

Canada East Coast Stocks

v4.491 (Dec-21-2019)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
1. ACADRED2J3K [Acadian redfish NAFO Division 2J3K]	TB SSB	ER F	TB SSB	ER F	
2. ACADRED3LNO-UT12 [Acadian redfish NAFO Division 3LNO and Units 1 and 2]	TB SSB	ER F	TB SSB	ER F	
3. ACADREDUT3 [Acadian redfish Unit 3]	TB SSB	ER F	TB SSB	ER F	
4. AMPL23K [American plaice Labrador - NE Newfoundland]	TB SSB	ER F	TB SSB	ER F	
5. AMPL3LNO [American plaice Grand Banks]	TB SSB	ER F	TB SSB	ER F	
6. AMPL3M [American plaice Flemish Cap]	TB SSB	ER F	TB SSB	ER F	
7. AMPL3Ps [American plaice St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F	
8. AMPL4T [American plaice Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
9. AMPL4VWX [American plaice Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F	
10. ARCSURF4RST [Arctic surfclam Quebec and Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
11. ARCSURFBANQ [Arctic surfclam Banquereau]	TB SSB	ER F	TB SSB	ER F	
12. ARCSURFGB [Arctic surfclam Division 3LNO]	TB SSB	ER F	TB SSB	ER F	
13. ARCSURFQCW [Arctic surfclam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F	
14. ATHAL3NOPs4VWX5Zc [Atlantic halibut Scotian Shelf and Southern Grand Banks]	TB SSB	ER F	TB SSB	ER F	
15. BSKATCANATL [Barndoor skate Canadian Atlantic Ocean]	TB SSB	ER F	TB SSB	ER F	
16. CAPE4RST [Capelin Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
17. COD1abdce [Atlantic cod NAFO 1abdce]	TB SSB	ER F	TB SSB	ER F	
18. COD1IN [Atlantic cod NAFO Subarea 1 (inshore)]	TB SSB	ER F	TB SSB	ER F	
19. COD2J3KL [Atlantic cod Southern Labrador-Eastern Newfoundland]	TB SSB	ER F	TB SSB	ER F	
20. COD3M [Atlantic cod Flemish Cap]	TB SSB	ER F	TB SSB	ER F	
21. COD3NO [Atlantic cod Southern Grand Banks]	TB SSB	ER F	TB SSB	ER F	
22. COD3Pn4RS [Atlantic cod Northern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
23. COD3Ps [Atlantic cod St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F	
24. COD4TVn [Atlantic cod Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
25. COD4VsW [Atlantic cod Eastern Scotian Shelf]	TB SSB	ER F	TB SSB	ER F	
26. COD4X5Yb [Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine]	TB SSB	ER F	TB SSB	ER F	
27. COD5Zjm [Atlantic cod NAFO 5Zjm]	TB SSB	ER F	TB SSB	ER F	
28. CUSK4X [Cusk Western Scotian Shelf]	TB SSB	ER F	TB SSB	ER F	
29. GHAL01ABCDEF [Greenland halibut NAFO divisions 01ABCDEF]	TB SSB	ER F	TB SSB	ER F	
30. GHAL23KLMNO [Greenland halibut Labrador Shelf - Grand Banks]	TB SSB	ER F	TB SSB	ER F	
31. GHAL4RST [Greenland halibut Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
32. GURCH4RST [Green sea urchin Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F	
33. HAD3LNO [Haddock Grand Banks]	TB SSB	ER F	TB SSB	ER F	
34. HAD4X5Y [Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine]	TB SSB	ER F	TB SSB	ER F	
35. HERR4RFA [Herring NAFO division 4R (Fall spawners)]	TB SSB	ER F	TB SSB	ER F	

36. HERR4RSP [Herring NAFO division 4R (Spring spawners)]	TB SSB	ER F	TB SSB	ER F
37. HERR4S [Herring Quebec North Shore]	TB SSB	ER F	TB SSB	ER F
38. HERR4TFA [Herring Southern Gulf of St. Lawrence (Fall spawners)]	TB SSB	ER F	TB SSB	ER F
39. HERR4TSP [Herring Southern Gulf of St. Lawrence (Spring spawners)]	TB SSB	ER F	TB SSB	ER F
40. HERR4VWX [Herring Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F
41. HERRNFLDESC [Herring Newfoundland East and South Coast]	TB SSB	ER F	TB SSB	ER F
42. LOBSTERLFA15-18 [American lobster Quebec North Shore and Anticosti Island (LFA 15-18)]	TB SSB	ER F	TB SSB	ER F
43. LOBSTERLFA19-21 [American lobster Gaspé (LFA 19-21)]	TB SSB	ER F	TB SSB	ER F
44. LOBSTERLFA22 [American lobster Magdalen Islands (LFA 22)]	TB SSB	ER F	TB SSB	ER F
45. LOBSTERLFA23-26AB [American lobster Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
46. LOBSTERLFA27-33 [American lobster Atlantic Coast of Nova Scotia (LFA 27-33)]	TB SSB	ER F	TB SSB	ER F
47. LOBSTERLFA3-14 [American lobster Lobster Fishing Areas 3-14]	TB SSB	ER F	TB SSB	ER F
48. LOBSTERLFA34 [American lobster Lobster Fishing Area 34]	TB SSB	ER F	TB SSB	ER F
49. LOBSTERLFA35-38 [American lobster Lobster Fishing Areas 35-38]	TB SSB	ER F	TB SSB	ER F
50. LOBSTERLFA41 [American lobster Lobster Fishing Area 41]	TB SSB	ER F	TB SSB	ER F
51. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]	TB SSB	ER F	TB SSB	ER F
52. MONK3LNOPs [Monkfish NAFO Divisions 3LNOPs]	TB SSB	ER F	TB SSB	ER F
53. PANDAL4RST [Northern shrimp Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
54. PANDALSFA13-15 [Northern shrimp Eastern Scotian Shelf (SFA 13-15)]	TB SSB	ER F	TB SSB	ER F
55. PANDALSFA2-3 [Northern shrimp Shrimp Fishing Areas 2-3]	TB SSB	ER F	TB SSB	ER F
56. PANDALSFA4 [Northern shrimp Shrimp Fishing Area 4]	TB SSB	ER F	TB SSB	ER F
57. PANDALSFA5 [Northern shrimp Shrimp Fishing Area 5]	TB SSB	ER F	TB SSB	ER F
58. PANDALSFA6 [Northern shrimp Shrimp Fishing Area 6]	TB SSB	ER F	TB SSB	ER F
59. POLL3Ps [Pollock St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
60. POLL4VWX [Pollock Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F
61. PORSHARATL [Porbeagle shark Canadian Atlantic Ocean]	TB SSB	ER F	TB SSB	ER F
62. REDDEEP2J3K-3LNO [Deepwater redfish NAFO Divisions 2J3K-3LNO]	TB SSB	ER F	TB SSB	ER F
63. REDDEEPUT12 [Deepwater redfish Units 1 and 2]	TB SSB	ER F	TB SSB	ER F
64. REDFISHSPP1 [Redfish species West Greenland]	TB SSB	ER F	TB SSB	ER F
65. REDFISHSPP3LN [Redfish species N and SW Grand Banks]	TB SSB	ER F	TB SSB	ER F
66. REDFISHSPP3M [Redfish species Flemish Cap]	TB SSB	ER F	TB SSB	ER F
67. REDFISHSPP3Pn4RSTVn [Redfish species Gulf of St. Lawrence and Cabot Strait]	TB SSB	ER F	TB SSB	ER F
68. ROCKCRABLFA23-26 [Rock crab Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
69. ROCKCRABQCW [Rock crab Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
70. SCALL3Ps [Sea scallop St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
71. SCALL4T [Sea scallop Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
72. SCALLGB [Sea scallop Georges Bank]	TB SSB	ER F	TB SSB	ER F
73. SCALLNBB [Sea scallop North Brown Bank]	TB SSB	ER F	TB SSB	ER F
74. SCALLSFA16-20 [Sea scallop Scallop Fishing Areas 16-20]	TB SSB	ER F	TB SSB	ER F
75. SCALLSPA1-6 [Sea scallop Bay of Fundy (SPA 1-6)]	TB SSB	ER F	TB SSB	ER F
76. SCALLWSFA29 [Sea scallop West Scallop Fishing Area 29]	TB SSB	ER F	TB SSB	ER F

77. SDOG4VWX5 [Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank]	TB SSB	ER F	TB SSB	ER F
78. SHAKE4VWX [Silver hake Scotian Shelf and Bay of Fundy]	TB SSB	ER F	TB SSB	ER F
79. SMOOTHSKA2J3K [Smooth skate NAFO Division 2J3K]	TB SSB	ER F	TB SSB	ER F
80. SMOOTHSKA4T [Smooth skate Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
81. SNOWCRAB2HJ [Snow crab Division 2HJ]	TB SSB	ER F	TB SSB	ER F
82. SNOWCRAB3K [Snow crab Division 3K]	TB SSB	ER F	TB SSB	ER F
83. SNOWCRAB3LNO [Snow crab Division 3LNO]	TB SSB	ER F	TB SSB	ER F
84. SNOWCRAB3Ps [Snow crab St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
85. SNOWCRAB4R3Pn [Snow crab Division 4R3Pn]	TB SSB	ER F	TB SSB	ER F
86. SNOWCRABSCMA12-17 [Snow crab Northern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
87. SNOWCRABSGSL [Snow crab Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
88. SSCLAMQCW [Softshell clam Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
89. STRSHRIMPFA2-3 [Aesop shrimp Shrimp Fishing Areas 2-3]	TB SSB	ER F	TB SSB	ER F
90. TSKA3LNOPs [Thorny skate Grand Bank and St Pierre Bank]	TB SSB	ER F	TB SSB	ER F
91. TSKA4T [Thorny skate Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
92. WHAKE3Ps [White hake St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
93. WHAKE4RS [White hake Northern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
94. WHAKE4T [White hake Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
95. WHAKE4VWX5 [White hake Scotian Shelf, Bay of Fundy and Georges Bank]	TB SSB	ER F	TB SSB	ER F
96. WINFLOUN4T [Winter flounder Southern Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
97. WITFLOUN3Ps [Witch flounder St. Pierre Bank]	TB SSB	ER F	TB SSB	ER F
98. WITFLOUN4RST [Witch flounder Gulf of St. Lawrence]	TB SSB	ER F	TB SSB	ER F
99. WWHELKQCW [Waved whelk Quebec Coastal Waters]	TB SSB	ER F	TB SSB	ER F
100. YELL3LNO [Yellowtail flounder Grand Banks]	TB SSB	ER F	TB SSB	ER F

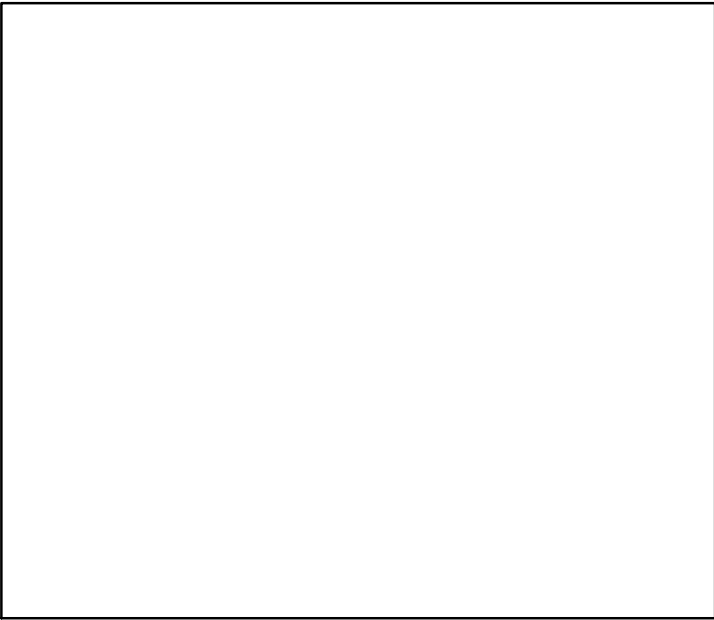
Acadian redfish NAFO Division 2J3K [ACADRED2J3K]

Metadata	
Scientific Name	Sebastes fasciatus
Current Assess ID	DFO-ACADRED2J3K-1960-2010-WATSON
Area	NAFO Division 2J3K
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	MSY-MT	2010	3000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	27,600	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2010	0.002	-	-
TC	TC-MT	2010	49		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

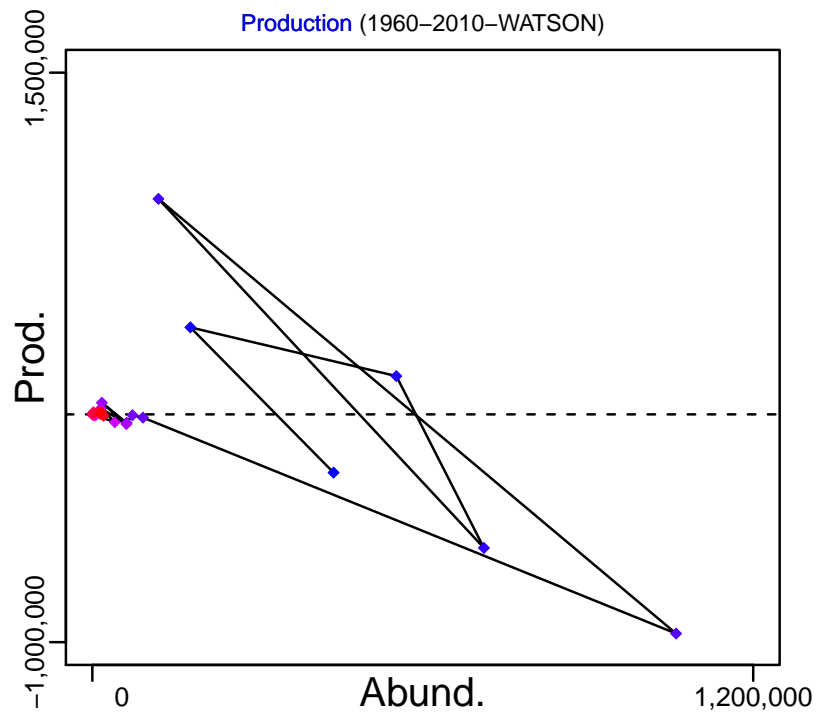
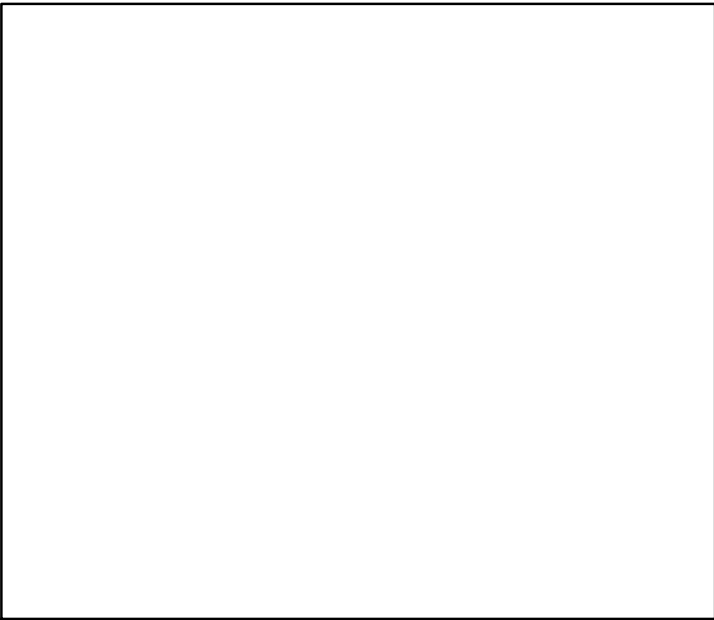
Kobe MSY*



Kobe MGT*



Spawner Recruit*

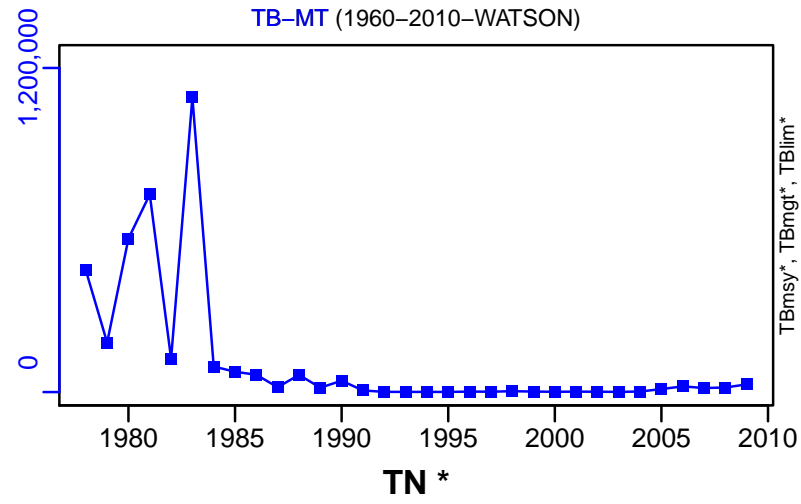


◆ Start Year ◆ End Year * No Data

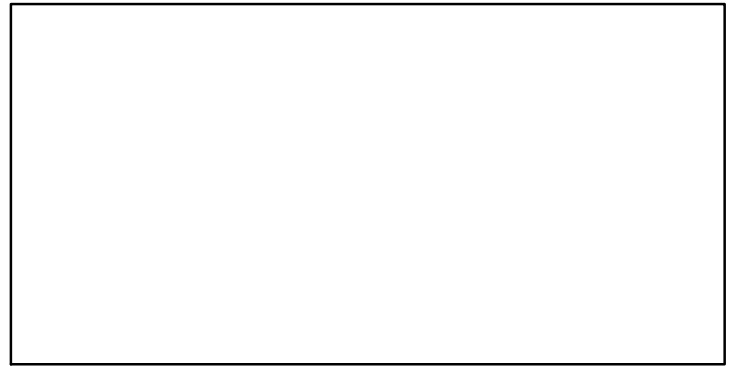
Acadian redfish NAFO Division 2J3K [ACADRED2J3K]

TB-MT (1960-2010-WATSON)

SSB*

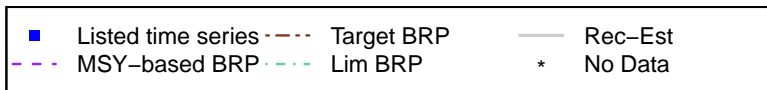
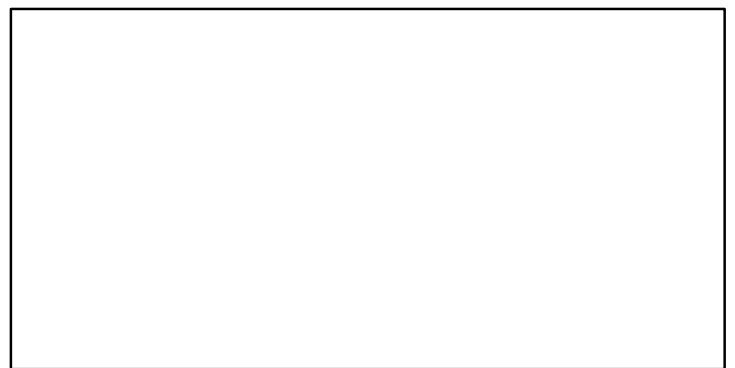
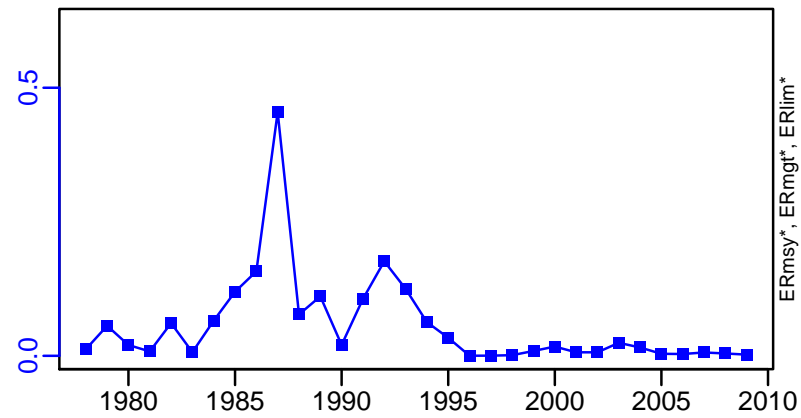


F*



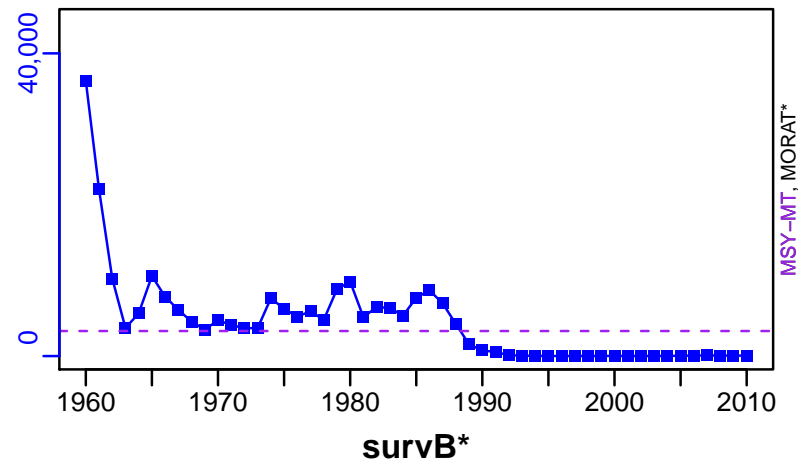
ER-calc-ratio (1960-2010-WATSON)

Recruits*



Acadian redfish NAFO Division 2J3K [ACADRED2J3K]

TC-MT, TL*, RecC* (1960-2010-WATSON)



TAC*, Cpair*, Cadv*



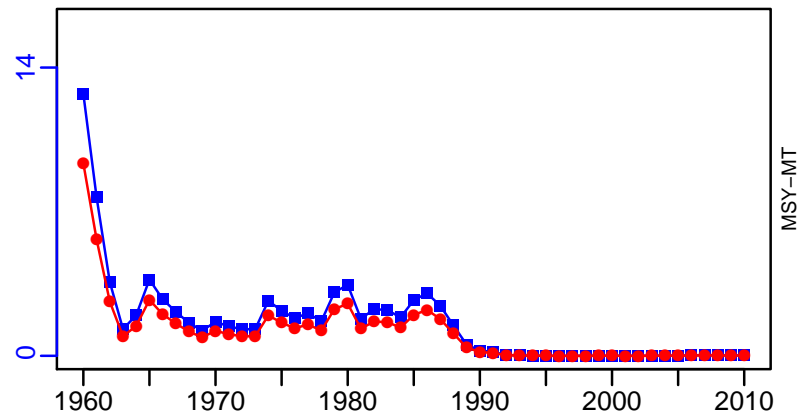
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2010-WATSON)



■ 1st listed time series ▲ 3rd listed time series — MORAT
 ● 2nd listed time series - - - MSY * No Data

Acadian redfish NAFO Division 3LNO and Units 1 and 2 [ACADRED3LNO-UT12]

Metadata	
Scientific Name	Sebastes fasciatus
Current Assess ID	DFO-ACADRED3LNO-UT12-1960-2010-WATSON
Area	NAFO Division 3LNO and Units 1 and 2
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	MSY-MT	2010	116,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	248,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2010	0.036	-	-
TC	TC-MT	2010	9000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*

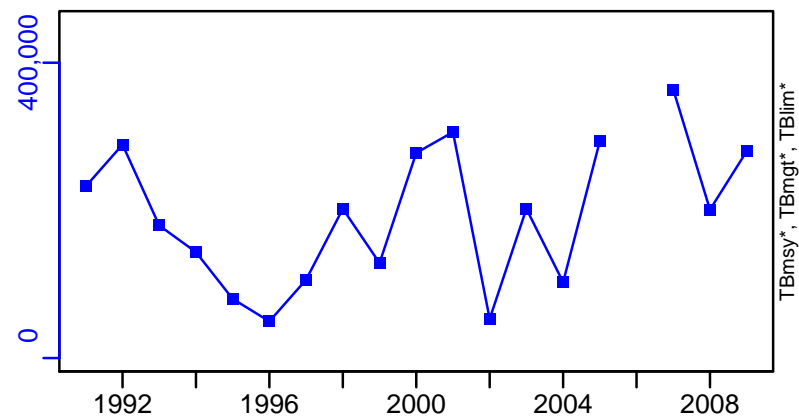


◆ Start Year ◆ End Year * No Data

Acadian redfish NAFO Division 3LNO and Units 1 and 2 [ACADRED3LNO-UT12]

TB-MT (1960-2010-WATSON)

SSB*



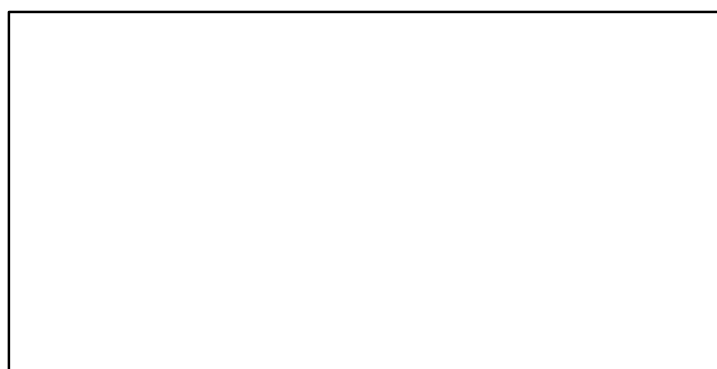
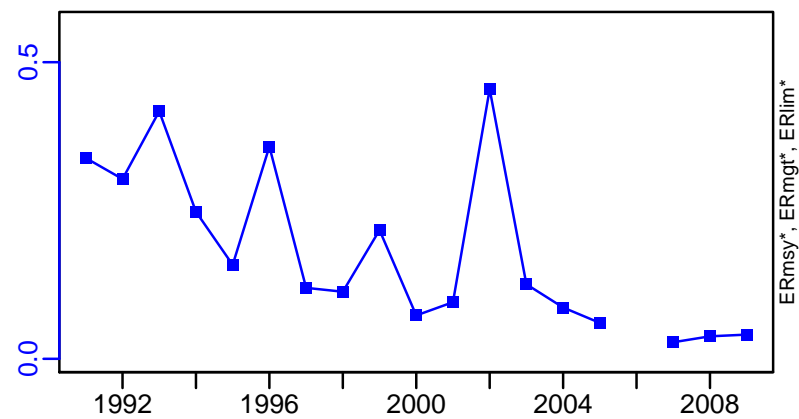
TN *

F*



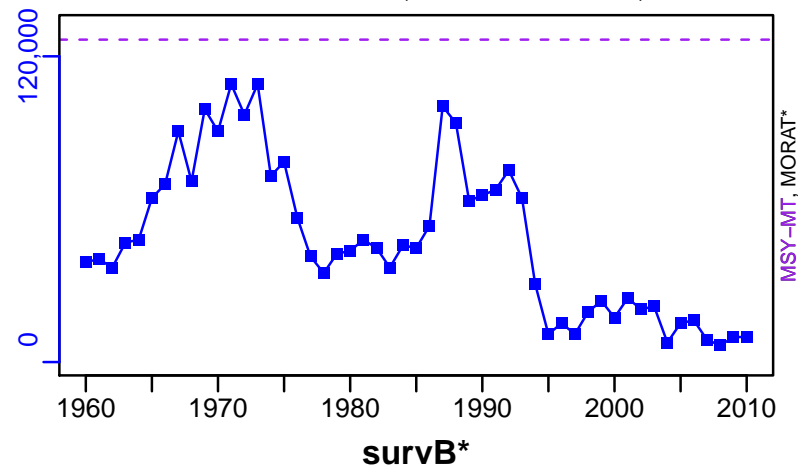
ER-calc-ratio (1960-2010-WATSON)

Recruits*



Acadian redfish NAFO Division 3LNO and Units 1 and 2 [ACADRED3LNO-UT12]

TC-MT, TL*, RecC* (1960-2010-WATSON)



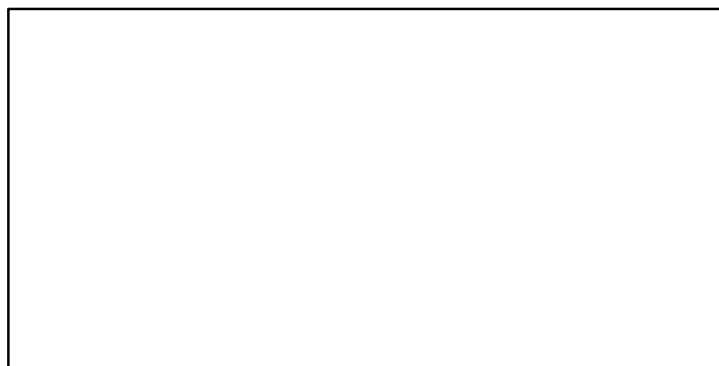
TAC*, Cpair*, Cadv*



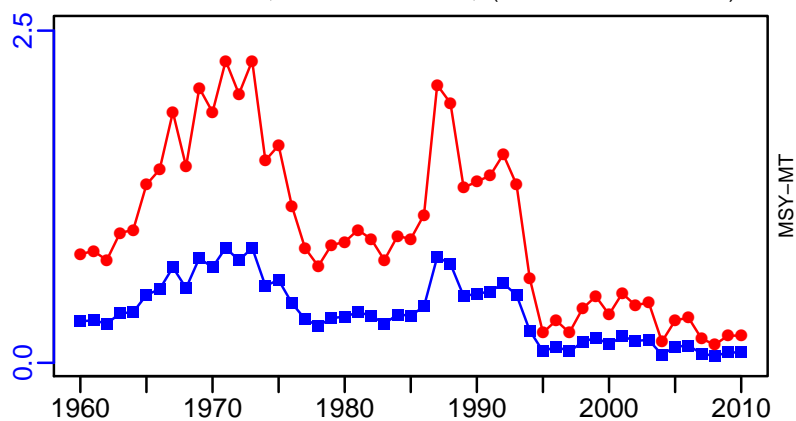
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2010-WATSON)



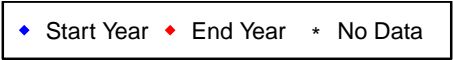
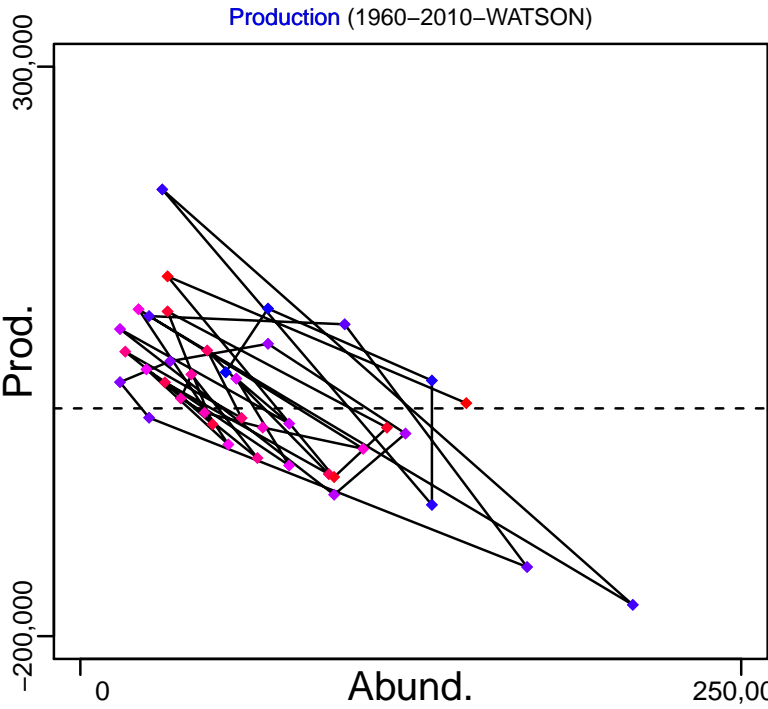
■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Acadian redfish Unit 3 [ACADREDUT3]

Metadata	
Scientific Name	Sebastes fasciatus
Current Assess ID	DFO-ACADREDUT3-1960-2010-WATSON
Area	Unit 3
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2010

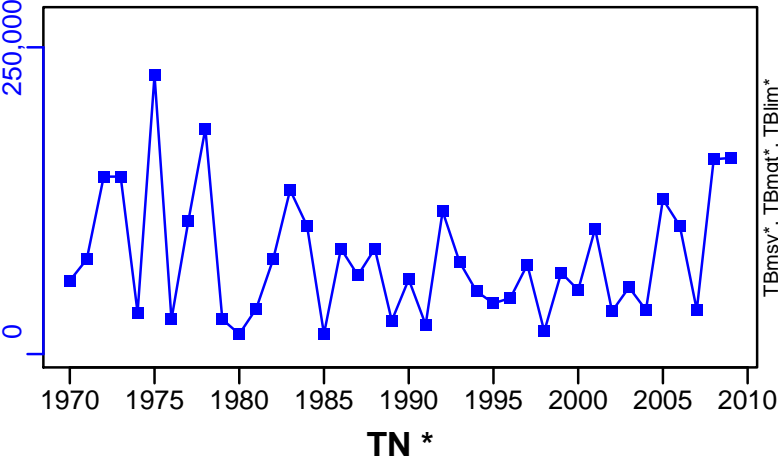
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	131,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	147,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2010	0.031	-	-
TC	TC-MT	2010	5200		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Acadian redfish Unit 3 [ACADREDUT3]

TB-MT (1960-2010-WATSON)



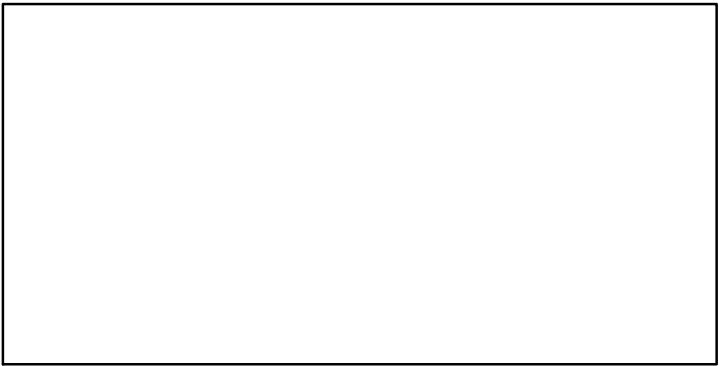
SSB*



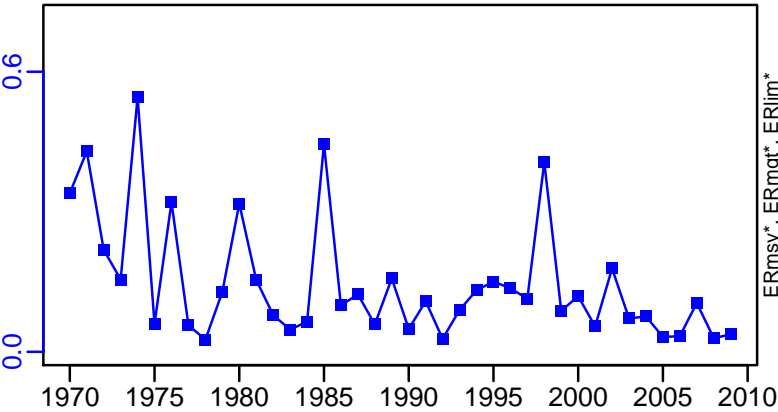
TN *



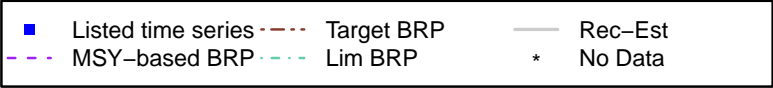
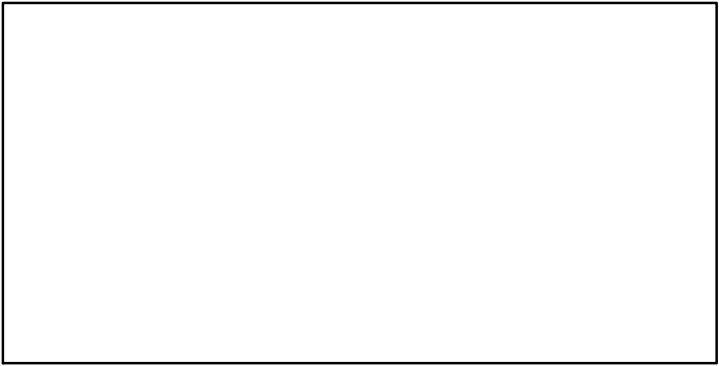
F*



ER-calc-ratio (1960-2010-WATSON)

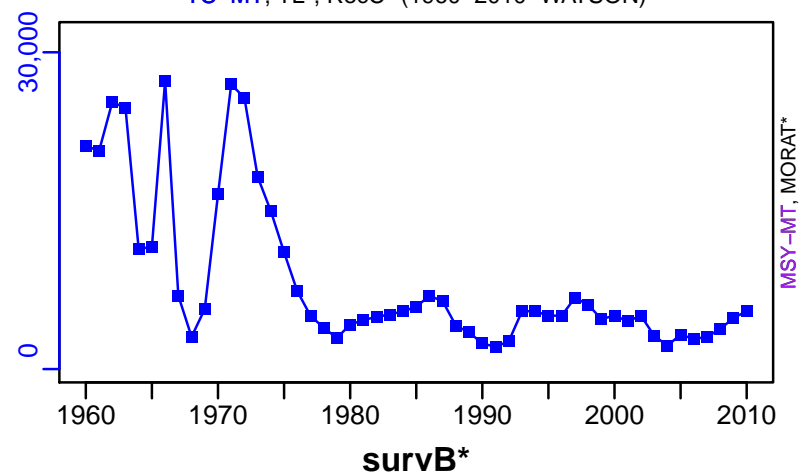


Recruits*



Acadian redfish Unit 3 [ACADREDUT3]

TC-MT, TL*, RecC* (1960-2010-WATSON)



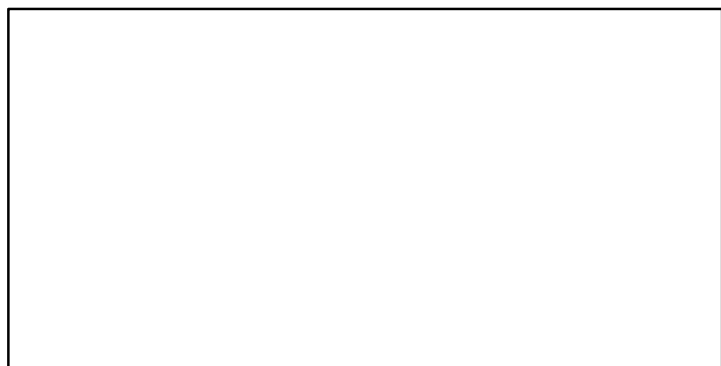
TAC*, Cpair*, Cadv*



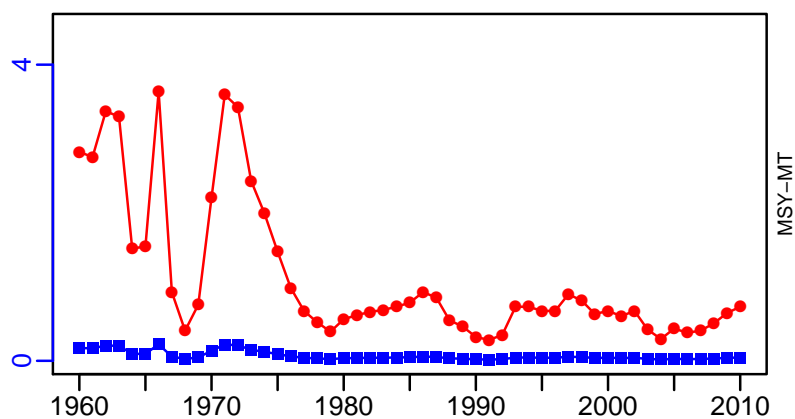
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2010-WATSON)



- 1st listed time series
- 2nd listed time series
- 3rd listed time series
- MSY
- MORAT
- No Data

American plaice Labrador - NE Newfoundland [AMPL23K]

Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	DFO-AMPL23K-1960-2012-WATSON
Area	Labrador - NE Newfoundland
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012, 2004

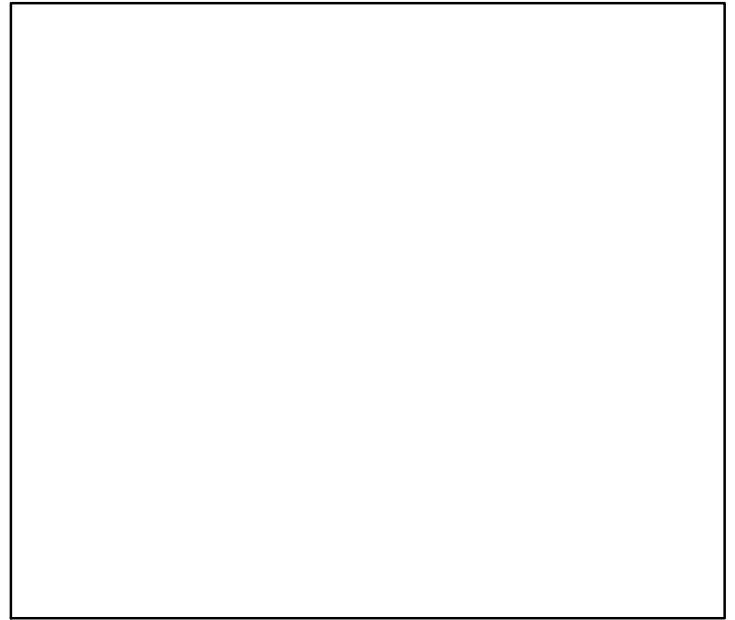
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	29,000	Both	-
SSB	SSB-MT	2004	3620	Females	-
TN	TN-E00	2012	2.17×10^8	-	-
R	R-E00	2004	3,330,000	-	3+
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.001	-	-
TC	TC-MT	2012	17		
TL	TL-MT	2012	65		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

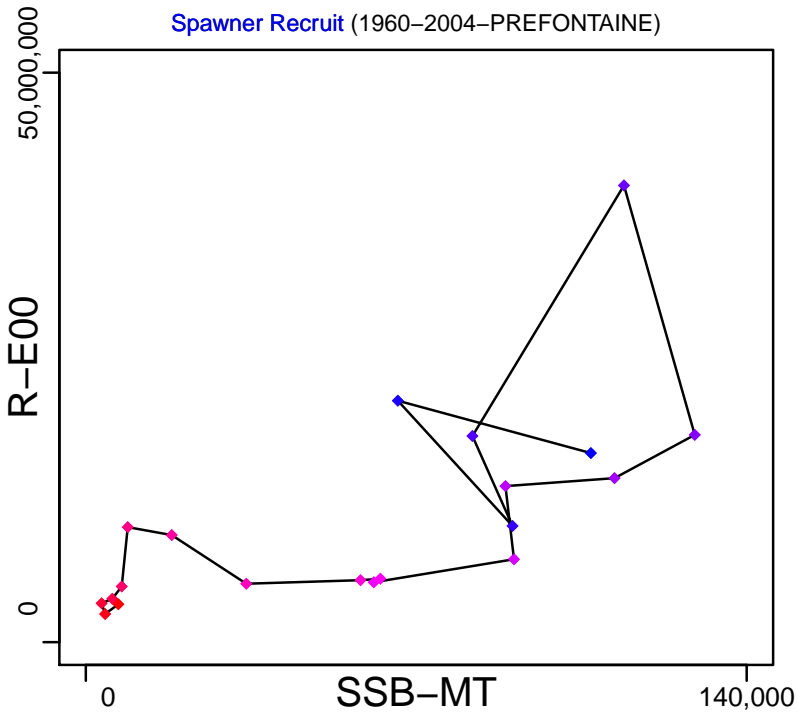
Kobe MSY*



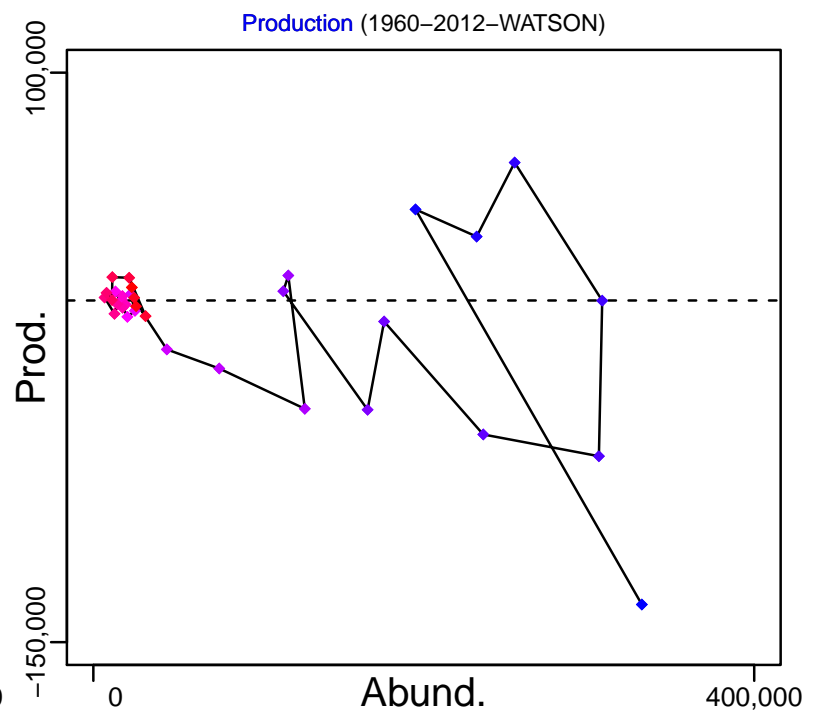
Kobe MGT*



Spawner Recruit (1960–2004–PREFONTAINE)



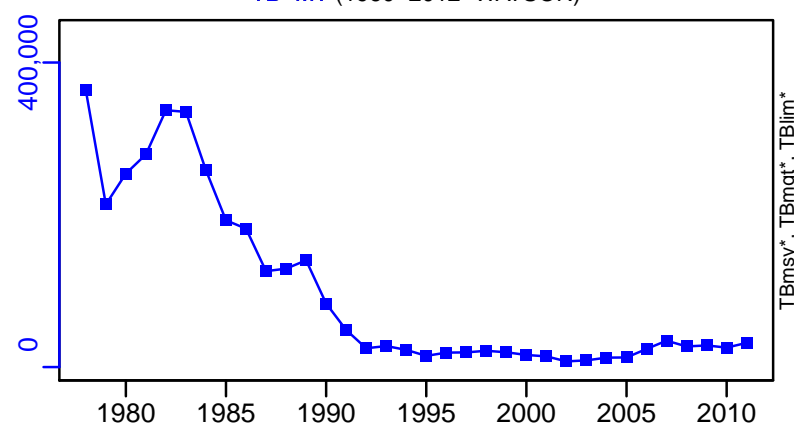
Production (1960–2012–WATSON)



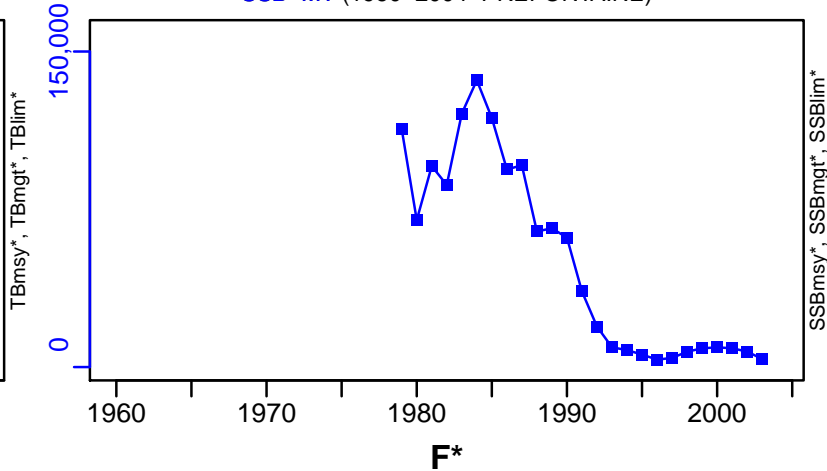
◆ Start Year ◆ End Year * No Data

American plaice Labrador – NE Newfoundland [AMPL23K]

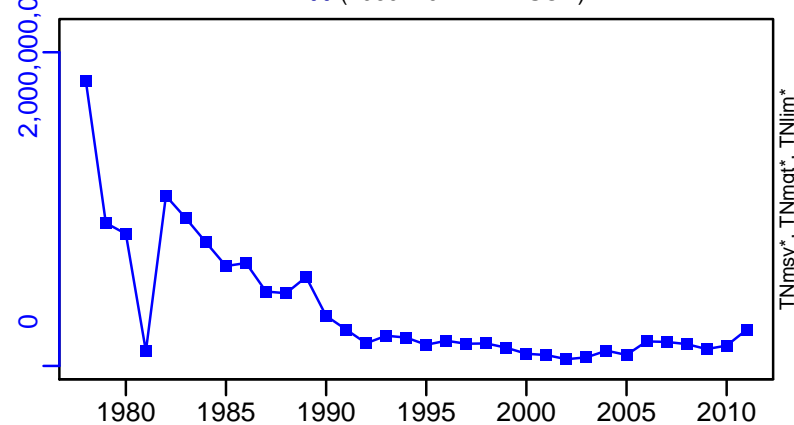
TB-MT (1960–2012–WATSON)



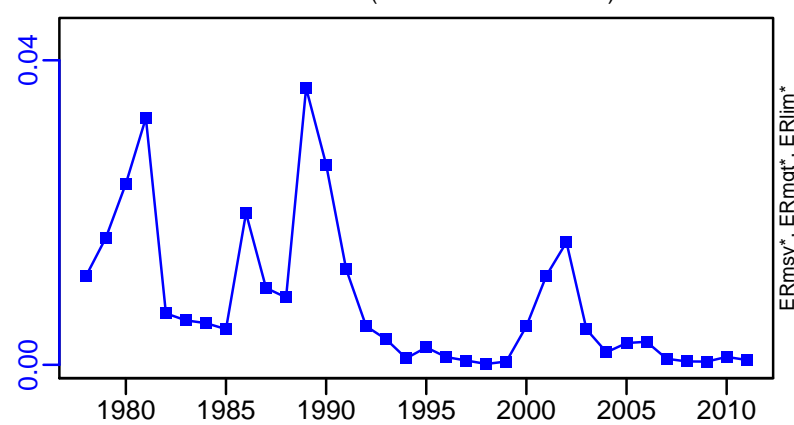
SSB-MT (1960–2004–PREFONTAINE)



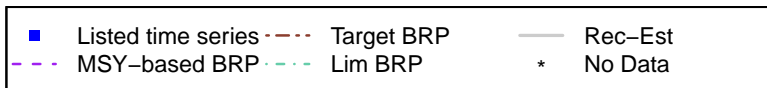
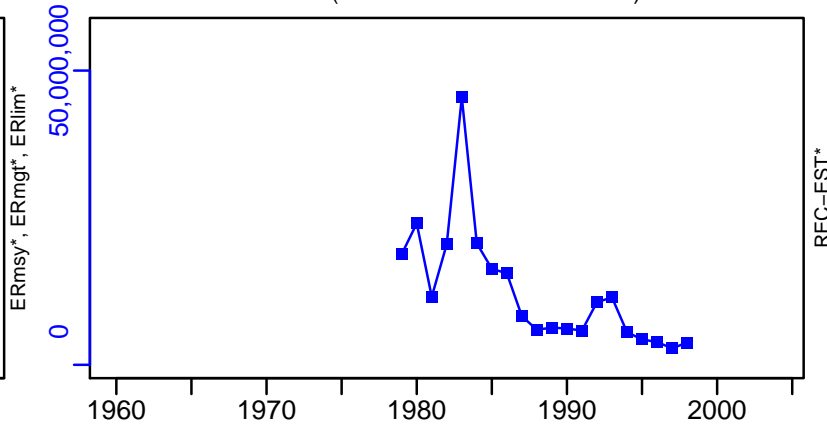
TN-E00 (1960–2012–WATSON)



ER-calc-ratio (1960–2012–WATSON)



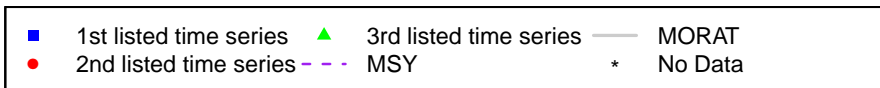
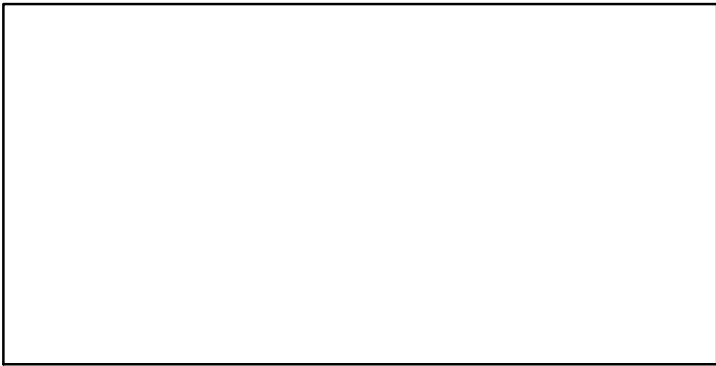
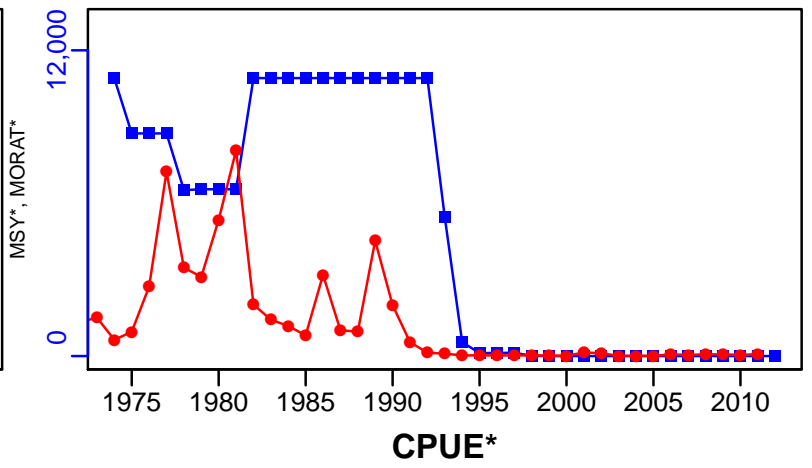
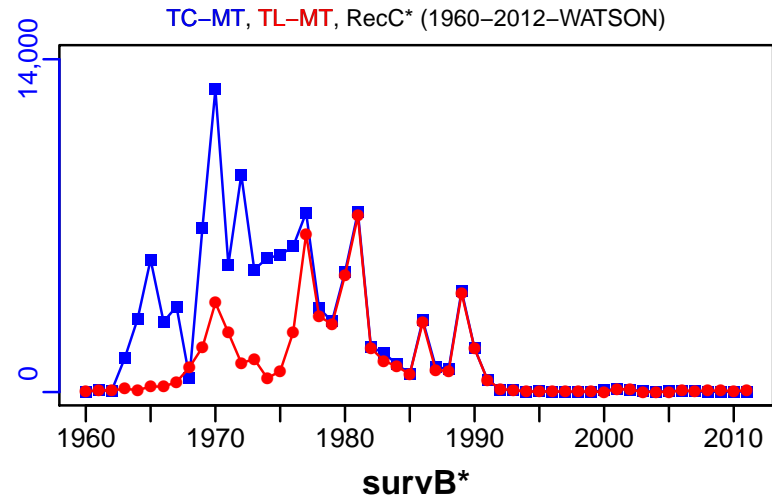
R-E00 (1960–2004–PREFONTAINE)



American plaice Labrador – NE Newfoundland [AMPL23K]

TC-MT, TL-MT, RecC* (1960–2012–WATSON)

TAC-MT, Cpair-MT, Cadv* (1960–2012–WATSON)



American plaice Grand Banks [AMPL3LNO]

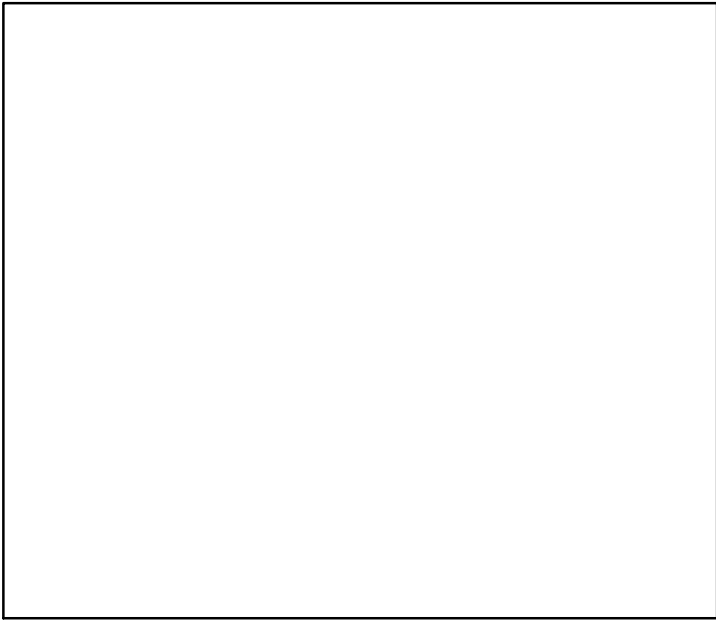
Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	NAFO-SC-AMPL3LNO-1955-2007-BAUM
Area	Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.2
TBlim	TBlim-MT	2007	50,000
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	50,500	-	5+
SSB	SSB-MT	2007	35,500	Both	-
TN	-	-	-	-	-
R	R-E00	2007	33,500,000	-	5
F	F-1/yr	2007	0.193	Both	9 to 14
ER	ER-ratio	2007	0.064	-	-
TC	-	-	-		
TL	TL-MT	2007	2830		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

American plaice Grand Banks [AMPL3LNO]

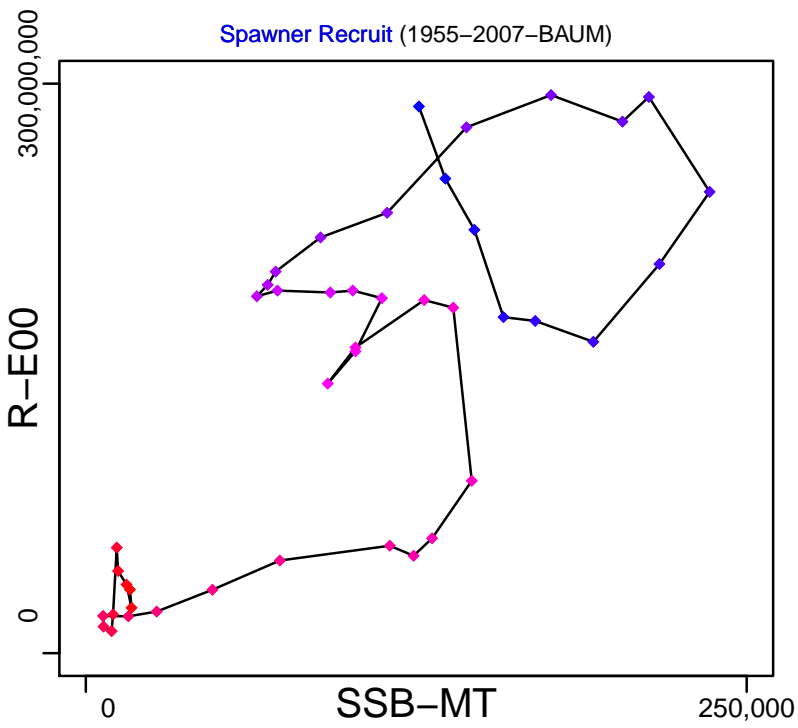
Kobe MSY*



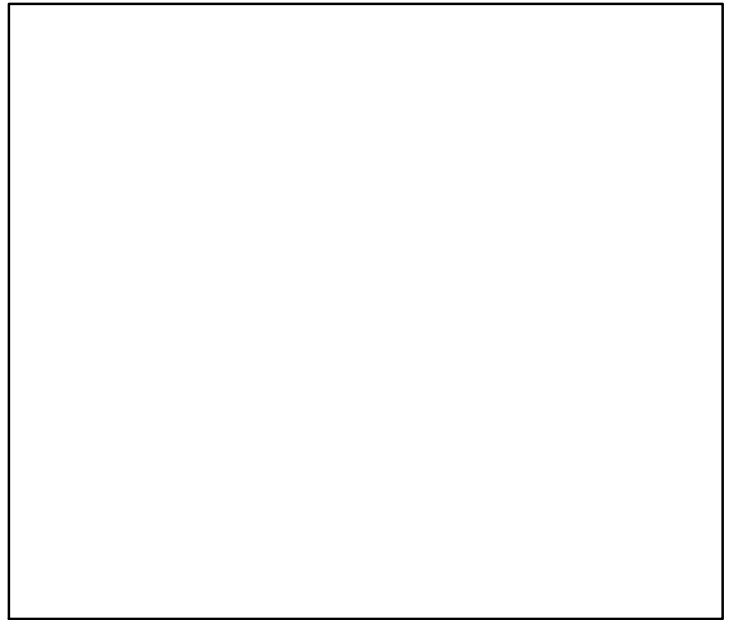
Kobe MGT*



Spawner Recruit (1955–2007–BAUM)



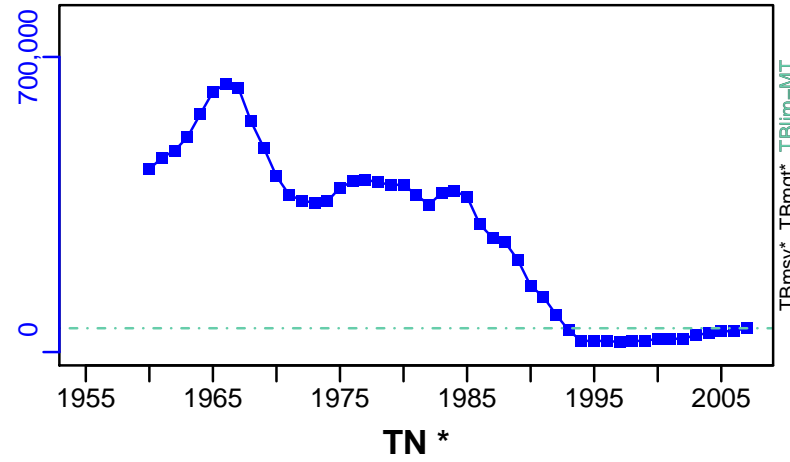
Production*



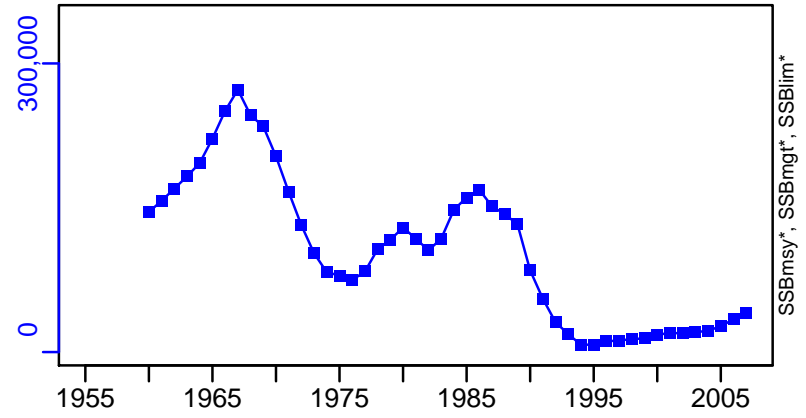
◆ Start Year ◆ End Year * No Data

American plaice Grand Banks [AMPL3LNO]

