

Dear Coilin,

Thank you sincerely for submitting assessments to the Myers II database. We have entered 37 of your assessments, and now wish to quality assure/quality control (QA/QC) these data for a release version of the database. Please follow the steps below to ensure that your assessments have been dutifully represented:

QA/QC steps

For each assessment:

1. Ensure that the General assessment details are correct.
2. Ensure that the units for all Biometrics and Time Series shown are correct. To aid in this, we have included the minimum, maximum, first year, and last year of the spawning stock biomass, recruitment, fishing mortality, total biomass, and catch (where provided).
3. If there are blank values in the Biometrics table, please include these in your response (see below), where they are available. Please note that in the Biometrics table, the following abbreviations are used:
 - SSB-AGE-yr = Ages for which the spawning stock biomass is defined
 - REC-AGE = Age at recruitment
 - F-AGE-yr = Ages for which the fishing mortality is defined
 - TB-AGE-yr = Ages for which the total biomass is defined
 - M = Natural mortality
 - A50-yr = The age at 50% maturity
 - L50-cm = The length at 50% maturity
 - MORATOR-yr-yr = Moratorium years
 - LME = Large Marine Ecosystem
4. To ensure that the recruitment time series has been offset by the age at recruitment so that yearclass matches up with spawner biomass, please make sure that the difference between the last year of the recruitment and last year of the SSB time series is equal to the age at recruitment supplied (unless there is another reason, e.g. estimates unavailable).
5. Provide Large Marine Ecosystem (LME) designation(s) for your stock (unless it is a high seas stock). Please enter a primary, secondary and tertiary LME (if they exist) in the issue you submit (see below). A map of the LMEs is provided on the last page of this document.

QA/QC submission process

If you (or someone else) submitted the assessments via the RAM legacy site, please log into : <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting> and locate the issue(s) associated with your spreadsheet submission(s). Once you locate your assessment, open the associated issue and choose "Add response". At the top of this response write:

QAQC: Assessment ID (this ID is located at the top of each assessment in the current document)

If you did not submit via the RAM Legacy site, please go to the url above and click "Submit a new issue" with the title: *QAQC: Assessment ID* (located at the top of each assessment in this pdf).

If you found no issues with the QA/QC document, please type: "QA/QC correct". If you have found issues, please update the assessment spreadsheet accordingly or write the details of corrections to be made in the dialogue box. Once we have received and processed your response, the assessment will be flagged as quality controlled and the data it contains will be used for analyses.

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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

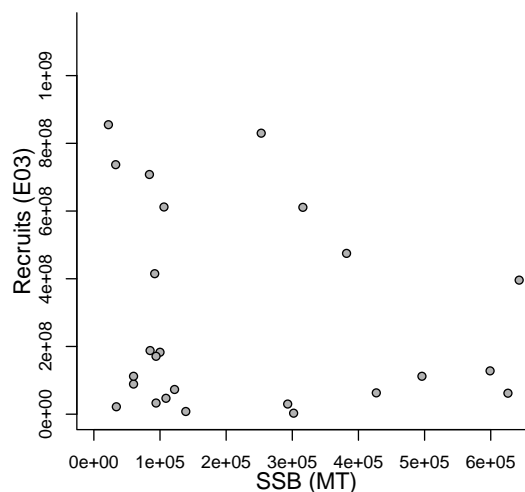
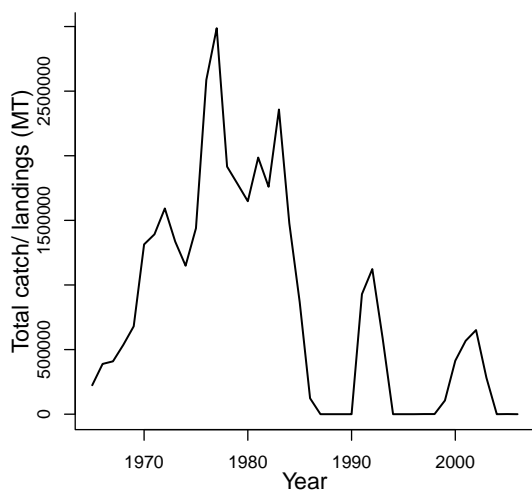
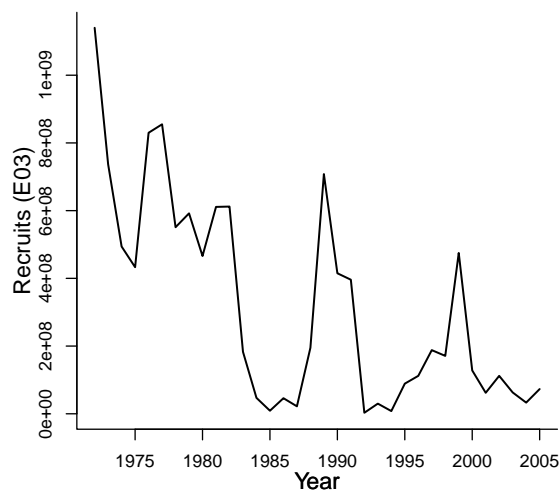
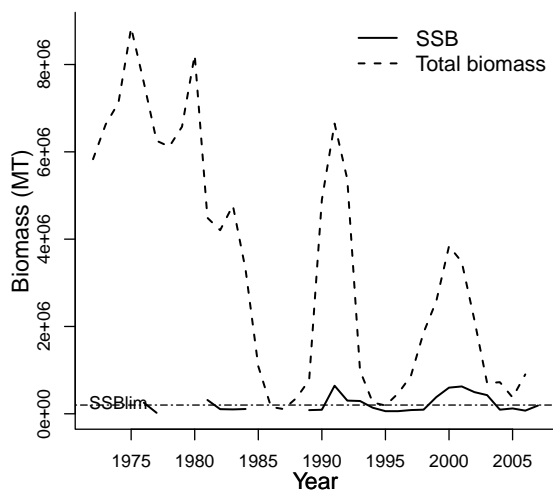
General assessment details.

| 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 | 2010-07-18 |
| 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 | primary LME | | secondary LME | | tertiary LME | |
|-------------|------------------|-------|------------------------|-----------|--------------|----|
| | 20 - Barents Sea | na | na | na | na | na |
| Parameter | Value | Units | Reference points | | | |
| SSB-AGE-yr | 2+ | yr | Parameter | Value | Units | |
| REC-AGE-yr | 1 | yr | SSBlim-MT (SSB) | 200000 | MT | |
| TB-AGE-yr | 1+ | yr | MORATOR-yr-yr | 1986-1991 | yr-yr | |
| M-1/T | AVAILABLE | 1/T | MORATOR-yr-yr | 1993-1999 | yr-yr | |
| SSB-SEX-sex | | | MORATOR-yr-yr | 2004-2006 | yr-yr | |
| F-AGE-yr | | | SSB_{2007}/SSB_{lim} | 0.945 | | |
| M | | | | | | |
| A50-yr | | | | | | |
| L50-cm | | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|------------|---|---------|---------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1973 | 1972 | | 1972 | 1965 |
| Maximum year | 2007 | 2005 | | 2006 | 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/363>

Area ID: multinational-ICES-I-II

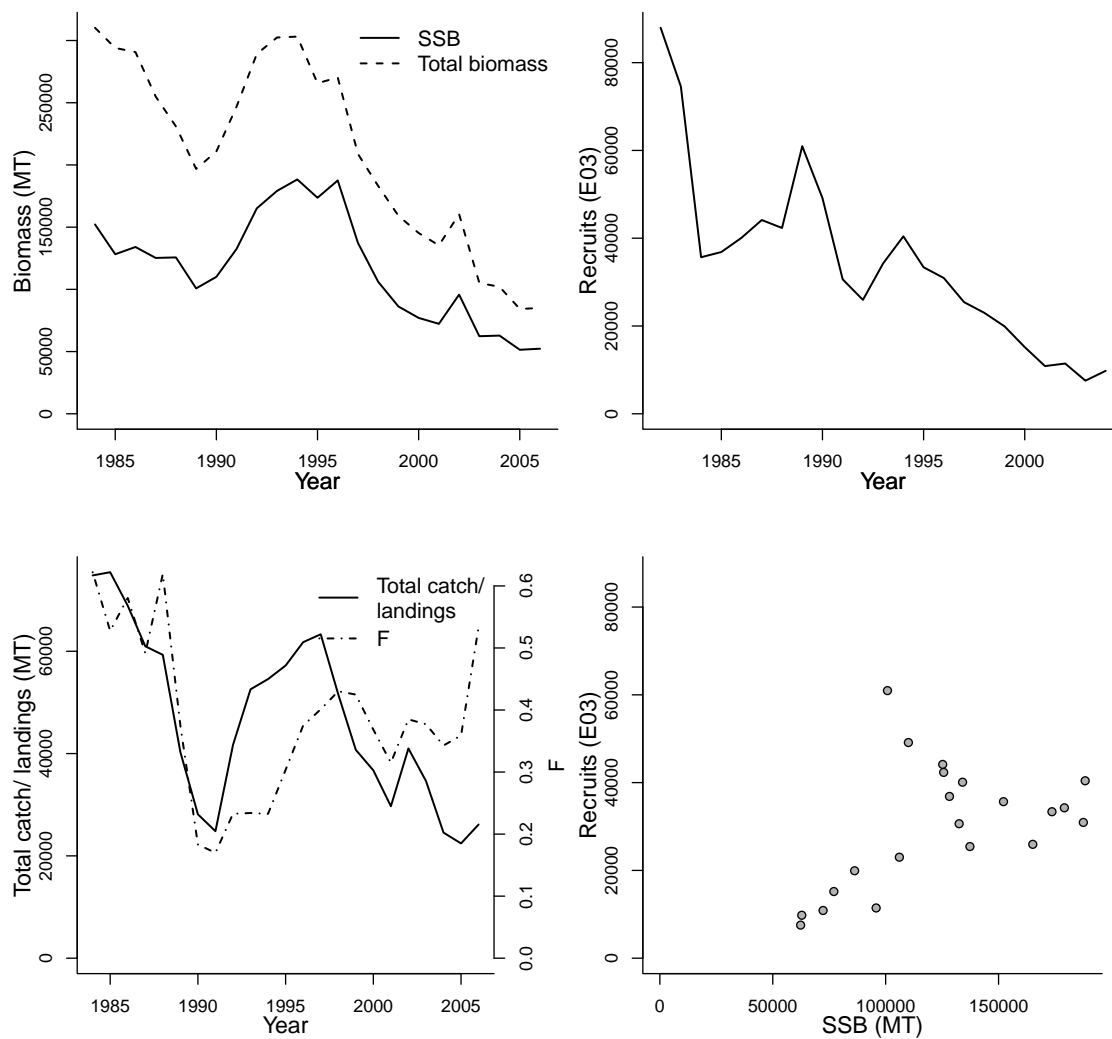
General assessment details.

| 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 | 2010-07-18 |
| 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 | | |
| 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 | | | |
| SSB-SEX-sex | | | | | |
| M | | | | | |
| L50-cm | | | | | |

| 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/364>

Area ID: multinational-ICES-I-II

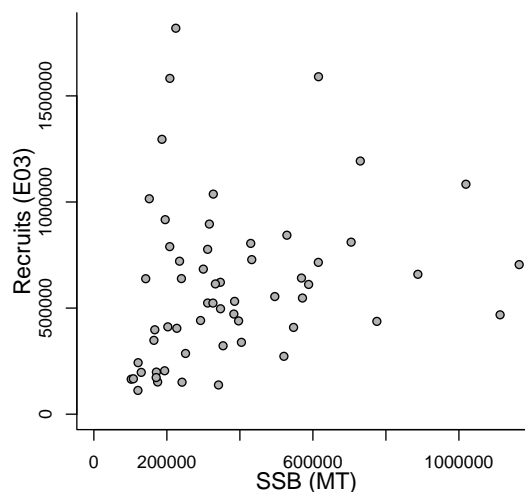
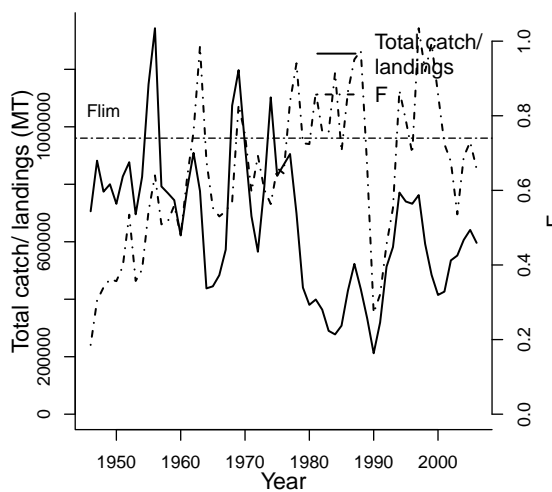
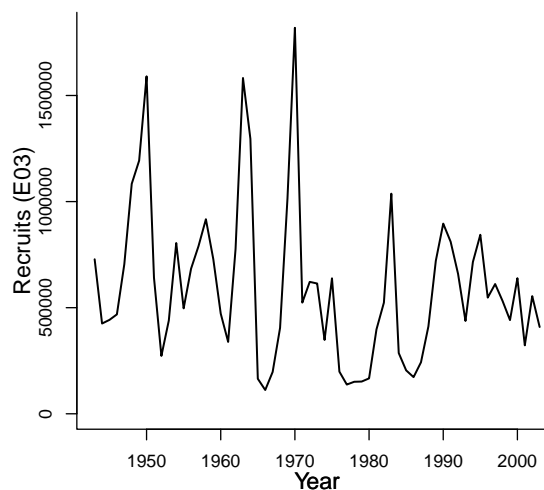
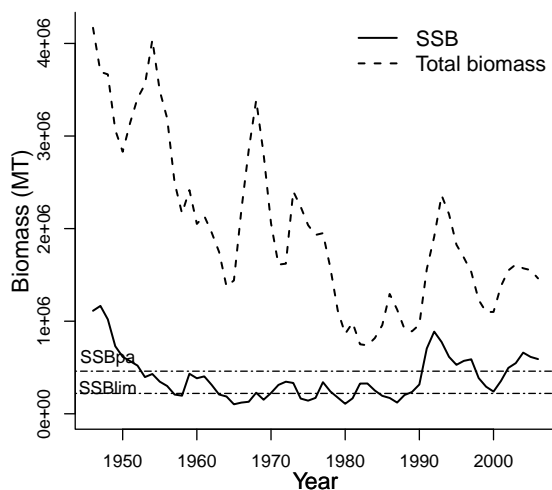
General assessment details.

| 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 | 2010-07-18 |
| 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 | Reference points | | | |
| | | | Parameter | Value | Units | |
| A50-yr | 6.5 | yr | | | | |
| SSB-AGE-yr | 3+ | yr | SSBlim-MT (SSB) | 220000 | MT | |
| SSB-SEX-sex | 0 | sex | SSBpa-MT (SSB) | 460000 | MT | |
| REC-AGE-yr | 3 | yr | F0.1-1/T | 0.15 | 1/T | |
| F-AGE-yr-yr | 5-10 | yr-yr | Flim-1/T (F) | 0.74 | 1/T | |
| M-1/T | 0.2 | 1/T | Fpa-1/T (F) | 0.4 | 1/T | |
| TB-AGE-yr | 3+ | yr | Fmax-1/T | 0.28 | 1/T | |
| M | | | SSB_{2006}/SSB_{lim} | 2.685 | | |
| L50-cm | | | F_{2006}/F_{lim} | 0.889 | | |

| Time series minima and maxima | | | | | |
|-------------------------------|---------|---------|--------|---------|---------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1946 | 1943 | 1946 | 1946 | 1946 |
| Maximum year | 2006 | 2003 | 2006 | 2006 | 2006 |
| Time series minimum | 102315 | 112039 | 0.1857 | 738675 | 212000 |
| Time series maximum | 1165059 | 1818949 | 1.0347 | 4168882 | 1343068 |
| 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/365>

Area ID: multinational-ICES-I-II

General assessment details.

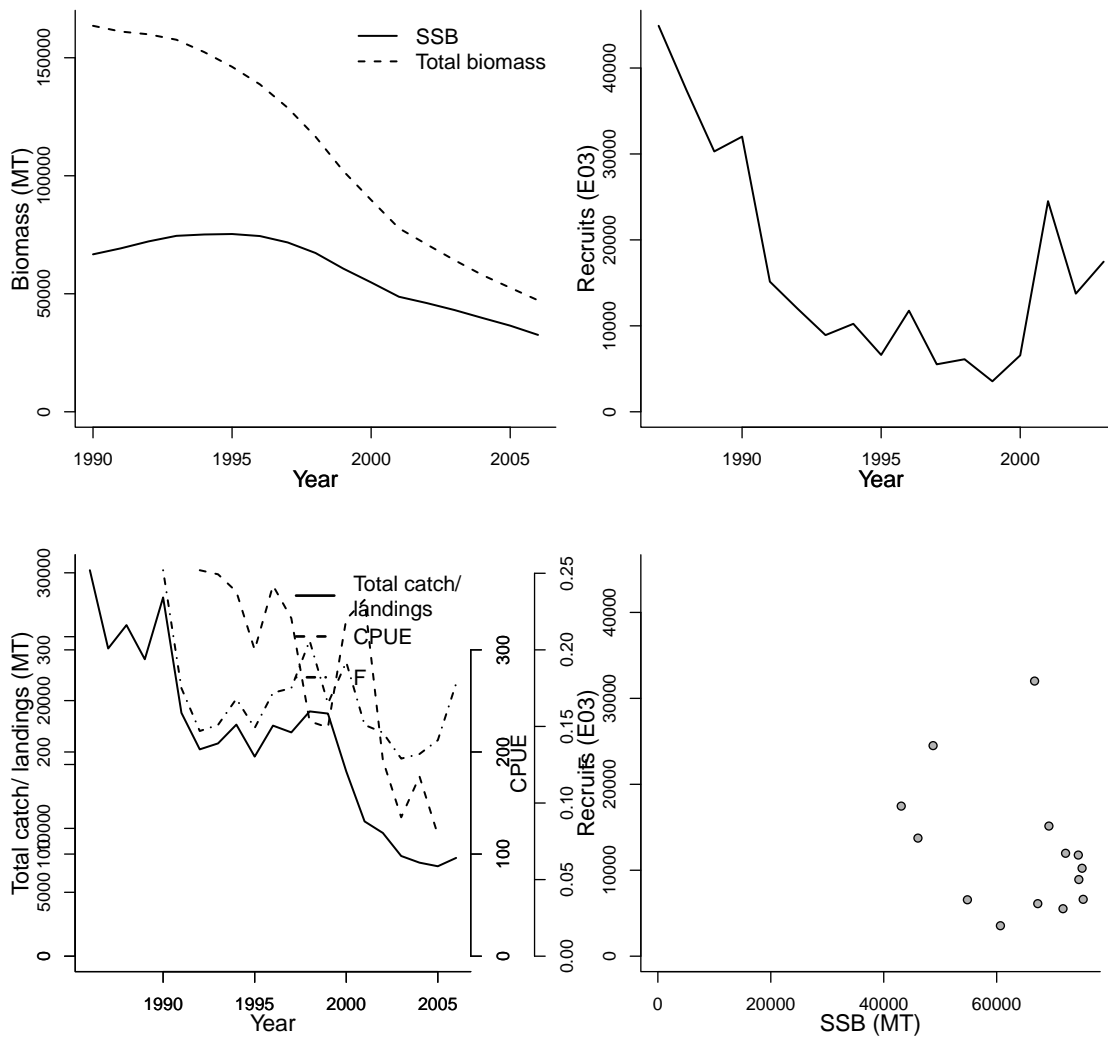
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Arctic Fisheries Working Group |
| Assessment authors | Anonymous |
| Assessment method | Globally Applicable area-Disaggregated General Ecosystem Toolbox - An ecosystem-based management tool used for assessment |
| 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 | 2010-07-18 |
| 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 | |
| A50-yr | 12 | yr | |
| REC-AGE-yr | 3 | yr | |
| SSB-AGE-yr | 4+ | yr | |
| M-1/T | 0.10 | 1/T | |
| TB-AGE-yr | 3+ | yr | |
| F-AGE-yr-yr | 12-19 | yr-yr | |
| SSB-SEX-sex | | | |
| M | | | |
| L50-cm | | | |

| Reference points | | |
|------------------|-----------|-------|
| Parameter | Value | Units |
| MORATOR-yr-yr | 2004-2007 | yr-yr |

