Dear Daniel,

Thank you sincerely for submitting assessments to the Myers II database. We have entered 5 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
DFO-MAR-CUSK4X-1970-2007-RICARD	3
DFO-NFLD-COD2J3KL-1850-2005-RICARD	5
DFO-SG-COD4TVn-1965-2009-RICARD	7
IMARPE-PANCHPERUNC-1963-2004-RICARD	9
SPRFMO-CHTRACCH-1950-2010-RICARD	11
LME map	13

Assessment of Western Scotian Shelf cusk (Brosme brosme) Assessment ID:DFO-MAR-CUSK4X-1970-2007-RICARD

Assessment ID:DFO-MAR-CUSK4X-1970-2007-RICARD Issue URL: http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/476

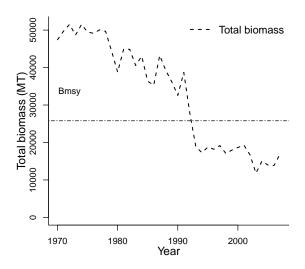
Area ID: Canada-DFO-4X

General assessment details.

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

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

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



No recruitment data available

No exploitation data available

No SSB-recruit data available

Assessment of Southern Labrador-Eastern Newfoundland atlantic cod (*Gadus morhua*) Assessment ID:DFO-NFLD-COD2J3KL-1850-2005-RICARD

Assessment ID:DFO-NFLD-COD2J3KL-1850-2005-RICARD Issue URL: http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/474

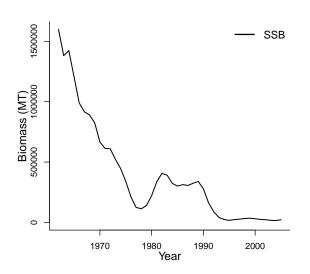
Area ID: Canada-DFO-2J3KL

General assessment details.

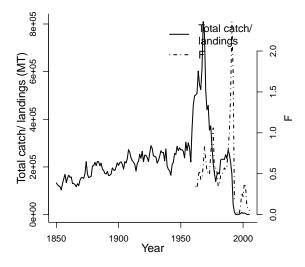
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum- of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	•
Timeseries span	1850-2005
Document	DFO-COD2J3KL-2006.pdf (pdf not in database)
Recorder	RICARD
Date entered	2011-02-11
Date last loaded	2011-02-11
QA/QC complete	NO
Date approved	

primary LM	E			secondary Ll	ME	tertiary	LME
9 - Newfour	ıdland-L	abrador	Shelf	na		na	
Parameter	Value	Units					
REC-AGE-yr F-AGE-yr-yr	3 2-10	yr yr-yr					
A50-yr	6-7	yr		Referen	ice p	oints	
M-1/T	0.4	1/T	Para	meter	Val	ue	Units
SSB-AGE-yr SSB-SEX-sex			MOI	RATOR-yr-yr	199	92-2005	yr-yr
TB-AGE-yr							
L50-cm							

Time series minima and maxima									
SSB R F TB Catch									
Minimum year	1962		1962		1850				
Maximum year	2005		2005		2005				
Time series minimum 15000 0.02 0									
Time series maximum 1599000 2.36 81000									
Units	MT		1/T		MT				



No recruitment data available



No SSB-recruit data available

Assessment of Southern Gulf of St. Lawrence atlantic cod (*Gadus morhua*) Assessment ID:DFO-SG-COD4TVn-1965-2009-RICARD

Assessment ID:DFO-SG-COD4TVn-1965-2009-RICARD Issue URL: http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/156

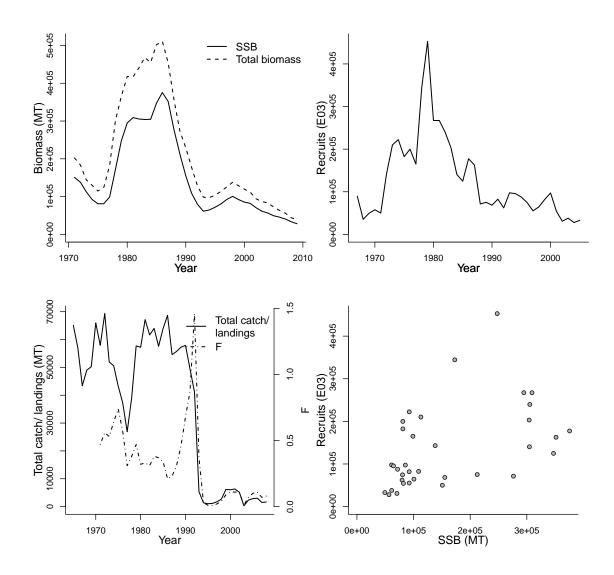
Area ID: Canada-DFO-4T

General assessment details.

