

bivalves-gastropods Stocks

v4.44 (Apr-02-2019)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgt
1. ARCSURF4RST [Arctic surfclam Quebec and Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
2. ARCSURFBANQ [Arctic surfclam Banquereau]	TB SSB	ER F	TB SSB	ER F
3. ARCSURFGB [Arctic surfclam Grand Bank]	TB SSB	ER F	TB SSB	ER F
4. ARCSURFQCW [Arctic surfclam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
5. DOYSFS [Dredge oyster Foveax Strait]	TB SSB	ER F	TB SSB	ER F
6. PAUANPAU5A [Black Foot Paua NZ North PAUA5A]	TB SSB	ER F	TB SSB	ER F
7. PAUAPAU5B [New Zealand abalone species New Zealand Area PAU 5B]	TB SSB	ER F	TB SSB	ER F
8. PAUAPAU5D [New Zealand abalone species New Zealand Area PAU 5D]	TB SSB	ER F	TB SSB	ER F
9. PAUAPAU7 [New Zealand abalone species New Zealand Area PAU 7]	TB SSB	ER F	TB SSB	ER F
10. PAUASPAU5A [Black Foot Paua NZ South PAUA5A]	TB SSB	ER F	TB SSB	ER F
11. PGEODWA [Pacific Geoduck Washington]	TB SSB	ER F	TB SSB	ER F
12. QUAHATLC [Ocean quahog Atlantic Coast]	TB SSB	ER F	TB SSB	ER F
13. SAABALONESA [Abalone South Africa]	TB SSB	ER F	TB SSB	ER F
14. SCALL3Ps [Sea scallop St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
15. SCALL4T [Sea scallop Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
16. SCALL5ZMAB [Sea scallop Georges Bank and Mid-Atlantic Bight]	TB SSB	ER F	TB SSB	ER F
17. SCALLGB [Sea scallop Georges Bank]	TB SSB	ER F	TB SSB	ER F
18. SCALLNBB [Sea scallop North Brown Bank]	TB SSB	ER F	TB SSB	ER F
19. SCALLSFA16-20 [Sea scallop Northern Gulf of St Lawrence]	TB SSB	ER F	TB SSB	ER F
20. SCALLSPA1-6 [Sea scallop Bay of Fundy (SPA 1-6)]	TB SSB	ER F	TB SSB	ER F
21. SCALLWSFA29 [Sea scallop West Scallop Fishing Area 29]	TB SSB	ER F	TB SSB	ER F
22. SSCLAMQCW [Softshell clam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
23. SURFMATLC [Atlantic surfclam Mid-Atlantic Coast]	TB SSB	ER F	TB SSB	ER F
24. WVSCALLALASKA [Weathervane scallop Alaska]	TB SSB	ER F	TB SSB	ER F
25. WWHELKQCW [Waved whelk Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F

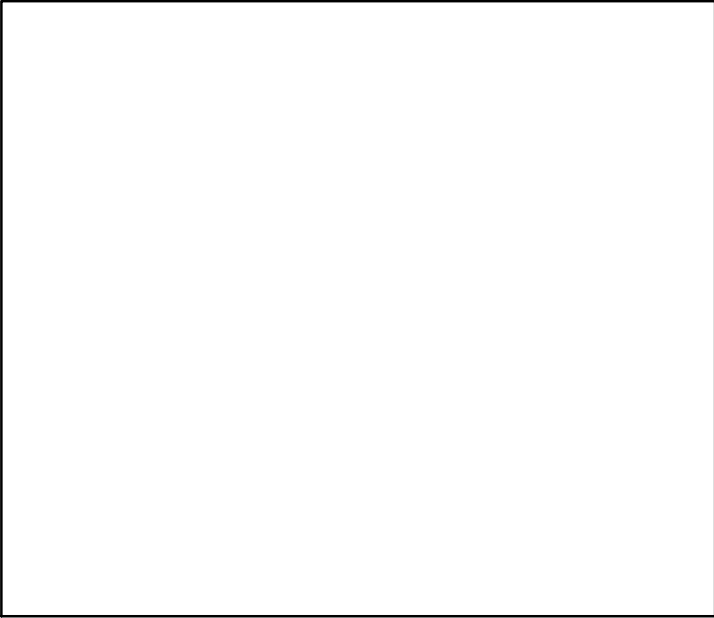
Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

Metadata	
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-QUE-ARCSURF4RST-1993-2014-OSGOOD
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2014

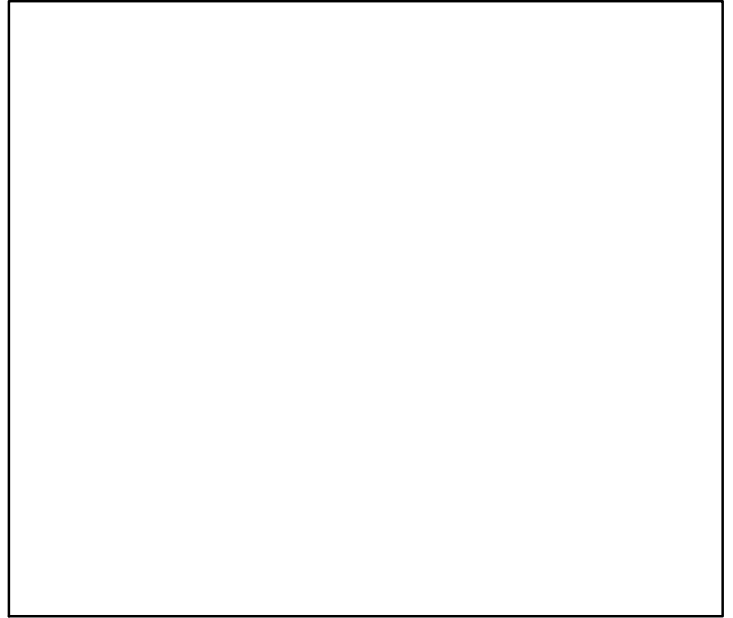
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2014	785	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

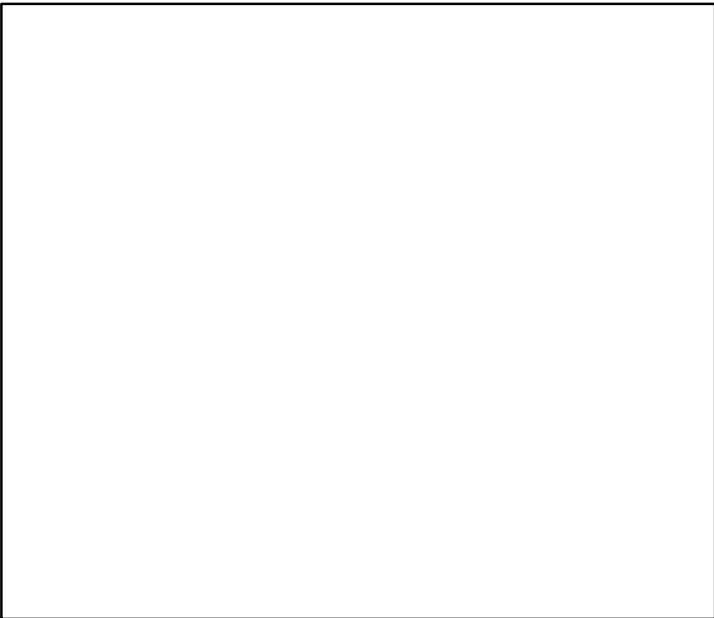
Kobe MSY*



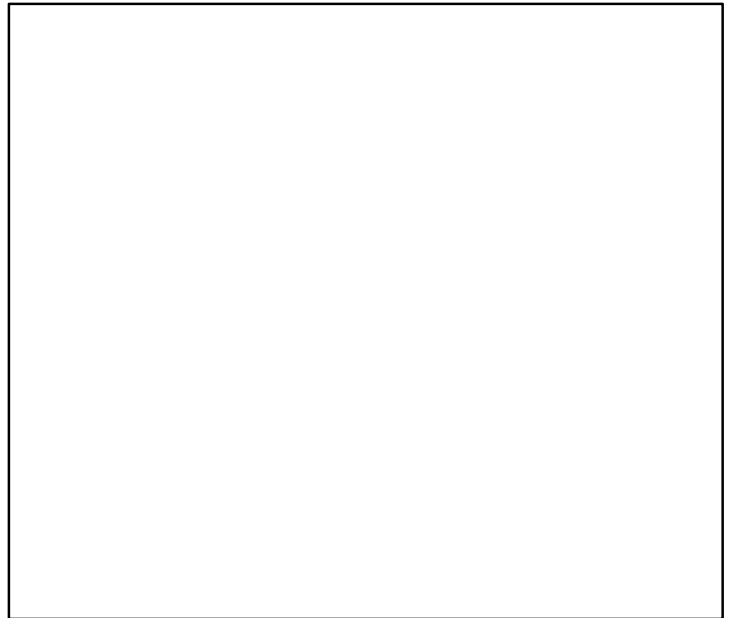
Kobe MGT*



Spawner Recruit*



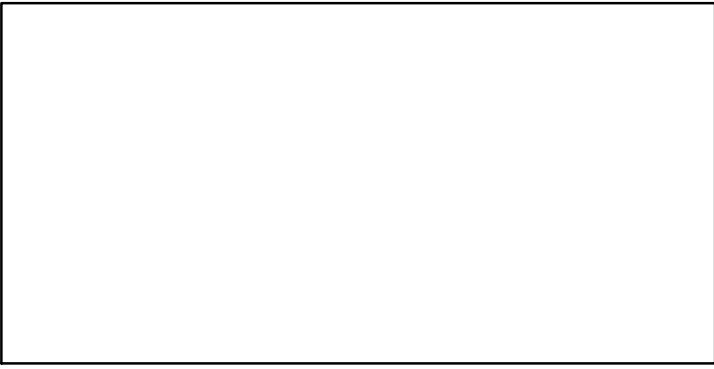
Production*



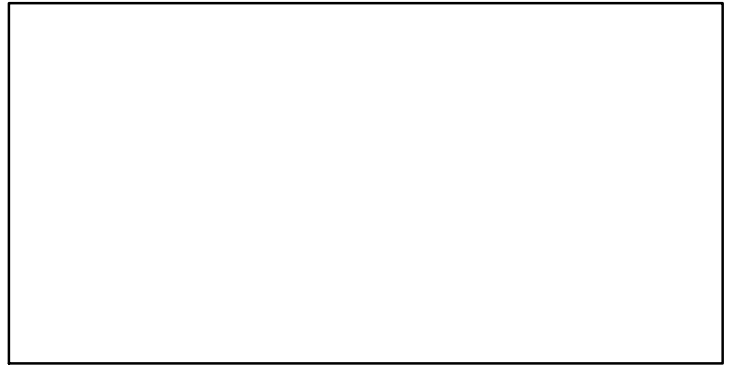
◆ Start Year ◆ End Year * No Data

Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

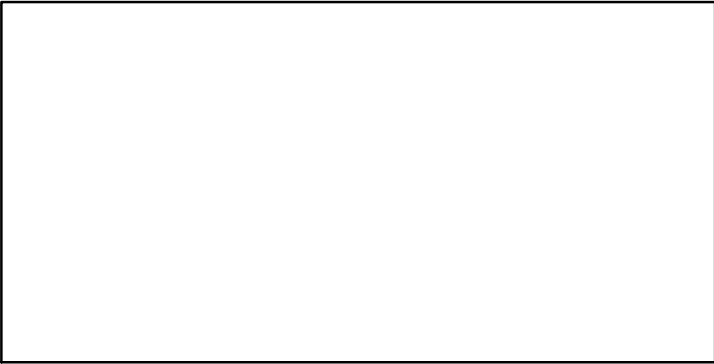
TB*



SSB*



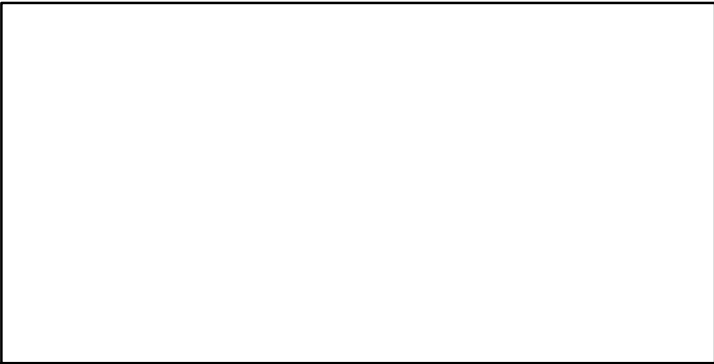
TN *



F*



ER*



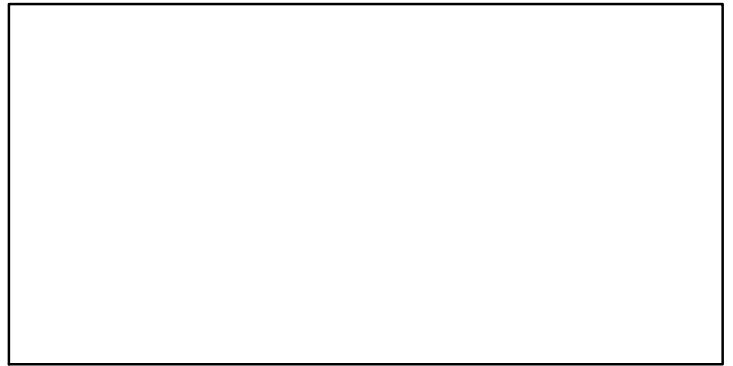
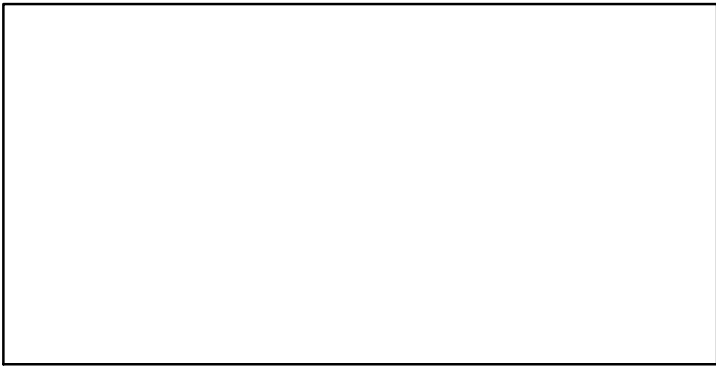
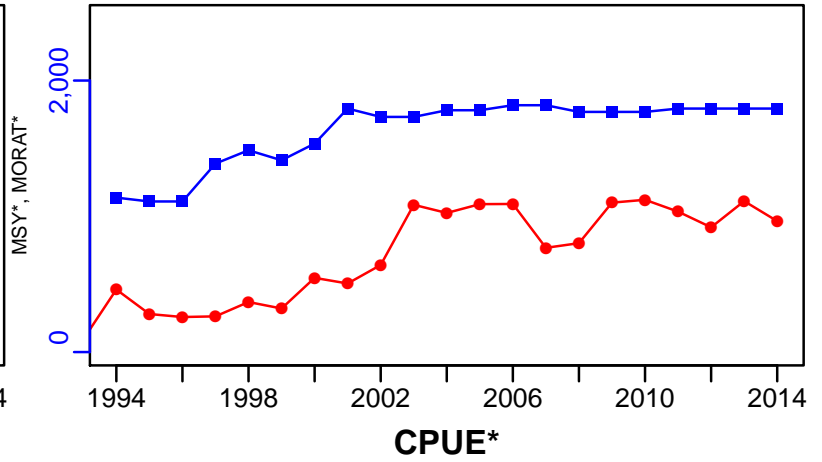
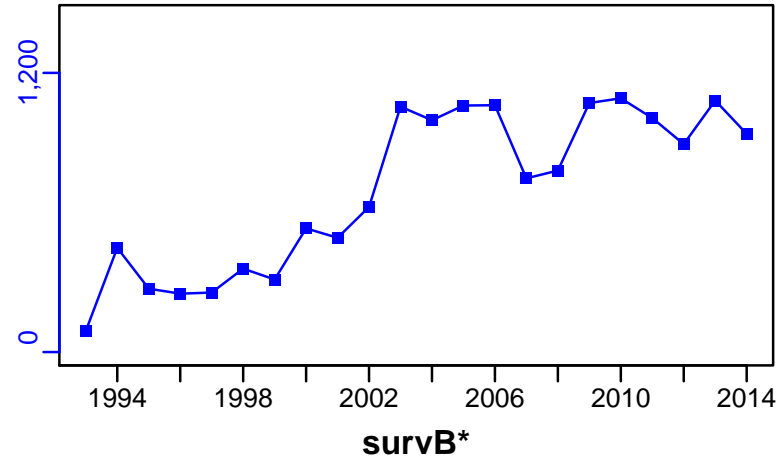
Recruits*



Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

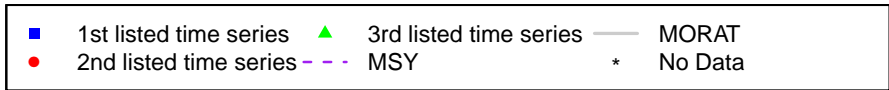
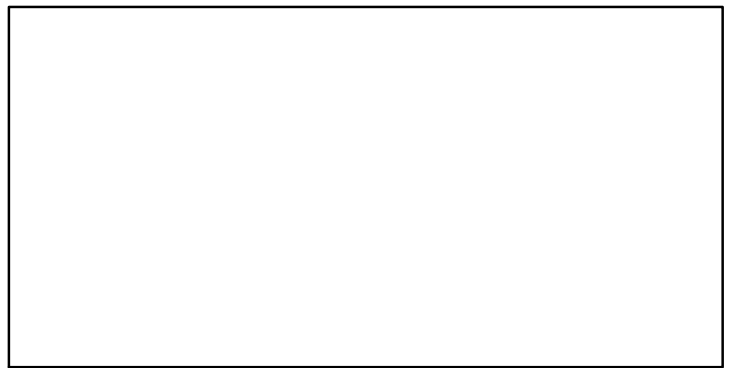
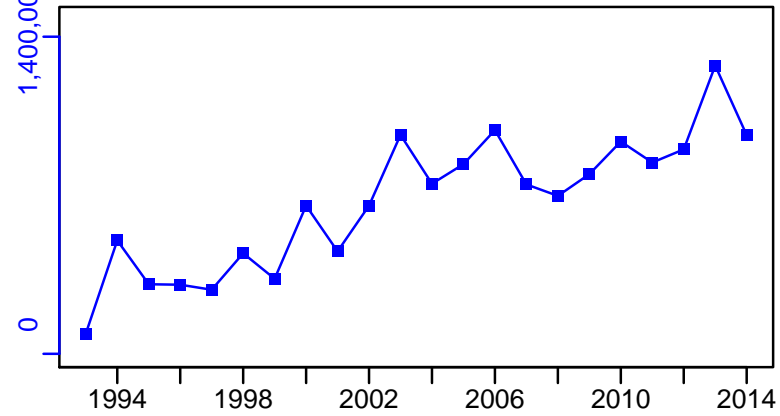
TL-MT, TC*, RecC* (1993-2014-OSGOOD)

TAC-MT, Cpair-MT, Cadv* (1993-2014-OSGOOD)



EFFORT-m2 (1993-2014-OSGOOD)

CdivMSY*



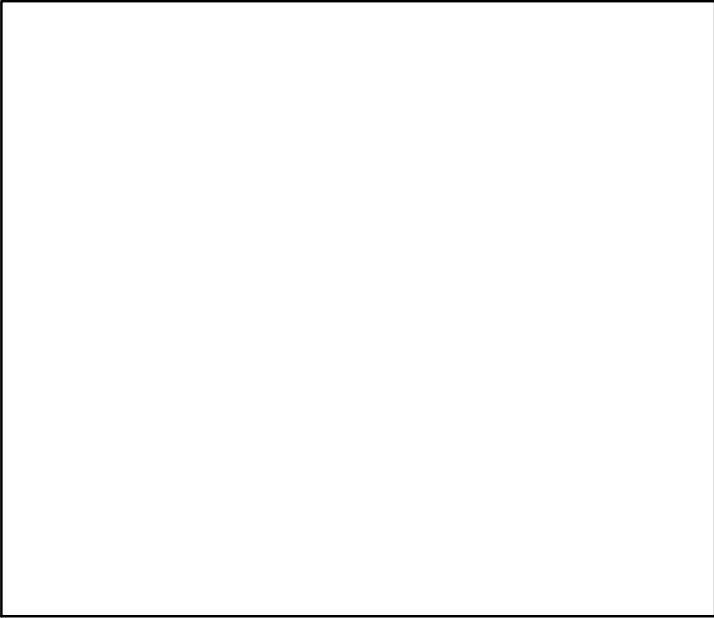
Arctic surfclam Banquereau [ARCSURFBANQ]

Metadata	
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-MAR-ARCSURFBANQ-1986-2010-CHING
Area	Banquereau
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2010

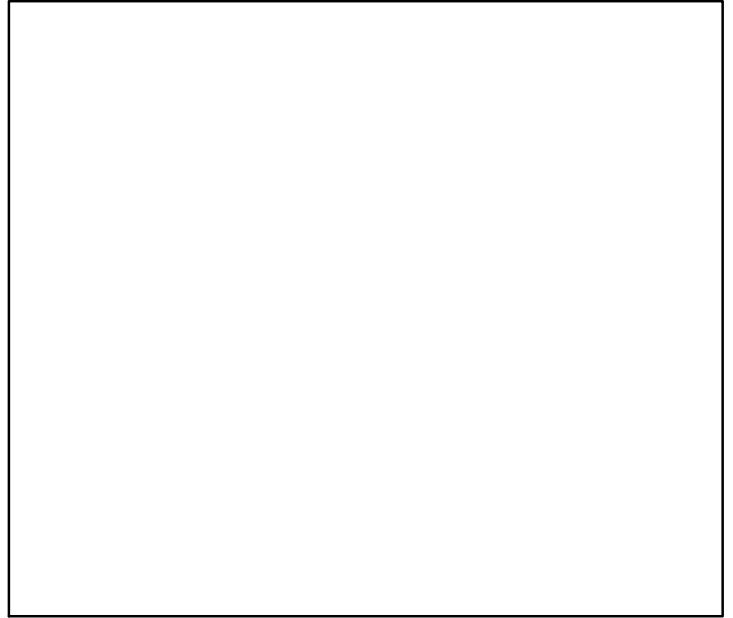
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2010	22,500		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

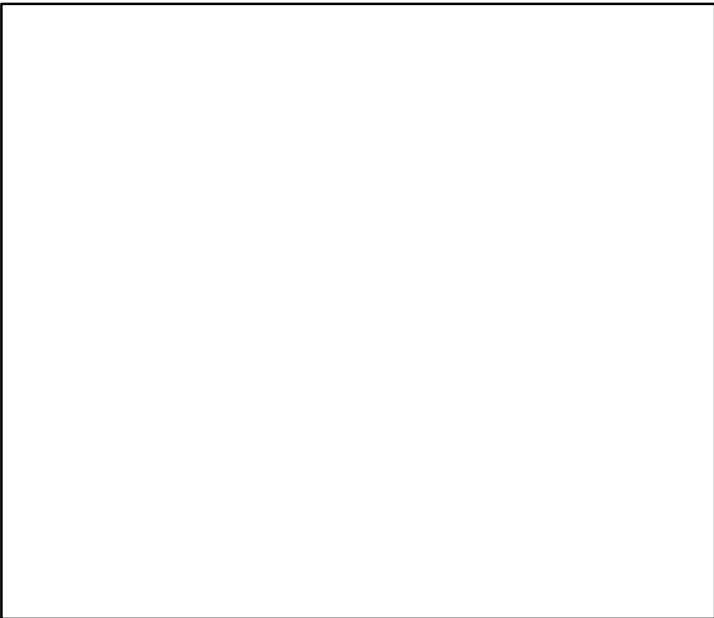
Kobe MSY*



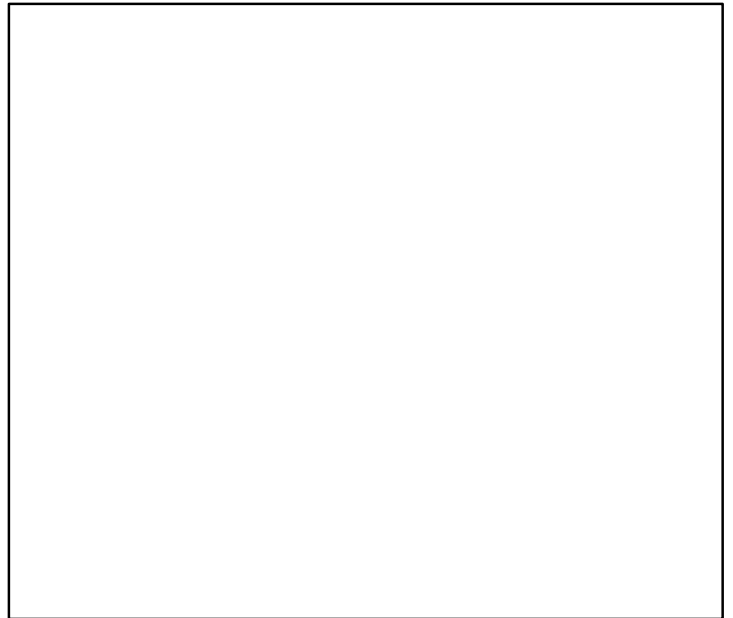
Kobe MGT*



Spawner Recruit*



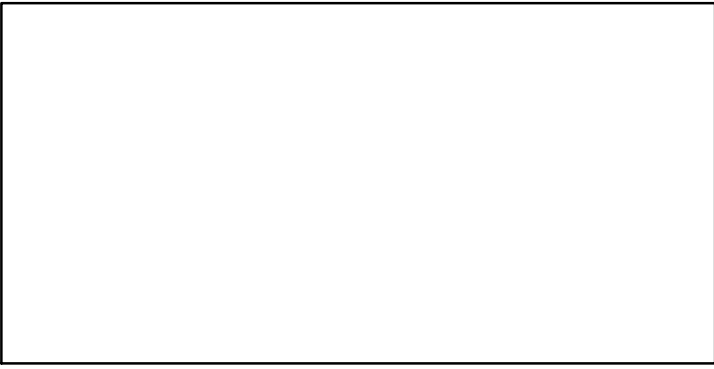
Production*



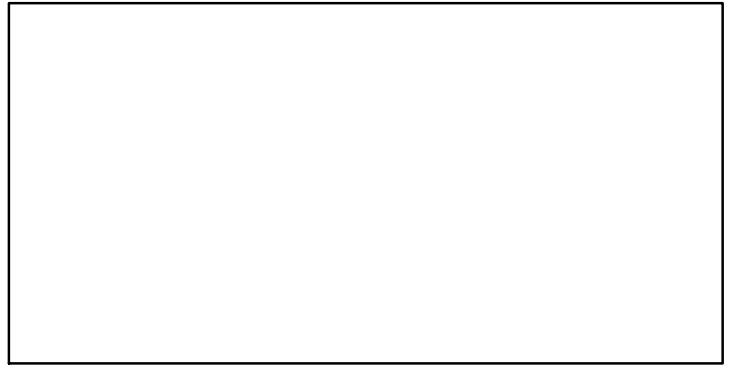
◆ Start Year ◆ End Year * No Data

Arctic surfclam Banquereau [ARCSURFBANQ]

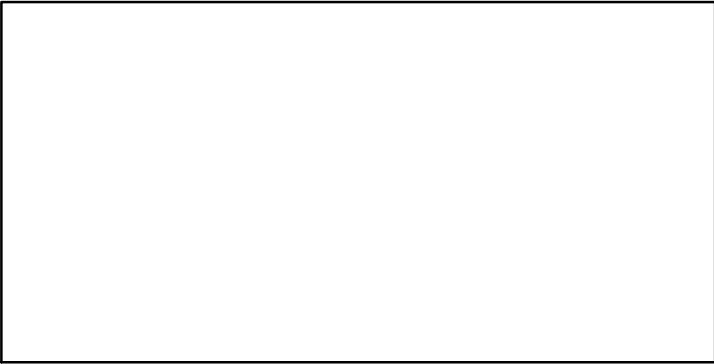
TB*



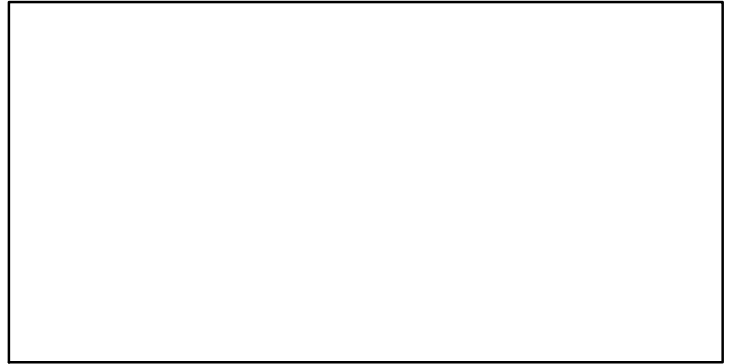
SSB*



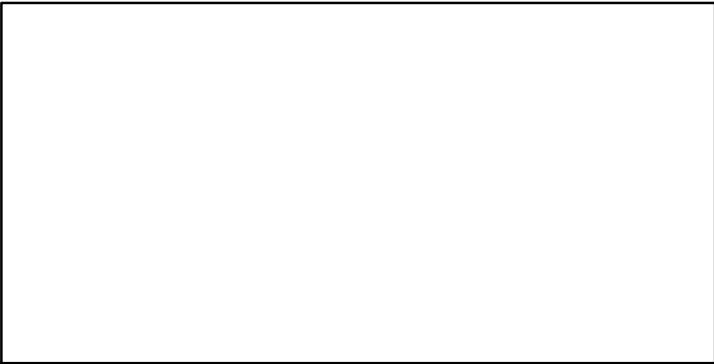
TN *



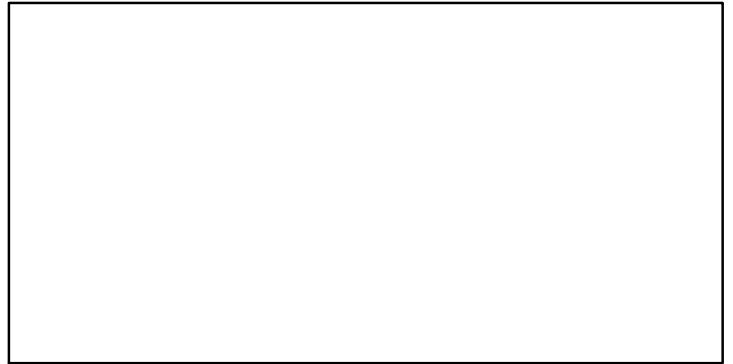
F*



ER*



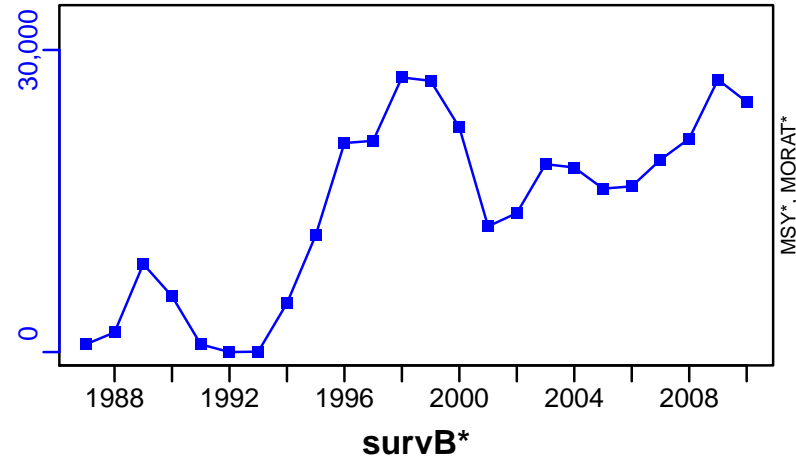
Recruits*



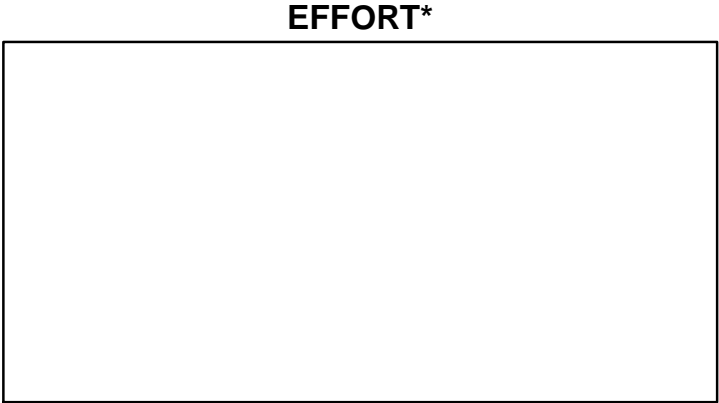
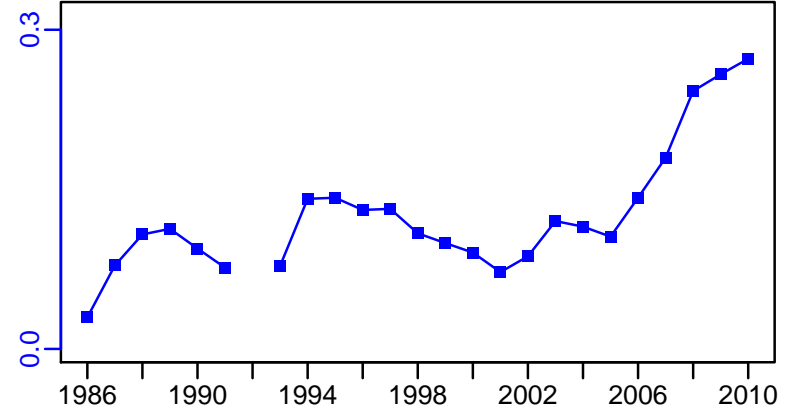
Arctic surfclam Banquereau [ARCSURFBANQ]

TC-MT, TL*, RecC* (1986-2010-CHING)

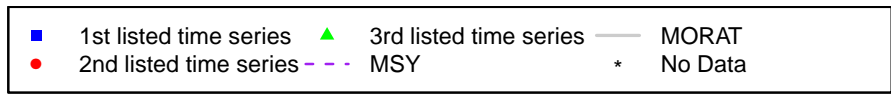
TAC*, Cpair*, Cadv*



CPUE-g/m2 (1986-2010-CHING)



CdivMSY*



Arctic surfclam Grand Bank [ARCSURFGB]

Metadata	
Scientific Name	Macromeris polynyma
Current Assess ID	DFO-ARCSURFGB-1989-2010-WATSON
Area	Division 3LNO
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERMgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.08
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2010	346	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERMgt	-	-	-	-	-

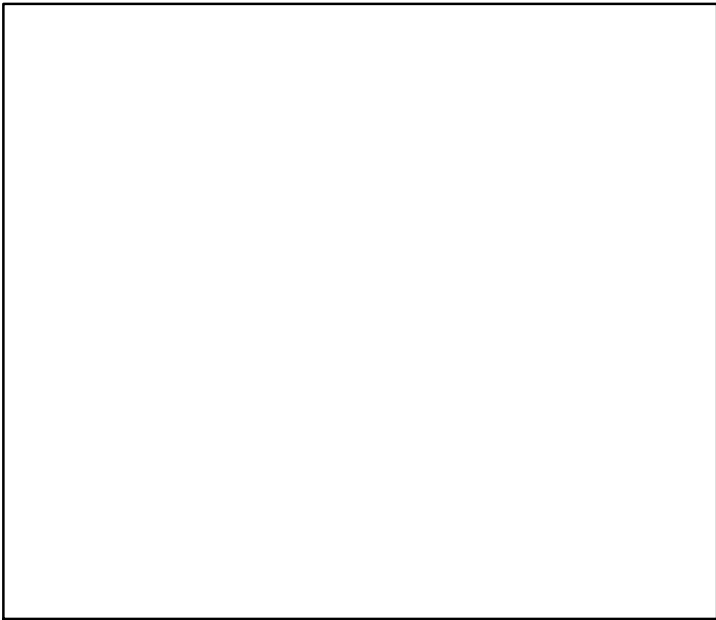
Kobe MSY*



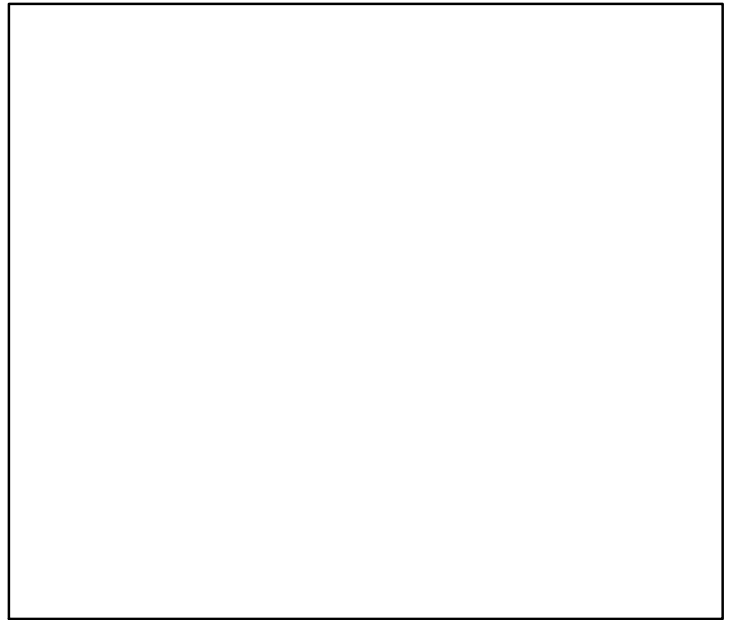
Kobe MGT*



Spawner Recruit*



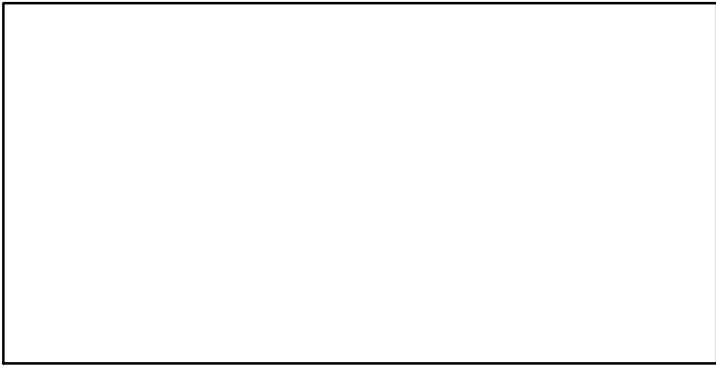
Production*



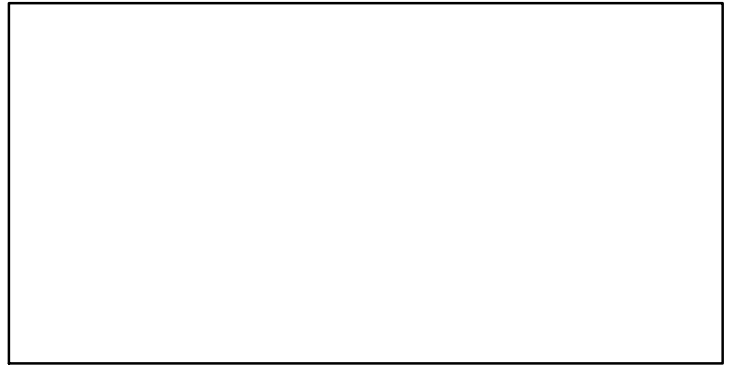
◆ Start Year ◆ End Year * No Data

Arctic surfclam Grand Bank [ARCSURFGB]

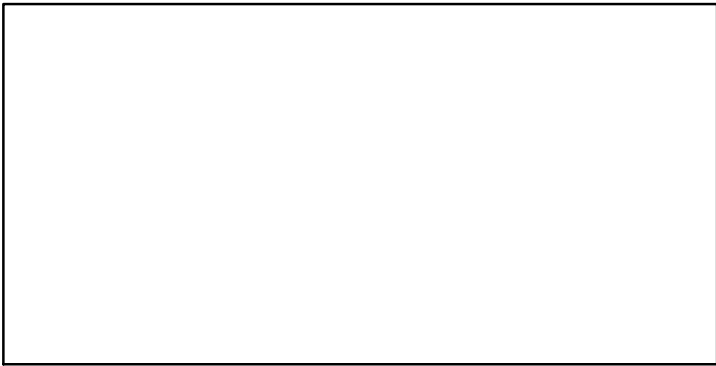
TB*



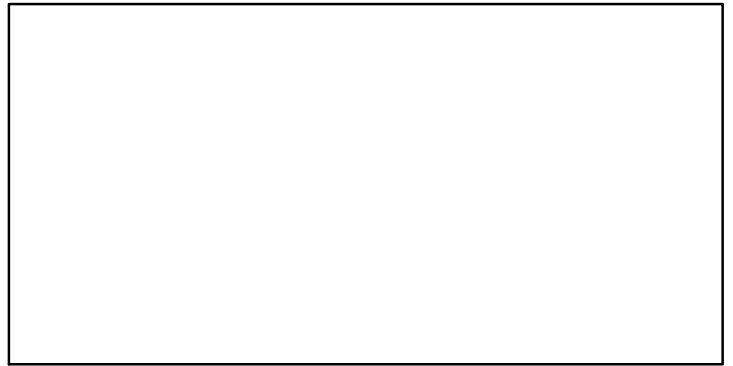
SSB*



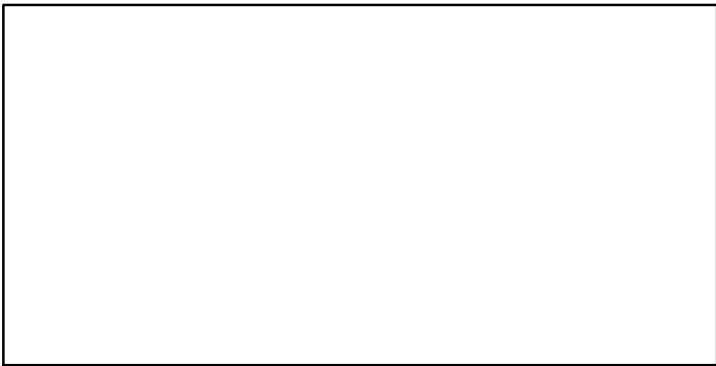
TN *



F*



ER*



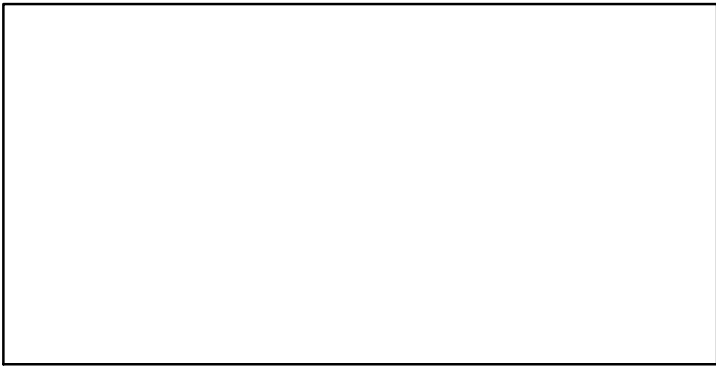
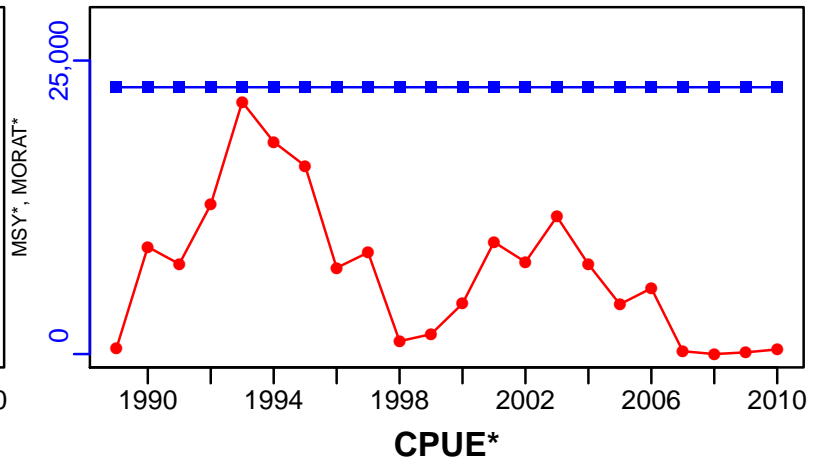
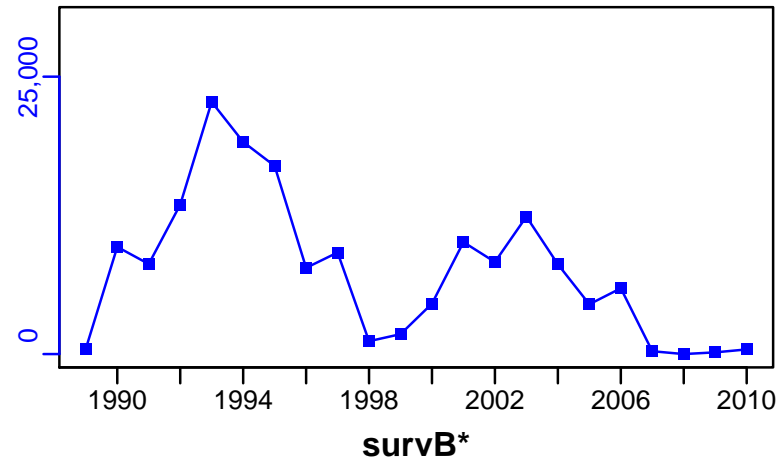
Recruits*



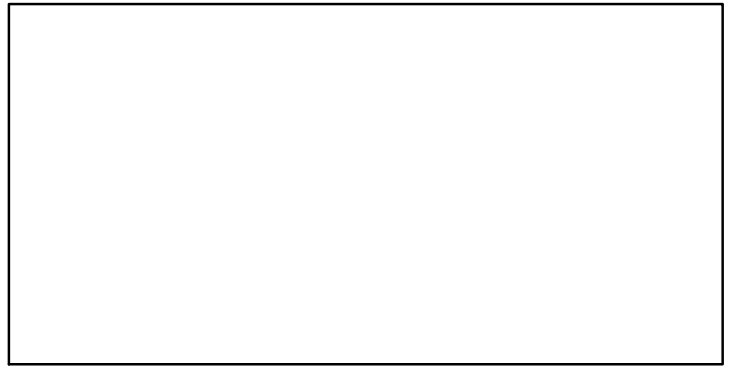
Arctic surfclam Grand Bank [ARCSURFGB]

TL-MT, TC*, RecC* (1989-2010-WATSON)

TAC-MT, Cpair-MT, Cadv* (1989-2010-WATSON)



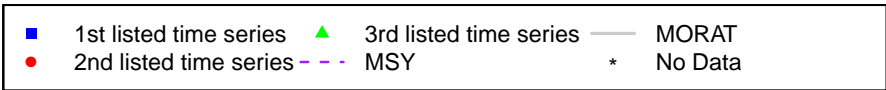
EFFORT*



CPUE*



CdivMSY*



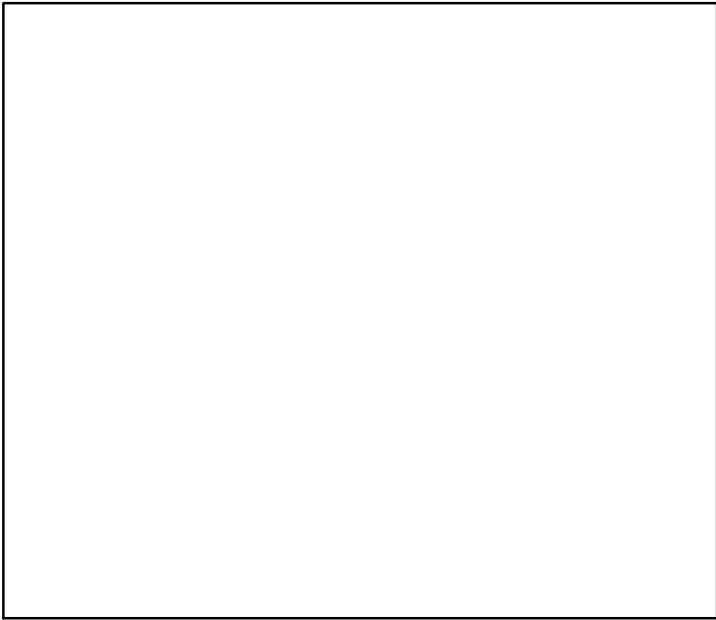
Arctic surfclam Quebec Coastal Waters [ARCSURFQCW]

Metadata	
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-QUE-ARCSURFQCW-1993-2011-CHING
Area	Quebec Coastal Waters
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	844	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

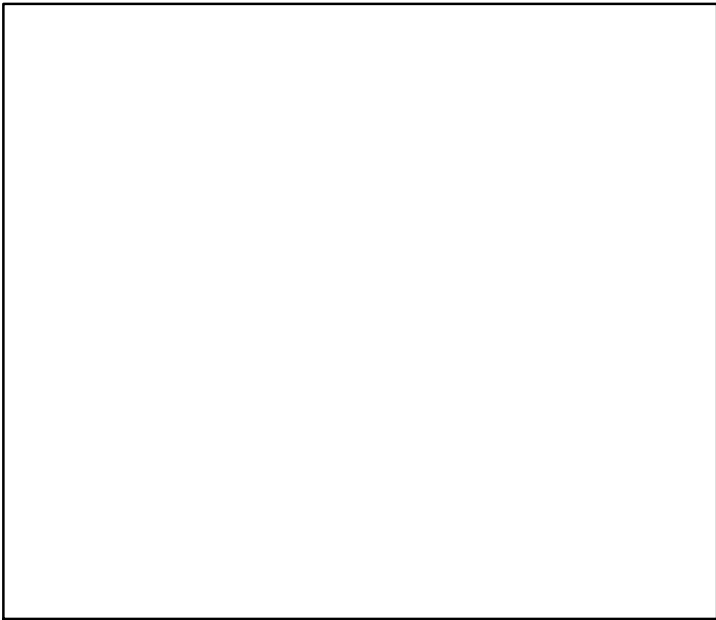
Kobe MSY*



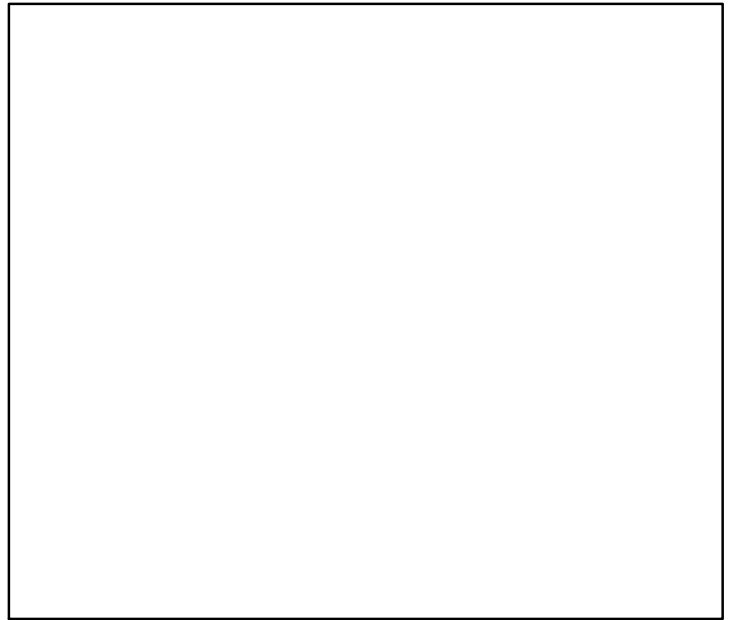
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Arctic surfclam Quebec Coastal Waters [ARCSURFQCW]