| 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/366>

Area ID: multinational-ICES-I-II

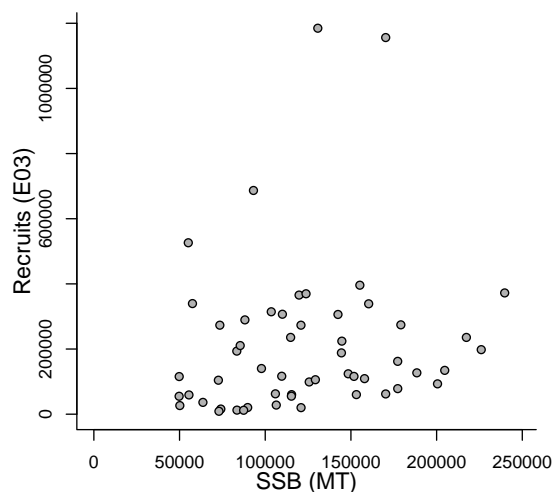
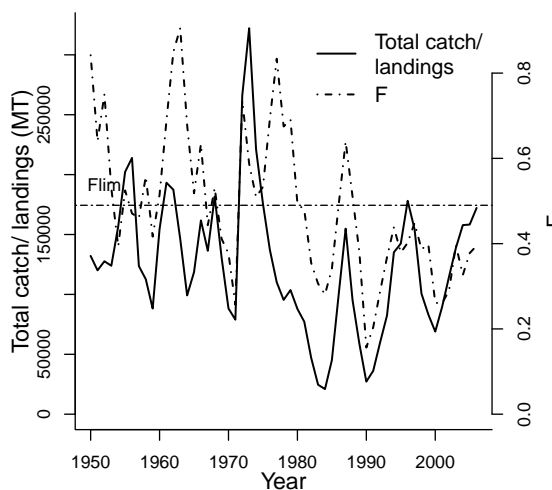
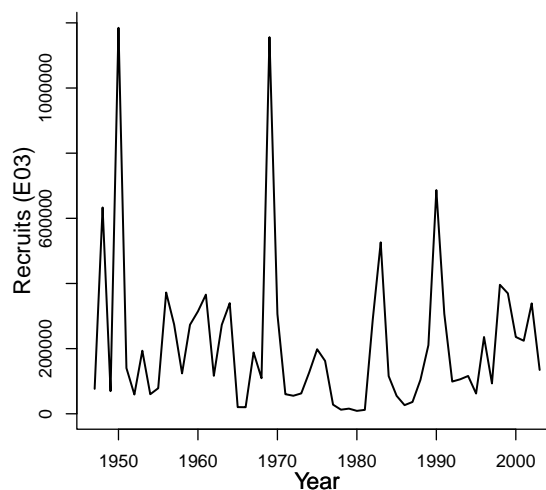
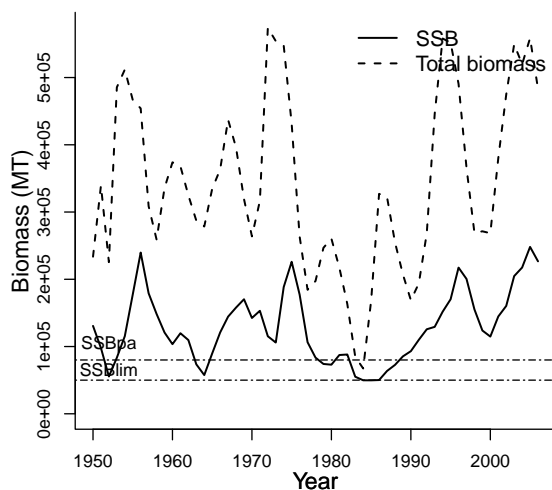
General assessment details.

| 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 | 2010-07-18 |
| 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 | |
| A50-yr | 6 | yr | Reference points |
| SSB-AGE-yr | 3+ | yr | Parameter |
| REC-AGE-yr | 3 | yr | Value |
| F-AGE-yr-yr | 4-7 | yr-yr | Units |
| M-1/T | 0.2+cod mortality | 1/T | SSBlim-MT (SSB) |
| TB-AGE-yr | 3+ | yr | SSBpa-MT (SSB) |
| SSB-SEX-sex | | | Flim-1/T (F) |
| M | | | Fpa-1/T (F) |
| L50-cm | | | SSB_{2006}/SSB_{lim} |
| | | | F_{2006}/F_{lim} |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|---------|--------|--------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1950 | 1947 | 1950 | 1950 | 1950 |
| Maximum year | 2006 | 2003 | 2006 | 2006 | 2006 |
| Time series minimum | 49753 | 8961 | 0.1562 | 67367 | 20945 |
| Time series maximum | 248181 | 1184843 | 0.9053 | 573954 | 322226 |
| Units | MT | E03 | 1/T | MT | MT |



Assessment of North-East Arctic pollock (*Pollachius virens*)

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

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

Area ID: multinational-ICES-I-II

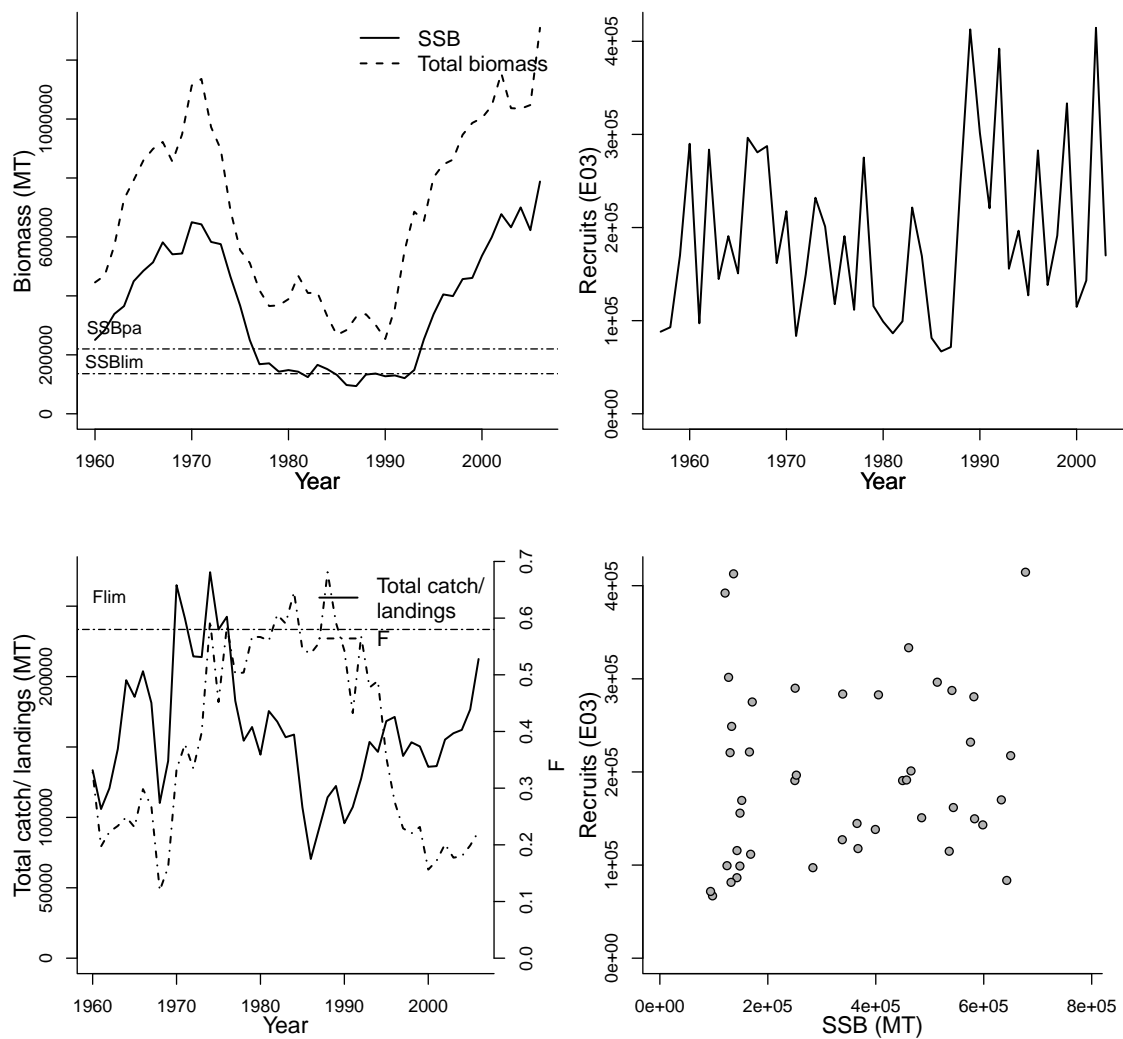
General assessment details.

| 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 | 2010-07-18 |
| 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 | Reference points | | | | | | |
| | | | | | Parameter | | Value | Units | | | |
| A50-yr | | | 5 | yr | SSBlim-MT (SSB) | | 136000 | MT | | | |
| SSB-AGE-yr | | | 4+ | yr | SSBpa-MT (SSB) | | 220000 | MT | | | |
| REC-AGE-yr | | | 3 | yr | F0.1-1/T | | 0.14 | 1/T | | | |
| F-AGE-yr-yr | | | 4-7 | yr-yr | Fmax-1/T | | 0.32 | 1/T | | | |
| M-1/T | | | 0.2 | 1/T | Flim-1/T (F) | | 0.58 | 1/T | | | |
| TB-AGE-yr | | | 3+ | yr | Fpa-1/T (F) | | 0.35 | 1/T | | | |
| SSB-SEX-sex | | | | | SSB_{2006}/SSB_{lim} | | 5.793 | | | | |
| M | | | | | F_{2006}/F_{lim} | | 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-REDDEEPI-II-1985-2006-MINTO

Issue URL: <http://www.marinebiodiversity.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 | 2010-07-18 |
| 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.

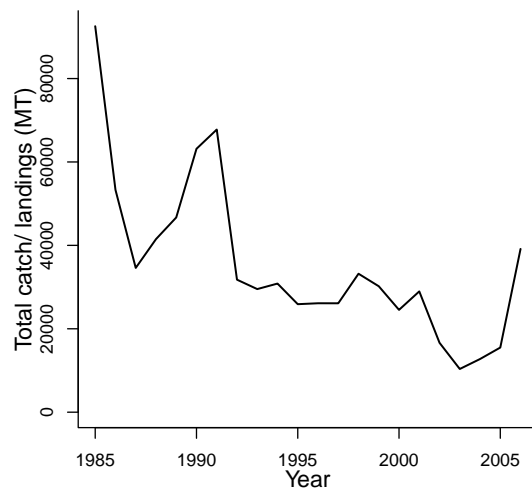
| primary LME | | secondary LME | | tertiary LME | |
|------------------|-------|--------------------|--|--------------|--|
| 20 - Barents Sea | | 21 - Norwegian Sea | | na | |
| Parameter | Value | Units | | | |
| A50-yr | 13 | yr | | | |
| REC-AGE | | | | | |
| SSB-AGE-yr | | | | | |
| SSB-SEX-sex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

Reference points
Parameter Value Units

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

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

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.

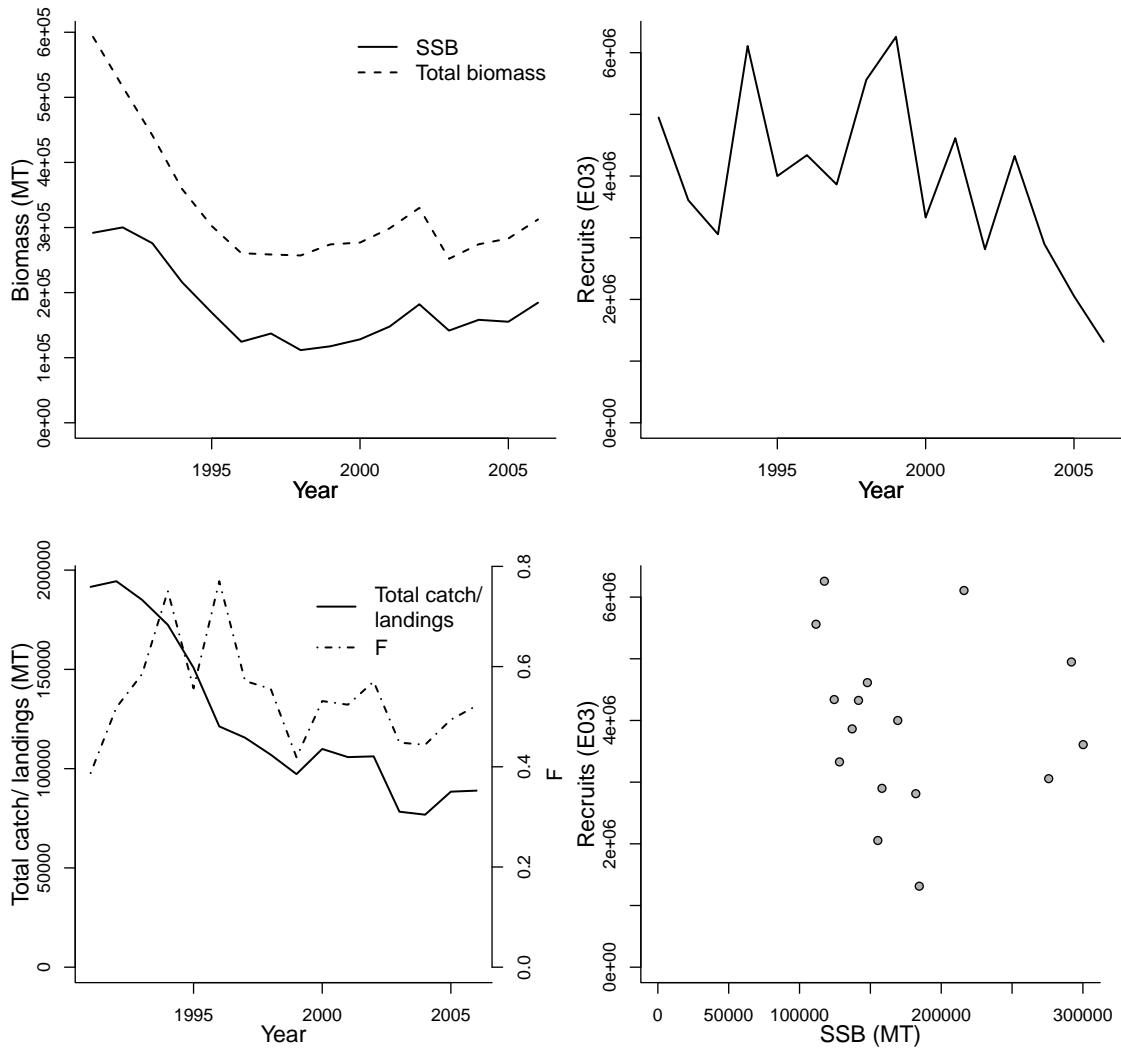
| Detail | Value |
|--------------------|--|
| Management body | ICES |
| Assessment group | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous |
| Assessment method | Integrated Catch-at-age Analysis |
| Publication year | 2007 |
| Timeseries span | 1991-2006 |
| Document | ICES-HAWG-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-15 |
| Date last loaded | 2010-07-18 |
| 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 | 23 - Baltic Sea | na |
| Parameter | Value | Units | |
| A50-yr | 2-3 | yr | |
| SSB-AGE-yr | 2+ | yr | |
| REC-AGE-yr | 0 | yr | |
| TB-AGE-yr | 0+ | yr | |
| F-AGE-yr-yr | 3-6 | yr-yr | |
| M-1/T | 0.2 for 2+ | 1/T | |
| SSB-SEX-sex | | | |
| M | | | |
| L50-cm | | | |

| Reference points | | |
|------------------|-------|-------|
| Parameter | Value | Units |
| F0.1-1/T | 0.22 | 1/T |
| Fmax-1/T | 0.53 | 1/T |

| 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 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

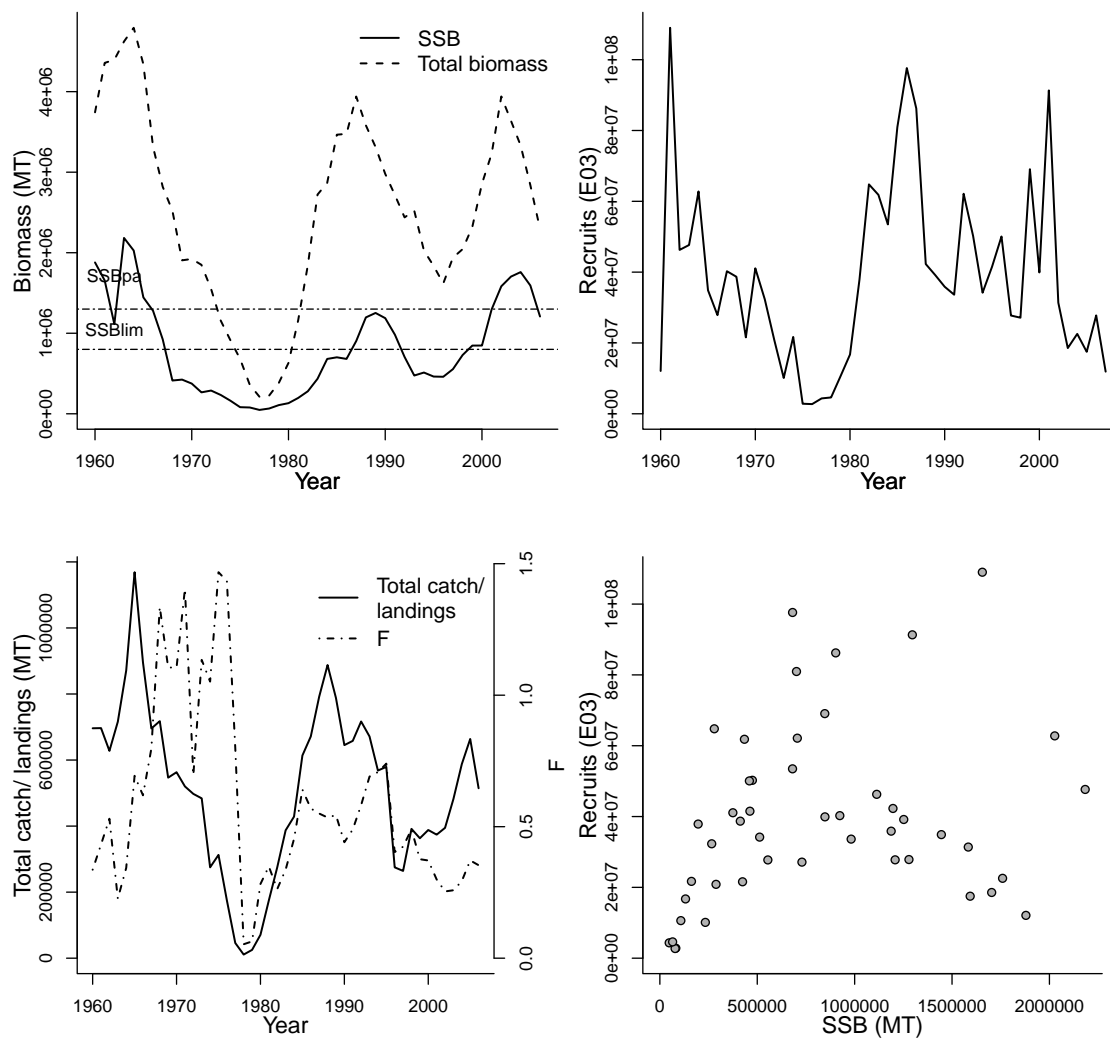
General assessment details.

| 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 | 2011-03-01 |
| 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 | na | na | na | na | na |
| Parameter | Value | Units | Reference points | | | |
| A50-yr | 2 | yr | Parameter | Value | Units | |
| SSB-AGE-yr | 2+ | yr | F0.1-1/T | 0.22 | 1/T | |
| REC-AGE-yr | 0 | yr | Fpa-1/T (F) | 0.25 | 1/T | |
| TB-AGE-yr | 0+ | yr | SSBpa-MT (SSB) | 1300000 | MT | |
| F-AGE-yr-yr | 2-6 | yr-yr | SSBlim-MT (SSB) | 800000 | MT | |
| M-1/T | 0.1 for 4+ | 1/T | SSB ₂₀₀₆ /SSB _{lim} | 1.510 | | |
| SSB-SEX-sex | | | | | | |
| M | | | | | | |
| L50-cm | | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|---------|-----------|--------|---------|---------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1960 | 1960 | 1960 | 1960 | 1960 |
| Maximum year | 2006 | 2007 | 2006 | 2006 | 2006 |
| Time series minimum | 47975 | 2732610 | 0.053 | 211261 | 11000 |
| Time series maximum | 2183501 | 109000000 | 1.4676 | 4792818 | 1168800 |
| Units | MT | E03 | 1/T | MT | 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