TB-MT (1955-2007-BAUM)



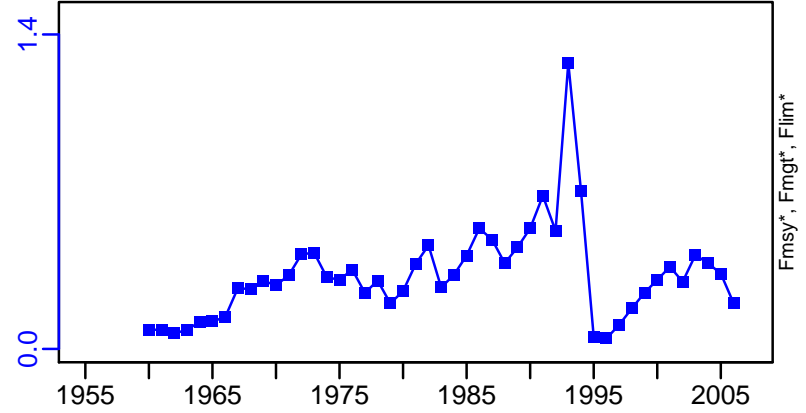
SSB-MT (1955-2007-BAUM)



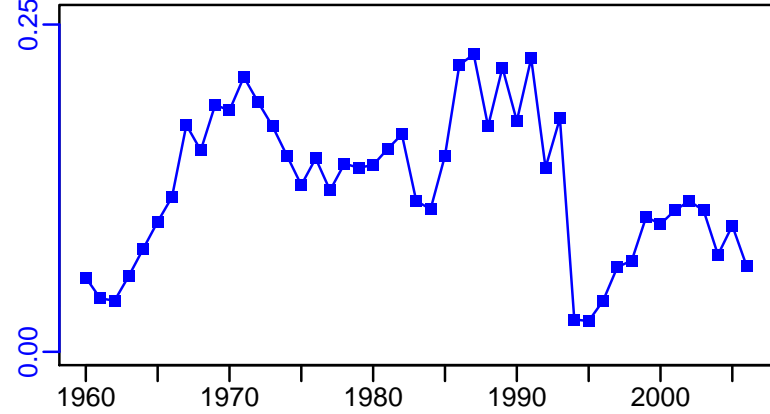
TN *



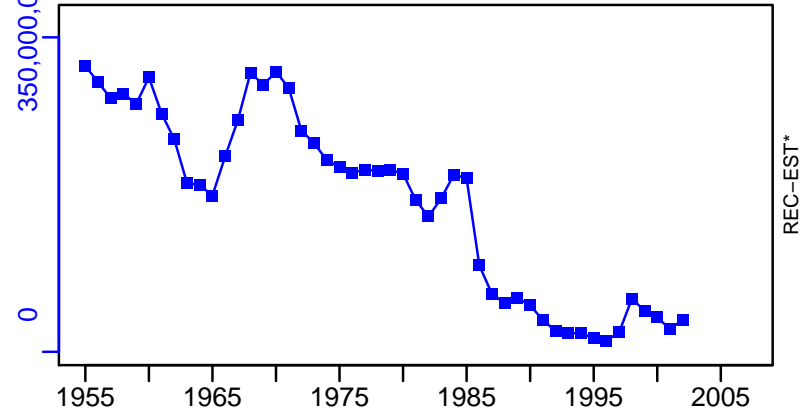
F-1/yr (1955-2007-BAUM)



ER-ratio (1955-2007-BAUM)



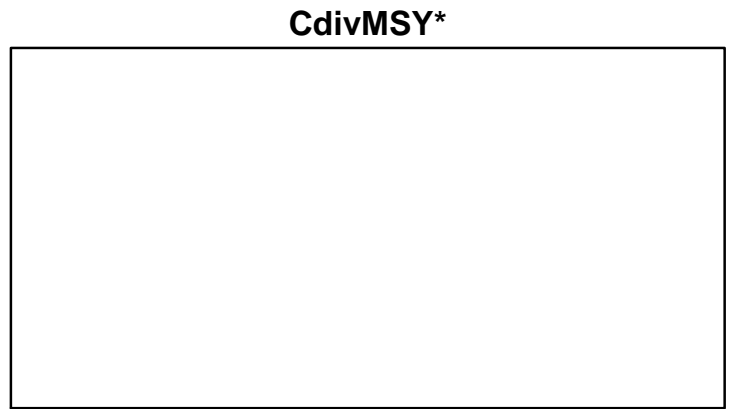
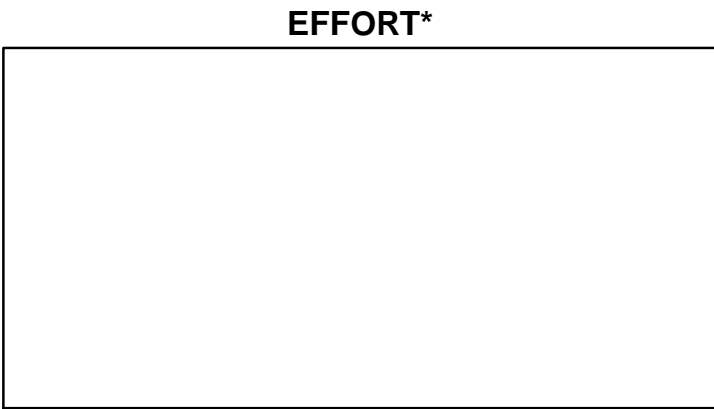
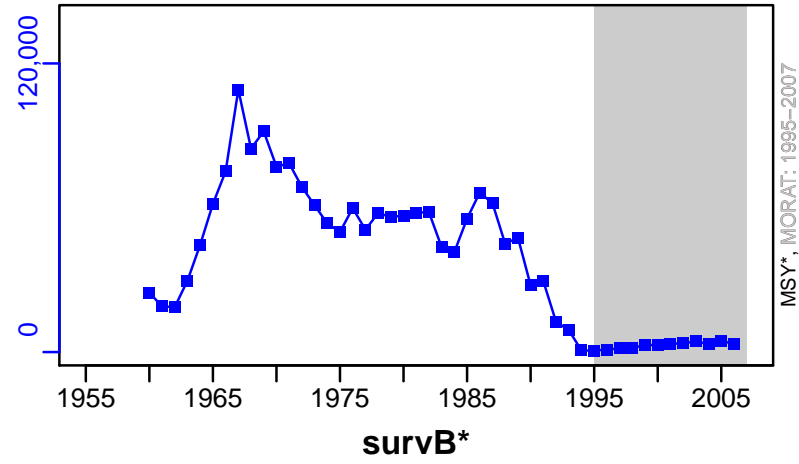
R-E00 (1955-2007-BAUM)



American plaice Grand Banks [AMPL3LNO]

TL-MT, TC*, RecC* (1955-2007-BAUM)

TAC*, Cpair*, Cadv*



American plaice Flemish Cap [AMPL3M]

Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	NAFO-SC-AMPL3M-1960-2007-BAUM
Area	Flemish Cap
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	1890	-	-
SSB	SSB-MT	2007	1170	Females	5+
TN	-	-	-	-	-
R	R-E00	2007	20,800,000	-	1
F	F-1/yr	2007	0.064	-	3 to 13
ER	ER-ratio	2007	0	-	-
TC	TC-MT	2007	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

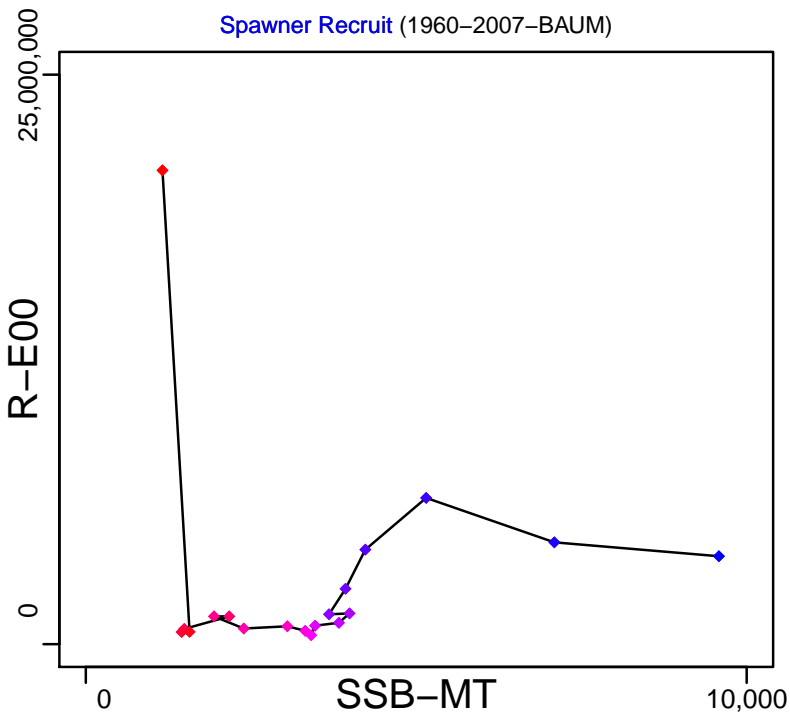
Kobe MSY*



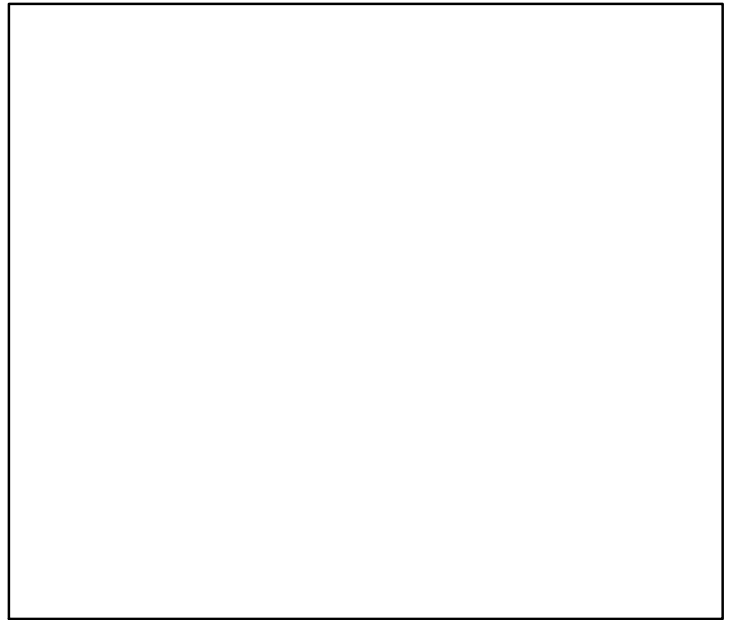
Kobe MGT*



Spawner Recruit (1960–2007–BAUM)



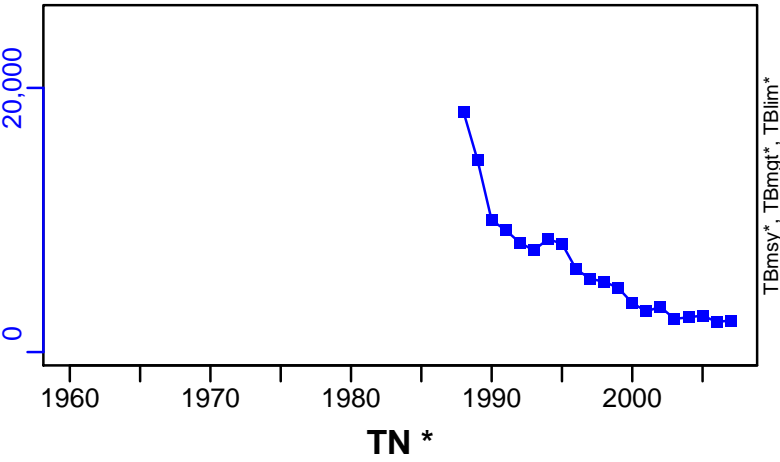
Production*



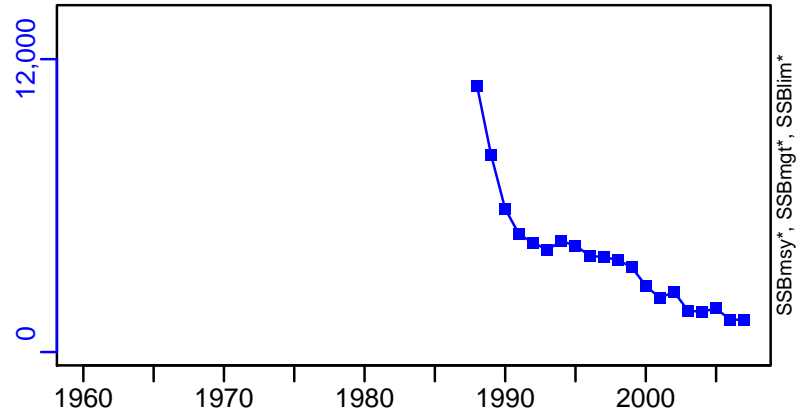
◆ Start Year ◆ End Year * No Data

American plaice Flemish Cap [AMPL3M]

TB-MT (1960–2007–BAUM)



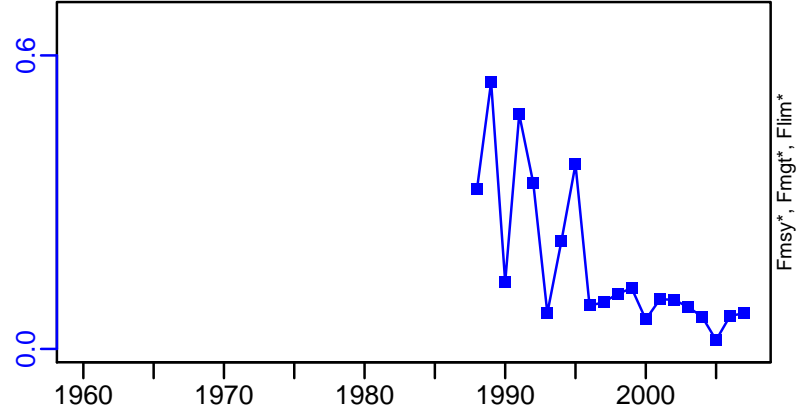
SSB-MT (1960–2007–BAUM)



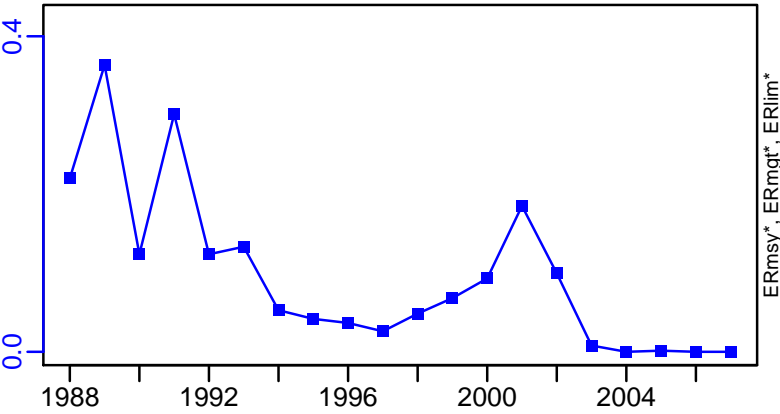
TN *



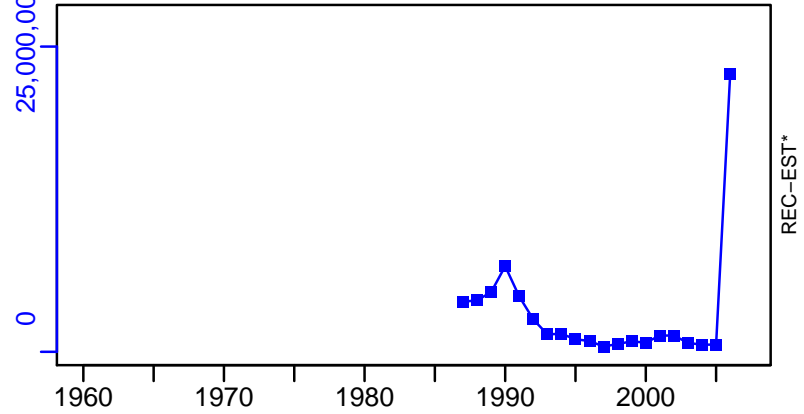
F-1/yr (1960–2007–BAUM)



ER-ratio (1960–2007–BAUM)

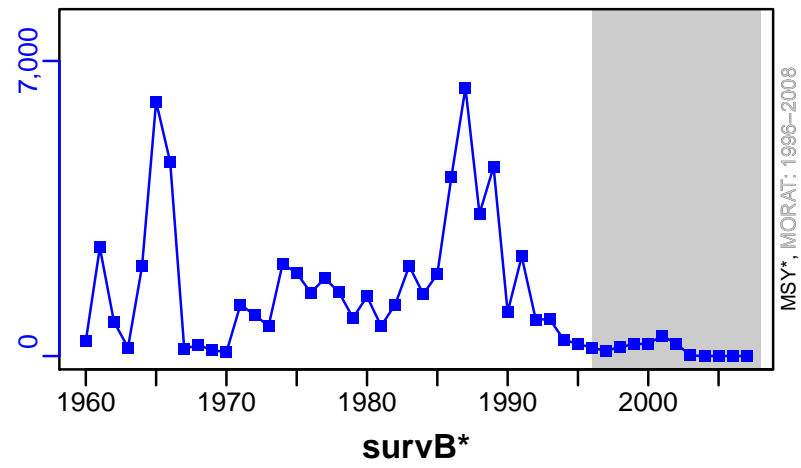


R-E00 (1960–2007–BAUM)



American plaice Flemish Cap [AMPL3M]

TC-MT, TL*, RecC* (1960–2007–BAUM)



TAC*, Cpair*, Cadv*



CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

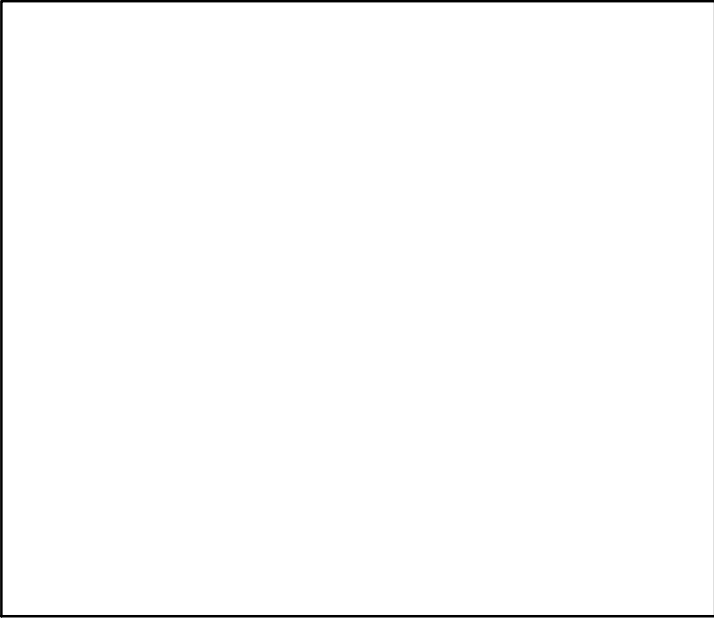
American plaice St. Pierre Bank [AMPL3Ps]

Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	DFO-AMPL3Ps-1960-2013-WATSON
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2013, 2005

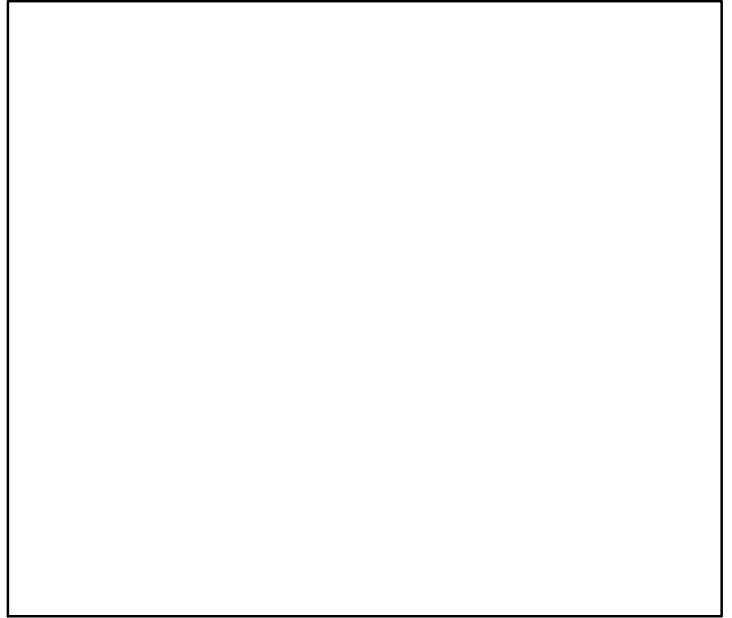
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-index	2013	15	Both	-
SSB	-	-	-	-	-
TN	TN-index	2013	112	-	-
R	R-E00	2005	27,200,000	-	5
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2005	503		
TL	TL-MT	2013	103		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

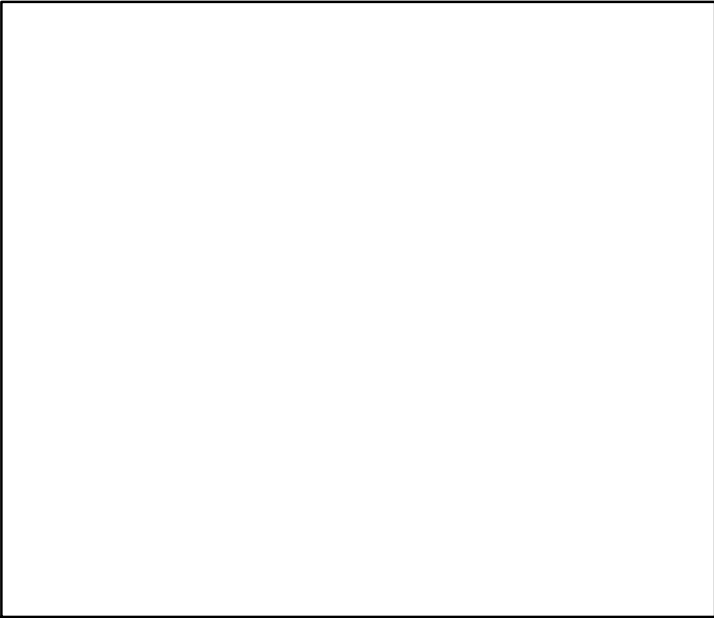
Kobe MSY*



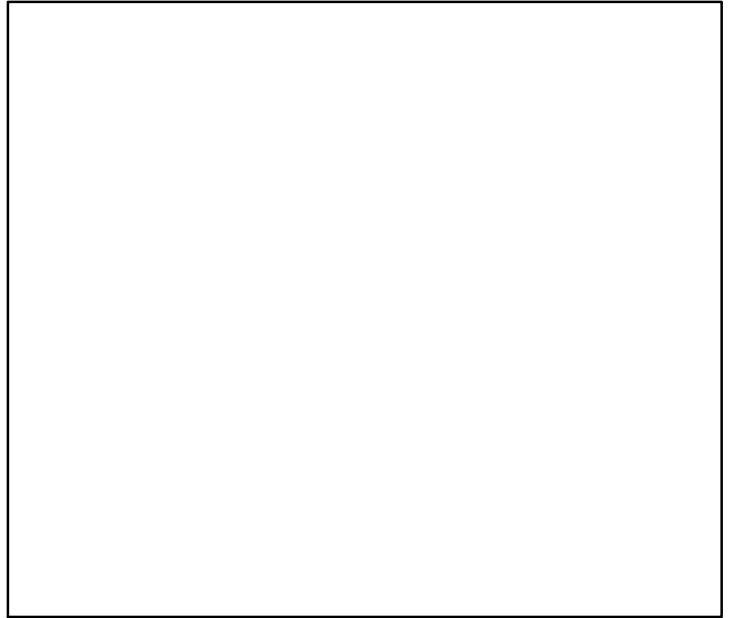
Kobe MGT*



Spawner Recruit*



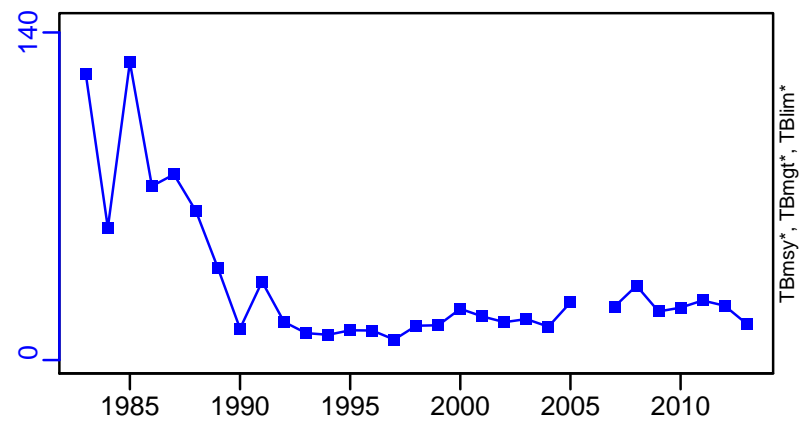
Production*



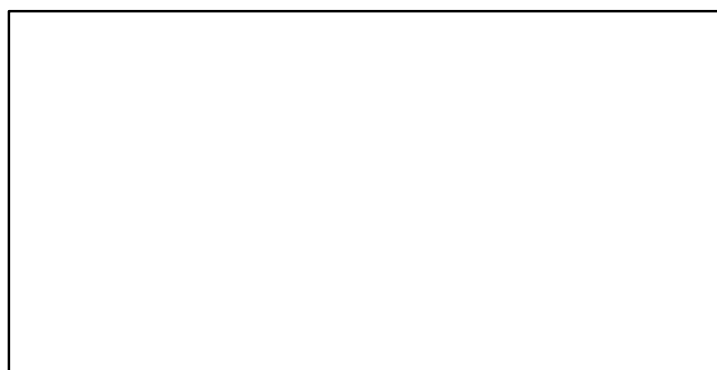
◆ Start Year ◆ End Year * No Data

American plaice St. Pierre Bank [AMPL3Ps]

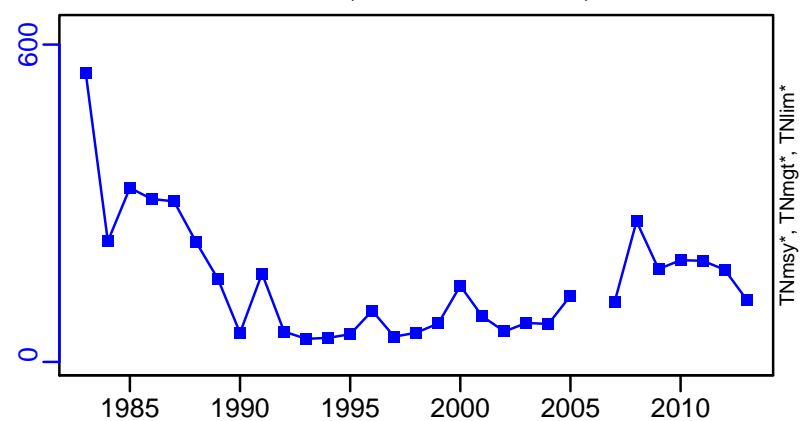
TB-index (1960–2013–WATSON)



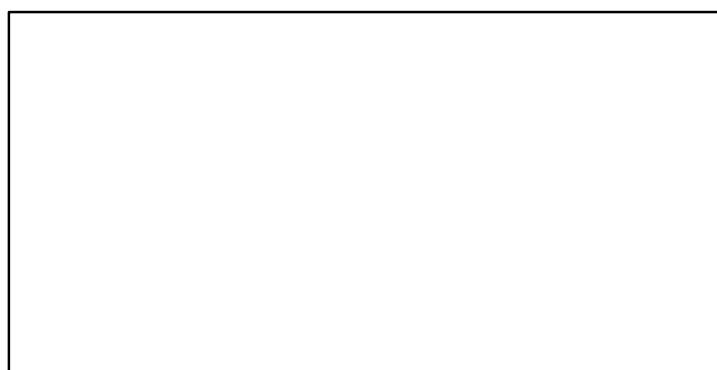
SSB*



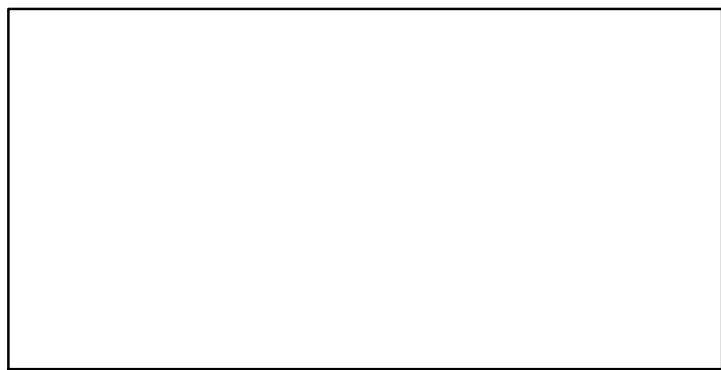
TN-index (1960–2013–WATSON)



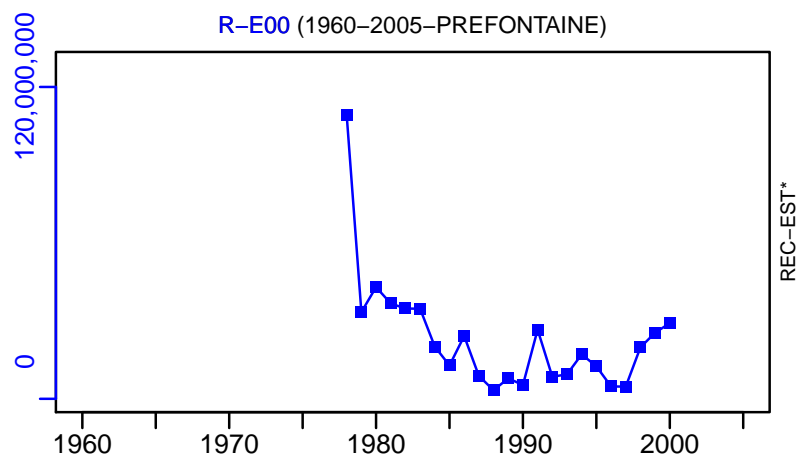
F*



ER*



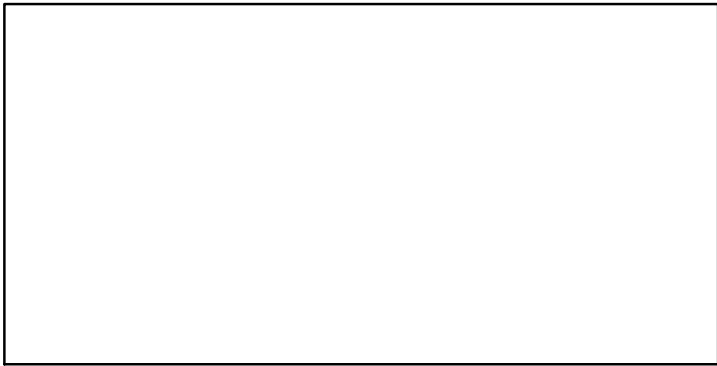
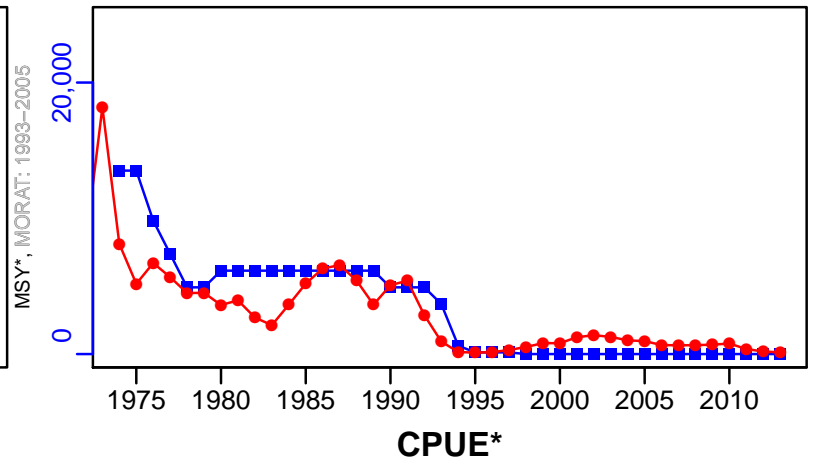
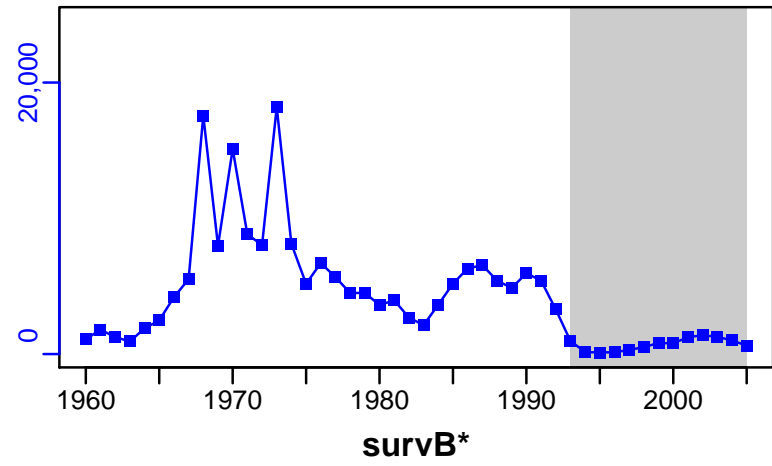
R-E00 (1960–2005–PREFONTAINE)



American plaice St. Pierre Bank [AMPL3Ps]

TC-MT, TL*, RecC* (1960–2005–PREFONTAINE)

TAC-MT, Cpair-MT, Cadv* (1960–2013–WATSON)



American plaice Southern Gulf of St. Lawrence [AMPL4T]

Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	DFO-AMPL4T-1965-2012-WATSON
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
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	SSBlim-MT	2012	64,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2012	41,700	-	-
TN	TN-E00	2012	9.26×10^8	-	4 to 9
R	R-E00	2012	3.84×10^8	-	4
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2012	90		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

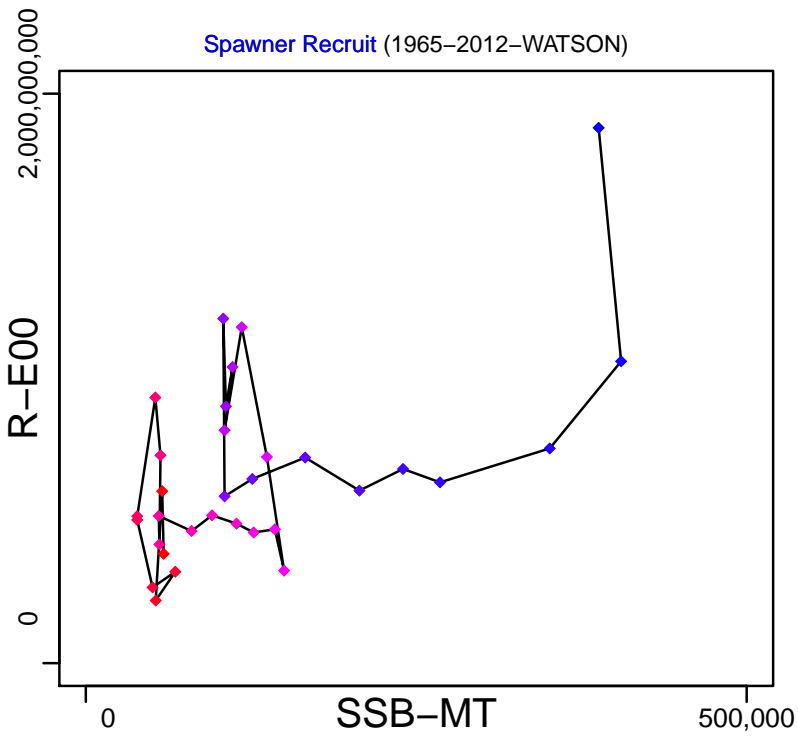
Kobe MSY*



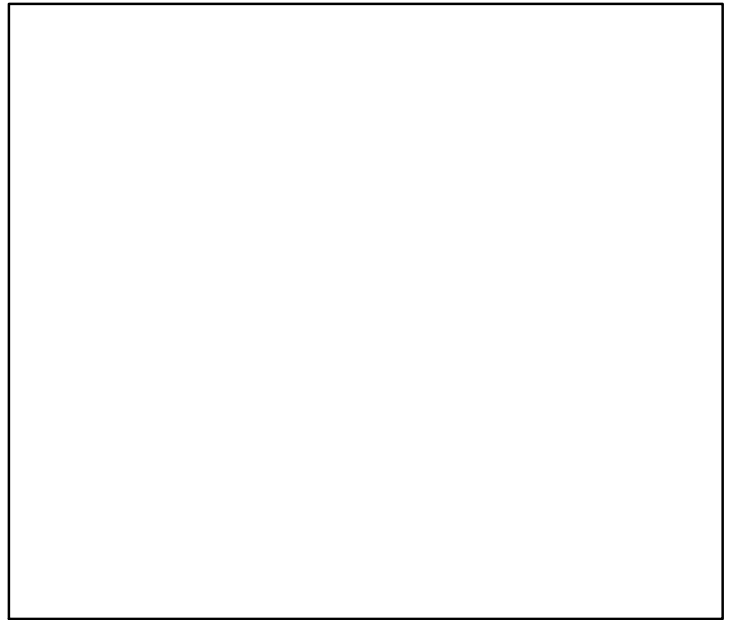
Kobe MGT*



Spawner Recruit (1965–2012–WATSON)



Production*



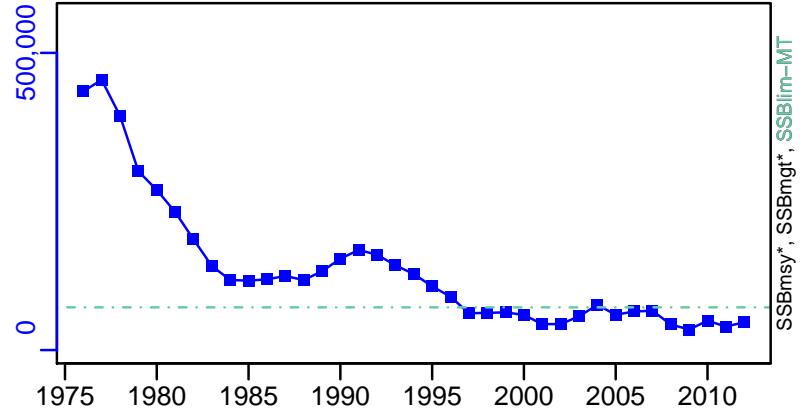
◆ Start Year ◆ End Year * No Data

American plaice Southern Gulf of St. Lawrence [AMPL4T]

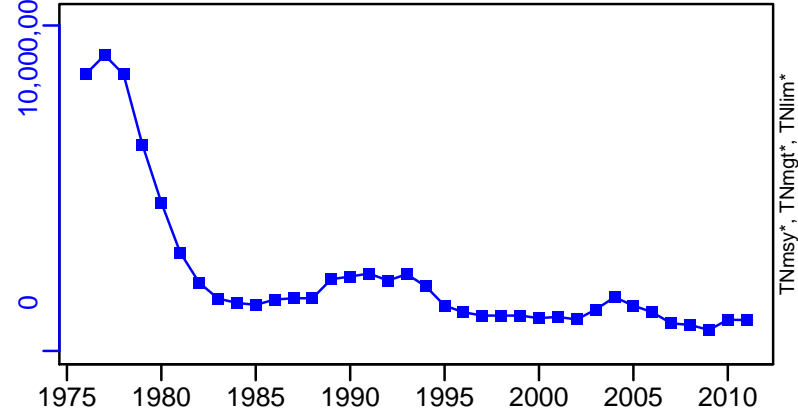
TB*



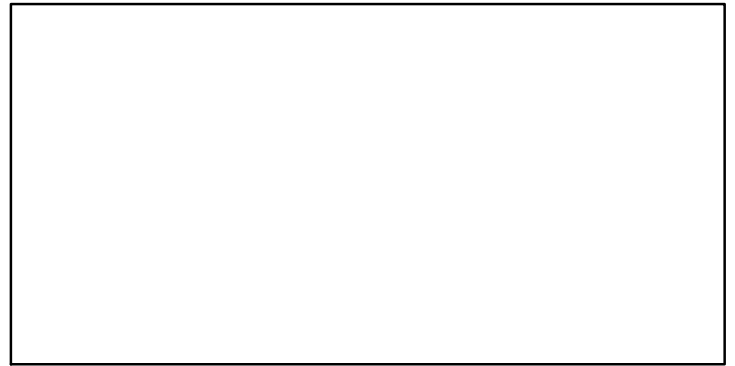
SSB-MT (1965–2012–WATSON)



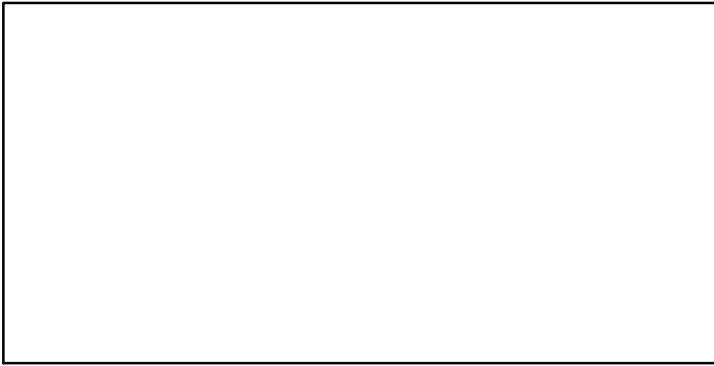
TN-E00 (1965–2012–WATSON)



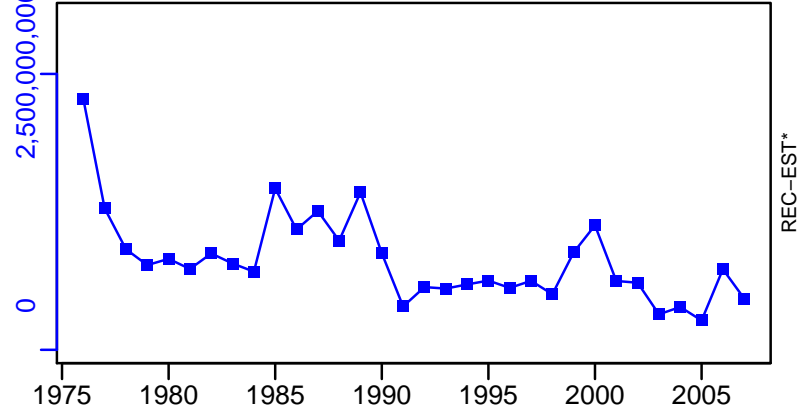
F*



ER*



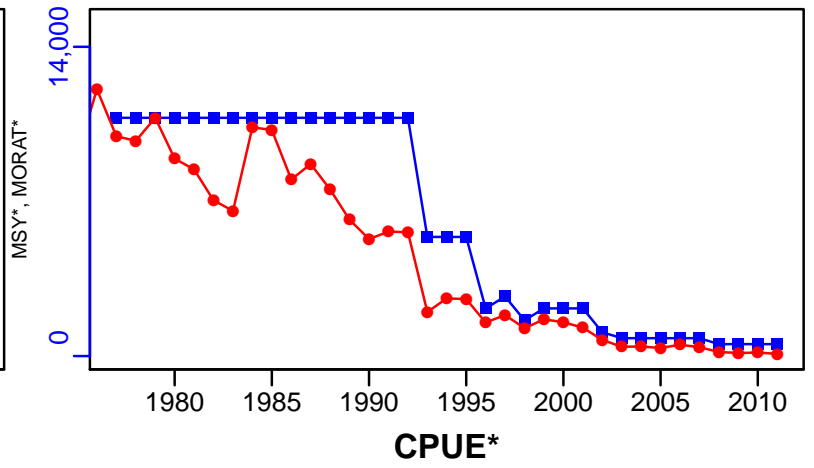
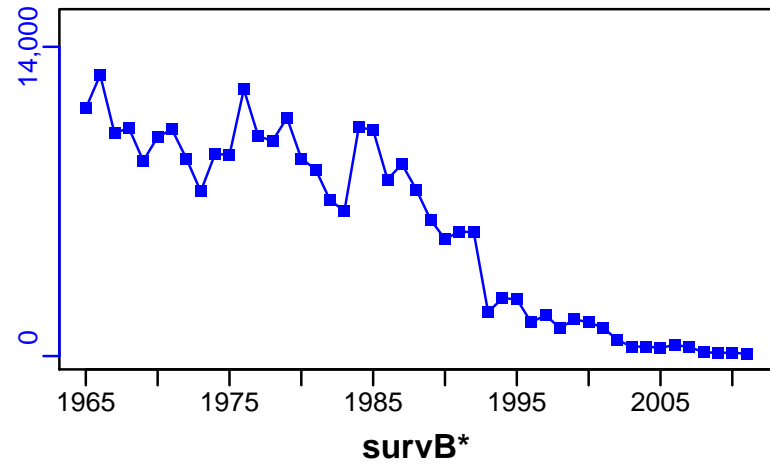
R-E00 (1965–2012–WATSON)



American plaice Southern Gulf of St. Lawrence [AMPL4T]

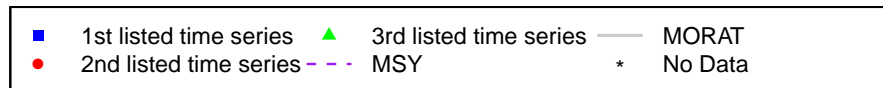
TC-MT, TL*, RecC* (1965-2012-WATSON)

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



EFFORT*

CdivMSY*



American plaice Scotian Shelf and Bay of Fundy [AMPL4VWX]

Metadata	
Scientific Name	Hippoglossoides platessoides
Current Assess ID	DFO-AMPL4VWX-1961-2010-WATSON
Area	Scotian Shelf and Bay of Fundy
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	MSY-MT	2010	5113
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2010	15,800	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	250		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERMgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



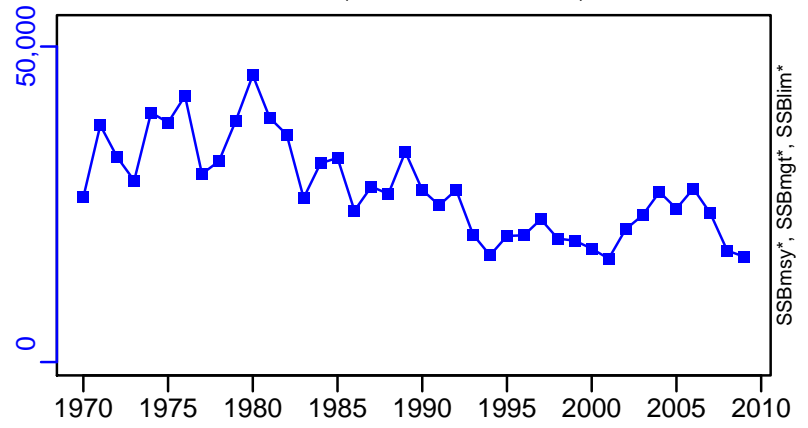
◆ Start Year ◆ End Year * No Data

American plaice Scotian Shelf and Bay of Fundy [AMPL4VWX]

TB*



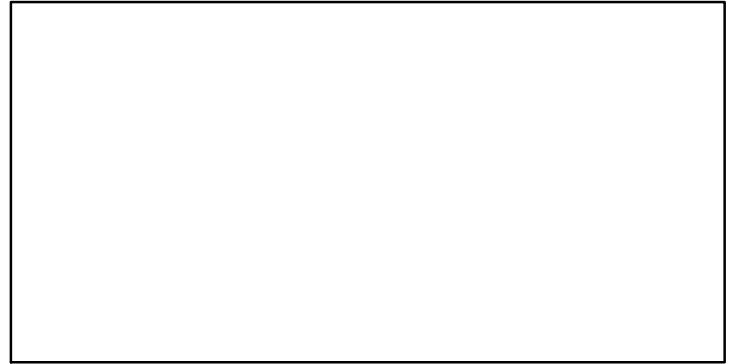
SSB-MT (1961-2010-WATSON)



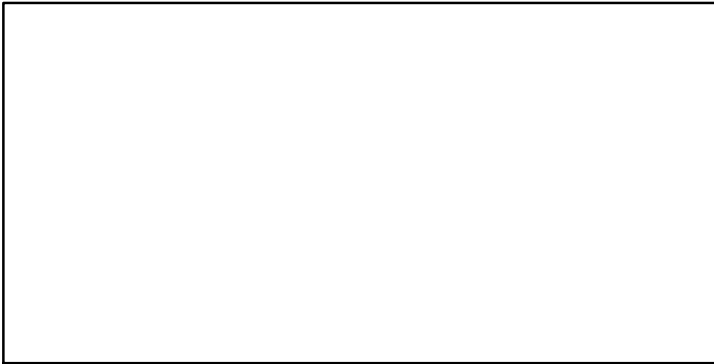
TN *



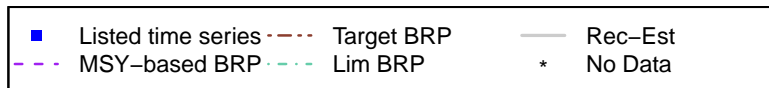
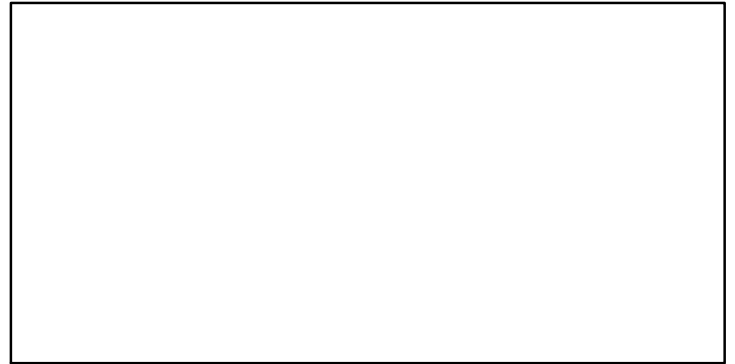
F*



ER*

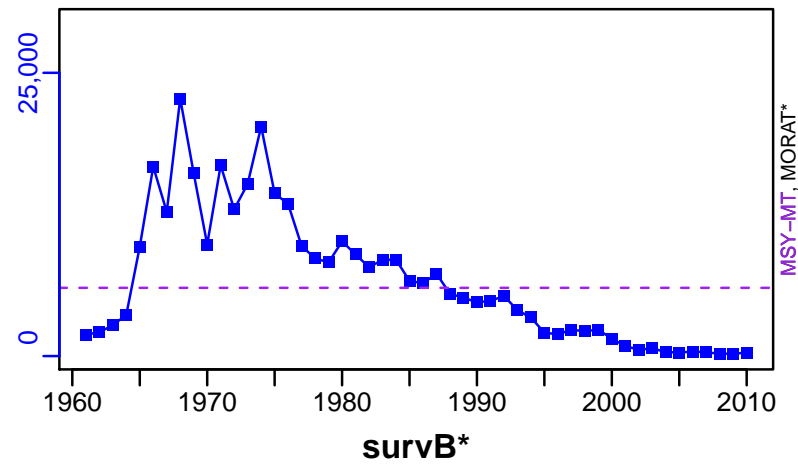


Recruits*



American plaice Scotian Shelf and Bay of Fundy [AMPL4VWX]

TL-MT, TC*, RecC* (1961-2010-WATSON)



TAC*, Cpair*, Cadv*



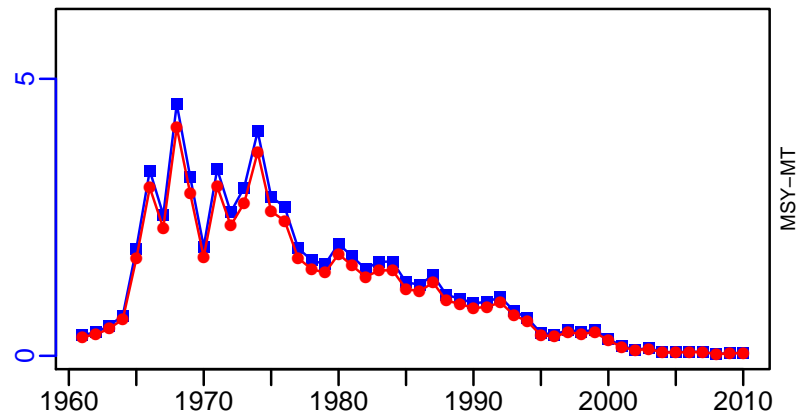
CPUE*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1961-2010-WATSON)



- 1st listed time series
- 2nd listed time series
- ▲ 3rd listed time series
- MORAT
- - MSY
- * No Data

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

Metadata	
Scientific Name	Mactromeris polynyma
Current Assess ID	DFO-QUE-ARCSURF4RST-1993-2014-OSGOOD
Area	Quebec and 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

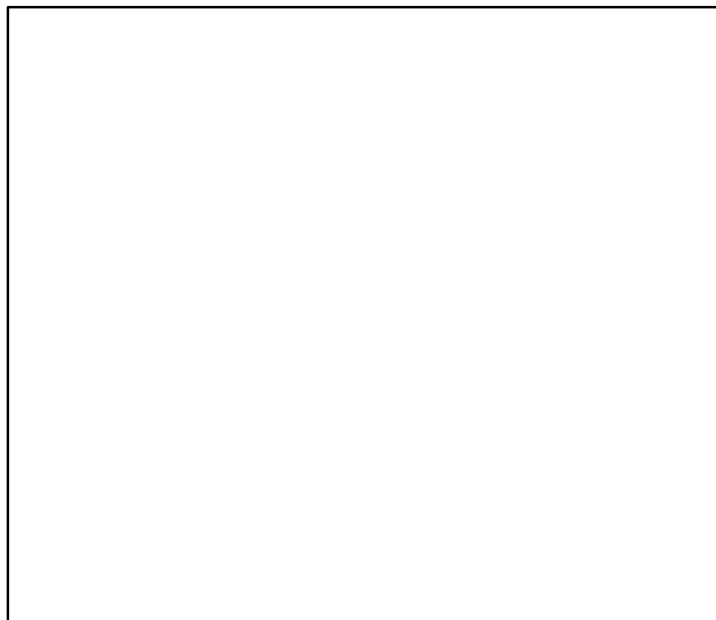
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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*

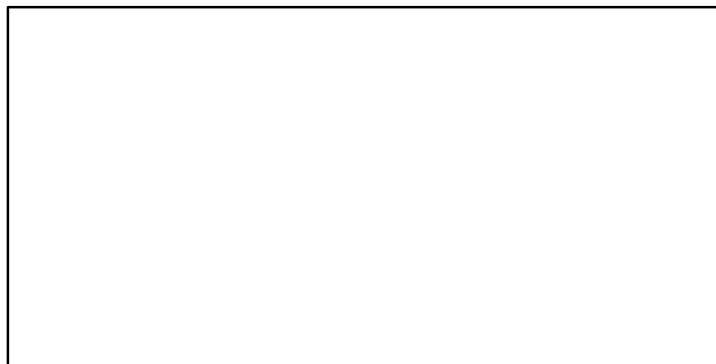


◆ Start Year ◆ End Year * No Data

TB*



SSB*



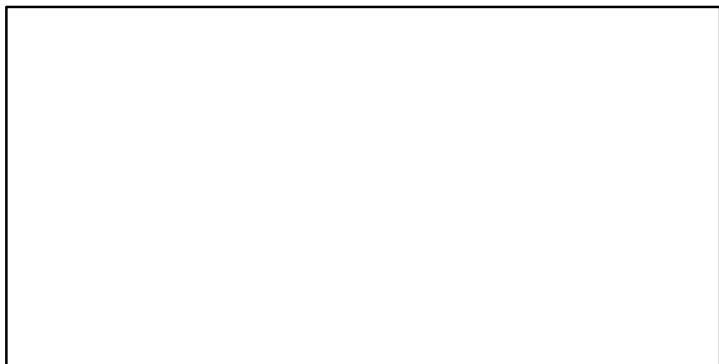
TN *



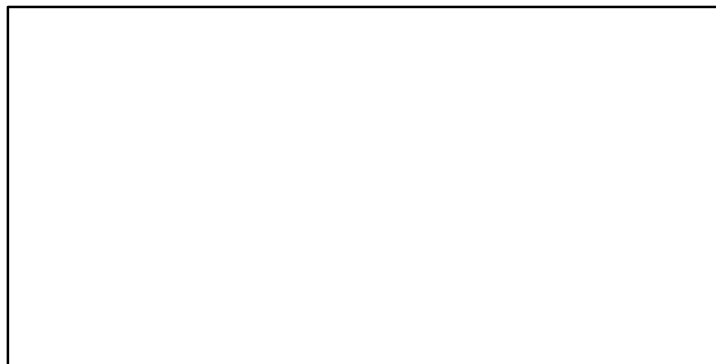
F*



ER*

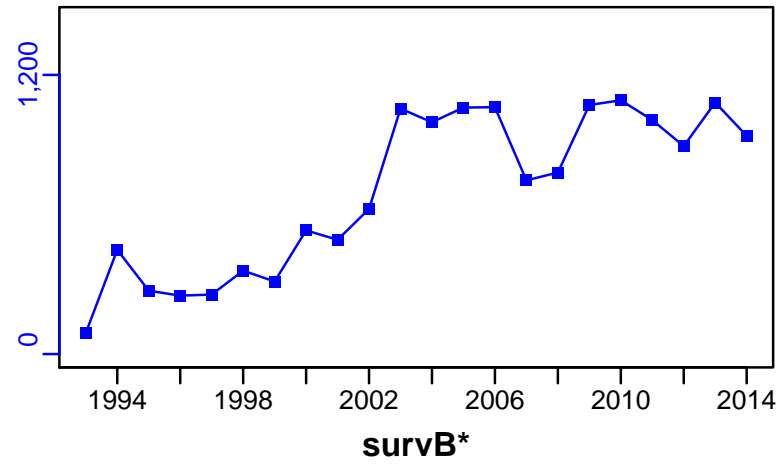


Recruits*

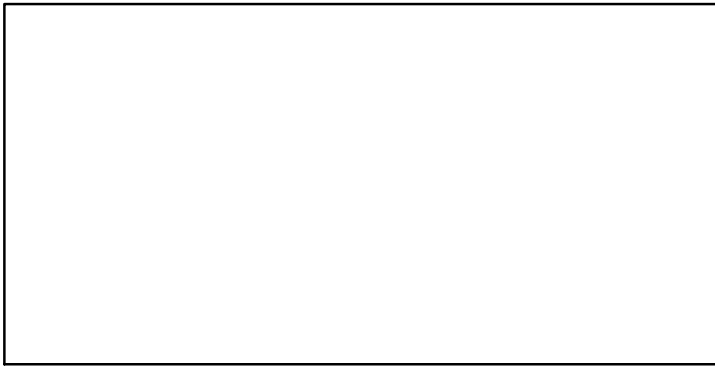
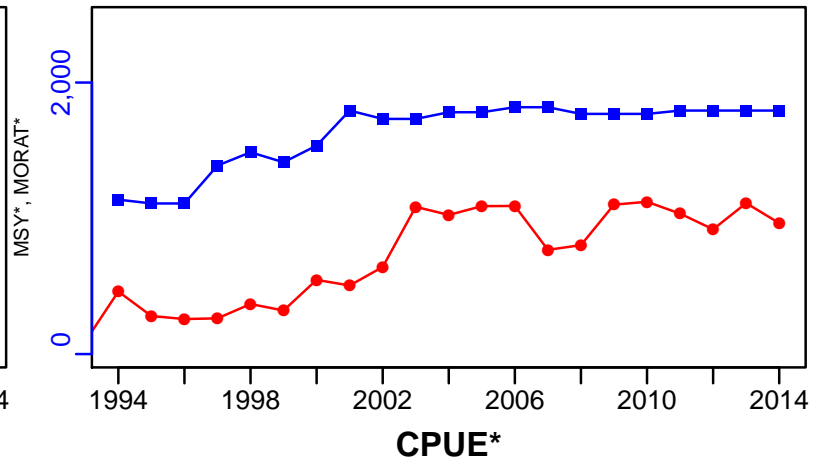


Arctic surfclam Quebec and Gulf of St. Lawrence [ARCSURF4RST]

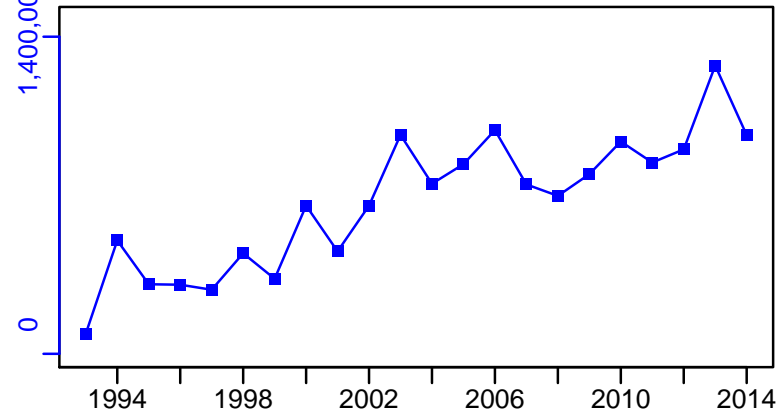
TL-MT, TC*, RecC* (1993-2014-OSGOOD)



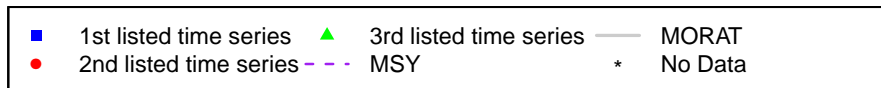
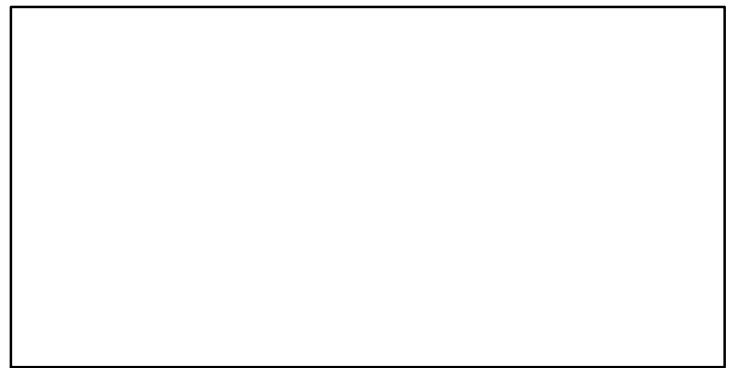
TAC-MT, Cpair-MT, Cadv* (1993-2014-OSGOOD)