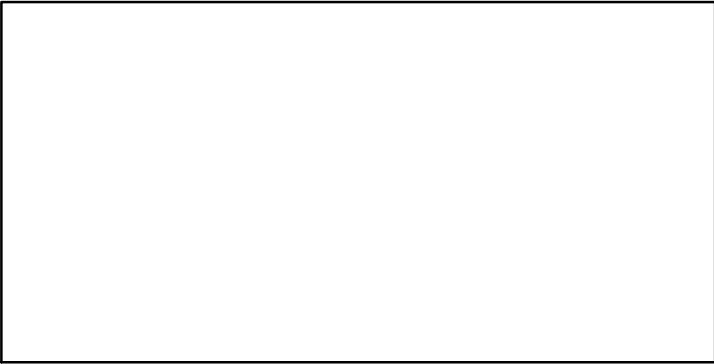
TB*



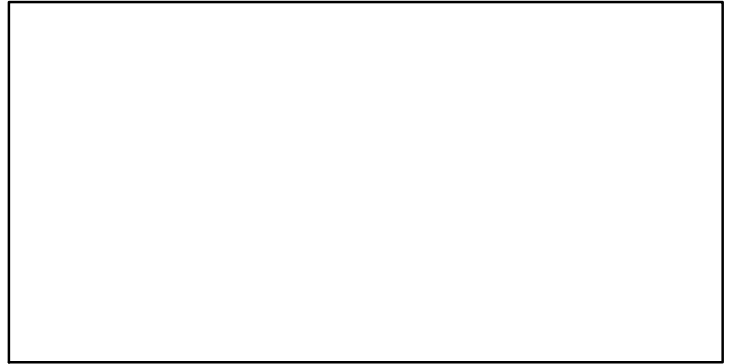
SSB*



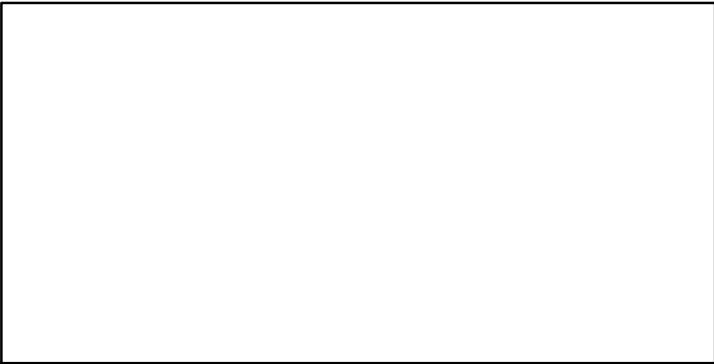
TN *



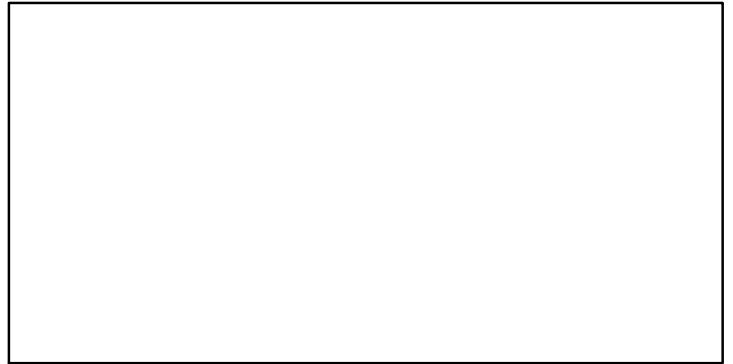
F*



ER*



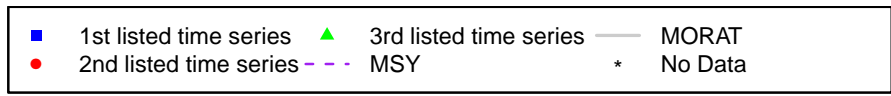
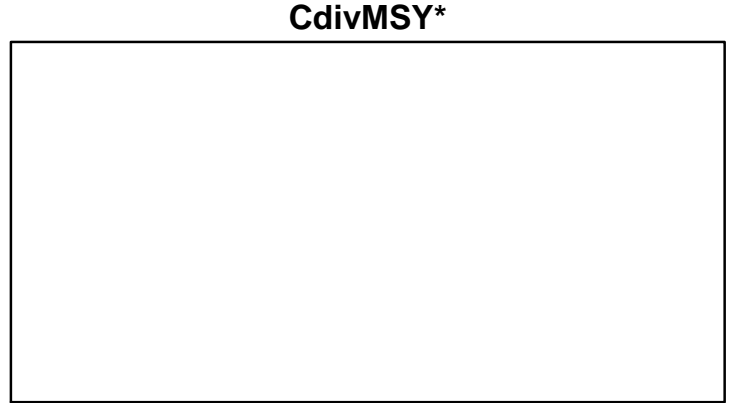
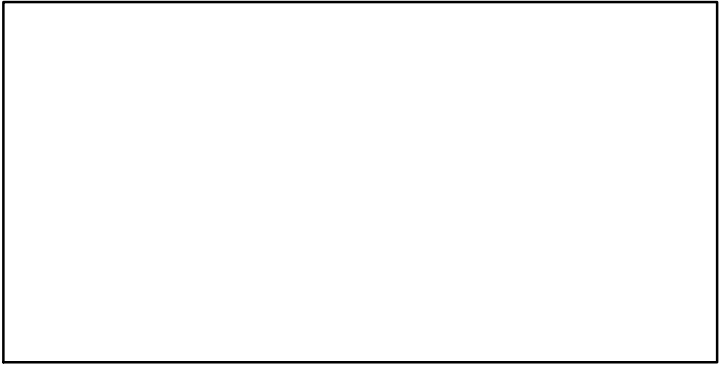
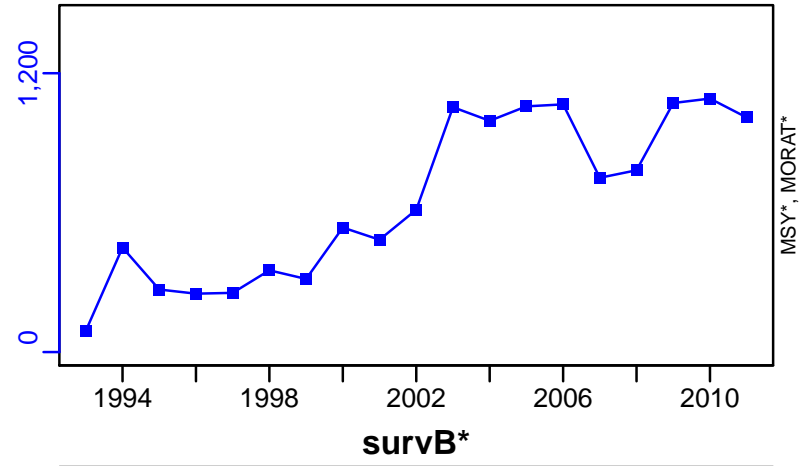
Recruits*



Arctic surfclam Quebec Coastal Waters [ARCSURFQCW]

TL-MT, TC*, RecC* (1993-2011-CHING)

TAC*, Cpair*, Cadv*



Dredge oyster Foveax Strait [DOYSFS]

Metadata	
Scientific Name	Ostrea chilensis
Current Assess ID	NIWA-DOYSFS-1906-2012-FU
Area	Foveax Strait
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	National Institute of Water and Atmospheric Research
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-E00	2012	1,501,772,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2012	0.1
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2012	1.44×10^9	-	-
TN	-	-	-	-	-
R	R-E00	2012	4.98×10^8	Both	-
F	F-1/yr	2012	0.01	Both	-
ER	-	-	-	-	-
TC	TC-E00	2012	12,600,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSBdivSSBmgt-dimensionless	2012	0.9		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Dredge oyster Foveax Strait [DOYSFS]

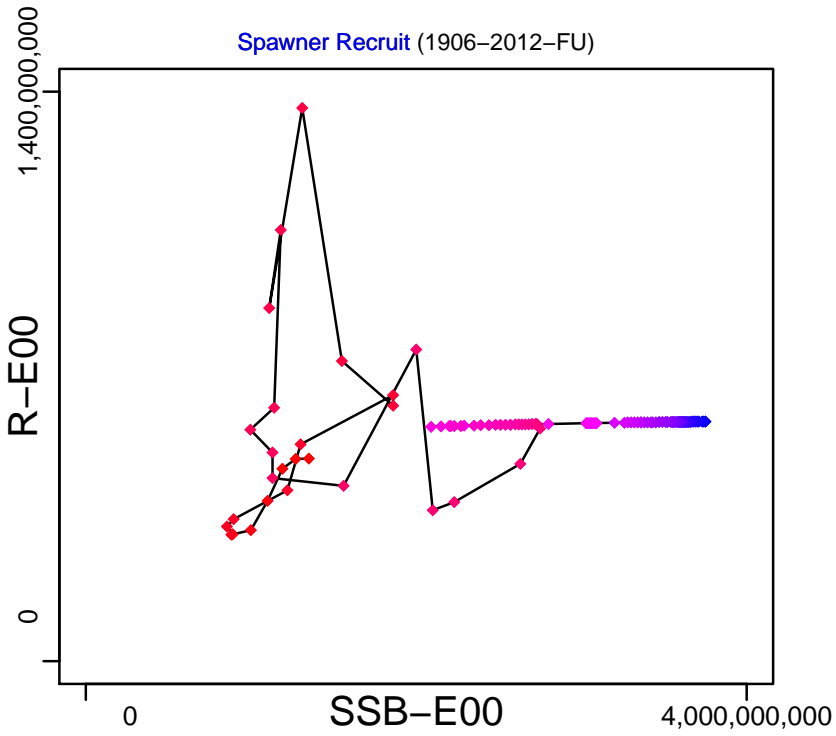
Kobe MSY*



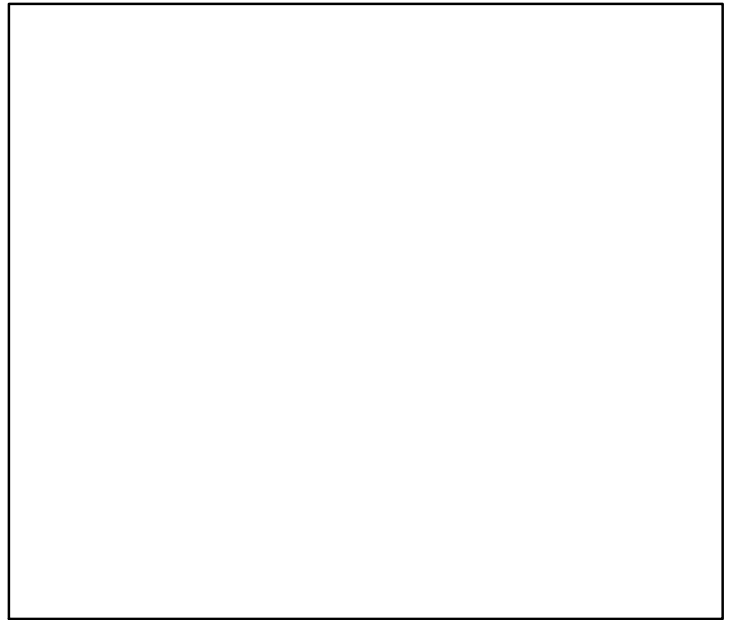
Kobe MGT*



Spawner Recruit (1906–2012–FU)



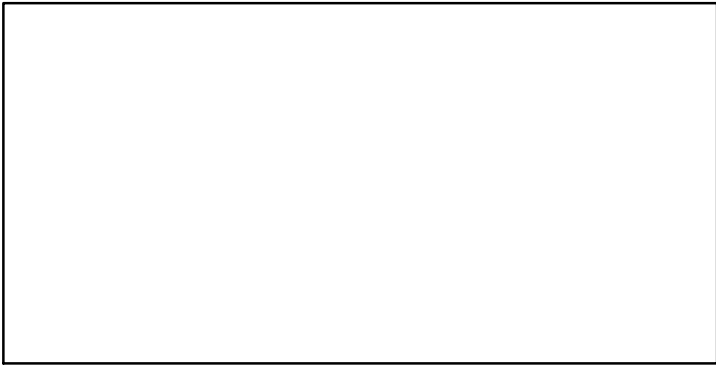
Production*



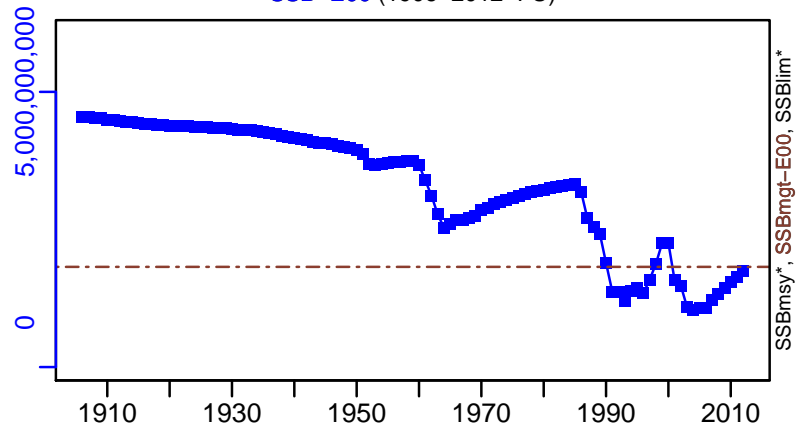
◆ Start Year ◆ End Year * No Data

Dredge oyster Foveax Strait [DOYSFS]

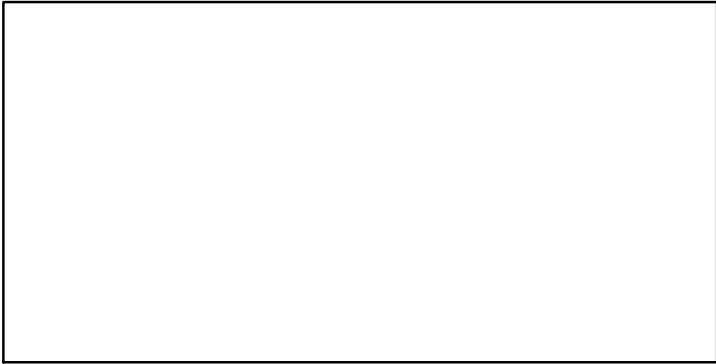
TB*



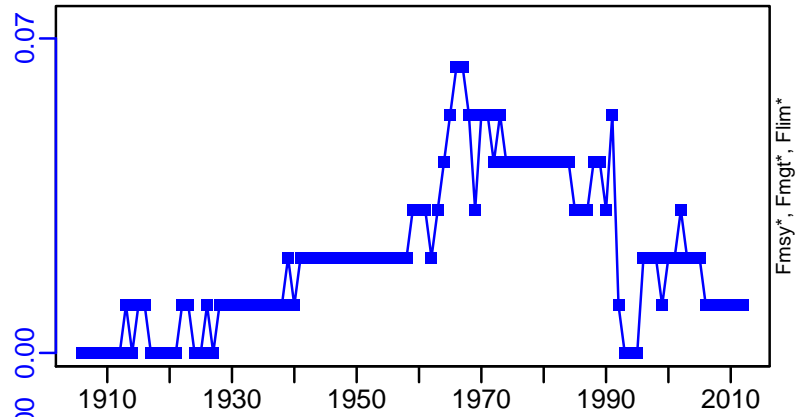
SSB-E00 (1906-2012-FU)



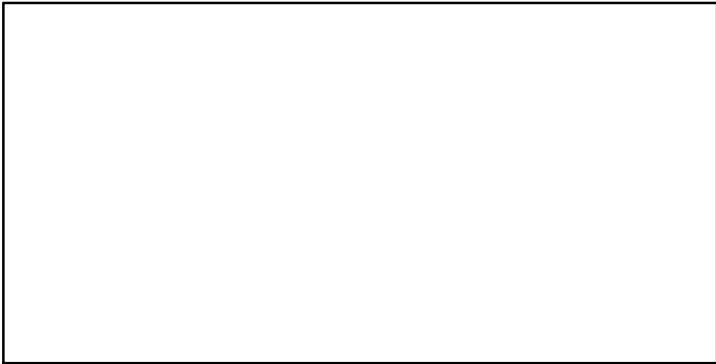
TN *



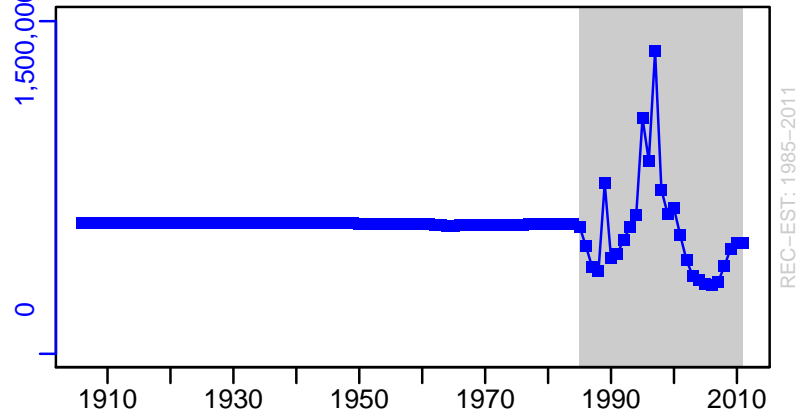
F-1/yr (1906-2012-FU)



ER*

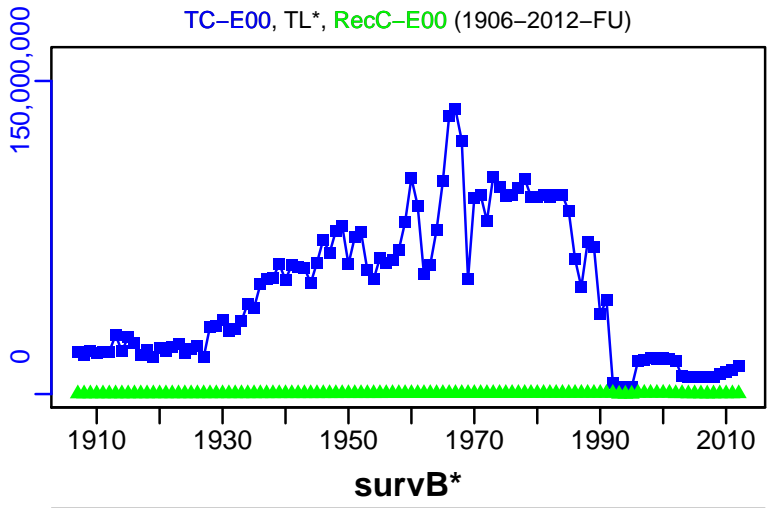


R-E00 (1906-2012-FU)

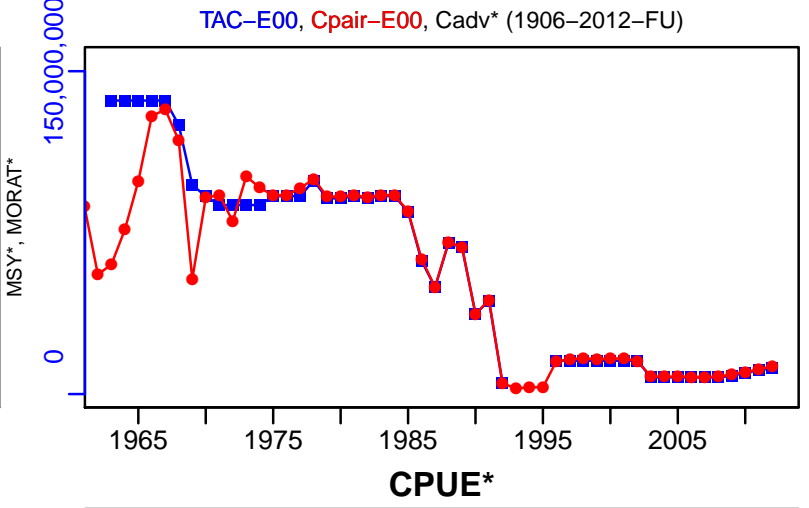


Dredge oyster Foveax Strait [DOYSFS]

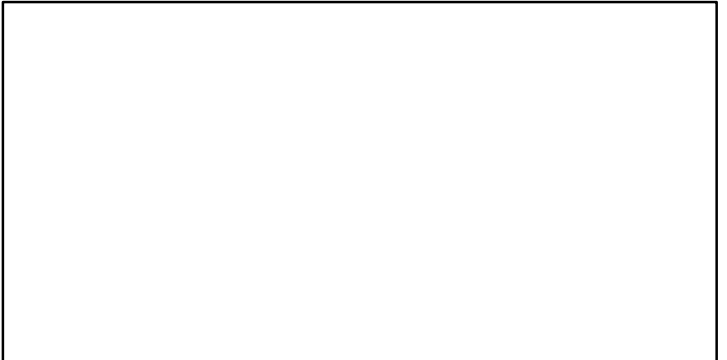
TC-E00, TL*, RecC-E00 (1906-2012-FU)



TAC-E00, Cpair-E00, Cadv* (1906-2012-FU)



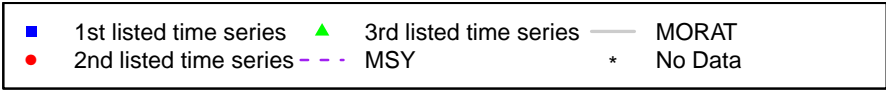
EFFORT*



CPUE*



CdivMSY*



Black Foot Paua NZ North PAUA5A [PAUANPAU5A]

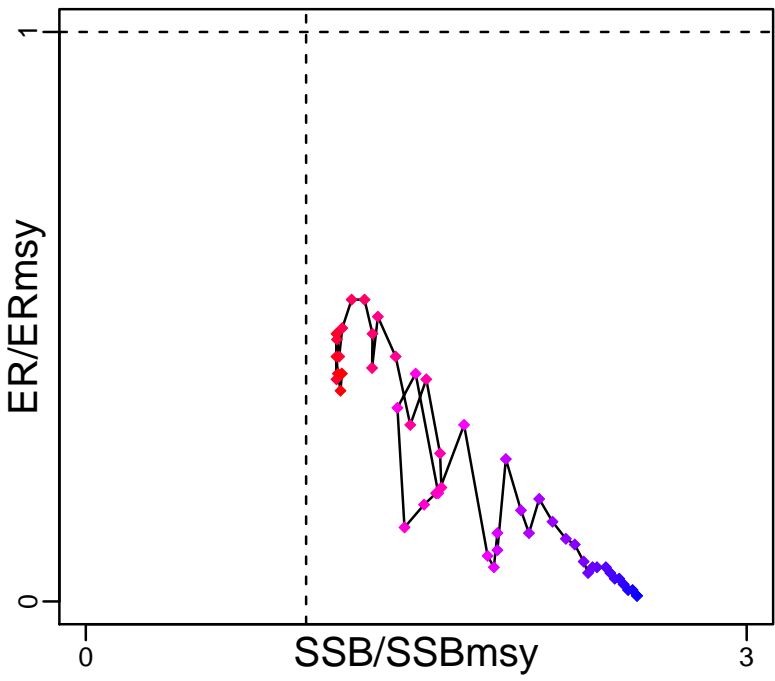
Metadata	
Scientific Name	Haliotis iris
Current Assess ID	NIWA-PAUANPAU5A-1965-2014-FU
Area	NZ Area North PAUA 5A
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	National Institute of Water and Atmospheric Research
Asmts in RAM	2010, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2014	187
SSBmsy	SSBmsy-MT	2014	496
Fmsy	Fmsy-extr-1/yr	2010	0.51
ERmsy	ERmsy-ratio	2014	0.39
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	496
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2014	0.21
TB0	-	-	-
SSB0	SSB0-MT	2014	1239
MSY	MSY-MT	2014	73
M	M-1/yr	2014	0.15
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

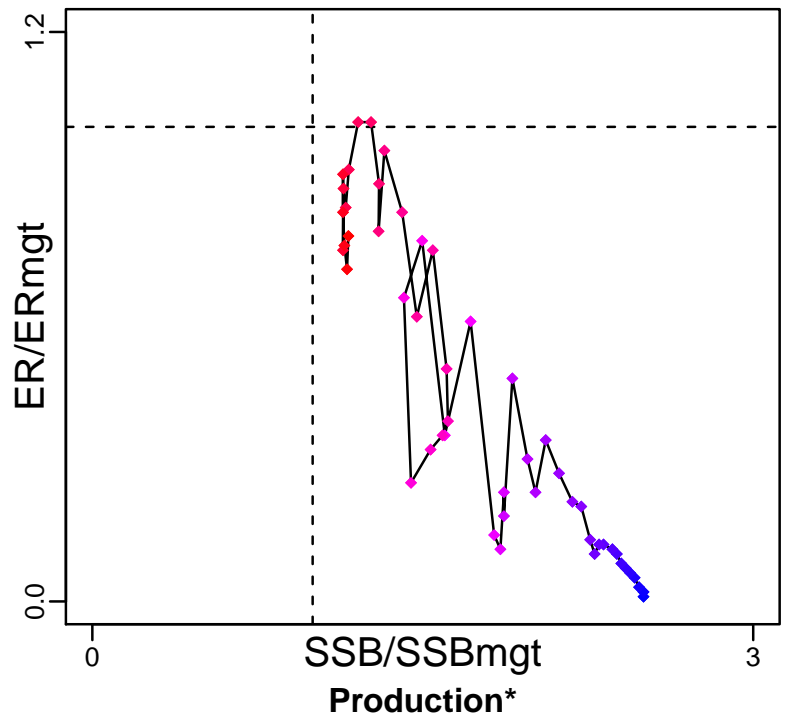
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2014	576	-	-
TN	-	-	-	-	-
R	R-E00	2014	602,000	Both	-
F	F-1/yr	2010	0.328	-	-
ER	ER-ratio	2014	0.16	Both	-
TC	TC-MT	2014	64		
TL	TL-MT	2014	64		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2014	1.162		
F/Fmsy	FdivFmsy-dimensionless	2010	0.643		
ER/ERmsy	ERdivERmsy-dimensionless	2014	0.4		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.162		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black Foot Paua NZ North PAUA5A [PAUANPAU5A]

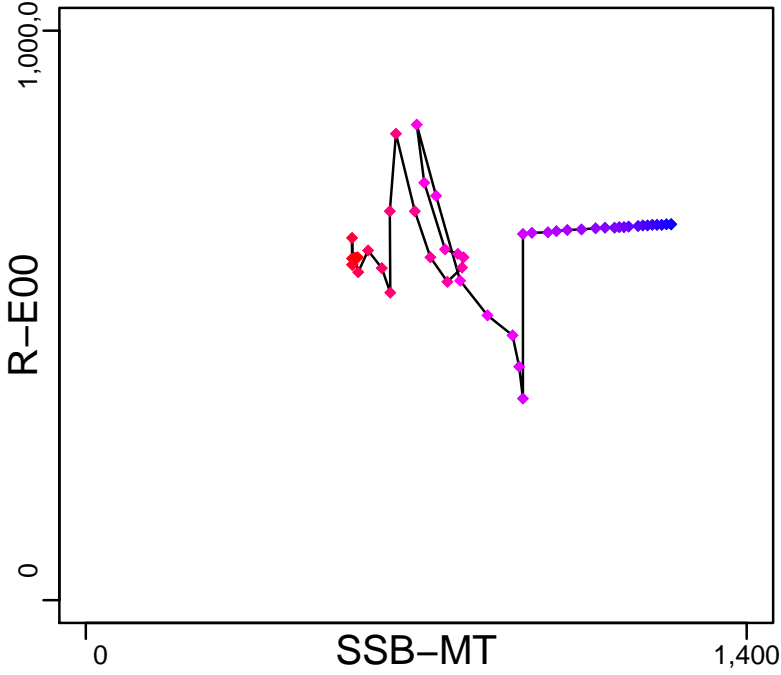
Kobe MSYpref (1965–2014–FU)



Kobe MGTpref (1965–2014–FU)



Spawner Recruit (1965–2014–FU)



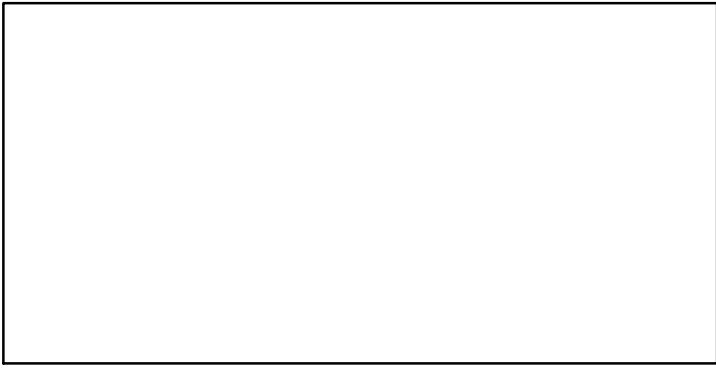
Production*



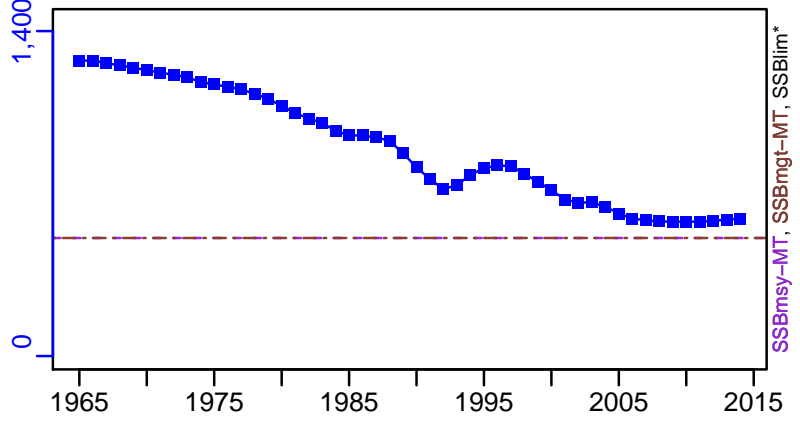
◆ Start Year ◆ End Year * No Data

Black Foot Paua NZ North PAUA5A [PAUANPAU5A]

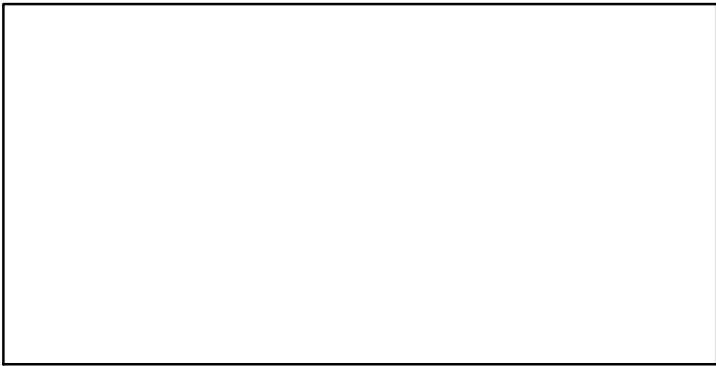
TB*



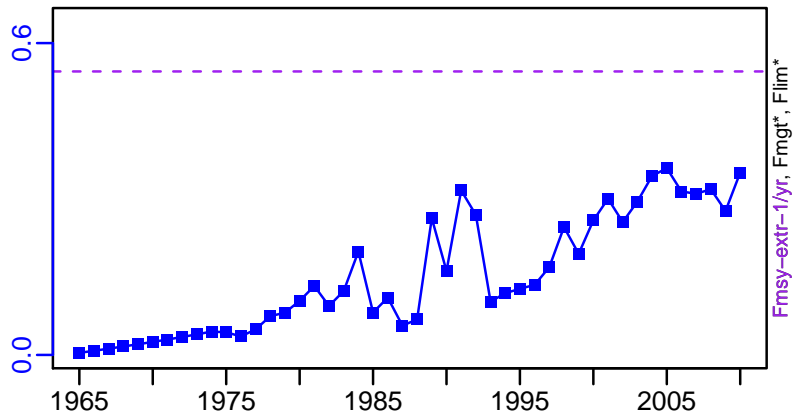
SSB-MT (1965-2014-FU)



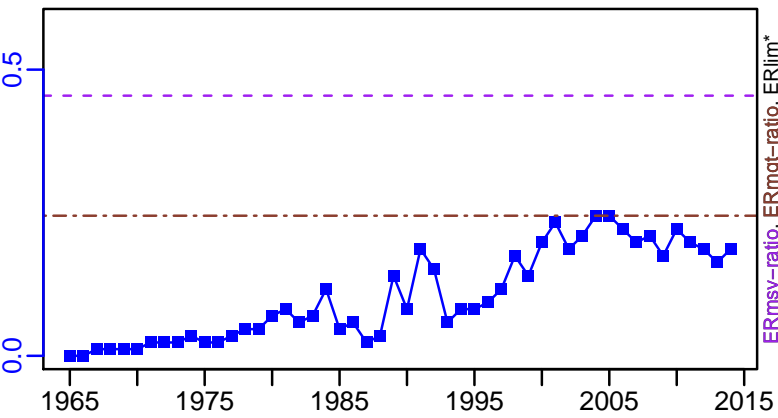
TN *



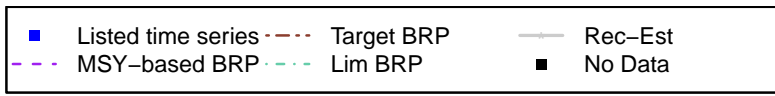
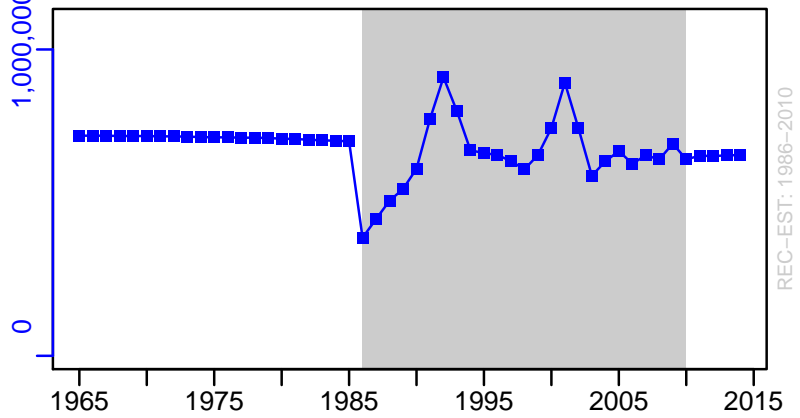
F-1/yr (1965-2010-CORDUE)



ER-ratio (1965-2014-FU)



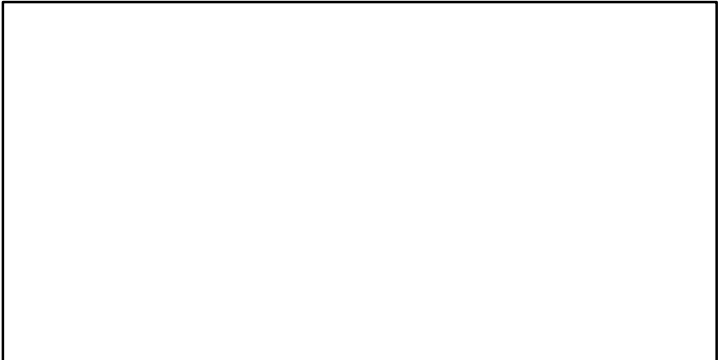
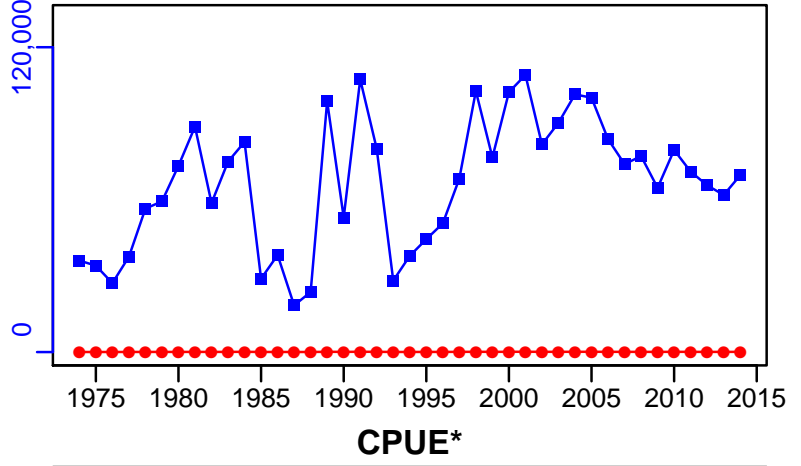
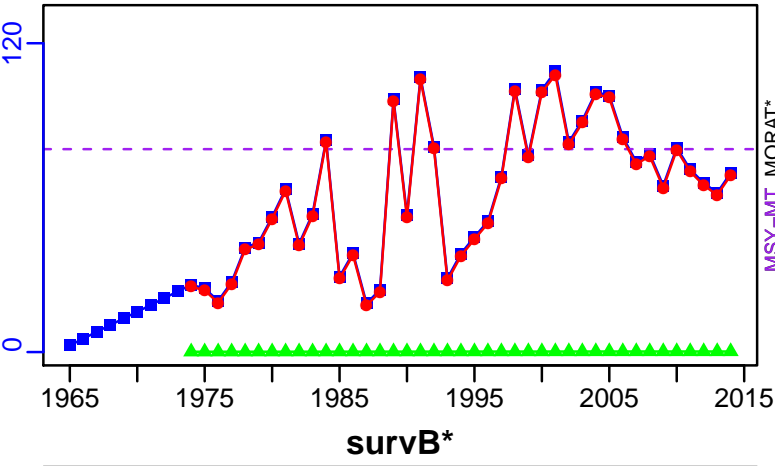
R-E00 (1965-2014-FU)



Black Foot Paua NZ North PAUA5A [PAUANPAU5A]

TC-MT, TL-MT, RecC-MT (1965-2014-FU)

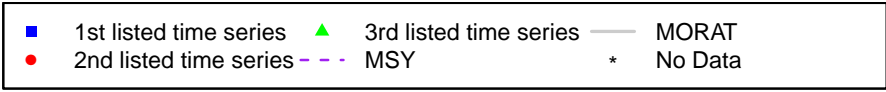
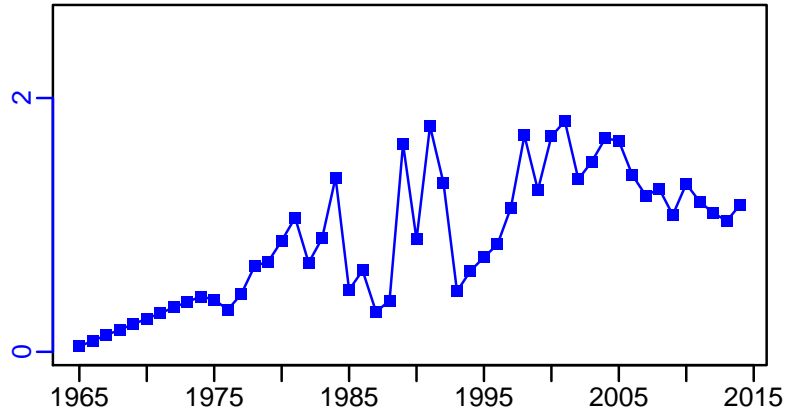
TAC-MT, Cpair-MT, Cadv* (1965-2014-FU)



EFFORT*



CdivMSY-ratio (1965-2014-FU)



New Zealand abalone species New Zealand Area PAU 5B [PAUAPAU5B]

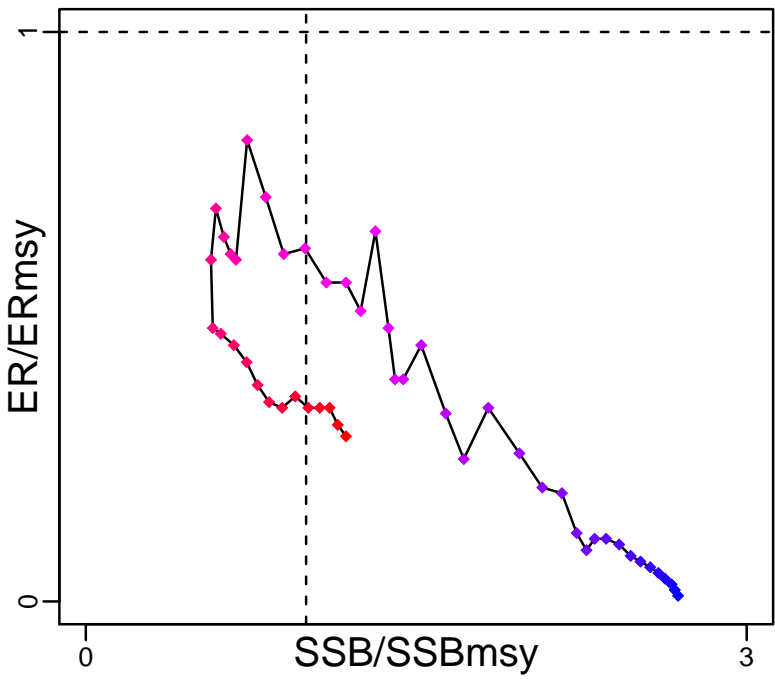
Metadata	
Scientific Name	Haliotis iris
Current Assess ID	NZMFishSHELLFISHWG-PAUAPAU5B-1965-2013-FU
Area	New Zealand Area PAU 5B (Stewart Island)
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	Shellfish Working Group
Asmts in RAM	2007, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	284
SSBmsy	SSBmsy-MT	2013	1346
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.67
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2013	1346
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2013	0.3
TB0	-	-	-
SSB0	SSB0-MT	2013	3366
MSY	MSY-MT	2013	190
M	M-1/yr	2013	0.15
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

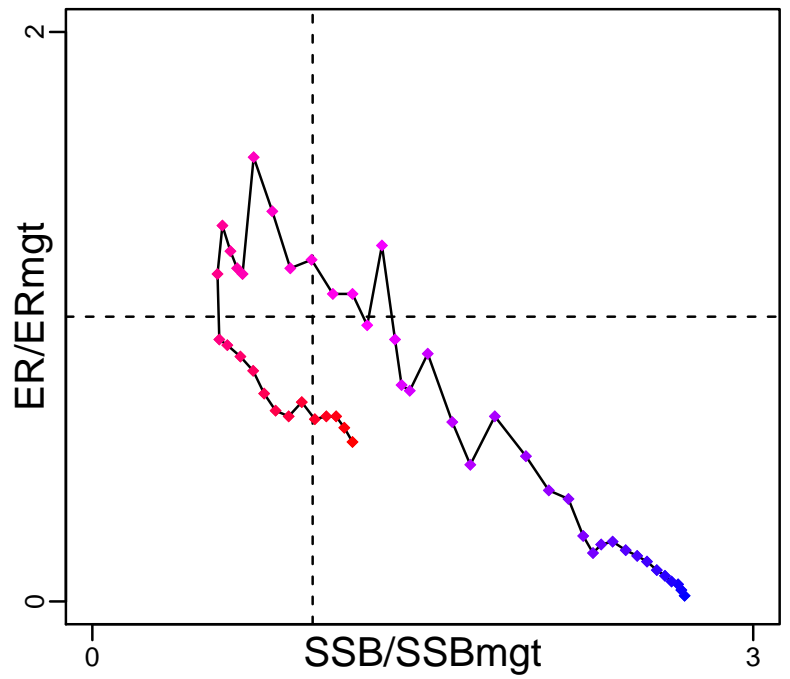
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	1570	-	-
SSB	SSB-MT	2013	1590	Both	-
TN	-	-	-	-	-
R	R-E00	2013	1×10^6	Both	-
F	-	-	-	-	-
ER	ER-ratio	2013	0.11	Both	-
TC	TC-MT	2013	101		
TL	TL-MT	2013	72		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	1.181		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2013	0.29		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2013	1.181		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

New Zealand abalone species New Zealand Area PAU 5B [PAUAPAU5B]

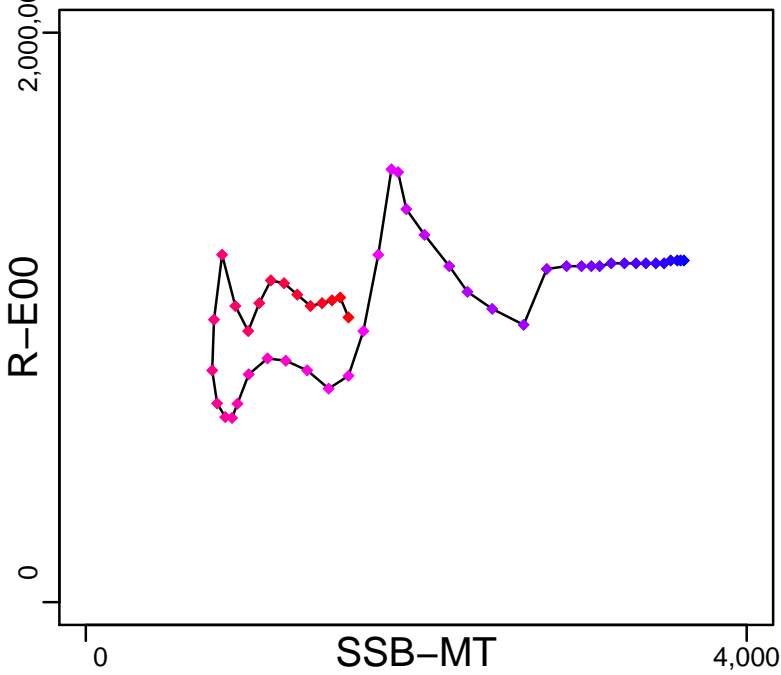
Kobe MSYpref (1965–2013–FU)



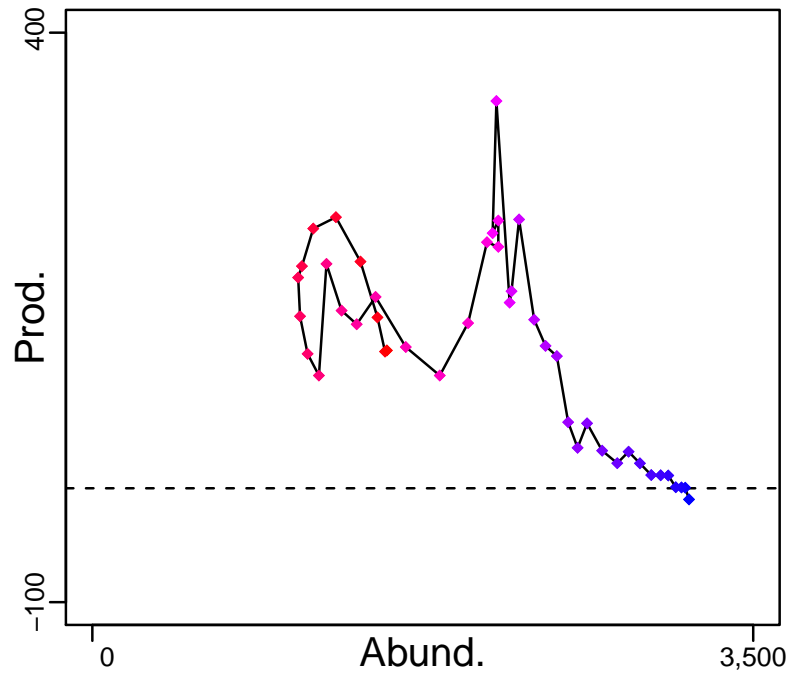
Kobe MGTpref (1965–2013–FU)



Spawner Recruit (1965–2013–FU)



Production (1963–2007–JENSEN)

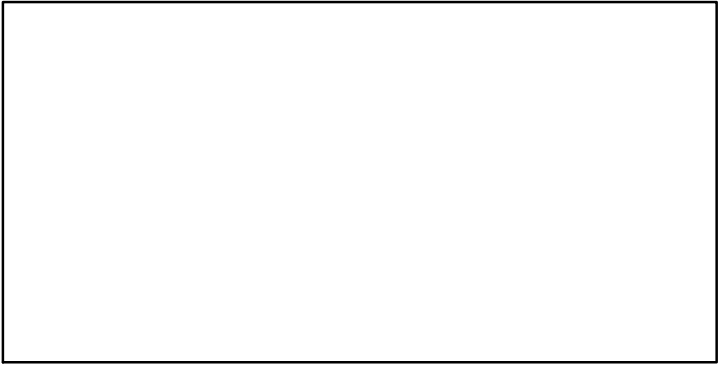
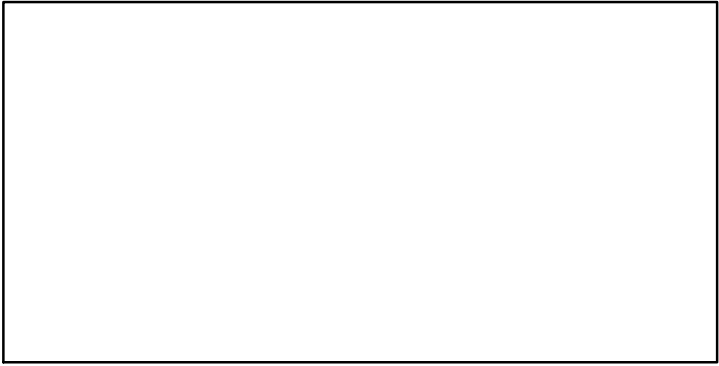
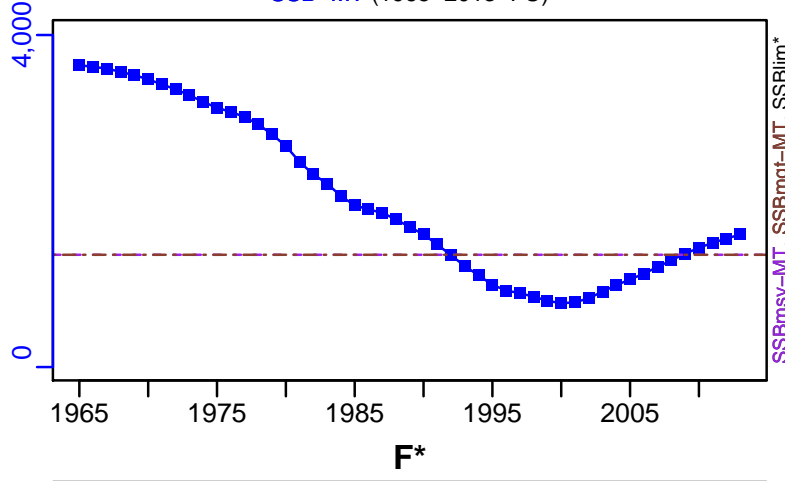
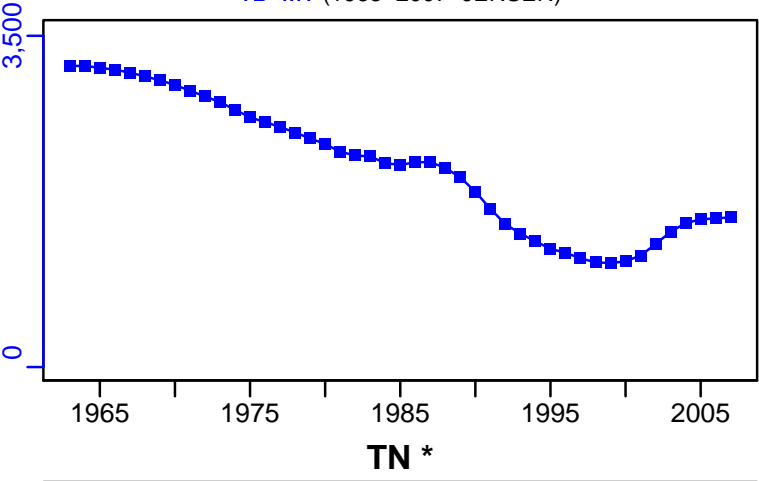


