

Dear Colleague,

Thank you sincerely for submitting assessments to the Myers II database. We have entered 14 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.

Contents

QA/QC steps	1
QA/QC submission process	1
MARAM-ANCHOSA-1984-2006-deMoor	3
MARAM-CHAKESA-1917-2008-DEDECKER	5
MARAM-CRLOBSTERSA12-1910-2008-Johnston	7
MARAM-CRLOBSTERSA34-1910-2008-Johnston	9
MARAM-CRLOBSTERSA56-1910-2008-Johnston	11
MARAM-CRLOBSTERSA7-1910-2008-Johnston	13
MARAM-CRLOBSTERSA8-1910-2008-Johnston	15
MARAM-CTRACSA-1950-2007-Johnston	17
MARAM-DEEPCHAKESA-1917-2008-DEDECKER	19
MARAM-KINGKLIPSA-1932-2008-DEDECKER	21
MARAM-PTOOTHFISHPEI-1960-2008-DEDECKER	23
MARAM-SAABALONESA-1951-2008-PLAGANYI	25
MARAM-SARDSA-1984-2006-deMoor	27
MARAM-SSLOBSTERSASC-1973-2008-Johnston	29
LME map	31

Assessment of South Africa anchovy (*Engraulis encrasicolus*)

Assessment ID: MARAM-ANCHOSA-1984-2006-deMoor

Issue URL: <http://www.marinebiodiversity.ca/ramlegacy/ramlegacy-bug-reporting/126>

Area ID: South Africa-DETMCM-SA

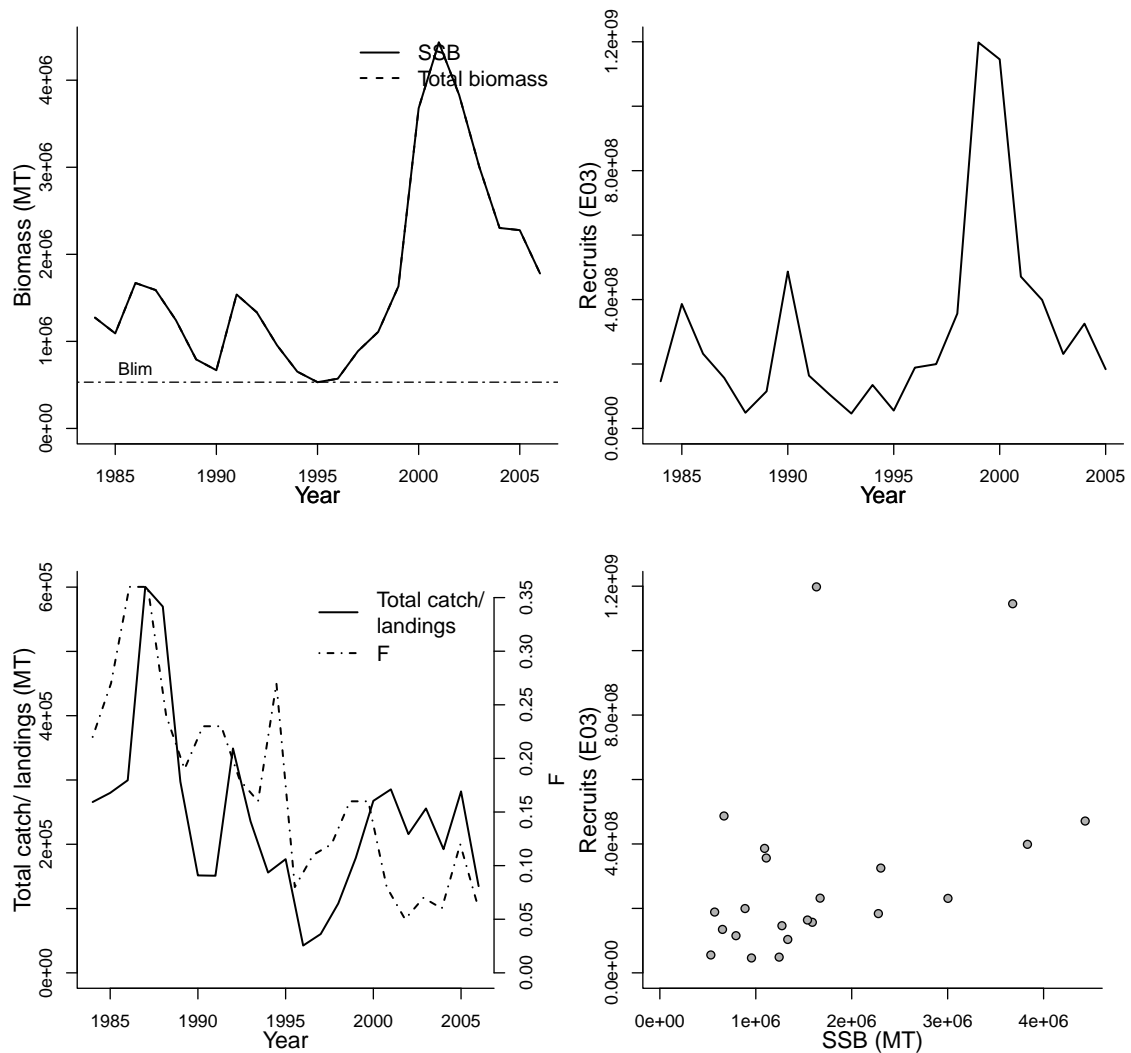
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Cunningham CL
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1984-2006
Document	.pdf (pdf not in database)
Recorder	deMoor
Date entered	2009-01-16
Date last loaded	2009-03-24
QA/QC complete	NO
Date approved	

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

			primary LME			secondary LME			tertiary LME		
			29 - Benguela Current			30 - Agulhas Current			na		
Parameter			Value	Units							
			Reference points								
TB-AGE-yr			1+	yr	Parameter			Value	Units		
M-1/yr			0.9	1/yr							
SSB-AGE-yr			1-4+	yr	Blim-MT (SSB)			531400	MT		
REC-AGE-yr			0	yr	SSB0-MT (SSB)			1838900	MT		
F-AGE-yr-yr			1+	yr-yr	SSBtarget-MT (SSB)			109600	MT		
M					SSBexceptional-MT (SSB)			400000	MT		
A50-yr					SSB_{2006}/B_{lim}			3.350			
L50-cm											

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1984	1984	1985	1984	1984
Maximum year	2006	2005	2006	2006	2006
Time series minimum	531441.84	46246000	0.05	531441.84	42475
Time series maximum	4433416.93	1197855000	0.36	4433416.93	600376
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa shallow-water cape hake (*Merluccius capensis*)

