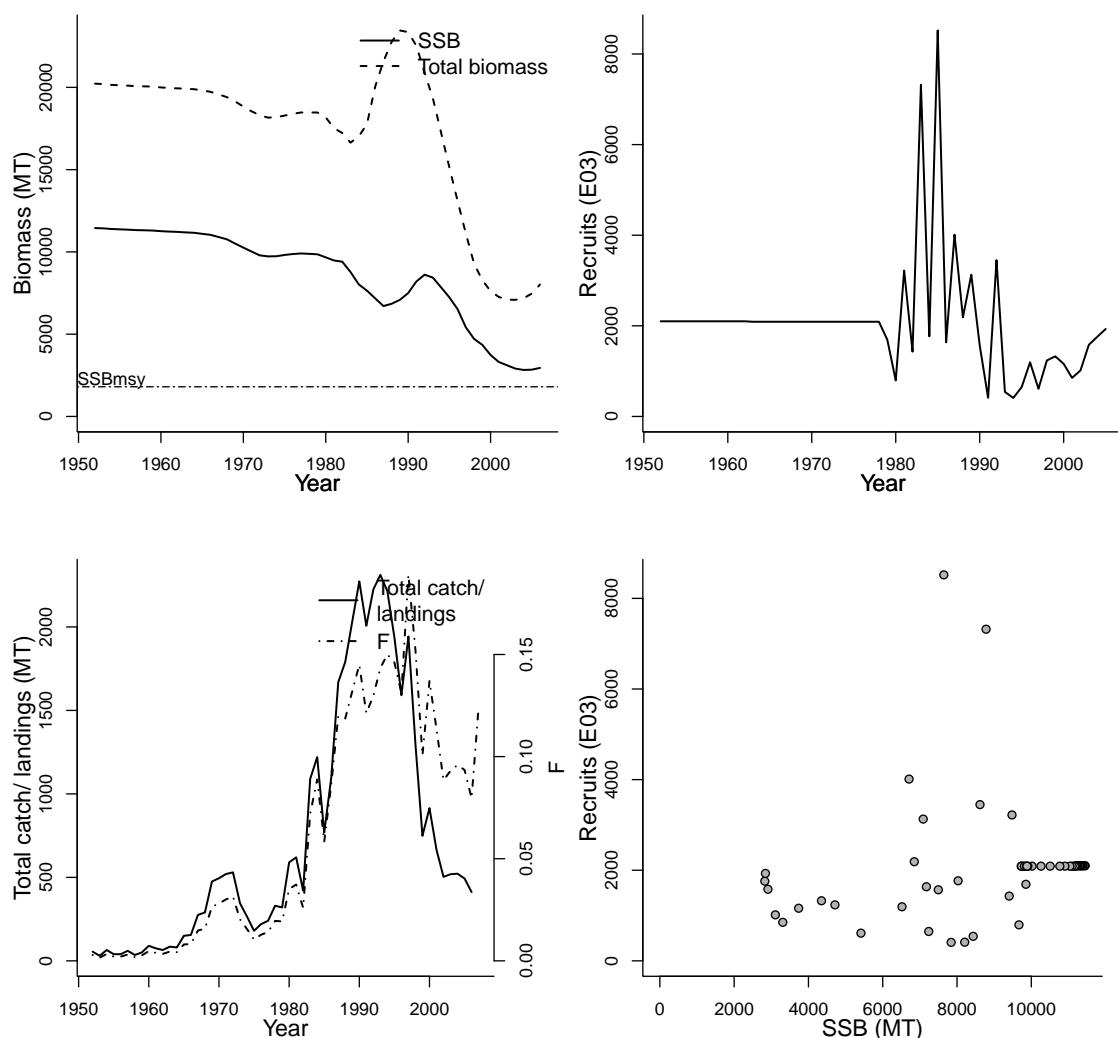
### General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1952-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-11                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                  | secondary LME     | tertiary LME |
|------------------------------|-------------------|--------------|
| 46 - New Zealand Shelf       | na                | na           |
| <hr/>                        |                   |              |
| Parameter                    | Value             | Units        |
| REC-AGE-yr                   | 1                 | yr           |
| TB-AGE-yr                    | 1                 | yr           |
| A50-yr                       | 8                 | yr           |
| M-1/yr                       | 0.24              | 1/yr         |
| SSB-AGE-yr                   |                   |              |
| SSB-SEX-sex                  |                   |              |
| F-AGE-yr                     |                   |              |
| M                            |                   |              |
| L50-cm                       |                   |              |
| <hr/>                        |                   |              |
| Reference points             |                   |              |
| Parameter                    | Value             | Units        |
| SSB0-MT (SSB)                | 11484.66666666667 | MT           |
| MSY-MT (TB)                  | 1432.04273333333  | MT           |
| SSB <sub>msy</sub> -MT (SSB) | 1803.02616666667  | MT           |
| F <sub>msy</sub> -1/yr (F)   | 0.289566666666667 | 1/yr         |
| BH-h-dimless                 | 0.9               | dimless      |
| $F_{2007}/F_{msy}$           | 0.429             |              |
| $SSB_{2006}/SSB_{msy}$       | 1.636             |              |

| Time series minima and maxima |         |                  |                     |                   |
|-------------------------------|---------|------------------|---------------------|-------------------|
|                               | SSB     | R                | F                   | TB                |
| Minimum year                  | 1952    | 1952             | 1952                | 1952              |
| Maximum year                  | 2006    | 2005             | 2007                | 2006              |
| Time series minimum           | 2825.23 | 408.241333333333 | 0.00153075366666667 | 7086.31           |
| Time series maximum           | 11450.2 | 8519.18333333333 | 0.188977266666667   | 23459.06666666667 |
| Units                         | MT      | E03              | 1/yr                | MT                |



# Assessment of New Zealand Areas LIN 3 and 4 ling (*Genypterus blacodes*)

## Assessment

ID:NZMFishMIDDEPTHSWG-NZLINGLIN3-4-1972-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/157>

Area ID: New Zealand-MFish-LIN3-4

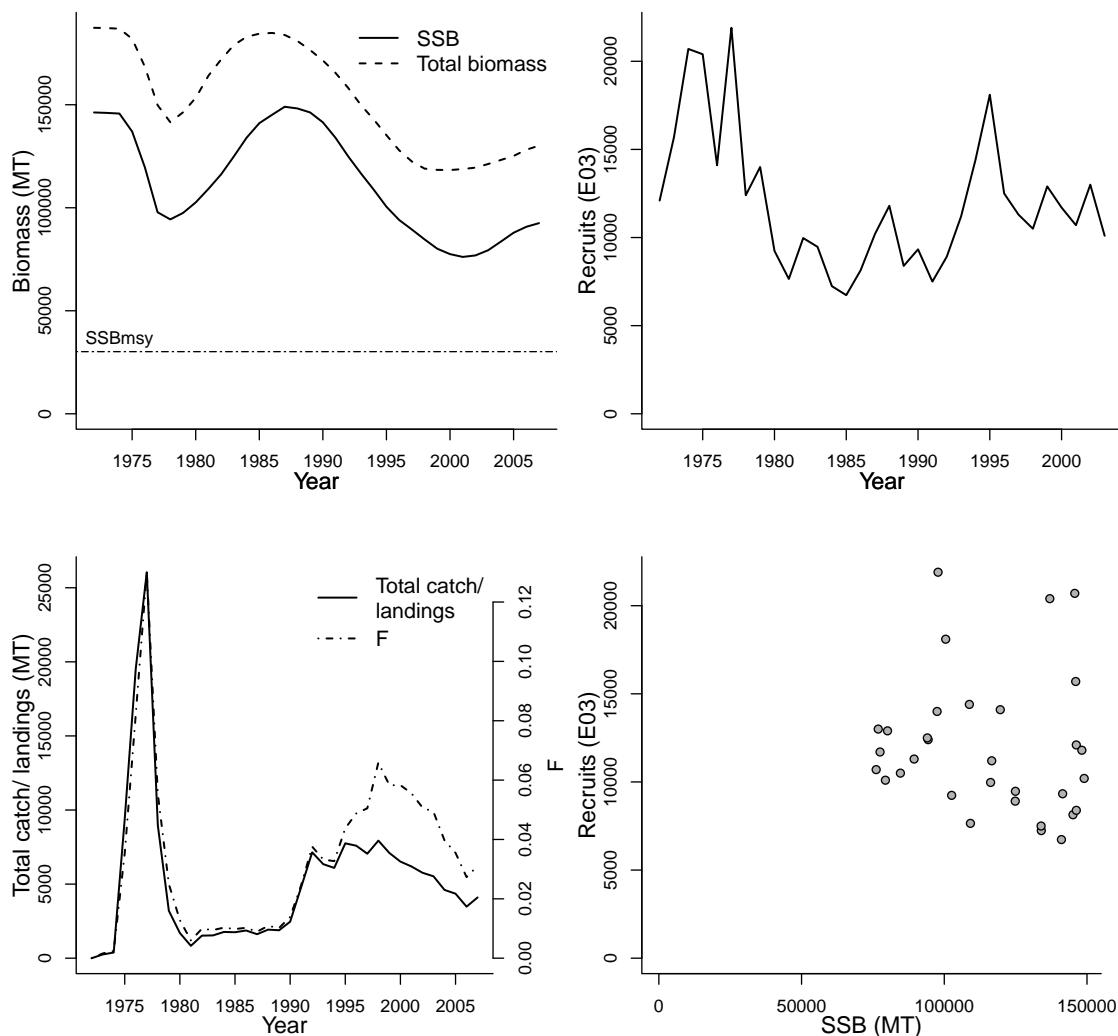
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1972-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 3     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 3     | yr    | SSB0-MT (SSB)          | 146255       | MT      |
| A50-yr                 | 9     | yr    | MSY-MT (TB)            | 9755.2085    | MT      |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)        | 30157.781    | MT      |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.354        | 1/yr    |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.9          | dimless |
| F-AGE-yr               |       |       | $F_{2007}/F_{msy}$     | 0.088        |         |
| M                      |       |       | $SSB_{2007}/SSB_{msy}$ | 3.069        |         |
| L50-cm                 |       |       |                        |              |         |

| Time series minima and maxima |         |       |           |        |
|-------------------------------|---------|-------|-----------|--------|
|                               | SSB     | R     | F         | TB     |
| Minimum year                  | 1972    | 1972  | 1972      | 1972   |
| Maximum year                  | 2007    | 2003  | 2007      | 2007   |
| Time series minimum           | 76136.8 | 6730  | 0         | 118300 |
| Time series maximum           | 149018  | 21900 | 0.1300457 | 187345 |
| Units                         | MT      | E03   | 1/yr      | MT     |



# Assessment of New Zealand Areas LIN 5 and 6 ling (*Genypterus blacodes*)

## Assessment

ID:NZMFishMIDDEPTHSWG-NZLINGLIN5-6-1972-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/159>

Area ID: New Zealand-MFish-LIN5-6

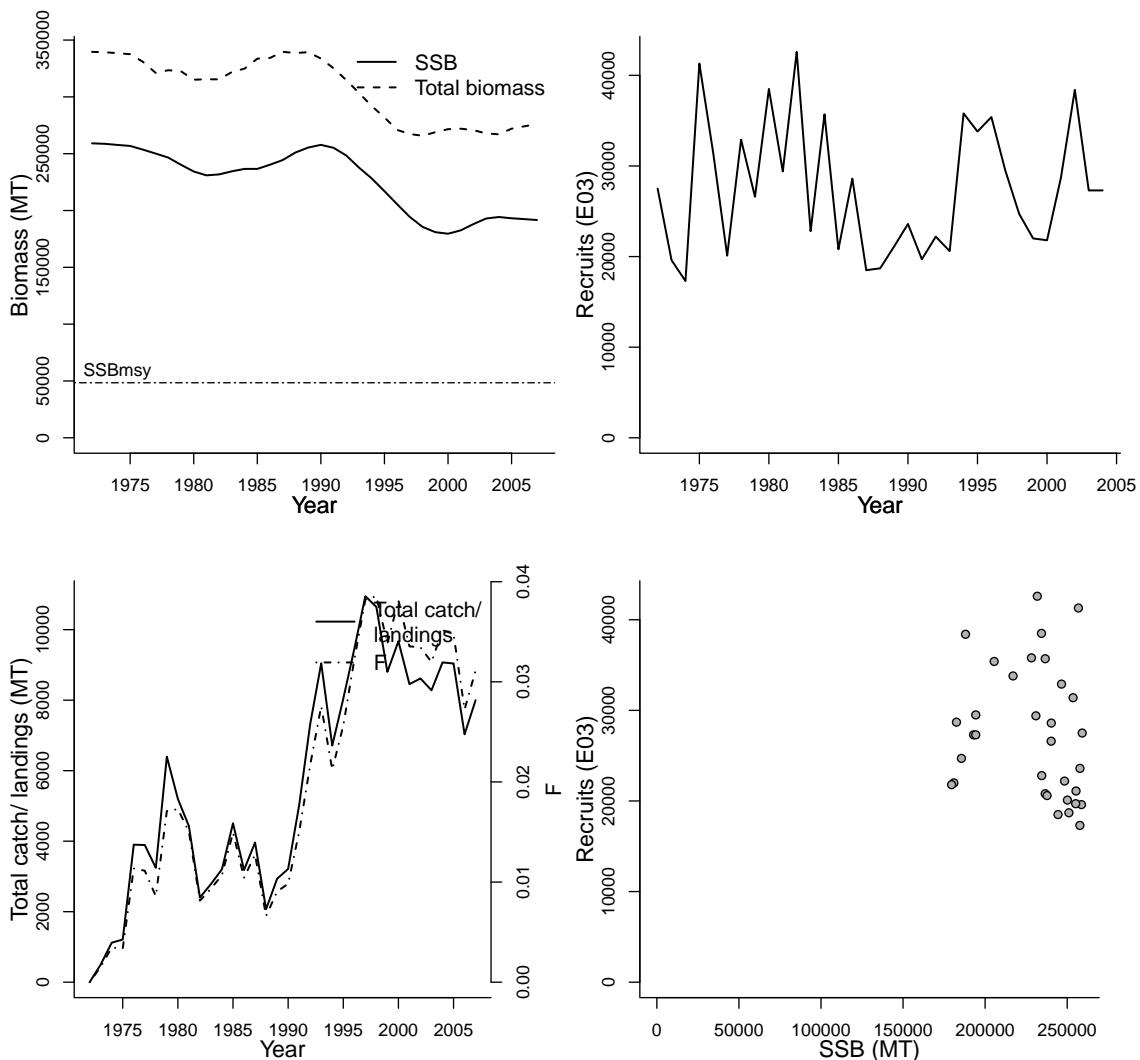
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1972-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |           | tertiary LME |
|------------------------|-------|-------|------------------------|-----------|--------------|
| 46 - New Zealand Shelf |       |       | na                     | na        |              |
| Parameter              | Value | Units | Reference points       |           |              |
| REC-AGE-yr             | 3     | yr    | Parameter              | Value     | Units        |
| TB-AGE-yr              | 3     | yr    | SSB0-MT (SSB)          | 259140    | MT           |
| A50-yr                 | 8     | yr    | MSY-MT (TB)            | 20497.974 | MT           |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)        | 48407.352 | MT           |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.314     | 1/yr         |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.9       | dimless      |
| F-AGE-yr               |       |       | $F_{2007}/F_{msy}$     | 0.099     |              |
| M                      |       |       | $SSB_{2007}/SSB_{msy}$ | 3.959     |              |
| L50-cm                 |       |       |                        |           |              |

| Time series minima and maxima |        |       |           |        |
|-------------------------------|--------|-------|-----------|--------|
|                               | SSB    | R     | F         | TB     |
| Minimum year                  | 1972   | 1972  | 1972      | 1972   |
| Maximum year                  | 2007   | 2004  | 2007      | 2007   |
| Time series minimum           | 179574 | 17300 | 0         | 265773 |
| Time series maximum           | 259140 | 42600 | 0.0385508 | 339670 |
| Units                         | MT     | E03   | 1/yr      | MT     |



# Assessment of New Zealand Areas LIN 6b ling (*Genypterus blacodes*)

## Assessment

ID:NZMFishMIDDEPTHSWG-NZLINGLIN6b-1980-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/158>

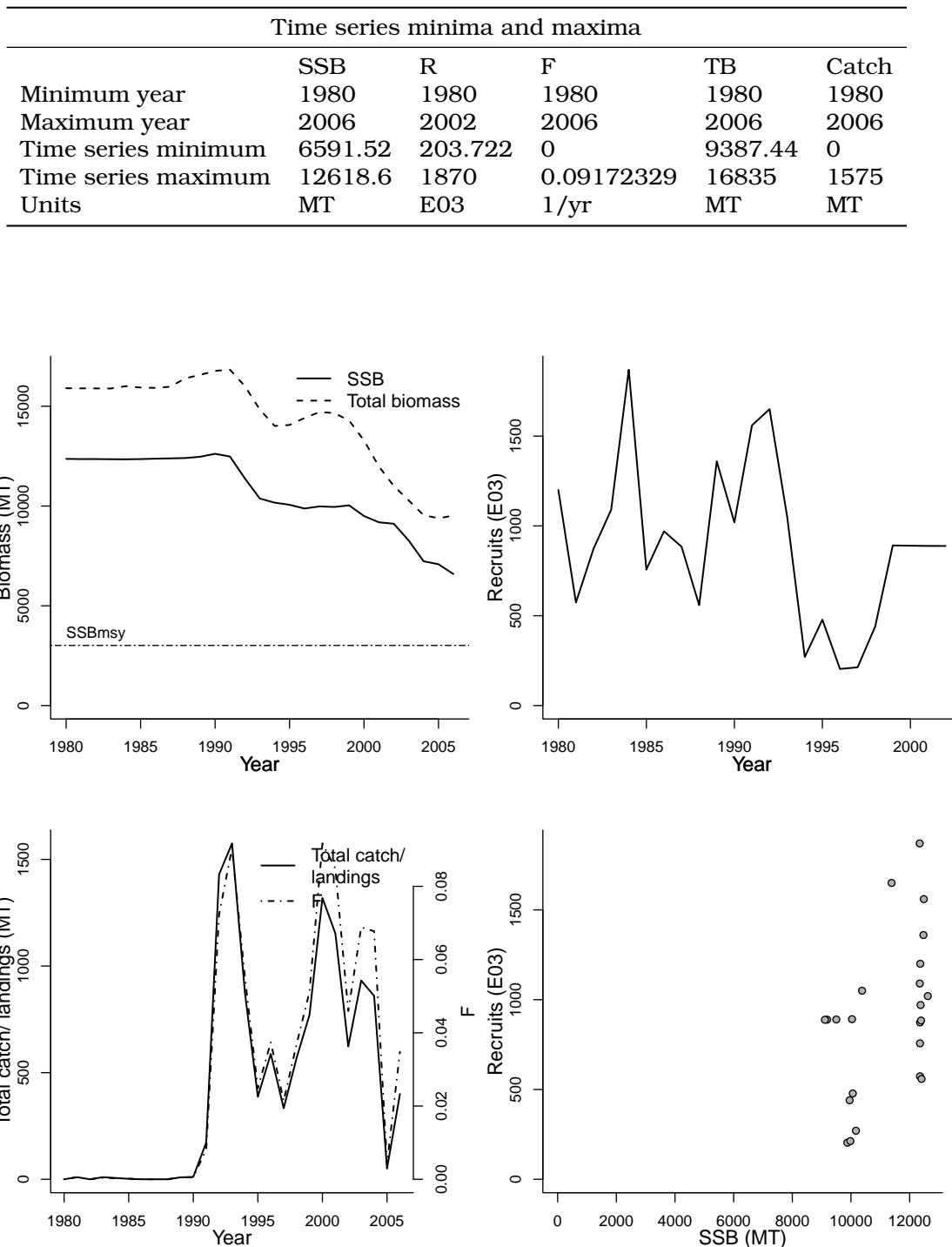
Area ID: New Zealand-MFish-LIN6b

General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1980-2006                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 3     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 3     | yr    | SSB0-MT (SSB)          | 12363        | MT      |
| A50-yr                 | 9     | yr    | MSY-MT (TB)            | 893.8449     | MT      |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)        | 3014.0994    | MT      |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.308        | 1/yr    |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.9          | dimless |
| F-AGE-yr               |       |       | $F_{2006}/F_{msy}$     | 0.113        |         |
| M                      |       |       | $SSB_{2006}/SSB_{msy}$ | 2.187        |         |
| L50-cm                 |       |       |                        |              |         |



# Assessment of New Zealand Areas LIN 72 ling (*Genypterus blacodes*)

## Assessment

ID:NZMFishMIDDEPTHSWG-NZLINGLIN72-1972-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/160>

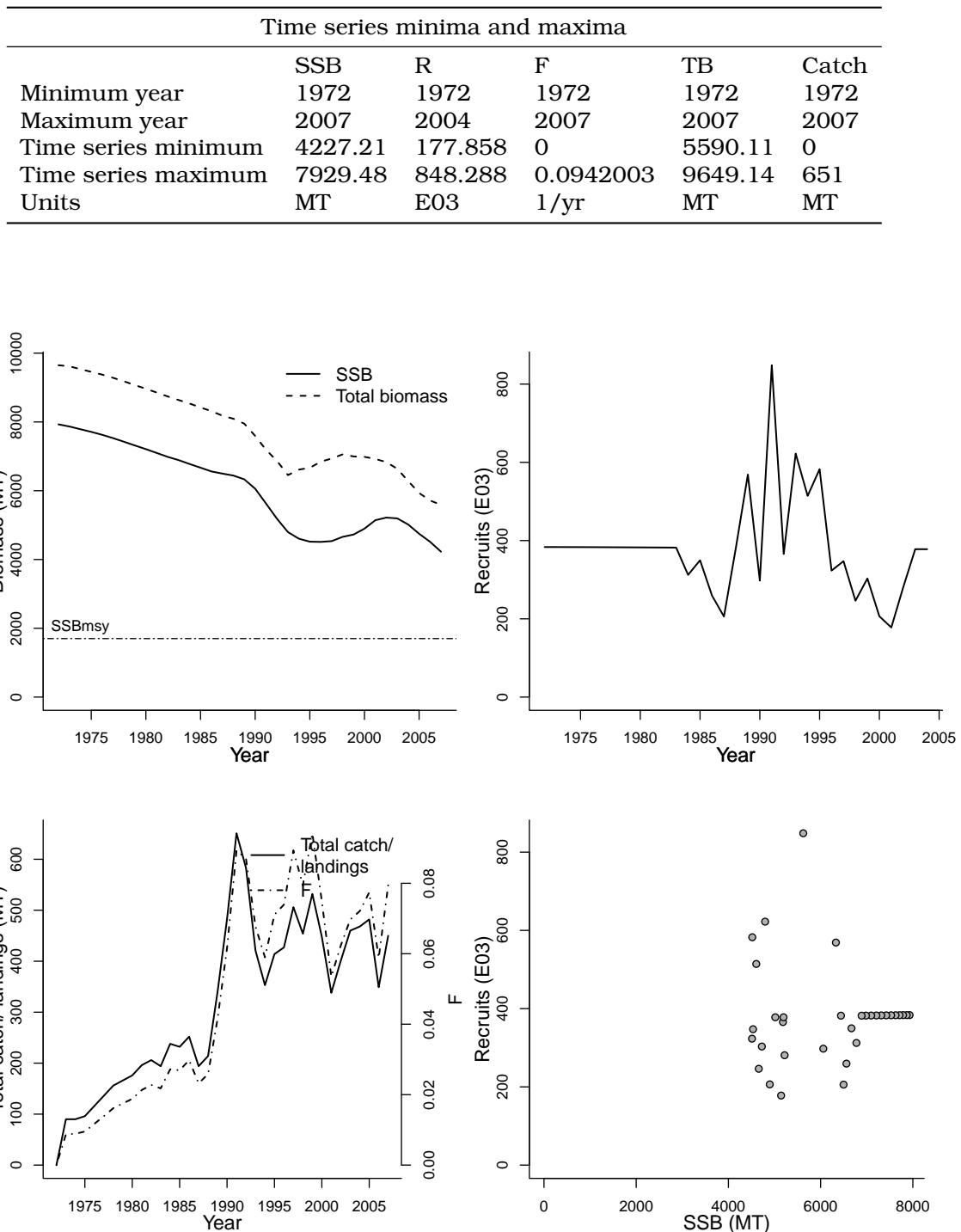
Area ID: New Zealand-MFish-LIN72

General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1972-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |             | tertiary LME |
|------------------------|-------|-------|------------------------|-------------|--------------|
| 46 - New Zealand Shelf |       |       | na                     | na          |              |
| Parameter              | Value | Units | Reference points       |             |              |
| REC-AGE-yr             | 3     | yr    | Parameter              | Value       | Units        |
| TB-AGE-yr              | 3     | yr    | SSBO-MT (SSB)          | 7929.48     | MT           |
| A50-yr                 | 8.75  | yr    | MSY-MT (TB)            | 515.8919688 | MT           |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)        | 1700.080512 | MT           |
| SSB-AGE-yr             |       |       | Fmsy-1/yr (F)          | 0.246       | 1/yr         |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.9         | dimless      |
| F-AGE-yr               |       |       | $F_{2007}/F_{msy}$     | 0.323       |              |
| M                      |       |       | $SSB_{2007}/SSB_{msy}$ | 2.486       |              |
| L50-cm                 |       |       |                        |             |              |



# Assessment of New Zealand Areas LIN 7WC-WCSI ling (*Genypterus blacodes*)

## Assessment

ID:NZMFishMIDDEPTHSWG-NZLINGLIN7WC-1972-2008-JENSEN  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/161>

Area ID: New Zealand-MFish-LIN7WC-WCSI

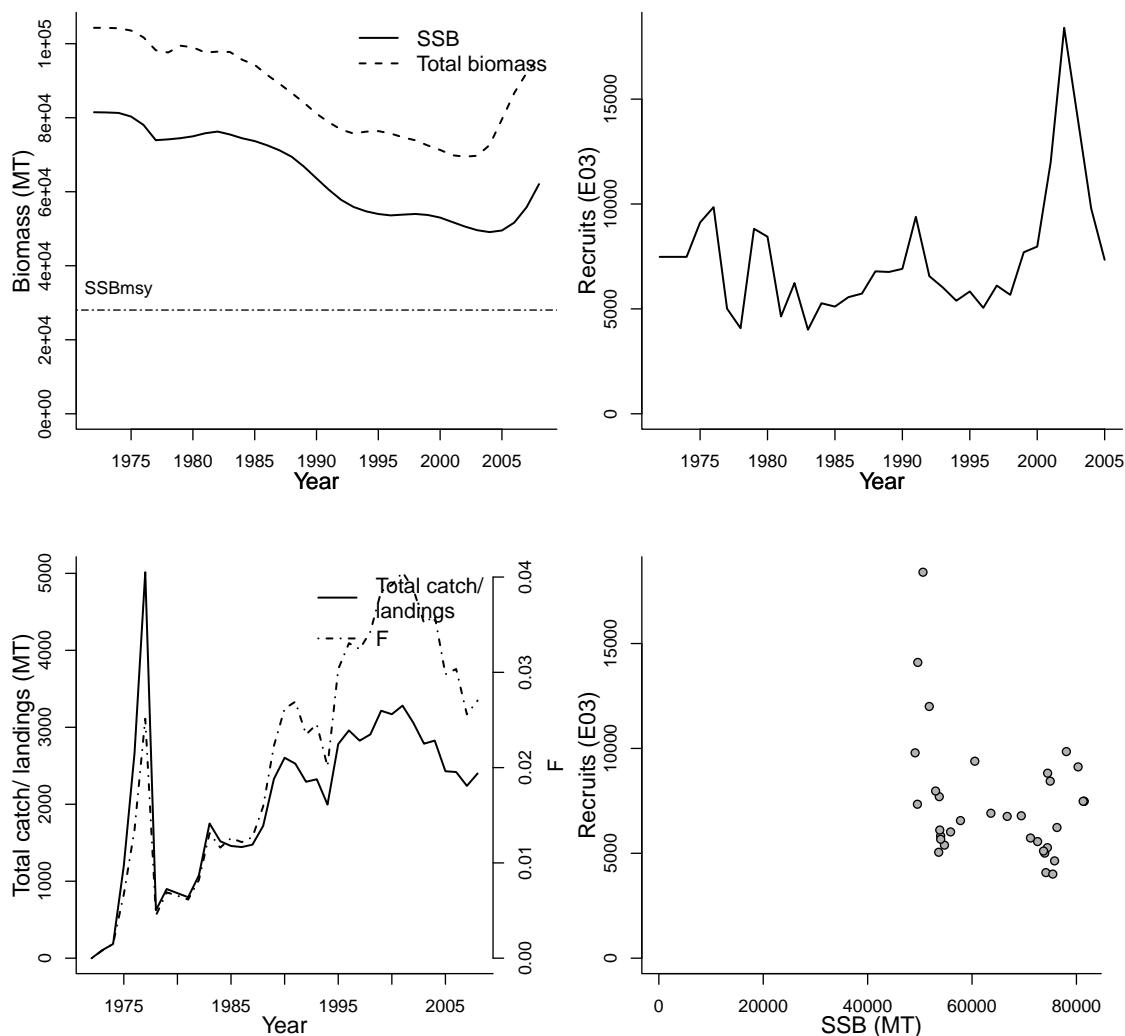
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1972-2008                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                | tertiary LME |         |
|------------------------|-------|-------|------------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                           | na           |         |
| Parameter              | Value | Units | Reference points             |              |         |
| REC-AGE-yr             | 3     | yr    | Parameter                    | Value        | Units   |
| TB-AGE-yr              | 3     | yr    | SSB0-MT (SSB)                | 81482.4      | MT      |
| A50-yr                 | 8.25  | yr    | MSY-MT (TB)                  | 6062.29056   | MT      |
| M-1/yr                 | 0.22  | 1/yr  | SSB <sub>msy</sub> -MT (SSB) | 28029.9456   | MT      |
| SSB-AGE-yr             |       |       | F <sub>msy</sub> -1/yr (F)   | 0.202        | 1/yr    |
| SSB-SEX-sex            |       |       | BH-h-dimless                 | 0.9          | dimless |
| F-AGE-yr               |       |       | $F_{2008}/F_{msy}$           | 0.134        |         |
| M                      |       |       | $SSB_{2008}/SSB_{msy}$       | 2.214        |         |
| L50-cm                 |       |       |                              |              |         |

| Time series minima and maxima |         |       |            |         |
|-------------------------------|---------|-------|------------|---------|
|                               | SSB     | R     | F          | TB      |
| Minimum year                  | 1972    | 1972  | 1972       | 1972    |
| Maximum year                  | 2008    | 2005  | 2008       | 2008    |
| Time series minimum           | 49091.7 | 4010  | 0          | 69479.9 |
| Time series maximum           | 81482.4 | 18400 | 0.04050748 | 104298  |
| Units                         | MT      | E03   | 1/yr       | MT      |



# Assessment of New Zealand - Campbell Island Rise southern blue whiting (*Micromesistius australis*)

Assessment

ID:NZMFishMIDDEPTHSWG-SBWHITACIR-1979-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/190>

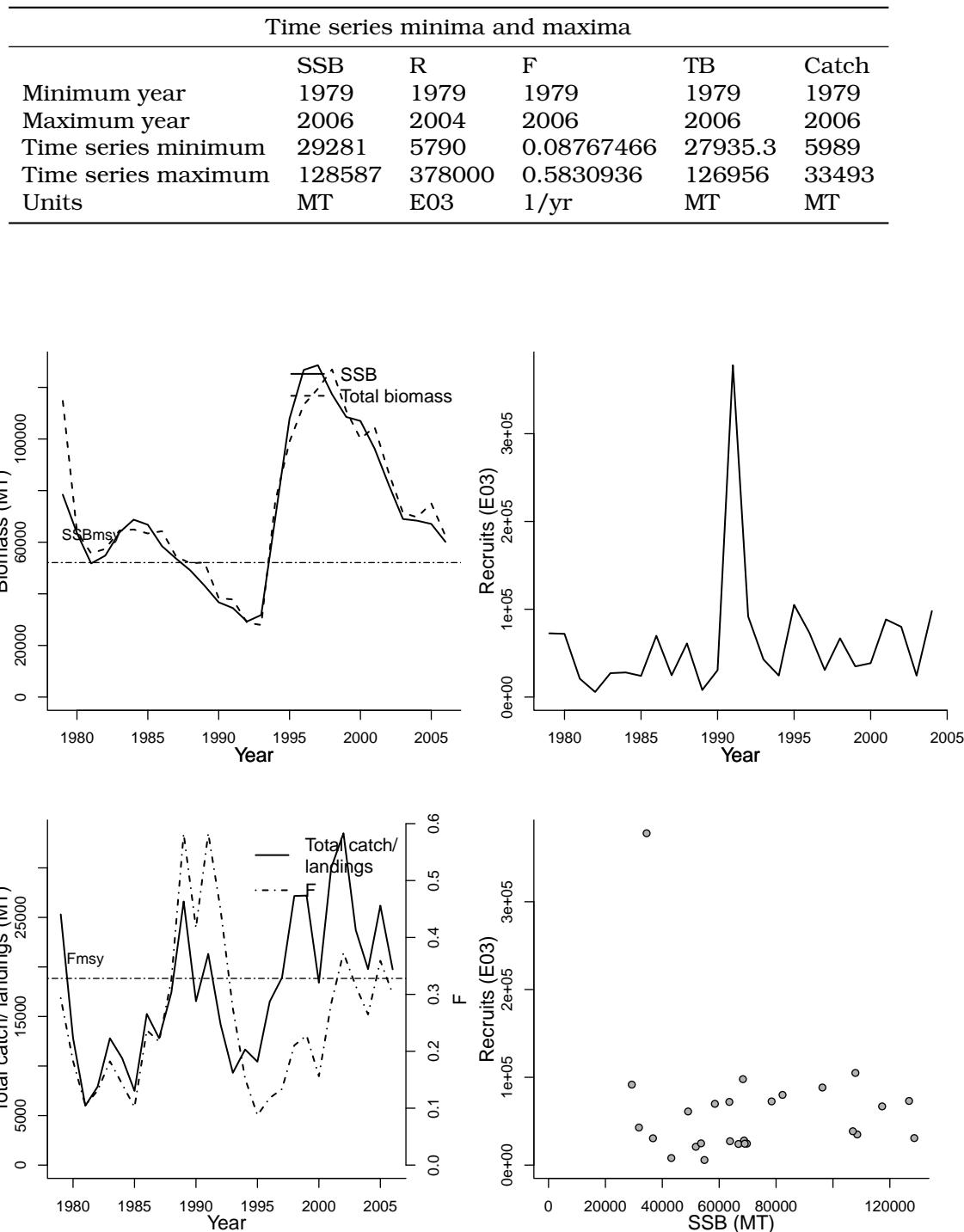
Area ID: New Zealand-MFish-CIR

General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1979-2006                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-09                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |            | tertiary LME |
|------------------------|-------|-------|------------------------|------------|--------------|
| 46 - New Zealand Shelf |       |       | na                     | na         |              |
| Parameter              | Value | Units | Reference points       |            |              |
| REC-AGE-yr             | 2     | yr    | Parameter              | Value      | Units        |
| TB-AGE-yr              | 2     | yr    | Fmsy-1/yr (F)          | 0.328      | 1/yr         |
| A50-yr                 | 3     | yr    | SSBmsy-MT (SSB)        | 52105.0464 | MT           |
| M-1/yr                 | 0.114 | 1/yr  | MSY-MT (TB)            | 19276.2356 | MT           |
| SSB-AGE-yr             |       |       | SSB0-MT (SSB)          | 328946.0   | MT           |
| SSB-SEX-sex            |       |       | RO-E00                 | 5.84E+07   | E00          |
| F-AGE-yr               |       |       | BH-h-dimless           | 1          | dimless      |
| M                      |       |       | $F_{2006}/F_{msy}$     | 0.918      |              |
| L50-cm                 |       |       | $SSB_{2006}/SSB_{msy}$ | 1.154      |              |



# Assessment of Chatham Rise southern hake (*Merluccius australis*)

## Assessment

ID:NZMFishMIDDEPTHSWG-SOUTHHAKECR-1975-2006-JENSEN  
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/180>

Area ID: New Zealand-MFish-CR

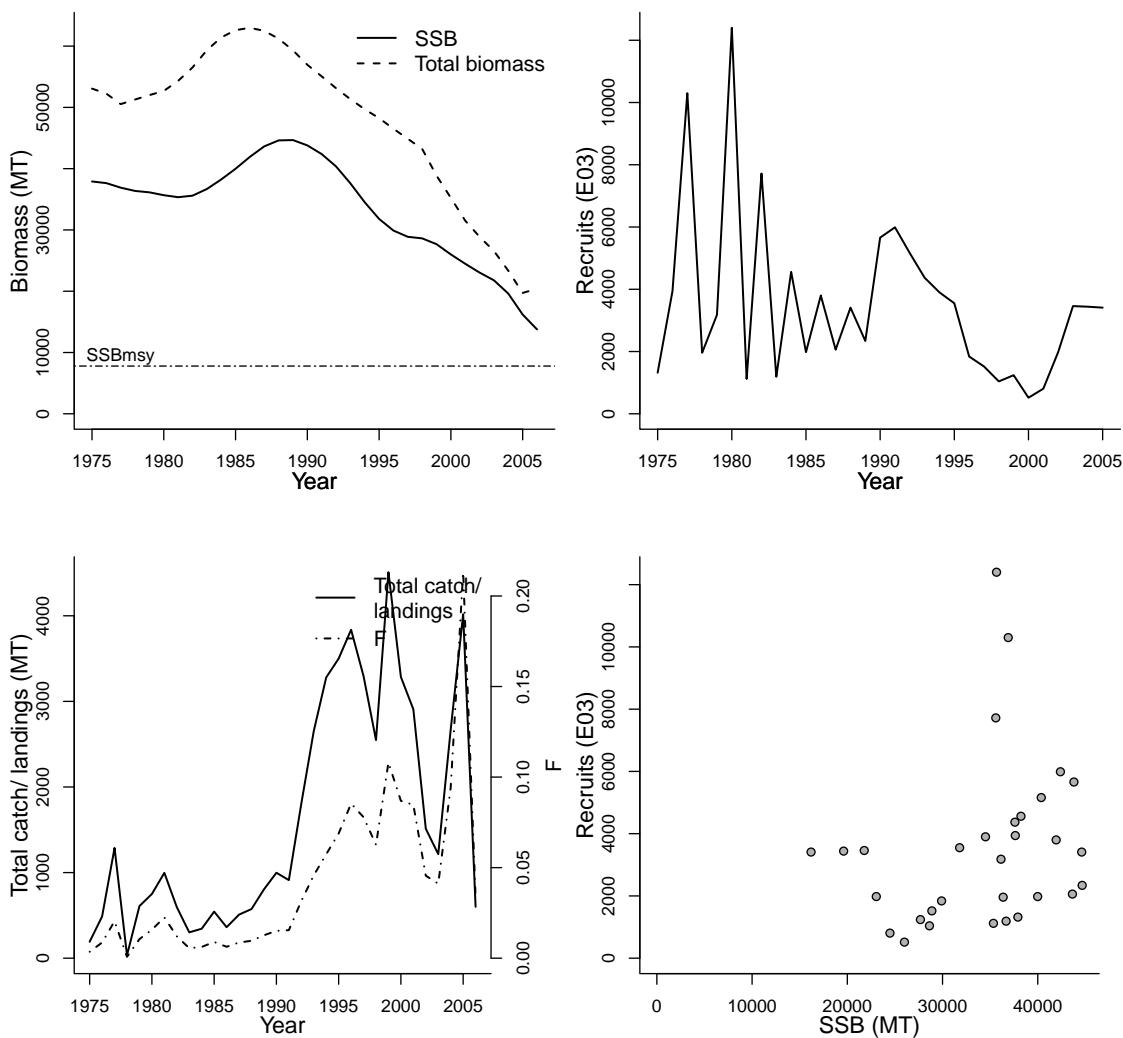
### General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1975-2006                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-11                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME           | tertiary LME |         |
|------------------------|-------|-------|-------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                      | na           |         |
| Parameter              | Value | Units | Reference points        |              |         |
| REC-AGE-yr             | 1     | yr    | Parameter               | Value        | Units   |
| TB-AGE-yr              | 1     | yr    | Fmsy-1/yr (F)           | 2.90E-01     | 1/yr    |
| A50-yr                 | 7     | yr    | MSY-MT (TB)             | 3042.60651   | MT      |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)         | 7786.9455    | MT      |
| SSB-AGE-yr             |       |       | SSB0-MT (SSB)           | 37985.1      | MT      |
| SSB-SEX-sex            |       |       | BH-h-dimless            | 0.9          | dimless |
| F-AGE-yr               |       |       | $F_{2006}/F_{m sy}$     | 0.116        |         |
| M                      |       |       | $SSB_{2006}/SSB_{m sy}$ | 1.768        |         |
| L50-cm                 |       |       |                         |              |         |

| Time series minima and maxima |         |       |              |         |
|-------------------------------|---------|-------|--------------|---------|
|                               | SSB     | R     | F            | TB      |
| Minimum year                  | 1975    | 1975  | 1975         | 1975    |
| Maximum year                  | 2006    | 2005  | 2006         | 2006    |
| Time series minimum           | 13770.4 | 516   | 0.0007420451 | 19723.6 |
| Time series maximum           | 44663.7 | 12400 | 0.2131267    | 62986.5 |
| Units                         | MT      | E03   | 1/yr         | MT      |



# Assessment of Sub-Antarctic southern hake (*Merluccius australis*)

## Assessment

ID:NZMFishMIDDEPTHSWG-SOUTHHAKESA-1975-2007-JENSEN  
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/181>

Area ID: New Zealand-MFish-SA

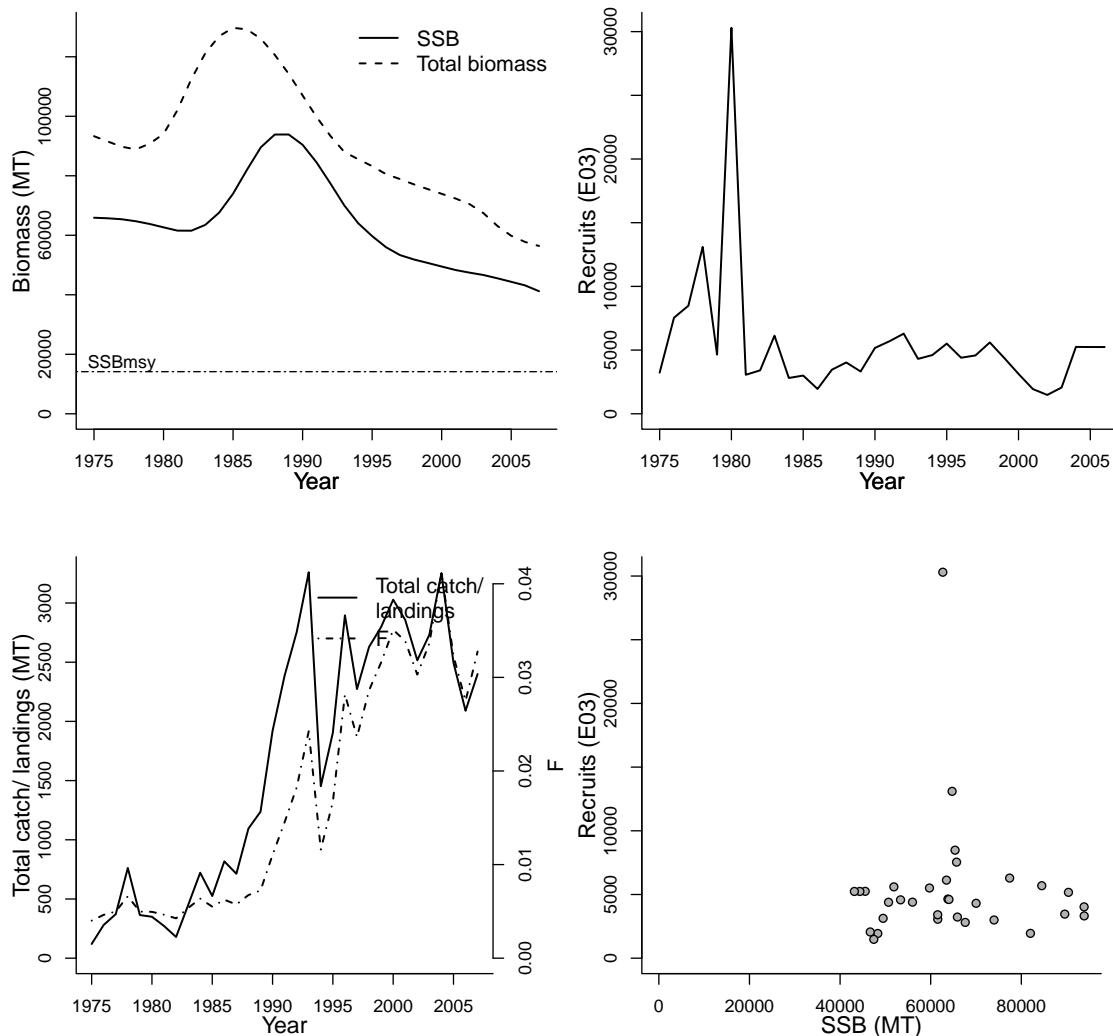
General assessment details.

| Detail             | Value                                    |
|--------------------|--|
| Management body    | MFish                                    |
| Assessment group   | Middle Depths Working Group              |
| Assessment authors | Cordue, PatrickL.                        |
| Assessment method  | CASAL                                    |
| Publication year   |  |
| Timeseries span    | 1975-2007                                |
| Document           | CORDUEperscomm.pdf (pdf not in database) |
| Recorder           | JENSEN                                   |
| Date entered       | 2009-03-11                               |
| Date last loaded   | 2011-07-25                               |
| QA/QC complete     | YES                                      |
| Date approved      | 2011-06-10                               |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          | tertiary LME |         |
|------------------------|-------|-------|------------------------|--------------|---------|
| 46 - New Zealand Shelf |       |       | na                     | na           |         |
| Parameter              | Value | Units | Reference points       |              |         |
| REC-AGE-yr             | 1     | yr    | Parameter              | Value        | Units   |
| TB-AGE-yr              | 1     | yr    | Fmsy-1/yr (F)          | 0.307        | 1/yr    |
| A50-yr                 | 7.25  | yr    | MSY-MT (TB)            | 5810.2831    | MT      |
| M-1/yr                 | 0.18  | 1/yr  | SSBmsy-MT (SSB)        | 14153.0846   | MT      |
| SSB-AGE-yr             |       |       | SSB0-MT (SSB)          | 65951        | MT      |
| SSB-SEX-sex            |       |       | BH-h-dimless           | 0.9          | dimless |
| F-AGE-yr               |       |       | $F_{2007}/F_{msy}$     | 0.107        |         |
| M                      |       |       | $SSB_{2007}/SSB_{msy}$ | 2.911        |         |
| L50-cm                 |       |       |                        |              |         |

| Time series minima and maxima |         |       |             |         |
|-------------------------------|---------|-------|-------------|---------|
|                               | SSB     | R     | F           | TB      |
| Minimum year                  | 1975    | 1975  | 1975        | 1975    |
| Maximum year                  | 2007    | 2006  | 2007        | 2007    |
| Time series minimum           | 41198.1 | 1480  | 0.004012136 | 56399.5 |
| Time series maximum           | 93878.8 | 30300 | 0.04123631  | 129739  |
| Units                         | MT      | E03   | 1/yr        | MT      |



# Assessment of New Zealand Area PAU 5A new zealand abalone species (*Haliotis iris*)

## Assessment

ID:NZMFishSHELLFISHWG-PAUAPAU5A-1964-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/183>

Area ID: New Zealand-MFish-PAU5A

### General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Shellfish Working Group            |
| Assessment authors | Breen, Paul                        |
| Assessment method  | Custom length-based Bayesian Model |
| Publication year   | 2007                               |
| Timeseries span    | 1964-2006                          |
| Document           | ref07-09-FAR.pdf (pdf in database) |
| Recorder           | JENSEN                             |
| Date entered       | 2009-03-11                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2010-12-16                         |

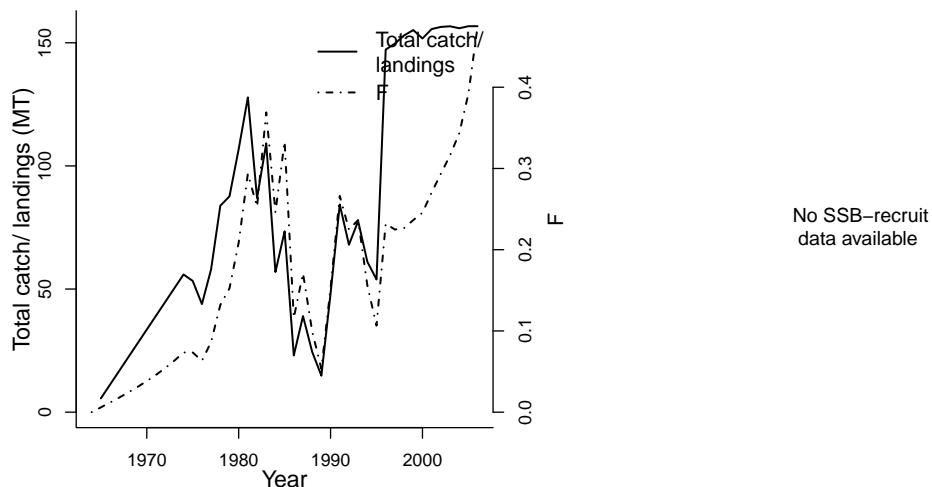
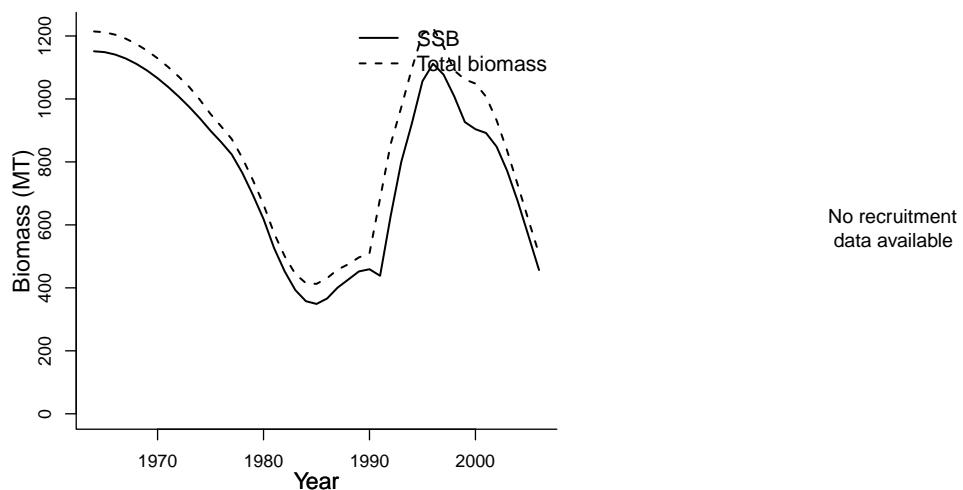
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |         |   |          |          |
|-------------------------------|---------|---|----------|----------|
|                               | SSB     | R | F        | TB       |
| Minimum year                  | 1964    |   | 1964     | 1964     |
| Maximum year                  | 2006    |   | 2006     | 2006     |
| Time series minimum           | 348.871 |   | 0        | 412.6615 |
| Time series maximum           | 1151.38 |   | 0.475108 | 1225.96  |
| Units                         | MT      |   | ratio    | MT       |
|                               |         |   |          | MT       |



# Assessment of New Zealand Area PAU 5B (Stewart Island) new zealand abalone species (*Haliotis iris*)

## Assessment

ID:NZMFishSHELLFISHWG-PAUAPAU5B-1963-2007-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/185>

Area ID: New Zealand-MFish-PAU5B

## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Shellfish Working Group            |
| Assessment authors | Breen, Paul A.                     |
| Assessment method  | Custom length-based Bayesian Model |
| Publication year   | 1963-2007                          |
| Timeseries span    | ref08-05-FAR.pdf (pdf in database) |
| Document           | JENSEN                             |
| Recorder           |                                    |
| Date entered       | 2009-03-11                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

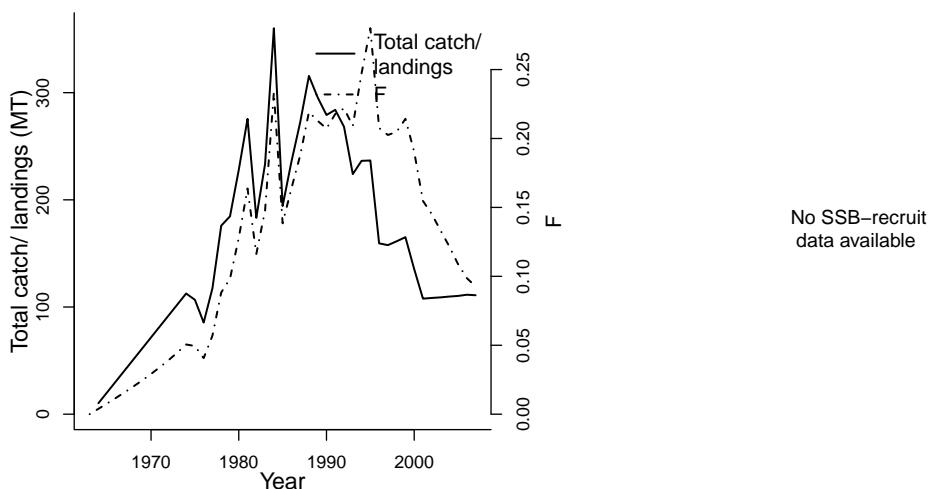
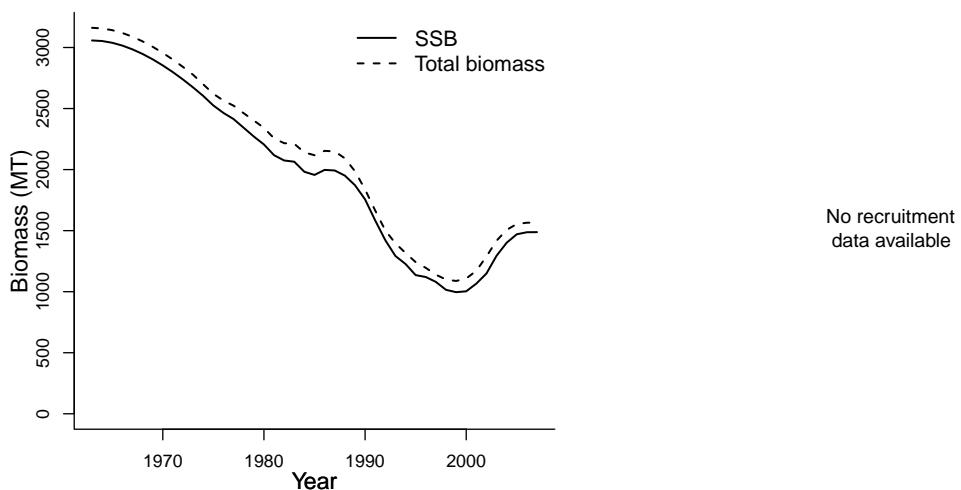
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| <hr/>                  |               |              |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |          |   |           |          |
|-------------------------------|----------|---|-----------|----------|
|                               | SSB      | R | F         | TB       |
| Minimum year                  | 1963     |   | 1963      | 1963     |
| Maximum year                  | 2007     |   | 2007      | 2007     |
| Time series minimum           | 995.966  |   | 0         | 1087.835 |
| Time series maximum           | 3057.775 |   | 0.2800015 | 3161.35  |
| Units                         | MT       |   | ratio     | MT       |



# Assessment of New Zealand Area PAU 5D (Otago) new zealand abalone species (*Haliotis iris*)

## Assessment

ID:NZMFishSHELLFISHWG-PAUAPAU5D-1964-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/184>

Area ID: New Zealand-MFish-PAU5D

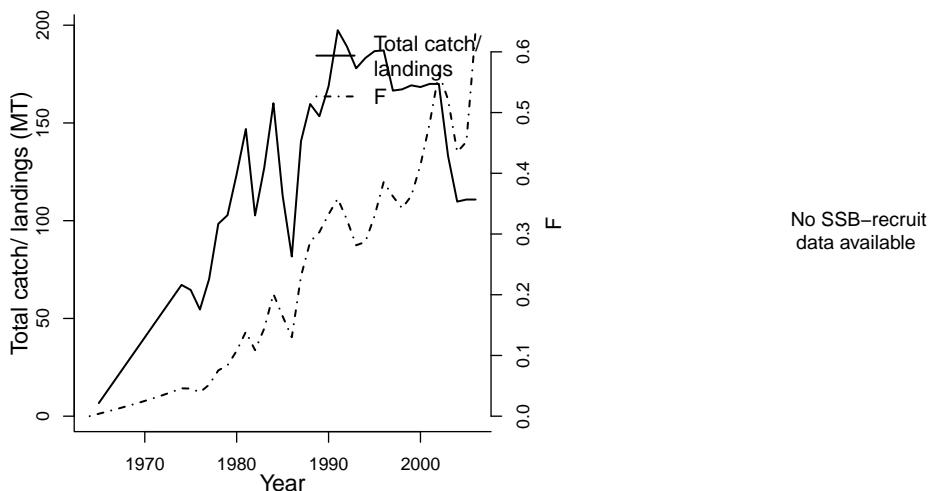
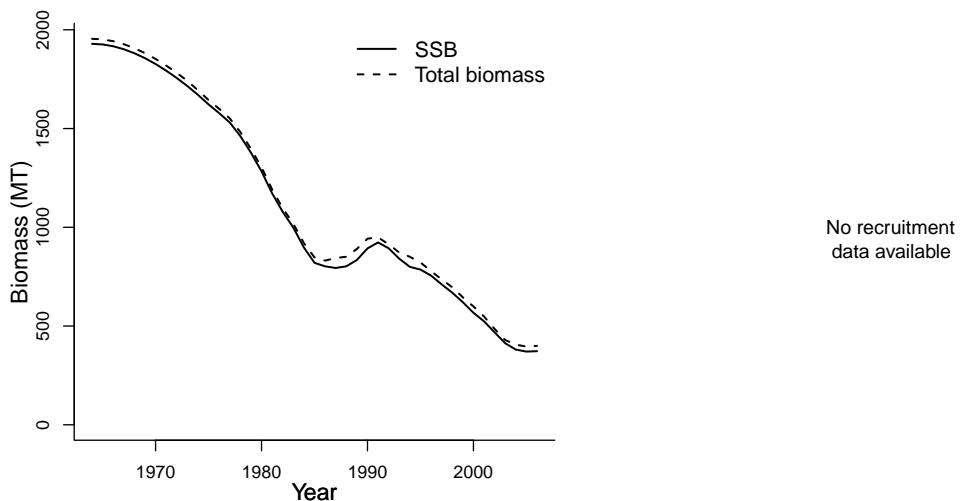
General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Shellfish Working Group            |
| Assessment authors | Breen, Paul                        |
| Assessment method  | Custom length-based Bayesian Model |
| Publication year   | 2007                               |
| Timeseries span    | 1964-2006                          |
| Document           | ref07-09-FAR.pdf (pdf in database) |
| Recorder           | JENSEN                             |
| Date entered       | 2009-03-11                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |                  |           |       |       |
|------------------------|---------------|--------------|------------------|-----------|-------|-------|
| 46 - New Zealand Shelf | na            | na           |                  |           |       |       |
| Parameter              | Value         | Units        | Reference points | Parameter | Value | Units |
| REC-AGE                |               |              |                  |           |       |       |
| SSB-AGE-yr             |               |              |                  |           |       |       |
| SSB-SEX-sex            |               |              |                  |           |       |       |
| TB-AGE-yr              |               |              |                  |           |       |       |
| F-AGE-yr               |               |              |                  |           |       |       |
| M                      |               |              |                  |           |       |       |
| A50-yr                 |               |              |                  |           |       |       |
| L50-cm                 |               |              |                  |           |       |       |

| Time series minima and maxima |          |   |           |         |
|-------------------------------|----------|---|-----------|---------|
|                               | SSB      | R | F         | TB      |
| Minimum year                  | 1964     |   | 1964      | 1964    |
| Maximum year                  | 2006     |   | 2006      | 2006    |
| Time series minimum           | 370.6535 |   | 0         | 395.837 |
| Time series maximum           | 1928.83  |   | 0.6356325 | 1954.34 |
| Units                         | MT       |   | ratio     | MT      |



# Assessment of New Zealand Area PAU 7 (Marlborough) new zealand abalone species (*Haliotis iris*)

## Assessment

ID:NZMFishSHELLFISHWG-PAUAPAU7-1964-2008-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/186>

Area ID: New Zealand-MFish-PAU7

## General assessment details.

| Detail             | Value                              |
|--------------------|------------------------------------|
| Management body    | MFish                              |
| Assessment group   | Shellfish Working Group            |
| Assessment authors | McKenzie, Andy                     |
| Assessment method  | Custom length-based Bayesian Model |
| Publication year   | 1964-2008                          |
| Timeseries span    | ref09-34-FAR.pdf (pdf in database) |
| Document           | JENSEN                             |
| Recorder           |                                    |
| Date entered       | 2009-03-11                         |
| Date last loaded   | 2011-07-25                         |
| QA/QC complete     | YES                                |
| Date approved      | 2011-06-10                         |

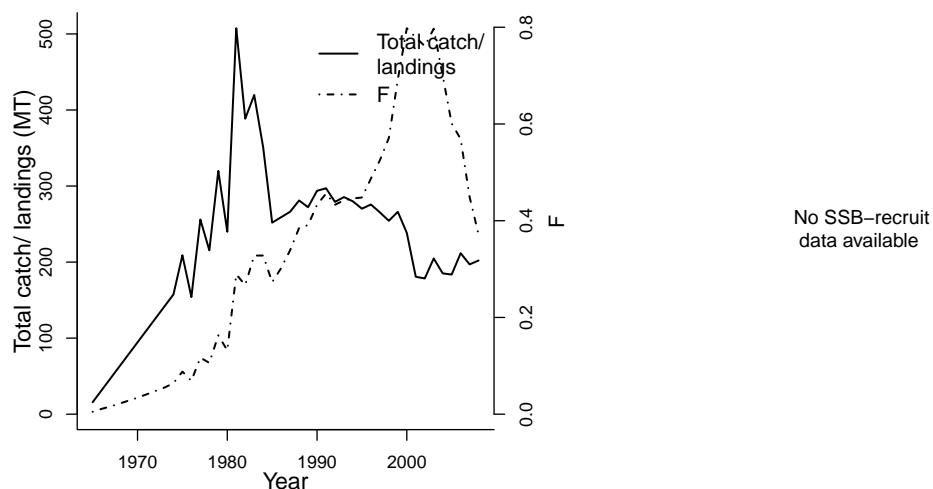
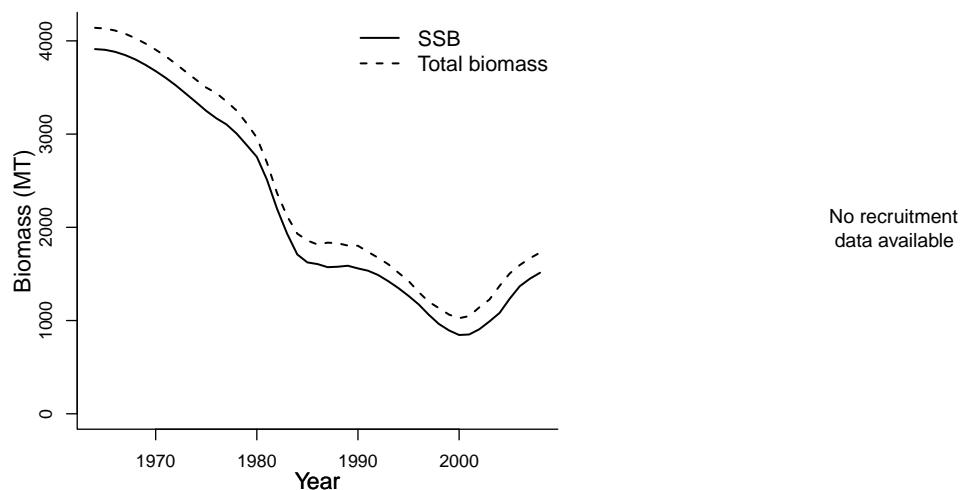
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME | tertiary LME |
|------------------------|---------------|--------------|
| 46 - New Zealand Shelf | na            | na           |
| Parameter              | Value         | Units        |
| REC-AGE                |               |              |
| SSB-AGE-yr             |               |              |
| SSB-SEX-sex            |               |              |
| TB-AGE-yr              |               |              |
| F-AGE-yr               |               |              |
| M                      |               |              |
| A50-yr                 |               |              |
| L50-cm                 |               |              |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |

| Time series minima and maxima |         |   |       |         |
|-------------------------------|---------|---|-------|---------|
|                               | SSB     | R | F     | TB      |
| Minimum year                  | 1964    |   | 1965  | 1964    |
| Maximum year                  | 2008    |   | 2008  | 2008    |
| Time series minimum           | 845.1   |   | 0.005 | 1025.2  |
| Time series maximum           | 3911.64 |   | 0.798 | 4140.13 |
| Units                         | MT      |   | ratio | MT      |



# Assessment of Northern Pacific Coast lingcod

## (*Ophiodon elongatus*)

Assessment ID:PFMC-LINGCODNPCOAST-1956-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/345>

Area ID: USA-NMFS-NPCOAST

General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | NMFS                                       |
| Assessment group   | Pacific Fishery Management Council         |
| Assessment authors | Jagiolo, Thomas                            |
| Assessment method  | Stock Synthesis v2.0 model                 |
| Publication year   | 2005                                       |
| Timeseries span    | 1956-2005                                  |
| Document           | 2005-SAFE-WClingscod.pdf (pdf in database) |
| Recorder           | STANTON                                    |
| Date entered       | 2009-05-20                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

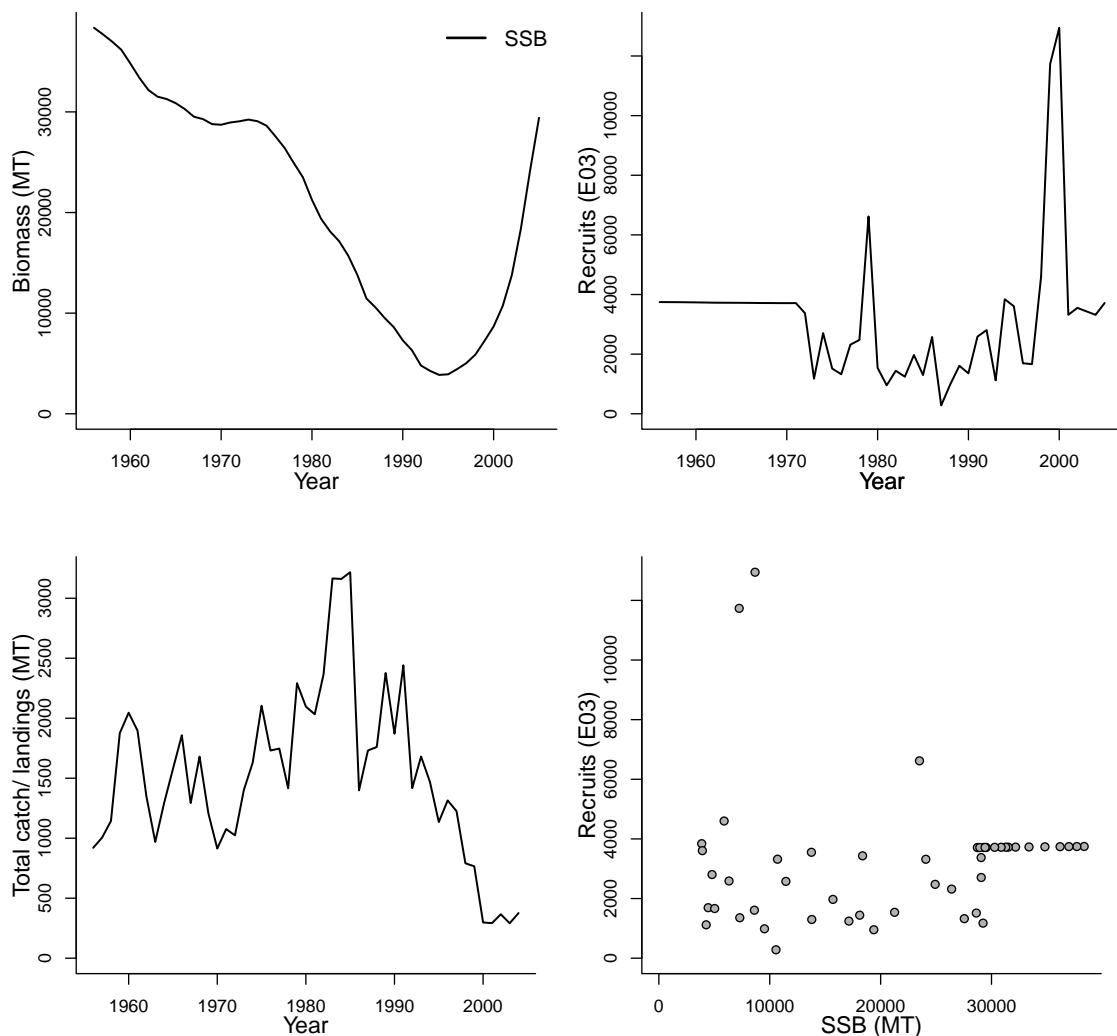
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       | secondary LME | tertiary LME     |
|------------------------|-------|---------------|------------------|
| 3 - California Current |       | na            | na               |
| Parameter              | Value | Units         |                  |
| SSB-SEX-sex            | 1     | sex           |                  |
| REC-AGE-yr             | 0     | yr            |                  |
| M-1/yr                 | 0.18  | 1/yr          | Reference points |
| NATMORT-1/yr           | 0.18  | 1/yr          | Parameter        |
| SSB-AGE-yr             |       |               | Value            |
| TB-AGE-yr              |       |               | Units            |
| F-AGE-yr               |       |               |                  |
| M                      |       |               |                  |
| A50-yr                 |       |               |                  |
| L50-cm                 |       |               |                  |

| Parameter        | Value | Units |
|------------------|-------|-------|
| NATMORT-1/yr (M) | 0.18  | 1/yr  |
| SSB0-MT (SSB)    | 52850 | MT    |

| Time series minima and maxima |       |       |   |      |
|-------------------------------|-------|-------|---|------|
|                               | SSB   | R     | F | TB   |
| Minimum year                  | 1956  | 1956  |   | 1956 |
| Maximum year                  | 2005  | 2005  |   | 2004 |
| Time series minimum           | 3864  | 282   |   | 291  |
| Time series maximum           | 38357 | 12945 |   | 3217 |
| Units                         | MT    | E03   |   | MT   |



# Assessment of Southern Pacific Coast lingcod

## (*Ophiodon elongatus*)

Assessment ID:PFMC-LINGCODSPCOAST-1956-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/346>

Area ID: USA-NMFS-SPCOAST

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Pacific Fishery Management Council              |
| Assessment authors | Jagiolo, Thomas                                 |
| Assessment method  | Stock Synthesis v2.0 model                      |
| Publication year   | 2005  |
| Timeseries span    | 1956-2005                                       |
| Document           | 2005_SAFE_Wcliningcod.pdf (pdf not in database) |
| Recorder           | STANTON   |
| Date entered       | 2009-05-20                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