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

TB*



SSB*



TN *



F*



ER*



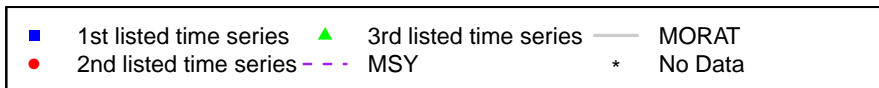
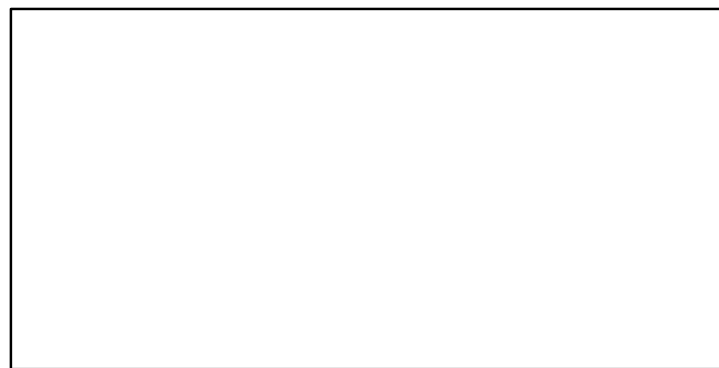
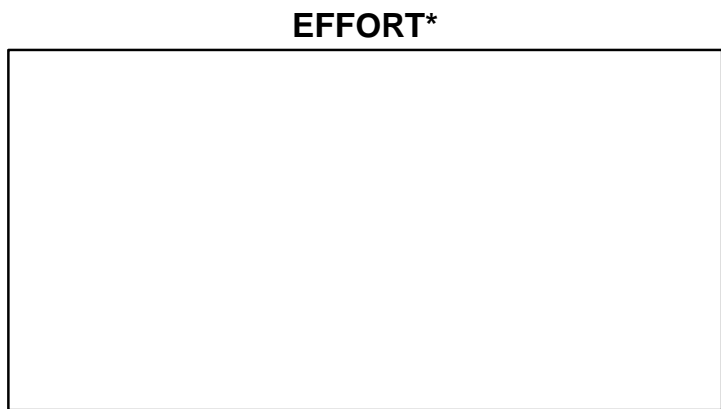
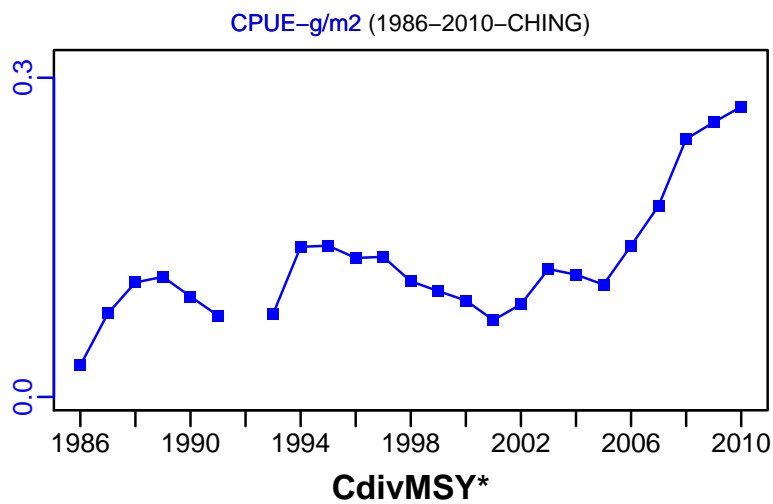
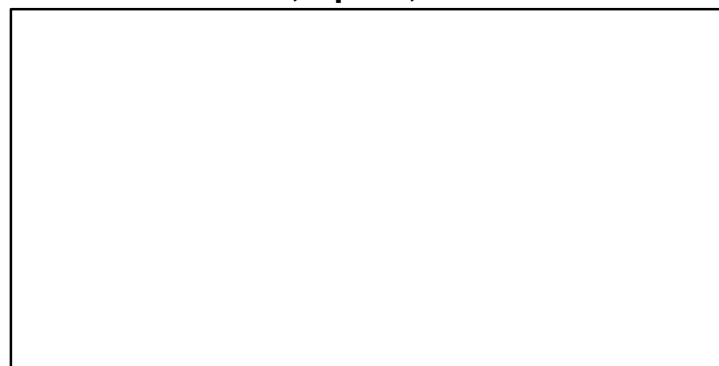
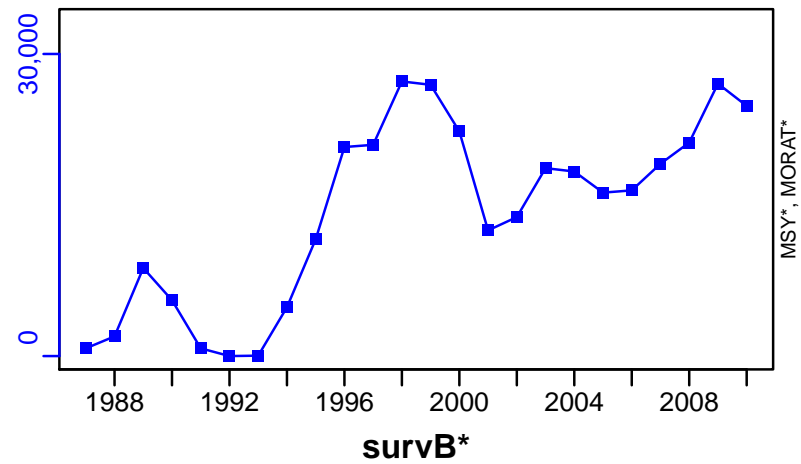
Recruits*



Arctic surfclam Banquereau [ARCSURFBANQ]

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

TAC*, Cpair*, Cadv*



Arctic surfclam Division 3LNO [ARCSURFGB]

Metadata	
Scientific Name	Mactromeris 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*

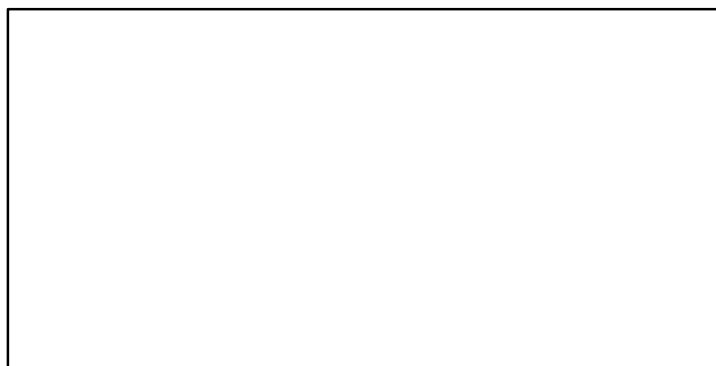


◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



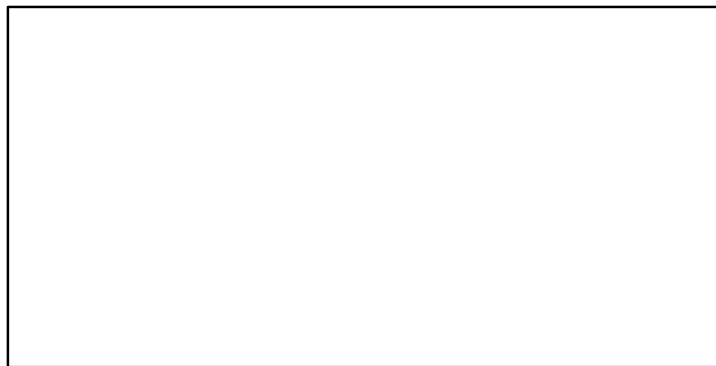
F*



ER*



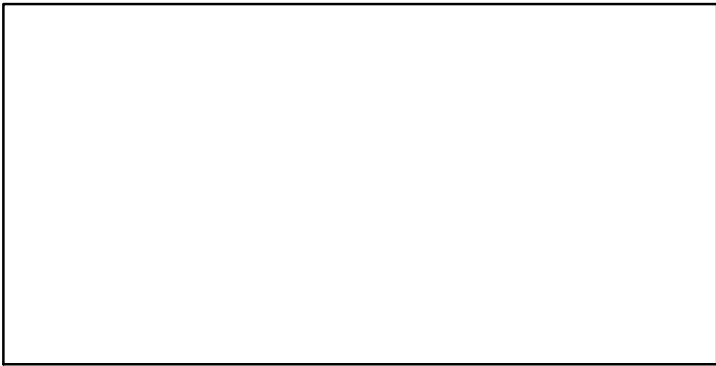
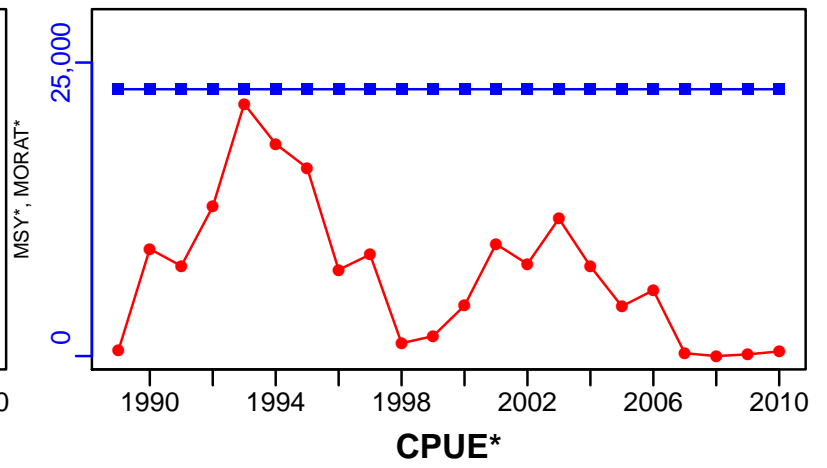
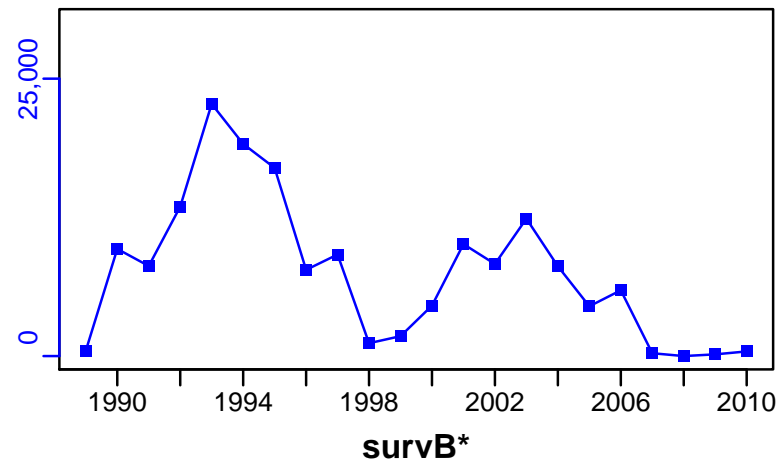
Recruits*



Arctic surfclam Division 3LNO [ARCSURFGB]

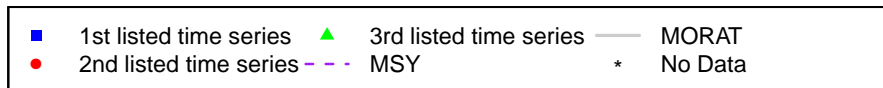
TL-MT, TC*, RecC* (1989-2010-WATSON)

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



EFFORT*

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

TB*



SSB*



TN *



F*



ER*



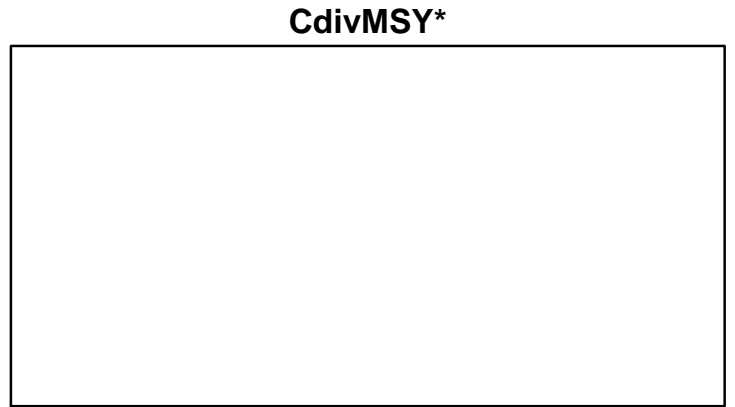
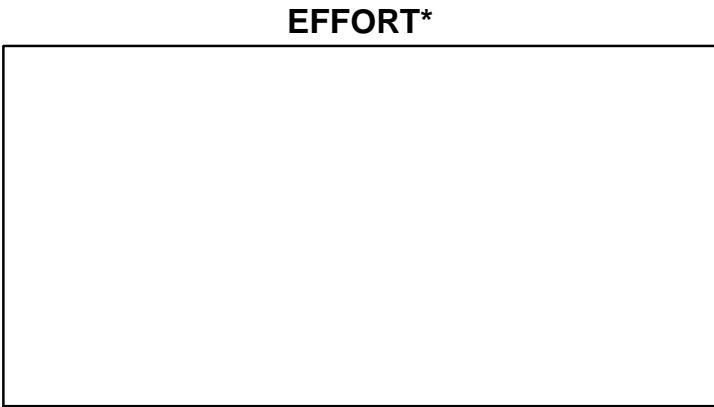
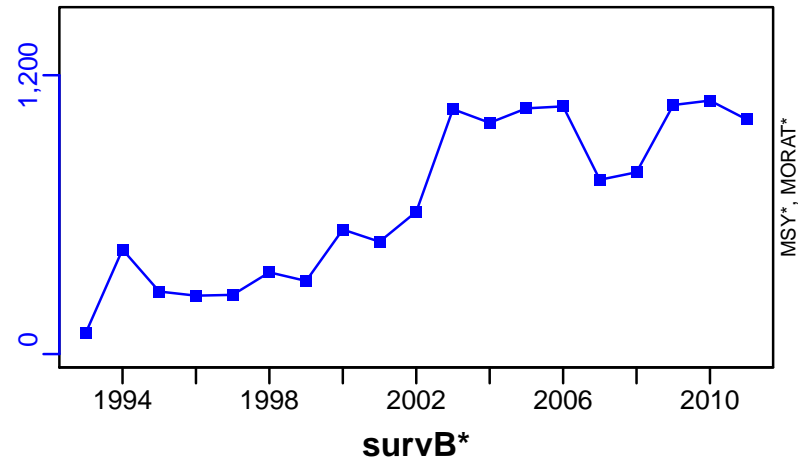
Recruits*



Arctic surfclam Quebec Coastal Waters [ARCSURFQCW]

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

TAC*, Cpair*, Cadv*



Atlantic halibut Scotian Shelf and Southern Grand Banks [ATHAL3NOPs4VWX5Zc]

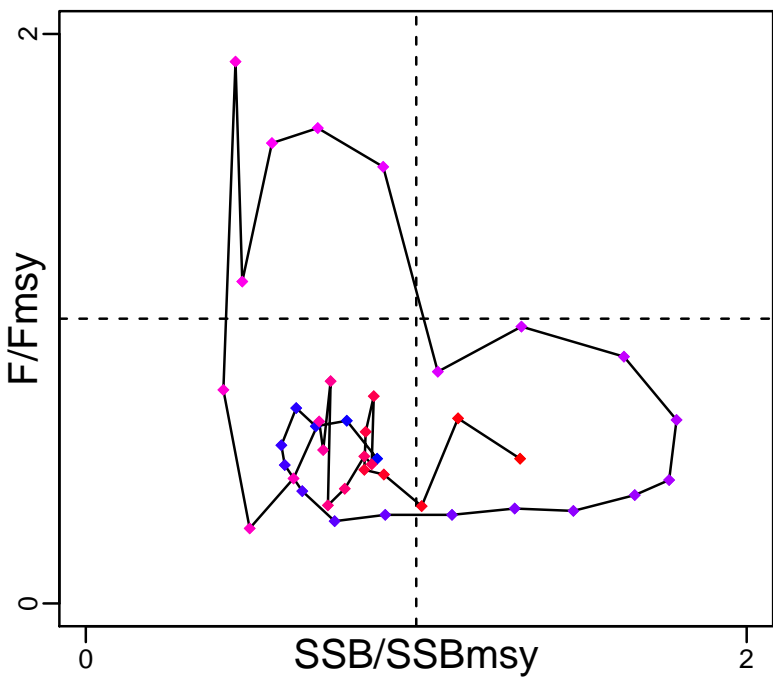
Metadata	
Scientific Name	Hippoglossus hippoglossus
Current Assess ID	DFO-ATHAL3NOPs4VWX5Zc-1970-2014-WATSON
Area	Scotian Shelf and Southern Grand Banks
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2010	4900
Fmsy	Fmsy-1/yr	2010	0.36
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

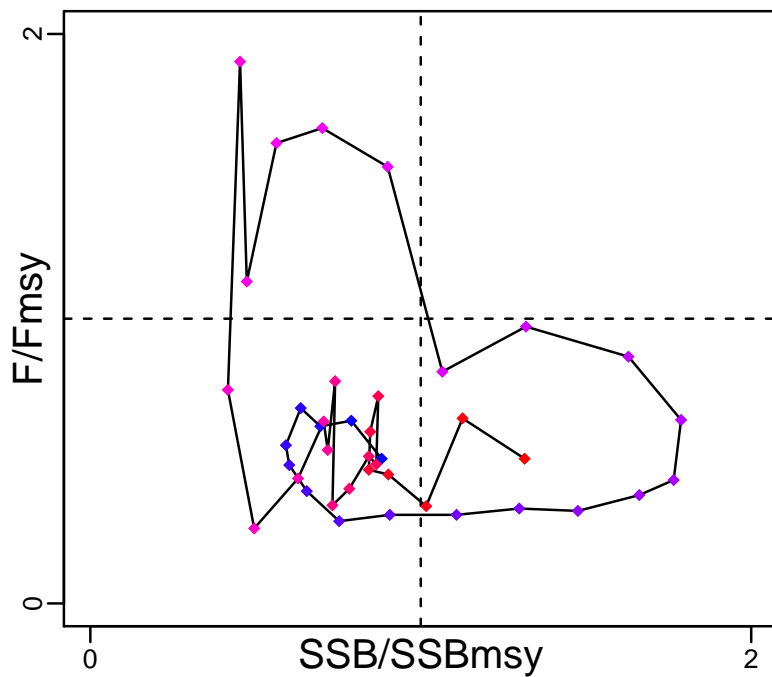
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	31,800	-	-
SSB	SSB-MT	2014	6650	-	-
TN	TN-E00	2014	3,460,000	Both	-
R	R-E00	2014	669,000	-	-
F	F-1/yr	2010	0.3	-	-
ER	ER-calc-ratio	2014	0.072	-	-
TC	-	-	-		
TL	TL-MT	2014	2290		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2010	1.314		
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	0.833		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic halibut Scotian Shelf and Southern Grand Banks [ATHAL3NOPs4VWX5Zc]

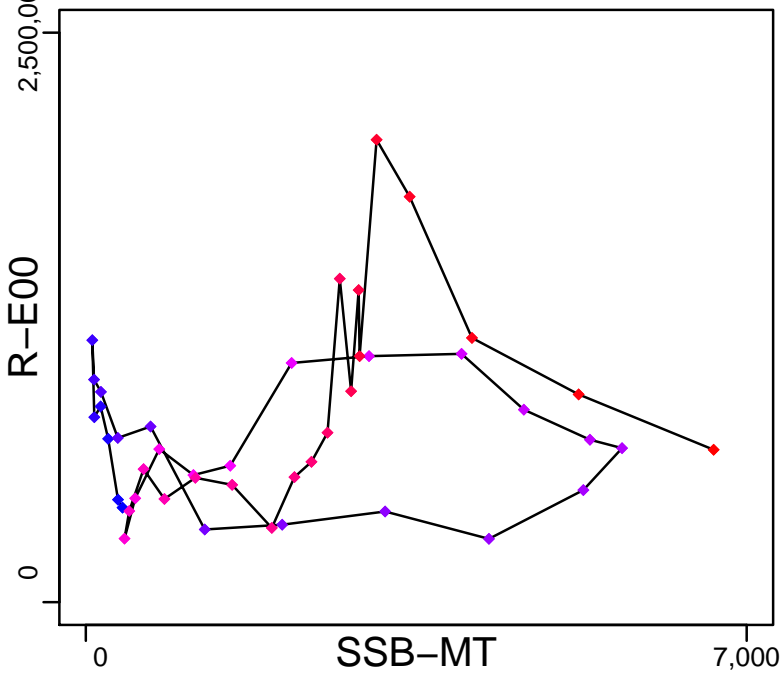
Kobe MSYpref (1960–2010–CHING)



Kobe MGTpref (1960–2010–CHING)

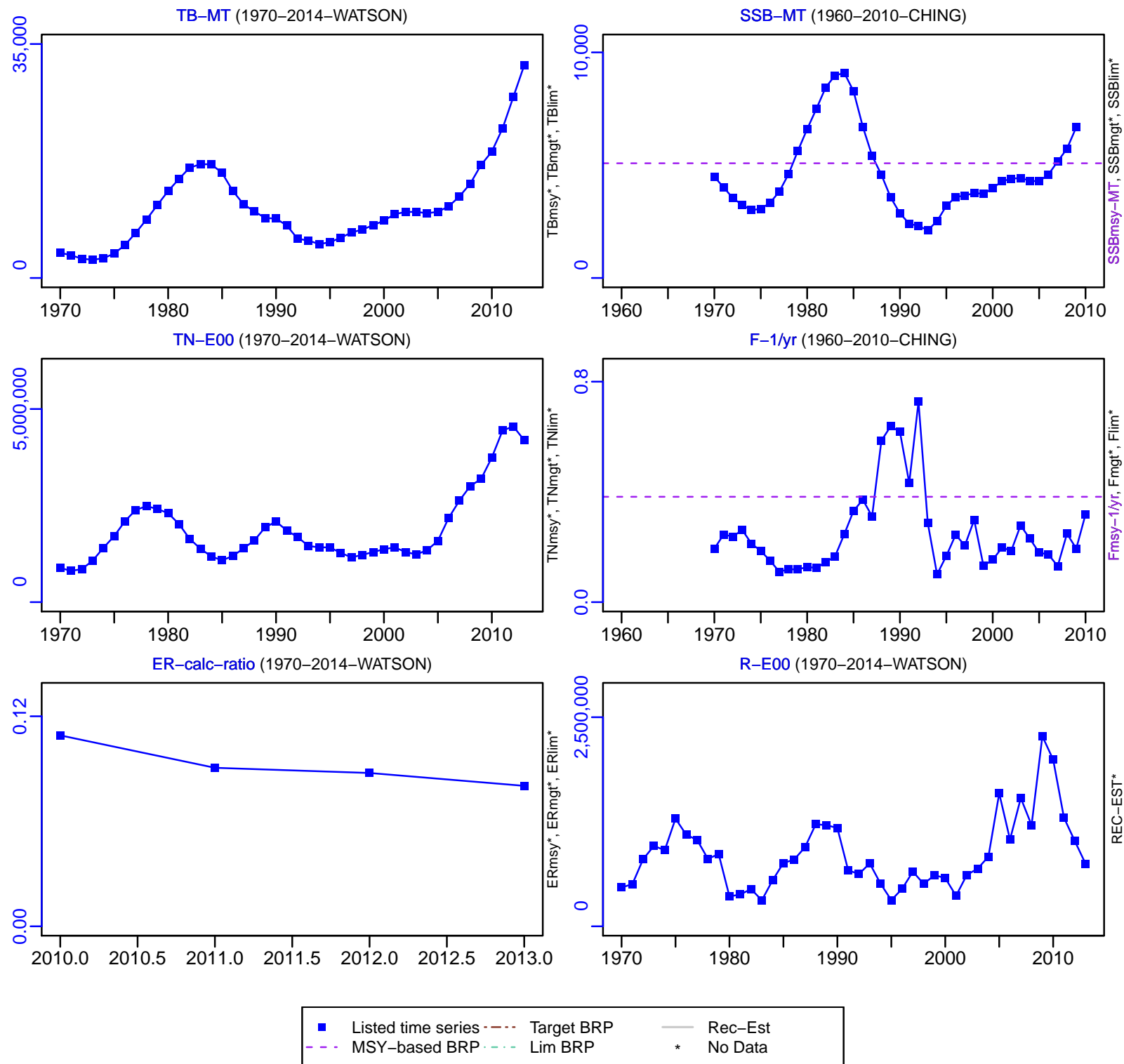


Spawner Recruit (1970–2014–WATSON)



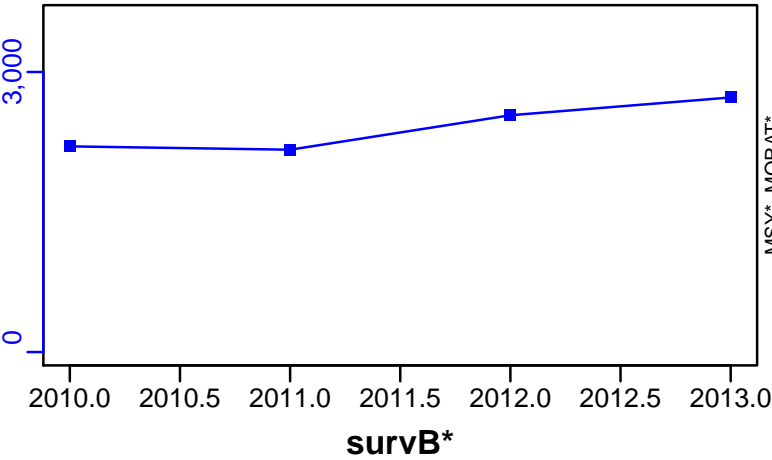
◆ Start Year ◆ End Year * No Data

Atlantic halibut Scotian Shelf and Southern Grand Banks [ATHAL3NOPs4VWX5Zc]

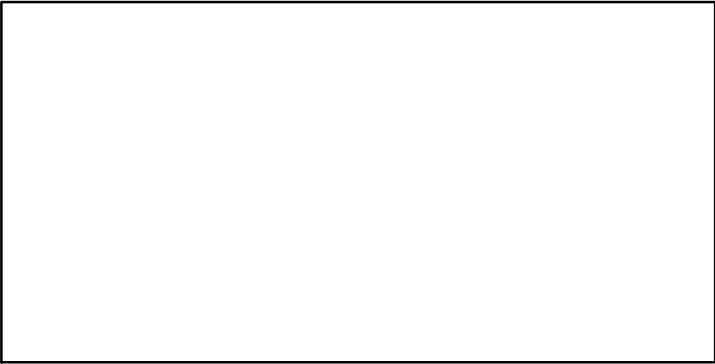
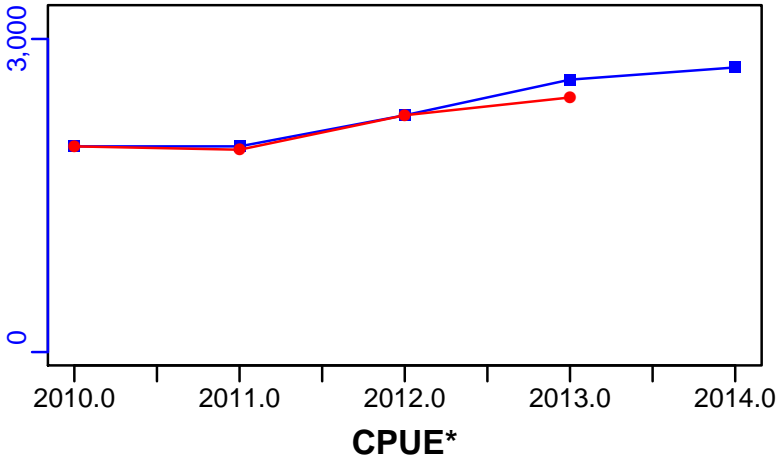


Atlantic halibut Scotian Shelf and Southern Grand Banks [ATHAL3NOPs4VWX5Zc]

TL-MT, TC*, RecC* (1970-2014-WATSON)



TAC-MT, Cpair-MT, Cadv* (1970-2014-WATSON)



EFFORT*



CdivMSY*



Barndoor skate Canadian Atlantic Ocean [BSKATCANATL]

Metadata	
Scientific Name	Dipturus laevis
Current Assess ID	DFO-MAR-BSKATCANATL-1970-1987-PREFONTAINE
Area	Canadian Atlantic Ocean
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	1987

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	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



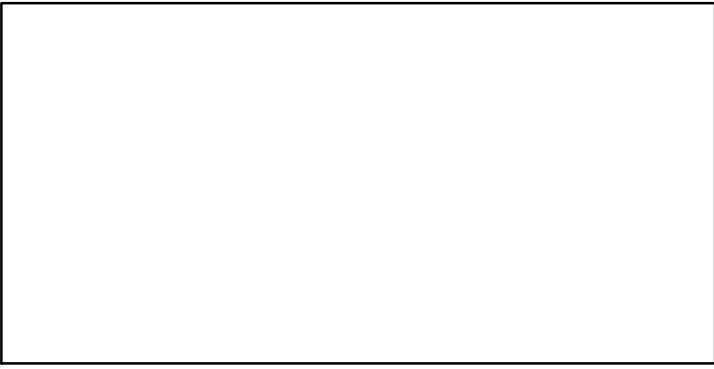
Production*



◆ Start Year ◆ End Year * No Data

Barndoor skate Canadian Atlantic Ocean [BSKATCANATL]

TB*



SSB*



TN *



F*



ER*

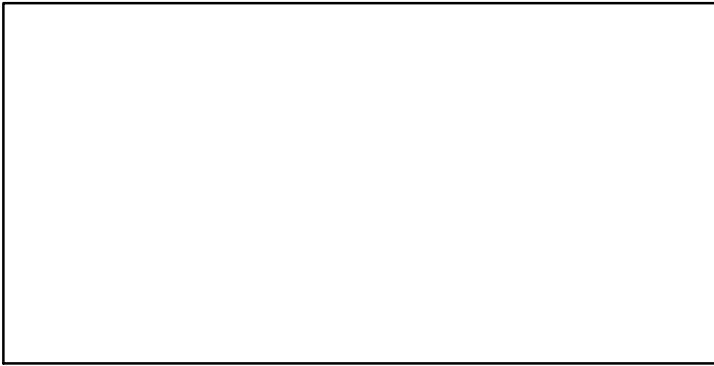


Recruits*

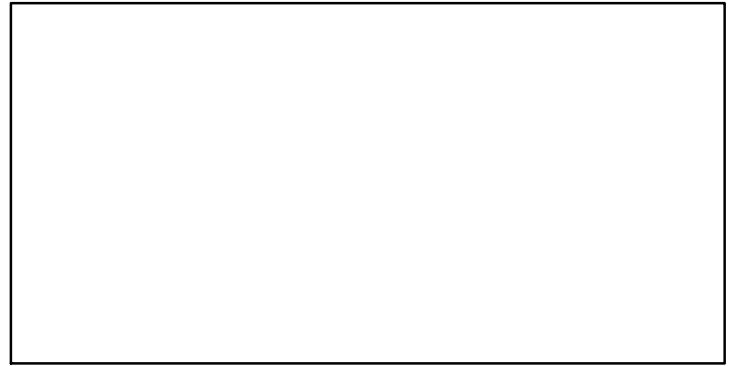


Barndoor skate Canadian Atlantic Ocean [BSKATCANATL]

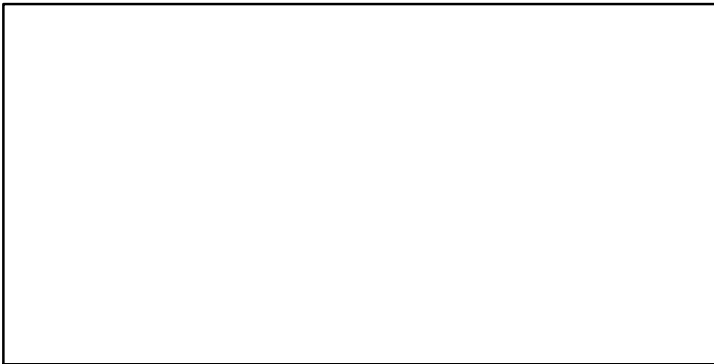
TC*, TL*, RecC*



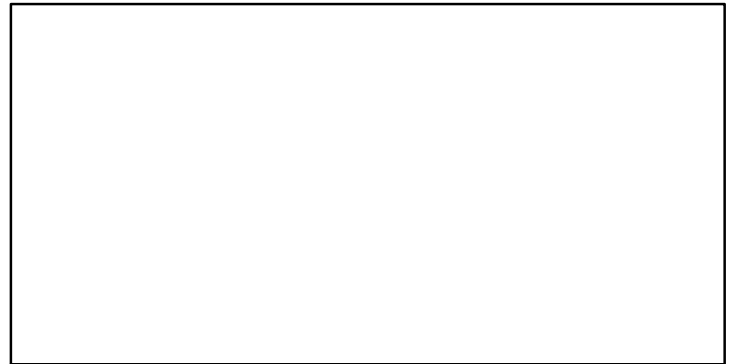
TAC*, Cpair*, Cadv*



survB*



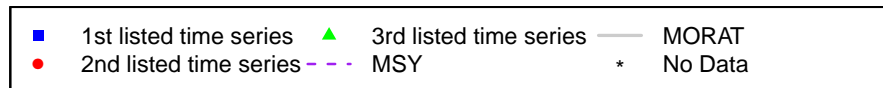
CPUE*



EFFORT*



CdivMSY*



Capelin Gulf of St. Lawrence [CAPE4RST]

Metadata	
Scientific Name	Mallotus villosus
Current Assess ID	DFO-CAPE4RST-1960-2012-WATSON
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012, 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	2012	9470		
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

TB*



SSB*



TN *



F*



ER*

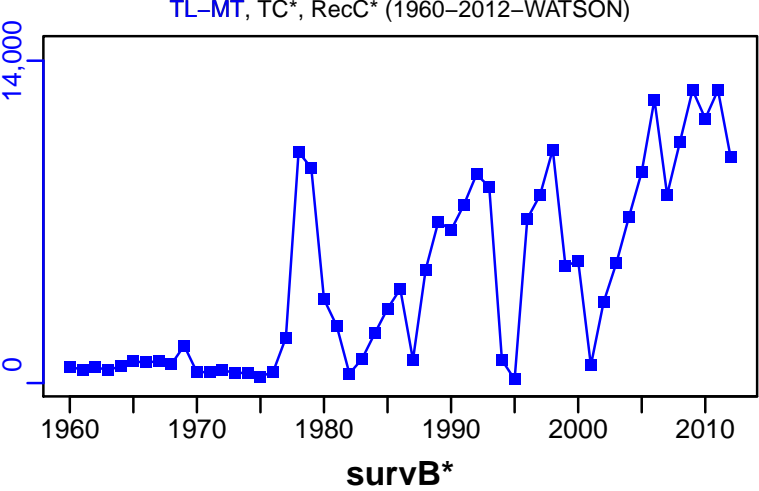


Recruits*

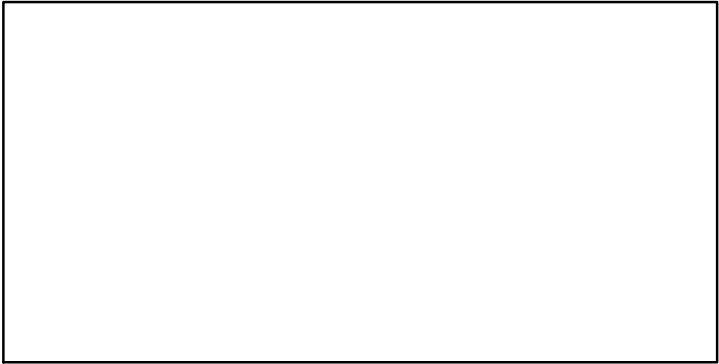
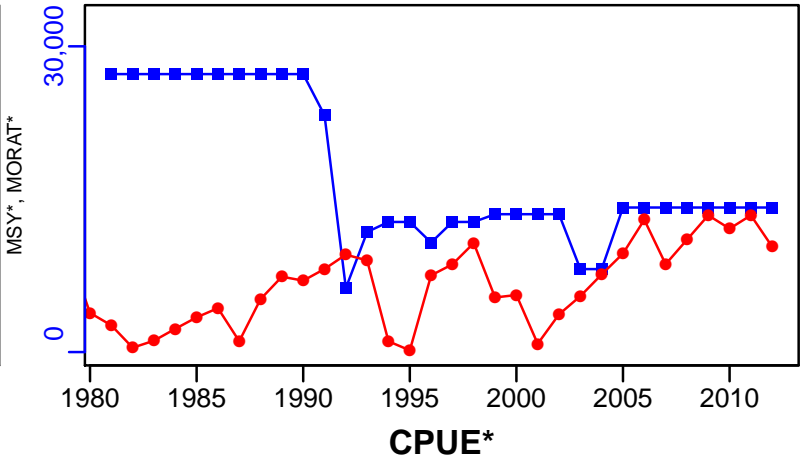


Capelin Gulf of St. Lawrence [CAPE4RST]

TL-MT, TC*, RecC* (1960-2012-WATSON)



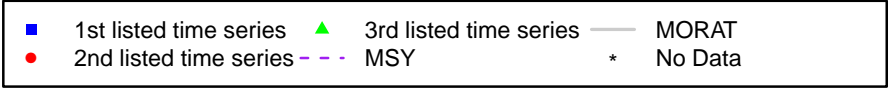
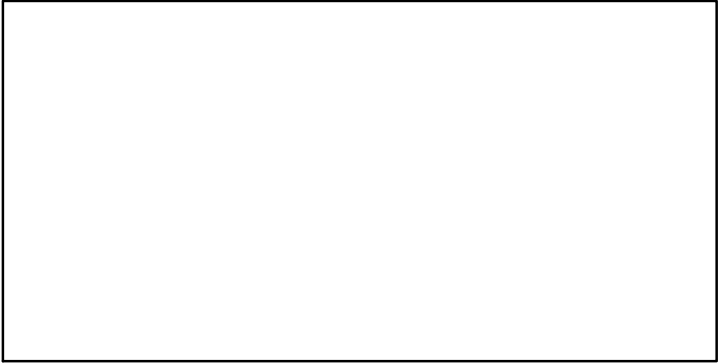
TAC-MT, Cpair-MT, Cadv* (1960-2012-WATSON)



EFFORT*



CdivMSY*



Atlantic cod NAFO 1abdce [COD1abdce]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	NWWG-COD1abdce-1952-2016-ICESIMP2018
Area	NAFO 1abdce
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2015, 2016

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	2016	3740		
TL	TL-MT	2015	4860		
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

TB*



SSB*



TN *



F*



ER*

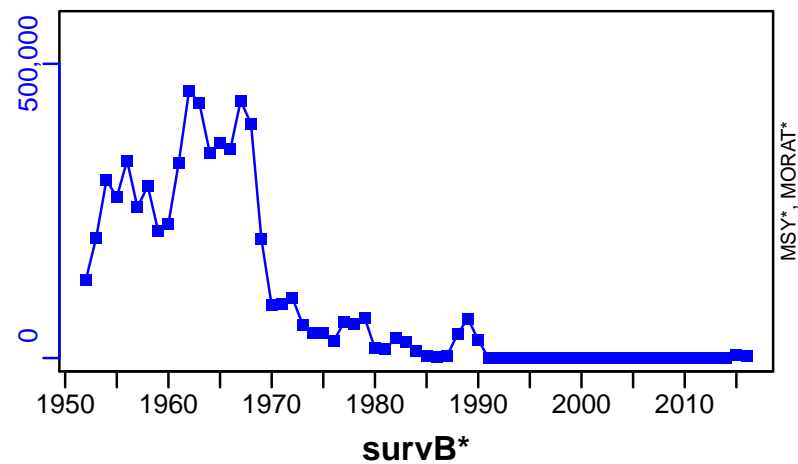


Recruits*



Atlantic cod NAFO 1abdce [COD1abdce]

TC-MT, TL*, RecC* (1952-2016-ICESIMP2018)



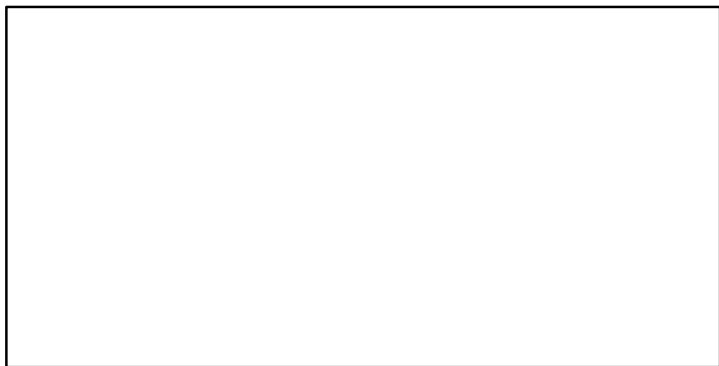
TAC*, Cpair*, Cadv*



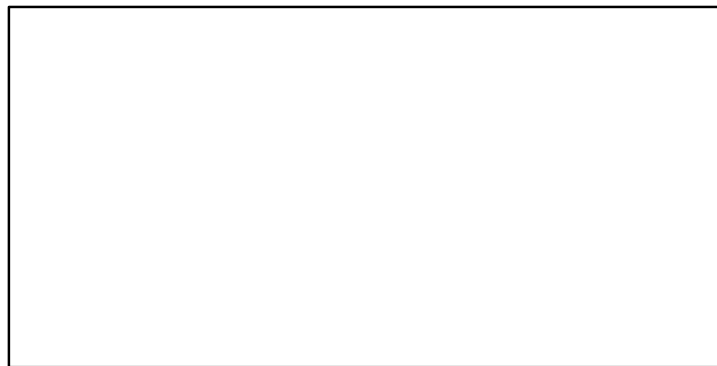
CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Atlantic cod NAFO Subarea 1 (inshore) [COD1IN]

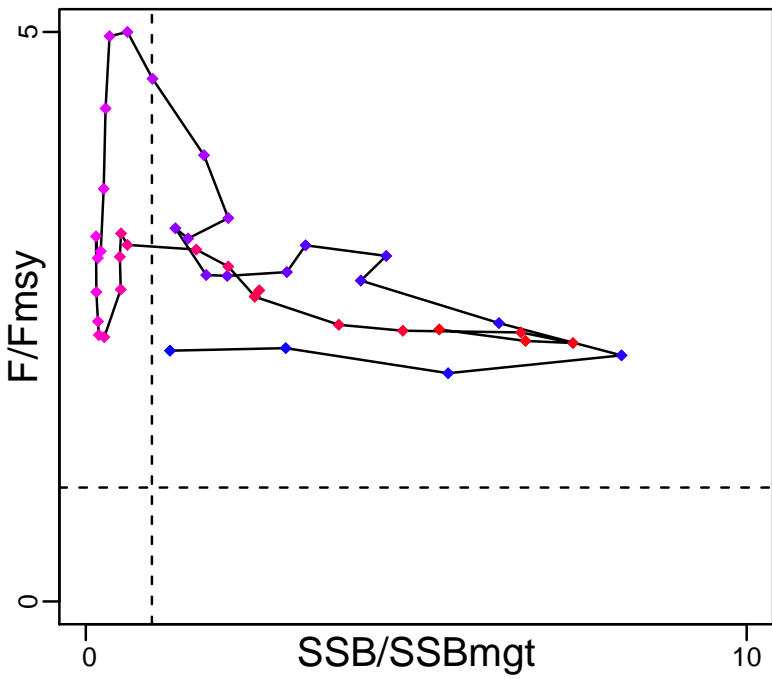
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	NWWG-COD1IN-1975-2018-ICESIMP2018
Area	NAFO Subarea 1 (inshore)
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2016, 2016, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.268
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	5983
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	4346
Flim	-	-	-
ERlim	-	-	-

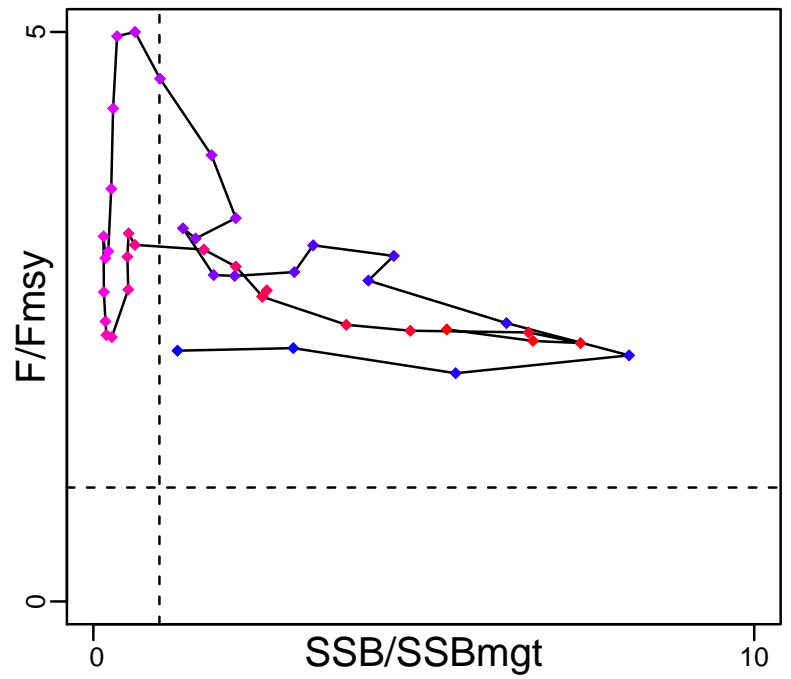
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	46,100	Both	-
SSB	SSB-MT	2018	33,800	Both	-
TN	-	-	-	-	-
R	R-E00	2018	10,600,000	-	1
F	F-1/yr	2018	0.64	-	4 to 8
ER	ER-calc-ratio	2018	0.677	-	-
TC	TC-MT	2016	25,300		
TL	TL-MT	2018	31,200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	2.388		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	5.649		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic cod NAFO Subarea 1 (inshore) [COD1IN]

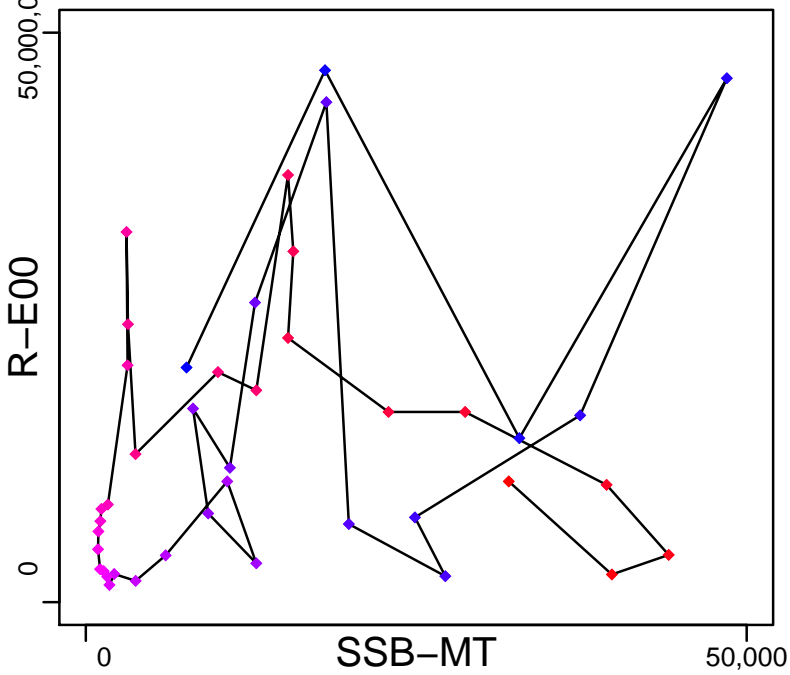
Kobe MSYpref (1975–2018–ICESIMP2018)



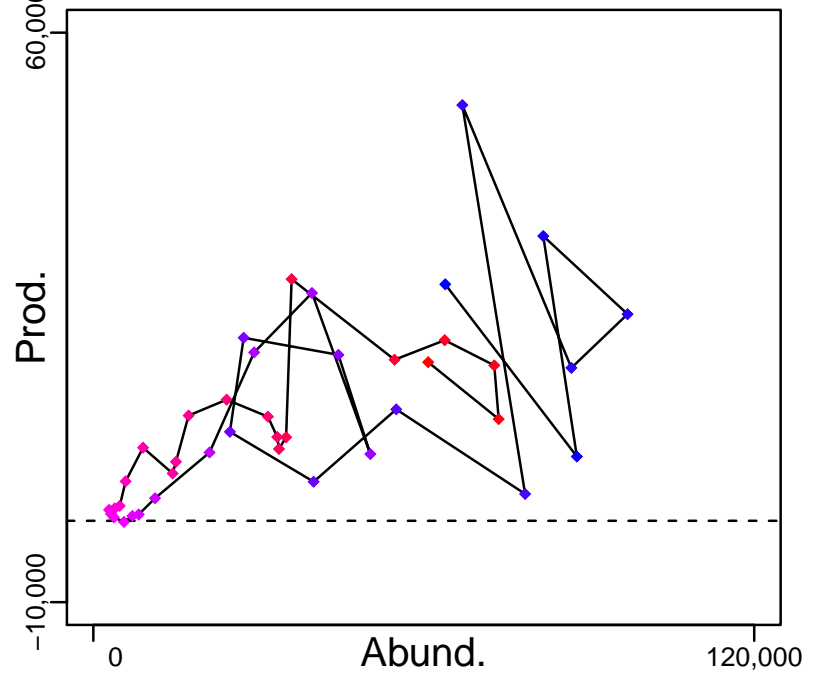
Kobe MGTpref (1975–2018–ICESIMP2018)



Spawner Recruit (1975–2018–ICESIMP2018)



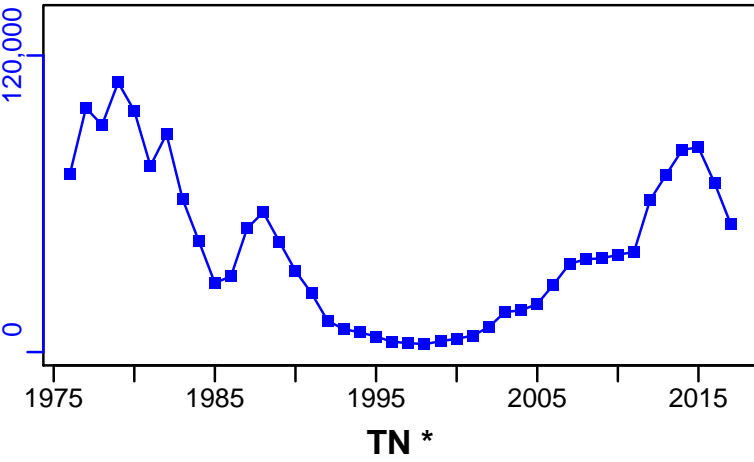
Production (1975–2018–ICESIMP2018)



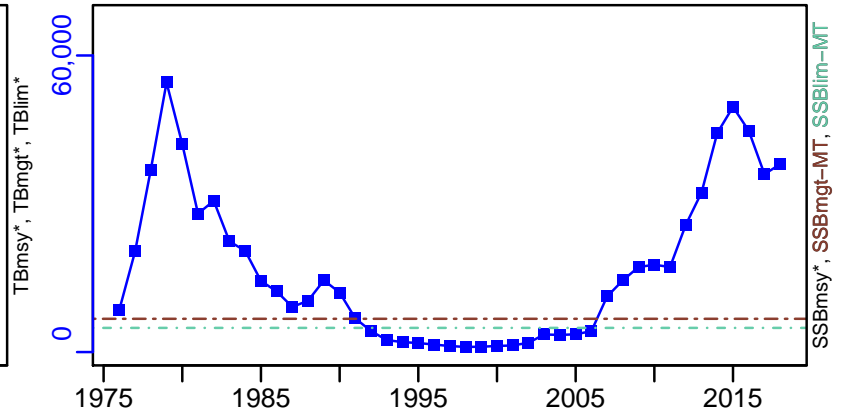
◆ Start Year ◆ End Year * No Data

Atlantic cod NAFO Subarea 1 (inshore) [COD1IN]

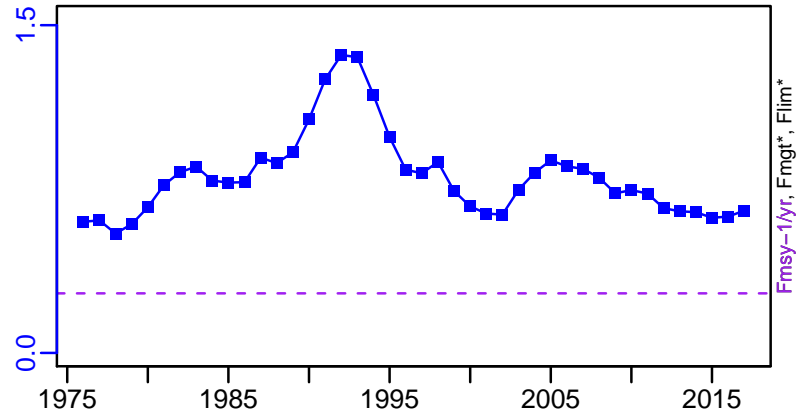
TB-MT (1975–2018–ICESIMP2018)



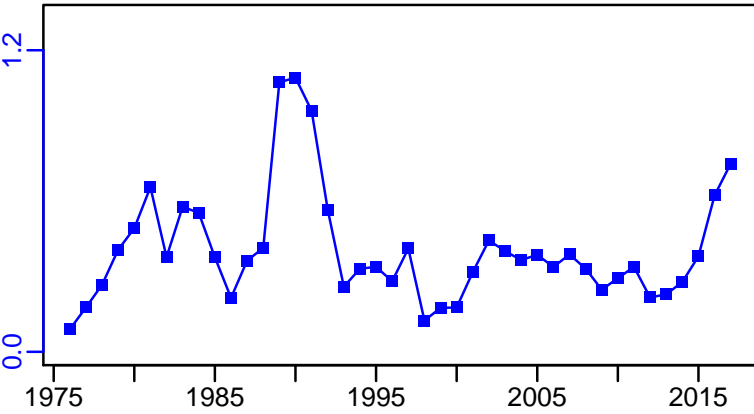
SSB-MT (1975–2018–ICESIMP2018)



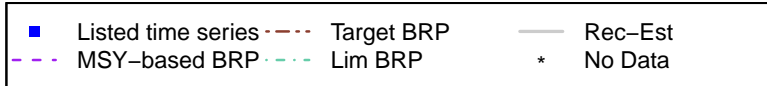
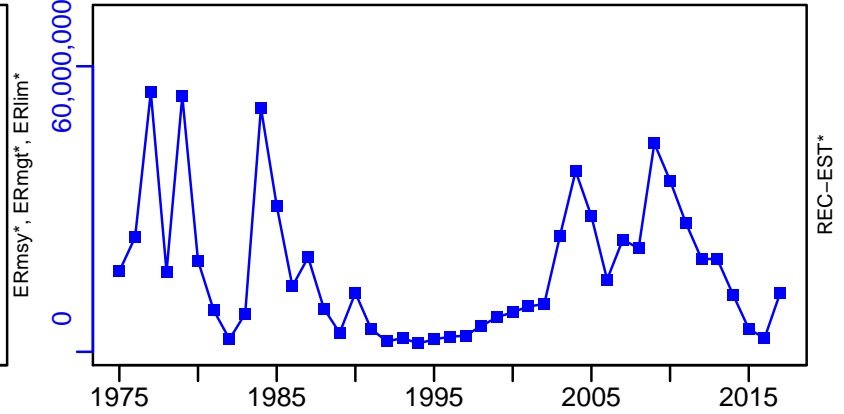
F-1/yr (1975–2018–ICESIMP2018)



ER-calc-ratio (1975–2018–ICESIMP2018)

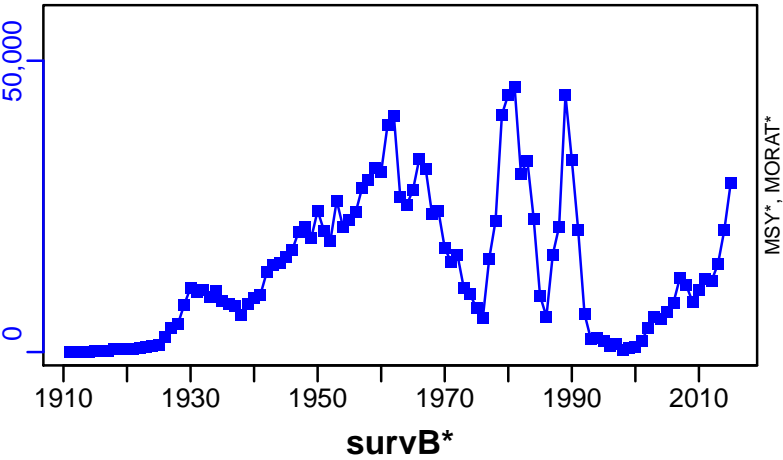


R-E00 (1975–2018–ICESIMP2018)



Atlantic cod NAFO Subarea 1 (inshore) [COD1IN]

TC-MT, TL*, RecC* (1911-2016-ICESIMP2016)



TAC*, Cpair*, Cadv*



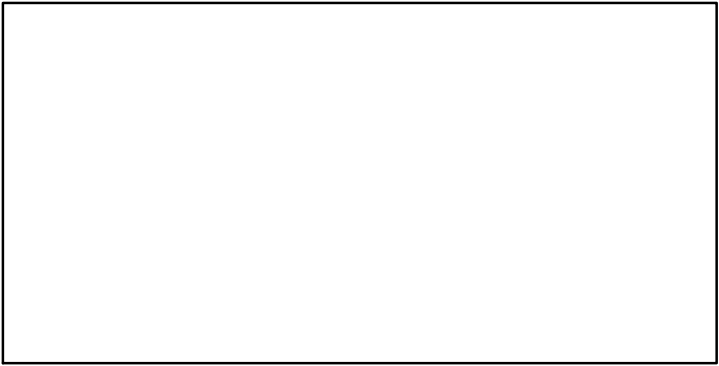
CPUE*



EFFORT*



CdivMSY*



Atlantic cod Southern Labrador-Eastern Newfoundland [COD2J3KL]

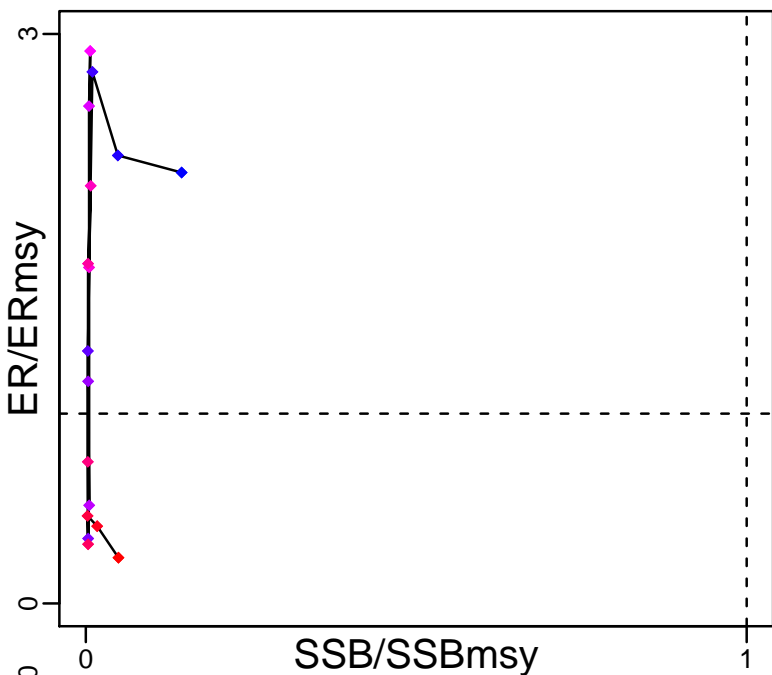
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-NFLD-COD2J3KL-1959-2018-ASHBROOK
Area	Southern Labrador-Eastern Newfoundland
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland Region
Asmts in RAM	2014, 2011, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2011	1×10^6
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2011	0.1
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	932,432
Flim	-	-	-
ERlim	-	-	-

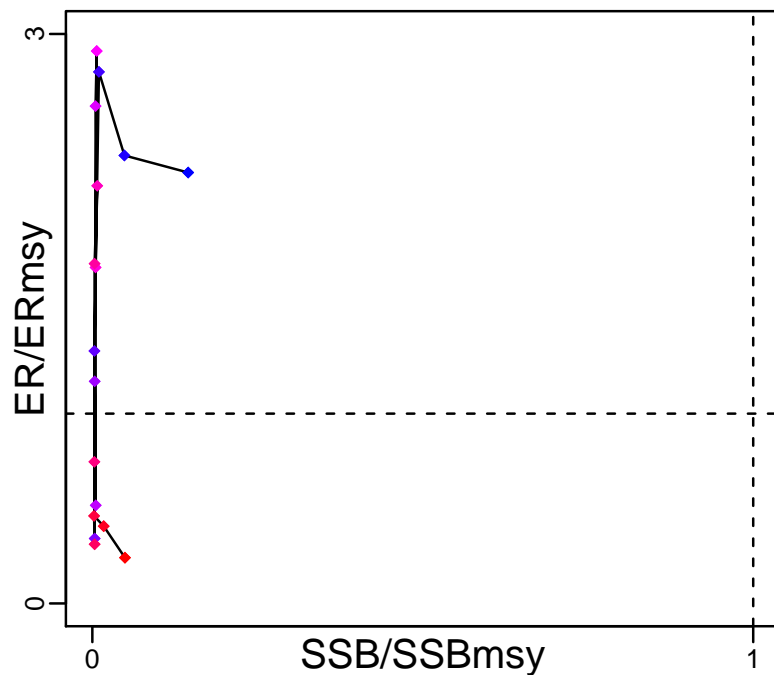
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	467,000	Both	2+
SSB	SSB-MT	2018	315,000	Both	5+
TN	TN-E00	2018	7.95×10^8	Both	2+
R	R-E00	2018	2.62×10^8	Both	2
F	F-1/yr	2018	0.02	-	5-14
ER	ER-calc-ratio	2018	0.02	-	-
TC	TC-MT	2018	13,030		
TL	TL-MT	2014	4580		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.066		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.241		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic cod Southern Labrador–Eastern Newfoundland [COD2J3KL]