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

_	primary LME	seco	ndary LM	IE tertiary	LME	
	8 - Scotian Shelf	na		na		
Parameter	Value		Units			
F-AGE-yr-y A50-yr	rr 7+ 4-5		yr-yr yr			
M-1/T	SEE TIMESEF	RIES	1/T	Refere	nce poin	ts
REC-AGE				Parameter	Value	Units
SSB-AGE-y SSB-SEX-s				Bcrp-MT	80000	MT
TB-AGE-yr						
M						
L50-cm						

Time series minima and maxima								
SSB R F TB Catch								
Minimum year	1971	1967	1971	1971	1965			
Maximum year 2009 2005 2008 2009 2008								
Time series minimum 28235 27883 0.01 38776 289								
Time series maximum 375498 452876 1.46 510714 6931								
Units	MT	E03	1/T	MT	MT			



Assessment of North-Central Peruvian coast peruvian anchoveta (*Engraulis ringens*) Assessment ID:IMARPE-PANCHPERUNC-1963-2004-RICARD

Assessment ID:IMARPE-PANCHPERUNC-1963-2004-RICARD Issue URL: http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/458

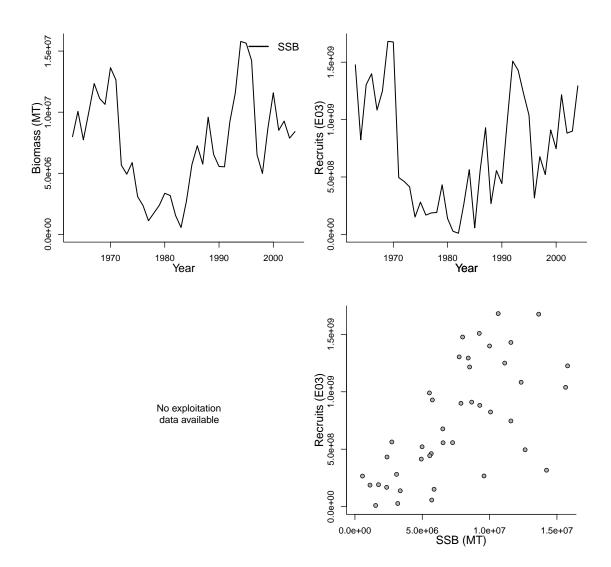
Area ID: Peru-IMARPE-NC

General assessment details.

Detail	Value
Management body	IMARPE
Assessment group	Instituto del Mar del Peru
Assessment authors	Cahuin, Sandra M.
Assessment method	Virtual Population Analysis
Publication year	2009
Timeseries span	1963-2004
Document	Cahuin_etal_2009.pdf (pdf in database)
Recorder	RICARD
Date entered	2010-07-21
Date last loaded	2010-07-21
QA/QC complete	YES
Date approved	2010-07-21

primary LME	C		seco	ondary LME	tertiary	LME
13 - Humboldt Current			na		na	
Parameter	Value	Uni	its			
REC-AGE-yr SSB-AGE-yr	0	yr				
SSB-SEX-sex				Referen	nce poin	ts
TB-AGE-yr F-AGE-yr M				Parameter	Value	Units
A50-yr L50-cm						

Time series minima and maxima						
	SSB	R	F	ТВ	Catch	
Minimum year	1963	1963				
Maximum year	2004	2004				
Time series minimum	561000	10000000				
Time series maximum	15792000	1681000000				
Units	MT	E03				



Assessment of Chilean EEZ and offshore chilean jack mackerel (*Trachurus murphyi*) Assessment ID:SPRFMO-CHTRACCH-1950-2010-RICARD

Assessment ID:SPRFMO-CHTRACCH-1950-2010-RICARD Issue URL: http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting/424

Area ID: multinational-SPRFMO-CH

General assessment details.

Detail	Value
Management body	SPRFMO
Assessment group	South Pacific Regional Fisheries Management Organization
Assessment authors	South Pacific Regional Fisheries Management Organisation
Assessment method	Joint Jack Mackerel
Publication year	2010
Timeseries span	1950-2010
Document	9th-SWG-Report-Final-Adopted-
	28Oct2010.pdf (pdf in database)
Recorder	RICARD
Date entered	2011-02-28
Date last loaded	2011-02-28
QA/QC complete	YES
Date approved	2011-02-28

primary LME sec			ondary LME	tertiary	LME
13 - Humboldt Current na				na	
Parameter	Value	Units			
A50-yr	5	yr			
M-1/yr	0.23	1/yr			
REC-AGE					
SSB-AGE-yr			Reference points		
SSB-SEX-sex			Parameter	Value	Units
TB-AGE-yr					
F-AGE-yr					
M					
L50-cm					

Time series minima and maxima						
	SSB	R	F	TB	Catch	
Minimum year	1958	1970		1970	1950	
Maximum year	2010	2010		2010	2010	
Time series minimum	484120	3143930000		2362660	800	
Time series maximum	17554500	50229100000		27321000	4756979	
Units	MT	E03		MT	MT	