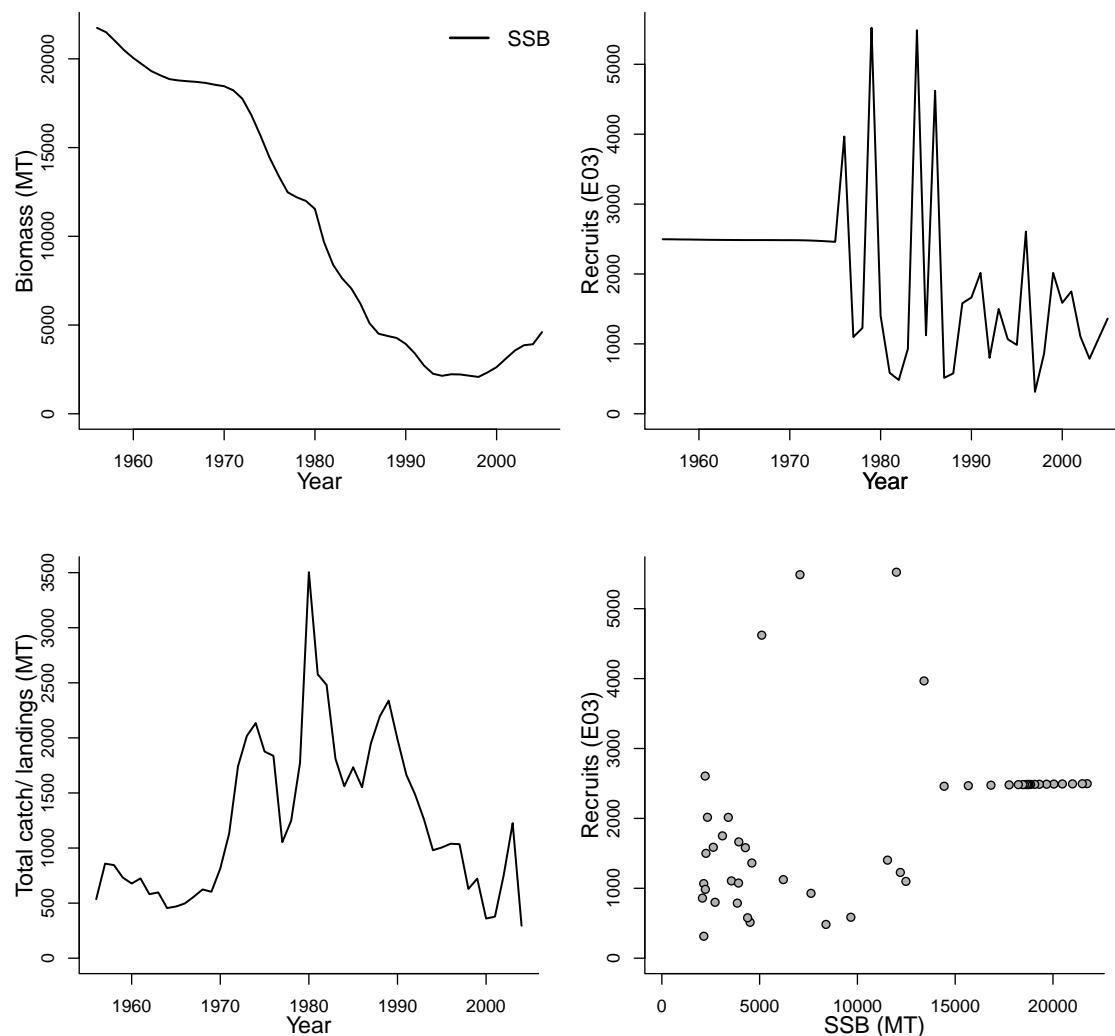
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       | secondary LME | tertiary LME     |
|------------------------|-------|---------------|------------------|
| 3 - California Current |       | na            | na               |
| Parameter              | Value | Units         |                  |
| SSB-SEX-sex            | 1     | sex           |                  |
| REC-AGE-yr             | 0     | yr            |                  |
| M-1/yr                 | 0.18  | 1/yr          | Reference points |
| NATMORT-1/yr           | 0.18  | 1/yr          | Parameter        |
| SSB-AGE-yr             |       |               | Value            |
| TB-AGE-yr              |       |               | Units            |
| F-AGE-yr               |       |               |                  |
| M                      |       |               |                  |
| A50-yr                 |       |               |                  |
| L50-cm                 |       |               |                  |

| Parameter        | Value | Units |
|------------------|-------|-------|
| NATMORT-1/yr (M) | 0.18  | 1/yr  |
| SSB0-MT (SSB)    | 52850 | MT    |

| Time series minima and maxima |       |      |   |      |
|-------------------------------|-------|------|---|------|
|                               | SSB   | R    | F | TB   |
| Minimum year                  | 1956  | 1956 |   | 1956 |
| Maximum year                  | 2005  | 2005 |   | 2004 |
| Time series minimum           | 2075  | 314  |   | 295  |
| Time series maximum           | 21749 | 5522 |   | 3504 |
| Units                         | MT    | E03  |   | MT   |



# Assessment of Rhode Island american lobster (*Homarus americanus*)

Assessment ID: RIDEM-LOBSTERRI-1959-2007-COLLIE

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/312>

Area ID: USA-US State-RI

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | US State  |
| Assessment group   | Rhode Island Department of Environmental Management |
| Assessment authors | Gibson, Mark  |
| Assessment method  | Age-aggregated surplus production model             |
| Publication year   | 2008  |
| Timeseries span    | 1959-2007   |
| Document           | NULL (pdf not in database)                          |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-13  |

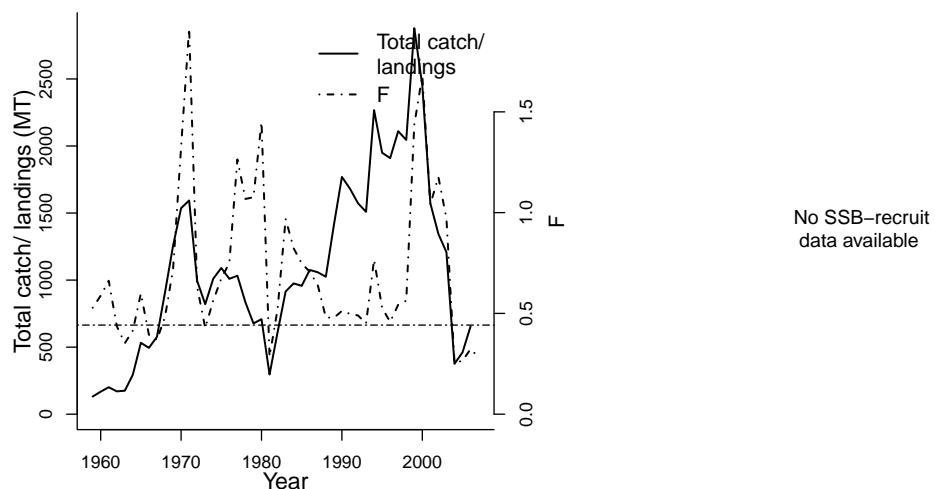
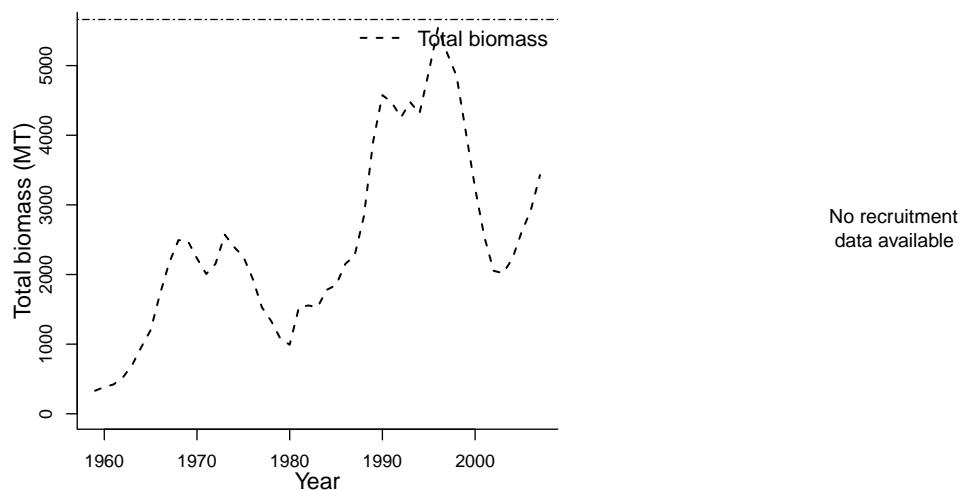
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME | tertiary LME |
|--------------------------------------|---------------|--------------|
| 7 - Northeast U.S. Continental Shelf | na            | na           |
| Parameter                            | Value         | Units        |
| REC-AGE                              |               |              |
| SSB-AGE-yr                           |               |              |
| SSB-SEX-sex                          |               |              |
| TB-AGE-yr                            |               |              |
| F-AGE-yr                             |               |              |
| M                                    |               |              |
| A50-yr                               |               |              |
| L50-cm                               |               |              |

| Parameter           | Value | Units | Reference points |
|---------------------|-------|-------|------------------|
| Bmsy-MT (TB)        | 5662  | MT    | Parameter        |
| Fmsy-1/yr (F)       | 0.442 | 1/yr  | Value            |
| Fext-1/yr (F)       | 0.884 | 1/yr  | Units            |
| $TB_{2007}/B_{msy}$ | 0.606 |       |                  |
| $F_{2007}/F_{msy}$  | 0.640 |       |                  |

| Time series minima and maxima |       |   |          |          |
|-------------------------------|-------|---|----------|----------|
|                               | SSB   | R | F        | TB       |
| Minimum year                  |       |   | 1959     | 1959     |
| Maximum year                  |       |   | 2007     | 2007     |
| Time series minimum           | 0.255 |   | 330.892  | 131.581  |
| Time series maximum           | 1.915 |   | 5542.814 | 2878.455 |
| Units                         | 1/T   |   | MT       | MT       |



# Assessment of Rhode Island tautog (*Tautoga onitis*)

Assessment ID: RIDEM-TAUTOGRI-1959-2007-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/313>

Area ID: USA-US State-RI

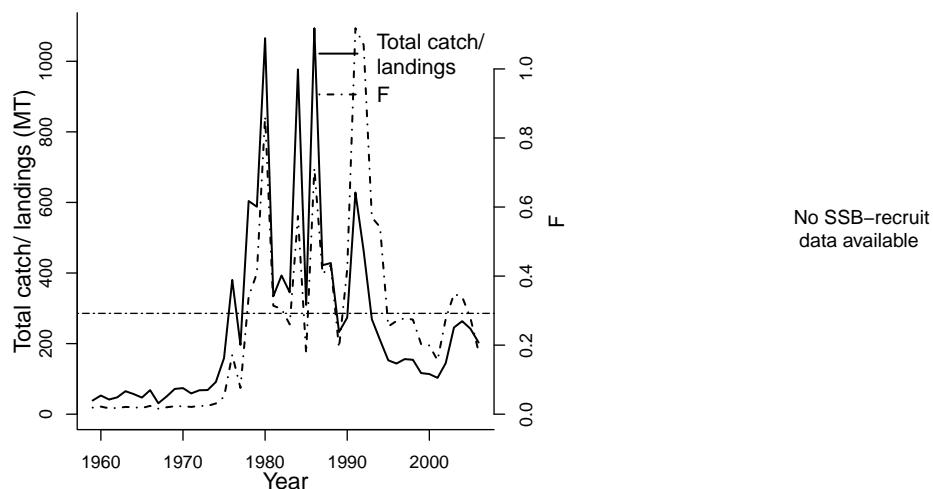
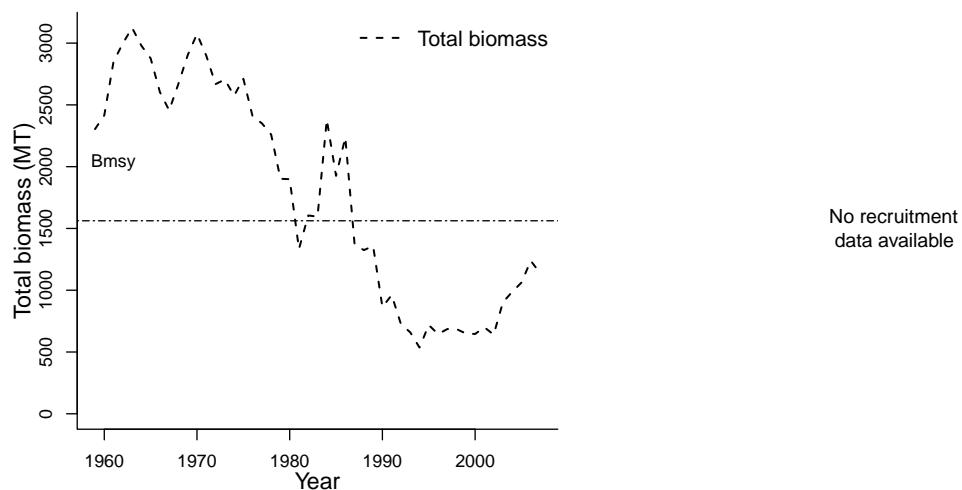
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | US State  |
| Assessment group   | Rhode Island Department of Environmental Management |
| Assessment authors | Gibson, Mark  |
| Assessment method  | Age-aggregated surplus production model             |
| Publication year   | 2008  |
| Timeseries span    | 1959-2007   |
| Document           | NULL (pdf not in database)                          |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       |        | tertiary LME |
|--------------------------------------|-------|-------|---------------------|--------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na     |              |
| Parameter                            | Value | Units | Reference points    |        |              |
| REC-AGE                              |       |       | Parameter           | Value  | Units        |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)         | 369.56 | MT           |
| SSB-SEX-sex                          |       |       | Fmsy-1/yr (F)       | 0.292  | 1/yr         |
| TB-AGE-yr                            |       |       | Fext-1/yr (F)       | 0.584  | 1/yr         |
| F-AGE-yr                             |       |       | Bmsy-MT (TB)        | 1562   | MT           |
| M                                    |       |       | $TB_{2007}/B_{msy}$ | 0.729  |              |
| A50-yr                               |       |       | $F_{2006}/F_{msy}$  | 0.620  |              |
| L50-cm                               |       |       |                     |        |              |

| Time series minima and maxima |       |       |         |          |      |
|-------------------------------|-------|-------|---------|----------|------|
|                               | SSB   | R     | F       | TB       |      |
| Minimum year                  |       |       | 1959    | 1959     | 1959 |
| Maximum year                  |       |       | 2006    | 2007     | 2006 |
| Time series minimum           | 0.016 |       | 536.293 | 30.997   |      |
| Time series maximum           |       | 1.118 | 3123.86 | 1093.669 |      |
| Units                         | 1/T   |       | MT      | MT       |      |



# Assessment of Rhode Island winter flounder (*Pseudopleuronectes americanus*)

Assessment ID: RIDEM-WINFLOUNDRI-1959-2007-COLLIE

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/314>

Area ID: USA-US State-RI

## General assessment details.

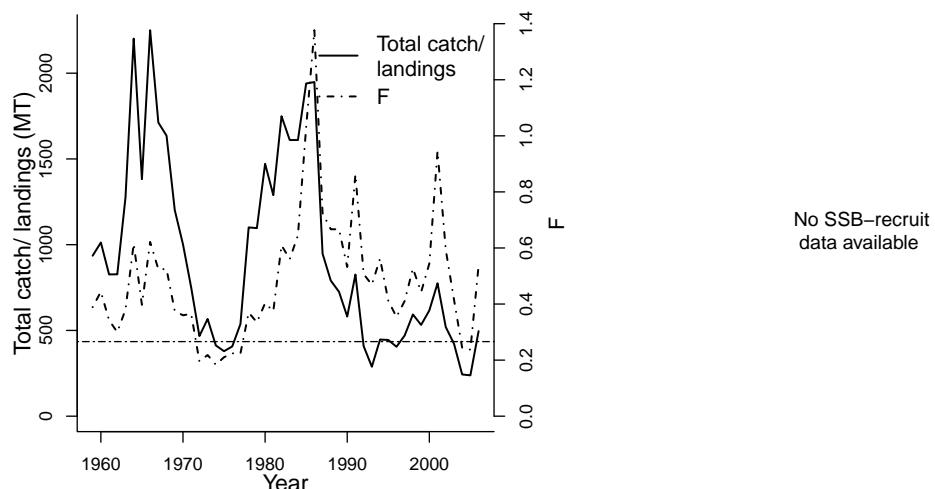
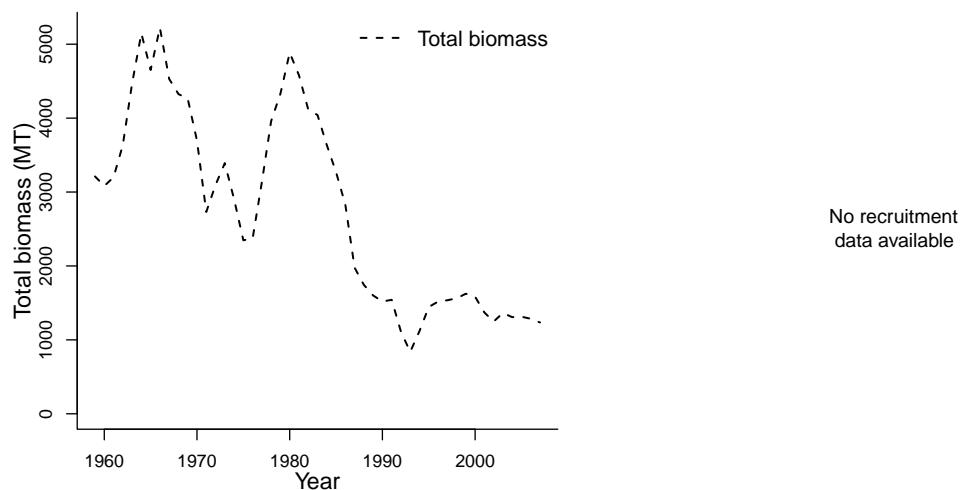
| Detail             | Value   |
|--------------------|---|
| Management body    | US State  |
| Assessment group   | Rhode Island Department of Environmental Management   |
| Assessment authors | Gibson, Mark, Rhode Island Department of Environmental Management, <a href="mailto:jmark.gibson@dem.ri.gov">jmark.gibson@dem.ri.gov</a> |
| Assessment method  | Age-aggregated surplus production model   |
| Publication year   | 2008  |
| Timeseries span    | 1959-2007   |
| Document           | NULL (pdf not in database)  |
| Recorder           | COLLIE  |
| Date entered       | 2008-04-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-14  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME       |       | tertiary LME |
|--------------------------------------|-------|-------|---------------------|-------|--------------|
| 7 - Northeast U.S. Continental Shelf |       |       | na                  | na    |              |
| Parameter                            | Value | Units | Parameter           | Value | Units        |
| M-1/T                                | 0.2   | 1/T   | Bmsy-MT (TB)        | 5478  | MT           |
| REC-AGE                              |       |       | Fmsy-1/yr (F)       | 0.266 | 1/yr         |
| SSB-AGE-yr                           |       |       | Fext-1/yr (F)       | 0.532 | 1/yr         |
| SSB-SEX-sex                          |       |       | $TB_{2007}/B_{msy}$ | 0.225 |              |
| TB-AGE-yr                            |       |       | $F_{2006}/F_{msy}$  | 2.022 |              |
| F-AGE-yr                             |       |       |                     |       |              |
| M                                    |       |       |                     |       |              |
| A50-yr                               |       |       |                     |       |              |
| L50-cm                               |       |       |                     |       |              |

## Time series minima and maxima

|                     | SSB | R | F      | TB        | Catch     |
|---------------------|-----|---|--------|-----------|-----------|
| Minimum year        |     |   | 1959   | 1959      | 1959      |
| Maximum year        |     |   | 2006   | 2007      | 2006      |
| Time series minimum |     |   | 0.1836 | 837.8442  | 238.1142  |
| Time series maximum |     |   | 1.3767 | 5222.0217 | 2250.6061 |
| Units               |     |   | 1/yr   | MT        | MT        |



# Assessment of Atlantic bonnethead shark (*Sphyrna tiburo*)

Assessment ID:SEFSC-BHEADSHARATL-1950-2005-FAUCONNET  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/326>

Area ID: USA-NMFS-ATL

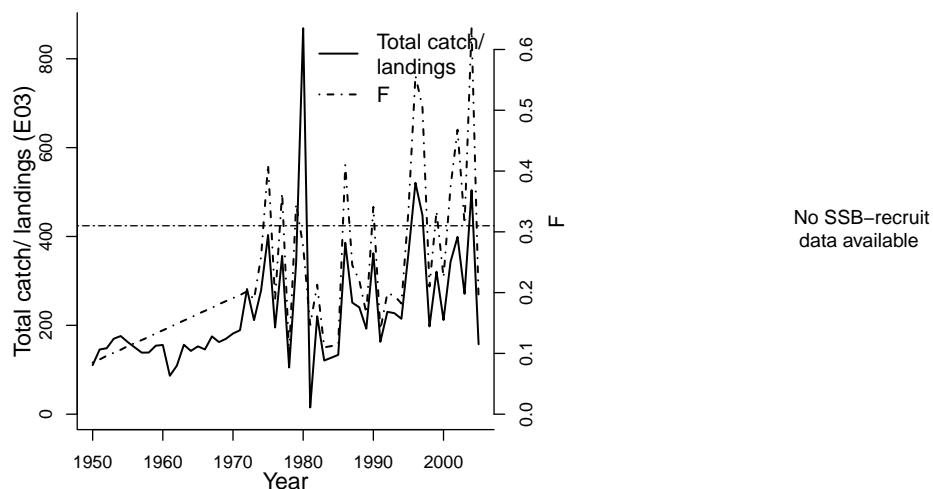
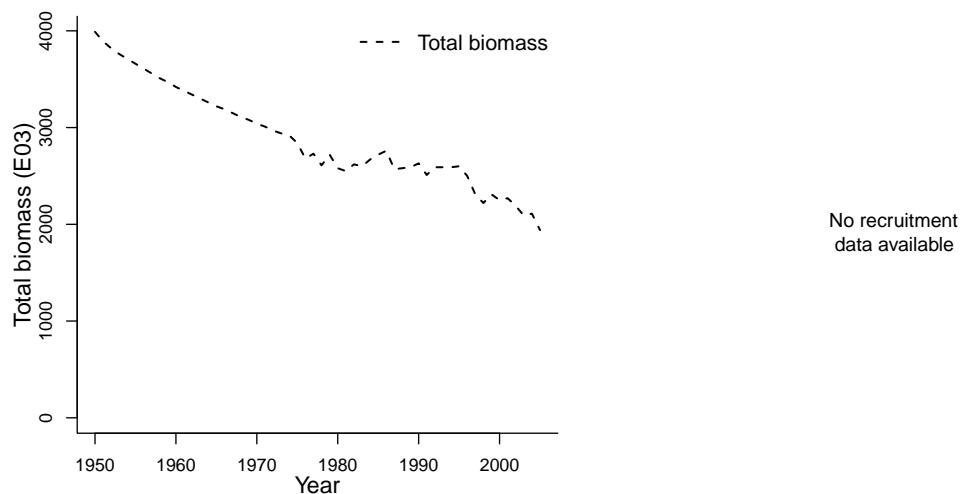
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Brooks, Liz                                     |
| Assessment method  | Age-structured surplus production model         |
| Publication year   | 2007  |
| Timeseries span    | 1950-2005                                       |
| Document           | SmallcoastalAtl2007-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-08                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |        |       | secondary LME                        |          |         | tertiary LME |       |       |
|--------------------------------------|--------|-------|--------------------------------------|----------|---------|--------------|-------|-------|
| 6 - Southeast U.S. Continental Shelf |        |       | 7 - Northeast U.S. Continental Shelf |          |         | na           |       |       |
| Parameter                            | Value  | Units | Parameter                            | Value    | Units   | Parameter    | Value | Units |
| SSB-AGE-yr                           | 3.5    | yr    | Fmsy-1/yr (F)                        | 0.31     | 1/yr    |              |       |       |
| SSB-SEX-sex                          | 1      | sex   | Fcurrent-1/T (F)                     | 0.19     | 1/T     |              |       |       |
| REC-AGE-yr                           | age 1? | yr    | MSY-MT (TB)                          | 568871   | MT      |              |       |       |
| TB-AGE-yr                            |        |       | SPRmsy-E00                           | 0.42     | E00     |              |       |       |
| F-AGE-yr                             |        |       | SSFmsy-E00                           | 1.99E+06 | E00     |              |       |       |
| M                                    |        |       | Nmsy-E00                             | 1.92E+06 | E00     |              |       |       |
| A50-yr                               |        |       | BH-h-dimless                         | 0.44     | dimless |              |       |       |
| L50-cm                               |        |       | $F_{2005}/F_{msy}$                   | 0.606    |         |              |       |       |

| Time series minima and maxima |       |   |      |         |
|-------------------------------|-------|---|------|---------|
|                               | SSB   | R | F    | TB      |
| Minimum year                  |       |   | 1950 | 1950    |
| Maximum year                  |       |   | 2005 | 2005    |
| Time series minimum           | 0.085 |   | 1940 | 15.111  |
| Time series maximum           | 0.635 |   | 3990 | 868.767 |
| Units                         | 1/yr  |   | E03  | E03     |



# Assessment of Atlantic blacknose shark (*Carcharhinus acronotus*)

Assessment ID:SEFSC-BNOSESHARATL-1950-2005-FAUCONNET  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/324>

Area ID: USA-NMFS-ATL

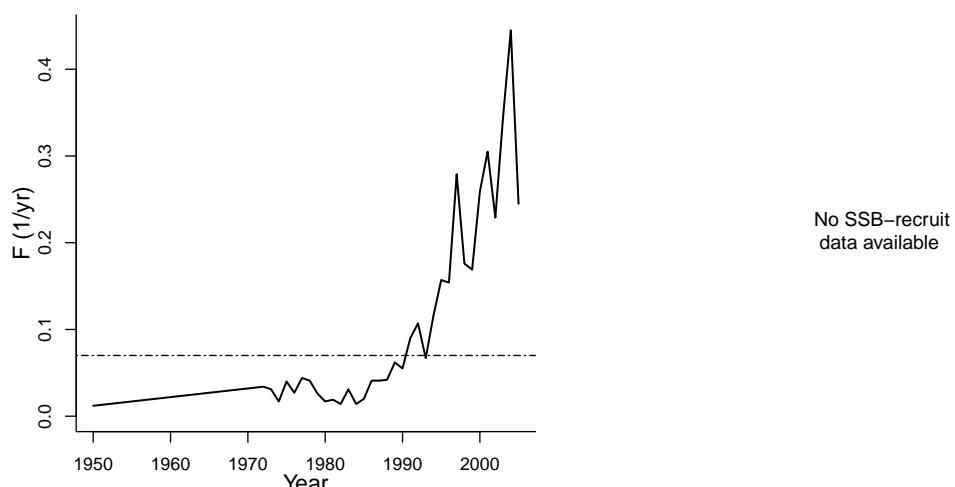
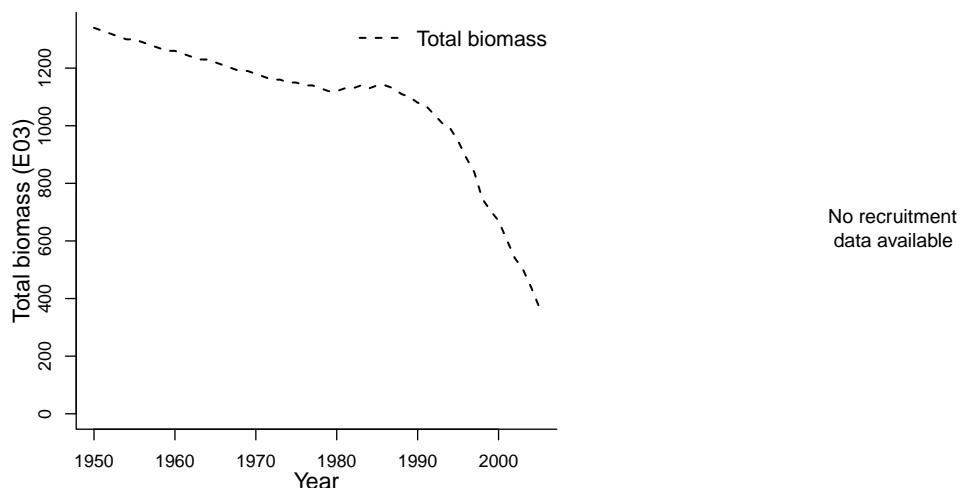
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Brooks, Liz                                     |
| Assessment method  | Age-structured surplus production model         |
| Publication year   | 2007  |
| Timeseries span    | 1950-2005                                       |
| Document           | SmallcoastalAtl2007-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-06                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                        |        |         | tertiary LME |       |       |
|--------------------------------------|-------|-------|--------------------------------------|--------|---------|--------------|-------|-------|
| 6 - Southeast U.S. Continental Shelf |       |       | 7 - Northeast U.S. Continental Shelf |        |         | na           |       |       |
| Parameter                            | Value | Units | Reference points                     |        |         | Parameter    | Value | Units |
| SSB-AGE-yr                           | 4.5   | yr    | Fmsy-1/yr (F)                        | 0.07   | 1/yr    |              |       |       |
| SSB-SEX-sex                          | 1     | sex   | Fcurrent-1/T (F)                     | 0.24   | 1/T     |              |       |       |
| REC-AGE                              |       |       | MSY-MT (TB)                          | 89.415 | MT      |              |       |       |
| TB-AGE-yr                            |       |       | SPRmsy-E00                           | 0.71   | E00     |              |       |       |
| F-AGE-yr                             |       |       | SSFmsy-E00                           | 349060 | E00     |              |       |       |
| M                                    |       |       | Nmsy-E00                             | 570753 | E00     |              |       |       |
| A50-yr                               |       |       | BH-h-dimless                         | 0.24   | dimless |              |       |       |
| L50-cm                               |       |       | $F_{2005}/F_{msy}$                   | 3.500  |         |              |       |       |

| Time series minima and maxima |     |   |       |      |       |
|-------------------------------|-----|---|-------|------|-------|
|                               | SSB | R | F     | TB   | Catch |
| Minimum year                  |     |   |       | 1950 | 1950  |
| Maximum year                  |     |   |       | 2005 | 2005  |
| Time series minimum           |     |   | 0.012 | 372  |       |
| Time series maximum           |     |   | 0.445 | 1340 |       |
| Units                         |     |   | 1/yr  | E03  |       |



# Assessment of Atlantic blacktip shark (*Carcharhinus limbatus*)

Assessment ID:SEFSC-BTIPSHARATL-1981-2004-FAUCONNET

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/321>

Area ID: USA-NMFS-ATL

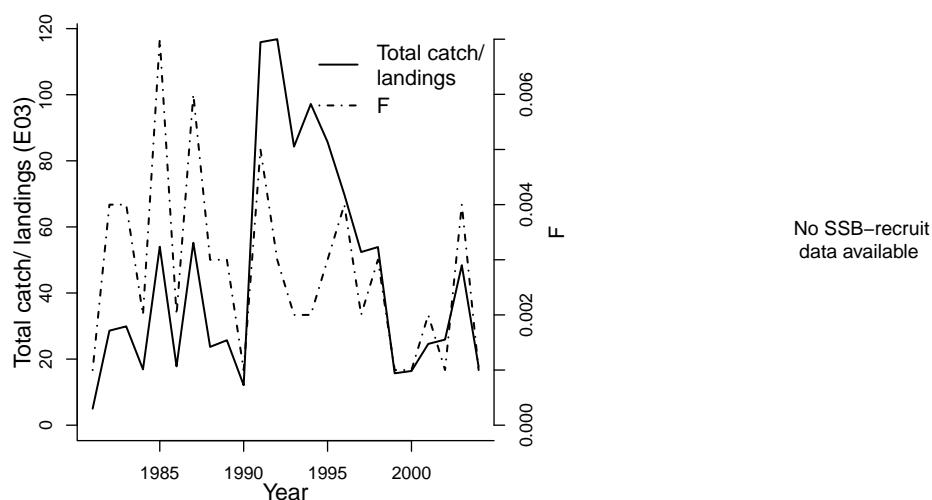
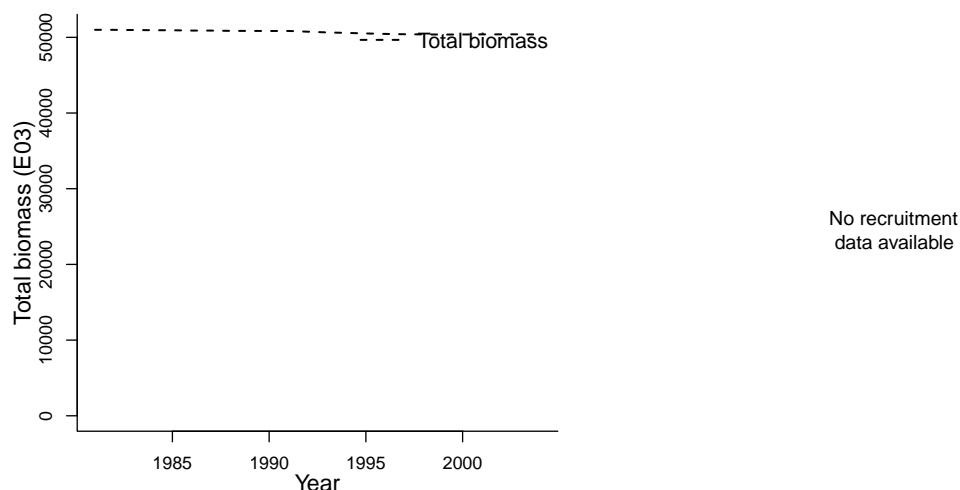
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Carlson, John                                   |
| Assessment method  | State-space age-structured production model     |
| Publication year   | 2006  |
| Timeseries span    | 1981-2004                                       |
| Document           | LargeCoastalAtl2006-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-05                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |                                      | secondary LME      |          |         | tertiary LME |
|--------------------------------------|-------|--------------------------------------|--------------------|----------|---------|--------------|
| 6 - Southeast U.S. Continental Shelf |       | 7 - Northeast U.S. Continental Shelf |                    | na       |         |              |
| Parameter                            | Value | Units                                | Reference points   |          |         |              |
| SSB-AGE-yr                           | 7.5   | yr                                   | Parameter          | Value    | Units   |              |
| SSB-SEX-sex                          | 1     | sex                                  | Fmsy-1/T (F)       | 0.2      | 1/T     |              |
| A50-yr                               | 7.5   | yr                                   | MSY-MT (TB)        | 1.49E+04 | MT      |              |
| REC-AGE                              |       |                                      | R0-E00             | 1.50E+06 | E00     |              |
| TB-AGE-yr                            |       |                                      | SPRmsy-E00         | 0.62     | E00     |              |
| F-AGE-yr                             |       |                                      | BH-h-dimless       | 0.38     | dimless |              |
| M                                    |       |                                      | $F_{2004}/F_{msy}$ | 0.005    |         |              |
| L50-cm                               |       |                                      |                    |          |         |              |

| Time series minima and maxima |     |   |       |         |
|-------------------------------|-----|---|-------|---------|
|                               | SSB | R | F     | TB      |
| Minimum year                  |     |   | 1981  | 1981    |
| Maximum year                  |     |   | 2004  | 2004    |
| Time series minimum           |     |   | 0.001 | 50365.1 |
| Time series maximum           |     |   | 0.007 | 50996.3 |
| Units                         |     |   | 1/yr  | E03     |
|                               |     |   |       | E03     |



# Assessment of Gulf of Mexico blacktip shark (*Carcharhinus limbatus*)

Assessment ID:SEFSC-BTIPSHARGM-1981-2004-FAUCONNET  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/322>

Area ID: USA-NMFS-GM

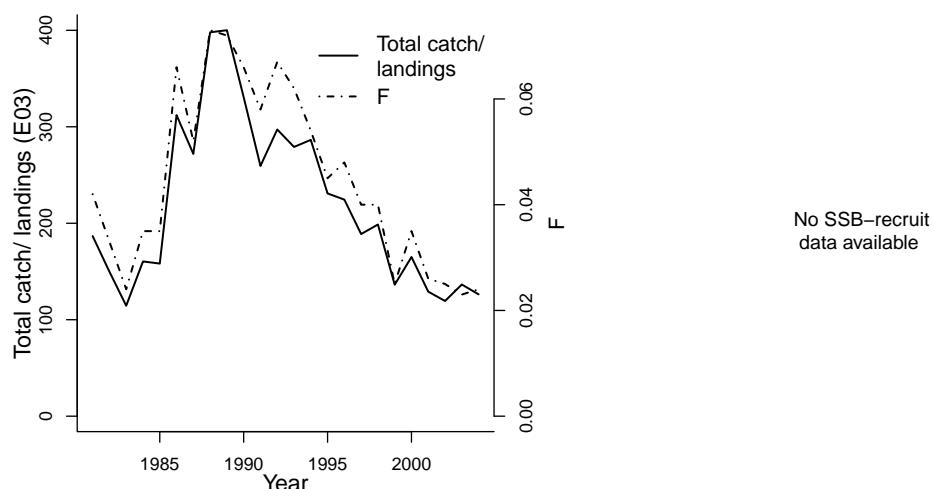
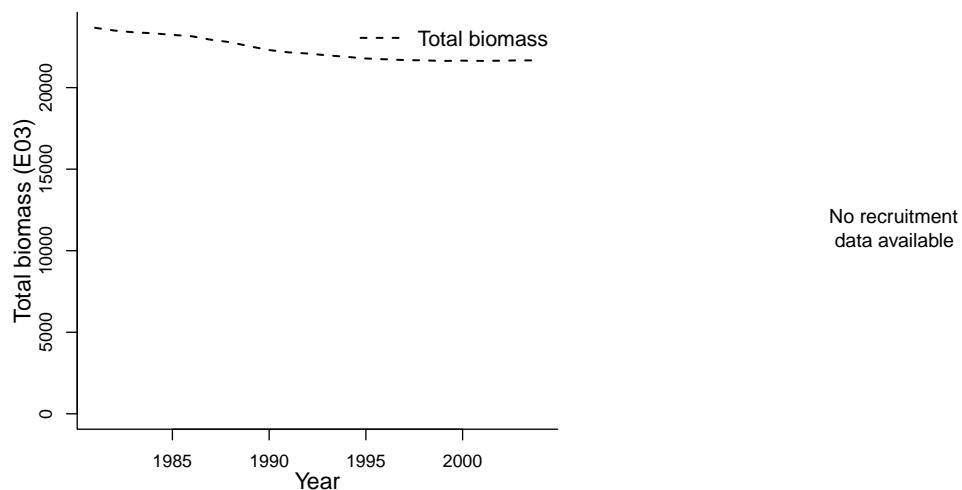
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Carlson, John                                   |
| Assessment method  | State-space age-structured production model     |
| Publication year   | 2006  |
| Timeseries span    | 1981-2004                                       |
| Document           | LargeCoastalAtl2006-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-04                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME      |          | tertiary LME |
|--------------------|-------|-------|--------------------|----------|--------------|
| 5 - Gulf of Mexico |       |       | na                 | na       |              |
| Parameter          | Value | Units | Reference points   |          |              |
| SSB-AGE-yr         | 6.5   | yr    | Parameter          | Value    | Units        |
| SSB-SEX-sex        | 1     | sex   | Fmsy-1/T (F)       | 0.20     | 1/T          |
| A50-yr             | 6.5   | yr    | MSY-MT (TB)        | 2.42E+04 | MT           |
| REC-AGE            |       |       | R0-E00             | 1.50E+07 | E00          |
| TB-AGE-yr          |       |       | SPRmsy-E00         | 0.62     | E00          |
| F-AGE-yr           |       |       | BH-h-dimless       | 0.40     | dimless      |
| M                  |       |       | $F_{2004}/F_{msy}$ | 0.120    |              |
| L50-cm             |       |       |                    |          |              |

| Time series minima and maxima |       |   |      |          |       |
|-------------------------------|-------|---|------|----------|-------|
|                               | SSB   | R | F    | TB       |       |
| Minimum year                  |       |   | 1981 | 1981     | 1981  |
| Maximum year                  |       |   | 2004 | 2004     | 2004  |
| Time series minimum           | 0.023 |   |      | 21636.06 | 114.5 |
| Time series maximum           | 0.073 |   |      | 23667.92 | 400.1 |
| Units                         | 1/yr  |   | E03  |          | E03   |



# Assessment of Atlantic finetooth shark (*Carcharhinus isodon*)

Assessment ID:SEFSC-FTOOTHSARATL-1976-2005-FAUCONNET  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/323>

Area ID: USA-NMFS-ATL

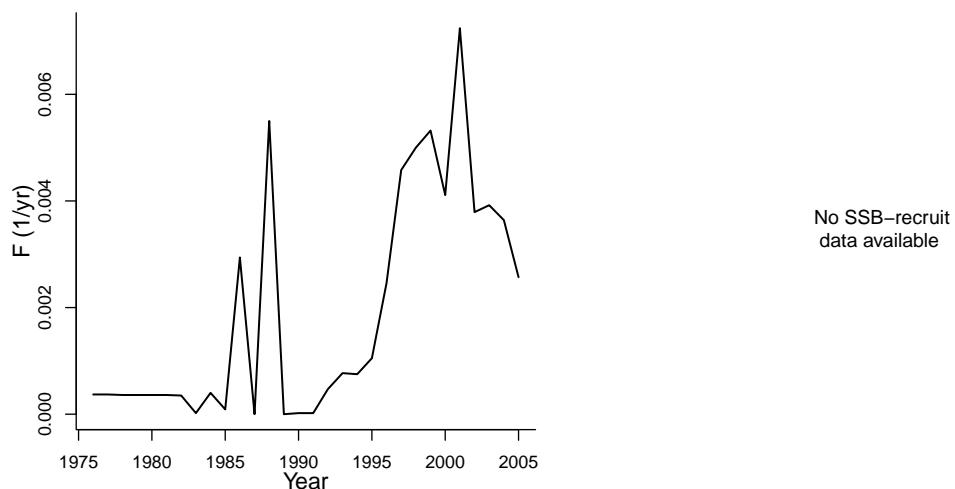
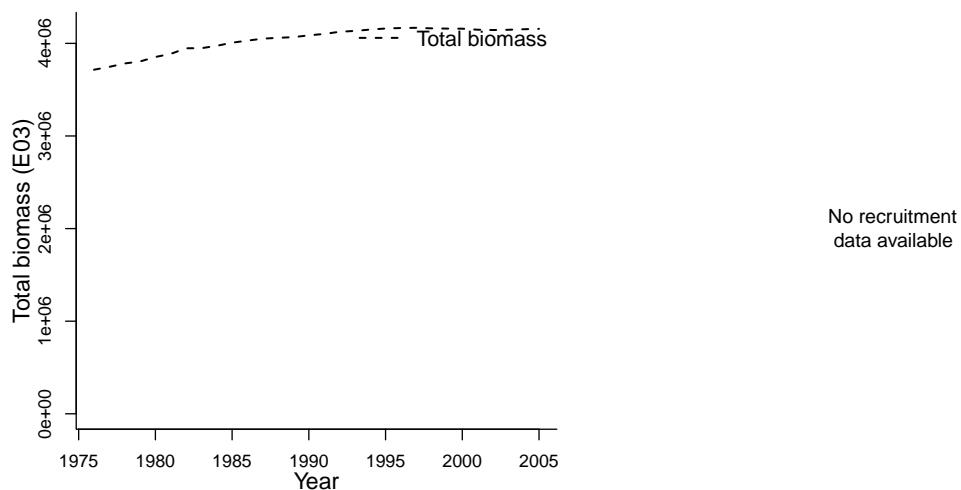
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Brooks, Liz                                     |
| Assessment method  | Bayesian Biomass Model                          |
| Publication year   | 2007  |
| Timeseries span    | 1976-2005                                       |
| Document           | SmallcoastalAtl2007-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-07                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME                        |       |                    | tertiary LME |       |
|--------------------------------------|--------------------------------------|-------|--------------------|--------------|-------|
| 6 - Southeast U.S. Continental Shelf | 7 - Northeast U.S. Continental Shelf |       |                    | na           |       |
| Parameter                            | Value                                | Units | Reference points   |              |       |
| A50-yr                               | 5                                    | yr    | Parameter          | Value        | Units |
| REC-AGE                              |                                      |       | Fmsy-1/T (F)       | 0.030        | 1/T   |
| SSB-AGE-yr                           |                                      |       | Nmsy-E00           | 3199000      | E00   |
| SSB-SEX-sex                          |                                      |       | MSY-E00            | 96000        | E00   |
| TB-AGE-yr                            |                                      |       | K-E00              | 6397000      | E00   |
| F-AGE-yr                             |                                      |       | RY-E00             | 21000        | E00   |
| M                                    |                                      |       | r-1/yr             | 0.060        | 1/yr  |
| L50-cm                               |                                      |       | $F_{2005}/F_{msy}$ | 0.086        |       |

| Time series minima and maxima |     |   |         |         |
|-------------------------------|-----|---|---------|---------|
|                               | SSB | R | F       | TB      |
| Minimum year                  |     |   | 1976    | 1976    |
| Maximum year                  |     |   | 2005    | 2005    |
| Time series minimum           |     |   | 0       | 3715591 |
| Time series maximum           |     |   | 0.00724 | 4168160 |
| Units                         |     |   | 1/yr    | E03     |



# Assessment of Gulf of Mexico gag (*Mycteroperca microlepis*)

Assessment ID:SEFSC-GAGGM-1963-2004-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/18>

Area ID: USA-NMFS-GM

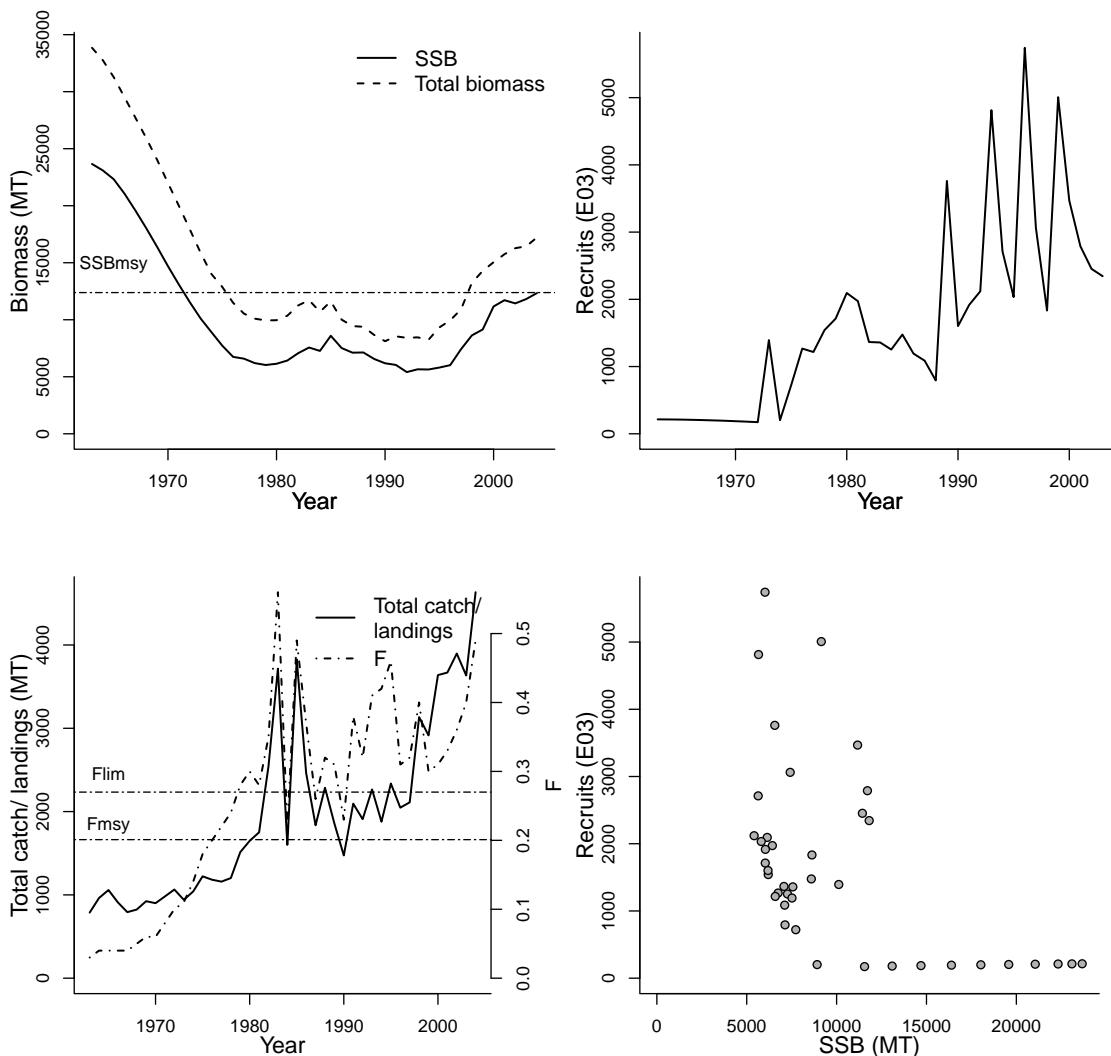
## General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center          |
| Assessment authors |   |
| Assessment method  | Unknown                                     |
| Publication year   | 2007  |
| Timeseries span    | 1963-2004                                   |
| Document           | JENSEN_GAGGM_2007.pdf (pdf not in database) |
| Recorder           | JENSEN                                      |
| Date entered       | 2008-11-19                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2010-03-16                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |           |       | secondary LME          |          | tertiary LME |  |  |  |
|--------------------|-----------|-------|------------------------|----------|--------------|--|--|--|
| 5 - Gulf of Mexico |           |       | na                     | na       |              |  |  |  |
| Parameter          | Value     | Units | Reference points       |          |              |  |  |  |
|                    |           |       | Parameter              | Value    | Units        |  |  |  |
| M-1/T              | AVAILABLE | 1/T   | F0.1-1/yr (F)          | 0.129    | 1/yr         |  |  |  |
| A50-yr             | 3.5       | yr    | Flim-1/yr (F)          | 0.27     | 1/yr         |  |  |  |
| REC-AGE            |           |       | Fmax-1/yr (F)          | 0.201    | 1/yr         |  |  |  |
| SSB-AGE-yr         |           |       | Fmsy-1/yr (F)          | 0.201    | 1/yr         |  |  |  |
| SSB-SEX-sex        |           |       | MSY-MT (TB)            | 2241.65  | MT           |  |  |  |
| TB-AGE-yr          |           |       | SSBmsy-MT (SSB)        | 12383.06 | MT           |  |  |  |
| F-AGE-yr           |           |       | $F_{2004}/F_{lim}$     | 1.815    |              |  |  |  |
| M                  |           |       | $F_{2004}/F_{msy}$     | 2.438    |              |  |  |  |
| L50-cm             |           |       | $SSB_{2004}/SSB_{msy}$ | 0.997    |              |  |  |  |

| Time series minima and maxima |          |         |      |          |
|-------------------------------|----------|---------|------|----------|
|                               | SSB      | R       | F    | TB       |
| Minimum year                  | 1963     | 1963    | 1963 | 1963     |
| Maximum year                  | 2004     | 2003    | 2004 | 2004     |
| Time series minimum           | 5410.9   | 172.637 | 0.03 | 8116.58  |
| Time series maximum           | 23661.63 | 5741.39 | 0.56 | 33847.49 |
| Units                         | MT       | E03     | 1/yr | MT       |



# Assessment of Southern Atlantic coast gag (*Mycteroperca microlepis*)

Assessment ID:SEFSC-GAGSATLC-1962-2005-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/17>

Area ID: USA-NMFS-SATLC

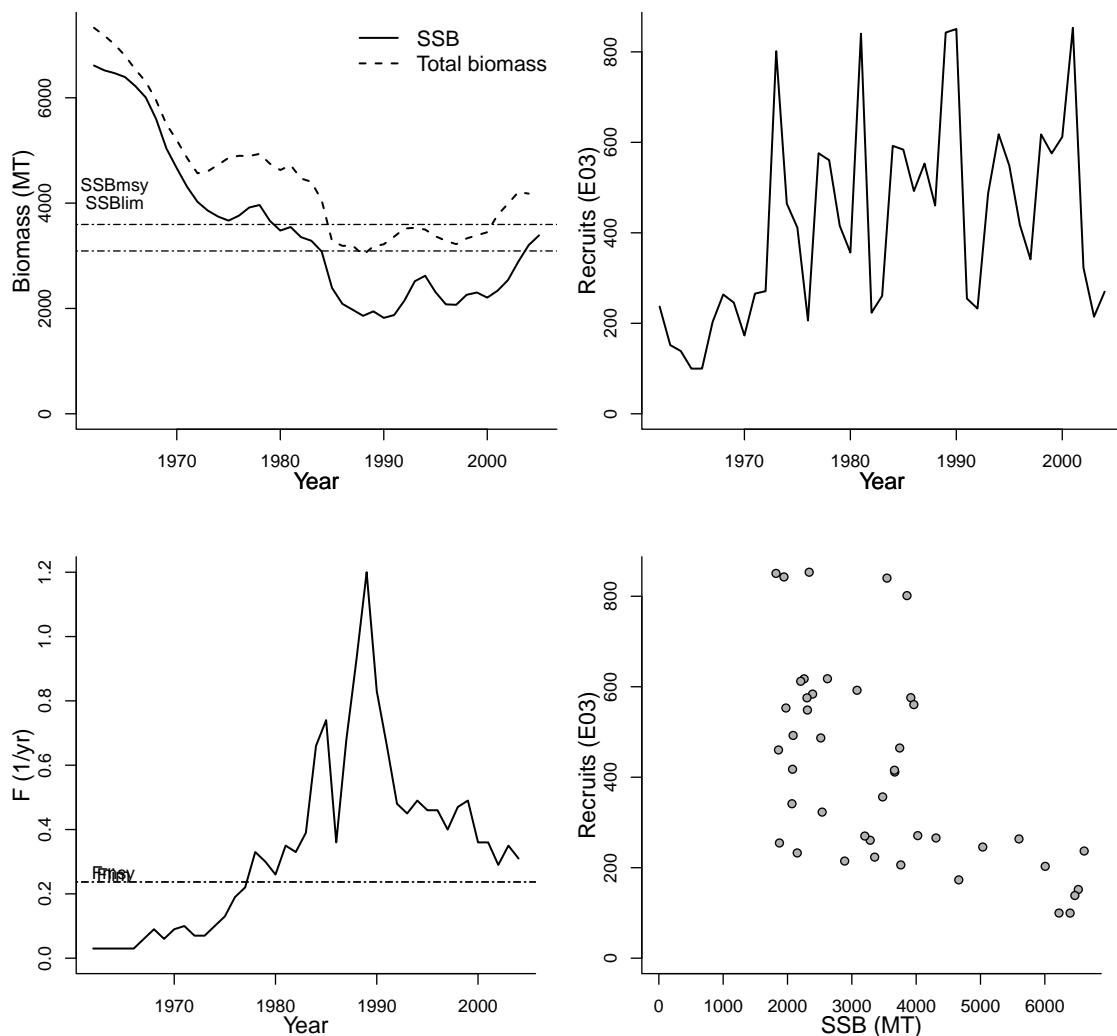
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center                 |
| Assessment authors | NULL   |
| Assessment method  | an AD-Model builder statistical Catch at Age Model |
| Publication year   | 2006   |
| Timeseries span    | 1962-2005  |
| Document           | JENSEN_GAGSATLC_2006.pdf (pdf in database)         |
| Recorder           | JENSEN   |
| Date entered       | 2008-11-19   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-16   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                                      |             | tertiary LME |
|--------------------------------------|-------|-------|--|-------------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na   | na          |              |
| Parameter                            | Value | Units | Reference points                                   |             |              |
| M-1/yr                               | 0.14  | 1/yr  | SSBlim-MT (SSB)                                    | 3091.456276 | MT           |
| REC-AGE                              |       |       | Flim-1/yr (F)                                      | 0.237       | 1/yr         |
| SSB-AGE-yr                           |       |       | Fmsy-1/yr (F)                                      | 0.237       | 1/yr         |
| SSB-SEX-sex                          |       |       | MSY-MT (TB)  | 562         | MT           |
| TB-AGE-yr                            |       |       | SSBmsy-MT (SSB)                                    | 3594.7166   | MT           |
| F-AGE-yr                             |       |       | SSB <sub>2005</sub> /SSB <sub>lim</sub>            | 1.096       |              |
| M                                    |       |       | F <sub>2004</sub> /F <sub>lim</sub>                | 1.308       |              |
| A50-yr                               |       |       | F <sub>2004</sub> /F <sub>m<sub>sy</sub></sub>     | 1.308       |              |
| L50-cm                               |       |       | SSB <sub>2005</sub> /SSB <sub>m<sub>sy</sub></sub> | 0.942       |              |

| Time series minima and maxima |         |         |      |         |
|-------------------------------|---------|---------|------|---------|
|                               | SSB     | R       | F    | TB      |
| Minimum year                  | 1962    | 1962    | 1962 | 1962    |
| Maximum year                  | 2005    | 2004    | 2004 | 2004    |
| Time series minimum           | 1820.98 | 99.7721 | 0.03 | 3016.8  |
| Time series maximum           | 6611.83 | 853.149 | 1.2  | 7328.64 |
| Units                         | MT      | E03     | 1/yr | MT      |



# Assessment of Gulf of Mexico greater amberjack (*Seriola dumerili*)

Assessment ID:SEFSC-GRAMBERGM-1986-2004-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/20>

Area ID: USA-NMFS-GM

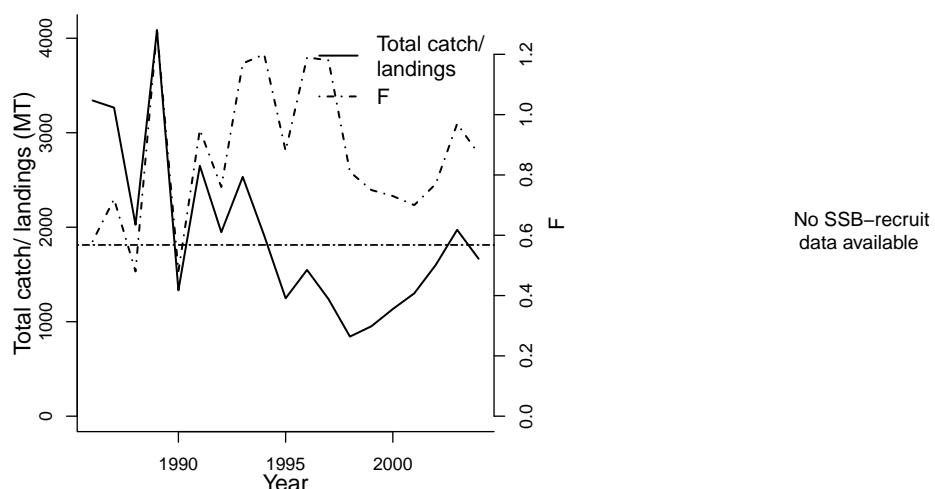
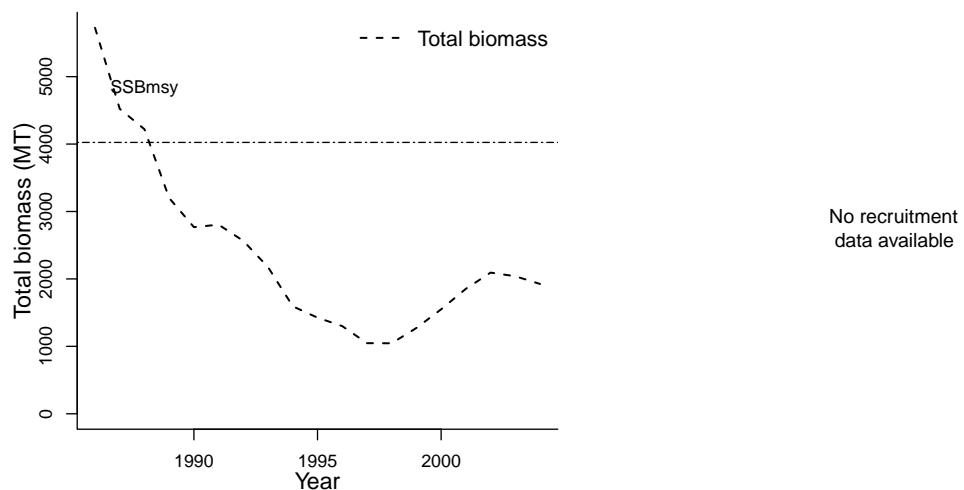
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | NULL  |
| Assessment method  | Surplus production model                        |
| Publication year   | 2006  |
| Timeseries span    | 1986-2004                                       |
| Document           | JENSEN_GRAMBERGM_2006.pdf (pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-19                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2010-03-16                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |       |       | secondary LME      |             | tertiary LME |  |
|--------------------|-------|-------|--------------------|-------------|--------------|--|
| 5 - Gulf of Mexico |       |       | na                 |             | na           |  |
| Parameter          | Value | Units | Reference points   |             |              |  |
| REC-AGE            |       |       | Parameter          | Value       | Units        |  |
| SSB-AGE-yr         |       |       | SSBmsy-MT (SSB)    | 4024.721816 | MT           |  |
| SSB-SEX-sex        |       |       | Flim-1/yr (F)      | 0.5679      | 1/yr         |  |
| TB-AGE-yr          |       |       | Fmsy-1/T (F)       | 0.5679      | 1/T          |  |
| F-AGE-yr           |       |       | MSY-MT (TB)        | 2285.650088 | MT           |  |
| M                  |       |       | $F_{2004}/F_{lim}$ | 1.532       |              |  |
| A50-yr             |       |       | $F_{2004}/F_{msy}$ | 1.532       |              |  |
| L50-cm             |       |       |                    |             |              |  |

| Time series minima and maxima |     |   |      |         |
|-------------------------------|-----|---|------|---------|
|                               | SSB | R | F    | TB      |
| Minimum year                  |     |   | 1986 | 1986    |
| Maximum year                  |     |   | 2004 | 2004    |
| Time series minimum           |     |   | 0.48 | 1045.53 |
| Time series maximum           |     |   | 1.28 | 5724.33 |
| Units                         |     |   | 1/yr | MT      |
|                               |     |   |      | MT      |



# Assessment of Southern Atlantic coast greater amberjack (*Seriola dumerili*)

Assessment ID:SEFSC-GRAMBERSATLC-1946-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/70>

Area ID: USA-NMFS-SATLC

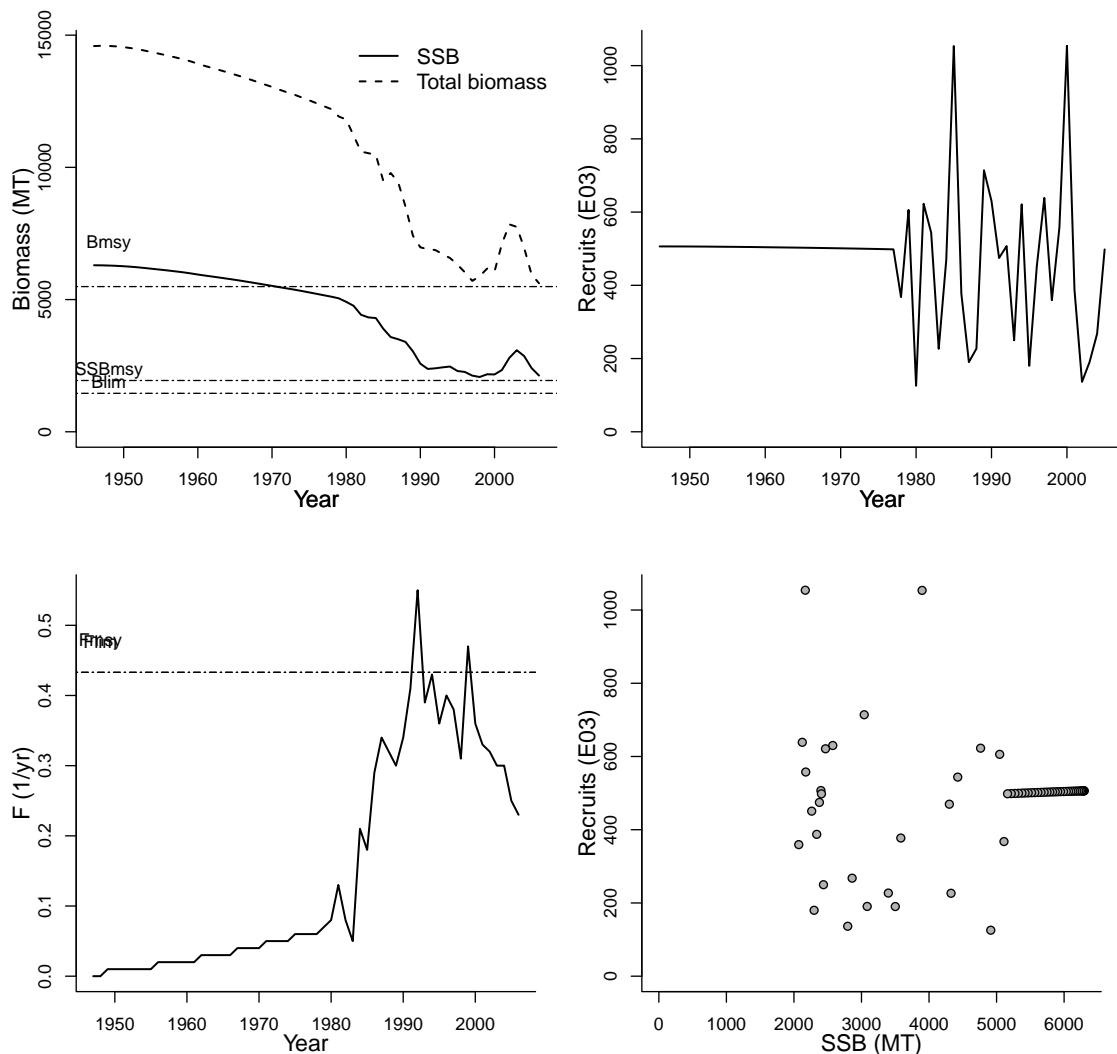
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                    |
| Assessment authors | NULL  |
| Assessment method  | Statistical catch-at-age model                        |
| Publication year   | 2008  |
| Timeseries span    | 1946-2006   |
| Document           | JENSEN_GRAMBERSATLC_2008.pdf<br>(pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-26  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          |        | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                     | na     |              |
| Parameter                            | Value | Units | Reference points       |        |              |
| M-1/yr                               | 0.25  | 1/yr  | Blim-MT (TB)           | 1455   | MT           |
| REC-AGE                              |       |       | Bmsy-MT (TB)           | 5491   | MT           |
| SSB-AGE-yr                           |       |       | Flim-1/yr (F)          | 0.433  | 1/yr         |
| SSB-SEX-sex                          |       |       | Fmsy-1/yr (F)          | 0.433  | 1/yr         |
| TB-AGE-yr                            |       |       | MSY-MT (TB)            | 909.45 | MT           |
| F-AGE-yr                             |       |       | SSBmsy-MT (SSB)        | 1940   | MT           |
| M                                    |       |       | $F_{2006}/F_{lim}$     | 0.531  |              |
| A50-yr                               |       |       | $TB_{2006}/B_{msy}$    | 1.023  |              |
| L50-cm                               |       |       | $F_{2006}/F_{msy}$     | 0.531  |              |
|                                      |       |       | $SSB_{2006}/SSB_{msy}$ | 1.096  |              |

| Time series minima and maxima |         |         |      |         |
|-------------------------------|---------|---------|------|---------|
|                               | SSB     | R       | F    | TB      |
| Minimum year                  | 1946    | 1946    | 1947 | 1946    |
| Maximum year                  | 2006    | 2005    | 2006 | 2006    |
| Time series minimum           | 2071.47 | 125.609 | 0    | 5616.53 |
| Time series maximum           | 6297.2  | 1054.1  | 0.55 | 14597.1 |
| Units                         | MT      | E03     | 1/yr | MT      |



# Assessment of Gulf of Mexico gray triggerfish (*Balistes capriscus*)

Assessment ID:SEFSC-GTRIGGM-1981-2004-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/67>

Area ID: USA-NMFS-GM

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center            |
| Assessment authors | Anonymous                                     |
| Assessment method  | Age-structured surplus production model       |
| Publication year   | 2006  |
| Timeseries span    | 1981-2004                                     |
| Document           | JENSEN_GTRIGGM_2006.pdf (pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-21                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                    |

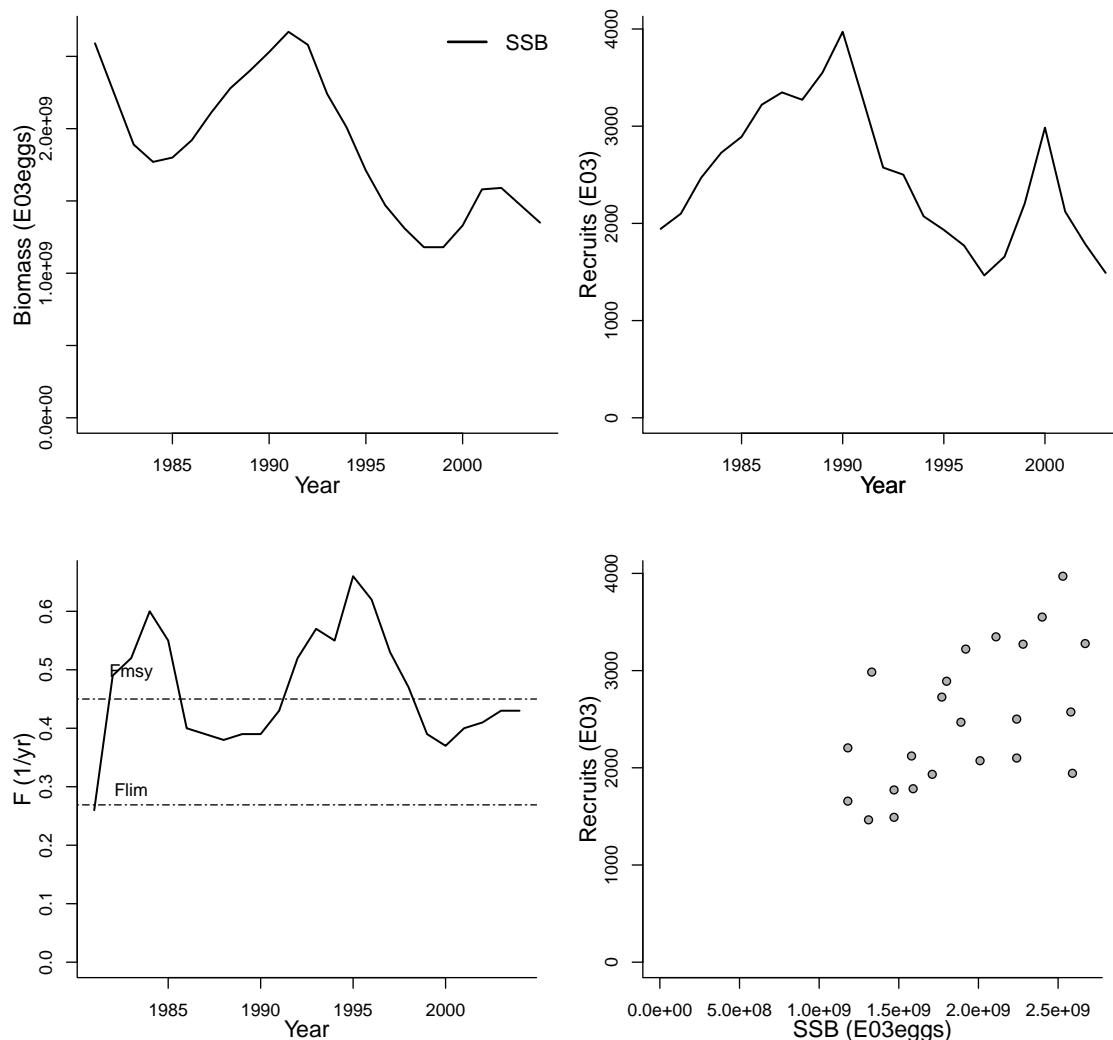
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | primary LME        |      | secondary LME |    | tertiary LME |    |
|-------------|--------------------|------|---------------|----|--------------|----|
|             | 5 - Gulf of Mexico | na   | na            | na | na           | na |
| M-1/yr      | 0.27               | 1/yr |               |    |              |    |
| REC-AGE     |                    |      |               |    |              |    |
| SSB-AGE-yr  |                    |      |               |    |              |    |
| SSB-SEX-sex |                    |      |               |    |              |    |
| TB-AGE-yr   |                    |      |               |    |              |    |
| F-AGE-yr    |                    |      |               |    |              |    |
| M           |                    |      |               |    |              |    |
| A50-yr      |                    |      |               |    |              |    |
| L50-cm      |                    |      |               |    |              |    |

| Parameter   | Value | Units | Reference points | Parameter              | Value      | Units   |
|-------------|-------|-------|------------------|------------------------|------------|---------|
| M-1/yr      | 0.27  | 1/yr  |                  | Flim-1/yr (F)          | 0.269      | 1/yr    |
| REC-AGE     |       |       |                  | Fmsy-1/T (F)           | 0.45       | 1/T     |
| SSB-AGE-yr  |       |       |                  | MSY-MT (TB)            | 743        | MT      |
| SSB-SEX-sex |       |       |                  | SSBmsy-E03eggs         | 1210000000 | E03eggs |
| TB-AGE-yr   |       |       |                  | $F_{2004}/F_{lim}$     | 1.599      |         |
| F-AGE-yr    |       |       |                  | $F_{2004}/F_{msy}$     | 0.956      |         |
| M           |       |       |                  | $SSB_{2004}/SSB_{msy}$ | 1.116      |         |
| A50-yr      |       |       |                  |                        |            |         |
| L50-cm      |       |       |                  |                        |            |         |

| Time series minima and maxima |            |        |      |    |       |
|-------------------------------|------------|--------|------|----|-------|
|                               | SSB        | R      | F    | TB | Catch |
| Minimum year                  | 1981       | 1981   | 1981 |    |       |
| Maximum year                  | 2004       | 2003   | 2004 |    |       |
| Time series minimum           | 1180000000 | 1464.6 | 0.26 |    |       |
| Time series maximum           | 2670000000 | 3971.1 | 0.66 |    |       |
| Units                         | E03eggs    | E03    | 1/yr |    |       |



# Assessment of Gulf of Mexico king mackerel (*Scomberomorus cavalla*)

Assessment ID:SEFSC-KMACKGM-1992-2001-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/71>

Area ID: USA-NMFS-GM

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                    |
| Assessment authors | NULL  |
| Assessment method  | Virtual Population Analysis                           |
| Publication year   | 2004  |
| Timeseries span    | 1992-2001   |
| Document           | JENSEN_KMACKGMSATLC_2004.pdf<br>(pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