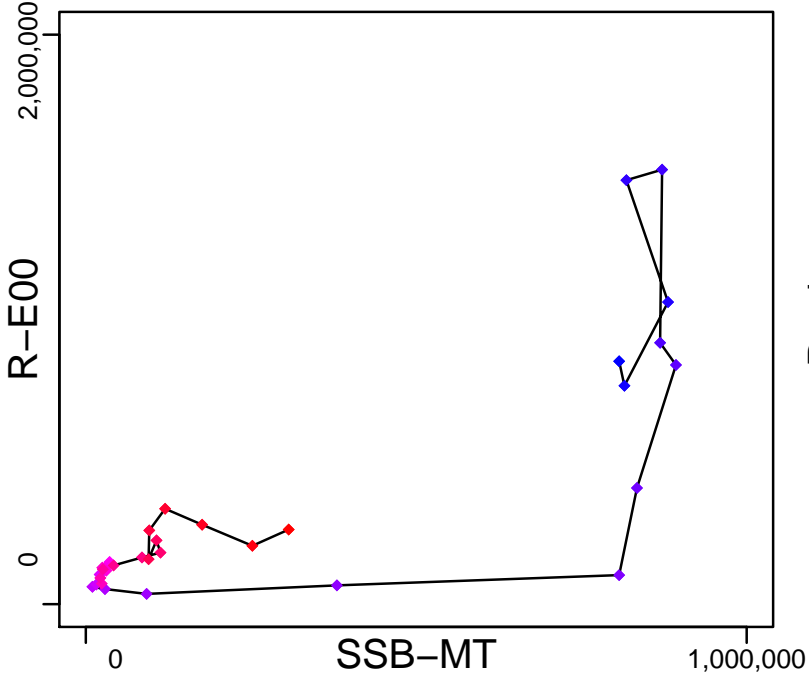
Kobe MSYpref (1850–2011–CHING)



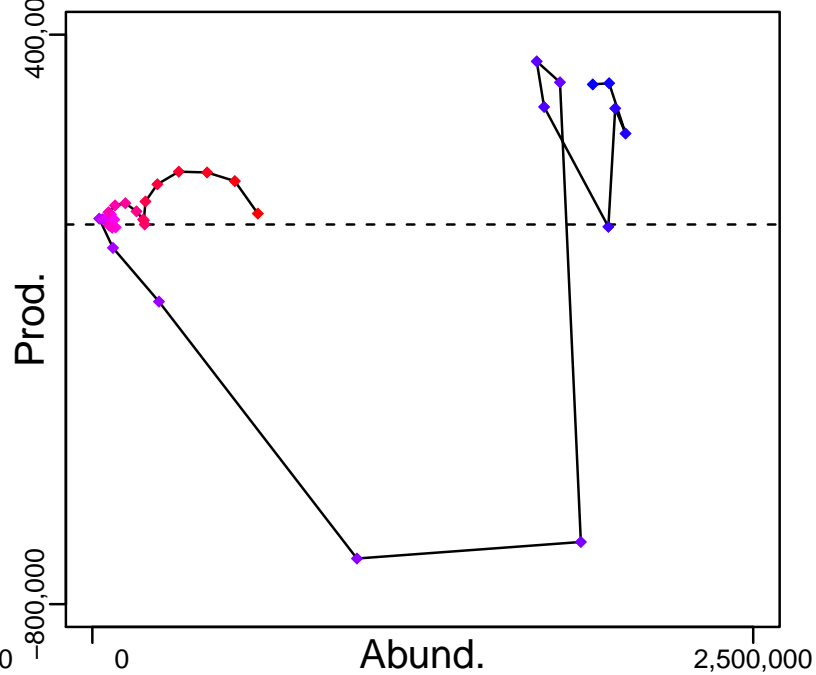
Kobe MGTpref (1850–2011–CHING)



Spawner Recruit (1959–2018–ASHBROOK)

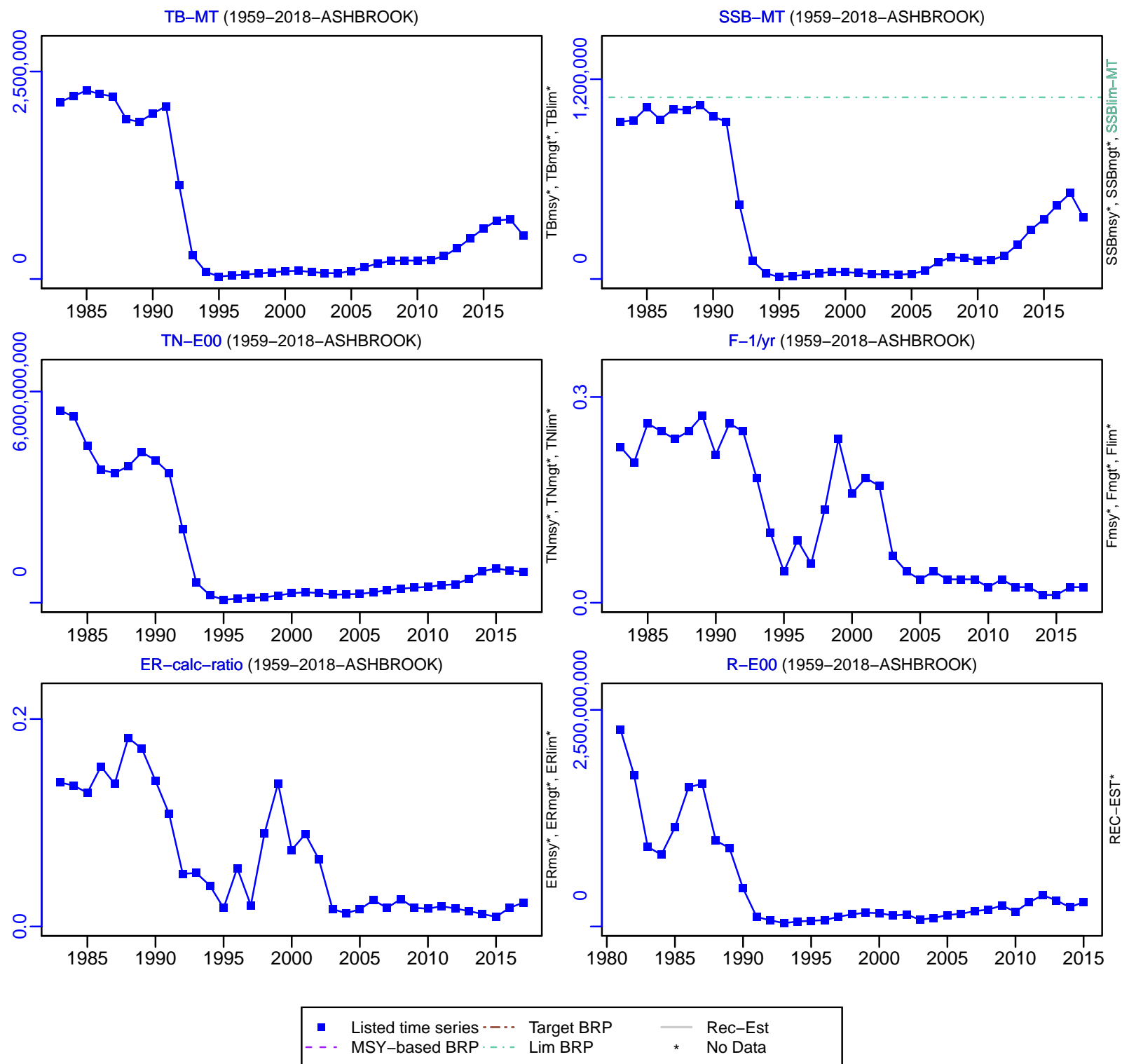


Production (1959–2018–ASHBROOK)



◆ Start Year ◆ End Year * No Data

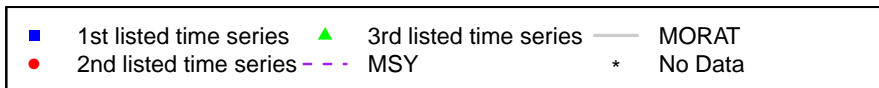
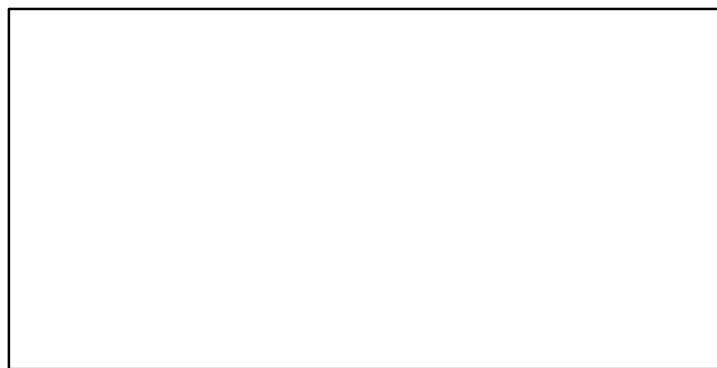
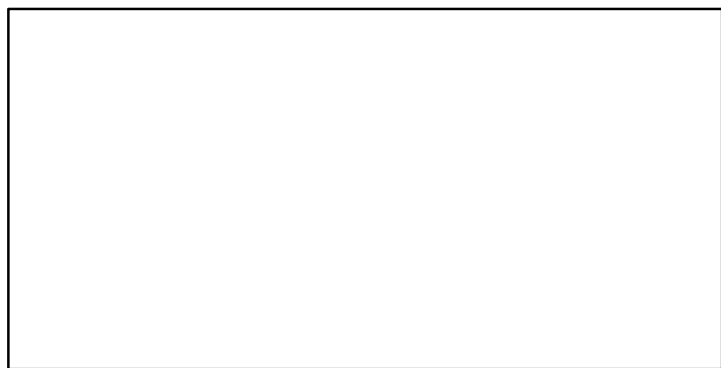
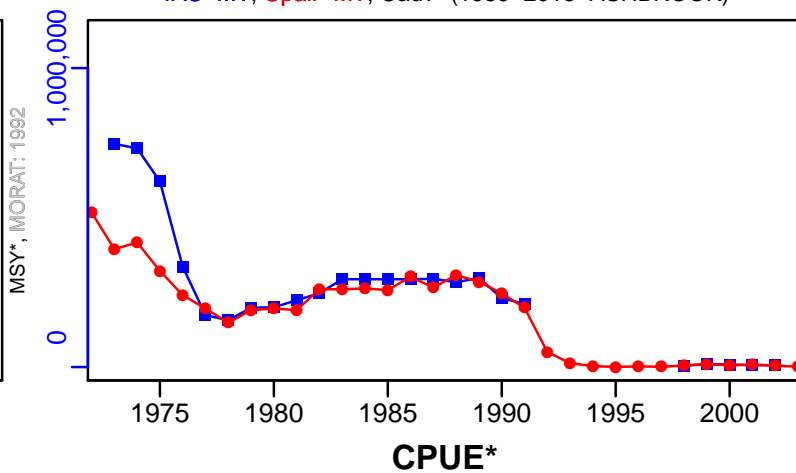
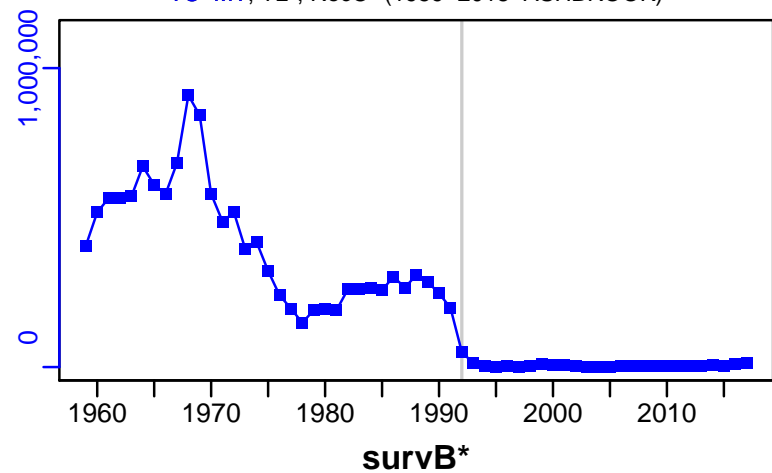
Atlantic cod Southern Labrador–Eastern Newfoundland [COD2J3KL]



Atlantic cod Southern Labrador–Eastern Newfoundland [COD2J3KL]

TC–MT, TL*, RecC* (1959–2018–ASHBROOK)

TAC–MT, Cpair–MT, Cadv* (1959–2018–ASHBROOK)



Atlantic cod Flemish Cap [COD3M]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	NAFO-SC-COD3M-1960-2012-CHING
Area	Flemish Cap
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
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	TB-MT	2012	58,800	-	-
SSB	SSB-MT	2012	36,100	-	-
TN	-	-	-	-	-
R	R-E00	2012	45,600	-	-
F	F-1/yr	2012	0.327	-	-
ER	ER-ratio	2012	0.236	-	-
TC	TC-MT	2012	13,900		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic cod Flemish Cap [COD3M]

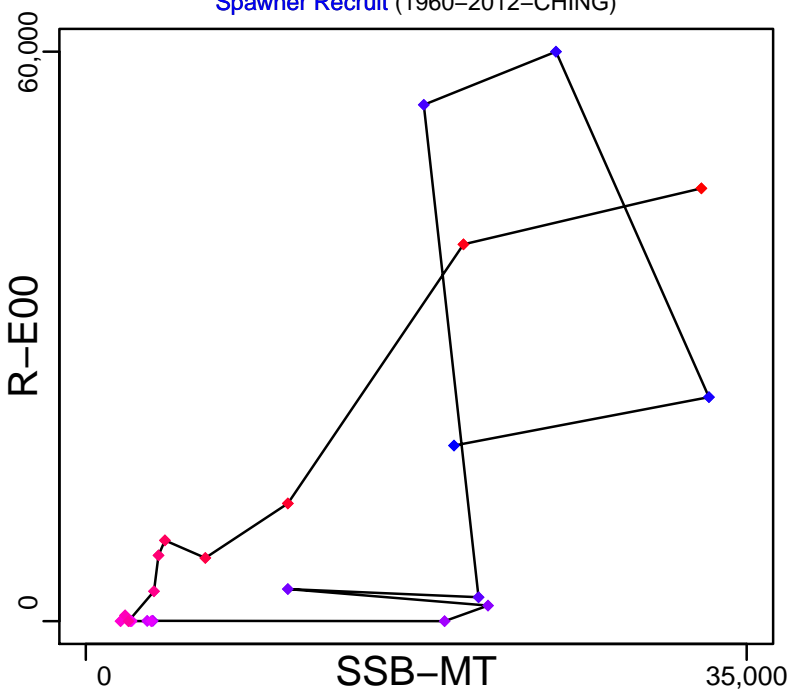
Kobe MSY*



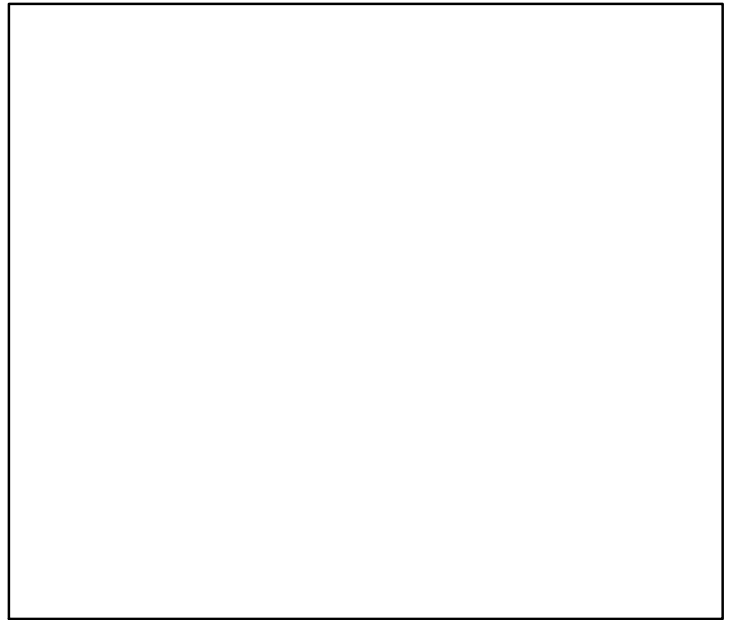
Kobe MGT*



Spawner Recruit (1960–2012–CHING)



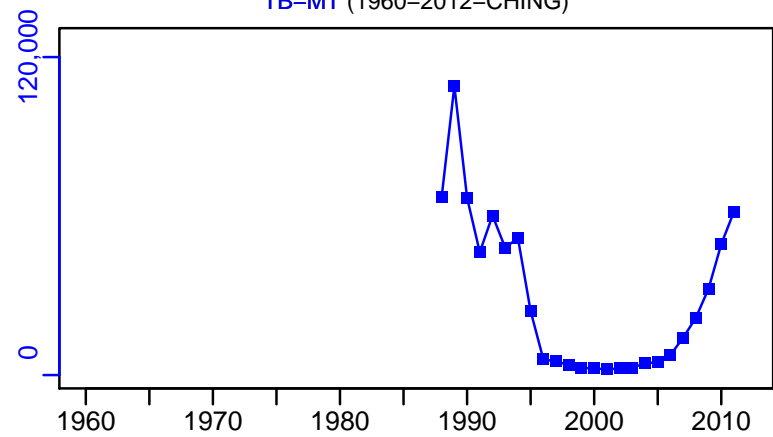
Production*



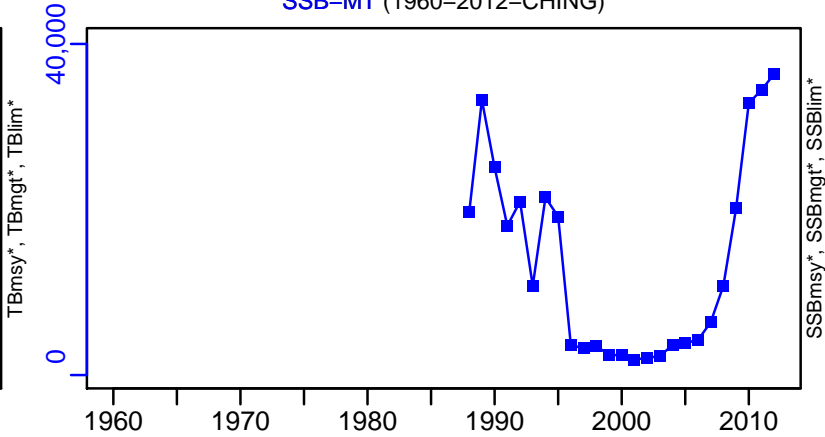
◆ Start Year ◆ End Year * No Data

Atlantic cod Flemish Cap [COD3M]

TB-MT (1960–2012–CHING)



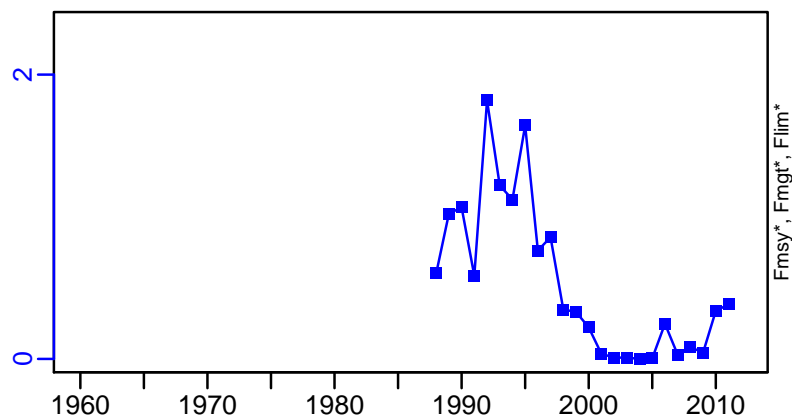
SSB-MT (1960–2012–CHING)



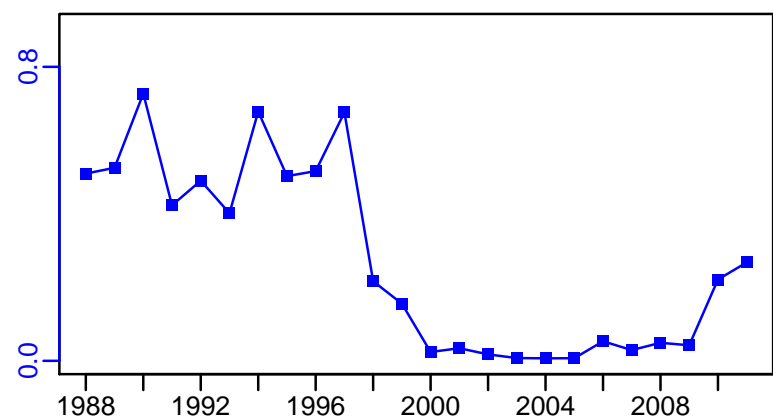
TN *



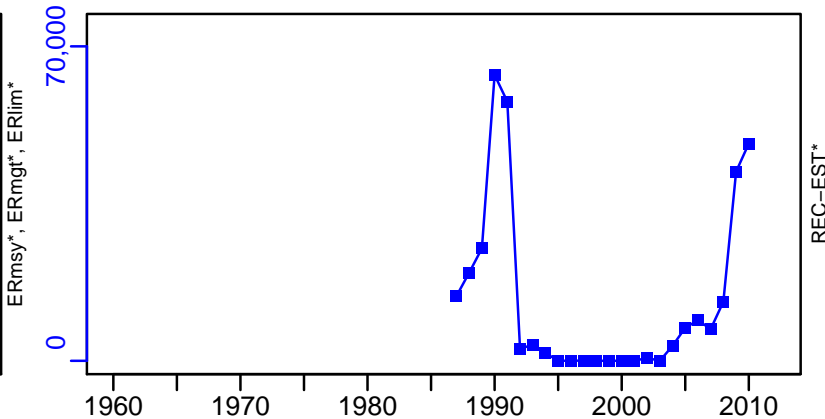
F-1/yr (1960–2012–CHING)



ER-ratio (1960–2012–CHING)



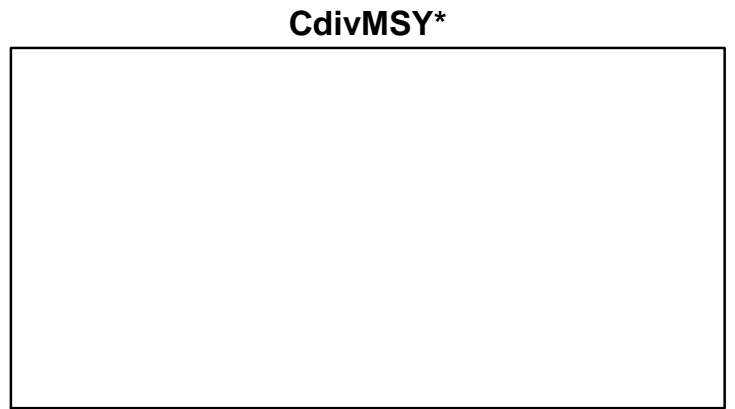
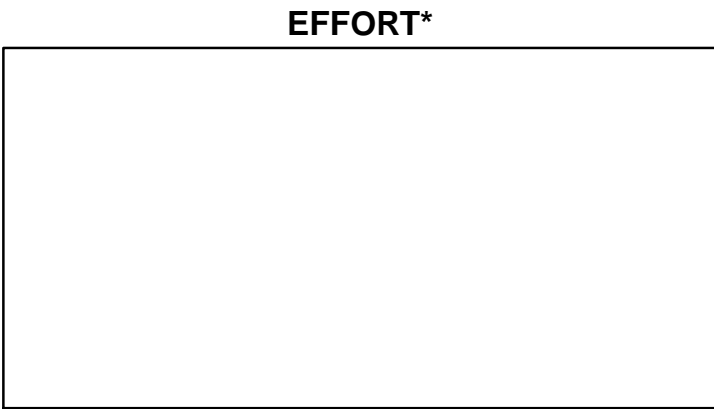
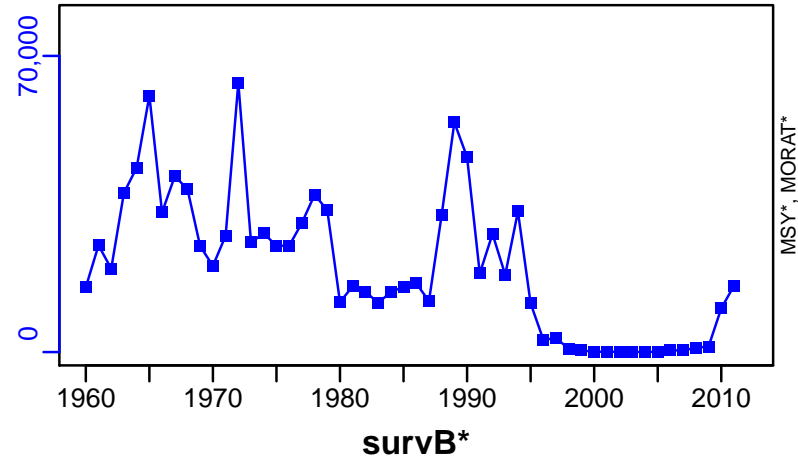
R-E00 (1960–2012–CHING)



Atlantic cod Flemish Cap [COD3M]

TC-MT, TL*, RecC* (1960-2012-CHING)

TAC*, Cpair*, Cadv*



Atlantic cod Southern Grand Banks [COD3NO]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	NAFO-SC-COD3NO-1953-2011-CHING
Area	Southern Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
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	7570	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2011	0.108	-	-
TC	TC-MT	2011	819		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*

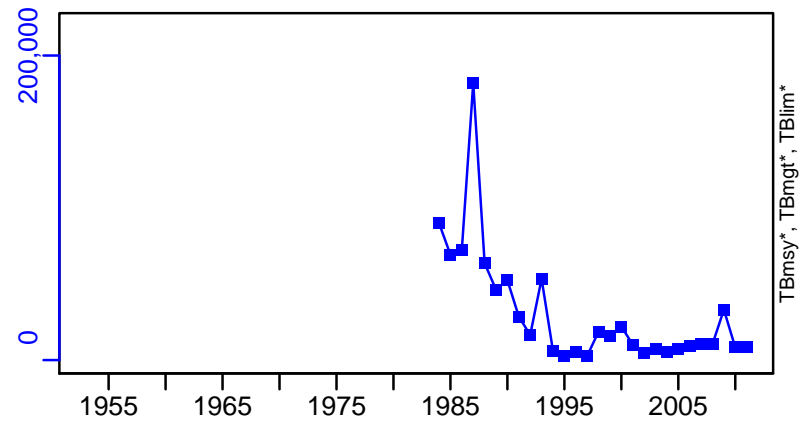


◆ Start Year ◆ End Year * No Data

Atlantic cod Southern Grand Banks [COD3NO]

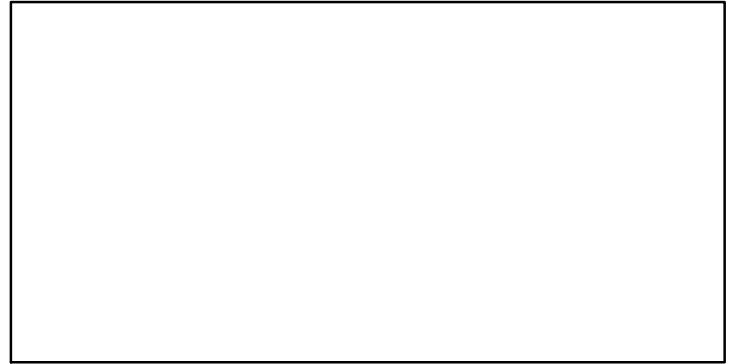
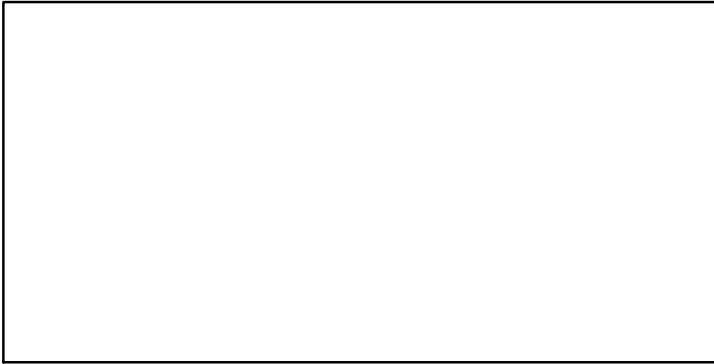
TB-MT (1953–2011–CHING)

SSB*



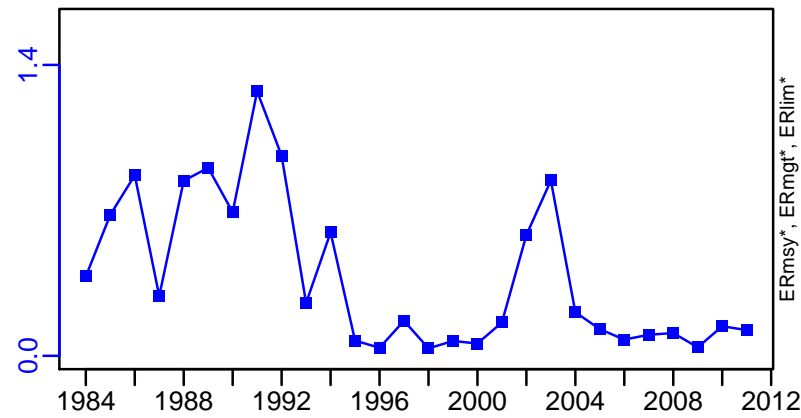
TN *

F*



ER-ratio (1953–2011–CHING)

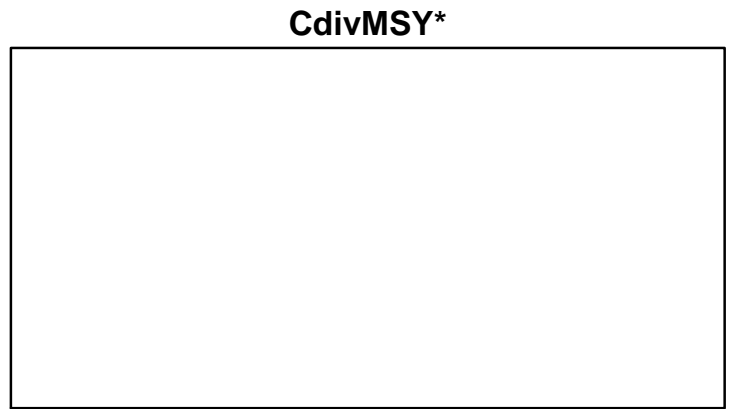
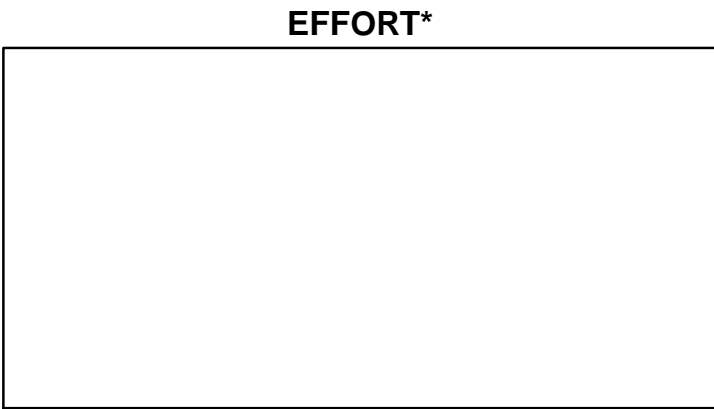
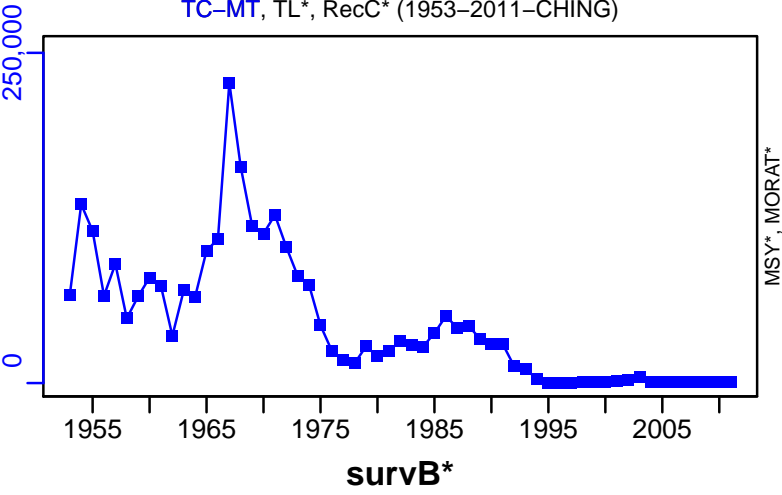
Recruits*



Atlantic cod Southern Grand Banks [COD3NO]

TC-MT, TL*, RecC* (1953-2011-CHING)

TAC*, Cpair*, Cadv*



Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-COD3Pn4RS-1964-2015-WATSON
Area	Northern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2015, 2012

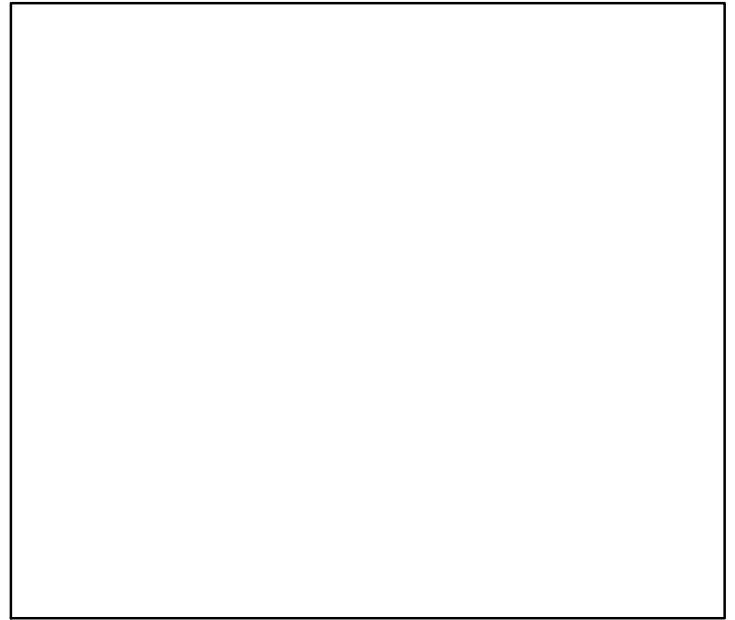
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	47,100	-	3+
SSB	SSB-MT	2015	17,700	-	3+
TN	TN-E00	2015	1.44×10^8	-	3+
R	R-E00	2012	1.5×10^7	-	-
F	F-1/yr	2015	0.09	-	7 to 9
ER	ER-ratio	2015	0.07	-	-
TC	-	-	-		
TL	TL-MT	2015	1240		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

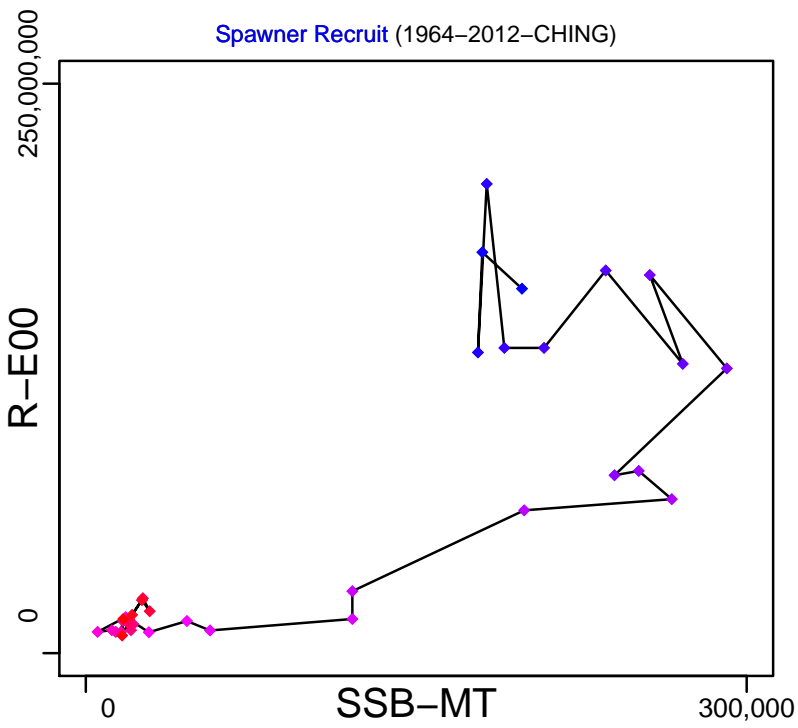
Kobe MSY*



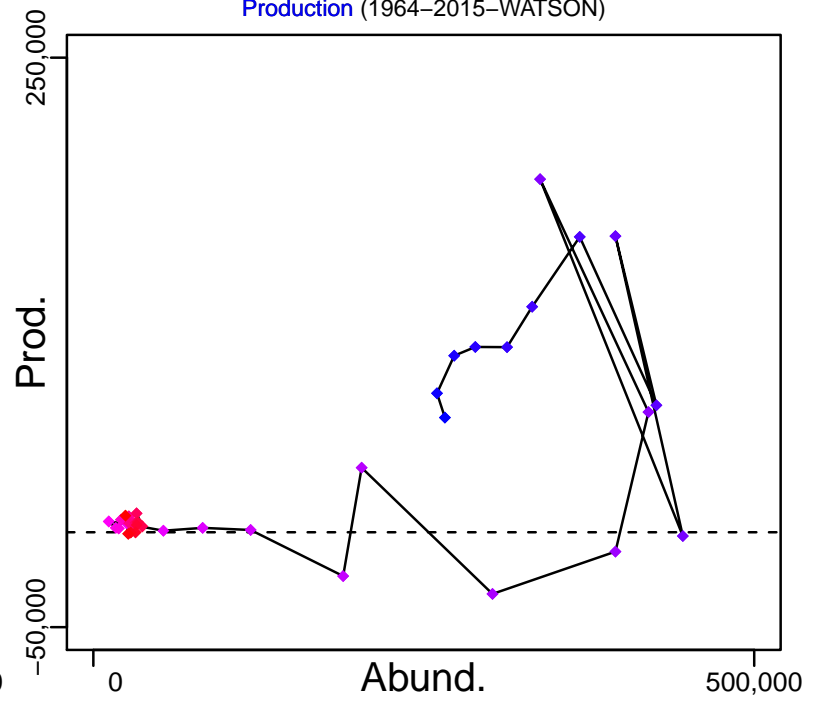
Kobe MGT*



Spawner Recruit (1964–2012–CHING)

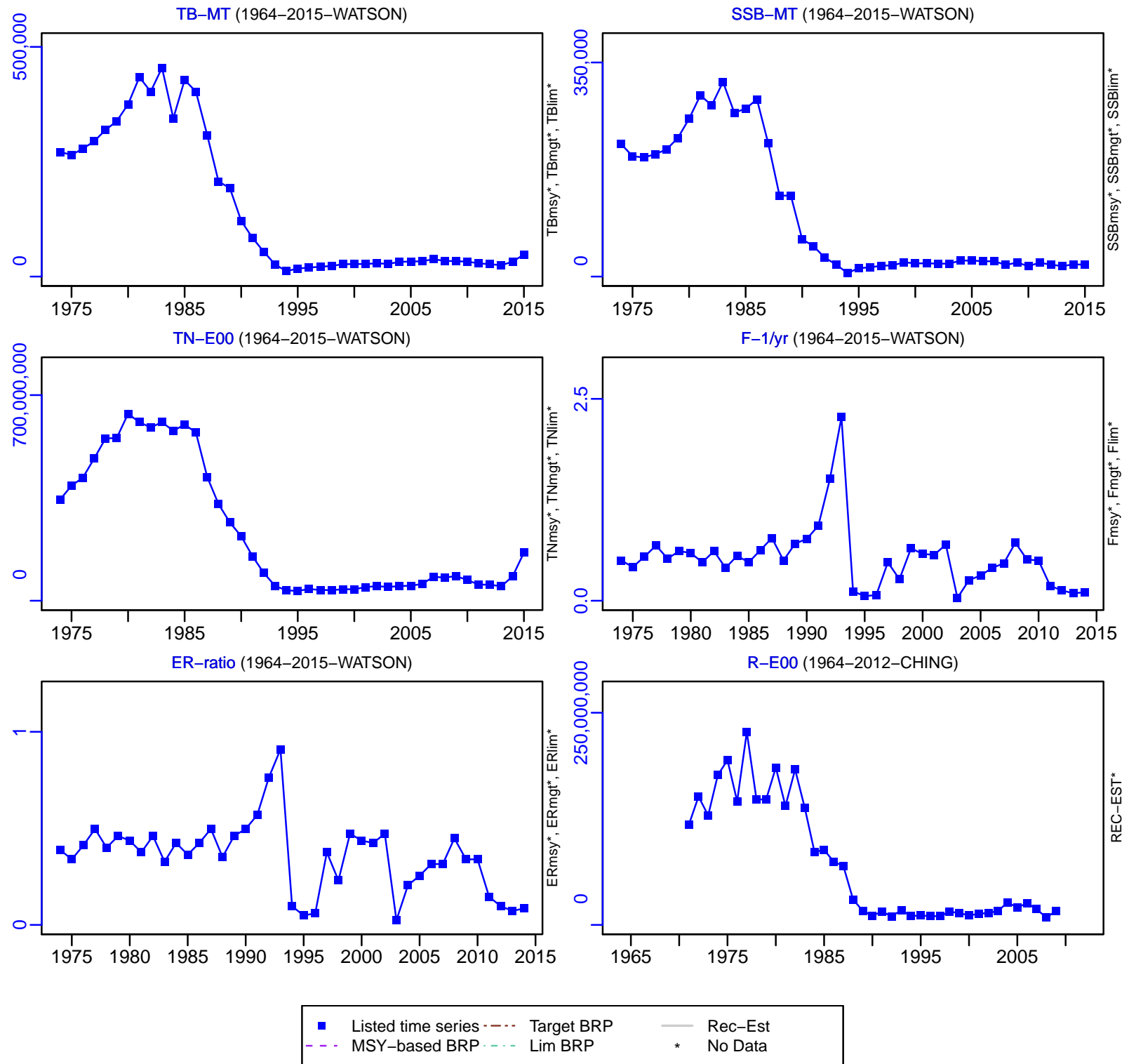


Production (1964–2015–WATSON)



◆ Start Year ◆ End Year * No Data

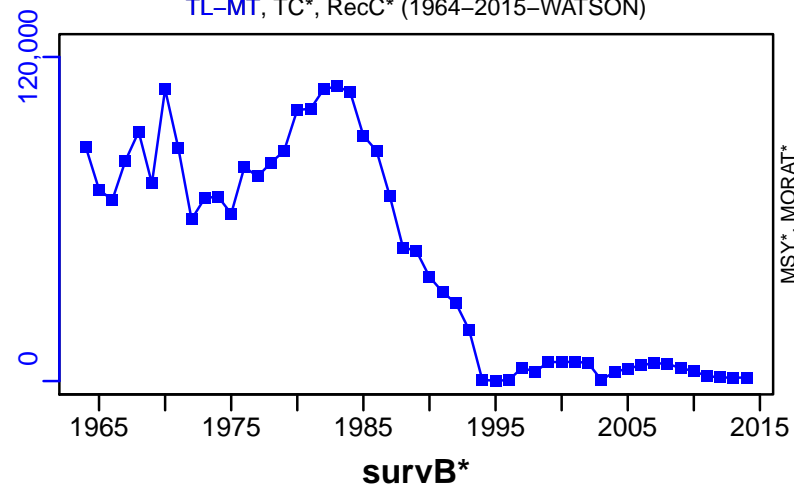
Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]



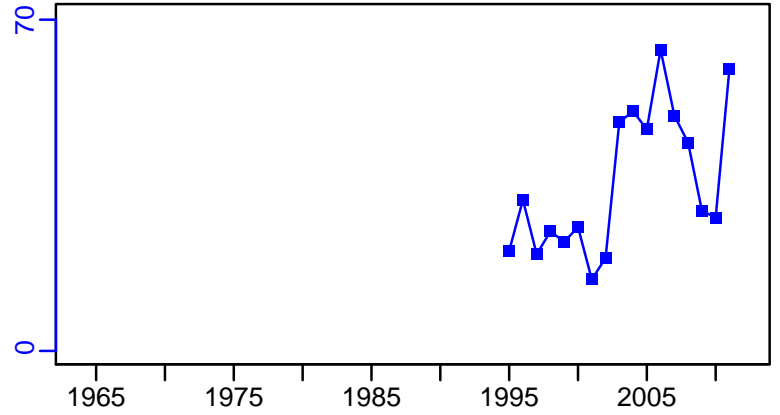
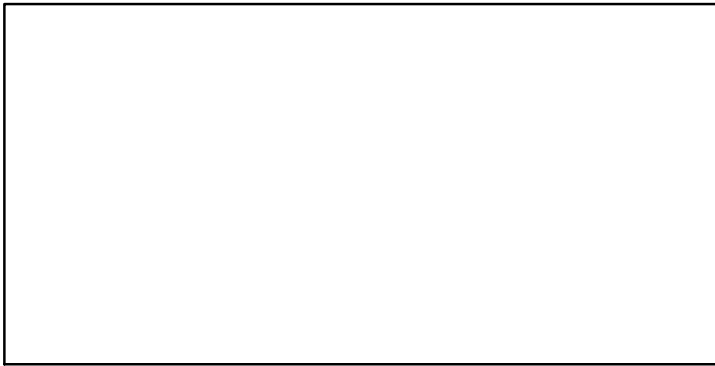
Atlantic cod Northern Gulf of St. Lawrence [COD3Pn4RS]

TL-MT, TC*, RecC* (1964-2015-WATSON)

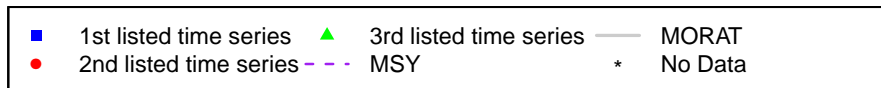
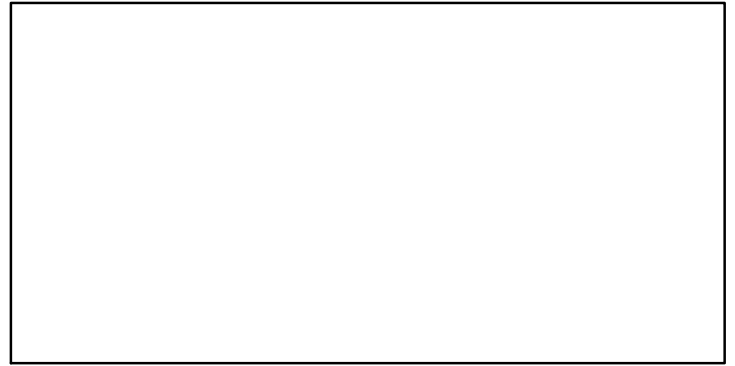
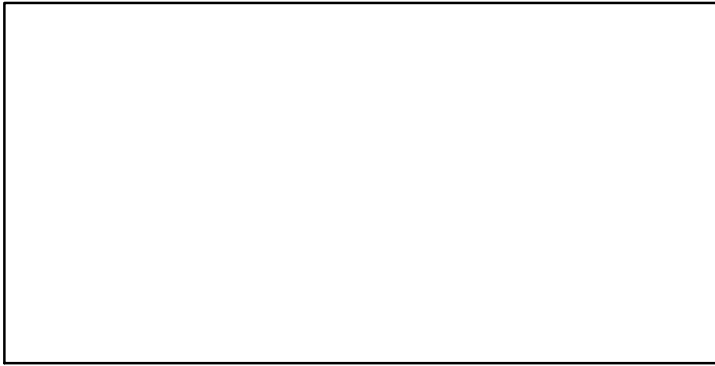
TAC*, Cpair*, Cadv*



gillnetCPUE-E00pertow (1964-2012-CHING)



EFFORT*



Atlantic cod St. Pierre Bank [COD3Ps]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-COD3Ps-1980-2014-WATSON
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2011

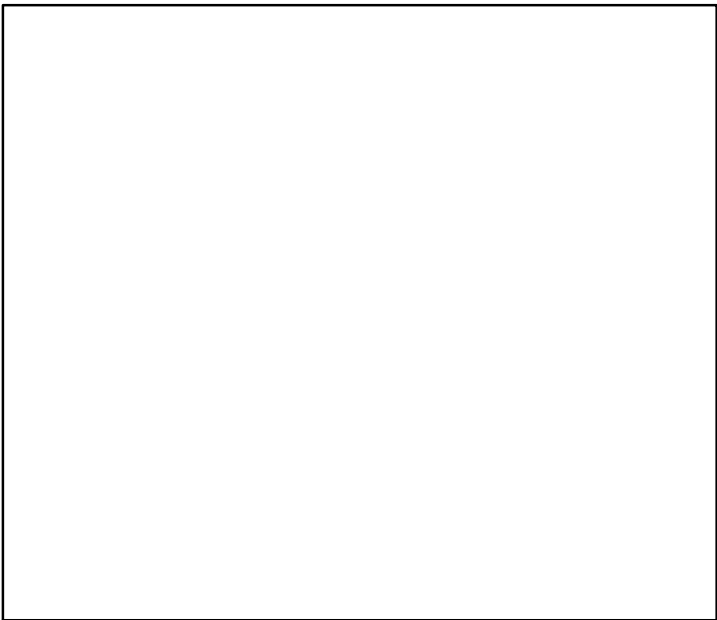
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	27,600	-	-
SSB	-	-	-	-	-
TN	TN-E00	2014	58,100,000	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.152	-	-
TC	TC-MT	2014	4190		
TL	TL-MT	2011	4320		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSBdivSSBmgt-dimensionless	2014	1.6		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

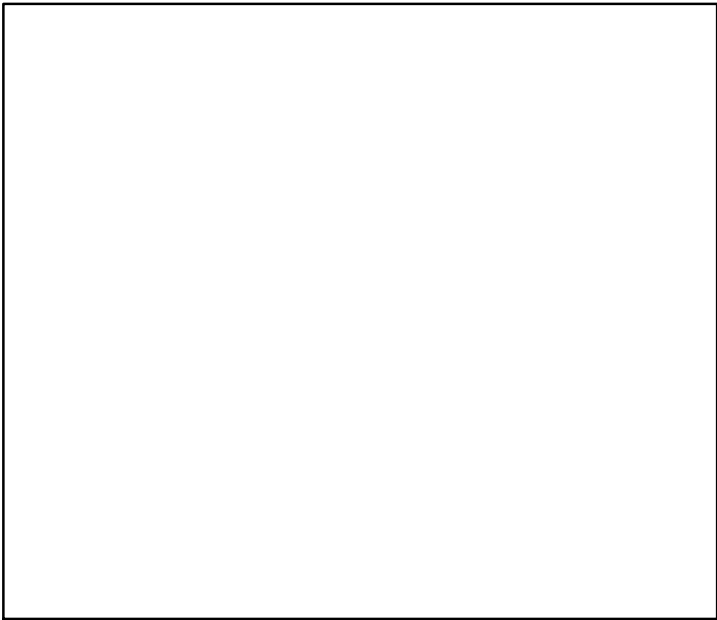
Kobe MSY*



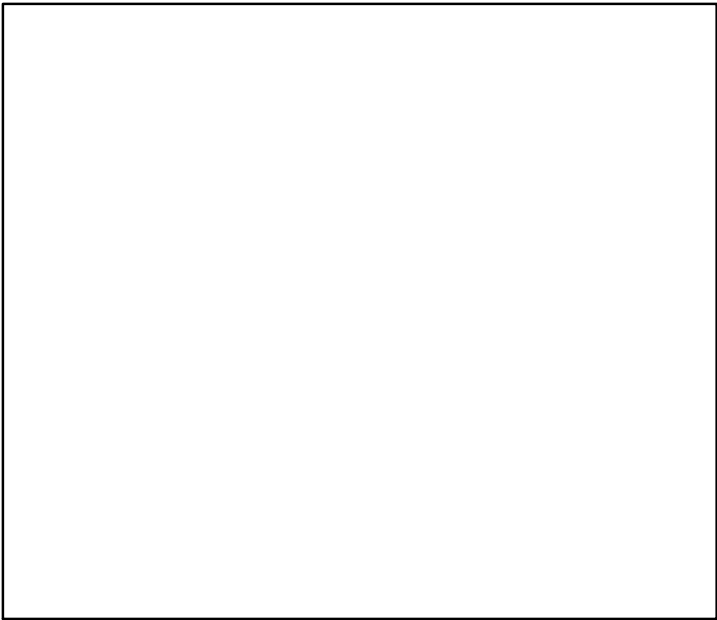
Kobe MGT*



Spawner Recruit*



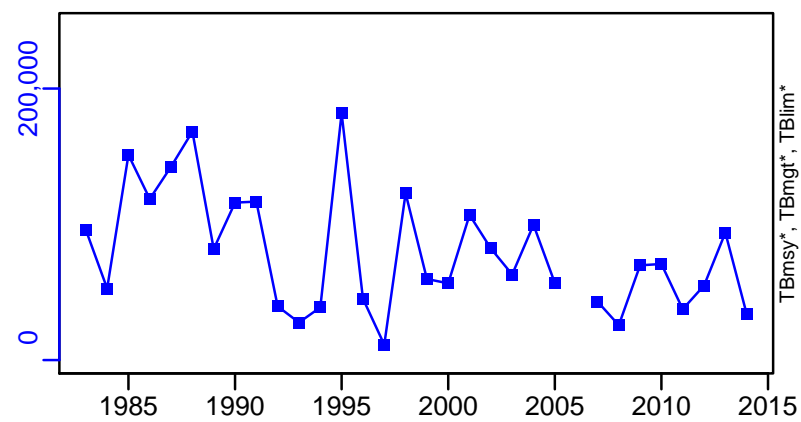
Production*



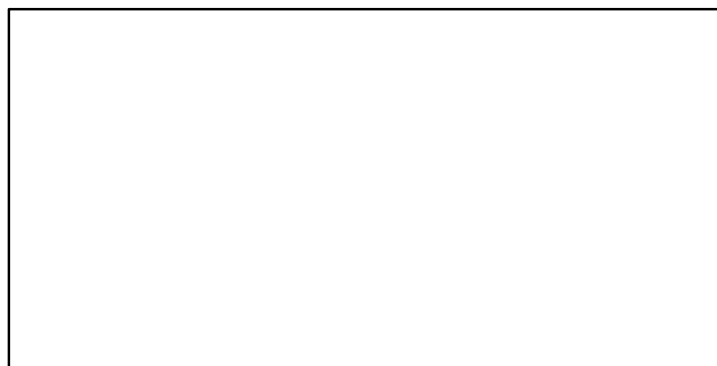
◆ Start Year ◆ End Year * No Data

Atlantic cod St. Pierre Bank [COD3Ps]

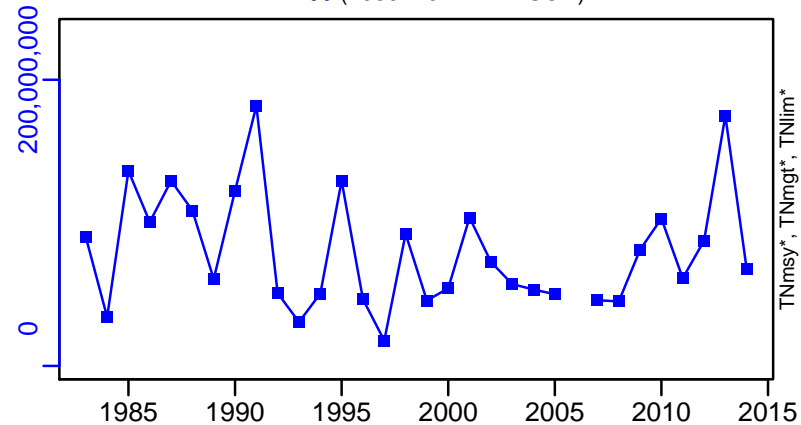
TB-MT (1980-2014-WATSON)



SSB*



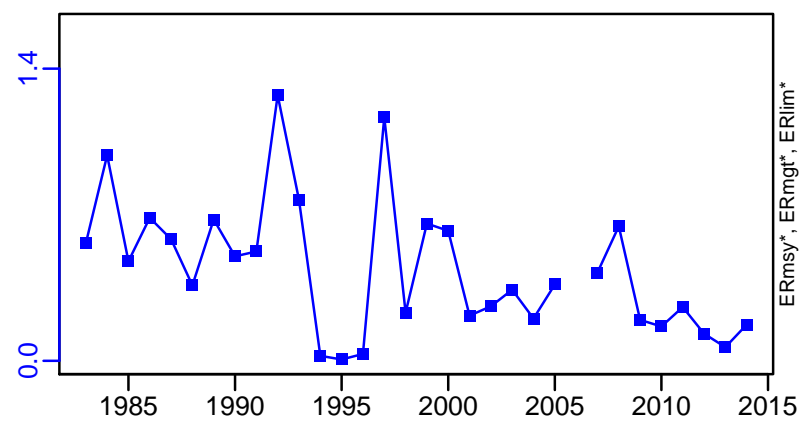
TN-E00 (1980-2014-WATSON)



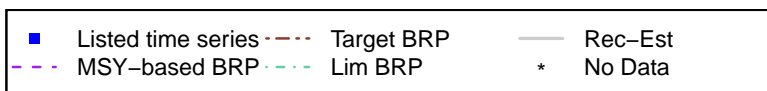
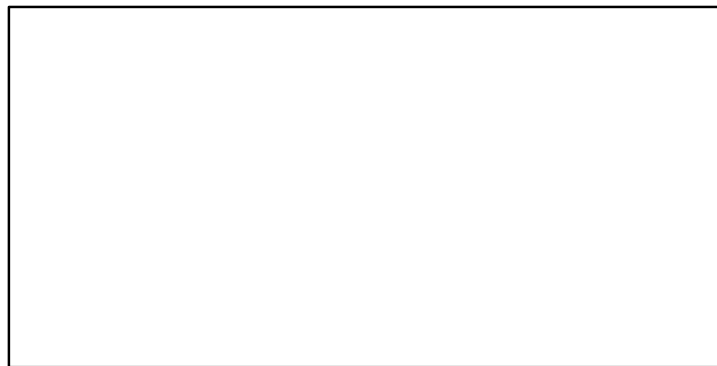
F*



ER-calc-ratio (1980-2014-WATSON)

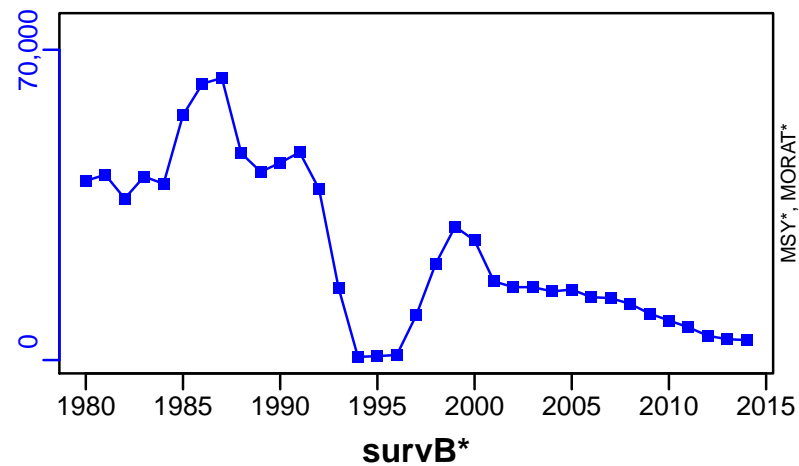


Recruits*

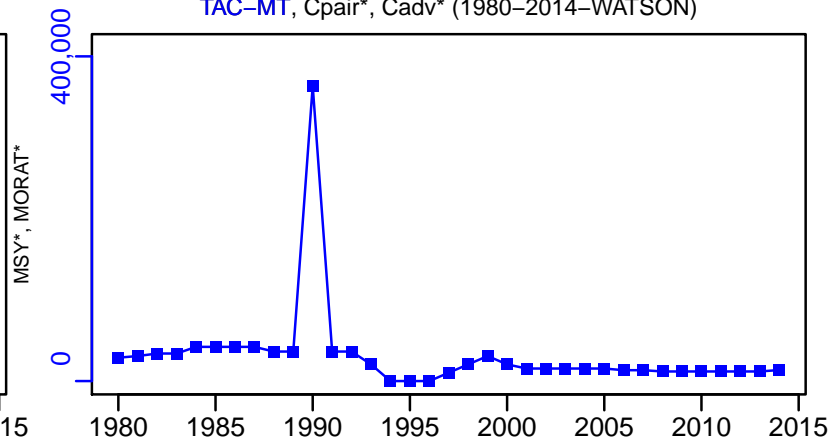


Atlantic cod St. Pierre Bank [COD3Ps]

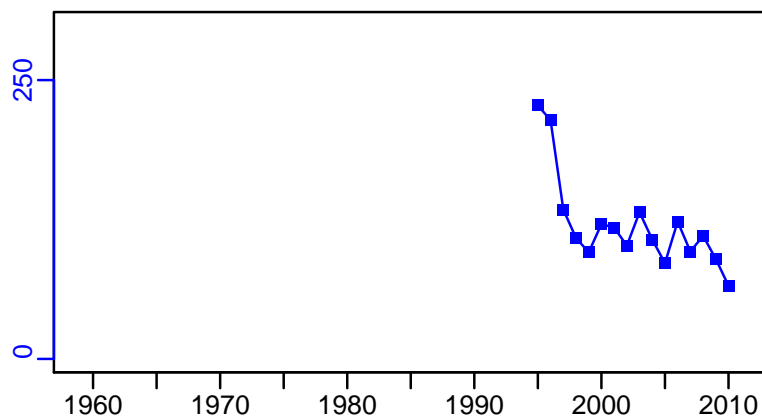
TC-MT, TL*, RecC* (1980-2014-WATSON)



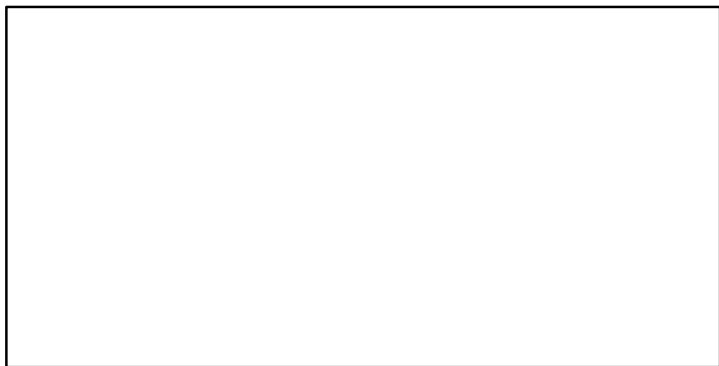
TAC-MT, Cpair*, Cadv* (1980-2014-WATSON)



CPUE-fishperE03hooks (1959-2011-CHING)



EFFORT*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-COD4TVn-1965-2015-WATSON
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2015, 2011

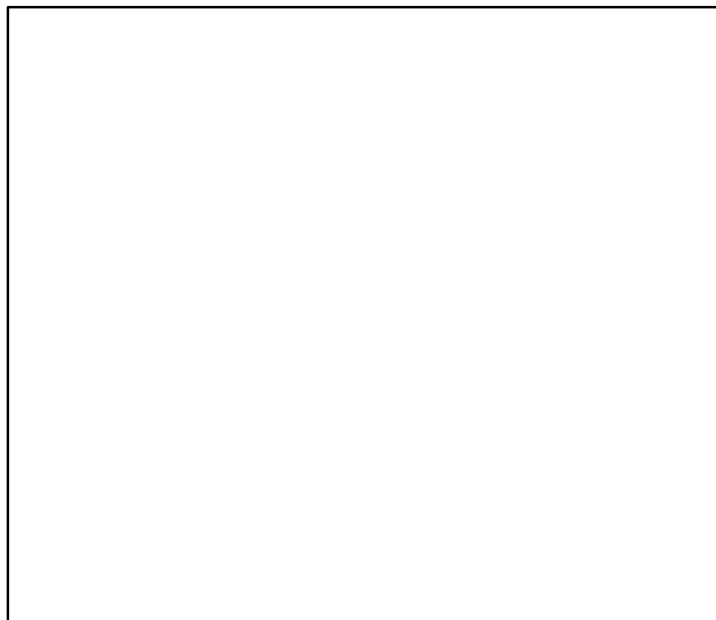
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	80,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	34,300	-	-
SSB	SSB-MT	2015	31,000	Both	5+
TN	TN-E00	2015	2.53×10^8	Both	3+
R	-	-	-	-	-
F	F-1/yr	2015	0.002	Both	5 to 8
ER	ER-ratio	2011	0.005	-	-
TC	-	-	-		
TL	TL-MT	2015	114		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



