

Dear Susan,

Thank you sincerely for submitting assessments to the Myers II database. We have entered 7 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 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

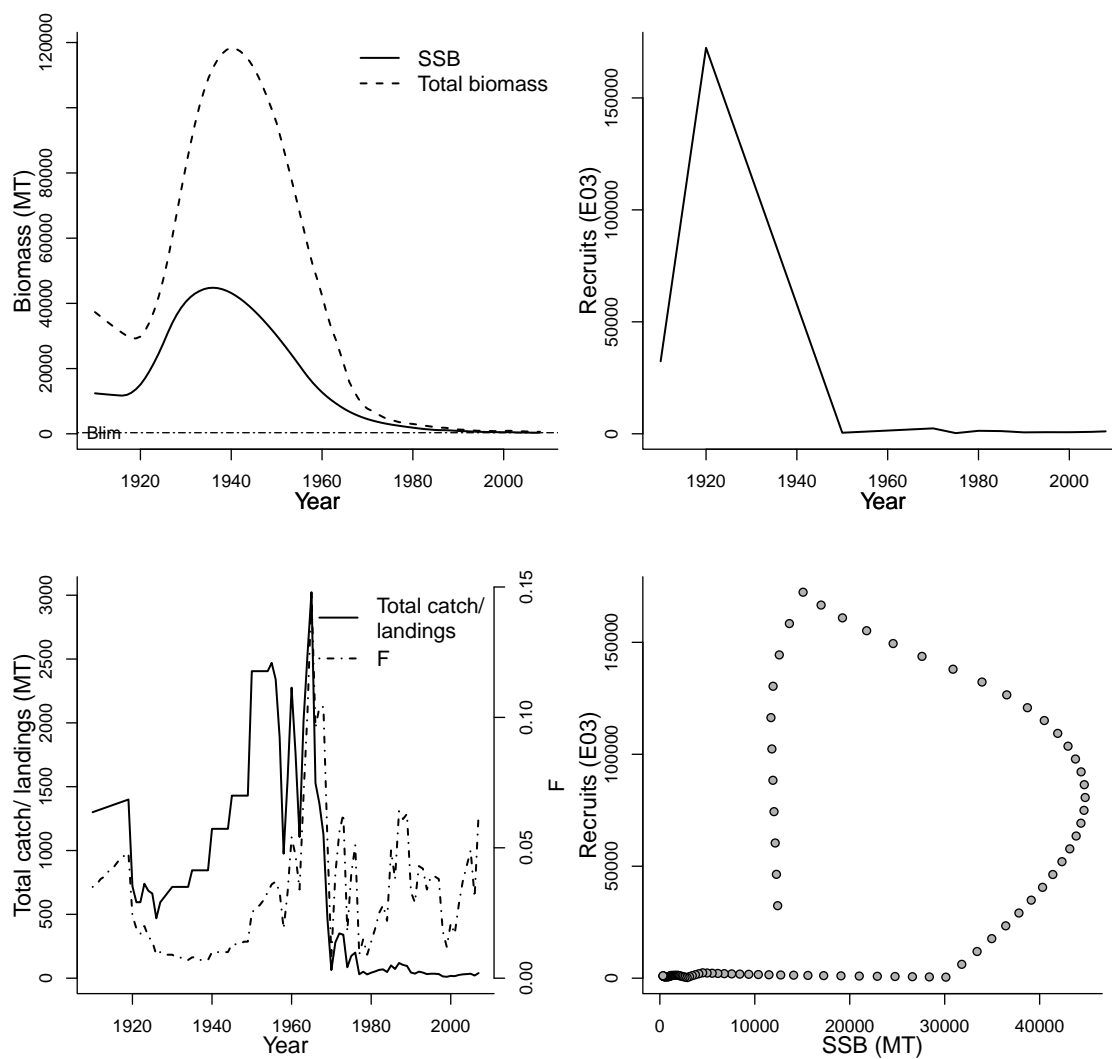
## General assessment details.