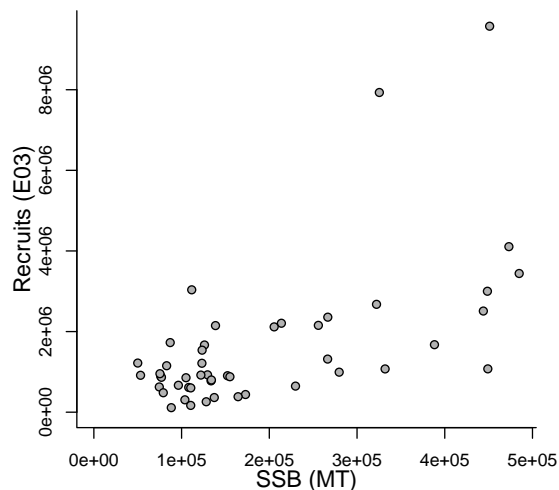
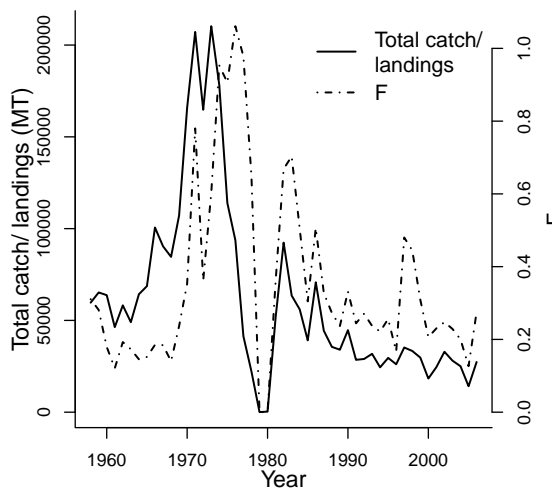
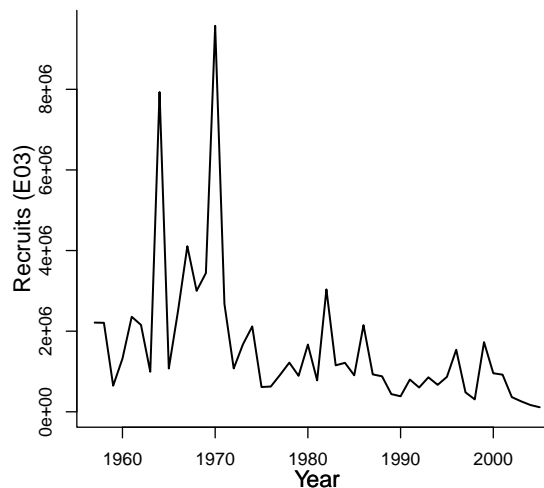
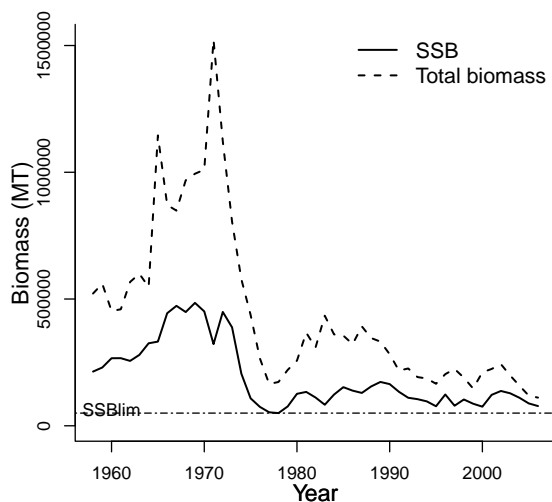
General assessment details.

| 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 | 2010-07-18 |
| 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 | Reference points | | |
| REC-AGE-yr | 1 | yr | Parameter | Value | Units |
| TB-AGE-yr | 1+ | yr | F0.1-1/T | 0.17 | 1/T |
| F-AGE-yr-yr | 3-6 | yr-yr | SSBlim-MT (SSB) | 50000 | MT |
| M-1/T | 0.1 for 4+ | 1/T | SSB_{2006}/SSB_{lim} | 1.556 | |
| SSB-SEX-sex | | | | | |
| M | | | | | |
| L50-cm | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|---------|--------|---------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1958 | 1957 | 1958 | 1958 | 1958 |
| Maximum year | 2006 | 2005 | 2006 | 2006 | 2006 |
| Time series minimum | 50015 | 112240 | 0.0004 | 111054 | 60 |
| Time series maximum | 484835 | 9575740 | 1.0609 | 1522522 | 210270 |
| Units | MT | E03 | 1/T | MT | 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

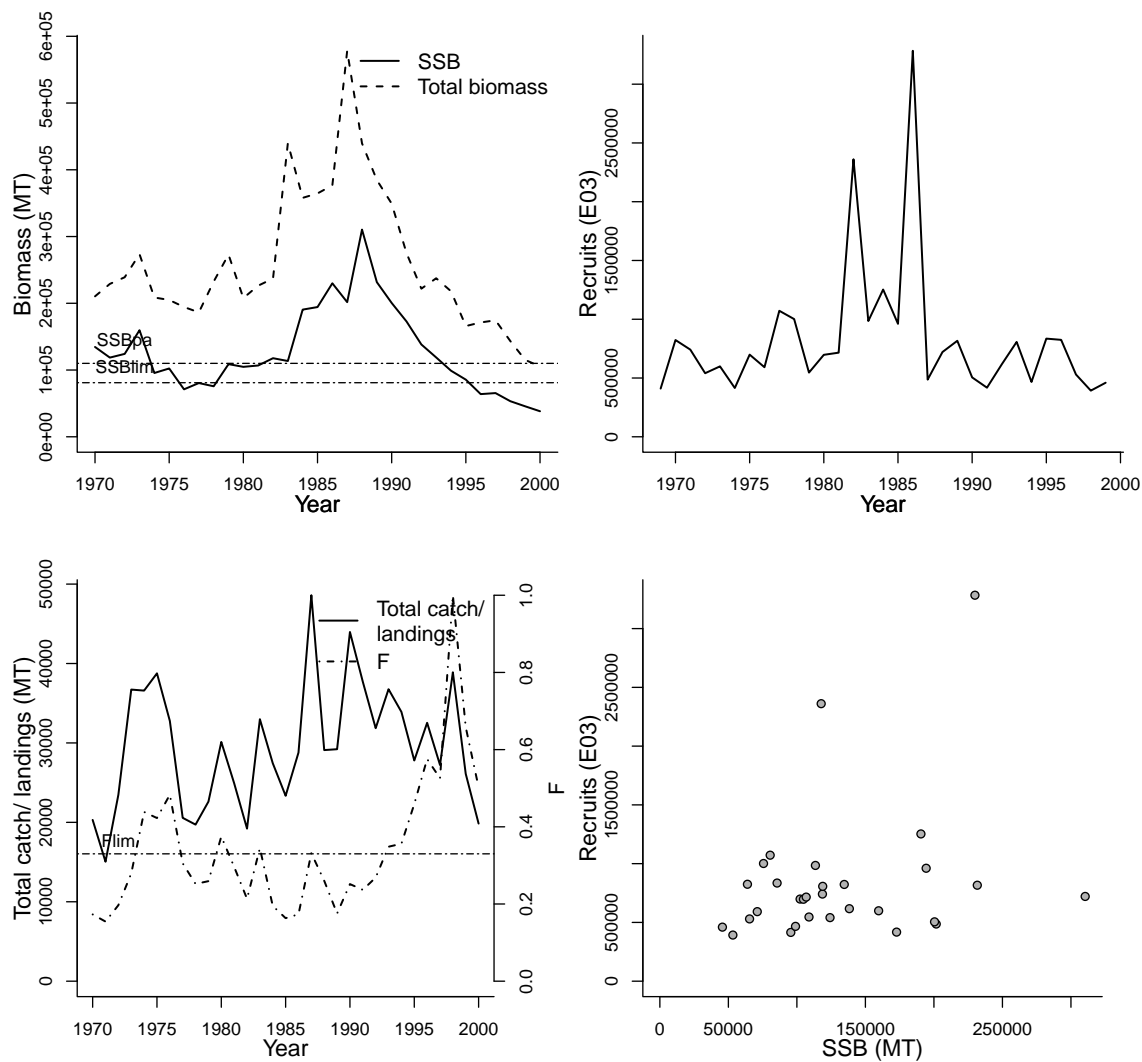
General assessment details.

| 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 | 2011-03-01 |
| 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 | Catch |
| Minimum year | 1970 | 1969 | 1970 | 1970 | 1970 |
| Maximum year | 2000 | 1999 | 2000 | 2000 | 2000 |
| Time series minimum | 38246 | 392621 | 0.1545 | 105417 | 15044 |
| Time series maximum | 310384 | 3284004 | 1.0001 | 578250 | 48600 |
| Units | MT | E03 | 1/T | MT | 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.

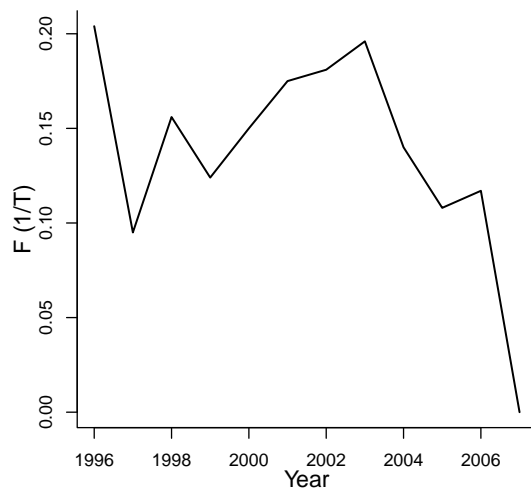
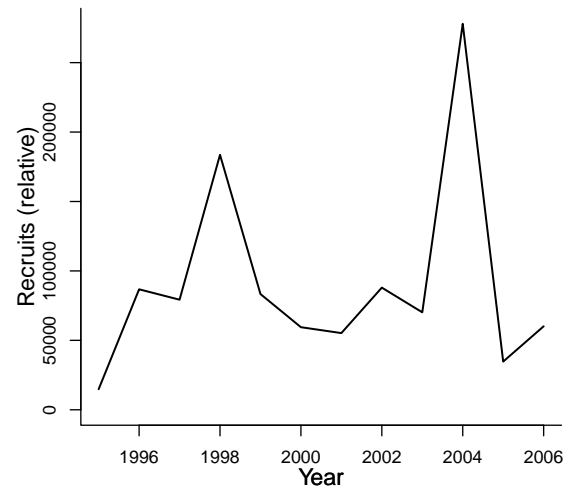
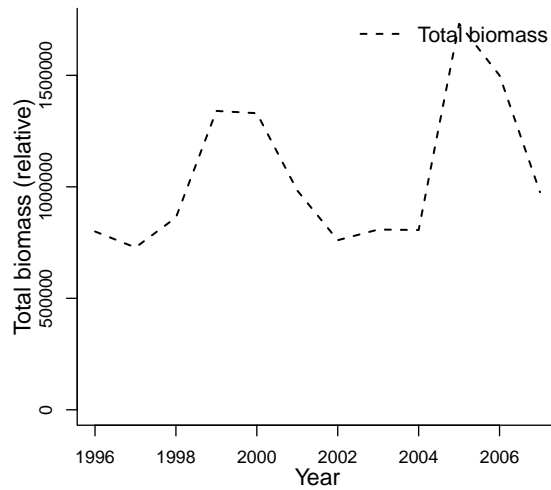
| Detail | Value |
|--------------------|--|
| Management body | ICES |
| Assessment group | Herring Assessment Working Group for the Area South of 62N |
| Assessment authors | Anonymous |
| Assessment method | Catch-Survey Analysis (like a state space approach) |
| Publication year | 2007 |
| Timeseries span | 1995-2007 |
| Document | ICES-HAWG-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-15 |
| Date last loaded | 2010-07-18 |
| 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 |

| primary LME | secondary LME | tertiary LME |
|----------------|---------------|--------------|
| 22 - North Sea | na | na |

| 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 | |



No SSB-recruit
data available

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.

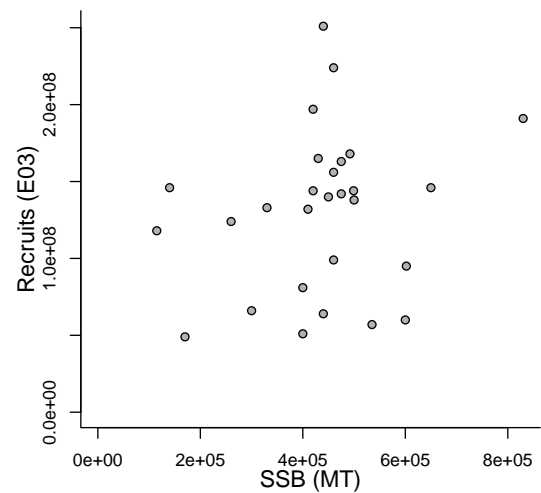
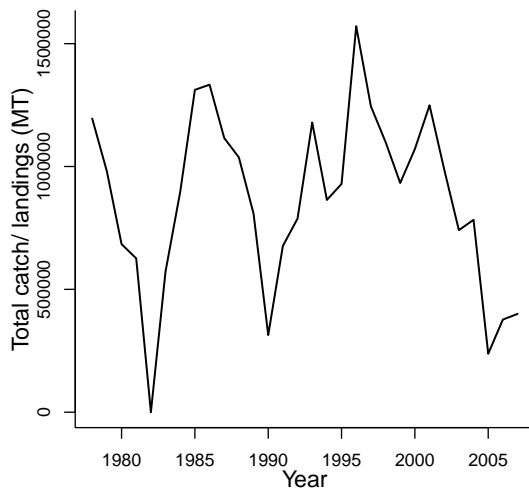
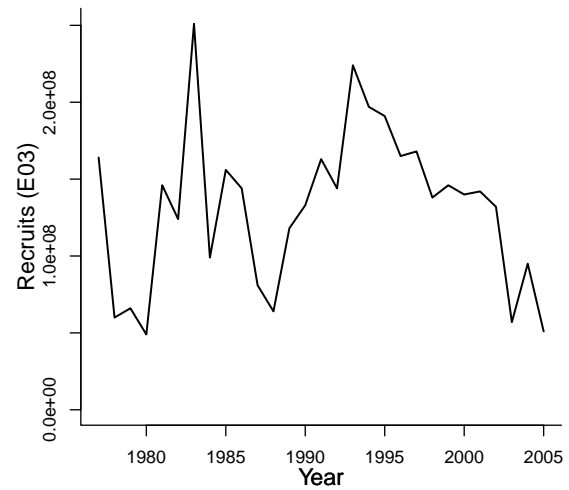
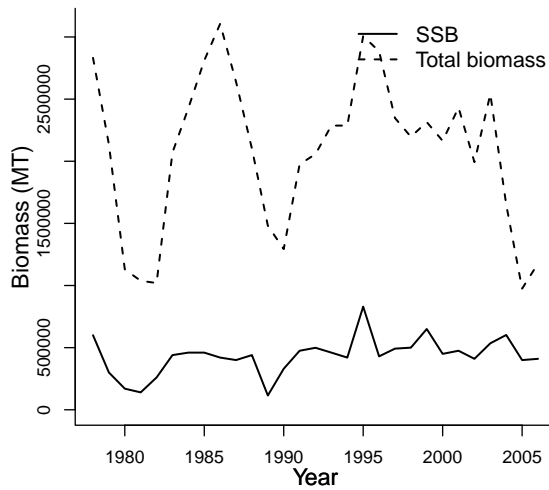
| Detail | Value |
|--------------------|--------------------------------------|
| Management body | ICES |
| Assessment group | North-Western Working Group |
| Assessment authors | Anonymous |
| Assessment method | acoustic surveys |
| Publication year | 2007 |
| Timeseries span | 1977-2007 |
| Document | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-10 |
| Date last loaded | 2010-07-18 |
| 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 | |
| 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 | Catch |
| Minimum year | 1978 | 1977 | | 1978 | 1978 |
| Maximum year | 2006 | 2005 | | 2006 | 2007 |
| Time series minimum | 115000 | 49000000 | | 975000 | 0 |
| Time series maximum | 830000 | 251000000 | | 3106000 | 1571000 |
| 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.

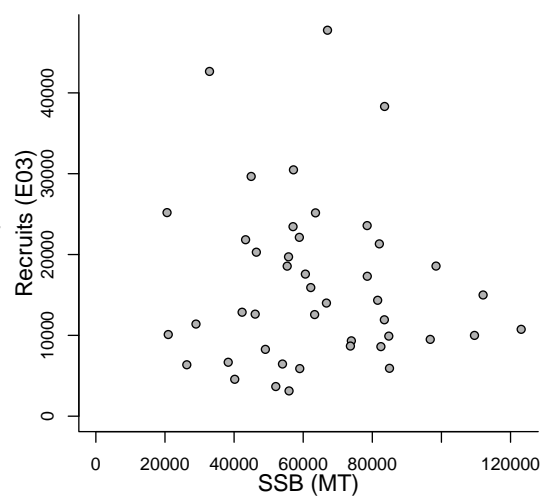
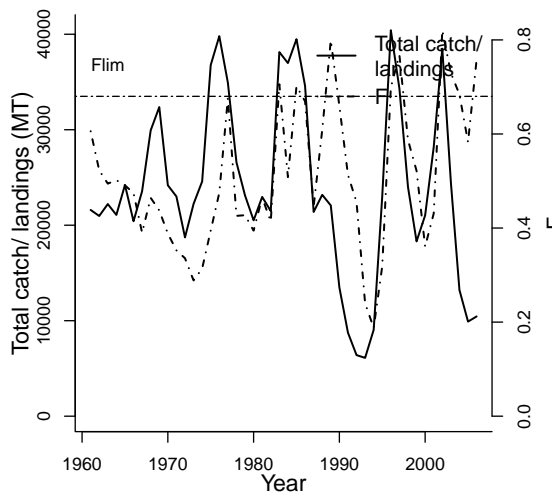
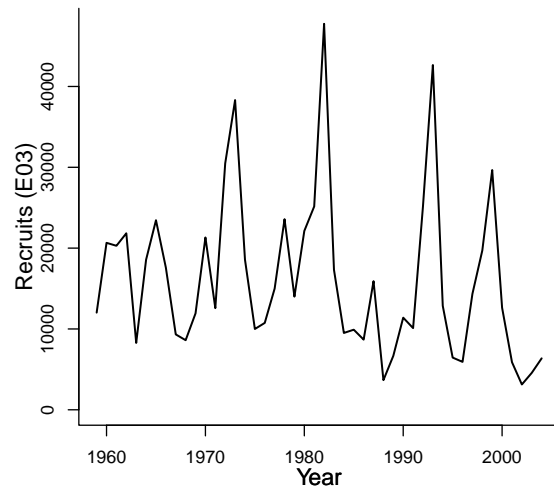
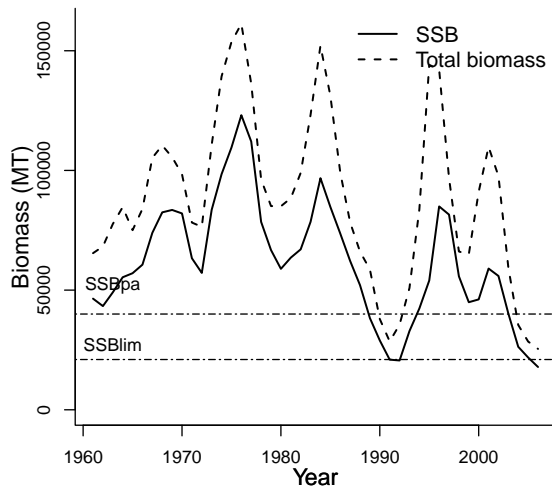
| Detail | Value |
|--------------------|--------------------------------------|
| Management body | ICES |
| Assessment group | North-Western Working Group |
| Assessment authors | Anonymous |
| Assessment method | Virtual Population Analysis |
| Publication year | 2007 |
| Timeseries span | 1959-2006 |
| Document | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-08 |
| Date last loaded | 2010-07-18 |
| 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 | | |
| | | | Parameter | Value | Units |
| 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_{2006}/SSB_{lim} | 0.851 | |
| L50-cm | | | F_{2006}/F_{lim} | 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/376>