◆ Start Year ◆ End Year * No Data

New Zealand abalone species New Zealand Area PAU 5B [PAUAPAU5B]

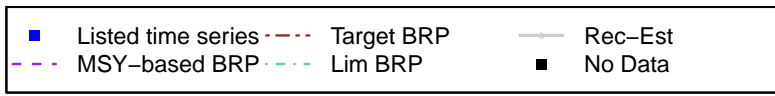
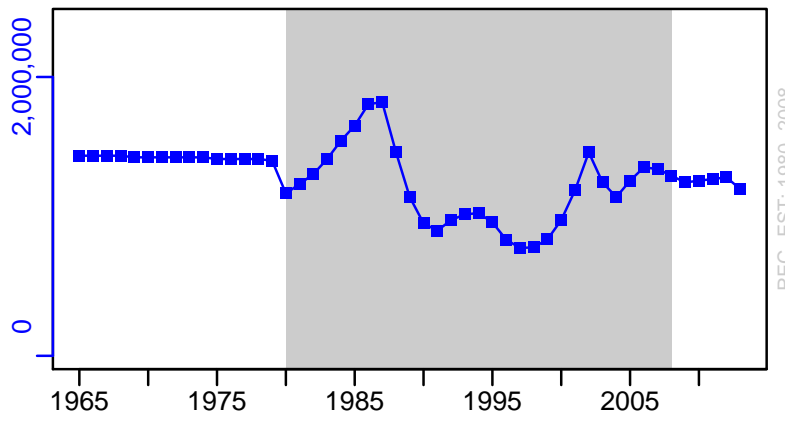
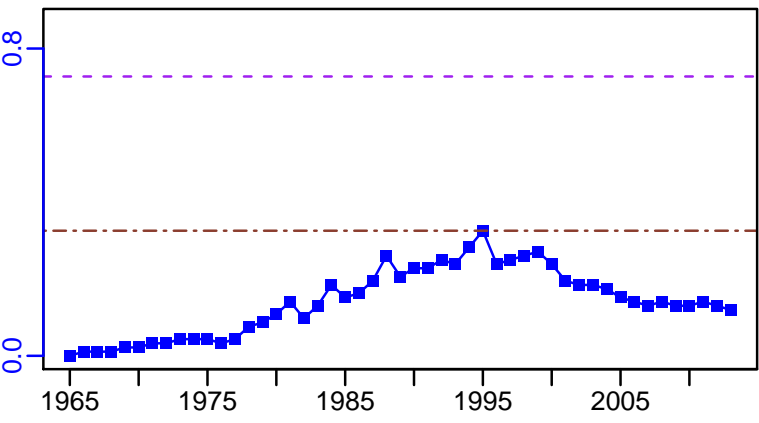
TB-MT (1963-2007-JENSEN)

SSB-MT (1965-2013-FU)



ER-ratio (1965-2013-FU)

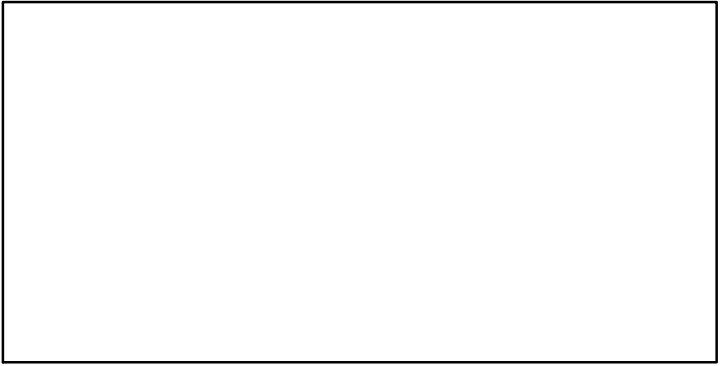
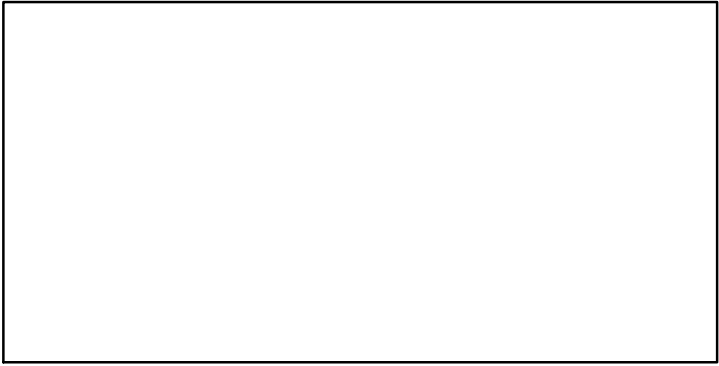
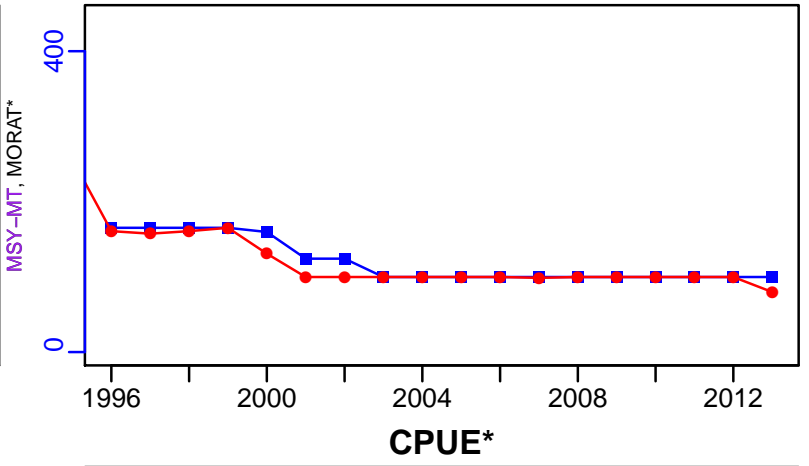
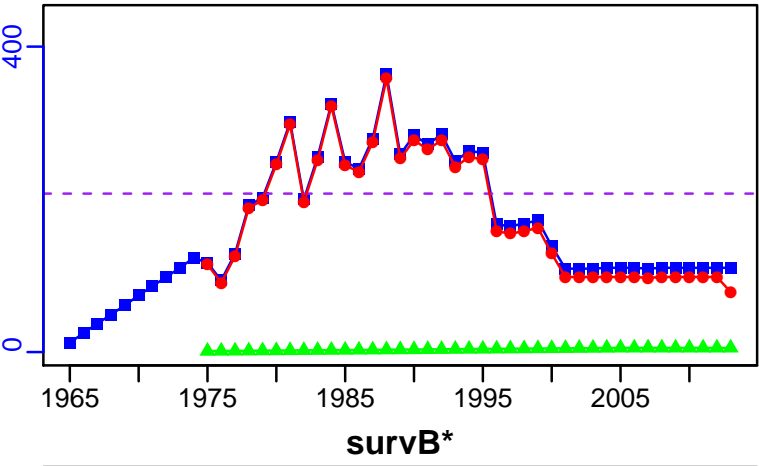
R-E00 (1965-2013-FU)



New Zealand abalone species New Zealand Area PAU 5B [PAUAPAU5B]

TC-MT, TL-MT, RecC-MT (1965-2013-FU)

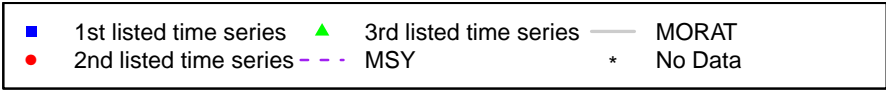
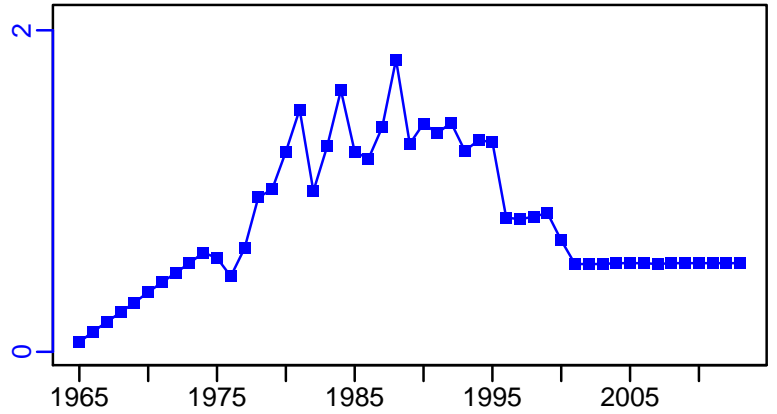
TAC-MT, Cpair-MT, Cadv* (1965-2013-FU)



EFFORT*



CdivMSY-ratio (1965-2013-FU)



New Zealand abalone species New Zealand Area PAU 5D [PAUAPAU5D]

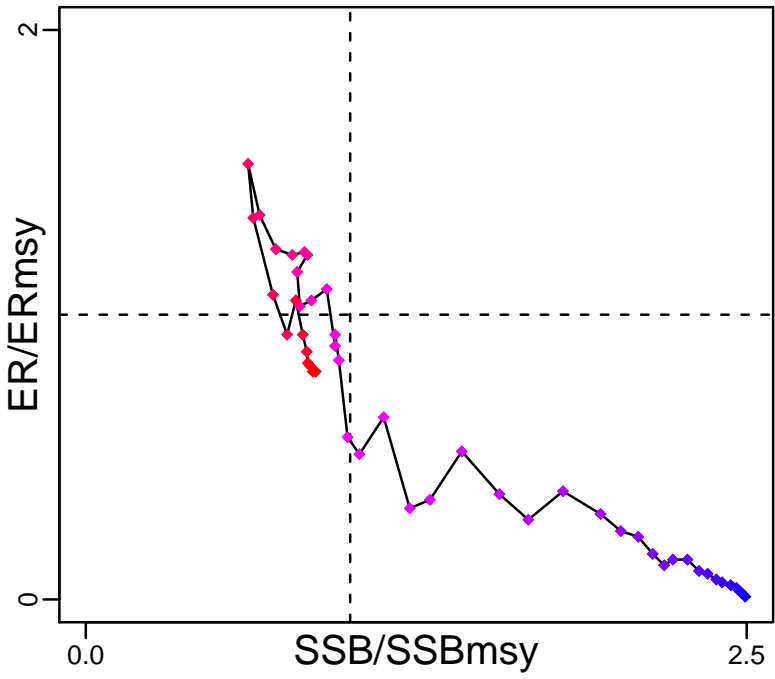
Metadata	
Scientific Name	Haliotis iris
Current Assess ID	NZMFishSHELLFISHWG-PAUAPAU5D-1965-2012-FU
Area	New Zealand Area PAU 5D (Otago)
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	Shellfish Working Group
Asmts in RAM	2006, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2012	465
SSBmsy	SSBmsy-MT	2012	914
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2012	0.26
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2012	914
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2012	0.16
TB0	-	-	-
SSB0	SSB0-MT	2012	2285
MSY	MSY-MT	2012	121
M	M-1/yr	2012	0.15
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

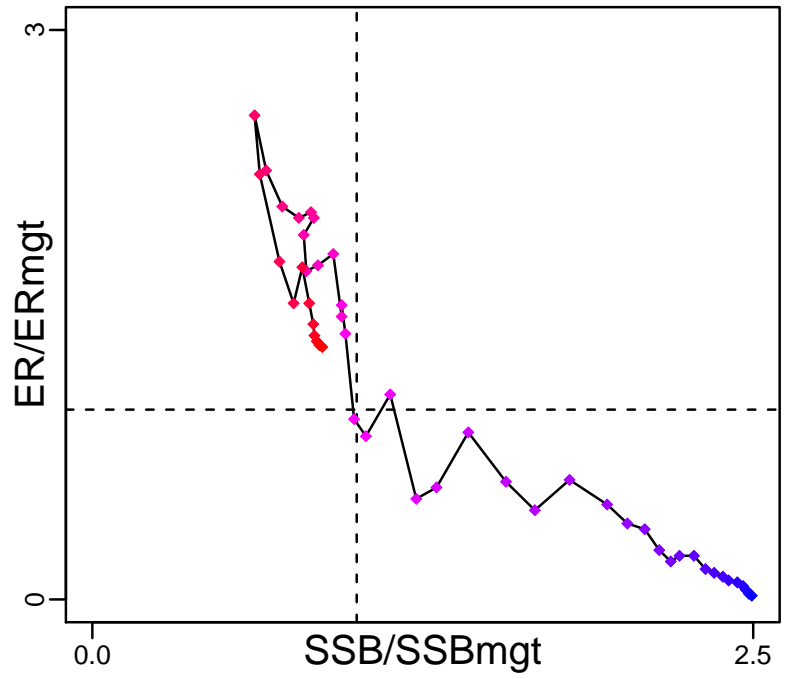
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2006	400	-	-
SSB	SSB-MT	2012	795	-	-
TN	-	-	-	-	-
R	R-E00	2012	884,000	Both	-
F	-	-	-	-	-
ER	ER-ratio	2012	0.21	Both	-
TC	TC-MT	2012	111		
TL	TL-MT	2012	89		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2012	0.87		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2012	0.8		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2012	0.87		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

New Zealand abalone species New Zealand Area PAU 5D [PAUAPAU5D]

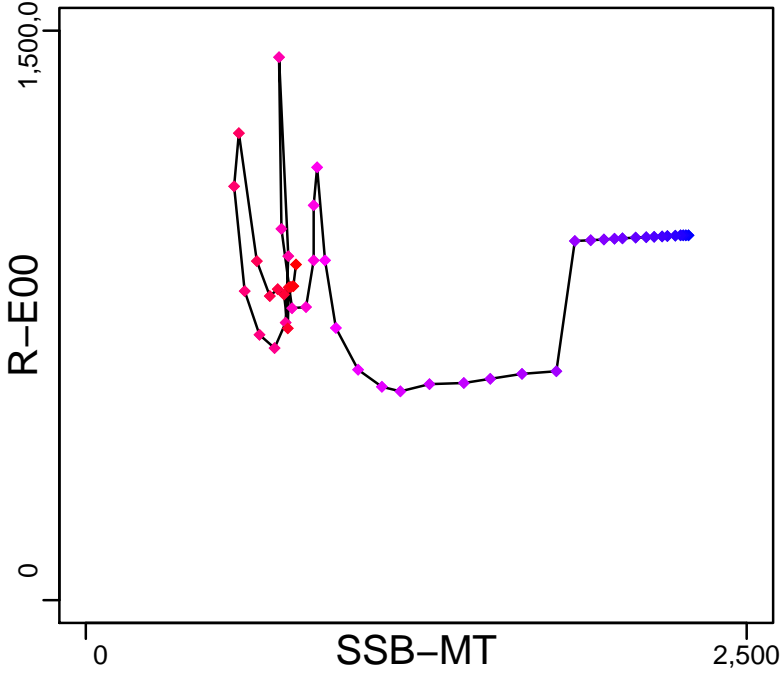
Kobe MSYpref (1965–2012–FU)



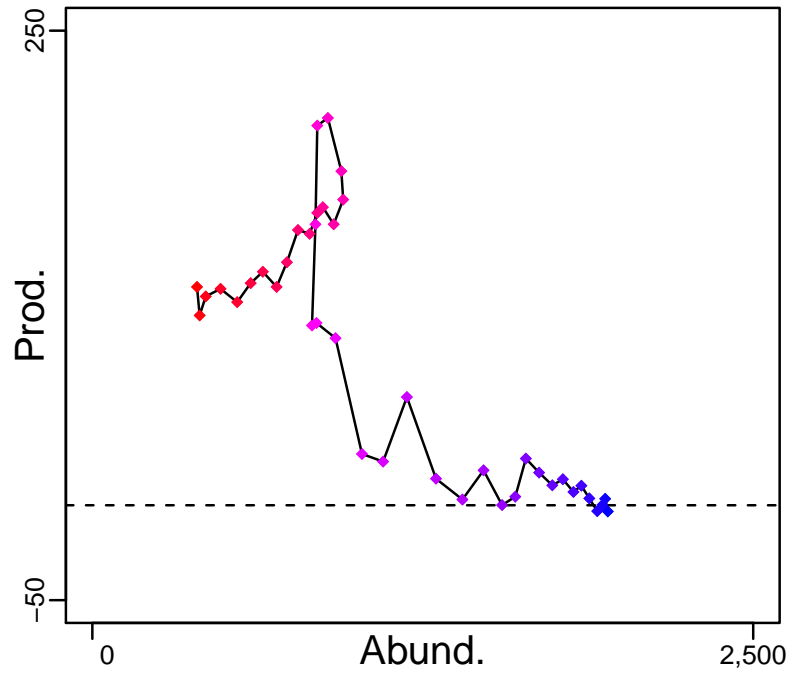
Kobe MGTpref (1965–2012–FU)



Spawner Recruit (1965–2012–FU)



Production (1964–2006–JENSEN)

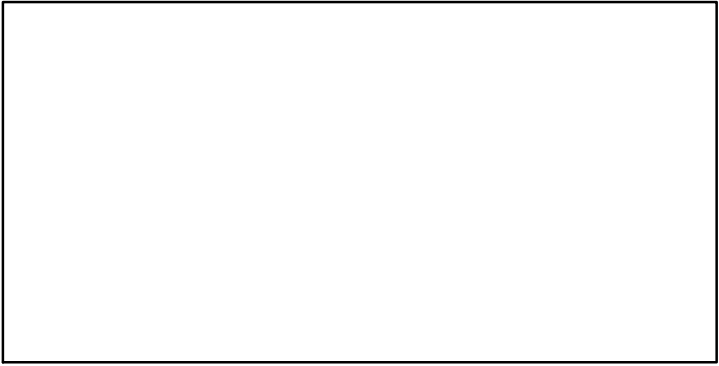
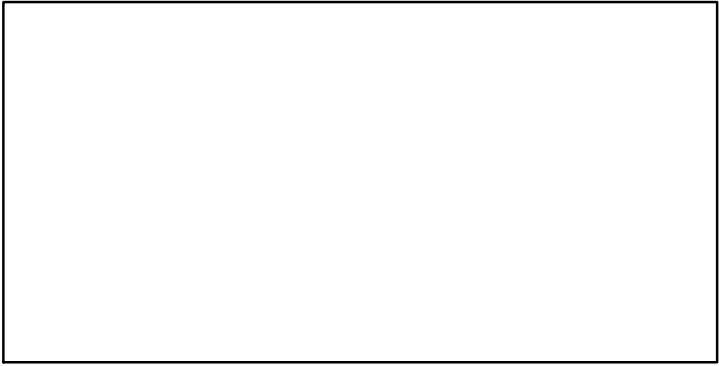
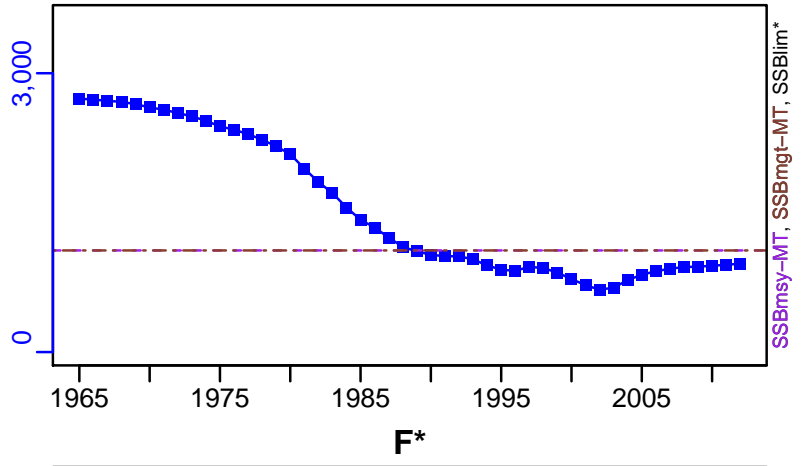
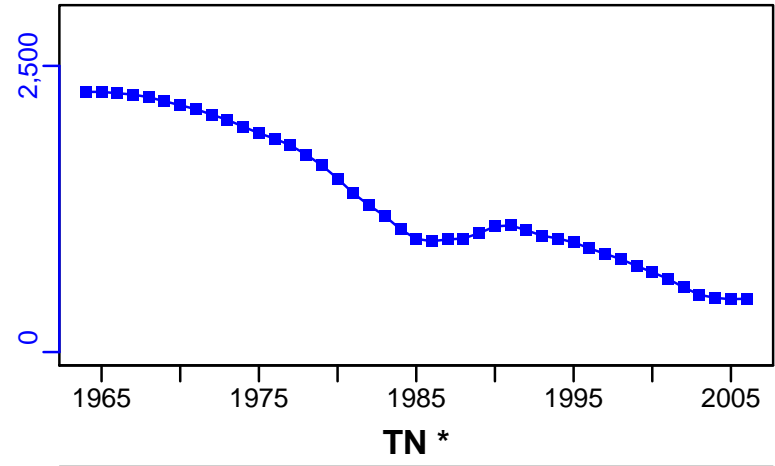


◆ Start Year ◆ End Year * No Data

New Zealand abalone species New Zealand Area PAU 5D [PAUAPAU5D]

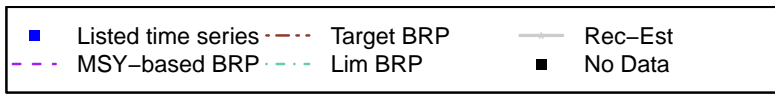
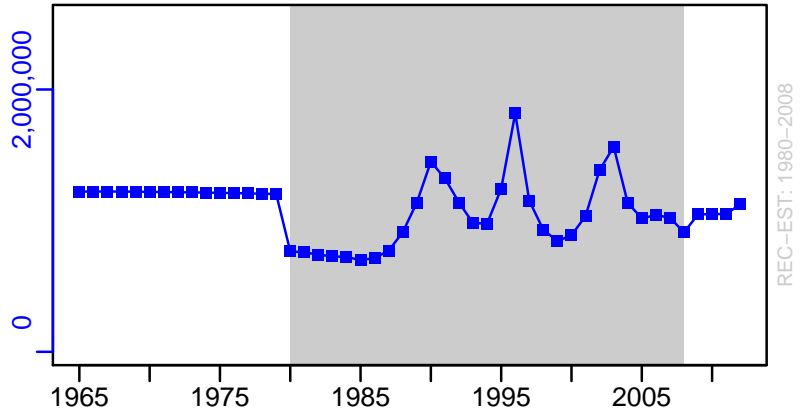
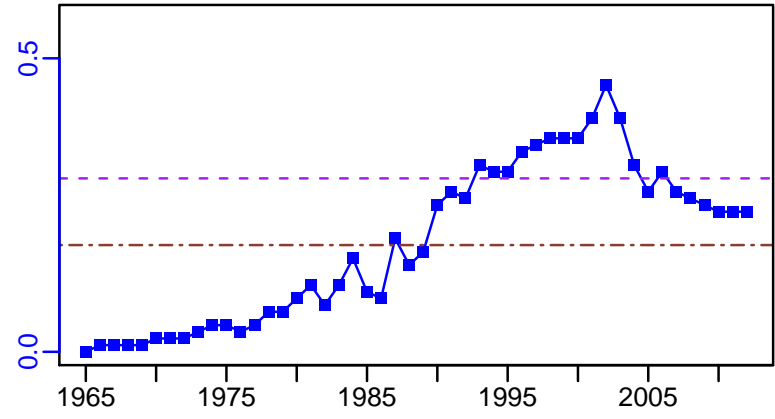
TB-MT (1964-2006-JENSEN)

SSB-MT (1965-2012-FU)



ER-ratio (1965-2012-FU)

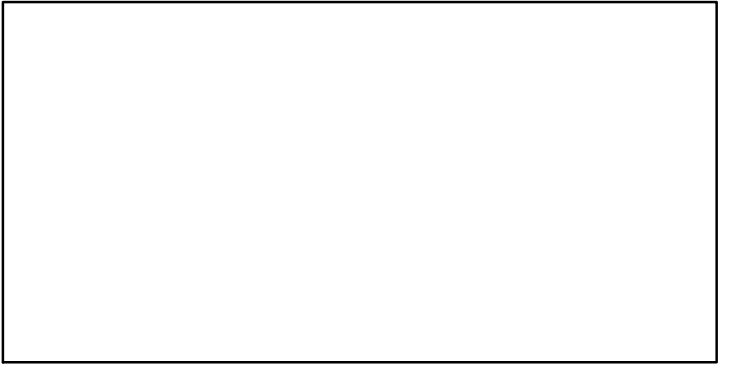
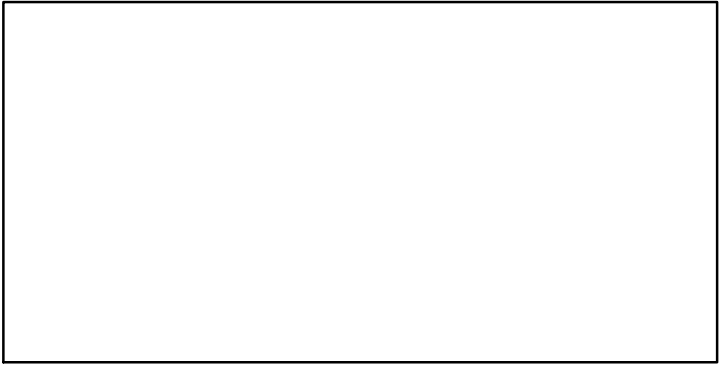
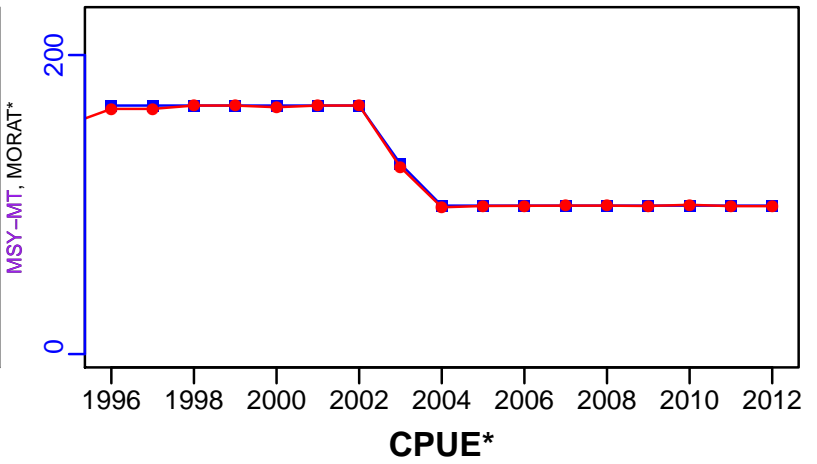
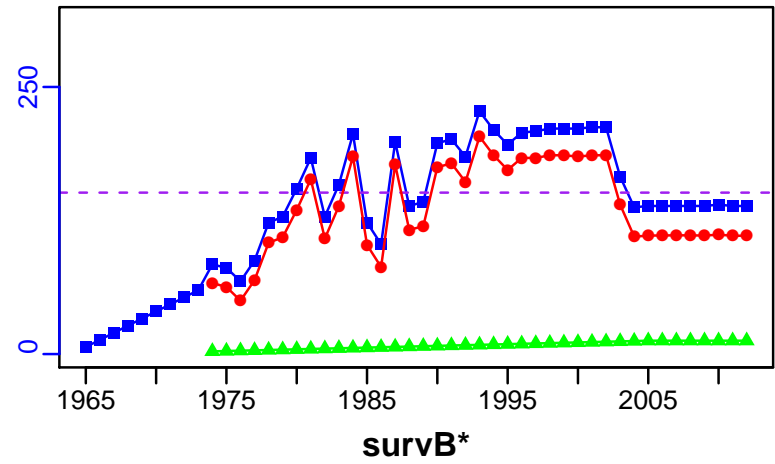
R-E00 (1965-2012-FU)



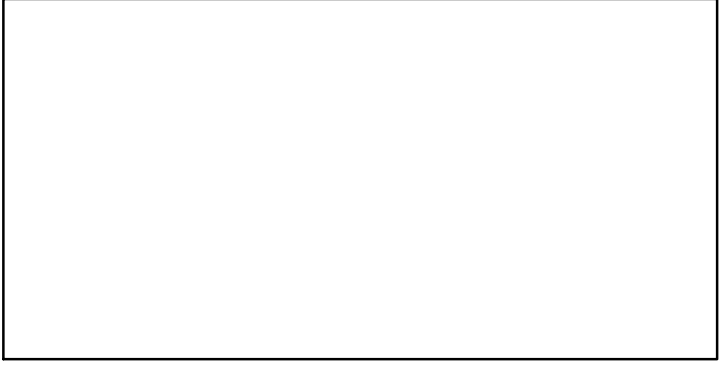
New Zealand abalone species New Zealand Area PAU 5D [PAUAPAU5D]

TC-MT, TL-MT, RecC-MT (1965-2012-FU)

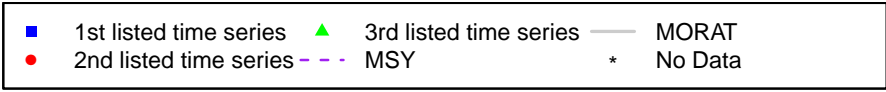
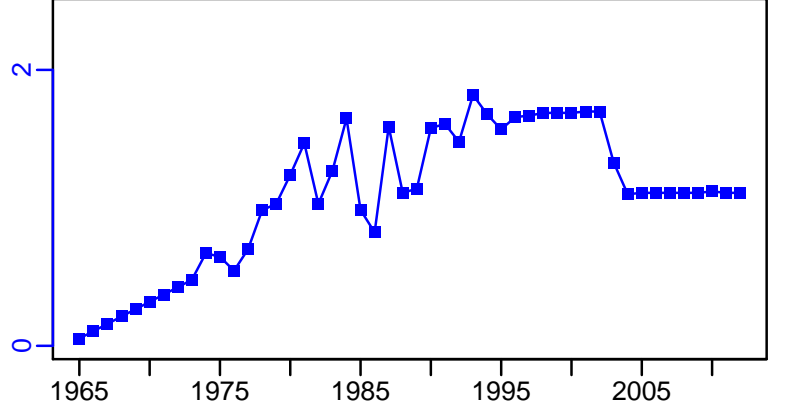
TAC-MT, Cpair-MT, Cadv* (1965-2012-FU)



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CdivMSY-ratio (1965-2012-FU)



New Zealand abalone species New Zealand Area PAU 7 [PAUAPAU7]

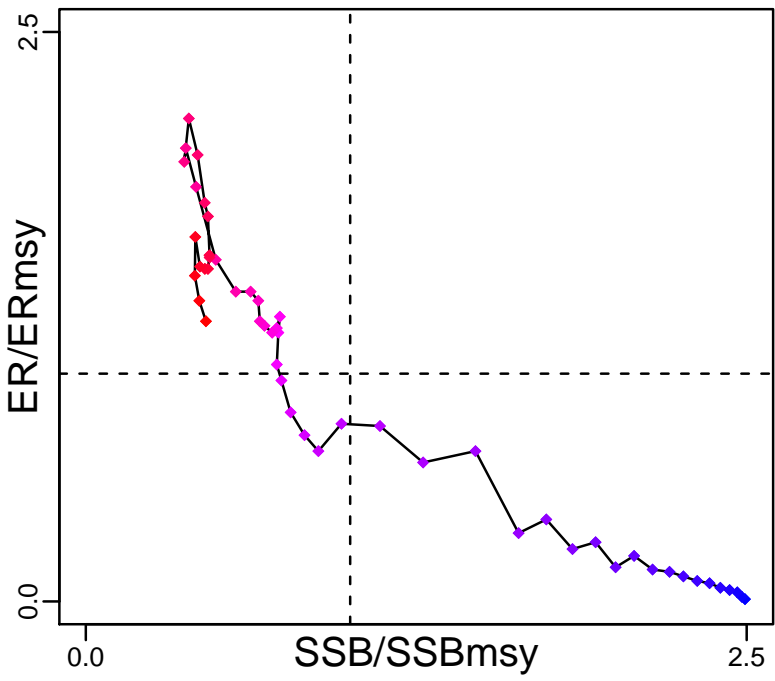
Metadata	
Scientific Name	Haliotis iris
Current Assess ID	NIWA-PAUAPAU7-1965-2015-FU
Area	New Zealand Area PAU 7 (Marlborough)
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	National Institute of Water and Atmospheric Research
Asmts in RAM	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2015	559
SSBmsy	SSBmsy-MT	2015	1716
Fmsy	Fmsy-extr-1/yr	2011	0.33
ERmsy	ERmsy-ratio	2015	0.37
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	1716
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	0.19
TB0	-	-	-
SSB0	SSB0-MT	2015	4291
MSY	MSY-MT	2015	207
M	M-1/yr	2015	0.11
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

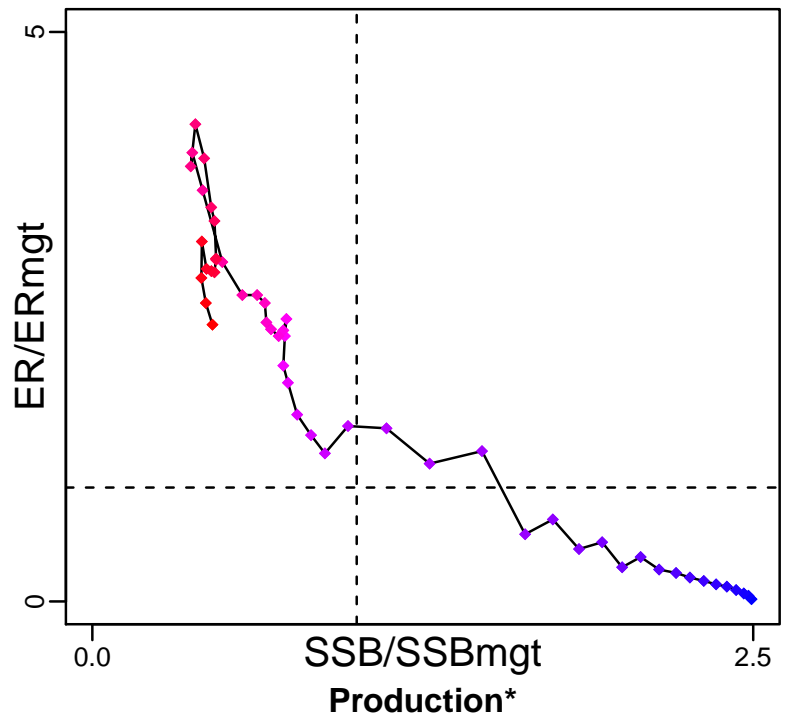
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2015	780	Both	-
TN	-	-	-	-	-
R	R-E00	2015	1,180,000	Both	-
F	F-1/yr	2011	0.429	-	-
ER	ER-ratio	2015	0.46	Both	-
TC	TC-MT	2015	143		
TL	TL-MT	2015	135		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	0.454		
F/Fmsy	FdivFmsy-dimensionless	2011	1.3		
ER/ERmsy	ERdivERmsy-dimensionless	2015	1.23		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	0.454		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

New Zealand abalone species New Zealand Area PAU 7 [PAU7PAU7]

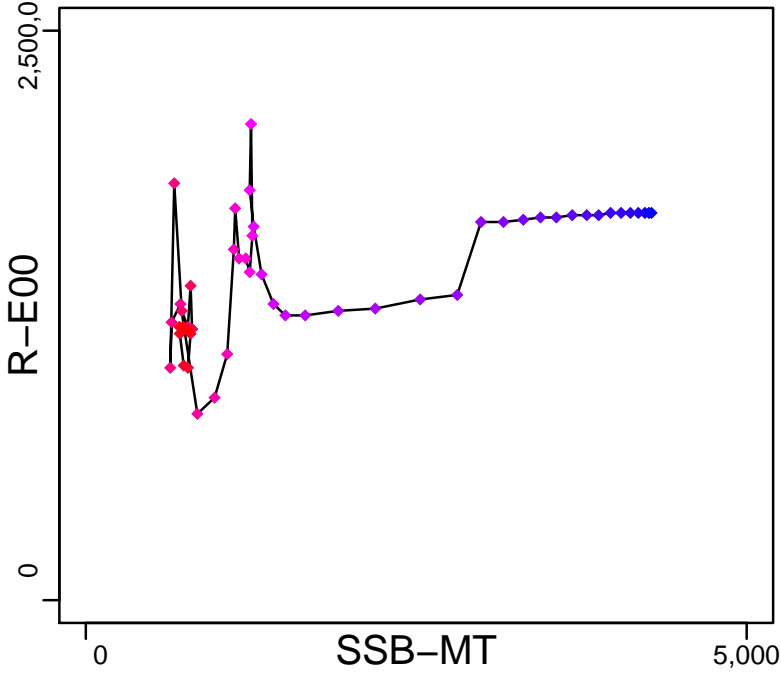
Kobe MSYpref (1965–2015–FU)



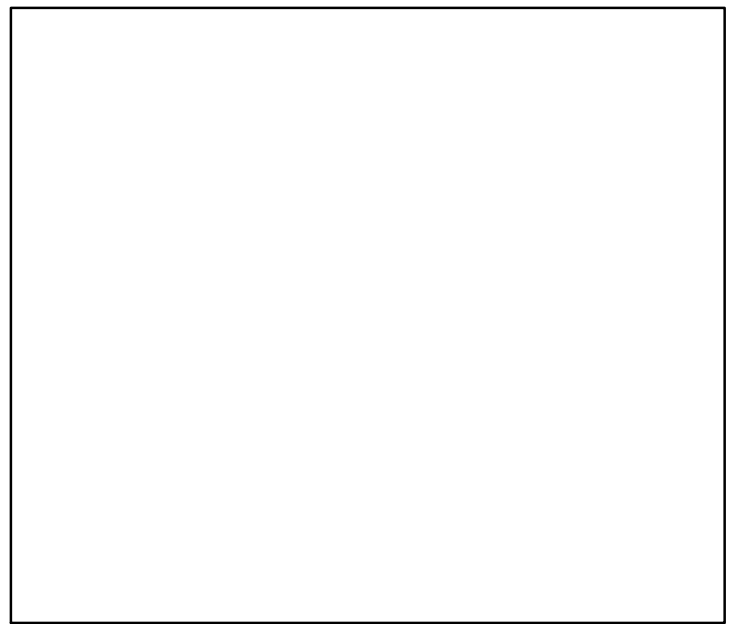
Kobe MGTpref (1965–2015–FU)



Spawner Recruit (1965–2015–FU)



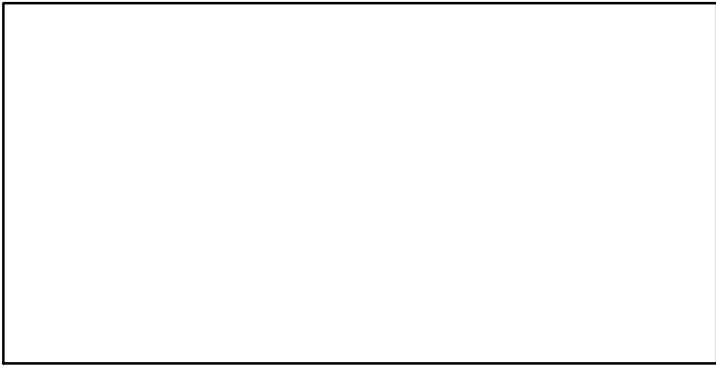
Production*



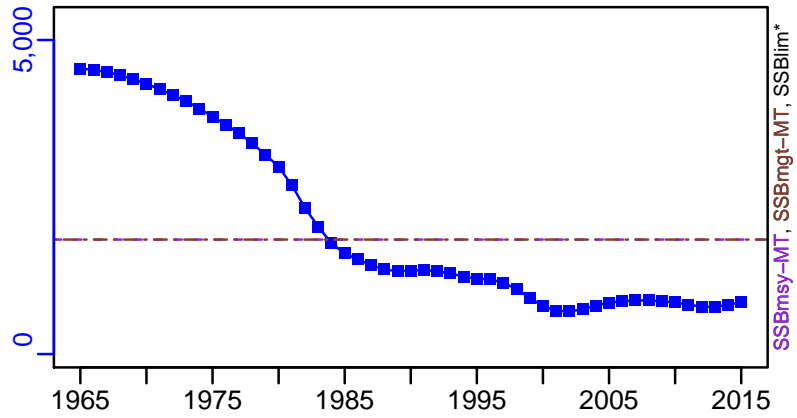
◆ Start Year ◆ End Year * No Data

New Zealand abalone species New Zealand Area PAU 7 [PAU7PAU7]

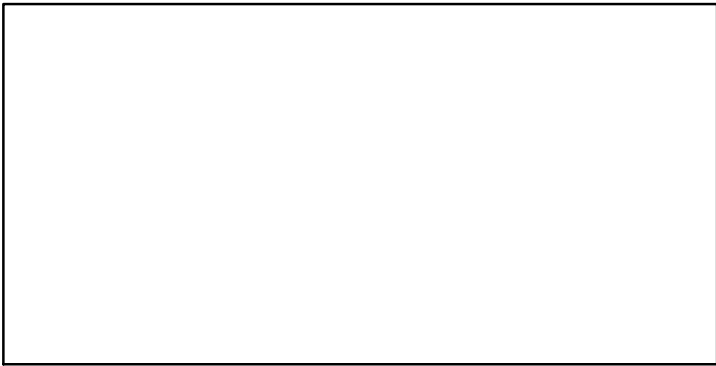
TB*



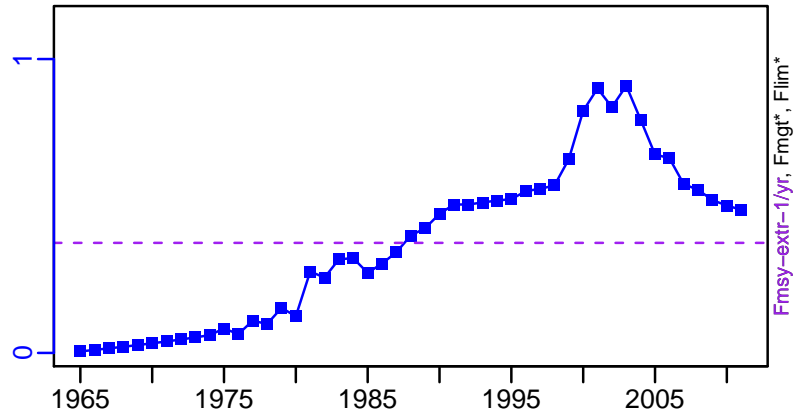
SSB-MT (1965-2015-FU)



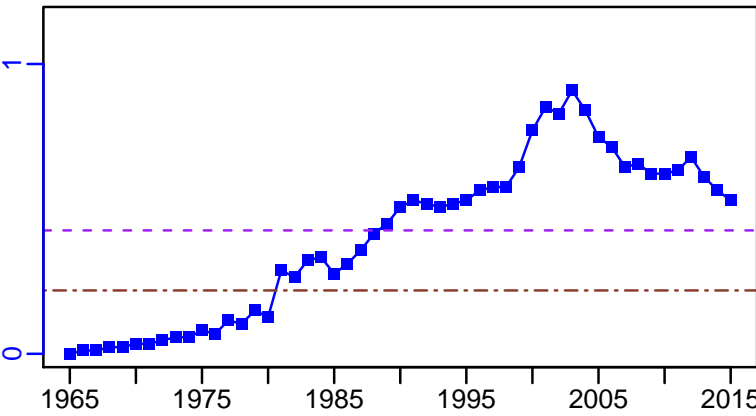
TN *



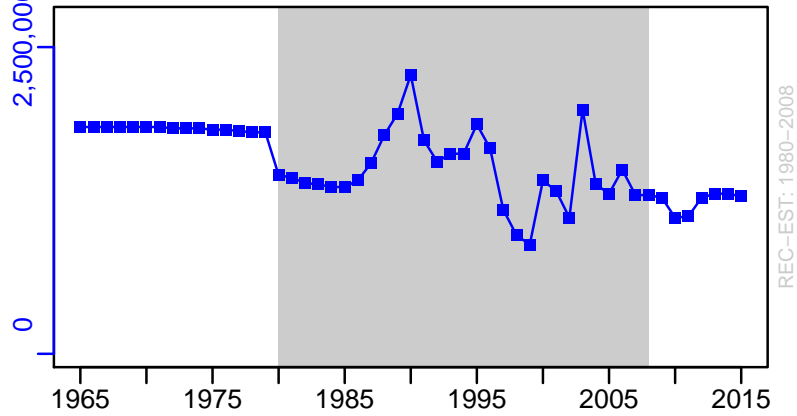
F-1/yr (1965-2011-CORDUE)



ER-ratio (1965-2015-FU)



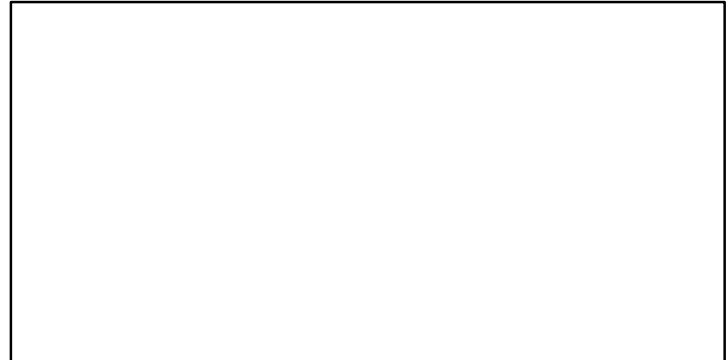
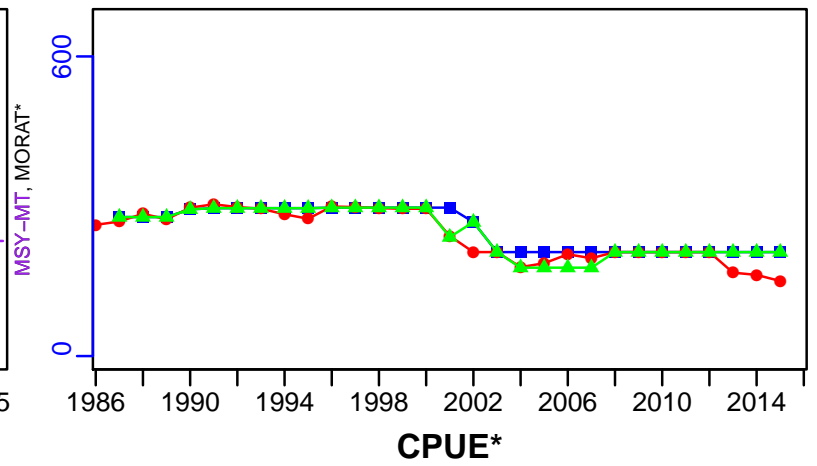
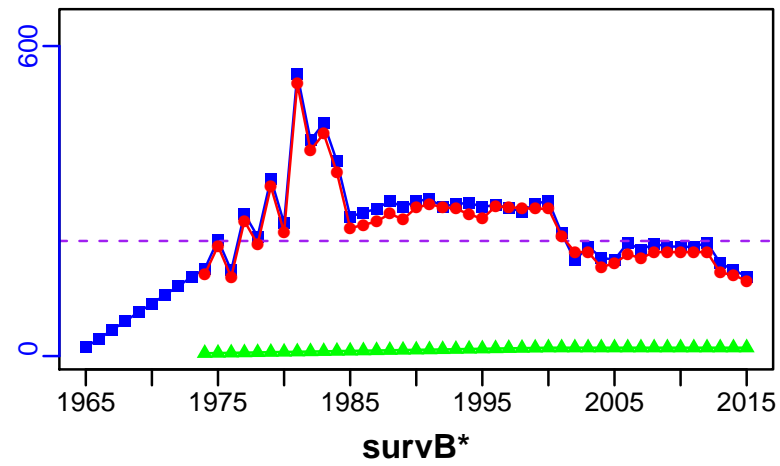
R-E00 (1965-2015-FU)



New Zealand abalone species New Zealand Area PAU 7 [PAU7PAU7]

TC-MT, TL-MT, RecC-MT (1965-2015-FU)

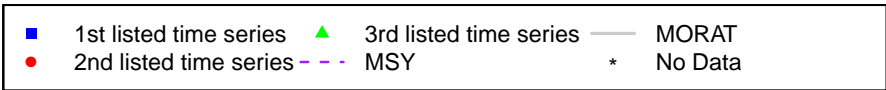
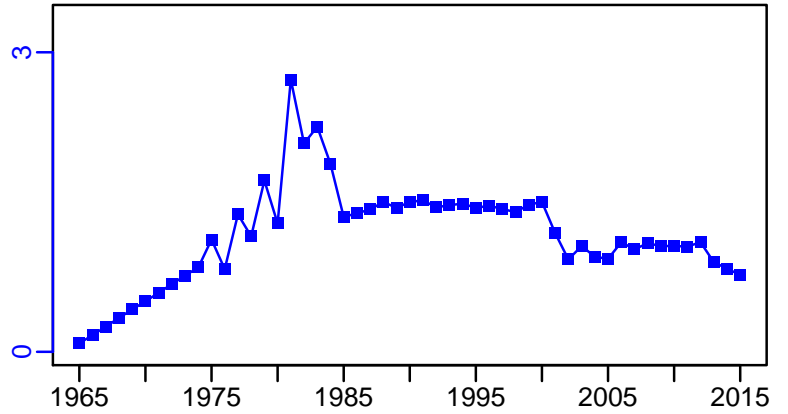
TAC-MT, Cpair-MT, Cadvised-MT (1965-2015-FU)



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CdivMSY-ratio (1965-2015-FU)



Black Foot Paua NZ South PAUA5A [PAUASPAU5A]

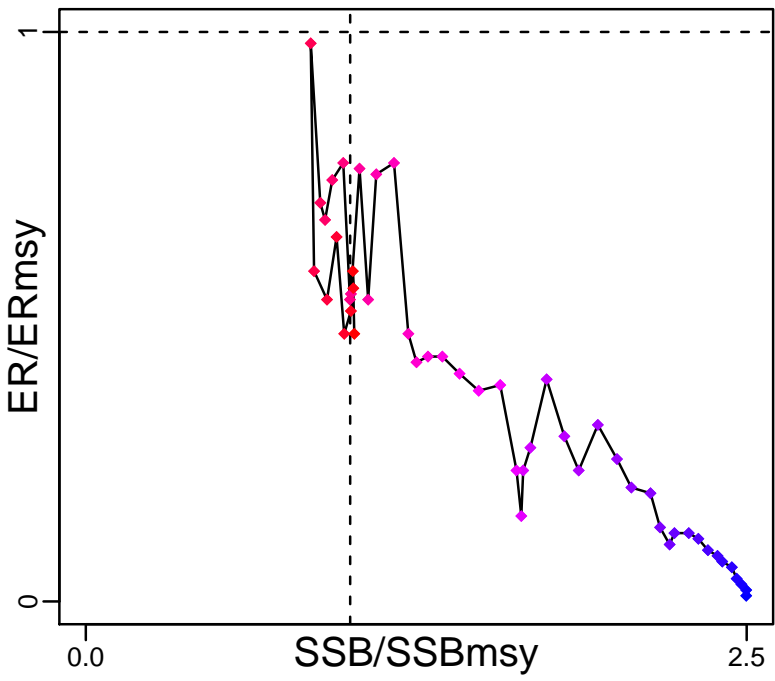
Metadata	
Scientific Name	Haliotis iris
Current Assess ID	NIWA-PAUASPAU5A-1965-2014-FU
Area	NZ Area South PAUA 5A
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	National Institute of Water and Atmospheric Research
Asmts in RAM	2009, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2014	248
SSBmsy	SSBmsy-MT	2014	552
Fmsy	Fmsy-extr-1/yr	2009	0.21
ERmsy	ERmsy-ratio	2014	0.23
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	552
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2014	0.13
TB0	-	-	-
SSB0	SSB0-MT	2014	1381
MSY	MSY-MT	2014	57
M	M-1/yr	2014	0.11
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