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, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2007
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
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-SEX-sex	1	sex			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (TB)	326	MT
SSB-AGE-yr			SSB0-MT (SSB)	12407	MT
TB-AGE-yr			R0-E00	32386294	E00
F-AGE-yr					
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	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

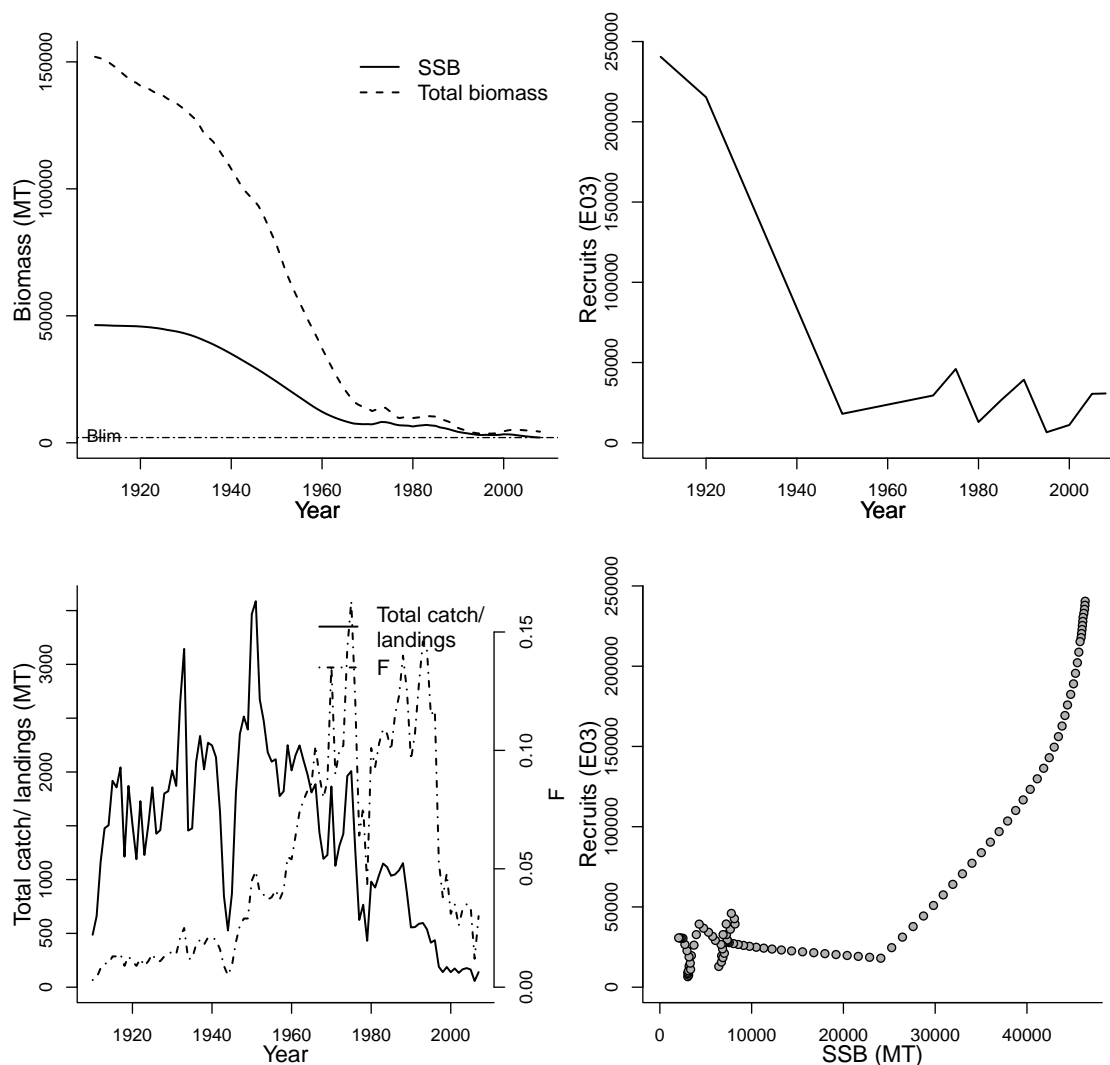
## General assessment details.