Area ID: multinational-ICES-Va

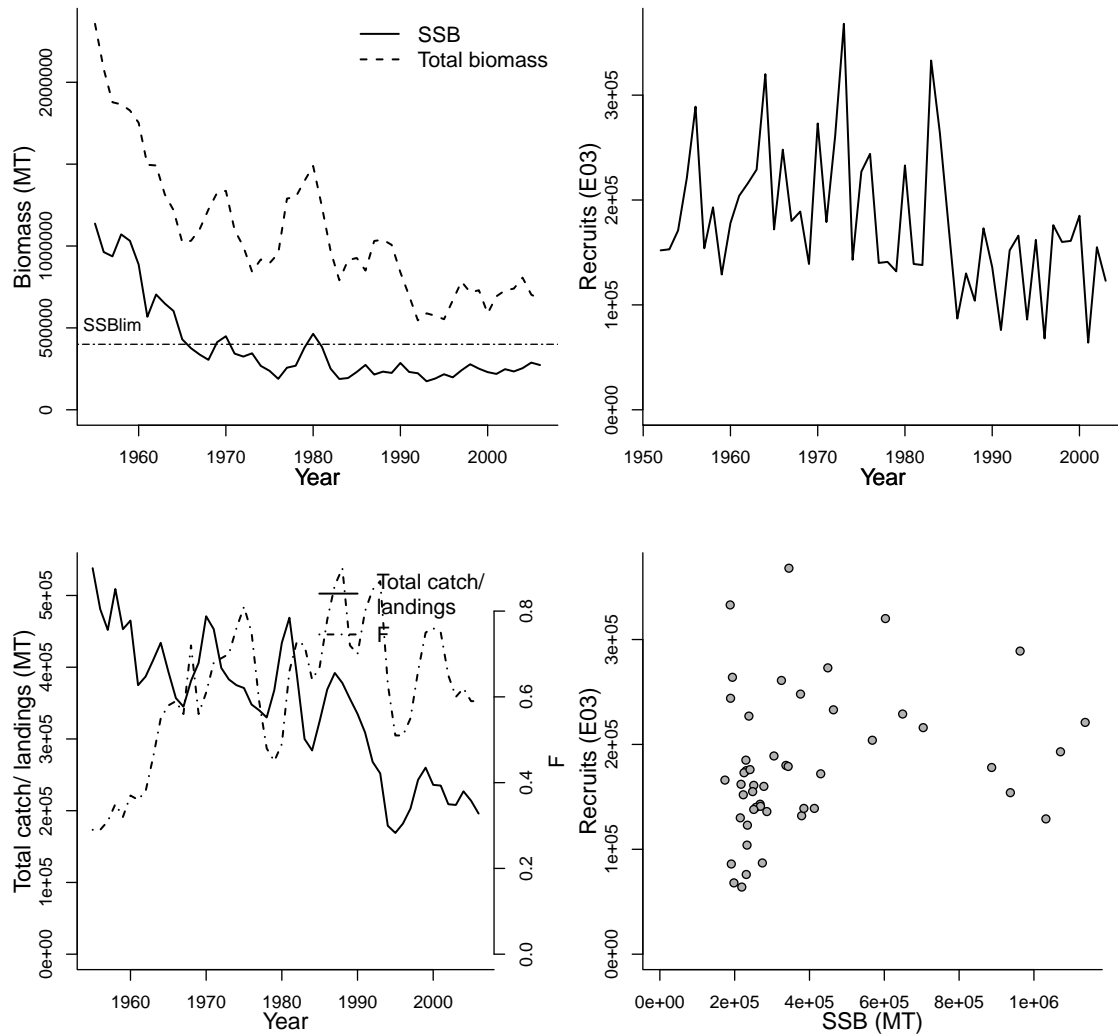
General assessment details.

| 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 | 2010-07-18 |
| 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 | | | |
| A50-yr | 6.5 | yr | | | |
| SSB-AGE-yr | 3+ | yr | | | |
| REC-AGE-yr | 3 | yr | | | |
| TB-AGE-yr | 4+ | yr | | | |
| M-1/T | 0.25 | 1/T | | | |
| F-AGE-yr-yr | 5-10 | yr-yr | | | |
| SSB-SEX-sex | | | | | |
| M | | | | | |
| L50-cm | | | | | |
| | | | Reference points | | |
| | | | Parameter | Value | Units |
| | | | SSBlim-MT (SSB) | 400000 | MT |
| | | | F0.1-1/T | 0.15 | 1/T |
| | | | Fmax-1/T | 0.34 | 1/T |
| | | | SSB_{2006}/SSB_{lim} | 0.682 | |

| Time series minima and maxima | | | | | |
|-------------------------------|---------|--------|------|---------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1955 | 1952 | 1955 | 1955 | 1955 |
| Maximum year | 2006 | 2003 | 2006 | 2006 | 2006 |
| Time series minimum | 174000 | 64000 | 0.29 | 546000 | 169000 |
| Time series maximum | 1137000 | 368000 | 0.9 | 2357000 | 538000 |
| Units | MT | E03 | 1/T | MT | MT |



Assessment of Faroe Plateau haddock (*Melanogrammus aeglefinus*)

Assessment ID: NWWG-HADFAPL-1955-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/377>

Area ID: multinational-ICES-Vb1

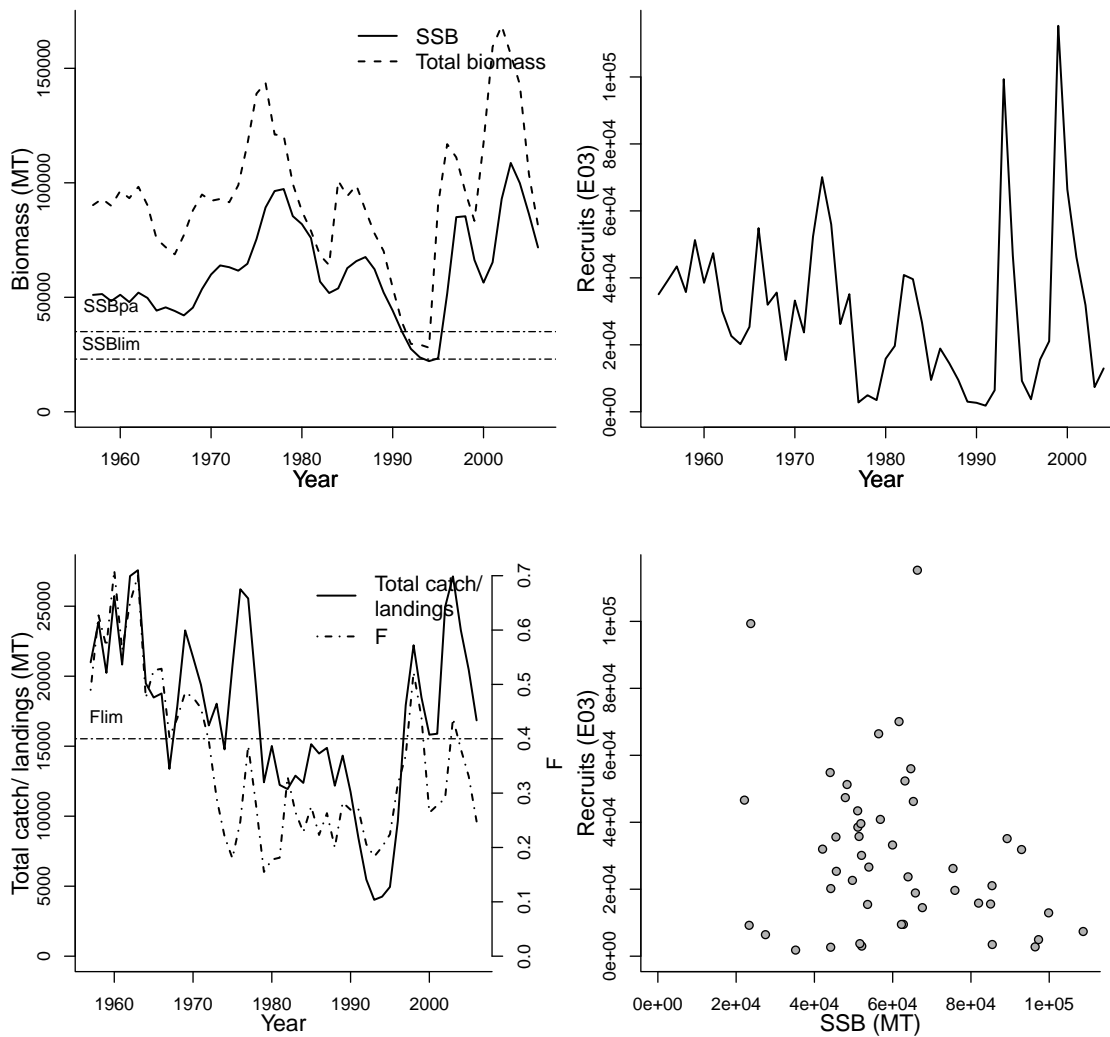
General assessment details.

| 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 | 2010-07-18 |
| 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 | | |
| | | | Parameter | Value | Units |
| A50-yr | 3 | yr | SSBlim-MT (SSB) | 23000 | MT |
| SSB-AGE-yr | 2+ | yr | SSBpa-MT (SSB) | 35000 | MT |
| REC-AGE-yr | 2 | yr | F0.1-1/T | 0.15 | 1/T |
| F-AGE-yr-yr | 3-7 | yr-yr | Fmax-1/T | 0.61 | 1/T |
| TB-AGE-yr | 0+ | yr | Flim-1/T (F) | 0.4 | 1/T |
| M-1/T | 0.2 | 1/T | Fpa-1/T (F) | 0.25 | 1/T |
| SSB-SEX-sex | | | SSB_{2006}/SSB_{lim} | 3.121 | |
| M | | | F_{2006}/F_{lim} | 0.619 | |
| L50-cm | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|--------|--------|--------|-------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1957 | 1955 | 1957 | 1957 | 1957 |
| Maximum year | 2006 | 2004 | 2006 | 2006 | 2006 |
| Time series minimum | 22125 | 1826 | 0.155 | 27998 | 4026 |
| Time series maximum | 108674 | 115282 | 0.7101 | 168570 | 27571 |
| Units | MT | E03 | 1/T | MT | 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

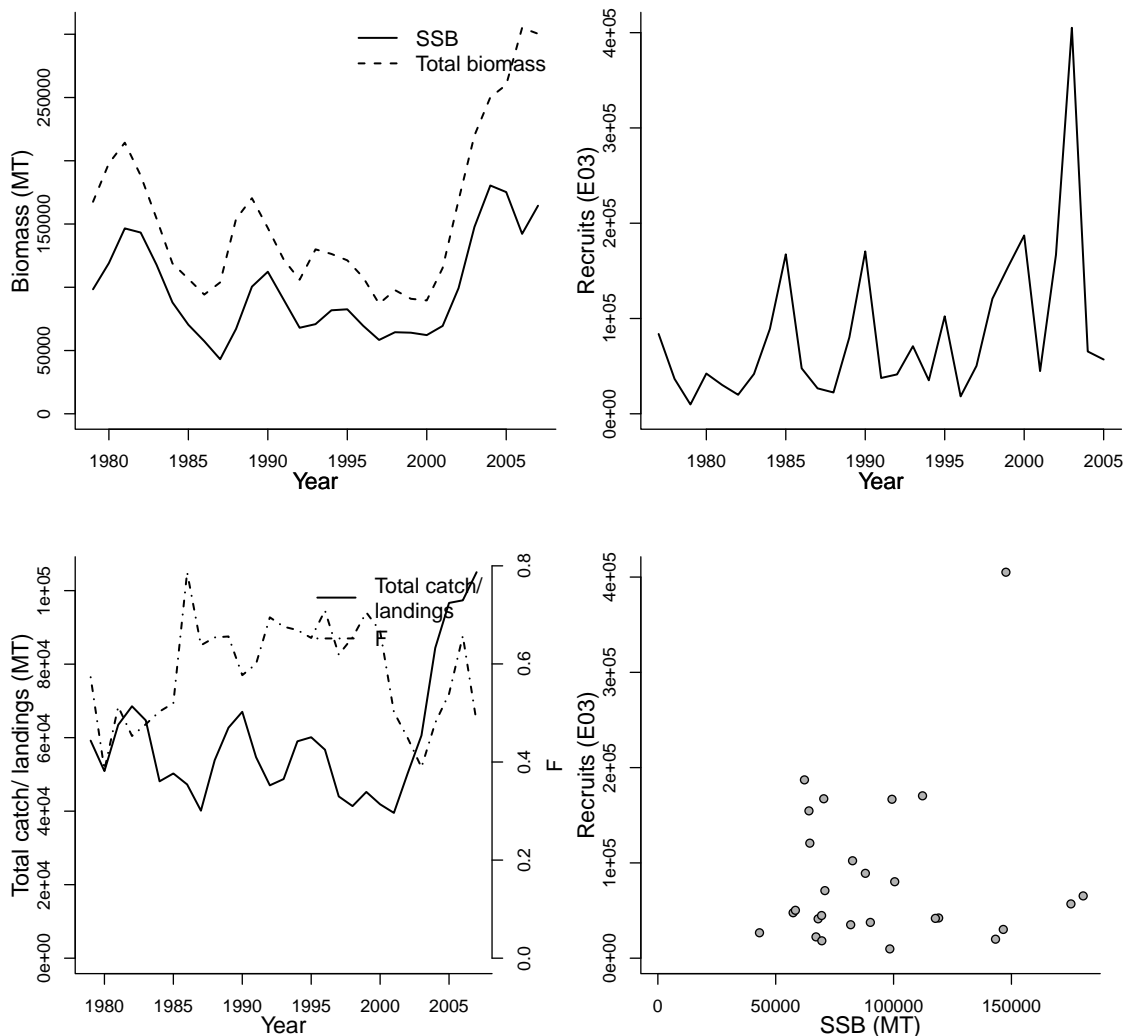
General assessment details.

| 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 | 2010-07-18 |
| 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 | | |
| A50-yr | 4 | yr | Parameter | Value | Units |
| SSB-AGE-yr | 1+ | yr | F0.1-1/T | 0.16 | 1/T |
| REC-AGE-yr | 2 | yr | Fmax-1/T | 0.44 | 1/T |
| TB-AGE-yr | 3+ | yr | Fpa-1/T (F) | 0.47 | 1/T |
| M-1/T | 0.2 | 1/T | | | |
| F-AGE-yr-yr | 4-7 | yr-yr | | | |
| 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 | 2007 | 2007 | 2007 |
| Time series minimum | 43116 | 9758 | 0.384 | 86966 | 39530 |
| Time series maximum | 180435 | 405094 | 0.787 | 305098 | 105012 |
| Units | MT | E03 | 1/T | MT | MT |



Assessment of Faroe Plateau pollock (*Pollachius virens*)

Assessment ID: NWWG-POLLFAPL-1958-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/379>

Area ID: multinational-ICES-Vb1

General assessment details.

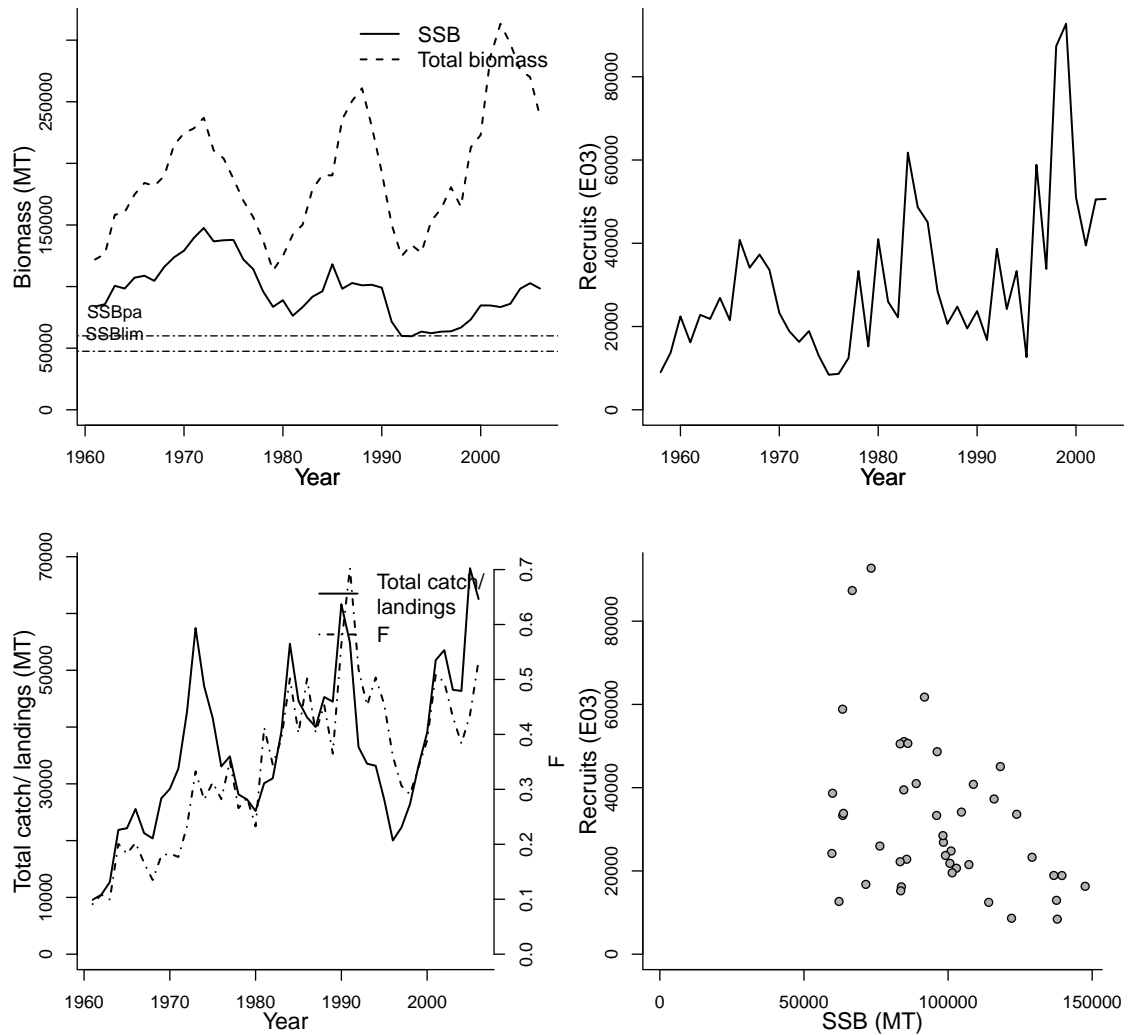
| Detail | Value |
|--------------------|--------------------------------------|
| Management body | ICES |
| Assessment group | North-Western Working Group |
| Assessment authors | Anonymous |
| Assessment method | Virtual Population Analysis |
| Publication year | 2007 |
| Timeseries span | 1958-2006 |
| Document | ICES-NWWG-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-09 |
| Date last loaded | 2010-07-18 |
| 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 | | | | |
| A50-yr | 5 | yr | Reference points | | | |
| SSB-AGE-yr | 3+ | yr | Parameter | Value | Units | |
| REC-AGE-yr | 3 | yr | SSBlim-MT (SSB) | 47500 | MT | |
| F-AGE-yr-yr | 4-8 | yr-yr | SSBpa-MT (SSB) | 60000 | MT | |
| TB-AGE-yr | 3+ | yr | F0.1-1/T | 0.14 | 1/T | |
| M-1/T | 0.2 | 1/T | Fmax-1/T | 0.45 | 1/T | |
| SSB-SEX-sex | | | Fpa-1/T (F) | 0.5 | 1/T | |
| M | | | SSB_{2006}/SSB_{lim} | 2.072 | | |
| 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 Kattegat and Skagerrak atlantic cod (*Gadus morhua*)

Assessment ID:WGBFAS-CODKAT-1970-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/380>