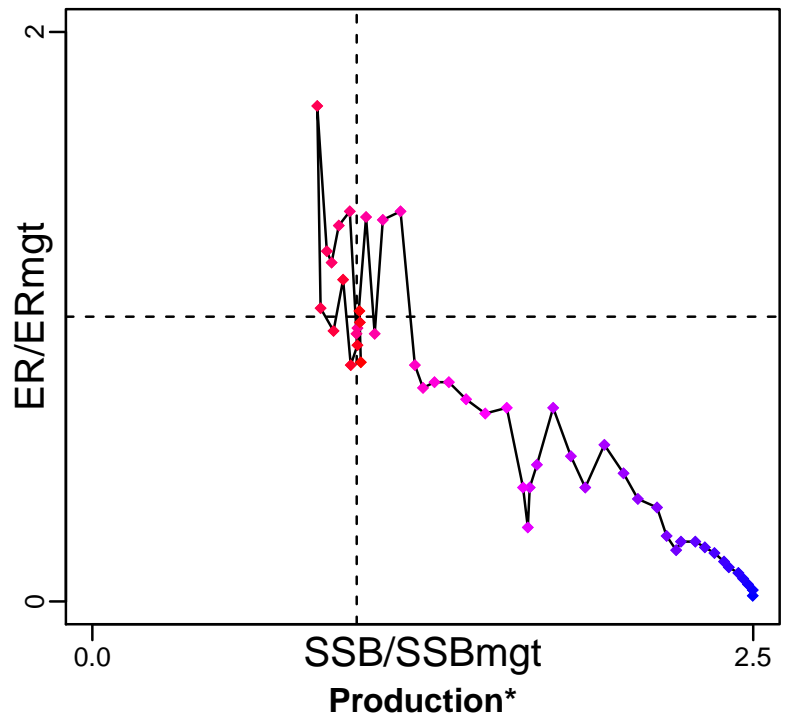
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2014	561	-	-
TN	-	-	-	-	-
R	R-E00	2014	376,000	Both	-
F	F-1/yr	2009	0.222	-	-
ER	ER-ratio	2014	0.11	Both	-
TC	TC-MT	2014	46		
TL	TL-MT	2014	39		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2014	1.016		
F/Fmsy	FdivFmsy-dimensionless	2009	1.06		
ER/ERmsy	ERdivERmsy-dimensionless	2014	0.47		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.016		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black Foot Paua NZ South PAUA5A [PAUASPAU5A]

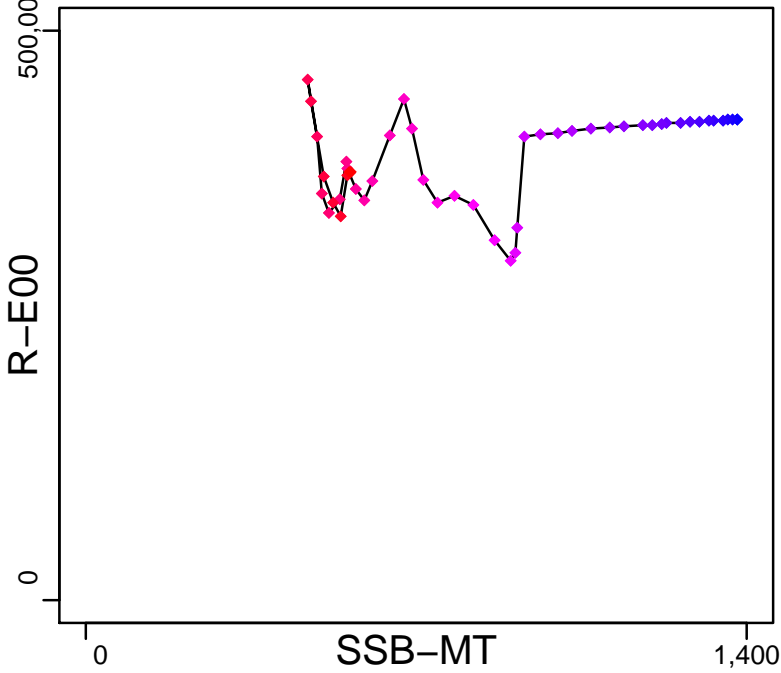
Kobe MSYpref (1965–2014–FU)



Kobe MGTpref (1965–2014–FU)



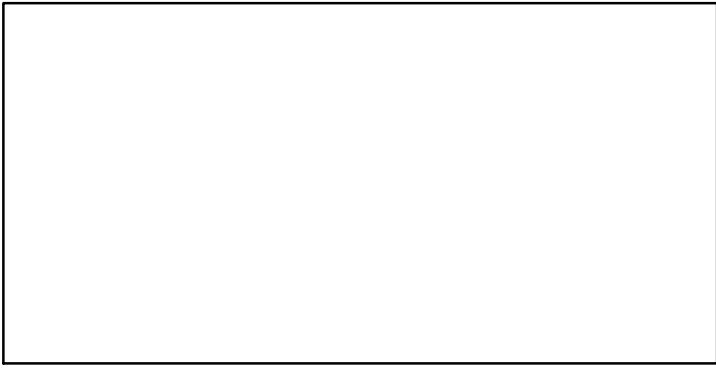
Spawner Recruit (1965–2014–FU)



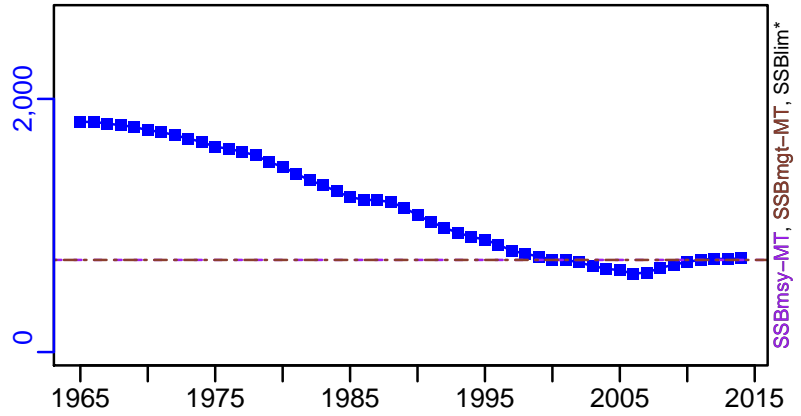
◆ Start Year ◆ End Year * No Data

Black Foot Paua NZ South PAUA5A [PAUASPAU5A]

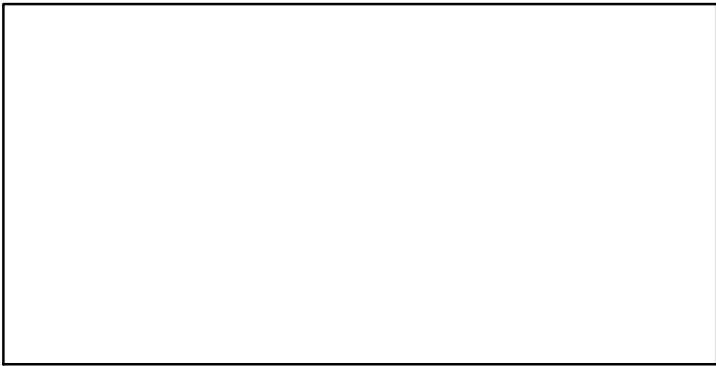
TB*



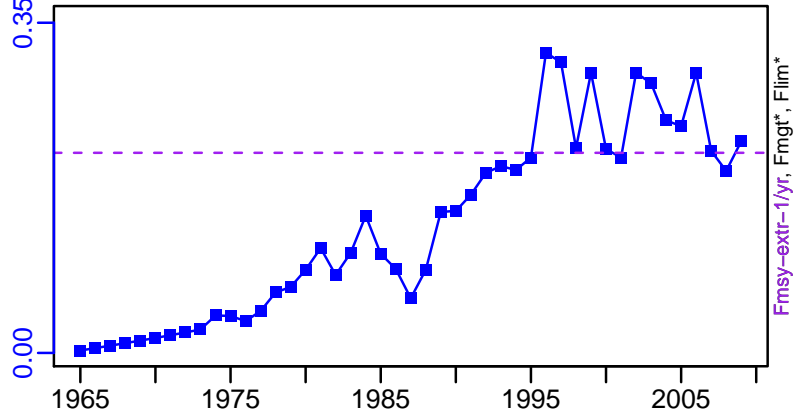
SSB-MT (1965-2014-FU)



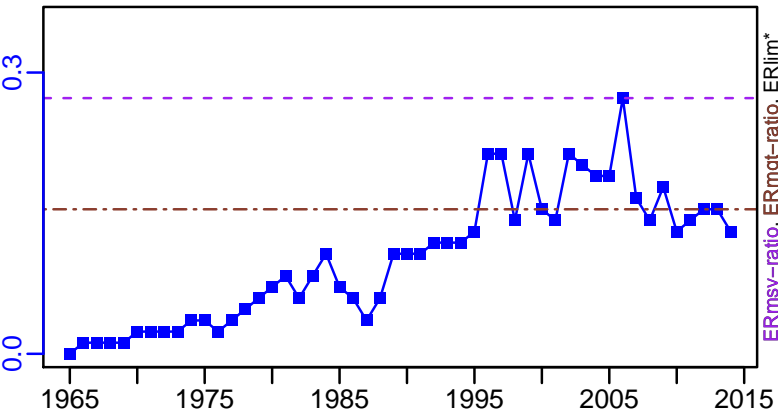
TN *



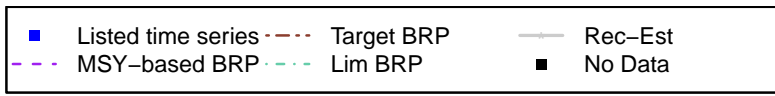
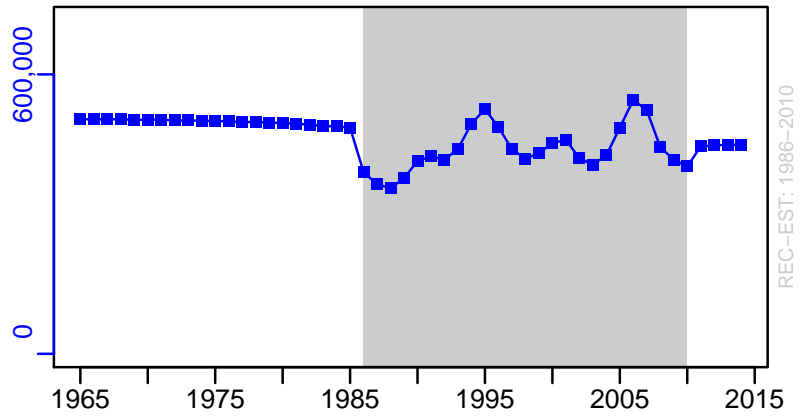
F-1/yr (1965-2009-CORDUE)



ER-ratio (1965-2014-FU)



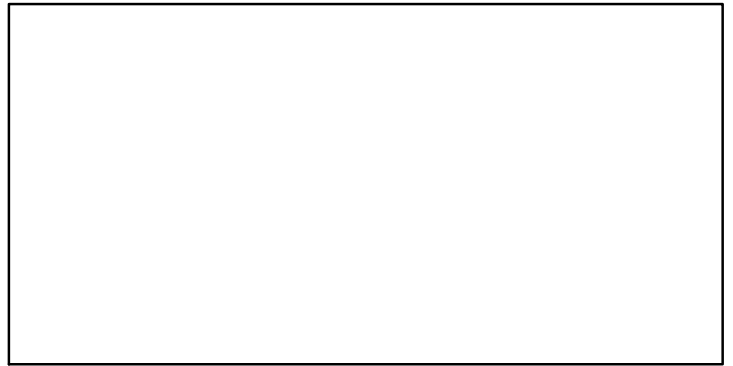
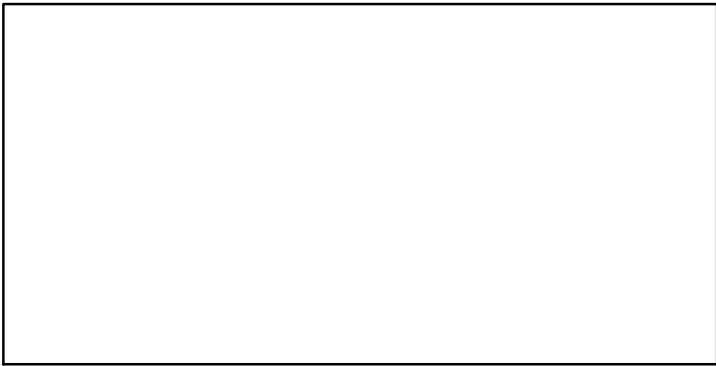
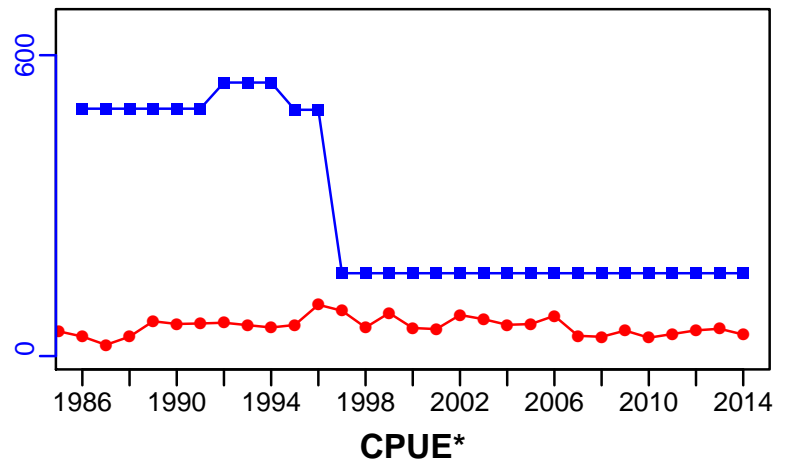
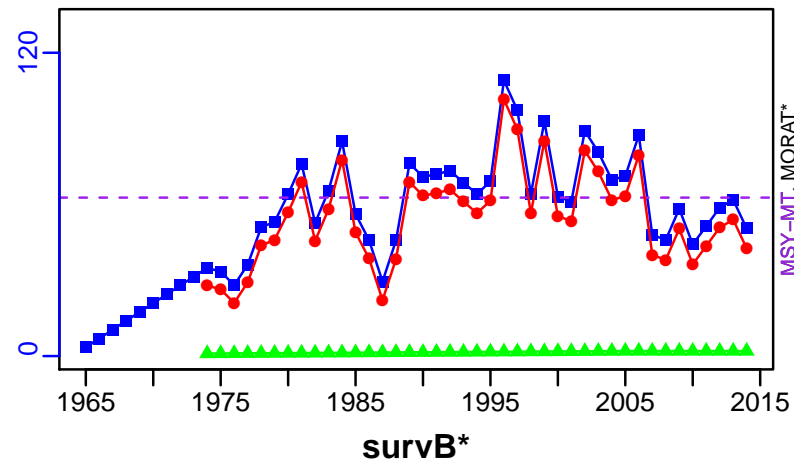
R-E00 (1965-2014-FU)



Black Foot Paua NZ South PAUA5A [PAUASPAU5A]

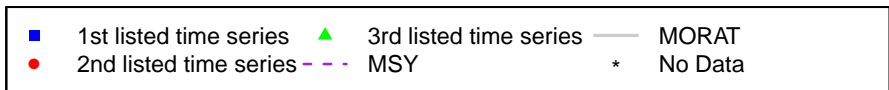
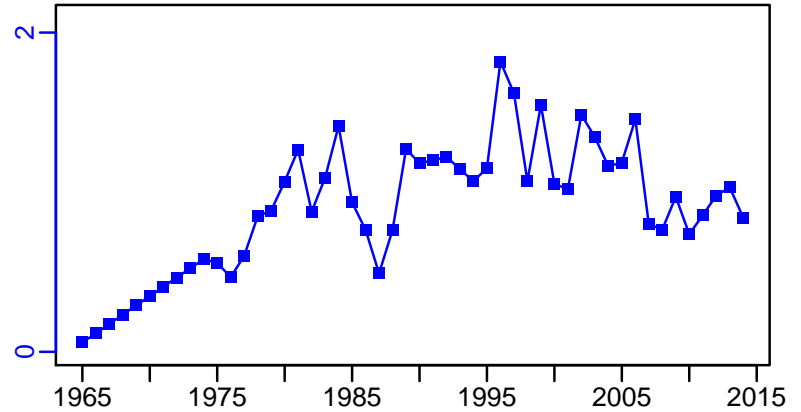
TC-MT, TL-MT, RecC-MT (1965-2014-FU)

TAC-MT, Cpair-MT, Cadv* (1965-2014-FU)



EFFORT*

CdivMSY-ratio (1965-2014-FU)



Pacific Geoduck Washington [PGEODWA]

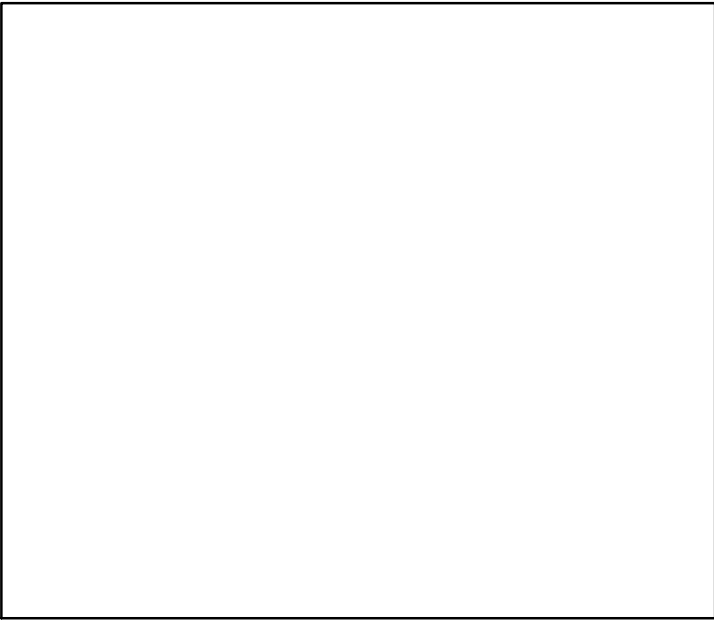
Metadata	
Scientific Name	Panopea generosa
Current Assess ID	WDFW-PGEODWA-1980-2010-HIVELY
Area	Washington
Management Authority	State of Washington
Assessor	Washington Department of Fish and Wildlife
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	85,400	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2010	0.025	-	-
TC	TC-MT	2010	2150		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific Geoduck Washington [PGEODWA]

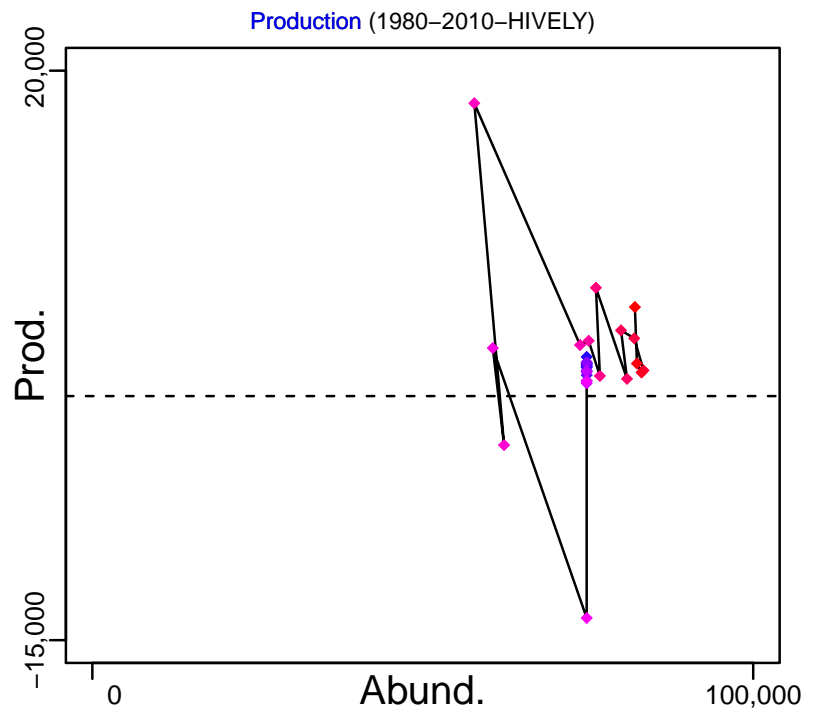
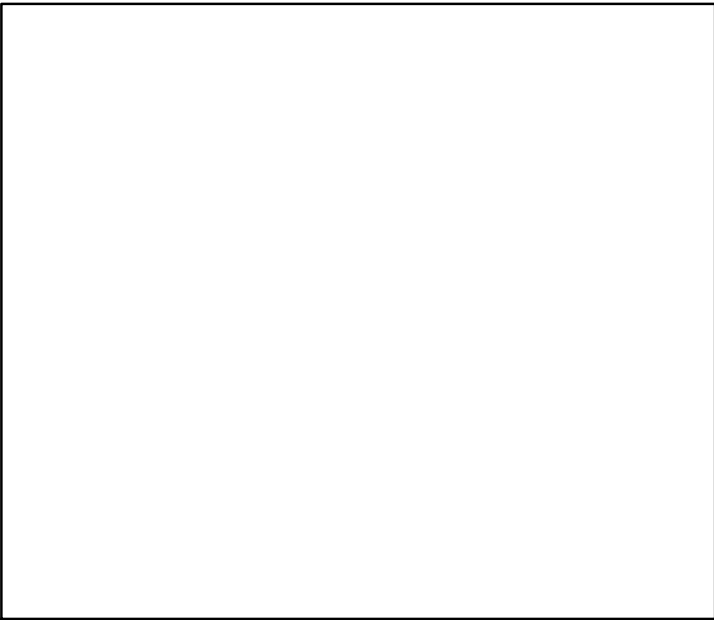
Kobe MSY*



Kobe MGT*



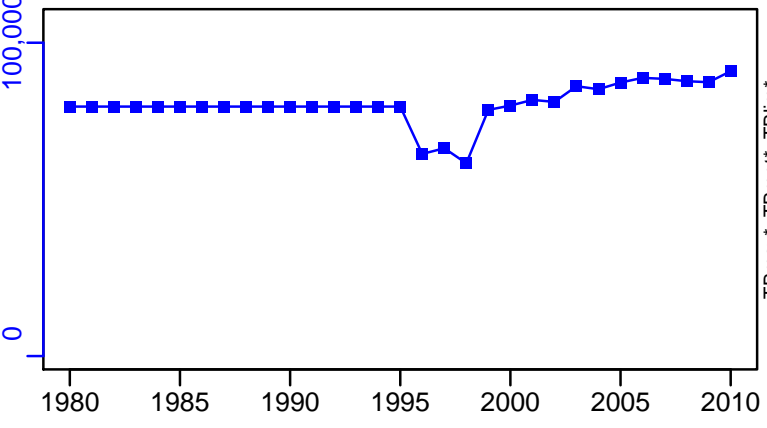
Spawner Recruit*



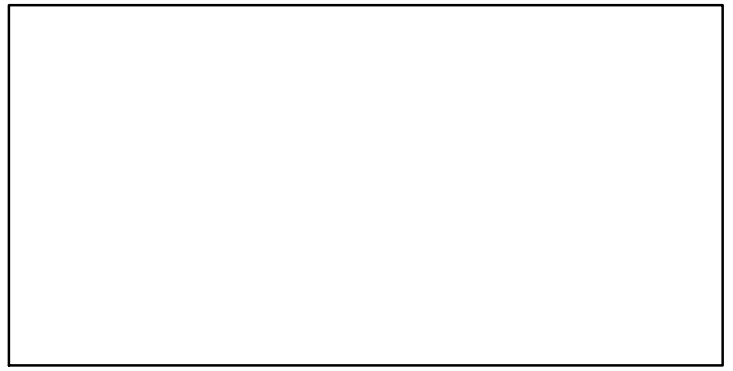
◆ Start Year ◆ End Year * No Data

Pacific Geoduck Washington [PGEODWA]

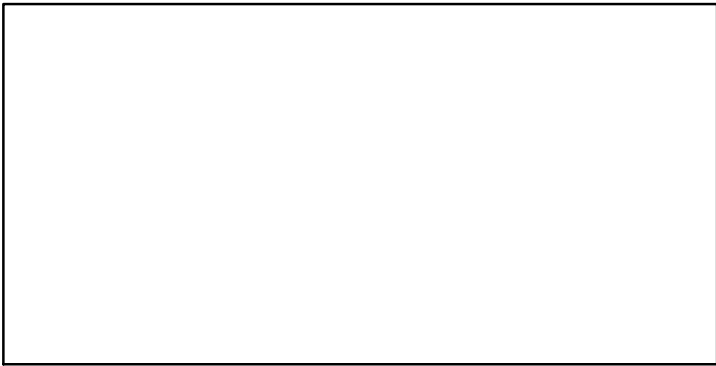
TB-MT (1980-2010-HIVELY)



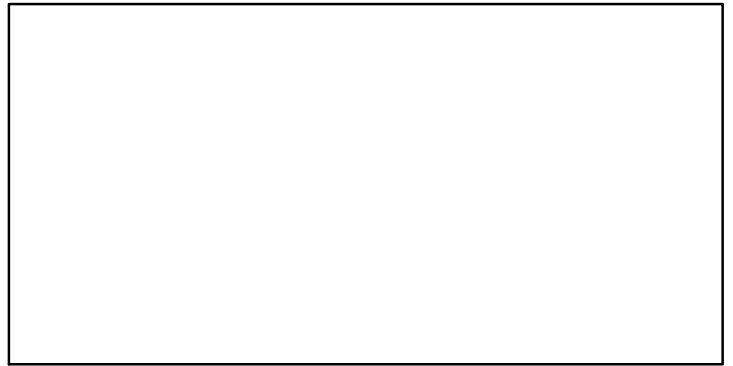
SSB*



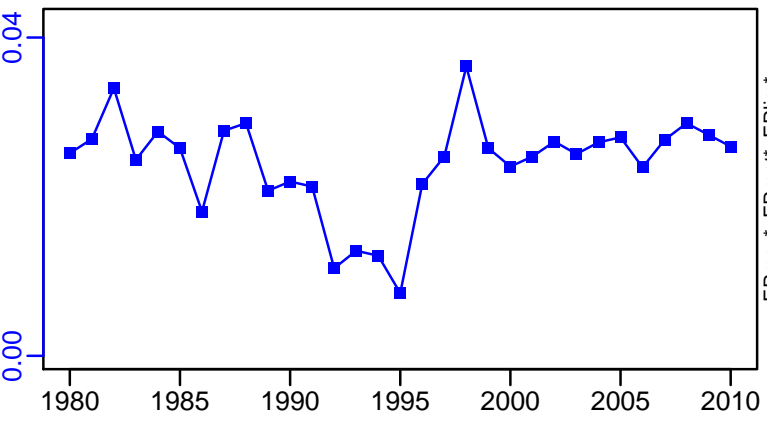
TN *



F*



ER-ratio (1980-2010-HIVELY)



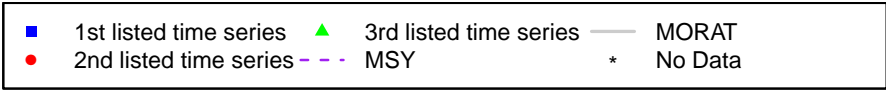
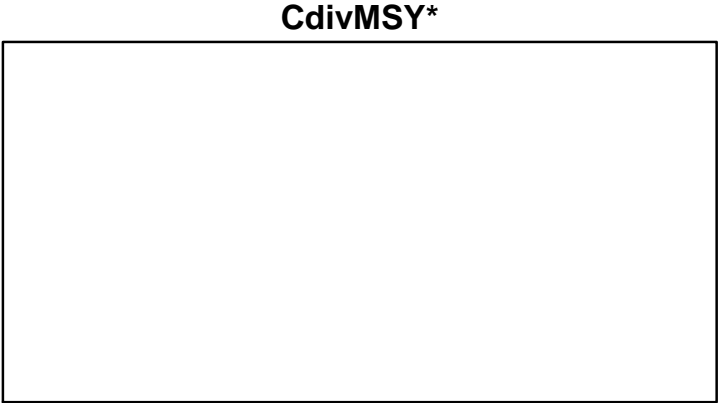
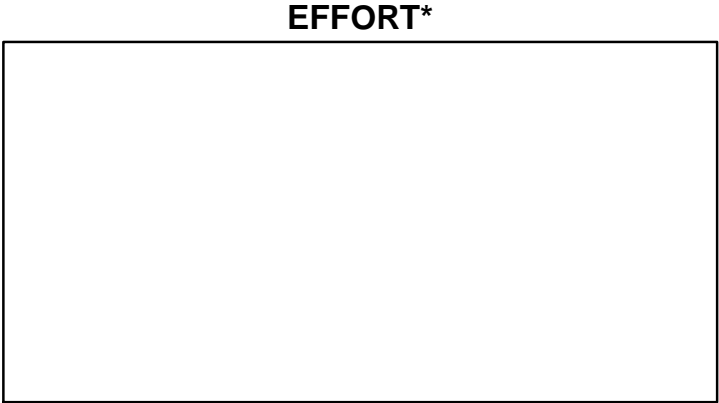
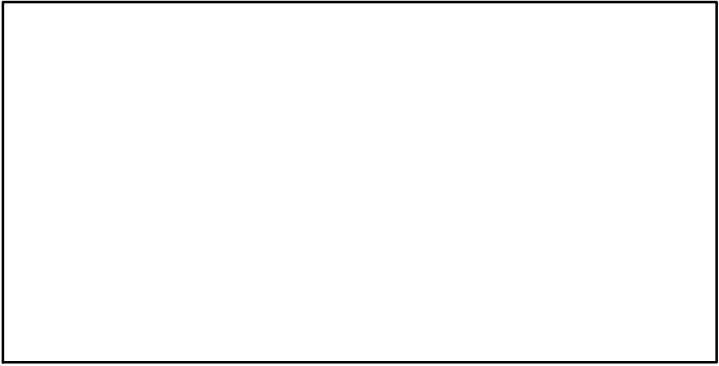
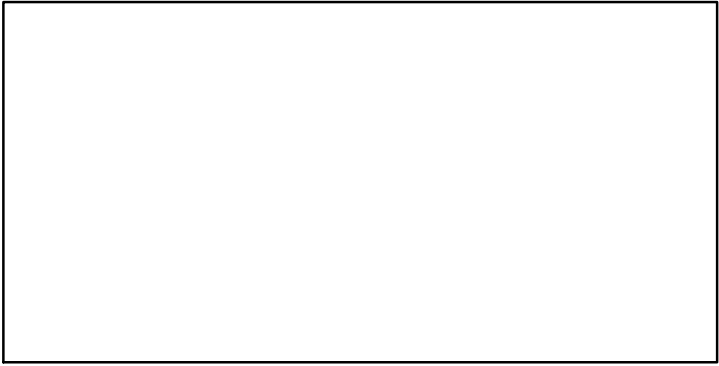
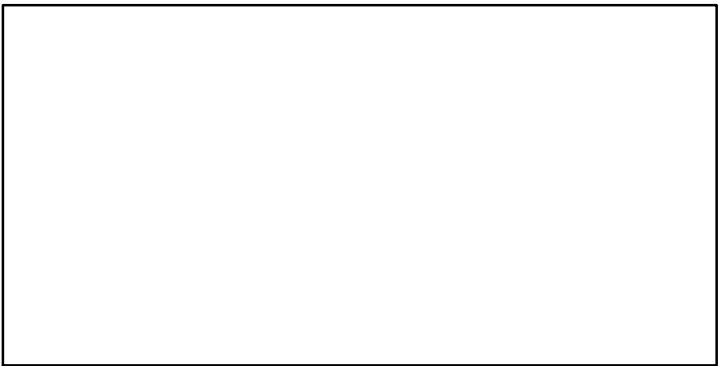
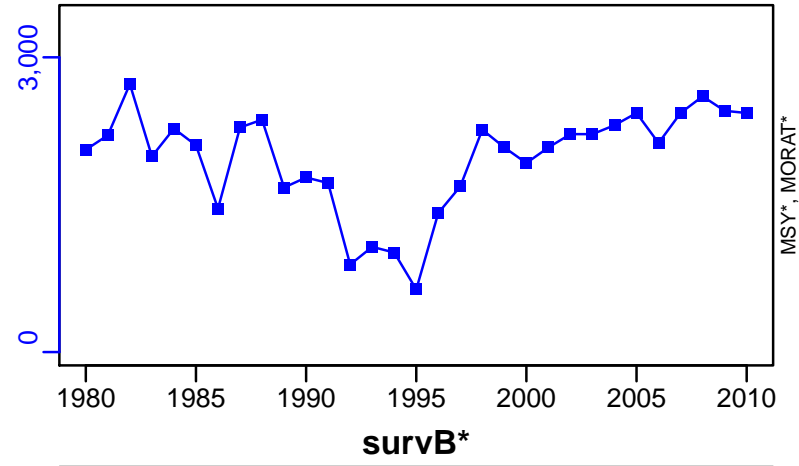
Recruits*



Pacific Geoduck Washington [PGEODWA]

TC-MT, TL*, RecC* (1980-2010-HIVELY)

TAC*, Cpair*, Cadv*



Ocean quahog Atlantic Coast [QUAHATLC]

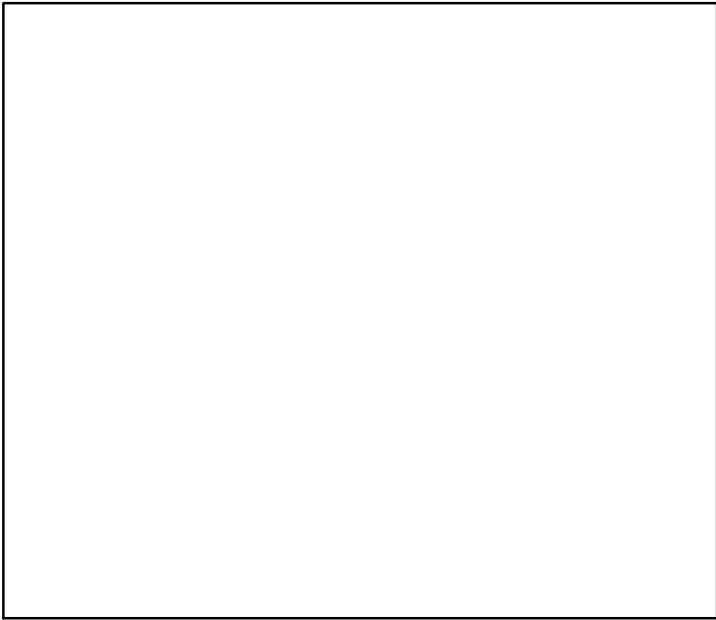
Metadata	
Scientific Name	Arctica islandica
Current Assess ID	NEFSC-QUAHATLC-1978-2011-SISIMP2016
Area	Atlantic Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northeast Fisheries Science Center
Asmts in RAM	2008, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2011	1,730,000
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2008	0.02
TBlim	TBlim-MT	2011	1,390,000
SSBlim	-	-	-
Flim	Flim-1/yr	2011	0.022
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	2,960,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2011	0.005	-	-
ER	ER-calc-ratio	2011	0.005	-	-
TC	TC-MT	2011	14,100		
TL	TL-MT	2008	15,500		
TB/TBmsy	TB-MT/TBmsy-MT	2011	1.711		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Ocean quahog Atlantic Coast [QUAHATLC]

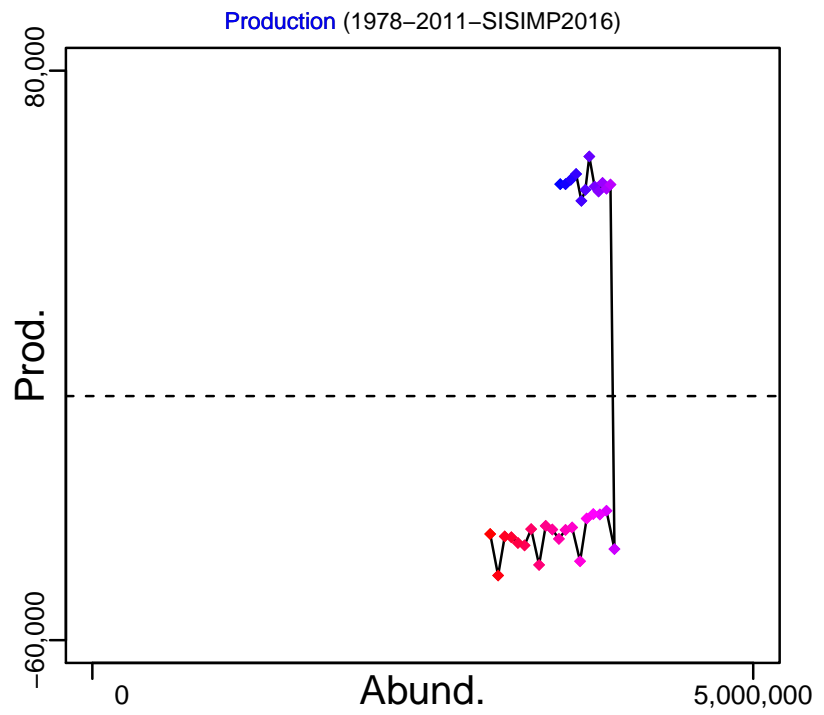
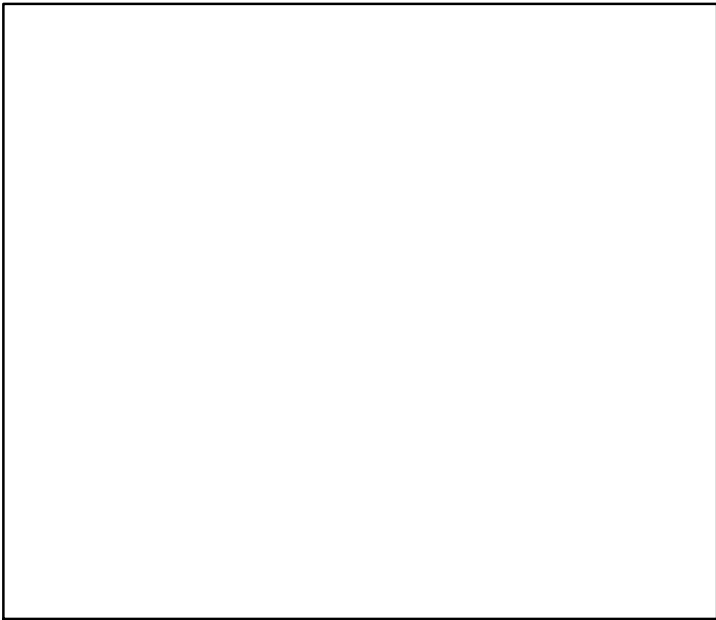
Kobe MSY*



Kobe MGT*



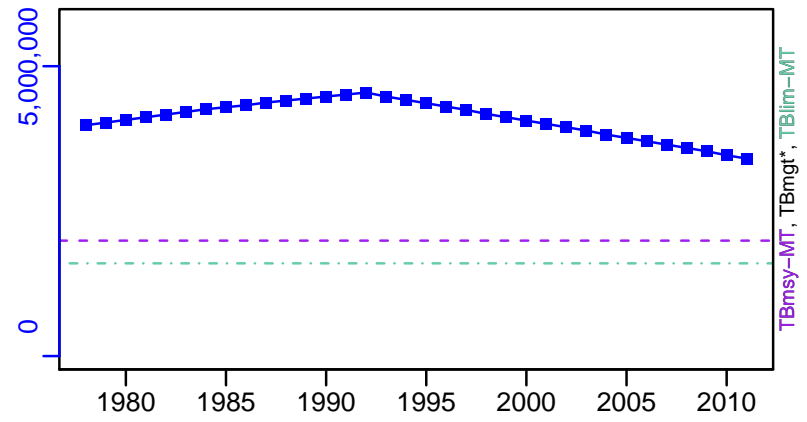
Spawner Recruit*



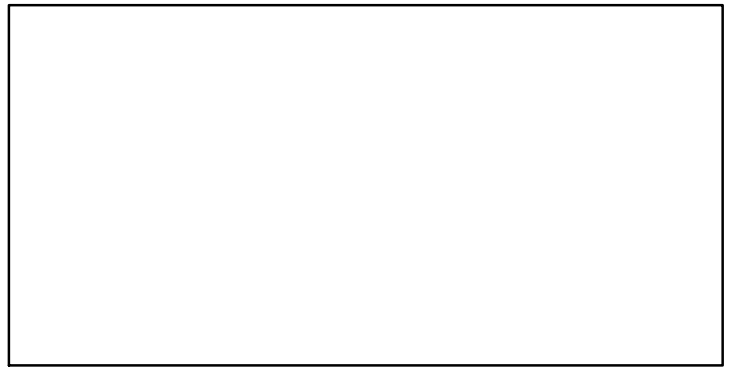
◆ Start Year ◆ End Year * No Data

Ocean quahog Atlantic Coast [QUAHATLC]

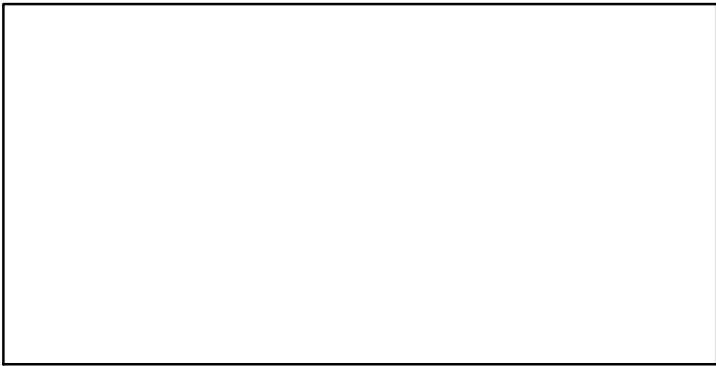
TB-MT (1978-2011-SISIMP2016)



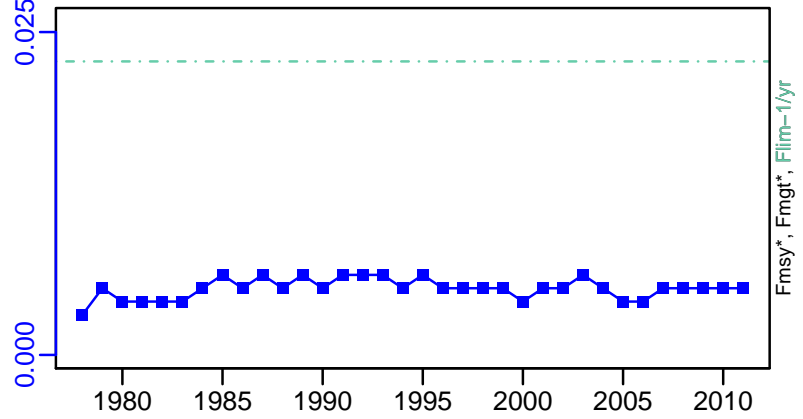
SSB*



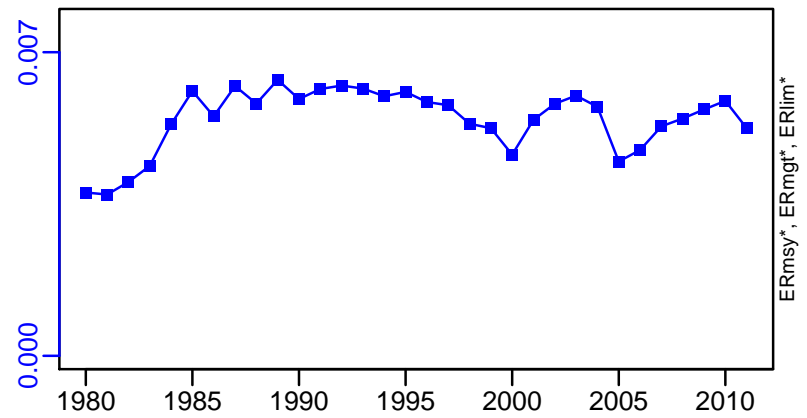
TN *



F-1/yr (1978-2011-SISIMP2016)



ER-calc-ratio (1978-2011-SISIMP2016)



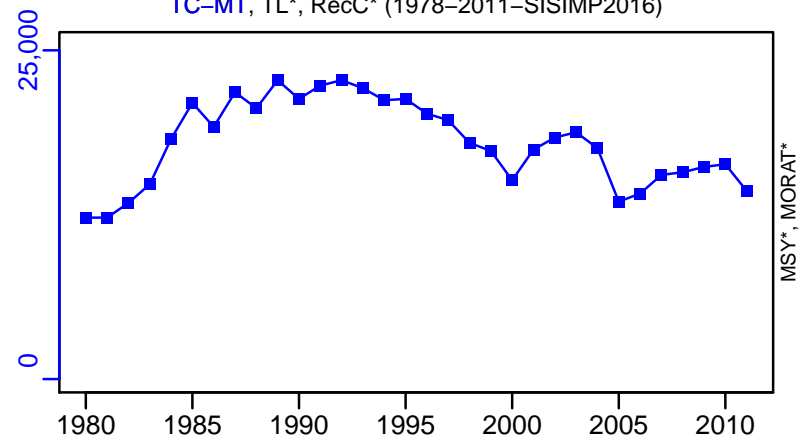
Recruits*



Ocean quahog Atlantic Coast [QUAHATLC]

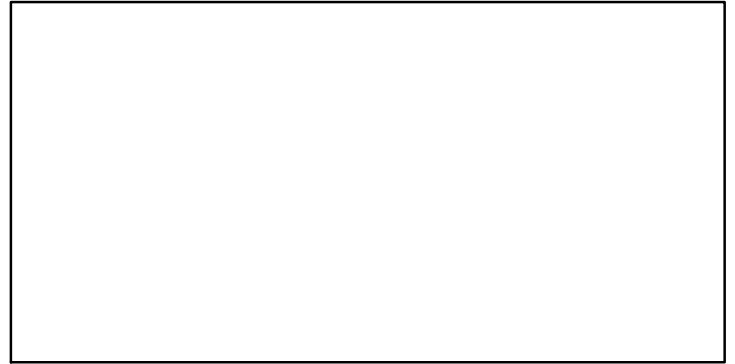
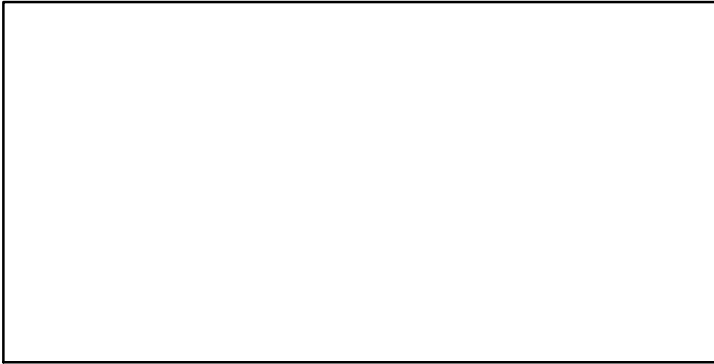
TC-MT, TL*, RecC* (1978-2011-SISIMP2016)

TAC*, Cpair*, Cadv*



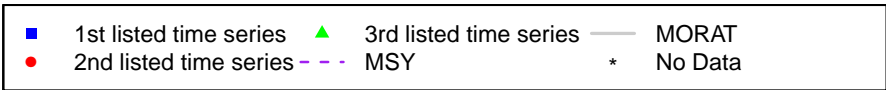
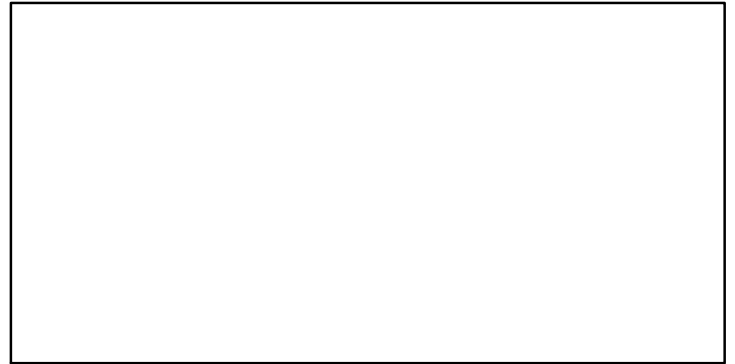
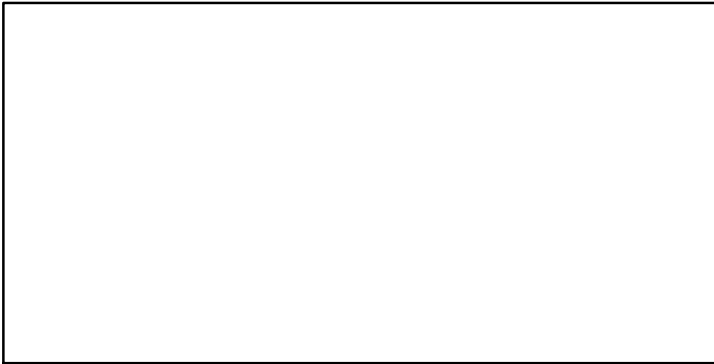
survB*

CPUE*



EFFORT*

CdivMSY*



Abalone South Africa [SAABALONESA]

Metadata	
Scientific Name	Haliotis midae
Current Assess ID	MARAM-SAABALONESA-1951-2015-Brandao
Area	South Africa
Management Authority	South African national management, Fisheries Branch of Department of Agriculture, Forestry and Fisheries
Assessor	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Asmts in RAM	2013, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2015	11,575
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2015	31,391
SSB0	SSB0-MT	2015	28,937
MSY	-	-	-
M	M-1/yr	2015	0.15
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	6210	-	1+
SSB	SSB-MT	2015	5080	-	7+
TN	-	-	-	-	-
R	R-E00	2015	9,070,000	-	8
F	F-1/yr	2015	0.035	-	-
ER	ER-ratio	2015	0.16	-	-
TC	TC-MT	2015	985		
TL	TL-MT	2015	50		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2015	0.439		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Abalone South Africa [SAABALONESA]