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, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2007
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
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-SEX-sex	1	sex			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (TB)	2048	MT
SSB-AGE-yr			SSB0-MT (SSB)	46342	MT
TB-AGE-yr			R0-E00	240492130	E00
F-AGE-yr					
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	2047.91	6554.977	0.003	3589.86	57.53
Time series maximum	46342.25	240492.13	0.163	151997.41	3587.07
Units	MT	E03	1/yr	MT	MT



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

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

Area ID: South Africa-DETMCM-5-6

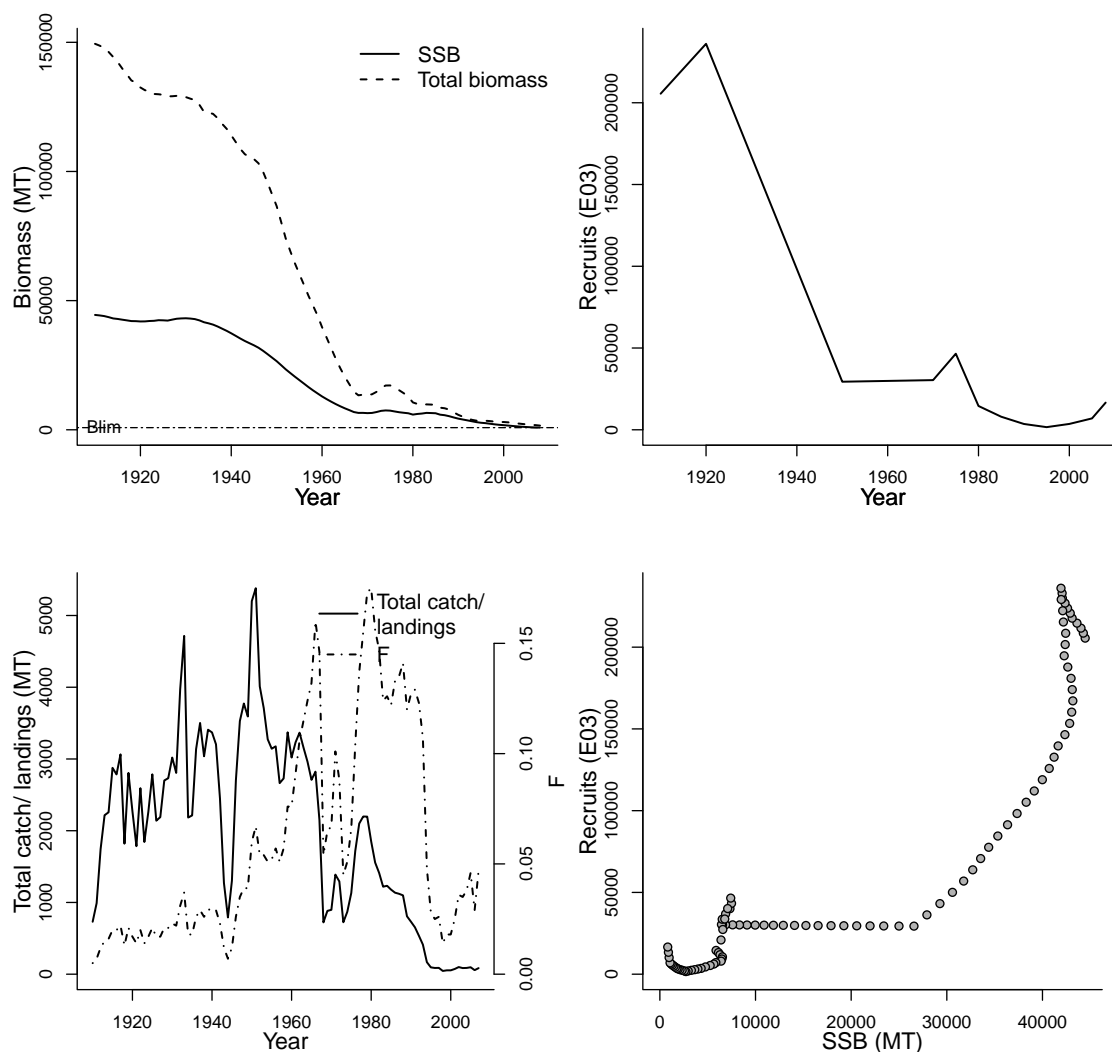
## General assessment details.