Assessment ID:MARAM-CHAKESA-1917-2008-DEDECKER

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/195>

Area ID: South Africa-DETMCM-SA

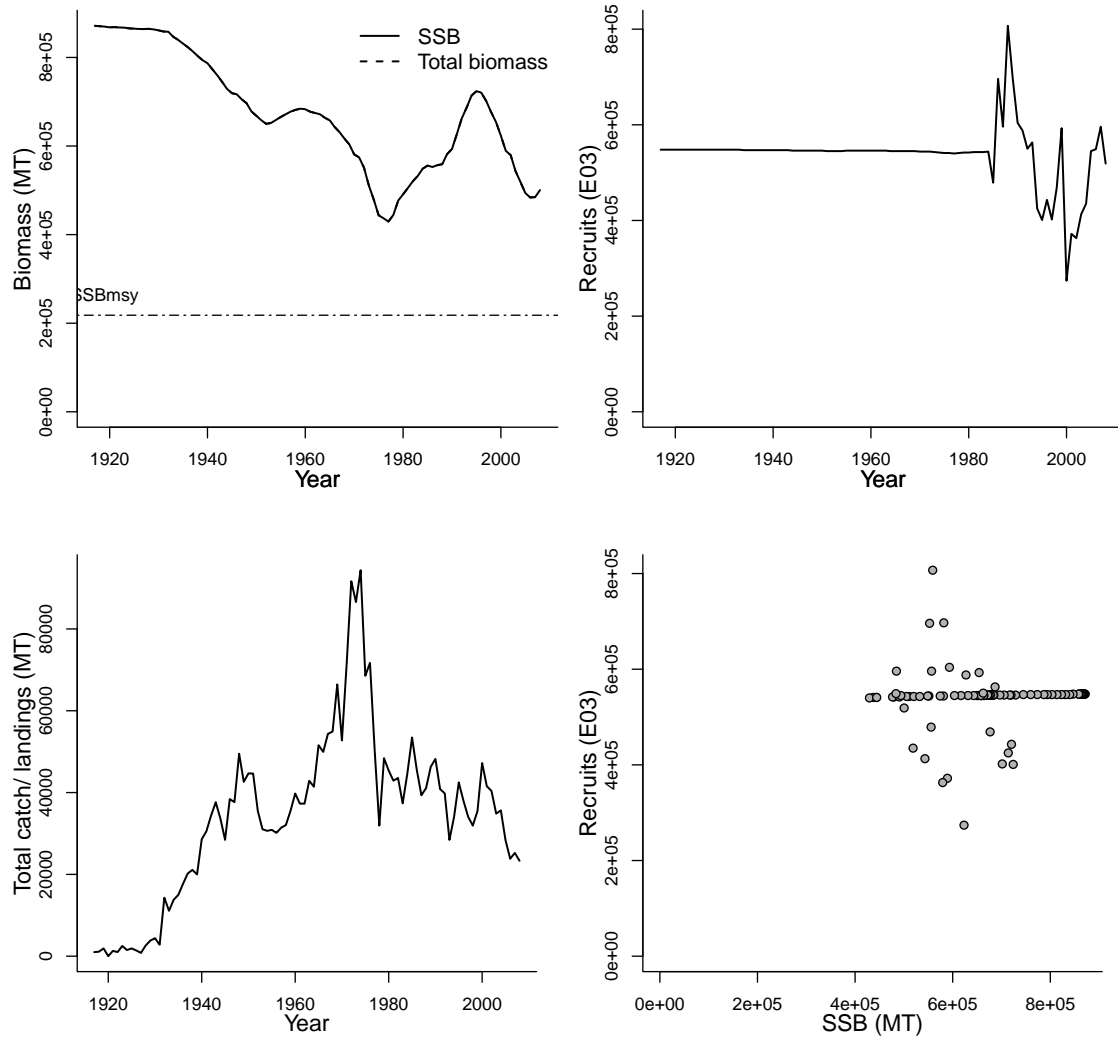
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Rademeyer, R.A.
Assessment method	Age-structured surplus production model
Publication year	
Timeseries span	1917-2008
Document	SA-Mcapensis-2008_IWS_DEC08_H.5.pdf (pdf not in database)
Recorder	DEDECKER
Date entered	2009-02-13
Date last loaded	2009-12-07
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME			tertiary LME		
29 - Benguela Current			30 - Agulhas Current			na		
Parameter	Value	Units	Reference points			Parameter	Value	Units
SSB-AGE-yr	3+	yr	SSB _{msy} -MT (SSB)	218000	MT			
REC-AGE-yr	0	yr	SSB ₀ -MT (SSB)	871000	MT			
F-AGE-yr-yr	0-7+	yr-yr	R ₀ -E ₀₉ (R)	0.548	E ₀₉			
TB-AGE-yr	3	yr	MSY-MT (TB)	86000	MT			
A ₅₀ -yr	3	yr	BH-h-dimless	0.95	dimless			
M-1/yr	0.4	1/yr	SSB_{2008}/SSB_{msy}	2.296				
M								
L ₅₀ -cm								

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1917	1917		1917	1917
Maximum year	2008	2008		2008	2008
Time series minimum	429458.4	274000		429458.4	0
Time series maximum	871443.8	807000		871443.8	94359
Units	MT	E03		MT	MT



Assessment of South Africa Areas 1-2 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID:MARAM-CRLOBSTERSA12-1910-2008-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/135>

Area ID: South Africa-DETMCM-1-2

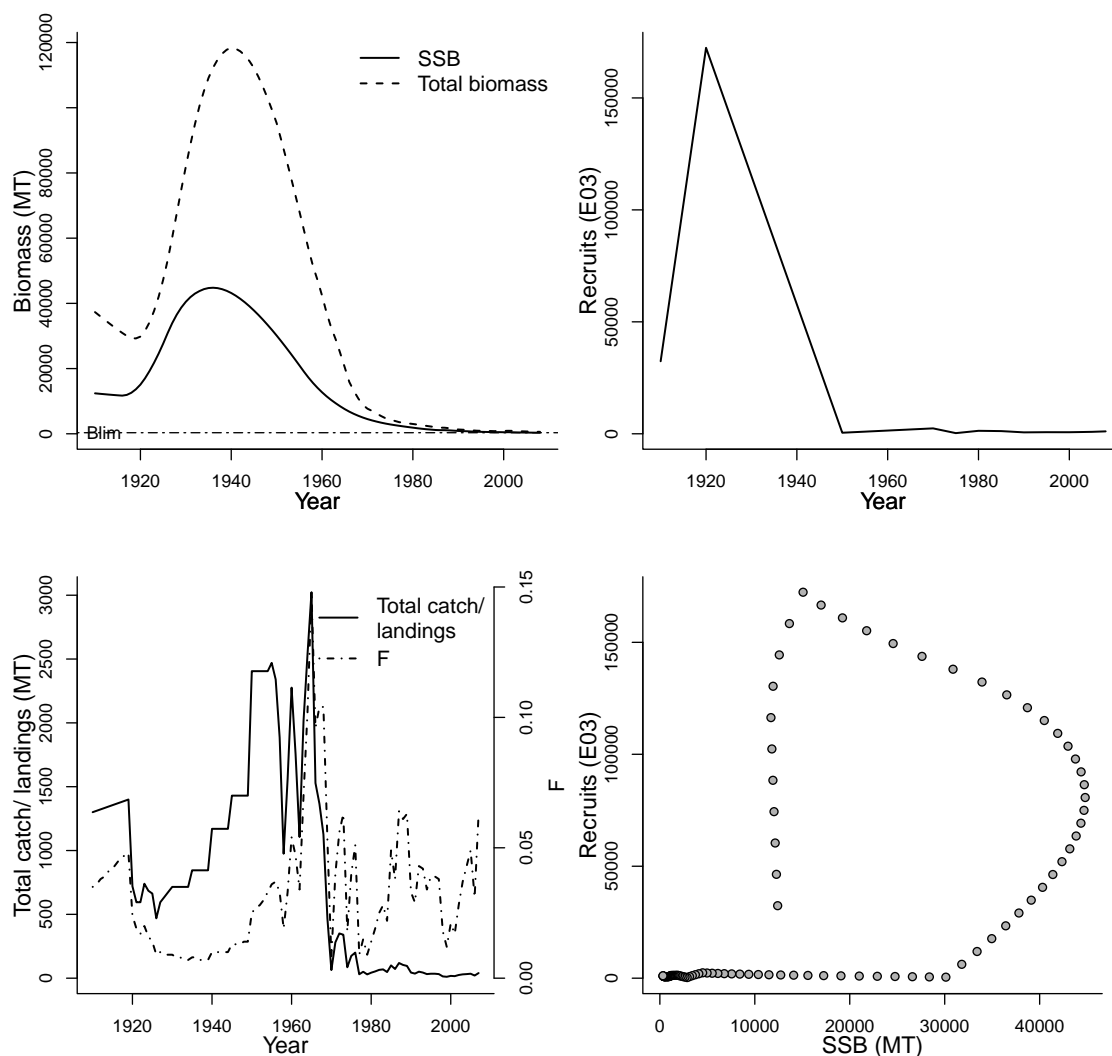
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-25
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME	tertiary LME	
29 - Benguela Current			na	na	
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (SSB)	326	MT
SSB-AGE-yr			SSB0-MT (SSB)	12407	MT
TB-AGE-yr			R0-E00	32386294	E00
F-AGE-yr			SSB_{2008}/B_{lim}	1.003	
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	326.94	289.43869	0.007	593.17	11
Time series maximum	44795.87	172388.67	0.148	118382.77	3023.5
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa Areas 3-4 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA34-1910-2008-Johnston
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/136>