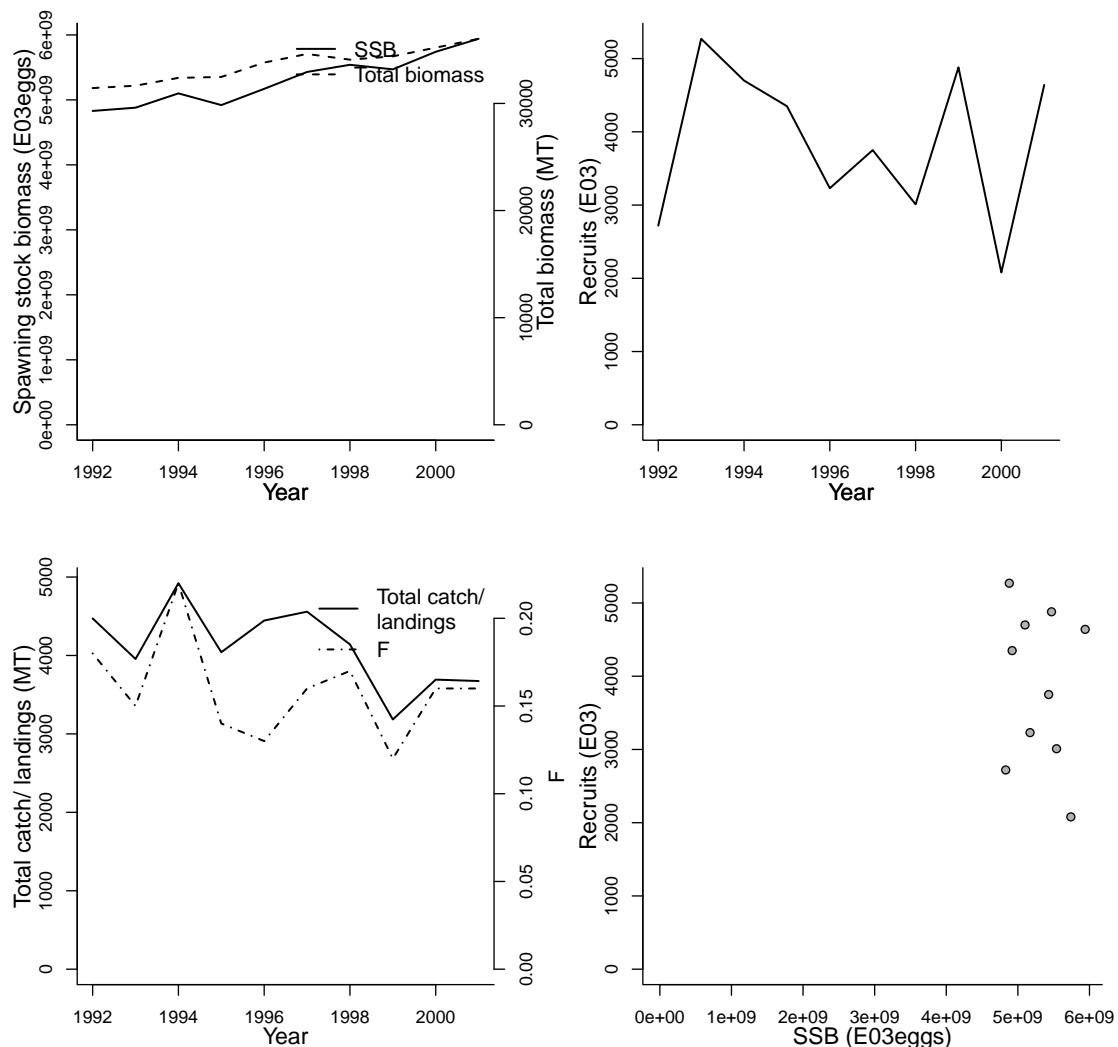
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units | primary LME        | secondary LME | tertiary LME |
|-------------|-------|-------|--------------------|---------------|--------------|
|             |       |       | 5 - Gulf of Mexico | na            | na           |
| M-1/yr      | 0.2   | 1/yr  |                    |               |              |
| REC-AGE     |       |       |                    |               |              |
| SSB-AGE-yr  |       |       |                    |               |              |
| SSB-SEX-sex |       |       |                    |               |              |
| TB-AGE-yr   |       |       |                    |               |              |
| F-AGE-yr    |       |       |                    |               |              |
| M           |       |       |                    |               |              |
| A50-yr      |       |       |                    |               |              |
| L50-cm      |       |       |                    |               |              |

| Parameter               | Value       | Units   | Reference points |
|-------------------------|-------------|---------|------------------|
|                         |             |         | Parameter        |
|                         |             |         | Value            |
|                         |             |         | Units            |
| Fmsy-1/T (F)            | 0.269       | 1/T     |                  |
| MSY-MT (TB)             | 5178.659864 | MT      |                  |
| SSBmsy-E03eggs          | 6385000000  | E03eggs |                  |
| $F_{2001}/F_{m sy}$     | 0.595       |         |                  |
| $SSB_{2001}/SSB_{m sy}$ | 0.930       |         |                  |

| Time series minima and maxima |            |      |      |          |         |
|-------------------------------|------------|------|------|----------|---------|
|                               | SSB        | R    | F    | TB       | Catch   |
| Minimum year                  | 1992       | 1992 | 1992 | 1992     | 1992    |
| Maximum year                  | 2001       | 2001 | 2001 | 2001     | 2001    |
| Time series minimum           | 4830000000 | 2080 | 0.12 | 31433.93 | 3184.22 |
| Time series maximum           | 5940000000 | 5270 | 0.22 | 36033.35 | 4921.47 |
| Units                         | E03eggs    | E03  | 1/yr | MT       | MT      |



# Assessment of Southern Atlantic coast king mackerel (*Scomberomorus cavalla*)

Assessment ID:SEFSC-KMACKSATLC-1981-2001-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/72>

Area ID: USA-NMFS-SATLC

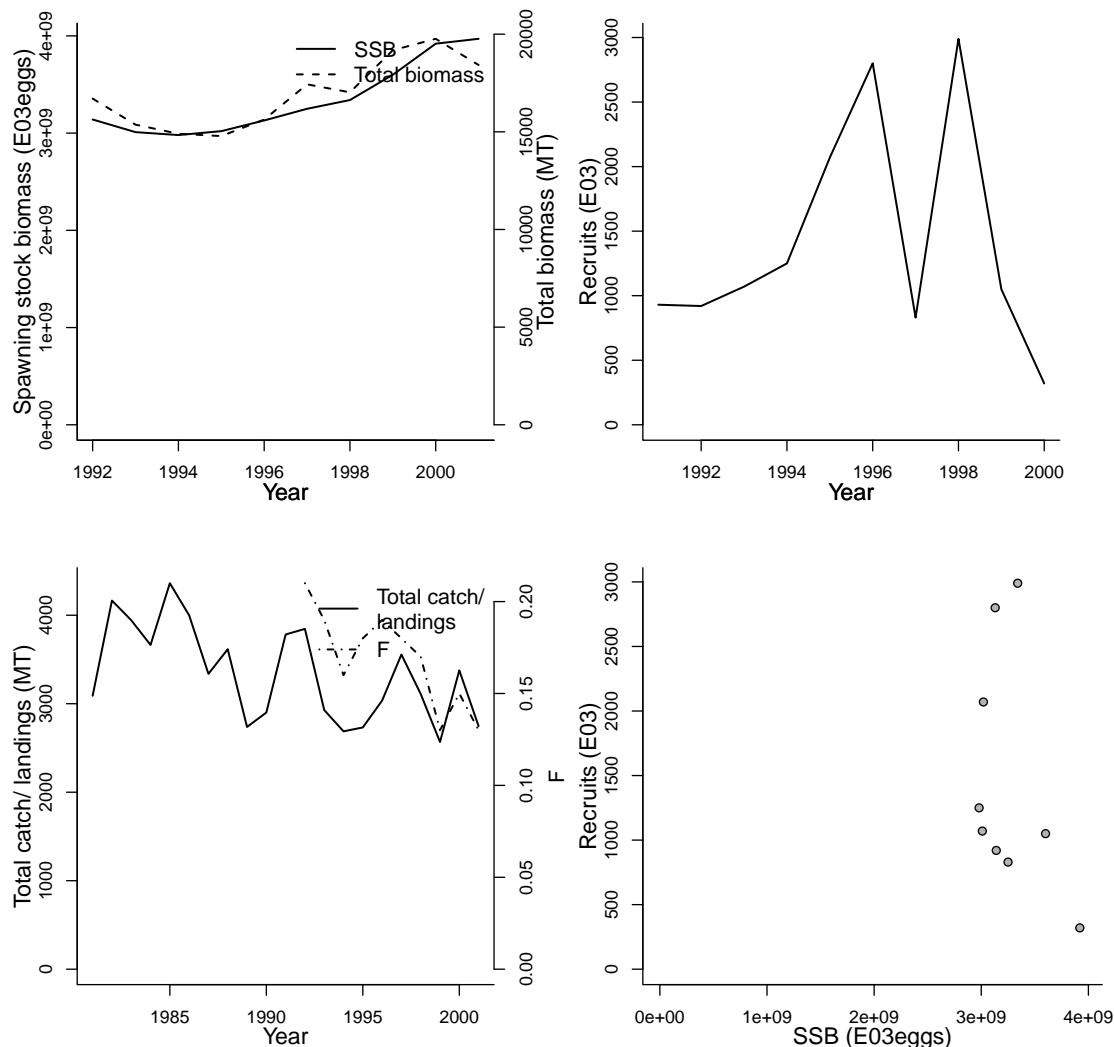
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                    |
| Assessment authors |   |
| Assessment method  | Virtual Population Analysis                           |
| Publication year   | 2004  |
| Timeseries span    | 1981-2001   |
| Document           | JENSEN_KMACKGMSATLC_2004.pdf<br>(pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME               | tertiary LME |
|--------------------------------------|-------|-------|-----------------------------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                          | na           |
| Parameter                            | Value | Units | Reference points            |              |
| M-1/yr                               | 0.15  | 1/yr  | Parameter                   | Value        |
| REC-AGE                              |       |       | F <sub>msy</sub> -1/T (F)   | 0.29         |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)                 | 2576.40      |
| SSB-SEX-sex                          |       |       | SSB <sub>m</sub> sy-E03eggs | 29300000000  |
| TB-AGE-yr                            |       |       | $F_{2001}/F_{msy}$          | 0.448        |
| F-AGE-yr                             |       |       | $SSB_{2001}/SSB_{msy}$      | 1.355        |
| M                                    |       |       |                             |              |
| A50-yr                               |       |       |                             |              |
| L50-cm                               |       |       |                             |              |

| Time series minima and maxima |            |      |      |          |         |
|-------------------------------|------------|------|------|----------|---------|
|                               | SSB        | R    | F    | TB       | Catch   |
| Minimum year                  | 1992       | 1991 | 1992 | 1992     | 1981    |
| Maximum year                  | 2001       | 2000 | 2001 | 2001     | 2001    |
| Time series minimum           | 2980000000 | 320  | 0.13 | 14782.56 | 2567.33 |
| Time series maximum           | 3970000000 | 2990 | 0.21 | 19763    | 4361.74 |
| Units                         | E03eggs    | E03  | 1/yr | MT       | MT      |



# Assessment of Gulf of Mexico gulf menhaden (*Brevoortia patronus*)

Assessment ID:SEFSC-MENATGM-1964-2004-GILROY

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/141>

Area ID: USA-NMFS-GM

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center           |
| Assessment authors | Vaughan, Douglas                             |
| Assessment method  | Statistical catch-at-age model               |
| Publication year   | 2007   |
| Timeseries span    | 1964-2004                                    |
| Document           | GILROY-MENHADENGM-2007.pdf (pdf in database) |
| Recorder           | GILROY                                       |
| Date entered       | 2009-02-16                                   |
| Date last loaded   | 2011-07-27                                   |
| QA/QC complete     | NO   |
| Date approved      |  |

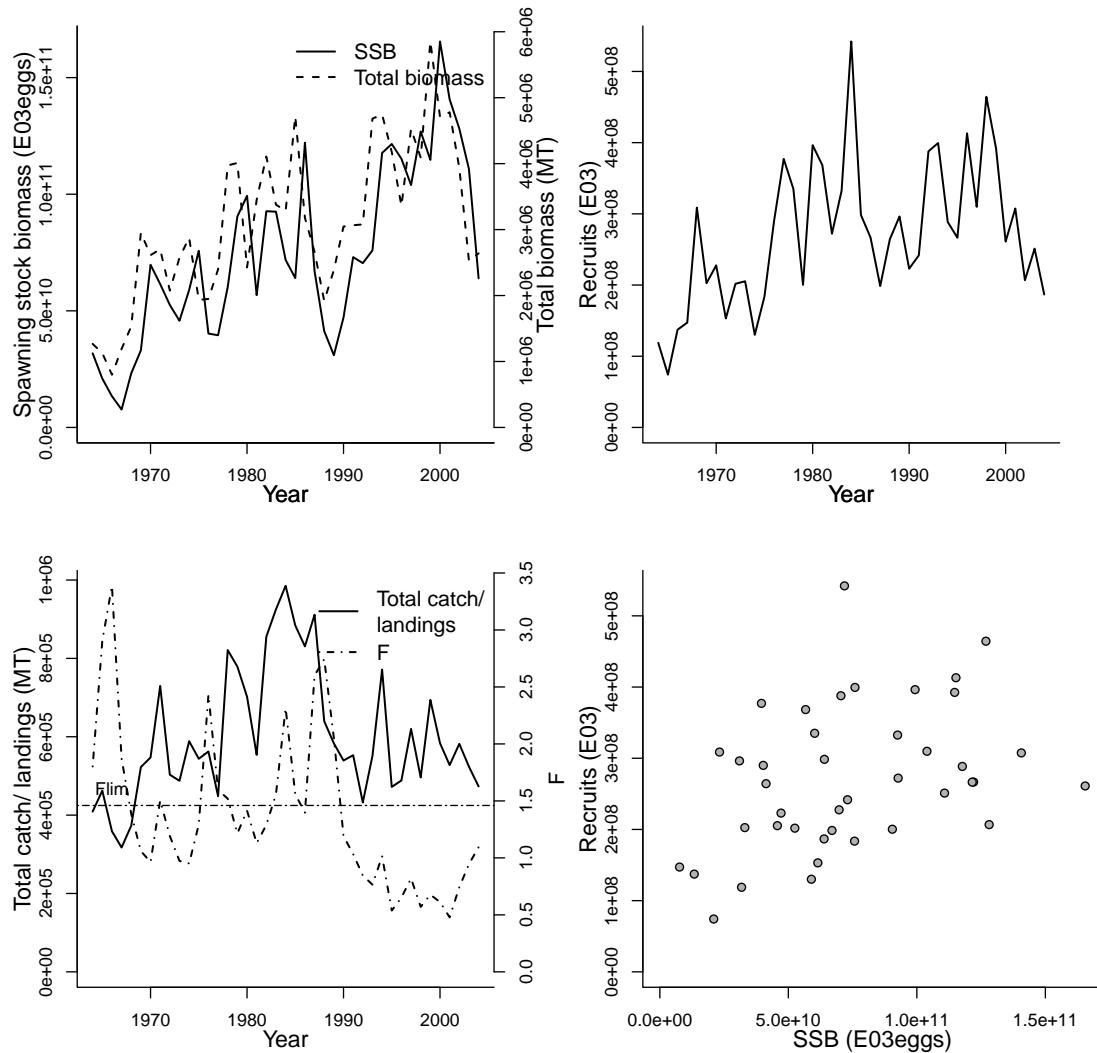
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 5 - Gulf of Mexico | na            | na           |
| <hr/>              |               |              |
| Parameter          | Value         | Units        |
| TB-AGE-yr          | 2+            | yr           |
| REC-AGE            |               |              |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |

| Parameter          | Value | Units |
|--------------------|-------|-------|
| Flim-1/yr (F)      | 1.46  | 1/yr  |
| Fcurrent-1/T (F)   | 1.094 | 1/T   |
| F0.1-1/yr (F)      | 3.12  | 1/yr  |
| $F_{2004}/F_{lim}$ | 0.749 |       |

|                     | Time series minima and maxima |           |       |         |        |
|---------------------|-------------------------------|-----------|-------|---------|--------|
|                     | SSB                           | R         | F     | TB      | Catch  |
| Minimum year        | 1964                          | 1964      | 1964  | 1964    | 1964   |
| Maximum year        | 2004                          | 2004      | 2004  | 2004    | 2004   |
| Time series minimum | 7668110000                    | 74200000  | 0.478 | 799000  | 317300 |
| Time series maximum | 165498000000                  | 542100000 | 3.387 | 5852700 | 985100 |
| Units               | E03eggs                       | E03       | 1/yr  | MT      | MT     |



# Assessment of Southern Atlantic coast and Gulf of Mexico mutton snapper (*Lutjanus analis*)

Assessment ID:SEFSC-MUTSNAPSATLCGM-1981-2006-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/85>

Area ID: USA-NMFS-SATLCGM

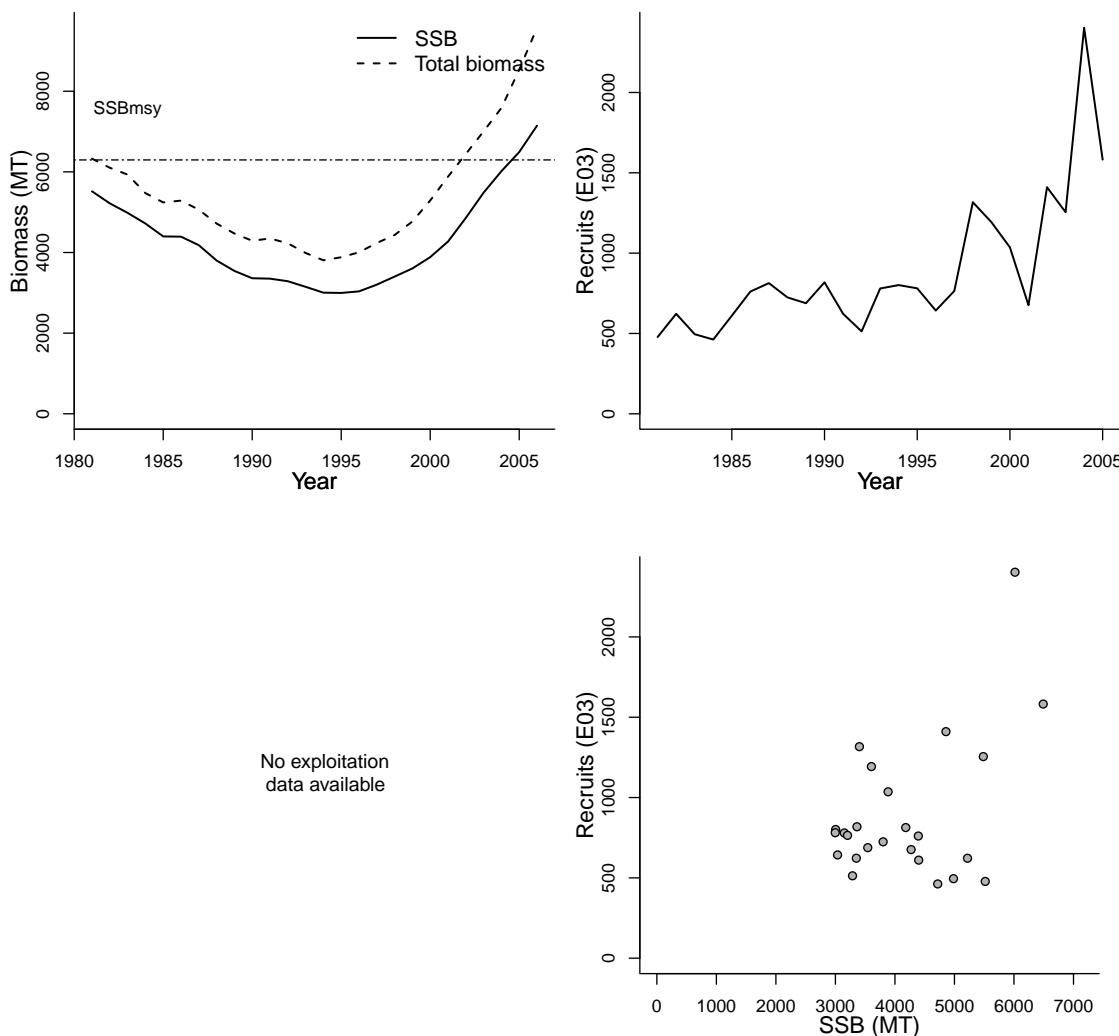
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                      |
| Assessment authors |   |
| Assessment method  | Statistical catch-at-age model                          |
| Publication year   | 2008  |
| Timeseries span    | 1981-2006   |
| Document           | JENSEN_MUTSNAPSATLCGM_2008.pdf<br>(pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-25  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |                    | secondary LME           | tertiary LME |
|--------------------------------------|-------|--------------------|-------------------------|--------------|
| 6 - Southeast U.S. Continental Shelf |       | 5 - Gulf of Mexico | na                      |              |
| Parameter                            | Value | Units              |                         |              |
| A50-yr                               | 3.7   | yr                 |                         |              |
| M-1/yr                               | 0.11  | 1/yr               |                         |              |
| REC-AGE                              |       |                    | Reference points        |              |
| SSB-AGE-yr                           |       |                    | Parameter               | Value        |
| SSB-SEX-sex                          |       |                    | Fmsy-1/T (F)            | 0.340        |
| TB-AGE-yr                            |       |                    | MSY-MT (TB)             | 688          |
| F-AGE-yr                             |       |                    | SSBmsy-MT (SSB)         | 6296         |
| M                                    |       |                    | $SSB_{2006}/SSB_{m sy}$ | 1.135        |
| L50-cm                               |       |                    |                         |              |

| Time series minima and maxima |         |         |   |         |       |
|-------------------------------|---------|---------|---|---------|-------|
|                               | SSB     | R       | F | TB      | Catch |
| Minimum year                  | 1981    | 1981    |   | 1981    |       |
| Maximum year                  | 2006    | 2005    |   | 2006    |       |
| Time series minimum           | 2997.36 | 462.157 |   | 3806.68 |       |
| Time series maximum           | 7145.87 | 2402.66 |   | 9573.19 |       |
| Units                         | MT      | E03     |   | MT      |       |



# Assessment of Gulf of Mexico red grouper

## *(Epinephelus morio)*

Assessment ID:SEFSC-RGROUPGM-1986-2005-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/68>

Area ID: USA-NMFS-GM

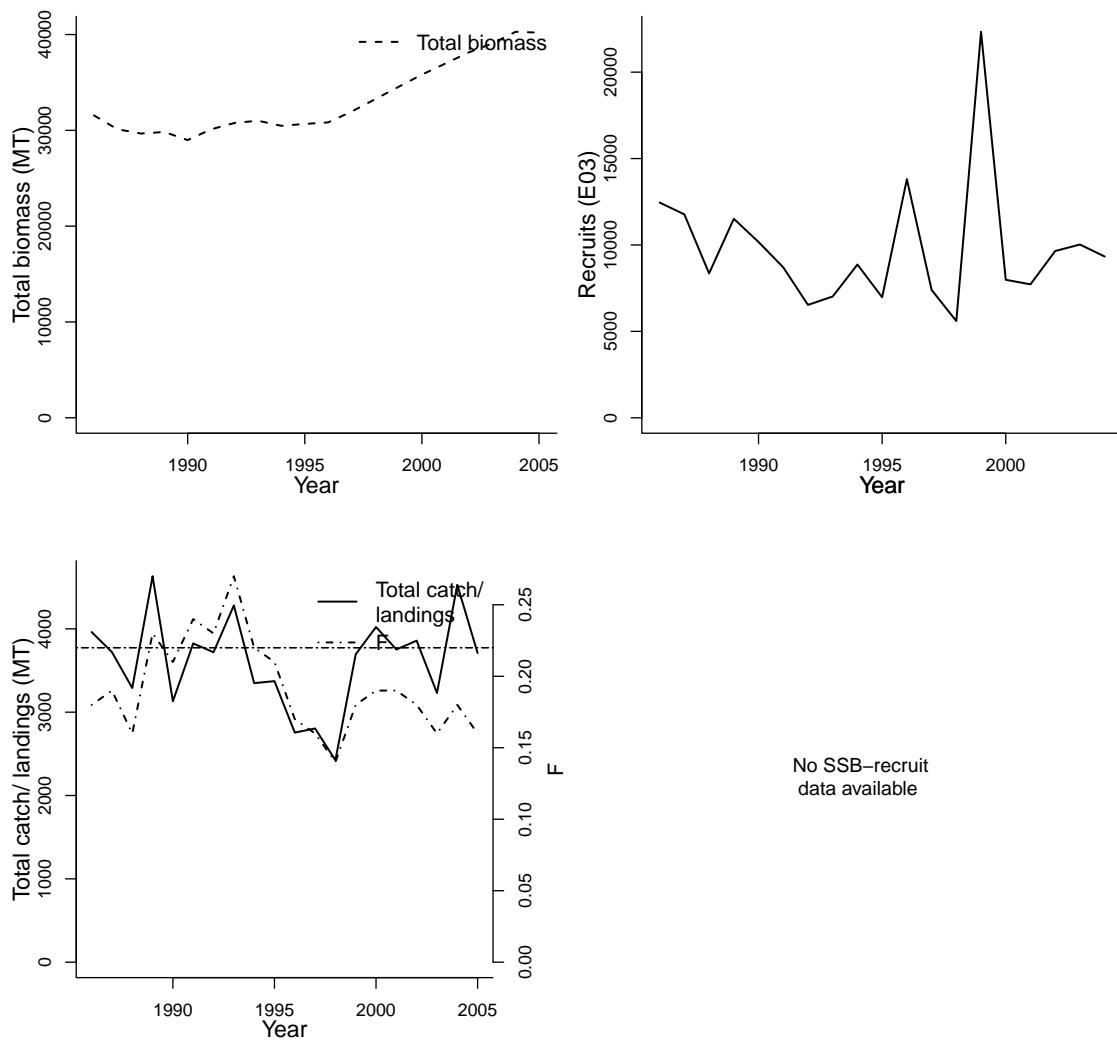
### General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | NMFS                                       |
| Assessment group   | Southeast Fisheries Science Center         |
| Assessment authors | Anonymous                                  |
| Assessment method  | Age Structured Assessment Program          |
| Publication year   | 2006                                       |
| Timeseries span    | 1986-2005                                  |
| Document           | JENSEN-RGROUPGM-2006.pdf (pdf in database) |
| Recorder           | JENSEN                                     |
| Date entered       | 2008-11-22                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-05                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          | secondary LME | tertiary LME  |
|----------------------|---------------|---------------|
| 5 - Gulf of Mexico   | na            | na            |
| <hr/>                |               |               |
| Parameter            | Value         | Units         |
| M-1/yr               | 0.14          | 1/yr          |
| REC-AGE              |               |               |
| SSB-AGE-yr           |               |               |
| SSB-SEX-sex          |               |               |
| TB-AGE-yr            |               |               |
| F-AGE-yr             |               |               |
| M                    |               |               |
| A50-yr               |               |               |
| L50-cm               |               |               |
| <hr/>                |               |               |
| Reference points     |               |               |
| Parameter            | Value         | Units         |
| SSBlim-FemaleGonadMT | 509           | FemaleGonadMT |
| SSBmsy-FemaleGonadMT | 591           | FemaleGonadMT |
| Flim-1/yr (F)        | 0.22          | 1/yr          |
| Fmsy-1/yr (F)        | 0.22          | 1/yr          |
| MSY-MT (TB)          | 3501.73024    | MT            |
| $F_{2005}/F_{lim}$   | 0.727         |               |
| $F_{2005}/F_{msy}$   | 0.727         |               |

| Time series minima and maxima |         |      |          |         |
|-------------------------------|---------|------|----------|---------|
|                               | SSB     | R    | F        | TB      |
| Minimum year                  |         | 1986 | 1986     | 1986    |
| Maximum year                  |         | 2004 | 2005     | 2005    |
| Time series minimum           | 5595.53 | 0.14 | 28984.4  | 2423.59 |
| Time series maximum           | 22335   | 0.27 | 40284.12 | 4631.5  |
| Units                         | E03     | 1/yr | MT       | MT      |



# Assessment of Southern Atlantic coast red porgy

## *(Pagrus pagrus)*

Assessment ID:SEFSC-RPORGYSATLC-1972-2004-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/73>

Area ID: USA-NMFS-SATLC

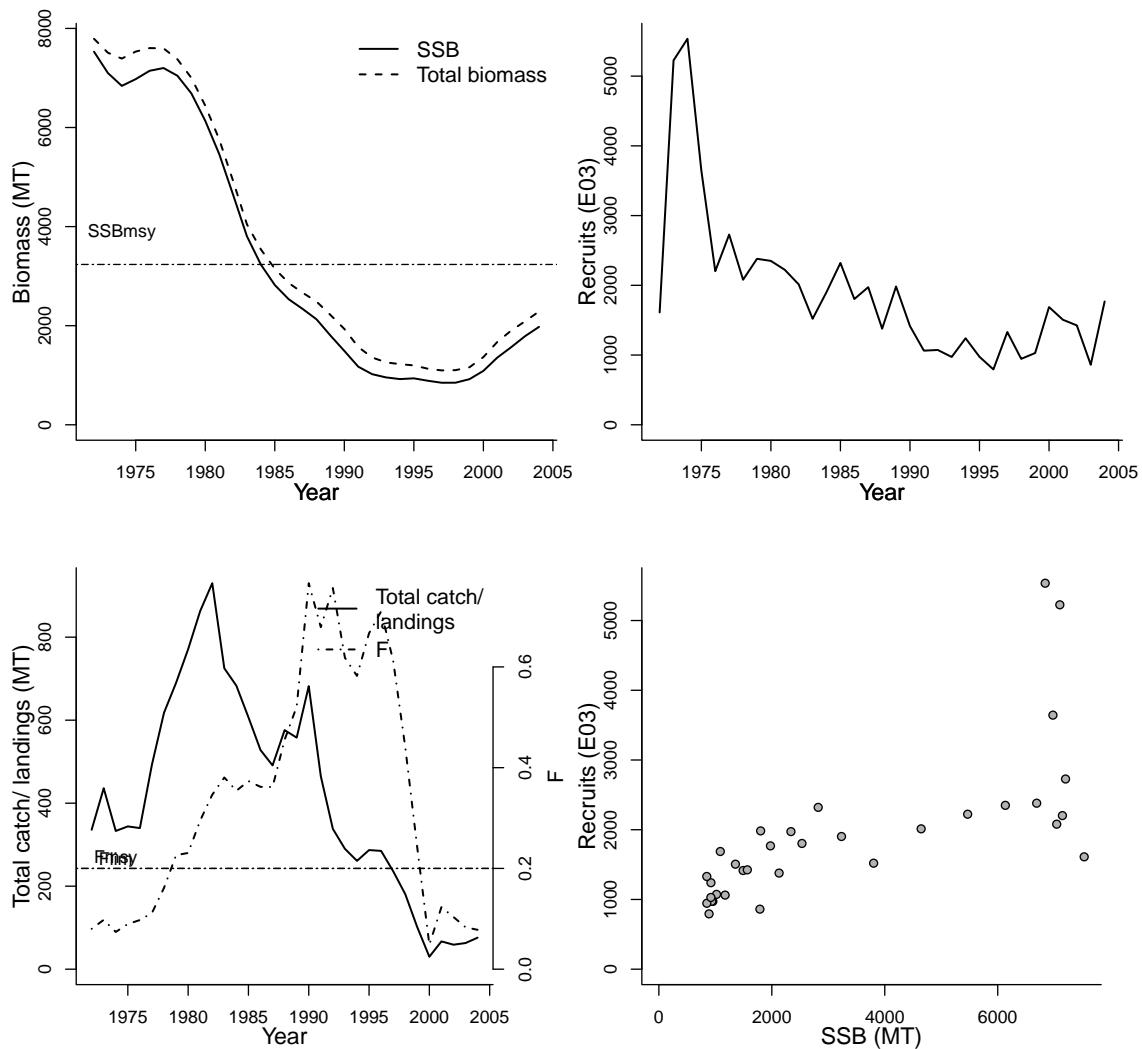
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center                   |
| Assessment authors |  |
| Assessment method  | Statistical catch-at-age model                       |
| Publication year   | 2006   |
| Timeseries span    | 1972-2004  |
| Document           | JENSEN_RPORGYSATLC_2006.pdf (pdf<br>not in database) |
| Recorder           | JENSEN   |
| Date entered       | 2008-11-25   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-05-05   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME    | tertiary LME  |
|--------------------------------------|------------------|---------------|
| 6 - Southeast U.S. Continental Shelf | na               | na            |
| <hr/>                                |                  |               |
| Parameter                            | Value            | Units         |
| A50-yr                               | 2                | yr            |
| M-1/T                                | 0.225            | 1/T           |
| REC-AGE                              |                  |               |
| SSB-AGE-yr                           |                  |               |
| SSB-SEX-sex                          |                  |               |
| TB-AGE-yr                            |                  |               |
| F-AGE-yr                             |                  |               |
| M                                    |                  |               |
| L50-cm                               |                  |               |
| <hr/>                                |                  |               |
| Parameter                            | Reference points |               |
| Parameter                            | Value            | Units         |
| Blim-FemaleGonadMT                   | 2507.9155        | FemaleGonadMT |
| Flim-1/yr (F)                        | 0.2              | 1/yr          |
| Fmsy-1/yr (F)                        | 0.200            | 1/yr          |
| MORATOR-yr-yr                        | 1999-2000        | yr-yr         |
| MSY-MT (TB)                          | 283.81           | MT            |
| SSBmsy-MT (SSB)                      | 3236.02          | MT            |
| $F_{2004}/F_{lim}$                   | 0.391            |               |
| $F_{2004}/F_{msy}$                   | 0.391            |               |
| $SSB_{2004}/SSB_{msy}$               | 0.611            |               |

| Time series minima and maxima |         |         |         |         |
|-------------------------------|---------|---------|---------|---------|
|                               | SSB     | R       | F       | TB      |
| Minimum year                  | 1972    | 1972    | 1972    | 1972    |
| Maximum year                  | 2004    | 2004    | 2004    | 2004    |
| Time series minimum           | 848.386 | 793.722 | 0.04862 | 1097.46 |
| Time series maximum           | 7530.42 | 5535.27 | 0.76616 | 7790.46 |
| Units                         | MT      | E03     | 1/yr    | MT      |



# Assessment of Eastern Gulf of Mexico red snapper (*Lutjanus campechanus*)

Assessment ID:SEFSC-RSNAPEGM-1872-2003-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/455>

Area ID: USA-NMFS-EGM

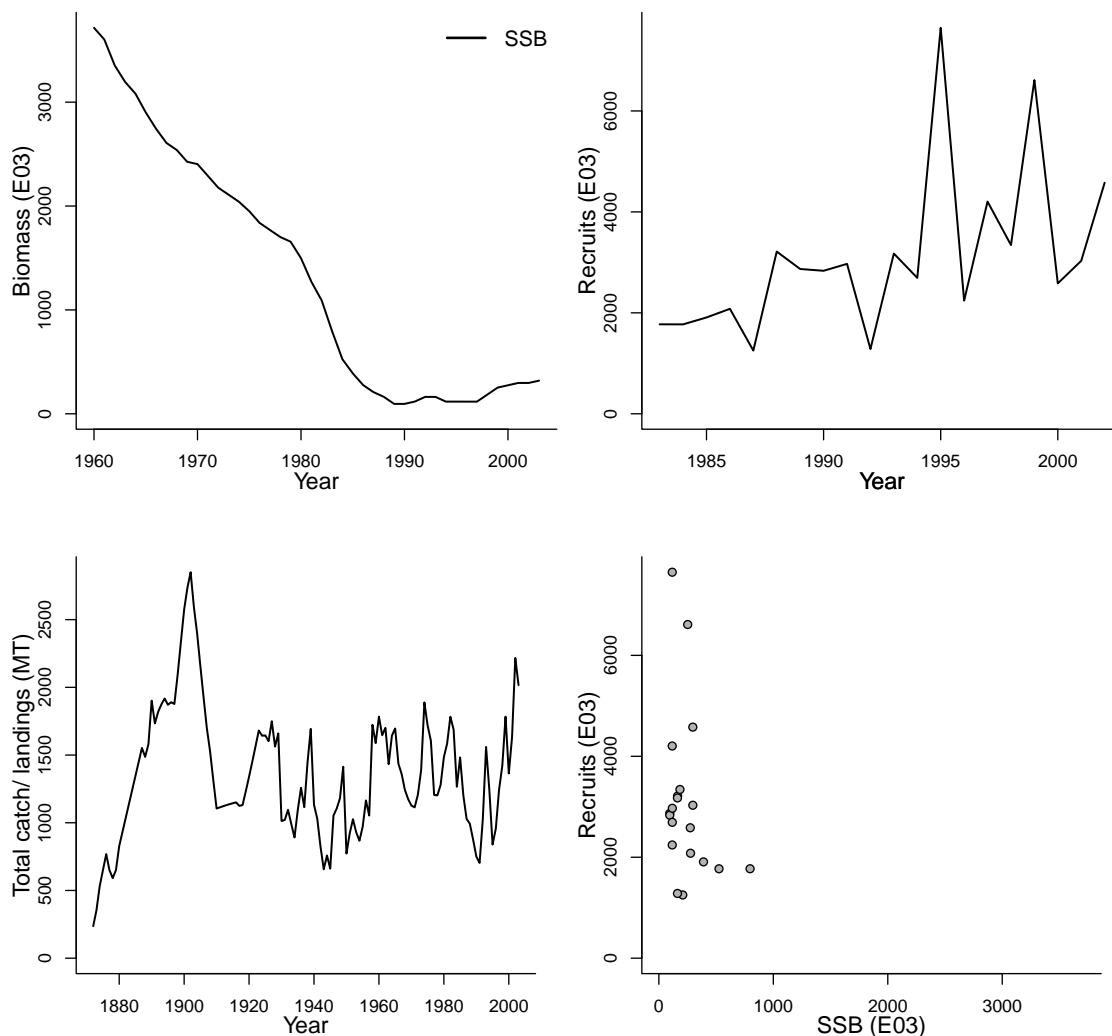
General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center          |
| Assessment authors | SEDAR                                       |
| Assessment method  | Statistical catch-at-age model              |
| Publication year   | 2005  |
| Timeseries span    | 1872-2003                                   |
| Document           | RedSnapper-SEDAR-2008.pdf (pdf in database) |
| Recorder           | STANTON                                     |
| Date entered       | 2010-05-10                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME  | secondary LME    | tertiary LME |
|--|------------------|--------------|
| 5 - Gulf of Mexico                                     | na               | na           |
| <hr/>  |                  |              |
| Parameter  | Value            | Units        |
| REC-AGE-yr   | 1+               | yr           |
| M-1/yr   | 0.1              | 1/yr         |
| NATMORT-1/yr   | 0.29             | 1/yr         |
| SSB-AGE-yr   |                  |              |
| SSB-SEX-sex  |                  |              |
| TB-AGE-yr  |                  |              |
| F-AGE-yr   |                  |              |
| M  |                  |              |
| A50-yr   |                  |              |
| L50-cm   |                  |              |
| <hr/>  |                  |              |
| Parameter  | Reference points |              |
| Parameter  | Value            | Units        |
| Fref-1/T (F)   | 0.069            | 1/T          |
| NATMORT-1/yr (M)                                       | 0.29             | 1/yr         |
| SSBmsy-MT (SSB)  | 1236505.488524   | MT           |
| MSY-MT (TB)  | 18656.4456137168 | MT           |
| BH-h-dimless   | 0.9              | dimless      |
| <i>SSB</i> <sub>2003</sub> / <i>SSB</i> <sub>msy</sub> | 0.000            |              |

| Time series minima and maxima |        |        |   |                  |
|-------------------------------|--------|--------|---|------------------|
|                               | SSB    | R      | F | Catch            |
| Minimum year                  | 1960   | 1983   |   | 1872             |
| Maximum year                  | 2003   | 2002   |   | 2003             |
| Time series minimum           | 95.143 | 1252.8 |   | 236.46949588262  |
| Time series maximum           | 3715.9 | 7647.4 |   | 2850.18167632275 |
| Units                         | E03    | E03    |   | MT               |



# Assessment of Southern Atlantic coast red snapper (*Lutjanus campechanus*)

Assessment ID:SEFSC-RSNAPSATLC-1945-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/69>

Area ID: USA-NMFS-SATLC

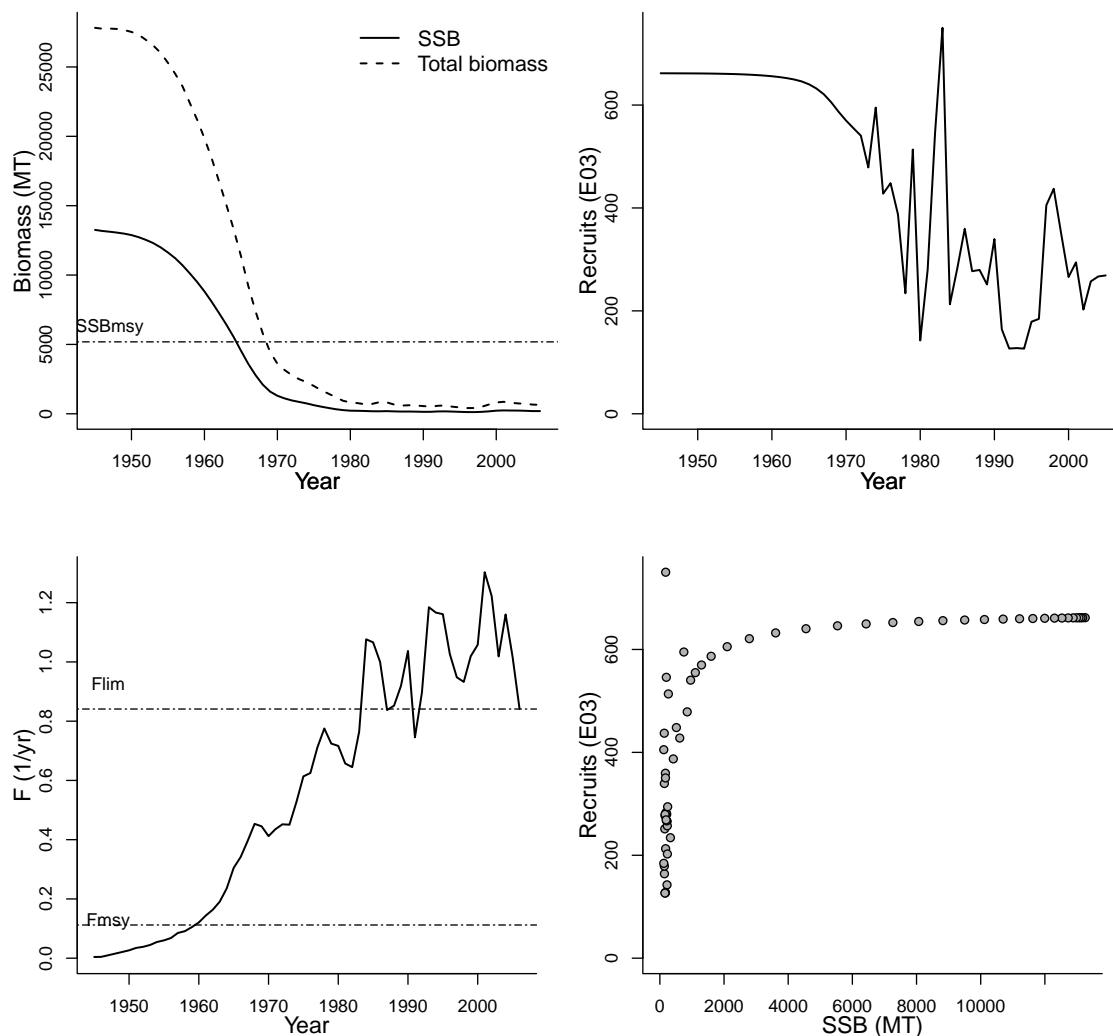
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center           |
| Assessment authors | NULL   |
| Assessment method  | Statistical catch-at-age model               |
| Publication year   | 2008   |
| Timeseries span    | 1945-2006                                    |
| Document           | JENSEN_RSNAPSATLC_2008.pdf (pdf in database) |
| Recorder           | JENSEN                                       |
| Date entered       | 2008-11-22                                   |
| Date last loaded   | 2011-07-26                                   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME    | tertiary LME  |
|--------------------------------------|------------------|---------------|
| 6 - Southeast U.S. Continental Shelf | na               | na            |
| <hr/>                                |                  |               |
| Parameter                            | Value            | Units         |
| SSB-SEX-sex                          | 1                | sex           |
| M-1/yr                               | 0.078            | 1/yr          |
| REC-AGE                              |                  |               |
| SSB-AGE-yr                           |                  |               |
| TB-AGE-yr                            |                  |               |
| F-AGE-yr                             |                  |               |
| M                                    |                  |               |
| A50-yr                               |                  |               |
| L50-cm                               |                  |               |
| <hr/>                                |                  |               |
| Parameter                            | Reference points |               |
| Parameter                            | Value            | Units         |
| Blim-FemaleGonadMT                   | 7275             | FemaleGonadMT |
| Flim-1/yr (F)                        | 0.841            | 1/yr          |
| Fmsy-1/yr (F)                        | 0.112            | 1/yr          |
| MSY-MT (TB)                          | 1049.61          | MT            |
| SSBmsy-MT (SSB)                      | 5184             | MT            |
| $F_{2006}/F_{lim}$                   | 1.001            |               |
| $F_{2006}/F_{msy}$                   | 7.513            |               |
| $SSB_{2006}/SSB_{msy}$               | 0.037            |               |

| Time series minima and maxima |         |         |         |         |
|-------------------------------|---------|---------|---------|---------|
|                               | SSB     | R       | F       | Catch   |
| Minimum year                  | 1945    | 1945    | 1945    | 1945    |
| Maximum year                  | 2006    | 2005    | 2006    | 2006    |
| Time series minimum           | 121.502 | 126.576 | 0.00411 | 412.95  |
| Time series maximum           | 13256.2 | 750.12  | 1.30281 | 27822.6 |
| Units                         | MT      | E03     | 1/yr    | MT      |



# Assessment of Western Gulf of Mexico red snapper (*Lutjanus campechanus*)

Assessment ID:SEFSC-RSNAPWGM-1880-2003-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/456>

Area ID: USA-NMFS-WGM

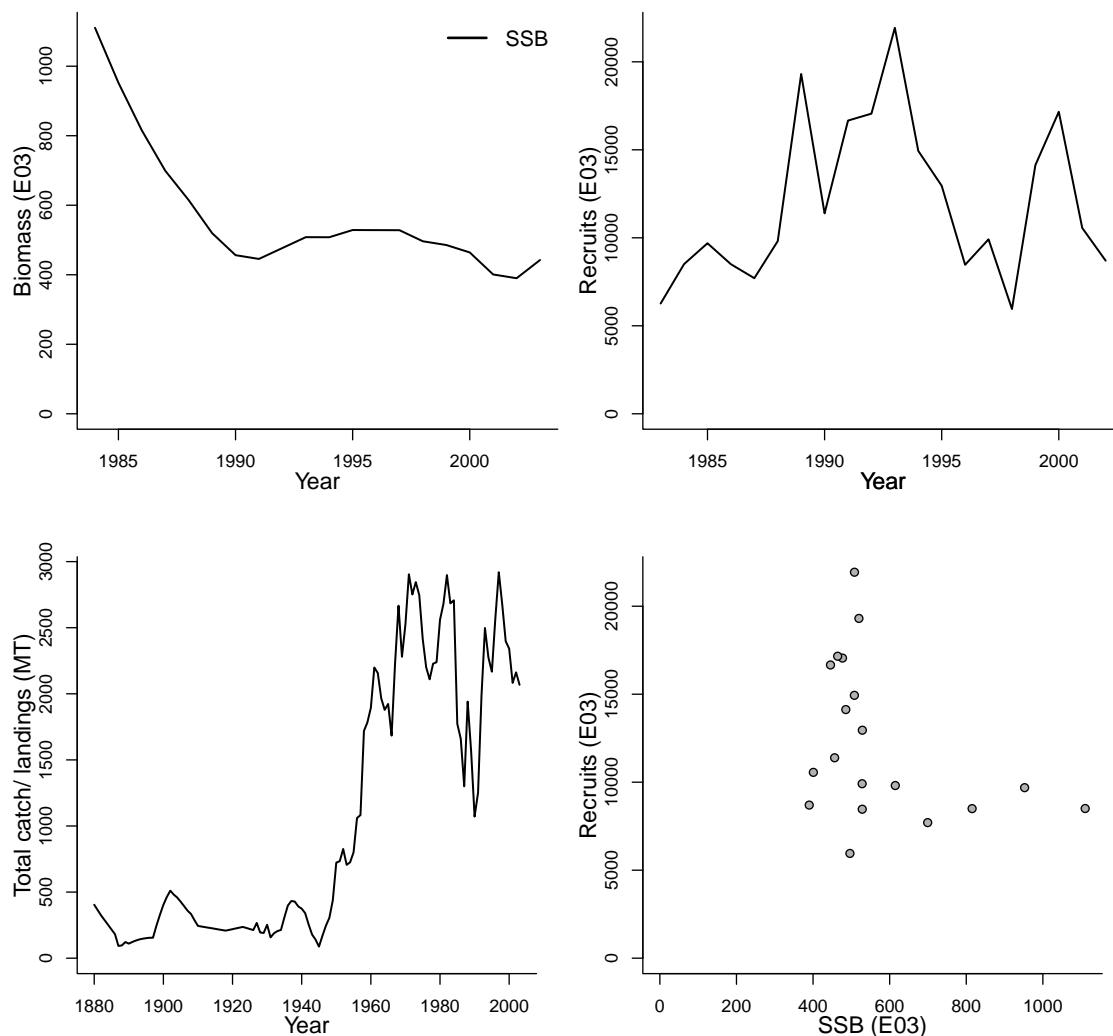
General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center          |
| Assessment authors | SEDAR                                       |
| Assessment method  | Statistical catch-at-age model              |
| Publication year   | 2005  |
| Timeseries span    | 1880-2003                                   |
| Document           | RedSnapper-SEDAR-2008.pdf (pdf in database) |
| Recorder           | STANTON                                     |
| Date entered       | 2010-05-10                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME    | tertiary LME |
|------------------------|------------------|--------------|
| 5 - Gulf of Mexico     | na               | na           |
| <hr/>                  |                  |              |
| Parameter              | Value            | Units        |
| REC-AGE-yr             | 1+               | yr           |
| M-1/yr                 | 0.1              | 1/yr         |
| NATMORT-1/yr           | 0.29             | 1/yr         |
| SSB-AGE-yr             |                  |              |
| SSB-SEX-sex            |                  |              |
| TB-AGE-yr              |                  |              |
| F-AGE-yr               |                  |              |
| M                      |                  |              |
| A50-yr                 |                  |              |
| L50-cm                 |                  |              |
| <hr/>                  |                  |              |
| Parameter              | Reference points |              |
| Parameter              | Value            | Units        |
| Fref-1/T (F)           | 0.069            | 1/T          |
| NATMORT-1/yr (M)       | 0.29             | 1/yr         |
| SSBmsy-MT (SSB)        | 1236505.488524   | MT           |
| MSY-MT (TB)            | 18656.4456137168 | MT           |
| BH-h-dimless           | 0.9              | dimless      |
| $SSB_{2003}/SSB_{msy}$ | 0.000            |              |

| Time series minima and maxima |        |        |   |                  |
|-------------------------------|--------|--------|---|------------------|
|                               | SSB    | R      | F | TB               |
| Minimum year                  | 1984   | 1983   |   | 1880             |
| Maximum year                  | 2003   | 2002   |   | 2003             |
| Time series minimum           | 390    | 5953.2 |   | 87.59095460885   |
| Time series maximum           | 1110.5 | 21933  |   | 2919.80356919405 |
| Units                         | E03    | E03    |   | MT               |



# Assessment of Atlantic sandbar shark (*Carcharhinus plumbeus*)

Assessment ID:SEFSC-SBARSHARATL-1975-2004-FAUCONNET

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/304>

Area ID: USA-NMFS-ATL

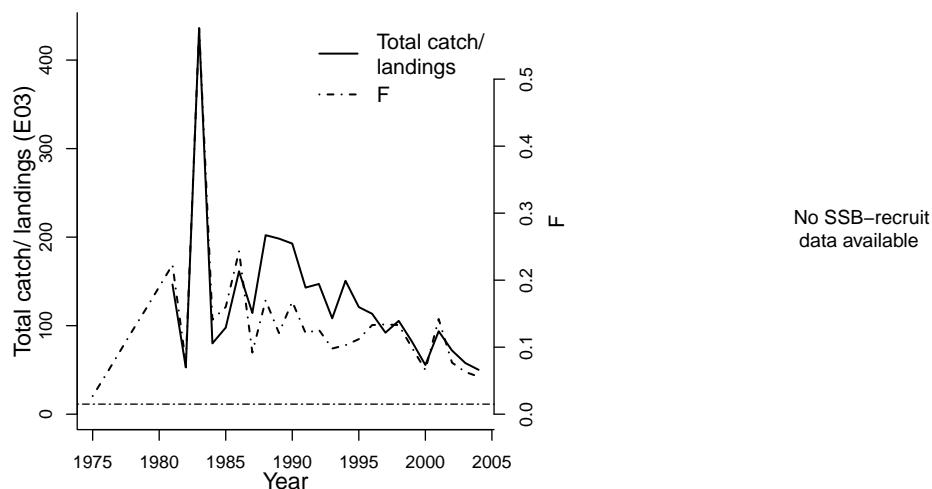
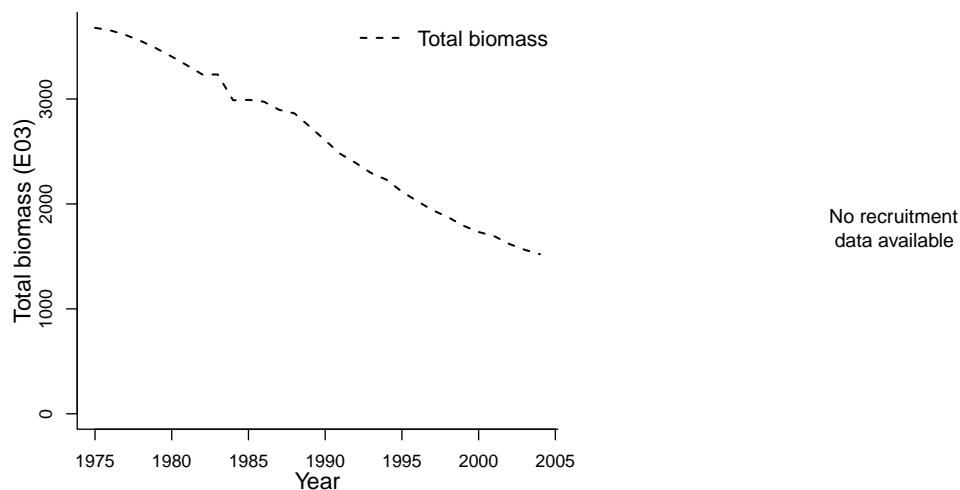
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Carlson, John                                   |
| Assessment method  | State-space age-structured production model     |
| Publication year   | 2006  |
| Timeseries span    | 1975-2004                                       |
| Document           | LargeCoastalAtl2006-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-04-29                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME       |       |       | secondary LME                        |            |         | tertiary LME |       |       |
|-------------------|-------|-------|--------------------------------------|------------|---------|--------------|-------|-------|
| 8 - Scotian Shelf |       |       | 7 - Northeast U.S. Continental Shelf |            |         | na           |       |       |
| Parameter         | Value | Units | Parameter                            | Value      | Units   | Parameter    | Value | Units |
| SSB-AGE-yr        | 19    | yr    | Fmsy-1/T (F)                         | 0.015      | 1/T     |              |       |       |
| SSB-SEX-sex       | 1     | sex   | Fref-1/T (F)                         | 9.80E-05   | 1/T     |              |       |       |
| A50-yr            | 19    | yr    | MSY-MT (TB)                          | 403        | MT      |              |       |       |
| M-1/T             | 0.224 | 1/T   | RO-E00                               | 5.00E+05   | E00     |              |       |       |
| REC-AGE           |       |       | SPRmsy-E00                           | 0.95       | E00     |              |       |       |
| TB-AGE-yr         |       |       | SSFmsy-E00                           | 1127210.53 | E00     |              |       |       |
| F-AGE-yr          |       |       | BH-h-dimless                         | 0.32       | dimless |              |       |       |
| M                 |       |       | $F_{2004}/F_{msy}$                   | 3.733      |         |              |       |       |
| L50-cm            |       |       |                                      |            |         |              |       |       |

| Time series minima and maxima |     |   |       |         |      |
|-------------------------------|-----|---|-------|---------|------|
|                               | SSB | R | F     | TB      |      |
| Minimum year                  |     |   | 1975  | 1975    | 1981 |
| Maximum year                  |     |   | 2004  | 2004    | 2004 |
| Time series minimum           |     |   | 0.027 | 1520.56 | 50.1 |
| Time series maximum           |     |   | 0.576 | 3678.73 | 436  |
| Units                         |     |   | 1/yr  | E03     | E03  |



# Assessment of Atlantic atlantic sharpnose shark (*Rhizoprionodon terraenovae*)

Assessment ID:SEFSC-SNOSESHARATL-1950-2005-FAUCONNET

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/325>

Area ID: USA-NMFS-ATL

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center              |
| Assessment authors | Brooks, Liz                                     |
| Assessment method  | Age-structured surplus production model         |
| Publication year   | 2007  |
| Timeseries span    | 1950-2005                                       |
| Document           | SmallcoastalAtl2007-SEFSC.pdf (pdf in database) |
| Recorder           | FAUCONNET                                       |
| Date entered       | 2009-05-07                                      |
| Date last loaded   | 2011-07-25                                      |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10                                      |

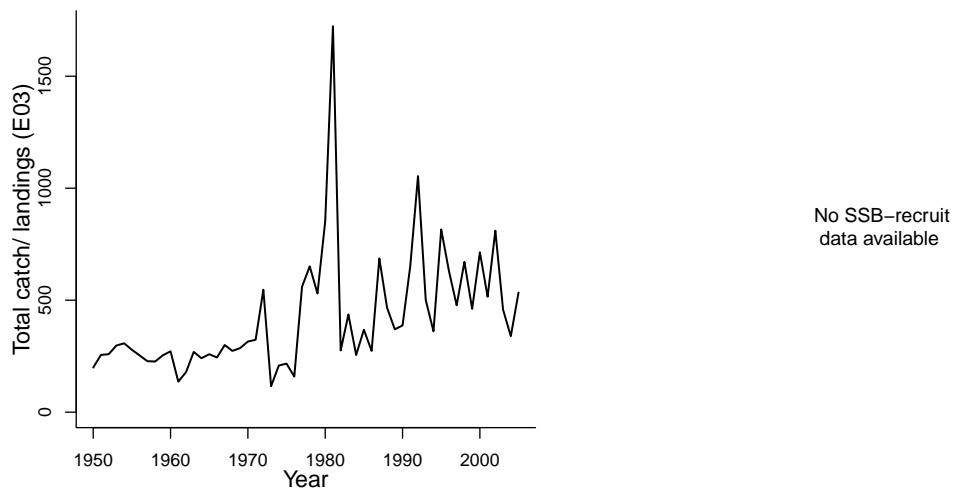
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME                        |          |         | tertiary LME |       |       |
|--------------------------------------|-------|-------|--------------------------------------|----------|---------|--------------|-------|-------|
| 6 - Southeast U.S. Continental Shelf |       |       | 7 - Northeast U.S. Continental Shelf |          |         | na           |       |       |
| Parameter                            | Value | Units | Parameter                            | Value    | Units   | Parameter    | Value | Units |
| SSB-AGE-yr                           | 2.5   | yr    | Fmsy-1/yr (F)                        | 0.19     | 1/yr    |              |       |       |
| SSB-SEX-sex                          | 1     | sex   | Fcurrent-1/T (F)                     | 0.13     | 1/T     |              |       |       |
| REC-AGE                              |       |       | MSY-MT (TB)                          | 1.27E+06 | MT      |              |       |       |
| TB-AGE-yr                            |       |       | r-1/yr                               | 0.165    | 1/yr    |              |       |       |
| F-AGE-yr                             |       |       | SPRmsy-E00                           | 0.59     | E00     |              |       |       |
| M                                    |       |       | SSFmsy-E00                           | 4.59E+06 | E00     |              |       |       |
| A50-yr                               |       |       | Nmsy-E00                             | 4.62E+06 | E00     |              |       |       |
| L50-cm                               |       |       | BH-h-dimless                         | 0.42     | dimless |              |       |       |

| Time series minima and maxima |     |   |   |    |          |
|-------------------------------|-----|---|---|----|----------|
|                               | SSB | R | F | TB | Catch    |
| Minimum year                  |     |   |   |    | 1950     |
| Maximum year                  |     |   |   |    | 2005     |
| Time series minimum           |     |   |   |    | 115.836  |
| Time series maximum           |     |   |   |    | 1723.362 |
| Units                         |     |   |   |    | E03      |

No biomass data available

No recruitment data available



# Assessment of Southern Atlantic coast snowy grouper (*Epinephelus niveatus*)

Assessment ID:SEFSC-SNOWGROUPSATLC-1961-2002-STANTON

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/358>

Area ID: USA-NMFS-SATLC

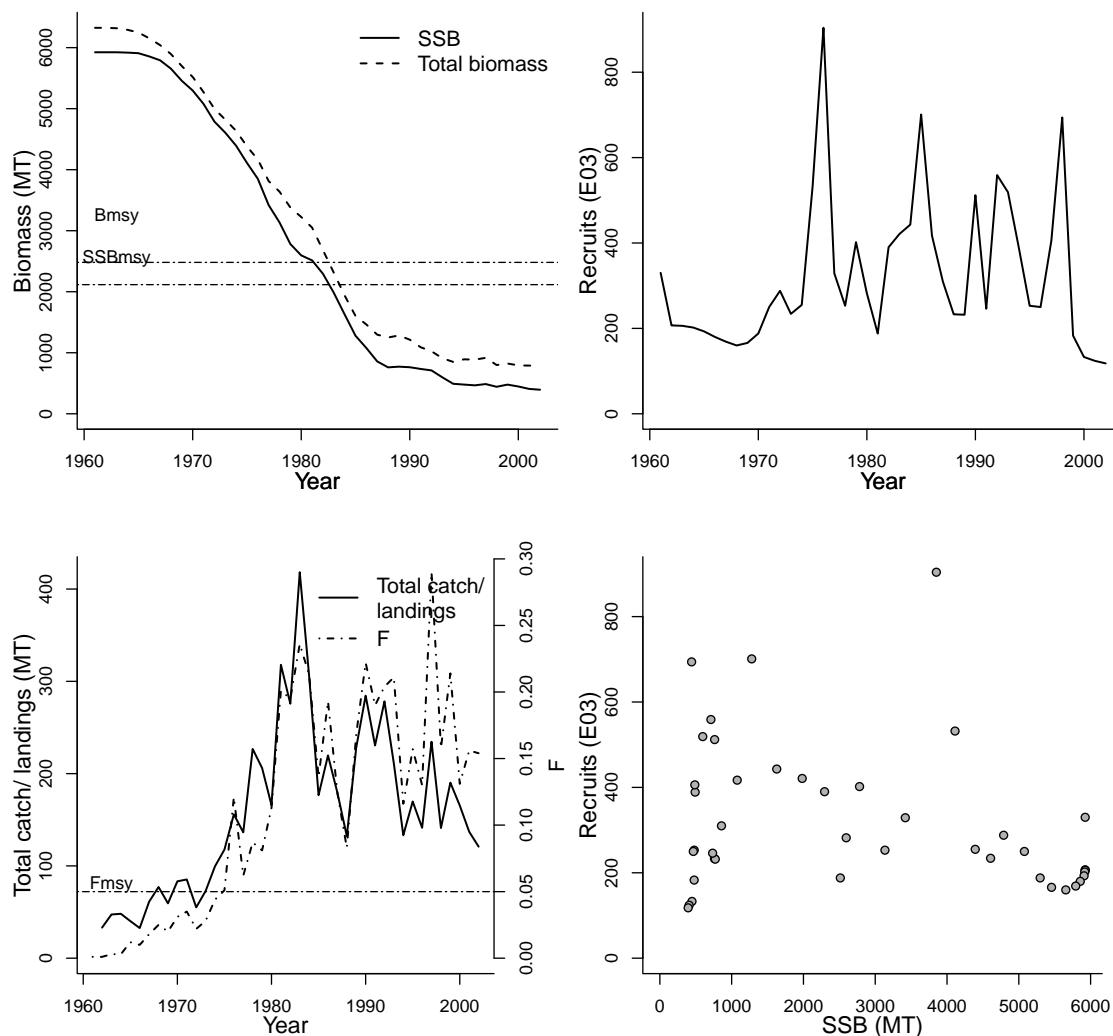
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                          |
| Assessment authors | Anonymous   |
| Assessment method  | Statistical catch-at-age model                              |
| Publication year   | 2004  |
| Timeseries span    | 1961-2002   |
| Document           | ref2004-SEDAR-deepwatersnappergrouper.pdf (pdf in database) |
| Recorder           | STANTON   |
| Date entered       | 2009-05-29  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-03-17  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          |       | tertiary LME |
|--------------------------------------|-------|-------|------------------------|-------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                     | na    |              |
| Parameter                            | Value | Units | Reference points       |       |              |
| SSB-AGE-yr                           | 5.6   | yr    | Fmsy-1/yr (F)          | 0.05  | 1/yr         |
| SSB-SEX-sex                          | 1     | sex   | F40%-1/T               | 0.047 | 1/T          |
| REC-AGE-yr                           | 0     | yr    | SSBmsy-MT (SSB)        | 2116  | MT           |
| F-AGE-yr-yr                          | 2+    | yr-yr | MSY-MT (TB)            | 142   | MT           |
| TB-AGE-yr                            | 1+    | yr    | Umsy-ratio (U)         | 0.037 | ratio        |
| L50-cm                               | 52.4  | cm    | Bmsy-MT (TB)           | 2481  | MT           |
| M                                    |       |       | $TB_{2002}/B_{msy}$    | 0.317 |              |
| A50-yr                               |       |       | $F_{2002}/F_{msy}$     | 3.080 |              |
|                                      |       |       | $SSB_{2002}/SSB_{msy}$ | 0.186 |              |

| Time series minima and maxima |        |      |       |        |        |
|-------------------------------|--------|------|-------|--------|--------|
|                               | SSB    | R    | F     | TB     | Catch  |
| Minimum year                  | 1961   | 1961 | 1961  | 1961   | 1962   |
| Maximum year                  | 2002   | 2002 | 2002  | 2002   | 2002   |
| Time series minimum           | 394.4  | 118  | 0.001 | 785.8  | 32.68  |
| Time series maximum           | 5924.4 | 904  | 0.29  | 6325.2 | 418.26 |
| Units                         | MT     | E03  | 1/yr  | MT     | MT     |



# Assessment of Southern Atlantic coast spanish mackerel (*Scomberomorus maculatus*)

Assessment ID:SEFSC-SPANMACKSATLC-1950-2008-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/75>

Area ID: USA-NMFS-SATLC

General assessment details.