Area ID: multinational-ICES-IIIa

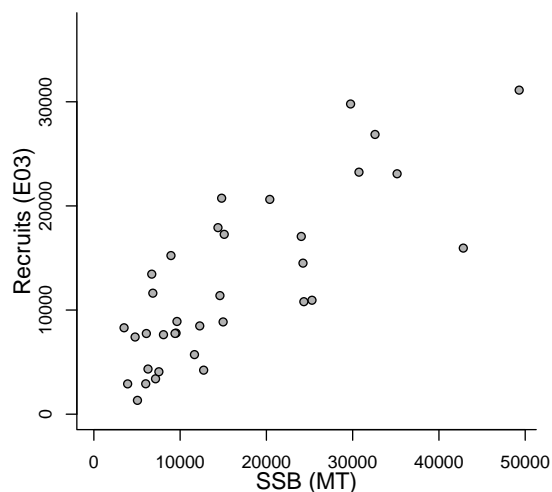
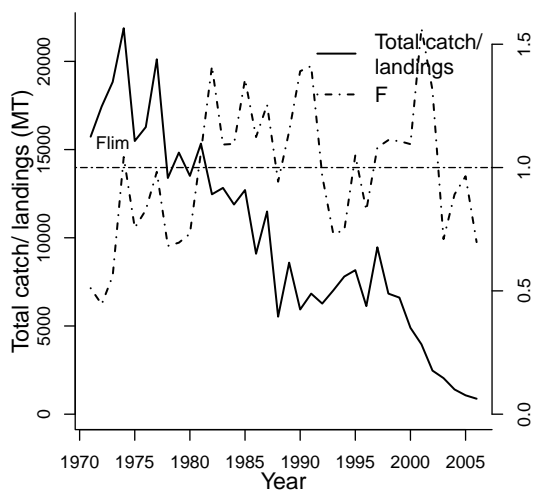
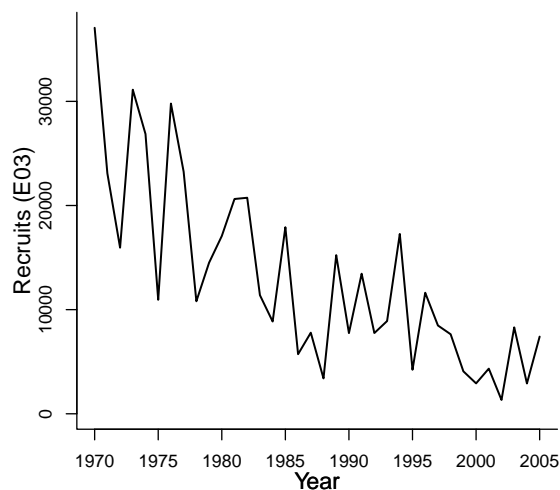
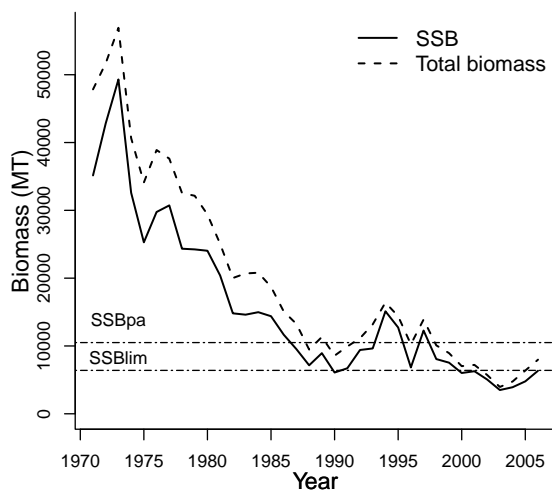
General assessment details.

| 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 | 2010-07-18 |
| 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 | 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 | | |
| | | | 22 - North Sea | na | na |
| | | | Reference points | | |
| | | | 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 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.

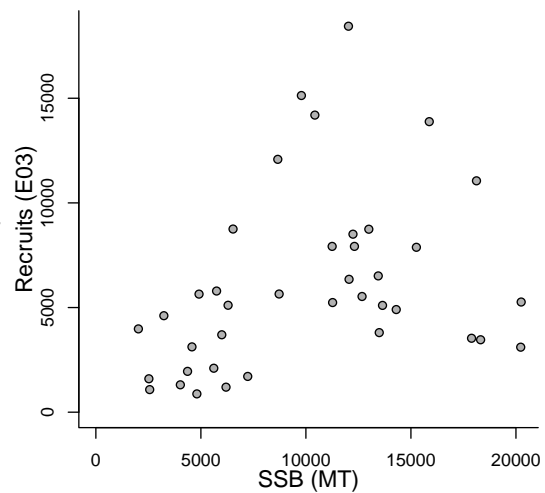
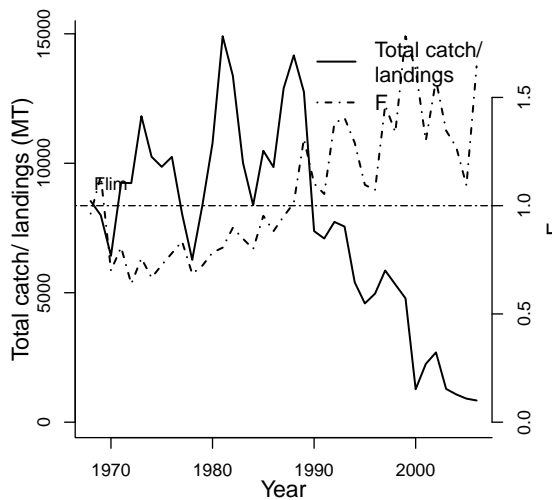
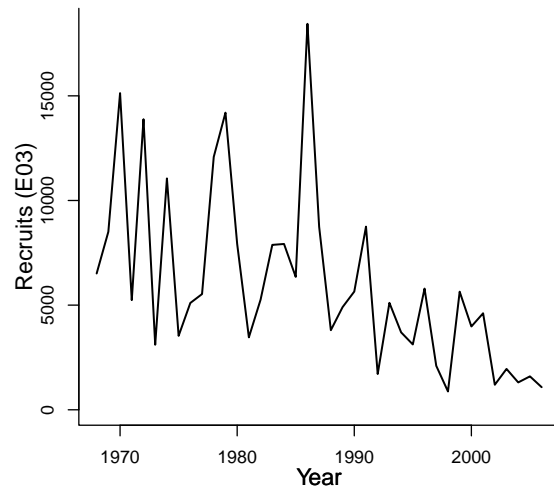
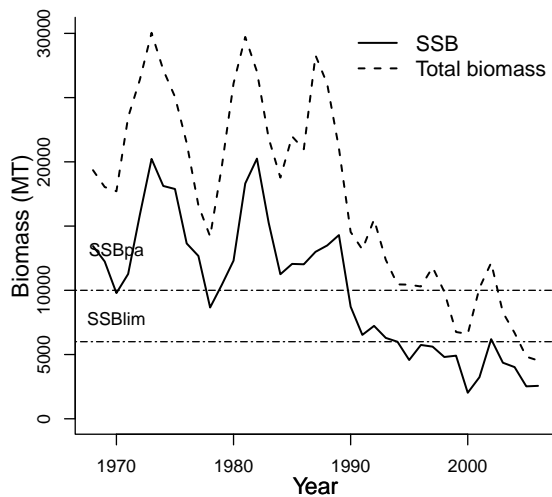
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous |
| Assessment method | The ADAPT approach with year effects in a catch multiplier |
| Publication year | 2007 |
| Timeseries span | 1968-2006 |
| Document | ICES-WGNSDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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 | 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 | F0.1-1/T | 0.18 | 1/T |
| SSB-SEX-sex | | | SSB_{2006}/SSB_{lim} | 0.427 | |
| M | | | F_{2006}/F_{lim} | 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:WGNMDS-CODVla-1977-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/382>

Area ID: multinational-ICES-Vla

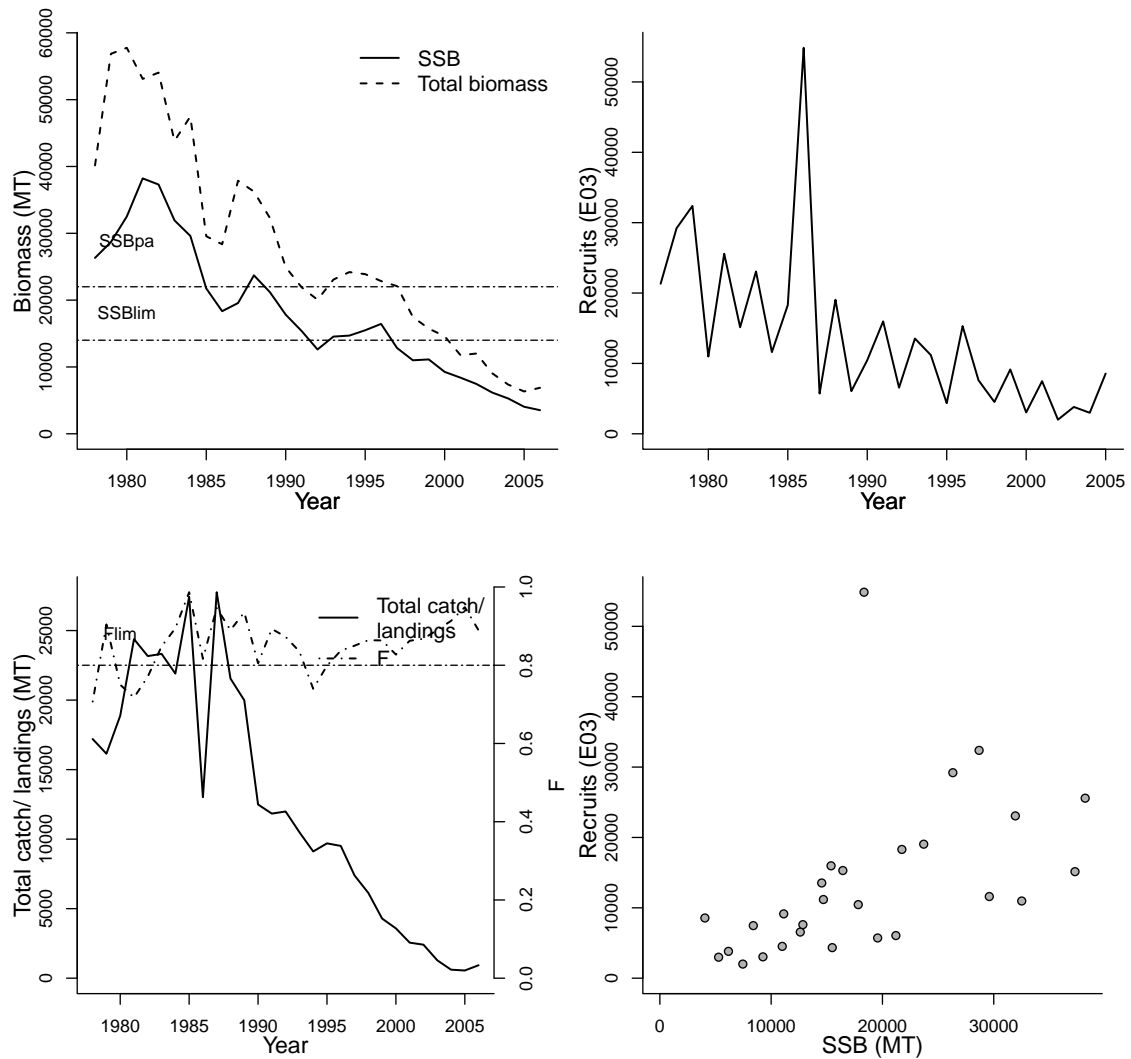
General assessment details.

| 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-WGNMDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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_{2006}/SSB_{lim} | 0.252 | |
| M | | | F_{2006}/F_{lim} | 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: WGNSSDS-HADIS-1972-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/383>

Area ID: multinational-ICES-VIIa

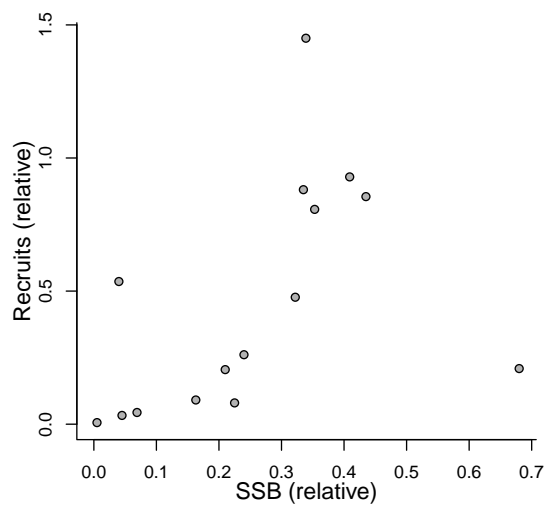
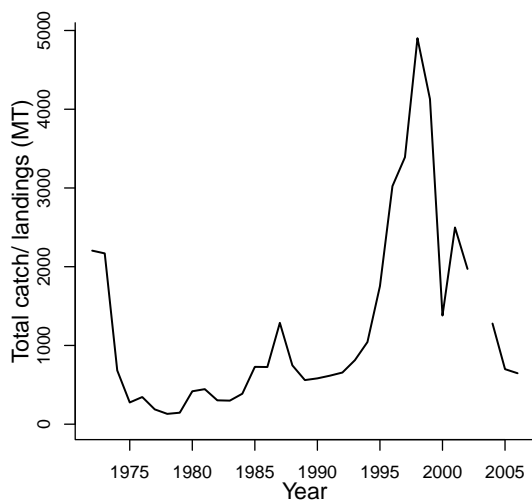
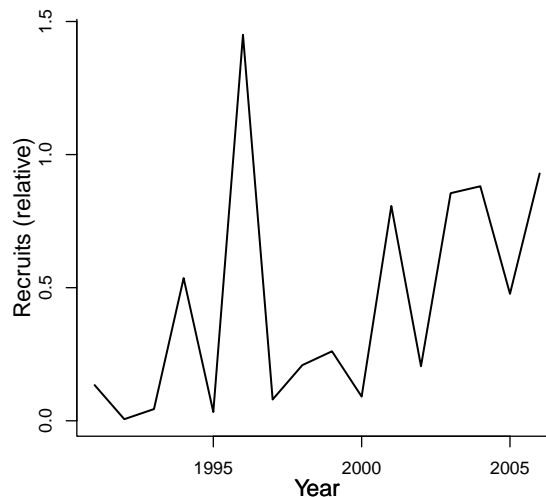
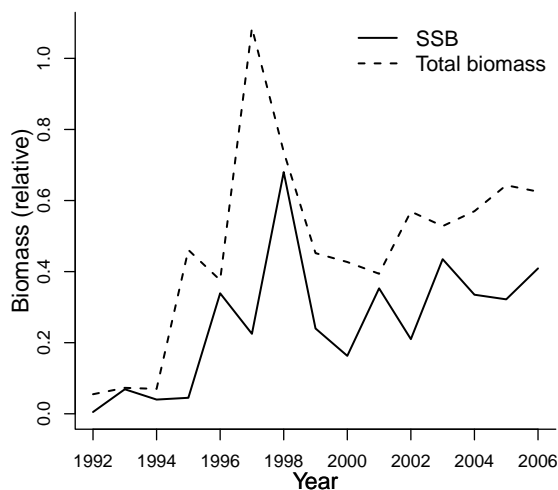
General assessment details.

| 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-WGNSSDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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 | 0 | yr | Reference points | | |
| M-1/T | 0.2 | 1/T | Parameter | Value | Units |
| SSB-SEX-sex | | | Fpa-1/T (F) | 0.5 | 1/T |
| TB-AGE-yr | | | Fmax-1/T | 0.35 | 1/T |
| F-AGE-yr | | | | | |
| M | | | | | |
| L50-cm | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|----------|----------|---|----------|-------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1992 | 1991 | | 1992 | 1972 |
| Maximum year | 2006 | 2006 | | 2006 | 2006 |
| Time series minimum | 0.005 | 0.006 | | 0.055 | 131 |
| Time series maximum | 0.68 | 1.45 | | 1.086 | 4902 |
| Units | relative | relative | | relative | MT |



Assessment of West of Scotland haddock (*Melanogrammus aeglefinus*)

Assessment ID: WGN SDS-HAD VIa-1977-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/ramlegacy/ramlegacy-bug-reporting/384>

Area ID: multinational-ICES-VIa

General assessment details.

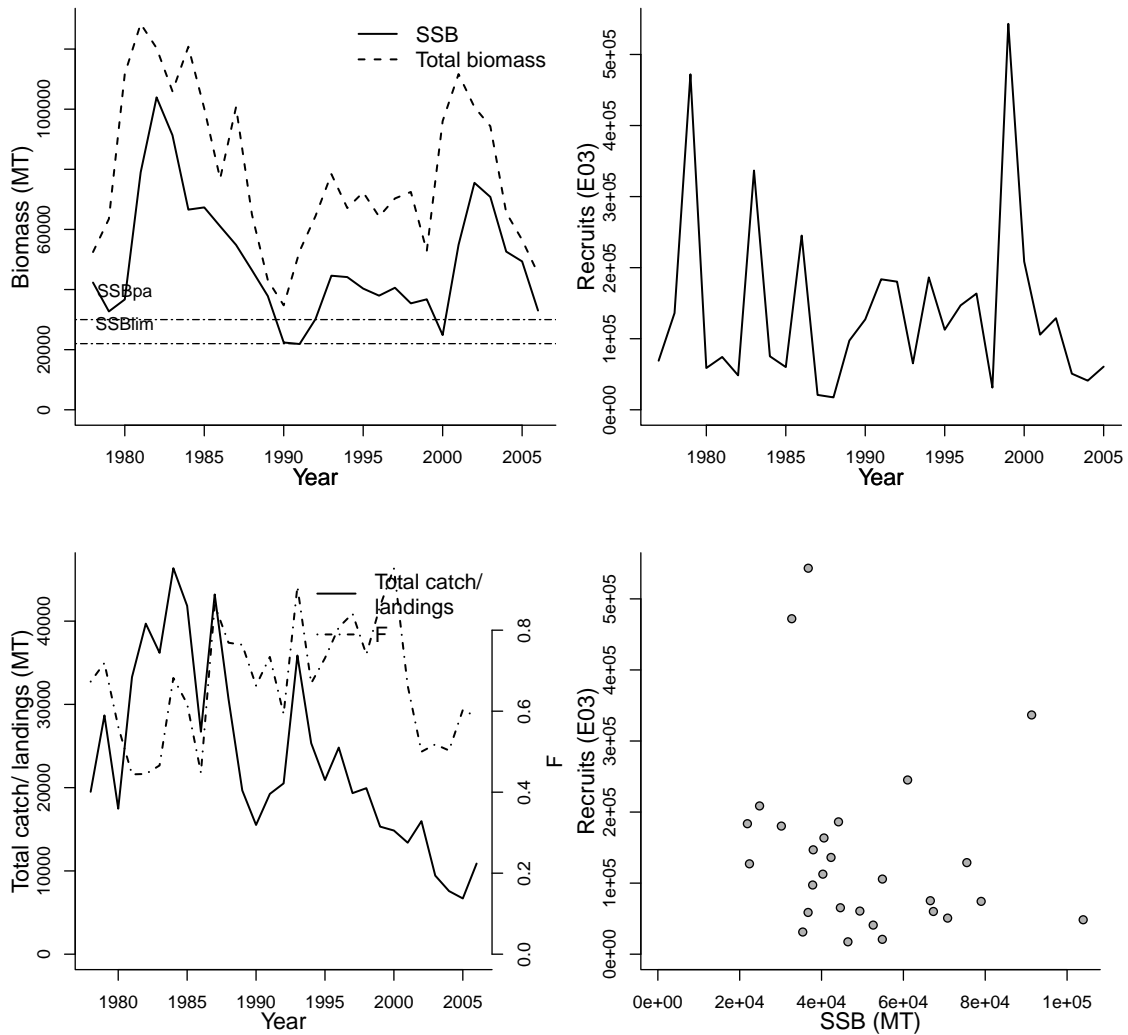
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anon |
| Assessment method | State-space catch at age time series analysis |
| Publication year | 2007 |
| Timeseries span | 1977-2006 |
| Document | ICES-WGN SDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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 | 2 | yr | SSBlim-MT (SSB) | 22000 | MT |
| SSB-AGE-yr | 2+ | yr | SSBpa-MT (SSB) | 30000 | MT |
| REC-AGE-yr | 1 | yr | Fpa-1/T (F) | 0.5 | 1/T |
| TB-AGE-yr | 1+ | yr | F0.1-1/T | 0.19 | 1/T |
| M-1/T | 0.2 | 1/T | Fmax-1/T | 0.21 | 1/T |
| F-AGE-yr-yr | 2-6 | yr-yr | SSB_{2006}/SSB_{lim} | 1.501 | |
| SSB-SEX-sex | | | | | |
| 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:WGNSSDS-PLAICIS-1962-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/385>