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, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2007
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
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-SEX-sex	1	sex			
REC-AGE-yr	0	yr	Reference points		
F-AGE-yr-yr		yr-yr	Parameter	Value	Units
L50-cm	6.5	cm	Blim-MT (TB)	822	MT
M-1/yr	0.1	1/yr	SSB0-MT (SSB)	44464	MT
SSB-AGE-yr			R0-E00	205531950	E00
TB-AGE-yr					
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	822.13	1611.32375	0.005	1617.85	45.18
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

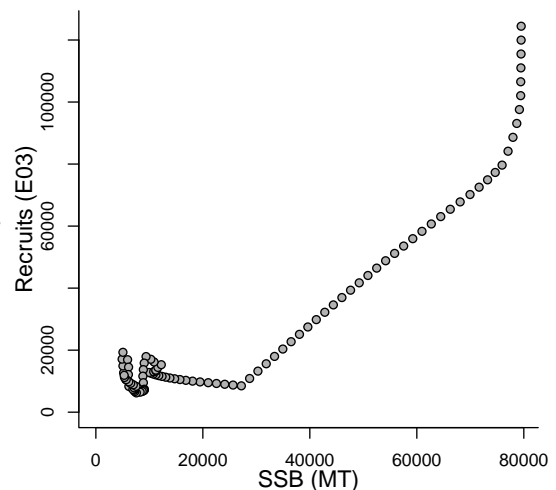
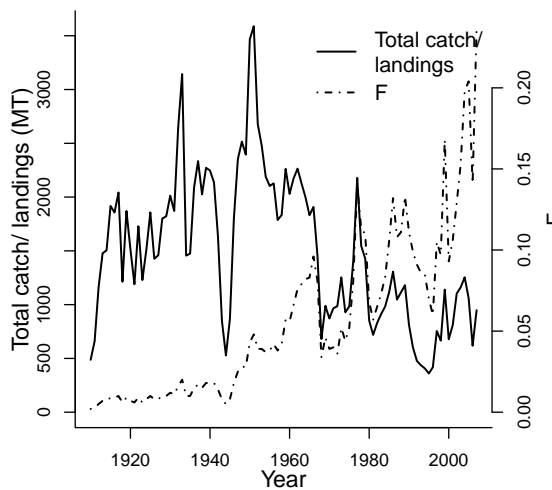
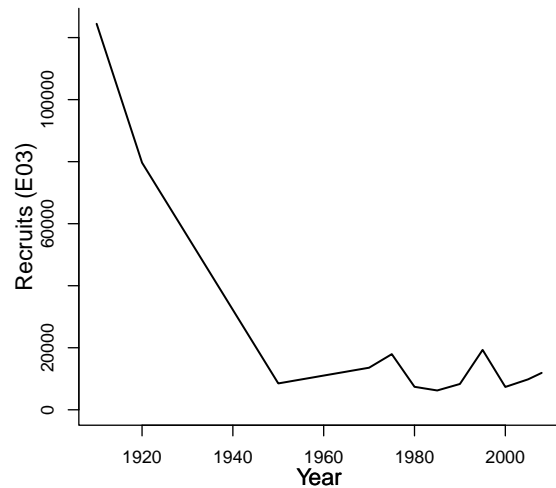
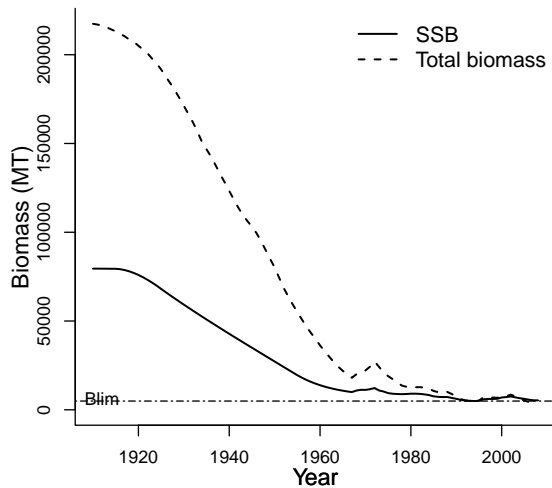
General assessment details.