Area ID: South Africa-DETMCM-3-4

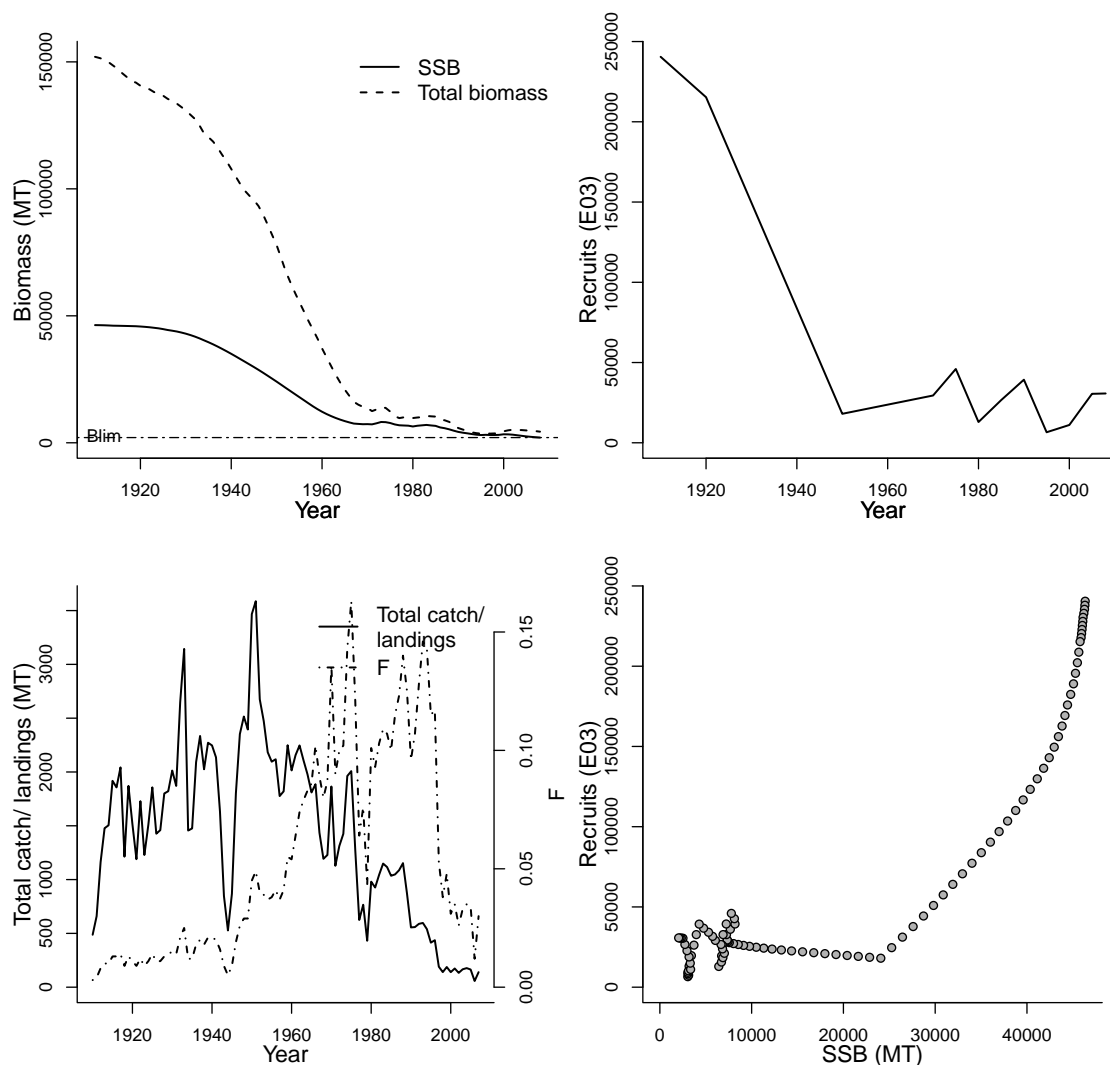
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-25
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME	tertiary LME	
29 - Benguela Current			na	na	
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (SSB)	2048	MT
SSB-AGE-yr			SSB0-MT (SSB)	46342	MT
TB-AGE-yr			R0-E00	240492130	E00
F-AGE-yr			SSB_{2008}/B_{lim}	1.000	
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	2047.91	6554.977	0.003	3589.86	57.52
Time series maximum	46342.25	240492.13	0.163	151997.41	3587.07
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa Areas 5-6 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID: MARAM-CRLOBSTERSA56-1910-2008-Johnston
 Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/137>

Area ID: South Africa-DETMCM-5-6

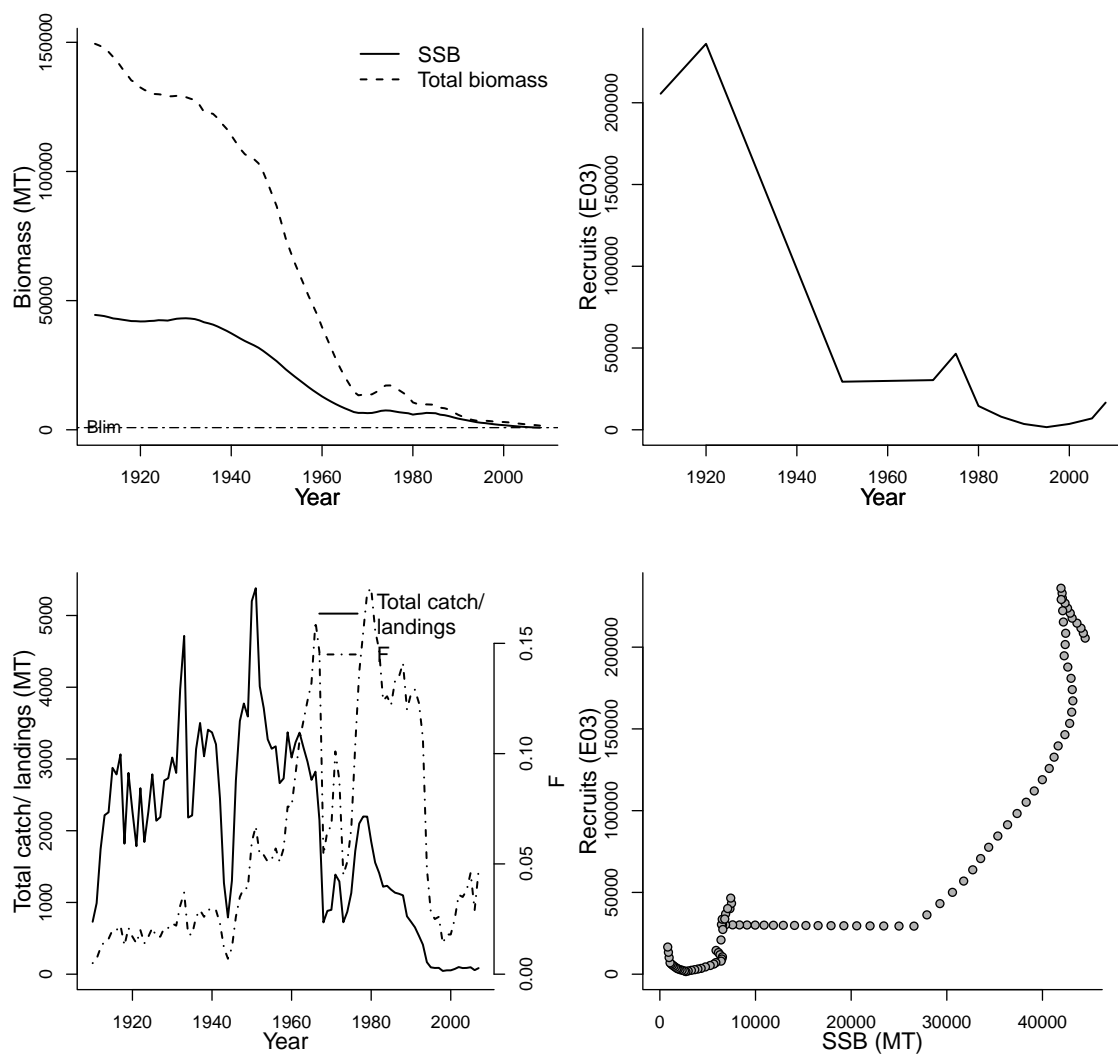
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-25
QA/QC complete	NO
Date approved	

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

			primary LME	secondary LME	tertiary LME
			29 - Benguela Current	na	na
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
F-AGE-yr-yr		yr-yr	Parameter	Value	Units
L50-cm	6.5	cm	Blim-MT (SSB)	822	MT
M-1/yr	0.1	1/yr	SSB0-MT (SSB)	44464	MT
SSB-AGE-yr			R0-E00	205531950	E00
TB-AGE-yr			SSB_{2008}/B_{lim}	1.000	
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	822.13	1611.32375	0.005	1617.85	45.17
Time series maximum	44464.08	236047.94	0.175	149419.94	5380.44
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa Area 7 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID:MARAM-CRLOBSTERSA7-1910-2008-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/138>