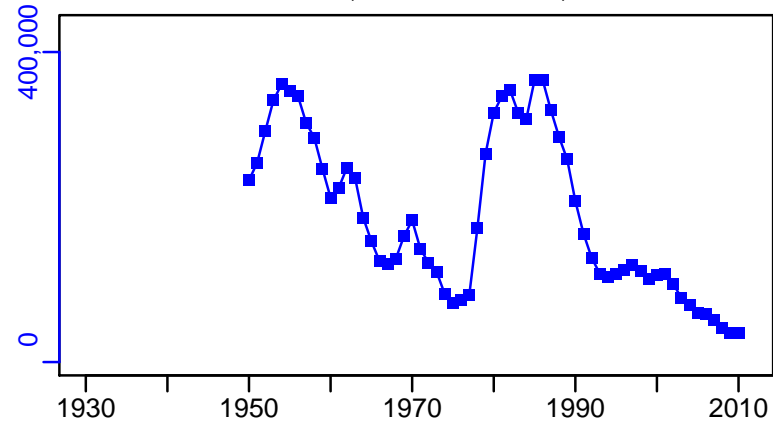
Production*



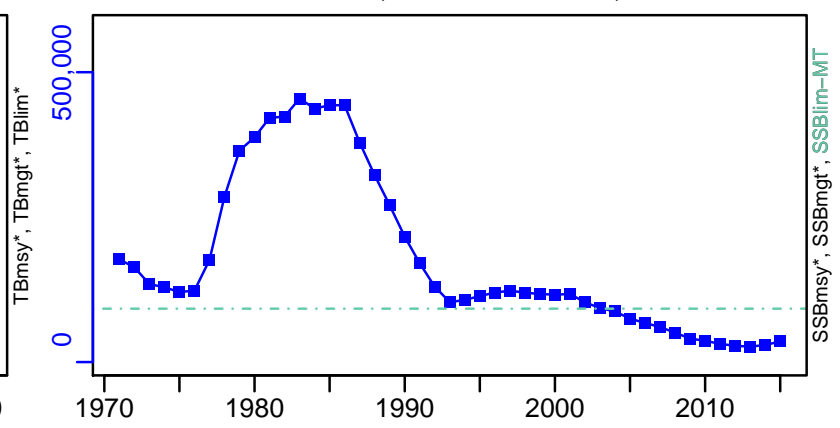
◆ Start Year ◆ End Year * No Data

Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]

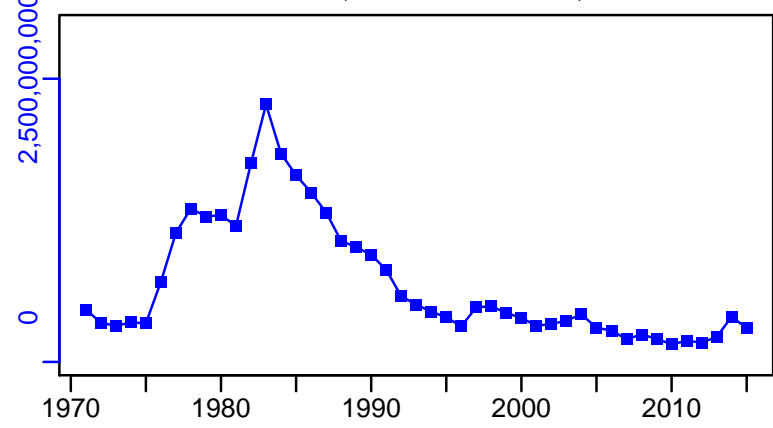
TB-MT (1930–2011–CHING)



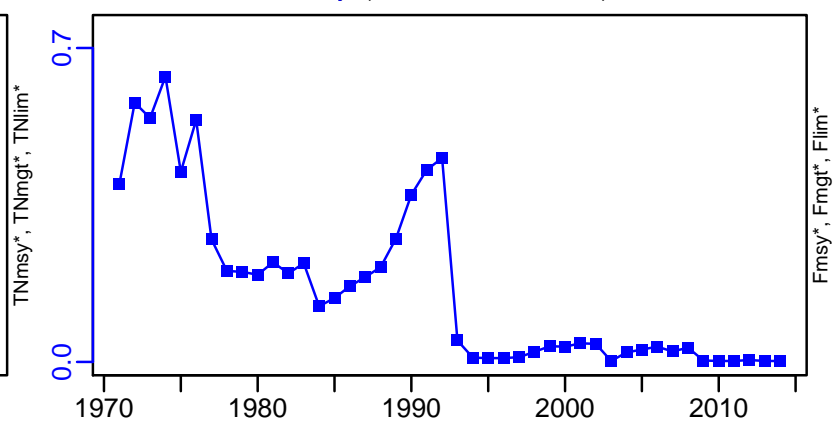
SSB-MT (1965–2015–WATSON)



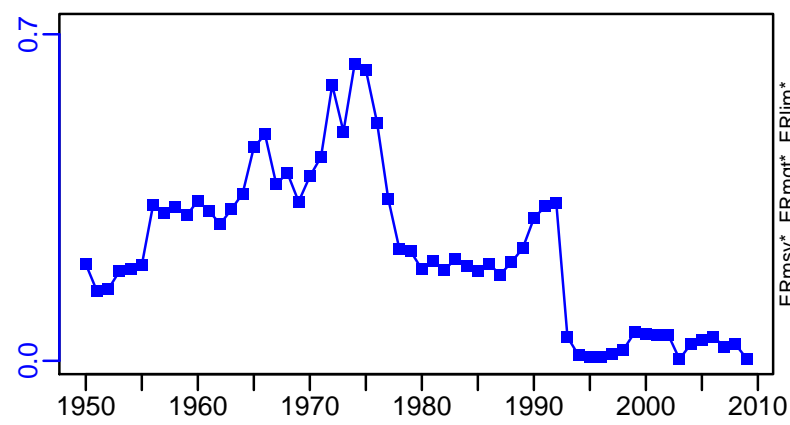
TN-E00 (1965–2015–WATSON)



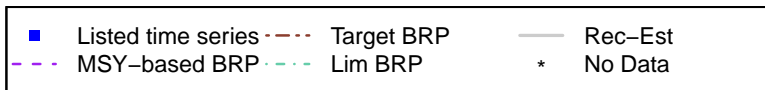
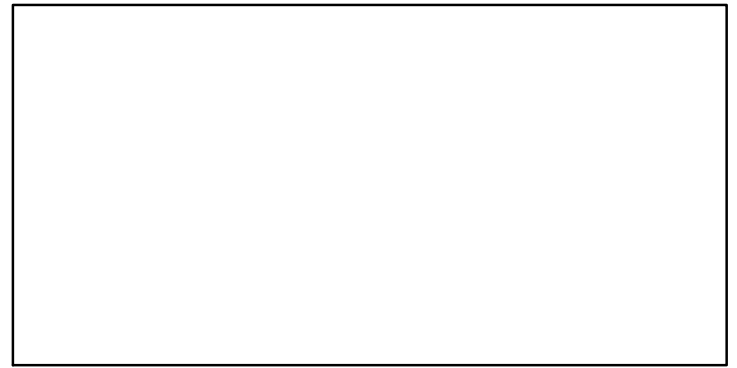
F-1/yr (1965–2015–WATSON)



ER-ratio (1930–2011–CHING)

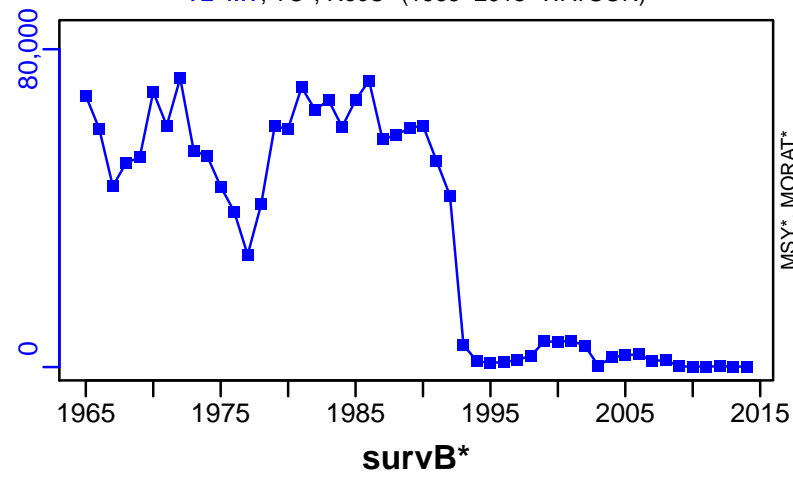


Recruits*

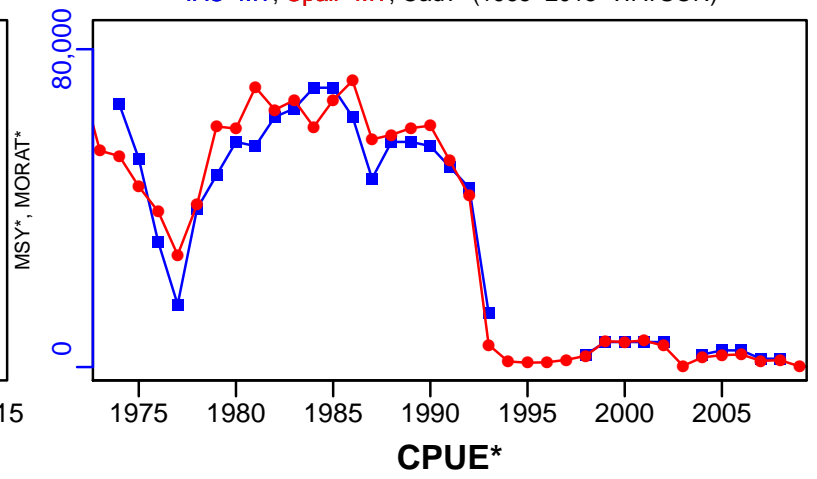


Atlantic cod Southern Gulf of St. Lawrence [COD4TVn]

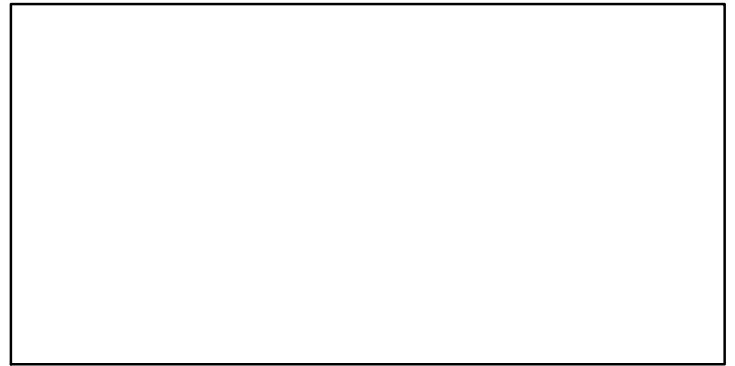
TL-MT, TC*, RecC* (1965-2015-WATSON)



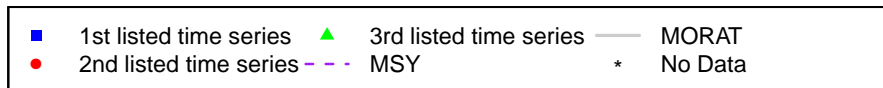
TAC-MT, Cpair-MT, Cadv* (1965-2015-WATSON)



EFFORT*



CdivMSY*



Atlantic cod Eastern Scotian Shelf [COD4VsW]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-MAR-COD4VsW-1958-2002-PREFONTAINE
Area	Eastern Scotian Shelf
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2002

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	SSB-MT	2002	4720	-	4+
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2002	0.008	-	-
TC	TC-MT	2002	83		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



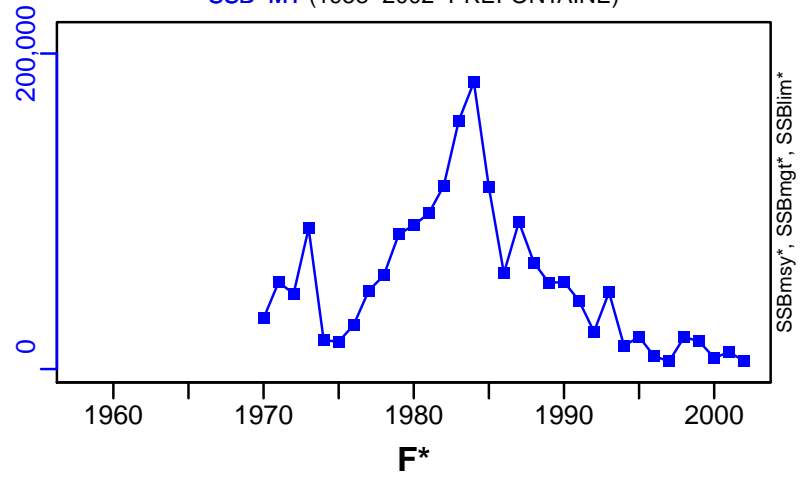
◆ Start Year ◆ End Year * No Data

Atlantic cod Eastern Scotian Shelf [COD4VsW]

TB*



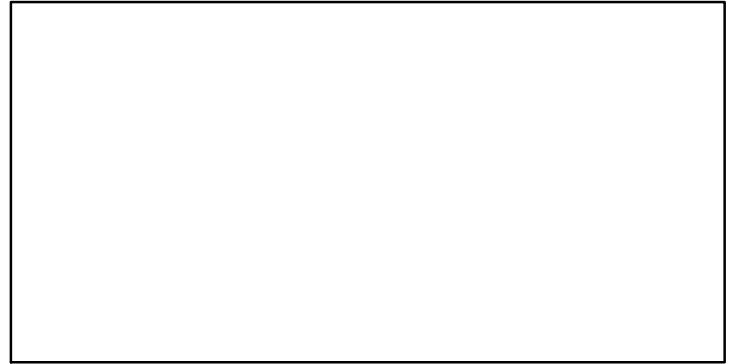
SSB-MT (1958–2002–PREFONTAINE)



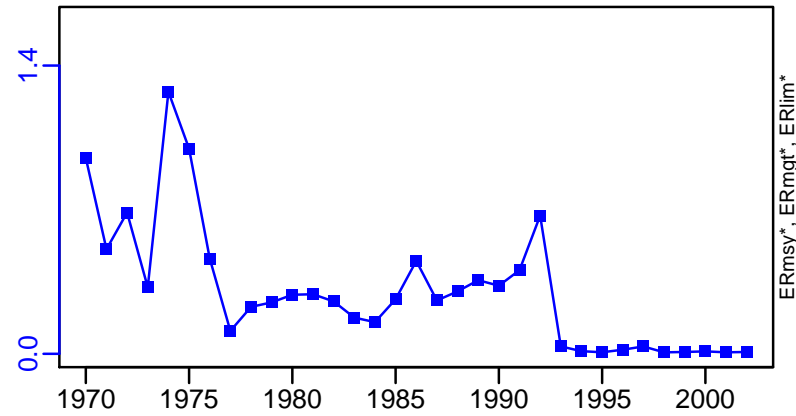
TN *



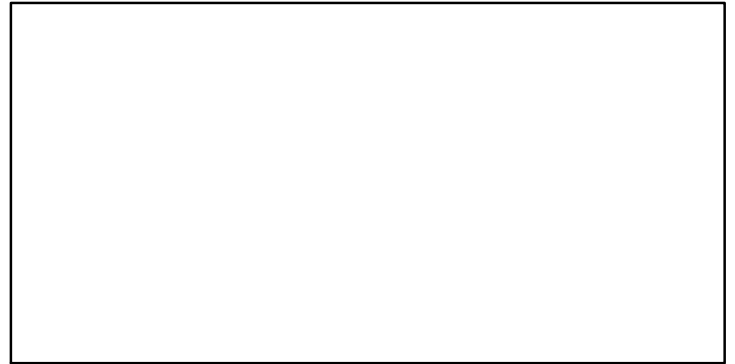
F*



ER-ratio (1958–2002–PREFONTAINE)

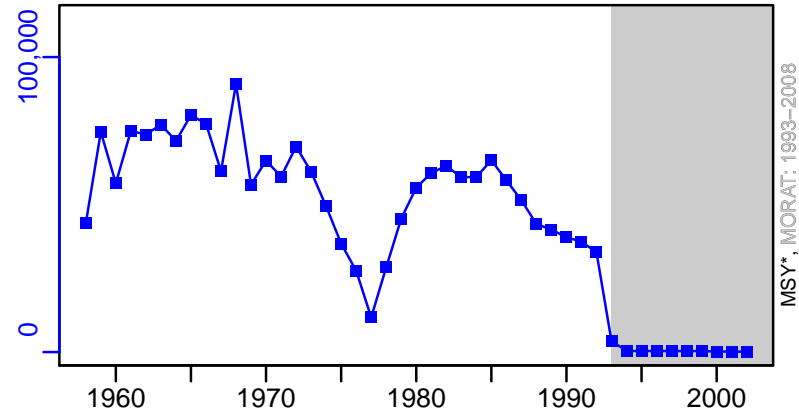


Recruits*



Atlantic cod Eastern Scotian Shelf [COD4VsW]

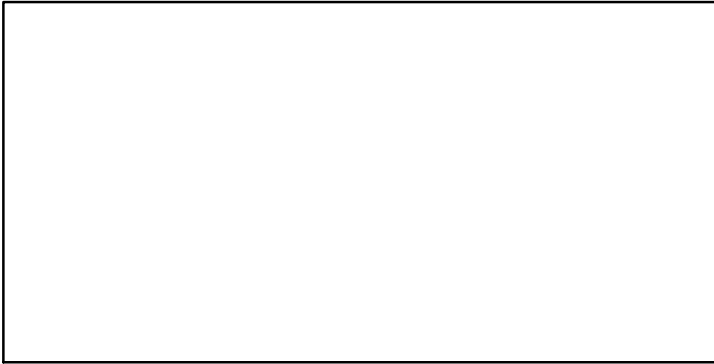
TC-MT, TL*, RecC* (1958-2002-PREFONTAINE)



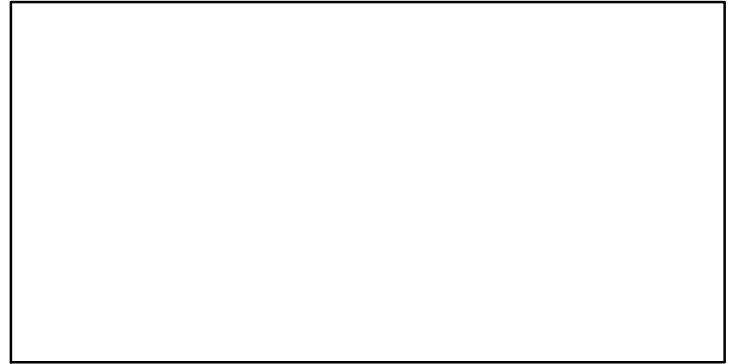
TAC*, Cpair*, Cadv*



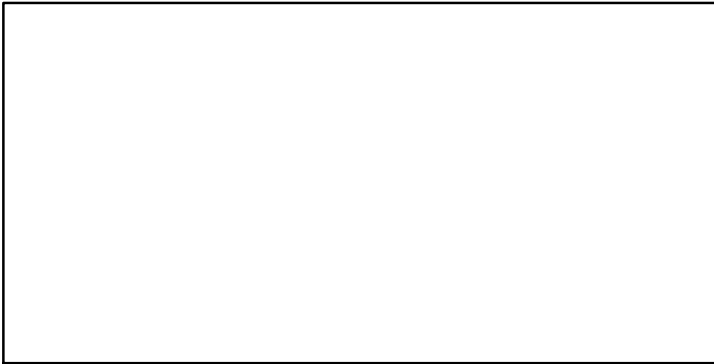
survB*



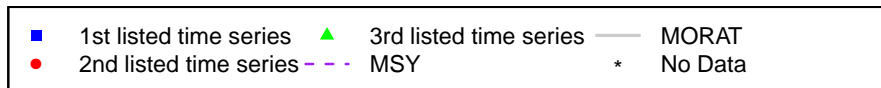
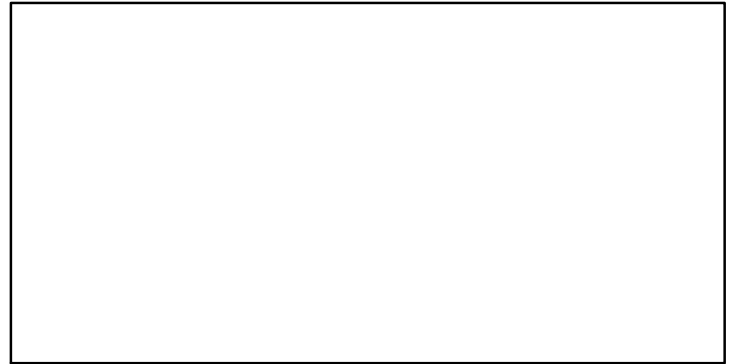
CPUE*



EFFORT*



CdivMSY*



Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	DFO-COD4X5Yb-1948-2009-WATSON
Area	Western Scotian Shelf, Bay of Fundy and Gulf of Maine
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2009

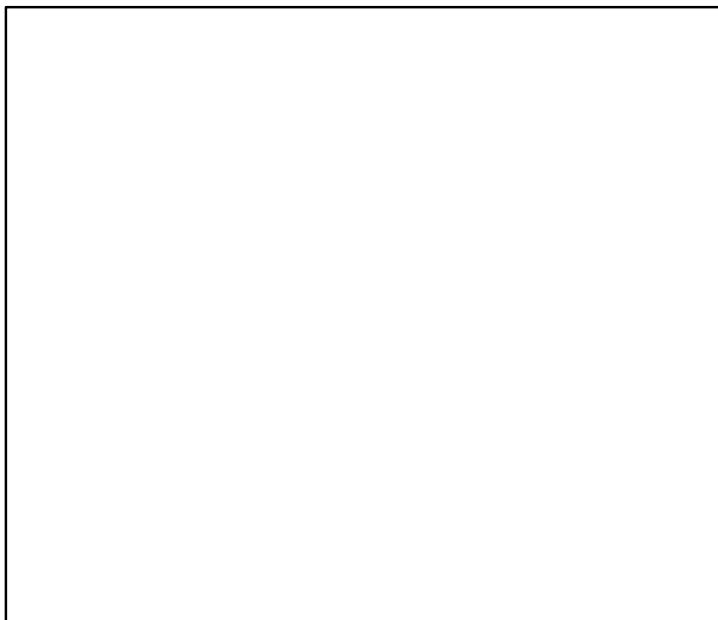
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2009	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2009	24,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2009	10,600	-	3+
TN	TN-E00	2009	5,170,000	-	3+
R	-	-	-	-	-
F	F-1/yr	2009	0.3	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2009	3170		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2009	1.5		
ER/ERmgt	-	-	-		

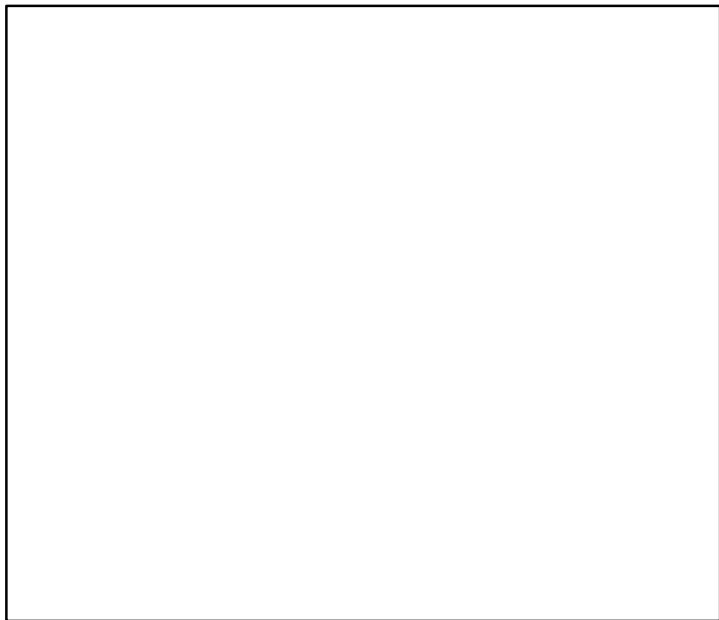
Kobe MSY*



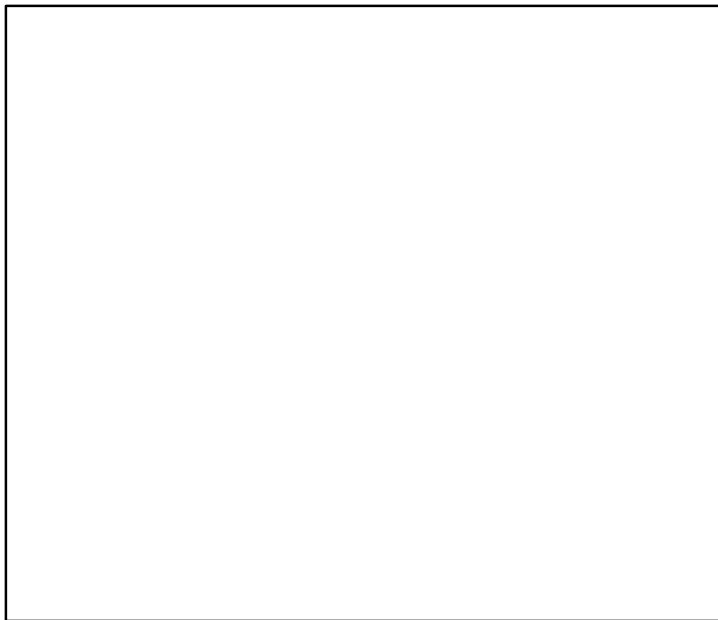
Kobe MGT*



Spawner Recruit*



Production*



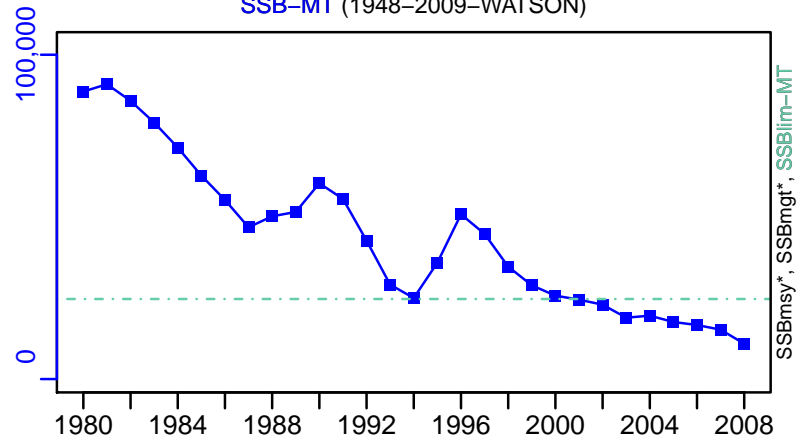
◆ Start Year ◆ End Year * No Data

Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]

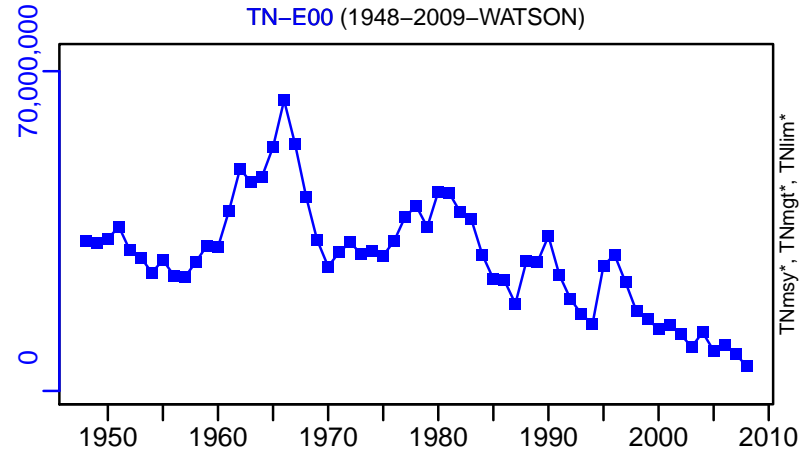
TB*



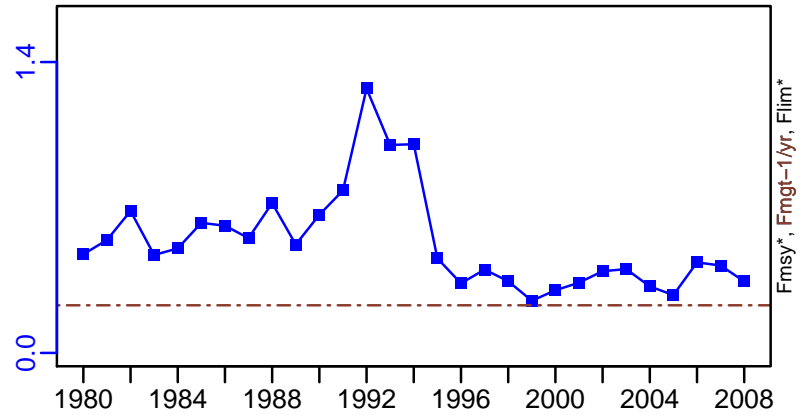
SSB-MT (1948–2009–WATSON)



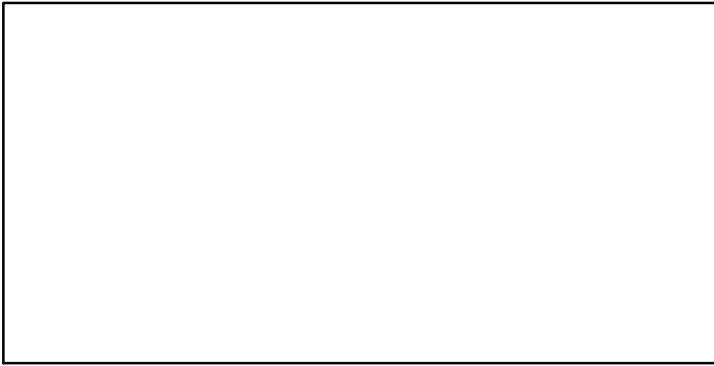
TN-E00 (1948–2009–WATSON)



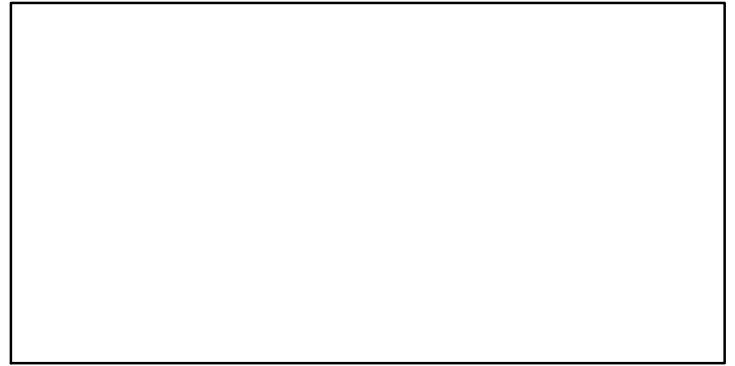
F-1/yr (1948–2009–WATSON)



ER*



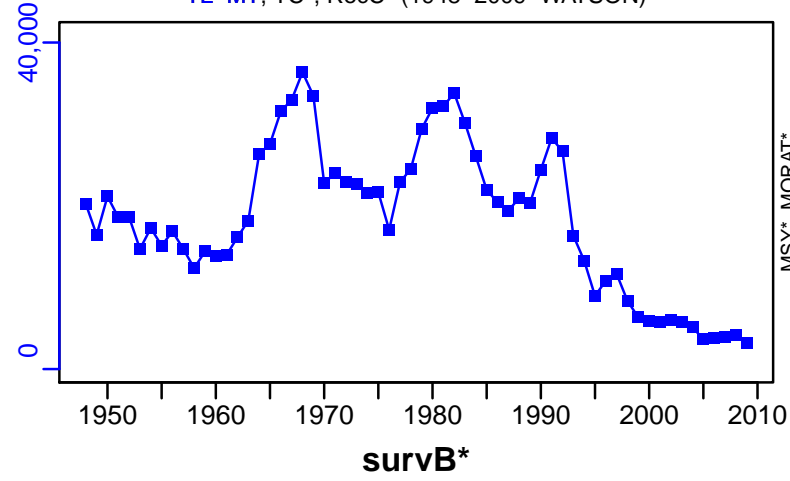
Recruits*



Atlantic cod Western Scotian Shelf, Bay of Fundy and Gulf of Maine [COD4X5Yb]

TL-MT, TC*, RecC* (1948-2009-WATSON)

TAC*, Cpair*, Cadv*



CPUE*

EFFORT*

CdivMSY*

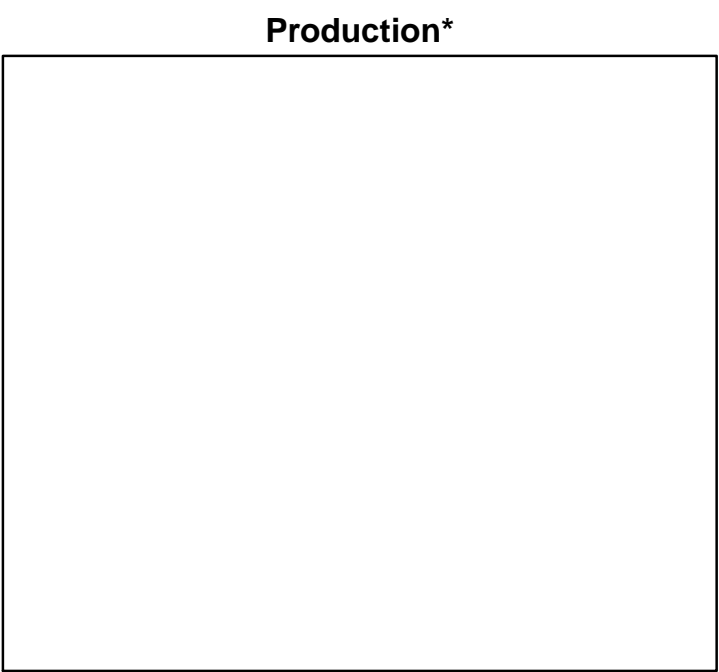
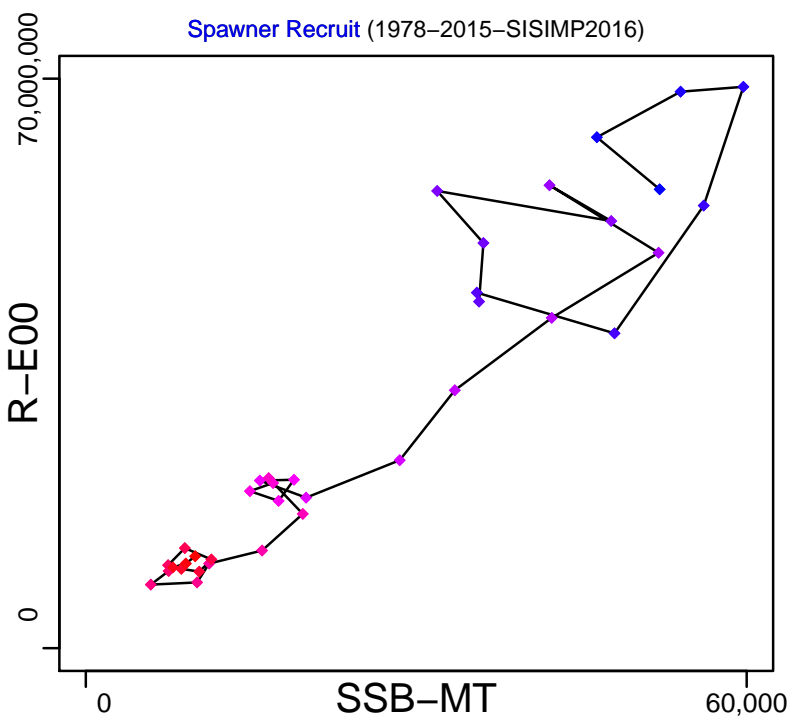
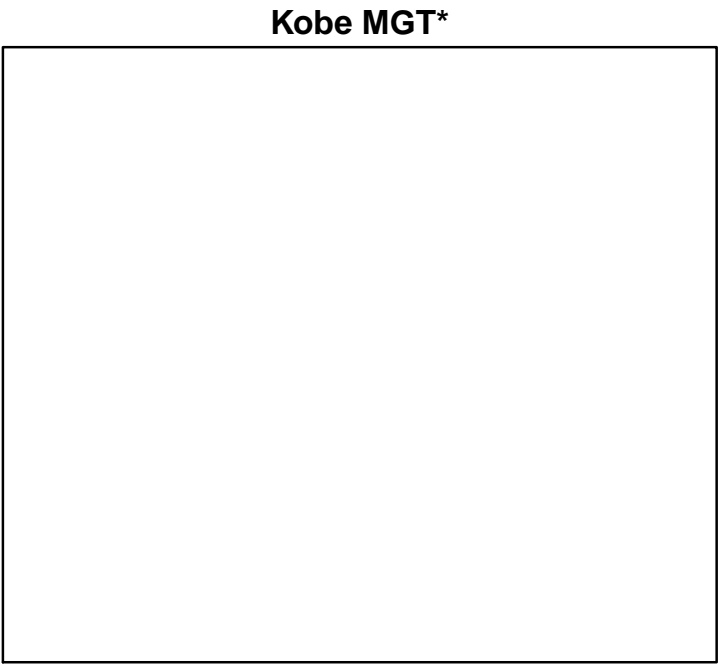
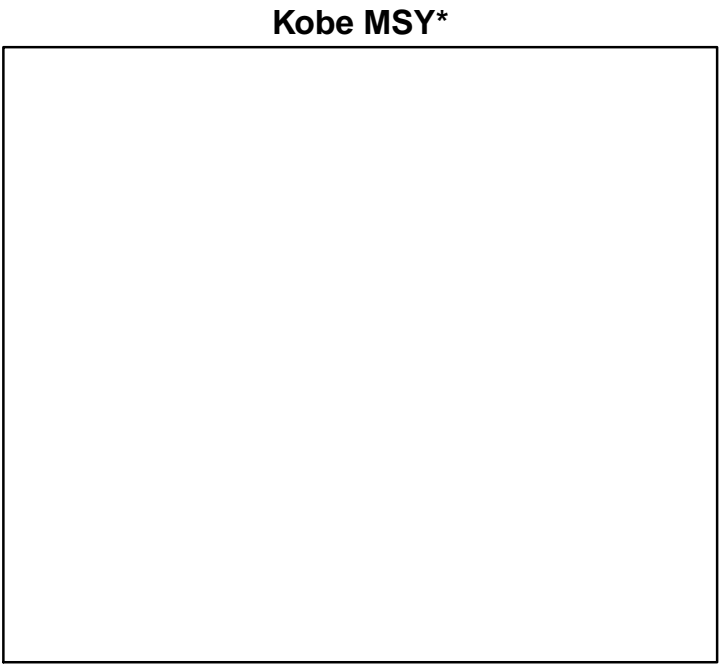
■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Atlantic cod NAFO 5Zjm [COD5Zjm]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	TRAC-COD5Zjm-1978-2015-SISIMP2016
Area	NAFO 5Zjm
Management Authority	Transboundary Resource Assessment Committee (USA and Canada)
Assessor	Transboundary Resource Assessment Committee (USA and Canada)
Asmts in RAM	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2015	0.11
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2010	21,000
Flim	Flim-1/yr	2015	0.11
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2015	10,000	-	3+
TN	TN-E00	2010	3,390,000	-	3+
R	R-E00	2015	11,300,000	-	1
F	F-1/yr	2015	0.04	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	574		
TL	TL-MT	2010	1860		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.364		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



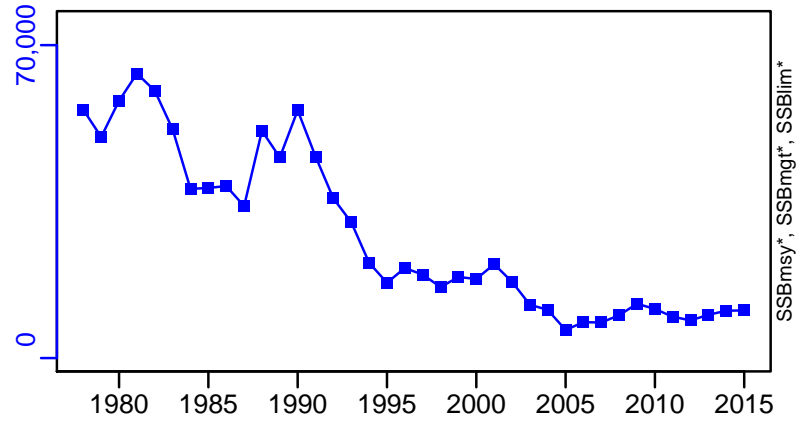
◆ Start Year ◆ End Year * No Data

Atlantic cod NAFO 5Zjm [COD5Zjm]

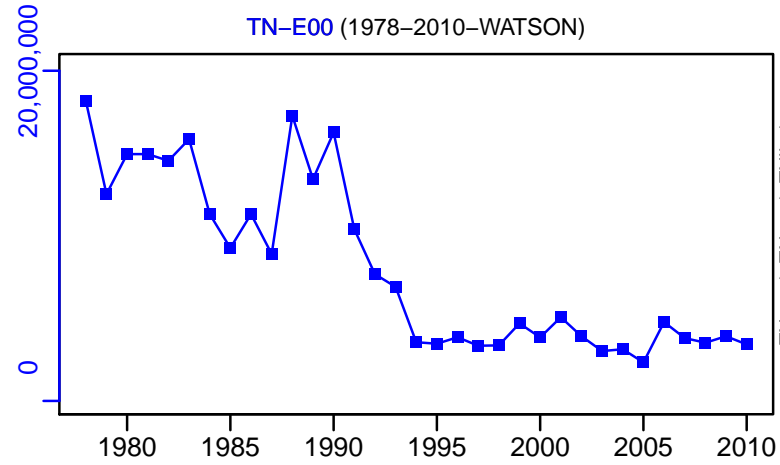
TB*



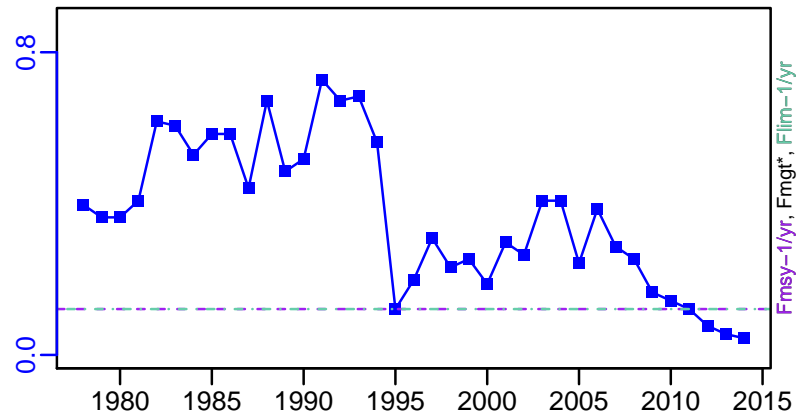
SSB-MT (1978–2015–SISIMP2016)



TN-E00 (1978–2010–WATSON)



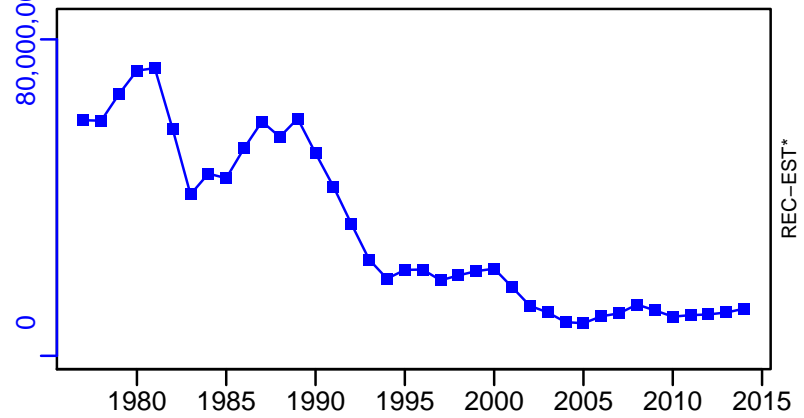
F-1/yr (1978–2015–SISIMP2016)



ER*

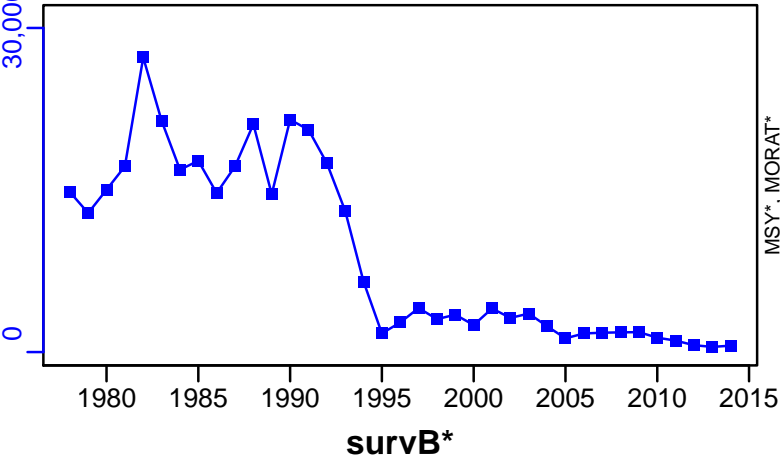


R-E00 (1978–2015–SISIMP2016)



Atlantic cod NAFO 5Zjm [COD5Zjm]

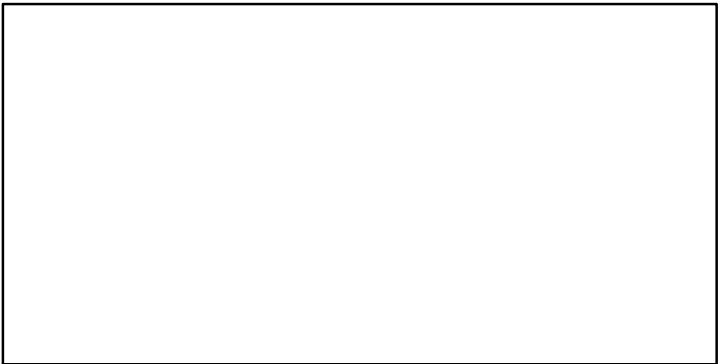
TC-MT, TL*, RecC* (1978-2015-SISIMP2016)



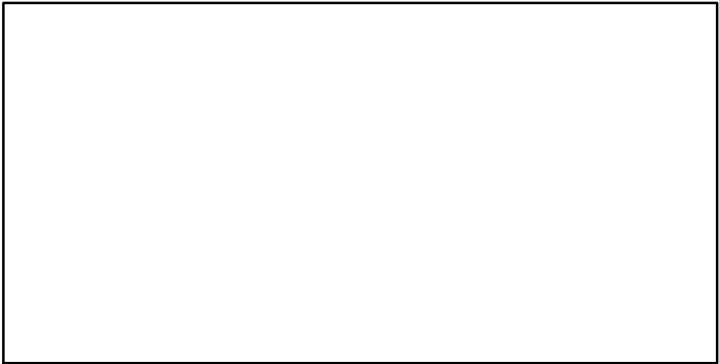
TAC*, Cpair*, Cadv*



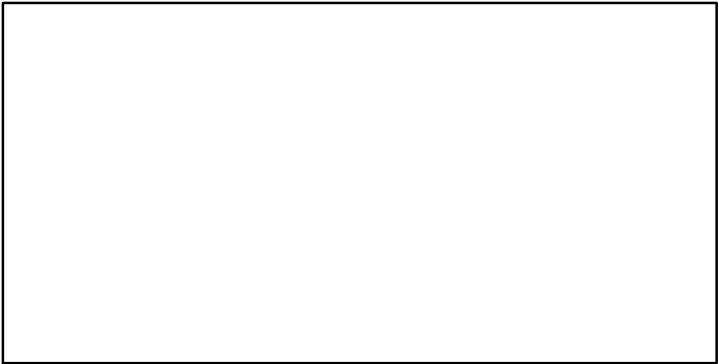
CPUE*



EFFORT*



CdivMSY*



Cusk Western Scotian Shelf [CUSK4X]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	DFO-MAR-CUSK4X-1970-2007-RICARD
Area	Western Scotian Shelf
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2007	25,790
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2007	0.058
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2007	47,430
SSB0	-	-	-
MSY	MSY-MT	2007	1483
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	16,900	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2007	0.655		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



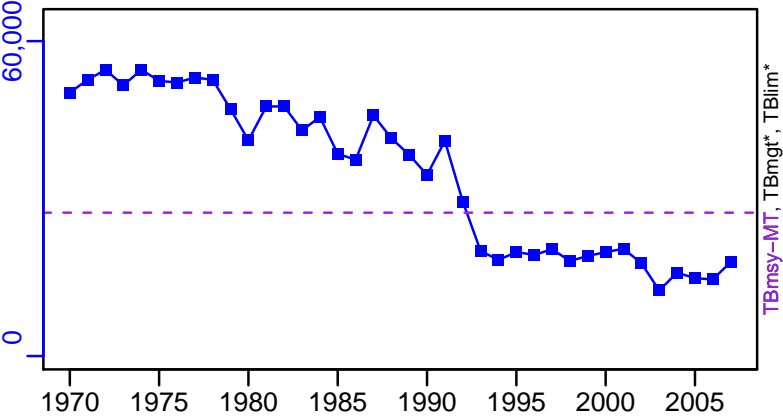
Production*



◆ Start Year ◆ End Year * No Data

Cusk Western Scotian Shelf [CUSK4X]

TB-MT (1970-2007-RICARD)



SSB*



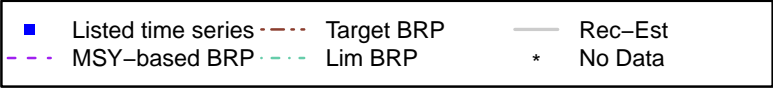
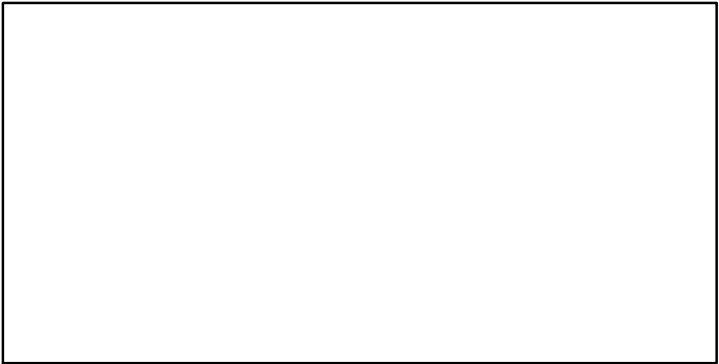
F*



ER*



Recruits*



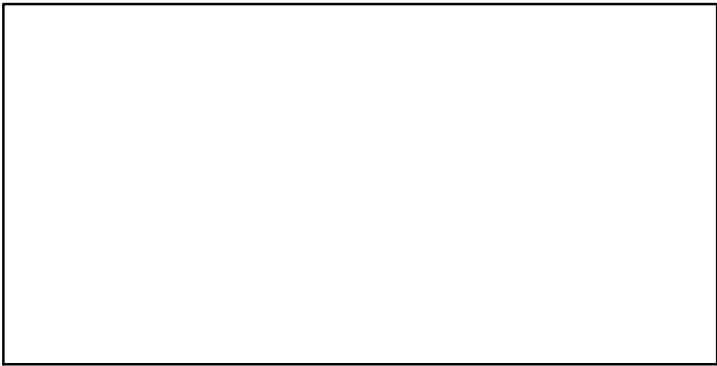
TC*, TL*, RecC*



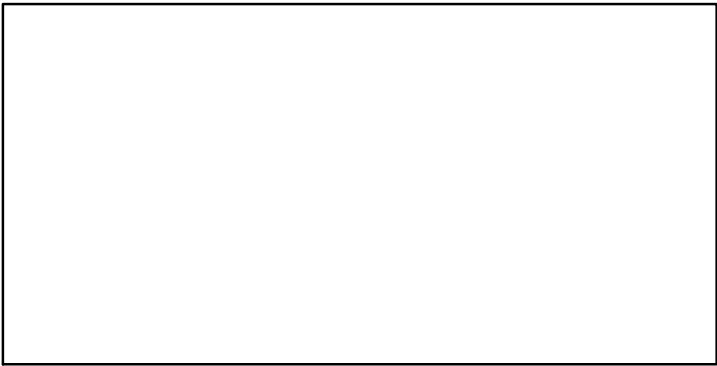
TAC*, Cpair*, Cadv*



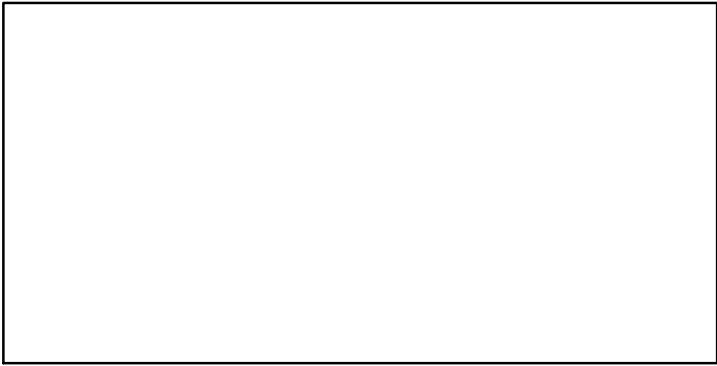
survB*



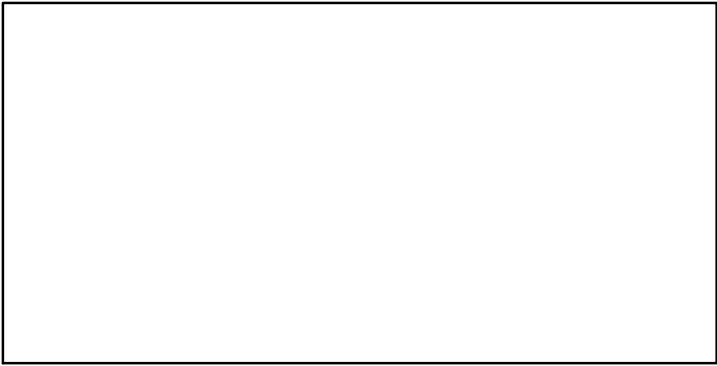
CPUE*



EFFORT*



CdivMSY*



■	1st listed time series	▲	3rd listed time series	—	MORAT
●	2nd listed time series	- -	MSY	*	No Data

Greenland halibut NAFO divisions 01ABCDEF [GHAL01ABCDEF]

Metadata	
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	NAFO-SC-GHAL01ABCDEF-1987-2006-PREFONTAINE
Area	NAFO divisions 01ABCDEF
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2006	0.22
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	2006	24,200		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

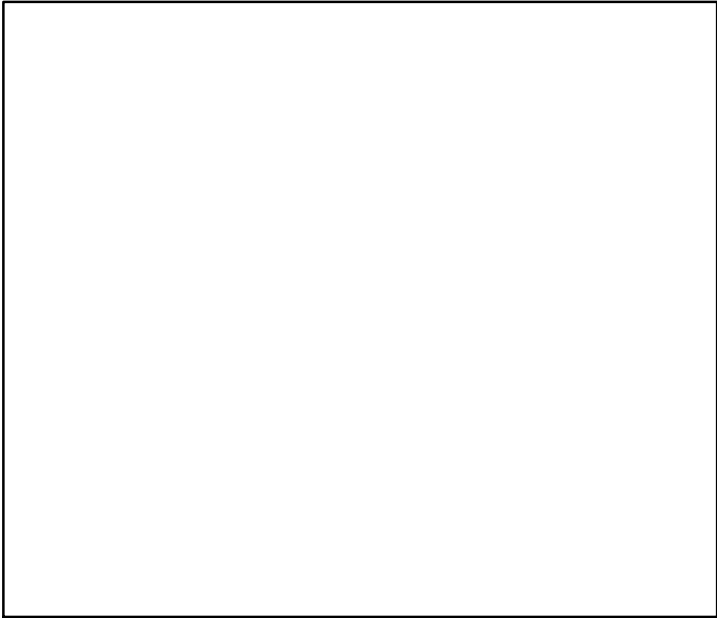
Kobe MSY*



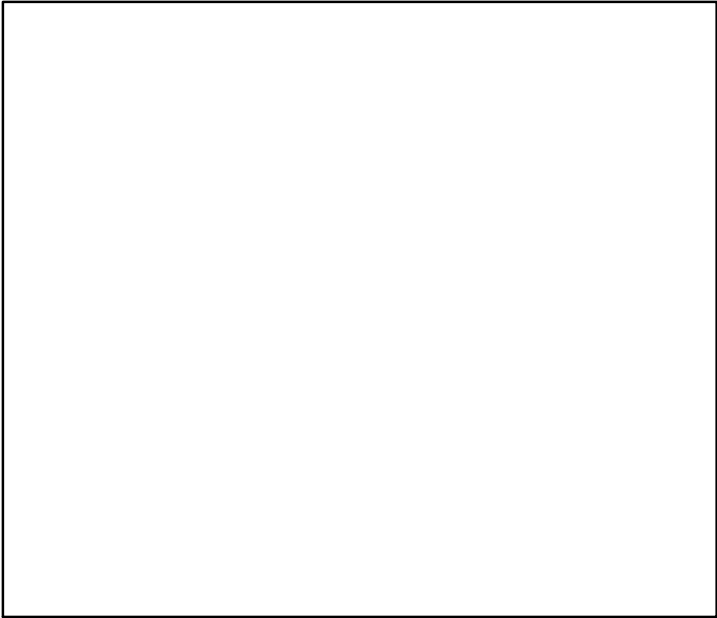
Kobe MGT*



Spawner Recruit*

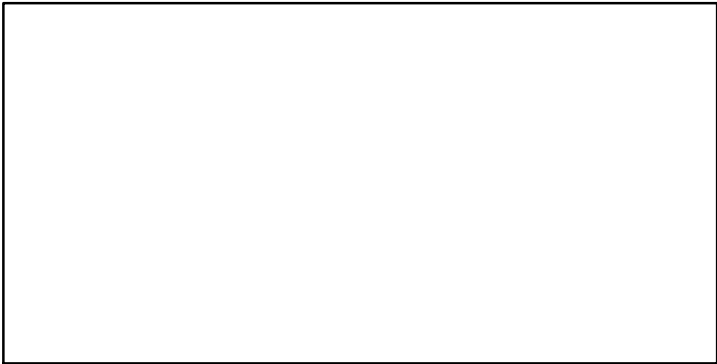


Production*

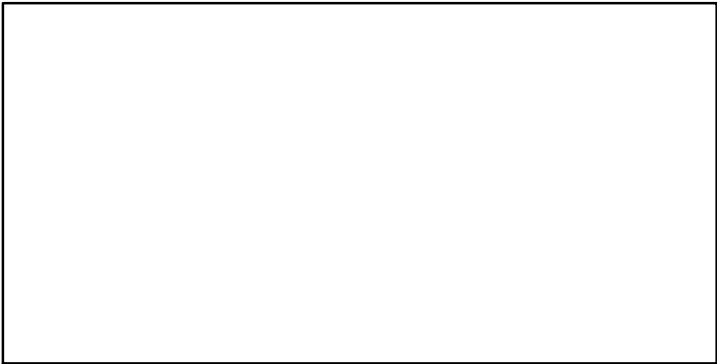


◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



F*



ER*



Recruits*



■ Listed time series

--- MSY-based BRP

--- Target BRP

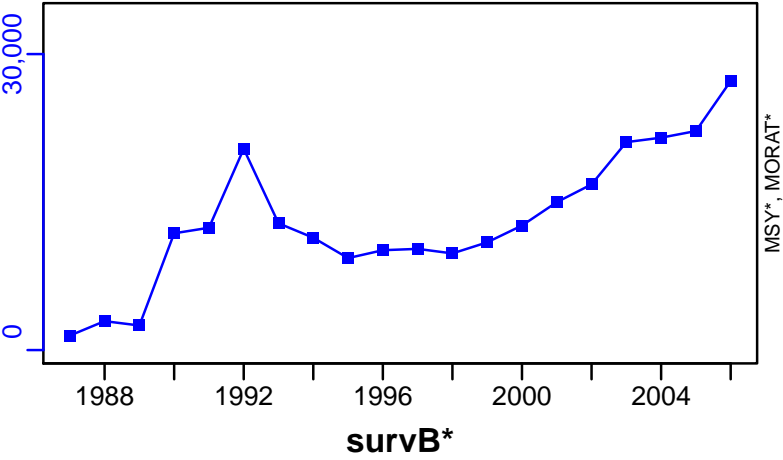
--- Lim BRP

— Rec-Est

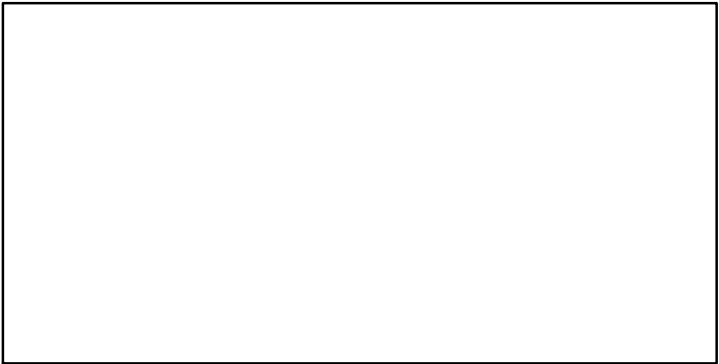
* No Data

Greenland halibut NAFO divisions 01ABCDEF [GHAL01ABCDEF]