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, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2007
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
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-SEX-sex	1	sex			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (TB)	4913	MT
SSB-AGE-yr			SSB0-MT (SSB)	79509	MT
TB-AGE-yr			R0-E00	124447910	E00
F-AGE-yr					
M					
A50-yr					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1910	1910	1910	1910	1910
Maximum year	2008	2008	2007	2008	2007
Time series minimum	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

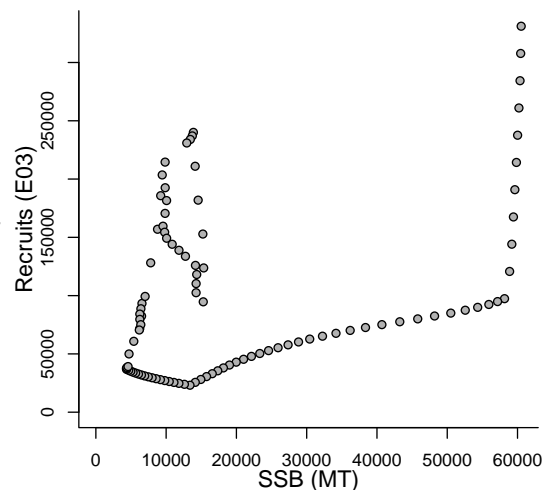
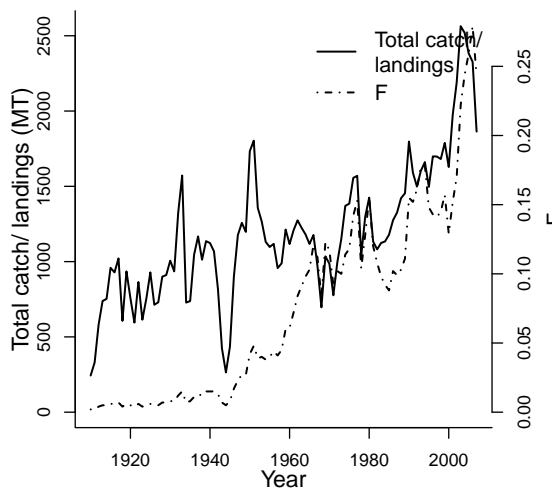
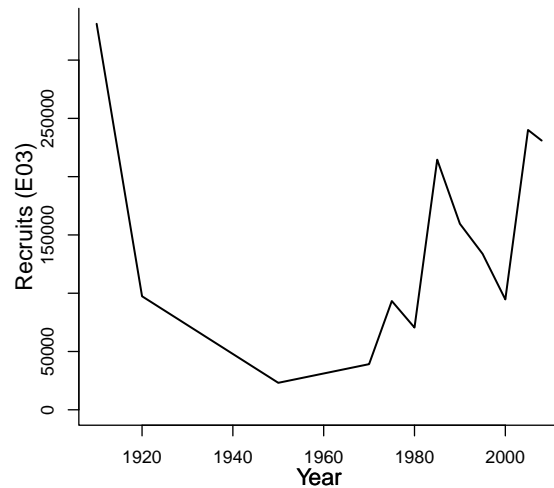
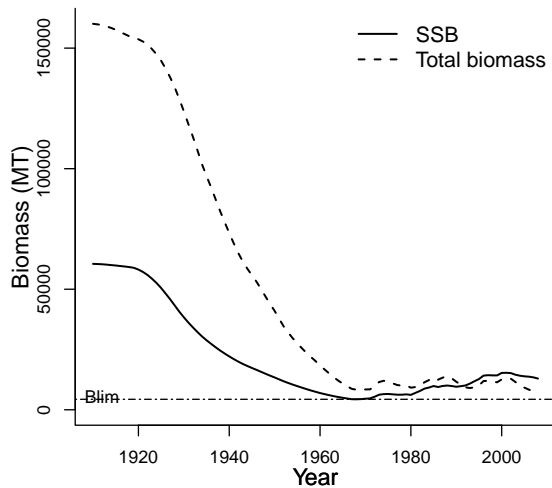
General assessment details.