Area ID: multinational-ICES-VIIa

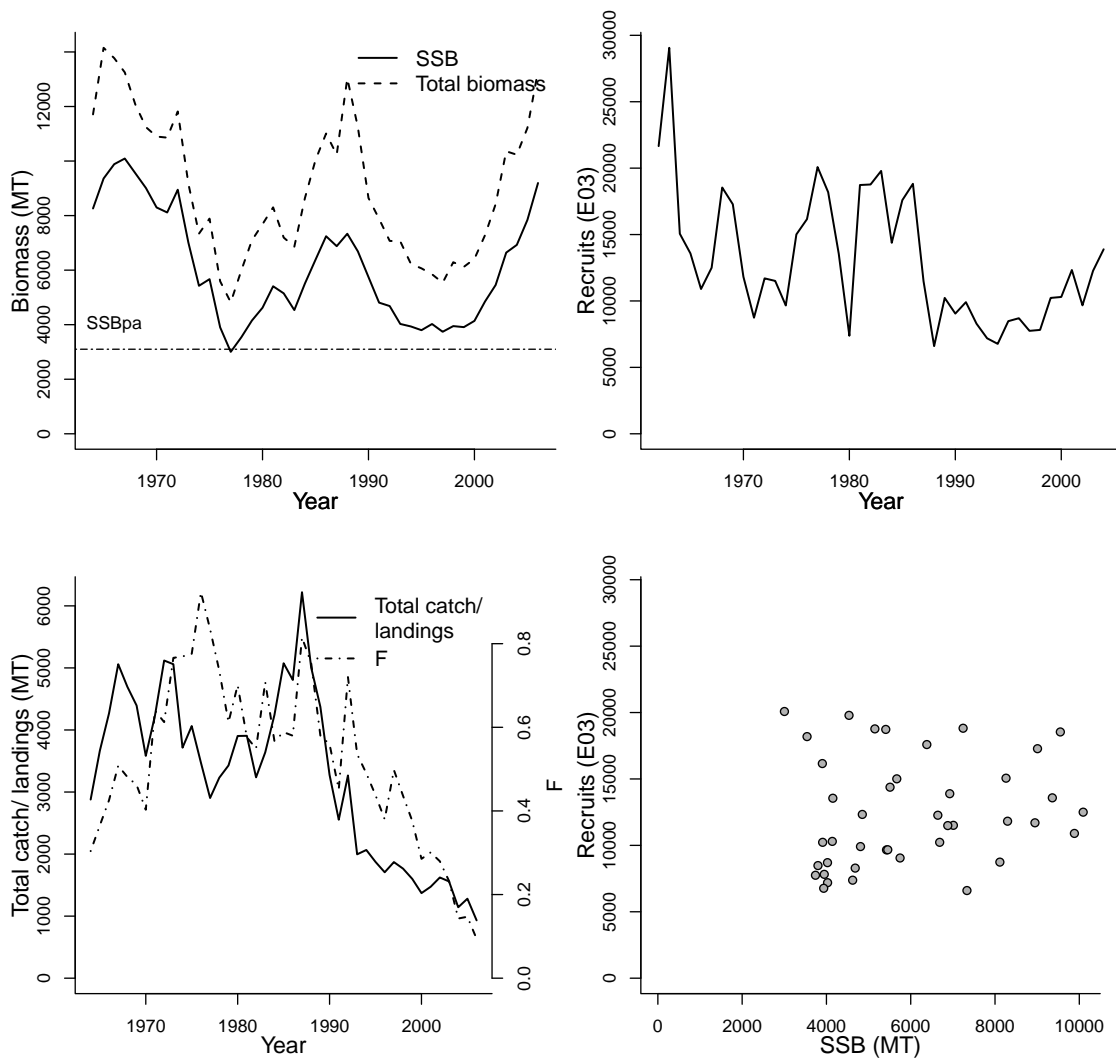
General assessment details.

| 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-WGNSSDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-15 |
| Date last loaded | 2010-07-18 |
| 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 | 3 | yr | Reference points | | |
| SSB-AGE-yr | 2+ | yr | | | |
| REC-AGE-yr | 2 | yr | Parameter | Value | Units |
| 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

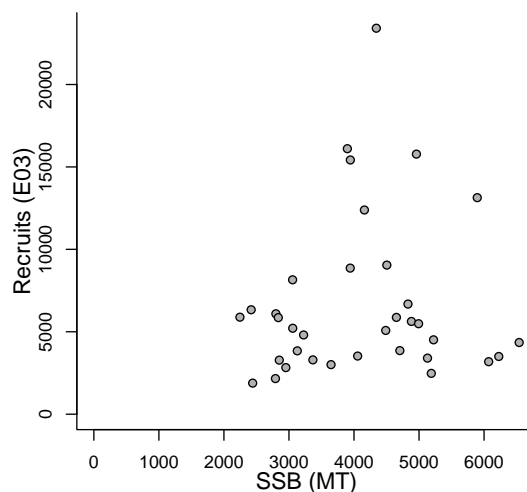
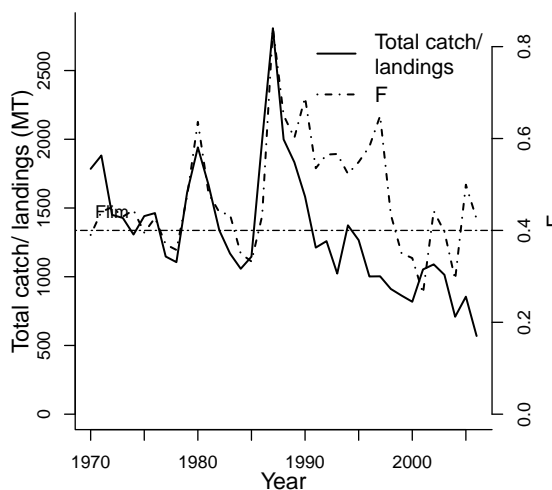
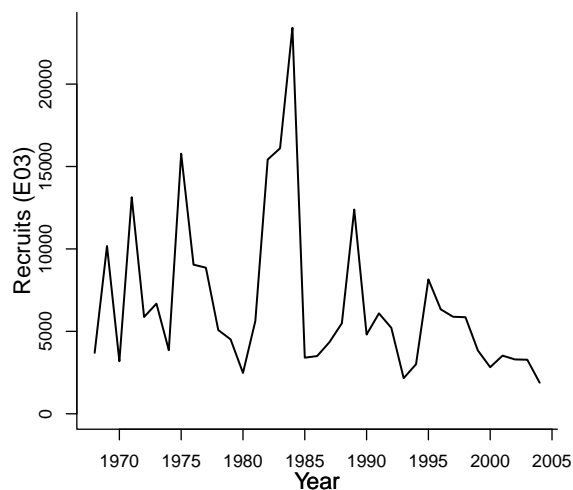
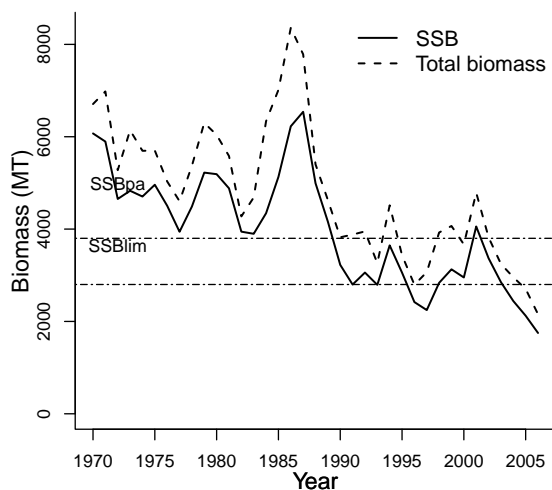
General assessment details.

| 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 | 2010-07-18 |
| 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 | 2-3 | yr | Fmax-1/T | 0.51 | 1/T |
| SSB-AGE-yr | 2+ | yr | F0.1-1/T | 0.18 | 1/T |
| REC-AGE-yr | 2 | yr | Fpa-1/T (F) | 0.3 | 1/T |
| TB-AGE-yr | 2+ | yr | SSBpa-MT (SSB) | 3800 | MT |
| F-AGE-yr-yr | 4-7 | yr-yr | SSBlim-MT (SSB) | 2800 | MT |
| M-1/T | 0.1 | 1/T | Flim-1/T (F) | 0.4 | 1/T |
| SSB-SEX-sex | | | SSB_{2006}/SSB_{lim} | 0.625 | |
| M | | | F_{2006}/F_{lim} | 1.062 | |
| L50-cm | | | | | |

| 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: WGN SDS-WHITVla-1984-2007-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/387>

Area ID: multinational-ICES-Vla

General assessment details.

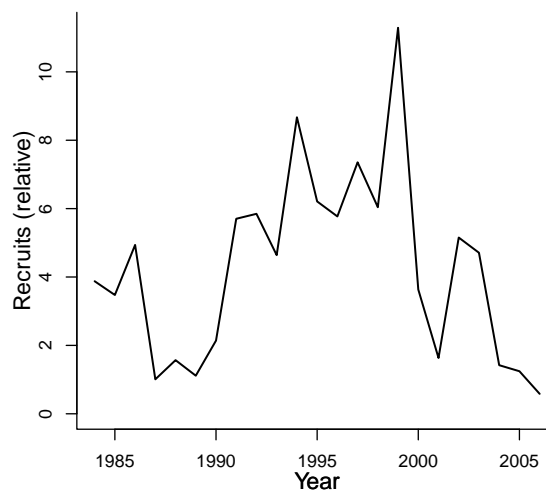
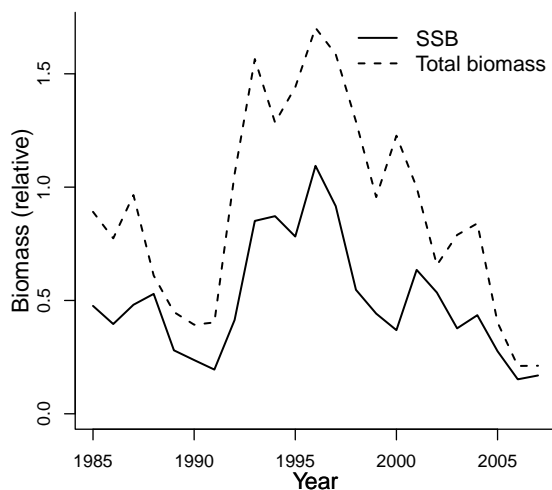
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Northern Shelf Demersal Stocks |
| Assessment authors | Anonymous |
| Assessment method | Survey based stock assessment method |
| Publication year | 2007 |
| Timeseries span | 1984-2007 |
| Document | ICES-WGN SDS-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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.

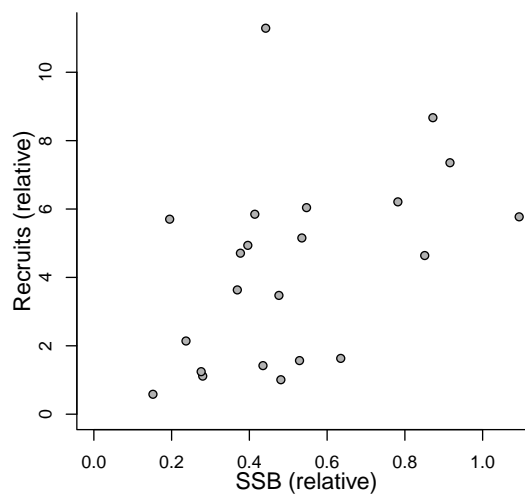
| primary LME | | secondary LME | tertiary LME |
|--------------------------|-------|---------------|--------------|
| 24 - Celtic-Biscay Shelf | | na | na |
| Parameter | Value | Units | |
| A50-yr | 2 | yr | |
| SSB-AGE-yr | 2+ | yr | |
| REC-AGE-yr | 1 | yr | |
| M-1/T | 0.2 | 1/T | |
| TB-AGE-yr | 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 | Catch |
| 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 | |



No exploitation
data available



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.

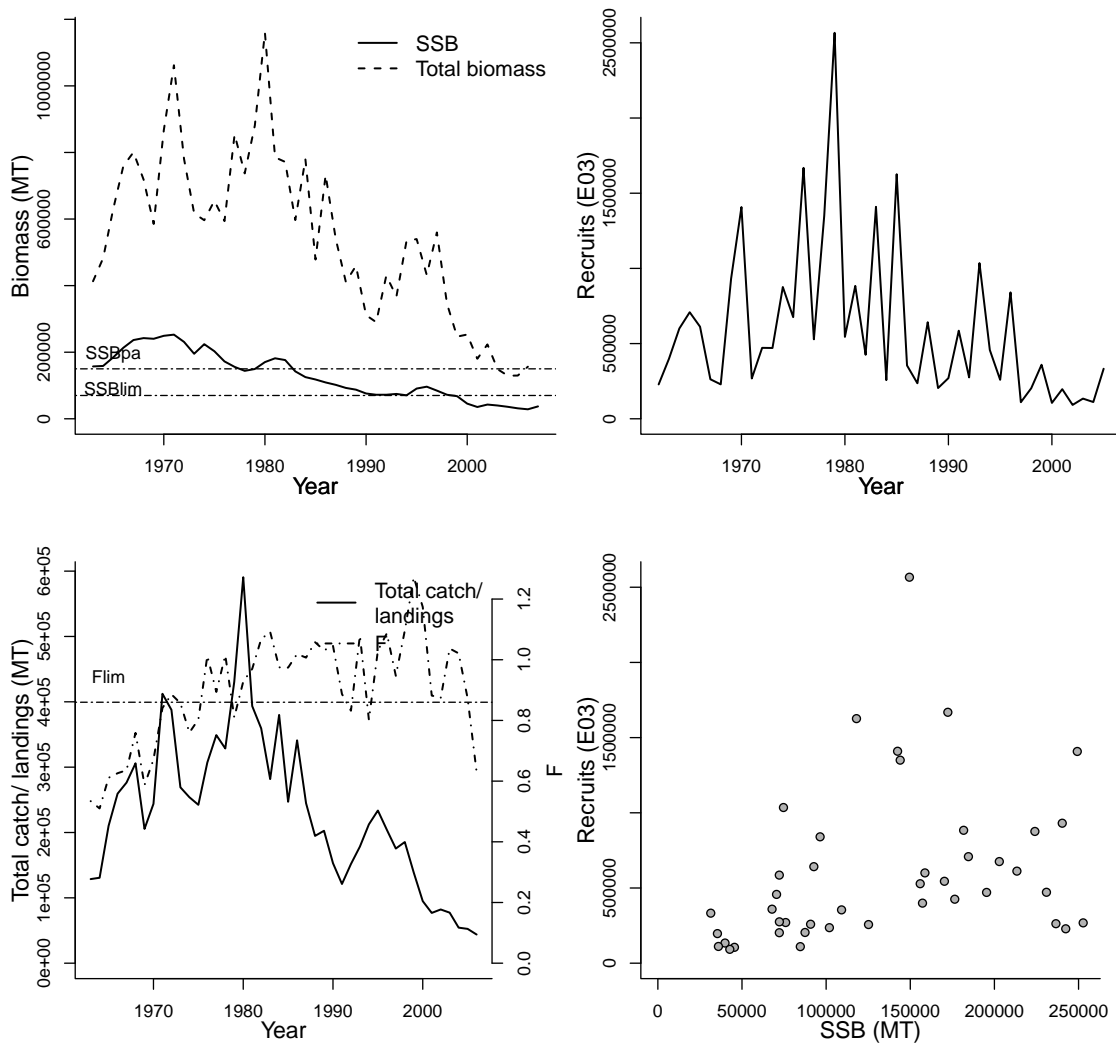
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous |
| Assessment method | The ADAPT approach with year effects in a catch multiplier |
| Publication year | 2007 |
| Timeseries span | 1962-2007 |
| Document | ICES-WGNSSK-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-11 |
| Date last loaded | 2010-07-18 |
| 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 | na | na |

| Parameter | Value | Units | | Reference points | |
|-------------|------------|-------|------------------------------|------------------|-------|
| | | | Parameter | Value | Units |
| F-AGE-yr-yr | 2-4 | yr-yr | F _{lim} -1/T (F) | 0.86 | 1/T |
| TB-AGE-yr | 1+ | yr | F _{pa} -1/T (F) | 0.65 | 1/T |
| A50-yr | 3-4 | yr | SSB _{lim} -MT (SSB) | 70000 | MT |
| M-1/T | 0.2 for 4+ | 1/T | SSB _{pa} -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.marinebiodiversity.ca/ramlegacy/ramlegacy-bug-reporting/388>

Area ID: multinational-ICES-IIIa-IV

General assessment details.

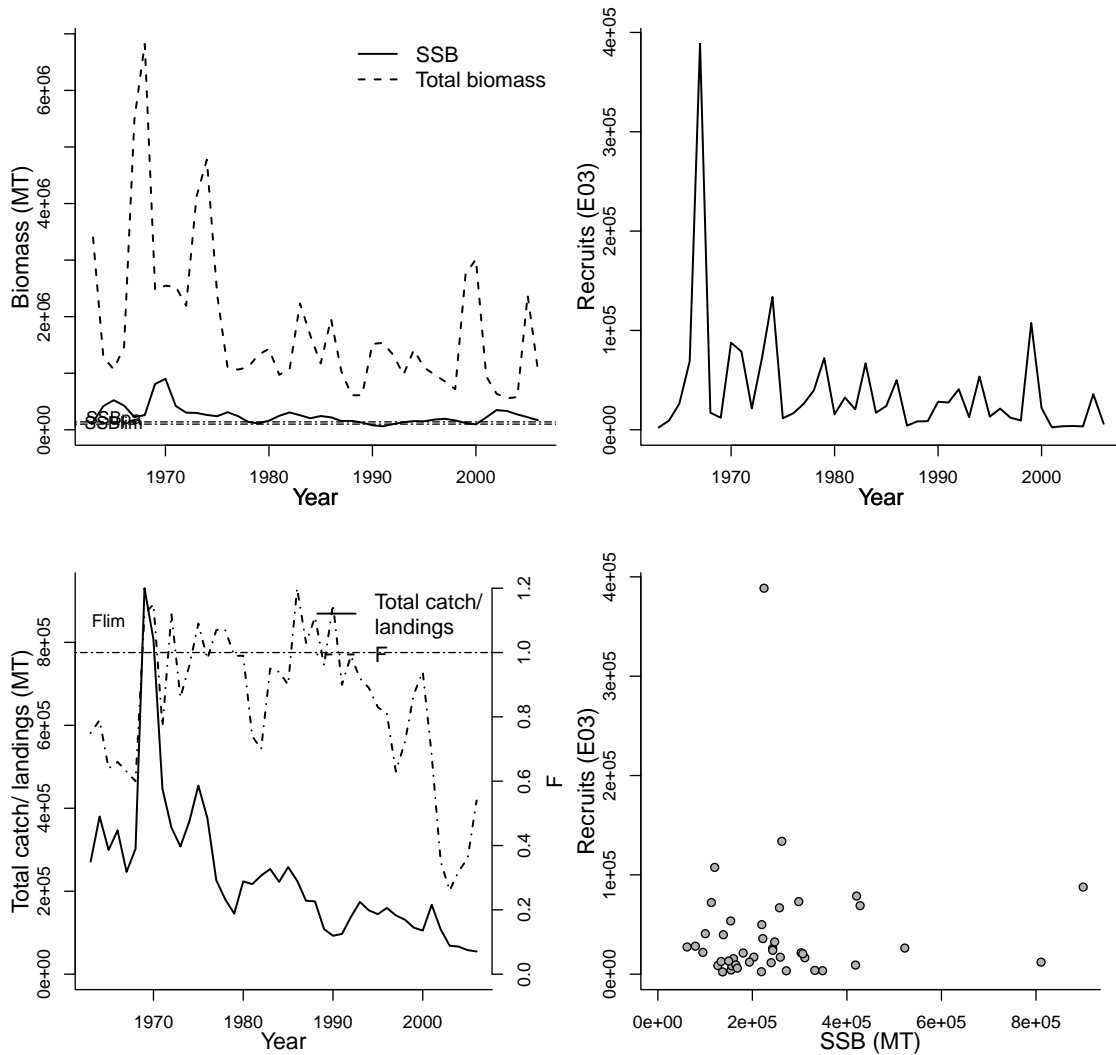
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anon |
| Assessment method | Extended Survivor Analysis |
| Publication year | 2007 |
| Timeseries span | 1963-2006 |
| Document | ICES-WGNSSK-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-14 |
| Date last loaded | 2010-07-18 |
| 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 | na | na |

| Parameter | Value | Units | Reference points | | |
|-------------|--------------|-------|------------------------|--------|-------|
| | | | Parameter | Value | Units |
| A50-yr | 2-3 | yr | SSBlim-MT (SSB) | 100000 | MT |
| SSB-AGE-yr | 1+ | yr | SSBpa-MT (SSB) | 140000 | MT |
| REC-AGE-yr | 0 | yr | Fpa-1/T (F) | 0.7 | 1/T |
| TB-AGE-yr | 0+ | yr | Flim-1/T (F) | 1 | 1/T |
| M-1/T | Age specific | 1/T | SSB_{2006}/SSB_{lim} | 1.682 | |
| F-AGE-yr-yr | 2-4 | yr-yr | F_{2006}/F_{lim} | 0.540 | |
| SSB-SEX-sex | | | | | |
| M | | | | | |
| L50-cm | | | | | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|-----------|------|---------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1963 | 1963 | 1963 | 1963 | 1963 |
| Maximum year | 2006 | 2006 | 2006 | 2006 | 2006 |
| Time series minimum | 61772 | 2316.936 | 0.26 | 558318 | 54753 |
| Time series maximum | 899883 | 388564.67 | 1.2 | 6823944 | 930538 |
| 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