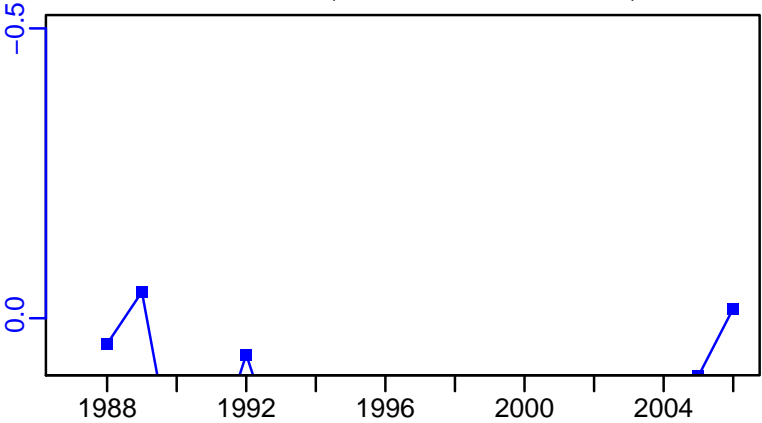
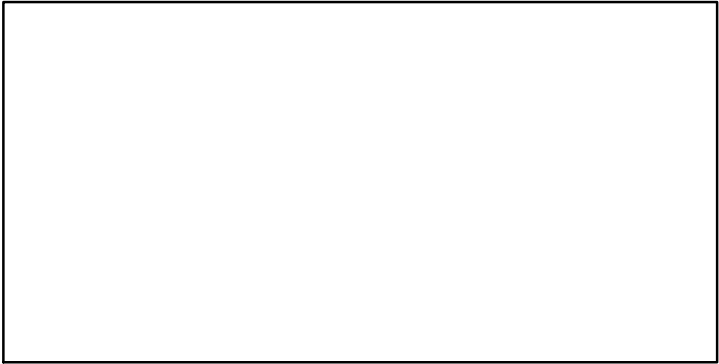
TC-MT, TL*, RecC* (1987-2006-PREFONTAINE)



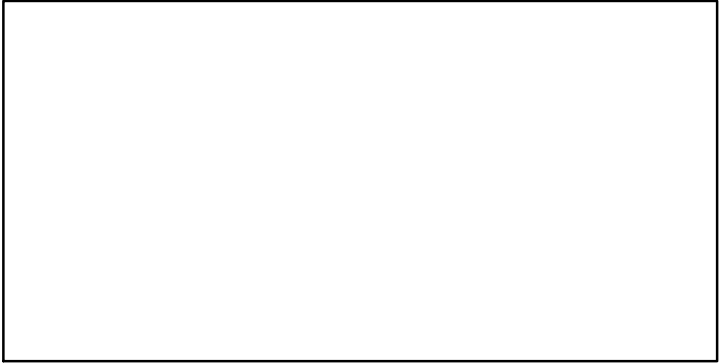
TAC*, Cpair*, Cadv*



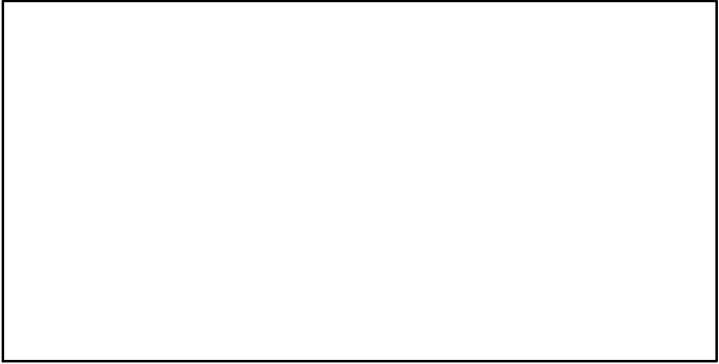
CPUEraw-C/E (1987-2006-PREFONTAINE)



EFFORT*



CdivMSY*



Greenland halibut Labrador Shelf - Grand Banks [GHAL23KLMNO]

Metadata	
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	NAFO-SC-GHAL23KLMNO-1960-2010-WATSON
Area	Labrador Shelf - Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2006, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERMgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2006	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2006	76,500	-	5+
SSB	SSB-MT	2006	2130	-	10+
TN	-	-	-	-	-
R	R-E00	2006	54,600,000	-	-
F	F-1/yr	2006	0.588	-	5 to 10
ER	ER-ratio	2006	0.314	-	-
TC	TC-MT	2010	6530		
TL	TL-MT	2006	24,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERMgt	-	-	-		

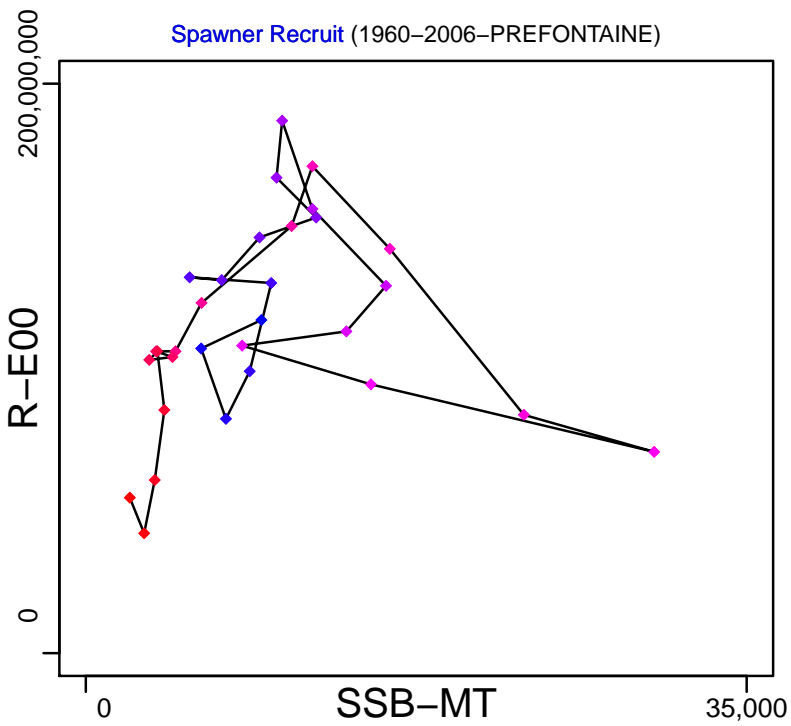
Kobe MSY*



Kobe MGT*



Spawner Recruit (1960–2006–PREFONTAINE)



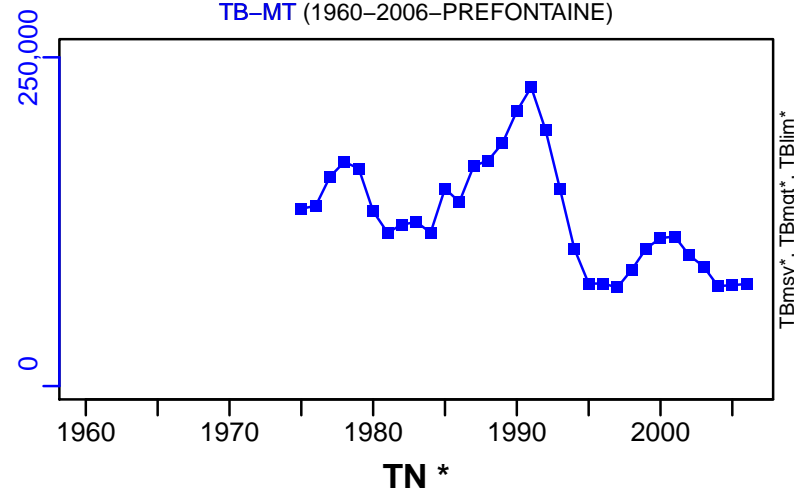
Production*



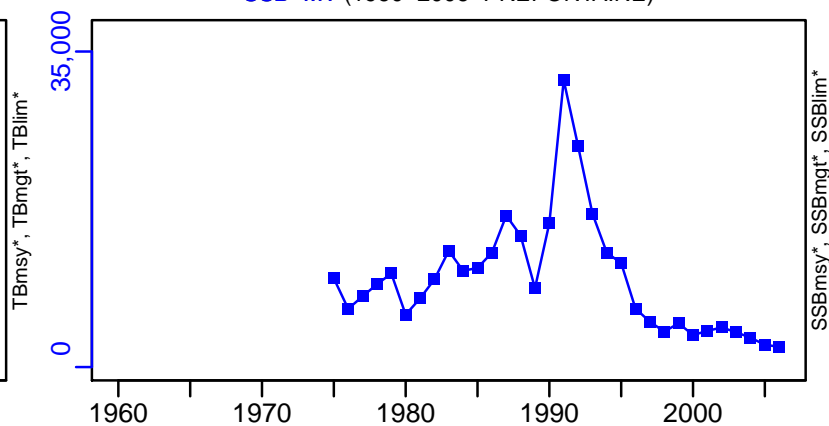
◆ Start Year ◆ End Year * No Data

Greenland halibut Labrador Shelf – Grand Banks [GHAL23KLMNO]

TB-MT (1960–2006–PREFONTAINE)



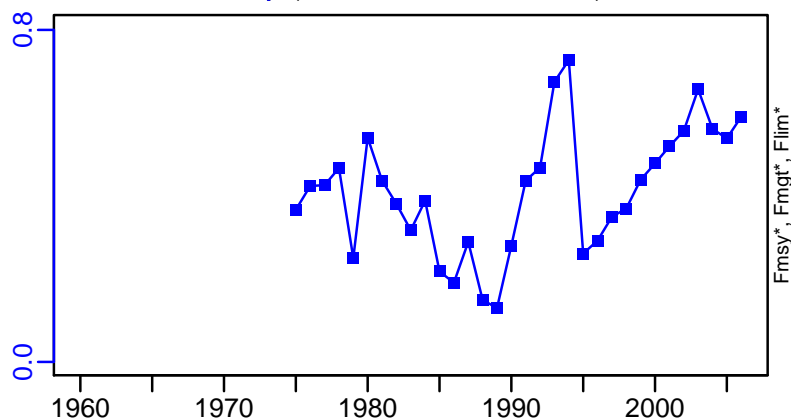
SSB-MT (1960–2006–PREFONTAINE)



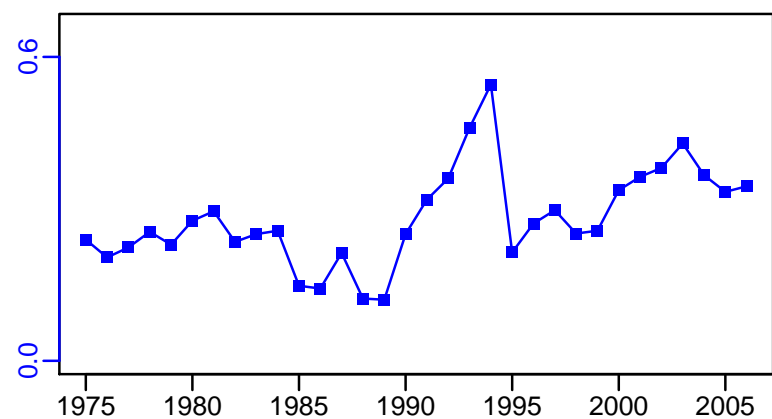
TN *



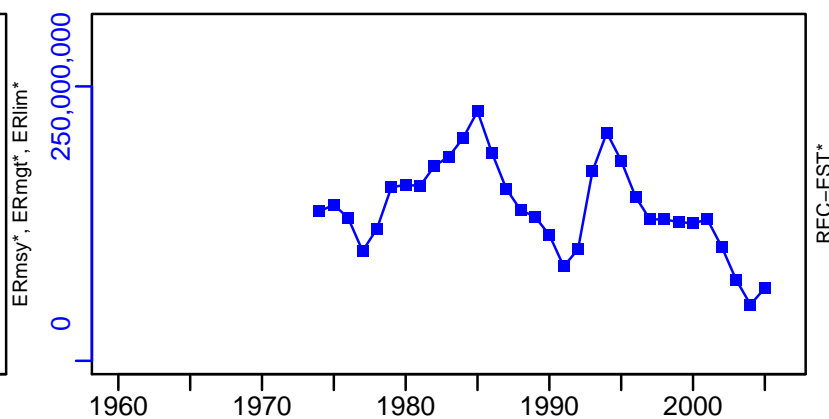
F-1/yr (1960–2006–PREFONTAINE)



ER-ratio (1960–2006–PREFONTAINE)

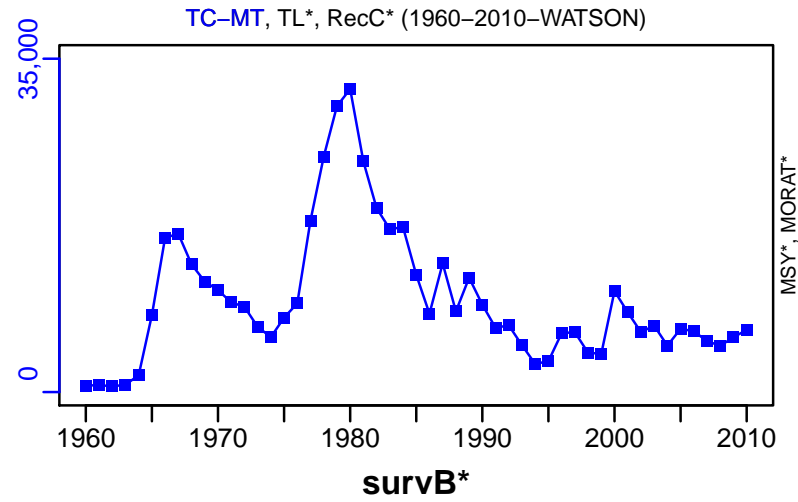


R-E00 (1960–2006–PREFONTAINE)



Greenland halibut Labrador Shelf – Grand Banks [GHAL23KLMNO]

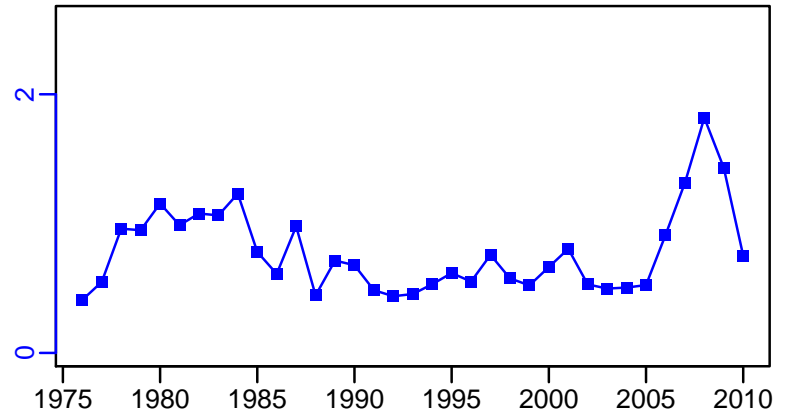
TC–MT, TL*, RecC* (1960–2010–WATSON)



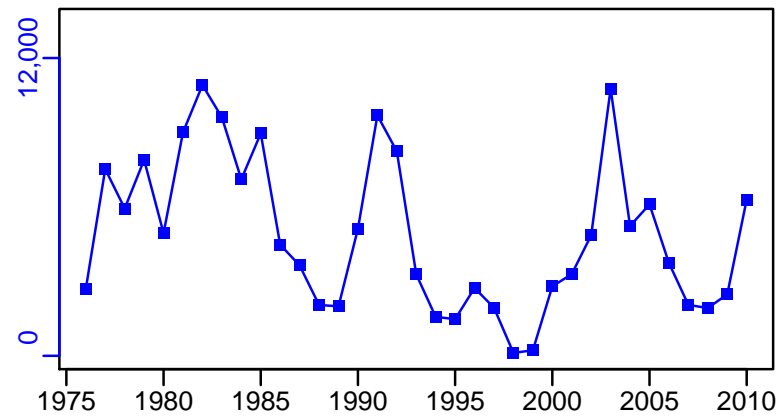
TAC*, Cpair*, Cadv*



CPUE–MT/hour (1960–2010–WATSON)



EFFORT–hour (1960–2010–WATSON)



CdivMSY*



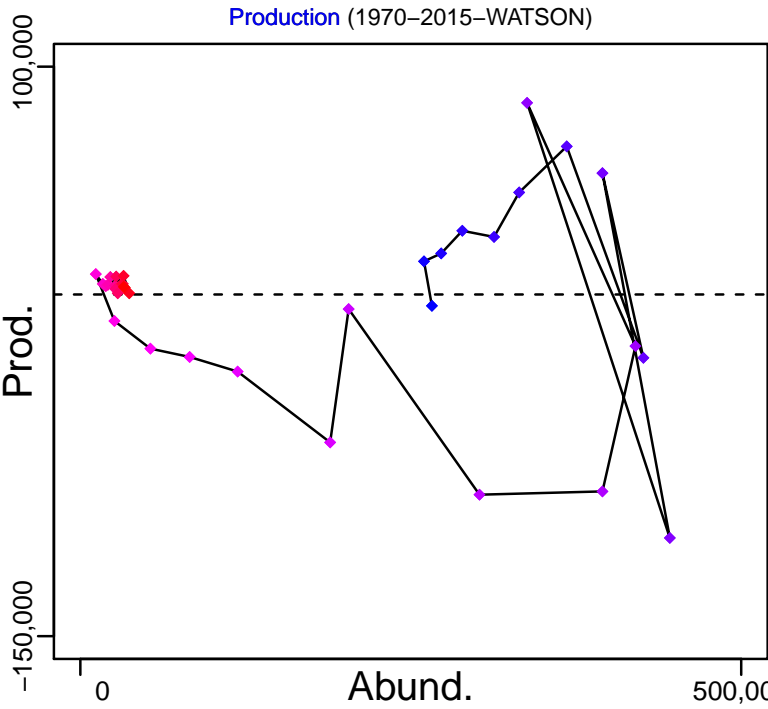
■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Greenland halibut Gulf of St. Lawrence [GHAL4RST]

Metadata	
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	DFO-GHAL4RST-1970-2015-WATSON
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2015, 2002

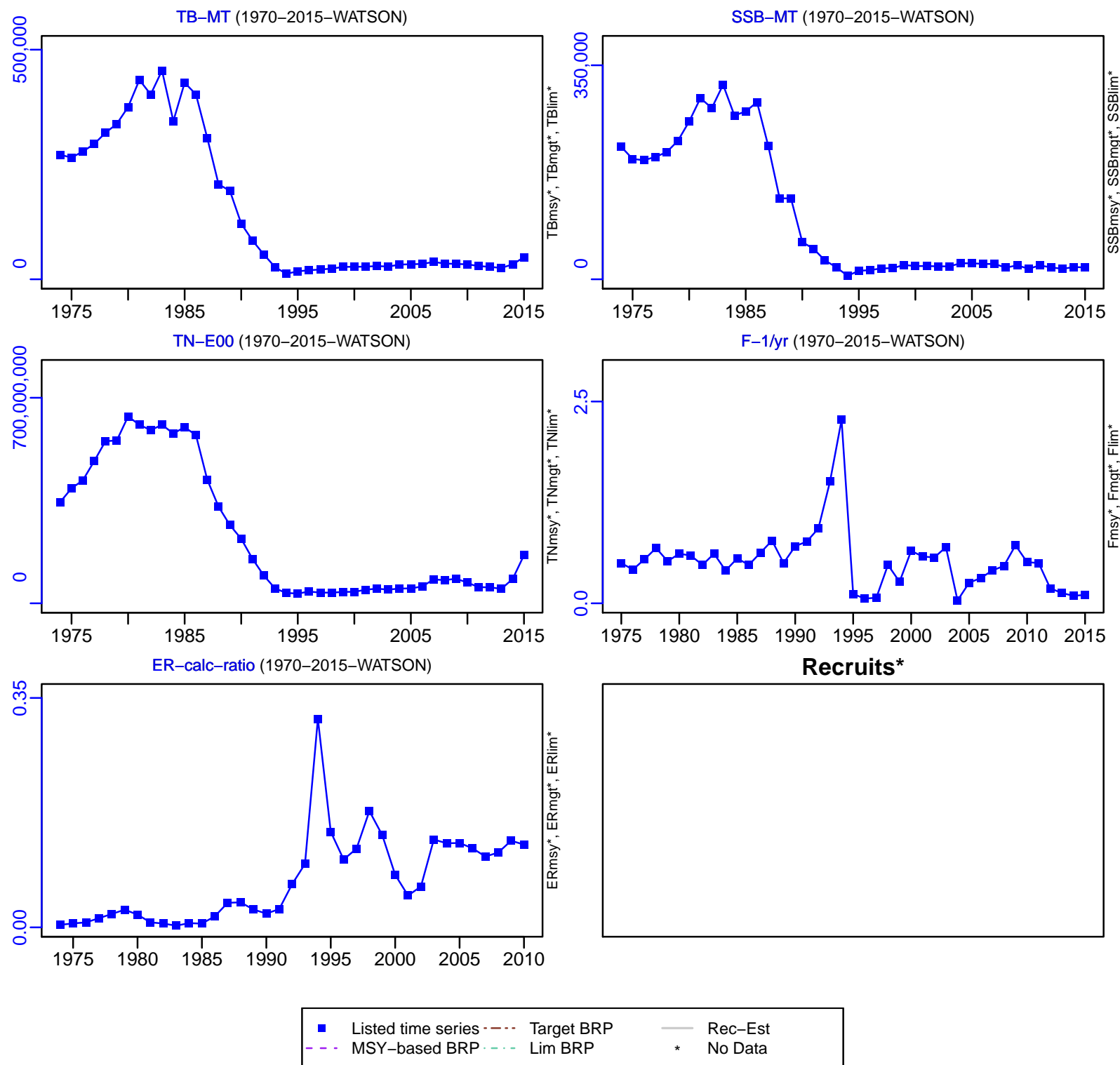
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	47,100	-	3+
SSB	SSB-MT	2015	17,700	-	3+
TN	TN-E00	2015	1.44×10^8	-	3+
R	-	-	-	-	-
F	F-1/yr	2015	0.09	-	7 to 9
ER	ER-calc-ratio	2015	0.124	-	-
TC	-	-	-		
TL	TL-MT	2015	3950		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



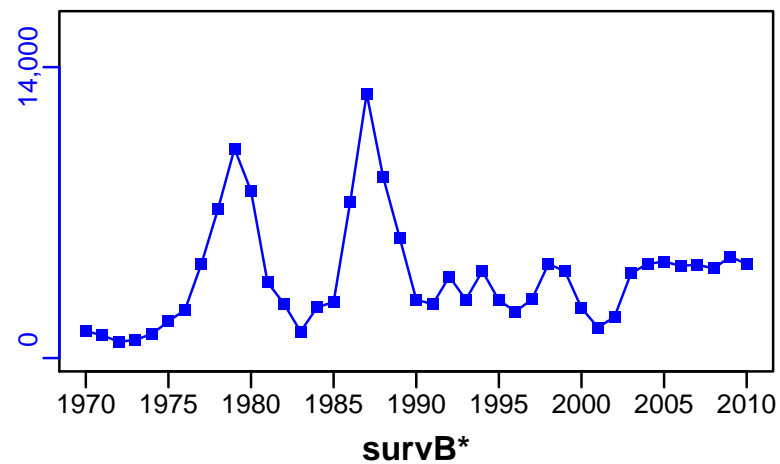
◆ Start Year ◆ End Year * No Data

Greenland halibut Gulf of St. Lawrence [GHAL4RST]

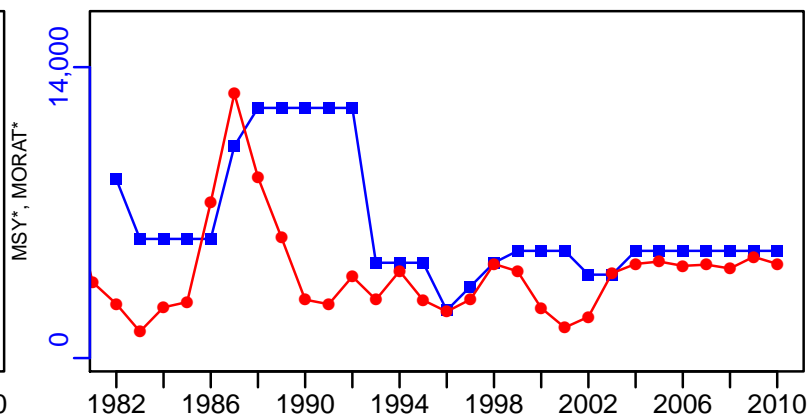


Greenland halibut Gulf of St. Lawrence [GHAL4RST]

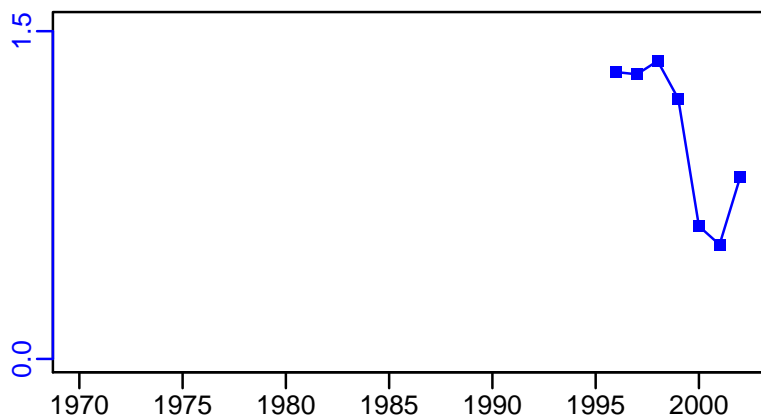
TL-MT, TC*, RecC* (1970-2015-WATSON)



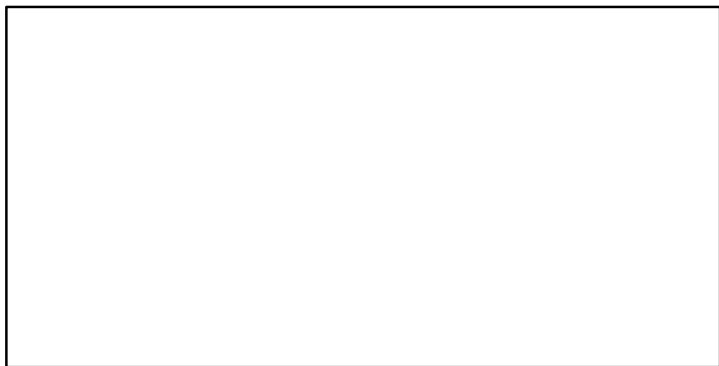
TAC-MT, Cpair-MT, Cadv* (1970-2015-WATSON)



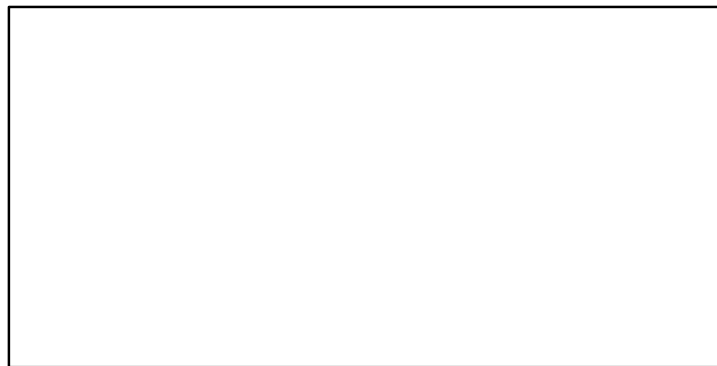
CPUEstand-C/E (1970-2002-PREFONTAINE)



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Green sea urchin Gulf of St. Lawrence [GURCH4RST]

Metadata	
Scientific Name	Strongylocentrotus droebachiensis
Current Assess ID	DFO-QUE-GURCH4RST-1991-2011-CHING
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	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	578		
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

Green sea urchin Gulf of St. Lawrence [GURCH4RST]

TB*



SSB*



TN *



F*



ER*

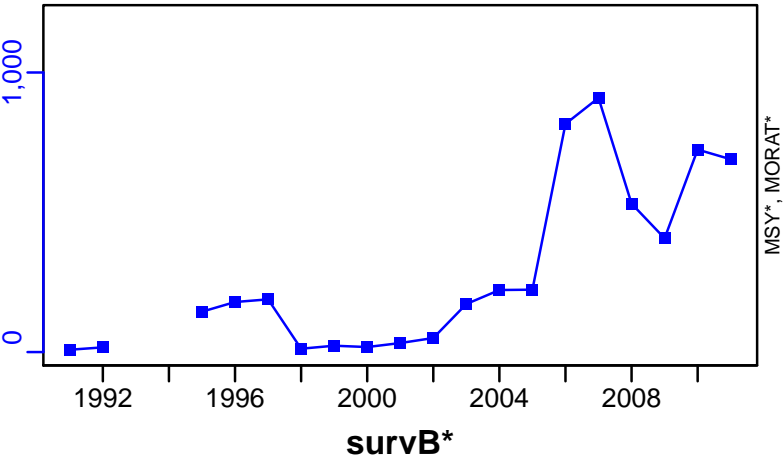


Recruits*



Green sea urchin Gulf of St. Lawrence [GURCH4RST]

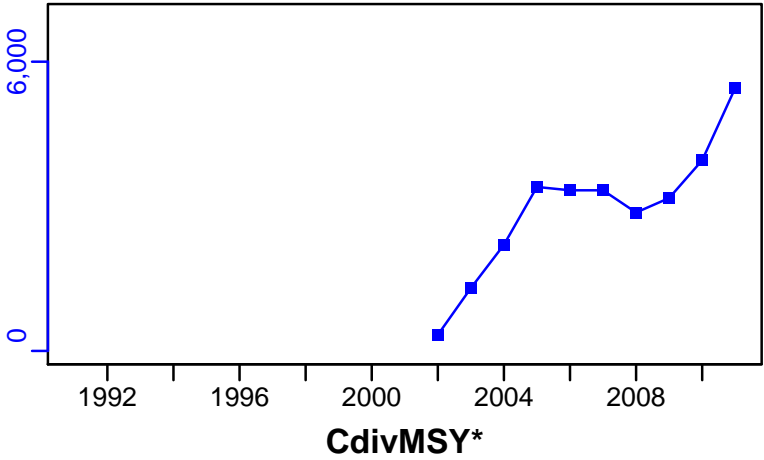
TL-MT, TC*, RecC* (1991-2011-CHING)



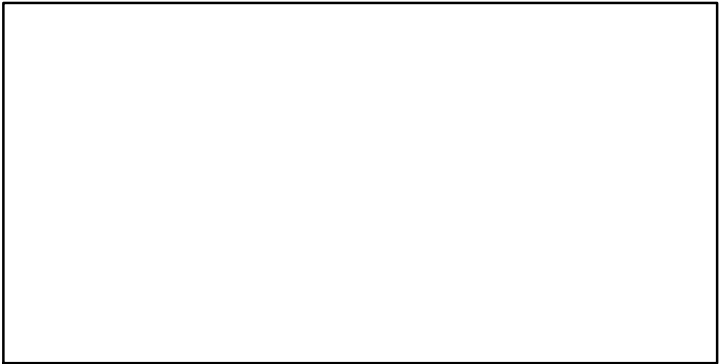
TAC*, Cpair*, Cadv*



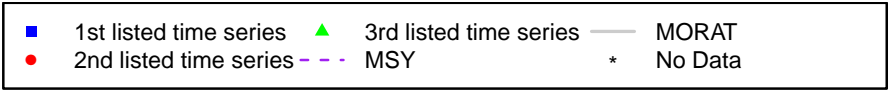
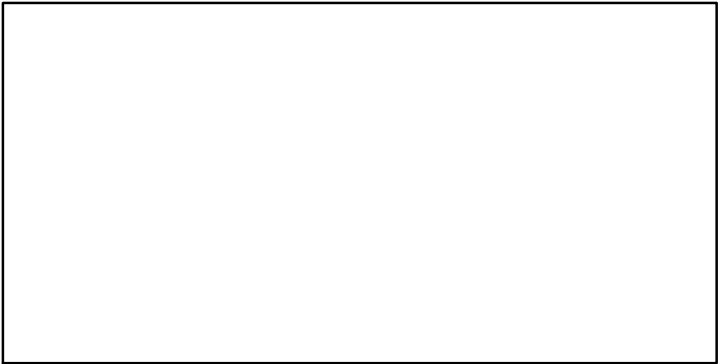
CPUE-1-kg/day (1991-2011-CHING)



EFFORT*



CdivMSY*



Haddock Grand Banks [HAD3LNO]

Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	NAFO-SC-HAD3LNO-1953-2017-ASHBROOK
Area	Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2013, 2017

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	2013	16,400	-	-
SSB	-	-	-	-	-
TN	TN-E00	2013	14,900,000	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.001	-	-
TC	TC-MT	2017	228		
TL	TL-MT	2013	21		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Haddock Grand Banks [HAD3LNO]

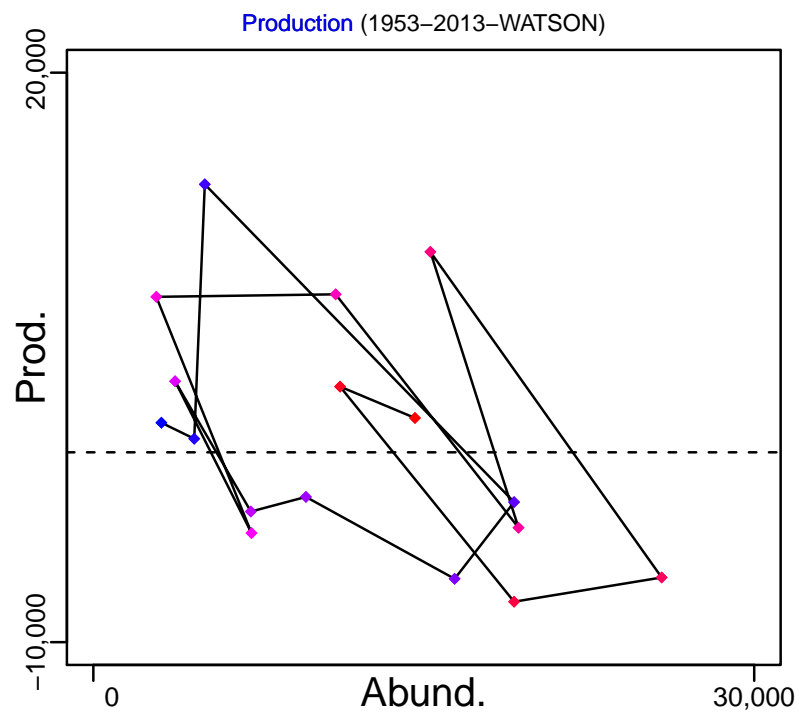
Kobe MSY*



Kobe MGT*



Spawner Recruit*

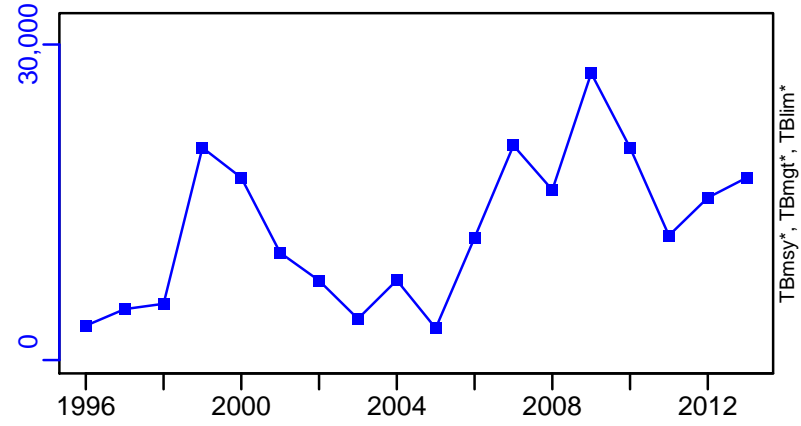


◆ Start Year ◆ End Year * No Data

Haddock Grand Banks [HAD3LNO]

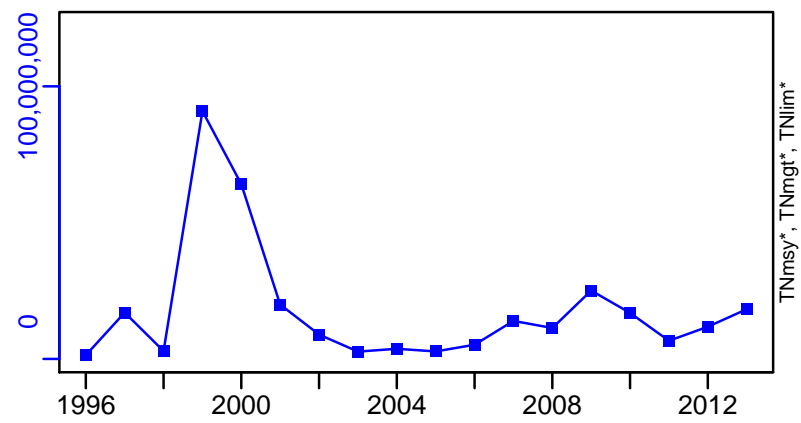
TB-MT (1953-2013-WATSON)

SSB*



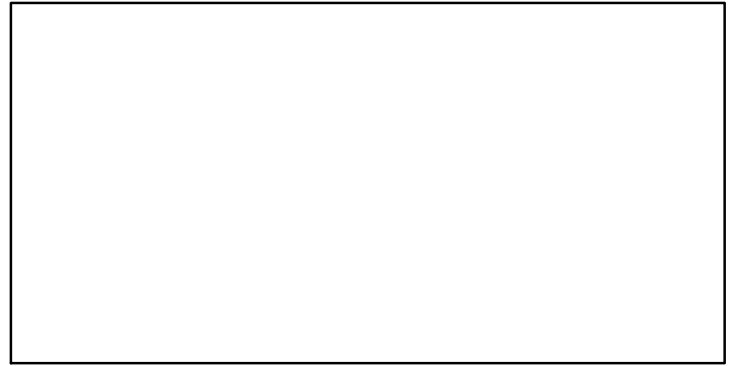
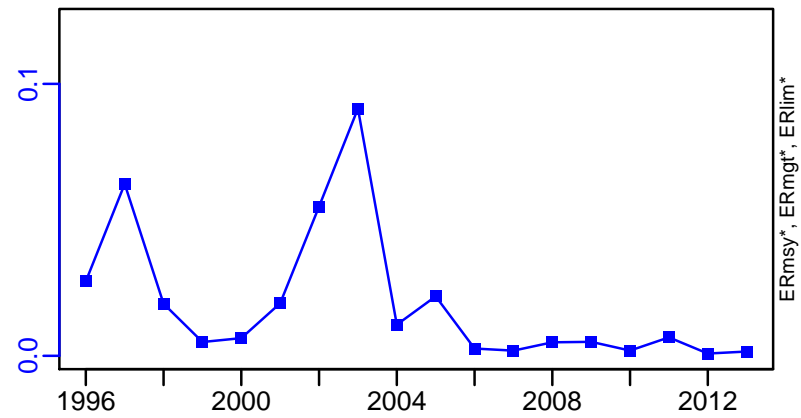
TN-E00 (1953-2013-WATSON)

F*



ER-calc-ratio (1953-2013-WATSON)

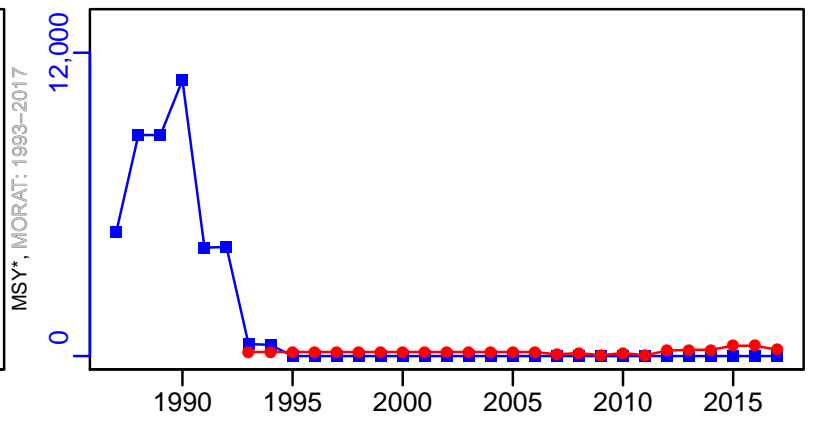
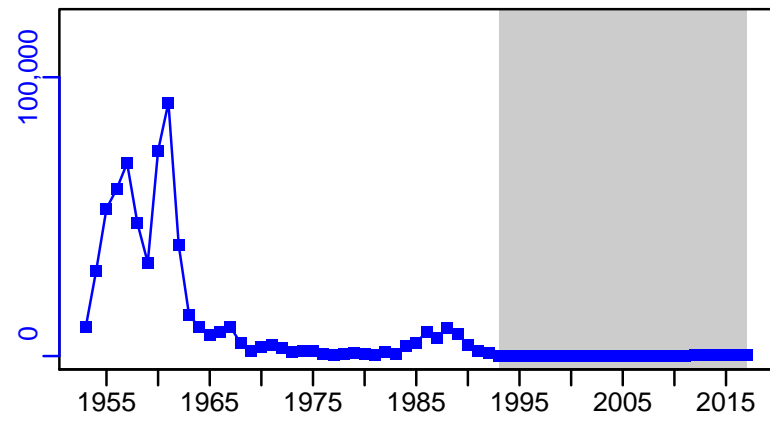
Recruits*



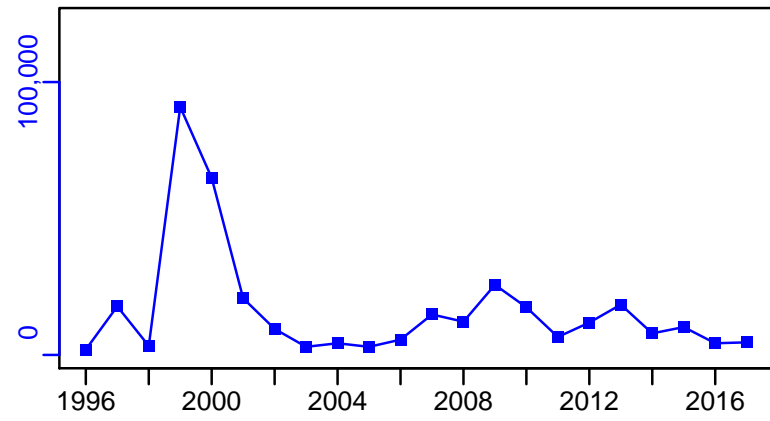
Haddock Grand Banks [HAD3LNO]

TC-MT, TL*, RecC* (1953-2017-ASHBROOK)

TAC-MT, Cpair-MT, Cadv* (1953-2017-ASHBROOK)



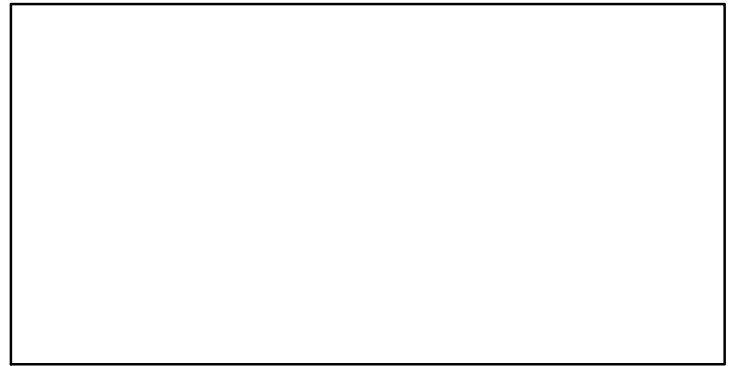
survB-E00 (1953-2017-ASHBROOK)



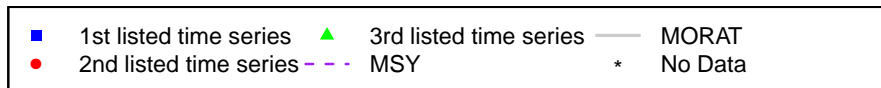
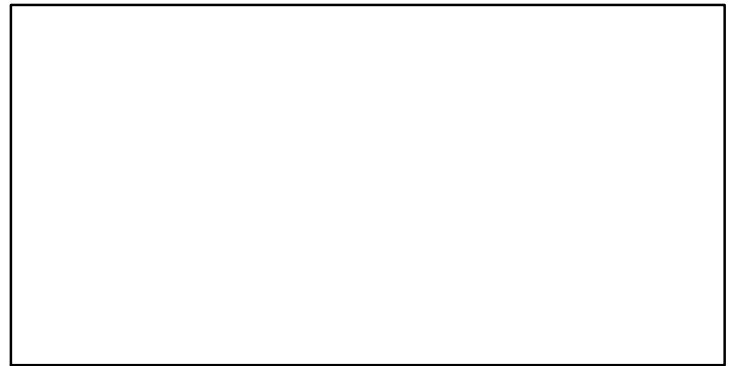
EFFORT*



CPUE*



CdivMSY*



Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]

Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	DFO-HAD4X5Y-1970-2014-WATSON
Area	Western Scotian Shelf, Bay of Fundy and Gulf of Maine
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2011	52,000
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2011	14,700
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	42,900	Both	-
SSB	SSB-MT	2011	42,700	-	4+
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.096	-	-
TC	TC-MT	2014	3520		
TL	TL-MT	2014	3520		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.821		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

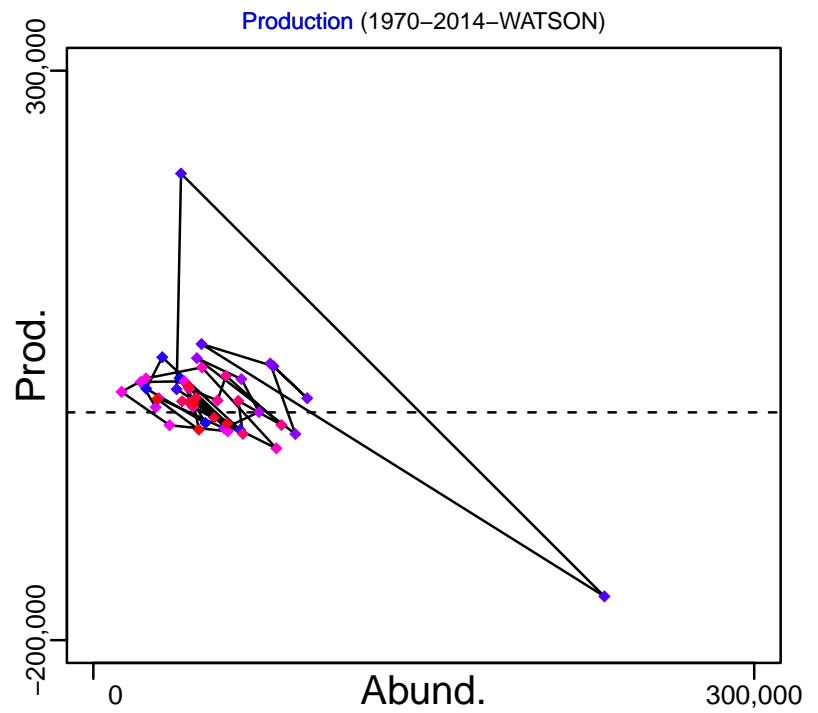
Kobe MSY*



Kobe MGT*



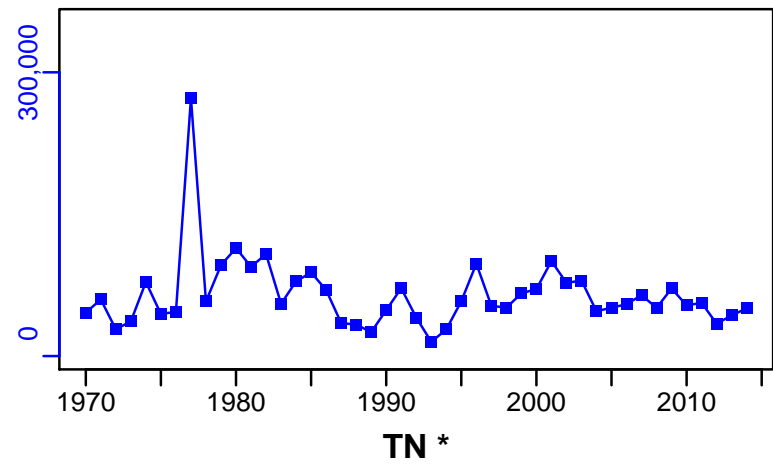
Spawner Recruit*



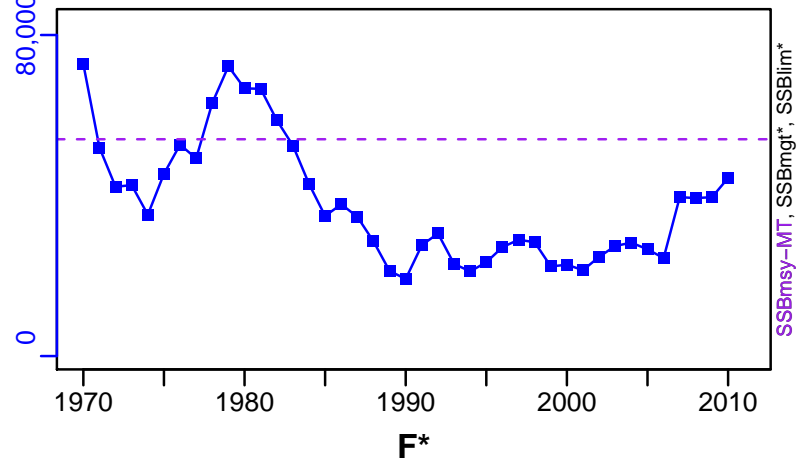
◆ Start Year ◆ End Year * No Data

Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]

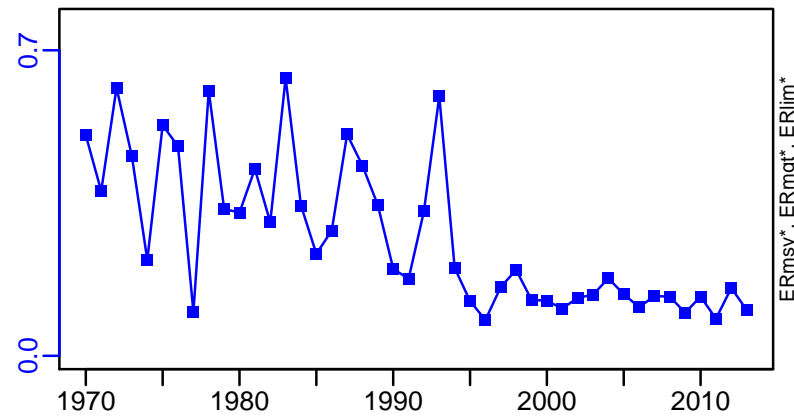
TB-MT (1970-2014-WATSON)



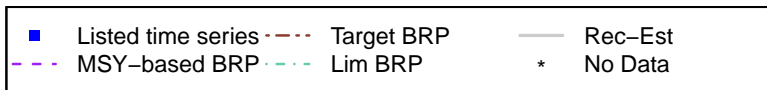
SSB-MT (1970-2011-CHING)



ER-calc-ratio (1970-2014-WATSON)

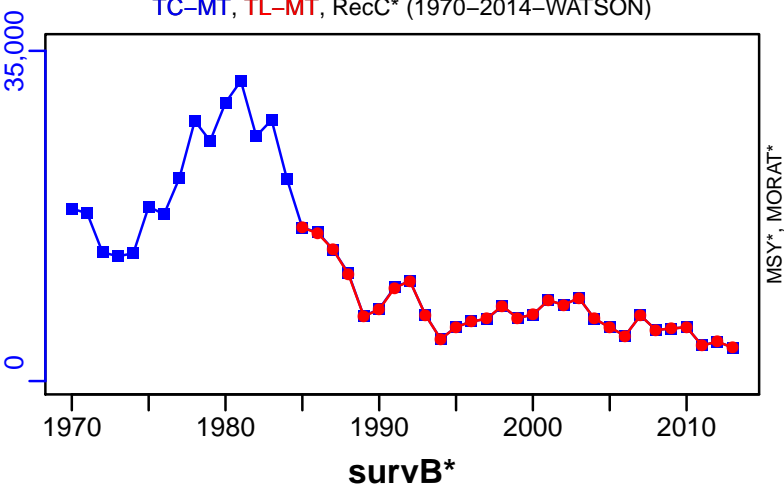


Recruits*



Haddock Western Scotian Shelf, Bay of Fundy and Gulf of Maine [HAD4X5Y]

TC-MT, TL-MT, RecC* (1970–2014–WATSON)



TAC*, Cpair*, Cadv*



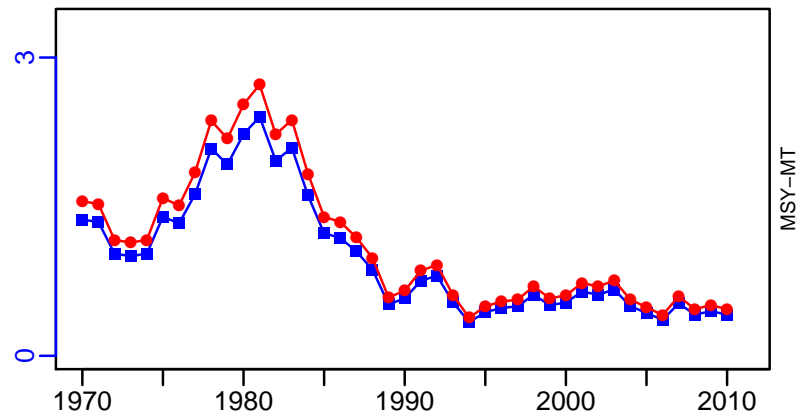
CPUE*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1970–2011–CHING)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

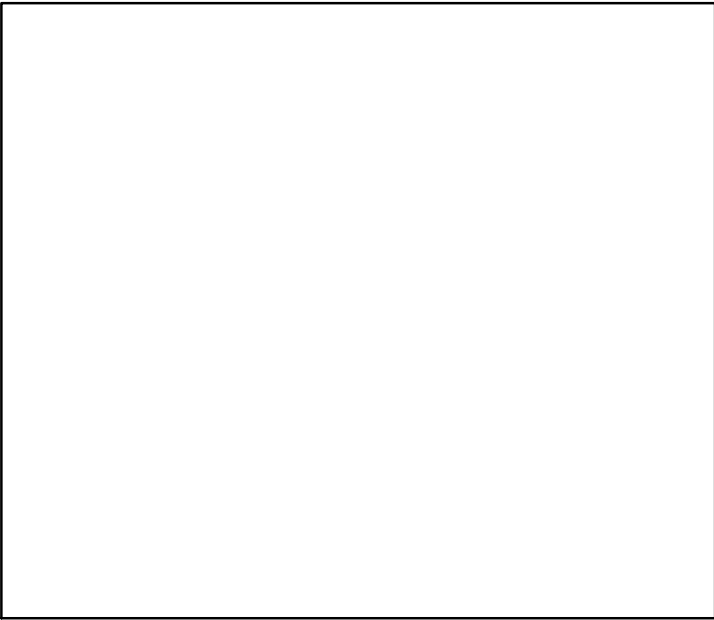
Herring NAFO division 4R (Fall spawners) [HERR4RFA]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-QUE-HERR4RFA-1971-2003-PREFONTAINE
Area	NAFO division 4R (Fall spawners)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2003

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2003	0.2
TBlim	TBlim-MT	2003	47,953
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2003	48,500	-	2+
TN	-	-	-	-	-
R	R-E00	2003	49,300,000	-	2
F	F-1/yr	2003	0.049	-	4+
ER	-	-	-	-	-
TC	TC-E00	2003	16,200,000		
TL	TL-MT	2003	4499		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

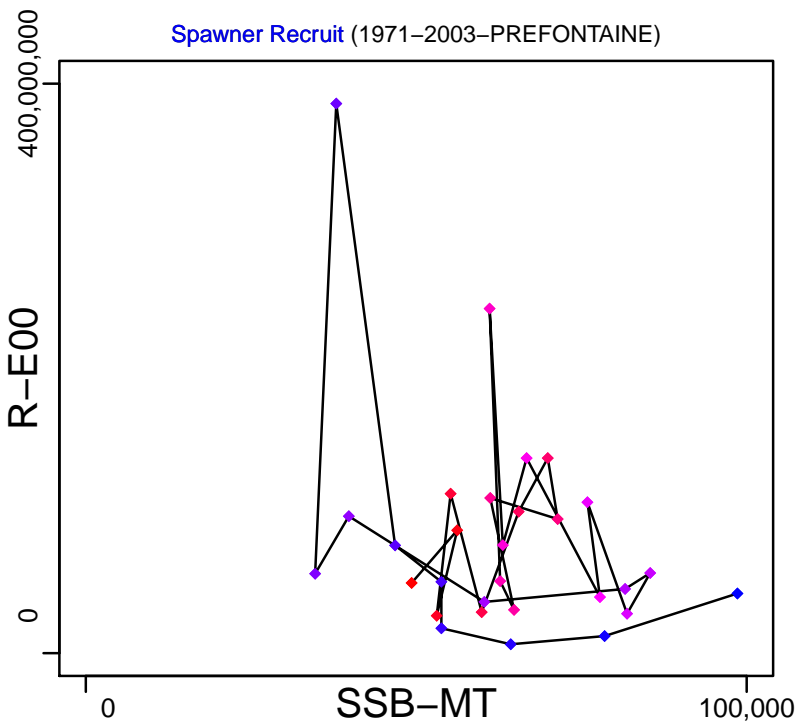
Kobe MSY*



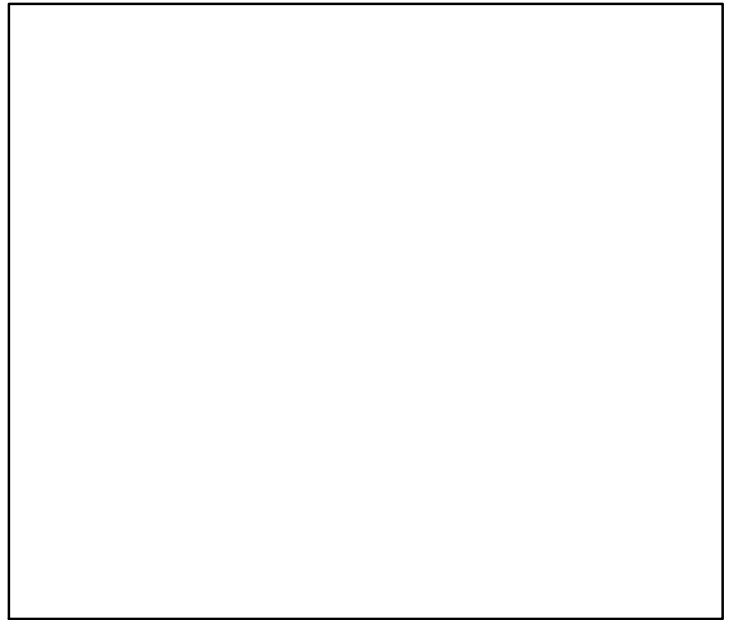
Kobe MGT*



Spawner Recruit (1971–2003–PREFONTAINE)



Production*



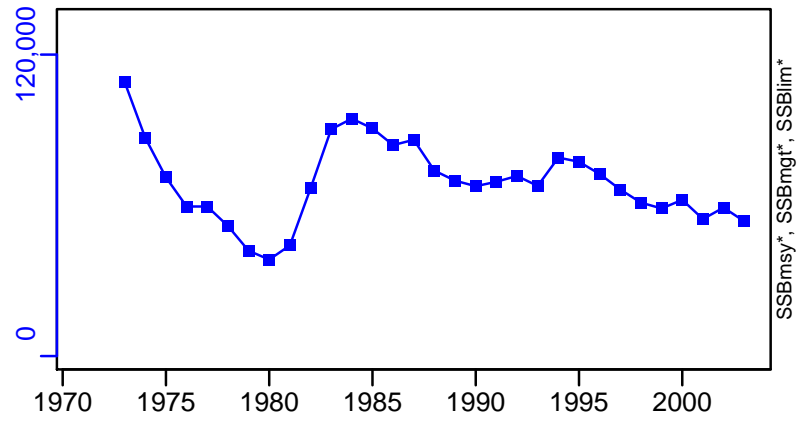
◆ Start Year ◆ End Year * No Data

Herring NAFO division 4R (Fall spawners) [HERR4RFA]

TB*



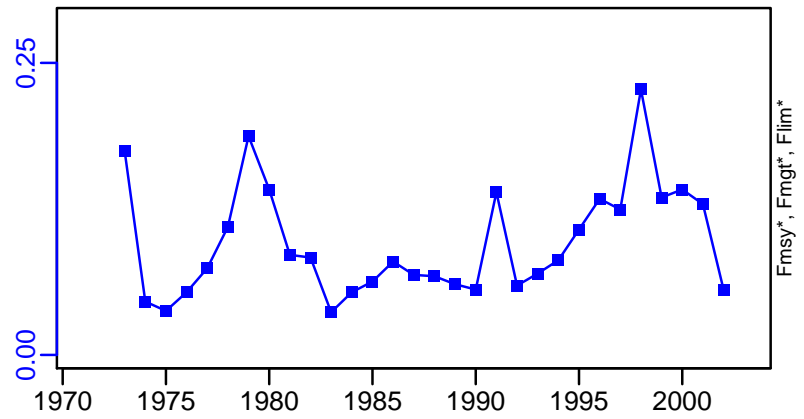
SSB-MT (1971-2003-PREFONTAINE)



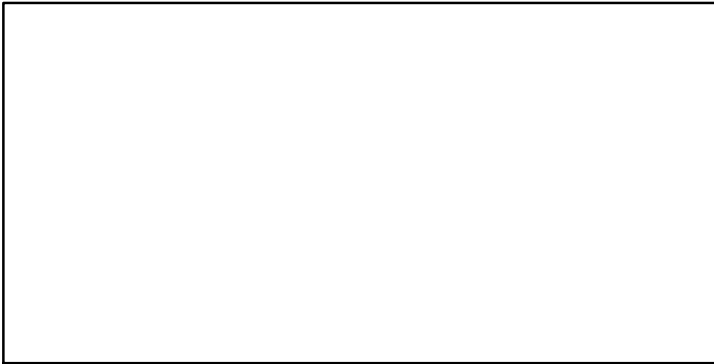
TN *



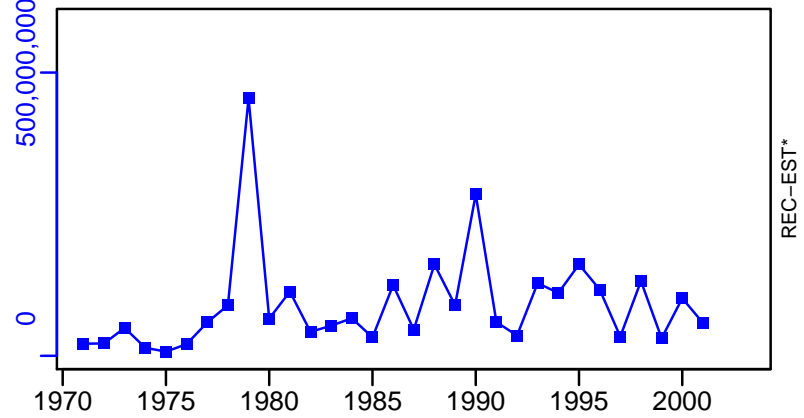
F-1/yr (1971-2003-PREFONTAINE)



ER*

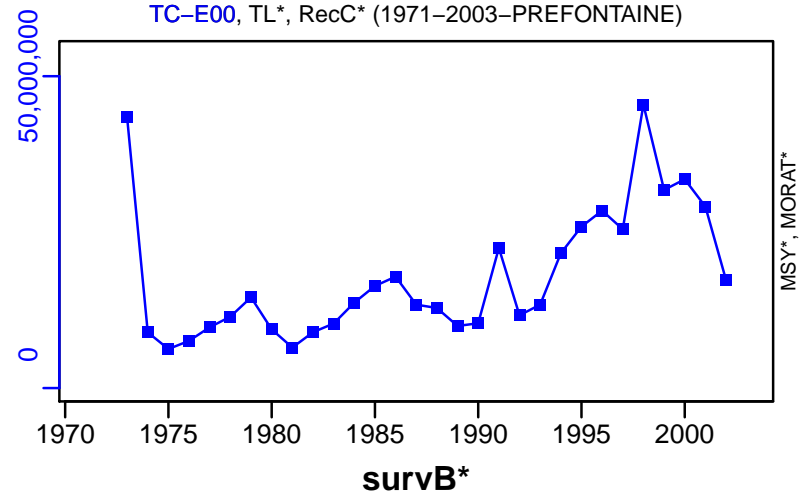


R-E00 (1971-2003-PREFONTAINE)