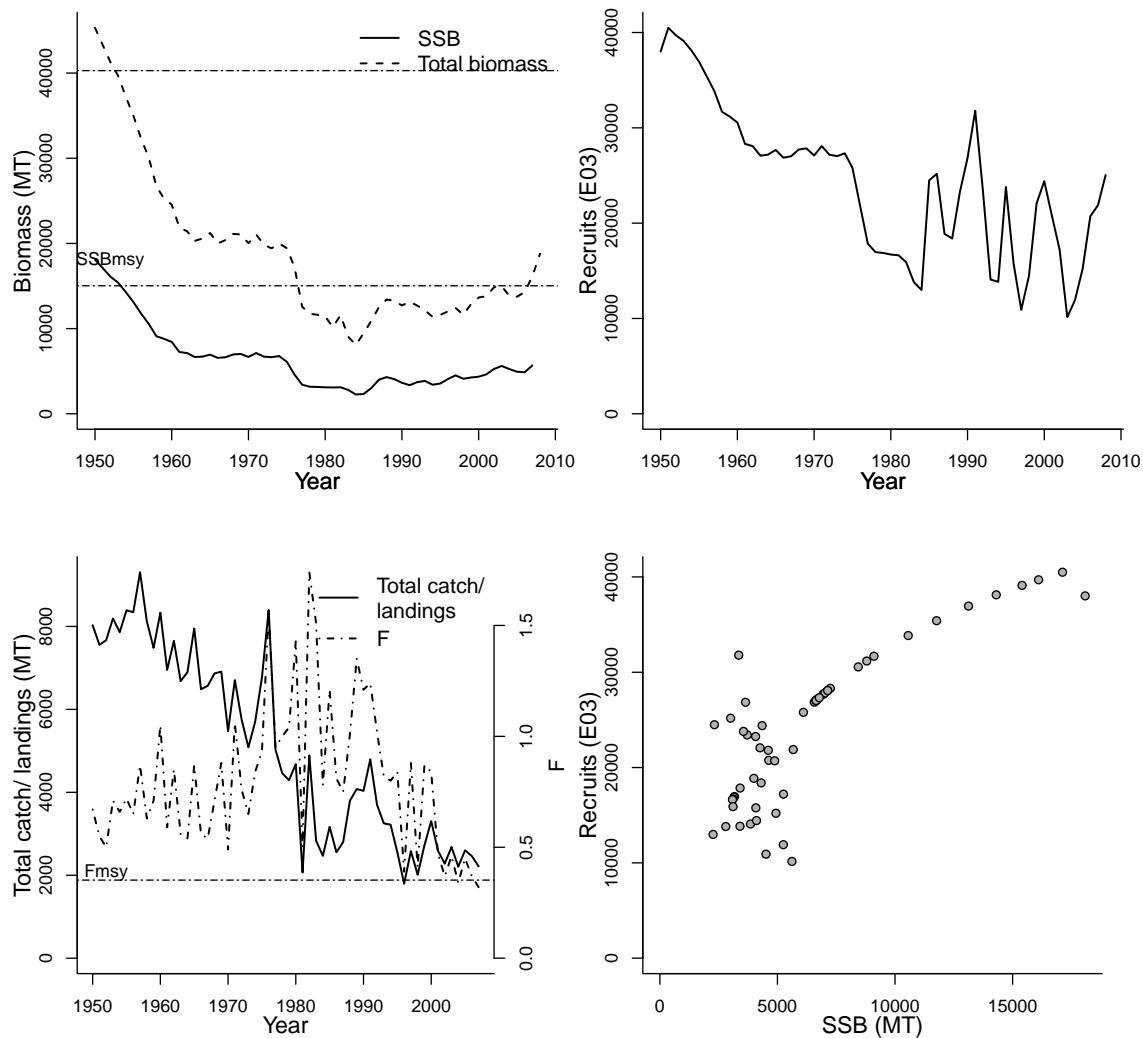
| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center                 |
| Assessment authors |  |
| Assessment method  | Statistical catch-at-age model                     |
| Publication year   | 2008   |
| Timeseries span    | 1950-2008  |
| Document           | JENSEN_SPANMACKSATLC_2008.pdf<br>(pdf in database) |
| Recorder           | JENSEN   |
| Date entered       | 2008-11-25   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-04-30   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          |                  | tertiary LME |
|--------------------------------------|-------|-------|------------------------|------------------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                     | na               |              |
| Parameter                            | Value | Units | Parameter              | Reference points |              |
| REC-AGE                              |       |       |                        |                  |              |
| SSB-AGE-yr                           |       |       | Bmsy-MT (TB)           | 40288            | MT           |
| SSB-SEX-sex                          |       |       | Fmsy-1/yr (F)          | 0.352            | 1/yr         |
| TB-AGE-yr                            |       |       | MSY-MT (TB)            | 5941.60          | MT           |
| F-AGE-yr                             |       |       | SSBmsy-MT (SSB)        | 15027            | MT           |
| M                                    |       |       | $TB_{2008}/B_{msy}$    | 0.467            |              |
| A50-yr                               |       |       | $F_{2007}/F_{msy}$     | 0.909            |              |
| L50-cm                               |       |       | $SSB_{2007}/SSB_{msy}$ | 0.377            |              |

## Time series minima and maxima

|                     | SSB   | R       | F    | TB    | Catch   |
|---------------------|-------|---------|------|-------|---------|
| Minimum year        | 1950  | 1950    | 1950 | 1950  | 1950    |
| Maximum year        | 2007  | 2008    | 2007 | 2008  | 2007    |
| Time series minimum | 2263  | 10149.6 | 0.32 | 8074  | 1797.32 |
| Time series maximum | 18087 | 40494.5 | 1.74 | 45316 | 9308.03 |
| Units               | MT    | E03     | 1/yr | MT    | MT      |



# Assessment of Southern Atlantic coast tilefish (*Lopholatilus chamaeleonticeps*)

Assessment ID:SEFSC-TILESATLC-1961-2002-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/357>

Area ID: USA-NMFS-SATLC

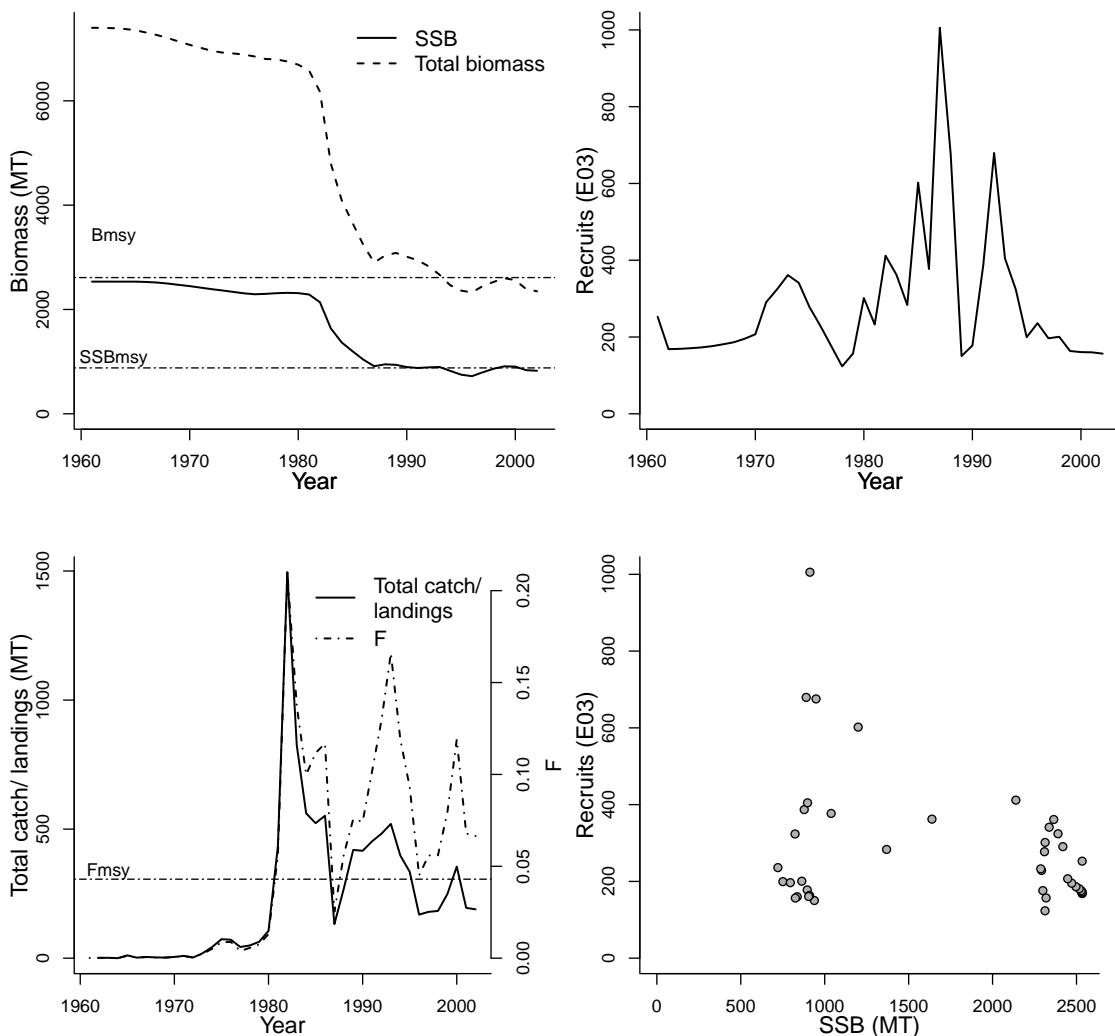
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center                              |
| Assessment authors | SEDAR 4 Stock Assessment Panel                                  |
| Assessment method  | Statistical catch-at-age model                                  |
| Publication year   | 2004  |
| Timeseries span    | 1961-2002   |
| Document           | 2004-SEDAR-deepwatersnappergrouper.pdf<br>(pdf not in database) |
| Recorder           | STANTON   |
| Date entered       | 2009-05-29  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-03-17  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          |        | tertiary LME |
|--------------------------------------|-------|-------|------------------------|--------|--------------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                     | na     |              |
| Parameter                            | Value | Units | Reference points       |        |              |
| SSB-SEX-sex                          | 1     | sex   | Fmax-1/yr (F)          | 0.081  | 1/yr         |
| F-AGE-yr-yr                          | 2+    | yr-yr | Fmsy-1/yr (F)          | 0.043  | 1/yr         |
| TB-AGE-yr                            | 1+    | yr    | F40%-1/T               | 0.043  | 1/T          |
| REC-AGE                              |       |       | SSBmsy-MT (SSB)        | 879.4  | MT           |
| SSB-AGE-yr                           |       |       | MSY-MT (TB)            | 152.6  | MT           |
| M                                    |       |       | Umsy-ratio (U)         | 0.035  | ratio        |
| A50-yr                               |       |       | Bmsy-MT (TB)           | 2611.4 | MT           |
| L50-cm                               |       |       | $TB_{2002}/B_{msy}$    | 0.899  |              |
|                                      |       |       | $F_{2002}/F_{msy}$     | 1.545  |              |
|                                      |       |       | $SSB_{2002}/SSB_{msy}$ | 0.938  |              |

| Time series minima and maxima |        |        |         |        |
|-------------------------------|--------|--------|---------|--------|
|                               | SSB    | R      | F       | TB     |
| Minimum year                  | 1961   | 1961   | 1961    | 1961   |
| Maximum year                  | 2002   | 2002   | 2002    | 2002   |
| Time series minimum           | 720.9  | 123.5  | 6e-05   | 2326.4 |
| Time series maximum           | 2533.8 | 1005.5 | 0.21004 | 7400.4 |
| Units                         | MT     | E03    | 1/yr    | MT     |



# Assessment of Gulf of Mexico vermillion snapper (*Rhomboplites aurorubens*)

Assessment ID:SEFSC-VSNAPGM-1981-2004-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/19>

Area ID: USA-NMFS-GM

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southeast Fisheries Science Center            |
| Assessment authors | NULL  |
| Assessment method  | Age-structured surplus production model       |
| Publication year   | 2006  |
| Timeseries span    | 1981-2004                                     |
| Document           | JENSEN_VSNAPGM_2006.pdf (pdf not in database) |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-19                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2010-03-08                                    |

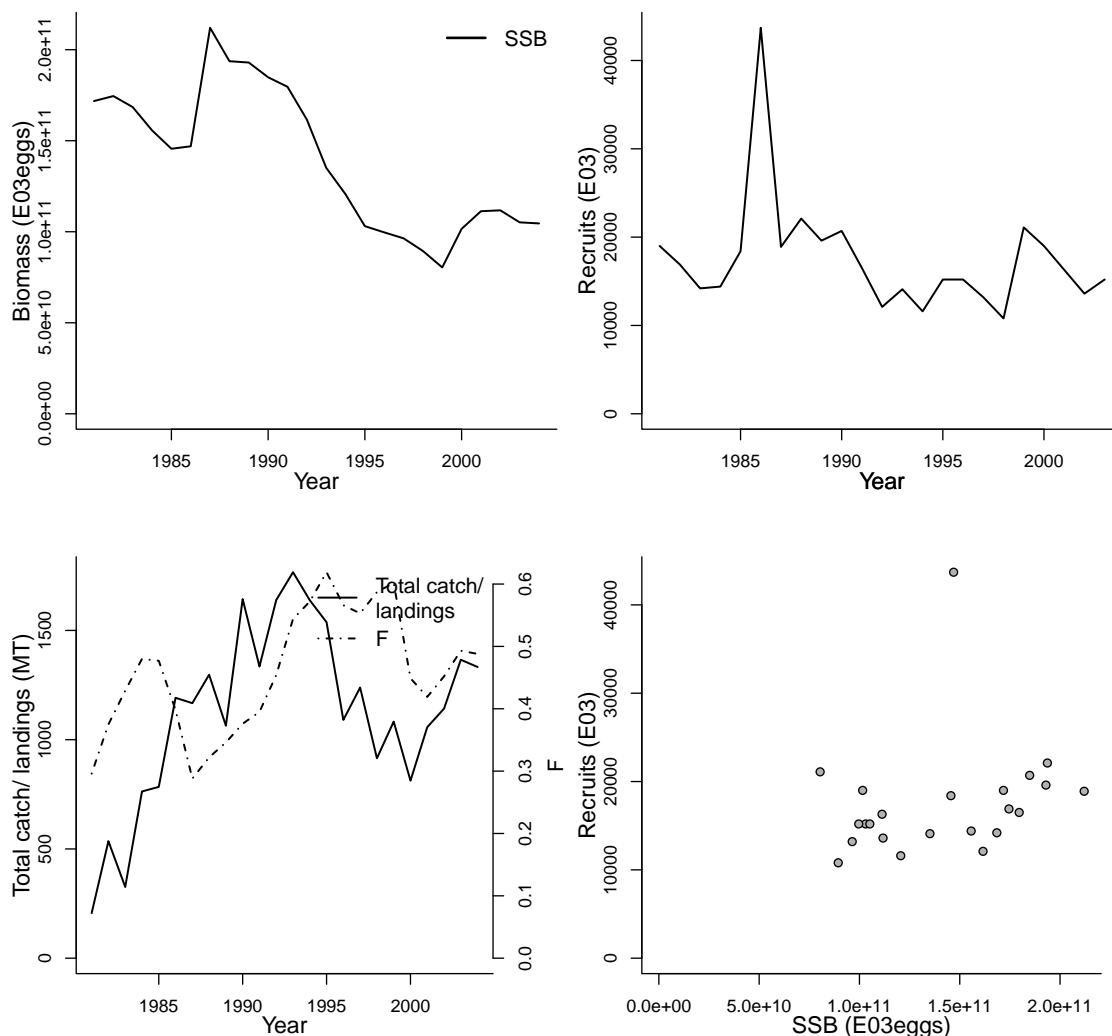
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        | secondary LME | tertiary LME |
|--------------------|---------------|--------------|
| 5 - Gulf of Mexico | na            | na           |
| Parameter          | Value         | Units        |
| M-1/T              | AVAILABLE     | 1/T          |
| REC-AGE            |               |              |
| SSB-AGE-yr         |               |              |
| SSB-SEX-sex        |               |              |
| TB-AGE-yr          |               |              |
| F-AGE-yr           |               |              |
| M                  |               |              |
| A50-yr             |               |              |
| L50-cm             |               |              |

| Parameter              | Reference points | Value   | Units |
|------------------------|------------------|---------|-------|
| SSBlim-E00eggs         | 7.14E+13         | E00eggs |       |
| Flim-1/yr (F)          | 0.79             | 1/yr    |       |
| Fmsy-1/T (F)           | 0.81             | 1/T     |       |
| MSY-MT (TB)            | 3374.72          | MT      |       |
| SSBmsy-E03eggs         | 68800000000      | E03eggs |       |
| $SSB_{2004}/SSB_{lim}$ | 0.001            |         |       |
| $F_{2004}/F_{lim}$     | 0.618            |         |       |
| $F_{2004}/F_{msy}$     | 0.602            |         |       |
| $SSB_{2004}/SSB_{msy}$ | 1.520            |         |       |

| Time series minima and maxima |              |       |       |         |
|-------------------------------|--------------|-------|-------|---------|
|                               | SSB          | R     | F     | TB      |
| Minimum year                  | 1981         | 1981  | 1981  | 1981    |
| Maximum year                  | 2004         | 2003  | 2004  | 2004    |
| Time series minimum           | 80395000000  | 10800 | 0.288 | 206.23  |
| Time series maximum           | 212030000000 | 43700 | 0.619 | 1766.47 |
| Units                         | E03eggs      | E03   | 1/yr  | MT      |



# Assessment of Southern Atlantic coast vermillion snapper (*Rhomboplites aurorubens*)

Assessment ID:SEFSC-VSNAPSATLC-1946-2008-STANTON  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/356>

Area ID: USA-NMFS-SATLC

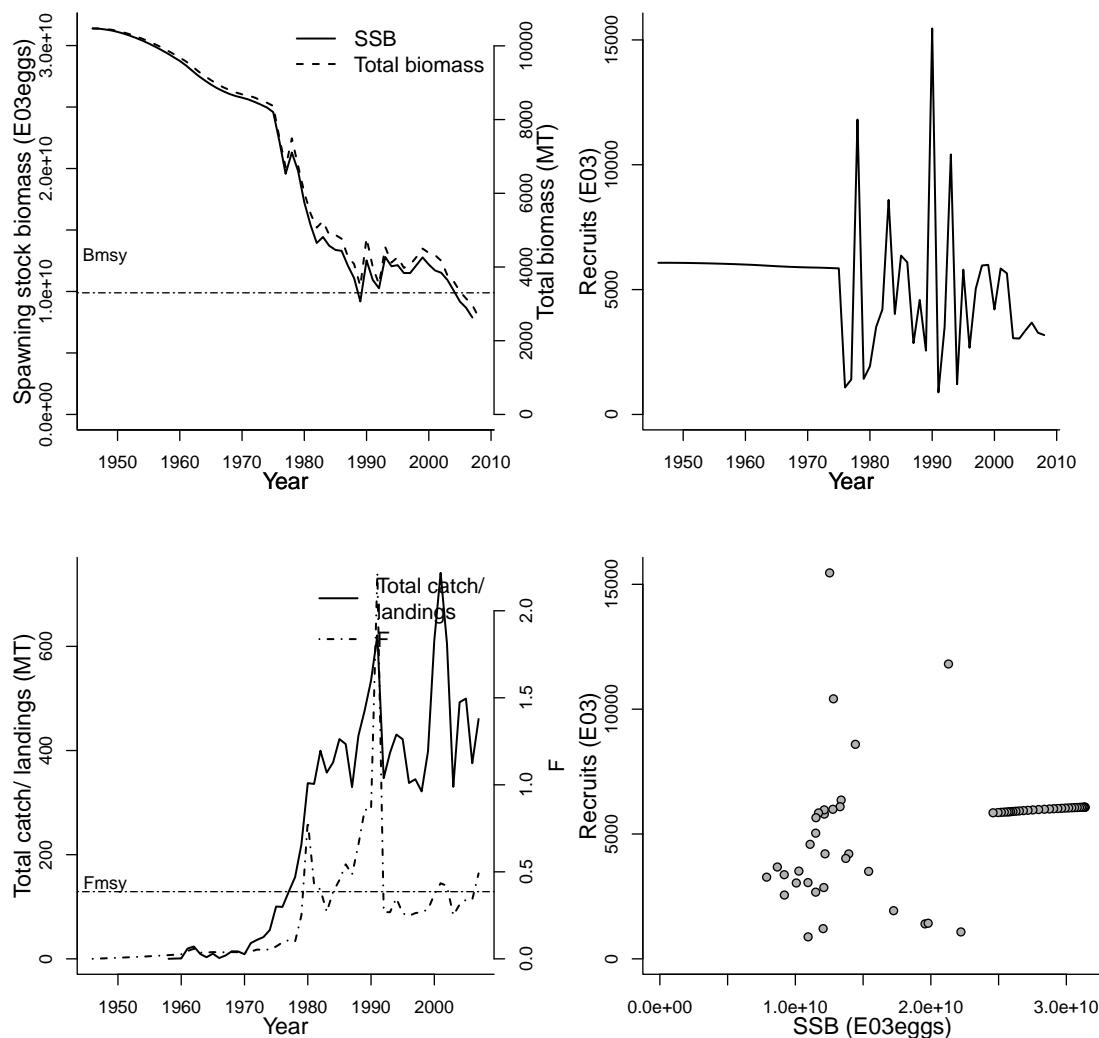
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center                             |
| Assessment authors | SEDAR 17 Stock Assessment Panel                                |
| Assessment method  | an AD-Model builder statistical Catch at Age Model             |
| Publication year   | 2008   |
| Timeseries span    | 1946-2008  |
| Document           | 2008-SEDAR-VermillionSnapper-Satl.pdf<br>(pdf not in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-06-01   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2010-03-05   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          | secondary LME    | tertiary LME |
|--------------------------------------|------------------|--------------|
| 6 - Southeast U.S. Continental Shelf | na               | na           |
| <hr/>                                |                  |              |
| Parameter                            | Value            | Units        |
| SSB-AGE-yr                           | 1                | yr           |
| REC-AGE-yr                           | 1                | yr           |
| F-AGE-yr-yr                          | 1+               | yr-yr        |
| M-1/yr                               | 0.22             | 1/yr         |
| NATMORT-1/yr                         | 0.22             | 1/yr         |
| SSB-SEX-sex                          |                  |              |
| TB-AGE-yr                            |                  |              |
| M                                    |                  |              |
| A50-yr                               |                  |              |
| L50-cm                               |                  |              |
| <hr/>                                |                  |              |
| Reference points                     |                  |              |
| Parameter                            | Value            | Units        |
| Fmsy-1/yr (F)                        | 0.386            | 1/yr         |
| NATMORT-1/yr (M)                     | 0.22             | 1/yr         |
| MSY-MT (TB)                          | 755.239045631861 | MT           |
| Bmsy-MT (TB)                         | 3300             | MT           |
| SSBmsy-E03eggs                       | 9160000000       | E03eggs      |
| BH-h-dimless                         | 0.56             | dimless      |
| $TB_{2008}/B_{msy}$                  | 0.801            |              |
| $F_{2007}/F_{msy}$                   | 1.273            |              |
| $SSB_{2007}/SSB_{msy}$               | 0.860            |              |

| Time series minima and maxima |             |         |        |       |                    |
|-------------------------------|-------------|---------|--------|-------|--------------------|
|                               | SSB         | R       | F      | TB    | Catch              |
| Minimum year                  | 1946        | 1946    | 1946   | 1946  | 1958               |
| Maximum year                  | 2007        | 2008    | 2007   | 2008  | 2007               |
| Time series minimum           | 7880000000  | 881     | 0      | 2642  | 0.0879978227342829 |
| Time series maximum           | 31390000000 | 15458.8 | 2.2178 | 10472 | 741.140796516375   |
| Units                         | E03eggs     | E03     | 1/yr   | MT    | MT                 |



# Assessment of Southern Atlantic coast yellowtail snapper (*Ocyurus chrysurus*)

Assessment ID:SEFSC-YTSNAPSATLC-1962-2001-STANTON  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/401>

Area ID: USA-NMFS-SATLC

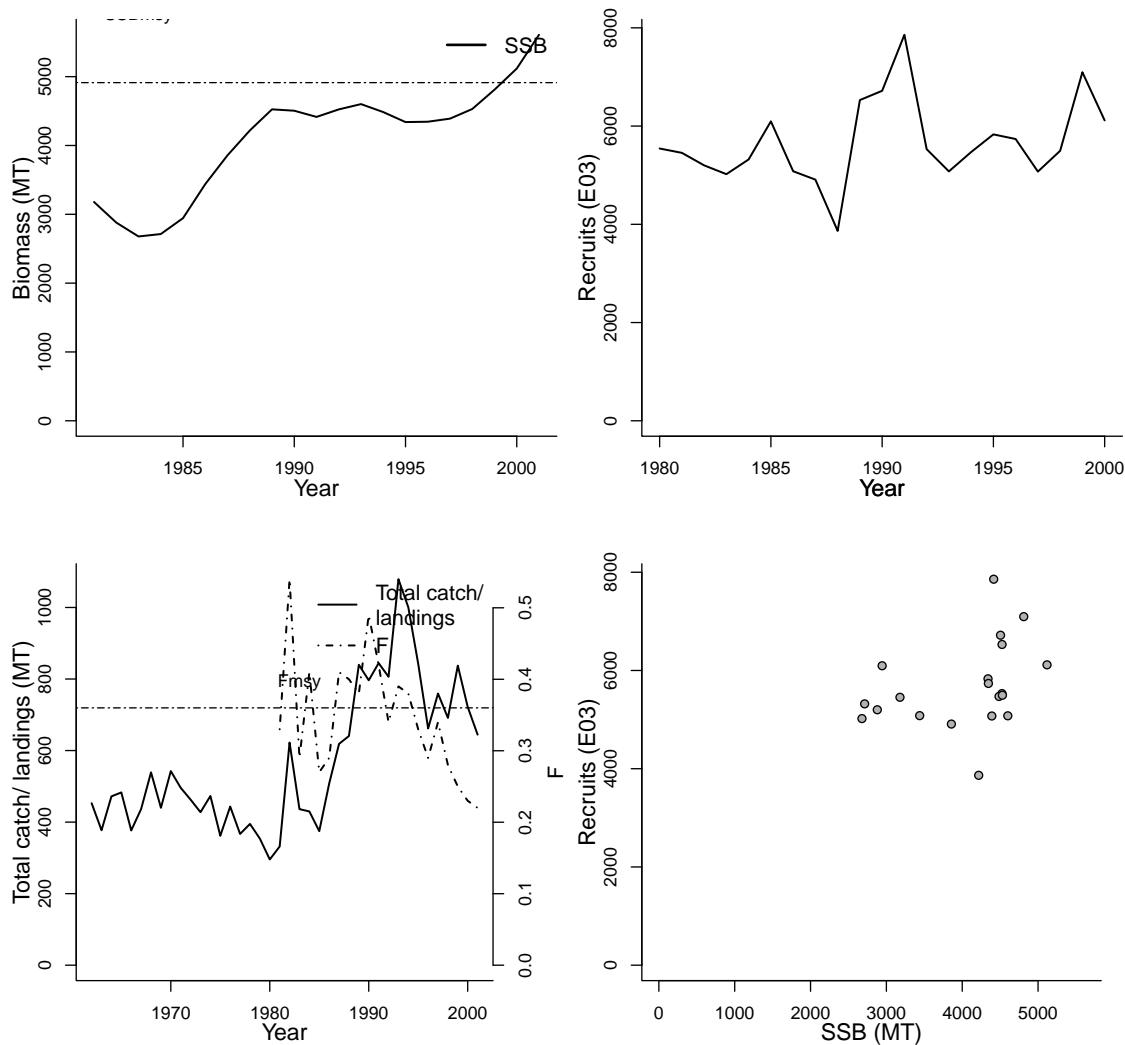
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southeast Fisheries Science Center                     |
| Assessment authors | Muller, R  |
| Assessment method  | Statistical catch-at-age model                         |
| Publication year   | 2003   |
| Timeseries span    | 1962-2001  |
| Document           | 2003_SEDAR_Yellowtailsnapper.pdf (pdf not in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-06-01   |
| Date last loaded   | 2011-07-27   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                          |       |       | secondary LME          | tertiary LME |         |
|--------------------------------------|-------|-------|------------------------|--------------|---------|
| 6 - Southeast U.S. Continental Shelf |       |       | na                     | na           |         |
| Parameter                            | Value | Units | Reference points       |              |         |
| SSB-AGE-yr                           | 1.7   | yr    | Parameter              | Value        | Units   |
| SSB-SEX-sex                          | 1     | sex   | Fmsy-1/yr (F)          | 0.36         | 1/yr    |
| REC-AGE-yr                           | 1     | yr    | NATMORT-1/yr (M)       | 0.2          | 1/yr    |
| L50-cm                               | 20.9  | cm    | SSBmsy-MT (SSB)        | 4913         | MT      |
| M-1/yr                               | 0.2   | 1/yr  | MSY-MT (TB)            | 1366         | MT      |
| NATMORT-1/yr                         | 0.2   | 1/yr  | BH-h-dimless           | 0.8          | dimless |
| TB-AGE-yr                            |       |       | $F_{2001}/F_{msy}$     | 0.611        |         |
| F-AGE-yr                             |       |       | $SSB_{2001}/SSB_{msy}$ | 1.141        |         |
| M                                    |       |       |                        |              |         |
| A50-yr                               |       |       |                        |              |         |

| Time series minima and maxima |      |          |      |    |       |
|-------------------------------|------|----------|------|----|-------|
|                               | SSB  | R        | F    | TB | Catch |
| Minimum year                  | 1981 | 1980     | 1981 |    | 1962  |
| Maximum year                  | 2001 | 2000     | 2001 |    | 2001  |
| Time series minimum           | 2678 | 3866.127 | 0.22 |    | 295.5 |
| Time series maximum           | 5608 | 7858.126 | 0.54 |    | 1079  |
| Units                         | MT   | E03      | 1/yr |    | MT    |



# Assessment of Northern Sea of Okhotsk walleye pollock (*Theragra chalcogramma*)

Assessment ID:SFI-WPOLLNSO-1985-1994-JENSEN

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/425>

Area ID: Russia-RFFA-NSO

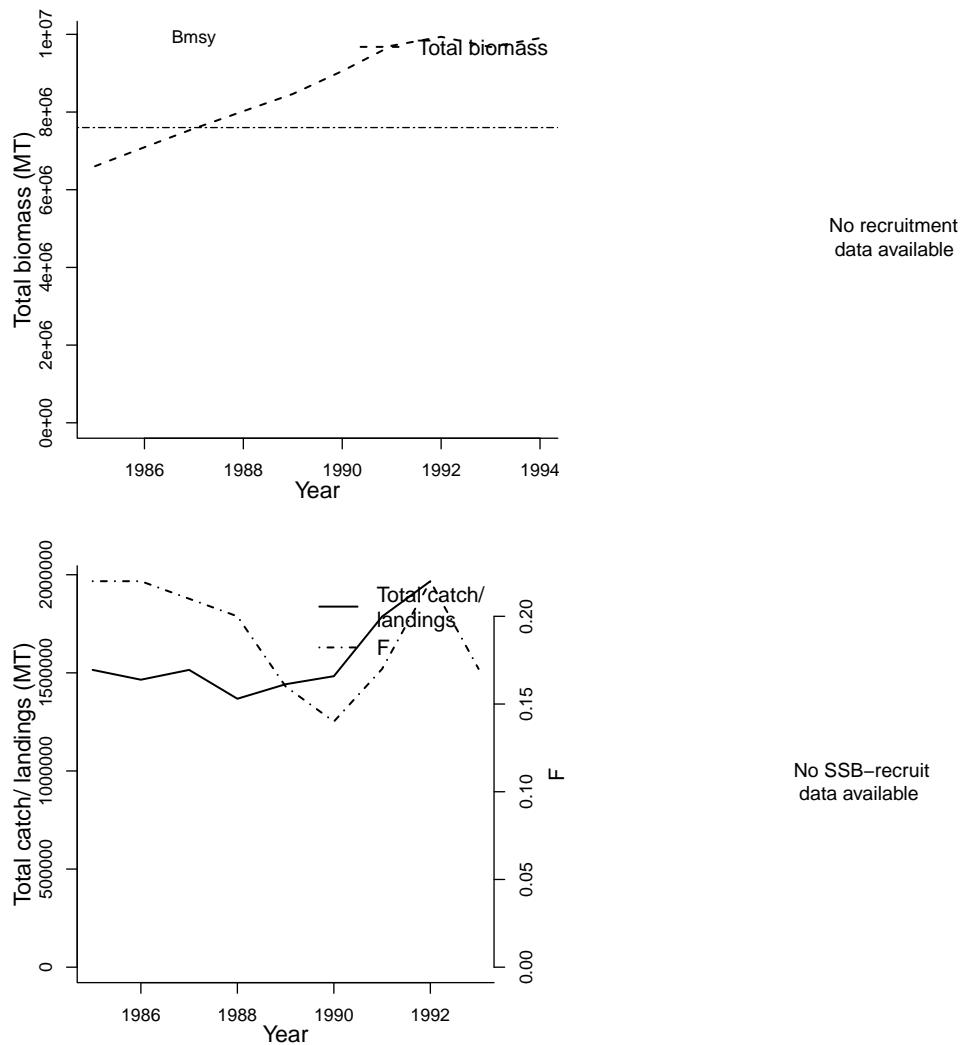
General assessment details.

| Detail             | Value                                      |
|--------------------|--|
| Management body    | RFFA                                       |
| Assessment group   | Sea Fisheries Institute Poland             |
| Assessment authors | Janusz, J.                                 |
| Assessment method  | Age-aggregated surplus production model    |
| Publication year   | 1997                                       |
| Timeseries span    | 1985-1994                                  |
| Document           | WPOLLNSO-1997-JENSEN.pdf (pdf in database) |
| Recorder           | JENSEN                                     |
| Date entered       | 2009-11-10                                 |
| Date last loaded   | 2011-07-25                                 |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                 |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME         |       |       | secondary LME                        |         | tertiary LME |
|---------------------|-------|-------|--------------------------------------|---------|--------------|
| 52 - Sea of Okhotsk |       |       | na                                   | na      |              |
| Parameter           | Value | Units | Reference points                     |         |              |
| M-1/yr              | 0.2   | 1/yr  | Parameter                            | Value   | Units        |
| REC-AGE             |       |       | F <sub>msy</sub> -1/yr (F)           | 0.27    | 1/yr         |
| SSB-AGE-yr          |       |       | MSY-MT (TB)                          | 2067000 | MT           |
| SSB-SEX-sex         |       |       | B <sub>msy</sub> -MT (TB)            | 7600000 | MT           |
| TB-AGE-yr           |       |       | TB <sub>1994</sub> /B <sub>msy</sub> | 1.303   |              |
| F-AGE-yr            |       |       | F <sub>1993</sub> /F <sub>msy</sub>  | 0.630   |              |
| M                   |       |       |                                      |         |              |
| A50-yr              |       |       |                                      |         |              |
| L50-cm              |       |       |                                      |         |              |

| Time series minima and maxima |      |   |   |         |         |
|-------------------------------|------|---|---|---------|---------|
|                               | SSB  | R | F | TB      | Catch   |
| Minimum year                  |      |   |   | 1985    | 1985    |
| Maximum year                  |      |   |   | 1993    | 1992    |
| Time series minimum           | 0.14 |   |   | 6605000 | 1368000 |
| Time series maximum           | 0.22 |   |   | 9937000 | 1967000 |
| Units                         | 1/yr |   |   | MT      | MT      |



# Assessment of South Pacific Ocean albacore tuna (*Thunnus alalunga*)

Assessment ID:SPC-ALBASPAC-1959-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/57>

Area ID: multinational-WCPFC-SPAC

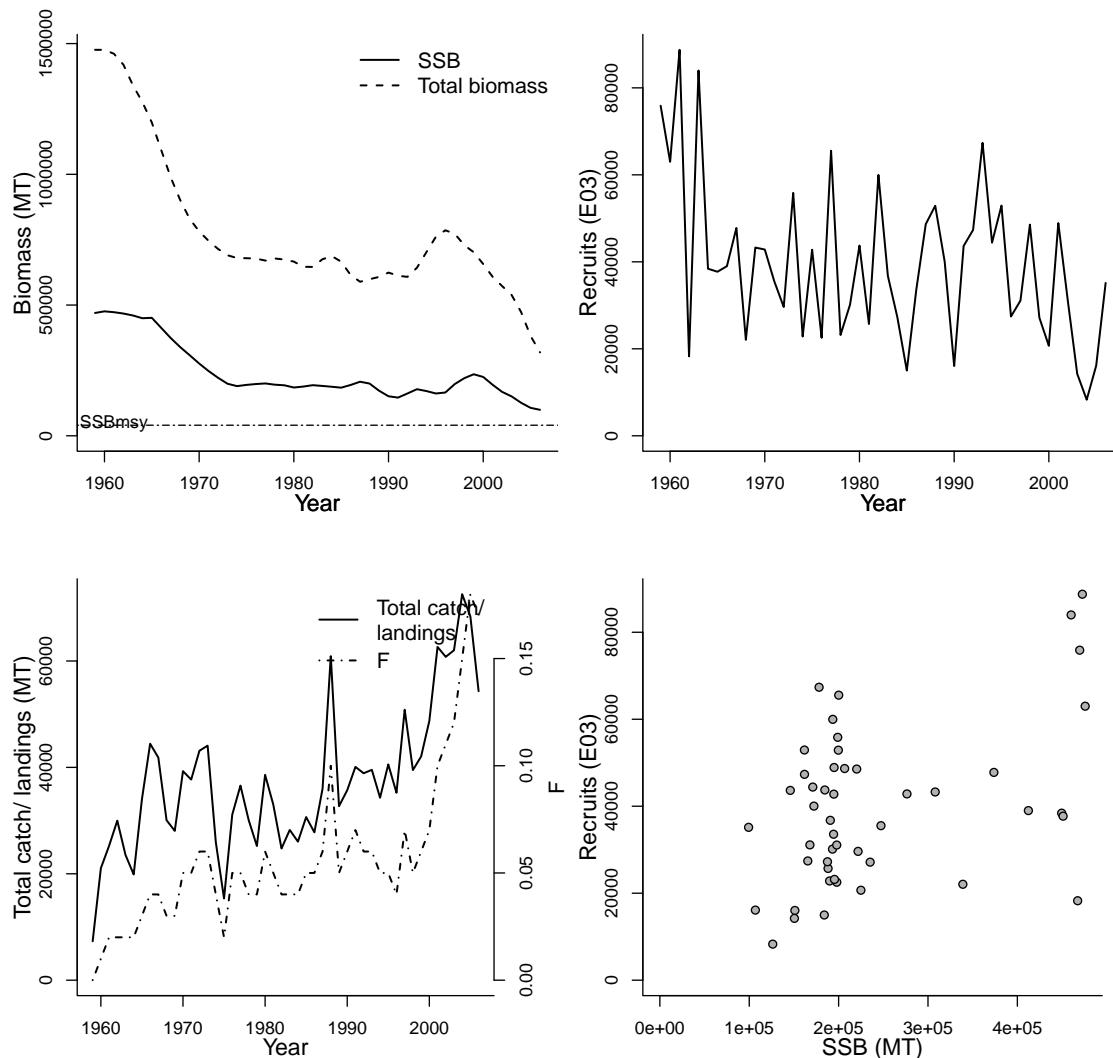
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | WCPFC   |
| Assessment group   | Secretariat of the Pacific Community  |
| Assessment authors | Hoyle, Simon  |
| Assessment method  | A length-based, age and spatially-structured model for fisheries stock assessment |
| Publication year   | 2008  |
| Timeseries span    | 1959-2006   |
| Document           | JENSEN_ALBWPO_2008.pdf (pdf in database)  |
| Recorder           | JENSEN  |
| Date entered       | 2008-10-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | Reference points       |          |       |
|-------------|-----------|-------|------------------------|----------|-------|
|             |           |       | Parameter              | Value    | Units |
| SSB-SEX-sex | 0         | sex   | Umsy-ratio (U)         | 1.88E-01 | ratio |
| A50-yr      | 5.5       | yr    | MSY-MT (TB)            | 63,830   | MT    |
| M-1/T       | AVAILABLE | 1/T   | SSBmsy-MT (SSB)        | 4.04E+04 | MT    |
| REC-AGE     |           |       | B0-MT                  | 698000   | MT    |
| SSB-AGE-yr  |           |       | $SSB_{2006}/SSB_{msy}$ | 2.457    |       |
| TB-AGE-yr   |           |       |                        |          |       |
| F-AGE-yr    |           |       |                        |          |       |
| M           |           |       |                        |          |       |
| L50-cm      |           |       |                        |          |       |

| Time series minima and maxima |        |       |       |         |
|-------------------------------|--------|-------|-------|---------|
|                               | SSB    | R     | F     | TB      |
| Minimum year                  | 1959   | 1959  | 1959  | 1959    |
| Maximum year                  | 2006   | 2006  | 2006  | 2006    |
| Time series minimum           | 99278  | 8295  | 0     | 318910  |
| Time series maximum           | 475880 | 88750 | 0.18  | 1476200 |
| Units                         | MT     | E03   | ratio | MT      |



# Assessment of Western Pacific Ocean bigeye tuna (*Thunnus obesus*)

Assessment ID:SPC-BIGEYEWPO-1952-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/59>

Area ID: multinational-SPC-WPO

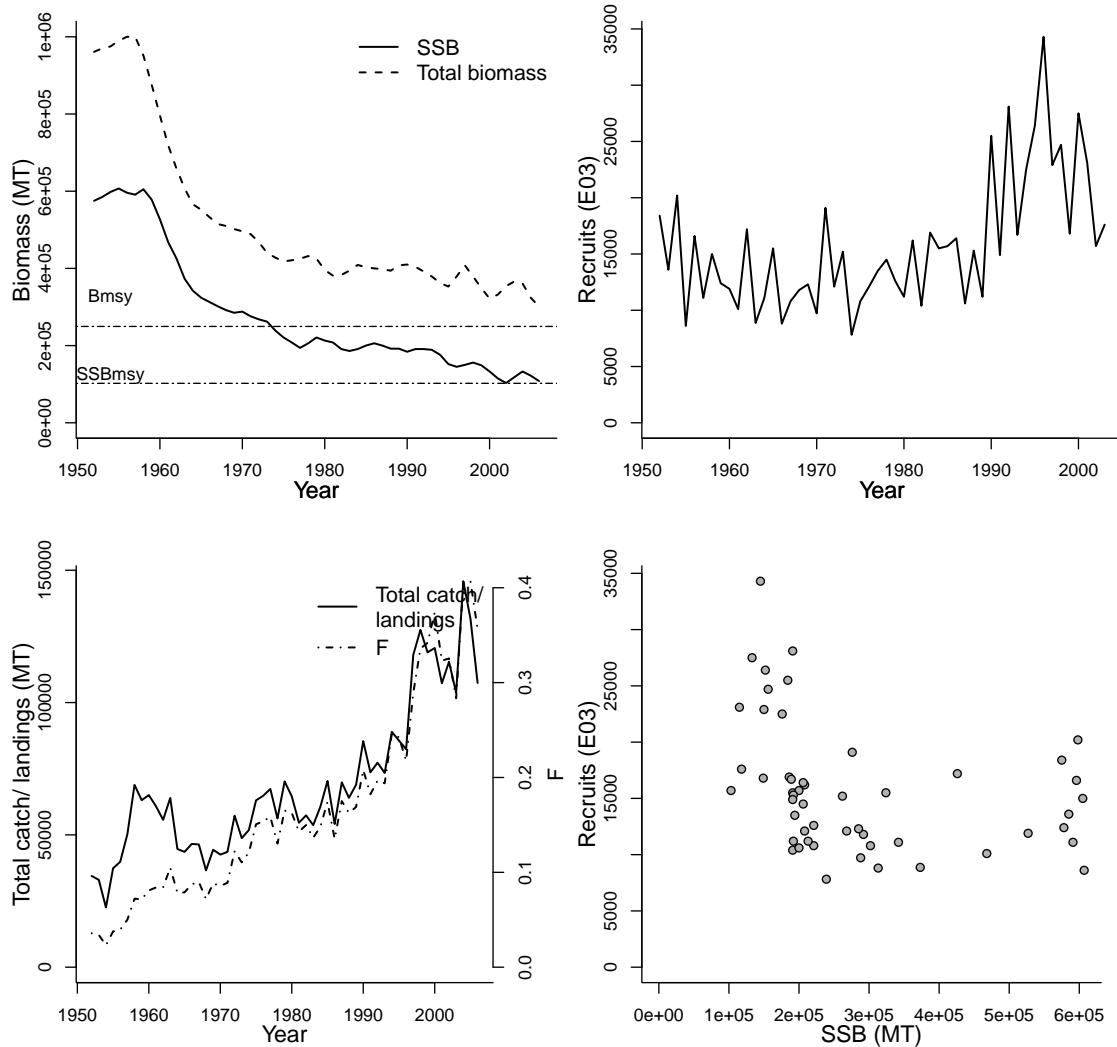
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | WCPFC   |
| Assessment group   | Secretariat of the Pacific Community  |
| Assessment authors | Langley, Adam   |
| Assessment method  | A length-based, age and spatially-structured model for fisheries stock assessment |
| Publication year   | 2008  |
| Timeseries span    | 1952-2006   |
| Document           | SC4-SA-WP1-rev1-bigeye-tuna.pdf (pdf in database)                                 |
| Recorder           | JENSEN  |
| Date entered       | 2008-10-30  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             |           |       | secondary LME          |        |       | tertiary LME |  |  |
|-------------------------|-----------|-------|------------------------|--------|-------|--------------|--|--|
| -99 - Pacific High Seas |           |       | na                     |        |       | na           |  |  |
| Parameter               | Value     | Units | Reference points       |        |       |              |  |  |
| SSB-SEX-sex             | 0         | sex   | Parameter              | Value  | Units |              |  |  |
| A50-yr                  | 3.6       | yr    | Bmsy-MT (TB)           | 249600 | MT    |              |  |  |
| M-1/T                   | AVAILABLE | 1/T   | Umsy-ratio (U)         | 0.2588 | ratio |              |  |  |
| REC-AGE                 |           |       | MSY-MT (TB)            | 64,600 | MT    |              |  |  |
| SSB-AGE-yr              |           |       | SSBmssy-MT (SSB)       | 102200 | MT    |              |  |  |
| TB-AGE-yr               |           |       | $TB_{2006}/B_{msy}$    | 1.206  |       |              |  |  |
| F-AGE-yr                |           |       | $SSB_{2006}/SSB_{msy}$ | 1.057  |       |              |  |  |
| M                       |           |       |                        |        |       |              |  |  |
| L50-cm                  |           |       |                        |        |       |              |  |  |

| Time series minima and maxima |        |       |        |         |
|-------------------------------|--------|-------|--------|---------|
|                               | SSB    | R     | F      | TB      |
| Minimum year                  | 1952   | 1952  | 1952   | 1952    |
| Maximum year                  | 2006   | 2003  | 2006   | 2006    |
| Time series minimum           | 103000 | 7820  | 0.0231 | 301000  |
| Time series maximum           | 607000 | 34300 | 0.4069 | 1000000 |
| Units                         | MT     | E03   | ratio  | MT      |



# Assessment of Central Western Pacific skipjack tuna (*Katsuwonus pelamis*)

Assessment ID:SPC-SKJCWPAC-1972-2006-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/15>

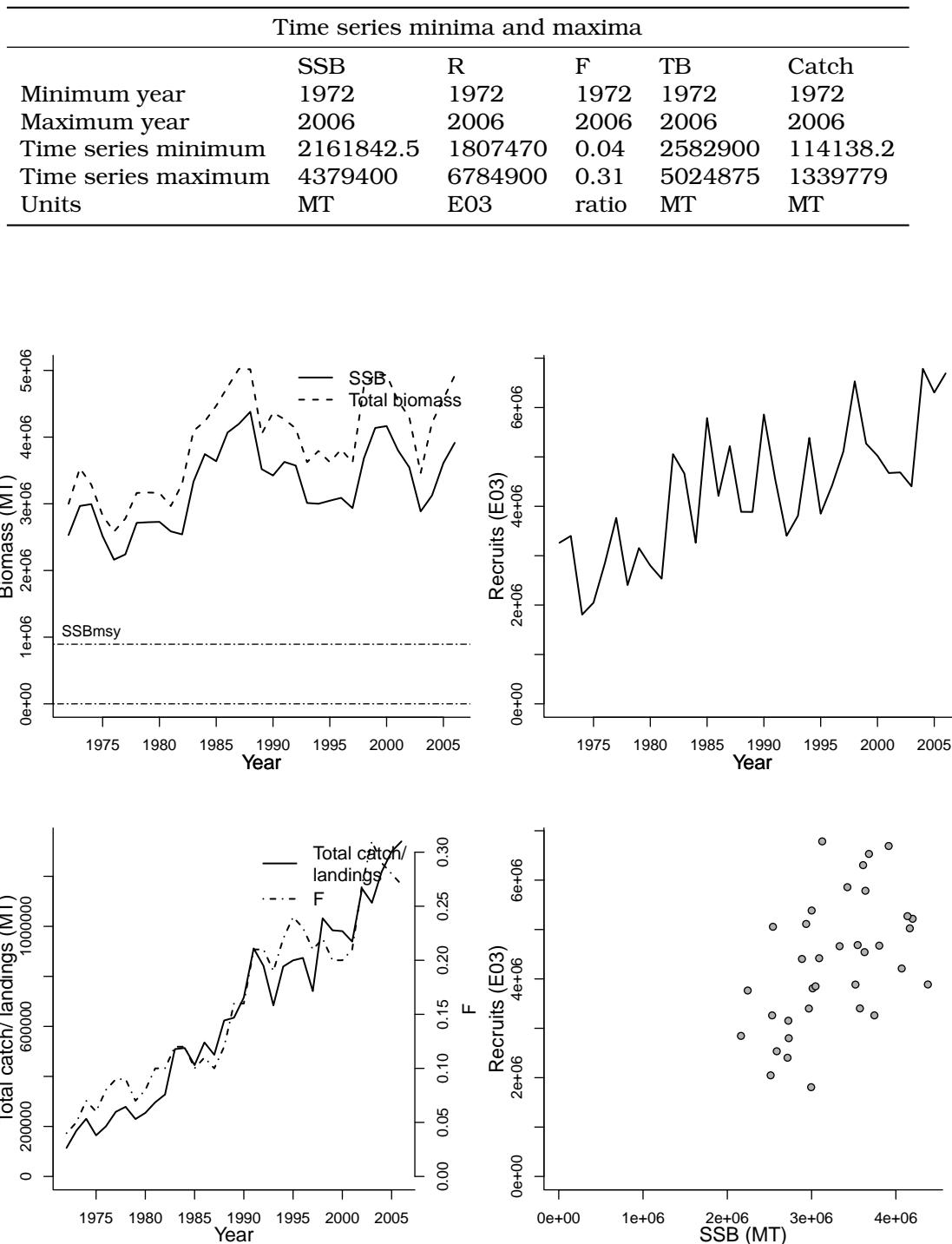
Area ID: USA-NMFS-CWPAC

General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | WCPFC   |
| Assessment group   | Secretariat of the Pacific Community  |
| Assessment authors | Langley, Adam   |
| Assessment method  | A length-based, age and spatially-structured model for fisheries stock assessment |
| Publication year   | 2008  |
| Timeseries span    | 1972-2006   |
| Document           | SC4-SA-WP4-SKJ-Assessment-rev1-skipjack.pdf (pdf in database)                     |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-18  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME             |  |  | secondary LME          |                  |  | tertiary LME |       |  |
|-------------|-----------|-------|-------------------------|--|--|------------------------|------------------|--|--------------|-------|--|
|             |           |       | -99 - Pacific High Seas |  |  | na                     |                  |  | na           |       |  |
| A50-yr      | 0.3125    | yr    |                         |  |  |                        |                  |  |              |       |  |
| M-1/T       | AVAILABLE | 1/T   |                         |  |  |                        |                  |  |              |       |  |
| REC-AGE     |           |       |                         |  |  | Parameter              | Reference points |  |              |       |  |
| SSB-AGE-yr  |           |       |                         |  |  | Bmsy-MT (TB)           | 1,438,000        |  |              | MT    |  |
| SSB-SEX-sex |           |       |                         |  |  | Umsy-ratio (U)         | 0.8900           |  |              | ratio |  |
| TB-AGE-yr   |           |       |                         |  |  | MSY-MT (TB)            | 1,279,600        |  |              | MT    |  |
| F-AGE-yr    |           |       |                         |  |  | SSBmssy-MT (SSB)       | 894200           |  |              | MT    |  |
| M           |           |       |                         |  |  | $TB_{2006}/B_{msy}$    | 4923525.000      |  |              |       |  |
| L50-cm      |           |       |                         |  |  | $SSB_{2006}/SSB_{msy}$ | 4.378            |  |              |       |  |



# Assessment of Western Pacific Ocean striped marlin (*Kajikia audax*)

Assessment ID:SPC-STMARLINSWPO-1950-2003-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/469>

Area ID: multinational-SPC-WPO

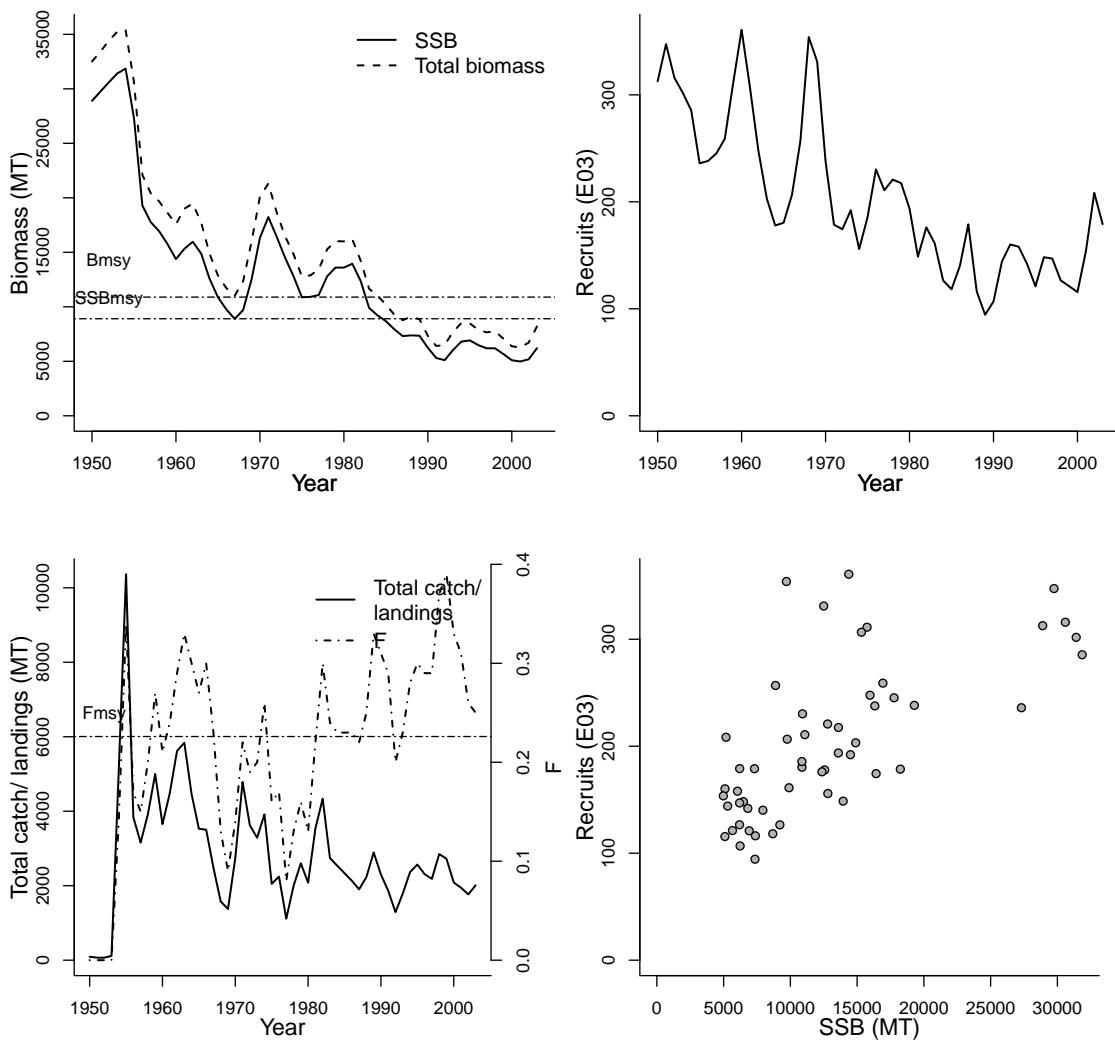
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | WCPFC   |
| Assessment group   | Secretariat of the Pacific Community  |
| Assessment authors | Langley, Adam   |
| Assessment method  | A length-based, age and spatially-structured model for fisheries stock assessment |
| Publication year   | 2006  |
| Timeseries span    | 1950-2003   |
| Document           | JENSEN-STMARLINSWPAC-2006.pdf<br>(pdf in database)                                |
| Recorder           | JENSEN  |
| Date entered       | 2011-01-14  |
| Date last loaded   | 2011-07-28  |
| QA/QC complete     | YES   |
| Date approved      | 2011-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             |       |       | secondary LME           | tertiary LME |       |
|-------------------------|-------|-------|-------------------------|--------------|-------|
| -99 - Pacific High Seas |       |       | na                      | na           |       |
| Parameter               | Value | Units | Reference points        |              |       |
| SSB-AGE-yr              | 2     | yr    | Parameter               | Value        | Units |
| SSB-SEX-sex             | 0     | sex   | Fmsy-1/yr (F)           | 0.226        | 1/yr  |
| M-1/yr                  | 0.4   | 1/yr  | SSBmsy-MT (SSB)         | 8903         | MT    |
| REC-AGE                 |       |       | MSY-MT (TB)             | 2465         | MT    |
| TB-AGE-yr               |       |       | Bmsy-MT (TB)            | 10890        | MT    |
| F-AGE-yr                |       |       | $TB_{2003}/B_{m sy}$    | 0.753        |       |
| M                       |       |       | $F_{2003}/F_{m sy}$     | 1.106        |       |
| A50-yr                  |       |       | $SSB_{2003}/SSB_{m sy}$ | 0.697        |       |
| L50-cm                  |       |       |                         |              |       |

| Time series minima and maxima |        |       |      |        |
|-------------------------------|--------|-------|------|--------|
|                               | SSB    | R     | F    | TB     |
| Minimum year                  | 1950   | 1950  | 1950 | 1950   |
| Maximum year                  | 2003   | 2003  | 2003 | 2003   |
| Time series minimum           | 4980.8 | 94.41 | 0    | 6263.6 |
| Time series maximum           | 31857  | 360.8 | 0.39 | 35417  |
| Units                         | MT     | E03   | 1/yr | MT     |



# Assessment of Central Western Pacific yellowfin tuna (*Thunnus albacares*)

Assessment ID:SPC-YFINCPAC-1952-2005-JENSEN

Issue URL: <http://www.marinbiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/60>

Area ID: USA-NMFS-CWPAC

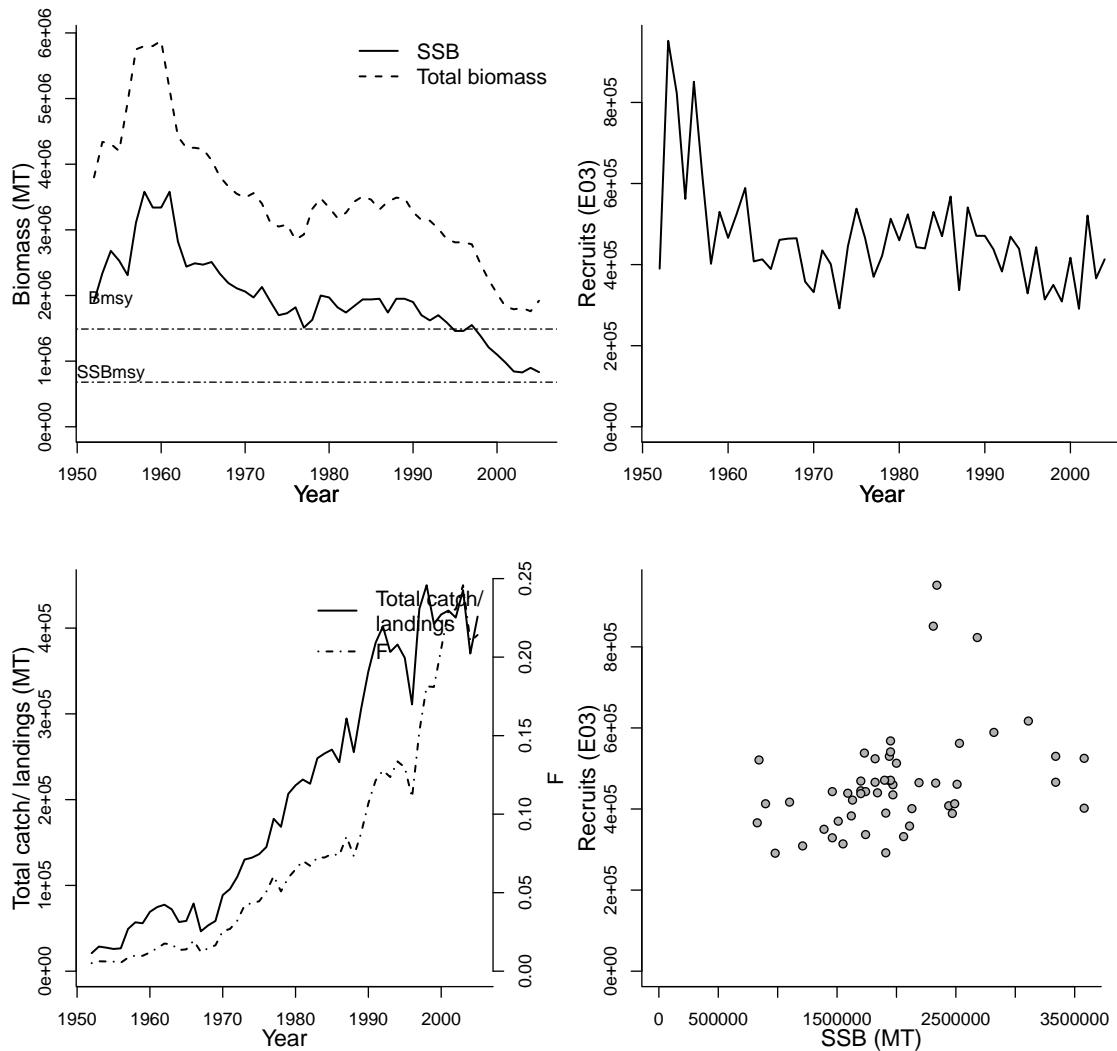
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | WCPFC   |
| Assessment group   | Secretariat of the Pacific Community  |
| Assessment authors | Langley, Adam   |
| Assessment method  | A length-based, age and spatially-structured model for fisheries stock assessment |
| Publication year   | 2007  |
| Timeseries span    | 1952-2005   |
| Document           | WCPFC-SC3-SA-SWG-WP-01.pdf (pdf in database)                                      |
| Recorder           | JENSEN  |
| Date entered       | 2008-11-18  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2010-05-04  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME             |           |       | secondary LME          |         |       | tertiary LME |       |       |
|-------------------------|-----------|-------|------------------------|---------|-------|--------------|-------|-------|
| -99 - Pacific High Seas |           |       | na                     |         |       | na           |       |       |
| Parameter               | Value     | Units | Reference points       |         |       |              |       |       |
| A50-yr                  | 2         | yr    | Parameter              | Value   | Units | Parameter    | Value | Units |
| M-1/T                   | AVAILABLE | 1/T   | Bmsy-MT (TB)           | 1489000 | MT    |              |       |       |
| REC-AGE                 |           |       | Umsy-ratio (U)         | 0.2686  | ratio |              |       |       |
| SSB-AGE-yr              |           |       | MSY-MT (TB)            | 400,000 | MT    |              |       |       |
| SSB-SEX-sex             |           |       | SSBmsy-MT (SSB)        | 679800  | MT    |              |       |       |
| TB-AGE-yr               |           |       | $TB_{2005}/B_{msy}$    | 1.289   |       |              |       |       |
| F-AGE-yr                |           |       | $SSB_{2005}/SSB_{msy}$ | 1.224   |       |              |       |       |
| M                       |           |       |                        |         |       |              |       |       |
| L50-cm                  |           |       |                        |         |       |              |       |       |

| Time series minima and maxima |         |        |        |         |
|-------------------------------|---------|--------|--------|---------|
|                               | SSB     | R      | F      | TB      |
| Minimum year                  | 1952    | 1952   | 1952   | 1952    |
| Maximum year                  | 2005    | 2004   | 2005   | 2005    |
| Time series minimum           | 828000  | 291000 | 0.0051 | 1760000 |
| Time series maximum           | 3580000 | 952000 | 0.2458 | 5880000 |
| Units                         | MT      | E03    | ratio  | MT      |



# Assessment of Chilean EEZ and offshore chilean jack mackerel (*Trachurus murphyi*)

Assessment ID:SPRFMO-CHTRACCH-1950-2010-RICARD

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/424>

Area ID: multinational-SPRFMO-CH

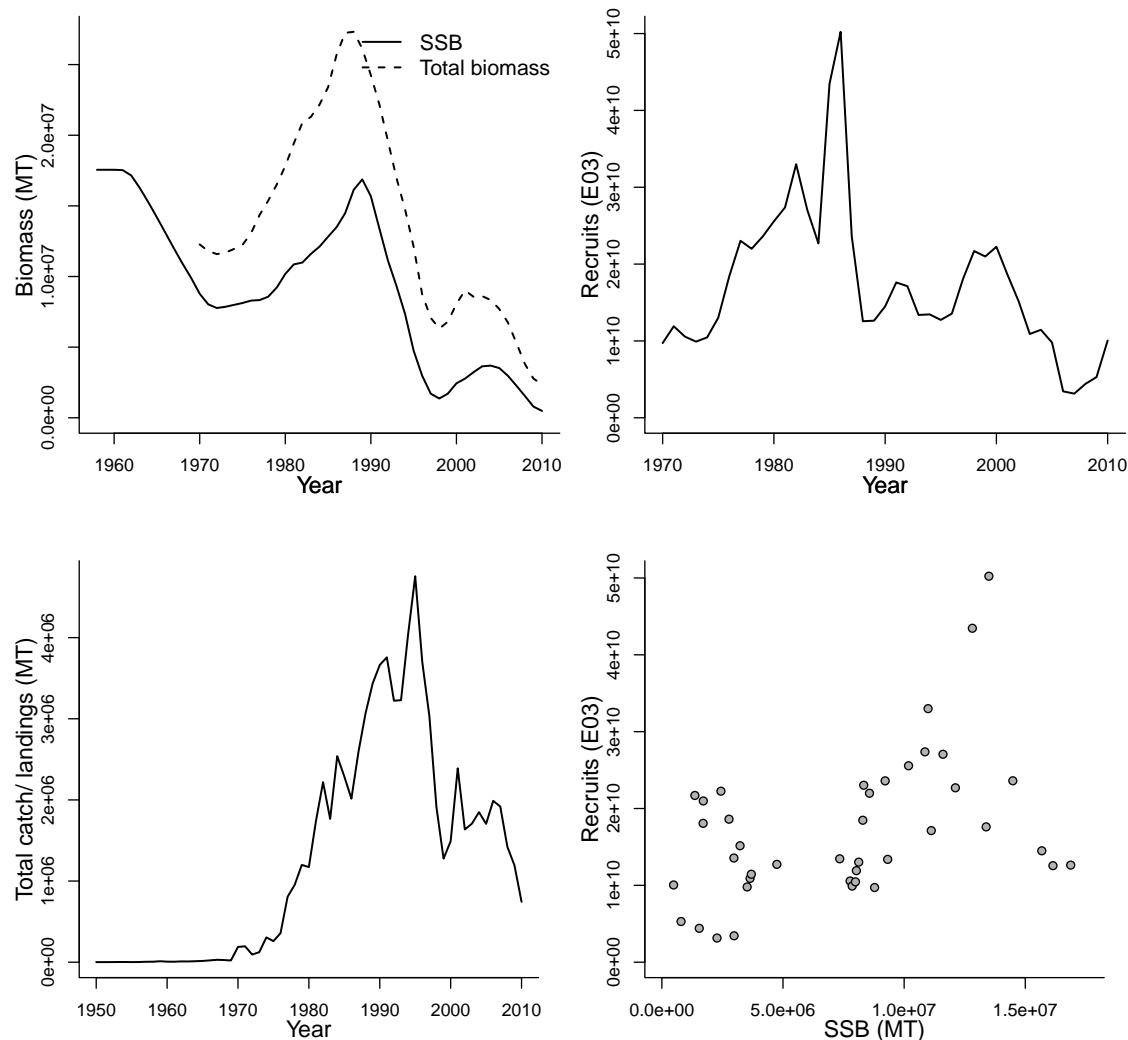
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | SPRFMO   |
| Assessment group   | South Pacific Regional Fisheries Management Organization     |
| Assessment authors | South Pacific Regional Fisheries Management Organisation     |
| Assessment method  | Joint Jack Mackerel  |
| Publication year   | 2010   |
| Timeseries span    | 1950-2010  |
| Document           | 9th-SWG-Report-Final-Adopted-28Oct2010.pdf (pdf in database) |
| Recorder           | RICARD   |
| Date entered       | 2011-02-28   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-02-28   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME           |       | secondary LME |    | tertiary LME     |
|-----------------------|-------|---------------|----|------------------|
| 13 - Humboldt Current |       | na            | na |                  |
| Parameter             | Value | Units         |    | Reference points |
| A50-yr                | 5     | yr            |    |                  |
| M-1/yr                | 0.23  | 1/yr          |    |                  |
| REC-AGE               |       |               |    |                  |
| SSB-AGE-yr            |       |               |    |                  |
| SSB-SEX-sex           |       |               |    |                  |
| TB-AGE-yr             |       |               |    |                  |
| F-AGE-yr              |       |               |    |                  |
| M                     |       |               |    |                  |
| L50-cm                |       |               |    |                  |

| Time series minima and maxima |          |             |          |         |
|-------------------------------|----------|-------------|----------|---------|
|                               | SSB      | R           | F        | TB      |
| Minimum year                  | 1958     | 1970        |          | 1970    |
| Maximum year                  | 2010     | 2010        |          | 2010    |
| Time series minimum           | 484120   | 3143930000  | 2362660  | 800     |
| Time series maximum           | 17554500 | 50229100000 | 27321000 | 4756979 |
| Units                         | MT       | E03         | MT       | MT      |



# Assessment of Southern California California scorpionfish (*Scorpaena guttata*)

Assessment ID: SWFSC-CALSCORPSCAL-1990-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/410>

Area ID: USA-NMFS-SCAL

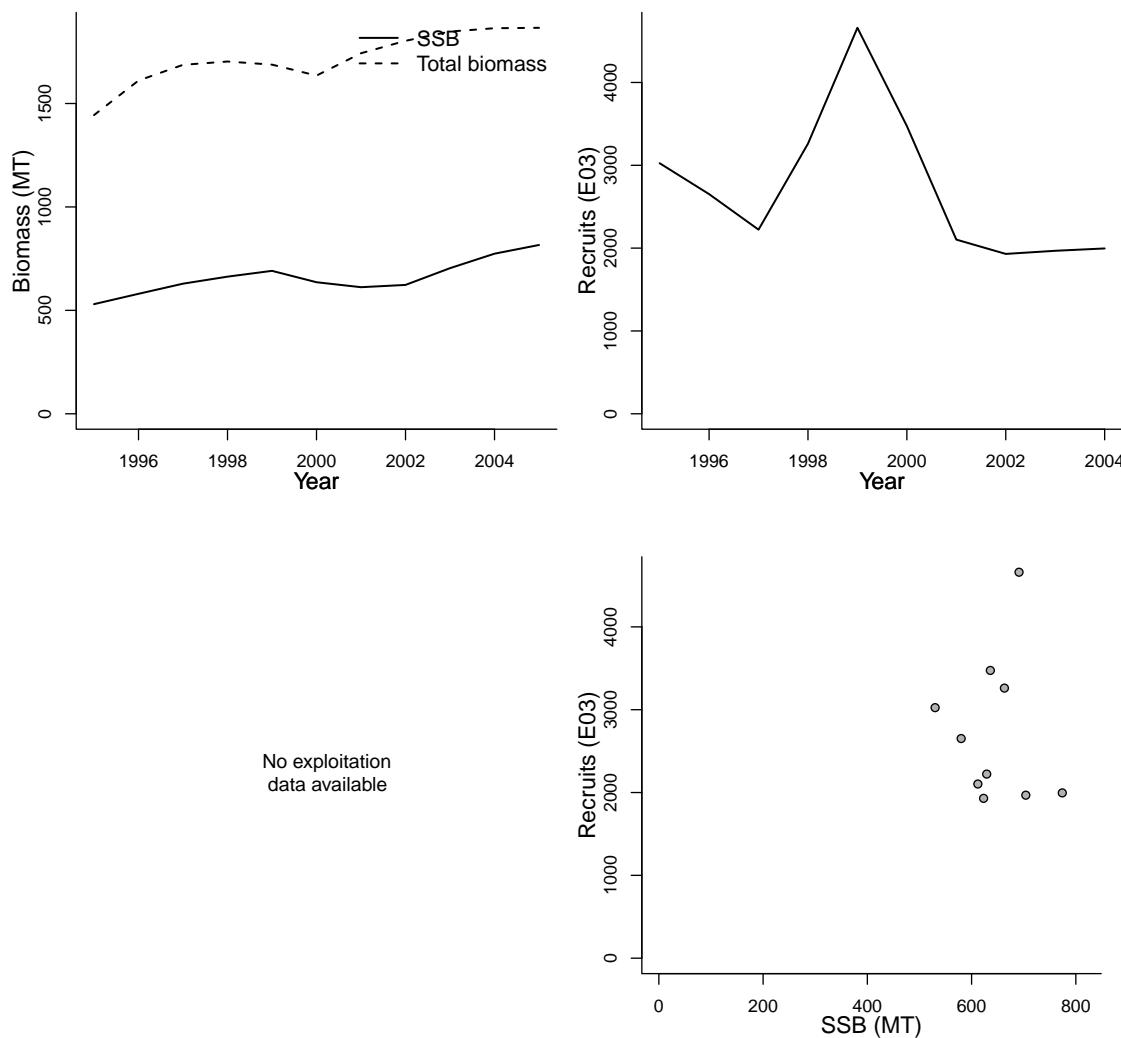
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southwest Fisheries Science Center                           |
| Assessment authors | Maunder, Mark  |
| Assessment method  | an AD-Model builder statistical Catch at Age Model           |
| Publication year   | 2005   |
| Timeseries span    | 1990-2005  |
| Document           | Scorpionfish_assessment_report_2005.pdf<br>(pdf in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-08-07   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME    |       | tertiary LME |
|------------------------|-------|-------|------------------|-------|--------------|
| 3 - California Current |       |       | na               | na    |              |
| Parameter              | Value | Units | Reference points |       |              |
| SSB-AGE-yr             | 2     | yr    | Parameter        | Value | Units        |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M) | 0.25  | 1/yr         |
| REC-AGE-yr             | 0     | yr    | MSY-MT (TB)      | 127   | MT           |
| TB-AGE-yr              | 2+    | yr    | SSBO-MT (SSB)    | 1024  | MT           |
| M-1/yr                 | 0.25  | 1/yr  | B0-MT            | 2007  | MT           |
| NATMORT-1/yr           | 0.25  | 1/yr  | BH-h-dimless     | 0.7   | dimless      |
| F-AGE-yr               |       |       |                  |       |              |
| M                      |       |       |                  |       |              |
| A50-yr                 |       |       |                  |       |              |
| L50-cm                 |       |       |                  |       |              |

| Time series minima and maxima |      |      |   |      |       |
|-------------------------------|------|------|---|------|-------|
|                               | SSB  | R    | F | TB   | Catch |
| Minimum year                  | 1995 | 1995 |   | 1995 |       |
| Maximum year                  | 2005 | 2004 |   | 2005 |       |
| Time series minimum           | 530  | 1930 |   | 1444 |       |
| Time series maximum           | 816  | 4660 |   | 1866 |       |
| Units                         | MT   | E03  |   | MT   |       |



# Assessment of Pacific Coast pacific chub mackerel (*Scomber japonicus*)

Assessment ID: SWFSC-CMACKPCOAST-1929-2008-PINSKY

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/406>

Area ID: USA-NMFS-PCOAST

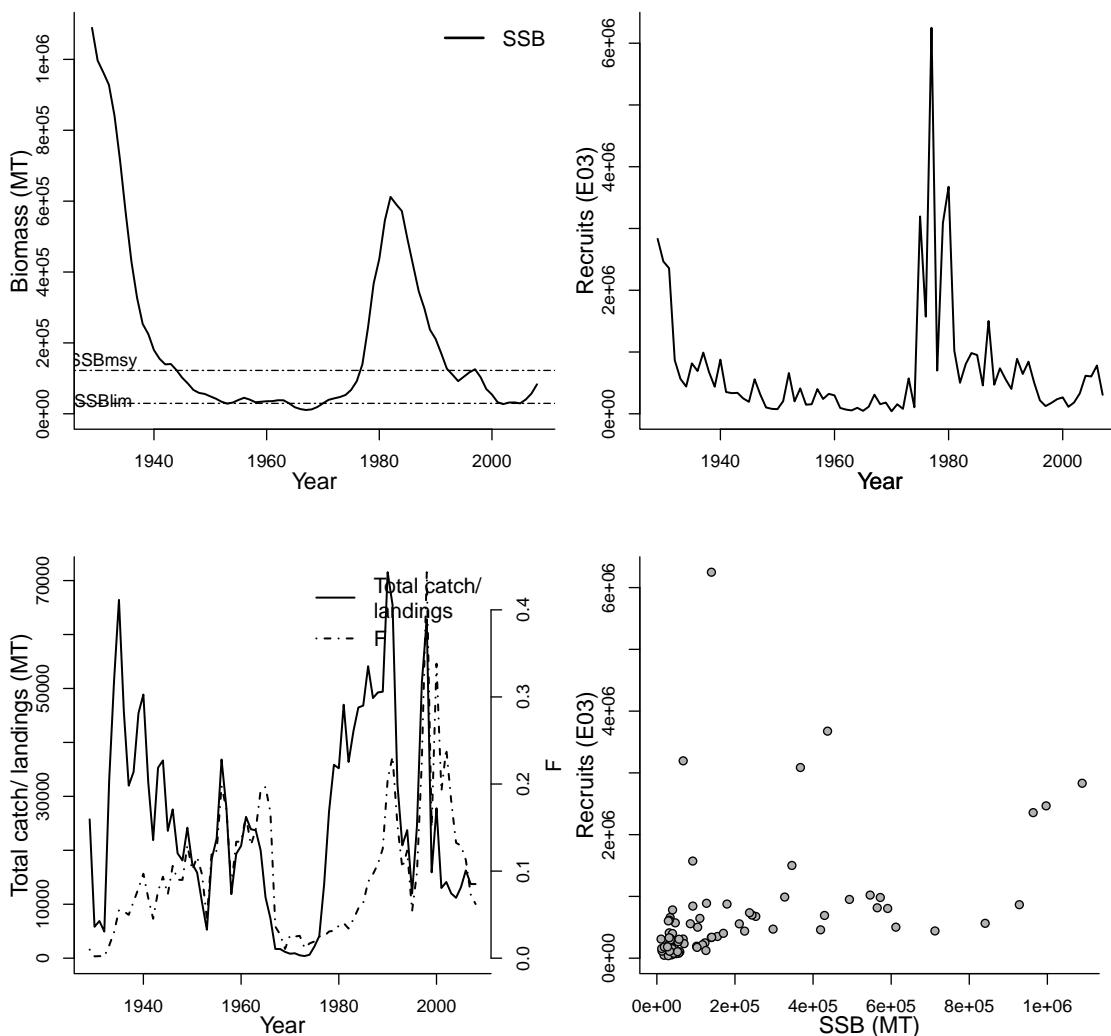
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southwest Fisheries Science Center                         |
| Assessment authors | Dorval,Emmanis   |
| Assessment method  | Age Structured Assessment Program                          |
| Publication year   | 2008   |
| Timeseries span    | 1929-2008  |
| Document           | PFMC_2008_CPS_SAFE_App2_PMackerel.pdf<br>(pdf in database) |
| Recorder           | PINSKY   |
| Date entered       | 2009-03-27   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-03-02   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |                  | tertiary LME |
|------------------------|-------|-------|---|------------------|--------------|
| 3 - California Current |       |       | na                                      | na               |              |
| Parameter              | Value | Units | Parameter                               | Reference points |              |
| SSB-AGE-yr             | 3+    | yr    | NATMORT-1/yr (M)                        | 0.5              | 1/yr         |
| REC-AGE-yr             | 0     | yr    | MSY-MT (TB)                             | 51772            | MT           |
| TB-AGE-yr              | 1+    | yr    | SSBlim-MT (SSB)                         | 29420            | MT           |
| M-1/yr                 | 0.5   | 1/yr  | MSY-MT (TB)                             | 23048.2          | MT           |
| NATMORT-1/yr           | 0.5   | 1/yr  | SSBmsy-MT (SSB)                         | 122357           | MT           |
| SSB-SEX-sex            |       |       | SSB0-MT (SSB)                           | 182791           | MT           |
| F-AGE-yr               |       |       | BH-h-dimless                            | 0.315471         | dimless      |
| M                      |       |       | SSB <sub>2008</sub> /SSB <sub>lim</sub> | 2.827            |              |
| A50-yr                 |       |       | SSB <sub>2008</sub> /SSB <sub>msy</sub> | 0.680            |              |
| L50-cm                 |       |       |   |                  |              |

| Time series minima and maxima |         |         |           |         |
|-------------------------------|---------|---------|-----------|---------|
|                               | SSB     | R       | F         | TB      |
| Minimum year                  | 1929    | 1929    | 1929      | 1929    |
| Maximum year                  | 2008    | 2007    | 2008      | 2008    |
| Time series minimum           | 10701.7 | 40830.5 | 0.0017804 | 400.94  |
| Time series maximum           | 1089110 | 6249070 | 0.443214  | 71550.6 |
| Units                         | MT      | E03     | 1/T       | MT      |