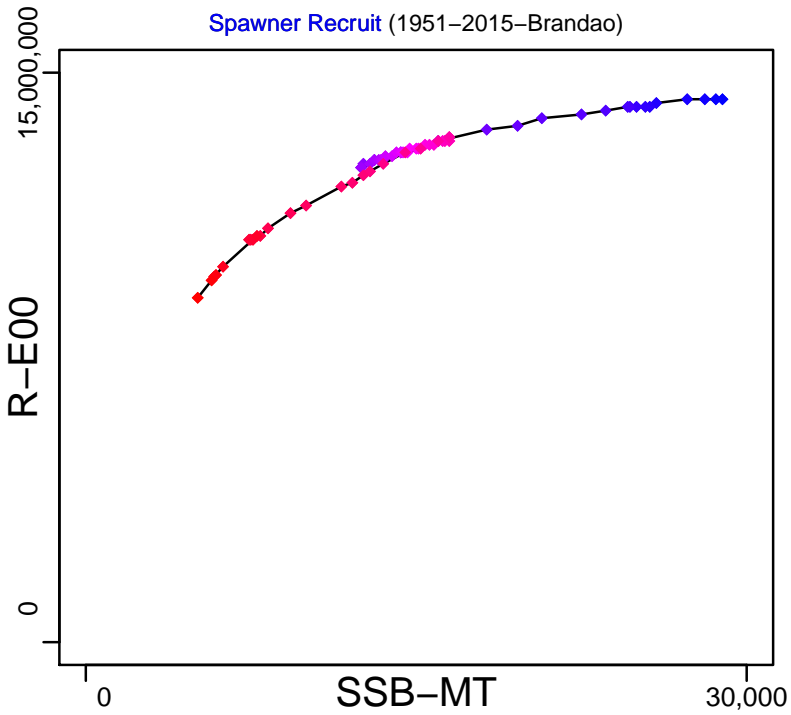
Kobe MSY*



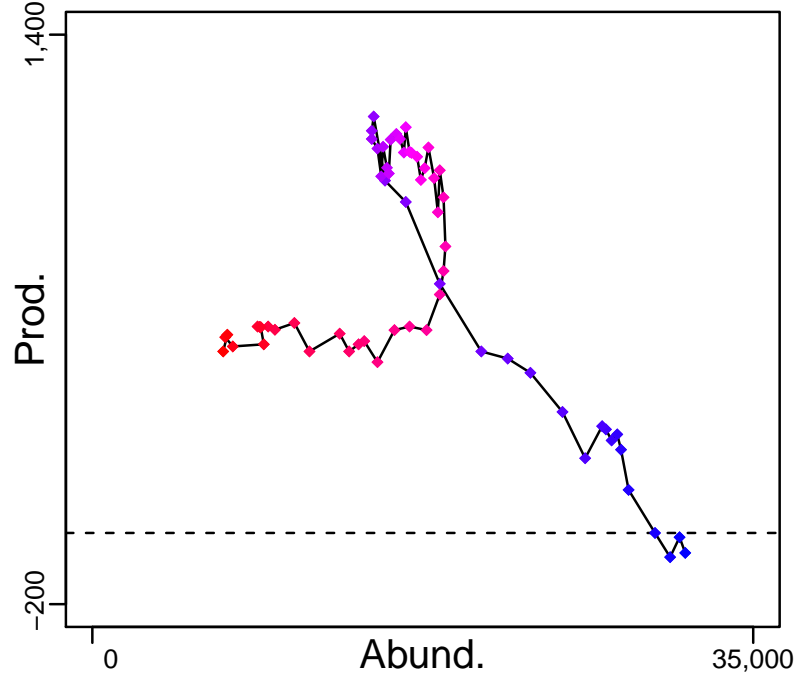
Kobe MGT*



Spawner Recruit (1951–2015–Brandao)



Production (1951–2015–Brandao)

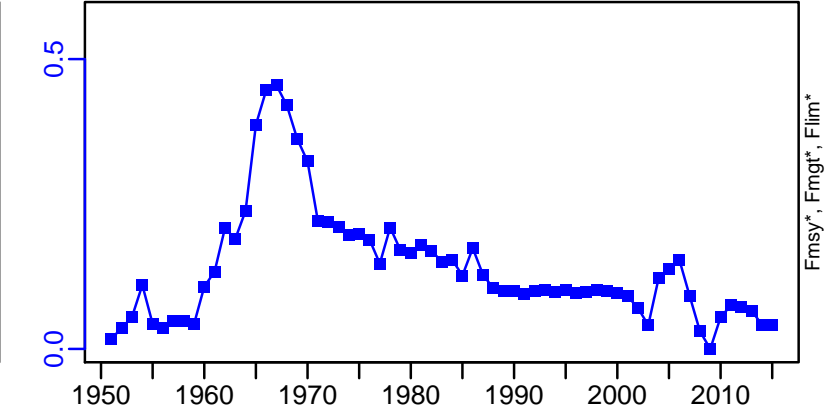
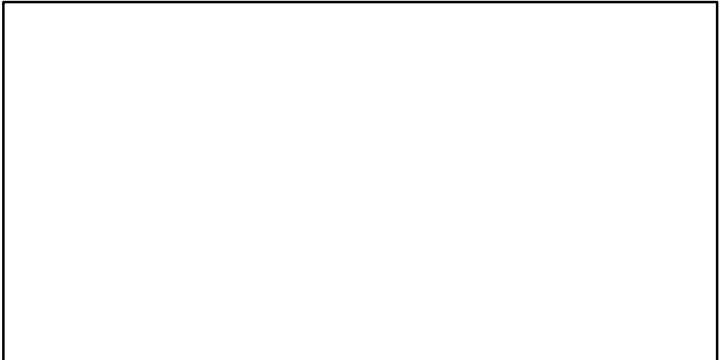
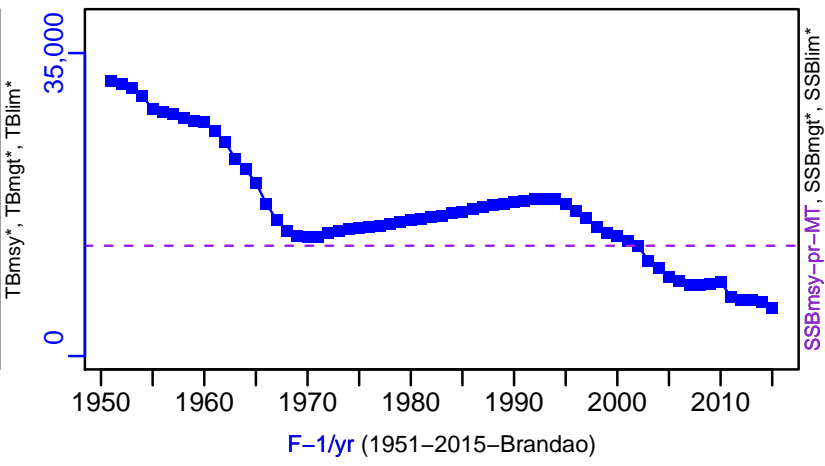
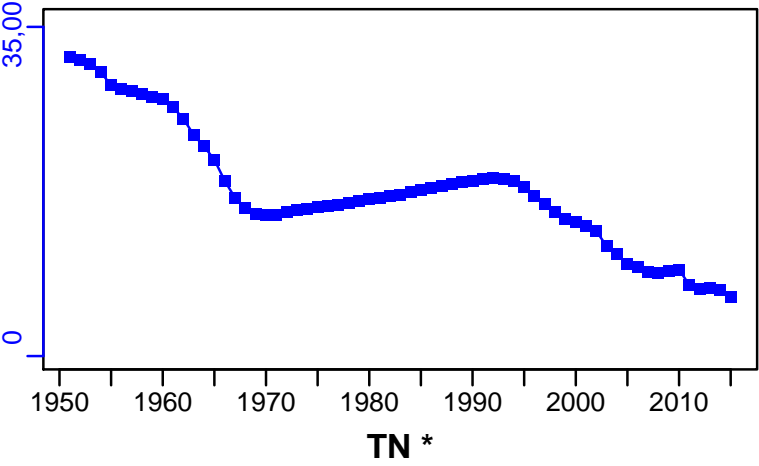


◆ Start Year ◆ End Year * No Data

Abalone South Africa [SAABALONESA]

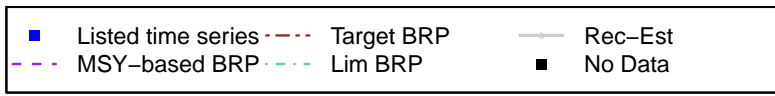
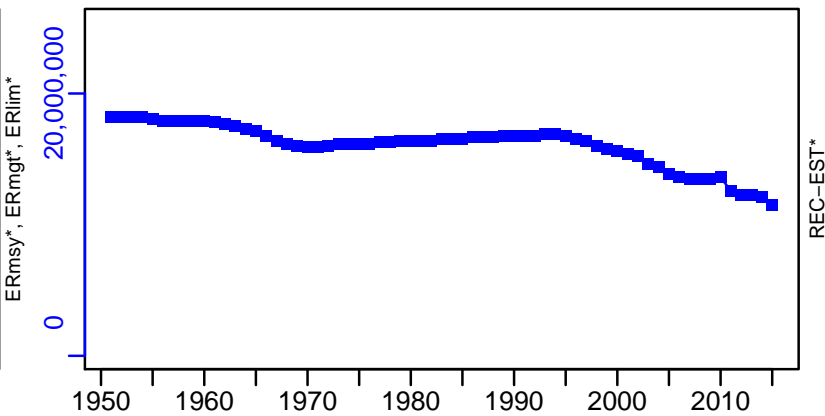
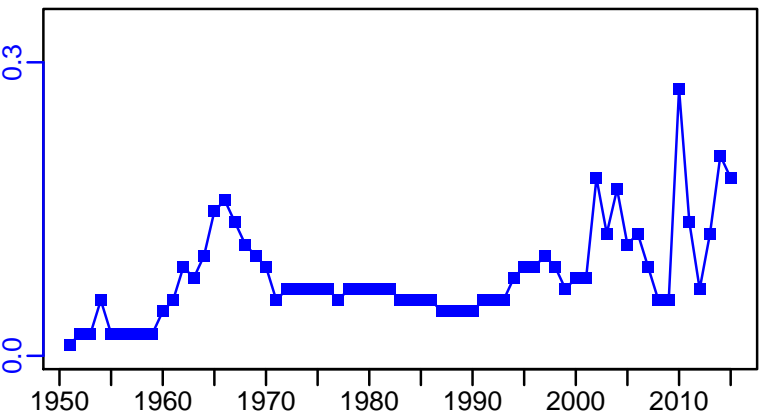
TB-MT (1951-2015-Brandao)

SSB-MT (1951-2015-Brandao)



ER-ratio (1951-2015-Brandao)

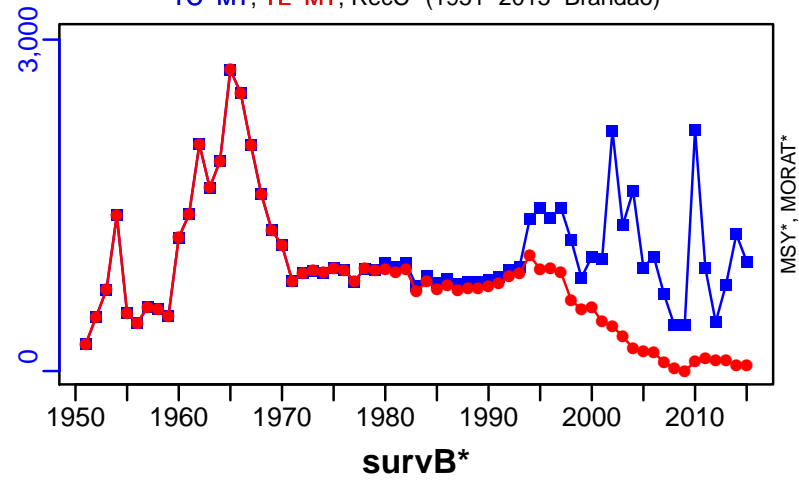
R-E00 (1951-2015-Brandao)



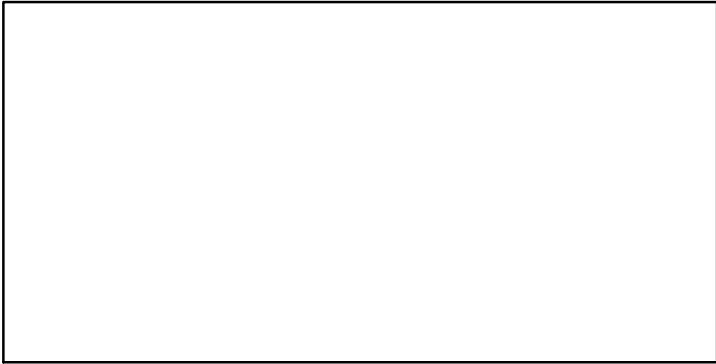
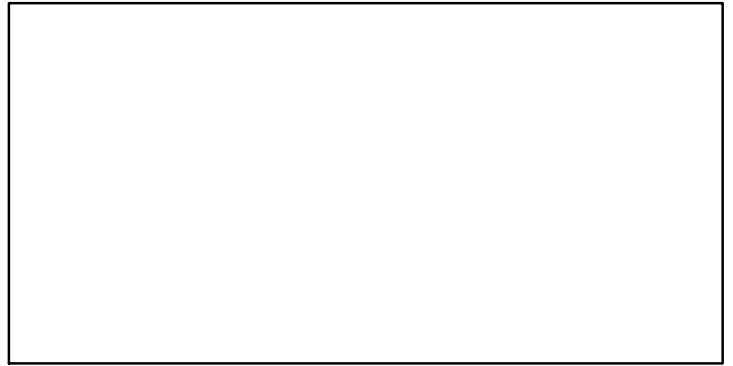
Abalone South Africa [SAABALONESA]

TC-MT, TL-MT, RecC* (1951-2015-Brandao)

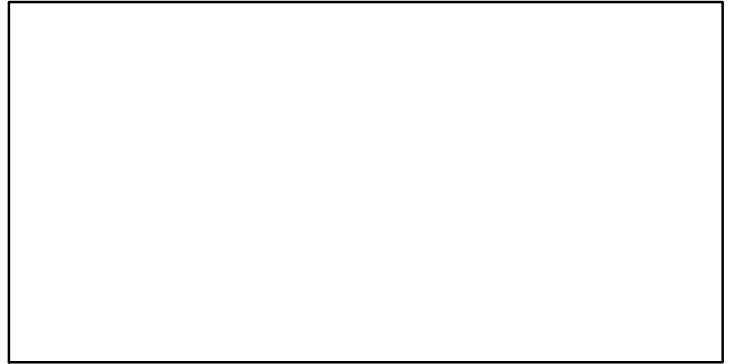
TAC*, Cpair*, Cadv*



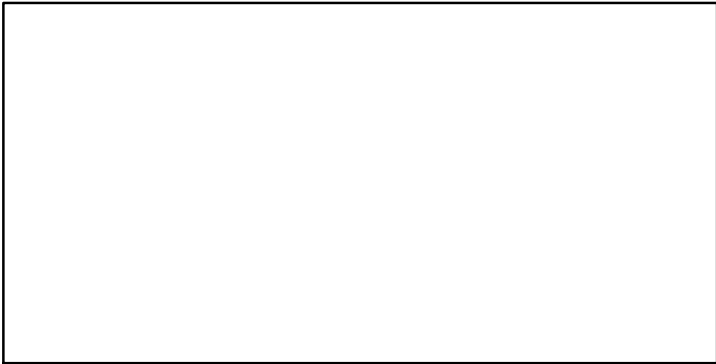
MSY*, MORAT*



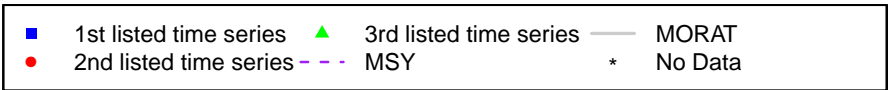
CPUE*



EFFORT*



CdivMSY*



Sea scallop St. Pierre Bank [SCALL3Ps]

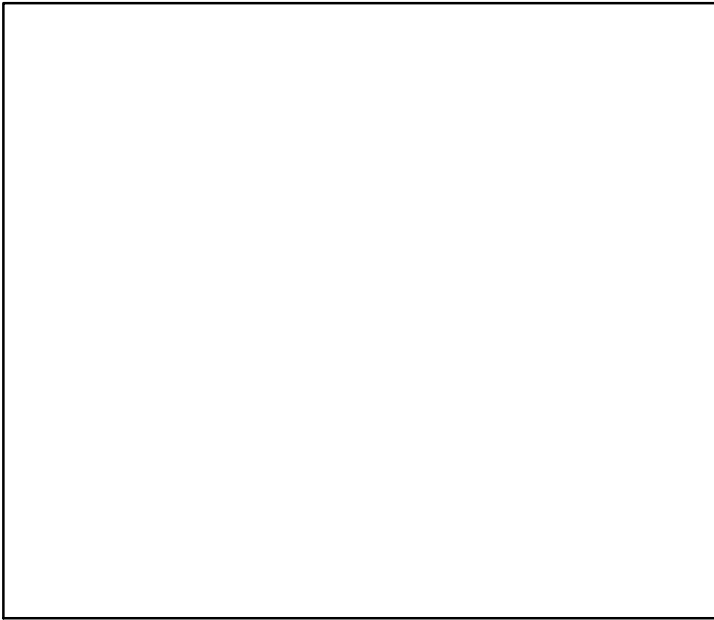
Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-NFLD-SCALL3Ps-1969-2010-CHING
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland Region
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2010	813	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sea scallop St. Pierre Bank [SCALL3Ps]

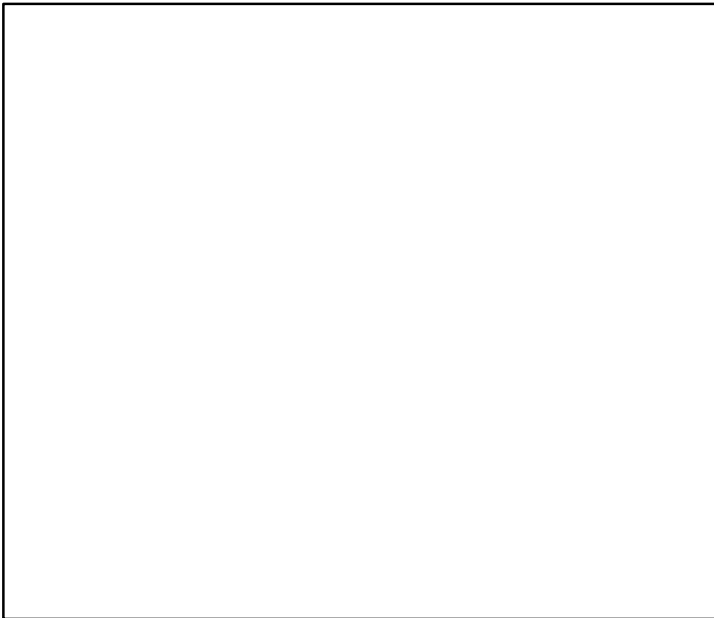
Kobe MSY*



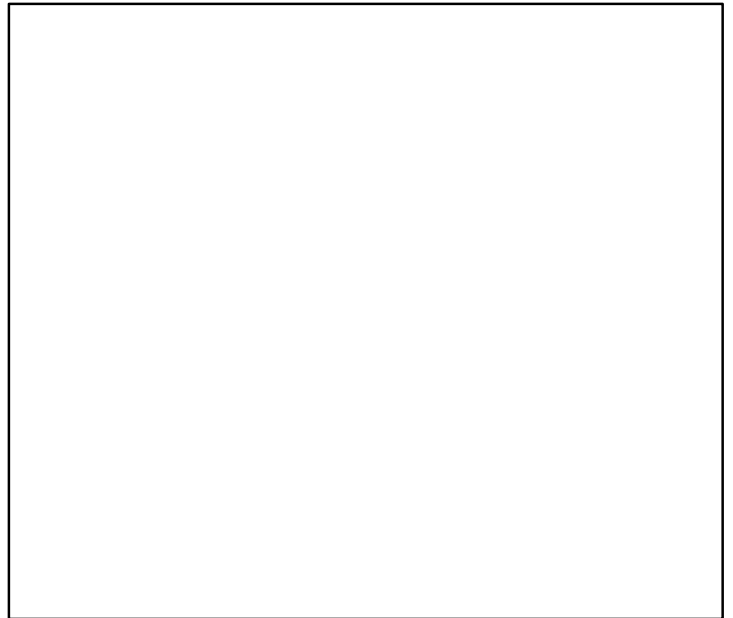
Kobe MGT*



Spawner Recruit*



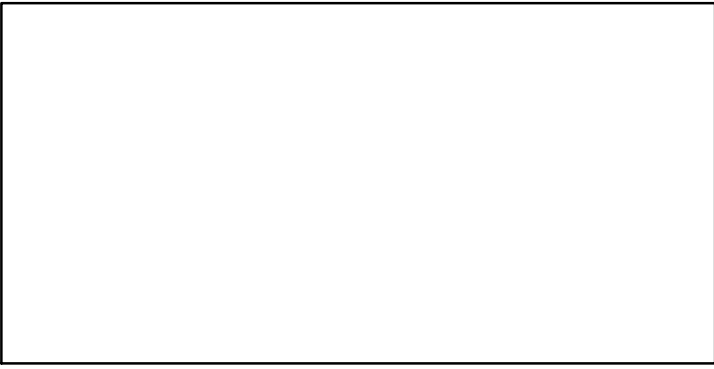
Production*



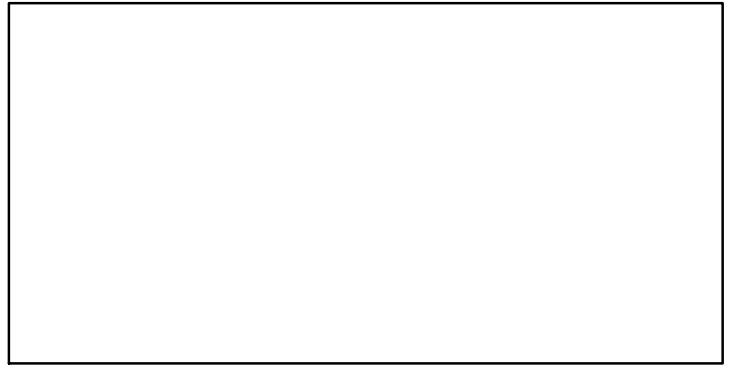
◆ Start Year ◆ End Year * No Data

Sea scallop St. Pierre Bank [SCALL3Ps]

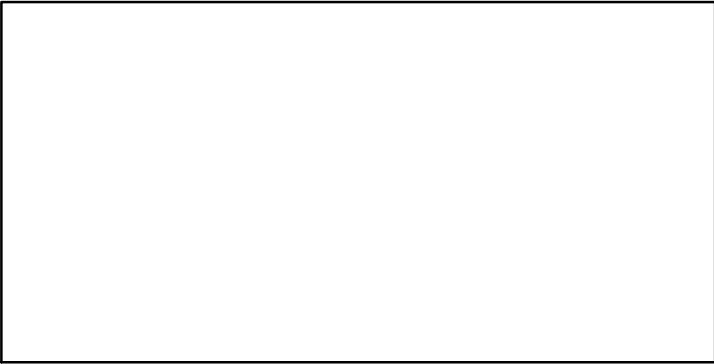
TB*



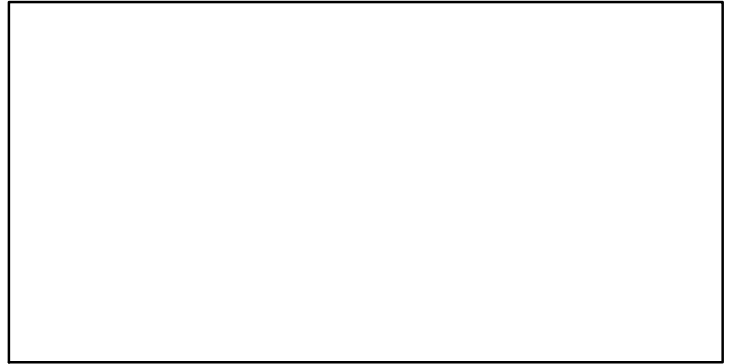
SSB*



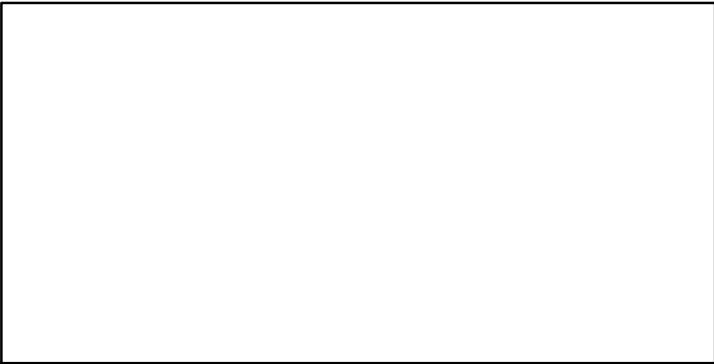
TN *



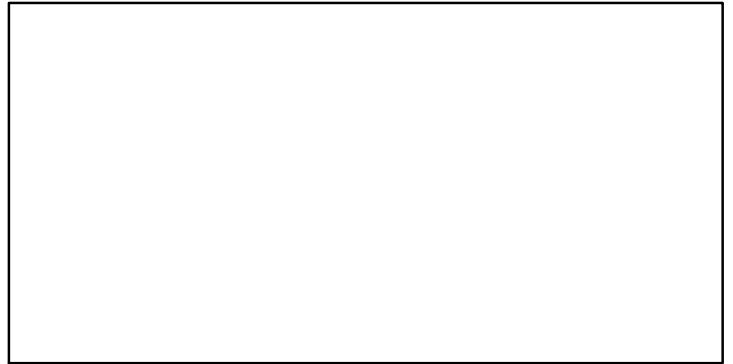
F*



ER*



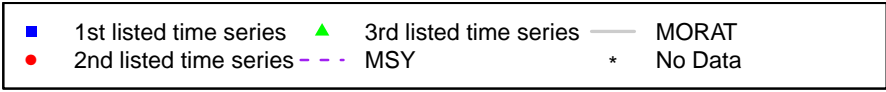
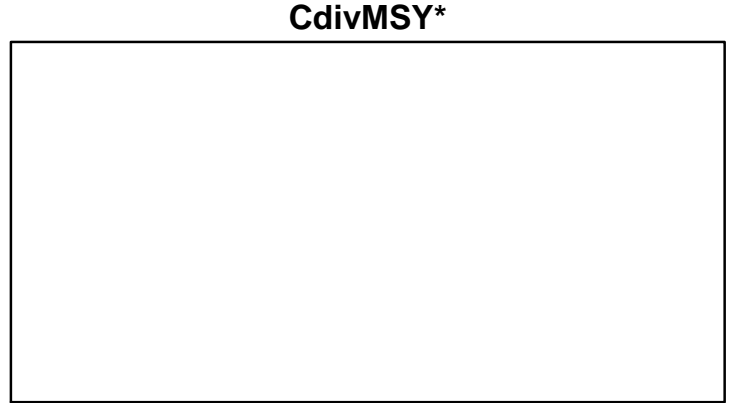
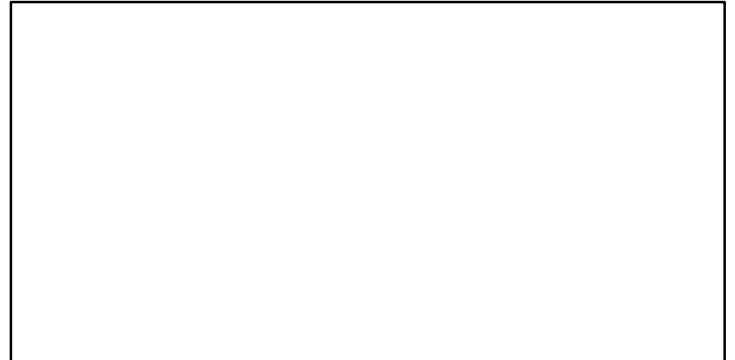
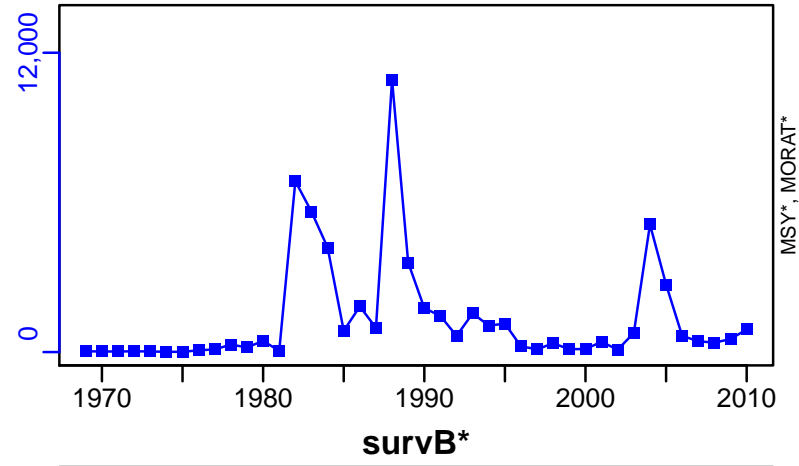
Recruits*



Sea scallop St. Pierre Bank [SCALL3Ps]

TL-MT, TC*, RecC* (1969-2010-CHING)

TAC*, Cpair*, Cadv*



Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-MAR-SCALL4T-1968-2014-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2014	91	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

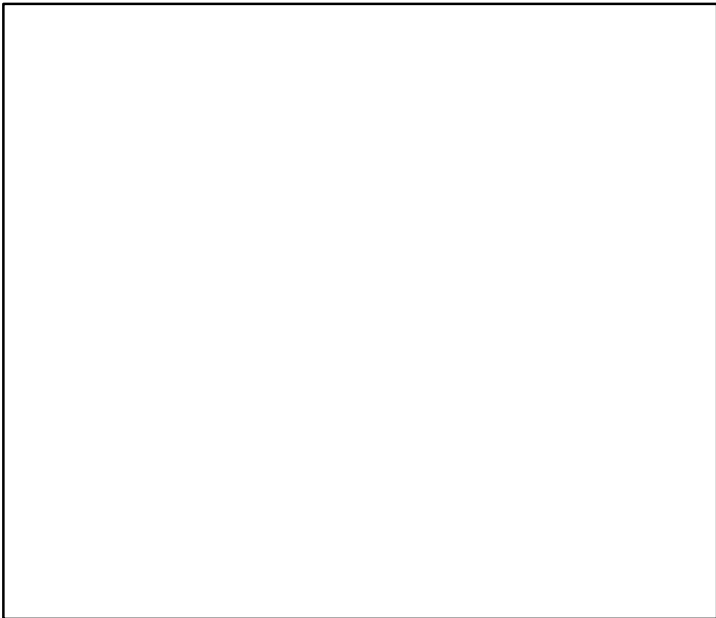
Kobe MSY*



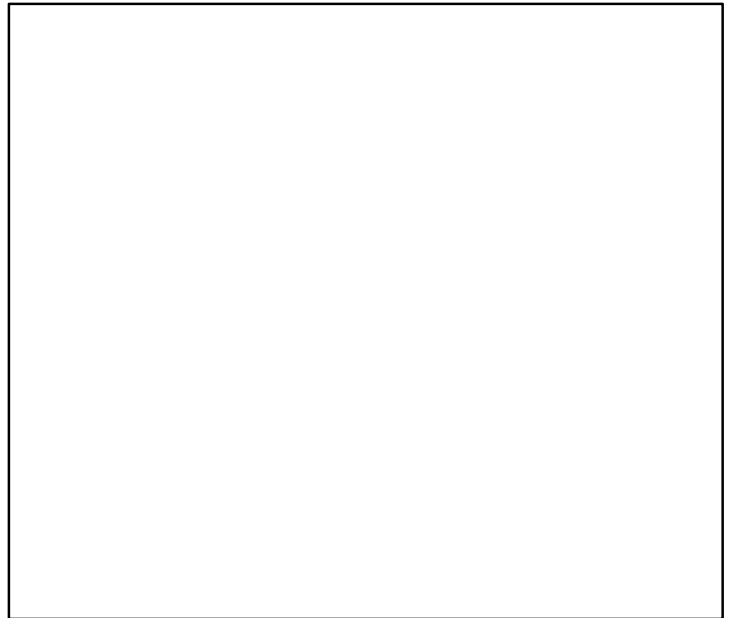
Kobe MGT*



Spawner Recruit*



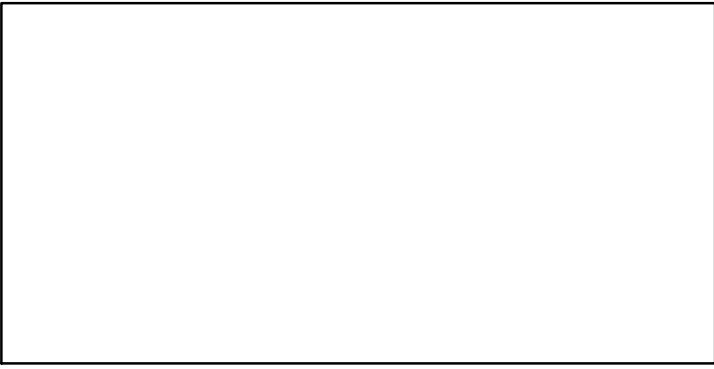
Production*



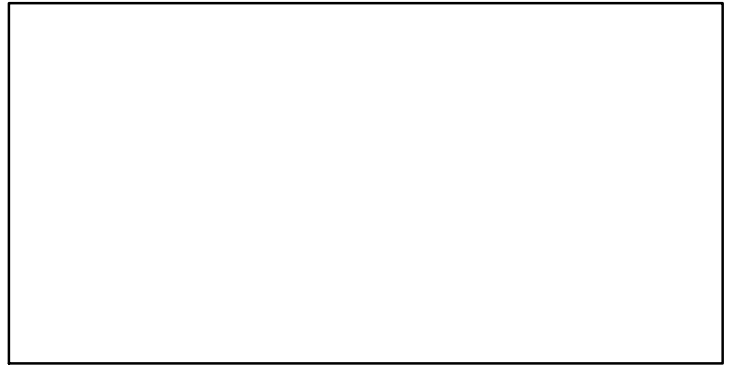
◆ Start Year ◆ End Year * No Data

Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

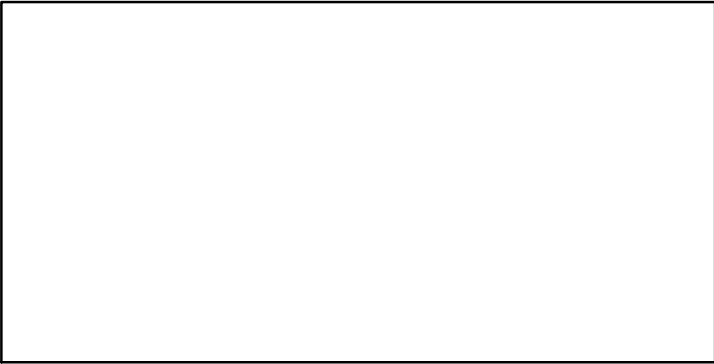
TB*



SSB*



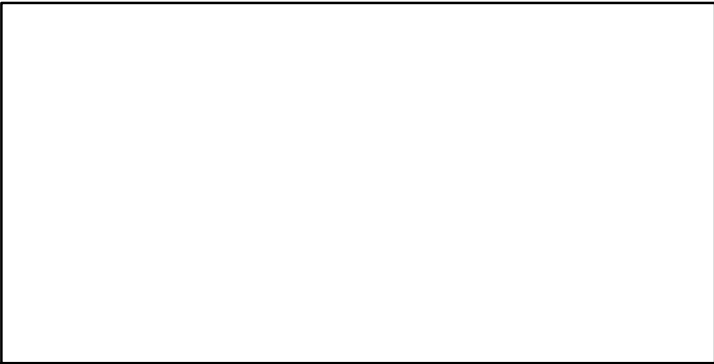
TN *



F*



ER*



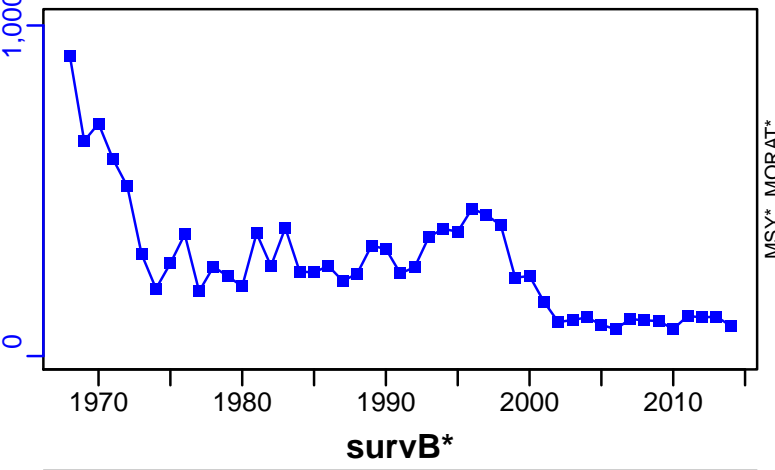
Recruits*



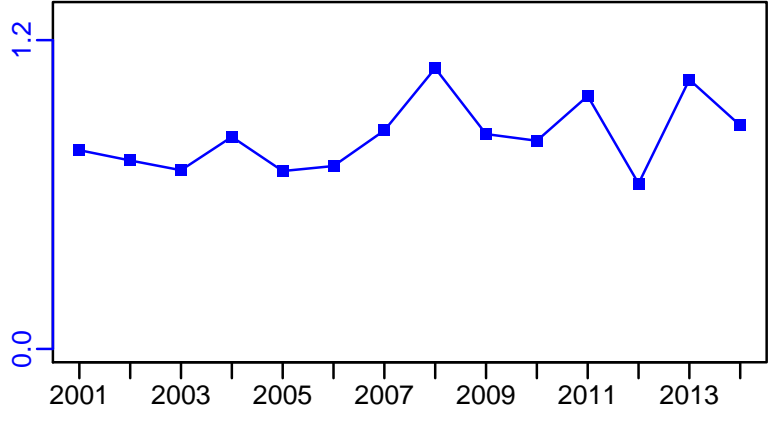
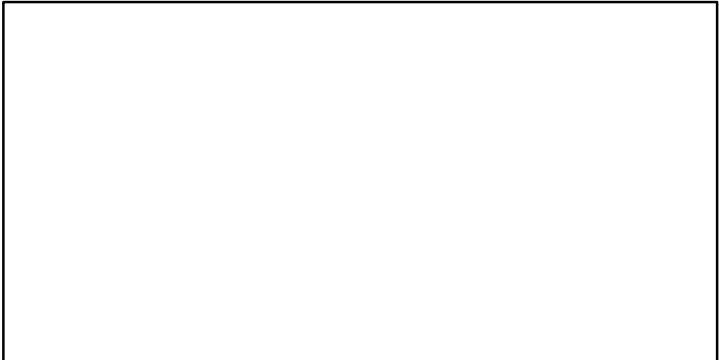
Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

TL-MT, TC*, RecC* (1968-2014-OSGOOD)

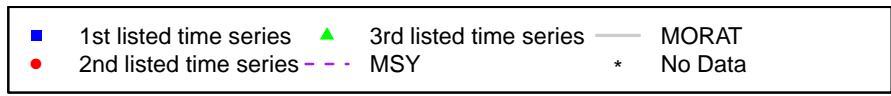
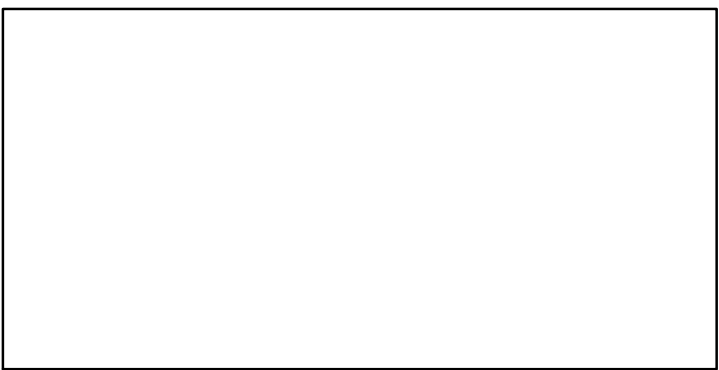
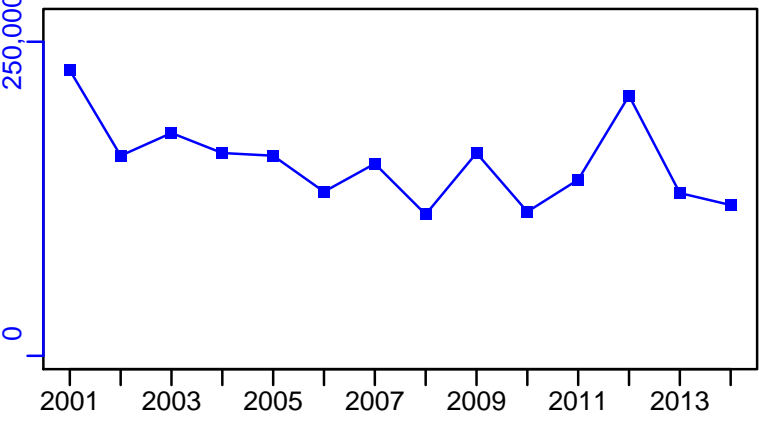
TAC*, Cpair*, Cadv*



CPUE-kg/hmdw (1968-2014-OSGOOD)



EFFORT-hour/md (1968-2014-OSGOOD)



Sea scallop Georges Bank and Mid-Atlantic Bight [SCALL5ZMAB]

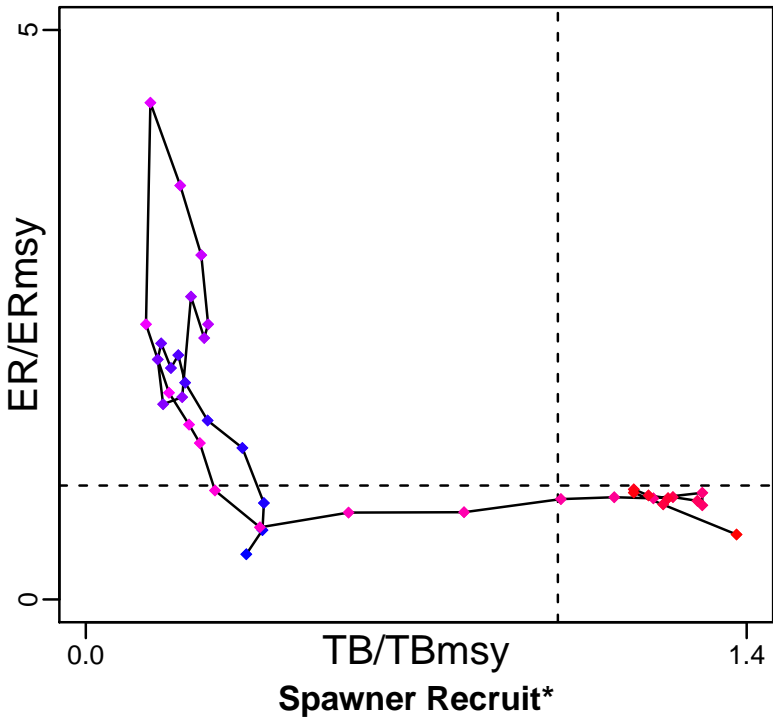
Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	NEFSC-SCALL5ZMAB-1964-2013-HIVELY
Area	Georges Bank and Mid-Atlantic Bight
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northeast Fisheries Science Center
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2013	96,480
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2013	0.48
ERmsy	ERmsy-calc-ratio	2013	0.247
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	23,798
M	M-1/yr	2013	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

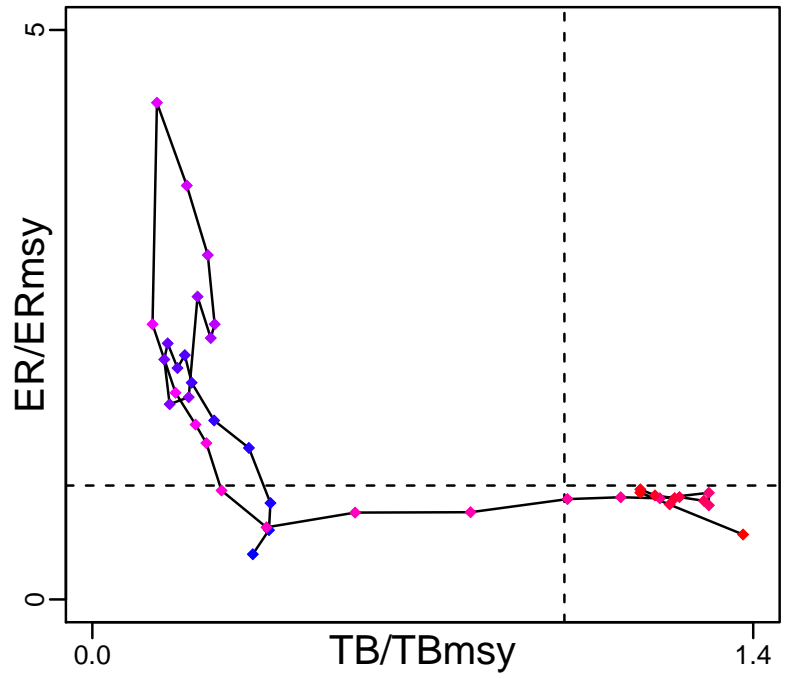
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	133,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2013	0.32	-	-
ER	ER-calc-ratio	2013	0.141	-	-
TC	-	-	-	-	-
TL	TL-MT	2013	18,700	-	-
TB/TBmsy	TB-MT/TBmsy-MT	2013	1.379	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	F-1/yr/Fmsy-1/yr	2013	0.667	-	-
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2013	0.57	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sea scallop Georges Bank and Mid-Atlantic Bight [SCALL5ZMAB]

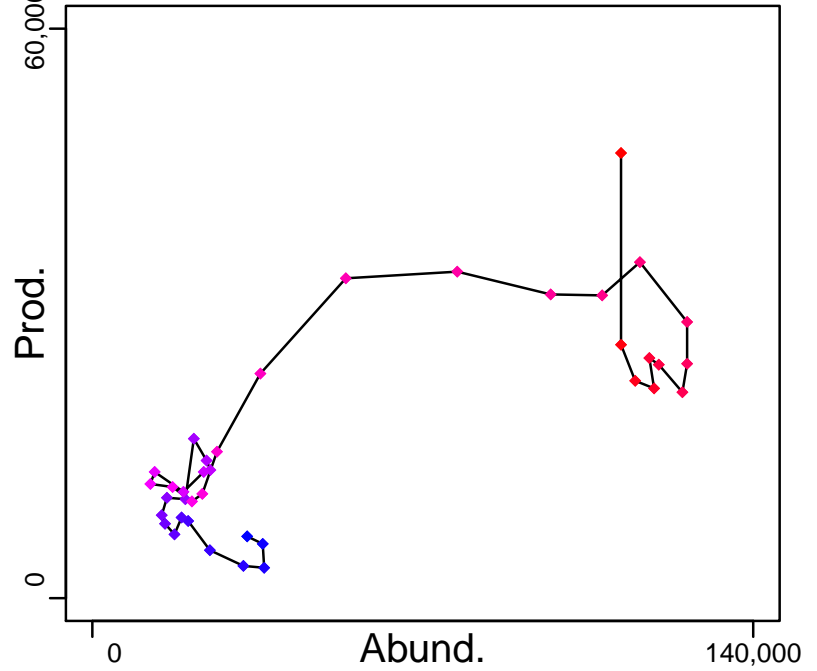
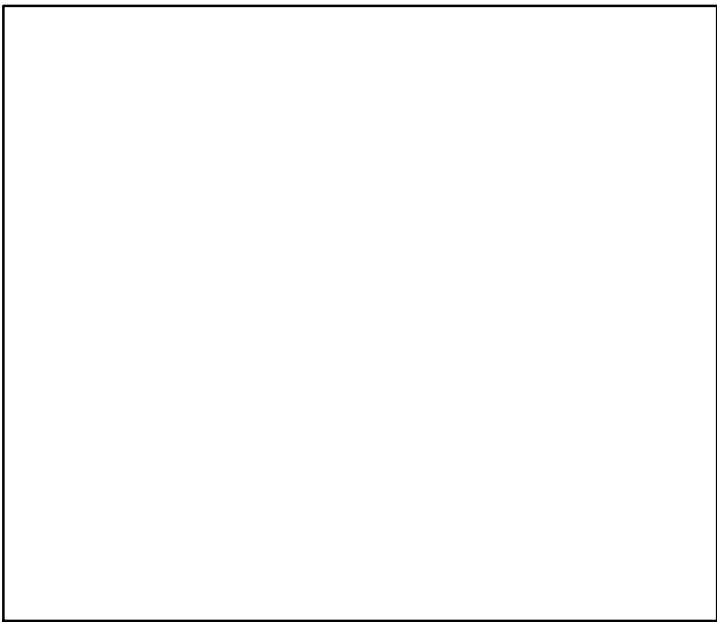
Kobe MSYpref (1964–2013–HIVELY)



Kobe MGTpref (1964–2013–HIVELY)



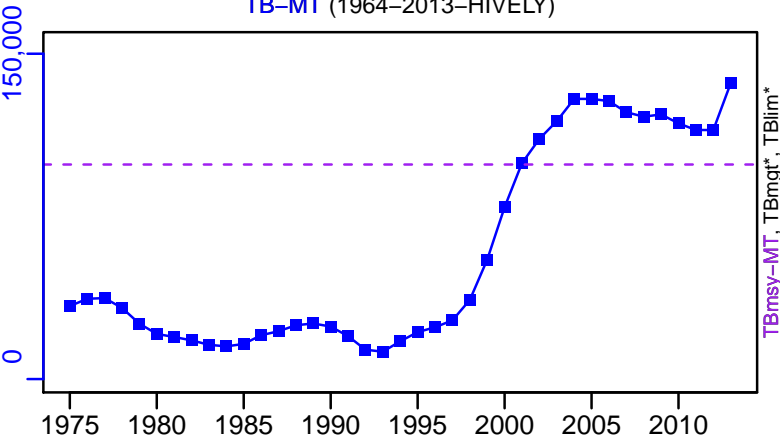
Production (1964–2013–HIVELY)



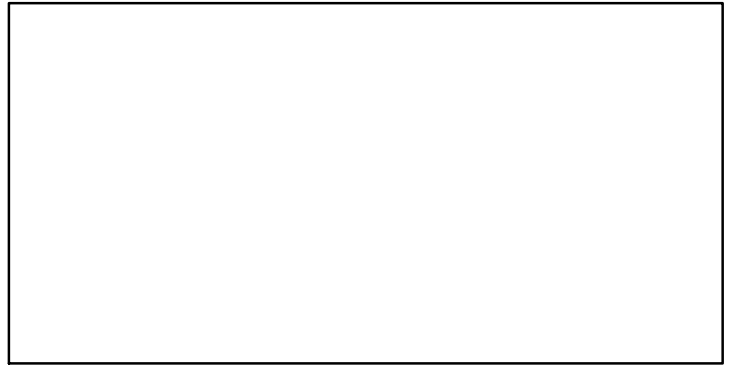
◆ Start Year ◆ End Year * No Data

Sea scallop Georges Bank and Mid-Atlantic Bight [SCALL5ZMAB]