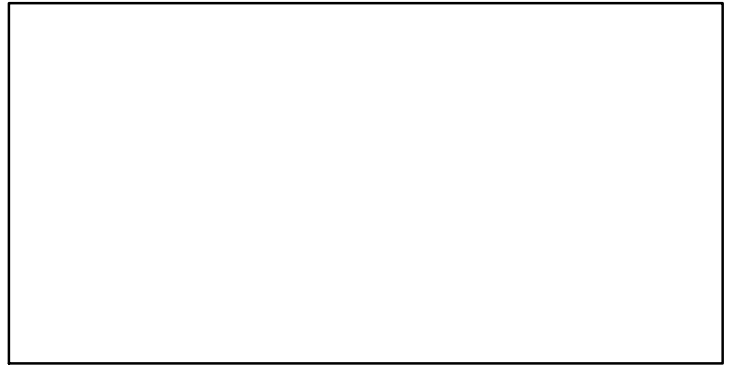


Herring NAFO division 4R (Fall spawners) [HERR4RFA]

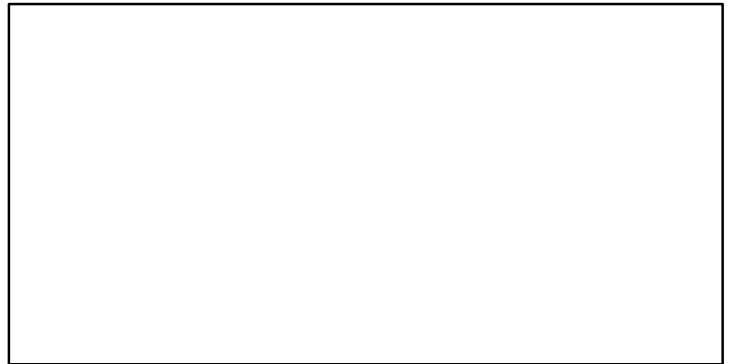
TC-E00, TL*, RecC* (1971-2003-PREFONTAINE)



TAC*, Cpair*, Cadv*



CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Herring NAFO division 4R (Spring spawners) [HERR4RSP]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-QUE-HERR4RSP-1963-2004-PREFONTAINE
Area	NAFO division 4R (Spring spawners)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2004

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2004	0.2
TBlim	TBlim-MT	2004	37,831
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

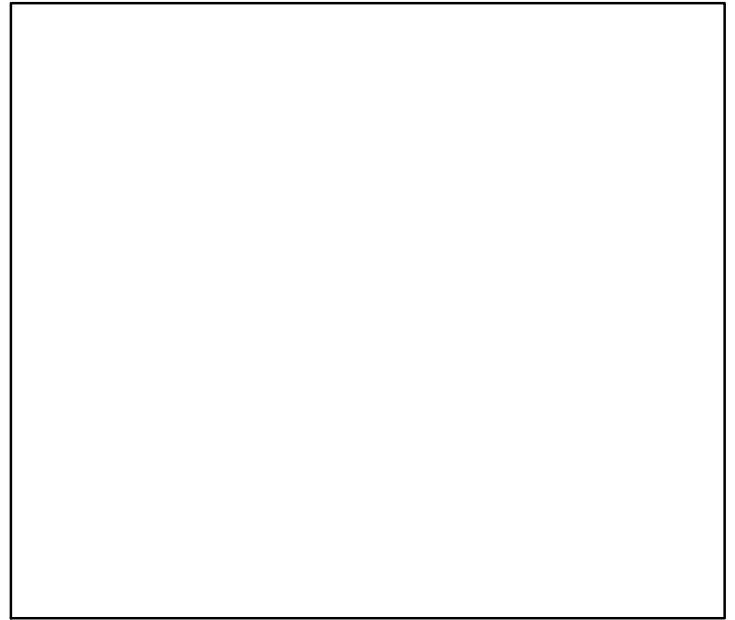
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2004	64,300	-	-
SSB	SSB-MT	2004	52,600	-	2+
TN	-	-	-	-	-
R	R-E00	2004	71,800,000	-	2
F	F-1/yr	2004	0.148	-	4+
ER	ER-calc-ratio	2004	0.103	-	-
TC	TC-E00	2004	22,700,000		
TL	TL-MT	2004	7926		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Herring NAFO division 4R (Spring spawners) [HERR4RSP]

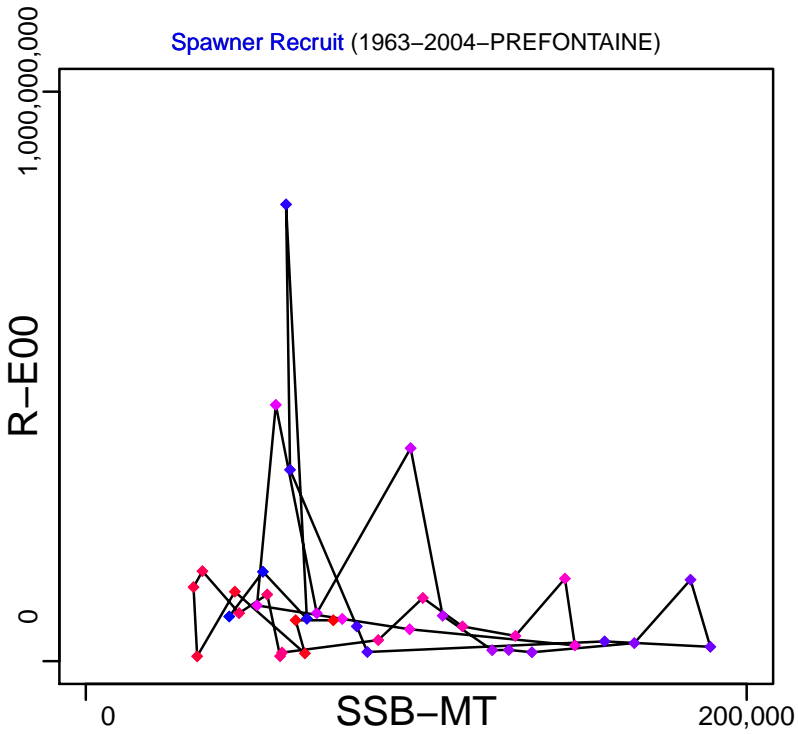
Kobe MSY*



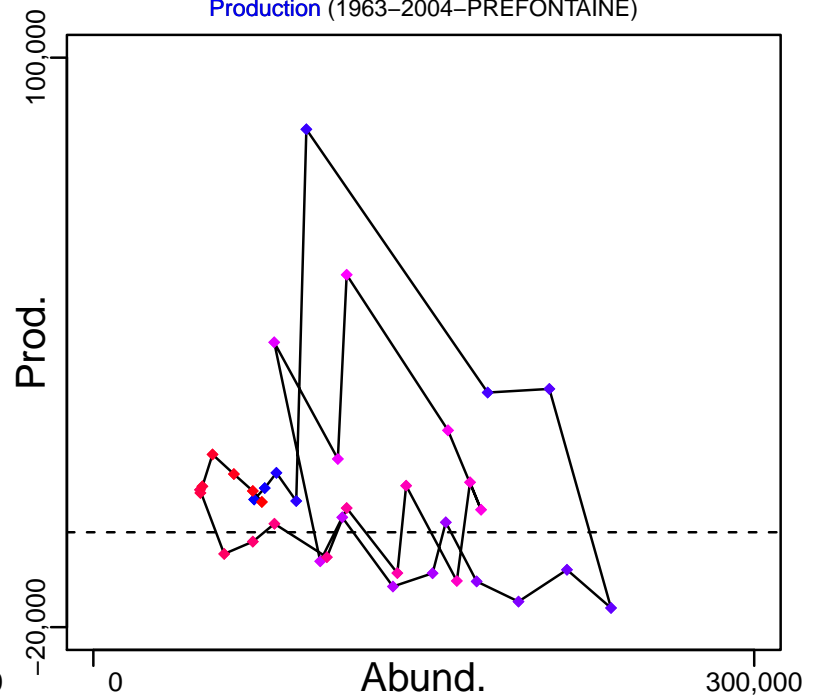
Kobe MGT*



Spawner Recruit (1963–2004–PREFONTAINE)



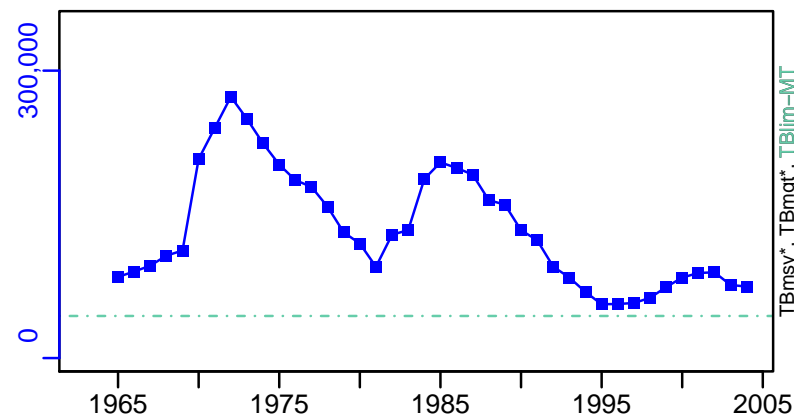
Production (1963–2004–PREFONTAINE)



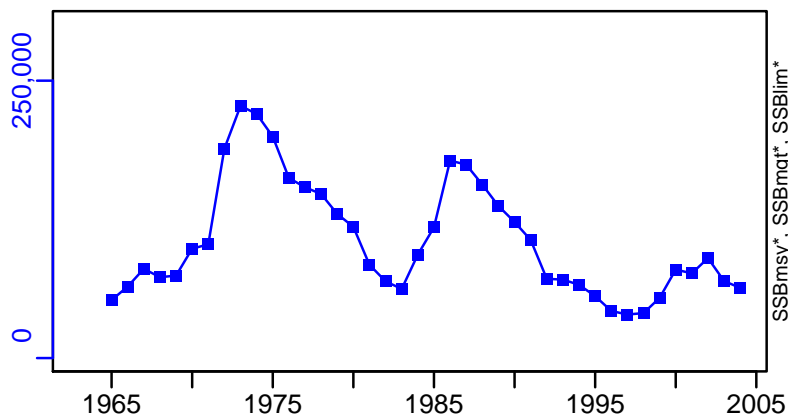
◆ Start Year ◆ End Year * No Data

Herring NAFO division 4R (Spring spawners) [HERR4RSP]

TB-MT (1963–2004–PREFONTAINE)



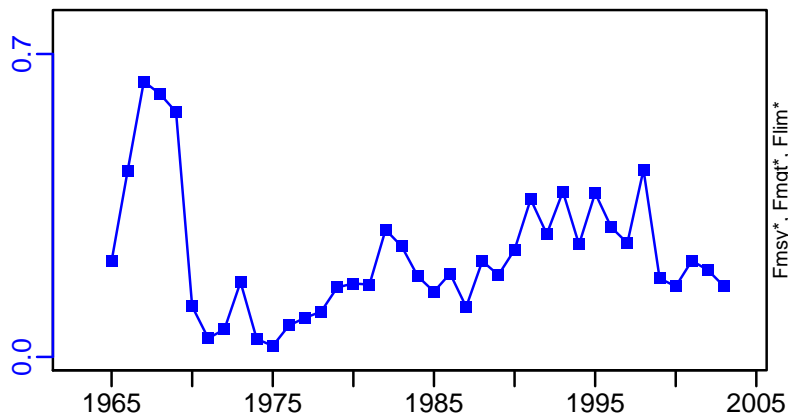
SSB-MT (1963–2004–PREFONTAINE)



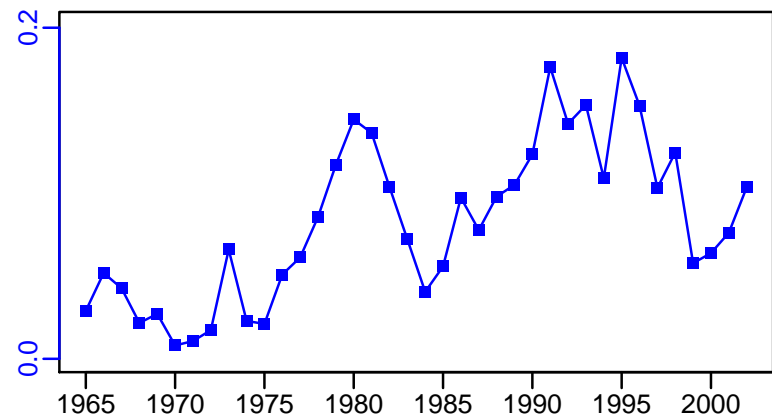
TN *



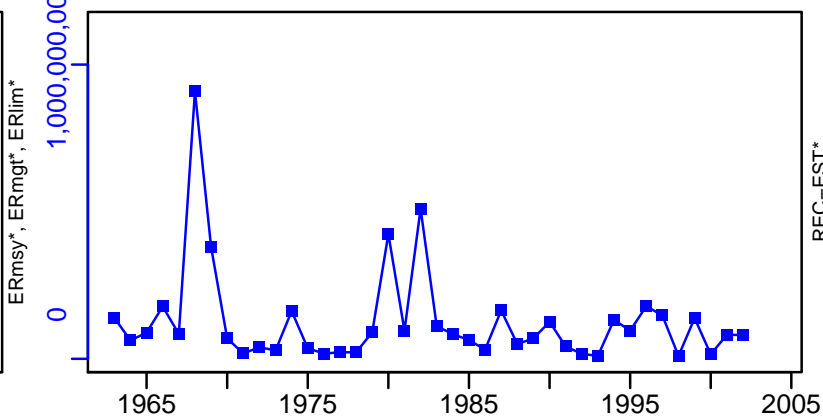
F-1/yr (1963–2004–PREFONTAINE)



ER-calc-ratio (1963–2004–PREFONTAINE)

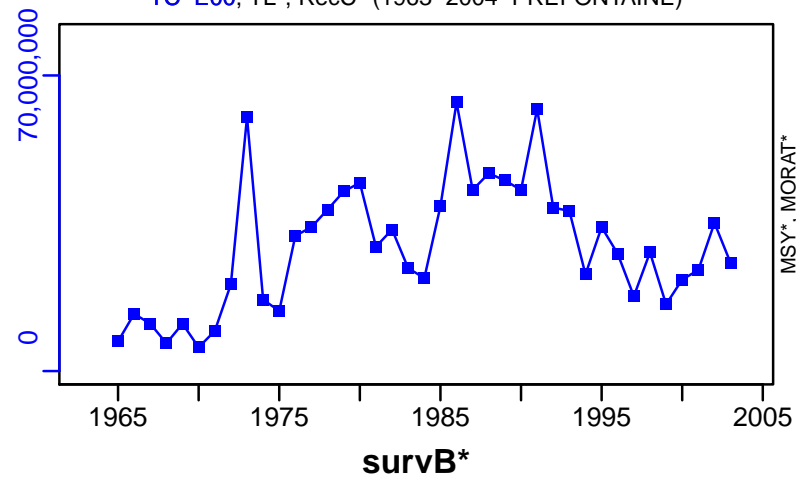


R-E00 (1963–2004–PREFONTAINE)



Herring NAFO division 4R (Spring spawners) [HERR4RSP]

TC-E00, TL*, RecC* (1963–2004–PREFONTAINE)



TAC*, Cpair*, Cadv*



CPUE*



EFFORT*



CdivMSY*



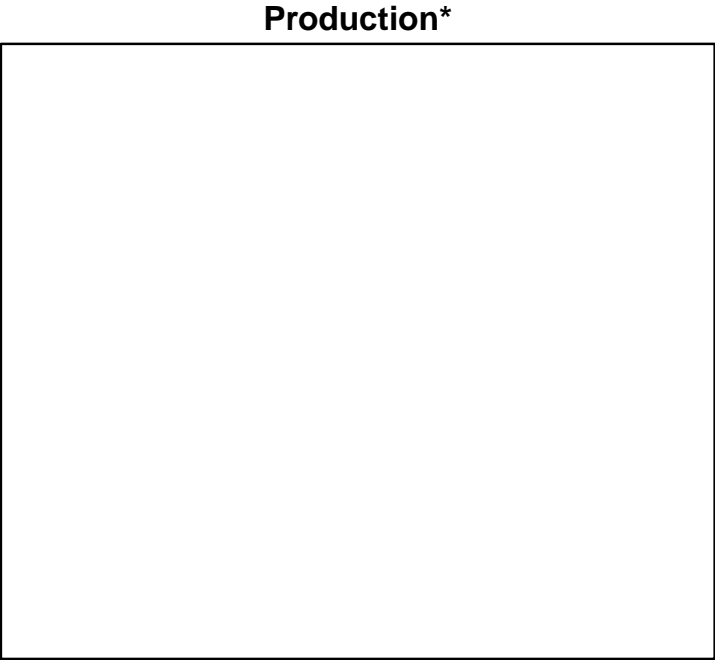
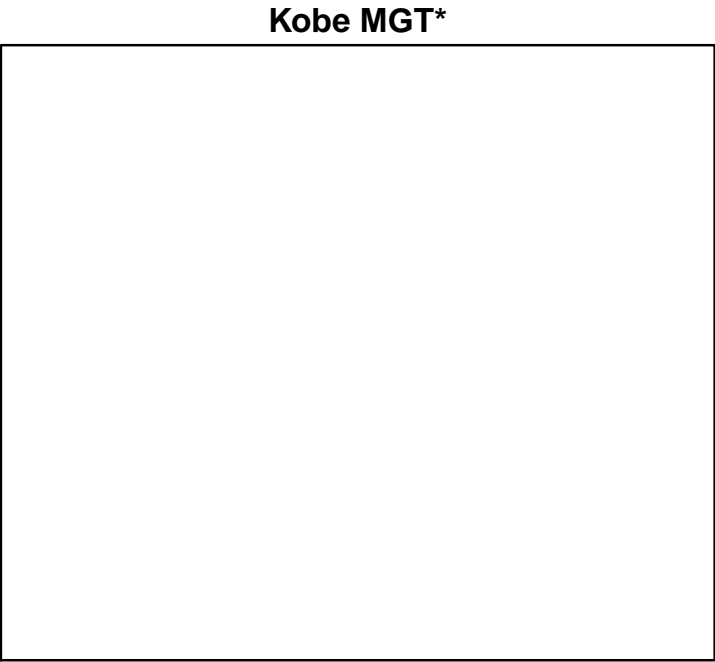
■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Herring Quebec North Shore [HERR4S]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-QUE-HERR4S-1979-2010-CHING
Area	Quebec North Shore
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	TC-MT	2010	407		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



F*



ER*



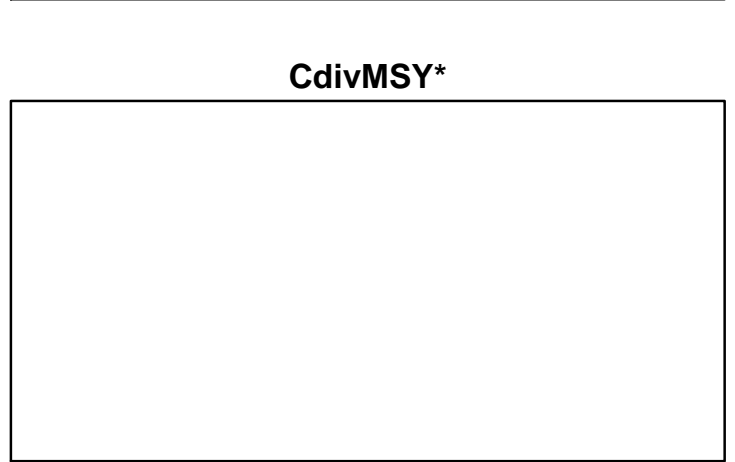
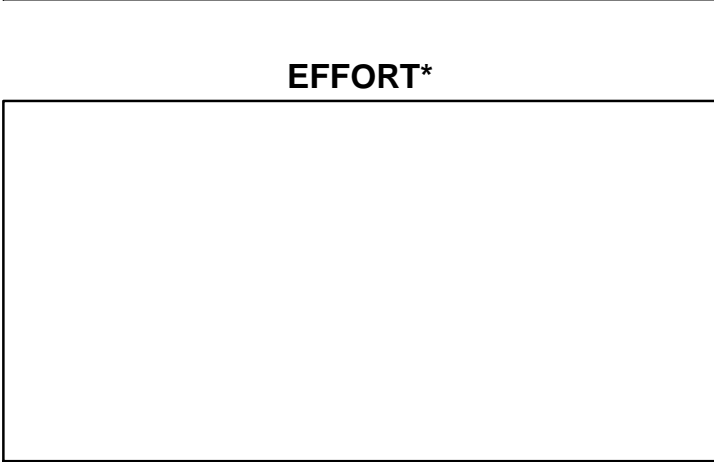
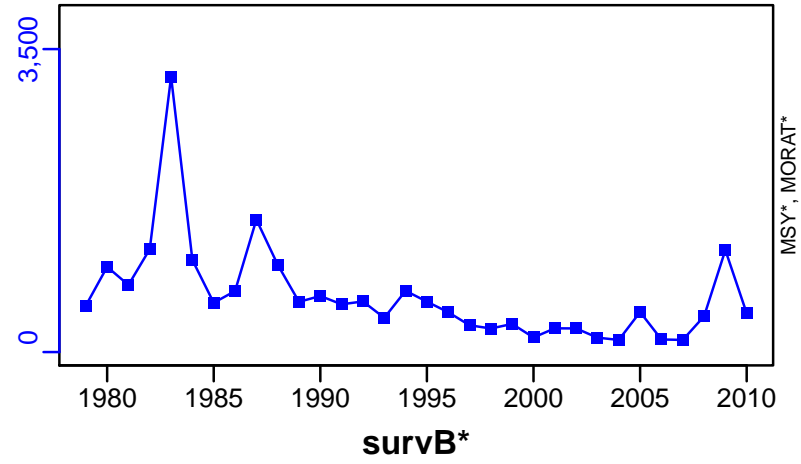
Recruits*



Herring Quebec North Shore [HERR4S]

TC-MT, TL*, RecC* (1979-2010-CHING)

TAC*, Cpair*, Cadv*



Herring Southern Gulf of St. Lawrence (Fall spawners) [HERR4TFA]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-HERR4TFA-1978-2014-WATSON
Area	Southern Gulf of St. Lawrence (Fall spawners)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2014	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2014	51,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	316,000	-	4+
SSB	SSB-MT	2014	99,000	Both	4 to 11
TN	TN-E00	2014	479,000	Both	4 to 11
R	R-E00	2007	2.9×10^8	-	4
F	F-1/yr	2014	0.423	Both	5 to 10
ER	-	-	-	-	-
TC	TC-MT	2014	34,400		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Herring Southern Gulf of St. Lawrence (Fall spawners) [HERR4TFA]

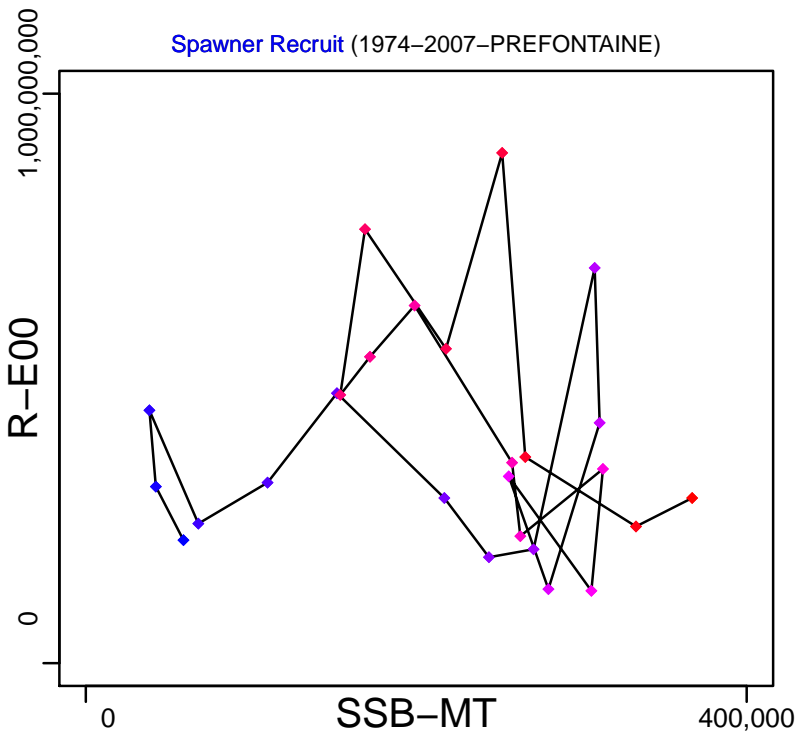
Kobe MSY*



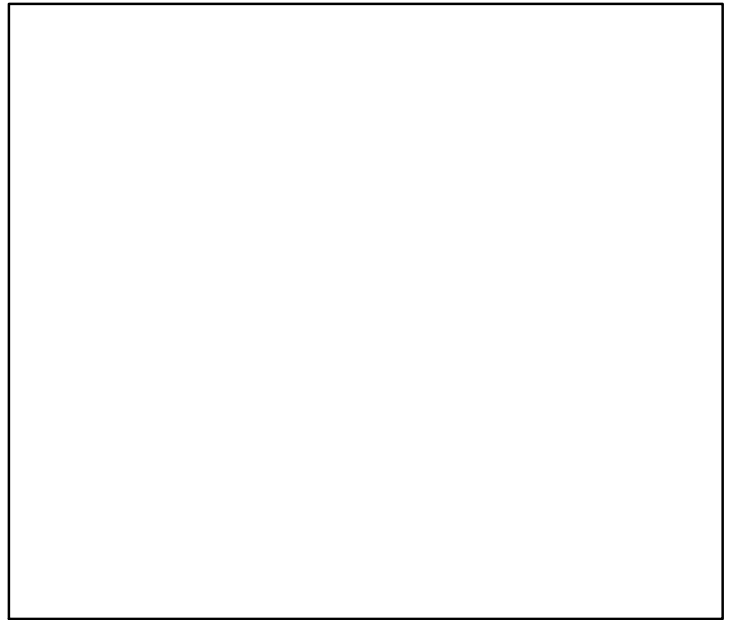
Kobe MGT*



Spawner Recruit (1974–2007–PREFONTAINE)



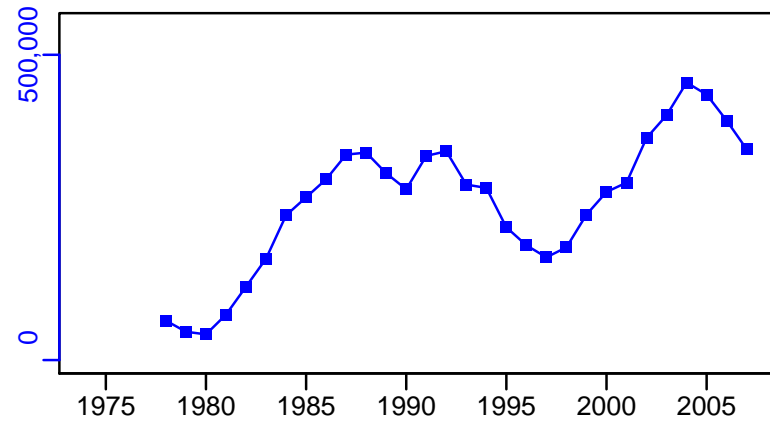
Production*



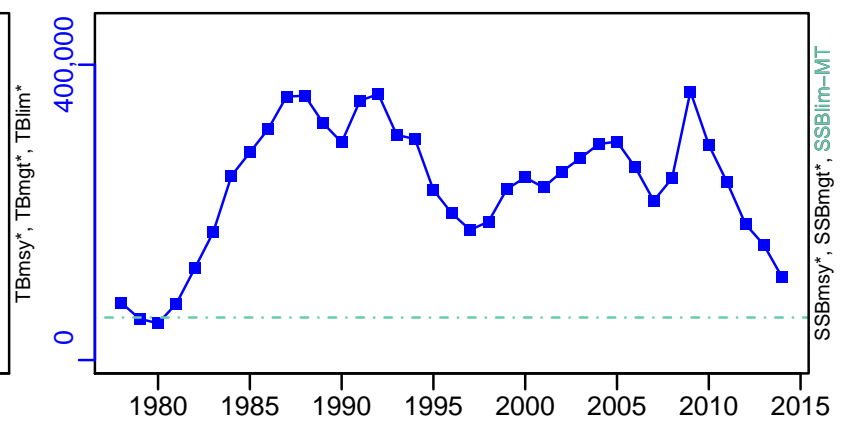
◆ Start Year ◆ End Year * No Data

Herring Southern Gulf of St. Lawrence (Fall spawners) [HERR4TFA]

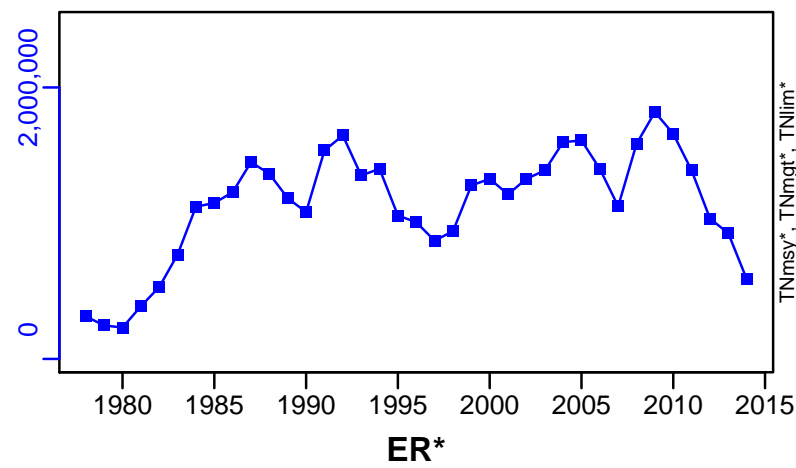
TB-MT (1974–2007–PREFONTAINE)



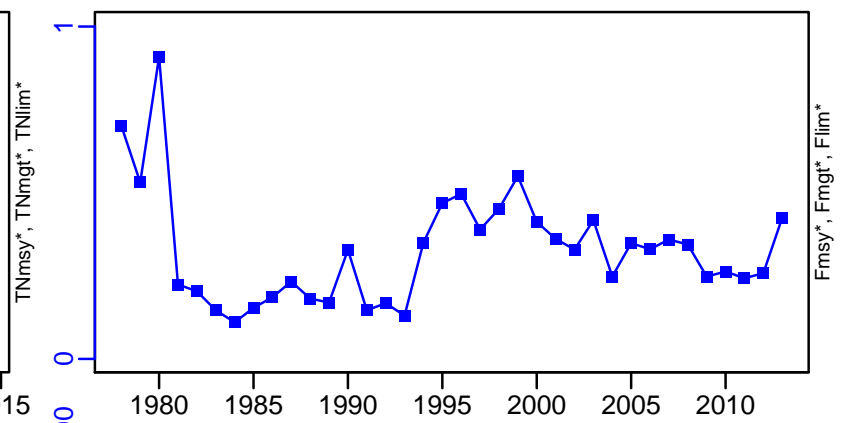
SSB-MT (1978–2014–WATSON)



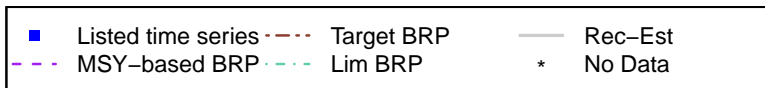
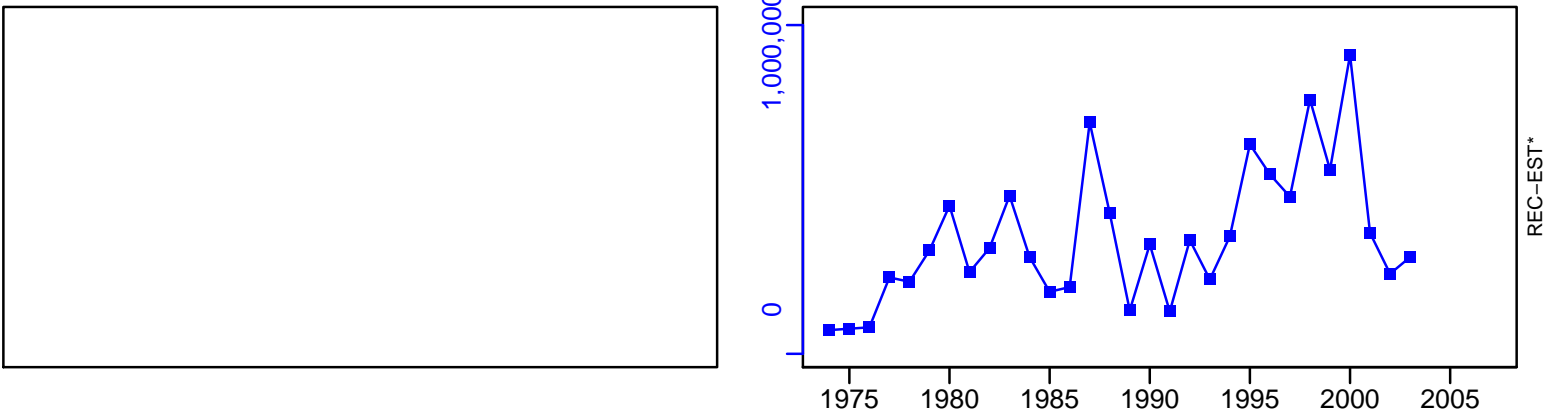
TN-E00 (1978–2014–WATSON)



F-1/yr (1978–2014–WATSON)



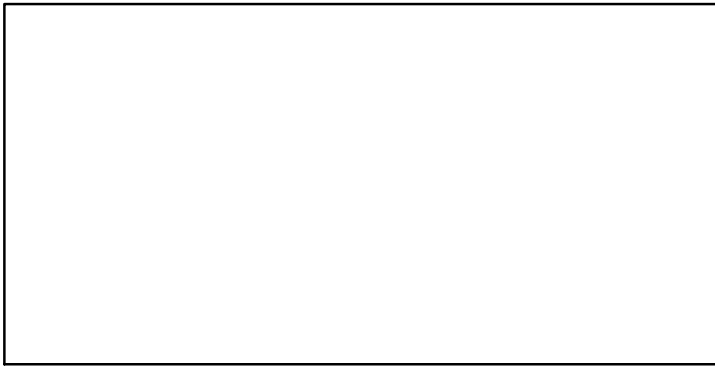
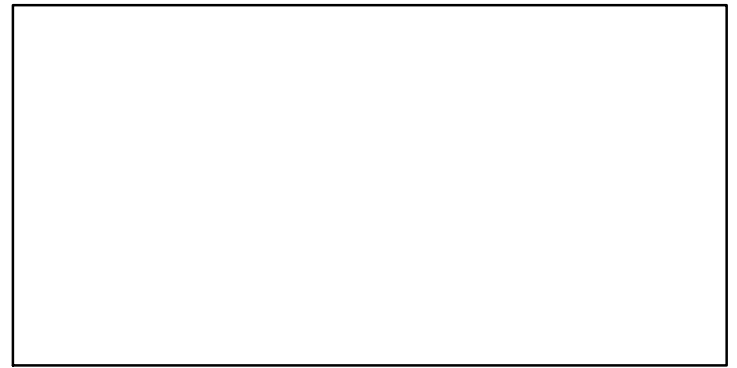
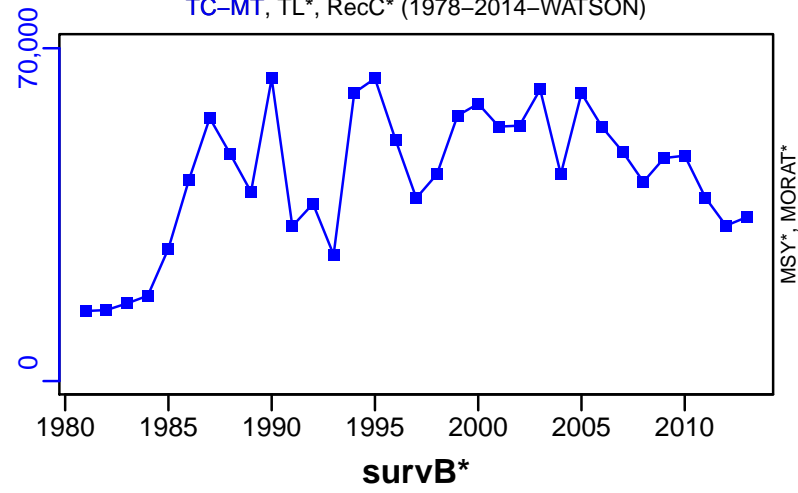
R-E00 (1974–2007–PREFONTAINE)



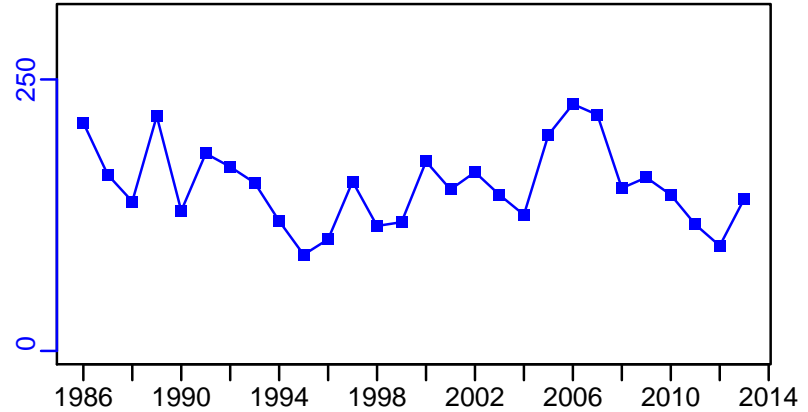
Herring Southern Gulf of St. Lawrence (Fall spawners) [HERR4TFA]

TC-MT, TL*, RecC* (1978-2014-WATSON)

TAC*, Cpair*, Cadv*

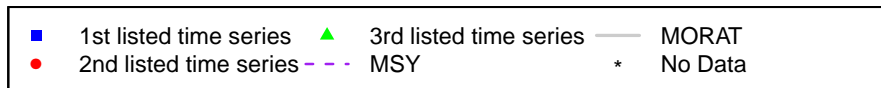


CPUE-kg/trip (1978-2014-WATSON)



EFFORT*

CdivMSY*



Herring Southern Gulf of St. Lawrence (Spring spawners) [HERR4TSP]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-HERR4TSP-1978-2014-WATSON
Area	Southern Gulf of St. Lawrence (Spring spawners)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2014	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2014	22,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	35,600	-	4 to 10
SSB	SSB-MT	2014	22,300	Both	4 to 11
TN	TN-E00	2014	76,800	Both	4 to 11
R	R-E00	2007	67,500,000	-	4
F	F-1/yr	2014	0.137	Both	5 to 10
ER	-	-	-	-	-
TC	TC-MT	2014	1700		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Herring Southern Gulf of St. Lawrence (Spring spawners) [HERR4TSP]

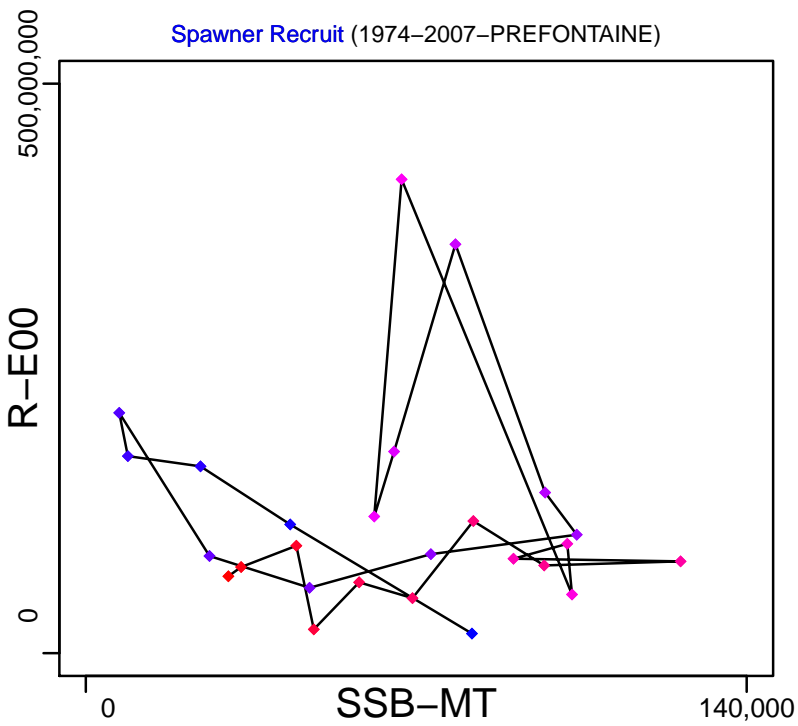
Kobe MSY*



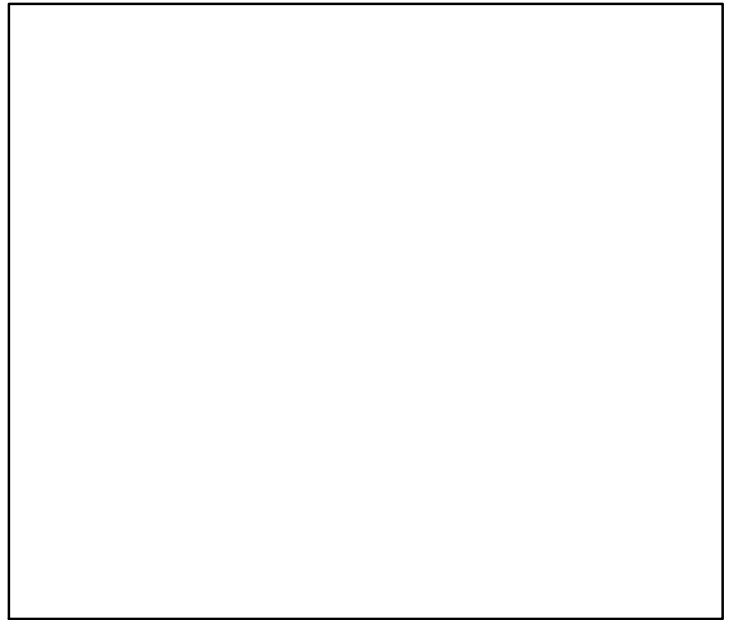
Kobe MGT*



Spawner Recruit (1974–2007–PREFONTAINE)



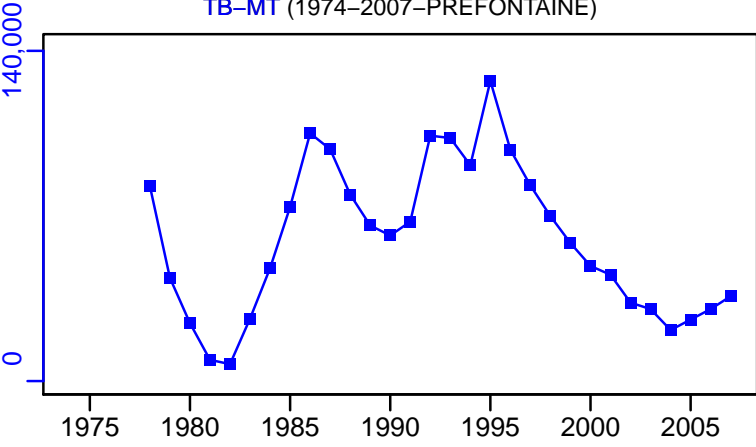
Production*



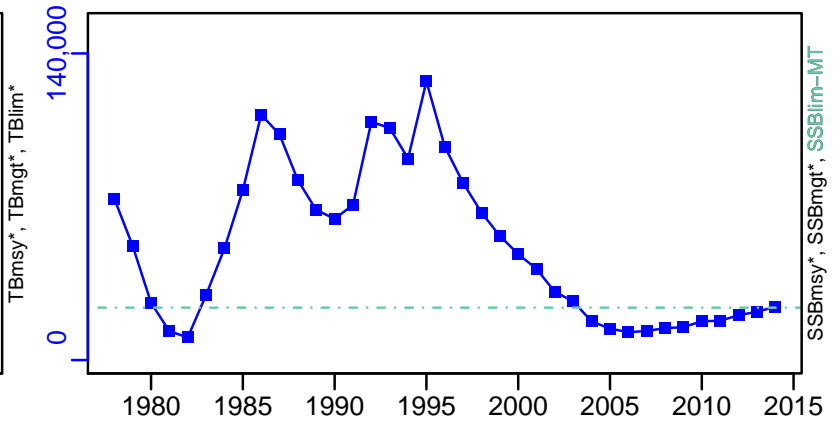
◆ Start Year ◆ End Year * No Data

Herring Southern Gulf of St. Lawrence (Spring spawners) [HERR4TSP]

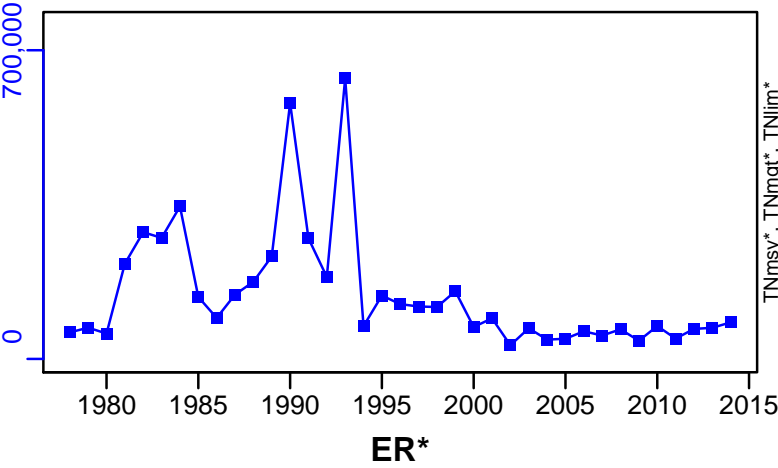
TB-MT (1974–2007–PREFONTAINE)



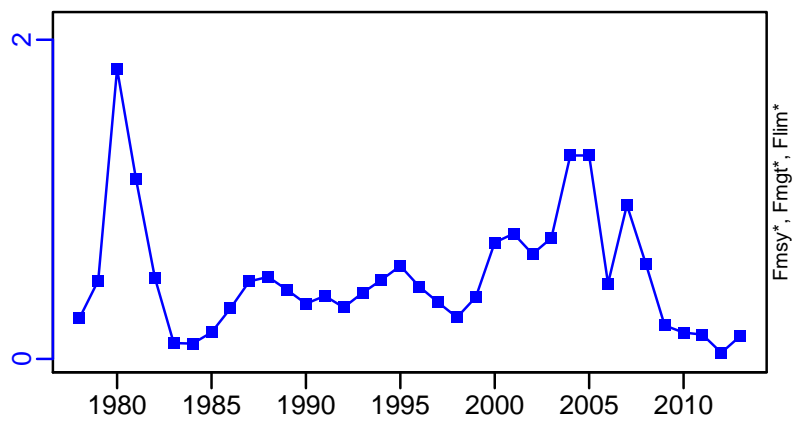
SSB-MT (1978–2014–WATSON)



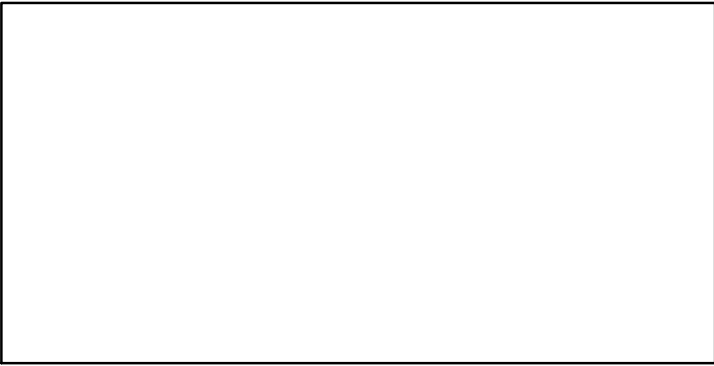
TN-E00 (1978–2014–WATSON)



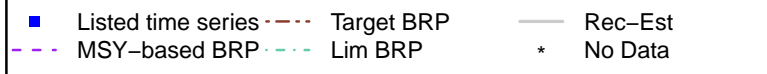
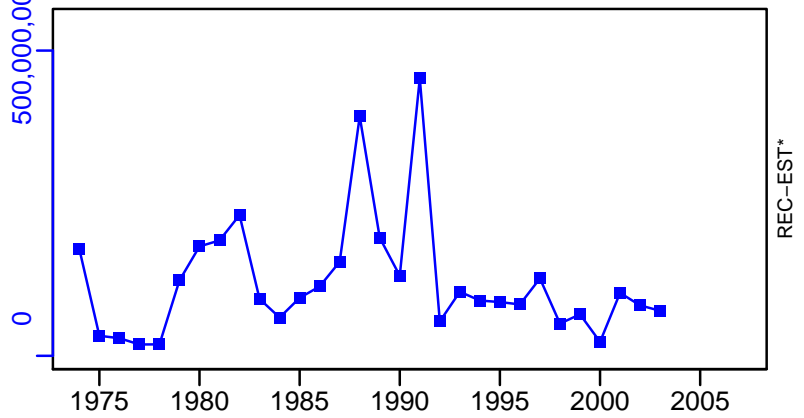
F-1/yr (1978–2014–WATSON)



ER*



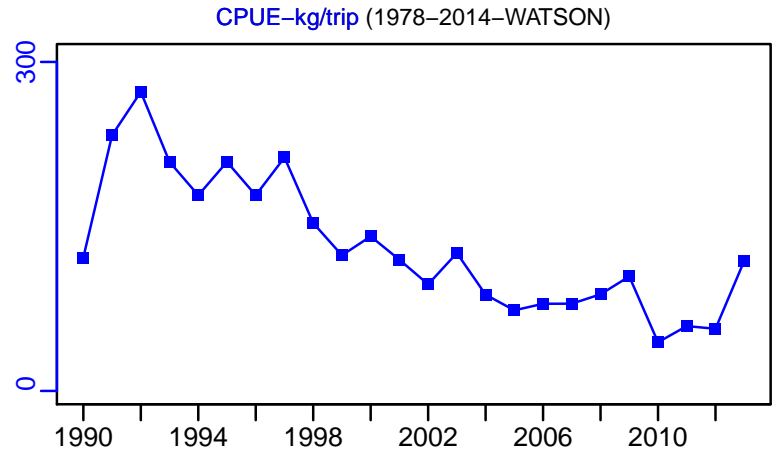
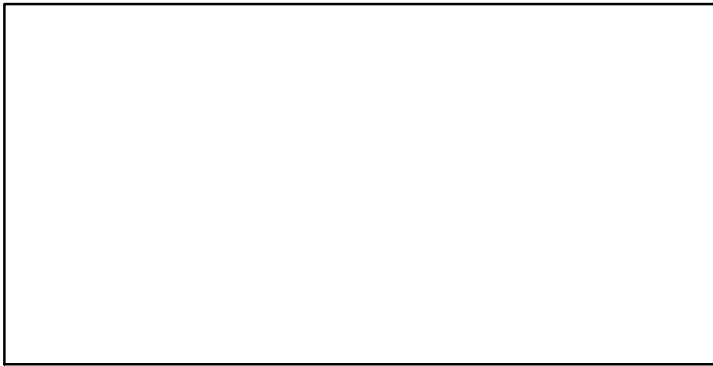
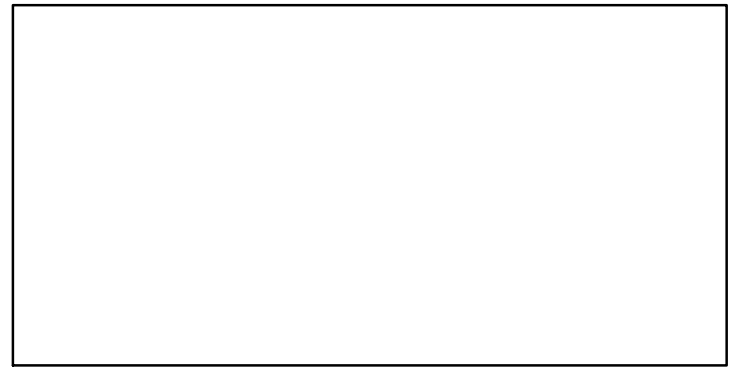
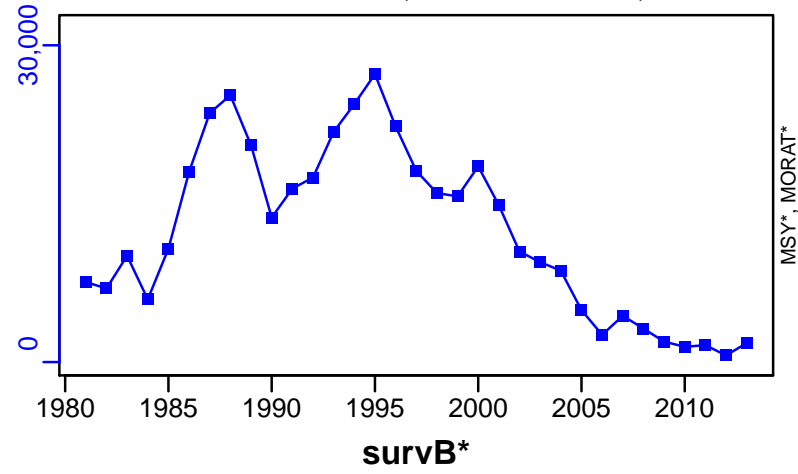
R-E00 (1974–2007–PREFONTAINE)



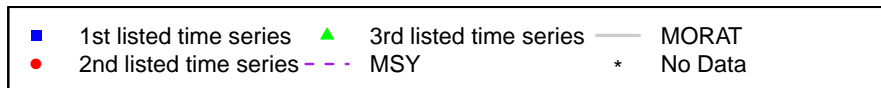
Herring Southern Gulf of St. Lawrence (Spring spawners) [HERR4TSP]

TC-MT, TL*, RecC* (1978-2014-WATSON)

TAC*, Cpair*, Cadv*



EFFORT*



Herring Scotian Shelf and Bay of Fundy [HERR4VWX]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-HERR4VWX-1963-2012-WATSON
Area	Scotian Shelf and Bay of Fundy
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012, 2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2006	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2006	91,700	-	-
SSB	SSB-MT	2012	476,000	-	-
TN	TN-index	2012	83	-	-
R	R-E00	2006	1×10^9	-	1
F	F-1/yr	2006	1.21	-	5 to 8
ER	ER-ratio	2012	0.101	Both	-
TC	-	-	-		
TL	TL-MT	2012	47,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

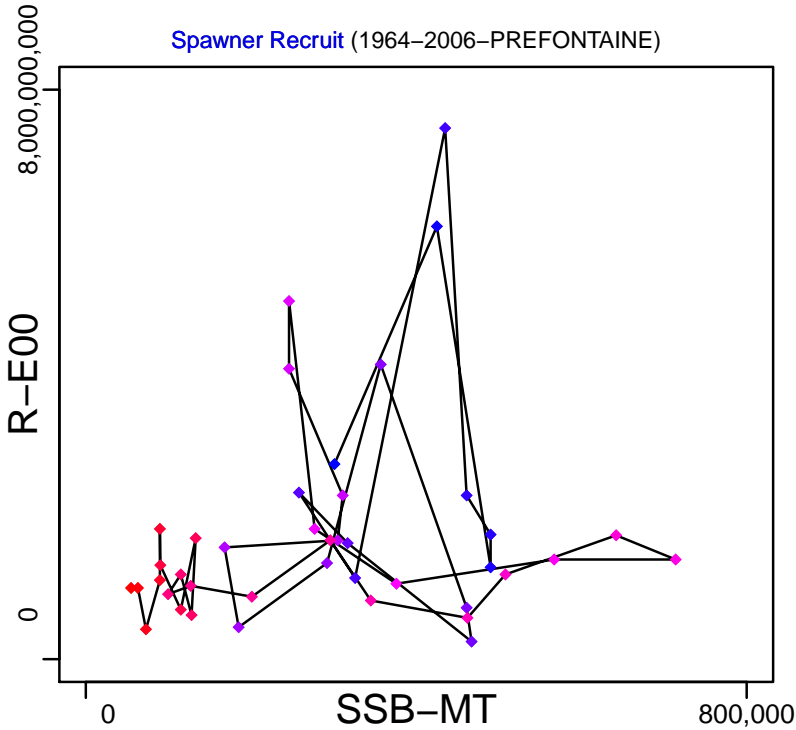
Kobe MSY*



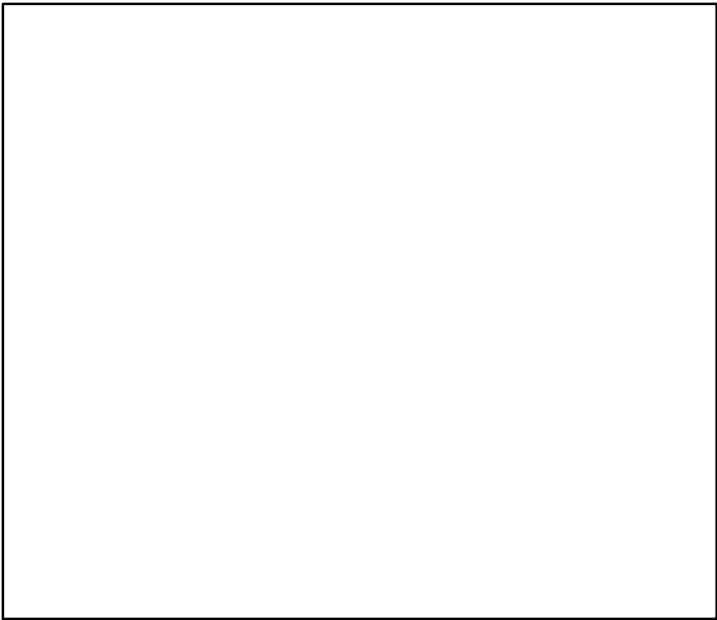
Kobe MGT*



Spawner Recruit (1964–2006–PREFONTAINE)



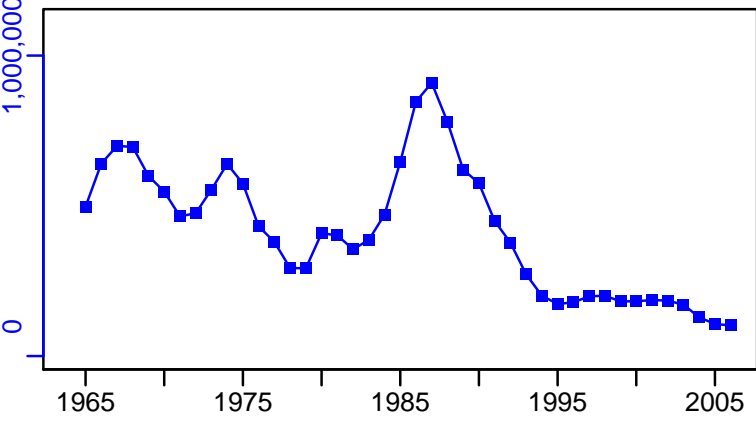
Production*



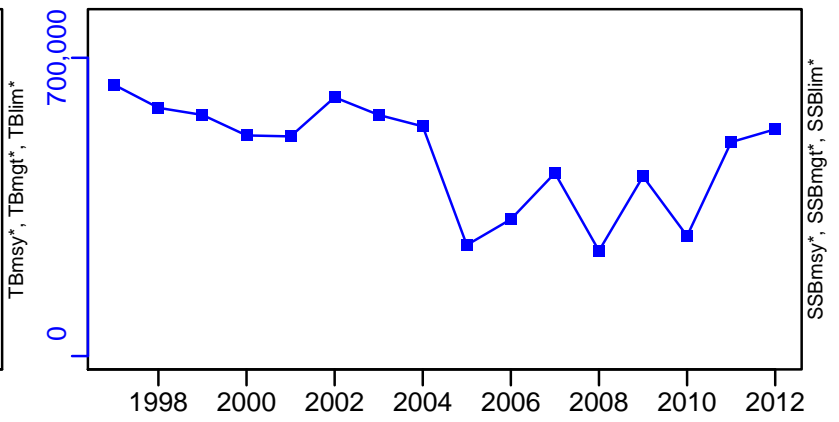
◆ Start Year ◆ End Year * No Data

Herring Scotian Shelf and Bay of Fundy [HERR4VWX]

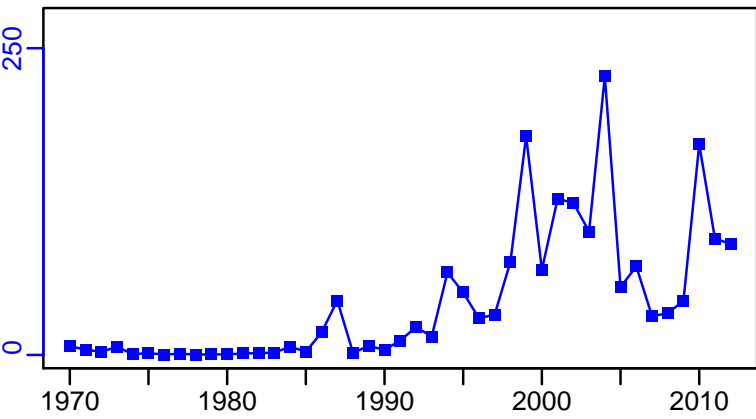
TB-MT (1964–2006–PREFONTAINE)



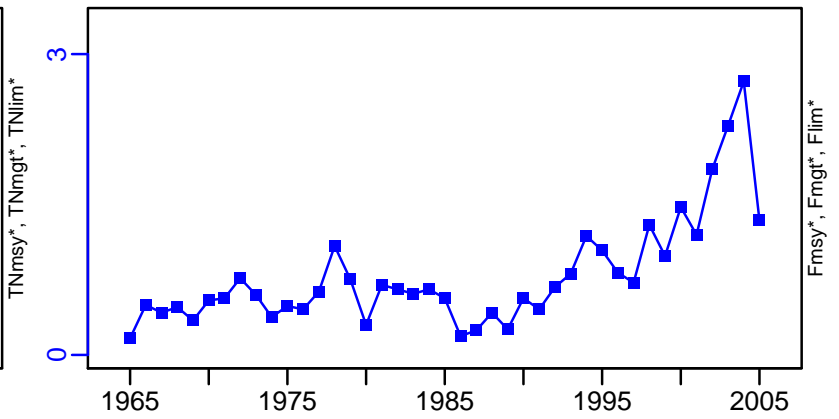
SSB-MT (1963–2012–WATSON)