# Assessment of Pacific Coast Dover sole

## *(Microstomus pacificus)*

Assessment ID: SWFSC-DSOLEPCOAST-1910-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/333>

Area ID: USA-NMFS-PCOAST

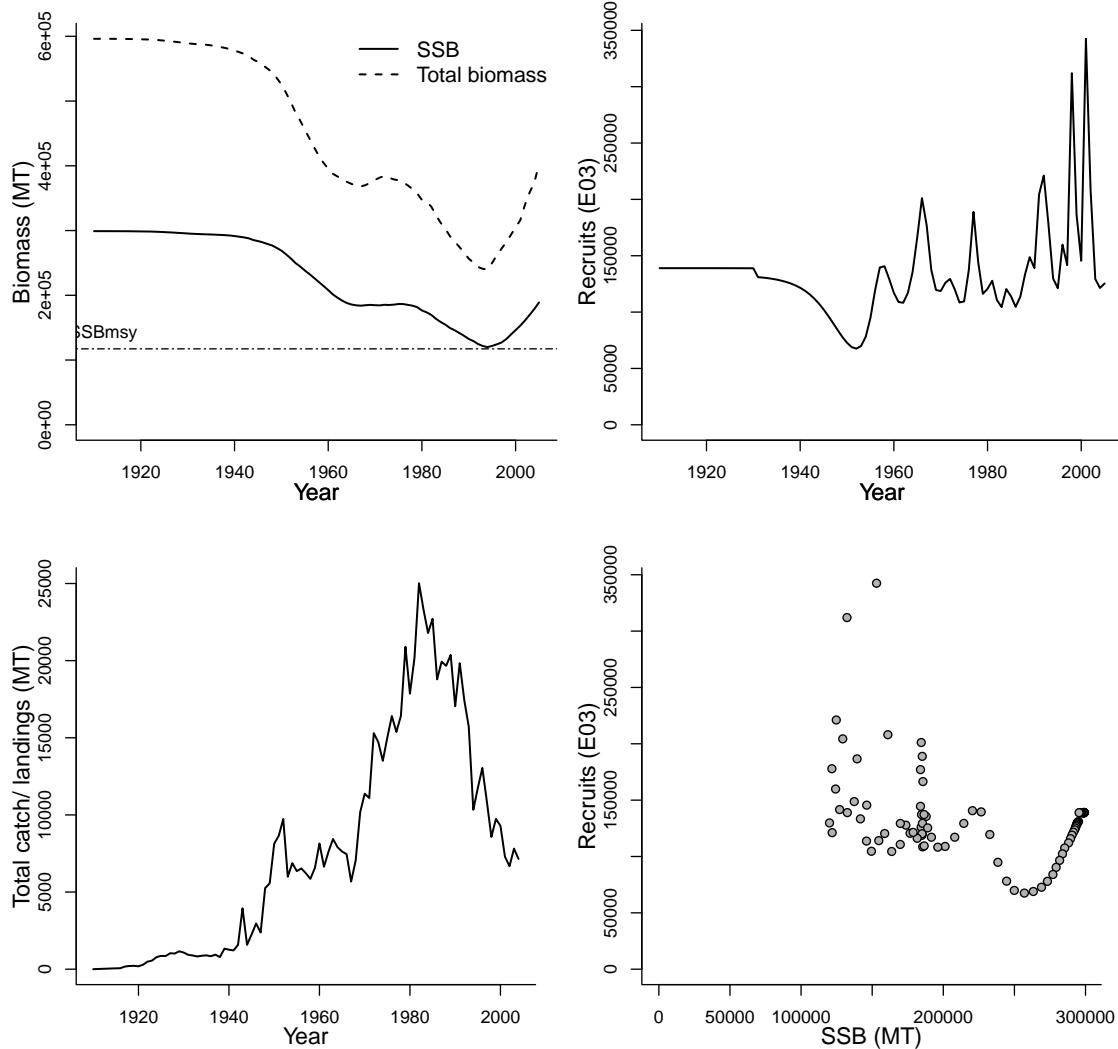
General assessment details.

| Detail             | Value                                   |
|--------------------|---|
| Management body    | NMFS                                    |
| Assessment group   | Southwest Fisheries Science Center      |
| Assessment authors | Sampson, David                          |
| Assessment method  | Stock Synthesis v2.0 model              |
| Publication year   | 2005                                    |
| Timeseries span    | 1910-2005                               |
| Document           | 2005-SAFE-WCdover.pdf (pdf in database) |
| Recorder           | STANTON                                 |
| Date entered       | 2009-05-18                              |
| Date last loaded   | 2011-07-25                              |
| QA/QC complete     | YES                                     |
| Date approved      | 2010-02-10                              |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME          |        | tertiary LME |
|------------------------|-------|-------|------------------------|--------|--------------|
| 3 - California Current |       |       | na                     | na     |              |
| Parameter              | Value | Units | Reference points       |        |              |
| SSB-AGE-yr             | 5+    | yr    | Parameter              | Value  | Units        |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)       | 0.09   | 1/yr         |
| REC-AGE-yr             | 0     | yr    | SPRF0-E01 (SPR)        | 2.15   | E01          |
| F-AGE-yr-yr            | 5+    | yr-yr | SSBmsy-MT (SSB)        | 117281 | MT           |
| TB-AGE-yr              | 5+    | yr    | MSY-MT (TB)            | 16505  | MT           |
| L50-cm                 | 33.4  | cm    | SSB0-MT (SSB)          | 299054 | MT           |
| M-1/yr                 | 0.09  | 1/yr  | BH-h-dimless           | 0.8    | dimless      |
| NATMORT-1/yr           | 0.09  | 1/yr  | $SSB_{2005}/SSB_{msy}$ | 1.611  |              |
| M                      |       |       |                        |        |              |
| A50-yr                 |       |       |                        |        |              |

| Time series minima and maxima |        |         |        |         |
|-------------------------------|--------|---------|--------|---------|
|                               | SSB    | R       | F      | TB      |
| Minimum year                  | 1910   | 1910    |        | 1910    |
| Maximum year                  | 2005   | 2005    |        | 2005    |
| Time series minimum           | 119986 | 67532.4 | 240148 | 0       |
| Time series maximum           | 299054 | 342481  | 596145 | 25019.3 |
| Units                         | MT     | E03     | MT     | MT      |



# Assessment of Southern Pacific Coast gopher rockfish (*Sebastodes carnatus*)

Assessment ID: SWFSC-GOPHERSPCOAST-1965-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/339>

Area ID: USA-NMFS-SPCOAST

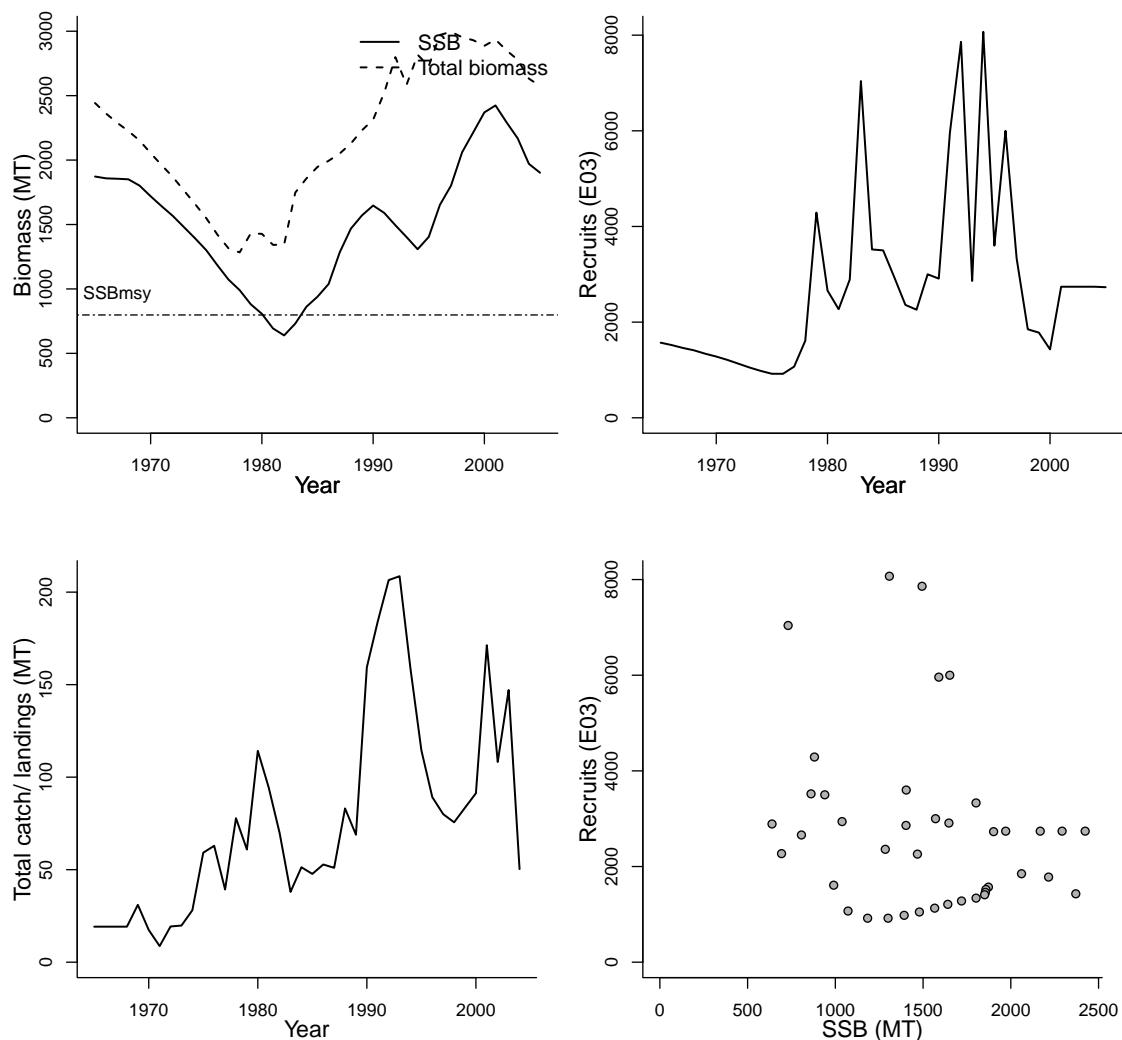
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southwest Fisheries Science Center            |
| Assessment authors | Key, Meisha                                   |
| Assessment method  | Stock Synthesis v2.0 model                    |
| Publication year   | 2005  |
| Timeseries span    | 1965-2005                                     |
| Document           | 2005-SAFE-Wcogopher.pdf (pdf not in database) |
| Recorder           | STANTON                                       |
| Date entered       | 2009-05-20                                    |
| Date last loaded   | 2011-07-25                                    |
| QA/QC complete     | YES   |
| Date approved      | 2010-02-10                                    |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       | tertiary LME |
|------------------------|-------|-------|---|-------|--------------|
| 3 - California Current |       |       | na                                      | na    |              |
| Parameter              | Value | Units | Reference points                        |       |              |
| SSB-AGE-yr             | 3+    | yr    | Parameter                               | Value | Units        |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)                        | 0.2   | 1/yr         |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)                         | 798   | MT           |
| F-AGE-yr-yr            | 1+    | yr-yr | MSY-MT (TB)                             | 101   | MT           |
| TB-AGE-yr              | 1+    | yr    | Umsy-ratio (U)                          | 0.103 | ratio        |
| M-1/yr                 | 0.2   | 1/yr  | SSB0-MT (SSB)                           | 1995  | MT           |
| NATMORT-1/yr           | 0.2   | 1/yr  | B0-MT                                   | 2440  | MT           |
| M                      |       |       | BH-h-dimless                            | 0.65  | dimless      |
| A50-yr                 |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 2.383 |              |
| L50-cm                 |       |       |   |       |              |

| Time series minima and maxima |        |      |        |       |
|-------------------------------|--------|------|--------|-------|
|                               | SSB    | R    | F      | TB    |
| Minimum year                  | 1965   | 1965 | 1965   | 1965  |
| Maximum year                  | 2005   | 2005 | 2005   | 2004  |
| Time series minimum           | 639.2  | 920  | 1283.3 | 8.7   |
| Time series maximum           | 2423.8 | 8070 | 2995.5 | 208.6 |
| Units                         | MT     | E03  | MT     | MT    |



# Assessment of Pacific Coast pacific sardine (*Sardinops sagax*)

Assessment ID: SWFSC-SARDPCOAST-1981-2007-PINSKY

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/407>

Area ID: USA-NMFS-PCOAST

General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southwest Fisheries Science Center           |
| Assessment authors | Hill, Kevin T.                               |
| Assessment method  | Stock Synthesis v2.0 model                   |
| Publication year   | 2007   |
| Timeseries span    | 1981-2007                                    |
| Document           | NOAA-TM-NMFS-SWFSC-413.pdf (pdf in database) |
| Recorder           | PINSKY                                       |
| Date entered       | 2009-03-27                                   |
| Date last loaded   | 2011-07-25                                   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                   |

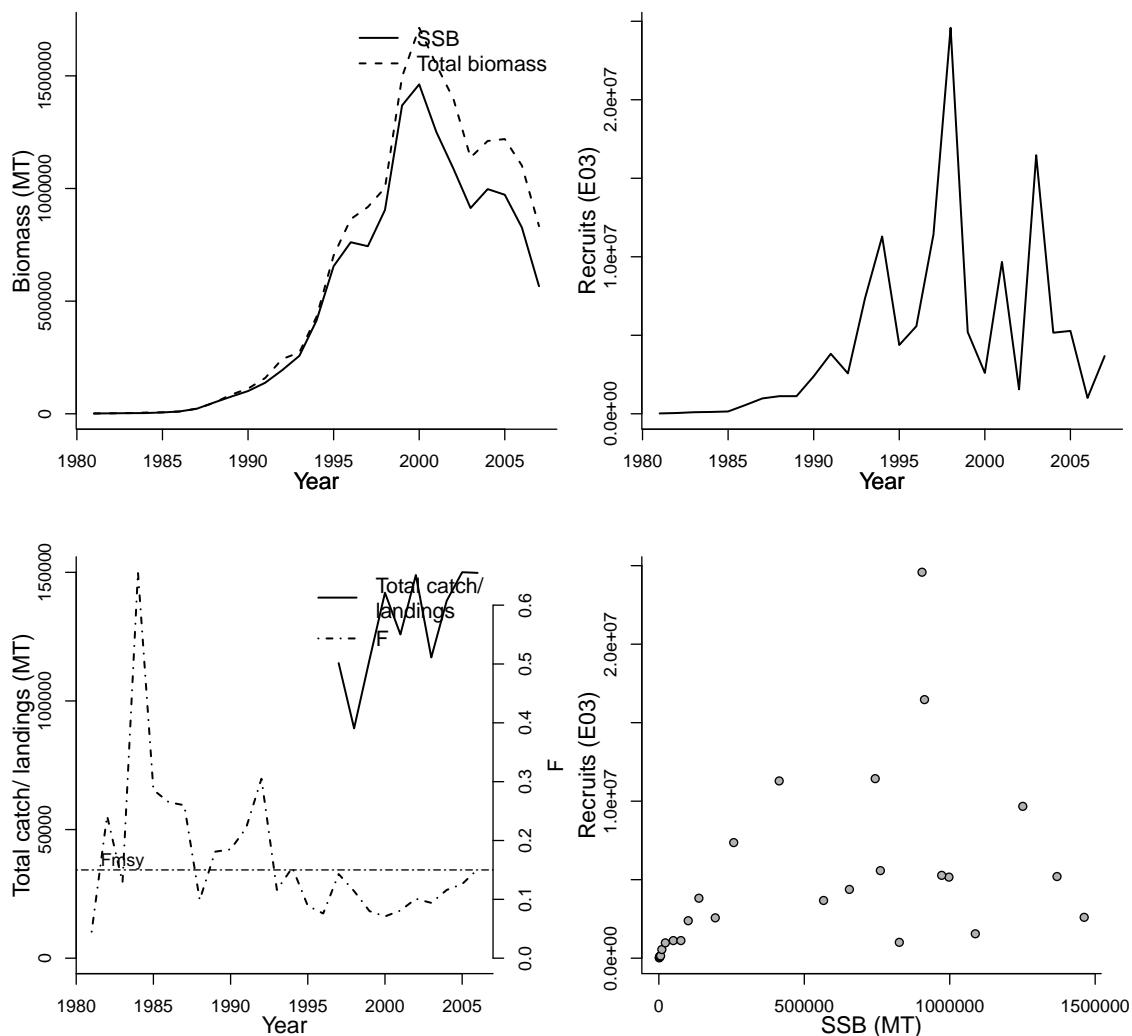
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            | secondary LME      | tertiary LME |
|------------------------|--------------------|--------------|
| 3 - California Current | 2 - Gulf of Alaska | na           |
| Parameter Value Units  |                    |              |
| SSB-SEX-sex            | NA                 | sex          |
| REC-AGE-yr             | 0                  | yr           |
| TB-AGE-yr              | 1+                 | yr           |
| L50-cm                 | 15.75              | cm           |
| M-1/yr                 | 0.4                | 1/yr         |
| SSB-AGE-yr             |                    |              |
| F-AGE-yr               |                    |              |
| M                      |                    |              |
| A50-yr                 |                    |              |

| Reference points   |       |       |
|--------------------|-------|-------|
| Parameter          | Value | Units |
| Fmsy-1/yr (F)      | 0.15  | 1/yr  |
| $F_{2006}/F_{msy}$ | 1.007 |       |

| Time series minima and maxima |         |          |       |         |
|-------------------------------|---------|----------|-------|---------|
|                               | SSB     | R        | F     | Catch   |
| Minimum year                  | 1981    | 1981     | 1981  | 1997    |
| Maximum year                  | 2007    | 2007     | 2006  | 2006    |
| Time series minimum           | 1353    | 22000    | 0.045 | 1404    |
| Time series maximum           | 1462200 | 24583000 | 0.656 | 1713280 |
| Units                         | MT      | E03      | ratio | MT      |



# Assessment of Pacific Coast shortbelly rockfish (*Sebastodes jordani*)

Assessment ID: SWFSC-SBELLYROCKPCOAST-1950-2005-BRANCH  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/66>

Area ID: USA-NMFS-PCOAST

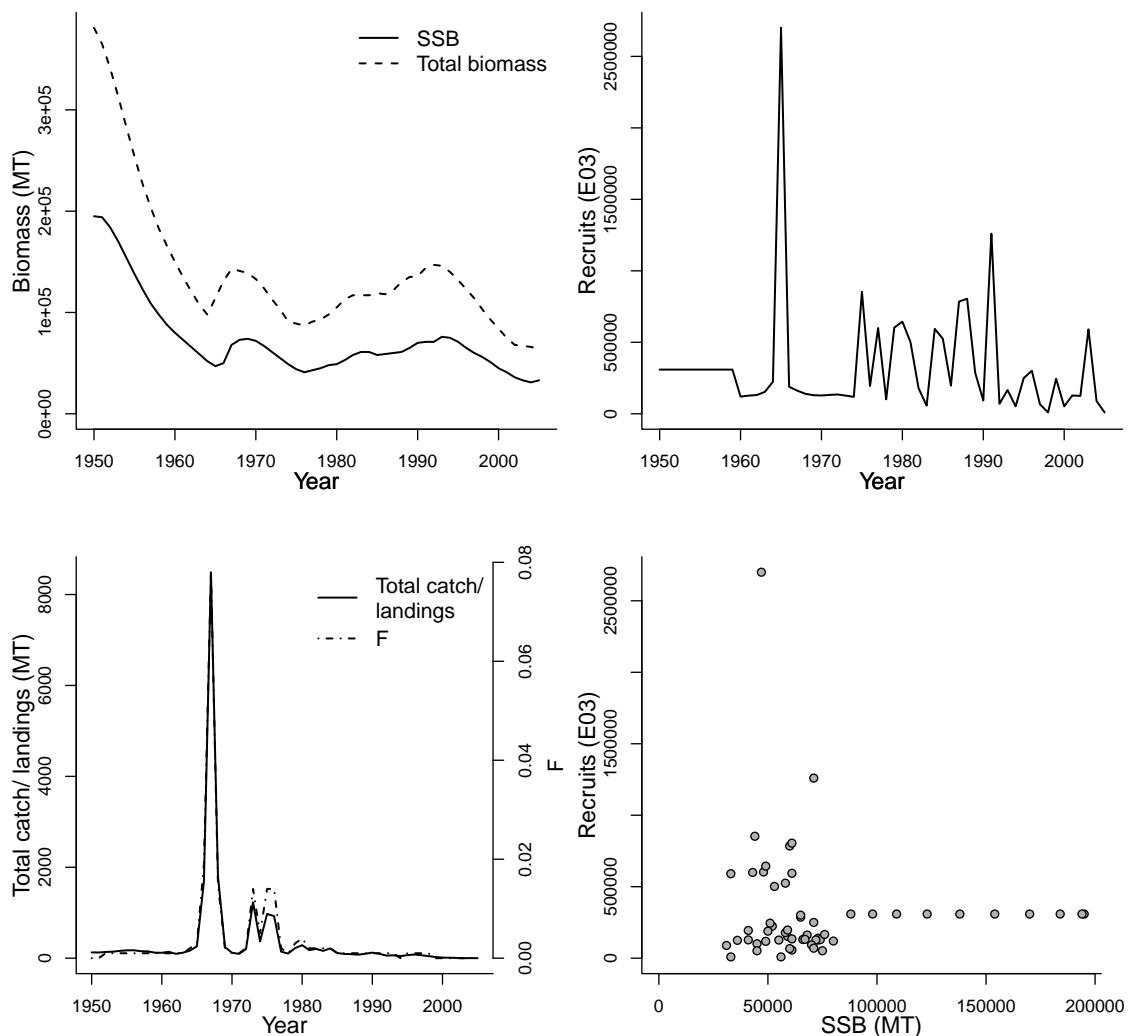
General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | NMFS  |
| Assessment group   | Southwest Fisheries Science Center                                    |
| Assessment authors | Field JC  |
| Assessment method  | Stock Synthesis v2.0 model  |
| Publication year   | 2007  |
| Timeseries span    | 1950-2005   |
| Document           | SWFSC-SBELLYROCKPCOAST-2007-Shortbelly rockfish.pdf (pdf in database) |
| Recorder           | BRANCH  |
| Date entered       | 2008-11-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2011-03-02  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME    |         |         | tertiary LME |  |  |
|------------------------|-------|-------|------------------|---------|---------|--------------|--|--|
| 3 - California Current |       |       | na               |         |         | na           |  |  |
| Parameter              | Value | Units | Reference points |         |         |              |  |  |
| SSB-SEX-sex            | 1     | sex   | Parameter        | Value   | Units   |              |  |  |
| REC-AGE-yr             | 0     | yr    | RO-E03 (R )      | 309.248 | E03     |              |  |  |
| F-AGE-yr-yr            | 1+    | yr-yr | SSB0-MT (SSB)    | 49500   | MT      |              |  |  |
| TB-AGE-yr              | 1+    | yr    | B0-MT            | 98400   | MT      |              |  |  |
| M-1/yr                 | 0.26  | 1/yr  | BH-h-dimless     | 0.65    | dimless |              |  |  |
| A50-yr                 | 2     | yr    |                  |         |         |              |  |  |
| L50-cm                 | 14    | cm    |                  |         |         |              |  |  |
| SSB-AGE-yr             |       |       |                  |         |         |              |  |  |
| M                      |       |       |                  |         |         |              |  |  |

| Time series minima and maxima |        |         |       |        |
|-------------------------------|--------|---------|-------|--------|
|                               | SSB    | R       | F     | TB     |
| Minimum year                  | 1950   | 1950    | 1950  | 1950   |
| Maximum year                  | 2005   | 2005    | 2005  | 2005   |
| Time series minimum           | 31000  | 9000    | 0     | 64000  |
| Time series maximum           | 195000 | 2700000 | 0.078 | 381000 |
| Units                         | MT     | E03     | 1/yr  | MT     |



# Assessment of Northern Pacific Coast starry flounder (*Platichthys stellatus*)

Assessment ID: SWFSC-STFLOUNNPCOAST-1970-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/344>

Area ID: USA-NMFS-NPCOAST

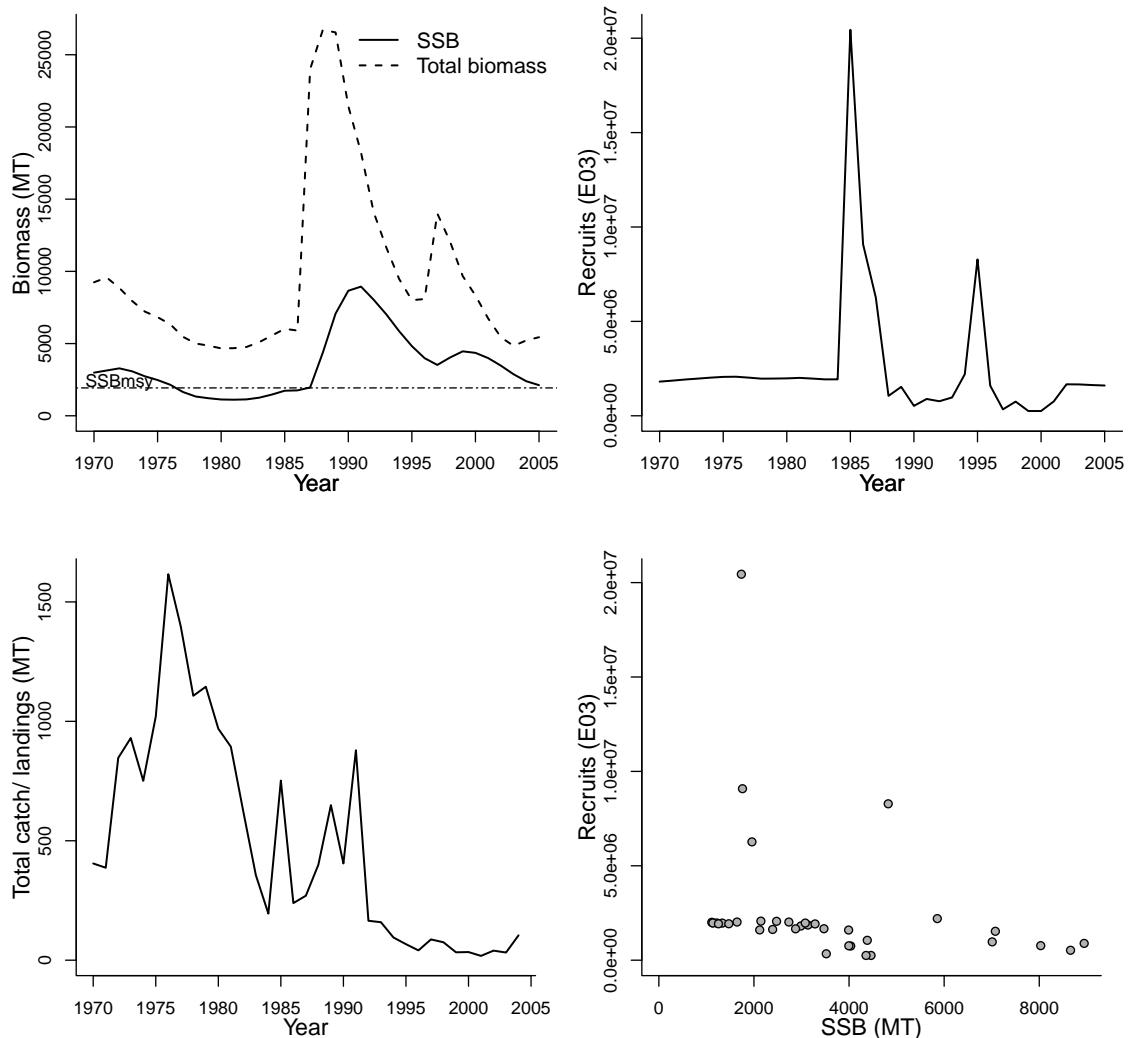
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southwest Fisheries Science Center               |
| Assessment authors | Ralston, Stephen                                 |
| Assessment method  | Stock Synthesis v2.0 model                       |
| Publication year   | 2005   |
| Timeseries span    | 1970-2005  |
| Document           | 2005-SAFE-WCstarryflounder.pdf (pdf in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-04-07                                       |
| Date last loaded   | 2011-07-25                                       |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10                                       |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       | tertiary LME |
|------------------------|-------|-------|---|-------|--------------|
| 3 - California Current |       |       | na                                      | na    |              |
| Parameter              | Value | Units | Reference points                        |       |              |
| SSB-AGE-yr             | 3+    | yr    | Parameter                               | Value | Units        |
| SSB-SEX-sex            | 1     | sex   | NATMORT-1/yr (M)                        | 0.3   | 1/yr         |
| REC-AGE-yr             | 0     | yr    | SSBmsy-MT (SSB)                         | 1930  | MT           |
| F-AGE-yr-yr            | 2+    | yr-yr | MSY-MT (TB)                             | 818   | MT           |
| TB-AGE-yr              | 2+    | yr    | Umsy-ratio (U)                          | 0.169 | ratio        |
| M-1/yr                 | 0.3   | 1/yr  | SSB0-MT (SSB)                           | 4824  | MT           |
| NATMORT-1/yr           | 0.3   | 1/yr  | B0-MT                                   | 12102 | MT           |
| M                      |       |       | BH-h-dimless                            | 0.8   | dimless      |
| A50-yr                 |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.099 |              |
| L50-cm                 |       |       |   |       |              |

| Time series minima and maxima |      |          |   |       |       |
|-------------------------------|------|----------|---|-------|-------|
|                               | SSB  | R        | F | TB    | Catch |
| Minimum year                  | 1970 | 1970     |   | 1970  | 1970  |
| Maximum year                  | 2005 | 2005     |   | 2005  | 2004  |
| Time series minimum           | 1113 | 251000   |   | 4667  | 18    |
| Time series maximum           | 8945 | 20445000 |   | 26727 | 1616  |
| Units                         | MT   | E03      |   | MT    | MT    |



# Assessment of Southern Pacific Coast starry flounder (*Platichthys stellatus*)

Assessment ID: SWFSC-STFLOUNSPCOAST-1970-2005-STANTON

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/343>

Area ID: USA-NMFS-SPCOAST

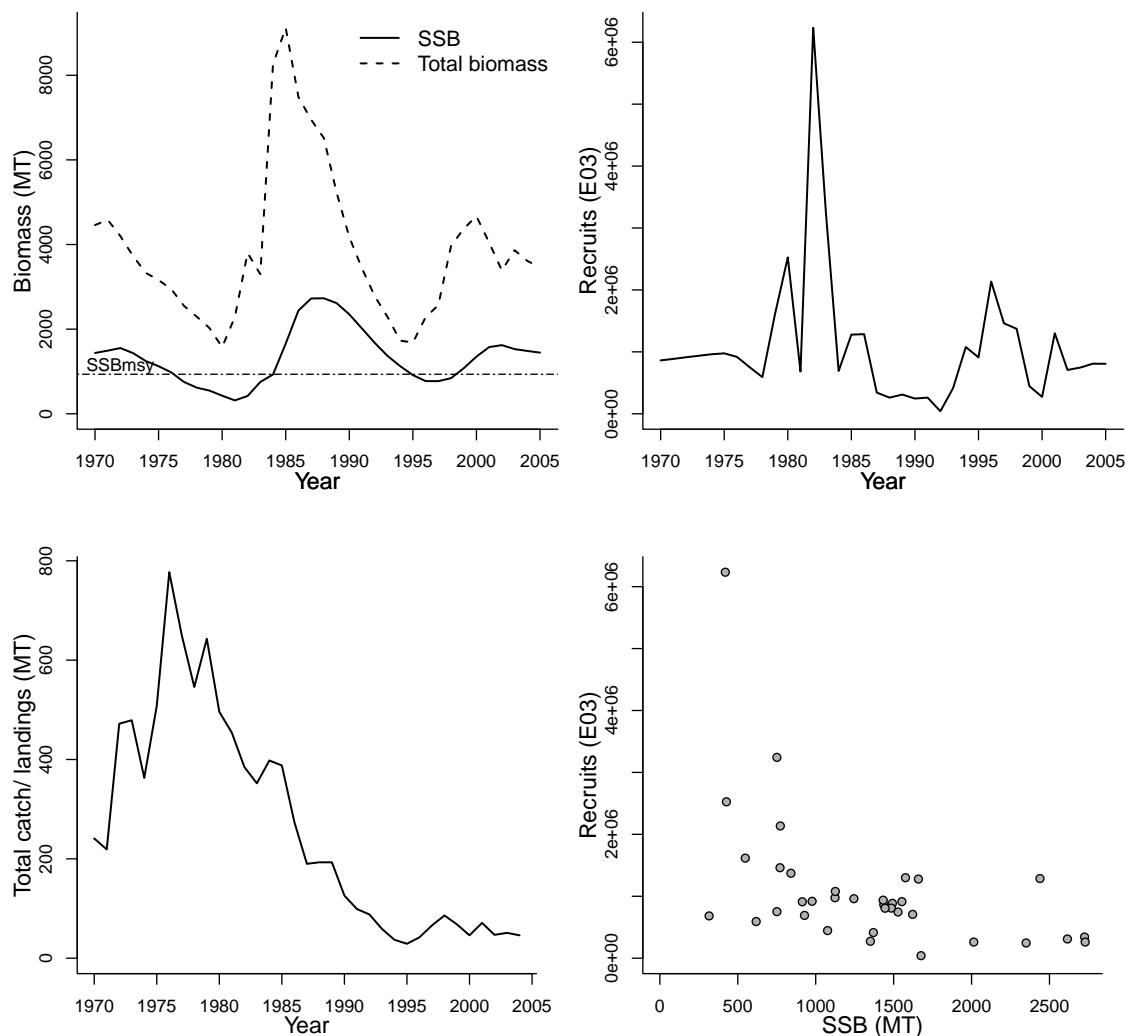
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | NMFS   |
| Assessment group   | Southwest Fisheries Science Center               |
| Assessment authors | Ralston, Stephen                                 |
| Assessment method  | Stock Synthesis v2.0 model                       |
| Publication year   | 2005   |
| Timeseries span    | 1970-2005  |
| Document           | 2005-SAFE-WCstarryflounder.pdf (pdf in database) |
| Recorder           | STANTON  |
| Date entered       | 2009-04-07                                       |
| Date last loaded   | 2011-07-25                                       |
| QA/QC complete     | YES  |
| Date approved      | 2010-02-10                                       |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME            |       |       | secondary LME                           |       |         | tertiary LME |       |       |
|------------------------|-------|-------|---|-------|---------|--------------|-------|-------|
| 3 - California Current |       |       | na                                      |       |         | na           |       |       |
| Parameter              | Value | Units | Reference points                        |       |         | Parameter    | Value | Units |
| SSB-AGE-yr             | 3+    | yr    | NATMORT-1/yr (M)                        | 0.3   | 1/yr    |              |       |       |
| SSB-SEX-sex            | 1     | sex   | SSBmsy-MT (SSB)                         | 934   | MT      |              |       |       |
| REC-AGE-yr             | 0     | yr    | MSY-MT (TB)                             | 396   | MT      |              |       |       |
| F-AGE-yr-yr            | 2+    | yr-yr | Umsy-ratio (U)                          | 0.169 | ratio   |              |       |       |
| TB-AGE-yr              | 2+    | yr    | SSB0-MT (SSB)                           | 2334  | MT      |              |       |       |
| M-1/yr                 | 0.3   | 1/yr  | B0-MT                                   | 5854  | MT      |              |       |       |
| NATMORT-1/yr           | 0.3   | 1/yr  | BH-h-dimless                            | 0.8   | dimless |              |       |       |
| M                      |       |       | SSB <sub>2005</sub> /SSB <sub>msy</sub> | 1.547 |         |              |       |       |
| A50-yr                 |       |       |   |       |         |              |       |       |
| L50-cm                 |       |       |   |       |         |              |       |       |

| Time series minima and maxima |      |         |    |      |
|-------------------------------|------|---------|----|------|
|                               | SSB  | R       | F  | TB   |
| Minimum year                  | 1970 | 1970    |    | 1970 |
| Maximum year                  | 2005 | 2005    |    | 2005 |
| Time series minimum           | 316  | 41000   |    | 1574 |
| Time series maximum           | 2729 | 6233000 |    | 9121 |
| Units                         | MT   | E03     | MT | MT   |



# Assessment of Tasmania tasmanian giant crab (*Pseudocarcinus gigas*)

Assessment ID:TAFI-TASGIANTCRABTAS-1990-2007-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/86>

Area ID: Australia-AFMA-TAS

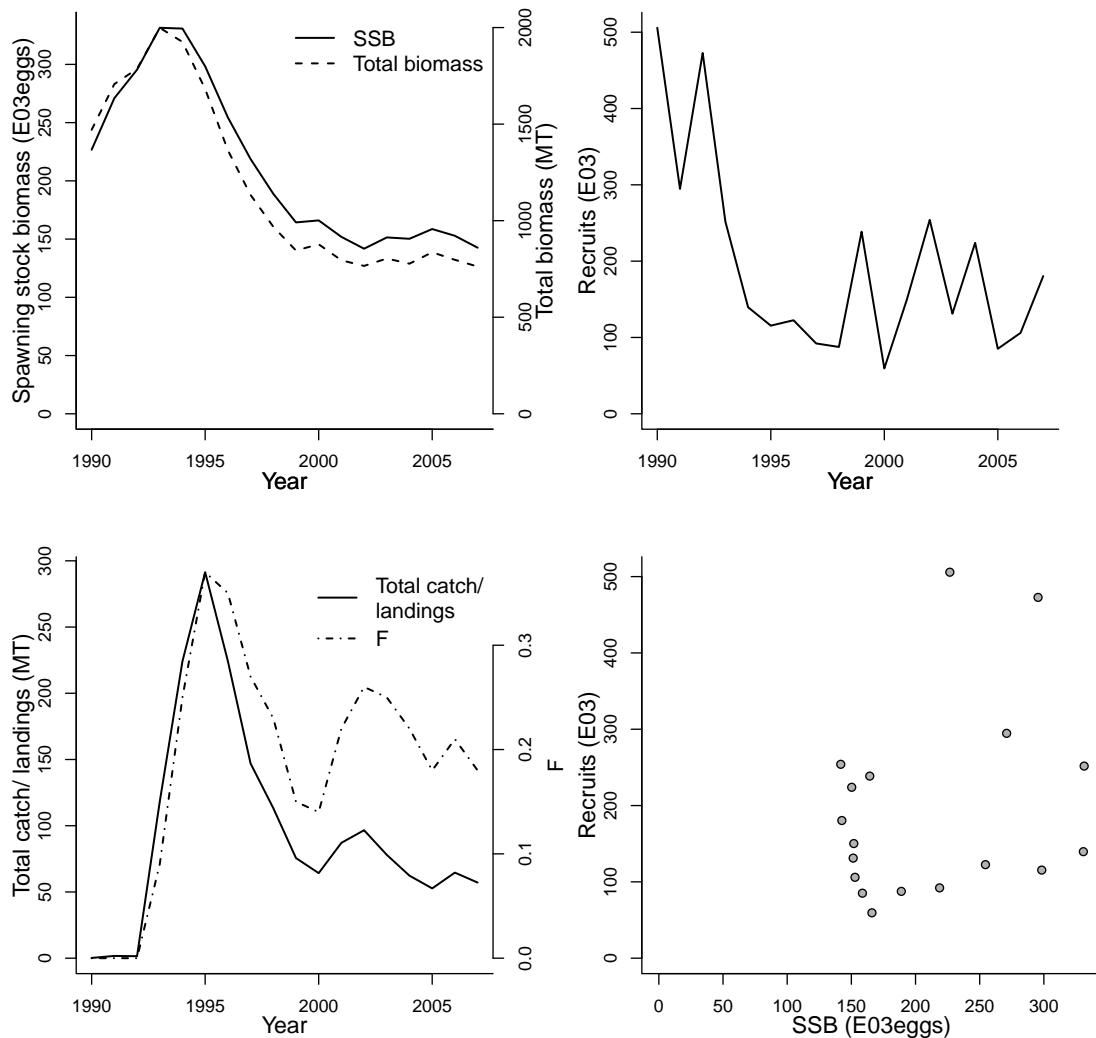
## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | AFMA   |
| Assessment group   | Tasmanian Aquaculture and Fisheries Institute  |
| Assessment authors | Phillippe Ziegler                              |
| Assessment method  | Size-based model                               |
| Publication year   | 2008   |
| Timeseries span    | 1990-2007                                      |
| Document           | JENSEN_TASGIANTCRAB_2008.pdf (pdf in database) |
| Recorder           | JENSEN   |
| Date entered       | 2008-11-29                                     |
| Date last loaded   | 2011-07-25                                     |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10                                     |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME                     | secondary LME    | tertiary LME |
|---------------------------------|------------------|--------------|
| 42 - Southeast Australian Shelf | na               | na           |
| Parameter    Value    Units     |                  |              |
| REC-AGE                         |                  |              |
| SSB-AGE-yr                      |                  |              |
| SSB-SEX-sex                     |                  |              |
| TB-AGE-yr                       | Reference points |              |
| F-AGE-yr                        | Parameter        | Value        |
| M                               |                  |              |
| A50-yr                          |                  |              |
| L50-cm                          |                  |              |

| Time series minima and maxima |           |         |       |         |
|-------------------------------|-----------|---------|-------|---------|
|                               | SSB       | R       | F     | TB      |
| Minimum year                  | 1990      | 1990    | 1990  | 1990    |
| Maximum year                  | 2007      | 2007    | 2007  | 2007    |
| Time series minimum           | 141.7377  | 59.4615 | 0     | 762.33  |
| Time series maximum           | 331.42152 | 505.763 | 0.37  | 1998.76 |
| Units                         | E03eggs   | E03     | ratio | MT      |
|                               |           |         |       | MT      |



# Assessment of Western Bering Sea walleye pollock (*Theragra chalcogramma*)

Assessment ID: VNIRO-WPOLLWBS-1994-2004-JENSEN

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/426>

Area ID: Russia-RFFA-WBS

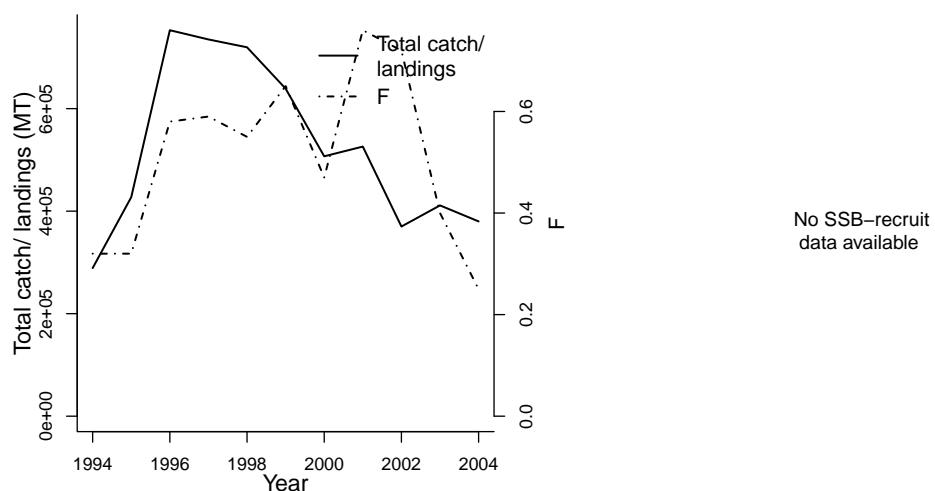
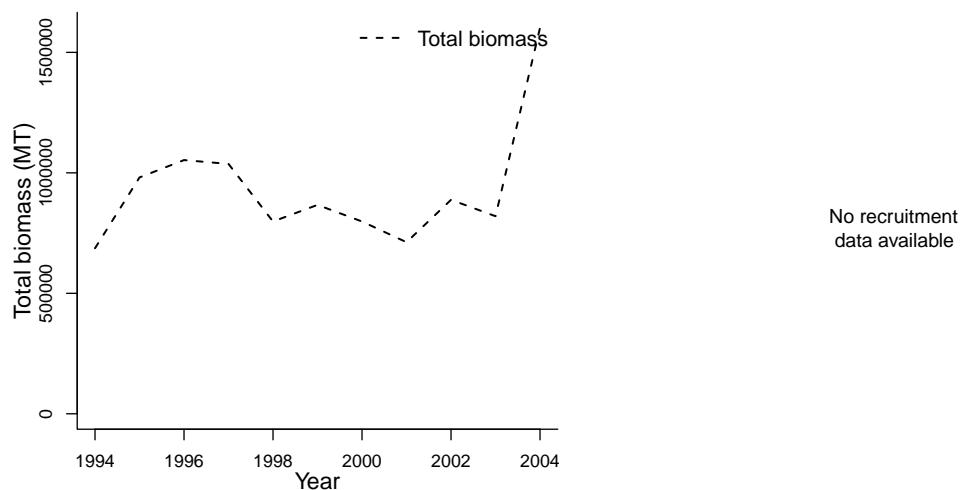
General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | RFFA   |
| Assessment group   | Russian Federal Research Institute of Fisheries and Oceanography |
| Assessment authors | Vasilyev, D.A.   |
| Assessment method  | Instantaneous Separable VPA                                      |
| Publication year   | 2004   |
| Timeseries span    | 1994-2004  |
| Document           | WPOLLWBS-2004-JENSEN.pdf (pdf in database)                       |
| Recorder           | JENSEN   |
| Date entered       | 2009-11-11   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2011-06-10   |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          |       | secondary LME |                  | tertiary LME |       |
|----------------------|-------|---------------|------------------|--------------|-------|
| 53 - West Bering Sea |       | na            |                  | na           |       |
| Parameter            | Value | Units         |                  |              |       |
| F-AGE-yr-yr          | 3-6   | yr-yr         |                  |              |       |
| TB-AGE-yr            | 2+    | yr            |                  |              |       |
| REC-AGE              |       |               | Reference points |              |       |
| SSB-AGE-yr           |       |               | Parameter        | Value        | Units |
| SSB-SEX-sex          |       |               |                  |              |       |
| M                    |       |               |                  |              |       |
| A50-yr               |       |               |                  |              |       |
| L50-cm               |       |               |                  |              |       |

| Time series minima and maxima |      |   |      |         |
|-------------------------------|------|---|------|---------|
|                               | SSB  | R | F    | TB      |
| Minimum year                  |      |   | 1994 | 1994    |
| Maximum year                  |      |   | 2004 | 2004    |
| Time series minimum           | 0.25 |   |      | 687000  |
| Time series maximum           | 0.76 |   |      | 1602000 |
| Units                         | 1/yr |   |      | MT      |



# Assessment of Western Baltic atlantic cod (*Gadus morhua*)

Assessment ID:WGBFAS-CODBA2224-1969-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/26>

Area ID: multinational-ICES-22-24

## General assessment details.

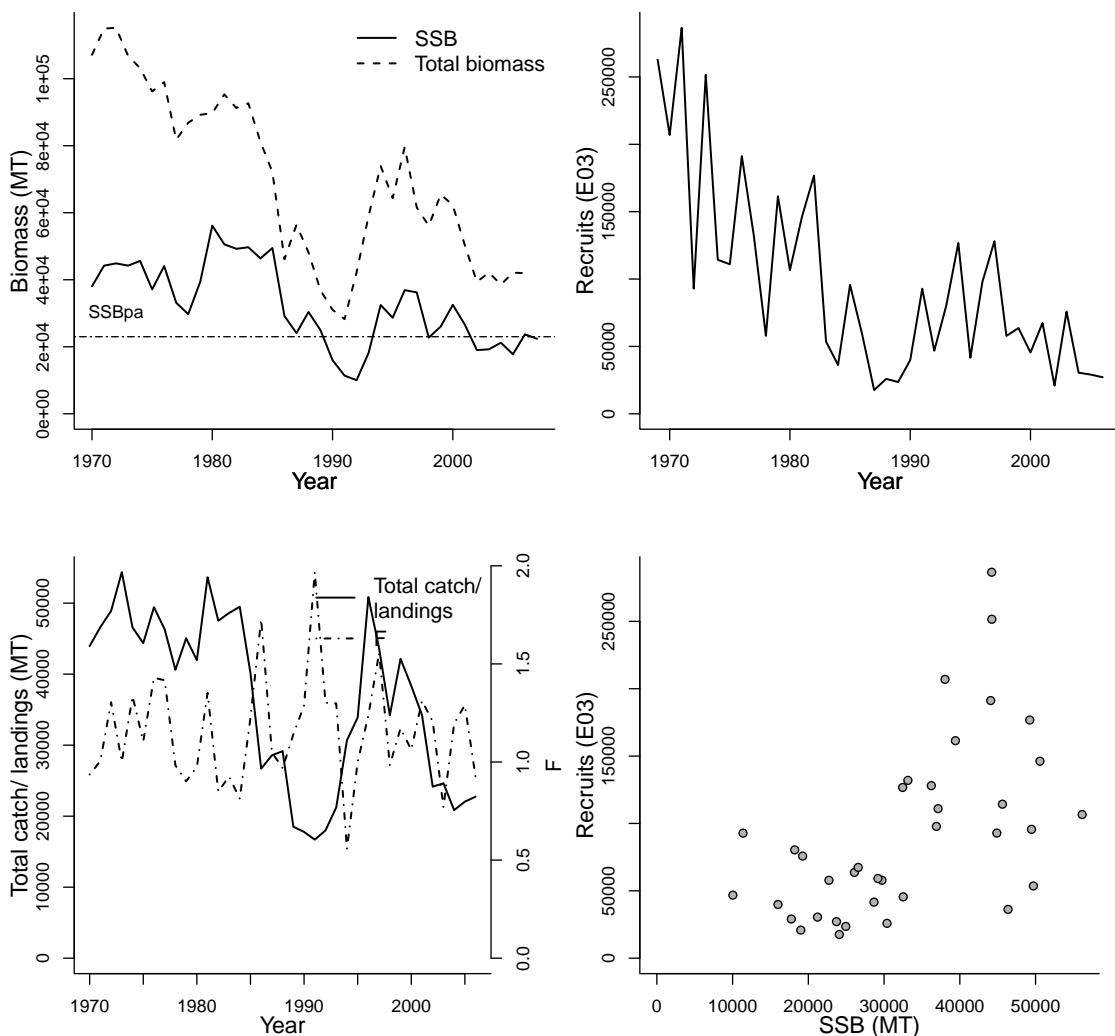
| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1969-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-18                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-27                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME  | tertiary LME     |
|-------------|-----------|-------|-----------------|----------------|------------------|
|             |           |       | 23 - Baltic Sea | na             | na               |
| SSB-AGE-yr  | AVAILABLE | yr    |                 |                |                  |
| REC-AGE-yr  | 1         | yr    |                 |                |                  |
| F-AGE-yr-yr | 3 to 6    | yr-yr |                 |                | Reference points |
| TB-AGE-yr   | 1+        | yr    |                 | Parameter      | Value            |
| A50-yr      | AVAILABLE | yr    |                 | SSBpa-MT (SSB) | 23000            |
| M-1/T       | AVAILABLE | 1/T   |                 | MT             |                  |
| SSB-SEX-sex |           |       |                 |                |                  |
| M           |           |       |                 |                |                  |
| L50-cm      |           |       |                 |                |                  |

## Time series minima and maxima

|                     | SSB   | R      | F      | TB     | Catch |
|---------------------|-------|--------|--------|--------|-------|
| Minimum year        | 1970  | 1969   | 1970   | 1970   | 1970  |
| Maximum year        | 2007  | 2006   | 2006   | 2006   | 2006  |
| Time series minimum | 10034 | 17605  | 0.5573 | 28235  | 16693 |
| Time series maximum | 56154 | 286485 | 1.9674 | 115194 | 54357 |
| Units               | MT    | E03    | 1/T    | MT     | MT    |



# Assessment of Eastern Baltic atlantic cod (*Gadus morhua*)

Assessment ID:WGBFAS-CODBA2532-1964-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/27>

Area ID: multinational-ICES-25-32

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1964-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-18                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-27                                |

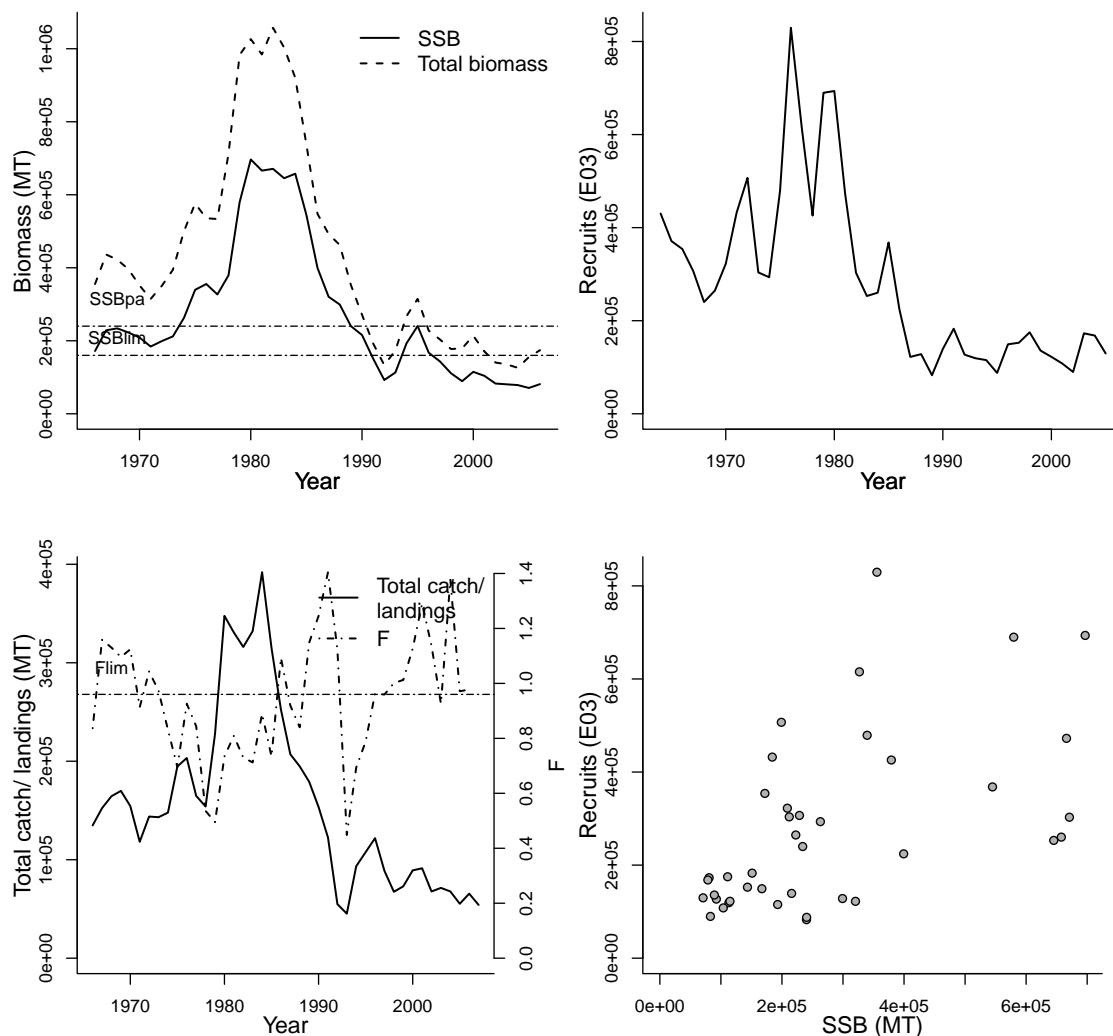
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME | tertiary LME |
|-------------|-----------|-------|-----------------|---------------|--------------|
|             |           |       | 23 - Baltic Sea | na            | na           |
| SSB-AGE-yr  | AVAILABLE | yr    |                 |               |              |
| REC-AGE-yr  | 2         | yr    |                 |               |              |
| F-AGE-yr-yr | 4 to 7    | yr-yr |                 |               |              |
| TB-AGE-yr   | 2+        | yr    |                 |               |              |
| A50-yr      | AVAILABLE | yr    |                 |               |              |
| M-1/T       | 0.2       | 1/T   |                 |               |              |
| SSB-SEX-sex |           |       |                 |               |              |
| M           |           |       |                 |               |              |
| L50-cm      |           |       |                 |               |              |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| Flim-1/T (F)           | 0.96             | 1/T   |       |
| Fpa-1/T (F)            | 0.6              | 1/T   |       |
| SSBlim-MT (SSB)        | 160000           | MT    |       |
| SSBpa-MT (SSB)         | 240000           | MT    |       |
| $SSB_{2006}/SSB_{lim}$ | 0.507            |       |       |
| $F_{2006}/F_{lim}$     | 1.018            |       |       |

| Time series minima and maxima |        |        |        |         |
|-------------------------------|--------|--------|--------|---------|
|                               | SSB    | R      | F      | TB      |
| Minimum year                  | 1966   | 1964   | 1966   | 1966    |
| Maximum year                  | 2006   | 2005   | 2006   | 2006    |
| Time series minimum           | 70762  | 82818  | 0.4482 | 125877  |
| Time series maximum           | 696743 | 829398 | 1.4046 | 1057368 |
| Units                         | MT     | E03    | 1/T    | MT      |



# Assessment of Kattegat and Skagerrak atlantic cod (*Gadus morhua*)

Assessment ID:WGBFAS-CODKAT-1970-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/380>

Area ID: multinational-ICES-IIIa

## General assessment details.

| Detail             | Value  |
|--------------------|--|
| Management body    | ICES   |
| Assessment group   | Baltic Fisheries Assessment Working Group                  |
| Assessment authors | Anonymous  |
| Assessment method  | The ADAPT approach with year effects in a catch multiplier |
| Publication year   | 2007   |
| Timeseries span    | 1970-2006  |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)                     |
| Recorder           | MINTO  |
| Date entered       | 2008-04-15   |
| Date last loaded   | 2011-07-25   |
| QA/QC complete     | YES  |
| Date approved      | 2009-06-10   |

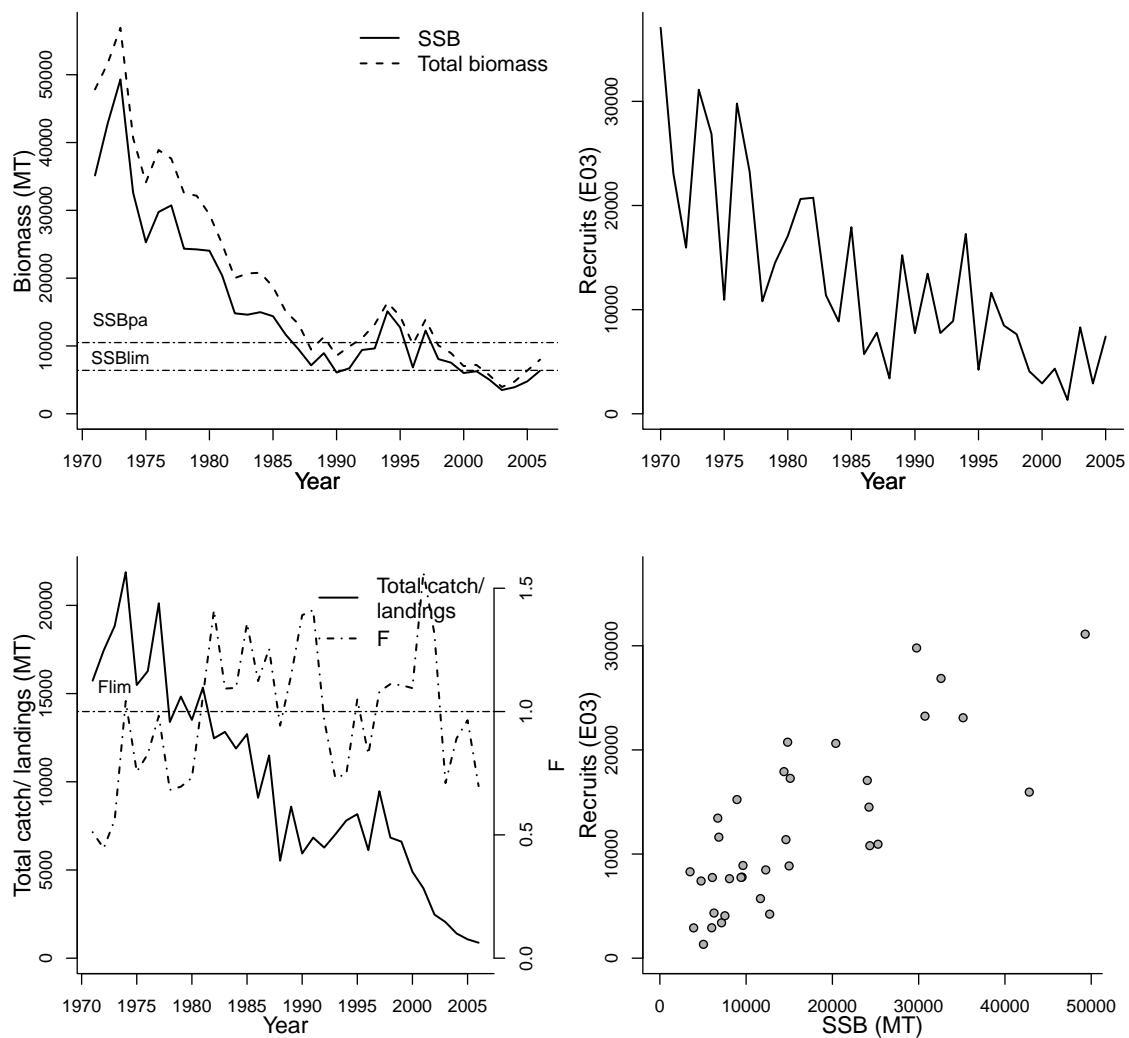
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| A50-yr      | 2     | yr    |
| SSB-AGE-yr  | 1+    | yr    |
| REC-AGE-yr  | 1     | yr    |
| TB-AGE-yr   | 1+    | yr    |
| F-AGE-yr-yr | 3-5   | yr-yr |
| M-1/T       | 0.2   | 1/T   |
| SSB-SEX-sex |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Parameter              | Value | Units |
|------------------------|-------|-------|
| Flim-1/T (F)           | 1     | 1/T   |
| Fpa-1/T (F)            | 0.6   | 1/T   |
| SSBpa-MT (SSB)         | 10500 | MT    |
| SSBlim-MT (SSB)        | 6400  | MT    |
| $SSB_{2006}/SSB_{lim}$ | 0.992 |       |
| $F_{2006}/F_{lim}$     | 0.698 |       |

| Time series minima and maxima |       |       |        |       |       |
|-------------------------------|-------|-------|--------|-------|-------|
|                               | SSB   | R     | F      | TB    | Catch |
| Minimum year                  | 1971  | 1970  | 1971   | 1971  | 1971  |
| Maximum year                  | 2006  | 2005  | 2006   | 2006  | 2006  |
| Time series minimum           | 3500  | 1330  | 0.4454 | 3952  | 876   |
| Time series maximum           | 49301 | 37064 | 1.565  | 56919 | 21880 |
| Units                         | MT    | E03   | 1/T    | MT    | MT    |



# Assessment of Eastern Baltic herring (*Clupea harengus*)

Assessment ID:WGBFAS-HERR2532-1973-2006-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/29>

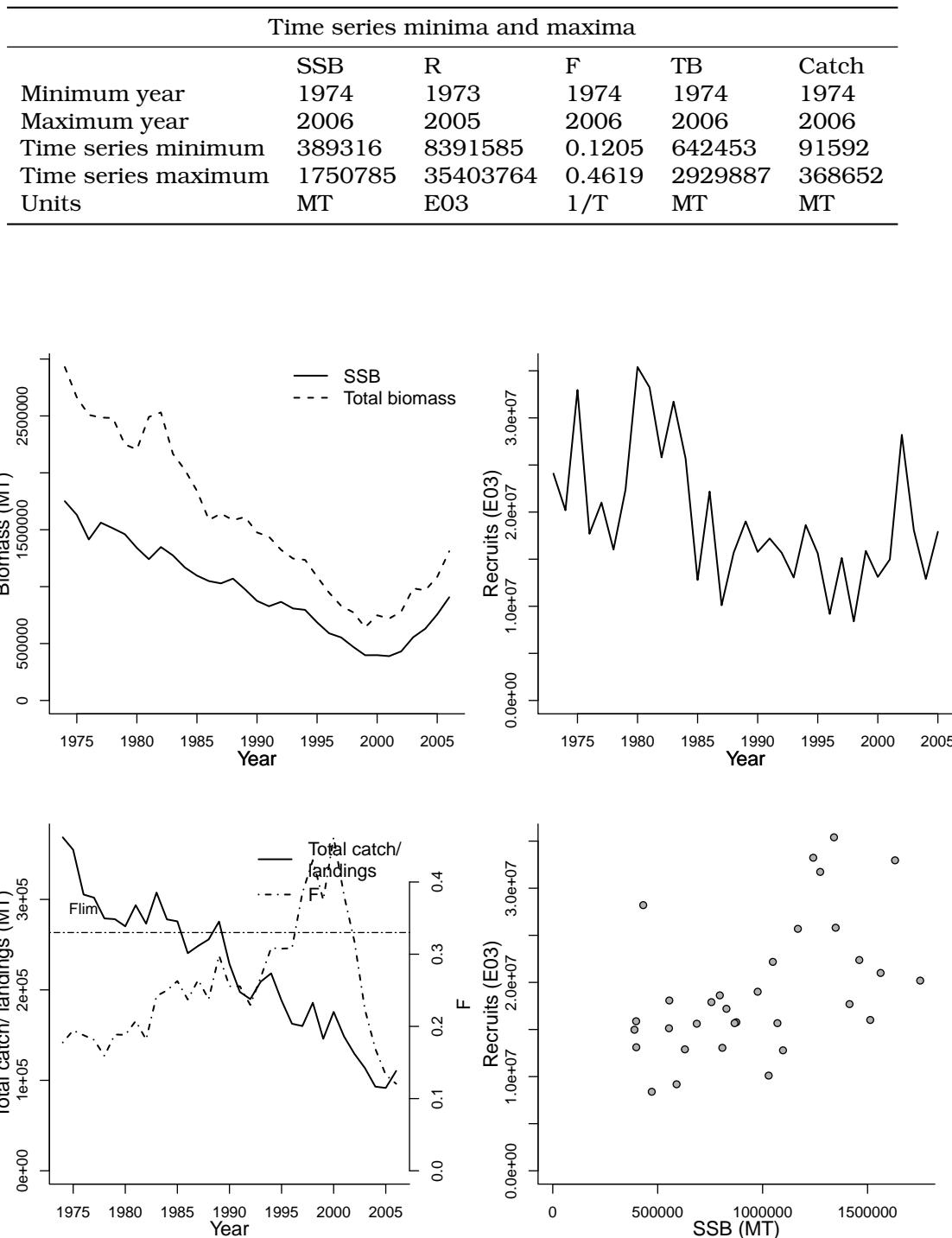
Area ID: multinational-ICES-25-32

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1973-2006                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-21                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME     |           | secondary LME | tertiary LME       |
|-----------------|-----------|---------------|--------------------|
| 23 - Baltic Sea |           | na            | na                 |
| Parameter       | Value     | Units         |                    |
| SSB-AGE-yr      | AVAILABLE | yr            |                    |
| REC-AGE-yr      | 1         | yr            | Reference points   |
| F-AGE-yr-yr     | 3 to 6    | yr-yr         | Parameter          |
| TB-AGE-yr       | 1+        | yr            | Value              |
| A50-yr          | AVAILABLE | yr            | 1/T                |
| M-1/T           | AVAILABLE | 1/T           | Flim-1/T (F)       |
| SSB-SEX-sex     |           |               | 0.33               |
| M               |           |               | Fpa-1/T (F)        |
| L50-cm          |           |               | 0.17               |
|                 |           |               | $F_{2006}/F_{lim}$ |
|                 |           |               | 0.365              |



# Assessment of Bothnian Sea herring (*Clupea harengus*)

Assessment ID:WGBFAS-HERR30-1972-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/30>

Area ID: multinational-ICES-30

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1972-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-18                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

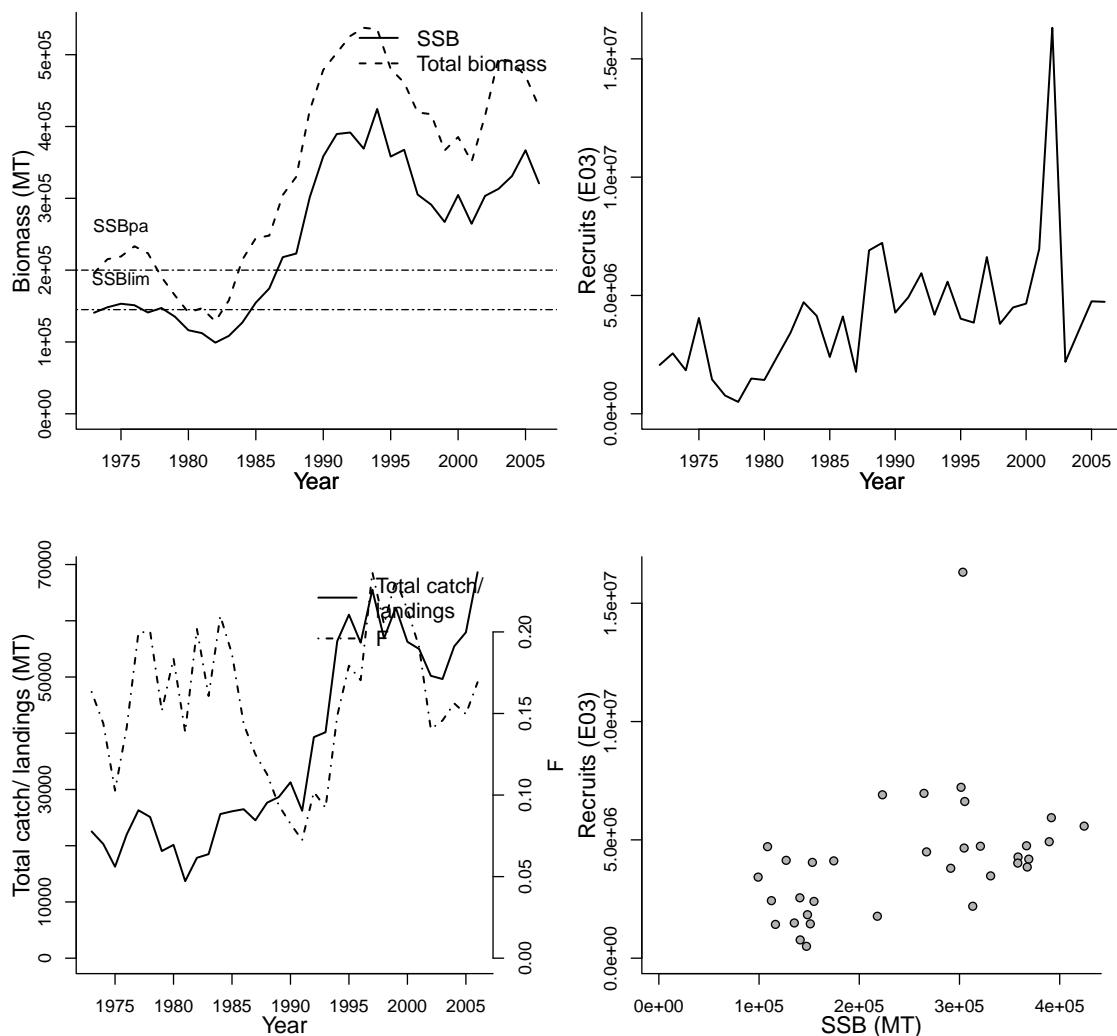
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME | tertiary LME |
|-------------|-----------|-------|-----------------|---------------|--------------|
|             |           |       | 23 - Baltic Sea | na            | na           |
| SSB-AGE-yr  | AVAILABLE | yr    |                 |               |              |
| REC-AGE-yr  | 1         | yr    |                 |               |              |
| F-AGE-yr-yr | 3 to 7    | yr-yr |                 |               |              |
| TB-AGE-yr   | 1+        | yr    |                 |               |              |
| A50-yr      | AVAILABLE | yr    |                 |               |              |
| M-1/T       | 0.2       | 1/T   |                 |               |              |
| SSB-SEX-sex |           |       |                 |               |              |
| M           |           |       |                 |               |              |
| L50-cm      |           |       |                 |               |              |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| Flim-1/T (F)           | 0.3              | 1/T   |       |
| Fpa-1/T (F)            | 0.21             | 1/T   |       |
| SSBlim-MT (SSB)        | 145000           | MT    |       |
| SSBpa-MT (SSB)         | 200000           | MT    |       |
| $SSB_{2006}/SSB_{lim}$ | 2.213            |       |       |
| $F_{2006}/F_{lim}$     | 0.564            |       |       |

| Time series minima and maxima |        |          |        |        |
|-------------------------------|--------|----------|--------|--------|
|                               | SSB    | R        | F      | TB     |
| Minimum year                  | 1973   | 1972     | 1973   | 1973   |
| Maximum year                  | 2006   | 2006     | 2006   | 2006   |
| Time series minimum           | 99048  | 501629   | 0.0724 | 128629 |
| Time series maximum           | 424424 | 16311979 | 0.2366 | 537441 |
| Units                         | MT     | E03      | 1/T    | MT     |