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, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2007
Timeseries span	1910-2008
Document	Johnston-SAWestRockLobster-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
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-SEX-sex	1	sex			
REC-AGE-yr	0	yr	Reference points		
L50-cm	6.5	cm	Parameter	Value	Units
M-1/yr	0.1	1/yr	Blim-MT (TB)	4350	MT
SSB-AGE-yr			SSB0-MT (SSB)	60521	MT
TB-AGE-yr			R0-E00	331132540	E00
F-AGE-yr					
M					
A50-yr					

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



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

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

Issue URL: <http://www.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, S.J.
Assessment method	Age-structured surplus production model
Publication year	2007
Timeseries span	1950-2007
Document	Johnston-SA Horse Mackerel-2007.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2010-07-16
QA/QC complete	NO
Date approved	

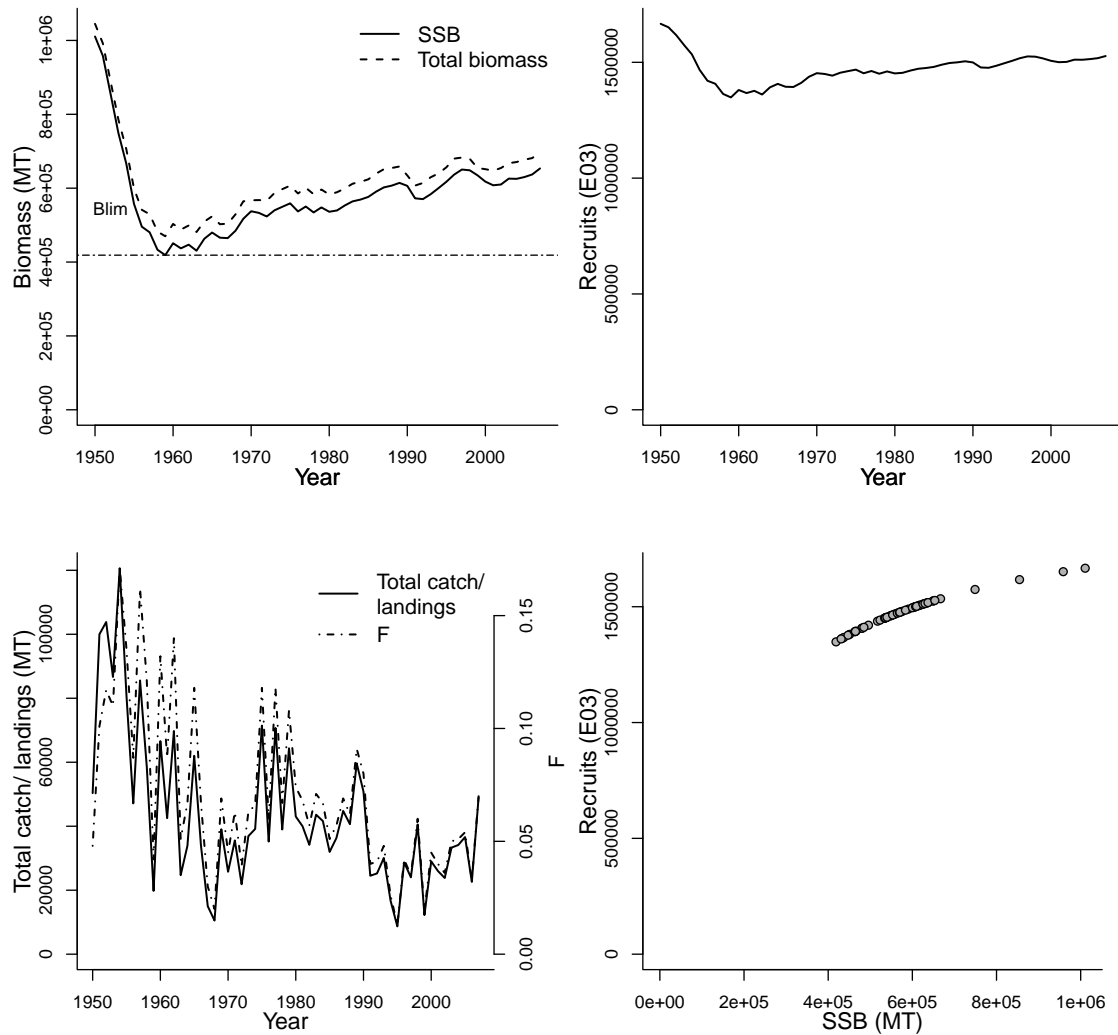
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