Area ID: South Africa-DETMCM-7

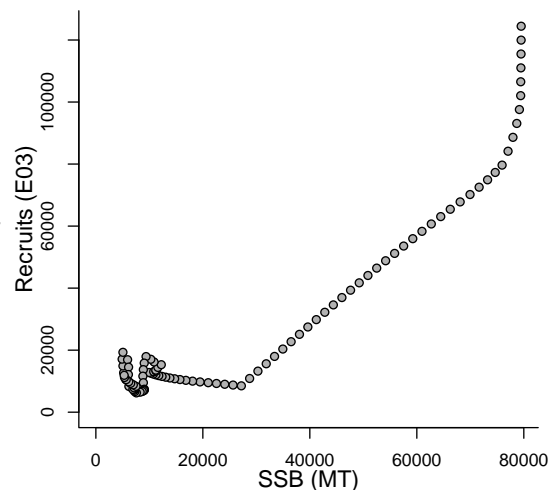
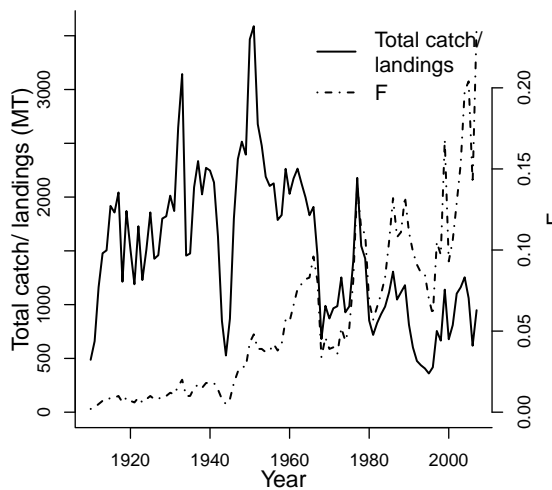
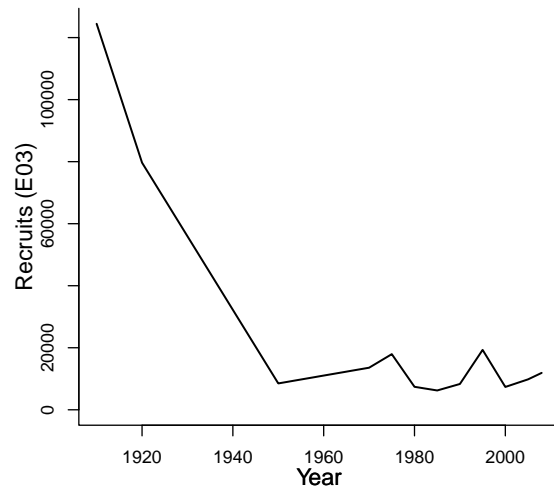
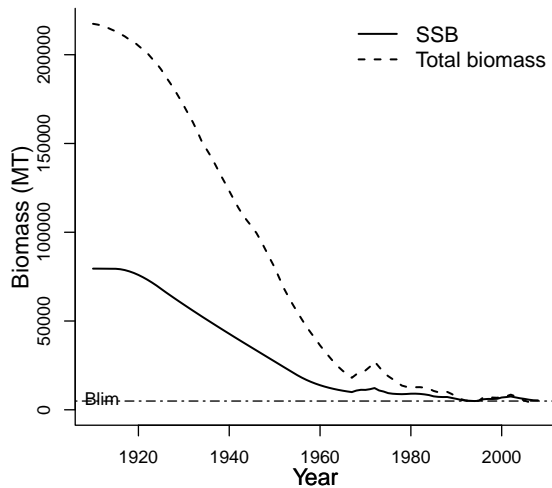
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-25
QA/QC complete	NO
Date approved	

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

			primary LME	secondary LME	tertiary LME
			29 - Benguela Current	na	na
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (SSB)	4913	MT
SSB-AGE-yr			SSB0-MT (SSB)	79509	MT
TB-AGE-yr			R0-E00	124447910	E00
F-AGE-yr			SSB_{2008}/B_{lim}	1.077	
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	4912.78	6224.131	0.002	3476.71	359.95
Time series maximum	79508.87	124447.91	0.238	217412.98	3588.63
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa Area 8 south african west coast rock lobster (*Jasus lalandii*)

Assessment ID:MARAM-CRLOBSTERSA8-1910-2008-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/139>

Area ID: South Africa-DETMCM-8

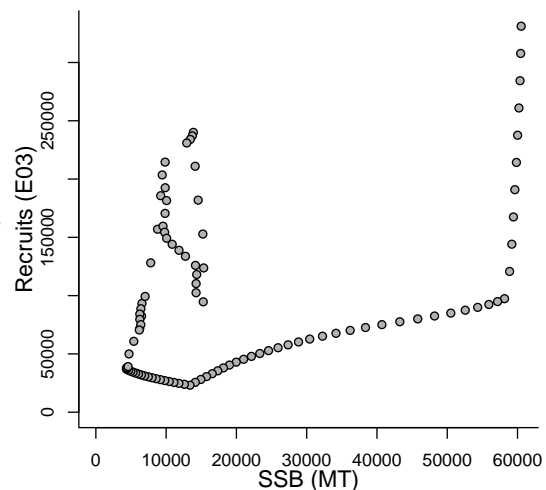
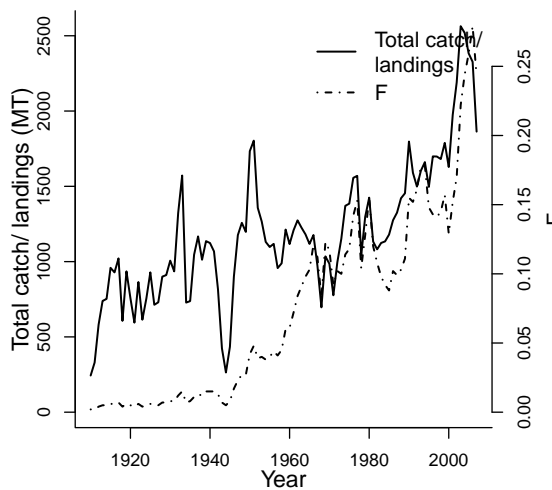
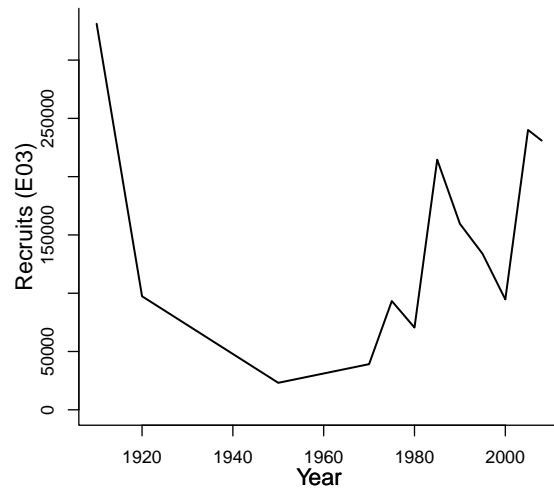
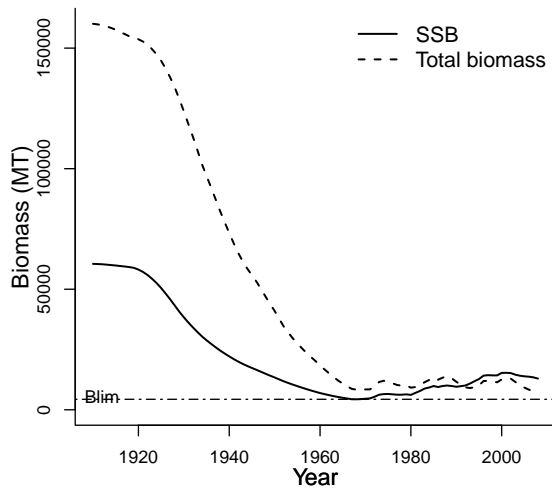
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-25
QA/QC complete	NO
Date approved	

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

			primary LME	secondary LME	tertiary LME
			29 - Benguela Current	na	na
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (SSB)	4350	MT
SSB-AGE-yr			SSB0-MT (SSB)	60521	MT
TB-AGE-yr			R0-E00	331132540	E00
F-AGE-yr			SSB_{2008}/B_{lim}	2.974	
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	4350.07	23132.88	0.002	7157.77	243.61
Time series maximum	60520.58	331132.54	0.279	160088.06	2563.4
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa South coast cape horse mackerel (*Trachurus capensis*)

Assessment ID: MARAM-CTRACSA-1950-2007-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/134>

Area ID: South Africa-DETMCM-SASC

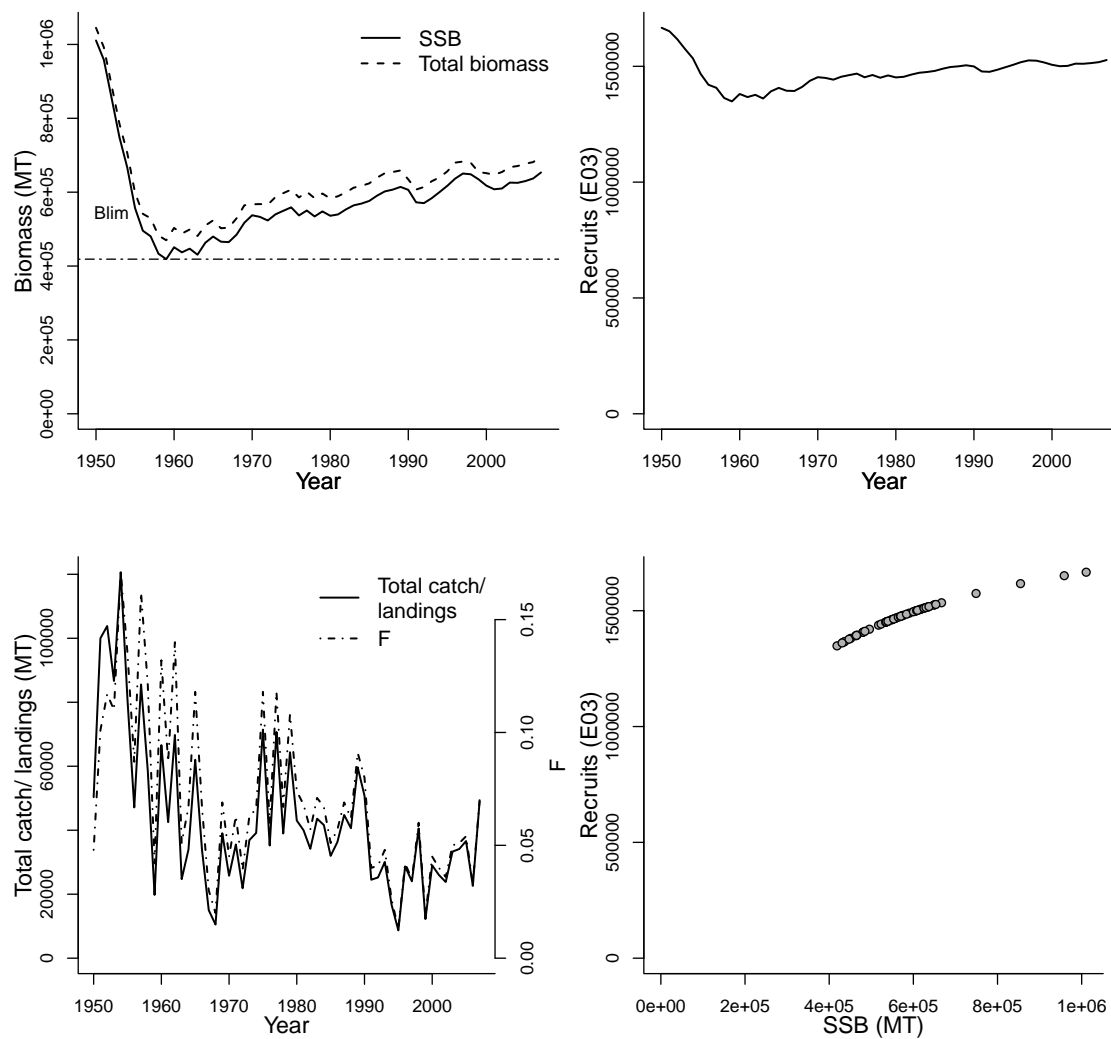
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Age-structured surplus production model
Publication year	
Timeseries span	1950-2007
Document	Johnston-SA Horse Mackerel-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-17
QA/QC complete	NO
Date approved	