# Assessment of Bothnian Bay herring (*Clupea harengus*)

Assessment ID:WGBFAS-HERR31-1979-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/31>

Area ID: multinational-ICES-31

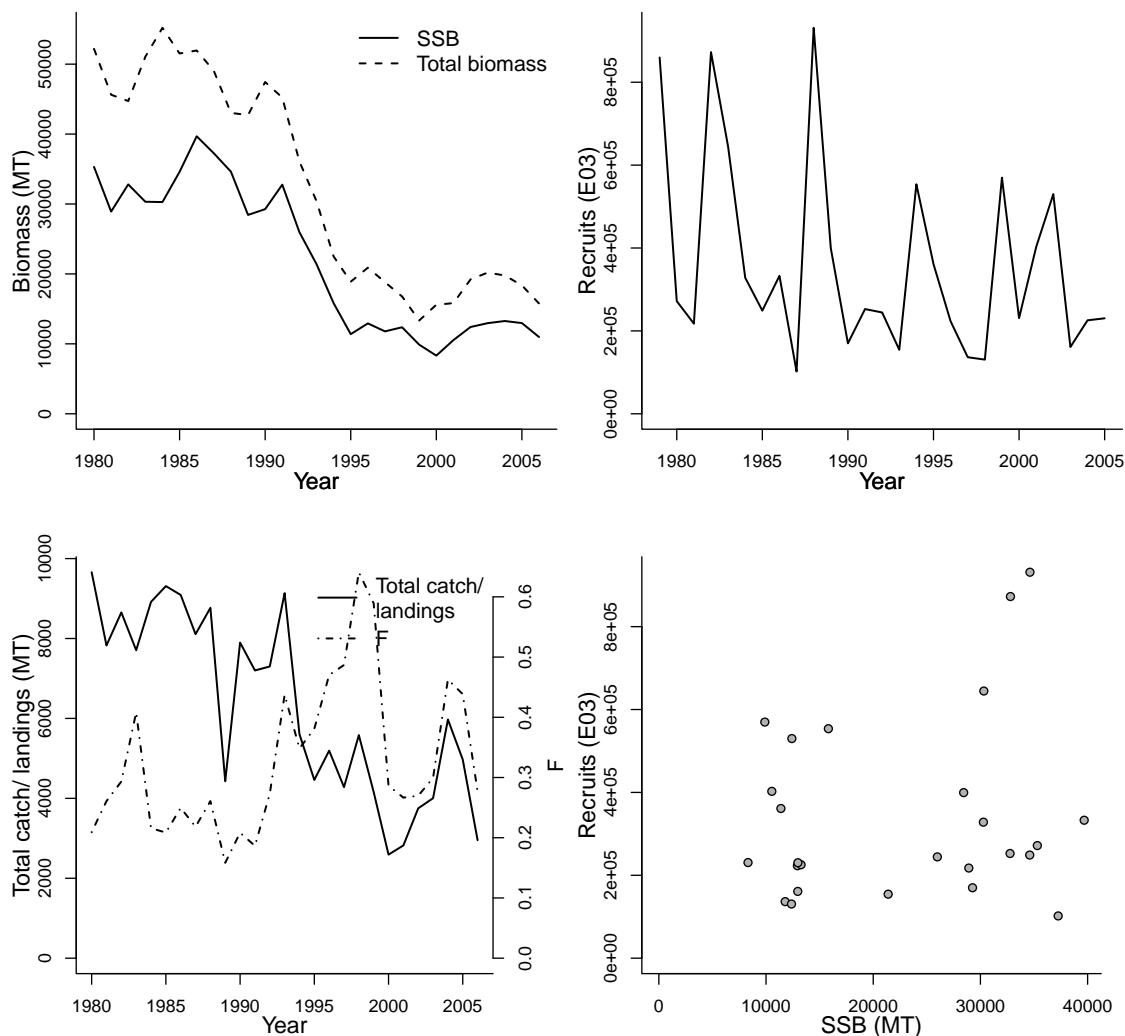
## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1979-2006                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-18                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME | tertiary LME     |
|-------------|-----------|-------|-----------------|---------------|------------------|
|             |           |       | 23 - Baltic Sea | na            | na               |
| SSB-AGE-yr  | AVAILABLE | yr    |                 |               |                  |
| REC-AGE-yr  | 1         | yr    |                 |               |                  |
| F-AGE-yr-yr | 3 to 7    | yr-yr |                 |               |                  |
| TB-AGE-yr   | 1+        | yr    |                 |               | Reference points |
| A50-yr      | AVAILABLE | yr    |                 | Parameter     | Value            |
| M-1/T       | 0.15      | 1/T   |                 |               | Units            |
| SSB-SEX-sex |           |       |                 |               |                  |
| M           |           |       |                 |               |                  |
| L50-cm      |           |       |                 |               |                  |

| Time series minima and maxima |       |        |        |       |
|-------------------------------|-------|--------|--------|-------|
|                               | SSB   | R      | F      | TB    |
| Minimum year                  | 1980  | 1979   | 1980   | 1980  |
| Maximum year                  | 2006  | 2005   | 2006   | 2006  |
| Time series minimum           | 8318  | 102001 | 0.1584 | 13338 |
| Time series maximum           | 39680 | 931324 | 0.6409 | 55196 |
| Units                         | MT    | E03    | 1/T    | MT    |



# Assessment of Iceland Grounds herring (*Clupea harengus*)

Assessment ID:WGBFAS-HERRIsum-1983-2007-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/47>

Area ID: multinational-ICES-Va

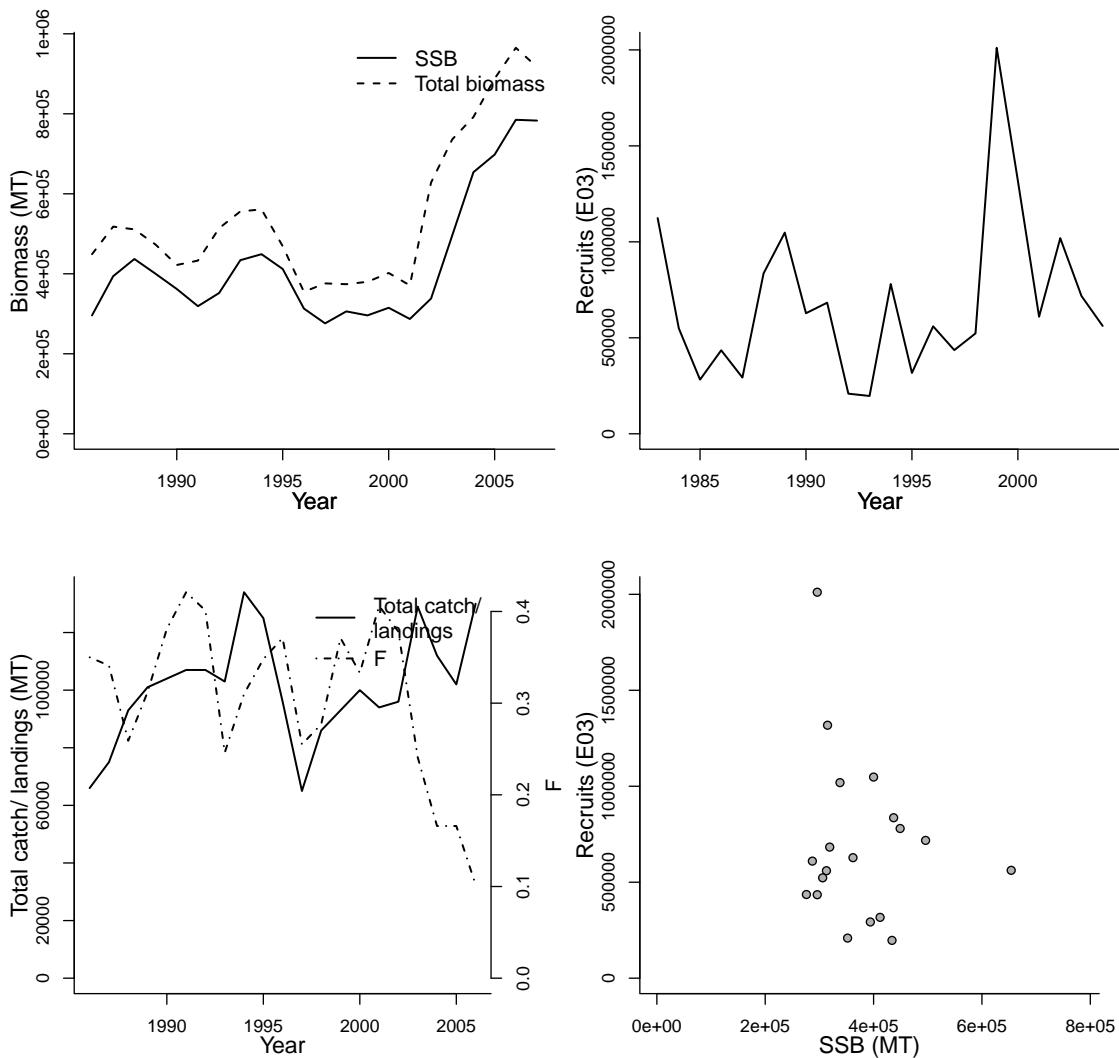
## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anon                                      |
| Assessment method  | VPA/ADPAT version 2.3.2 NOAA Fisheries    |
| Publication year   | 2007                                      |
| Timeseries span    | 1983-2007                                 |
| Document           | ICES-NWWG-2007.pdf (pdf in database)      |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-25                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME        |           | secondary LME | tertiary LME     |
|--------------------|-----------|---------------|------------------|
| 59 - Iceland Shelf |           | na            | na               |
| Parameter          | Value     | Units         |                  |
| SSB-AGE-yr         | AVAILABLE | yr            |                  |
| REC-AGE-yr         | 3         | yr            |                  |
| F-AGE-yr-yr        | 5 to 10   | yr-yr         |                  |
| TB-AGE-yr          | 3+        | yr            | Reference points |
| A50-yr             | AVAILABLE | yr            | Parameter        |
| M-1/T              | 0.1       | 1/T           | Value            |
| SSB-SEX-sex        |           |               | Units            |
| M                  |           |               |                  |
| L50-cm             |           |               |                  |

| Time series minima and maxima |        |         |       |        |
|-------------------------------|--------|---------|-------|--------|
|                               | SSB    | R       | F     | TB     |
| Minimum year                  | 1986   | 1983    | 1986  | 1986   |
| Maximum year                  | 2007   | 2004    | 2006  | 2007   |
| Time series minimum           | 276000 | 197000  | 0.102 | 355000 |
| Time series maximum           | 785000 | 2011000 | 0.421 | 965000 |
| Units                         | MT     | E03     | 1/T   | MT     |



# Assessment of Gulf of Riga East of Gotland herring (*Clupea harengus*)

Assessment ID:WGBFAS-HERRIGA-1976-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/32>

Area ID: multinational-ICES-28

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1976-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-21                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

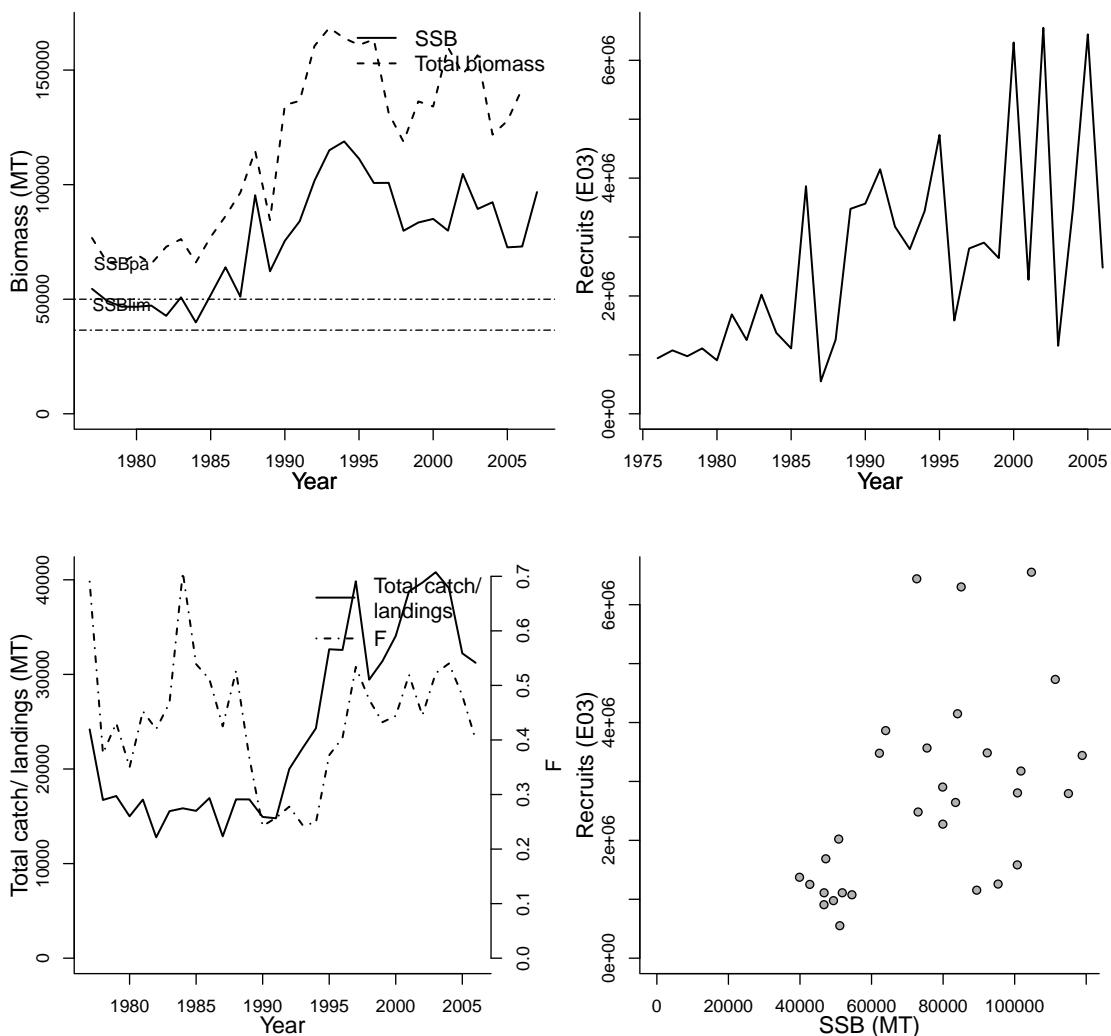
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME | tertiary LME |
|-------------|-----------|-------|-----------------|---------------|--------------|
|             |           |       | 23 - Baltic Sea | na            | na           |
| SSB-AGE-yr  | 1.5       | yr    |                 |               |              |
| REC-AGE-yr  | 1         | yr    |                 |               |              |
| F-AGE-yr-yr | 3 to 7    | yr-yr |                 |               |              |
| TB-AGE-yr   | 1+        | yr    |                 |               |              |
| A50-yr      | 1.5       | yr    |                 |               |              |
| M-1/T       | AVAILABLE | 1/T   |                 |               |              |
| SSB-SEX-sex |           |       |                 |               |              |
| M           |           |       |                 |               |              |
| L50-cm      |           |       |                 |               |              |

| Parameter              | Value | Units | Reference points |
|------------------------|-------|-------|------------------|
|                        |       |       | Parameter        |
|                        |       |       | Value            |
|                        |       |       | Units            |
| Fpa-1/T (F)            | 0.4   | 1/T   |                  |
| SSBlim-MT (SSB)        | 36500 | MT    |                  |
| SSBpa-MT (SSB)         | 50000 | MT    |                  |
| $SSB_{2007}/SSB_{lim}$ | 2.651 |       |                  |

| Time series minima and maxima |        |         |        |        |
|-------------------------------|--------|---------|--------|--------|
|                               | SSB    | R       | F      | TB     |
| Minimum year                  | 1977   | 1976    | 1977   | 1977   |
| Maximum year                  | 2007   | 2006    | 2006   | 2006   |
| Time series minimum           | 39874  | 551371  | 0.2423 | 65521  |
| Time series maximum           | 118870 | 6551573 | 0.7075 | 168458 |
| Units                         | MT     | E03     | 1/T    | MT     |



# Assessment of Kattegat and Skagerrak common european sole (*Solea vulgaris*)

Assessment ID:WGBFAS-SOLEIIIa-1982-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/80>

Area ID: multinational-ICES-IIIa

## General assessment details.

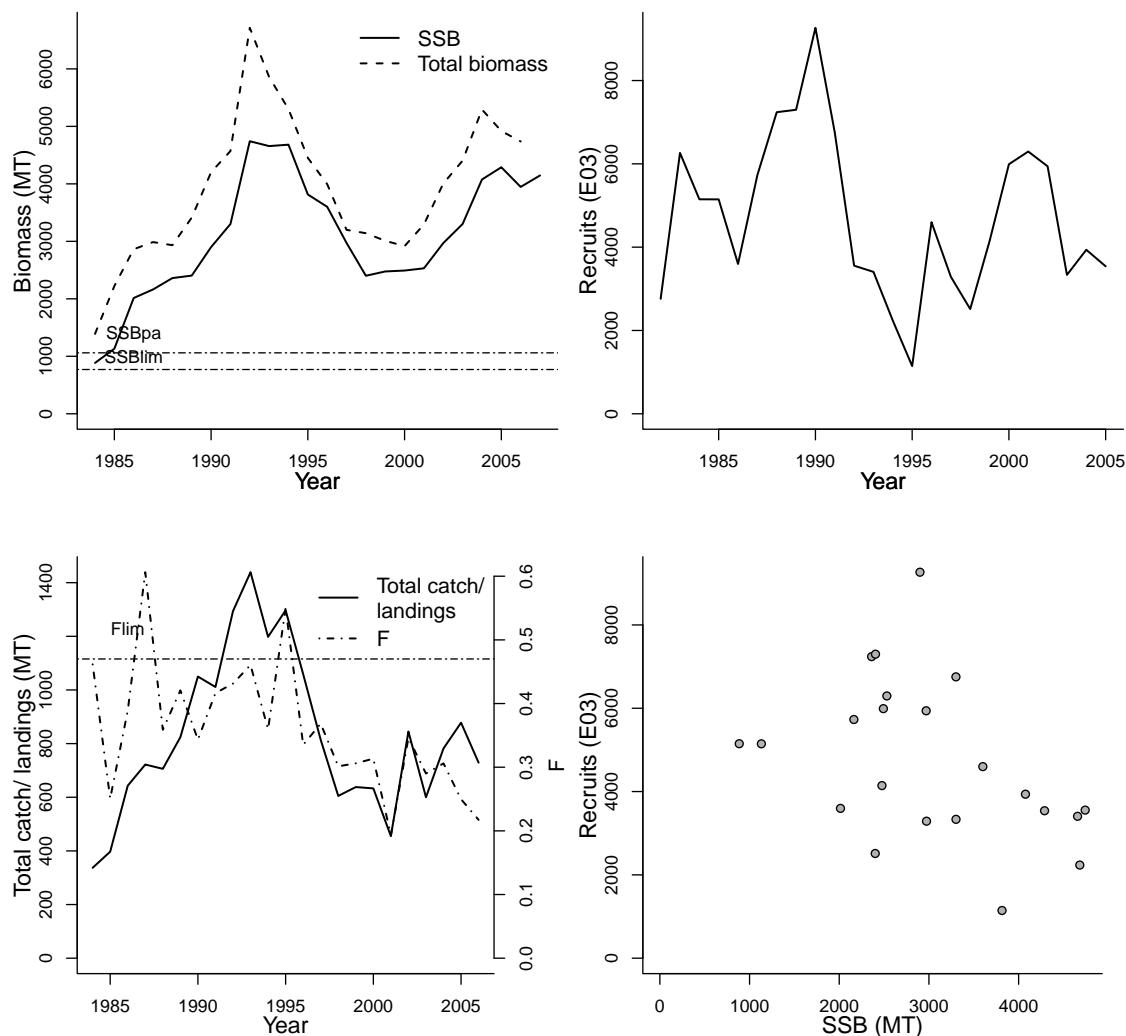
| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1982-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-27                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-29                                |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value  | Units |
|-------------|--------|-------|
| SSB-AGE-yr  | 3      | yr    |
| REC-AGE-yr  | 2      | yr    |
| F-AGE-yr-yr | 4 to 8 | yr-yr |
| TB-AGE-yr   | 2+     | yr    |
| A50-yr      | 3      | yr    |
| M-1/T       | 0.1    | 1/T   |
| SSB-SEX-sex |        |       |
| M           |        |       |
| L50-cm      |        |       |

| Parameter              | Reference points | Value | Units |
|------------------------|------------------|-------|-------|
| Flim-1/T (F)           |                  | 0.47  | 1/T   |
| Fpa-1/T (F)            |                  | 0.3   | 1/T   |
| SSBlim-MT (SSB)        |                  | 770   | MT    |
| SSBpa-MT (SSB)         |                  | 1060  | MT    |
| $SSB_{2007}/SSB_{lim}$ |                  | 5.384 |       |
| $F_{2006}/F_{lim}$     |                  | 0.462 |       |

| Time series minima and maxima |      |      |        |      |       |
|-------------------------------|------|------|--------|------|-------|
|                               | SSB  | R    | F      | TB   | Catch |
| Minimum year                  | 1984 | 1982 | 1984   | 1984 | 1984  |
| Maximum year                  | 2007 | 2005 | 2006   | 2006 | 2006  |
| Time series minimum           | 885  | 1145 | 0.1935 | 1390 | 337   |
| Time series maximum           | 4742 | 9266 | 0.6063 | 6715 | 1439  |
| Units                         | MT   | E03  | 1/T    | MT   | MT    |



# Assessment of Baltic Areas 22-32 sprat (*Sprattus sprattus*)

Assessment ID:WGBFAS-SPRAT22-32-1973-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/35>

Area ID: multinational-ICES-22-32

## General assessment details.

| Detail             | Value                                     |
|--------------------|---|
| Management body    | ICES                                      |
| Assessment group   | Baltic Fisheries Assessment Working Group |
| Assessment authors | Anonymous                                 |
| Assessment method  | Extended Survivor Analysis                |
| Publication year   | 2007                                      |
| Timeseries span    | 1973-2007                                 |
| Document           | ICES-WGBFAS-2007.pdf (pdf in database)    |
| Recorder           | JENNINGS                                  |
| Date entered       | 2008-11-19                                |
| Date last loaded   | 2011-07-25                                |
| QA/QC complete     | YES                                       |
| Date approved      | 2009-05-28                                |

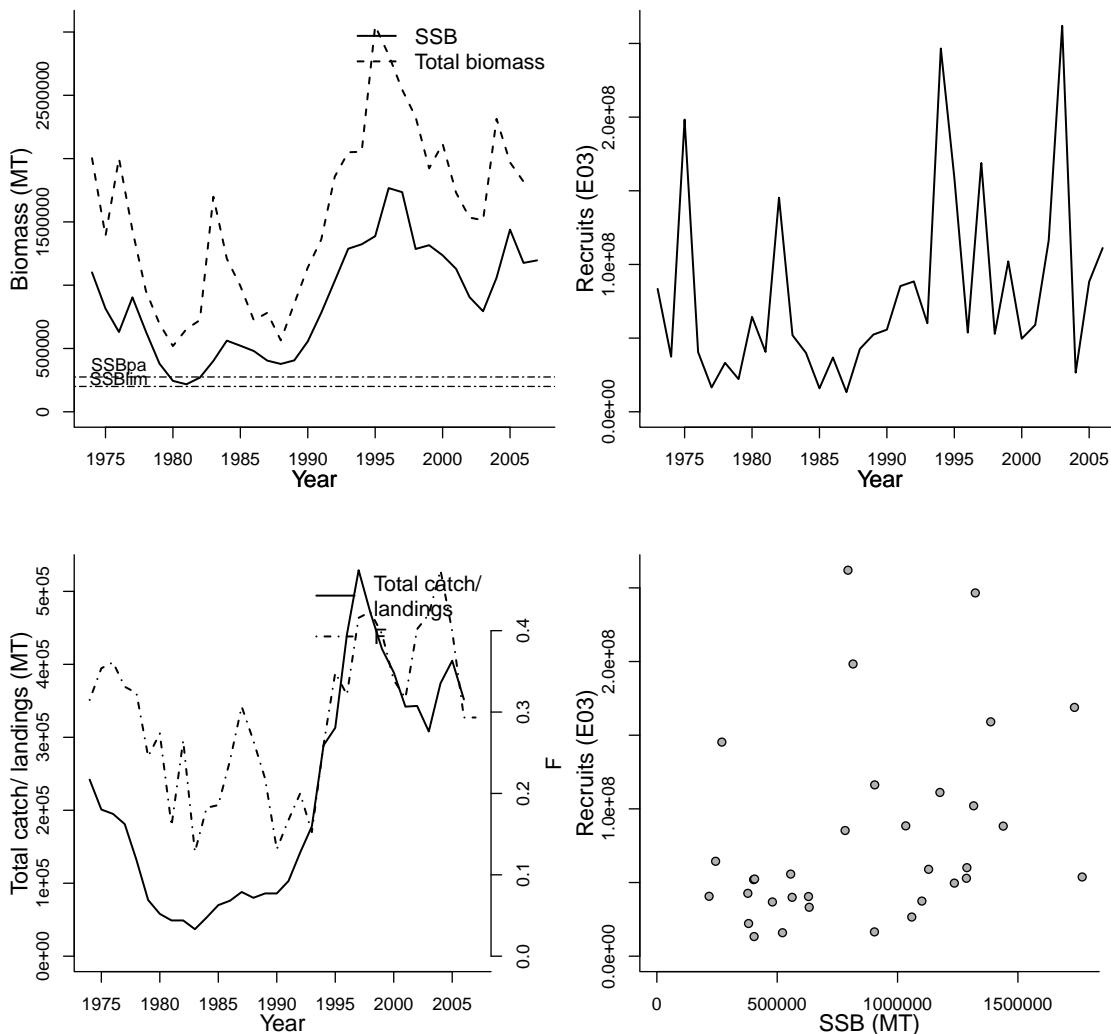
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value     | Units | primary LME     | secondary LME | tertiary LME |
|-------------|-----------|-------|-----------------|---------------|--------------|
|             |           |       | 23 - Baltic Sea | na            | na           |
| SSB-AGE-yr  | AVAILABLE | yr    |                 |               |              |
| REC-AGE-yr  | 1         | yr    |                 |               |              |
| F-AGE-yr-yr | 3 to 5    | yr-yr |                 |               |              |
| TB-AGE-yr   | 1+        | yr    |                 |               |              |
| A50-yr      | AVAILABLE | yr    |                 |               |              |
| M-1/T       | AVAILABLE | 1/T   |                 |               |              |
| SSB-SEX-sex |           |       |                 |               |              |
| M           |           |       |                 |               |              |
| L50-cm      |           |       |                 |               |              |

| Parameter                               | Reference points | Value | Units |
|---|------------------|-------|-------|
| Fpa-1/T (F)                             | 0.4              | 1/T   |       |
| SSBlim-MT (SSB)                         | 200000           | MT    |       |
| SSBpa-MT (SSB)                          | 275000           | MT    |       |
| SSB <sub>2007</sub> /SSB <sub>lim</sub> | 5.980            |       |       |

|                     | Time series minima and maxima |           |        |         |        |
|---------------------|-------------------------------|-----------|--------|---------|--------|
|                     | SSB                           | R         | F      | TB      | Catch  |
| Minimum year        | 1974                          | 1973      | 1974   | 1974    | 1974   |
| Maximum year        | 2007                          | 2006      | 2007   | 2006    | 2006   |
| Time series minimum | 217000                        | 13334000  | 0.1281 | 519000  | 37000  |
| Time series maximum | 1767000                       | 261984000 | 0.4743 | 3049000 | 529000 |
| Units               | MT                            | E03       | 1/T    | MT      | MT     |



# Assessment of VIIc-IXa fourspotted megrim (*Lepidorhombus boscii*)

Assessment ID: WGHMM-FMEG8c9a-1986-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/49>

Area ID: multinational-ICES-VIIc-IXa

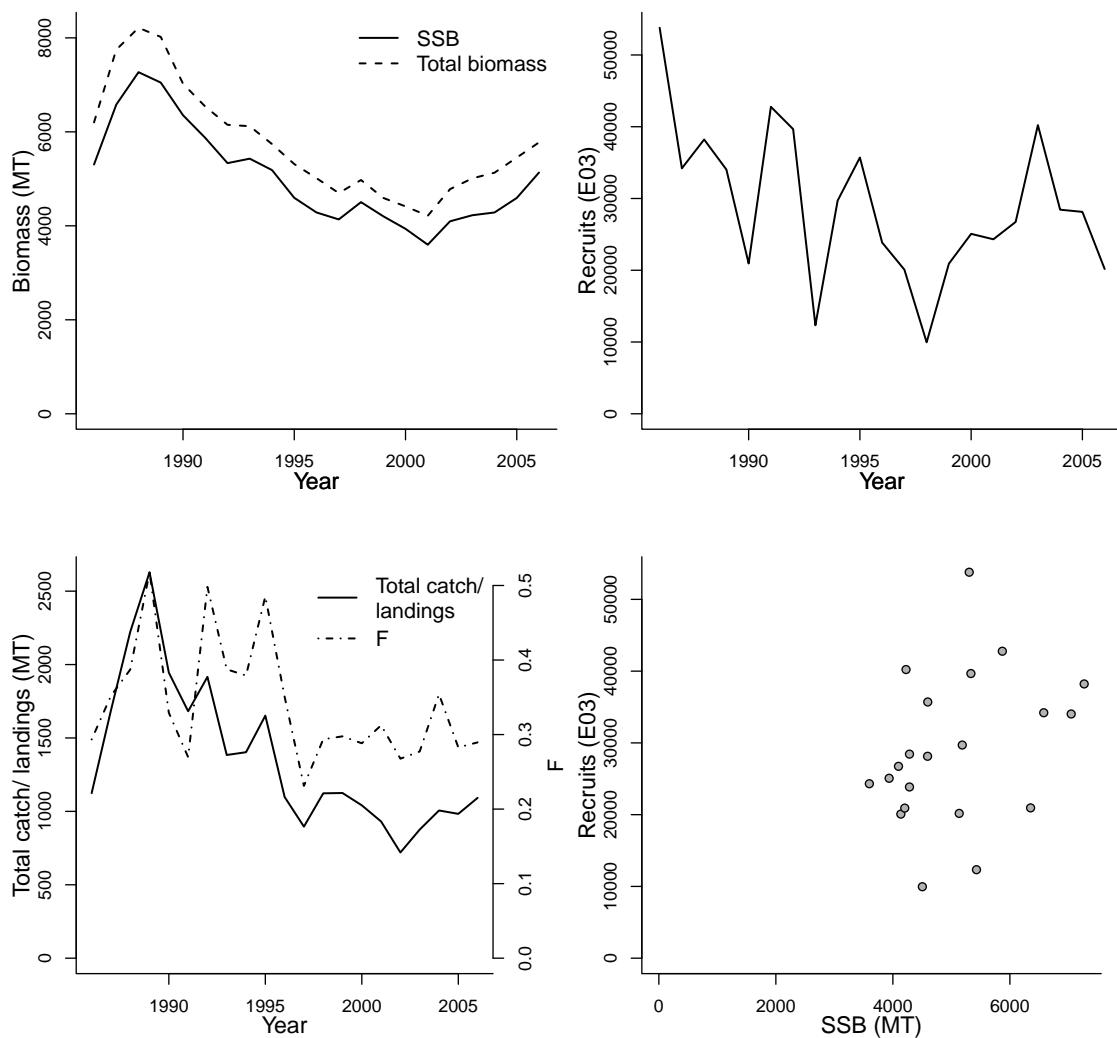
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrin |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1986-2006   |
| Document           | ICES-WGHMM-2007.pdf (pdf in database)   |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                      | primary LME | secondary LME | tertiary LME     |
|----------------------|-------------|---------------|------------------|
| 25 - Iberian Coastal | na          | na            |                  |
| Parameter            | Value       | Units         |                  |
| SSB-AGE-yr           | AVAILABLE   | yr            |                  |
| REC-AGE-yr           | 0           | yr            |                  |
| F-AGE-yr-yr          | 2 to 4      | yr-yr         |                  |
| TB-AGE-yr            | 0+          | yr            | Reference points |
| A50-yr               | AVAILABLE   | yr            | Parameter        |
| M-1/T                | 0.2         | 1/T           | Value            |
| SSB-SEX-sex          |             |               | Units            |
| M                    |             |               |                  |
| L50-cm               |             |               |                  |

| Time series minima and maxima |      |       |        |      |       |
|-------------------------------|------|-------|--------|------|-------|
|                               | SSB  | R     | F      | TB   | Catch |
| Minimum year                  | 1986 | 1986  | 1986   | 1986 | 1986  |
| Maximum year                  | 2006 | 2006  | 2006   | 2006 | 2006  |
| Time series minimum           | 3598 | 9961  | 0.2312 | 4214 | 720   |
| Time series maximum           | 7270 | 53785 | 0.5178 | 8214 | 2629  |
| Units                         | MT   | E03   | 1/T    | MT   | MT    |



# Assessment of IIIa-IV-VI-VII-VIIIabd hake

## *(Merluccius merluccius)*

Assessment ID: WGHMM-HAKENRTN-1977-2007-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/33>

Area ID: multinational-ICES-IIIa-IV-VI-VII-VIIIabd

### General assessment details.

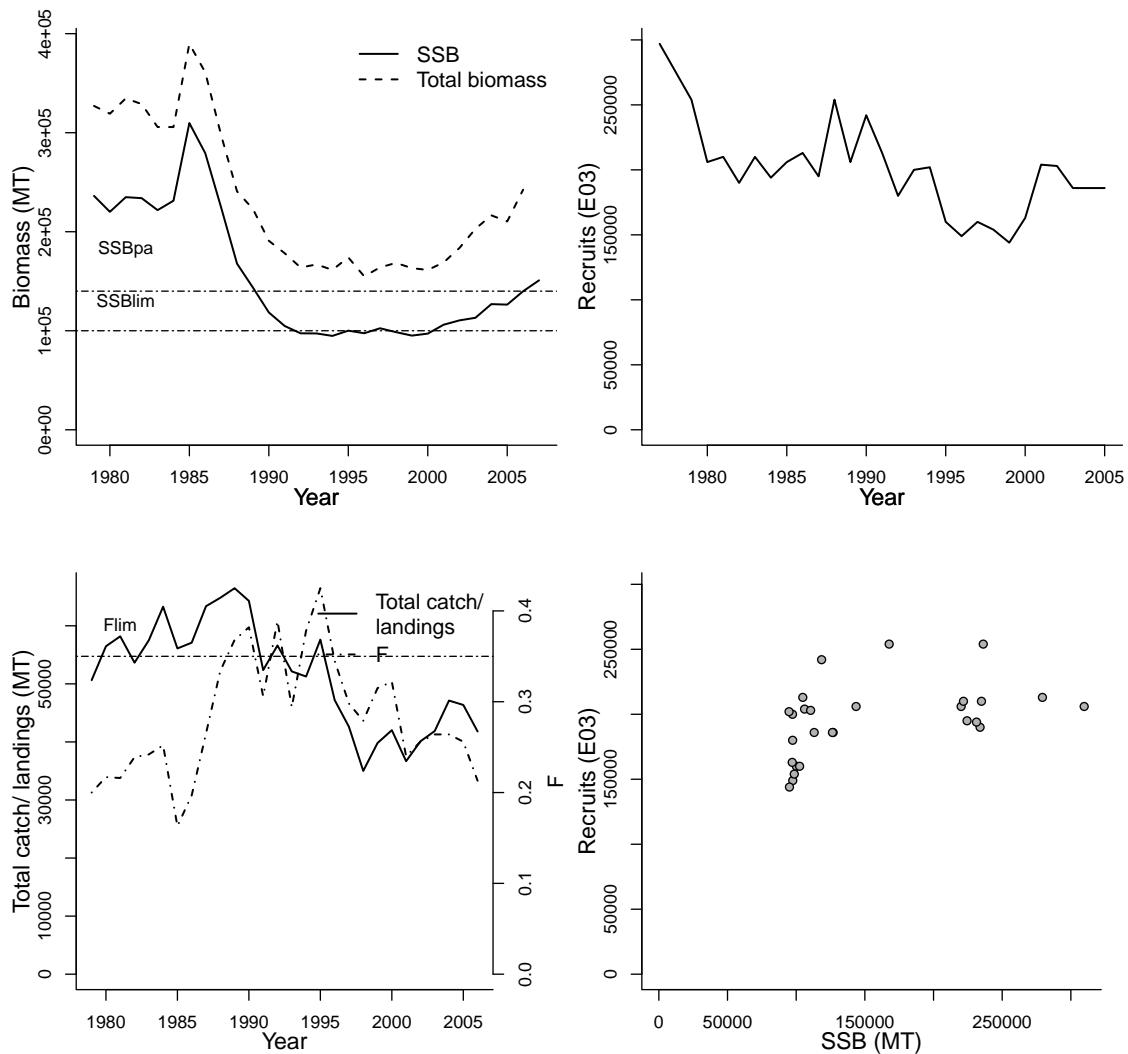
| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrin |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1977-2007   |
| Document           | ICES-WGHMM-2007.pdf (pdf in database)   |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-20  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           |       | secondary LME                           |        |       | tertiary LME |  |  |
|--------------------------|-----------|-------|---|--------|-------|--------------|--|--|
| 24 - Celtic-Biscay Shelf |           |       | 22 - North Sea                          |        |       | na           |  |  |
| Parameter                | Value     | Units | Reference points                        |        |       |              |  |  |
|                          |           |       | Parameter                               | Value  | Units |              |  |  |
| SSB-AGE-yr               | AVAILABLE | yr    | Flim-1/T (F)                            | 0.35   | 1/T   |              |  |  |
| REC-AGE-yr               | 0         | yr    | Fpa-1/T (F)                             | 0.25   | 1/T   |              |  |  |
| F-AGE-yr-yr              | 2 to 6    | yr-yr | SSBlim-MT (SSB)                         | 100000 | MT    |              |  |  |
| TB-AGE-yr                | 0+        | yr    | SSBpa-MT (SSB)                          | 140000 | MT    |              |  |  |
| A50-yr                   | AVAILABLE | yr    | SSB <sub>2007</sub> /SSB <sub>lim</sub> | 1.509  |       |              |  |  |
| M-1/T                    | 0.2       | 1/T   | F <sub>2006</sub> /F <sub>lim</sub>     | 0.609  |       |              |  |  |
| SSB-SEX-sex              |           |       |   |        |       |              |  |  |
| M                        |           |       |   |        |       |              |  |  |
| L50-cm                   |           |       |   |        |       |              |  |  |

## Time series minima and maxima

|                     | SSB    | R      | F     | TB     | Catch |
|---------------------|--------|--------|-------|--------|-------|
| Minimum year        | 1979   | 1977   | 1979  | 1979   | 1979  |
| Maximum year        | 2007   | 2005   | 2006  | 2006   | 2006  |
| Time series minimum | 94800  | 144000 | 0.163 | 154969 | 35010 |
| Time series maximum | 309700 | 297000 | 0.425 | 389774 | 66472 |
| Units               | MT     | E03    | 1/T   | MT     | MT    |



# Assessment of VIIc-IXa hake (*Merluccius merluccius*)

Assessment ID: WGHMM-HAKESOTH-1982-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/34>

Area ID: multinational-ICES-VIIc-IXa

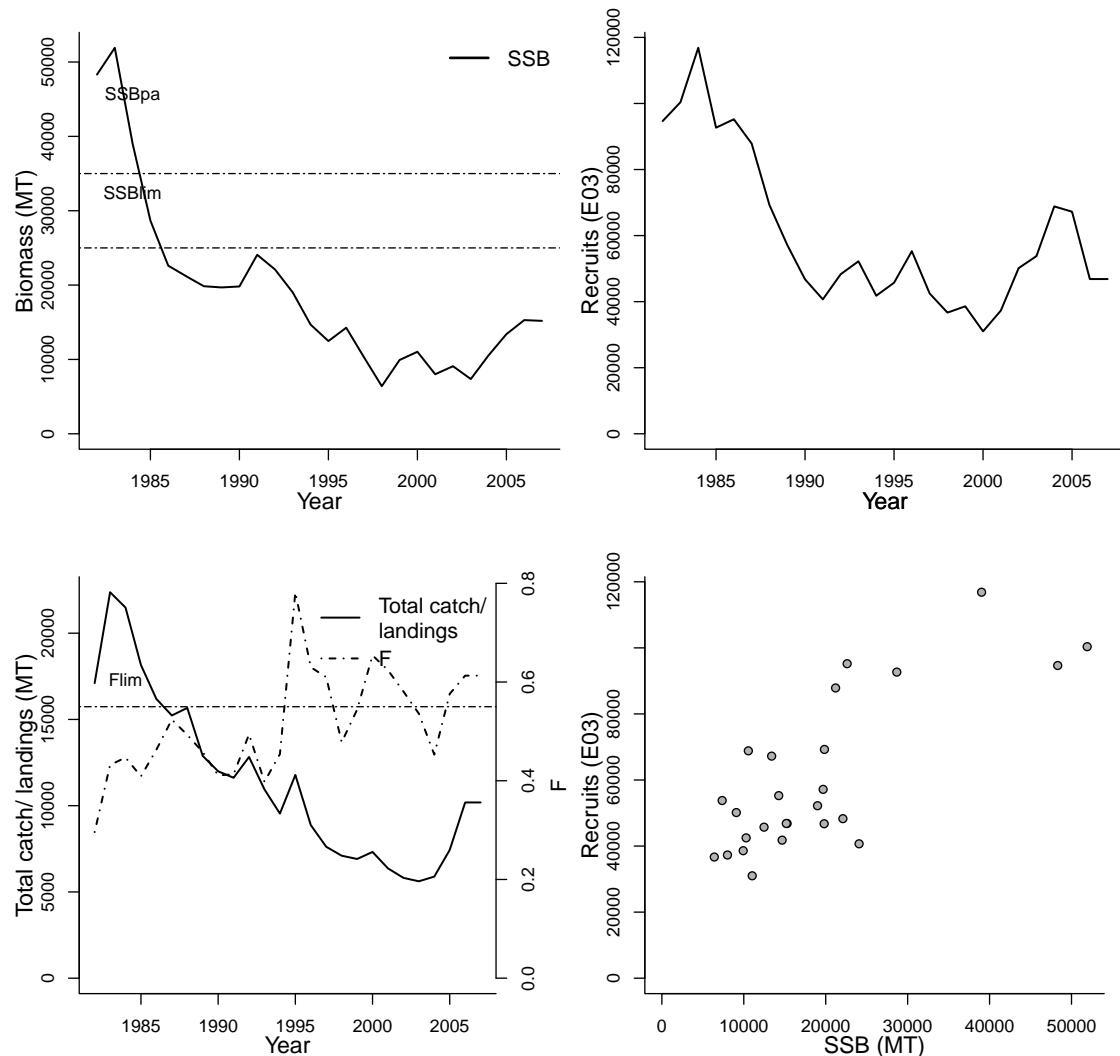
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrin |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1982-2007   |
| Document           | ICES-WGHMM-2007.pdf (pdf in database)   |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-21  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          |           |       | secondary LME                           |       |       | tertiary LME |  |  |
|----------------------|-----------|-------|---|-------|-------|--------------|--|--|
| 25 - Iberian Coastal |           |       | na                                      |       |       | na           |  |  |
| Parameter            | Value     | Units | Reference points                        |       |       |              |  |  |
| SSB-AGE-yr           | AVAILABLE | yr    | Parameter                               | Value | Units |              |  |  |
| REC-AGE-yr           | 0         | yr    | Flim-1/T (F)                            | 0.55  | 1/T   |              |  |  |
| F-AGE-yr-yr          | 2 to 5    | yr-yr | Fpa-1/T (F)                             | 0.44  | 1/T   |              |  |  |
| TB-AGE-yr            | 0+        | yr    | SSBlim-MT (SSB)                         | 25000 | MT    |              |  |  |
| A50-yr               | AVAILABLE | yr    | SSBpa-MT (SSB)                          | 35000 | MT    |              |  |  |
| M-1/T                | 0.2       | 1/T   | SSB <sub>2007</sub> /SSB <sub>lim</sub> | 0.608 |       |              |  |  |
| SSB-SEX-sex          |           |       | F <sub>2007</sub> /F <sub>lim</sub>     | 1.115 |       |              |  |  |
| M                    |           |       |   |       |       |              |  |  |
| L50-cm               |           |       |   |       |       |              |  |  |

| Time series minima and maxima |       |        |       |       |
|-------------------------------|-------|--------|-------|-------|
|                               | SSB   | R      | F     | TB    |
| Minimum year                  | 1982  | 1982   | 1982  | 1982  |
| Maximum year                  | 2007  | 2007   | 2007  | 2007  |
| Time series minimum           | 6401  | 31003  | 0.296 | 5617  |
| Time series maximum           | 51913 | 116850 | 0.782 | 22376 |
| Units                         | MT    | E03    | 1/T   | MT    |



# Assessment of VIIc-IXa megrim (*Lepidorhombus whiffagonis*)

Assessment ID: WGHMM-MEG8c9a-1985-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/50>

Area ID: multinational-ICES-VIIc-IXa

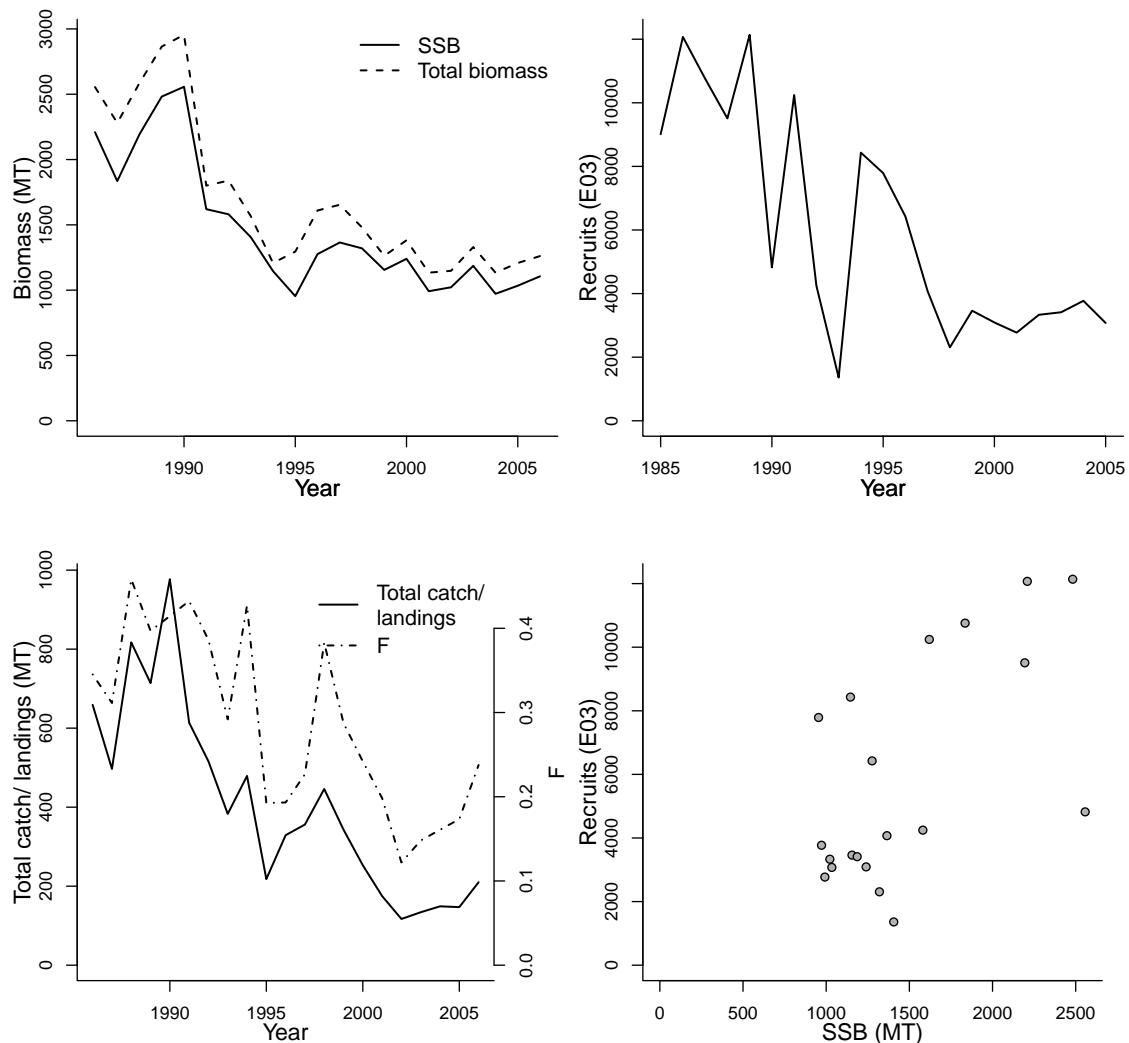
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrin |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1985-2007   |
| Document           | ICES-WGHMM-2007.pdf (pdf in database)   |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

|                      | primary LME | secondary LME | tertiary LME     |
|----------------------|-------------|---------------|------------------|
| 25 - Iberian Coastal | na          | na            |                  |
| Parameter            | Value       | Units         |                  |
| SSB-AGE-yr           | AVAILABLE   | yr            |                  |
| REC-AGE-yr           | 1           | yr            |                  |
| F-AGE-yr-yr          | 2 to 4      | yr-yr         |                  |
| TB-AGE-yr            | 1+          | yr            | Reference points |
| A50-yr               | AVAILABLE   | yr            | Parameter        |
| M-1/T                | 0.2         | 1/T           | Value            |
| SSB-SEX-sex          |             |               | Units            |
| M                    |             |               |                  |
| L50-cm               |             |               |                  |

| Time series minima and maxima |      |       |        |      |       |
|-------------------------------|------|-------|--------|------|-------|
|                               | SSB  | R     | F      | TB   | Catch |
| Minimum year                  | 1986 | 1985  | 1986   | 1986 | 1986  |
| Maximum year                  | 2006 | 2005  | 2006   | 2006 | 2006  |
| Time series minimum           | 954  | 1360  | 0.1219 | 1134 | 117   |
| Time series maximum           | 2557 | 12138 | 0.4583 | 2955 | 977   |
| Units                         | MT   | E03   | 1/T    | MT   | MT    |



# Assessment of Bay of Biscay common european sole (*Solea vulgaris*)

Assessment ID: WGHMM-SOLEVIII-1982-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/54>

Area ID: multinational-ICES-VIII

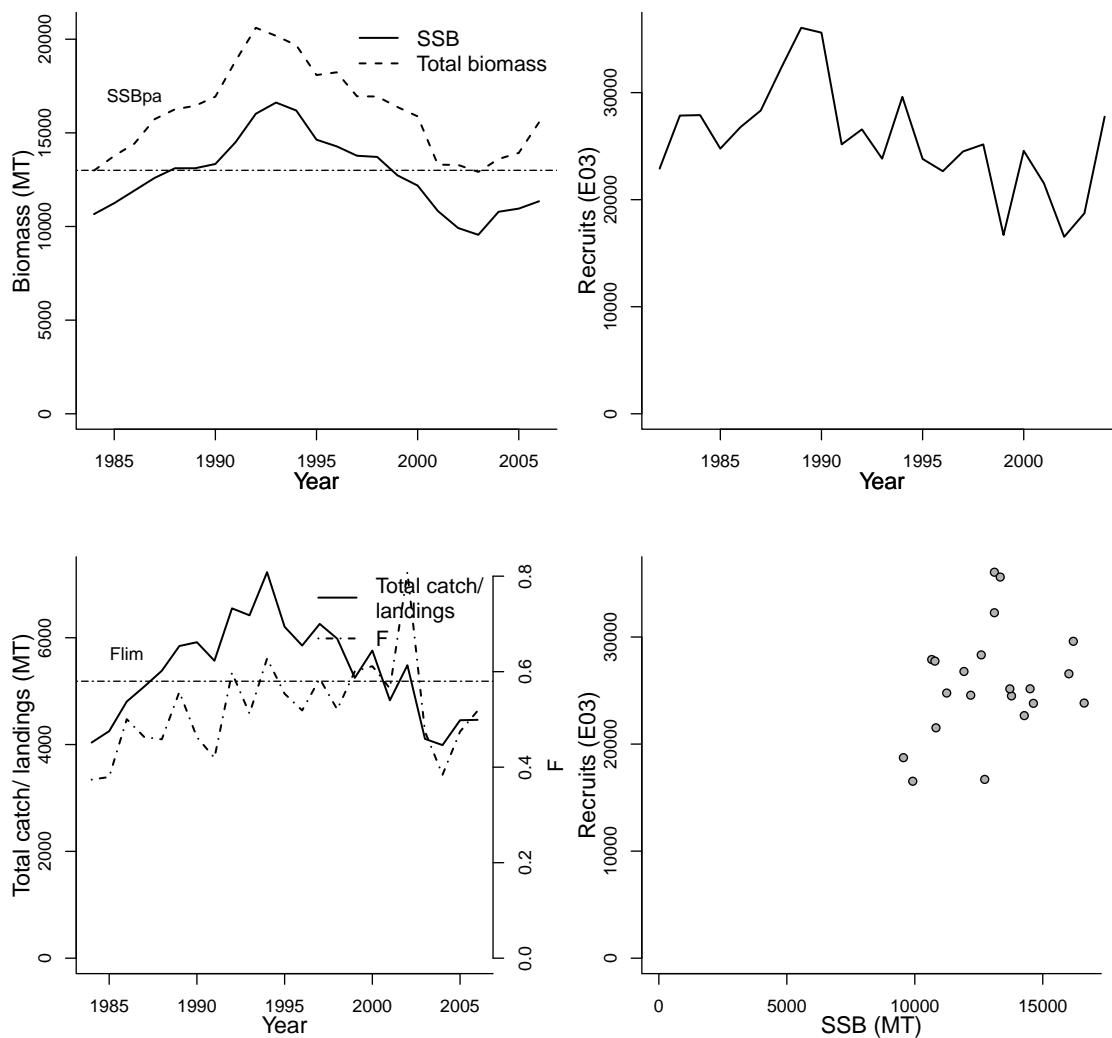
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Stocks of Hake, Monk and Megrin |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1982-2006   |
| Document           | ICES-WGHMM-2007.pdf (pdf in database)   |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME        | tertiary LME            |
|--------------------------|-----------|----------------------|-------------------------|
| 24 - Celtic-Biscay Shelf |           | 25 - Iberian Coastal | na                      |
| Parameter                | Value     | Units                |                         |
| SSB-AGE-yr               | AVAILABLE | yr                   |                         |
| REC-AGE-yr               | 2         | yr                   |                         |
| F-AGE-yr-yr              | 3 to 6    | yr-yr                | Reference points        |
| TB-AGE-yr                | 2+        | yr                   | Parameter               |
| A50-yr                   | AVAILABLE | yr                   | Value                   |
| M-1/T                    | 0.1       | 1/T                  | Units                   |
| SSB-SEX-sex              |           |                      |                         |
| M                        |           |                      | Flim-1/T (F) 0.58 1/T   |
| L50-cm                   |           |                      | Fpa-1/T (F) 0.42 1/T    |
|                          |           |                      | SSBpa-MT (SSB) 13000 MT |
|                          |           |                      | $F_{2006}/Flim$ 0.893   |

| Time series minima and maxima |       |       |        |       |
|-------------------------------|-------|-------|--------|-------|
|                               | SSB   | R     | F      | TB    |
| Minimum year                  | 1984  | 1982  | 1984   | 1984  |
| Maximum year                  | 2006  | 2004  | 2006   | 2006  |
| Time series minimum           | 9556  | 16530 | 0.3739 | 12915 |
| Time series maximum           | 16618 | 36055 | 0.8083 | 20609 |
| Units                         | MT    | E03   | 1/T    | MT    |



# Assessment of Bay of Biscay anchovy (*Engraulis encrasiculus*)

Assessment ID:WGMHSA-ANCHOBAYB-1986-2007-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/44>

Area ID: multinational-ICES-VIII

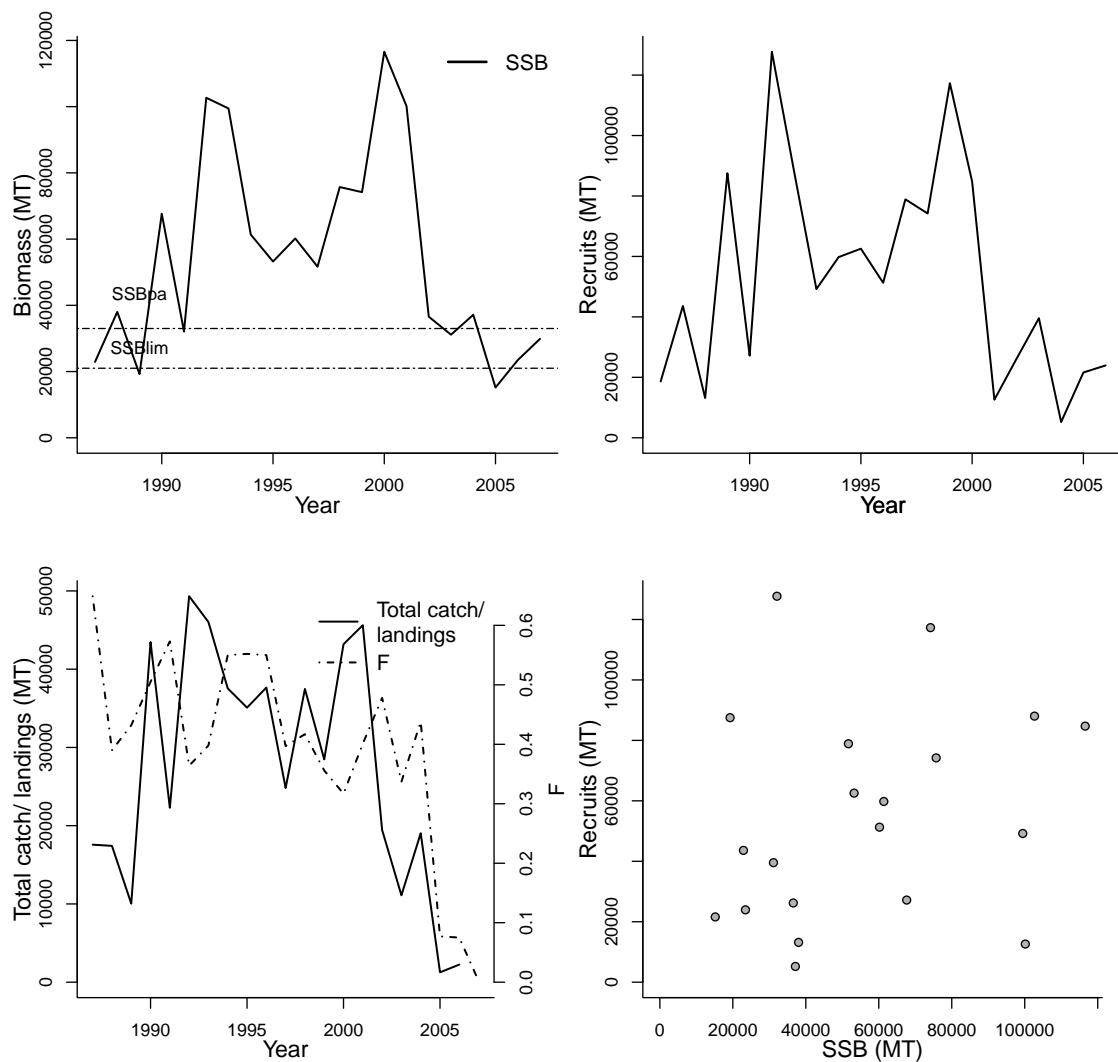
## General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Mackerel |
| Assessment authors | Anonymous                                   |
| Assessment method  | Bayesian Biomass Model                      |
| Publication year   | 2007  |
| Timeseries span    | 1986-2007                                   |
| Document           | ICES-WGMHSA007.pdf (pdf not in database)    |
| Recorder           | JENNINGS                                    |
| Date entered       | 2008-11-21                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |        | secondary LME        | tertiary LME           |
|--------------------------|--------|----------------------|------------------------|
| 24 - Celtic-Biscay Shelf |        | 25 - Iberian Coastal | na                     |
| Parameter                | Value  | Units                |                        |
| SSB-AGE-yr               | 1      | yr                   | Reference points       |
| REC-AGE-yr               | 1      | yr                   | Parameter              |
| F-AGE-yr-yr              | 1 to 2 | yr-yr                | Value                  |
| TB-AGE-yr                | 1+     | yr                   | Units                  |
| A50-yr                   | 1      | yr                   | Fpa-1/T (F)            |
| M-1/T                    | 1.2    | 1/T                  | SSBlim-MT (SSB)        |
| SSB-SEX-sex              |        |                      | SSBpa-MT (SSB)         |
| M                        |        |                      | $SSB_{2007}/SSB_{lim}$ |
| L50-cm                   |        |                      | 1.423                  |

| Time series minima and maxima |        |        |       |       |
|-------------------------------|--------|--------|-------|-------|
|                               | SSB    | R      | F     | TB    |
| Minimum year                  | 1987   | 1986   | 1987  | 1987  |
| Maximum year                  | 2007   | 2006   | 2007  | 2006  |
| Time series minimum           | 15177  | 5211   | 0.002 | 1264  |
| Time series maximum           | 116561 | 127703 | 0.649 | 49325 |
| Units                         | MT     | MT     | 1/T   | MT    |



# Assessment of IIa-IIIabd-IV-Vb-VI-VII-VIIIabcde-XII-XIV-Ixa mackerel (*Scomber scombrus*)

Assessment ID:WGMHSA-MACKNEICES-1972-2007-JENNINGS  
 Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/48>

Area ID:

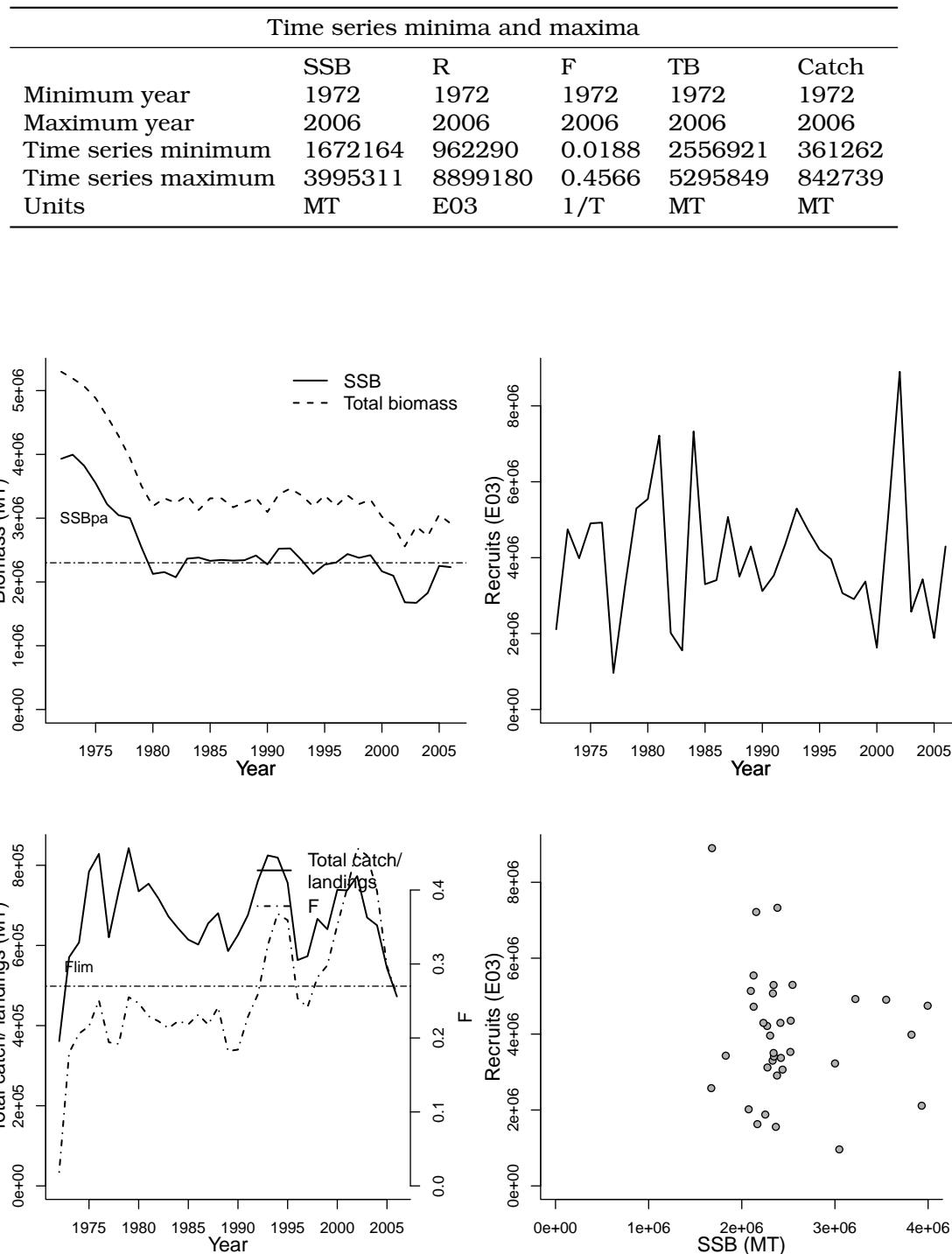
multinational-ICES-IIa-IIIabd-IV-Vb-VI-VII-VIIIabcde-XII-XIV-Ixa

General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Mackerel |
| Assessment authors | Anonymous                                   |
| Assessment method  | Integrated Catch-at-age Analysis            |
| Publication year   | 2007  |
| Timeseries span    | 1972-2007                                   |
| Document           | ICES-WGMHSA07.pdf (pdf in database)         |
| Recorder           | JENNINGS                                    |
| Date entered       | 2008-11-21                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28                                  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME        | tertiary LME     |
|--------------------------|-----------|----------------------|------------------|
| 24 - Celtic-Biscay Shelf |           | 25 - Iberian Coastal | 22 - North Sea   |
| Parameter                | Value     | Units                |                  |
| SSB-AGE-yr               | AVAILABLE | yr                   |                  |
| REC-AGE-yr               | 0         | yr                   |                  |
| F-AGE-yr-yr              | 4 to 8    | yr-yr                | Reference points |
| TB-AGE-yr                | 0+        | yr                   | Parameter        |
| A50-yr                   | AVAILABLE | yr                   | Value            |
| M-1/T                    | 0.15      | 1/T                  | Units            |
| SSB-SEX-sex              |           |                      |                  |
| M                        |           |                      |                  |
| L50-cm                   |           |                      |                  |



# Assessment of VIIc-IXa european pilchard (*Sardina pilchardus*)

Assessment ID:WGMHSA-SARDPVIIC-IXa-1978-2007-JENNINGS  
Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/53>

Area ID: multinational-ICES-VIIc-IXa

## General assessment details.

| Detail             | Value                                       |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Mackerel |
| Assessment authors | Anonymous                                   |
| Assessment method  | a flexible age structured model             |
| Publication year   | 2007  |
| Timeseries span    | 1978-2007                                   |
| Document           | ICES-WGMHSA07.pdf (pdf in database)         |
| Recorder           | JENNINGS                                    |
| Date entered       | 2008-11-21                                  |
| Date last loaded   | 2011-07-25                                  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29                                  |

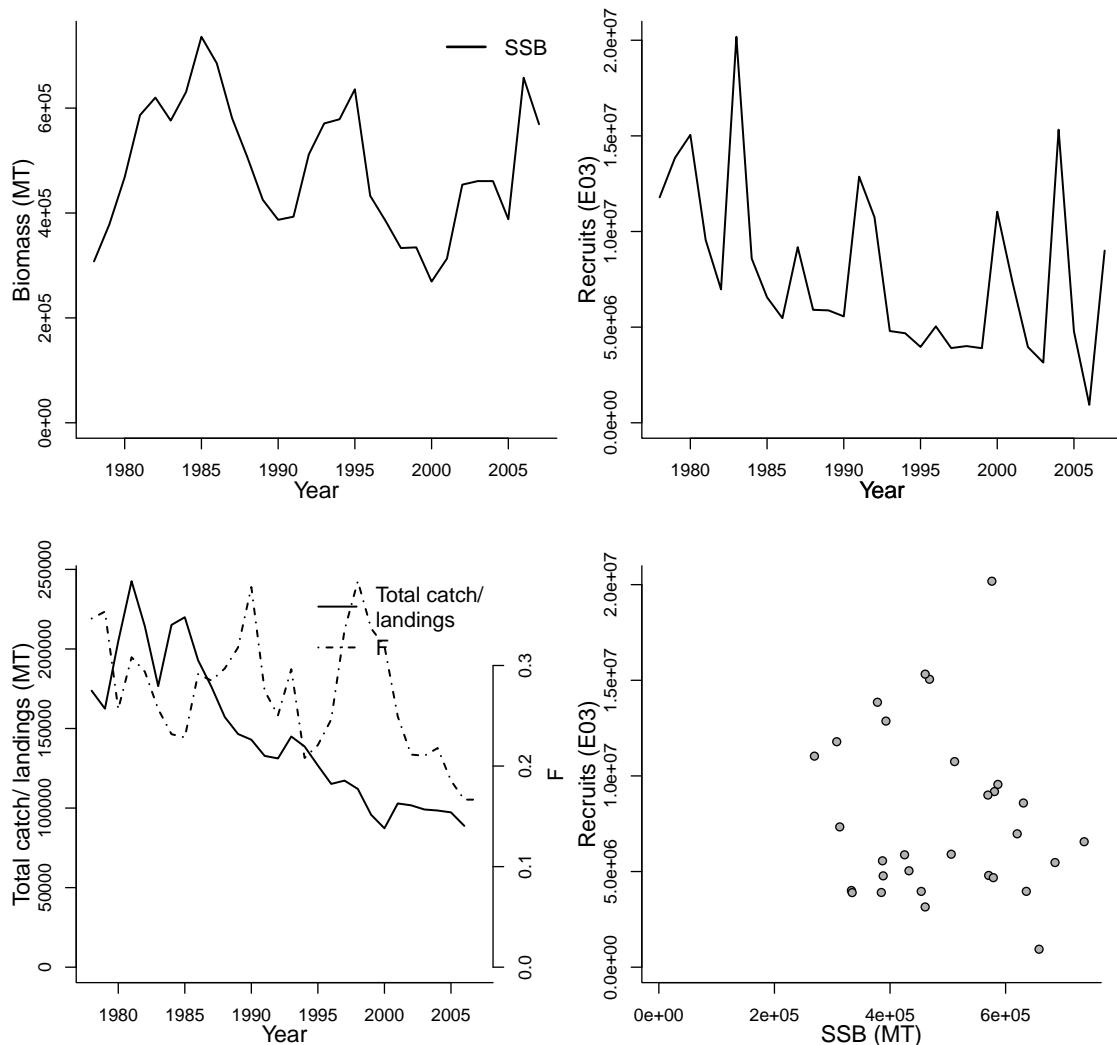
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME          | secondary LME | tertiary LME |
|----------------------|---------------|--------------|
| 25 - Iberian Coastal | na            | na           |
| <hr/>                |               |              |
| Parameter            | Value         | Units        |
| SSB-AGE-yr           | AVAILABLE     | yr           |
| REC-AGE-yr           | 0             | yr           |
| F-AGE-yr-yr          | 2 to 5        | yr-yr        |
| TB-AGE-yr            | 0+            | yr           |
| A50-yr               | AVAILABLE     | yr           |
| M-1/T                | 0.33          | 1/T          |
| SSB-SEX-sex          |               |              |
| M                    |               |              |
| L50-cm               |               |              |