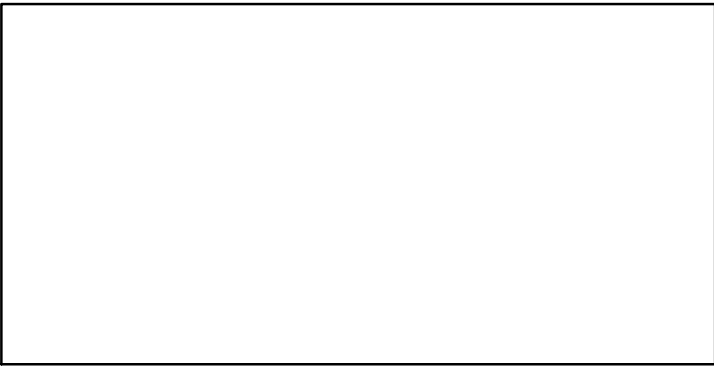
TB-MT (1964-2013-HIVELY)



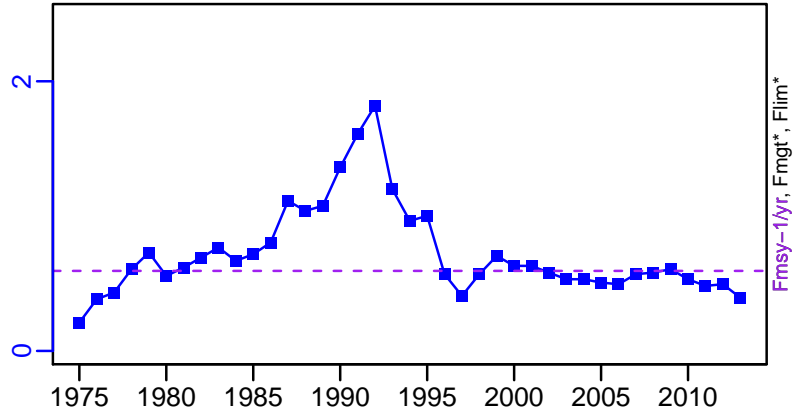
SSB*



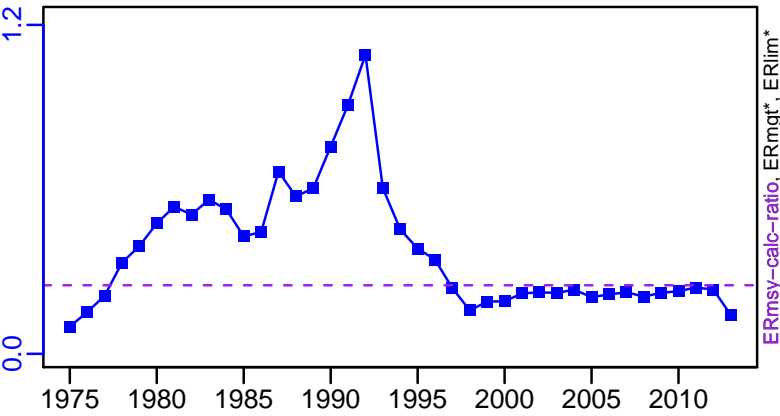
TN *



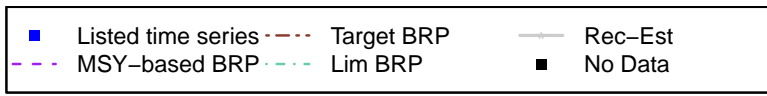
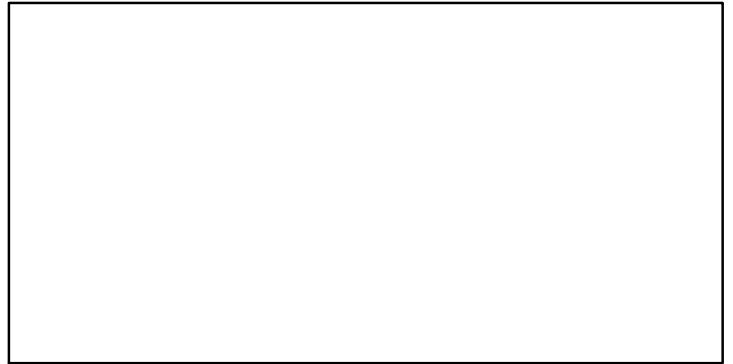
F-1/yr (1964-2013-HIVELY)



ER-calc-ratio (1964-2013-HIVELY)



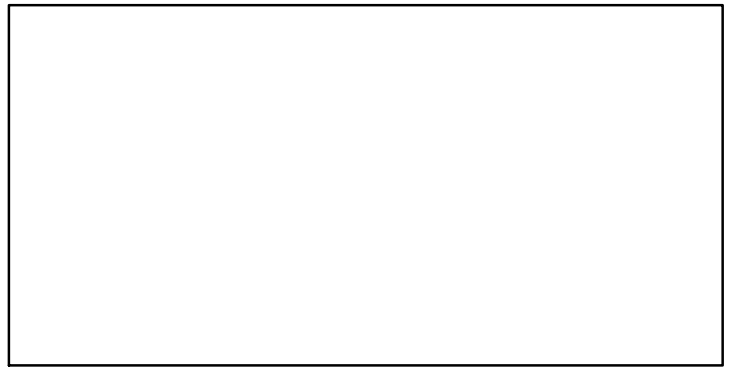
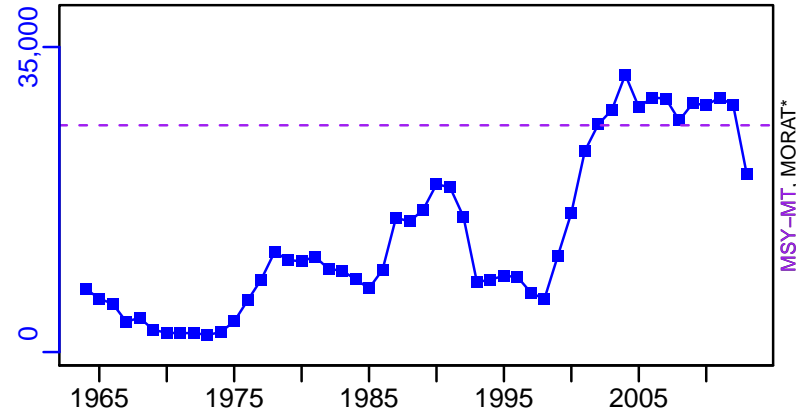
Recruits*



Sea scallop Georges Bank and Mid-Atlantic Bight [SCALL5ZMAB]

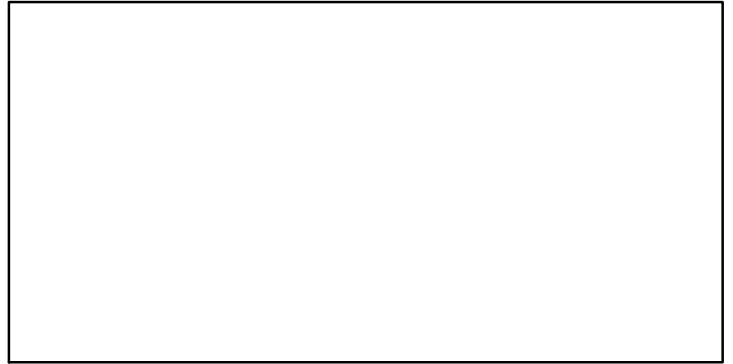
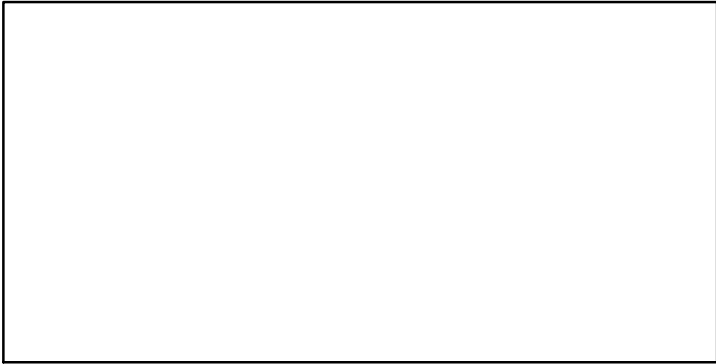
TL-MT, TC*, RecC* (1964-2013-HIVELY)

TAC*, Cpair*, Cadv*



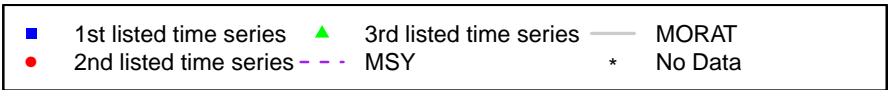
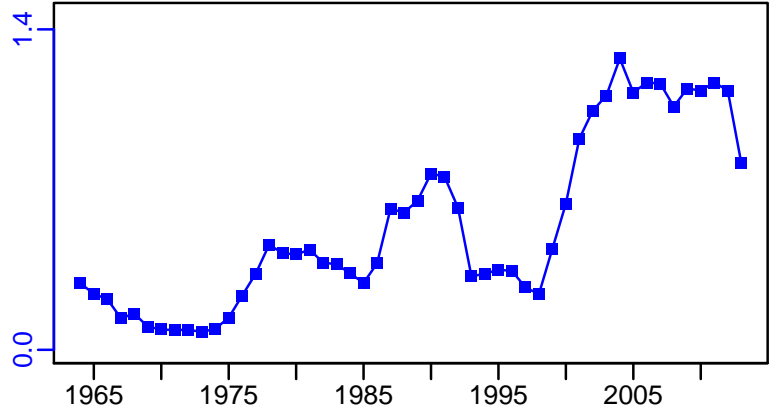
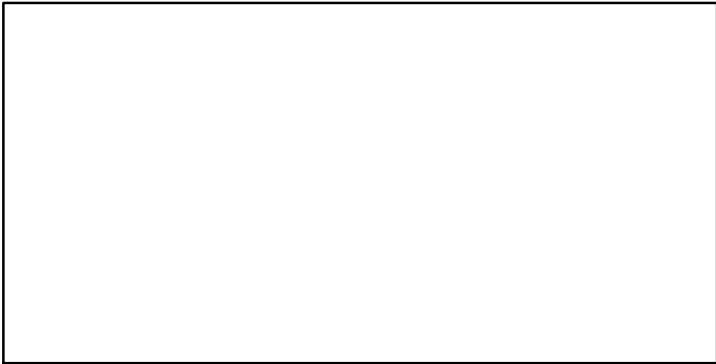
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1964-2013-HIVELY)



Sea scallop Georges Bank [SCALLGB]

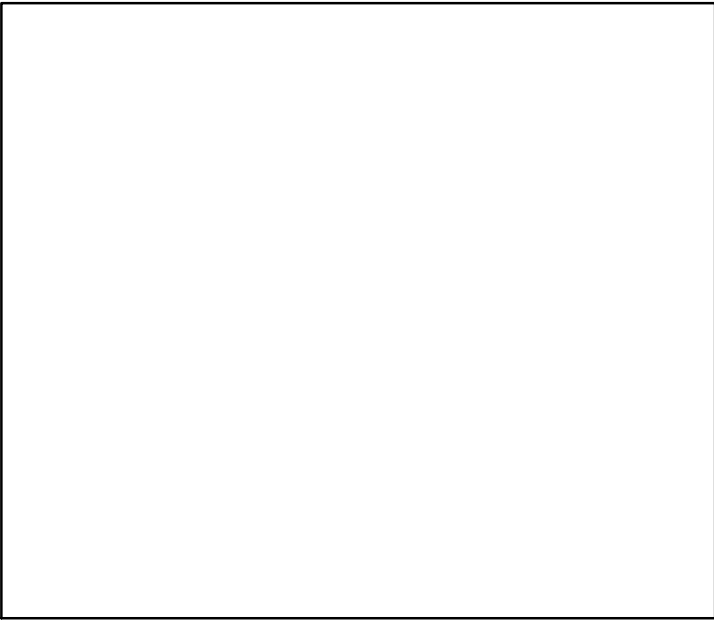
Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-SCALLGB-1986-2014-ASHBROOK
Area	Georges Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012, 2007, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	TBmgt-MT	2014	13,284
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2014	0.159
TBlim	TBlim-MT	2014	7137
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	25,500	Both	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2014	5270	Both	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.183	-	-
TC	-	-	-	-	-
TL	TL-MT	2014	5020	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	TB-MT/TBmgt-MT	2014	1.92	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sea scallop Georges Bank [SCALLGB]

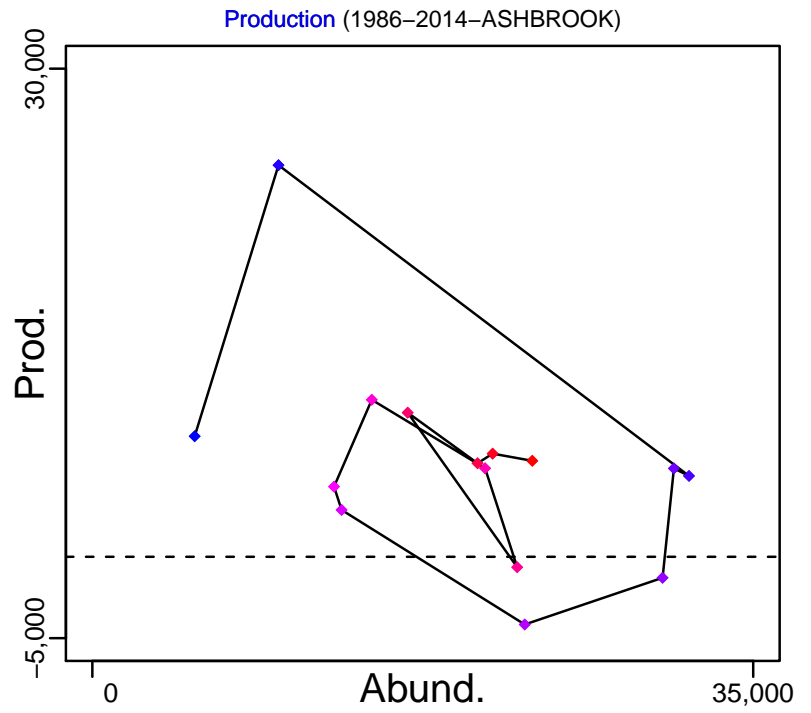
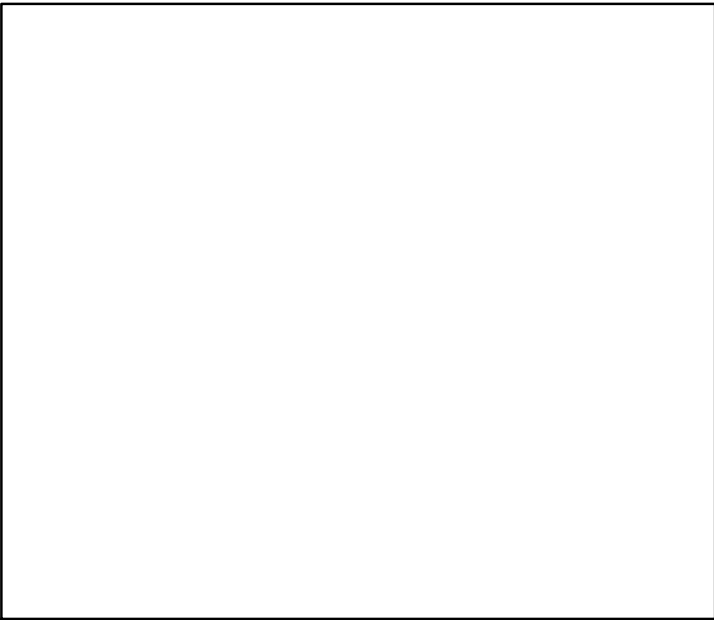
Kobe MSY*



Kobe MGT*



Spawner Recruit*

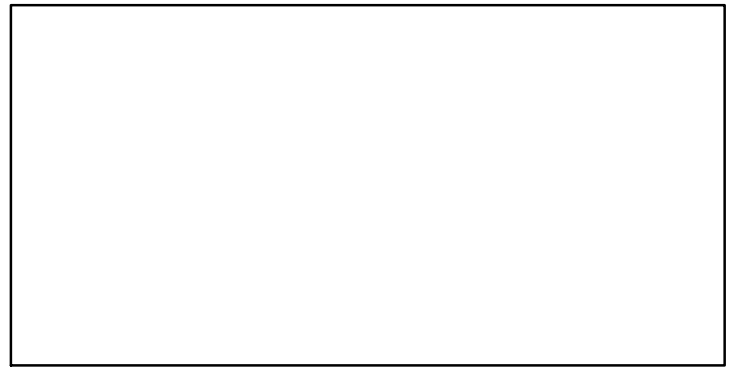
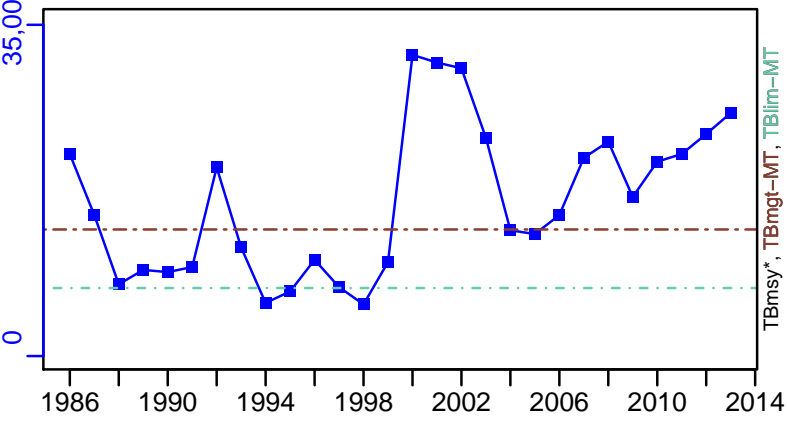


◆ Start Year ◆ End Year * No Data

Sea scallop Georges Bank [SCALLGB]

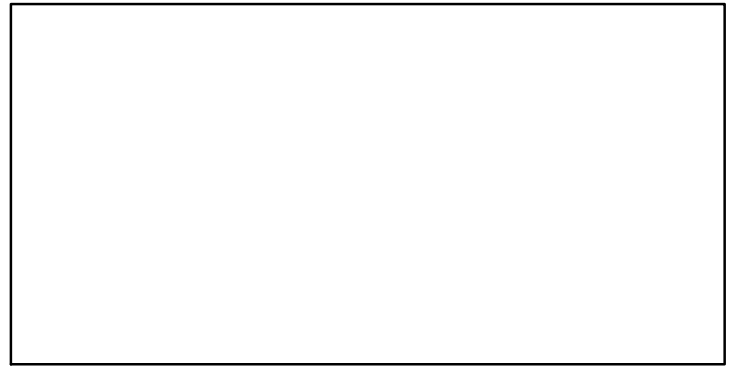
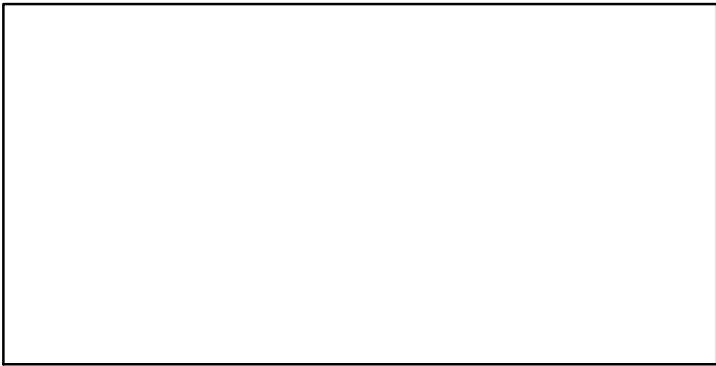
TB-MT (1986-2014-ASHBROOK)

SSB*



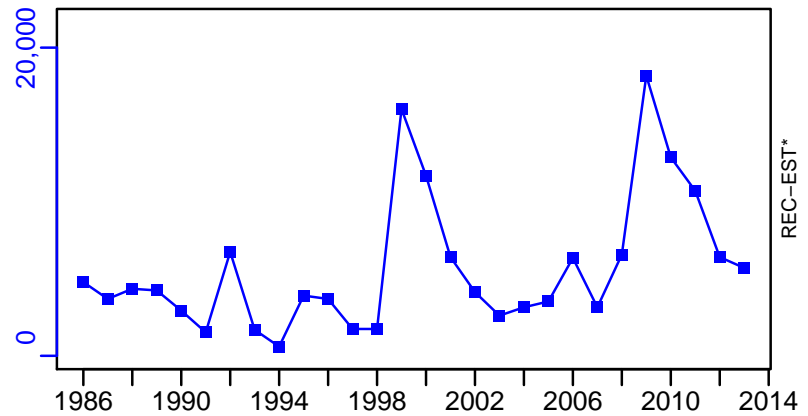
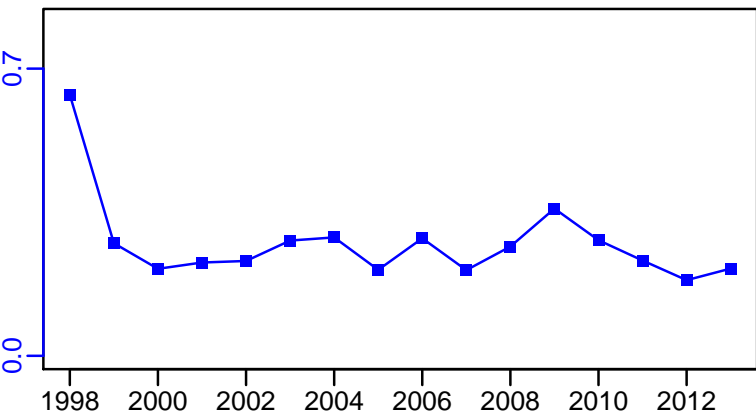
TN *

F*



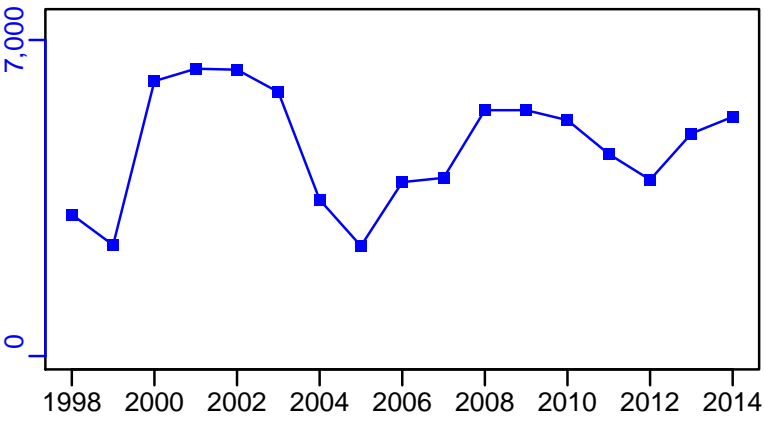
ER-calc-ratio (1986-2014-ASHBROOK)

R-MT (1986-2014-ASHBROOK)

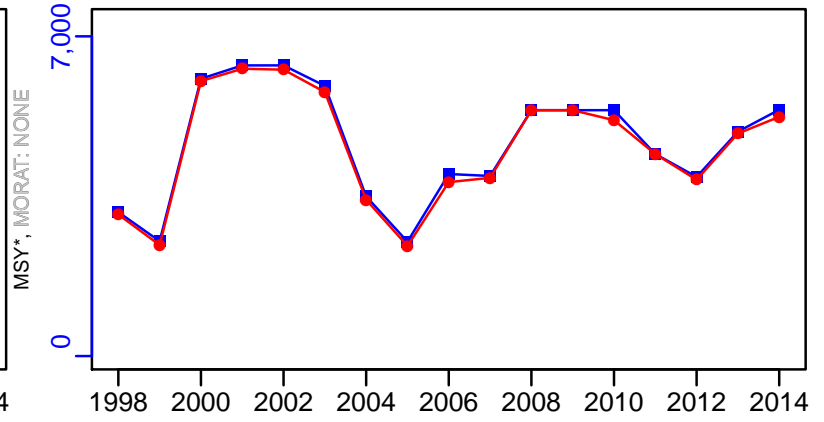


Sea scallop Georges Bank [SCALLGB]

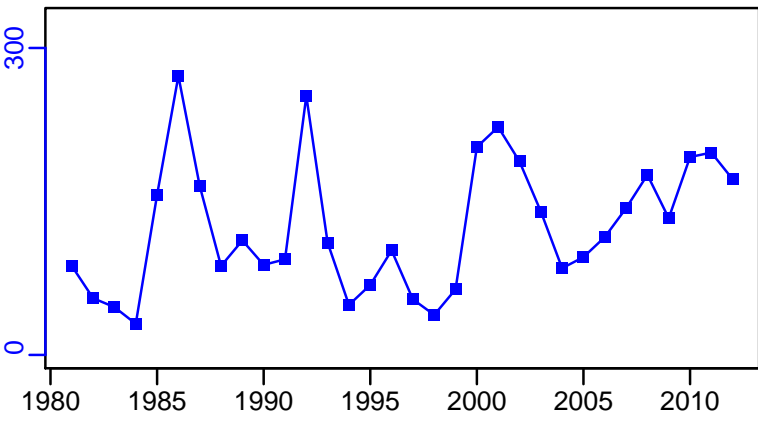
TL-MT, TC*, RecC* (1986-2014-ASHBROOK)



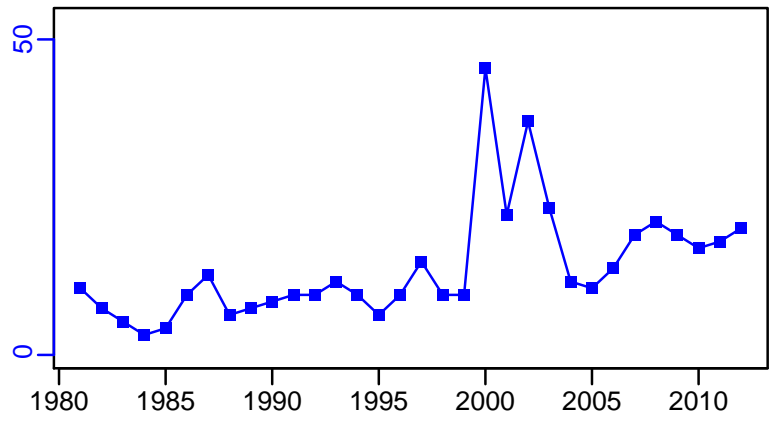
TAC-MT, Cpair-MT, Cadv* (1986-2014-ASHBROOK)



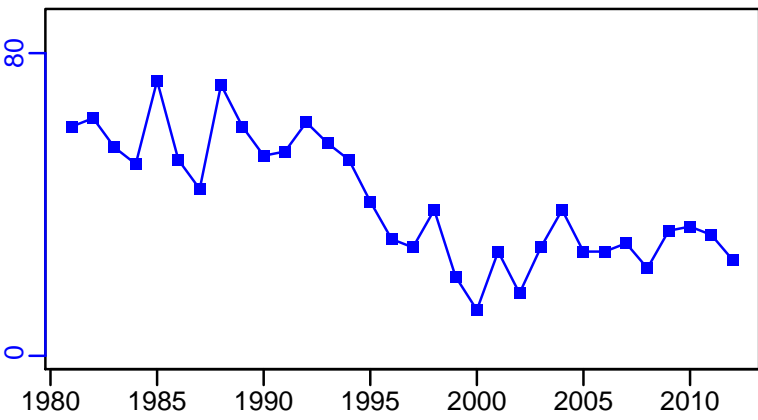
survB-E00/tow (1981-2012-ASHBROOK)



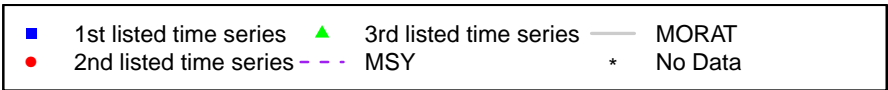
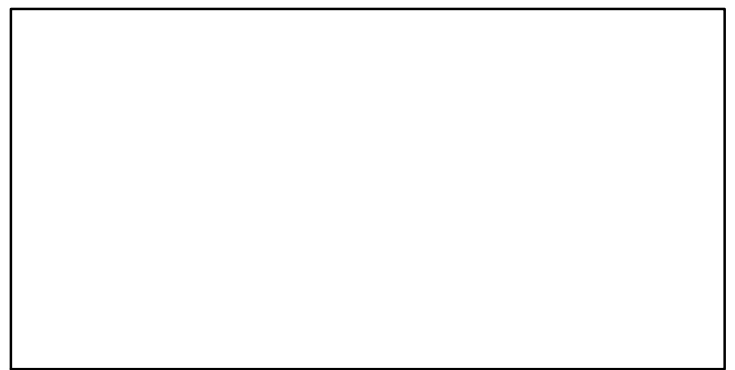
CPUE-kg/hm (1981-2012-ASHBROOK)



EFFORT-hm (1981-2012-ASHBROOK)



CdivMSY*



Sea scallop North Brown Bank [SCALLNBB]

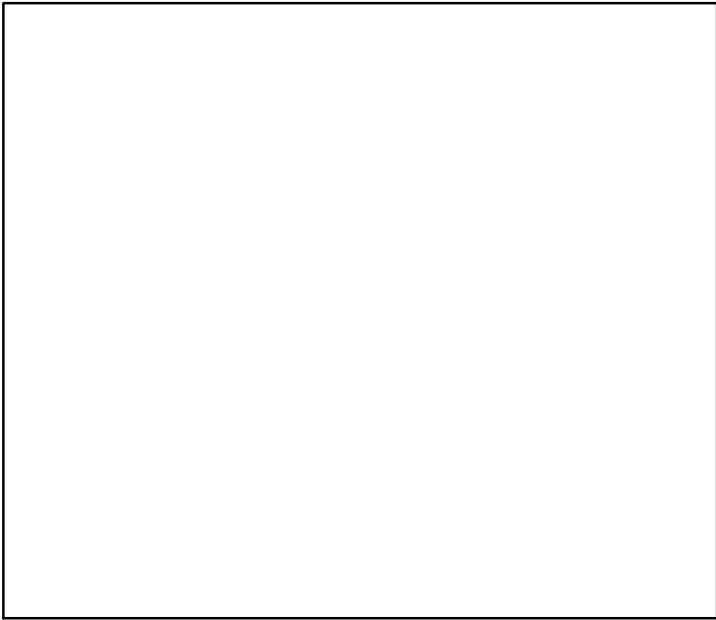
Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-MAR-SCALLNBB-1981-2011-CHING
Area	North Brown Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	13,100	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2011	0.02	-	-
TC	TC-MT	2011	201		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sea scallop North Brown Bank [SCALLNBB]

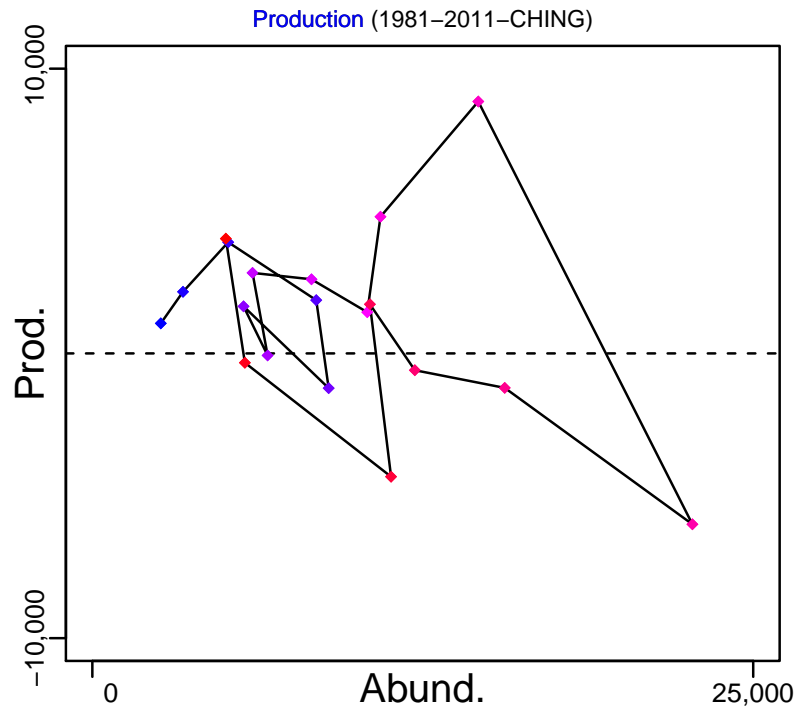
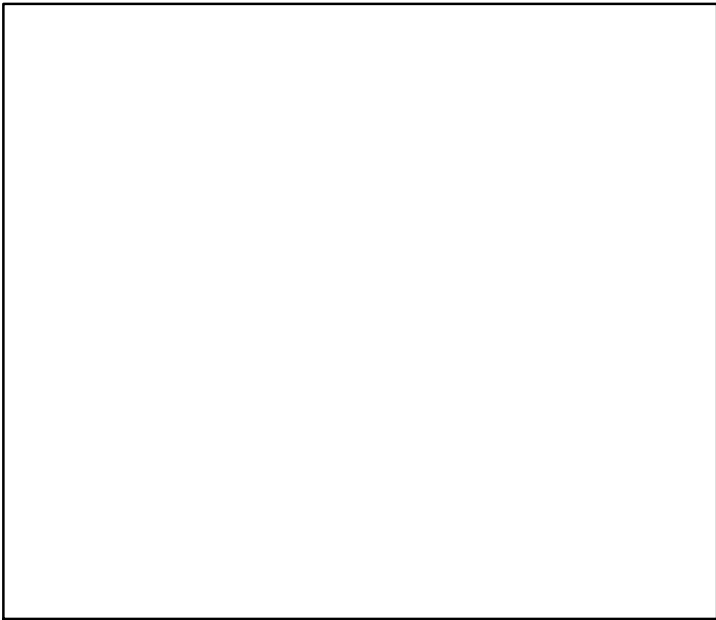
Kobe MSY*



Kobe MGT*



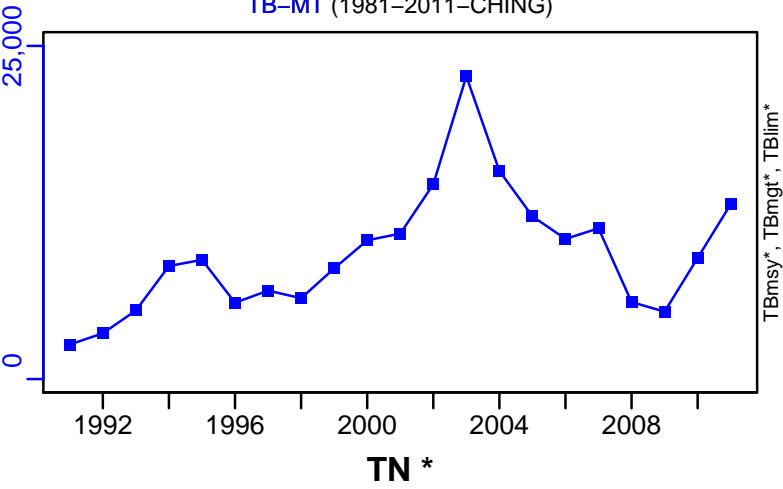
Spawner Recruit*



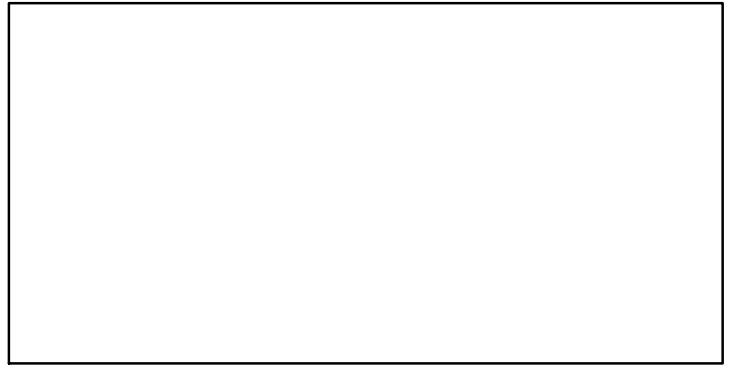
◆ Start Year ◆ End Year * No Data

Sea scallop North Brown Bank [SCALLNBB]

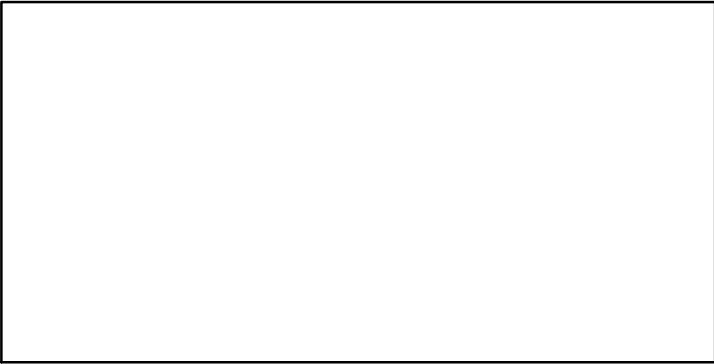
TB-MT (1981-2011-CHING)



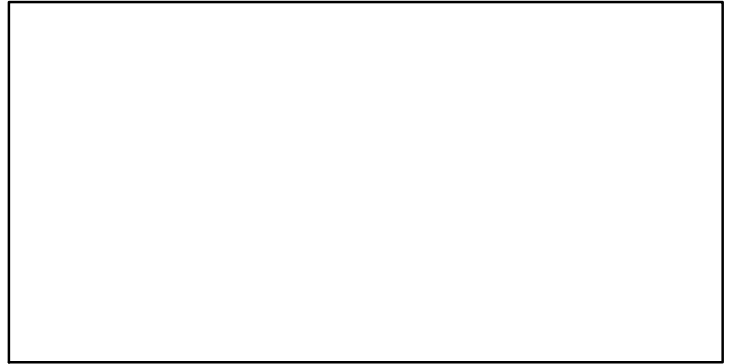
SSB*



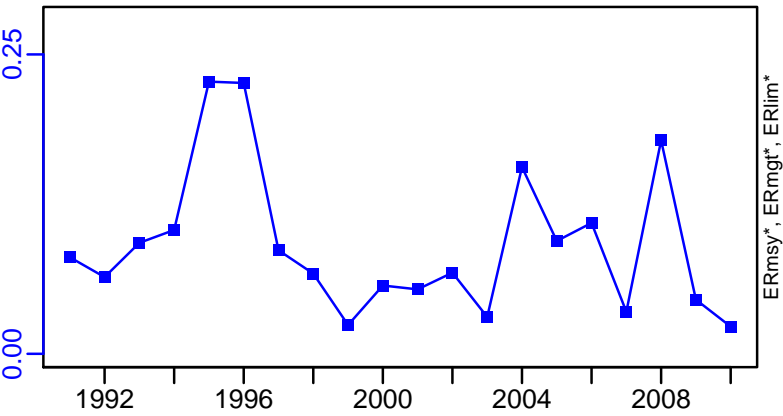
TN *



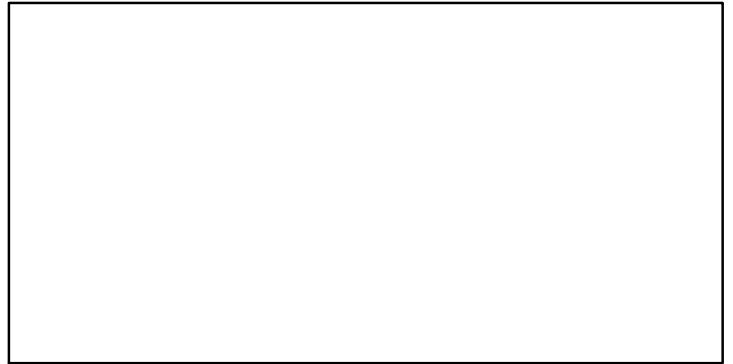
F*



ER-ratio (1981-2011-CHING)



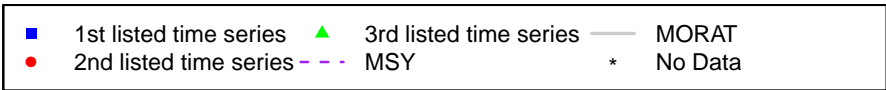
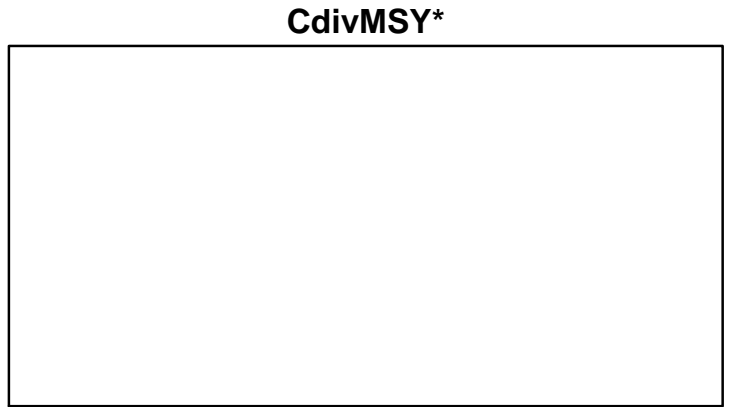
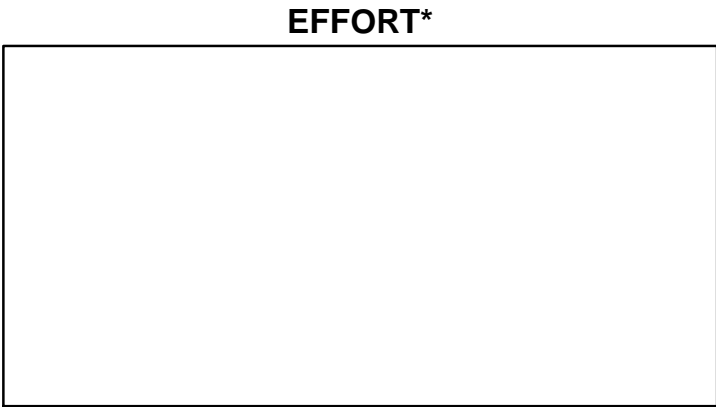
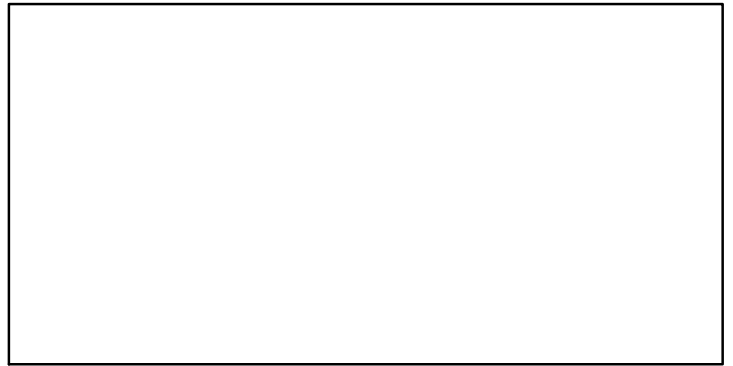
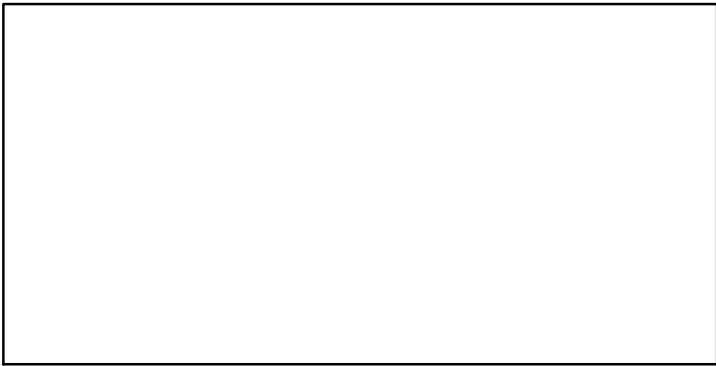
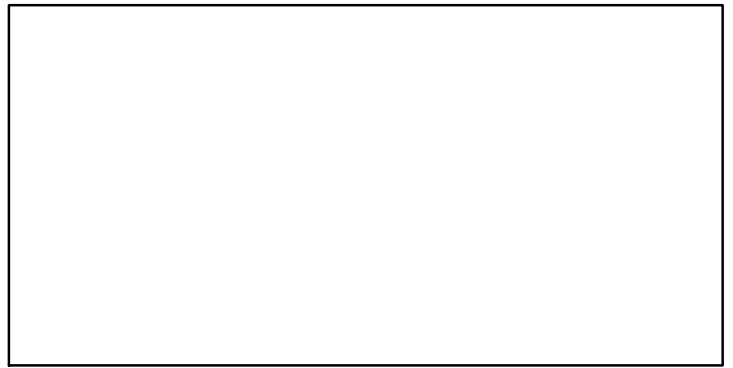
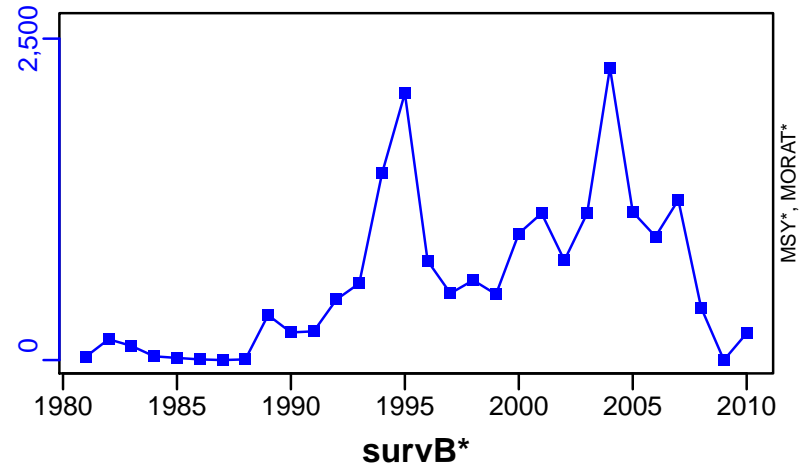
Recruits*



Sea scallop North Brown Bank [SCALLNBB]

TC-MT, TL*, RecC* (1981-2011-CHING)

TAC*, Cpair*, Cadv*



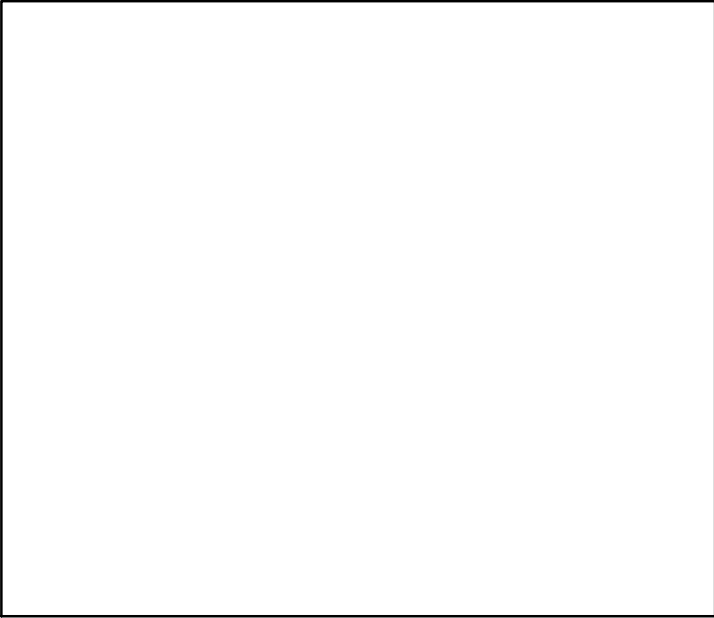
Sea scallop Northern Gulf of St Lawrence [SCALLSFA16-20]

Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-MAR-SCALLSFA16-20-1965-2012-OSGOOD
Area	Scallop Fishing Areas 16-20
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2012

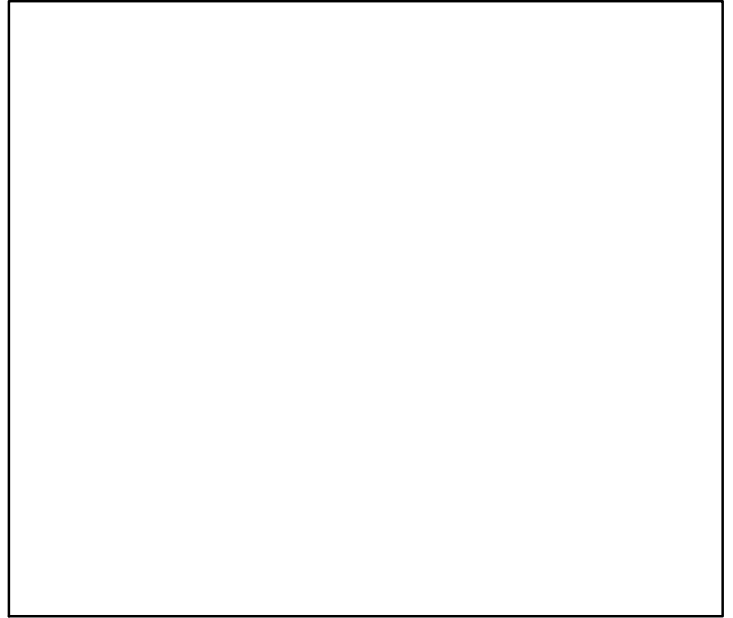
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2012	69	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