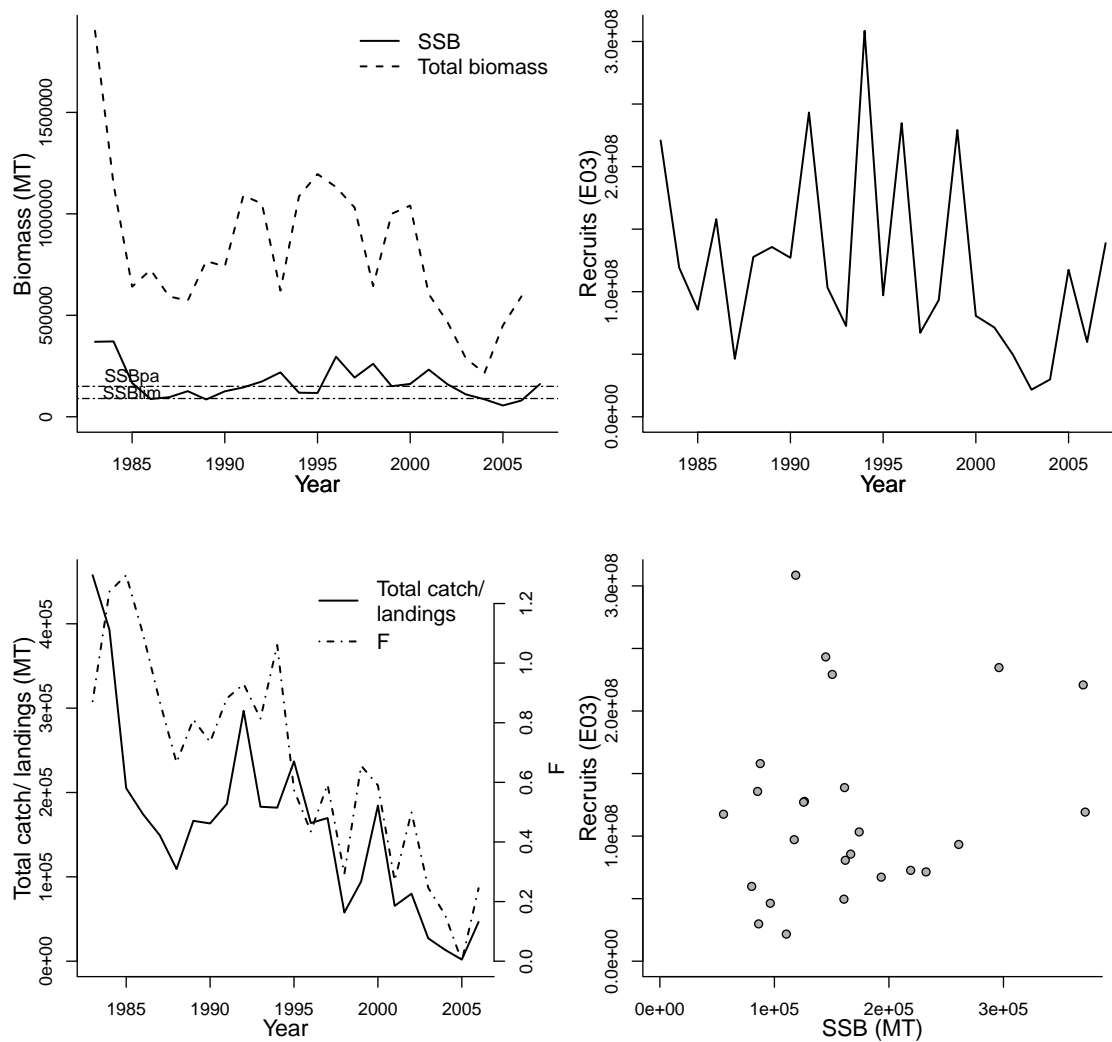
General assessment details.

| 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 | 2010-07-18 |
| 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 | 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 | Catch |
| Minimum year | 1983 | 1983 | 1983 | 1983 | 1983 |
| Maximum year | 2007 | 2007 | 2006 | 2006 | 2006 |
| Time series minimum | 55568 | 21662000 | 0 | 215118 | 1900 |
| Time series maximum | 371336 | 308548000 | 1.295 | 1902065 | 457600 |
| Units | MT | E03 | 1/T | MT | 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-VIIId

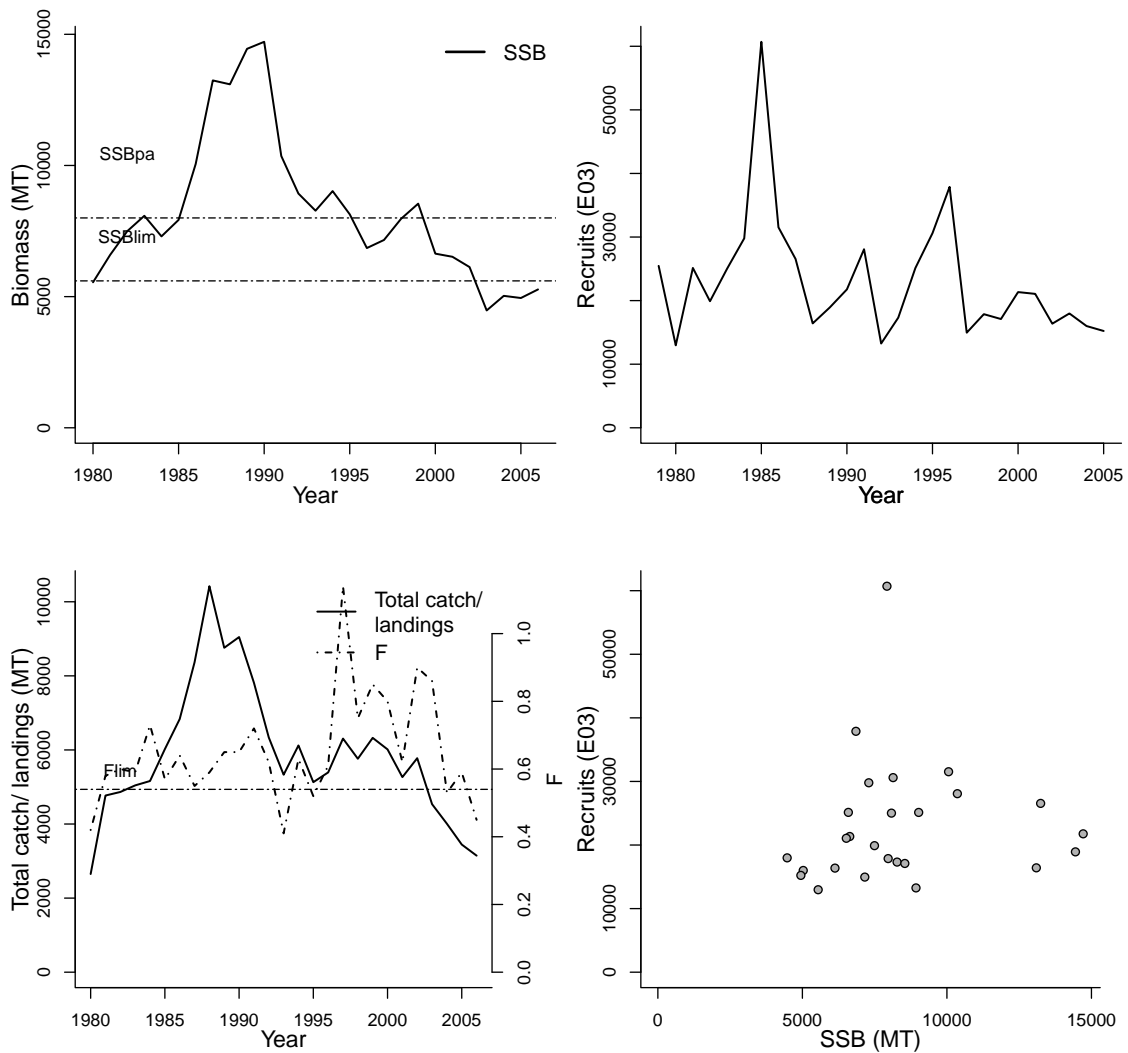
General assessment details.

| 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 | 1979-2006 |
| Document | ICES-WGNSSK-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-13 |
| Date last loaded | 2010-07-18 |
| 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 | 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 | Catch |
| 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-PLAICIIIa-1976-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/391>

Area ID: multinational-ICES-IIIa

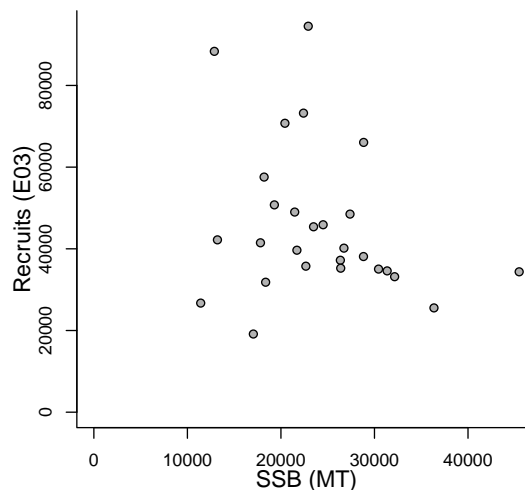
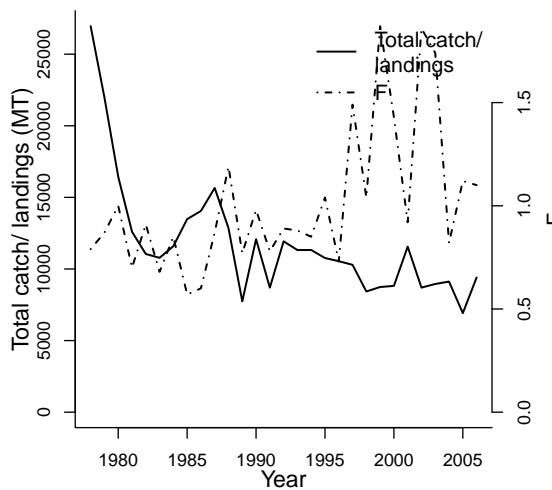
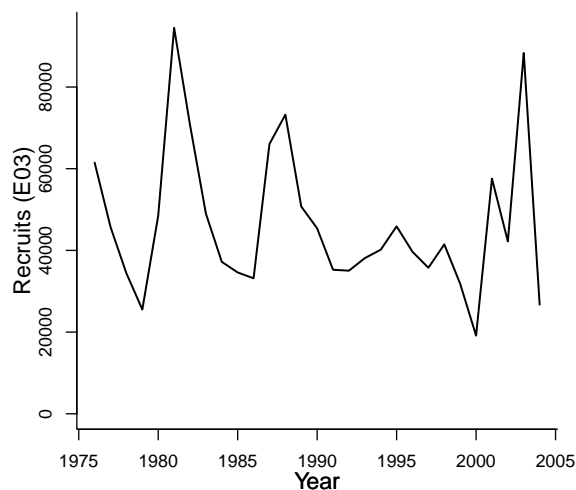
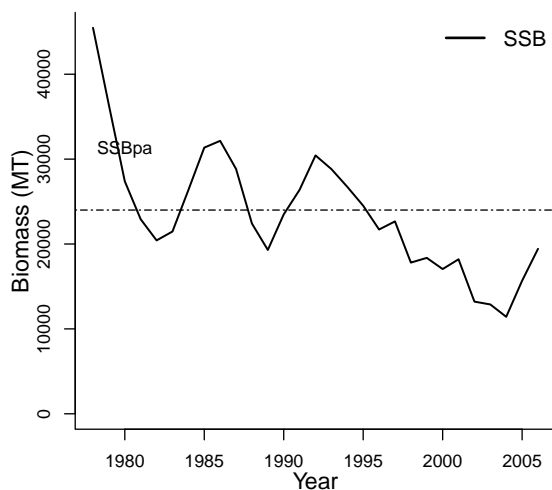
General assessment details.

| 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 | 2010-07-18 |
| 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 | 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 | Catch |
| 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

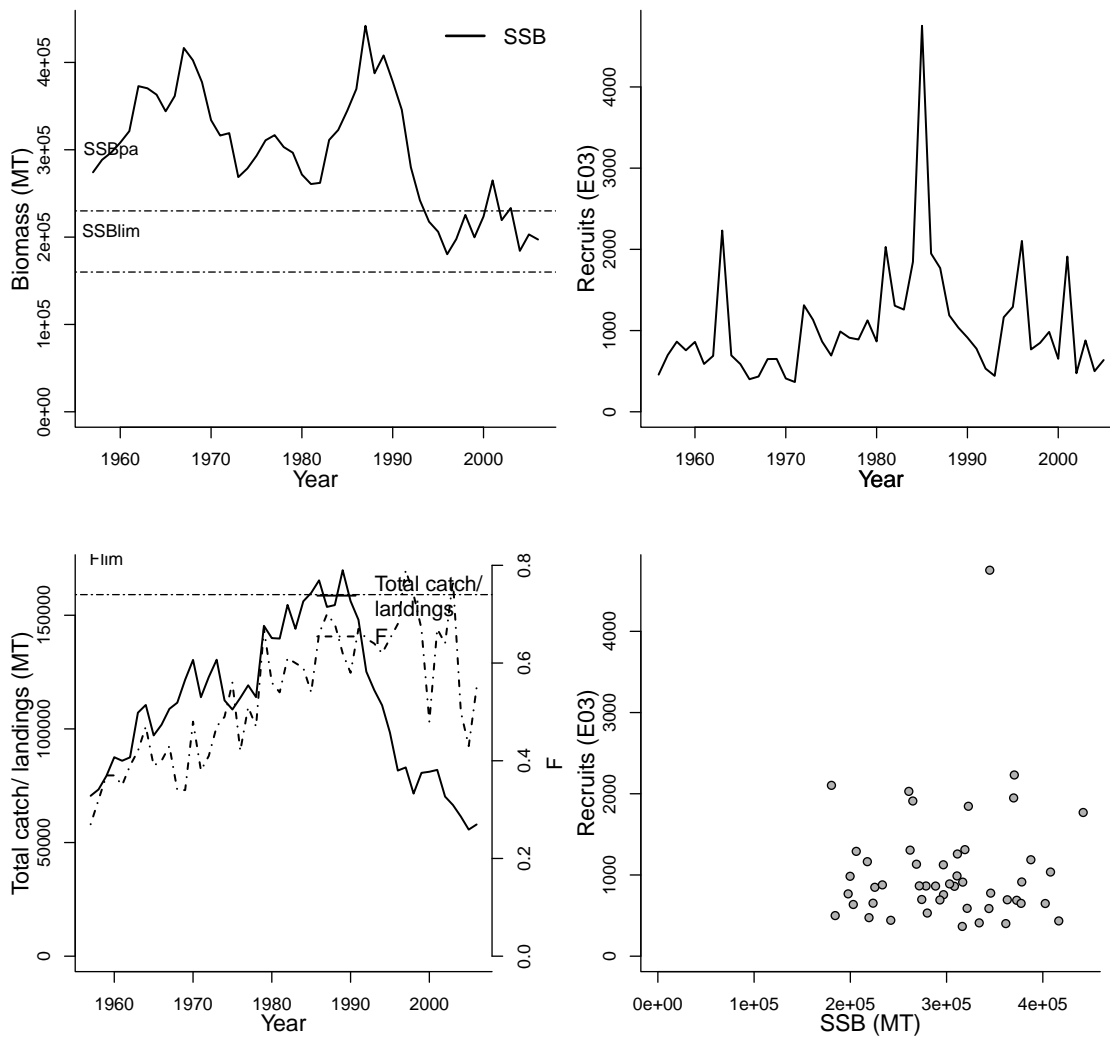
General assessment details.

| 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 | 2010-07-18 |
| 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 |
| primary LME | secondary LME | tertiary LME | M-1/T | 0.1 | 1/T |
| 22 - North Sea | na | na | 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) | 160000 | MT |
| | | | SSBpa-MT (SSB) | 230000 | MT |
| | | | Fpa-1/T (F) | 0.6 | 1/T |
| | | | Flim-1/T (F) | 0.74 | 1/T |
| | | | F0.1-1/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 | Catch |
| 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.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/393>

Area ID: multinational-ICES-IIIa-IV-VI

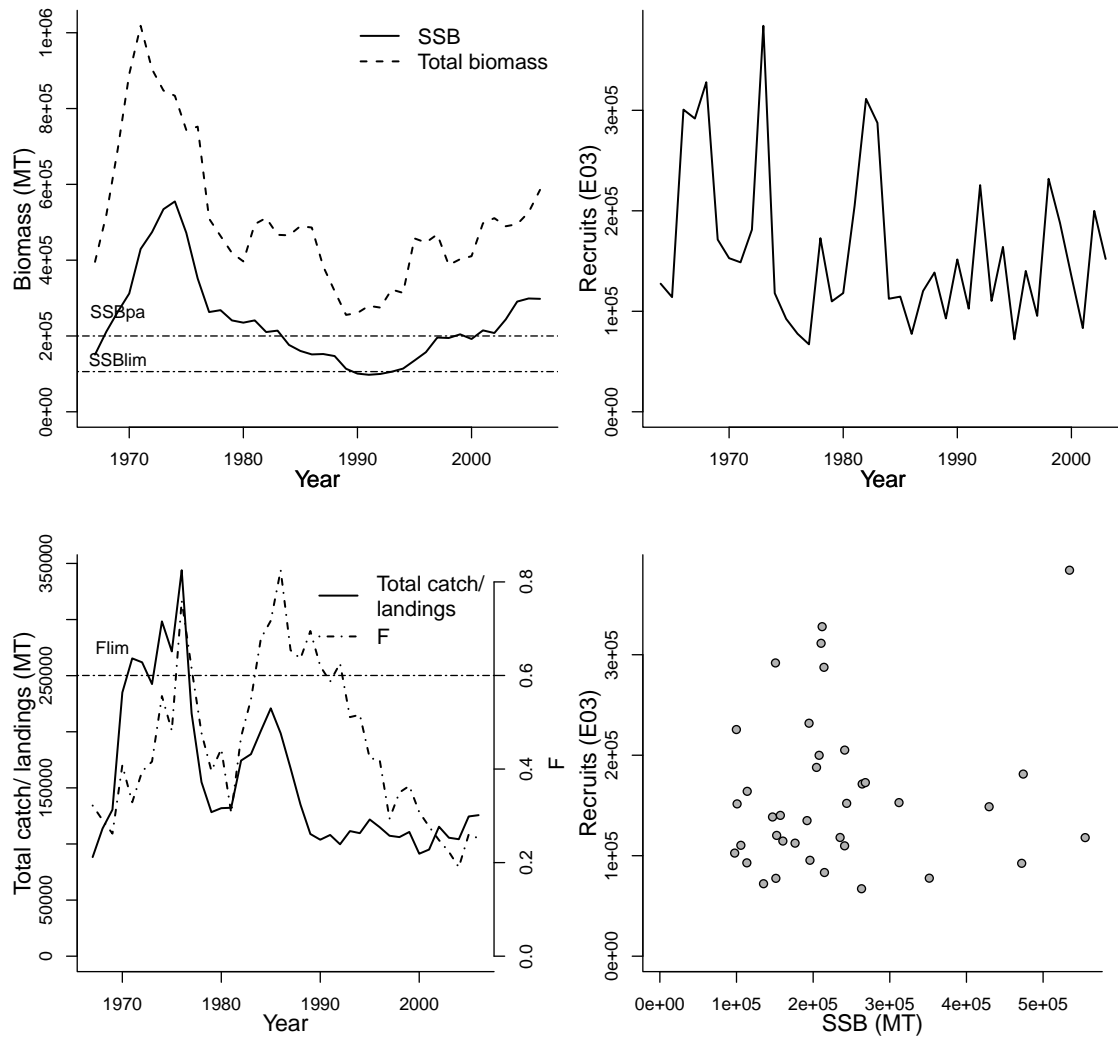
General assessment details.

| 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 | 2010-07-18 |
| 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 | | | | |
| SSB-AGE-yr | 4+ | yr | SSBlim-MT (SSB) | 106000 | MT | |
| REC-AGE-yr | 3 | yr | SSBpa-MT (SSB) | 200000 | MT | |
| TB-AGE-yr | 3+ | yr | Fpa-1/T (F) | 0.4 | 1/T | |
| M-1/T | 0.2 | 1/T | F0.1-1/T | 0.11 | 1/T | |
| F-AGE-yr-yr | 3-6 | yr-yr | Fmax-1/T | 0.22 | 1/T | |
| SSB-SEX-sex | | | Flim-1/T (F) | 0.6 | 1/T | |
| M | | | SSB_{2006}/SSB_{lim} | 2.811 | | |
| L50-cm | | | F_{2006}/F_{lim} | 0.420 | | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|--------|-------|---------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1967 | 1964 | 1967 | 1967 | 1967 |
| Maximum year | 2006 | 2003 | 2006 | 2006 | 2006 |
| Time series minimum | 97609 | 67123 | 0.19 | 255620 | 88326 |
| Time series maximum | 554904 | 384108 | 0.825 | 1018303 | 343967 |
| Units | MT | E03 | 1/T | MT | 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.