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

	primary LME		secondary LME	tertiary LME	
	30 - Agulhas Current		na	na	
Parameter	Value	Units			
REC-AGE-yr	0	yr	Reference points		
F-AGE-yr-yr	0-10	yr-yr	Parameter	Value	Units
A50-yr	3	yr	Blim-MT (SSB)	418631	MT
M-1/yr	0.3	1/yr	SSB0-MT (SSB)	1010700	MT
SSB-AGE-yr			R0-E00	166623000	E00
TB-AGE-yr			BH-h-dimless	0.6	dimless
M			SSB_{2007}/B_{lim}	1.561	
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1950	1950	1950	1950	1950
Maximum year	2007	2007	2007	2007	2007
Time series minimum	418631	1348400	0.013	469844	8693
Time series maximum	1010700	1666230	0.171	1045060	120650
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa deep-water cape hake (*Merluccius paradoxus*)

Assessment ID:MARAM-DEEPCHAKESA-1917-2008-DEDECKER

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/196>

Area ID: South Africa-DETMCM-SA

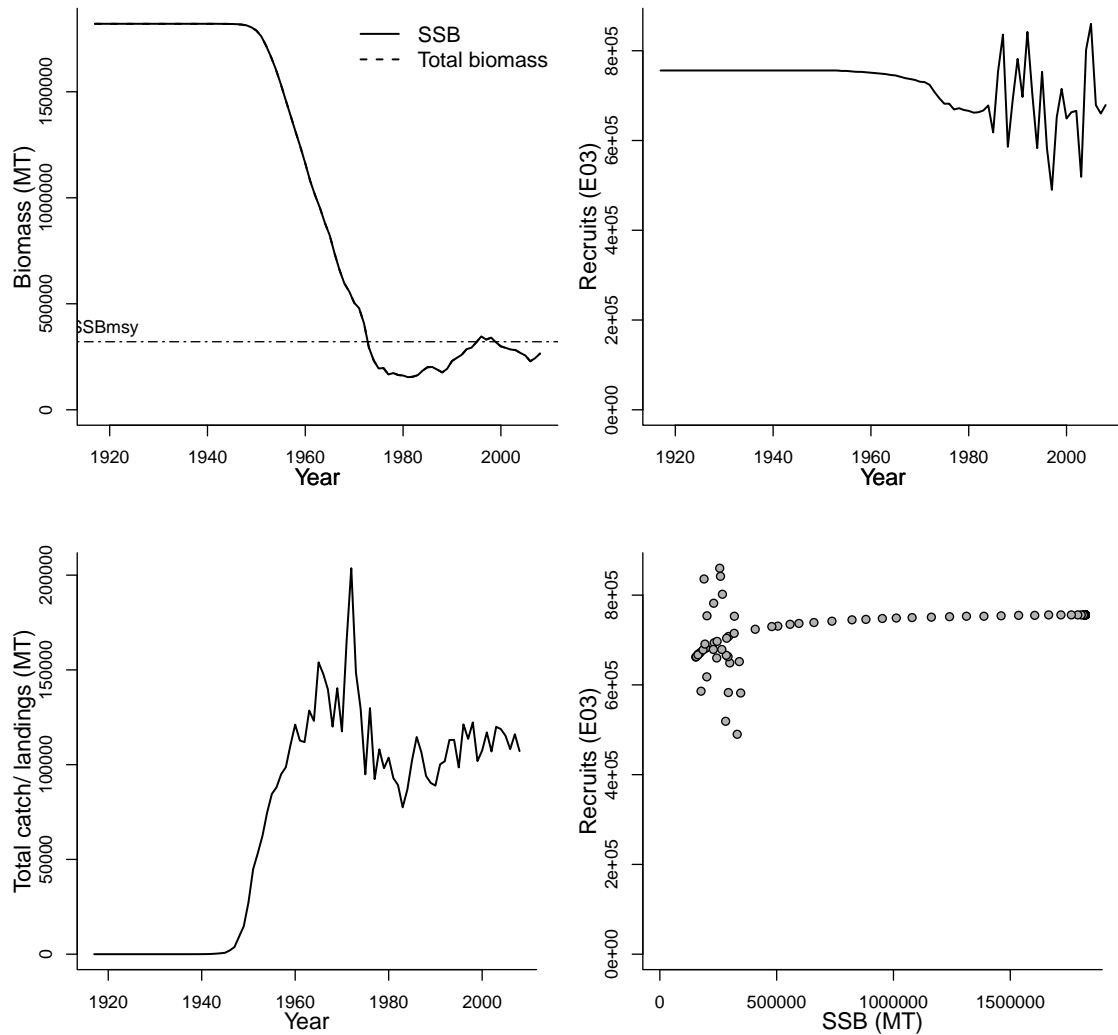
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Rademeyer, R.A.
Assessment method	Age-structured surplus production model
Publication year	
Timeseries span	1917-2008
Document	SA-Mparadoxus-2008-IWS-DEC08-H-5.pdf (pdf in database)
Recorder	DEDECKER
Date entered	2009-02-13
Date last loaded	2009-12-07
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME			tertiary LME		
29 - Benguela Current			30 - Agulhas Current			na		
Parameter	Value	Units	Reference points					
			Parameter	Value	Units			
SSB-AGE-yr	3+	yr	SSBmsy-MT (SSB)	321000	MT			
REC-AGE-yr	0	yr	SSB0-MT (SSB)	1821000	MT			
F-AGE-yr-yr	0-5+	yr-yr	R0-E09 (R)	0.756	E09			
TB-AGE-yr	3	yr	MSY-MT (TB)	113500	MT			
A50-yr	3	yr	BH-h-dimless	0.95	dimless			
M-1/T	AVAILABLE	1/T	SSB_{2008}/SSB_{msy}	0.826				
M-1/yr	AVAILABLE	1/yr						
M								
L50-cm								

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1917	1917		1917	1917
Maximum year	2008	2008		2008	2008
Time series minimum	153751.4	490000		153751.4	0
Time series maximum	1820629.2	860000		1820629.2	203658
Units	MT	E03		MT	MT



Assessment of South Africa kingklip (*Genypterus capensis*)