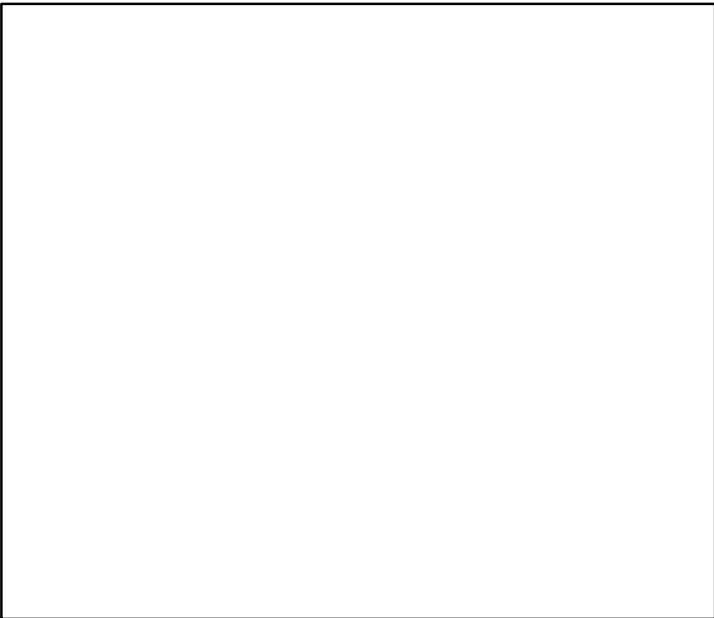
Kobe MSY*



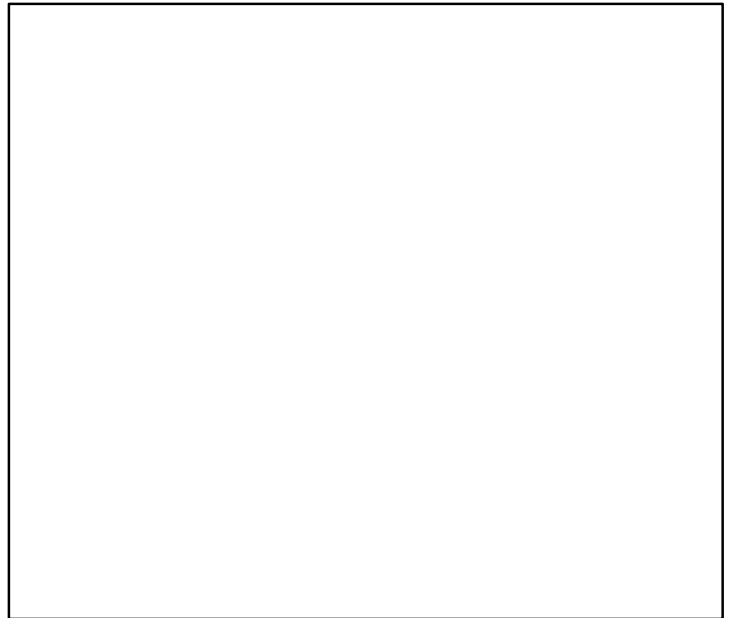
Kobe MGT*



Spawner Recruit*



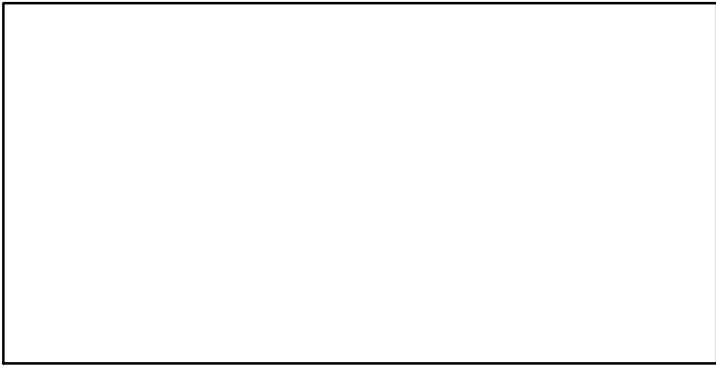
Production*



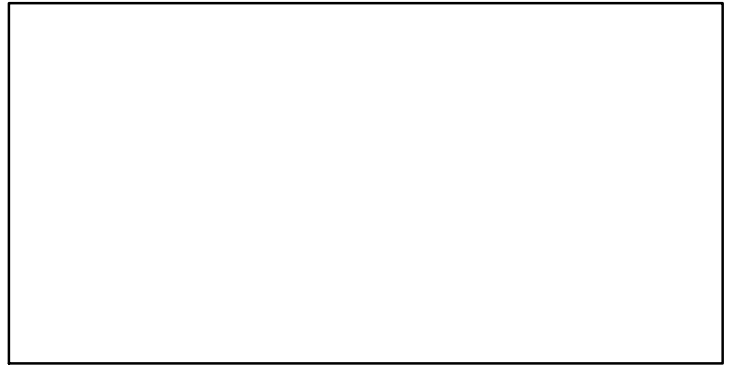
◆ Start Year ◆ End Year * No Data

Sea scallop Northern Gulf of St Lawrence [SCALLSFA16-20]

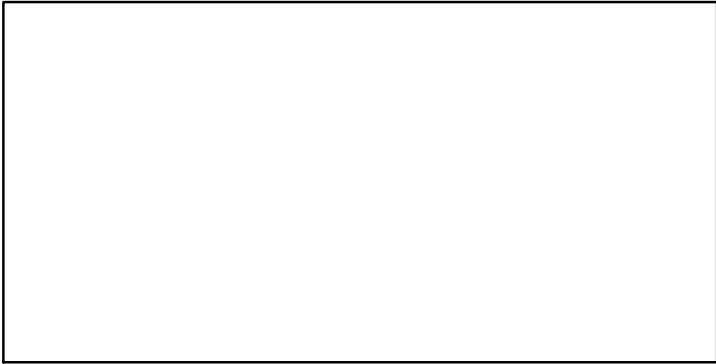
TB*



SSB*



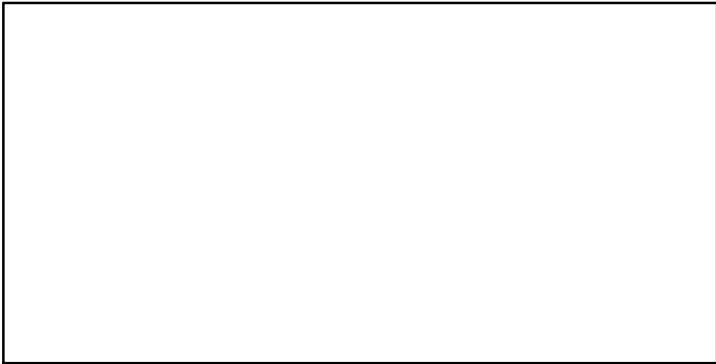
TN *



F*



ER*



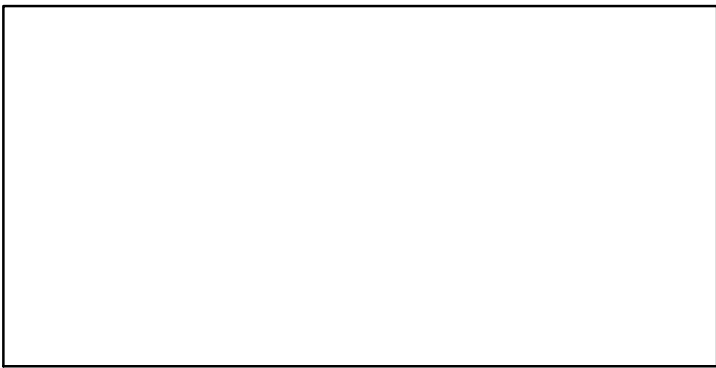
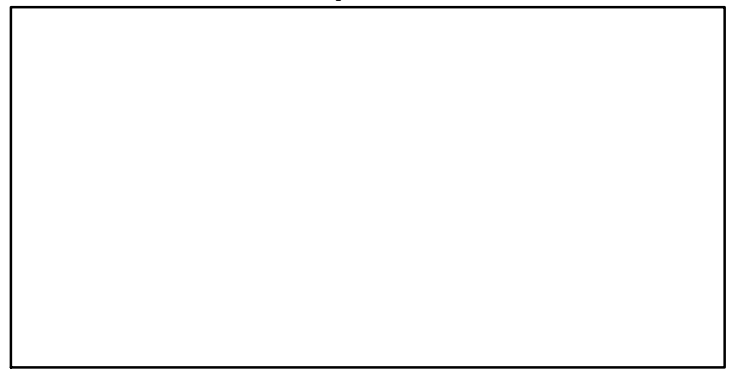
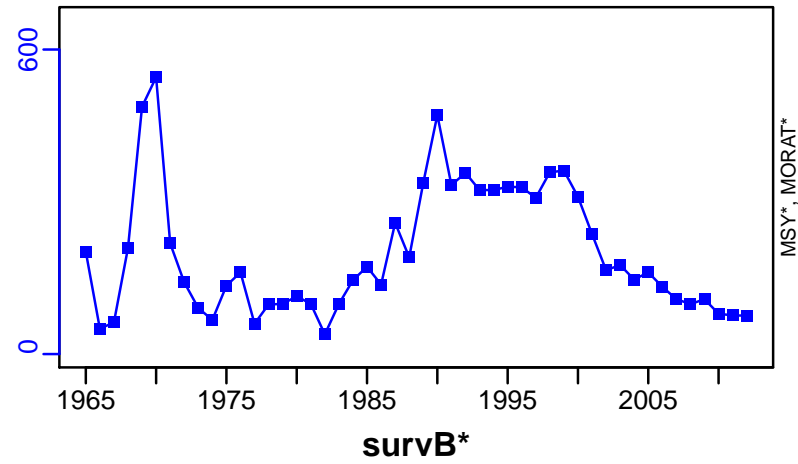
Recruits*



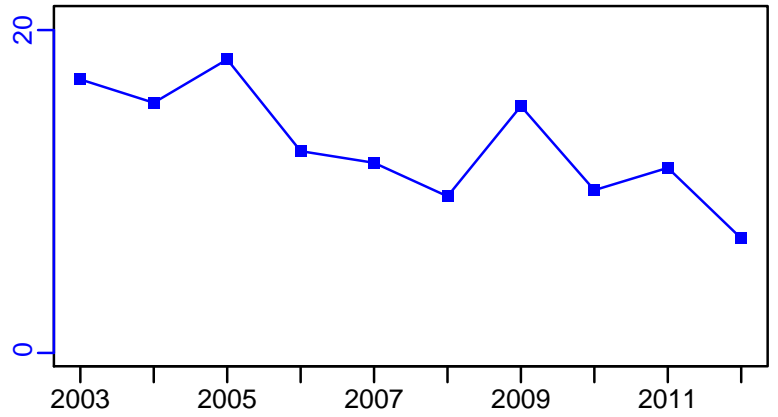
Sea scallop Northern Gulf of St Lawrence [SCALLSFA16-20]

TL-MT, TC*, RecC* (1965-2012-OSGOOD)

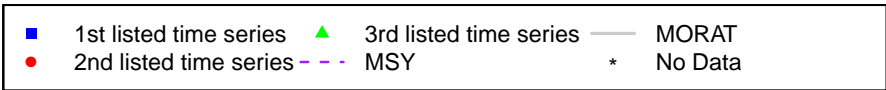
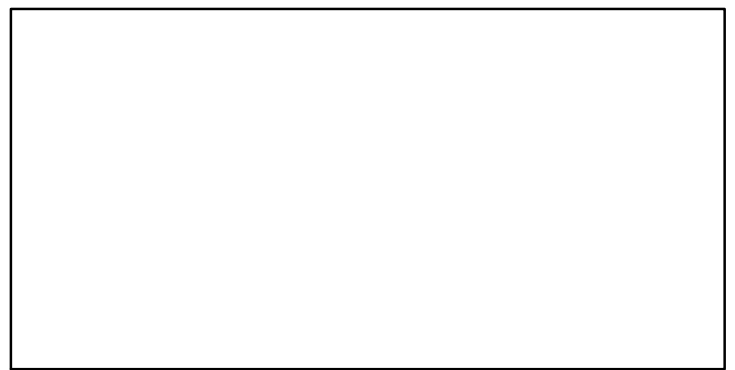
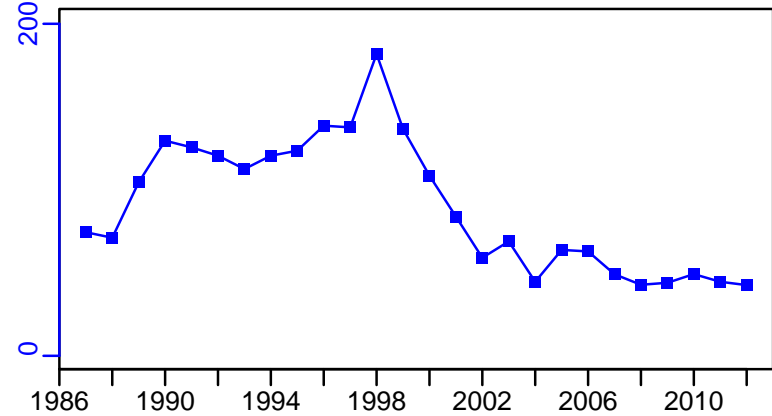
TAC*, Cpair*, Cadv*



CPUE-kg/hmdw (1965-2012-OSGOOD)



EFFORT-hour/mdw (1965-2012-OSGOOD)



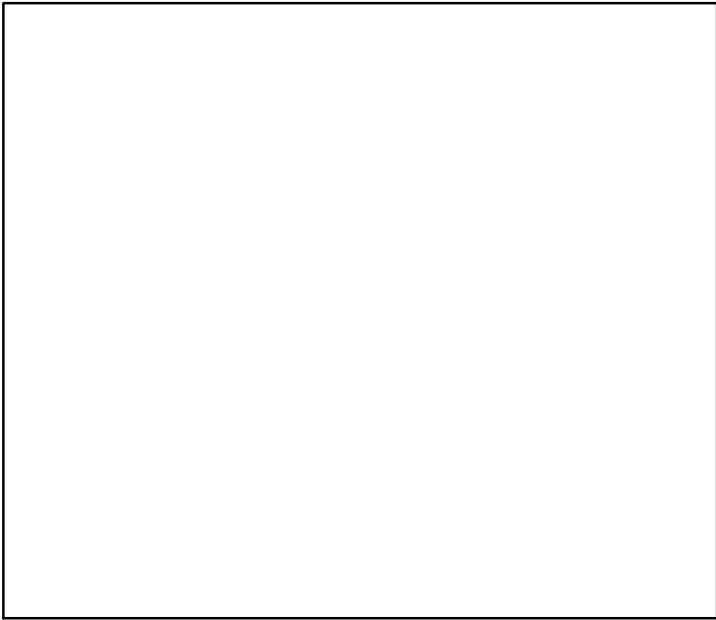
Sea scallop Bay of Fundy (SPA 1-6) [SCALLSPA1-6]

Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-MAR-SCALLSPA1-6-1975-2010-CHING
Area	Bay of Fundy (SPA 1-6)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2010	481	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

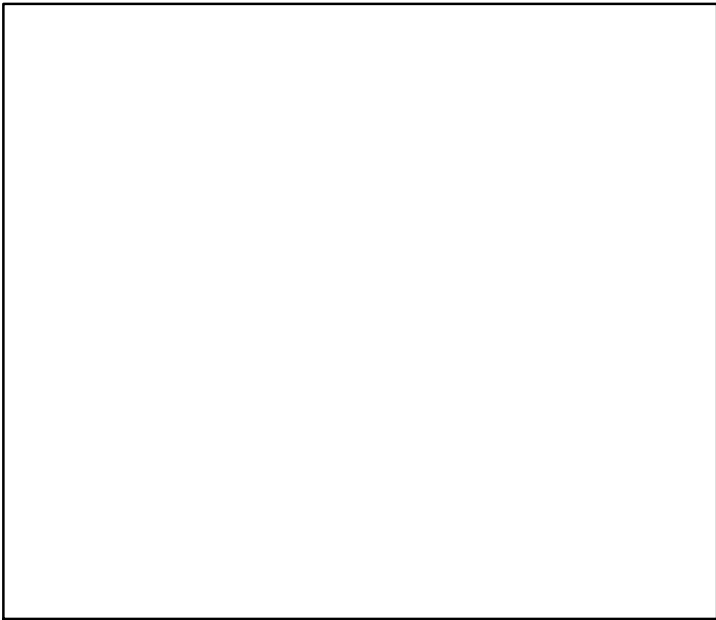
Kobe MSY*



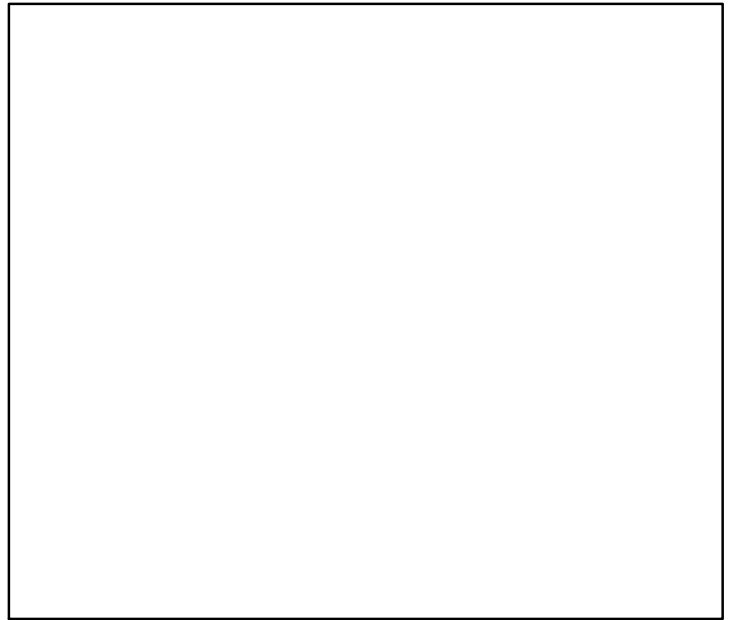
Kobe MGT*



Spawner Recruit*



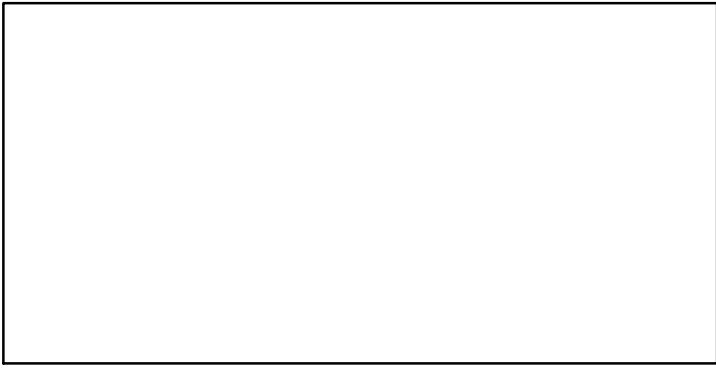
Production*



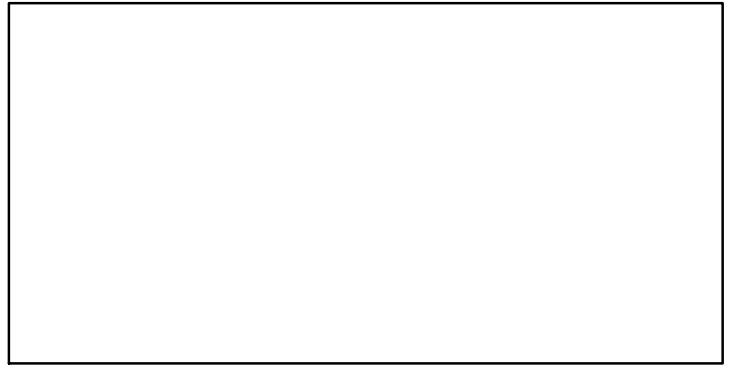
◆ Start Year ◆ End Year * No Data

Sea scallop Bay of Fundy (SPA 1-6) [SCALLSPA1-6]

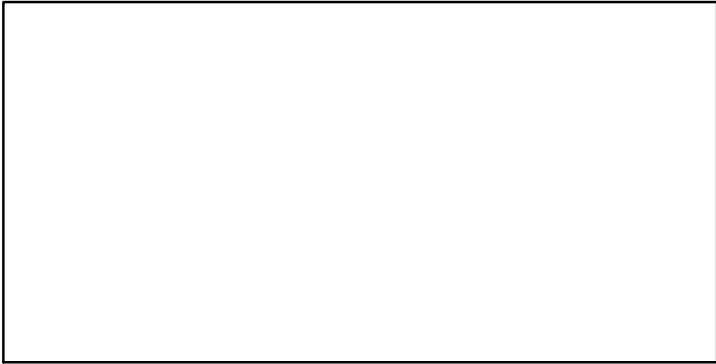
TB*



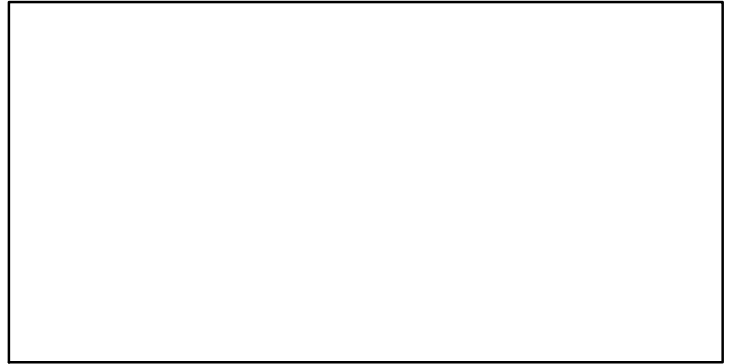
SSB*



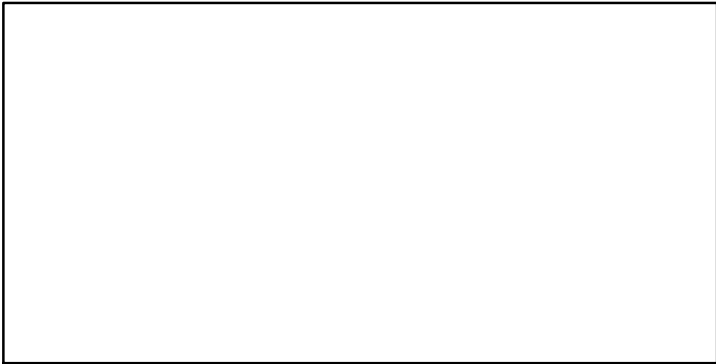
TN *



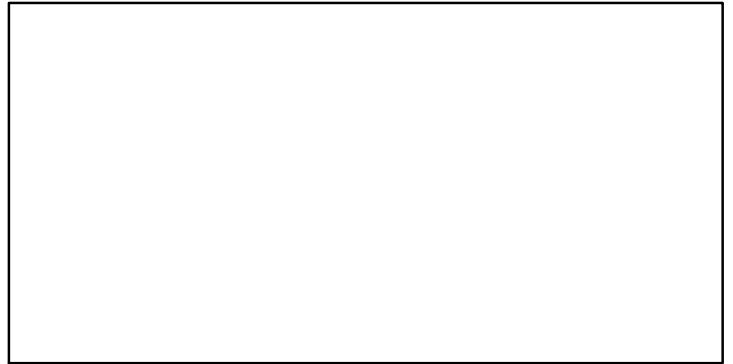
F*



ER*



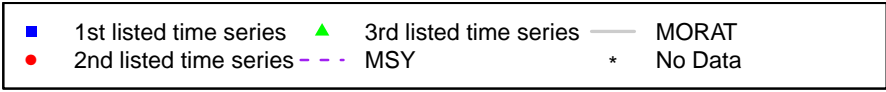
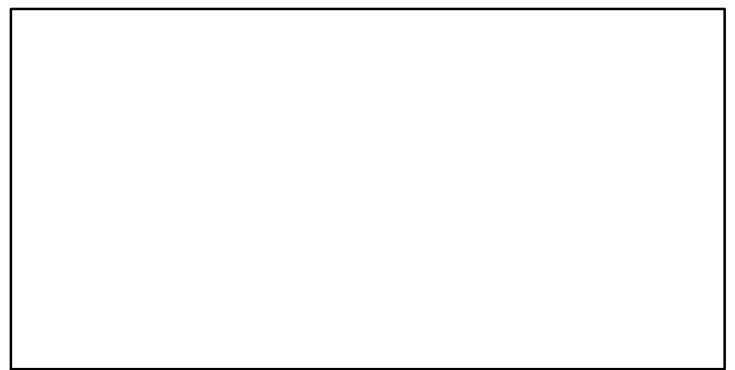
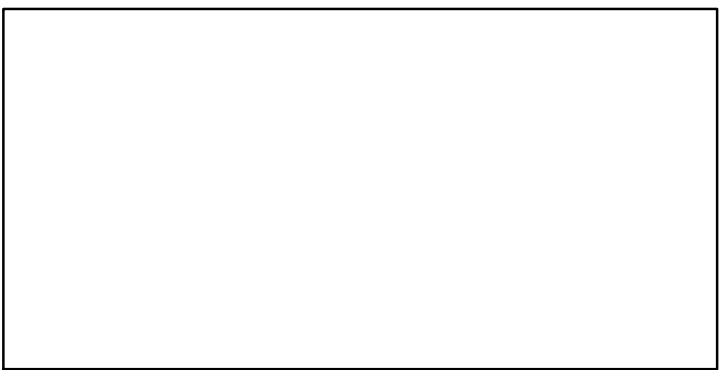
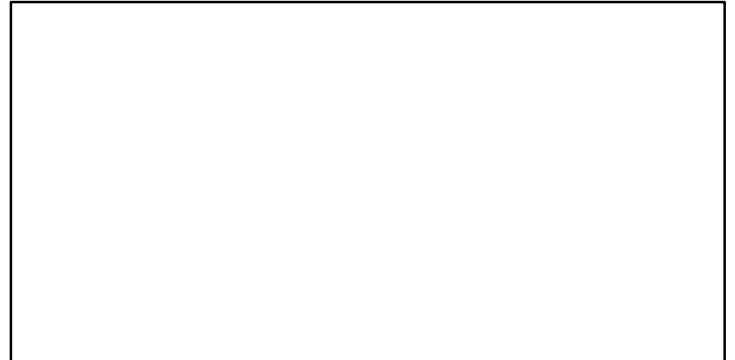
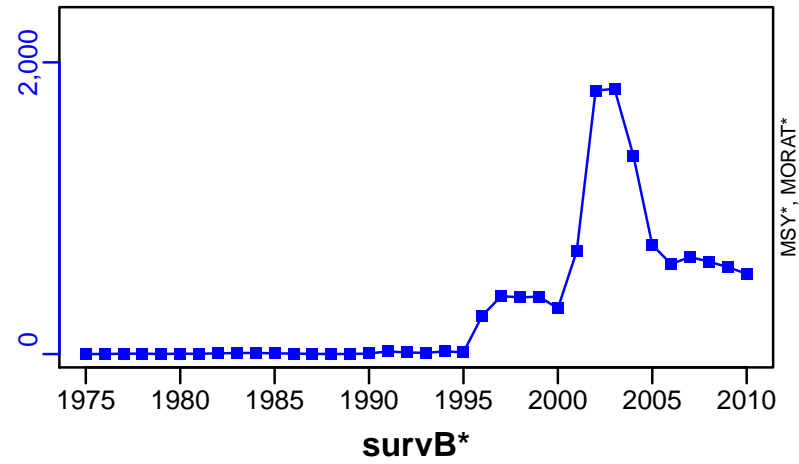
Recruits*



Sea scallop Bay of Fundy (SPA 1-6) [SCALLSPA1-6]

TL-MT, TC*, RecC* (1975-2010-CHING)

TAC*, Cpair*, Cadv*



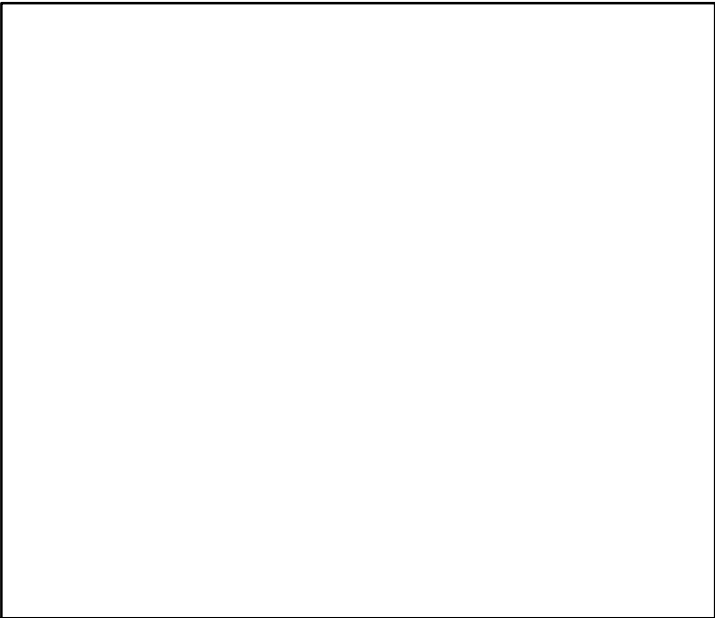
Sea scallop West Scallop Fishing Area 29 [SCALLWSFA29]

Metadata	
Scientific Name	Placopecten magellanicus
Current Assess ID	DFO-MAR-SCALLWSFA29-2001-2011-CHING
Area	West Scallop Fishing Area 29
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2011

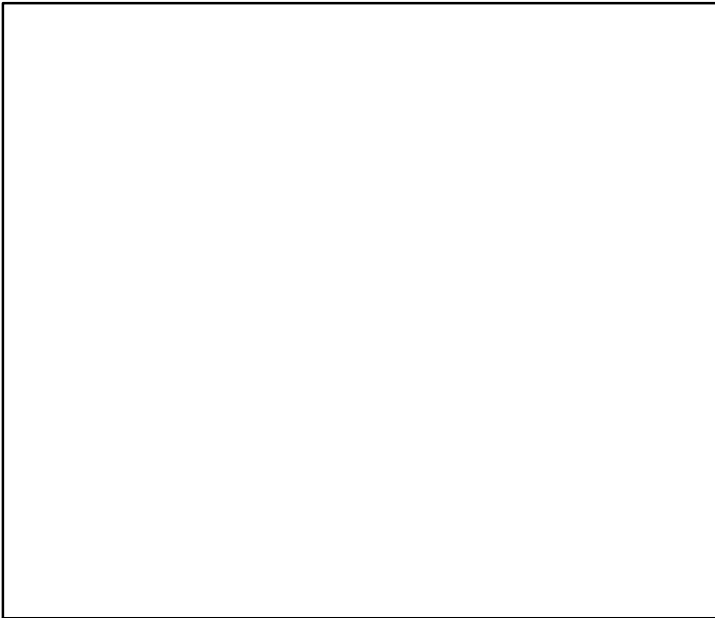
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2011	0.283	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	197	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

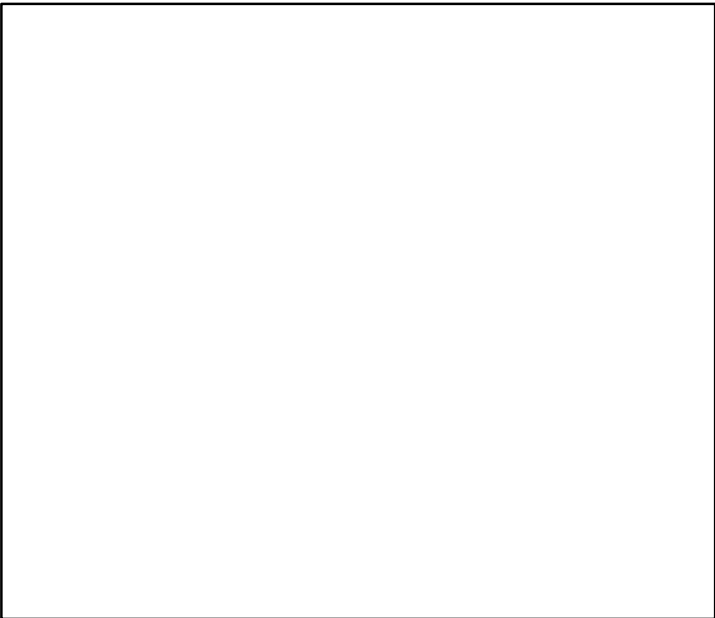
Kobe MSY*



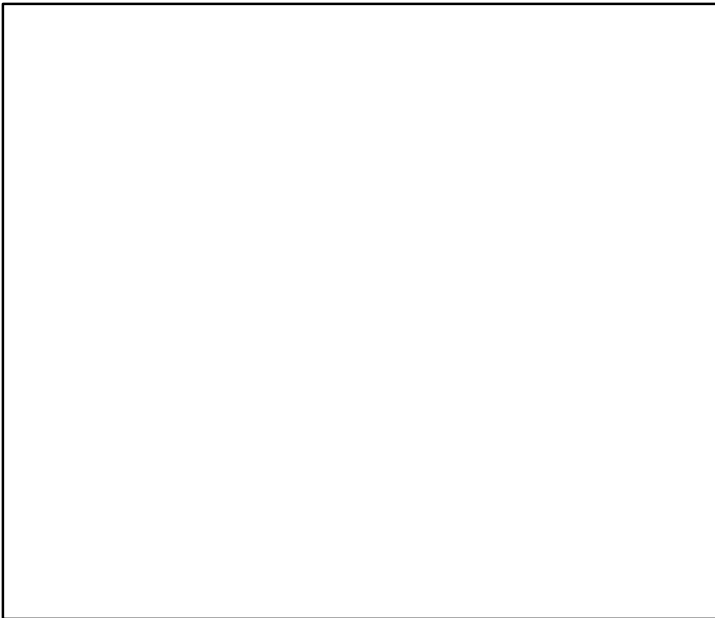
Kobe MGT*



Spawner Recruit*



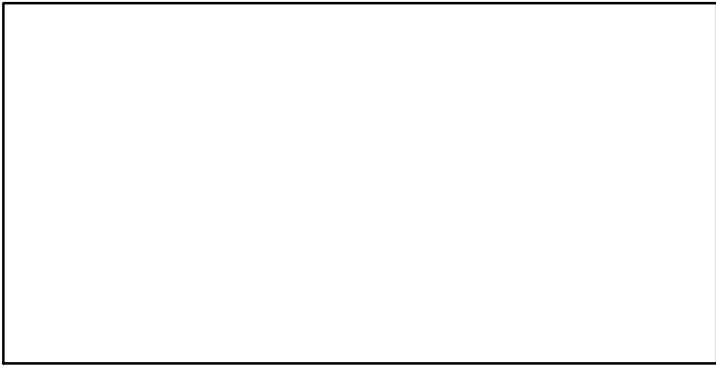
Production*



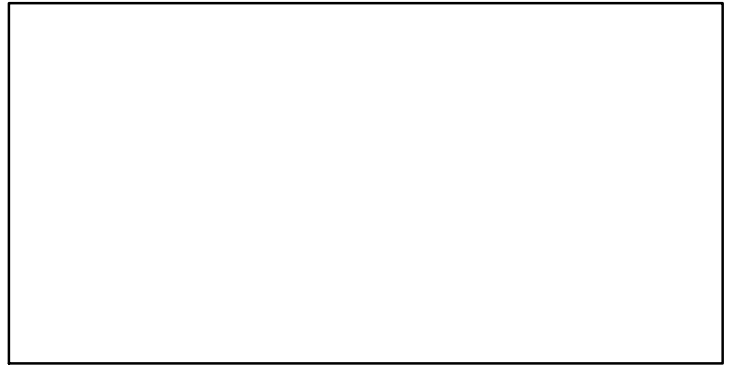
◆ Start Year ◆ End Year * No Data

Sea scallop West Scallop Fishing Area 29 [SCALLWSFA29]

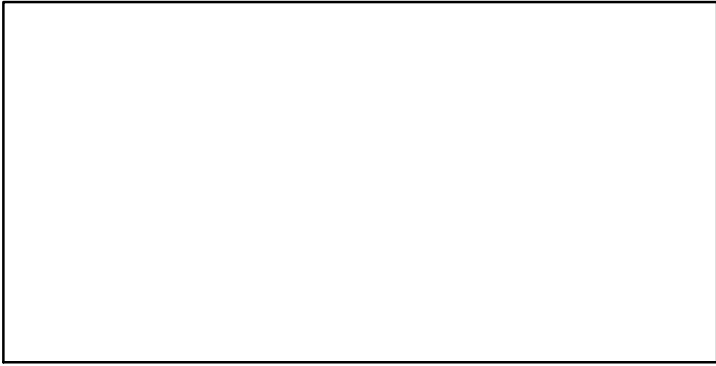
TB*



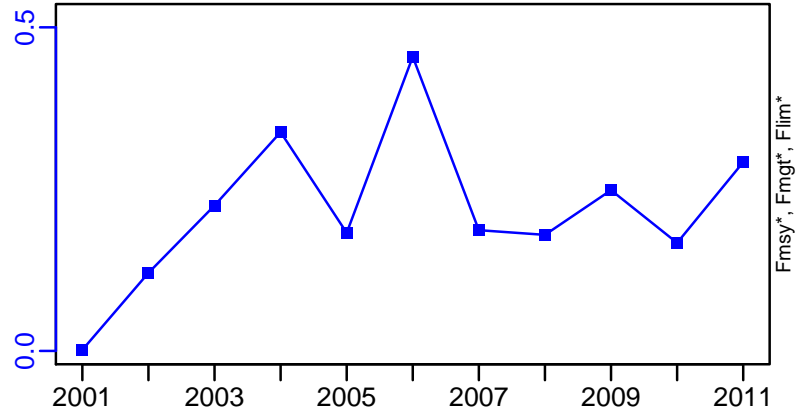
SSB*



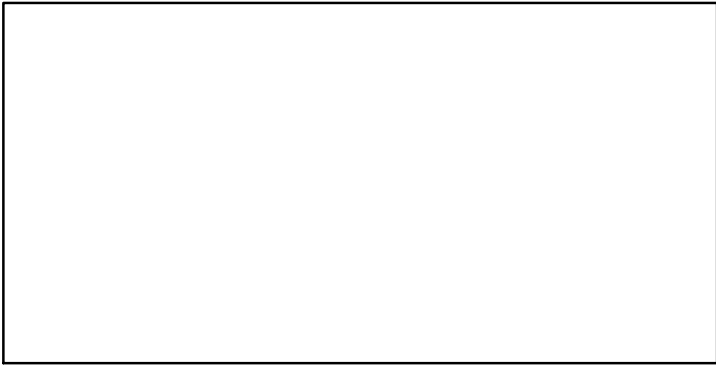
TN *



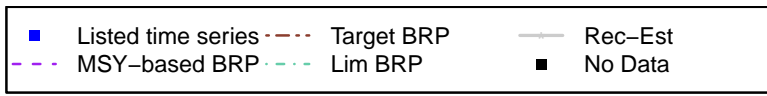
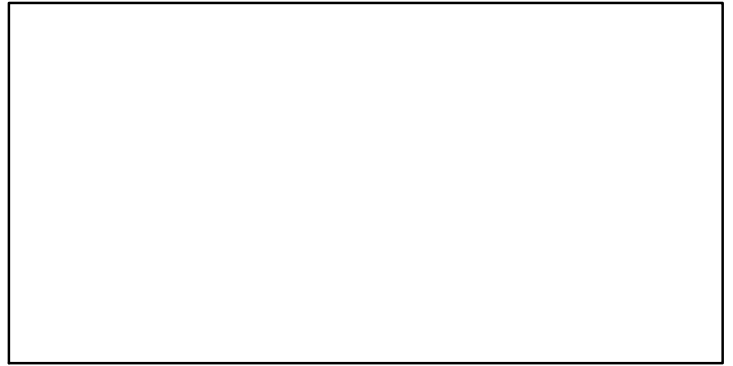
F-1/yr (2001-2011-CHING)



ER*



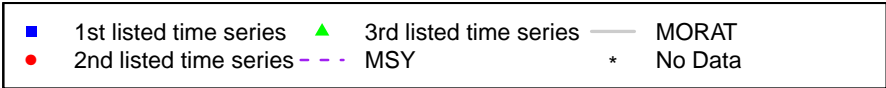
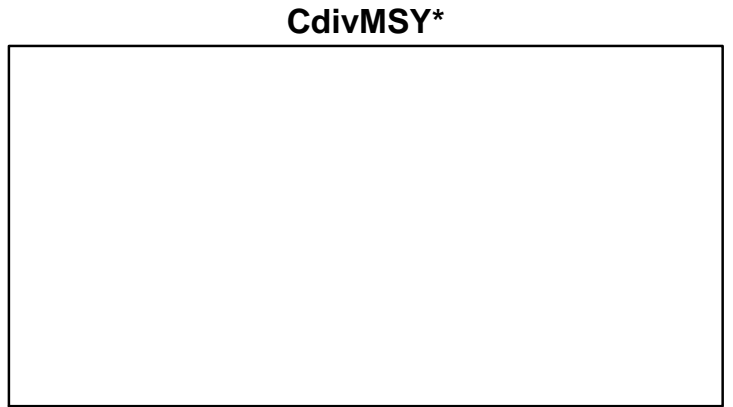
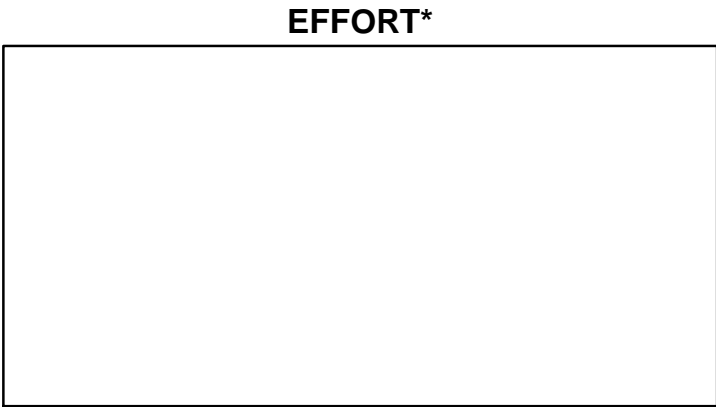
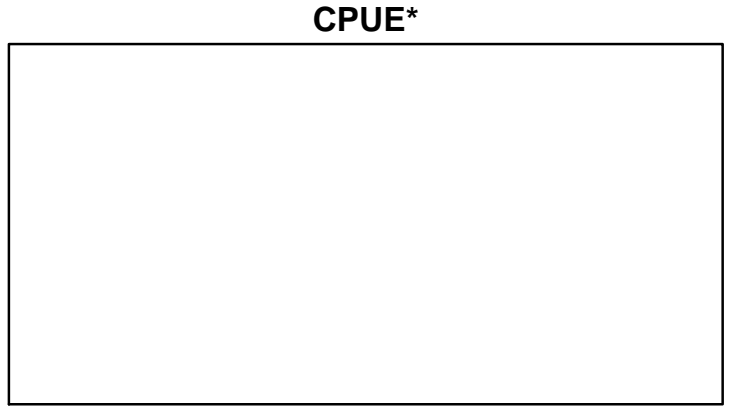
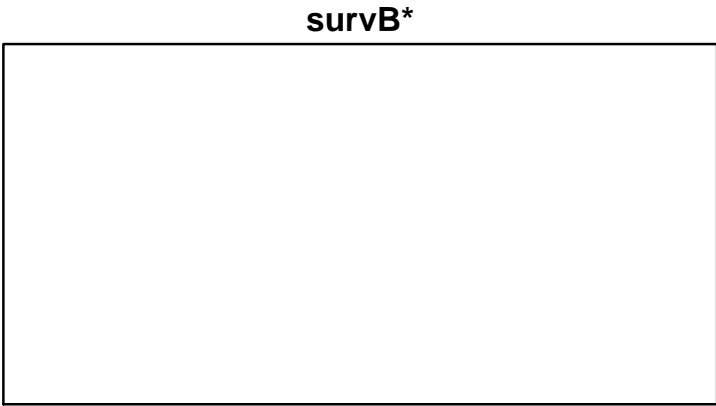
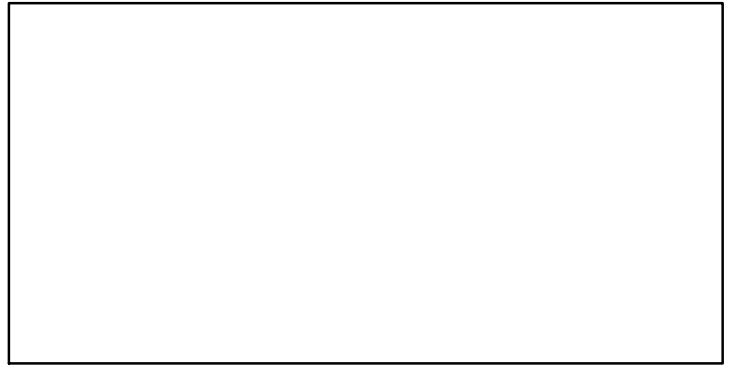
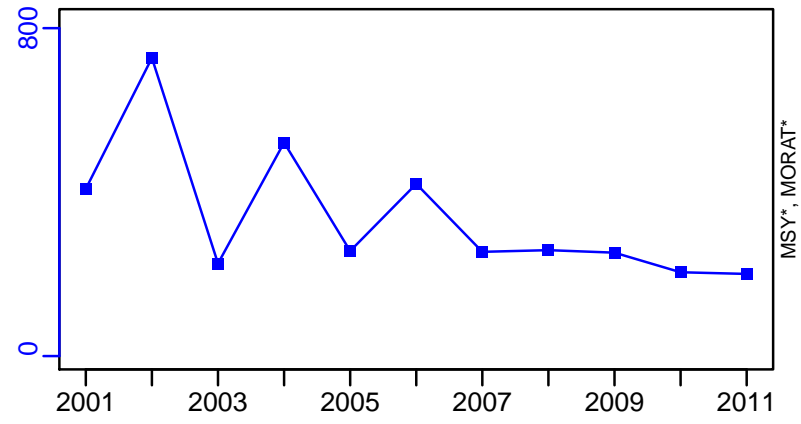
Recruits*



Sea scallop West Scallop Fishing Area 29 [SCALLWSFA29]

TL-MT, TC*, RecC* (2001-2011-CHING)

TAC*, Cpair*, Cadv*



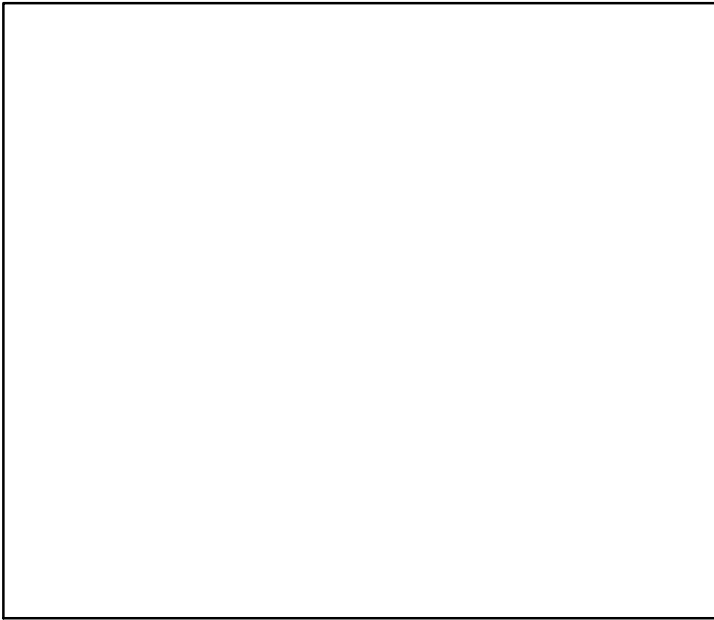
Softshell clam Quebec Coastal Waters [SSCLAMQCW]

Metadata	
Scientific Name	Mya arenaria
Current Assess ID	DFO-QUE-SSCLAMQCW-1930-2010-CHING
Area	Quebec Coastal Waters
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2010

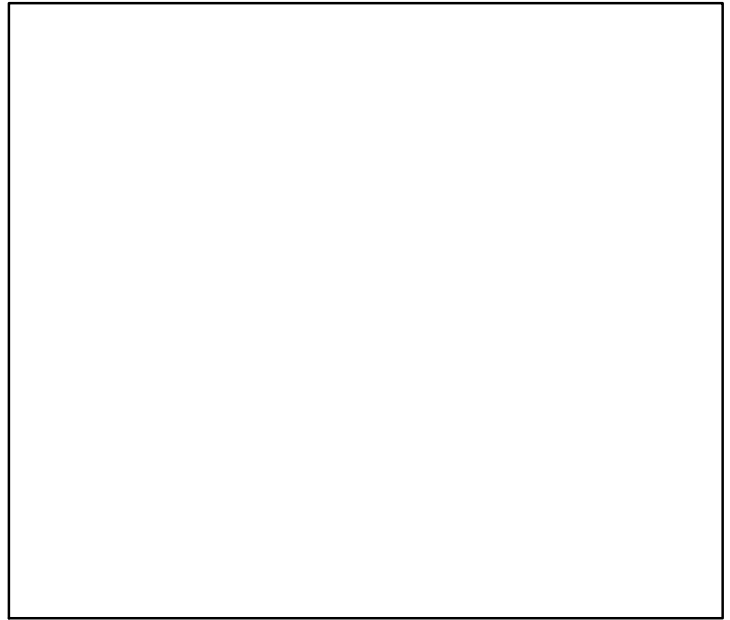
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2010	55	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

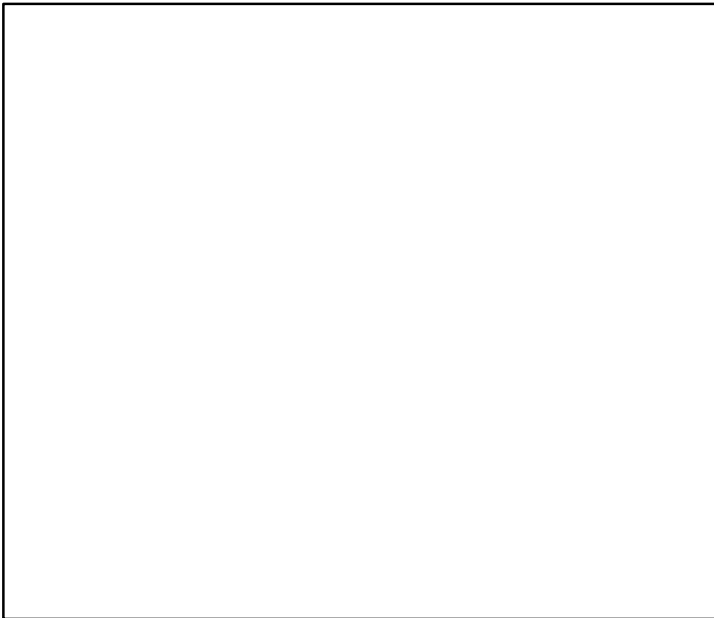
Kobe MSY*



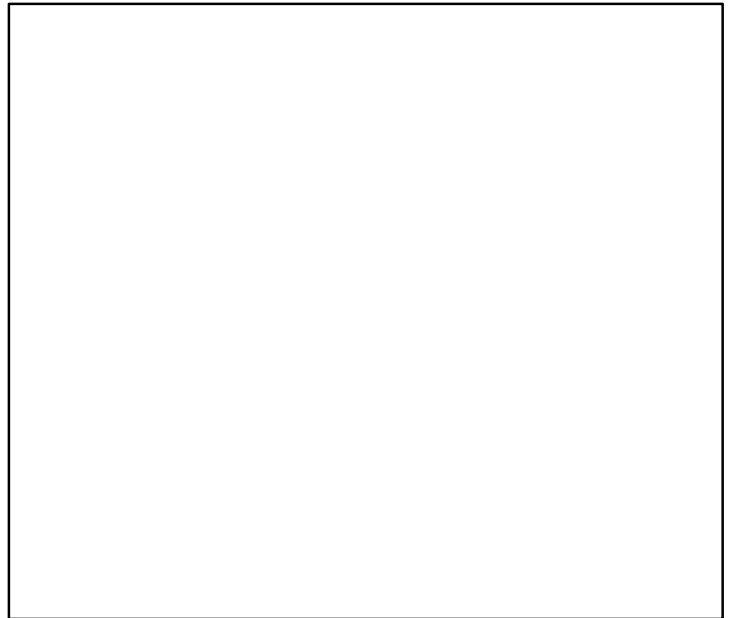
Kobe MGT*



Spawner Recruit*



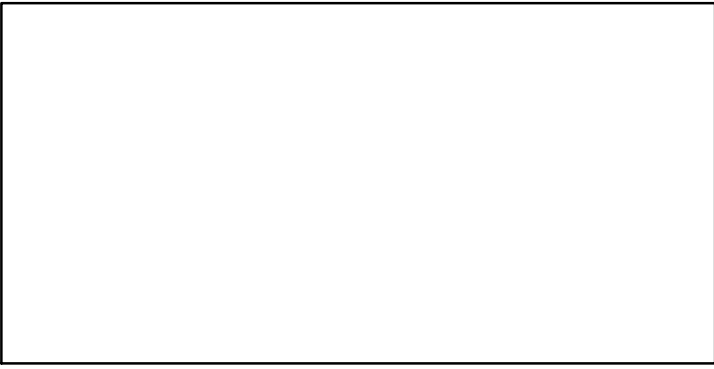
Production*



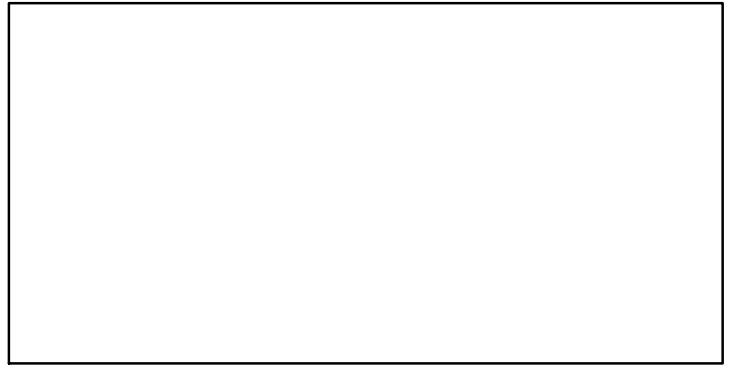
◆ Start Year ◆ End Year * No Data

Softshell clam Quebec Coastal Waters [SSCLAMQCW]