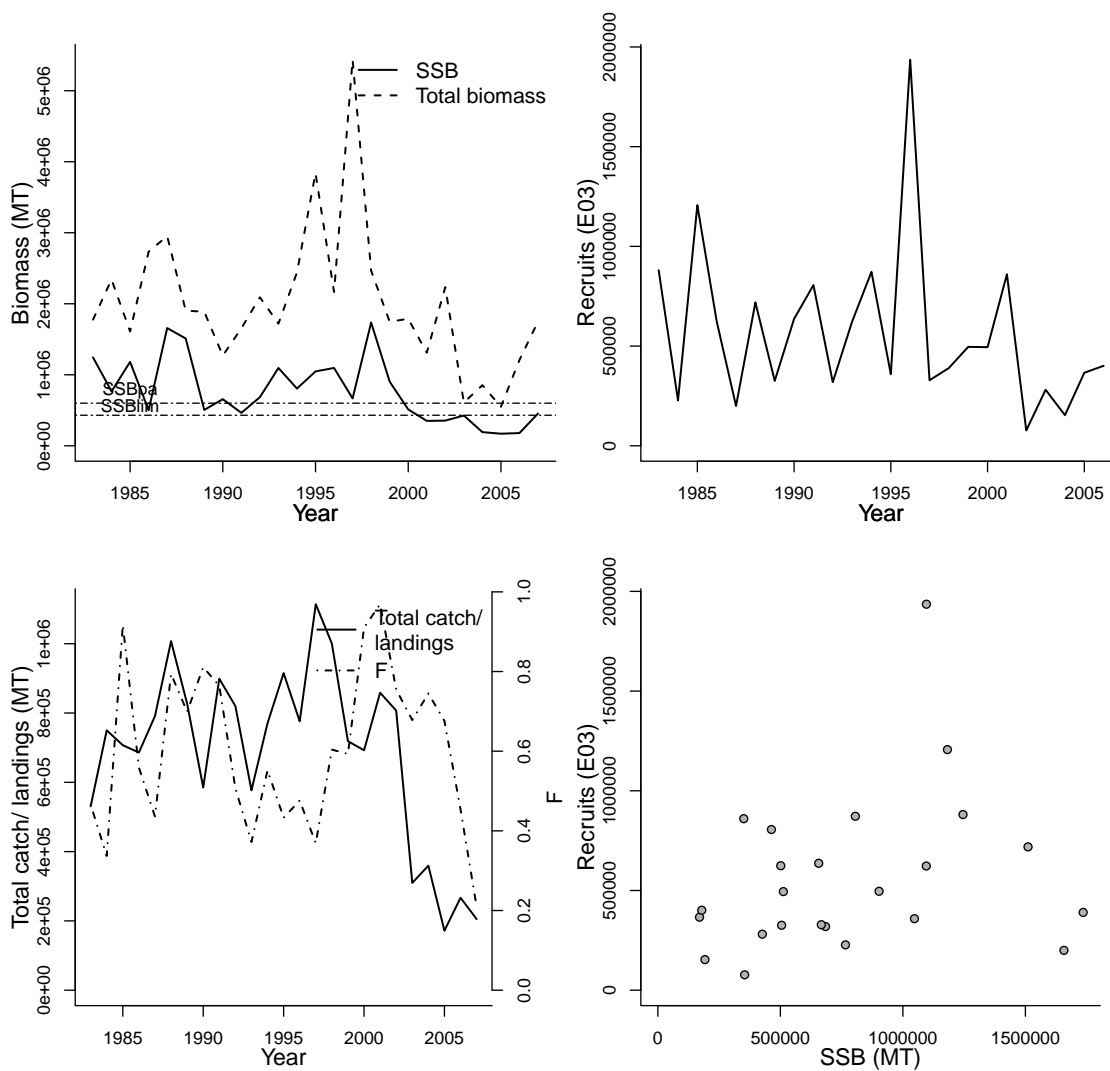
| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | Anonymous |
| Assessment method | Extended Survivor Analysis |
| Publication year | 2007 |
| Timeseries span | 1983-2007 |
| Document | ICES-WGNSSK-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-12 |
| Date last loaded | 2011-03-02 |
| 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 | na | na |
| Parameter | Value | Units | |
| 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 | | | |

| Reference points | | |
|------------------------|--------|-------|
| Parameter | Value | Units |
| 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 | Catch |
| Minimum year | 1983 | 1983 | 1983 | 1983 | 1983 |
| Maximum year | 2007 | 2006 | 2007 | 2007 | 2007 |
| Time series minimum | 169965 | 77203 | 0.21 | 549532 | 171790 |
| Time series maximum | 1735847 | 1935600 | 0.969 | 5435685 | 1114044 |
| Units | MT | E03 | 1/T | MT | 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

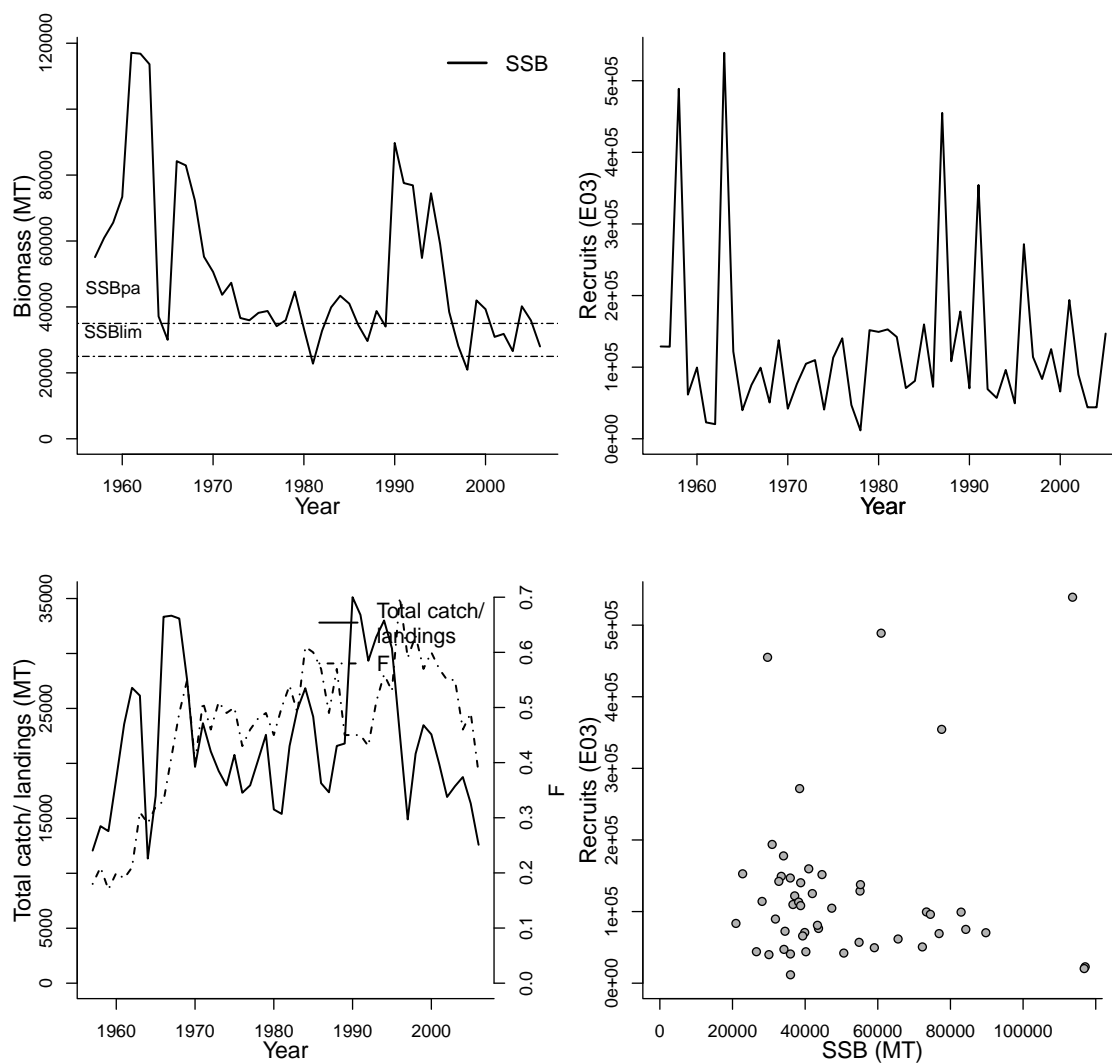
General assessment details.

| 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 | 2011-03-02 |
| 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 | 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 ₂₀₀₆ /SSB _{lim} | | 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-SOLEVIId-1981-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/396>

Area ID: multinational-ICES-VIId

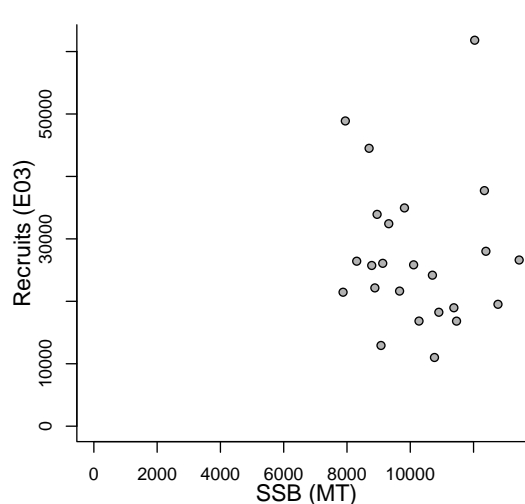
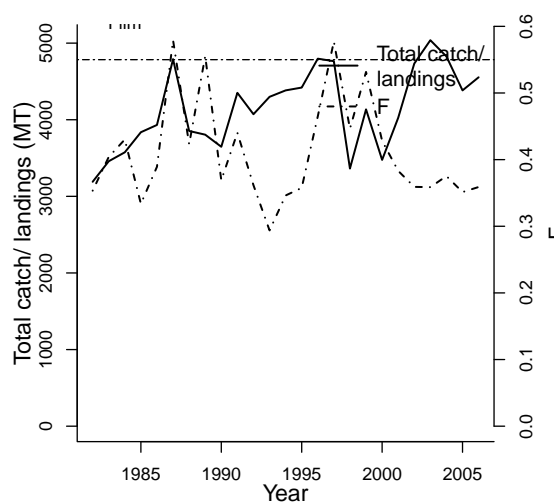
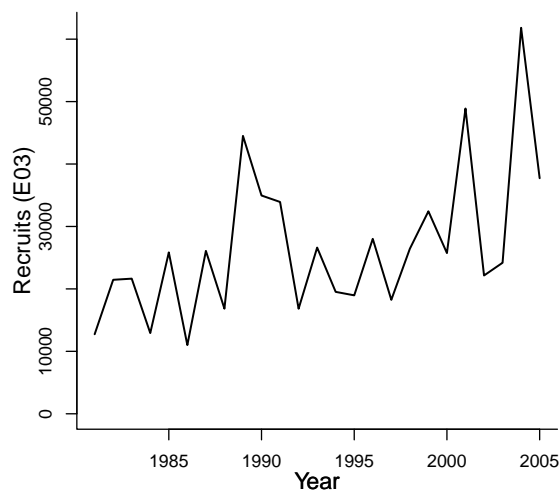
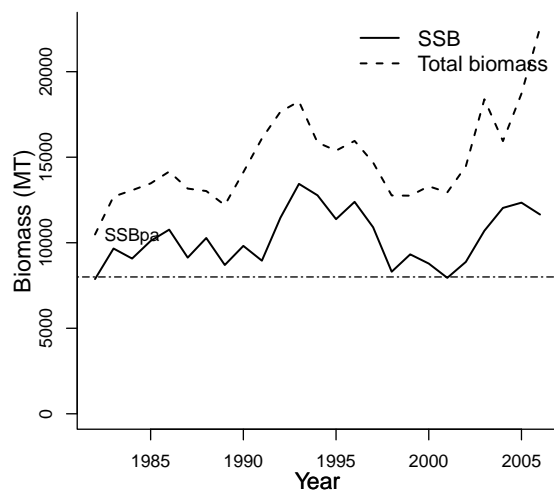
General assessment details.

| 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 | 1981-2006 |
| Document | ICES-WGNSSK-2007.pdf (pdf in database) |
| Recorder | MINTO |
| Date entered | 2008-04-13 |
| Date last loaded | 2010-07-18 |
| 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 | 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-VIId-IIIa-1979-2006-MINTO

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/397>

Area ID: multinational-ICES-IIIa-IV-VIId

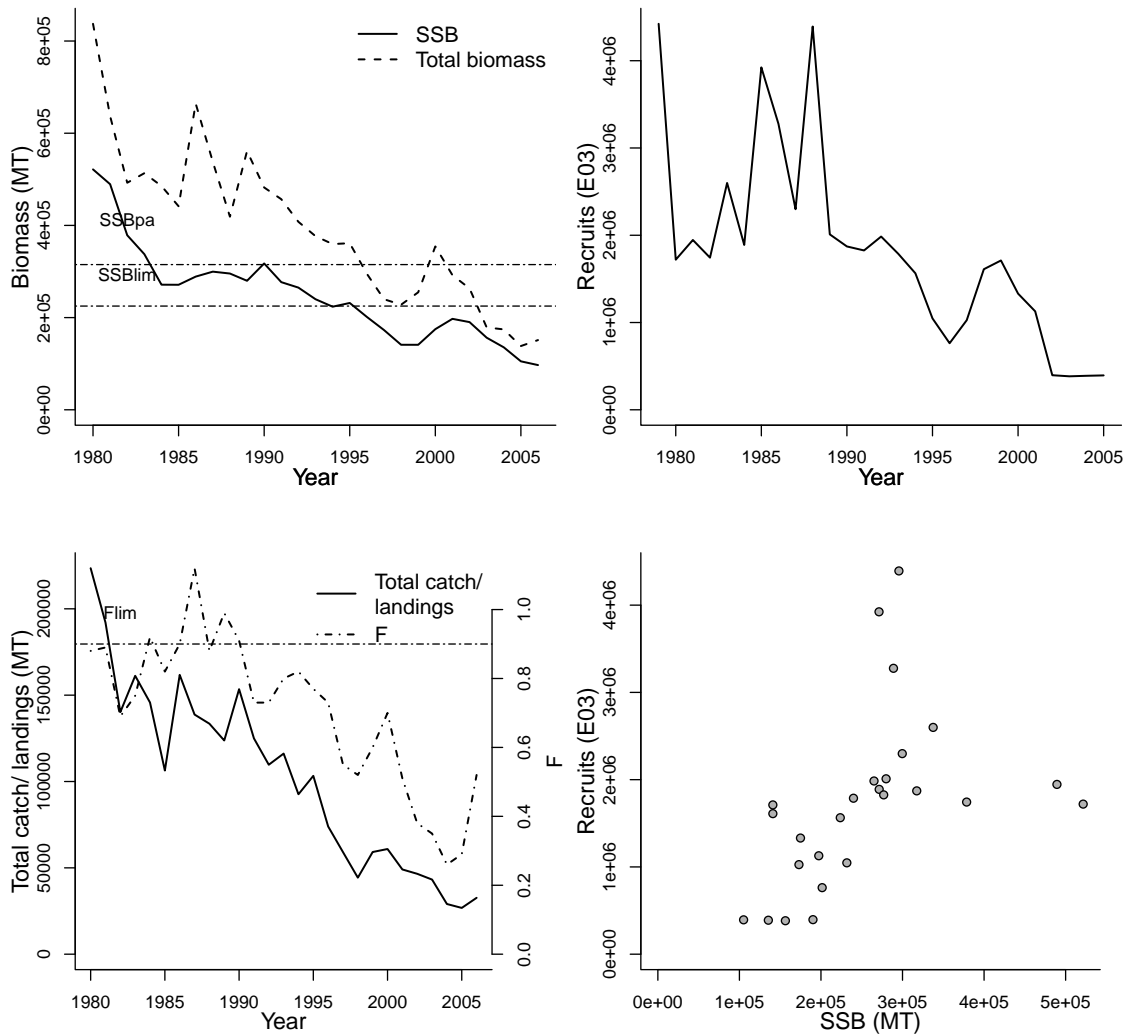
General assessment details.

| Detail | Value |
|--------------------|---|
| Management body | ICES |
| Assessment group | Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak |
| Assessment authors | 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 | 2010-07-18 |
| 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 | 1 | yr | | | |
| SSB-AGE-yr | 1+ | yr | SSBlim-MT (SSB) | 225000 | MT |
| REC-AGE-yr | 1 | yr | SSBpa-MT (SSB) | 315000 | MT |
| TB-AGE-yr | 1+ | yr | Fpa-1/T (F) | 0.65 | 1/T |
| M-1/T | Age specific | 1/T | F0.1-1/T | 0.1 | 1/T |
| F-AGE-yr-yr | 2-6 | yr-yr | Fmax-1/T | 0.19 | 1/T |
| SSB-SEX-sex | | | Flim-1/T (F) | 0.9 | 1/T |
| M | | | SSB_{2006}/SSB_{lim} | 0.431 | |
| L50-cm | | | F_{2006}/F_{lim} | 0.578 | |

| Time series minima and maxima | | | | | |
|-------------------------------|--------|---------|------|--------|--------|
| | SSB | R | F | TB | Catch |
| Minimum year | 1980 | 1979 | 1980 | 1980 | 1980 |
| Maximum year | 2006 | 2005 | 2006 | 2006 | 2006 |
| Time series minimum | 96967 | 383532 | 0.26 | 138290 | 26795 |
| Time series maximum | 521533 | 4423048 | 1.12 | 837376 | 223517 |
| Units | MT | E03 | 1/T | MT | MT |



MAP KEY:

- | LME Number | LME Name |
|------------|---------------------------|
| 1 | East Baltic Sea |
| 2 | North Sea |
| 3 | Gulf of California |
| 4 | California Current |
| 5 | Chukchi Sea |
| 6 | South Sea |
| 7 | Indian Ocean |
| 8 | South East Labrador Shelf |
| 9 | North East Labrador Shelf |
| 10 | Indian Pacific Ocean |
| 11 | Indian Pacific Ocean |
| 12 | Indian Pacific Ocean |
| 13 | Indian Pacific Ocean |
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| 100 | Indian Pacific Ocean |



LARGE MARINE ECOSYSTEMS are areas of the ocean characterized by distinct bathymetry, hydrography, productivity, and trophic interactions. They annually produce 95 percent of the world's fish catch. They are national and regional focal areas of a global effort to reduce the degradation of linked watersheds, marine resources, and coastal environments from pollution, habitat loss, and over-fishing.

For More Information Visit: www.edc.uri.edu/lme

NORTH POLAR REGION

SOUTH POLAR REGION