Assessment ID:MARAM-KINGKLIPSA-1932-2008-DEDECKER

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/201>

Area ID: South Africa-DETMCM-SA

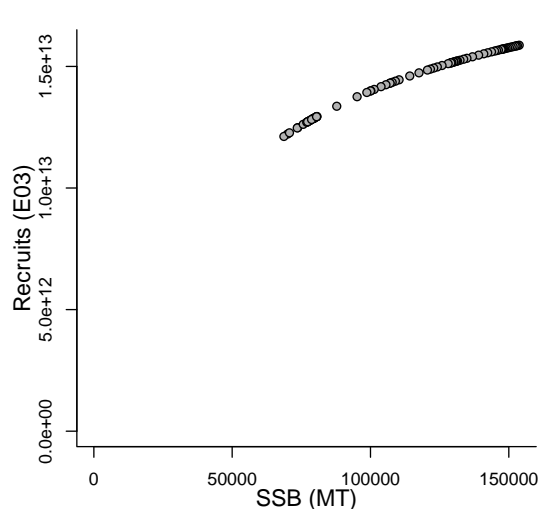
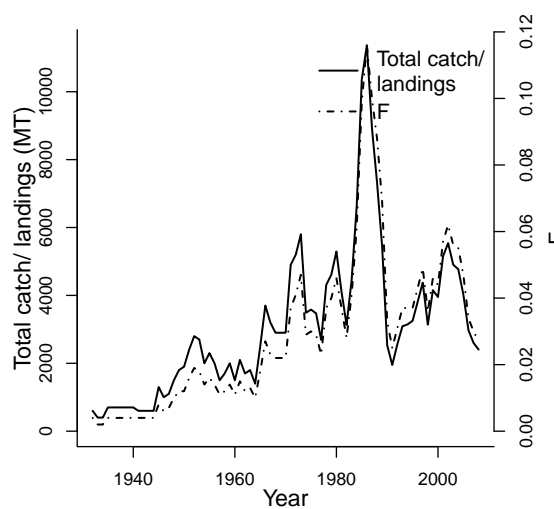
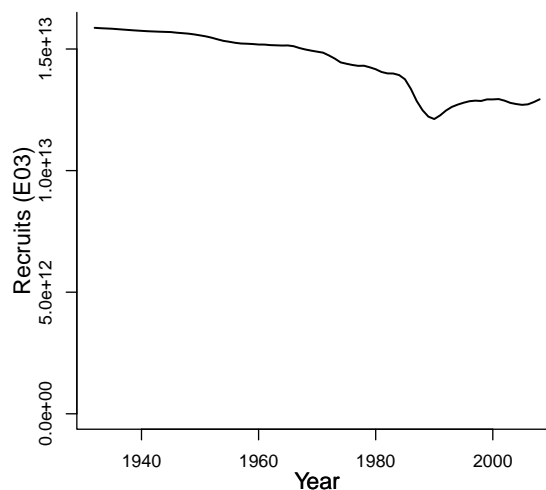
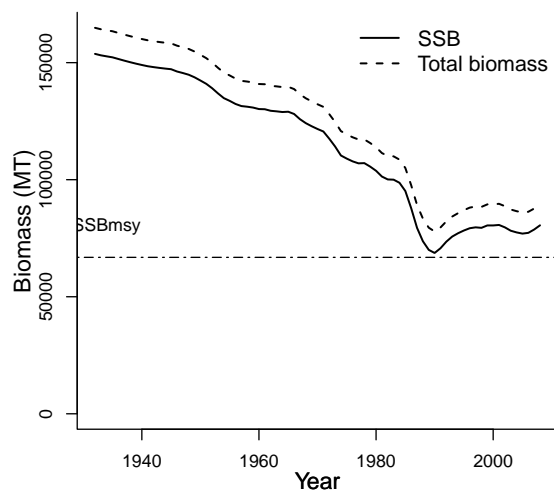
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Brandao, A
Assessment method	Age-structured surplus production model
Publication year	
Timeseries span	1932-2008
Document	Branch-SA-Kingklip-2008.pdf (pdf in database)
Recorder	DEDECKER
Date entered	2009-03-29
Date last loaded	2009-12-07
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME		tertiary LME
29 - Benguela Current			30 - Agulhas Current		na
Parameter	Value	Units	Reference points		
			Parameter	Value	Units
SSB-AGE-yr	5+	yr	SSBmsy-MT (SSB)	66828	MT
REC-AGE-yr	0	yr	SSB0-MT (SSB)	153752	MT
F-AGE-yr-yr	0+	yr-yr	MSY-MT (TB)	66882	MT
TB-AGE-yr	0+	yr	BH-h-dimless	0.5	dimless
A50-yr	5	yr	SSB_{2008}/SSB_{msy}	1.205	
M-1/yr	0.2	1/yr			
M					
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1932	1932	1932	1932	1932
Maximum year	2008	2008	2008	2008	2008
Time series minimum	68700.1	12120900000000	0.002	77875.9	400
Time series maximum	153752	15872300000000	0.116	164889	11370
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa Subantarctic Prince Edward Islands patagonian toothfish (*Dissostichus eleginoides*)

Assessment ID: MARAM-PTOOTHFISHPEI-1960-2008-DEDECKER
Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/199>

Area ID: South Africa-DETMCM-PEI

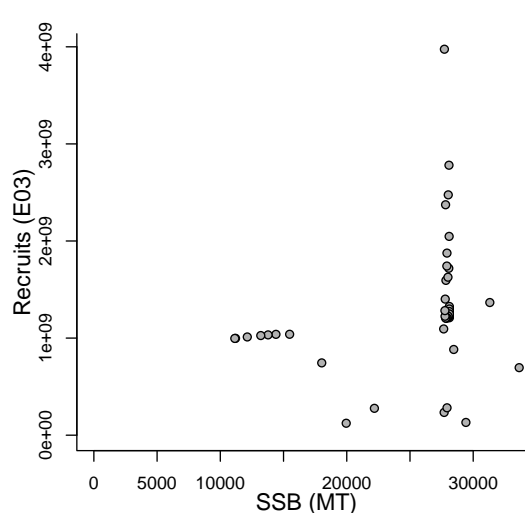
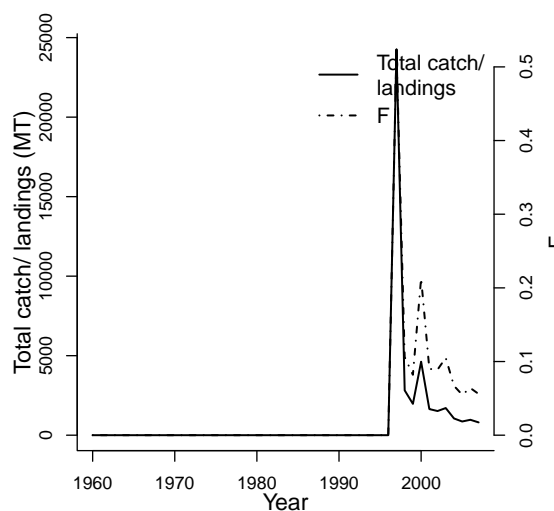
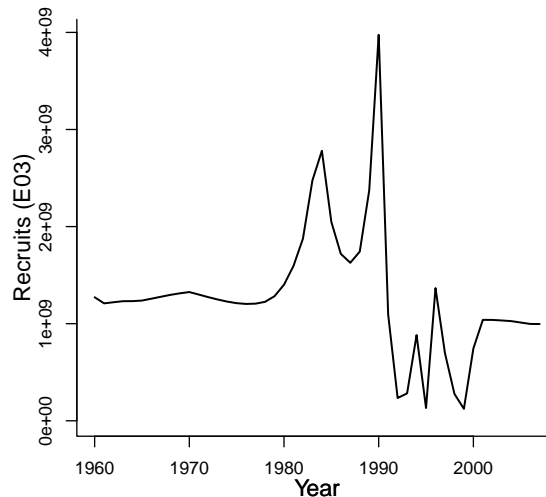
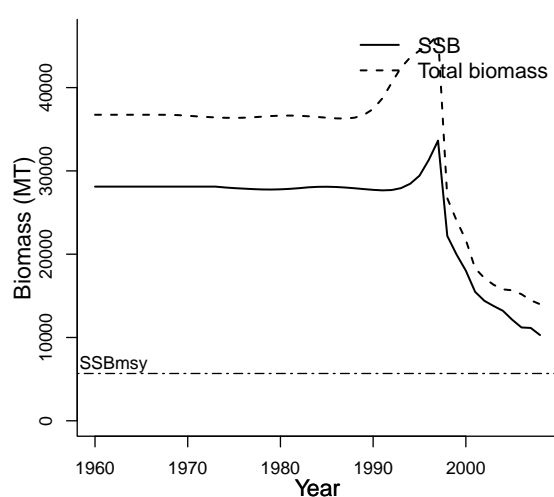
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Brandao, A
Assessment method	Age-structured surplus production model
Publication year	2007
Timeseries span	1960-2008
Document	Branch-SA-Toothfish-2007.pdf (pdf in database)
Recorder	DEDECKER
Date entered	2009-03-05
Date last loaded	2009-12-07
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME	tertiary LME	
-96 - Subantarctic High Seas			na	na	
Parameter	Value	Units	Reference points		
			Parameter	Value	Units
SSB-AGE-yr	13+	yr	SSBmsy-MT (SSB)	5678	MT
REC-AGE-yr	0	yr	SSB0-MT (SSB)	28111	MT
TB-AGE-yr	6+	yr	MSY-MT (TB)	2366	MT
A50-yr	13	yr	BH-h-dimless	0.75	dimless
M-1/yr	0.13	1/yr	SSB_{2008}/SSB_{msy}	1.812	
F-AGE-yr					
M					
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1960	1960	1960	1960	1960
Maximum year	2008	2007	2007	2008	2007
Time series minimum	10288.9	123205000	0	13993.9	0
Time series maximum	33635.4	3975250000	0.524	46337.7	24271.2
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa south african abalone (*Haliotis midae*)