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| Parameter | Value | Units | Reference points      |
|-----------|-------|-------|-----------------------|
|           |       |       | Parameter Value Units |

| Time series minima and maxima |        |          |        |        |
|-------------------------------|--------|----------|--------|--------|
|                               | SSB    | R        | F      | TB     |
| Minimum year                  | 1978   | 1978     | 1978   | 1978   |
| Maximum year                  | 2007   | 2007     | 2007   | 2006   |
| Time series minimum           | 269194 | 939973   | 0.1666 | 87272  |
| Time series maximum           | 735950 | 20179479 | 0.3838 | 242574 |
| Units                         | MT     | E03      | 1/T    | MT     |



# Assessment of Northeast Atlantic blue whiting

## *(Micromesistius poutassou)*

Assessment ID:WGNPBW-BWHITNEA-1980-2007-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/79>

Area ID: multinational-ICES-I-II-III-IV-V-VI-VII-VIII-IX-XII-XIV

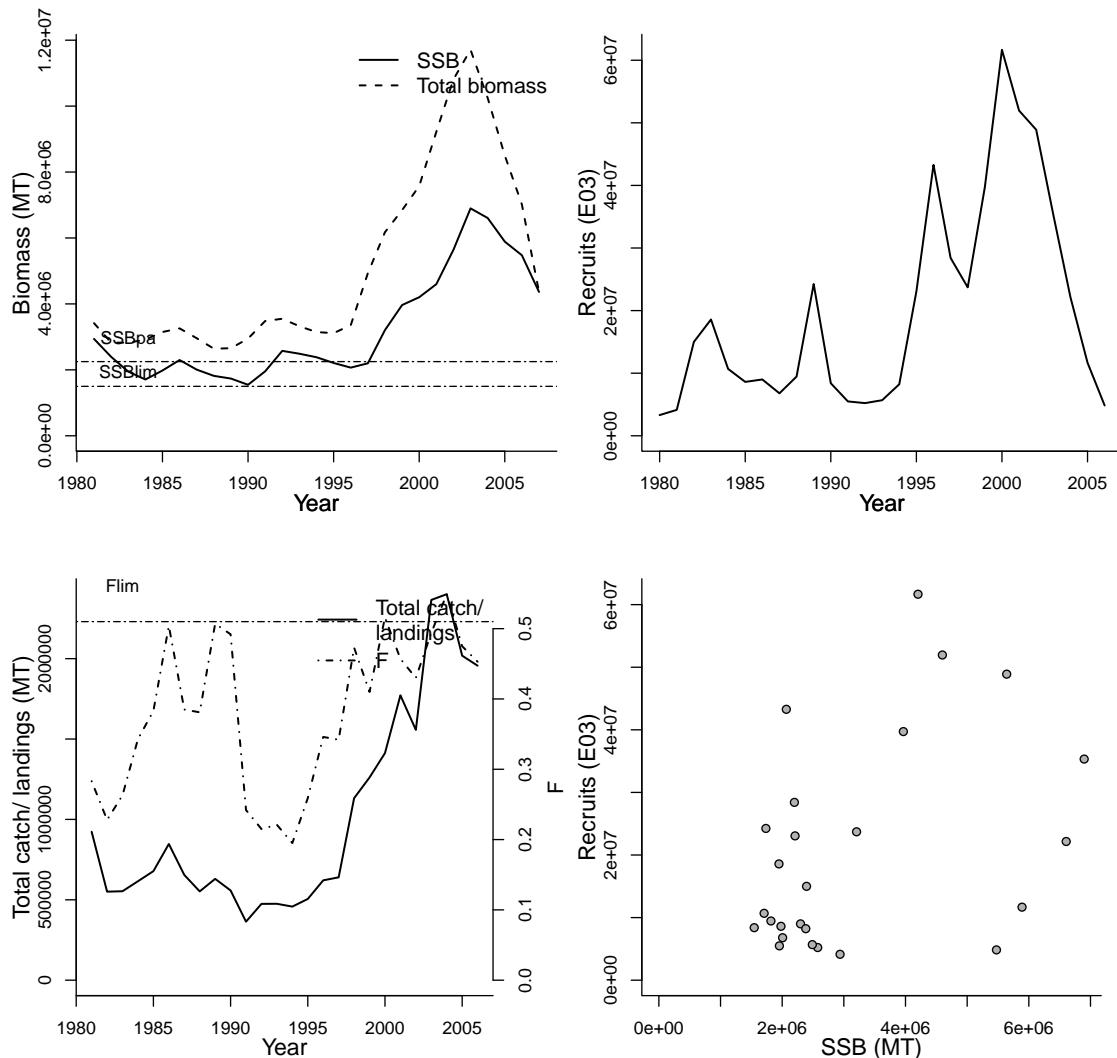
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Northern Pelagic and Blue Whiting Fisheries Working Group |
| Assessment authors | Anonymous   |
| Assessment method  | Stochastic Multi-species (SMS) model                      |
| Publication year   | 2007  |
| Timeseries span    | 1980-2007   |
| Document           | ICES-WGNPBW-2007.pdf (pdf in database)                    |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-25  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME      | tertiary LME           |
|--------------------------|-----------|--------------------|------------------------|
| 24 - Celtic-Biscay Shelf |           | 60 - Faroe Plateau | 59 - Iceland Shelf     |
| Parameter                | Value     | Units              | Reference points       |
| SSB-AGE-yr               | AVAILABLE | yr                 | Parameter              |
| REC-AGE-yr               | 1         | yr                 | Value                  |
| F-AGE-yr-yr              | 3 to 7    | yr-yr              | Units                  |
| TB-AGE-yr                | 1+        | yr                 | Flim-1/T (F)           |
| A50-yr                   | AVAILABLE | yr                 | 0.51                   |
| M-1/T                    | 0.2       | 1/T                | 1/T                    |
| SSB-SEX-sex              |           |                    | Fpa-1/T (F)            |
| M                        |           |                    | 0.32                   |
| L50-cm                   |           |                    | SSBlim-MT (SSB)        |
|                          |           |                    | 1500000                |
|                          |           |                    | MT                     |
|                          |           |                    | SSBpa-MT (SSB)         |
|                          |           |                    | 2250000                |
|                          |           |                    | MT                     |
|                          |           |                    | $SSB_{2007}/SSB_{lim}$ |
|                          |           |                    | 2.909                  |
|                          |           |                    | $F_{2006}/F_{lim}$     |
|                          |           |                    | 0.888                  |

| Time series minima and maxima |         |          |       |          |         |
|-------------------------------|---------|----------|-------|----------|---------|
|                               | SSB     | R        | F     | TB       | Catch   |
| Minimum year                  | 1981    | 1980     | 1981  | 1981     | 1981    |
| Maximum year                  | 2007    | 2006     | 2006  | 2007     | 2006    |
| Time series minimum           | 1546719 | 3308512  | 0.195 | 2642113  | 364008  |
| Time series maximum           | 6897723 | 61664776 | 0.549 | 11708107 | 2400795 |
| Units                         | MT      | E03      | 1/T   | MT       | MT      |



# Assessment of Irish Sea atlantic cod (*Gadus morhua*)

Assessment ID:WGNSDS-CODIS-1968-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/381>

Area ID: multinational-ICES-VIIa

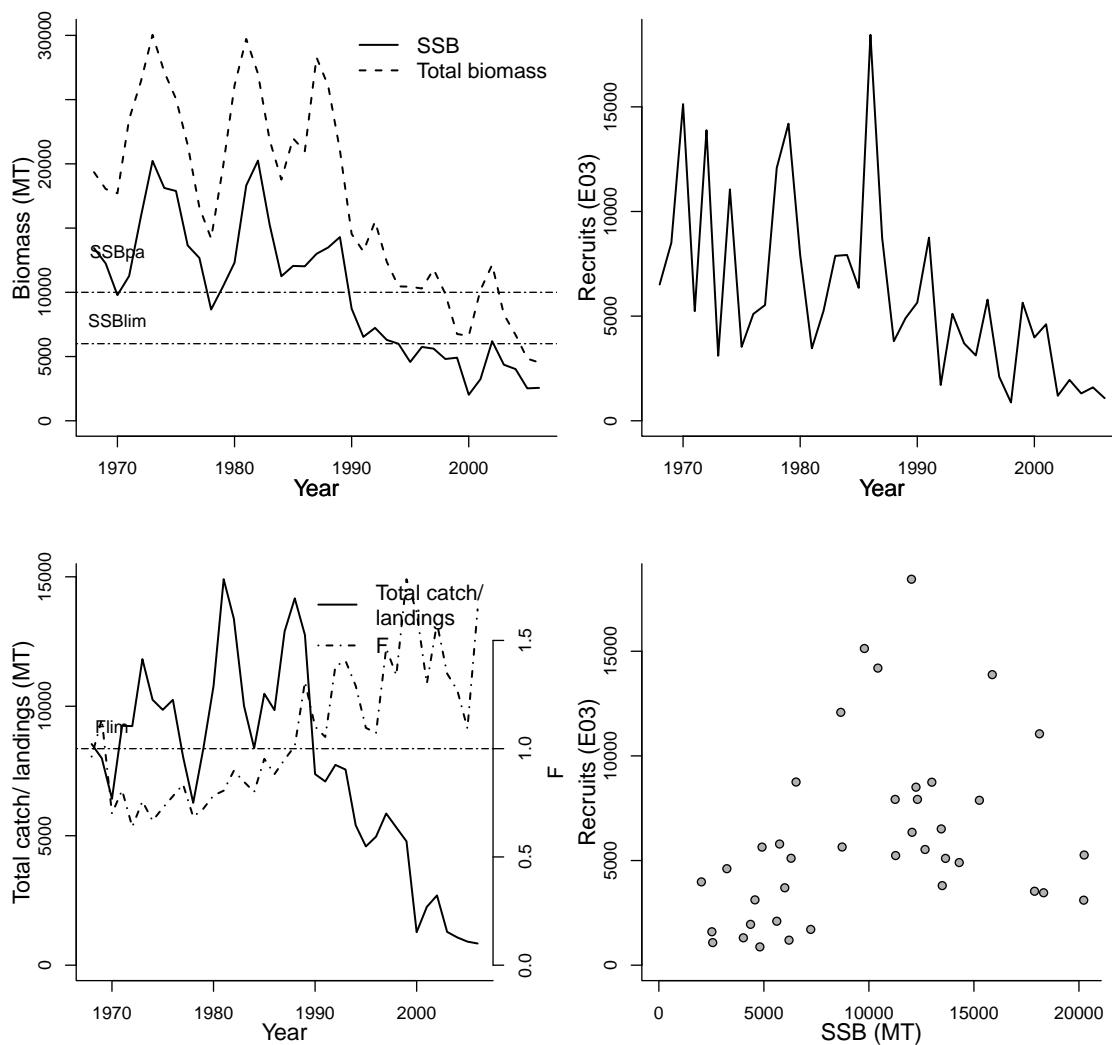
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | The ADAPT approach with year effects in a catch multiplier        |
| Publication year   | 2007  |
| Timeseries span    | 1968-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME                           |       | tertiary LME |
|--------------------------|-------|-------|---|-------|--------------|
| 24 - Celtic-Biscay Shelf |       |       | na                                      | na    |              |
| Parameter                | Value | Units | Reference points                        |       |              |
| A50-yr                   | 2     | yr    | SSBlim-MT (SSB)                         | 6000  | MT           |
| SSB-AGE-yr               | 2+    | yr    | SSBpa-MT (SSB)                          | 10000 | MT           |
| REC-AGE-yr               | 0     | yr    | Fpa-1/T (F)                             | 0.72  | 1/T          |
| TB-AGE-yr                | 0+    | yr    | Fmax-1/T                                | 0.32  | 1/T          |
| M-1/T                    | 0.2   | 1/T   | Flim-1/T (F)                            | 1     | 1/T          |
| F-AGE-yr-yr              | 2-4   | yr-yr | FO.1-1/T                                | 0.18  | 1/T          |
| SSB-SEX-sex              |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 0.427 |              |
| M                        |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | 1.644 |              |
| L50-cm                   |       |       |   |       |              |

| Time series minima and maxima |       |       |        |       |       |
|-------------------------------|-------|-------|--------|-------|-------|
|                               | SSB   | R     | F      | TB    | Catch |
| Minimum year                  | 1968  | 1968  | 1968   | 1968  | 1968  |
| Maximum year                  | 2006  | 2006  | 2006   | 2006  | 2006  |
| Time series minimum           | 2025  | 875   | 0.6386 | 4537  | 838   |
| Time series maximum           | 20249 | 18442 | 1.7828 | 30044 | 14907 |
| Units                         | MT    | E03   | 1/T    | MT    | MT    |



# Assessment of West of Scotland atlantic cod

## *(Gadus morhua)*

Assessment ID:WGNSDS-CODVIA-1977-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/382>

Area ID: multinational-ICES-VIA

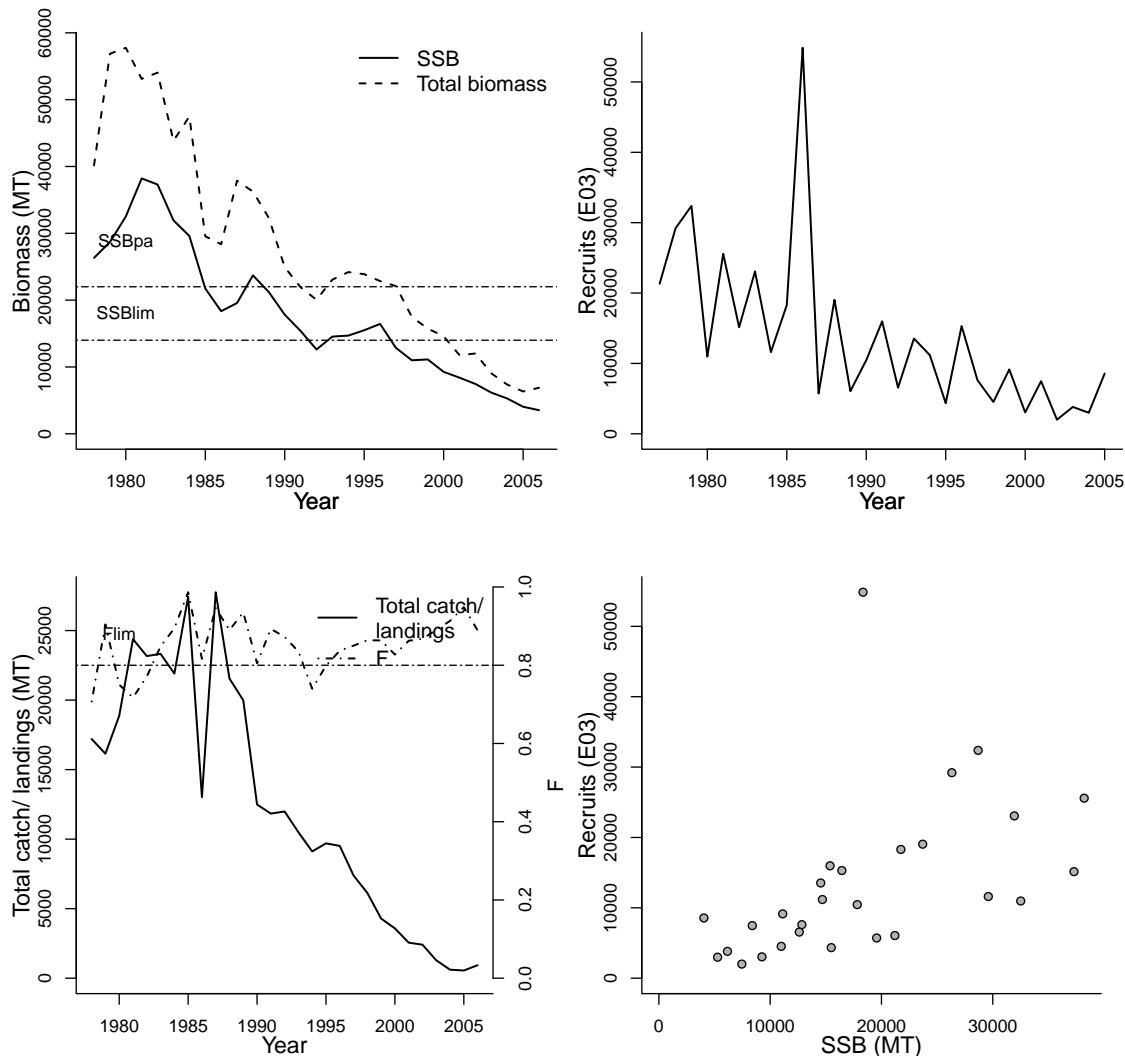
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anon  |
| Assessment method  | State-space catch at age time series analysis                     |
| Publication year   | 2007  |
| Timeseries span    | 1977-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME                           | tertiary LME |       |
|--------------------------|-------|-------|---|--------------|-------|
| 24 - Celtic-Biscay Shelf |       |       | na                                      | na           |       |
| Parameter                | Value | Units | Reference points                        |              |       |
| A50-yr                   | 2     | yr    | Parameter                               | Value        | Units |
| SSB-AGE-yr               | 2+    | yr    | SSBlim-MT (SSB)                         | 14000        | MT    |
| REC-AGE-yr               | 1     | yr    | SSBpa-MT (SSB)                          | 22000        | MT    |
| TB-AGE-yr                | 1+    | yr    | Fpa-1/T (F)                             | 0.6          | 1/T   |
| M-1/T                    | 0.2   | 1/T   | Fmax-1/T                                | 0.19         | 1/T   |
| F-AGE-yr-yr              | 2-5   | yr-yr | Flim-1/T (F)                            | 0.8          | 1/T   |
| SSB-SEX-sex              |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 0.252        |       |
| M                        |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | 1.111        |       |
| L50-cm                   |       |       |   |              |       |

| Time series minima and maxima |         |         |        |         |         |
|-------------------------------|---------|---------|--------|---------|---------|
|                               | SSB     | R       | F      | TB      | Catch   |
| Minimum year                  | 1978    | 1977    | 1978   | 1978    | 1978    |
| Maximum year                  | 2006    | 2005    | 2006   | 2006    | 2006    |
| Time series minimum           | 3530.6  | 2007.4  | 0.7072 | 6332.3  | 552     |
| Time series maximum           | 38214.9 | 54850.9 | 0.9867 | 57758.8 | 27758.1 |
| Units                         | MT      | E03     | 1/T    | MT      | MT      |



# Assessment of Irish Sea haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:WGNSDS-HADIS-1972-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/383>

Area ID: multinational-ICES-VIIa

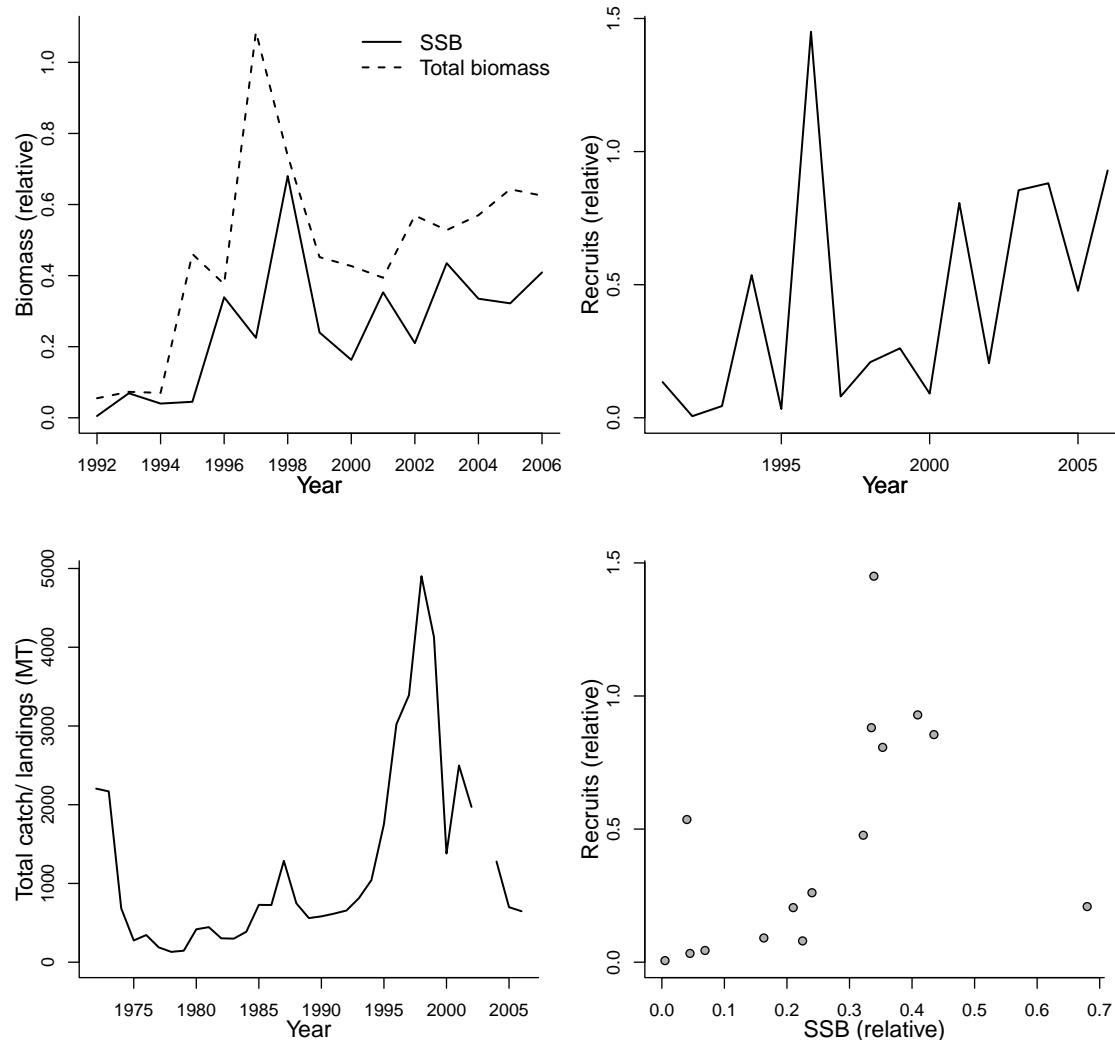
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Survey based stock assessment method                              |
| Publication year   | 2007  |
| Timeseries span    | 1972-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       | secondary LME |                  | tertiary LME |
|--------------------------|-------|---------------|------------------|--------------|
| 24 - Celtic-Biscay Shelf |       | na            | na               | na           |
| Parameter                | Value | Units         |                  |              |
| A50-yr                   | 2     | yr            |                  |              |
| SSB-AGE-yr               | 2+    | yr            |                  |              |
| REC-AGE-yr               | 0     | yr            | Reference points |              |
| M-1/T                    | 0.2   | 1/T           | Parameter        | Value        |
| SSB-SEX-sex              |       |               | Fpa-1/T (F)      | 0.5          |
| TB-AGE-yr                |       |               | Fmax-1/T         | 0.35         |
| F-AGE-yr                 |       |               |                  | 1/T          |
| M                        |       |               |                  |              |
| L50-cm                   |       |               |                  |              |

| Time series minima and maxima |          |          |   |          |
|-------------------------------|----------|----------|---|----------|
|                               | SSB      | R        | F | TB       |
| Minimum year                  | 1992     | 1991     |   | 1992     |
| Maximum year                  | 2006     | 2006     |   | 2006     |
| Time series minimum           | 0.005    | 0.006    |   | 0.055    |
| Time series maximum           | 0.68     | 1.45     |   | 1.086    |
| Units                         | relative | relative |   | relative |
|                               |          |          |   | MT       |



# Assessment of West of Scotland haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:WGNSDS-HADVIA-1977-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/384>

Area ID: multinational-ICES-VIA

### General assessment details.

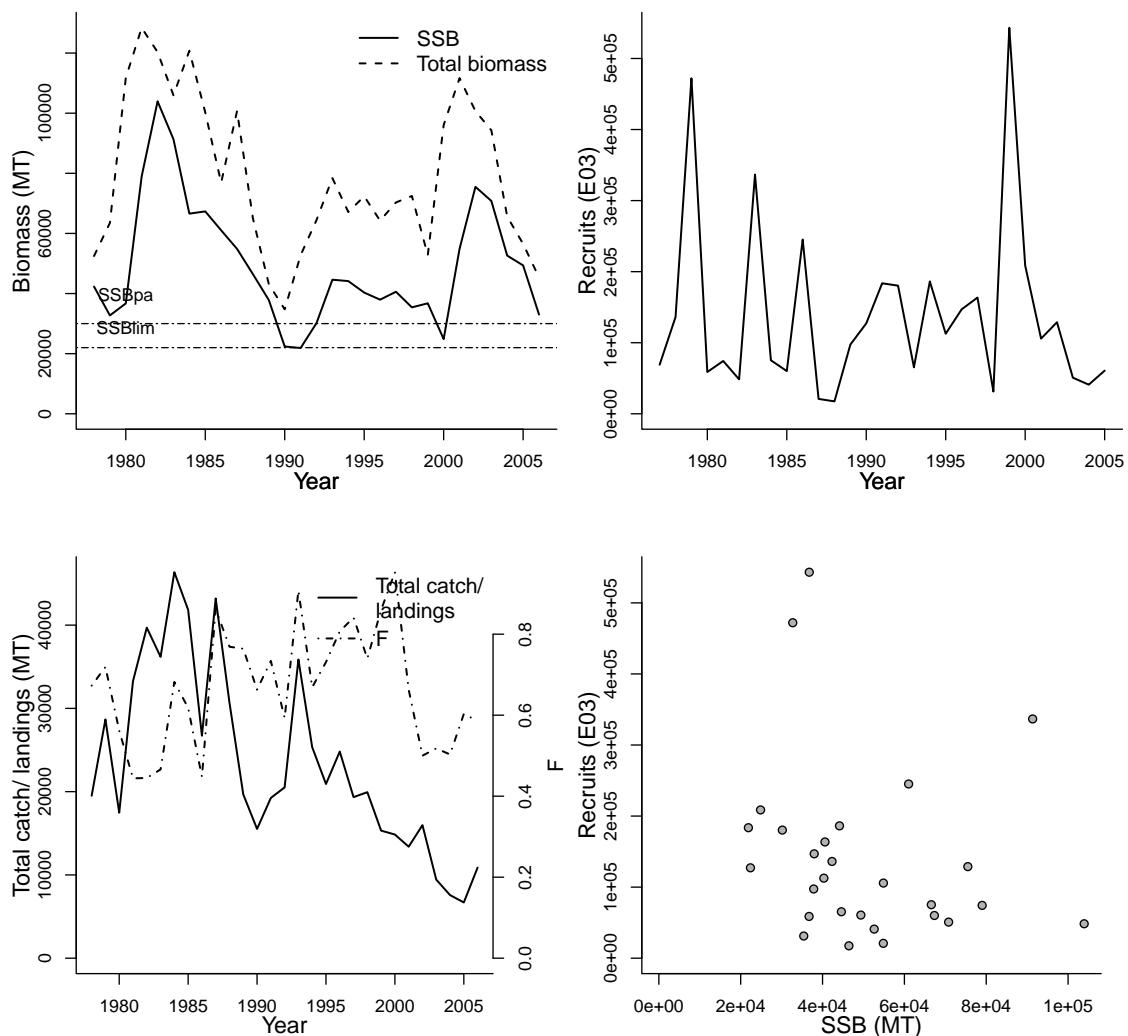
| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anon  |
| Assessment method  | State-space catch at age time series analysis                     |
| Publication year   | 2007  |
| Timeseries span    | 1977-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME                           |       | tertiary LME |  |
|--------------------------|-------|-------|---|-------|--------------|--|
| 24 - Celtic-Biscay Shelf |       |       | na                                      |       | na           |  |
| Parameter                | Value | Units | Reference points                        |       |              |  |
| A50-yr                   | 2     | yr    | Parameter                               | Value | Units        |  |
| SSB-AGE-yr               | 2+    | yr    | SSBlim-MT (SSB)                         | 22000 | MT           |  |
| REC-AGE-yr               | 1     | yr    | SSBpa-MT (SSB)                          | 30000 | MT           |  |
| TB-AGE-yr                | 1+    | yr    | Fpa-1/T (F)                             | 0.5   | 1/T          |  |
| M-1/T                    | 0.2   | 1/T   | F0.1-1/T                                | 0.19  | 1/T          |  |
| F-AGE-yr-yr              | 2-6   | yr-yr | Fmax-1/T                                | 0.21  | 1/T          |  |
| SSB-SEX-sex              |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 1.501 |              |  |
| M                        |       |       |   |       |              |  |
| L50-cm                   |       |       |   |       |              |  |

## Time series minima and maxima

|                     | SSB    | R      | F     | TB     | Catch |
|---------------------|--------|--------|-------|--------|-------|
| Minimum year        | 1978   | 1977   | 1978  | 1978   | 1978  |
| Maximum year        | 2006   | 2005   | 2006  | 2006   | 2006  |
| Time series minimum | 21880  | 17434  | 0.444 | 34739  | 6694  |
| Time series maximum | 103933 | 543159 | 0.953 | 128403 | 46355 |
| Units               | MT     | E03    | 1/T   | MT     | MT    |



# Assessment of Irish Sea european plaice (*Pleuronectes platessa*)

Assessment ID:WGNSDS-PLAICIS-1962-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/385>

Area ID: multinational-ICES-VIIa

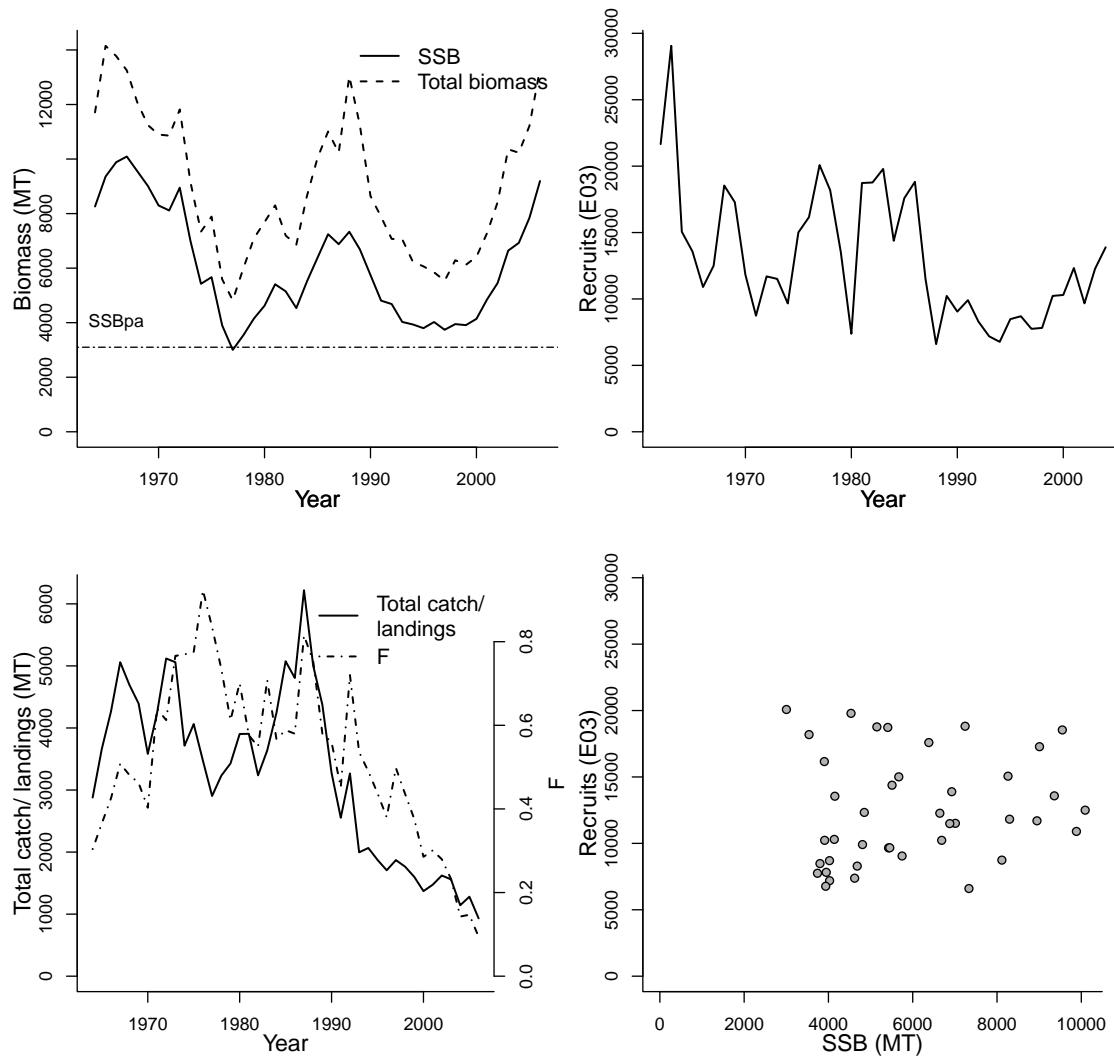
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Integrated Catch-at-age Analysis                                  |
| Publication year   | 2007  |
| Timeseries span    | 1962-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-15  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME    |       |       | tertiary LME |  |  |
|--------------------------|-------|-------|------------------|-------|-------|--------------|--|--|
| 24 - Celtic-Biscay Shelf |       |       | na               |       |       | na           |  |  |
| Parameter                | Value | Units | Reference points |       |       |              |  |  |
|                          |       |       | Parameter        | Value | Units |              |  |  |
| A50-yr                   | 3     | yr    |                  |       |       |              |  |  |
| SSB-AGE-yr               | 2+    | yr    |                  |       |       |              |  |  |
| REC-AGE-yr               | 2     | yr    |                  |       |       |              |  |  |
| TB-AGE-yr                | 2+    | yr    | Fmax-1/T         | 0.36  | 1/T   |              |  |  |
| F-AGE-yr-yr              | 3-6   | yr-yr | F0.1-1/T         | 0.13  | 1/T   |              |  |  |
| M-1/T                    | 0.12  | 1/T   | Fpa-1/T (F)      | 0.45  | 1/T   |              |  |  |
| SSB-SEX-sex              |       |       | SSBpa-MT (SSB)   | 3100  | MT    |              |  |  |
| M                        |       |       |                  |       |       |              |  |  |
| L50-cm                   |       |       |                  |       |       |              |  |  |

| Time series minima and maxima |       |       |        |       |       |
|-------------------------------|-------|-------|--------|-------|-------|
|                               | SSB   | R     | F      | TB    | Catch |
| Minimum year                  | 1964  | 1962  | 1964   | 1964  | 1964  |
| Maximum year                  | 2006  | 2004  | 2006   | 2006  | 2006  |
| Time series minimum           | 3003  | 6600  | 0.0941 | 4819  | 932   |
| Time series maximum           | 10092 | 29060 | 0.9231 | 14152 | 6220  |
| Units                         | MT    | E03   | 1/T    | MT    | MT    |



# Assessment of Irish Sea common european sole (*Solea vulgaris*)

Assessment ID:WGNSDS-SOLEIS-1968-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/386>

Area ID: multinational-ICES-VIIa

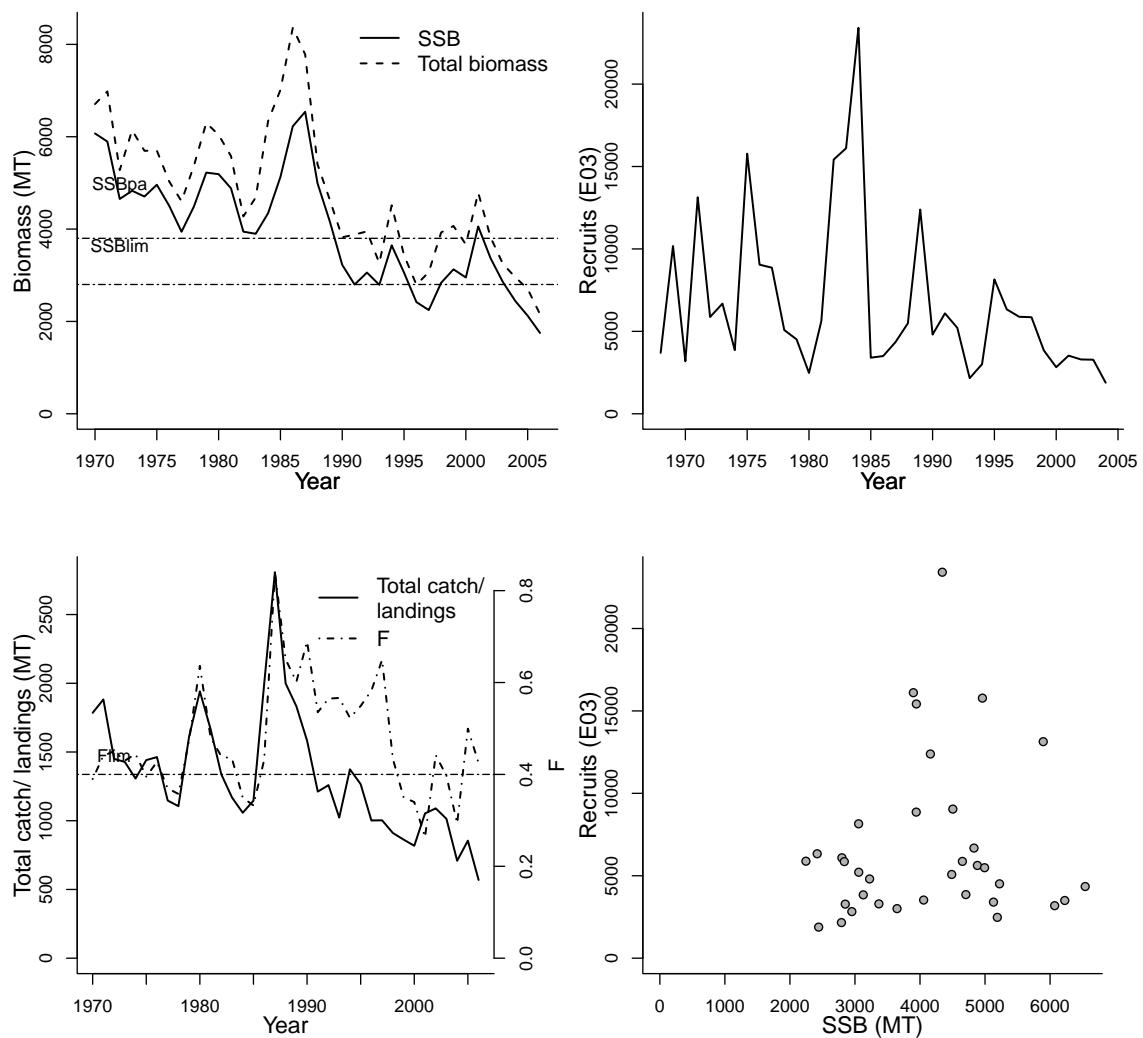
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1968-2006   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-15  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME                           |       | tertiary LME |
|--------------------------|-------|-------|---|-------|--------------|
| 24 - Celtic-Biscay Shelf |       |       | na                                      | na    |              |
| Parameter                | Value | Units | Reference points                        |       |              |
| A50-yr                   | 2-3   | yr    | Parameter                               | Value | Units        |
| SSB-AGE-yr               | 2+    | yr    | Fmax-1/T                                | 0.51  | 1/T          |
| REC-AGE-yr               | 2     | yr    | F0.1-1/T                                | 0.18  | 1/T          |
| TB-AGE-yr                | 2+    | yr    | Fpa-1/T (F)                             | 0.3   | 1/T          |
| F-AGE-yr-yr              | 4-7   | yr-yr | SSBpa-MT (SSB)                          | 3800  | MT           |
| M-1/T                    | 0.1   | 1/T   | SSBlim-MT (SSB)                         | 2800  | MT           |
| SSB-SEX-sex              |       |       | Flim-1/T (F)                            | 0.4   | 1/T          |
| M                        |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 0.625 |              |
| L50-cm                   |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | 1.062 |              |

| Time series minima and maxima |      |       |        |      |       |
|-------------------------------|------|-------|--------|------|-------|
|                               | SSB  | R     | F      | TB   | Catch |
| Minimum year                  | 1970 | 1968  | 1970   | 1970 | 1970  |
| Maximum year                  | 2006 | 2004  | 2006   | 2006 | 2006  |
| Time series minimum           | 1750 | 1886  | 0.263  | 2155 | 569   |
| Time series maximum           | 6540 | 23415 | 0.8401 | 8359 | 2808  |
| Units                         | MT   | E03   | 1/T    | MT   | MT    |



# Assessment of West of Scotland whiting

## (*Merlangius merlangus*)

Assessment ID:WGNSDS-WHITVIA-1984-2007-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/387>

Area ID: multinational-ICES-VIA

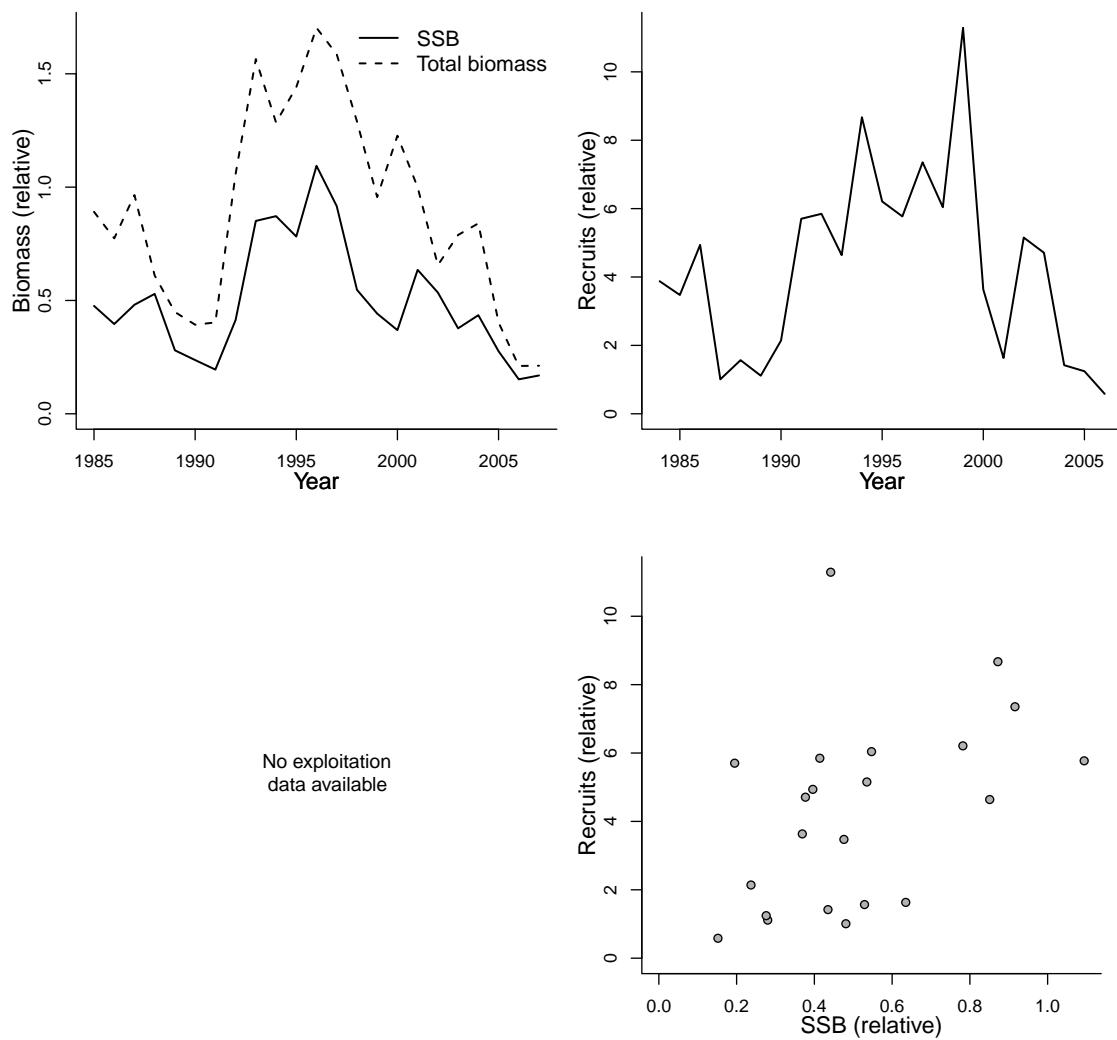
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Survey based stock assessment method                              |
| Publication year   | 2007  |
| Timeseries span    | 1984-2007   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)                            |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       | secondary LME |                  | tertiary LME |       |
|--------------------------|-------|---------------|------------------|--------------|-------|
| 24 - Celtic-Biscay Shelf |       | na            |                  | na           |       |
| Parameter                | Value | Units         |                  |              |       |
| A50-yr                   | 2     | yr            |                  |              |       |
| SSB-AGE-yr               | 2+    | yr            |                  |              |       |
| REC-AGE-yr               | 1     | yr            |                  |              |       |
| M-1/T                    | 0.2   | 1/T           | Reference points |              |       |
| TB-AGE-yr                | 1+    | yr            | Parameter        | Value        | Units |
| SSB-SEX-sex              |       |               |                  |              |       |
| F-AGE-yr                 |       |               |                  |              |       |
| M                        |       |               |                  |              |       |
| L50-cm                   |       |               |                  |              |       |

| Time series minima and maxima |          |          |   |          |
|-------------------------------|----------|----------|---|----------|
|                               | SSB      | R        | F | TB       |
| Minimum year                  | 1985     | 1984     |   | 1985     |
| Maximum year                  | 2007     | 2006     |   | 2007     |
| Time series minimum           | 0.152    | 0.583    |   | 0.211    |
| Time series maximum           | 1.094    | 11.288   |   | 1.703    |
| Units                         | relative | relative |   | relative |



# Assessment of North Sea atlantic cod (*Gadus morhua*)

Assessment ID:WGNSSK-CODNS-1962-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/398>

Area ID: multinational-ICES-IV

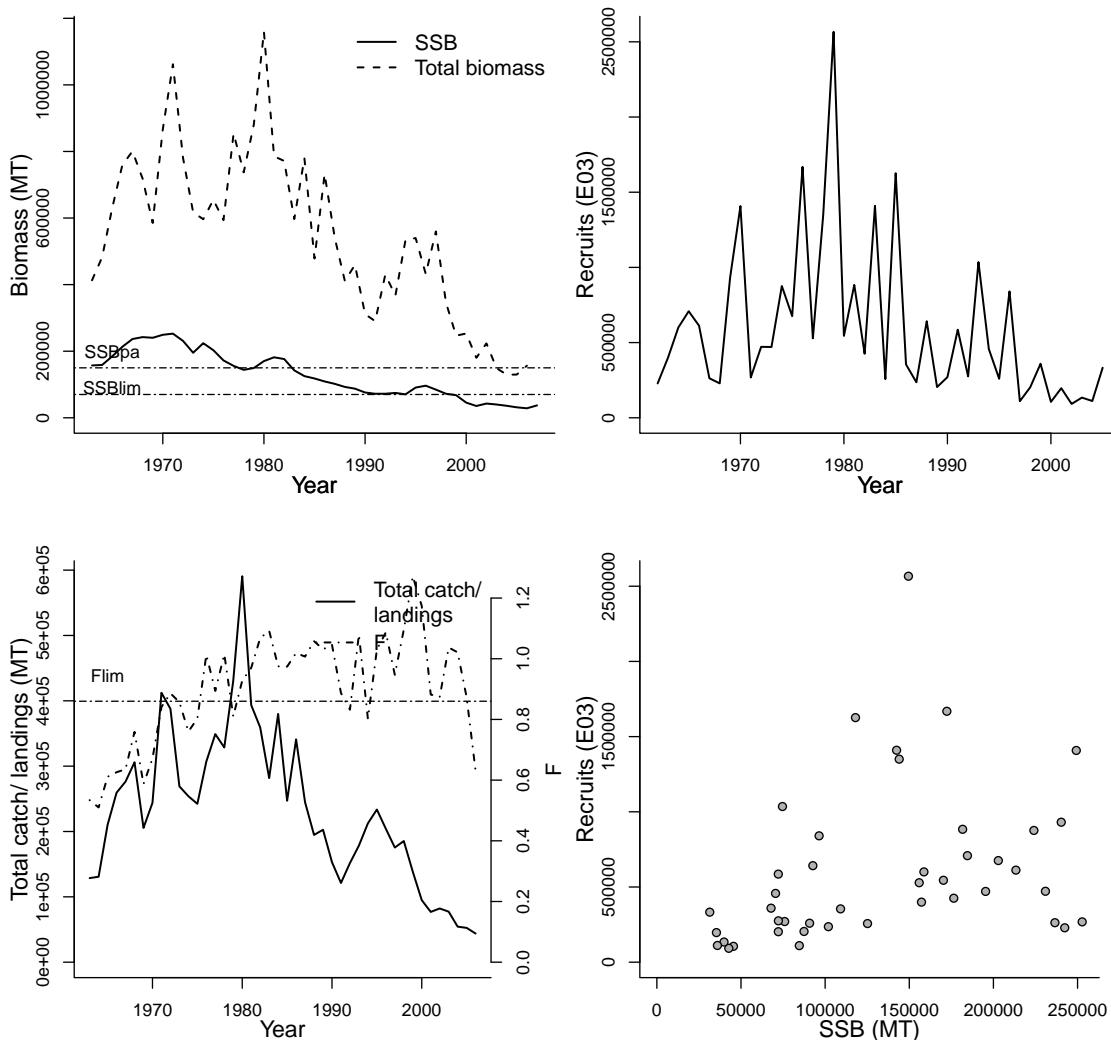
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | The ADAPT approach with year effects in a catch multiplier                        |
| Publication year   | 2007  |
| Timeseries span    | 1962-2007   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-11  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value      | Units | Reference points       |        |       |
|-------------|------------|-------|------------------------|--------|-------|
|             |            |       | Parameter              | Value  | Units |
| F-AGE-yr-yr | 2-4        | yr-yr | Flim-1/T (F)           | 0.86   | 1/T   |
| TB-AGE-yr   | 1+         | yr    | Fpa-1/T (F)            | 0.65   | 1/T   |
| A50-yr      | 3-4        | yr    | SSBlim-MT (SSB)        | 70000  | MT    |
| M-1/T       | 0.2 for 4+ | 1/T   | SSBpa-MT (SSB)         | 150000 | MT    |
| REC-AGE     |            |       | $SSB_{2007}/SSB_{lim}$ | 0.531  |       |
| SSB-AGE-yr  |            |       | $F_{2006}/F_{lim}$     | 0.733  |       |
| SSB-SEX-sex |            |       |                        |        |       |
| M           |            |       |                        |        |       |
| L50-cm      |            |       |                        |        |       |

| Time series minima and maxima |        |         |       |         |        |
|-------------------------------|--------|---------|-------|---------|--------|
|                               | SSB    | R       | F     | TB      | Catch  |
| Minimum year                  | 1963   | 1962    | 1963  | 1963    | 1963   |
| Maximum year                  | 2007   | 2005    | 2006  | 2006    | 2006   |
| Time series minimum           | 28481  | 92257   | 0.51  | 129581  | 43856  |
| Time series maximum           | 252747 | 2566638 | 1.272 | 1159434 | 590678 |
| Units                         | MT     | E03     | 1/T   | MT      | MT     |



# Assessment of IIIa and North Sea haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:WGNSSK-HADNS-IIIa-1963-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/388>

Area ID: multinational-ICES-IIIa-IV

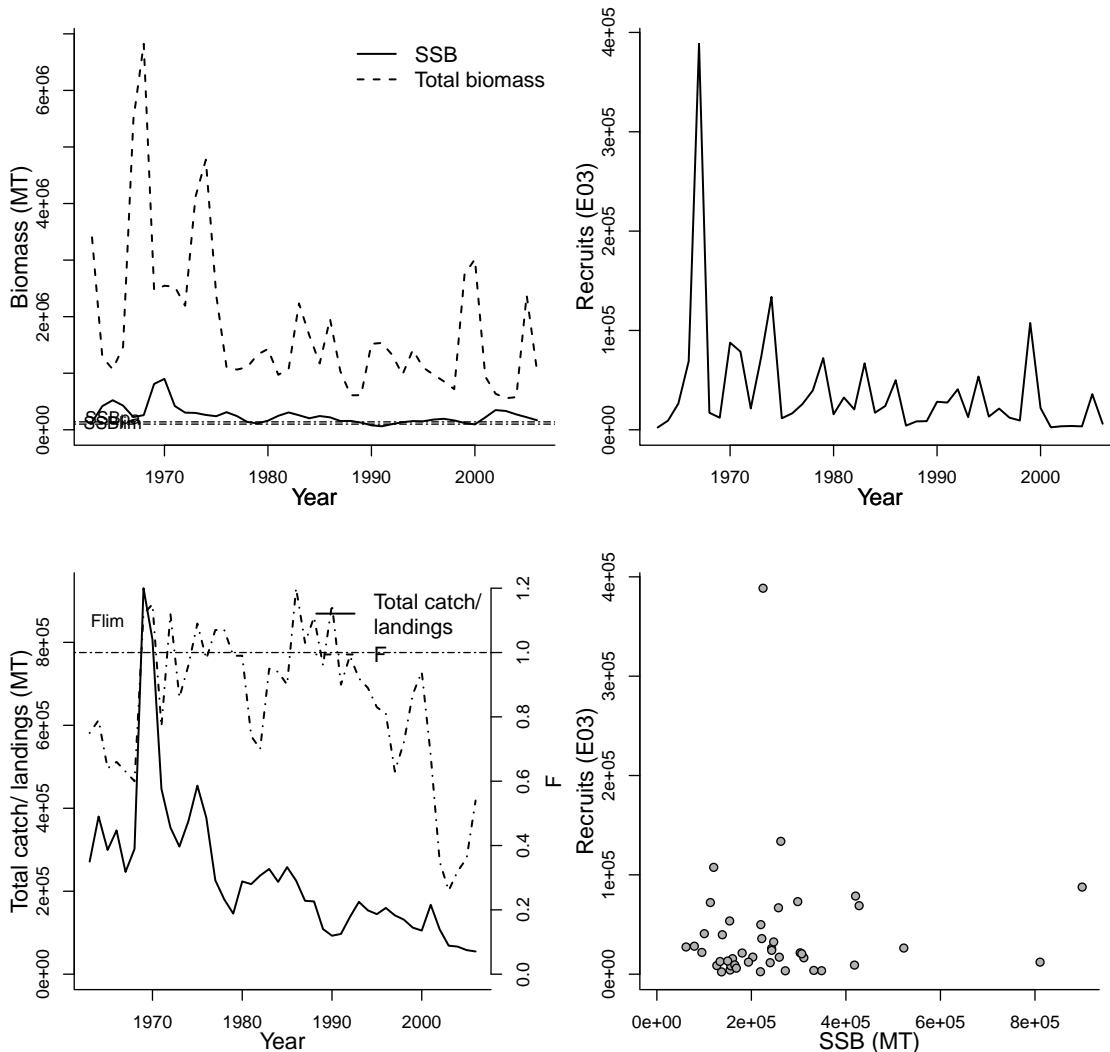
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anon  |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1963-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter      | Value        | Units | Reference points       |        |       |
|----------------|--------------|-------|------------------------|--------|-------|
|                |              |       | Parameter              | Value  | Units |
| 22 - North Sea | na           | na    |                        |        |       |
| A50-yr         | 2-3          | yr    |                        |        |       |
| SSB-AGE-yr     | 1+           | yr    | SSBlim-MT (SSB)        | 100000 | MT    |
| REC-AGE-yr     | 0            | yr    | SSBpa-MT (SSB)         | 140000 | MT    |
| TB-AGE-yr      | 0+           | yr    | Fpa-1/T (F)            | 0.7    | 1/T   |
| M-1/T          | Age specific | 1/T   | Flim-1/T (F)           | 1      | 1/T   |
| F-AGE-yr-yr    | 2-4          | yr-yr | $SSB_{2006}/SSB_{lim}$ | 1.682  |       |
| SSB-SEX-sex    |              |       | $F_{2006}/F_{lim}$     | 0.540  |       |
| M              |              |       |                        |        |       |
| L50-cm         |              |       |                        |        |       |

| Time series minima and maxima |        |           |      |         |
|-------------------------------|--------|-----------|------|---------|
|                               | SSB    | R         | F    | TB      |
| Minimum year                  | 1963   | 1963      | 1963 | 1963    |
| Maximum year                  | 2006   | 2006      | 2006 | 2006    |
| Time series minimum           | 61772  | 2316.936  | 0.26 | 558318  |
| Time series maximum           | 899883 | 388564.67 | 1.2  | 6823944 |
| Units                         | MT     | E03       | 1/T  | MT      |



# Assessment of Rockall Bank haddock

## *(Melanogrammus aeglefinus)*

Assessment ID:WGNSSK-HADROCK-1990-2007-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/28>

Area ID: multinational-ICES-VIb

### General assessment details.

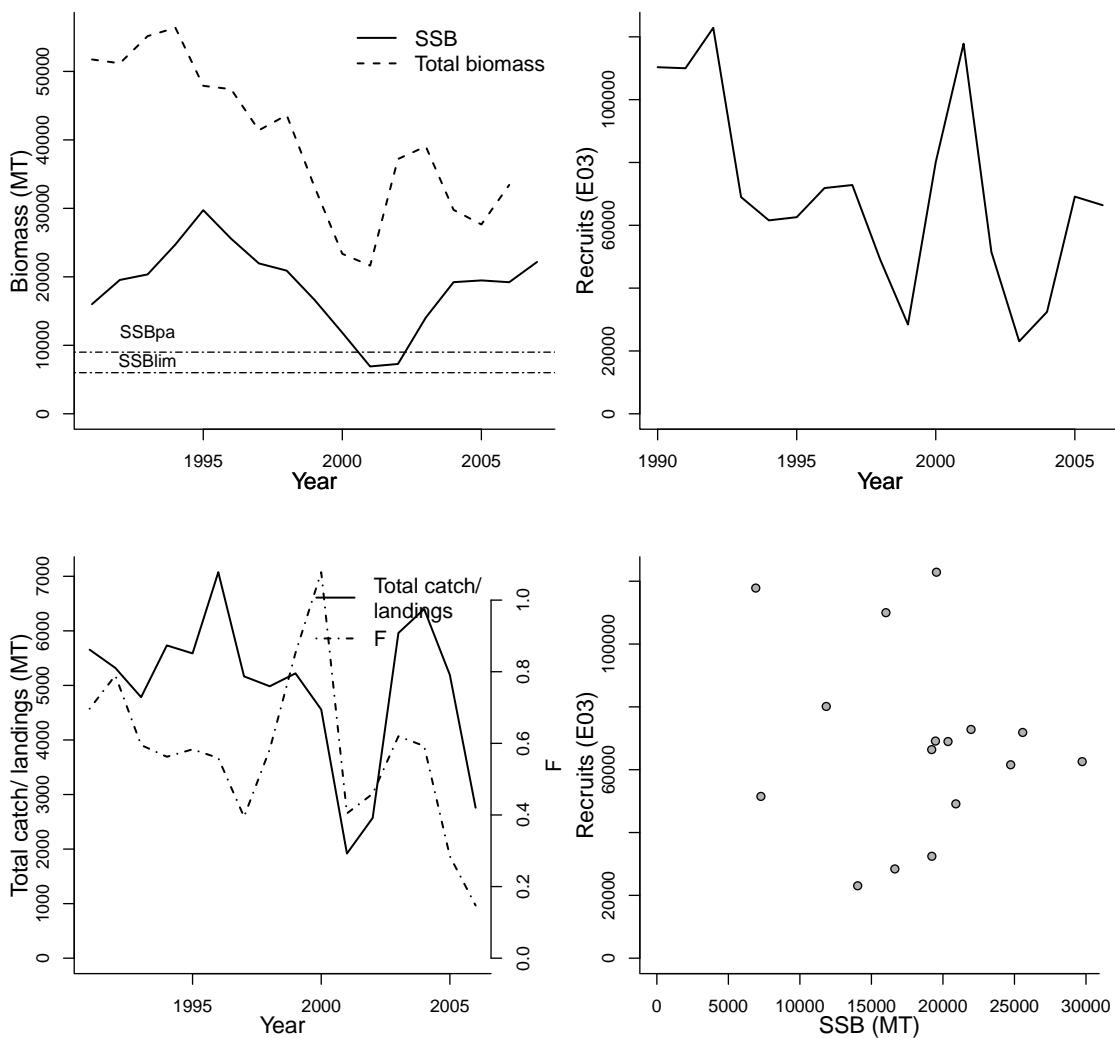
| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1990-2007   |
| Document           | ICES-WGNSDS-2007.pdf (pdf in database)  |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-20  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |        |       | secondary LME    |  |  | tertiary LME                            |       |       |  |  |
|--------------------------|--------|-------|------------------|--|--|---|-------|-------|--|--|
| 24 - Celtic-Biscay Shelf |        |       | na               |  |  | na                                      |       |       |  |  |
| Parameter                | Value  | Units | Reference points |  |  | Parameter                               | Value | Units |  |  |
| SSB-AGE-yr               | 2.5    | yr    |                  |  |  | Fpa-1/T (F)                             | 0.4   | 1/T   |  |  |
| REC-AGE-yr               | 1      | yr    |                  |  |  | SSBlim-MT (SSB)                         | 6000  | MT    |  |  |
| F-AGE-yr-yr              | 2 to 5 | yr-yr |                  |  |  | SSBpa-MT (SSB)                          | 9000  | MT    |  |  |
| TB-AGE-yr                | 1+     | yr    |                  |  |  | SSB <sub>2007</sub> /SSB <sub>lim</sub> | 3.695 |       |  |  |
| A50-yr                   | 2.5    | yr    |                  |  |  |   |       |       |  |  |
| M-1/T                    | 0.2    | 1/T   |                  |  |  |   |       |       |  |  |
| SSB-SEX-sex              |        |       |                  |  |  |   |       |       |  |  |
| M                        |        |       |                  |  |  |   |       |       |  |  |
| L50-cm                   |        |       |                  |  |  |   |       |       |  |  |

## Time series minima and maxima

|                     | SSB   | R      | F       | TB    | Catch |
|---------------------|-------|--------|---------|-------|-------|
| Minimum year        | 1991  | 1990   | 1991    | 1991  | 1991  |
| Maximum year        | 2007  | 2006   | 2006    | 2006  | 2006  |
| Time series minimum | 6913  | 23055  | 0.1473  | 21639 | 1918  |
| Time series maximum | 29734 | 122870 | 1.07795 | 56370 | 7075  |
| Units               | MT    | E03    | 1/T     | MT    | MT    |



# Assessment of North Sea norway pout (*Trisopterus esmarkii*)

Assessment ID:WGNSSK-NPOUTNS-1983-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/389>

Area ID: multinational-ICES-IV

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1983-2007   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

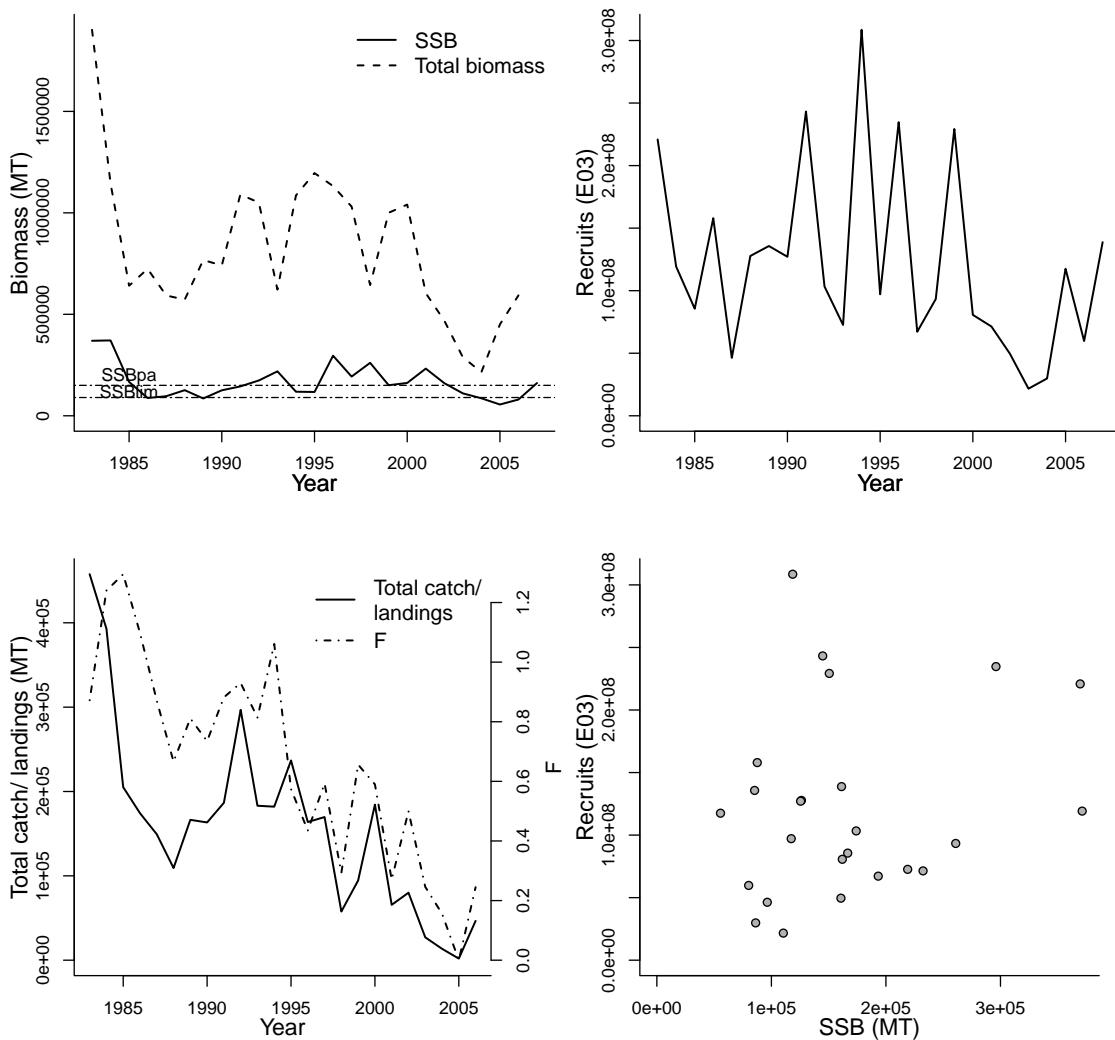
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| A50-yr      | 1-2   | yr    |
| SSB-AGE-yr  | 1+    | yr    |
| REC-AGE-yr  | 0     | yr    |
| TB-AGE-yr   | 0+    | yr    |
| M-1/T       | 0.4   | 1/T   |
| F-AGE-yr-yr | 1-2   | yr-yr |
| SSB-SEX-sex |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Reference points       |        |       |
|------------------------|--------|-------|
| Parameter              | Value  | Units |
| SSBlim-MT (SSB)        | 90000  | MT    |
| SSBpa-MT (SSB)         | 150000 | MT    |
| $SSB_{2007}/SSB_{lim}$ | 1.792  |       |

| Time series minima and maxima |        |           |       |         |
|-------------------------------|--------|-----------|-------|---------|
|                               | SSB    | R         | F     | TB      |
| Minimum year                  | 1983   | 1983      | 1983  | 1983    |
| Maximum year                  | 2007   | 2007      | 2006  | 2006    |
| Time series minimum           | 55568  | 21662000  | 0     | 215118  |
| Time series maximum           | 371336 | 308548000 | 1.295 | 1902065 |
| Units                         | MT     | E03       | 1/T   | MT      |



# Assessment of Eastern English Channel european plaice (*Pleuronectes platessa*)

Assessment ID:WGNSSK-PLAIC7d-1979-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/390>

Area ID: multinational-ICES-VIId

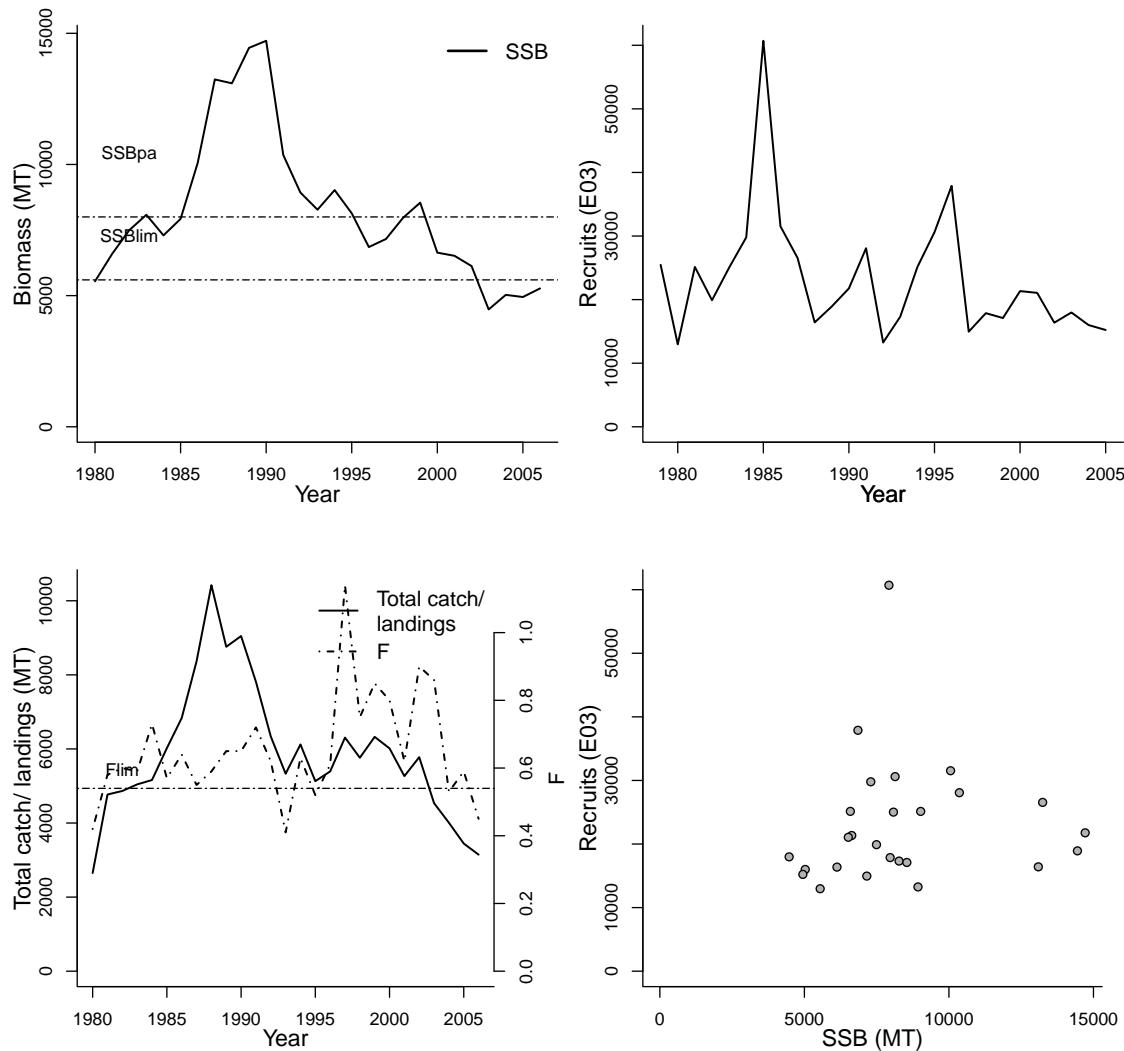
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1979-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME          | tertiary LME |       |
|--------------------------|-------|-------|------------------------|--------------|-------|
| 24 - Celtic-Biscay Shelf |       |       | na                     | na           |       |
| Parameter                | Value | Units | Reference points       |              |       |
| A50-yr                   | 3     | yr    | Parameter              | Value        | Units |
| SSB-AGE-yr               | 2+    | yr    | SSBlim-MT (SSB)        | 5600         | MT    |
| REC-AGE-yr               | 1     | yr    | SSBpa-MT (SSB)         | 8000         | MT    |
| TB-AGE-yr                | 1+    | yr    | Flim-1/T (F)           | 0.54         | 1/T   |
| M-1/T                    | 0.1   | 1/T   | Fpa-1/T (F)            | 0.45         | 1/T   |
| F-AGE-yr-yr              | 3-6   | yr-yr | $SSB_{2006}/SSB_{lim}$ | 0.942        |       |
| SSB-SEX-sex              |       |       | $F_{2006}/F_{lim}$     | 0.833        |       |
| M                        |       |       |                        |              |       |
| L50-cm                   |       |       |                        |              |       |

| Time series minima and maxima |       |       |      |       |
|-------------------------------|-------|-------|------|-------|
|                               | SSB   | R     | F    | TB    |
| Minimum year                  | 1980  | 1979  | 1980 | 1980  |
| Maximum year                  | 2006  | 2005  | 2006 | 2006  |
| Time series minimum           | 4473  | 12969 | 0.41 | 2650  |
| Time series maximum           | 14714 | 60704 | 1.14 | 10420 |
| Units                         | MT    | E03   | 1/T  | MT    |