			primary LME	secondary LME	tertiary LME
			30 - Agulhas Current	na	na
Parameter	Value	Units			
SSB-SEX-sex	0	sex			
REC-AGE-yr	0	yr			
F-AGE-yr-yr	0-10	yr-yr			
A50-yr	3	yr			
M-1/yr	0.3	1/yr			
SSB-AGE-yr					
TB-AGE-yr					
M					
L50-cm					

			Reference points		
Parameter	Value	Units	Parameter	Value	Units
			Blim-MT (TB)	418631	MT
			SSB0-MT (SSB)	1010700	MT
			R0-E00	166623000	E00
			BH-h-dimless	0.6	dimless

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 South coast southern spiny lobster (*Palinurus gilchristi*)

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

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

Area ID: South Africa-DETMCM-SASC

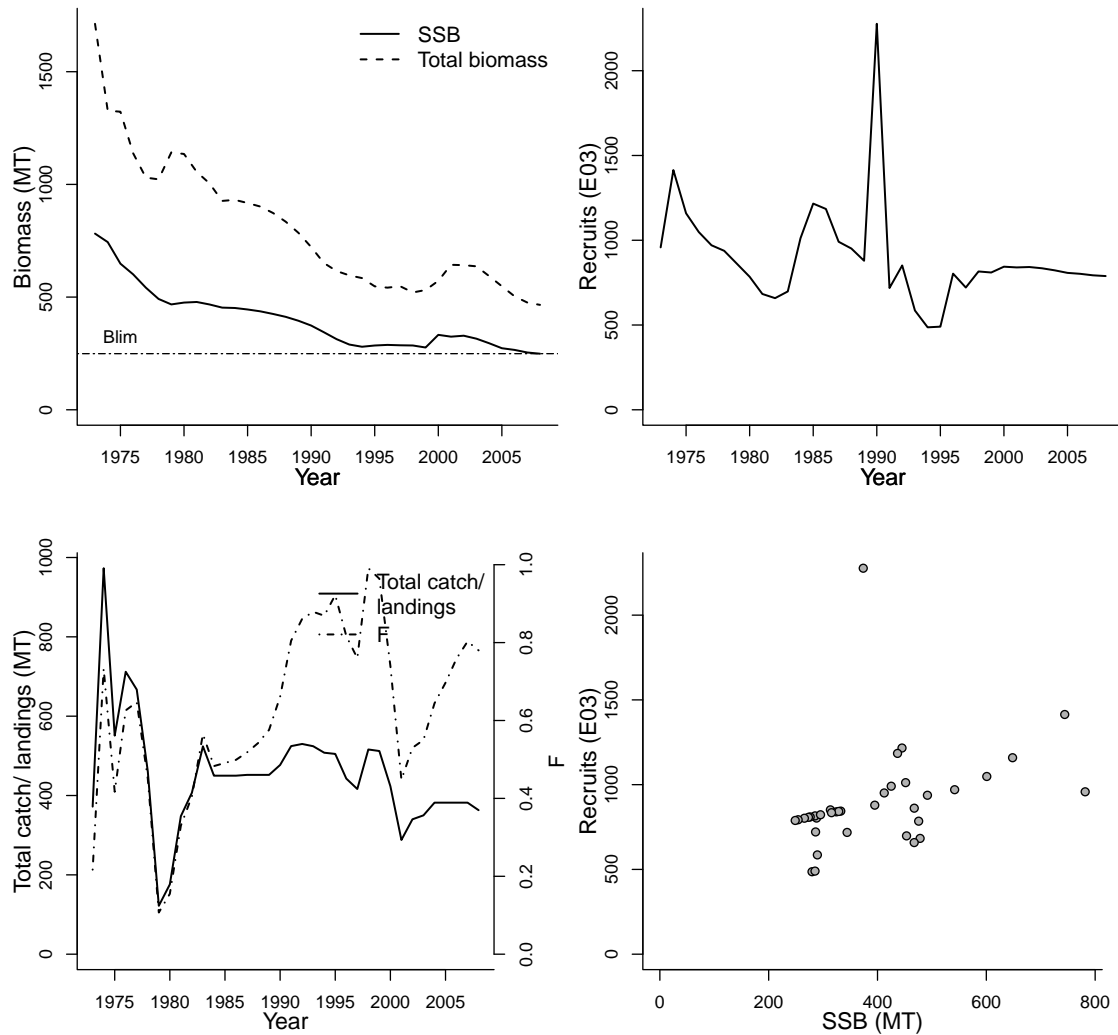
## General assessment details.

Detail	Value
Management body	DETMCM
Assessment group	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Assessment authors	Johnston, S.J.
Assessment method	Statistical catch-at-age model
Publication year	2008
Timeseries span	1973-2008
Document	Johnston-SASouthRockLobster-2008.pdf (pdf in database)
Recorder	Johnston
Date entered	2009-02-12
Date last loaded	2011-03-02
QA/QC complete	YES
Date approved	2011-03-02

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

primary LME			secondary LME	tertiary LME	
30 - Agulhas Current			na	na	
Parameter	Value	Units			
SSB-SEX-sex	1	sex	Reference points		
REC-AGE-yr	0	yr			
F-AGE-yr-yr	0+	yr-yr	Parameter	Value	Units
A50-yr	10	yr	Blim-MT (TB)	249	MT
M-1/yr	0.1	1/yr	SSB0-MT (SSB)	782	MT
TB-AGE-yr	0+	yr	R0-E00	958	E00
SSB-AGE-yr			BH-h-dimless	0.713	dimless
M					
L50-cm					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1973	1973	1973	1973	1973
Maximum year	2008	2008	2008	2008	2008
Time series minimum	248.77	486.42	0.107	465.44	122
Time series maximum	781.67	2276.74	0.991	1712.58	973
Units	MT	E03	1/yr	MT	MT





**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      |
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| 99         | Indian Pacific Ocean      |
| 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](http://www.edc.uri.edu/lme)**

NORTH POLAR REGION

SOUTH POLAR REGION