Assessment ID:MARAM-SAABALONESA-1951-2008-PLAGANYI

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/198>

Area ID: South Africa-DETMCM-SA

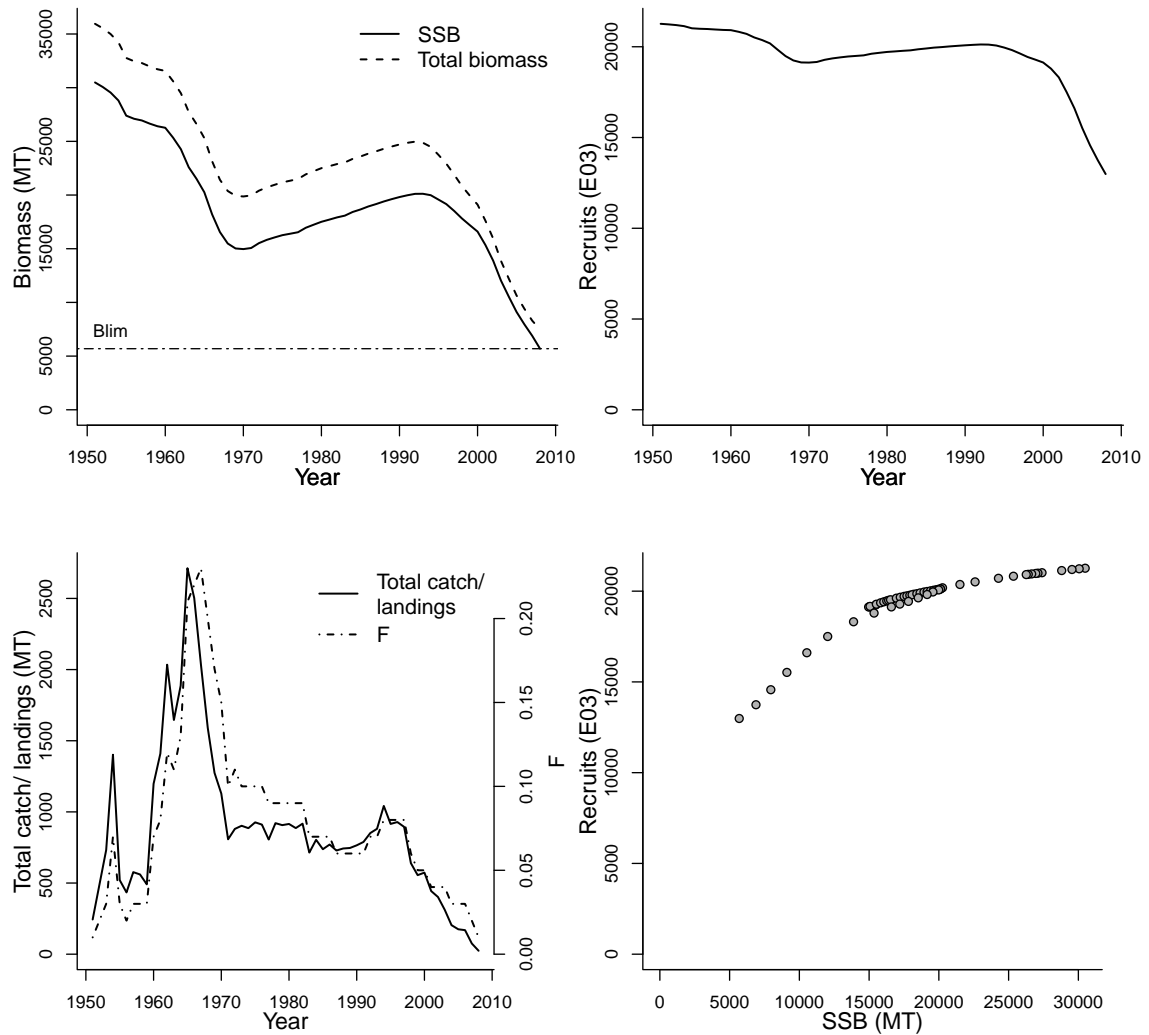
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Plaganyi EE
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1951-2008
Document	Plaganyi-SA-abalone-2008 NOV SWG-AB 21.pdf (pdf in database)
Recorder	PLAGANYI
Date entered	2009-03-13
Date last loaded	2009-12-01
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME	tertiary LME	
29 - Benguela Current			na	na	
Parameter	Value	Units			
SSB-AGE-yr	7+	yr	Reference points		
REC-AGE-yr	0	yr	Parameter	Value	Units
F-AGE-yr-yr	3+	yr-yr	Blim-MT (SSB)	5689	MT
TB-AGE-yr	1+	yr	SSB0-MT (SSB)	30489	MT
A50-yr	5	yr	SSB_{2008}/B_{lim}	1.000	
M-1/yr	0.326	1/yr			
M					
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1951	1951	1951	1951	1951
Maximum year	2008	2008	2008	2008	2008
Time series minimum	5689.03	12985	0.01	7467.76	24
Time series maximum	30488.96	21263.9	0.23	35949.1	2712.4
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa sardine (*Sardinops sagax*)

Assessment ID:MARAM-SARDSA-1984-2006-deMoor

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/127>

Area ID: South Africa-DETMCM-SA

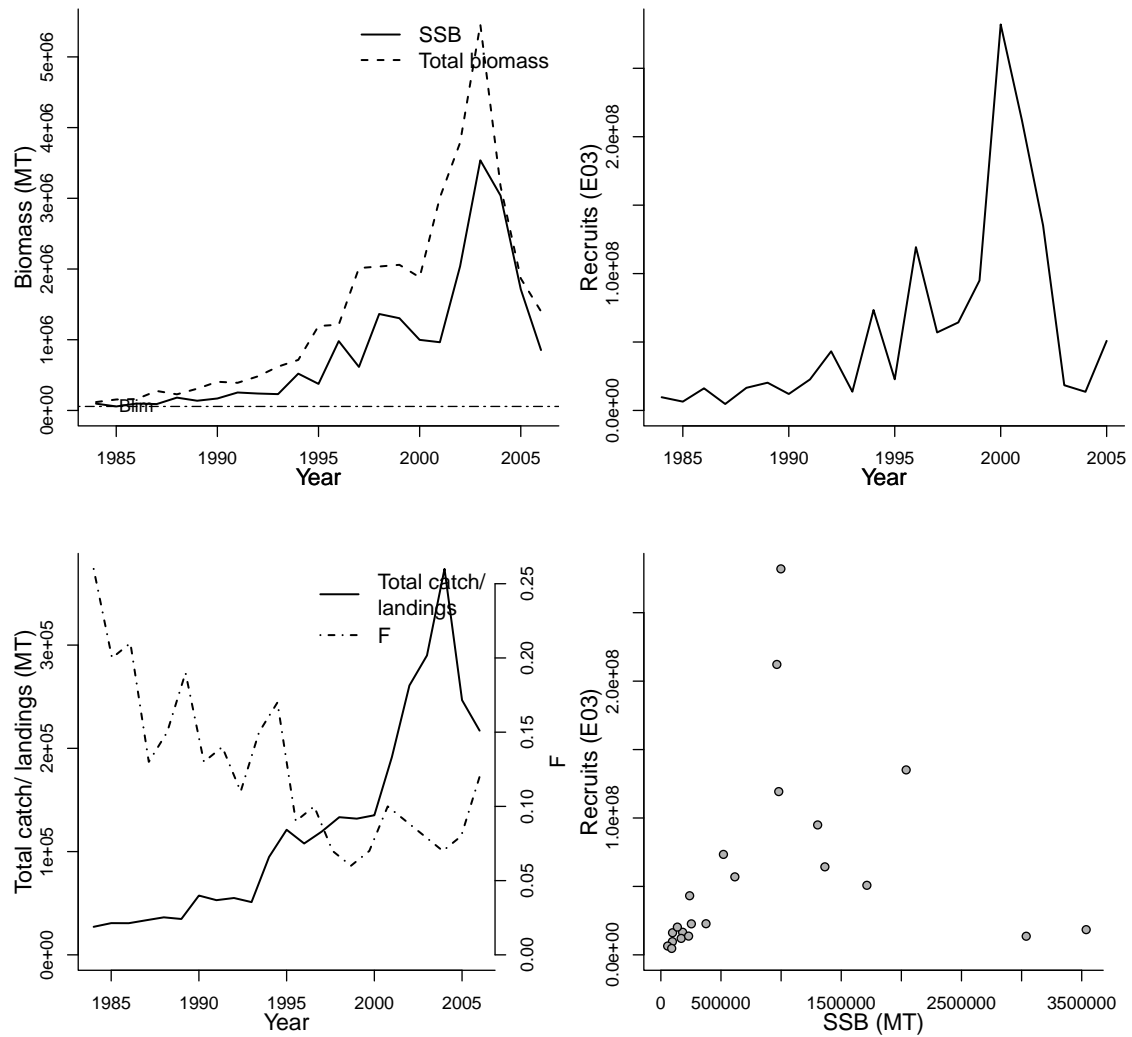
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Cunningham CL
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1984-2006
Document	deMoorSASardineAssessment-Sep07.pdf (pdf not in database)
Recorder	deMoor
Date entered	2009-01-16
Date last loaded	2009-03-24
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME			tertiary LME		
29 - Benguela Current			30 - Agulhas Current			na		
Parameter	Value	Units	Reference points					
			Parameter	Value	Units			
SSB-AGE-yr	2-5+	yr	Blim-MT (SSB)	56500	MT			
REC-AGE-yr	0	yr	SSB0-MT (SSB)	3446300	MT			
F-AGE-yr-yr		yr-yr	SSBtarget-MT (SSB)	594700	MT			
TB-AGE-yr	1+	yr	SSBexceptional-MT (SSB)	300000	MT			
A50-yr	2	yr	SSB_{2006}/B_{lim}	15.115				
M-1/yr	0.8	1/yr						
M								
L50-cm								