# Assessment of Kattegat and Skagerrak european plaice (*Pleuronectes platessa*)

Assessment ID:WGNSSK-PLAICIIa-1976-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/391>

Area ID: multinational-ICES-IIa

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1976-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

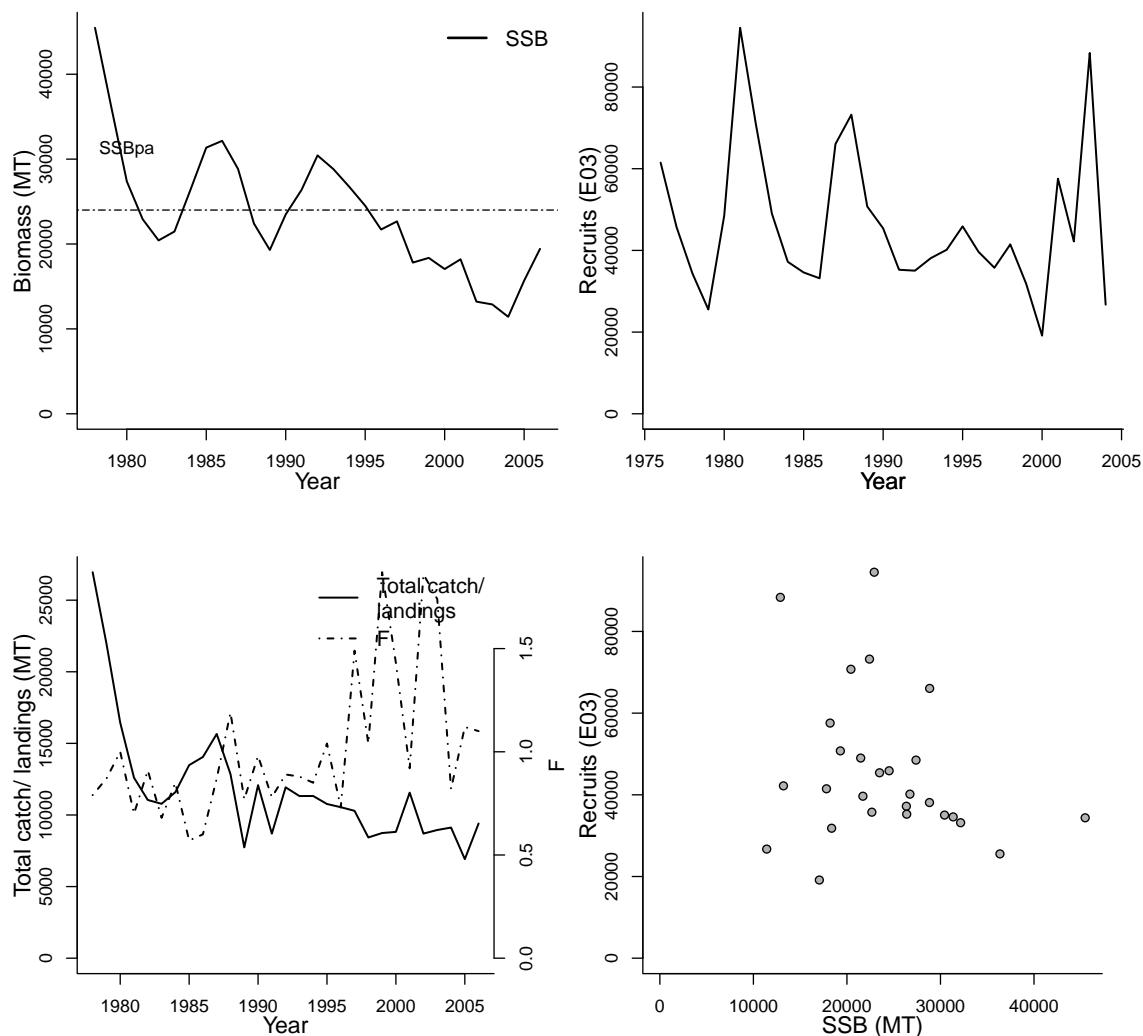
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| A50-yr      | 2     | yr    |
| SSB-AGE-yr  | 2+    | yr    |
| REC-AGE-yr  | 2     | yr    |
| M-1/T       | 0.1   | 1/T   |
| F-AGE-yr-yr | 4-8   | yr-yr |
| TB-AGE-yr   | 2+    | yr    |
| SSB-SEX-sex |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Reference points |       |       |
|------------------|-------|-------|
| Parameter        | Value | Units |
| SSBpa-MT (SSB)   | 24000 | MT    |
| Fpa-1/T (F)      | 0.73  | 1/T   |

| Time series minima and maxima |       |       |      |       |
|-------------------------------|-------|-------|------|-------|
|                               | SSB   | R     | F    | TB    |
| Minimum year                  | 1978  | 1976  | 1978 | 1978  |
| Maximum year                  | 2006  | 2004  | 2006 | 2006  |
| Time series minimum           | 11423 | 19141 | 0.57 | 6916  |
| Time series maximum           | 45470 | 94503 | 1.87 | 26953 |
| Units                         | MT    | E03   | 1/T  | MT    |



# Assessment of North Sea european plaice (*Pleuronectes platessa*)

Assessment ID:WGNSSK-PLAICNS-1956-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/392>

Area ID: multinational-ICES-IV

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1956-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

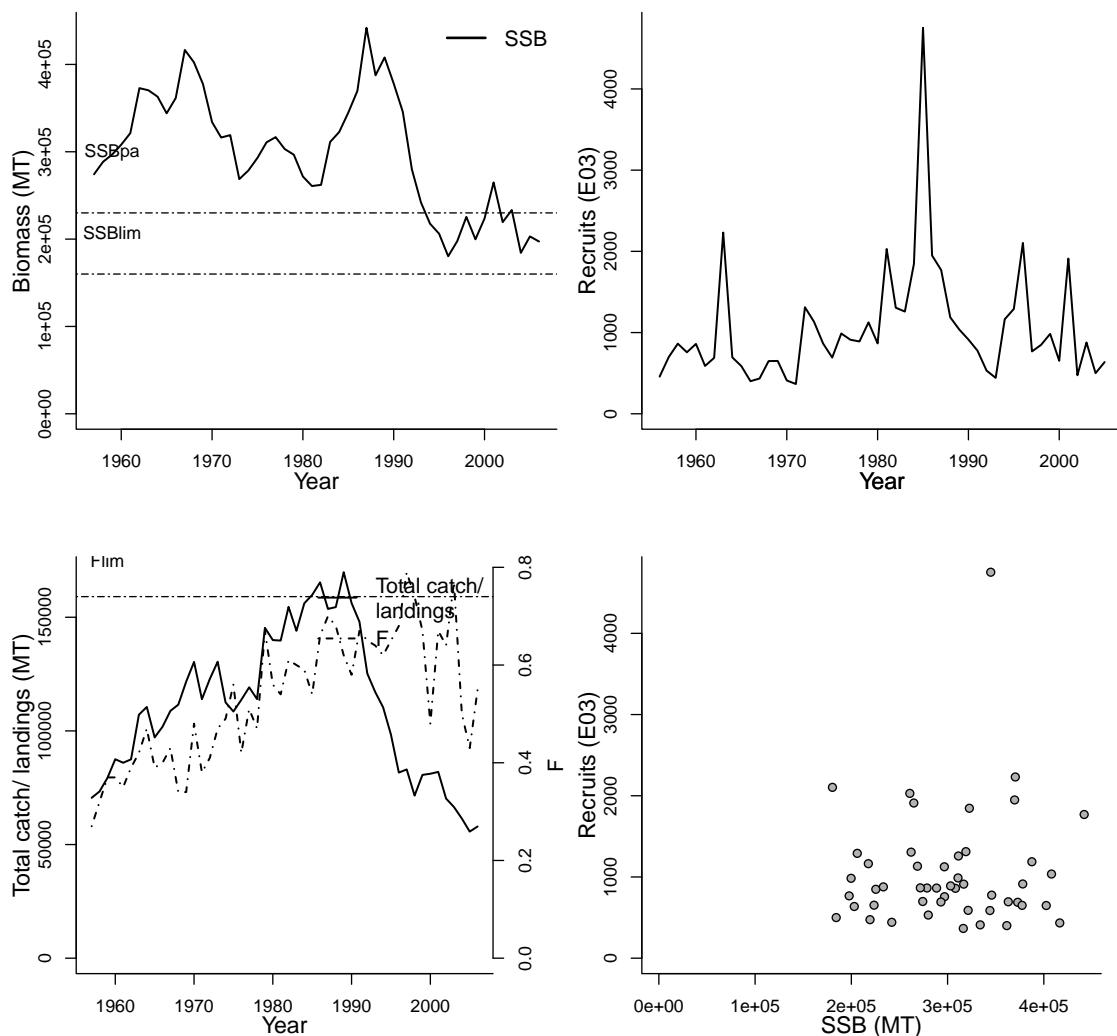
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| A50-yr      | 2-3   | yr    |
| SSB-AGE-yr  | 2+    | yr    |
| REC-AGE-yr  | 1     | yr    |
| M-1/T       | 0.1   | 1/T   |
| F-AGE-yr-yr | 2-6   | yr-yr |
| TB-AGE-yr   | 1+    | yr    |
| SSB-SEX-sex |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Parameter              | Reference points | Value  | Units |
|------------------------|------------------|--------|-------|
| SSBlim-MT (SSB)        |                  | 160000 | MT    |
| SSBpa-MT (SSB)         |                  | 230000 | MT    |
| Fpa-1/T (F)            |                  | 0.6    | 1/T   |
| Flim-1/T (F)           |                  | 0.74   | 1/T   |
| FO.1-1/T               |                  | 0.17   | 1/T   |
| $SSB_{2006}/SSB_{lim}$ |                  | 1.233  |       |
| $F_{2006}/F_{lim}$     |                  | 0.743  |       |

| Time series minima and maxima |        |          |      |        |
|-------------------------------|--------|----------|------|--------|
|                               | SSB    | R        | F    | TB     |
| Minimum year                  | 1957   | 1956     | 1957 | 1957   |
| Maximum year                  | 2006   | 2005     | 2006 | 2006   |
| Time series minimum           | 180384 | 366.601  | 0.27 | 55700  |
| Time series maximum           | 441943 | 4752.726 | 0.79 | 169818 |
| Units                         | MT     | E03      | 1/T  | MT     |



# Assessment of IIIa, VI and North Sea pollock

## *(Pollachius virens)*

Assessment ID:WGNSSK-POLLNS-VI-IIIa-1964-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/393>

Area ID: multinational-ICES-IIIa-IV-VI

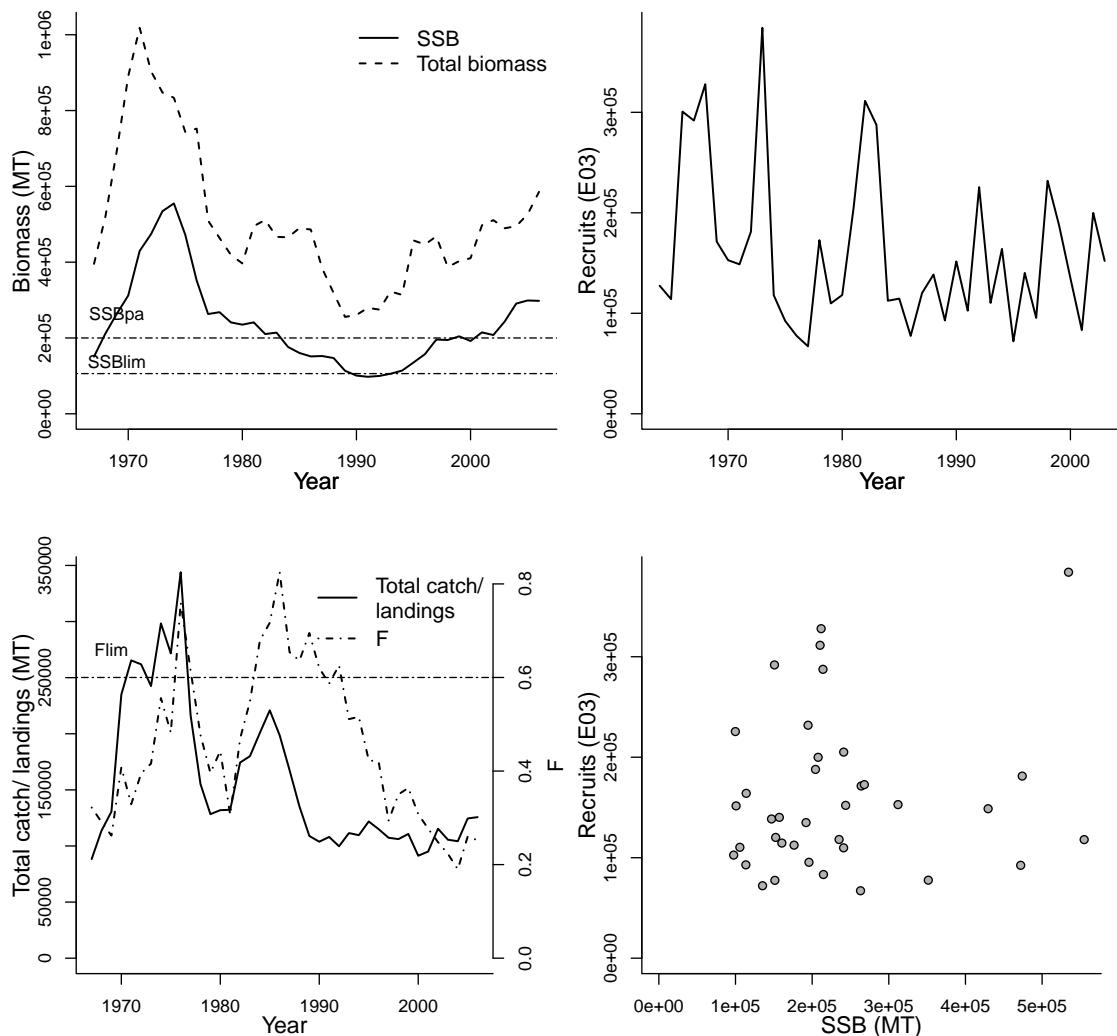
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1964-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME    |       |       | secondary LME                           |        |     | tertiary LME |       |       |
|----------------|-------|-------|---|--------|-----|--------------|-------|-------|
| 22 - North Sea |       |       | 24 - Celtic-Biscay Shelf                |        |     | na           |       |       |
| Parameter      | Value | Units | Reference points                        |        |     | Parameter    | Value | Units |
| A50-yr         | 4-5   | yr    | SSBlim-MT (SSB)                         | 106000 | MT  |              |       |       |
| SSB-AGE-yr     | 4+    | yr    | SSBpa-MT (SSB)                          | 200000 | MT  |              |       |       |
| REC-AGE-yr     | 3     | yr    | Fpa-1/T (F)                             | 0.4    | 1/T |              |       |       |
| TB-AGE-yr      | 3+    | yr    | F0.1-1/T                                | 0.11   | 1/T |              |       |       |
| M-1/T          | 0.2   | 1/T   | Fmax-1/T                                | 0.22   | 1/T |              |       |       |
| F-AGE-yr-yr    | 3-6   | yr-yr | Flim-1/T (F)                            | 0.6    | 1/T |              |       |       |
| SSB-SEX-sex    |       |       | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 2.811  |     |              |       |       |
| M              |       |       | F <sub>2006</sub> /F <sub>lim</sub>     | 0.420  |     |              |       |       |
| L50-cm         |       |       |   |        |     |              |       |       |

| Time series minima and maxima |        |        |       |         |
|-------------------------------|--------|--------|-------|---------|
|                               | SSB    | R      | F     | TB      |
| Minimum year                  | 1967   | 1964   | 1967  | 1967    |
| Maximum year                  | 2006   | 2003   | 2006  | 2006    |
| Time series minimum           | 97609  | 67123  | 0.19  | 255620  |
| Time series maximum           | 554904 | 384108 | 0.825 | 1018303 |
| Units                         | MT     | E03    | 1/T   | MT      |



# Assessment of North Sea sand lance (*Ammodytes marinus*)

Assessment ID:WGNSSK-SEELNS-1983-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/394>

Area ID: multinational-ICES-IV

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1983-2007   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-12  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

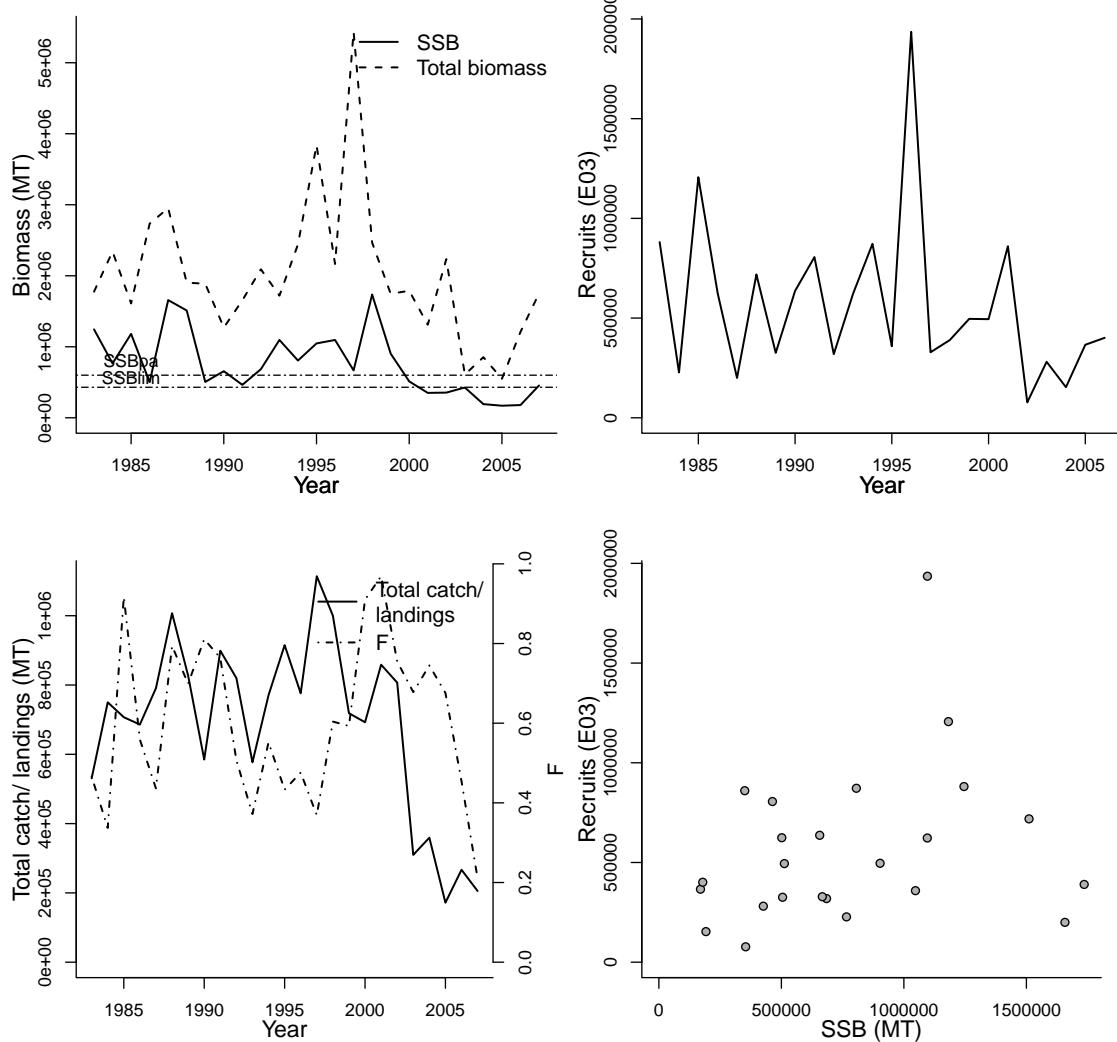
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value      | Units | primary LME    | secondary LME | tertiary LME |
|-------------|------------|-------|----------------|---------------|--------------|
|             |            |       | 22 - North Sea | na            | na           |
| A50-yr      | 2          | yr    |                |               |              |
| SSB-AGE-yr  | 2+         | yr    |                |               |              |
| REC-AGE-yr  | 0          | yr    |                |               |              |
| M-1/T       | 0.2 for 1+ | 1/T   |                |               |              |
| F-AGE-yr-yr | 1-2        | yr-yr |                |               |              |
| TB-AGE-yr   | 0+         | yr    |                |               |              |
| SSB-SEX-sex |            |       |                |               |              |
| M           |            |       |                |               |              |
| L50-cm      |            |       |                |               |              |

| Parameter              | Value  | Units | Reference points |
|------------------------|--------|-------|------------------|
| SSBlim-MT (SSB)        | 430000 | MT    |                  |
| SSBpa-MT (SSB)         | 600000 | MT    |                  |
| $SSB_{2007}/SSB_{lim}$ | 1.057  |       |                  |

| Time series minima and maxima |         |         |       |         |
|-------------------------------|---------|---------|-------|---------|
|                               | SSB     | R       | F     | TB      |
| Minimum year                  | 1983    | 1983    | 1983  | 1983    |
| Maximum year                  | 2007    | 2006    | 2007  | 2007    |
| Time series minimum           | 169965  | 77203   | 0.21  | 549532  |
| Time series maximum           | 1735847 | 1935600 | 0.969 | 5435685 |
| Units                         | MT      | E03     | 1/T   | MT      |



# Assessment of North Sea common european sole (*Solea vulgaris*)

Assessment ID:WGNSSK-SOLENS-1956-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/395>

Area ID: multinational-ICES-IV

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1956-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

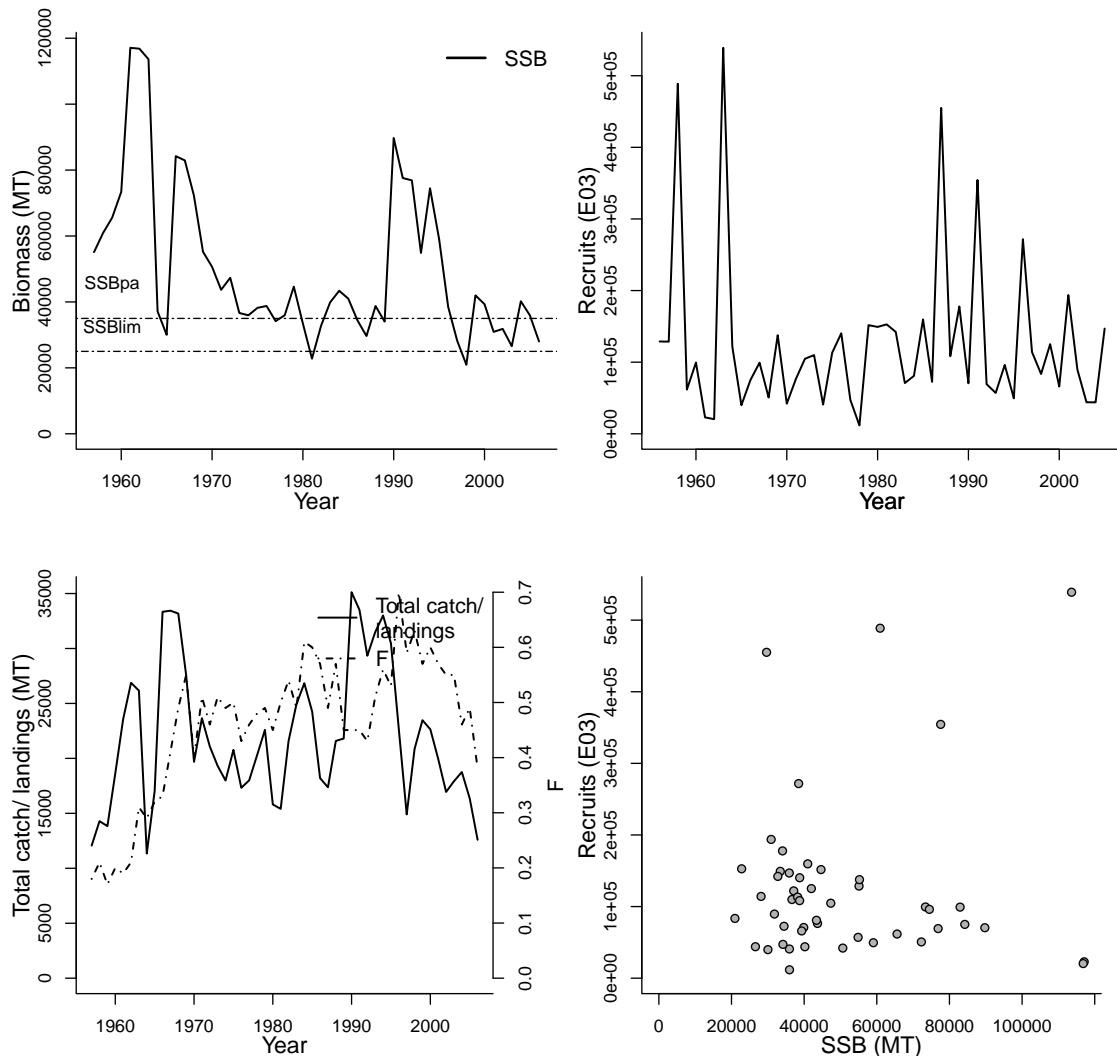
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| Parameter   | Value | Units |
|-------------|-------|-------|
| A50-yr      | 3     | yr    |
| SSB-AGE-yr  | 3+    | yr    |
| REC-AGE-yr  | 1     | yr    |
| M-1/T       | 0.1   | 1/T   |
| F-AGE-yr-yr | 2-6   | yr-yr |
| TB-AGE-yr   | 1+    | yr    |
| SSB-SEX-sex |       |       |
| M           |       |       |
| L50-cm      |       |       |

| Reference points                        |       |       |
|---|-------|-------|
| Parameter                               | Value | Units |
| SSBlim-MT (SSB)                         | 25000 | MT    |
| SSBpa-MT (SSB)                          | 35000 | MT    |
| Fpa-1/T (F)                             | 0.4   | 1/T   |
| F0.1-1/T                                | 0.119 | 1/T   |
| Fmax-1/T                                | 0.51  | 1/T   |
| SSB <sub>2006</sub> /SSB <sub>lim</sub> | 1.120 |       |

| Time series minima and maxima |        |        |      |    |       |
|-------------------------------|--------|--------|------|----|-------|
|                               | SSB    | R      | F    | TB | Catch |
| Minimum year                  | 1957   | 1956   | 1957 |    | 1957  |
| Maximum year                  | 2006   | 2005   | 2006 |    | 2006  |
| Time series minimum           | 20945  | 11727  | 0.17 |    | 11342 |
| Time series maximum           | 117094 | 538987 | 0.7  |    | 35120 |
| Units                         | MT     | E03    | 1/T  |    | MT    |



# Assessment of Eastern English Channel common european sole (*Solea vulgaris*)

Assessment ID:WGNSSK-SOLEVIIId-1981-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/396>

Area ID: multinational-ICES-VIIId

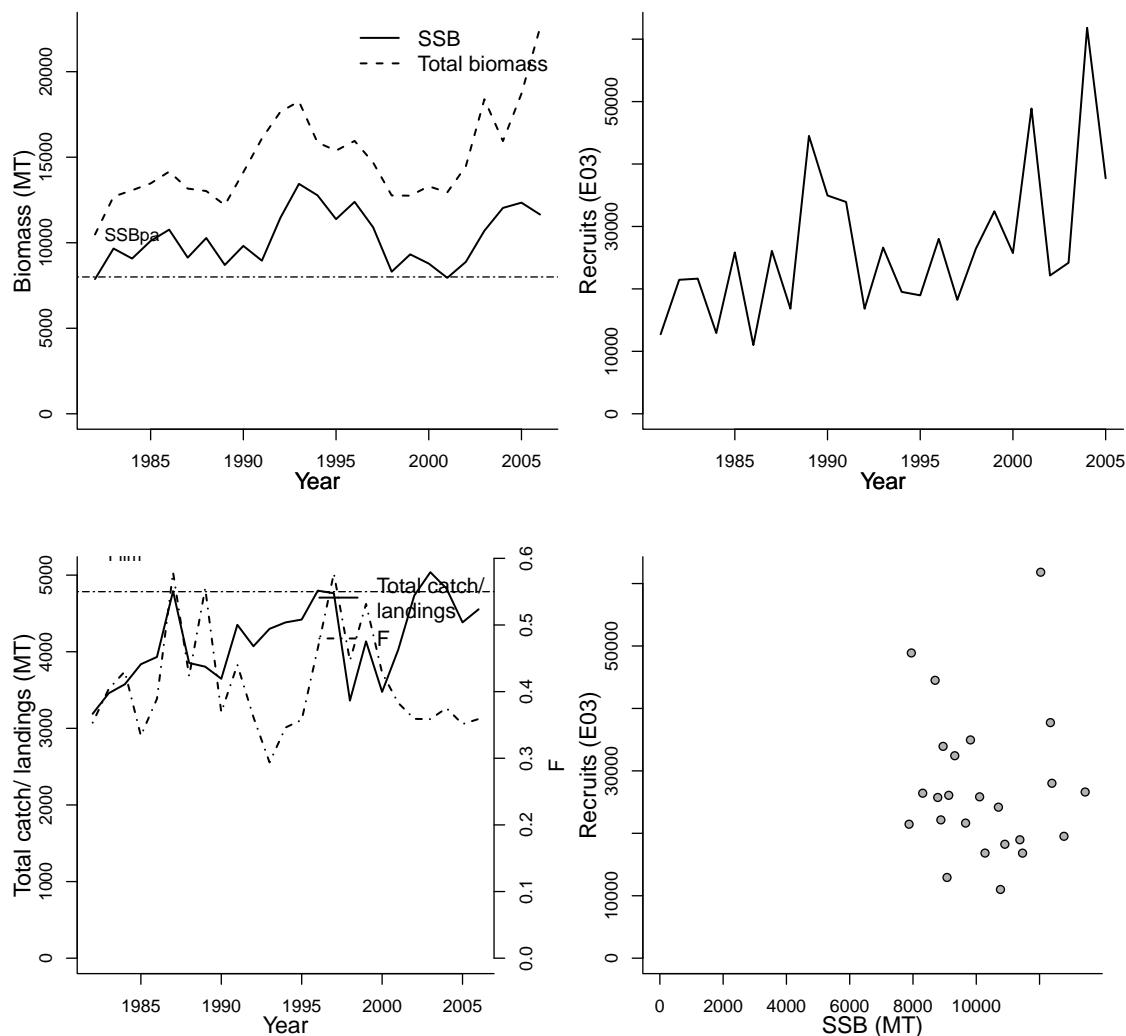
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1981-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-13  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |       |       | secondary LME      |       | tertiary LME |  |
|--------------------------|-------|-------|--------------------|-------|--------------|--|
| 24 - Celtic-Biscay Shelf |       |       | na                 |       | na           |  |
| Parameter                | Value | Units | Reference points   |       |              |  |
| A50-yr                   | 3     | yr    | Parameter          | Value | Units        |  |
| SSB-AGE-yr               | 3+    | yr    | SSBpa-MT (SSB)     | 8000  | MT           |  |
| REC-AGE-yr               | 1     | yr    | Fpa-1/T (F)        | 0.4   | 1/T          |  |
| TB-AGE-yr                | 1+    | yr    | Flim-1/T (F)       | 0.55  | 1/T          |  |
| M-1/T                    | 0.1   | 1/T   | F0.1-1/T           | 0.13  | 1/T          |  |
| F-AGE-yr-yr              | 3-8   | yr-yr | Fmax-1/T           | 0.3   | 1/T          |  |
| SSB-SEX-sex              |       |       | $F_{2006}/F_{lim}$ | 0.653 |              |  |
| M                        |       |       |                    |       |              |  |
| L50-cm                   |       |       |                    |       |              |  |

| Time series minima and maxima |       |       |        |       |       |
|-------------------------------|-------|-------|--------|-------|-------|
|                               | SSB   | R     | F      | TB    | Catch |
| Minimum year                  | 1982  | 1981  | 1982   | 1982  | 1982  |
| Maximum year                  | 2006  | 2005  | 2006   | 2006  | 2006  |
| Time series minimum           | 7876  | 11007 | 0.2938 | 10484 | 3190  |
| Time series maximum           | 13442 | 61817 | 0.5792 | 22566 | 5038  |
| Units                         | MT    | E03   | 1/T    | MT    | MT    |



# Assessment of IIIa, VIId and North Sea whiting

## *(Merlangius merlangus)*

Assessment ID: WGNSSK-WHITNS-VIIId-IIIa-1979-2006-MINTO

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/397>

Area ID: multinational-ICES-IIIa-IV-VIIId

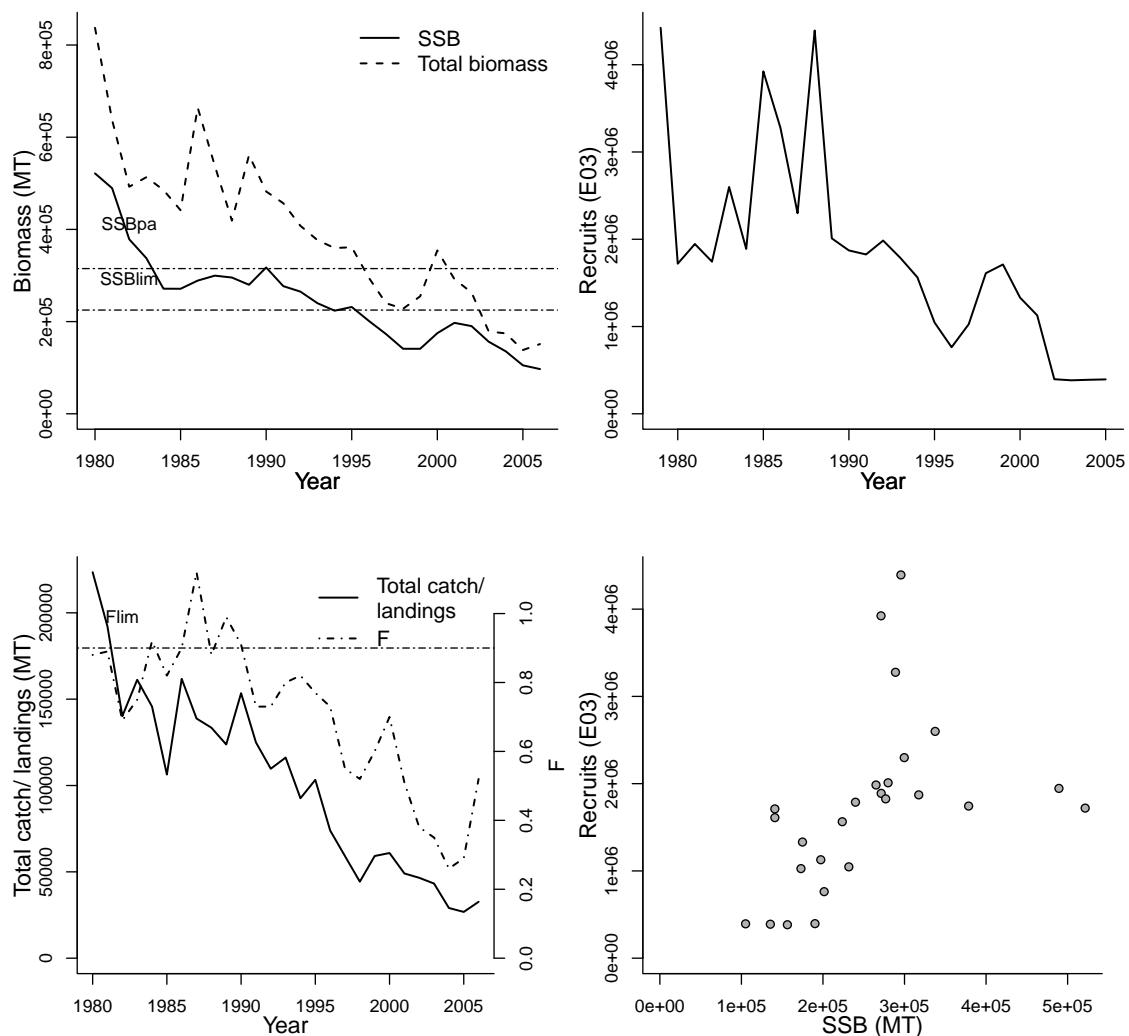
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anon  |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1979-2006   |
| Document           | ICES-WGNSSK-2007.pdf (pdf in database)  |
| Recorder           | MINTO   |
| Date entered       | 2008-04-14  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-06-10  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME    |              |       | secondary LME            |   |                  | tertiary LME |       |       |
|----------------|--------------|-------|--------------------------|---|------------------|--------------|-------|-------|
| 22 - North Sea |              |       | 24 - Celtic-Biscay Shelf |   |                  | na           |       |       |
| Parameter      | Value        | Units |                          | Parameter                               | Reference points |              | Value | Units |
| A50-yr         | 1            | yr    |                          | SSBlim-MT (SSB)                         | 225000           | MT           |       |       |
| SSB-AGE-yr     | 1+           | yr    |                          | SSBpa-MT (SSB)                          | 315000           | MT           |       |       |
| REC-AGE-yr     | 1            | yr    |                          | Fpa-1/T (F)                             | 0.65             | 1/T          |       |       |
| TB-AGE-yr      | 1+           | yr    |                          | F0.1-1/T                                | 0.1              | 1/T          |       |       |
| M-1/T          | Age specific | 1/T   |                          | Fmax-1/T                                | 0.19             | 1/T          |       |       |
| F-AGE-yr-yr    | 2-6          | yr-yr |                          | Flim-1/T (F)                            | 0.9              | 1/T          |       |       |
| SSB-SEX-sex    |              |       |                          | SSB <sub>2006</sub> /SSB <sub>lim</sub> | 0.431            |              |       |       |
| M              |              |       |                          | F <sub>2006</sub> /F <sub>lim</sub>     | 0.578            |              |       |       |
| L50-cm         |              |       |                          |   |                  |              |       |       |

| Time series minima and maxima |        |         |      |        |
|-------------------------------|--------|---------|------|--------|
|                               | SSB    | R       | F    | TB     |
| Minimum year                  | 1980   | 1979    | 1980 | 1980   |
| Maximum year                  | 2006   | 2005    | 2006 | 2006   |
| Time series minimum           | 96967  | 383532  | 0.26 | 138290 |
| Time series maximum           | 521533 | 4423048 | 1.12 | 837376 |
| Units                         | MT     | E03     | 1/T  | MT     |



# Assessment of ICES VIIb-k haddock

## (*Melanogrammus aeglefinus*)

Assessment ID:WGSSDS-HADVIIb-k-1993-2006-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/46>

Area ID: multinational-ICES-VIIb-k

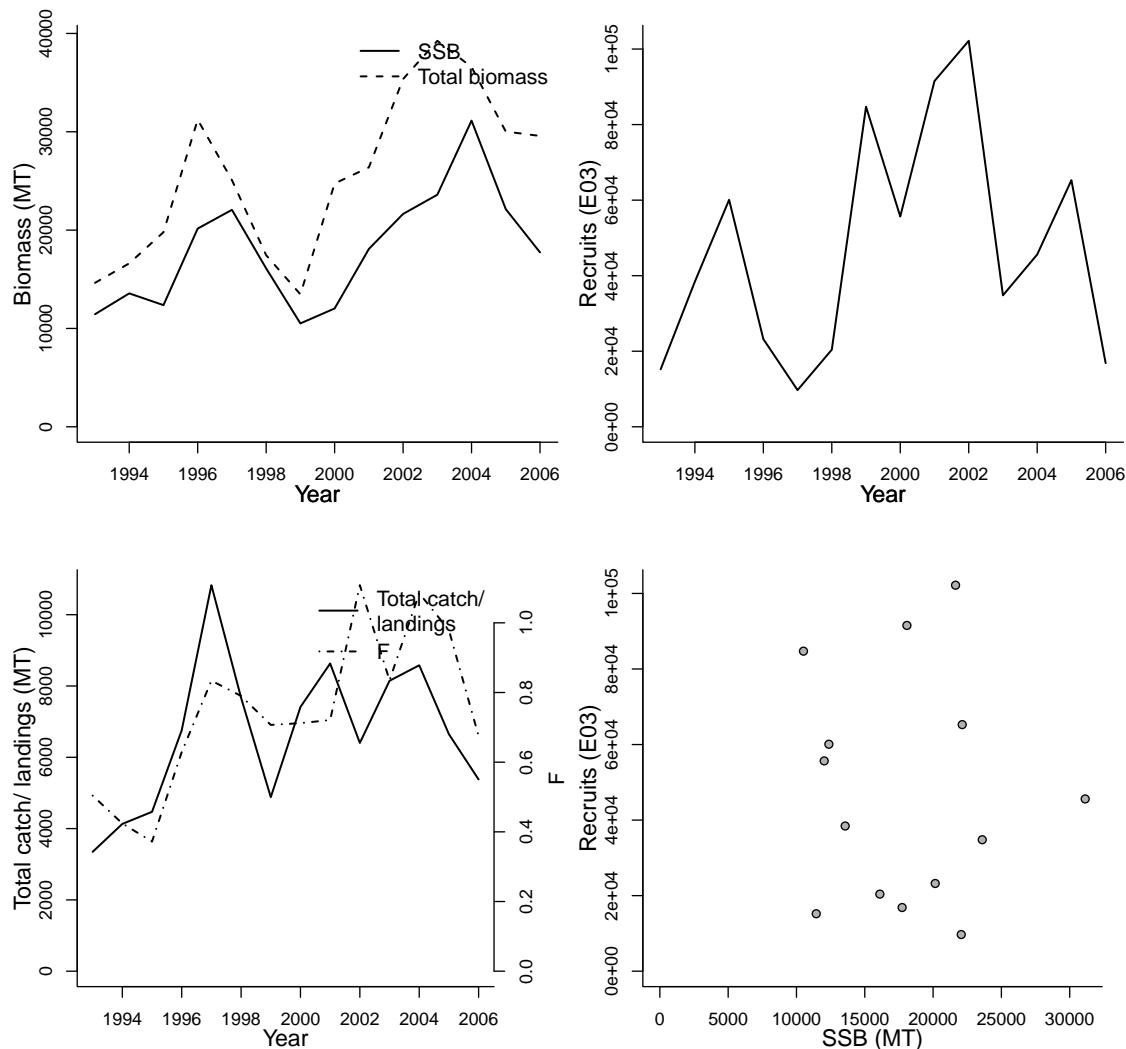
### General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1993-2006   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-24  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |        | secondary LME |                  | tertiary LME |       |
|--------------------------|--------|---------------|------------------|--------------|-------|
| 24 - Celtic-Biscay Shelf |        | na            |                  | na           |       |
| Parameter                | Value  | Units         |                  |              |       |
| SSB-AGE-yr               | 2      | yr            |                  |              |       |
| REC-AGE-yr               | 0      | yr            |                  |              |       |
| F-AGE-yr-yr              | 2 to 5 | yr-yr         |                  |              |       |
| TB-AGE-yr                | 0+     | yr            | Reference points |              |       |
| A50-yr                   | 2      | yr            | Parameter        | Value        | Units |
| M-1/T                    | 0.2    | 1/T           |                  |              |       |
| SSB-SEX-sex              |        |               |                  |              |       |
| M                        |        |               |                  |              |       |
| L50-cm                   |        |               |                  |              |       |

| Time series minima and maxima |       |        |       |       |       |
|-------------------------------|-------|--------|-------|-------|-------|
|                               | SSB   | R      | F     | TB    | Catch |
| Minimum year                  | 1993  | 1993   | 1993  | 1993  | 1993  |
| Maximum year                  | 2006  | 2006   | 2006  | 2006  | 2006  |
| Time series minimum           | 10512 | 9702   | 0.372 | 13468 | 3348  |
| Time series maximum           | 31133 | 102180 | 1.108 | 39251 | 10827 |
| Units                         | MT    | E03    | 1/T   | MT    | MT    |



# Assessment of Celtic Sea european plaice (*Pleuronectes platessa*)

Assessment ID:WGSSDS-PLAICCELT-1976-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/51>

Area ID: multinational-ICES-VIIIf-g

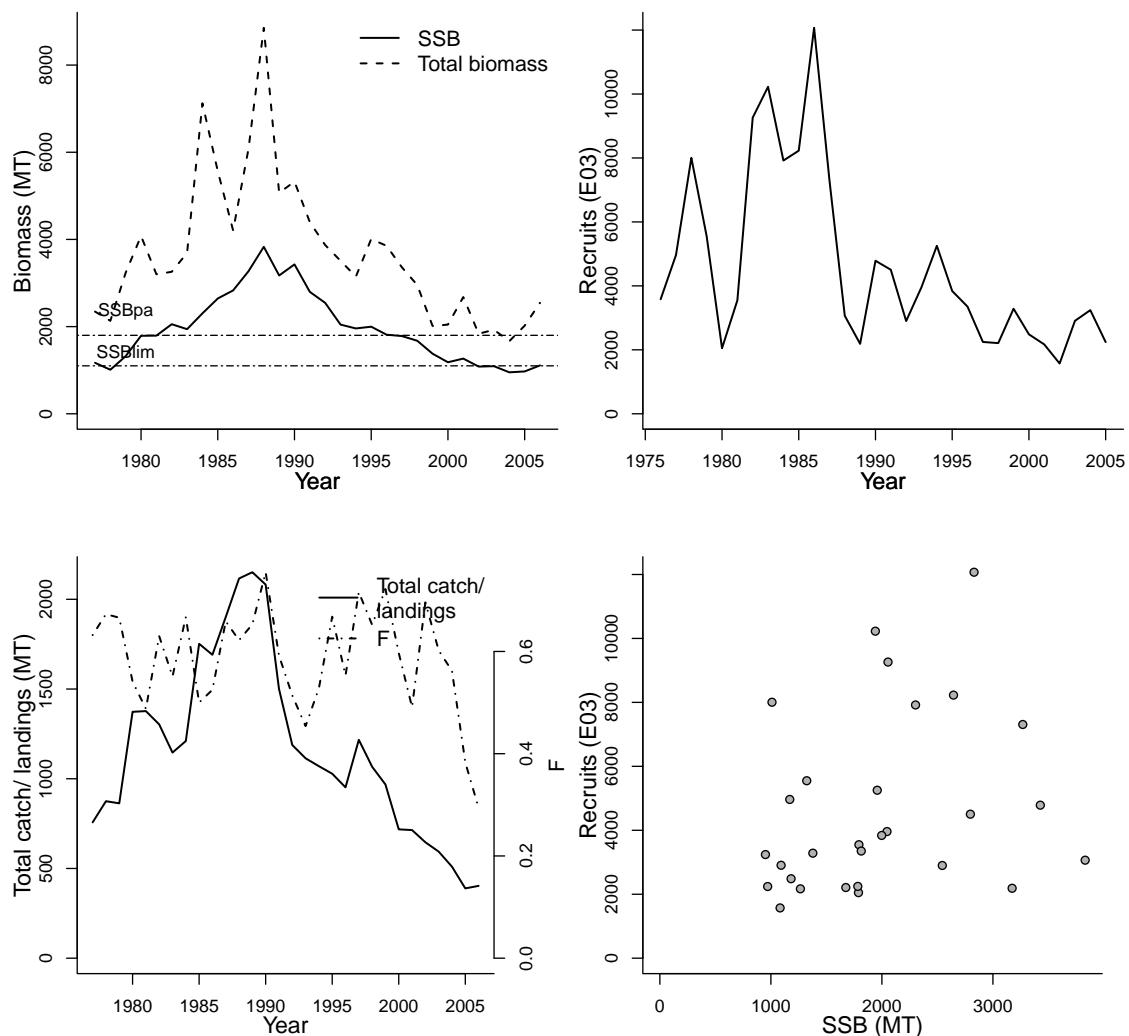
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1976-2006   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-22  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME                                  |
|--------------------------|-----------|---------------|---|
| 24 - Celtic-Biscay Shelf |           | na            | na  |
| Parameter                | Value     | Units         |   |
| SSB-AGE-yr               | AVAILABLE | yr            |   |
| REC-AGE-yr               | 1         | yr            | Reference points                              |
| F-AGE-yr-yr              | 3 to 6    | yr-yr         | Parameter                                     |
| TB-AGE-yr                | 1+        | yr            | Value   |
| A50-yr                   | AVAILABLE | yr            | Units   |
| M-1/T                    | 0.12      | 1/T           | SSBlim-MT (SSB) 1100 MT                       |
| SSB-SEX-sex              |           |               | SSBpa-MT (SSB) 1800 MT                        |
| M                        |           |               | SSB <sub>2006</sub> /SSB <sub>lim</sub> 1.009 |
| L50-cm                   |           |               |   |

| Time series minima and maxima |      |       |       |      |       |
|-------------------------------|------|-------|-------|------|-------|
|                               | SSB  | R     | F     | TB   | Catch |
| Minimum year                  | 1977 | 1976  | 1977  | 1977 | 1977  |
| Maximum year                  | 2006 | 2005  | 2006  | 2006 | 2006  |
| Time series minimum           | 951  | 1572  | 0.294 | 1666 | 389   |
| Time series maximum           | 3831 | 12071 | 0.755 | 8855 | 2151  |
| Units                         | MT   | E03   | 1/T   | MT   | MT    |



# Assessment of Western English Channel european plaice (*Pleuronectes platessa*)

Assessment ID:WGSSDS-PLAICECHW-1975-2006-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/52>

Area ID: multinational-ICES-VIIe

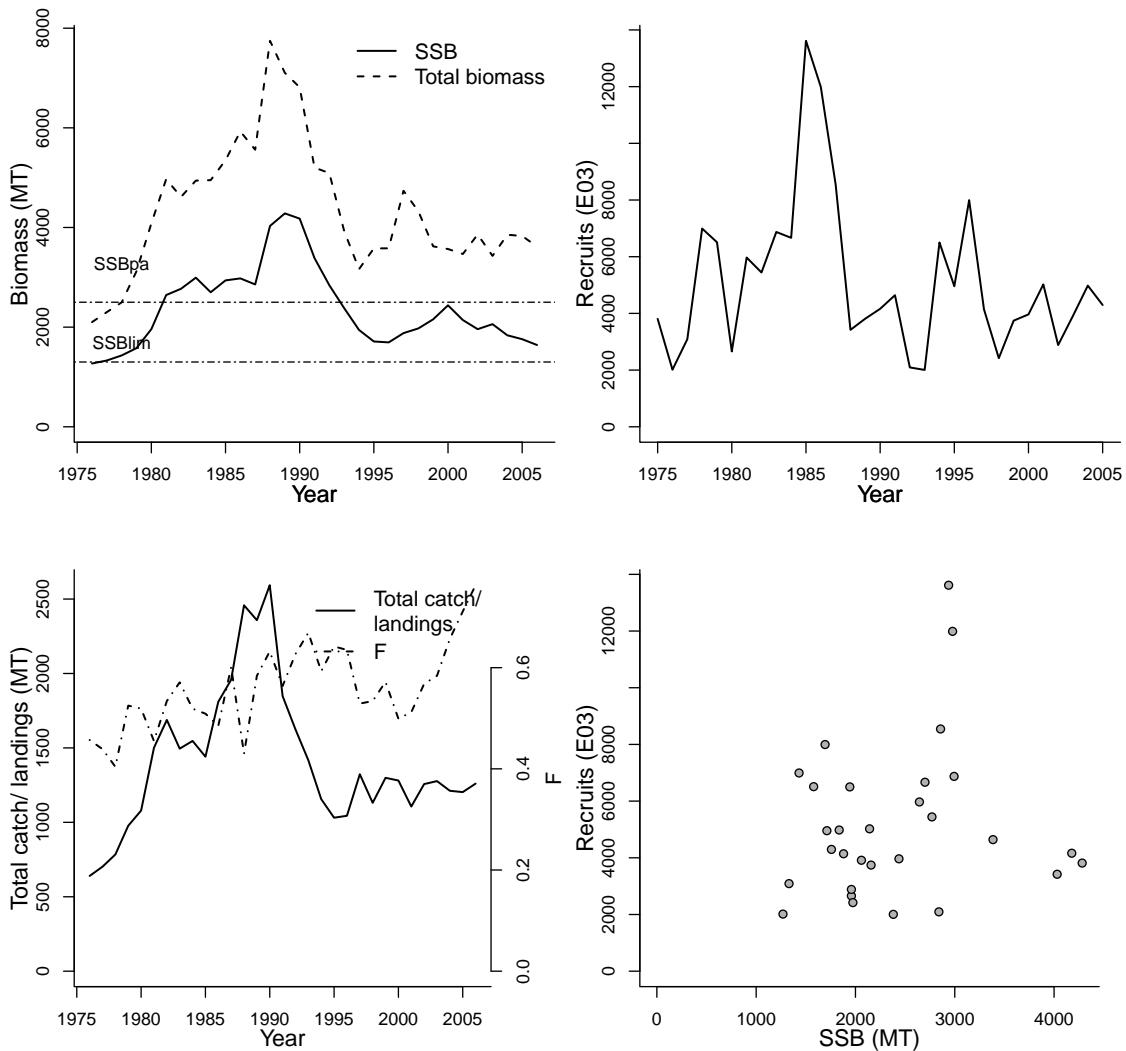
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1975-2006   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-28  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME     |
|--------------------------|-----------|---------------|------------------|
| 24 - Celtic-Biscay Shelf |           | na            | na               |
| Parameter                | Value     | Units         |                  |
| SSB-AGE-yr               | AVAILABLE | yr            |                  |
| REC-AGE-yr               | 1         | yr            |                  |
| F-AGE-yr-yr              | 3 to 7    | yr-yr         | Reference points |
| TB-AGE-yr                | 1+        | yr            | Parameter        |
| A50-yr                   | AVAILABLE | yr            | Value            |
| M-1/T                    | 0.12      | 1/T           | Units            |
| SSB-SEX-sex              |           |               |                  |
| M                        |           |               |                  |
| L50-cm                   |           |               |                  |

| Time series minima and maxima |      |       |       |      |       |
|-------------------------------|------|-------|-------|------|-------|
|                               | SSB  | R     | F     | TB   | Catch |
| Minimum year                  | 1976 | 1975  | 1976  | 1976 | 1976  |
| Maximum year                  | 2006 | 2005  | 2006  | 2006 | 2006  |
| Time series minimum           | 1270 | 2006  | 0.404 | 2101 | 640   |
| Time series maximum           | 4283 | 13617 | 0.763 | 7747 | 2593  |
| Units                         | MT   | E03   | 1/T   | MT   | MT    |



# Assessment of Celtic Sea common european sole (*Solea vulgaris*)

Assessment ID:WGSSDS-SOLECS-1970-2006-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/55>

Area ID: multinational-ICES-VIIIf-g

## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1970-2006   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-23  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29  |

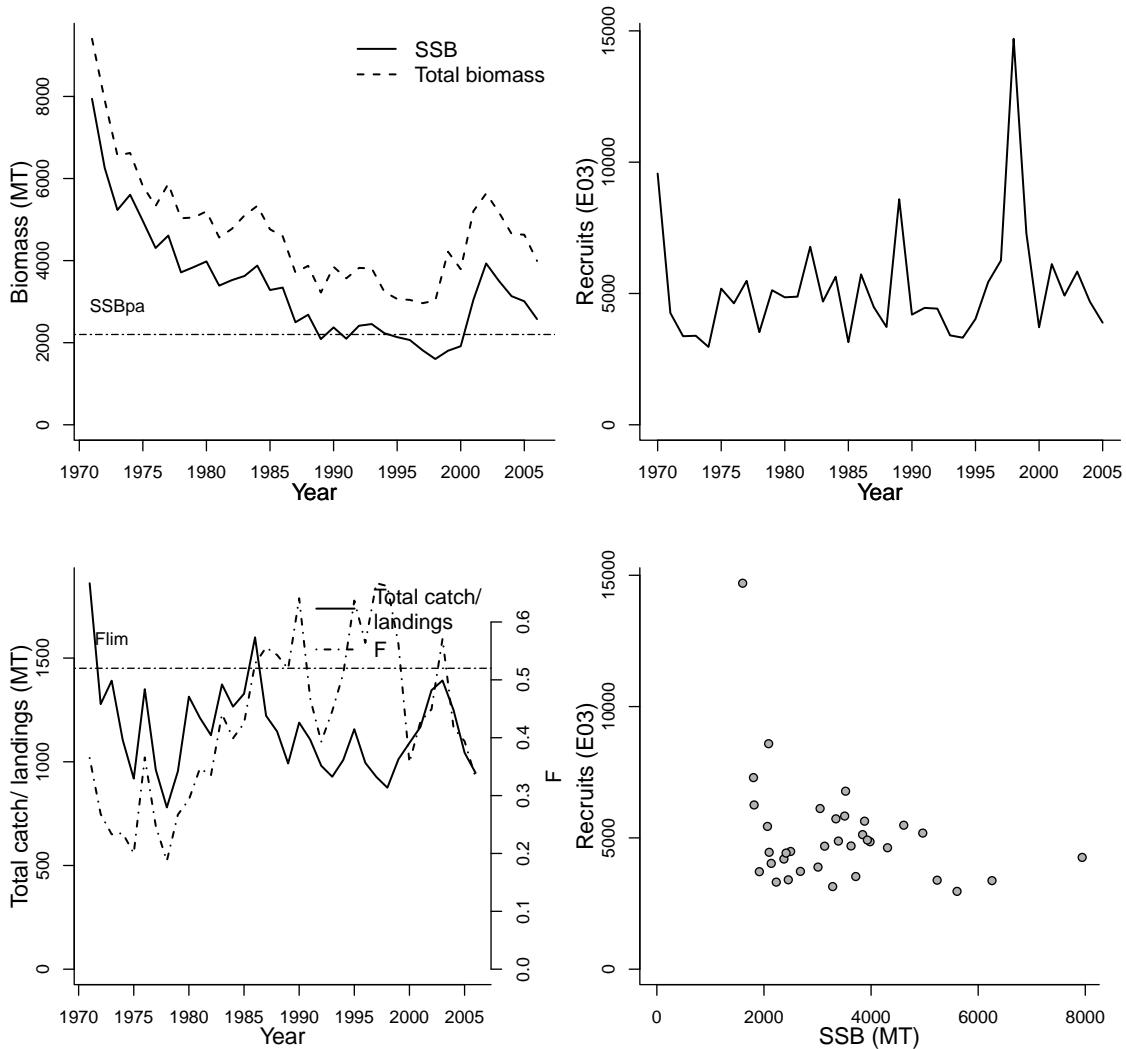
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME     |
|--------------------------|-----------|---------------|------------------|
| 24 - Celtic-Biscay Shelf |           | na            | na               |
| Parameter                | Value     | Units         |                  |
| SSB-AGE-yr               | AVAILABLE | yr            |                  |
| REC-AGE-yr               | 1         | yr            |                  |
| F-AGE-yr-yr              | 4 to 8    | yr-yr         | Reference points |
| TB-AGE-yr                | 1+        | yr            | Parameter        |
| A50-yr                   | AVAILABLE | yr            | Value            |
| M-1/T                    | 0.1       | 1/T           | Units            |
| SSB-SEX-sex              |           |               |                  |
| M                        |           |               |                  |
| L50-cm                   |           |               |                  |

| Parameter          | Value | Units | Reference points |
|--------------------|-------|-------|------------------|
| Flim-1/T (F)       | 0.52  | 1/T   | Parameter        |
| Fpa-1/T (F)        | 0.37  | 1/T   | Value            |
| SSBpa-MT (SSB)     | 2200  | MT    | Units            |
| $F_{2006}/F_{lim}$ | 0.637 |       |                  |

| Time series minima and maxima |      |       |       |      |       |
|-------------------------------|------|-------|-------|------|-------|
|                               | SSB  | R     | F     | TB   | Catch |
| Minimum year                  | 1971 | 1970  | 1971  | 1971 | 1971  |
| Maximum year                  | 2006 | 2005  | 2006  | 2006 | 2006  |
| Time series minimum           | 1602 | 2964  | 0.187 | 2963 | 780   |
| Time series maximum           | 7942 | 14698 | 0.667 | 9404 | 1861  |
| Units                         | MT   | E03   | 1/T   | MT   | MT    |



# Assessment of Western English Channel common european sole (*Solea vulgaris*)

Assessment ID:WGSSDS-SOLEVIIe-1968-2006-JENNINGS

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/78>

Area ID: multinational-ICES-VIIe

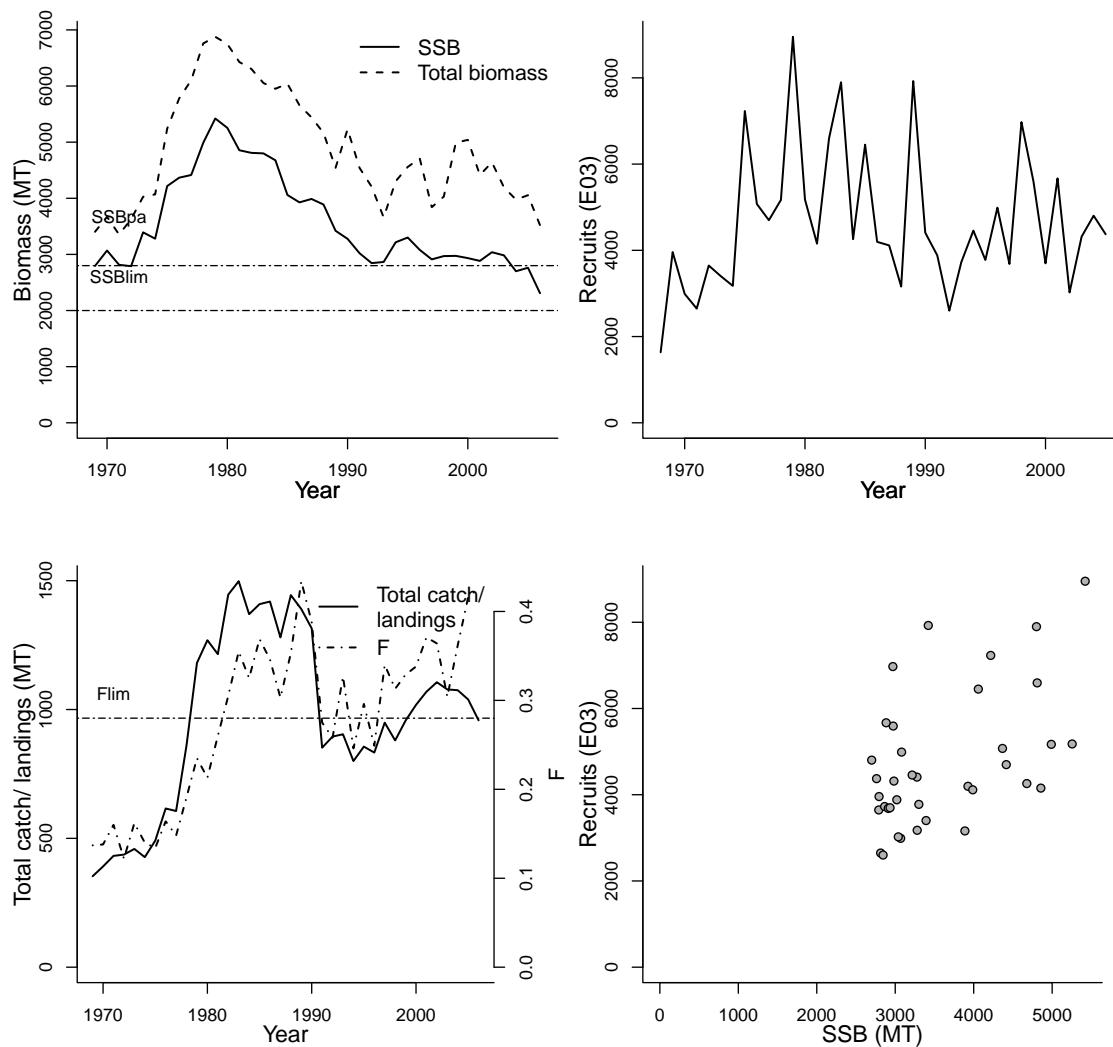
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1968-2006   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-25  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME                 |
|--------------------------|-----------|---------------|------------------------------|
| 24 - Celtic-Biscay Shelf |           | na            | na                           |
| Parameter                | Value     | Units         | Reference points             |
| SSB-AGE-yr               | AVAILABLE | yr            | Parameter                    |
| REC-AGE-yr               | 1         | yr            | Value                        |
| F-AGE-yr-yr              | 3 to 7    | yr-yr         | Units                        |
| TB-AGE-yr                | 1+        | yr            | Flim-1/T (F) 0.28 1/T        |
| A50-yr                   | AVAILABLE | yr            | Fpa-1/T (F) 0.2 1/T          |
| M-1/T                    | 0.1       | 1/T           | SSBlim-MT (SSB) 2000 MT      |
| SSB-SEX-sex              |           |               | SSBpa-MT (SSB) 2800 MT       |
| M                        |           |               | $SSB_{2006}/SSB_{lim}$ 1.154 |
| L50-cm                   |           |               | $F_{2006}/F_{lim}$ 1.521     |

| Time series minima and maxima |      |      |       |      |       |
|-------------------------------|------|------|-------|------|-------|
|                               | SSB  | R    | F     | TB   | Catch |
| Minimum year                  | 1969 | 1968 | 1969  | 1969 | 1969  |
| Maximum year                  | 2006 | 2005 | 2006  | 2006 | 2006  |
| Time series minimum           | 2308 | 1635 | 0.122 | 3354 | 353   |
| Time series maximum           | 5421 | 8952 | 0.434 | 6877 | 1498  |
| Units                         | MT   | E03  | 1/T   | MT   | MT    |



# Assessment of Celtic Sea whiting (*Merlangius merlangus*)

Assessment ID:WGSSDS-WHITVIIek-1982-2007-JENNINGS

Issue URL: <http://www.marinебiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/81>

Area ID: multinational-ICES-VIe-k

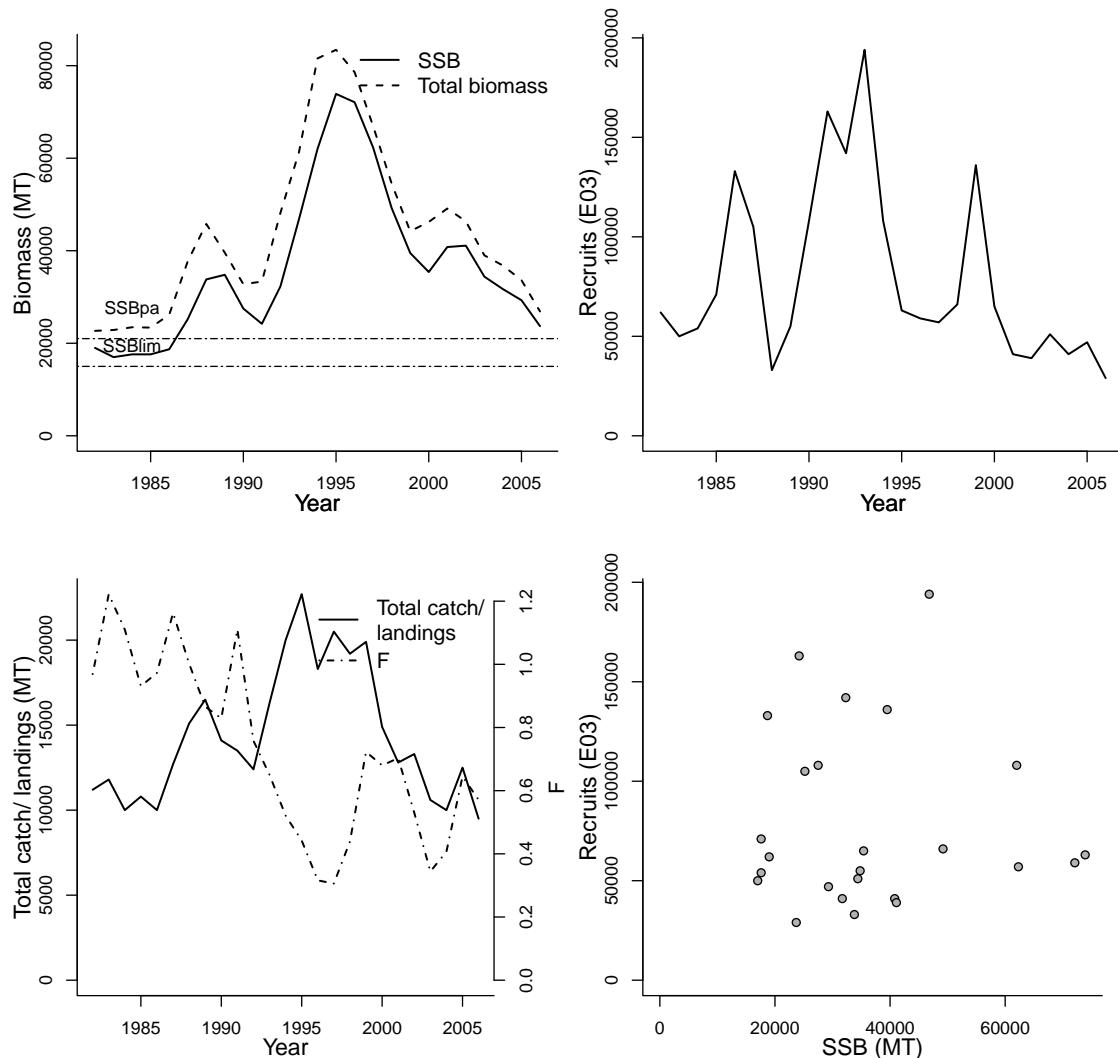
## General assessment details.

| Detail             | Value   |
|--------------------|---|
| Management body    | ICES  |
| Assessment group   | Working Group on the Assessment of Southern Shelf Demersal Stocks |
| Assessment authors | Anonymous   |
| Assessment method  | Extended Survivor Analysis  |
| Publication year   | 2007  |
| Timeseries span    | 1982-2007   |
| Document           | ICES-WGSSDS-2007.pdf (pdf in database)                            |
| Recorder           | JENNINGS  |
| Date entered       | 2008-11-27  |
| Date last loaded   | 2011-07-25  |
| QA/QC complete     | YES   |
| Date approved      | 2009-05-29  |

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

| primary LME              |           | secondary LME | tertiary LME           |
|--------------------------|-----------|---------------|------------------------|
| 24 - Celtic-Biscay Shelf |           | na            | na                     |
| Parameter                | Value     | Units         |                        |
| SSB-AGE-yr               | AVAILABLE | yr            |                        |
| REC-AGE-yr               | 0         | yr            | Reference points       |
| F-AGE-yr-yr              | 2 to 5    | yr-yr         | Parameter              |
| TB-AGE-yr                | 0+        | yr            | Value                  |
| A50-yr                   | AVAILABLE | yr            | SSBlim-MT (SSB)        |
| M-1/T                    | 0.2       | 1/T           | SSBpa-MT (SSB)         |
| SSB-SEX-sex              |           |               | $SSB_{2006}/SSB_{lim}$ |
| M                        |           |               | 1.580                  |
| L50-cm                   |           |               |                        |

| Time series minima and maxima |       |        |       |       |
|-------------------------------|-------|--------|-------|-------|
|                               | SSB   | R      | F     | TB    |
| Minimum year                  | 1982  | 1982   | 1982  | 1982  |
| Maximum year                  | 2006  | 2006   | 2006  | 2006  |
| Time series minimum           | 17000 | 29000  | 0.306 | 22680 |
| Time series maximum           | 73900 | 194000 | 1.222 | 83433 |
| Units                         | MT    | E03    | 1/T   | MT    |



**MAP KEY:****LME Numbers:**

- 1 East Baffin Sea
- 2 Gulf of Alaska
- 3 California Current
- 4 Gulf of California
- 5 Gulf of Mexico
- 6 Northwest U.S. Continental Shelf
- 7 Northeast U.S. Continental Shelf
- 8 Northeast Pacific shelf
- 9 Northeast Pacific shelf
- 10 Insular Pacific (Hawaiian Islands)
- 11 Caribbean Sea
- 12 Central American Coastal
- 13 North Atlantic
- 14 South Atlantic
- 15 South Africa
- 16 South Africa
- 17 South Africa
- 18 West Greenwich Shelf
- 19 East Brazil Shelf
- 20 East Brazil Shelf
- 21 Norwegian Shelf
- 22 Norwegian Shelf
- 23 Baltic Sea
- 24 Baltic Sea
- 25 British Coastal
- 26 British Coastal
- 27 Mediterranean Sea
- 28 Mediterranean Sea
- 29 Agulhas Current
- 30 Agulhas Current
- 31 Small Coastal Current
- 32 Red Sea
- 33 Red Sea
- 34 Gulf of Bengal
- 35 South China Sea
- 36 South China Sea
- 37 Indonesian Seas
- 38 Indonesian Seas
- 39 North Australian Shelf
- 40 Great Barrier Reef
- 41 South-Central Australian Shelf
- 42 Southwest Australian Shelf
- 43 Southwest Australian Shelf
- 44 Northwest Australian Shelf
- 45 Northwest Australian Shelf
- 46 Southwest Indian Ocean
- 47 Southwest Indian Ocean
- 48 Yellow Sea
- 49 Yellow Sea
- 50 Sea of Japan
- 51 Oyashio Current
- 52 Oyashio Current
- 53 West Kuring Gai
- 54 East Kuring Gai
- 55 East Spanish Seas
- 56 East Spanish Seas
- 57 Kara Sea
- 58 Kara Sea
- 59 Kara Sea
- 60 Kara Sea
- 61 Arctic seas
- 62 Arctic seas
- 63 Hudson Bay
- 64 Arctic Ocean

# *Large Marine Ecosystems of the World*

## and Linked Watersheds



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