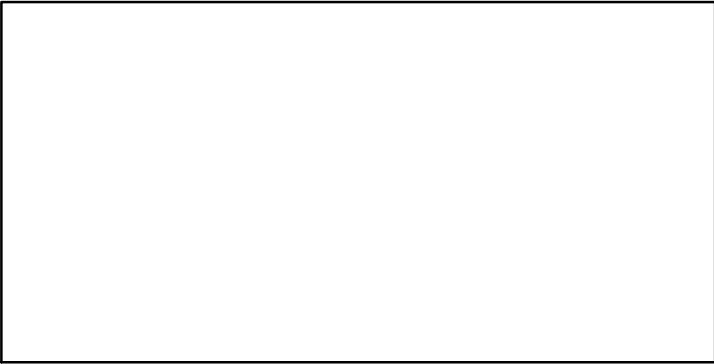
TB*



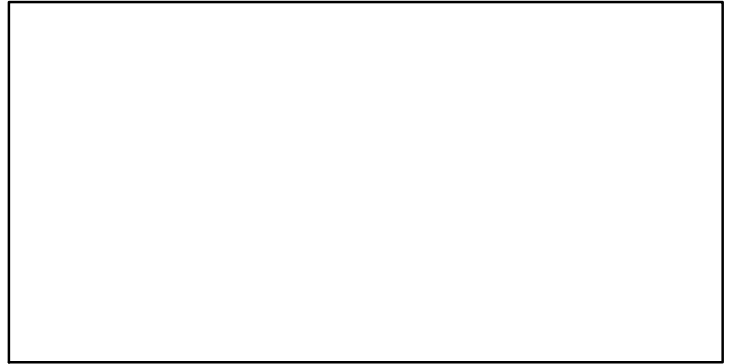
SSB*



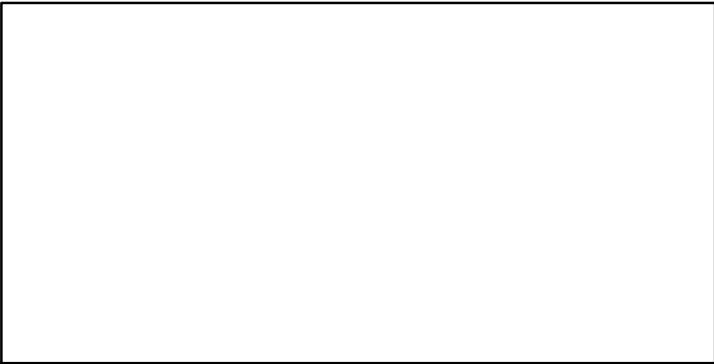
TN *



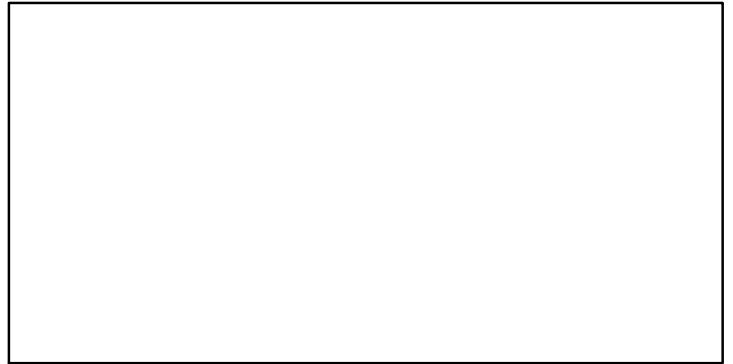
F*



ER*



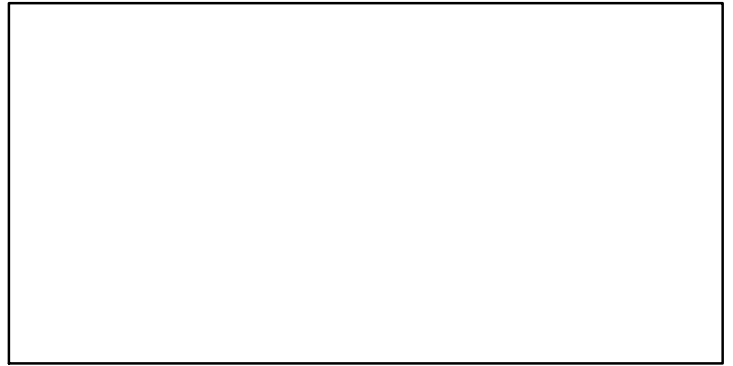
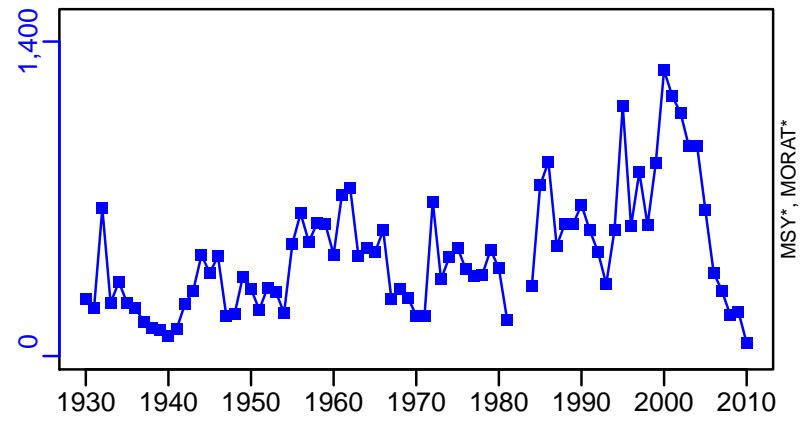
Recruits*



Softshell clam Quebec Coastal Waters [SSCLAMQCW]

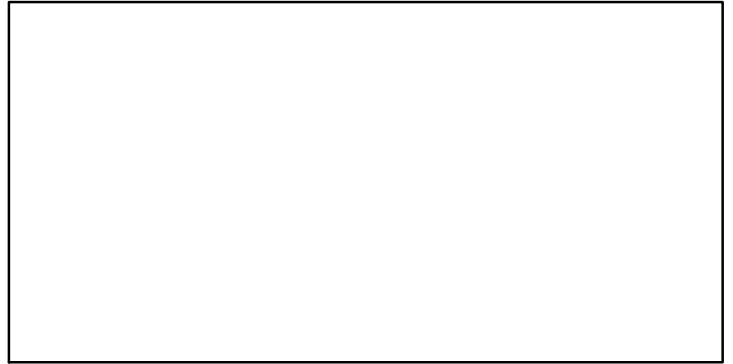
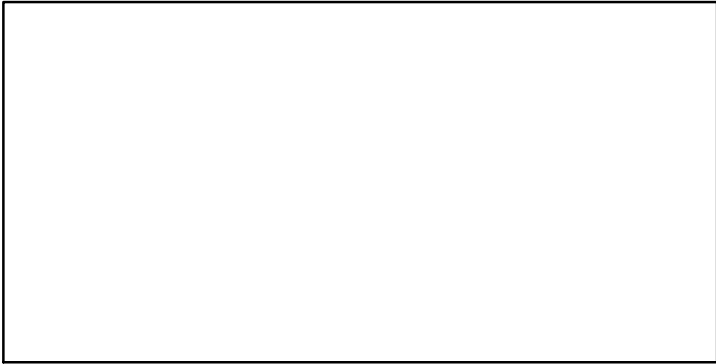
TL-MT, TC*, RecC* (1930-2010-CHING)

TAC*, Cpair*, Cadv*



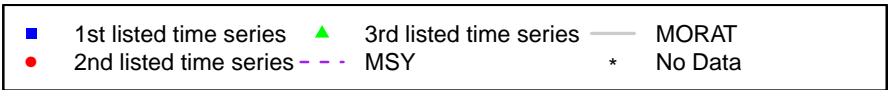
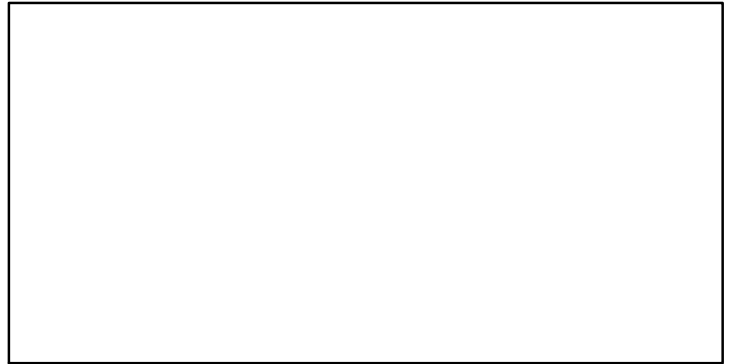
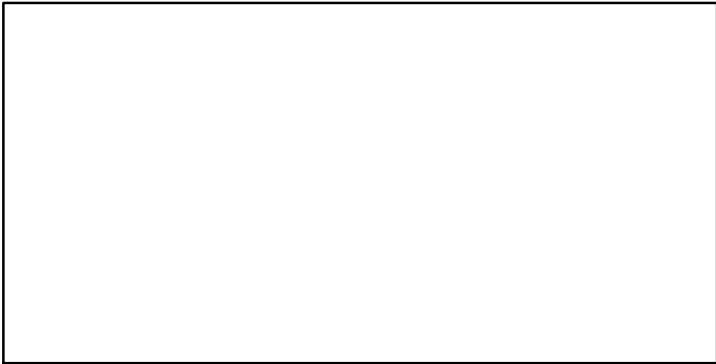
survB*

CPUE*



EFFORT*

CdivMSY*



Atlantic surfclam Mid-Atlantic Coast [SURFMATLC]

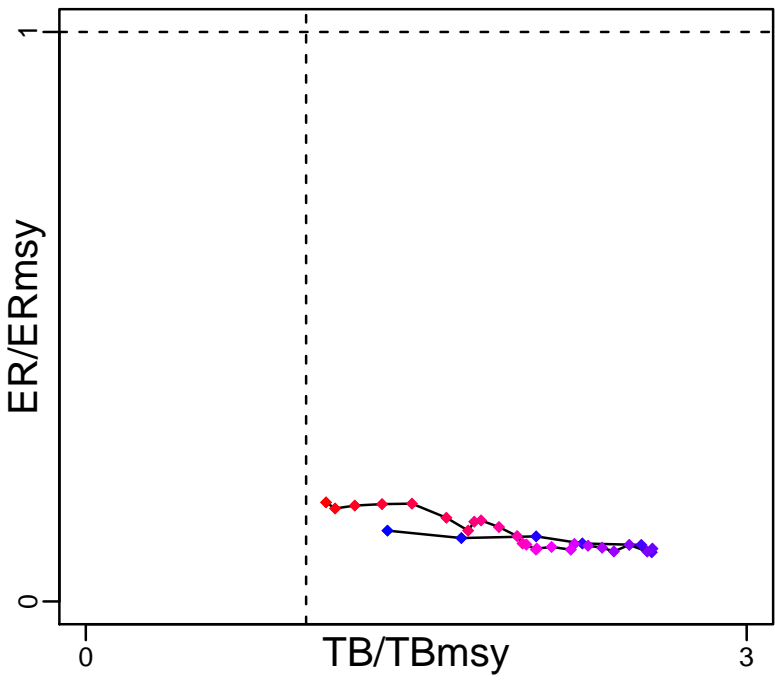
Metadata	
Scientific Name	Spisula solidissima
Current Assess ID	NEFSC-SURFMATLC-1982-2011-SISIMP2016
Area	Mid-Atlantic Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northeast Fisheries Science Center
Asmts in RAM	2008, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2011	972,000
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2011	0.15
ERmsy	ERmsy-calc-ratio	2011	0.101
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2011	98,000
M	M-1/yr	2008	0.15
TBlim	TBlim-MT	2011	486,000
SSBlim	-	-	-
Flim	Flim-1/yr	2011	0.15
ERlim	-	-	-

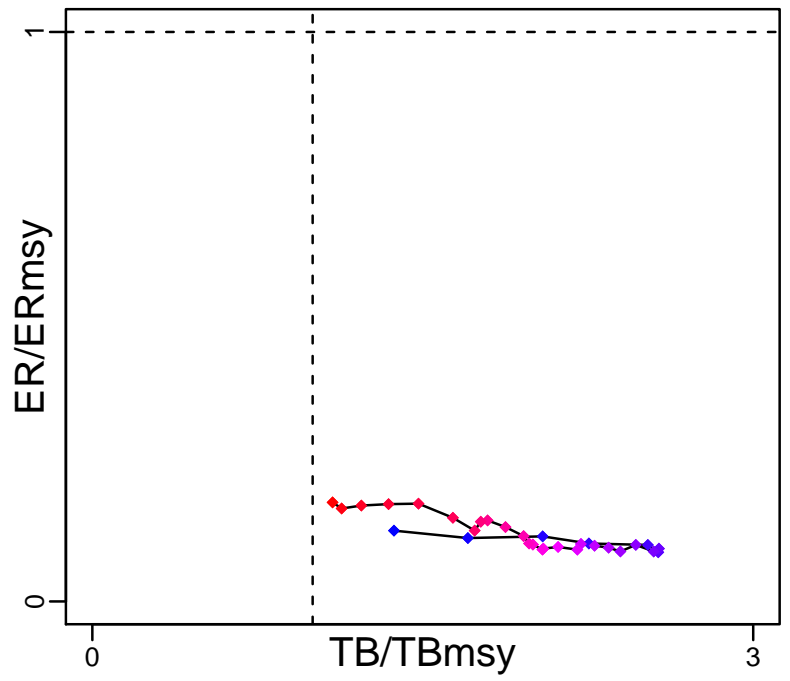
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	1,060,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2011	2,090,000	-	-
F	F-1/yr	2011	0.027	-	-
ER	ER-calc-ratio	2011	0.018	-	-
TC	TC-MT	2011	18,600		
TL	TL-MT	2008	22,500		
TB/TBmsy	TB-MT/TBmsy-MT	2011	1.091		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2011	0.18		
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2011	0.174		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic surfclam Mid-Atlantic Coast [SURFMATLC]

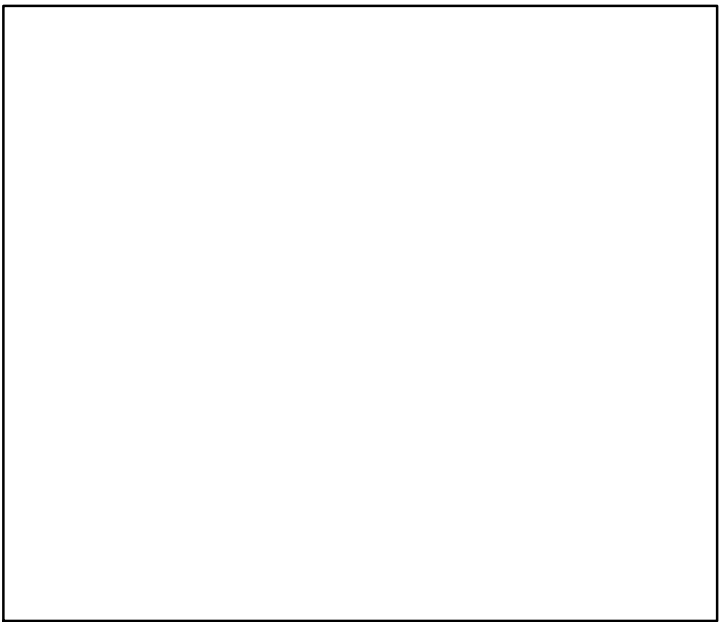
Kobe MSY_{pref} (1982–2011–SISIMP2016)



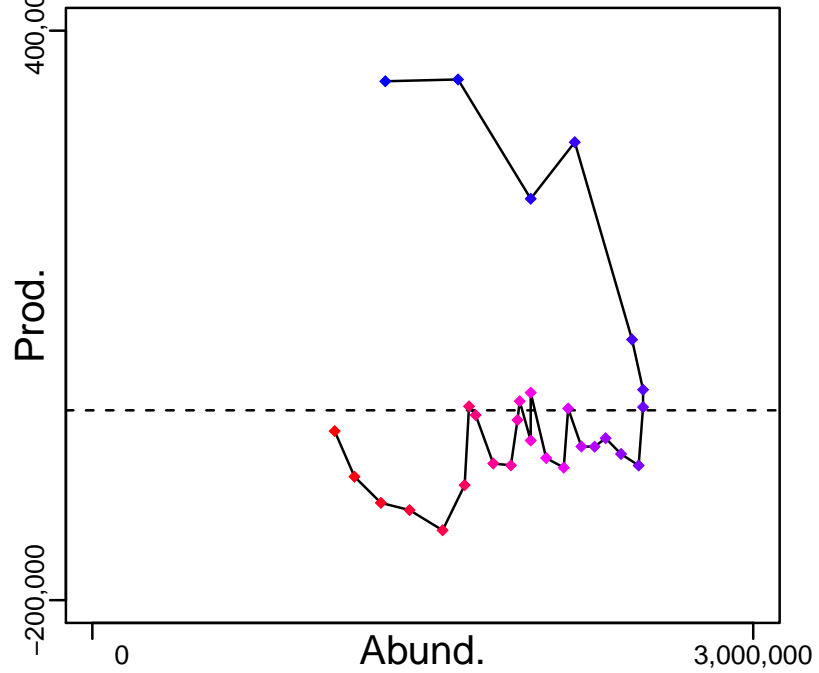
Kobe MGT_{pref} (1982–2011–SISIMP2016)



Spawner Recruit*



Production (1982–2011–SISIMP2016)

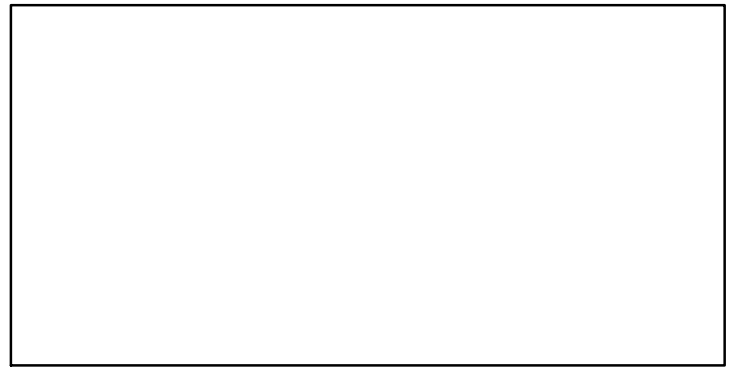
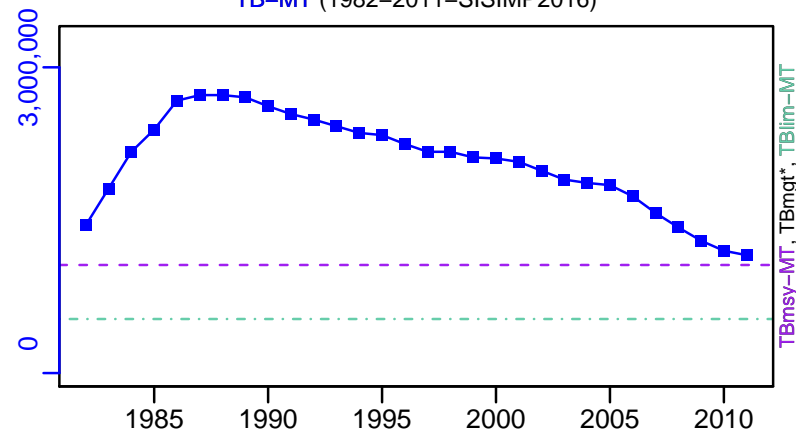


◆ Start Year ◆ End Year * No Data

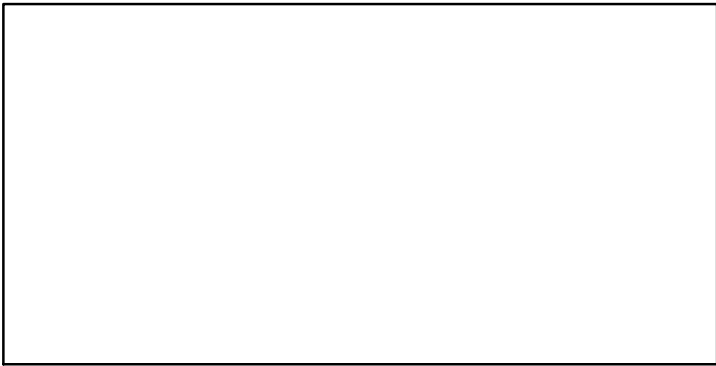
Atlantic surfclam Mid-Atlantic Coast [SURFMATLC]

TB-MT (1982-2011-SISIMP2016)

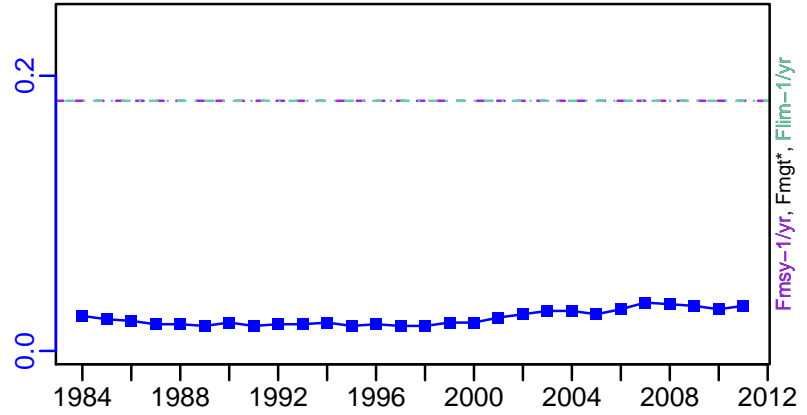
SSB*



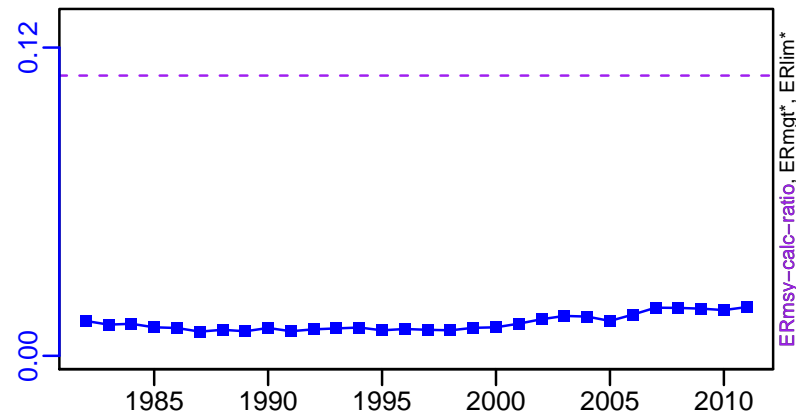
TN *



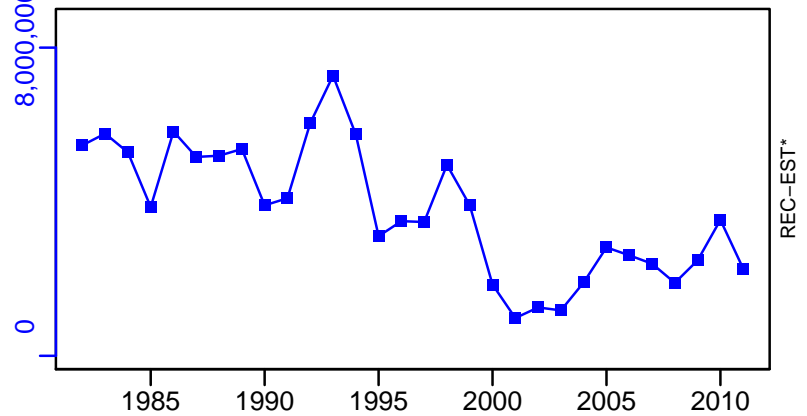
F-1/yr (1982-2011-SISIMP2016)



ER-calc-ratio (1982-2011-SISIMP2016)



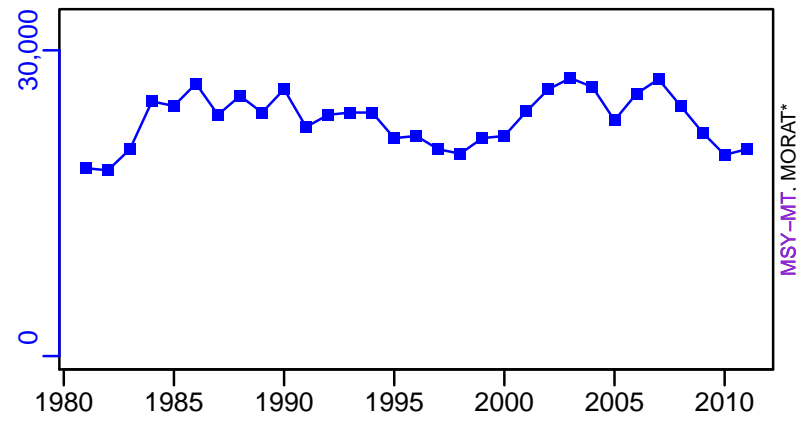
R-MT (1982-2011-SISIMP2016)



Atlantic surfclam Mid-Atlantic Coast [SURFMATLC]

TC-MT, TL*, RecC* (1982-2011-SISIMP2016)

TAC*, Cpair*, Cadv*

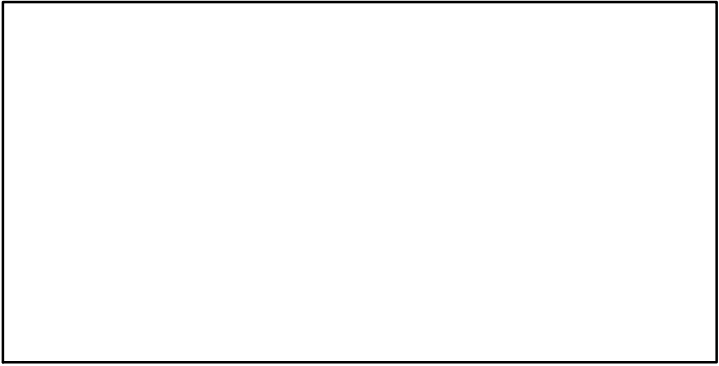
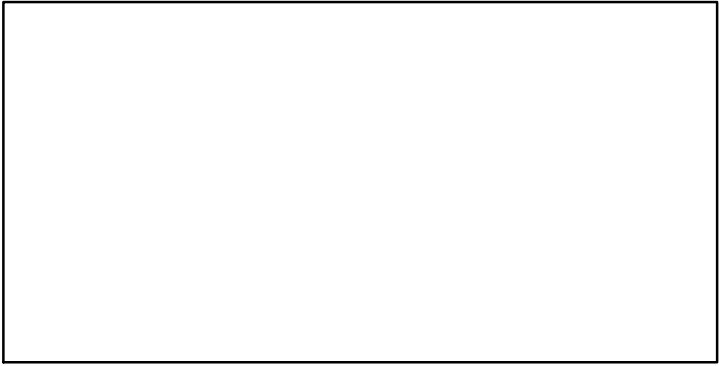


MSY-MT, MORAT*



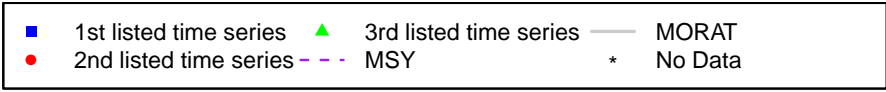
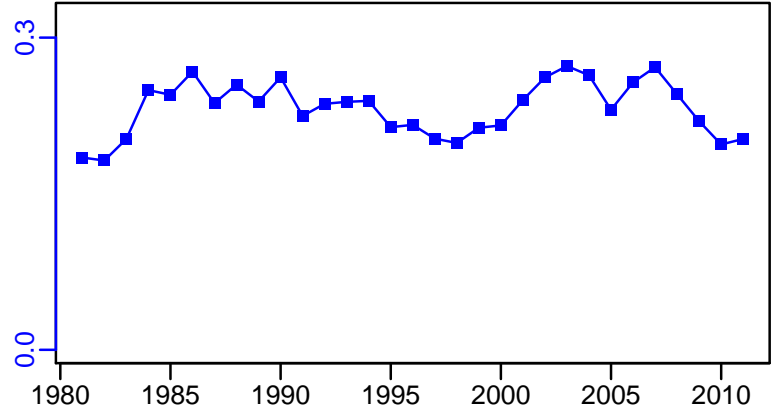
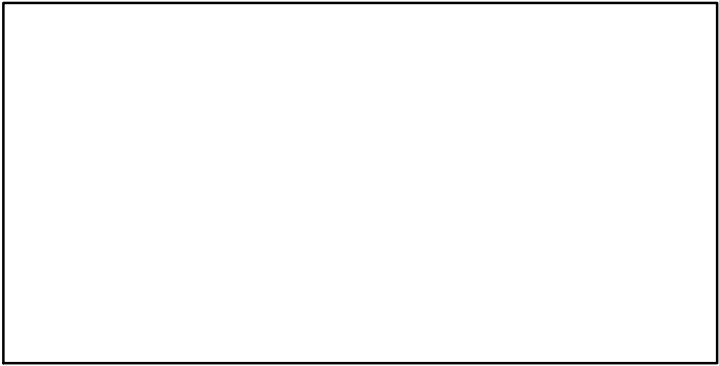
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1982-2011-SISIMP2016)



Weathervane scallop Alaska [WVSCALLALASKA]

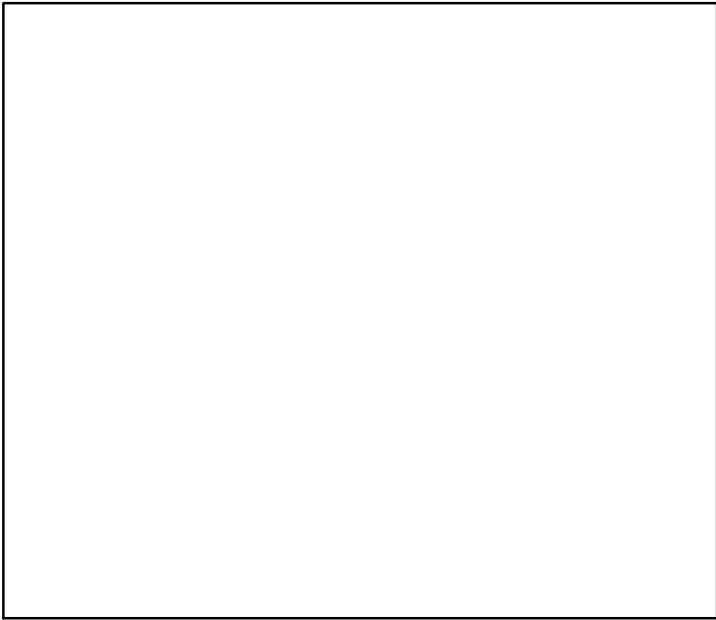
Metadata	
Scientific Name	Patinopecten caurinus
Current Assess ID	AFSC-WVSCALLALASKA-1994-2015-SISIMP2016
Area	Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	582
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	140		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Weathervane scallop Alaska [WVSCALLALASKA]

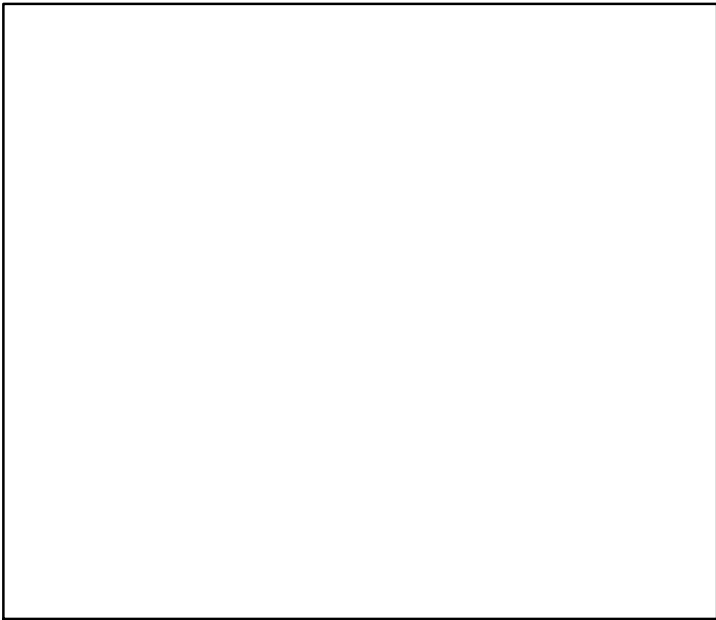
Kobe MSY*



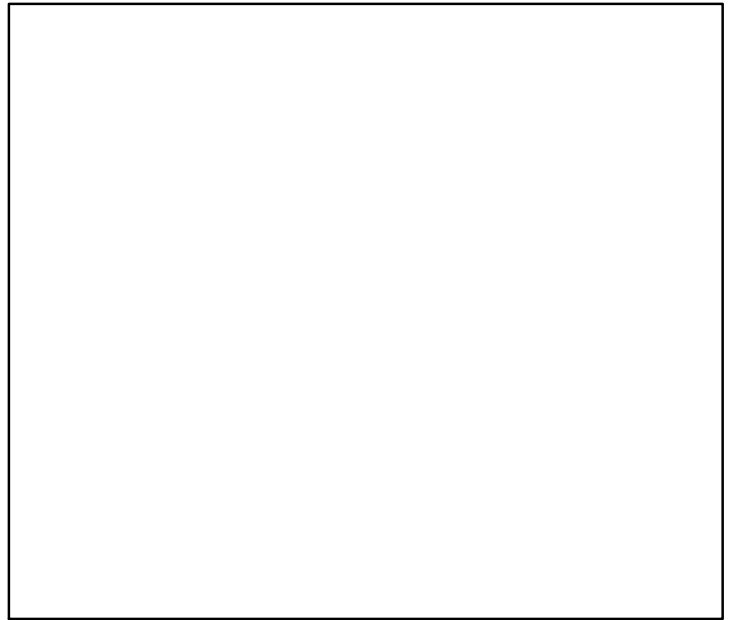
Kobe MGT*



Spawner Recruit*



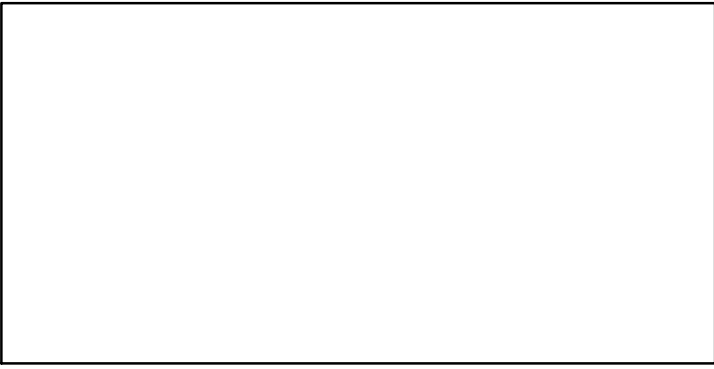
Production*



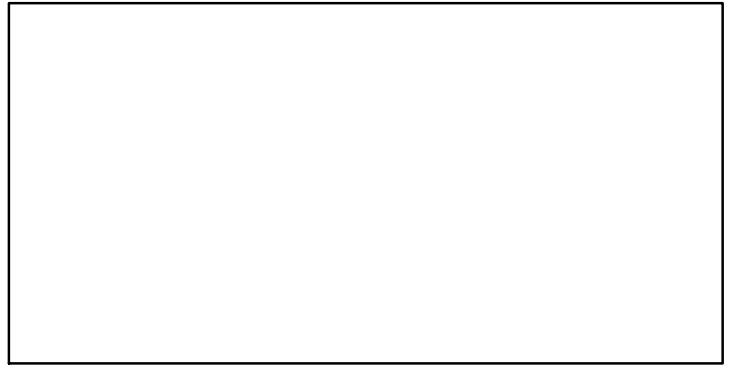
◆ Start Year ◆ End Year * No Data

Weathervane scallop Alaska [WVSCALLALASKA]

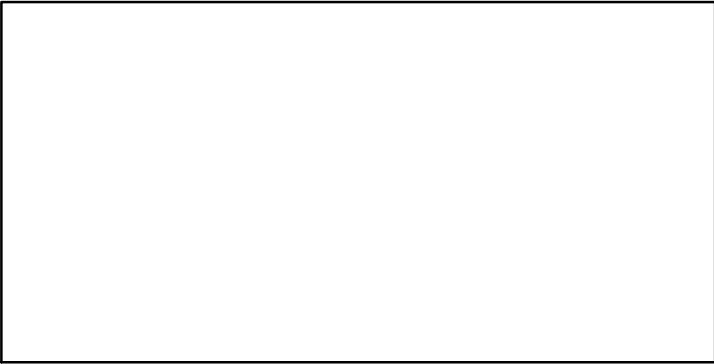
TB*



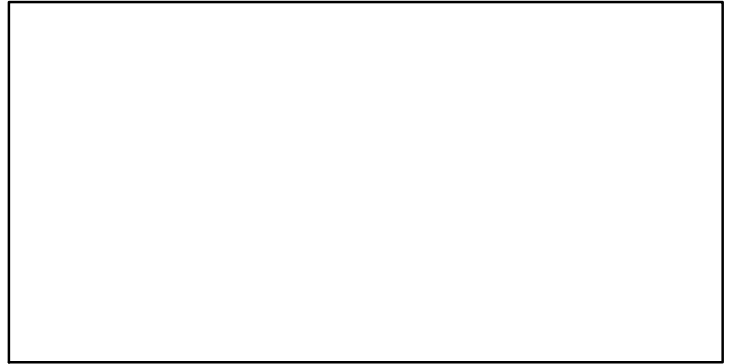
SSB*



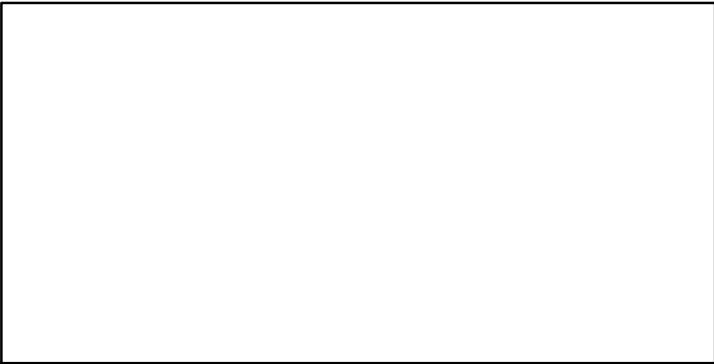
TN *



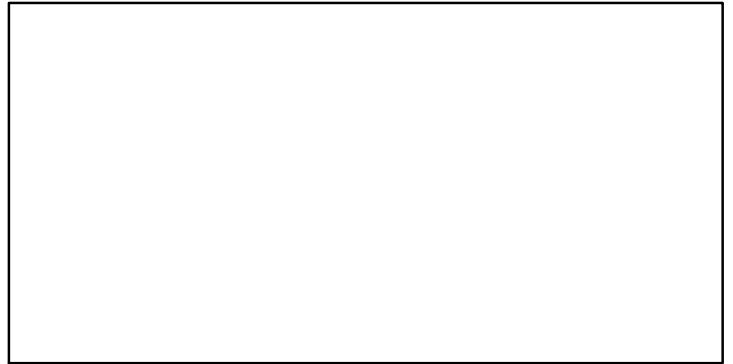
F*



ER*



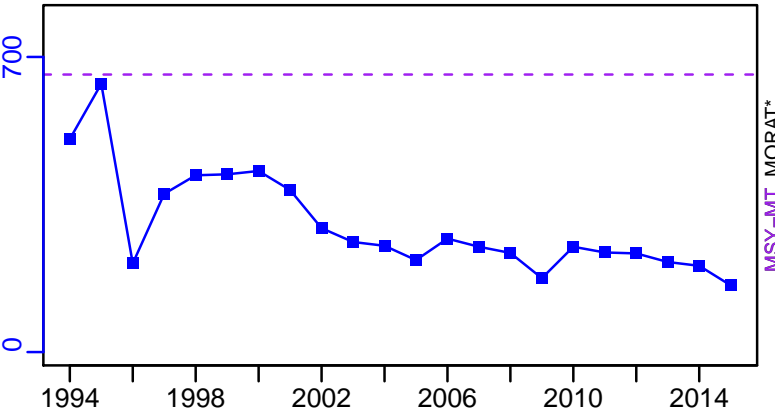
Recruits*



Weathervane scallop Alaska [WVSCALLALASKA]

TC-MT, TL*, RecC* (1994-2015-SISIMP2016)

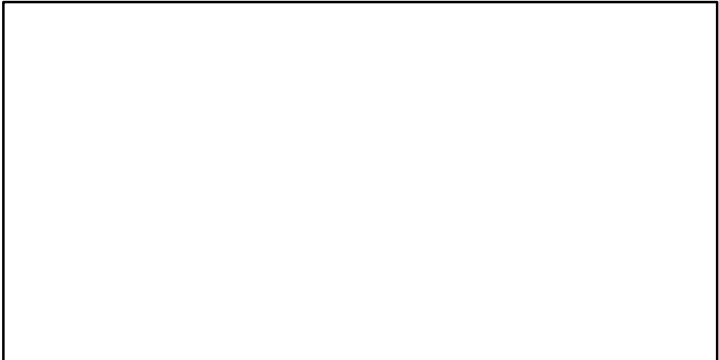
TAC*, Cpair*, Cadv*



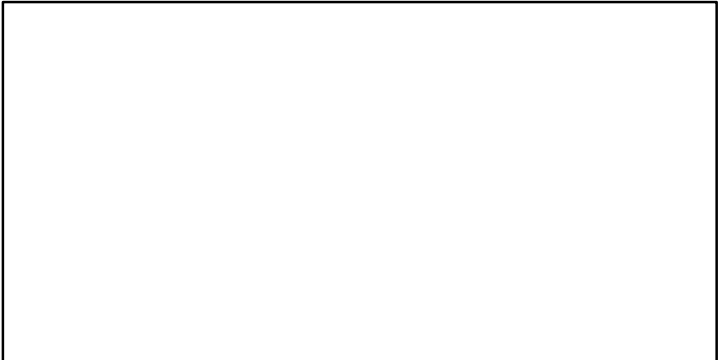
MSY-MT, MORAT*



survB*



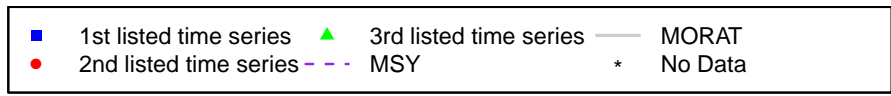
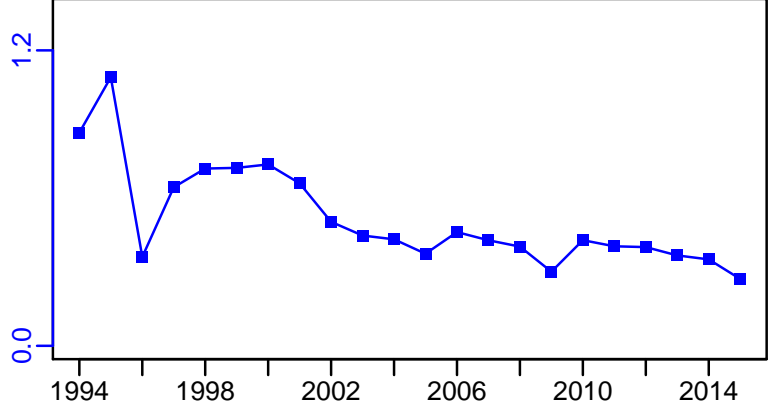
CPUE*



EFFORT*



CdivMSY-ratio (1994-2015-SISIMP2016)



Waved whelk Quebec Coastal Waters [WWHELKQCW]

Metadata	
Scientific Name	Buccinum undatum
Current Assess ID	DFO-QUE-WWHELKQCW-1987-2011-CHING
Area	Quebec Coastal Waters
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	1360	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

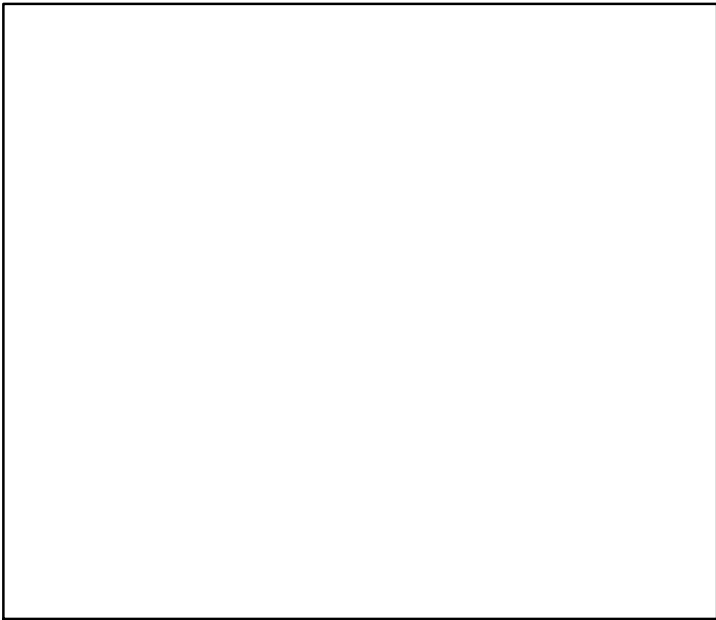
Kobe MSY*



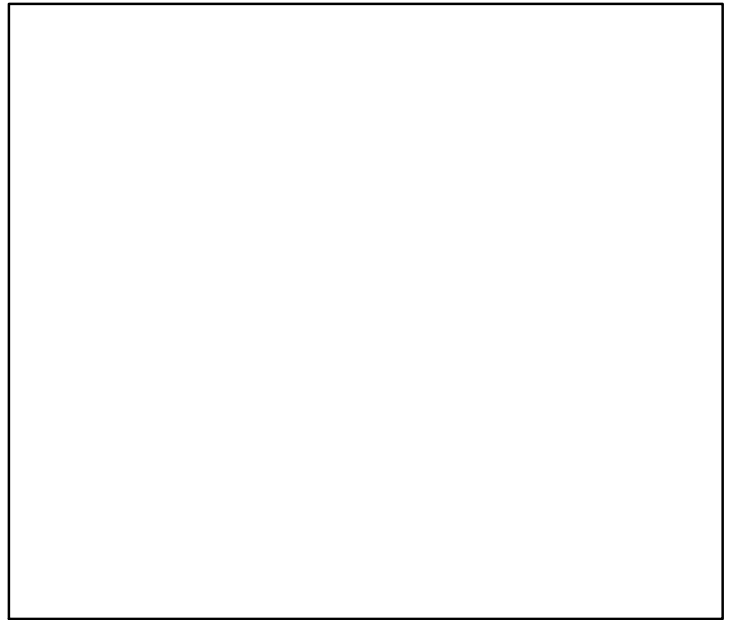
Kobe MGT*



Spawner Recruit*



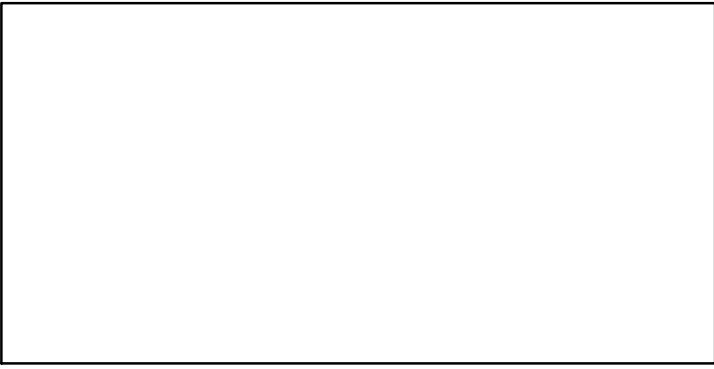
Production*



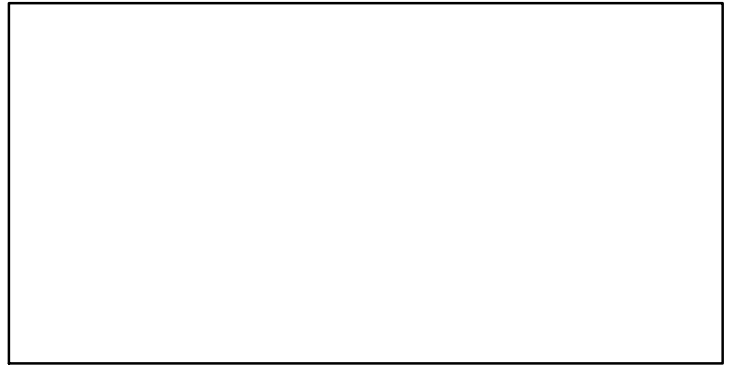
◆ Start Year ◆ End Year * No Data

Waved whelk Quebec Coastal Waters [WWHELKQCW]

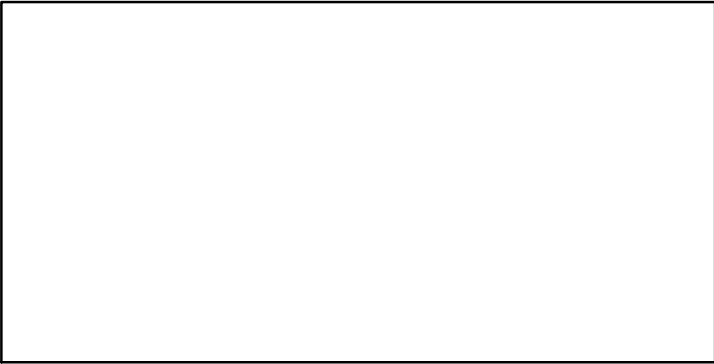
TB*



SSB*



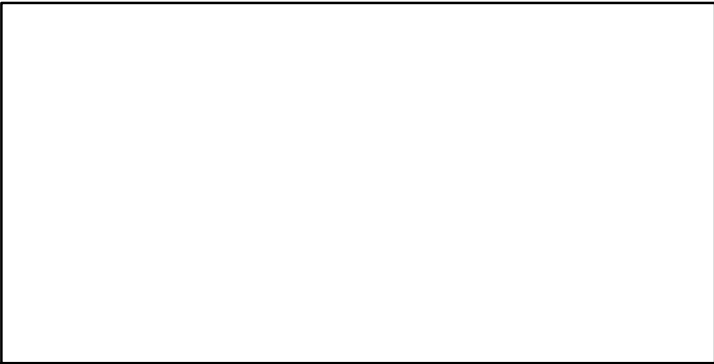
TN *



F*



ER*



Recruits*



Waved whelk Quebec Coastal Waters [WWHELKQCW]

TL-MT, TC*, RecC* (1987-2011-CHING)

TAC*, Cpair*, Cadv*