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1984	1984	1985	1984	1984
Maximum year	2006	2005	2006	2006	2006
Time series minimum	56511.907	4696000	0.06	118365.989	27154
Time series maximum	3537069.855	282029000	0.26	5458516.579	373811
Units	MT	E03	1/yr	MT	MT



Assessment of South Africa South coast southern spiny lobster (*Palinurus gilchristi*)

Assessment ID: MARAM-SSLOBSTERSASC-1973-2008-Johnston

Issue URL: <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/133>

Area ID: South Africa-DETMCM-SASC

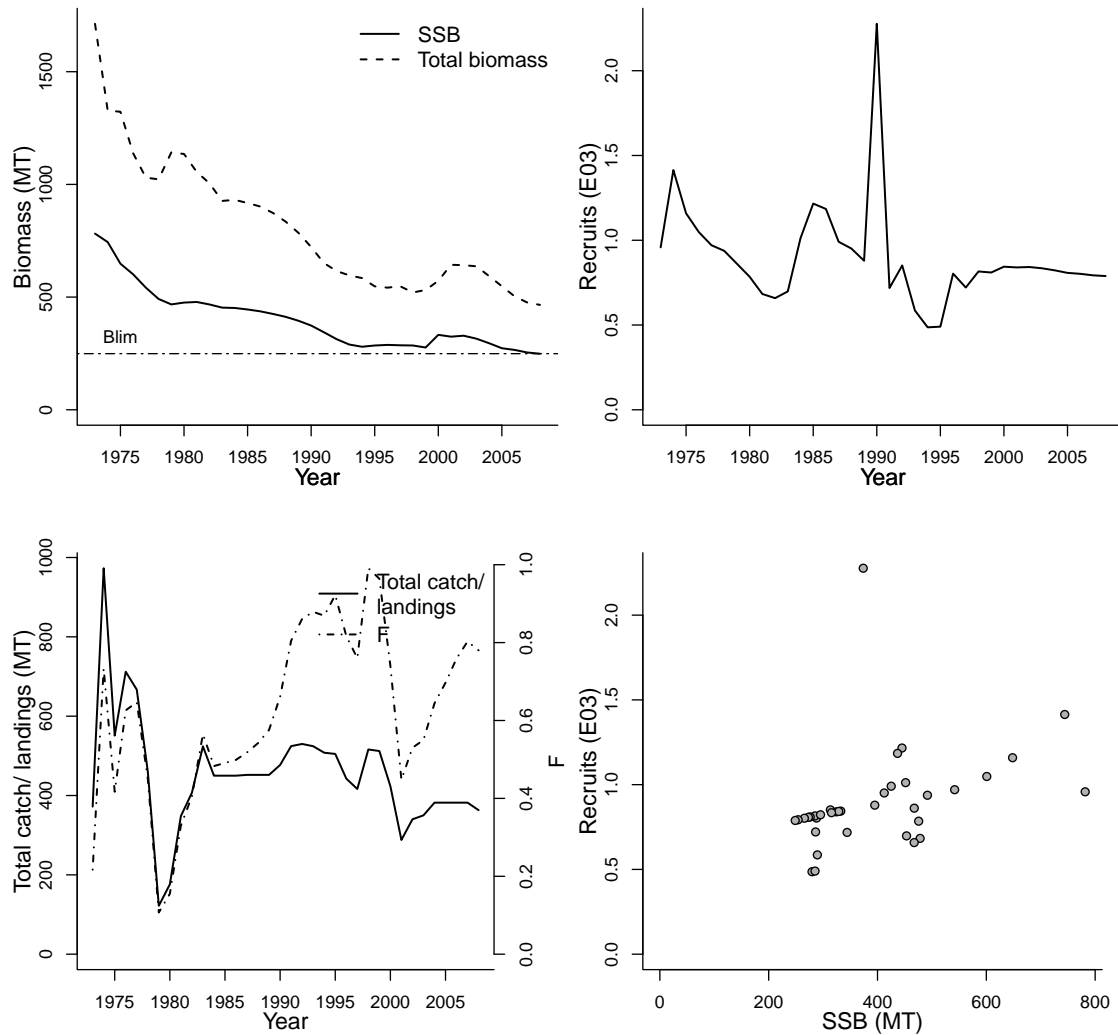
General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston SJ
Assessment method	Statistical catch-at-age model
Publication year	
Timeseries span	1973-2008
Document	Johnston-SASouthRockLobster-2008.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2009-03-17
QA/QC complete	NO
Date approved	

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

primary LME			secondary LME	tertiary LME	
30 - Agulhas Current			na	na	
Parameter	Value	Units	Reference points		
			Parameter	Value	Units
REC-AGE-yr	0	yr	Blim-MT (SSB)	249	MT
F-AGE-yr-yr	0-20	yr-yr	SSB0-MT (SSB)	782	MT
A50-yr	10	yr	R0-E00	958	E00
M-1/yr	0.1	1/yr	BH-h-dimless	0.713	dimless
SSB-AGE-yr			SSB_{2008}/B_{lim}	0.999	
TB-AGE-yr					
M					
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1973	1973	1973	1973	1973
Maximum year	2008	2008	2008	2008	2008
Time series minimum	248.76	0.48642	0.107	465.44	122
Time series maximum	781.67	2.27674	0.991	1712.58	973
Units	MT	E03	1/yr	MT	MT



MAP KEY:

- | Line Number: | Line Item |
|--------------|----------------------------|
| 1 | East Branch Shell |
| 2 | Northwest Australian Shell |
| 3 | California Current |
| 4 | California Current |
| 5 | California Current |
| 6 | South Shell |
| 7 | South Shell |
| 8 | South Shell |
| 9 | South Shell |
| 10 | South Shell |
| 11 | South Shell |
| 12 | South Shell |
| 13 | South Shell |
| 14 | South Shell |
| 15 | South Shell |
| 16 | South Shell |
| 17 | South Shell |
| 18 | South Shell |
| 19 | South Shell |
| 20 | South Shell |
| 21 | South Shell |
| 22 | South Shell |
| 23 | South Shell |
| 24 | South Shell |
| 25 | South Shell |
| 26 | South Shell |
| 27 | South Shell |
| 28 | South Shell |
| 29 | South Shell |
| 30 | South Shell |
| 31 | South Shell |
| 32 | South Shell |
| 33 | South Shell |
| 34 | South Shell |
| 35 | South Shell |
| 36 | South Shell |
| 37 | South Shell |
| 38 | South Shell |
| 39 | South Shell |
| 40 | South Shell |
| 41 | South Shell |
| 42 | South Shell |
| 43 | South Shell |
| 44 | South Shell |
| 45 | South Shell |
| 46 | South Shell |
| 47 | South Shell |
| 48 | South Shell |
| 49 | South Shell |
| 50 | South Shell |
| 51 | South Shell |
| 52 | South Shell |
| 53 | South Shell |
| 54 | South Shell |
| 55 | South Shell |
| 56 | South Shell |
| 57 | South Shell |
| 58 | South Shell |
| 59 | South Shell |
| 60 | South Shell |
| 61 | South Shell |
| 62 | South Shell |
| 63 | South Shell |
| 64 | South Shell |
| 65 | South Shell |
| 66 | South Shell |
| 67 | South Shell |
| 68 | South Shell |
| 69 | South Shell |
| 70 | South Shell |
| 71 | South Shell |
| 72 | South Shell |
| 73 | South Shell |
| 74 | South Shell |
| 75 | South Shell |
| 76 | South Shell |
| 77 | South Shell |
| 78 | South Shell |
| 79 | South Shell |
| 80 | South Shell |
| 81 | South Shell |
| 82 | South Shell |
| 83 | South Shell |
| 84 | South Shell |
| 85 | South Shell |
| 86 | South Shell |
| 87 | South Shell |
| 88 | South Shell |
| 89 | South Shell |
| 90 | South Shell |
| 91 | South Shell |
| 92 | South Shell |
| 93 | South Shell |
| 94 | South Shell |
| 95 | South Shell |
| 96 | South Shell |
| 97 | South Shell |
| 98 | South Shell |
| 99 | South Shell |
| 100 | South Shell |



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