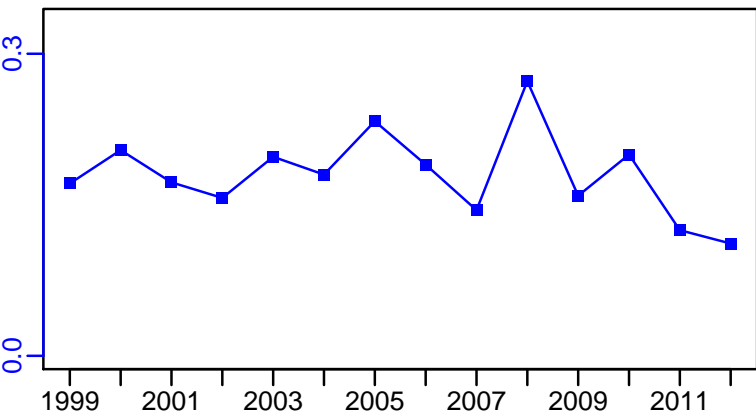
TN-index (1963–2012–WATSON)



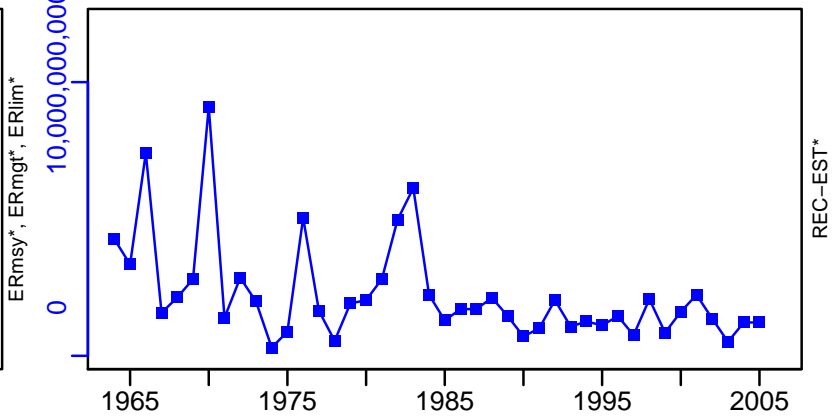
F-1/yr (1964–2006–PREFONTAINE)



ER-ratio (1963–2012–WATSON)



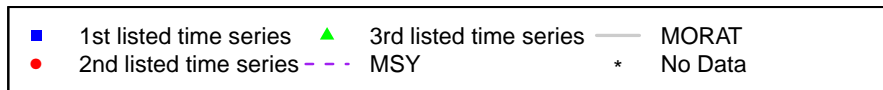
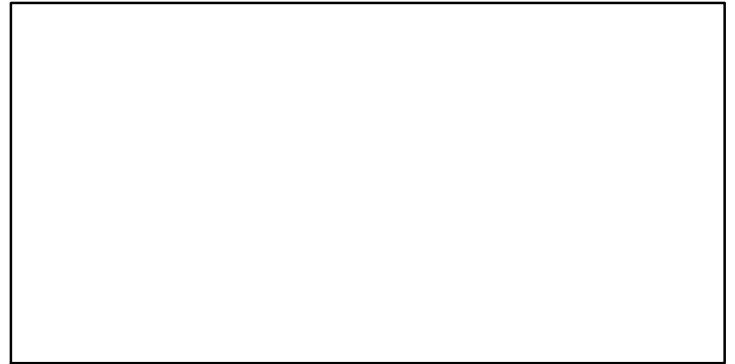
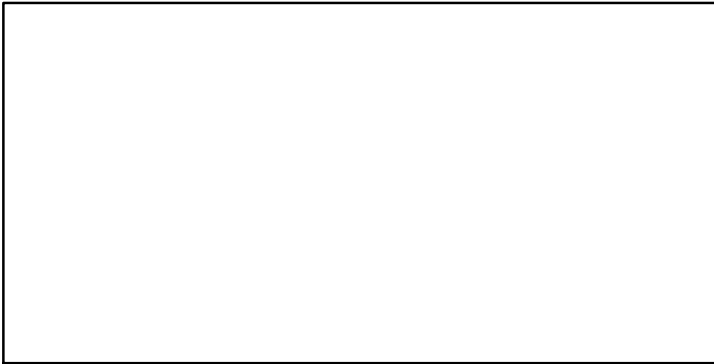
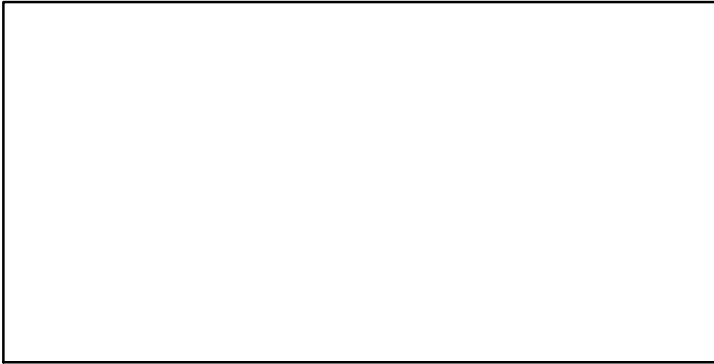
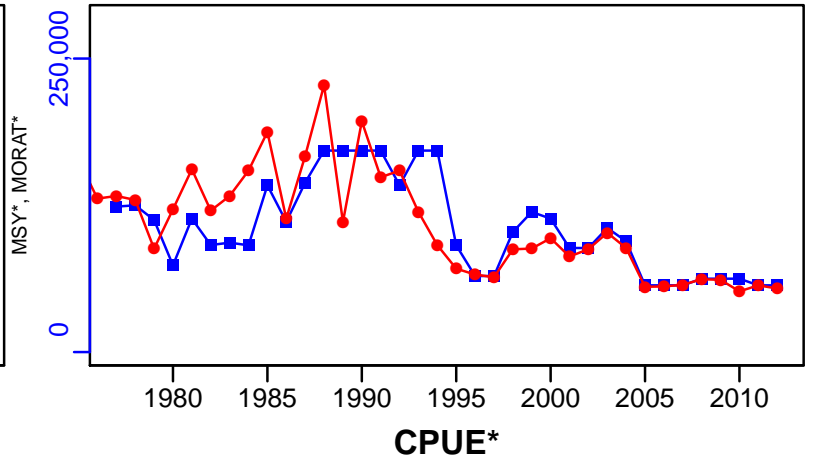
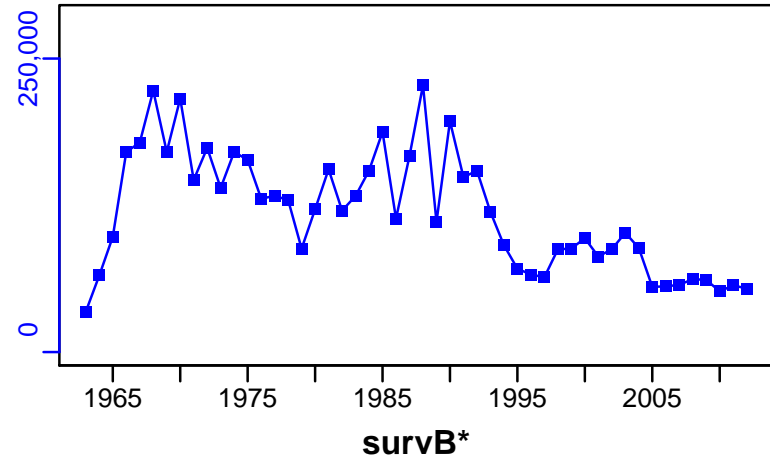
R-E00 (1964–2006–PREFONTAINE)



Herring Scotian Shelf and Bay of Fundy [HERR4VWX]

TL-MT, TC*, RecC* (1963-2012-WATSON)

TAC-MT, Cpair-MT, Cadv* (1963-2012-WATSON)



Herring Newfoundland East and South Coast [HERRNFLDESC]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	DFO-HERRNFLDESC-1966-2014-WATSON
Area	Newfoundland East and South Coast
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014

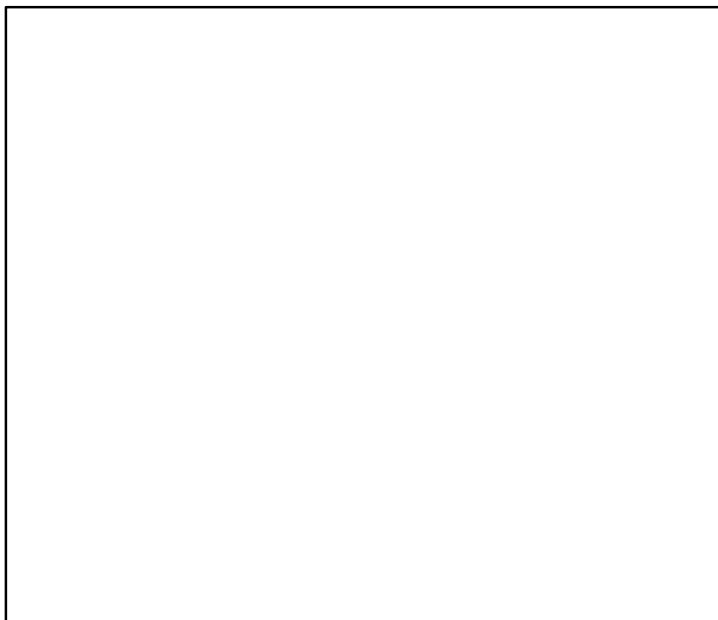
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	5770		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

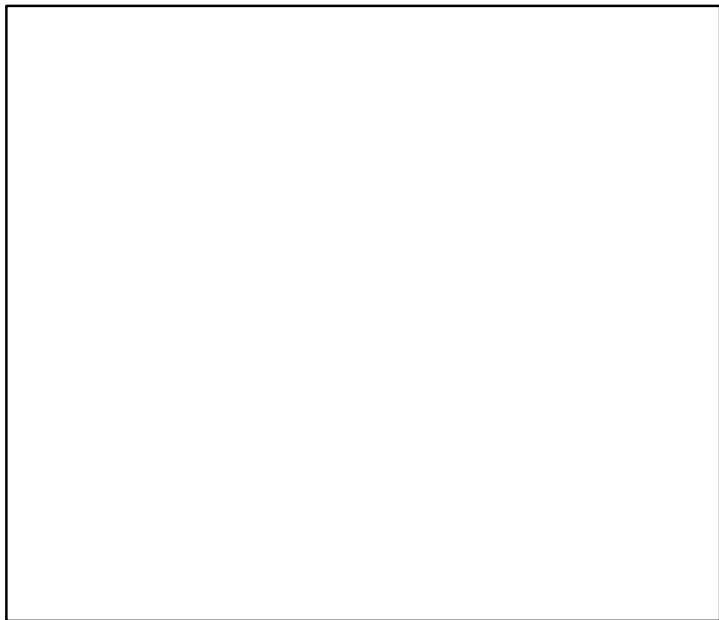
Kobe MSY*



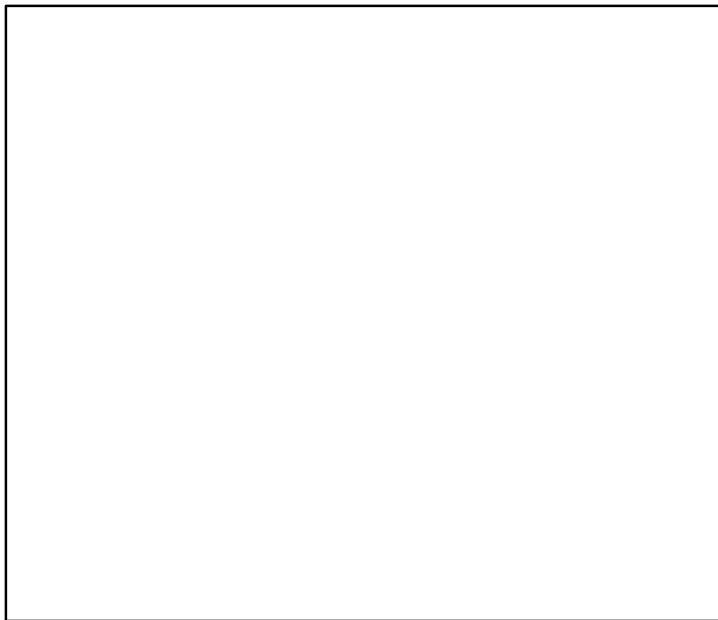
Kobe MGT*



Spawner Recruit*



Production*



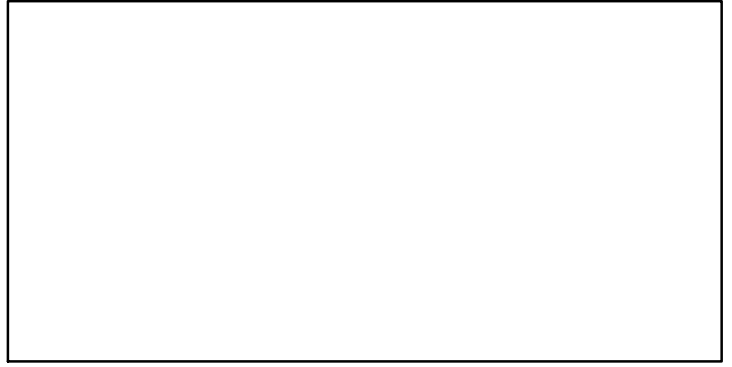
◆ Start Year ◆ End Year * No Data

Herring Newfoundland East and South Coast [HERRNFLDESC]

TB*



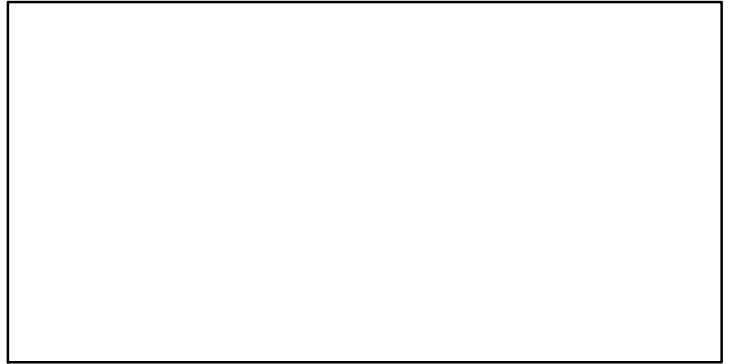
SSB*



TN *



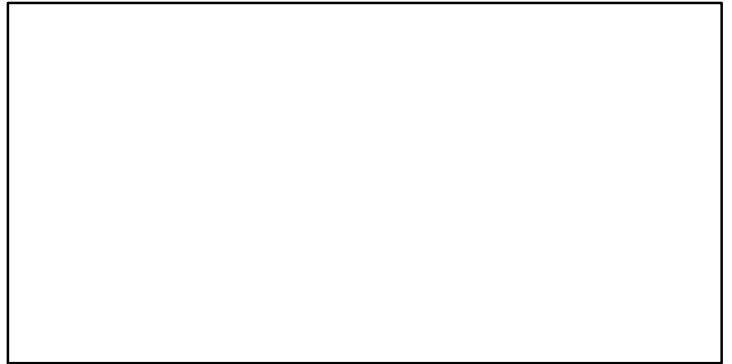
F*



ER*



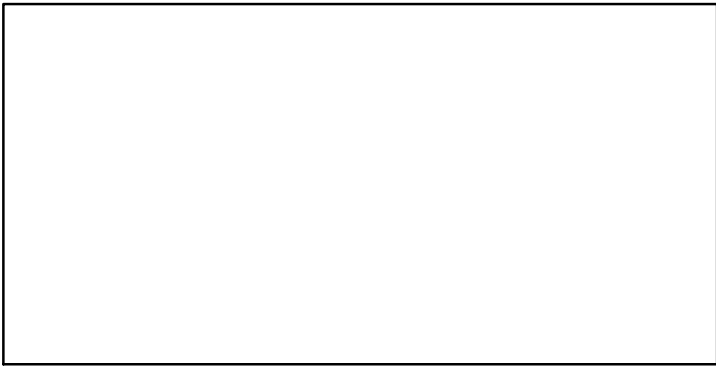
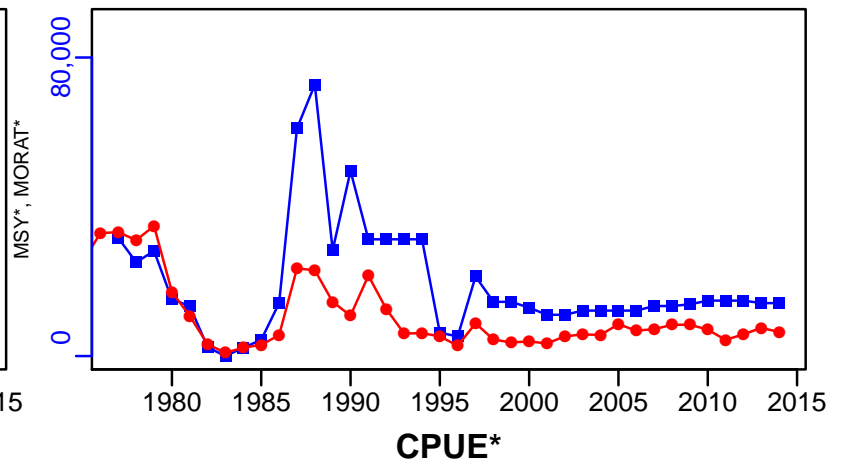
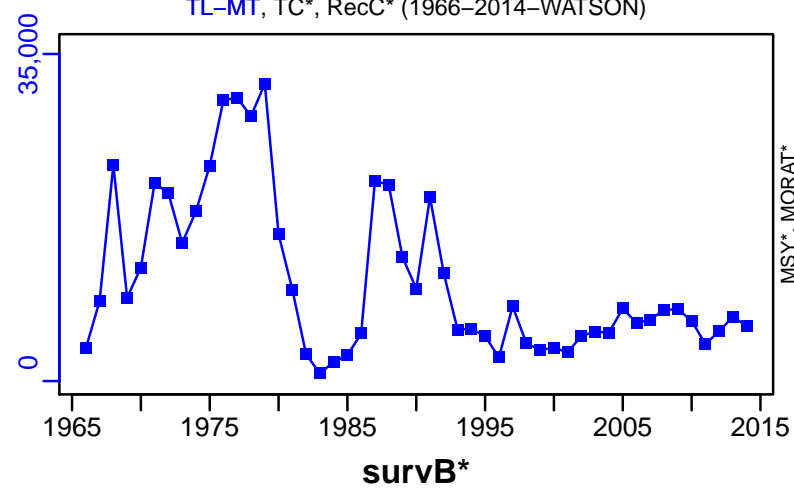
Recruits*



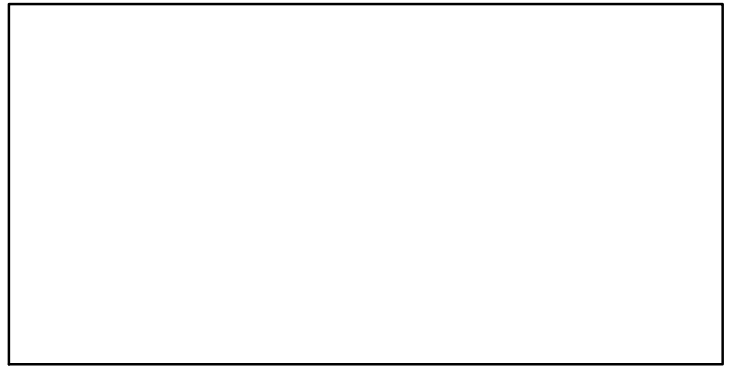
Herring Newfoundland East and South Coast [HERRNFLDESC]

TL-MT, TC*, RecC* (1966-2014-WATSON)

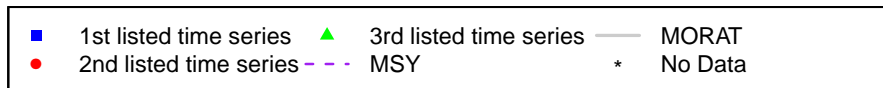
TAC-MT, Cpair-MT, Cadv* (1966-2014-WATSON)



EFFORT*



CdivMSY*



American lobster Quebec North Shore and Anticosti Island (LFA 15-18)
[LOBSTERLFA15-18]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-QUE-LOBSTERLFA15-18-1984-2011-CHING
Area	Quebec North Shore and Anticosti Island (LFA 15-18)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2011

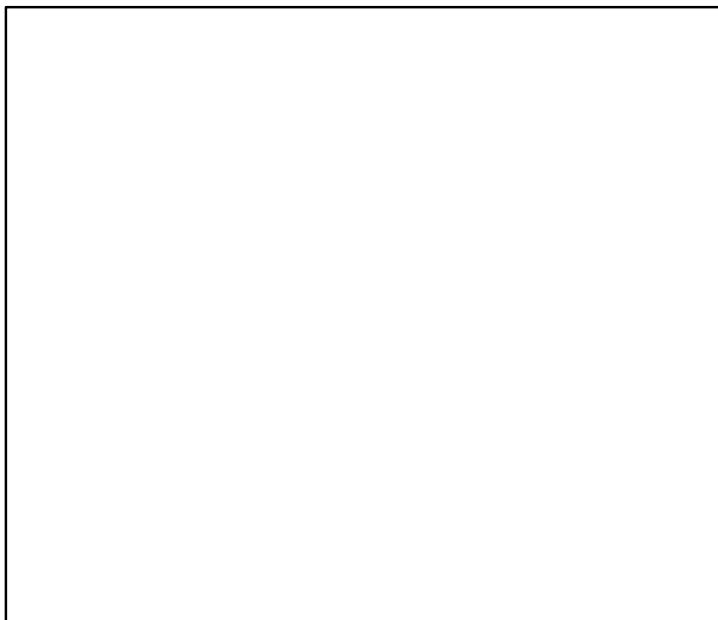
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	195	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

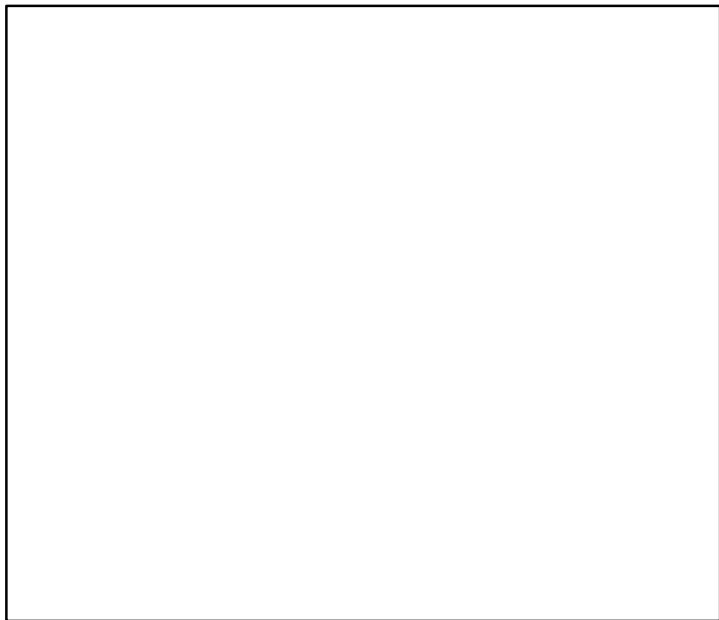
Kobe MSY*



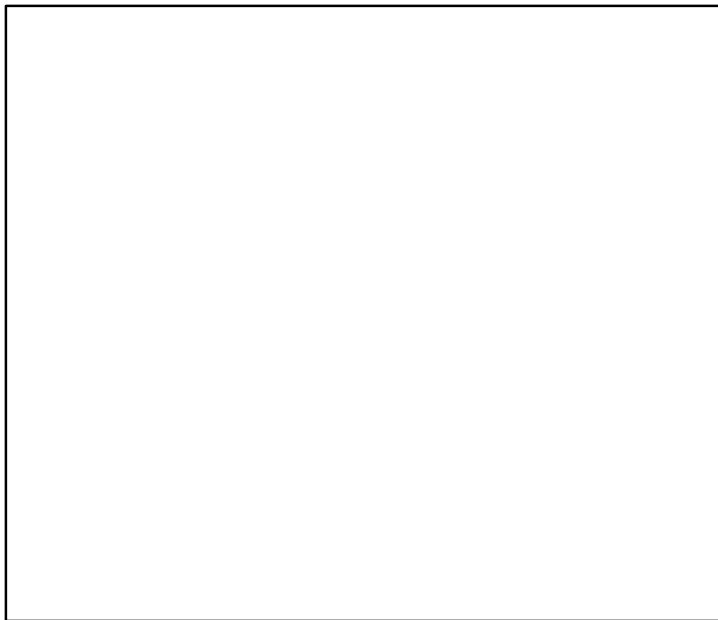
Kobe MGT*



Spawner Recruit*



Production*



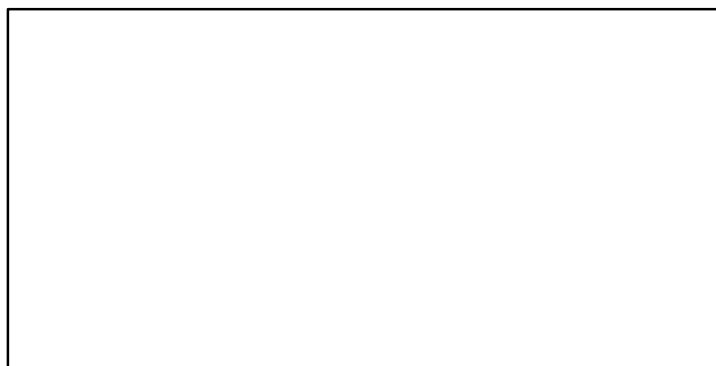
◆ Start Year ◆ End Year * No Data

American lobster Quebec North Shore and Anticosti Island (LFA 15–18) [LOBSTERLFA15–18]

TB*



SSB*



TN *



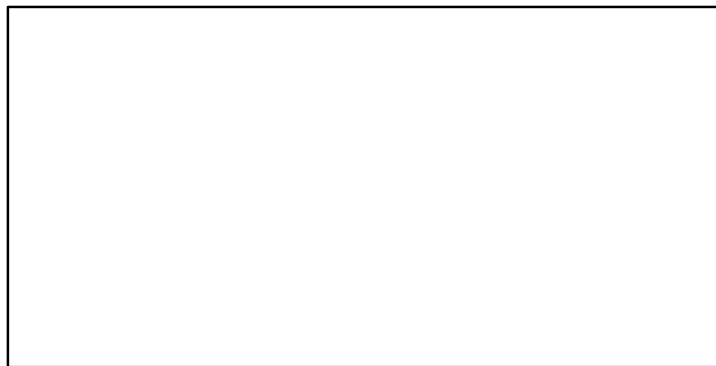
F*



ER*



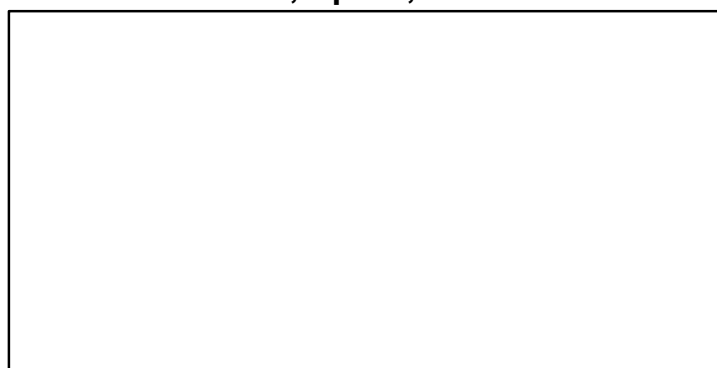
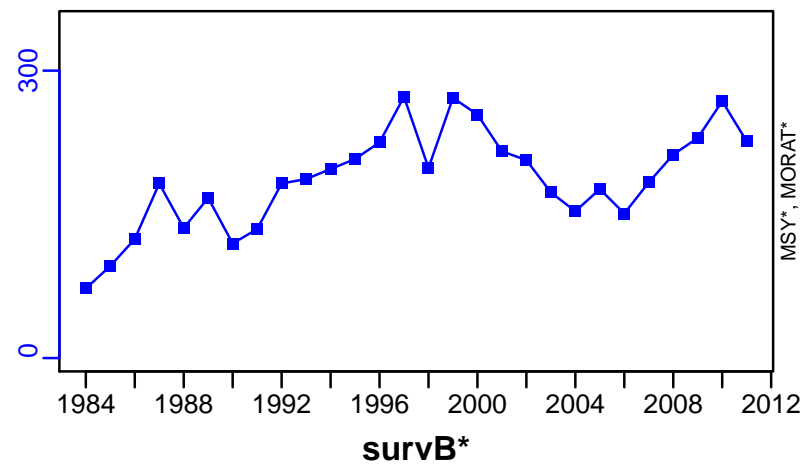
Recruits*



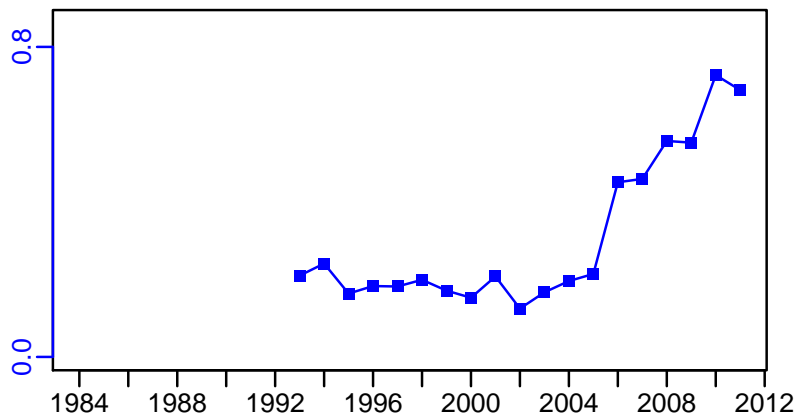
American lobster Quebec North Shore and Anticosti Island (LFA 15–18) [LOBSTERLFA15–18]

TL–MT, TC*, RecC* (1984–2011–CHING)

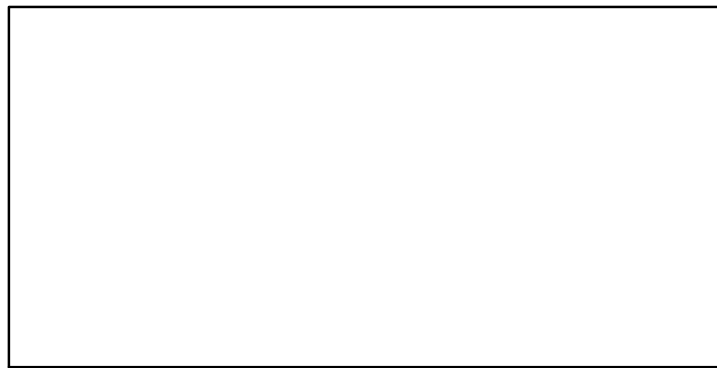
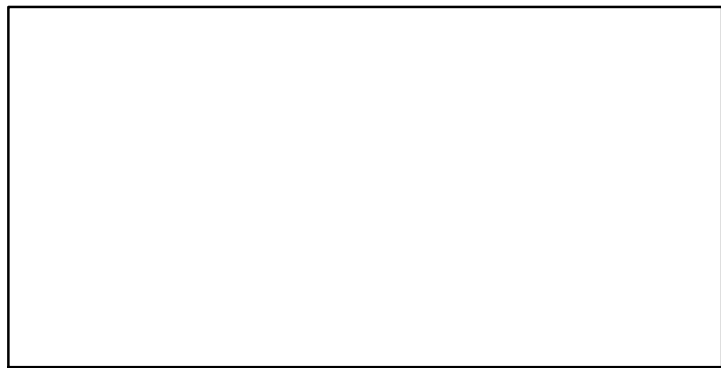
TAC*, Cpair*, Cadv*



CPUE–kg/trap (1984–2011–CHING)



EFFORT*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

American lobster Gaspe (LFA 19-21) [LOBSTERLFA19-21]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-QUE-LOBSTERLFA19-21-1945-2011-CHING
Area	Gaspe (LFA 19-21)
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	872		
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

TB*



SSB*



TN *



F*



ER*



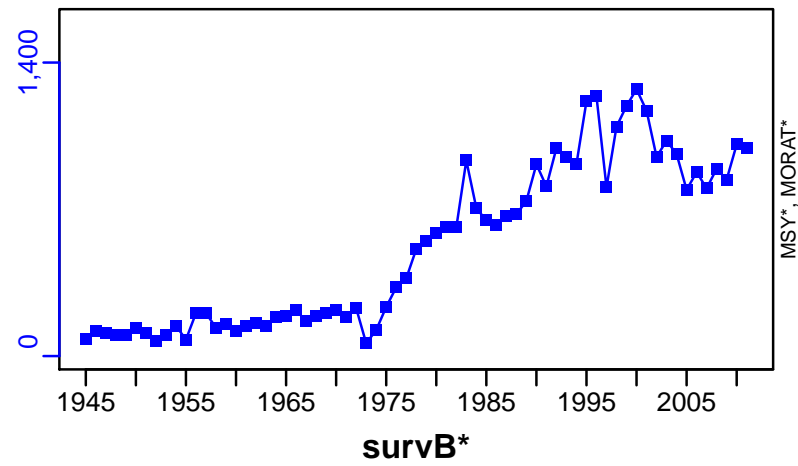
Recruits*



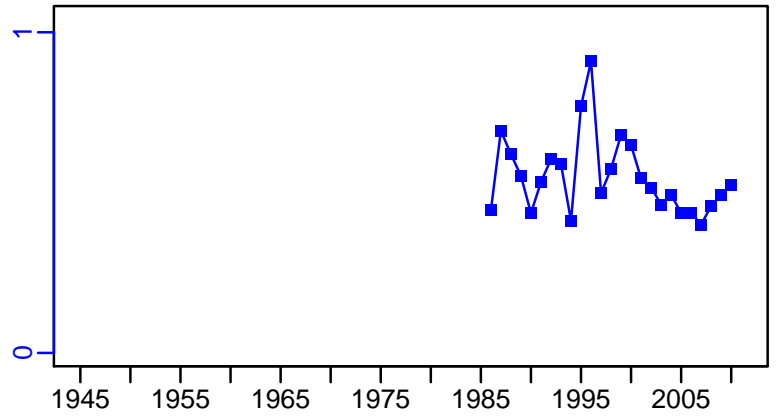
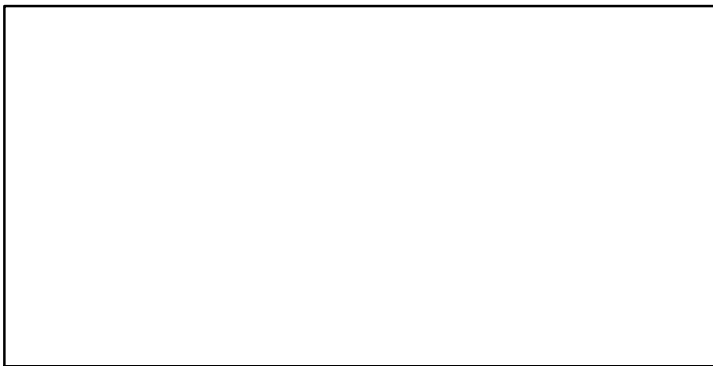
American lobster Gaspe (LFA 19–21) [LOBSTERLFA19–21]

TL–MT, TC*, RecC* (1945–2011–CHING)

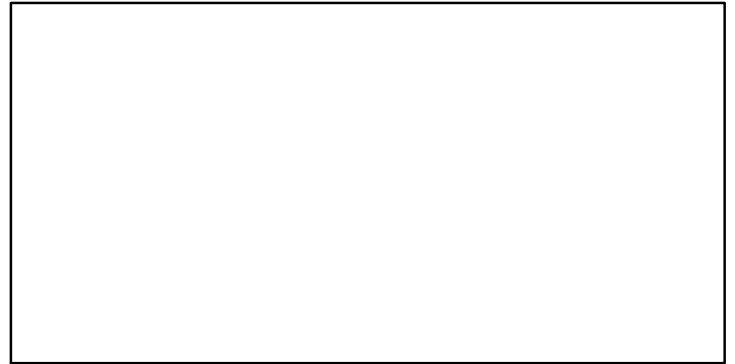
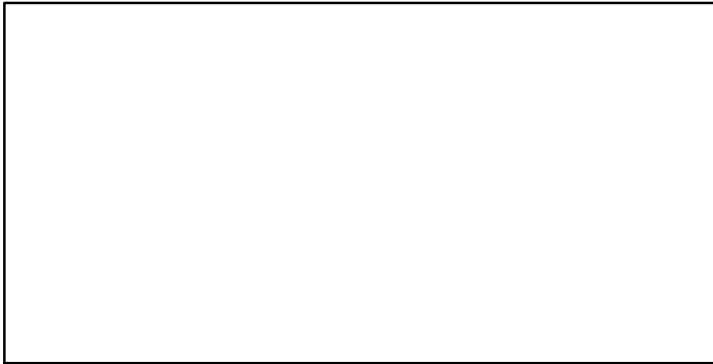
TAC*, Cpair*, Cadv*



CPUE–E00/trap (1945–2011–CHING)



EFFORT*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

American lobster Magdalen Islands (LFA 22) [LOBSTERLFA22]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-QUE-LOBSTERLFA22-1945-2011-CHING
Area	Magdalen Islands (LFA 22)
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	2650		
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

TB*



SSB*



TN *



F*



ER*



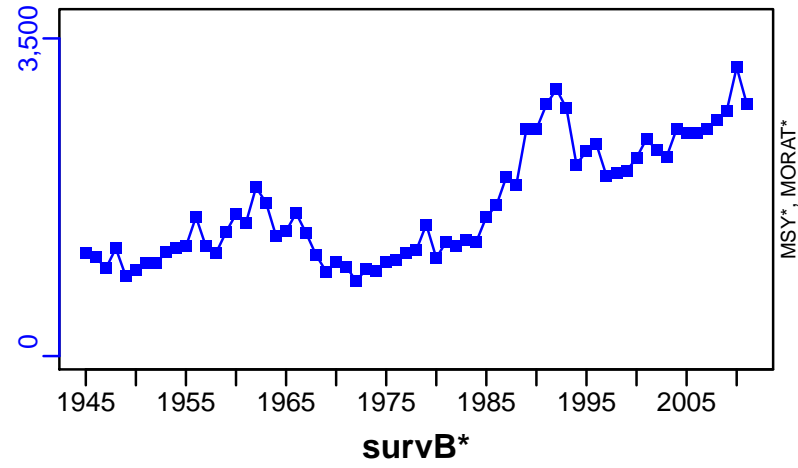
Recruits*



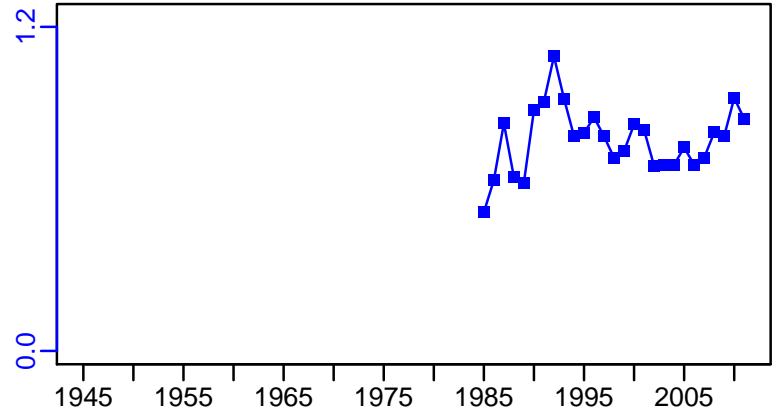
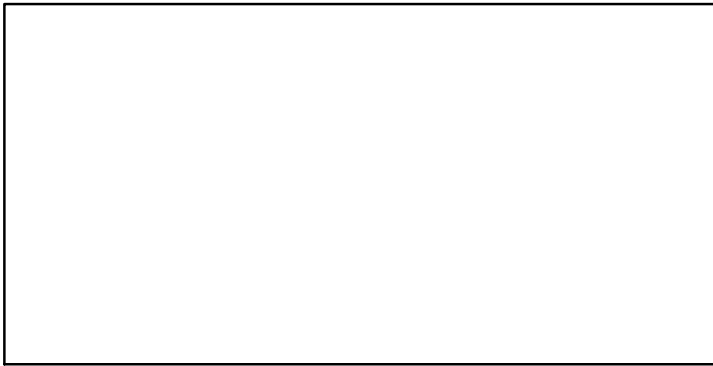
American lobster Magdalen Islands (LFA 22) [LOBSTERLFA22]

TL-MT, TC*, RecC* (1945-2011-CHING)

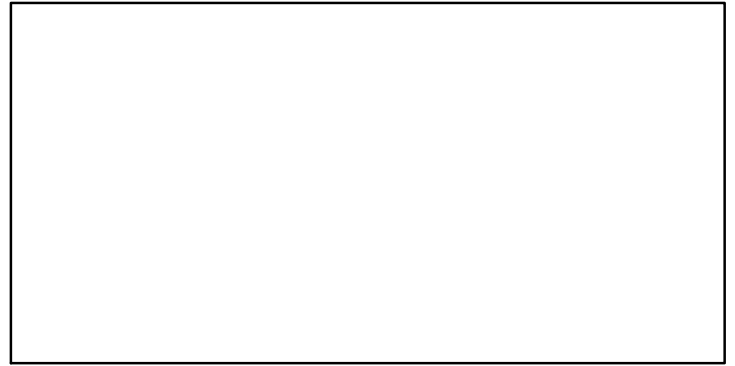
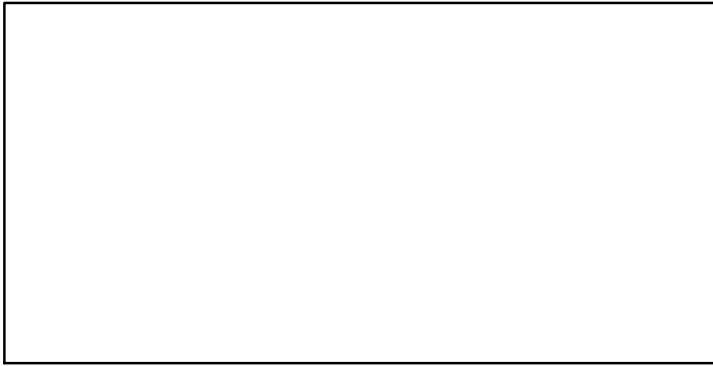
TAC*, Cpair*, Cadv*



CPUE-E00/trap (1945-2011-CHING)



EFFORT*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

American lobster Southern Gulf of St. Lawrence [LOBSTERLFA23-26AB]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-SG-LOBSTERLFA23-26AB-1892-2011-CHING
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf 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	18,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*

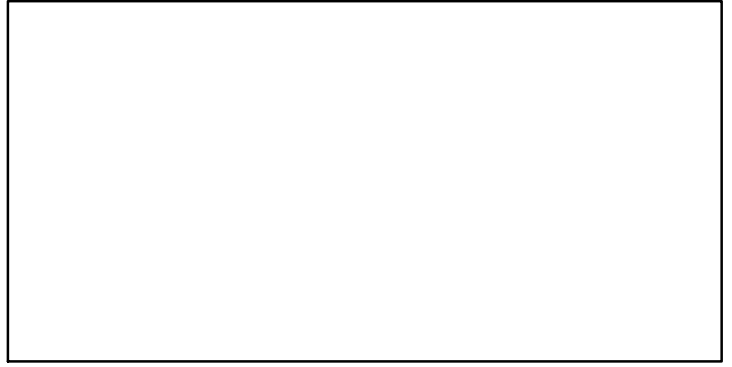


◆ Start Year ◆ End Year * No Data

TB*



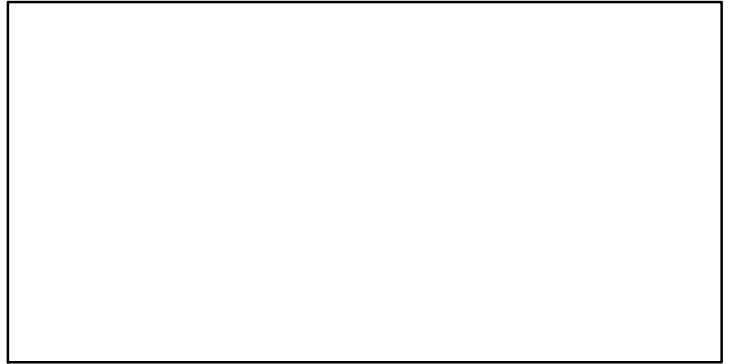
SSB*



TN *



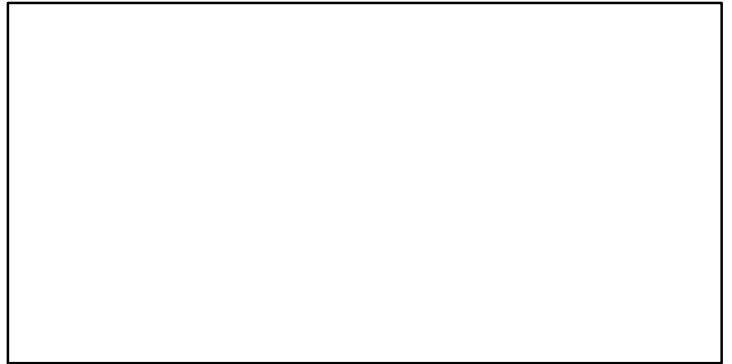
F*



ER*



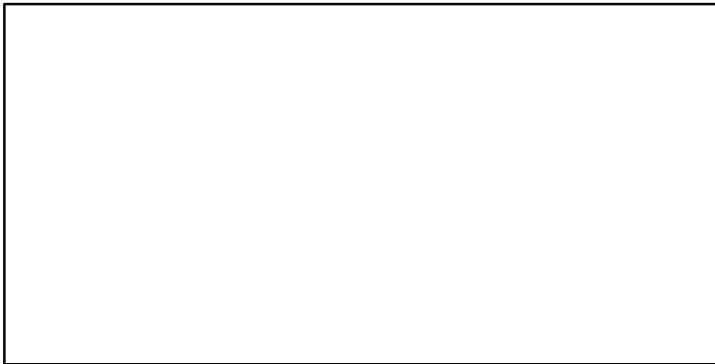
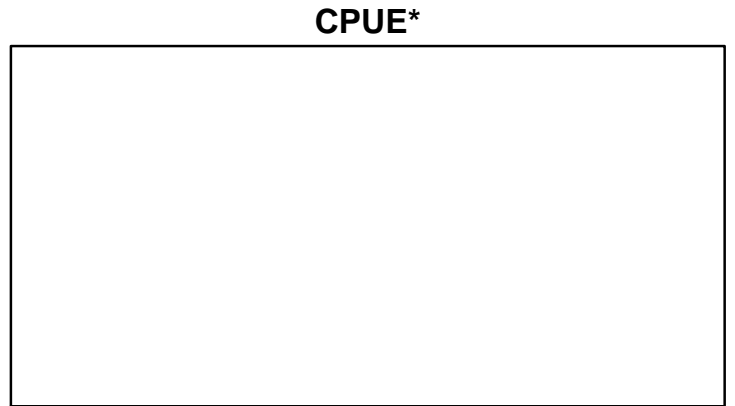
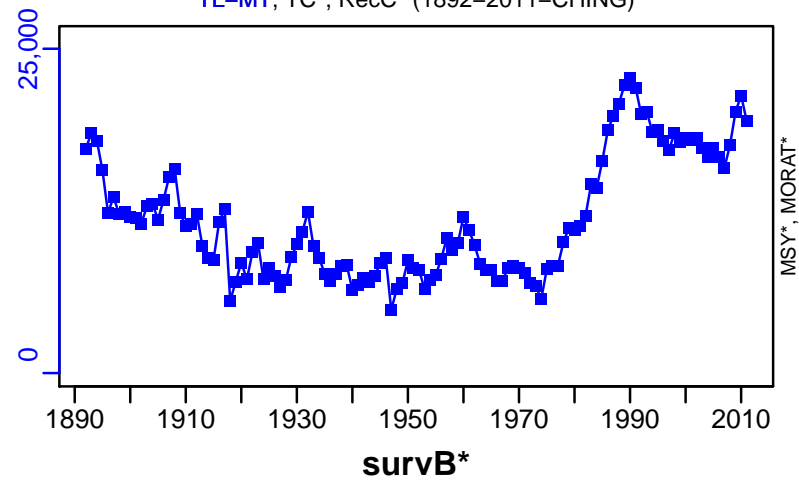
Recruits*



American lobster Southern Gulf of St. Lawrence [LOBSTERLFA23–26AB]

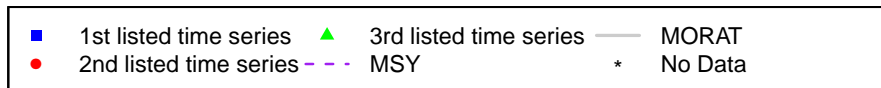
TL–MT, TC*, RecC* (1892–2011–CHING)

TAC*, Cpair*, Cadv*



EFFORT*

CdivMSY*



American lobster Atlantic Coast of Nova Scotia (LFA 27-33) [LOBSTERLFA27-33]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA27-33-1980-2010-CHING
Area	Atlantic Coast of Nova Scotia (LFA 27-33)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2010

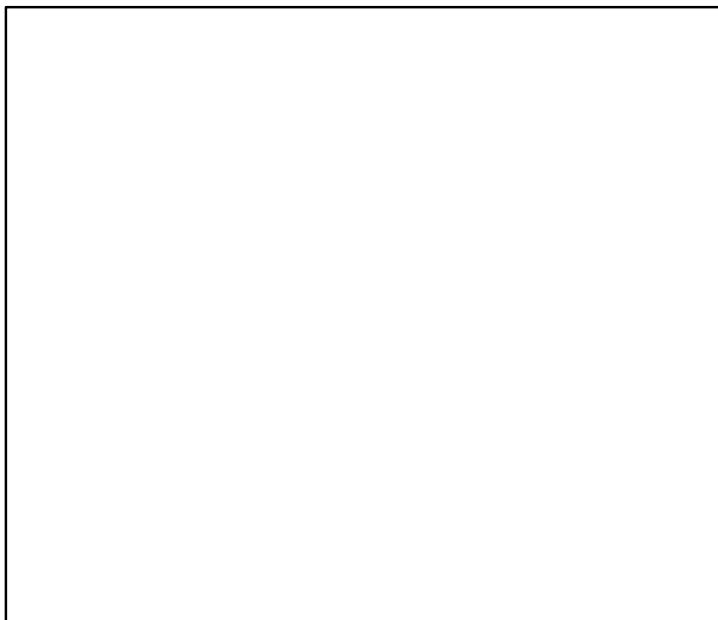
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2010	9810		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

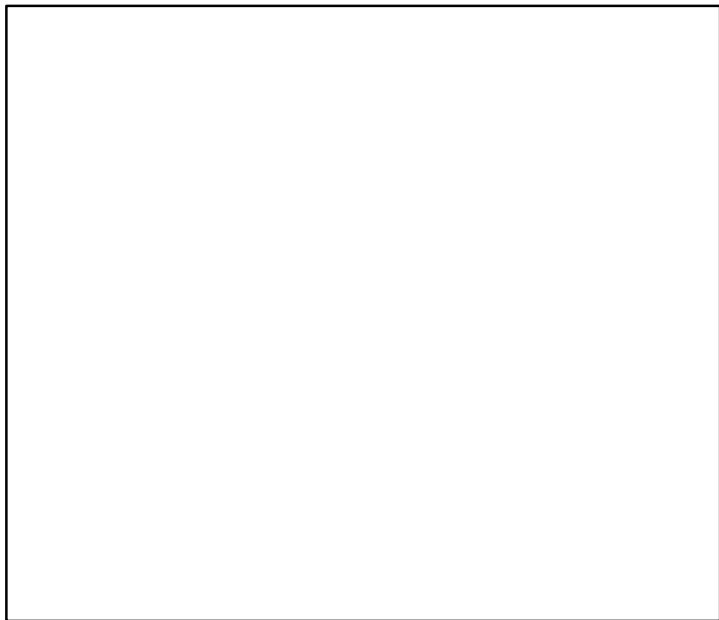
Kobe MSY*



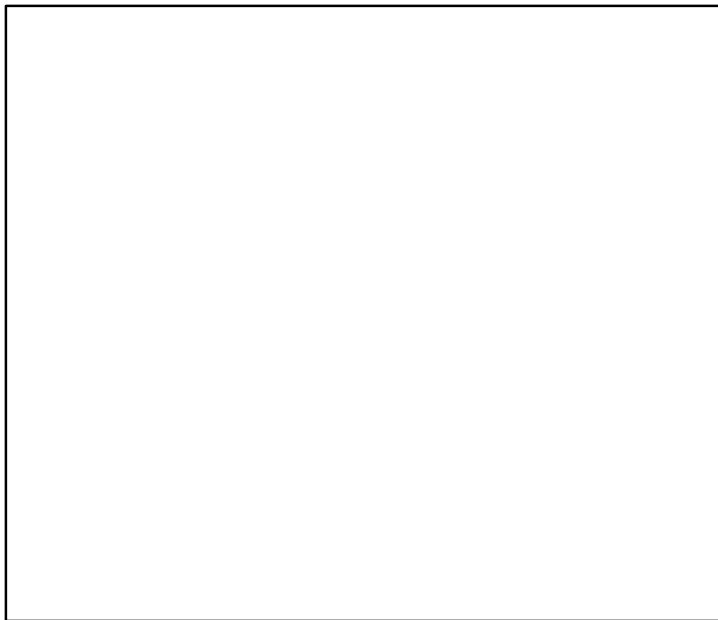
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



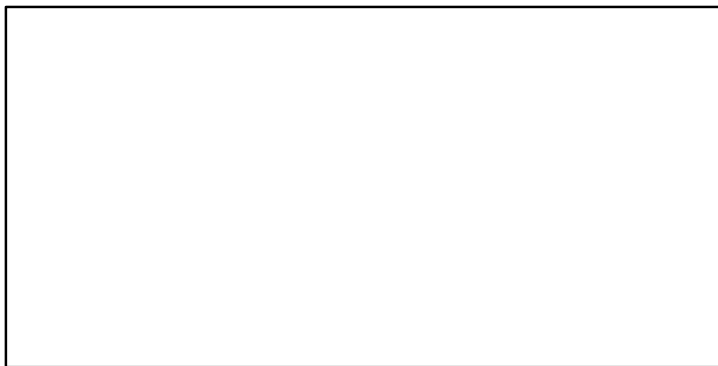
F*



ER*

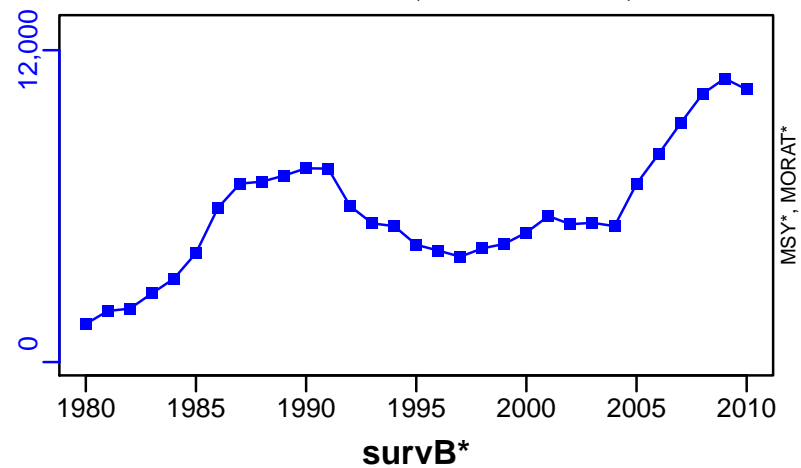


Recruits*



American lobster Atlantic Coast of Nova Scotia (LFA 27–33) [LOBSTERLFA27–33]

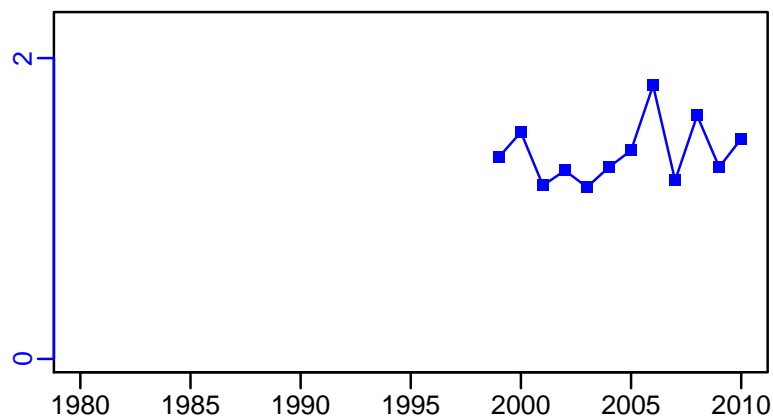
TL–MT, TC*, RecC* (1980–2010–CHING)



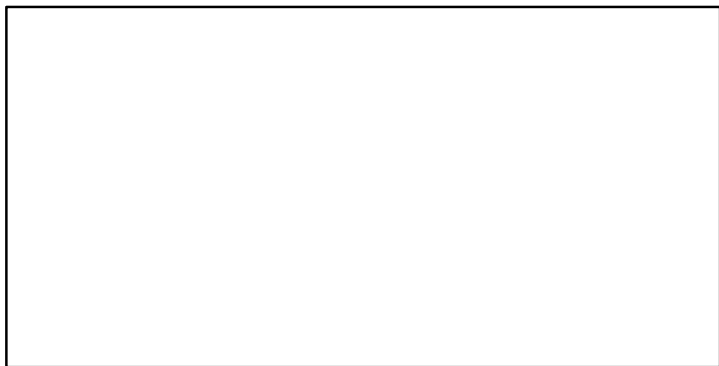
TAC*, Cpair*, Cadv*



CPUE–1–E00/trap (1980–2010–CHING)



EFFORT*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

American lobster Lobster Fishing Areas 3-14 [LOBSTERLFA3-14]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-LOBSTERLFA3-14-1960-2012-WATSON
Area	Lobster Fishing Areas 3-14
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012

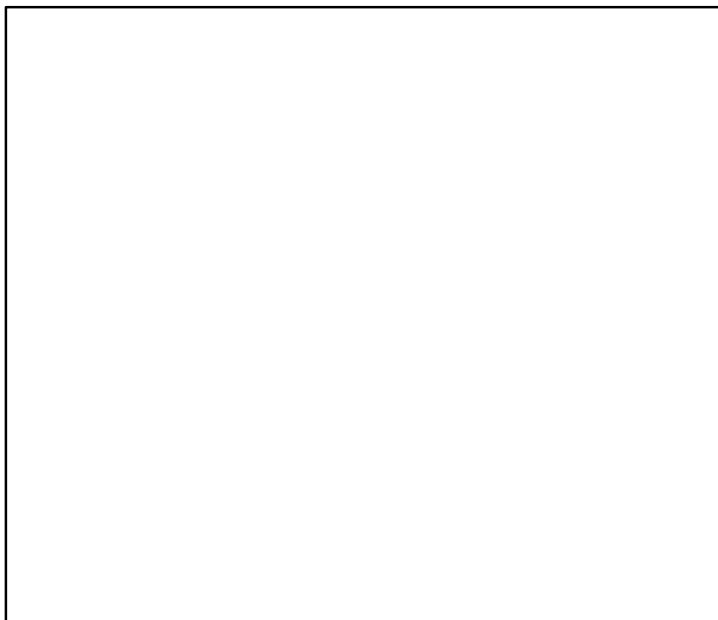
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2012	2150		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

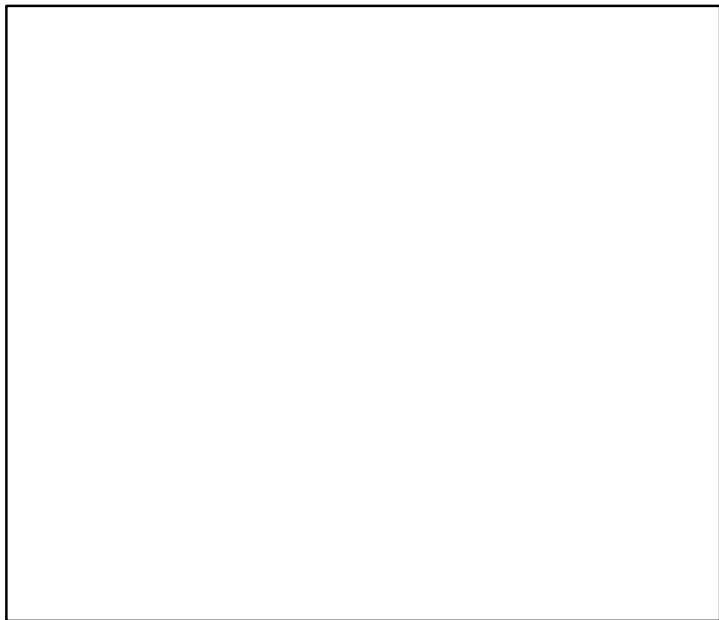
Kobe MSY*



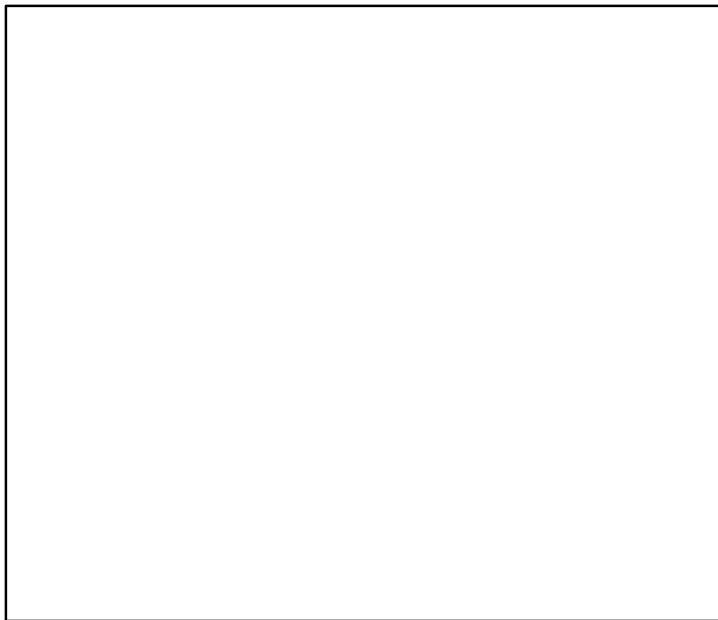
Kobe MGT*



Spawner Recruit*



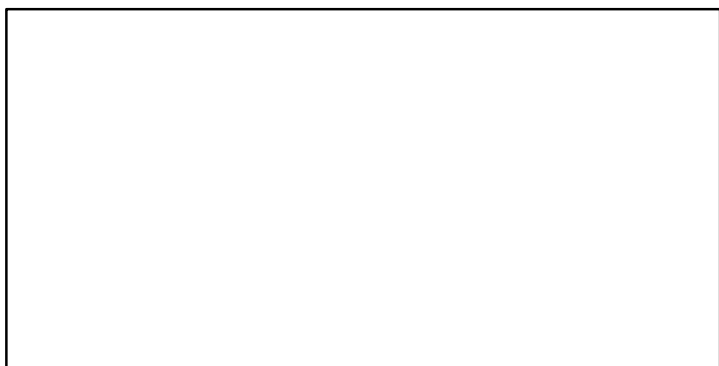
Production*



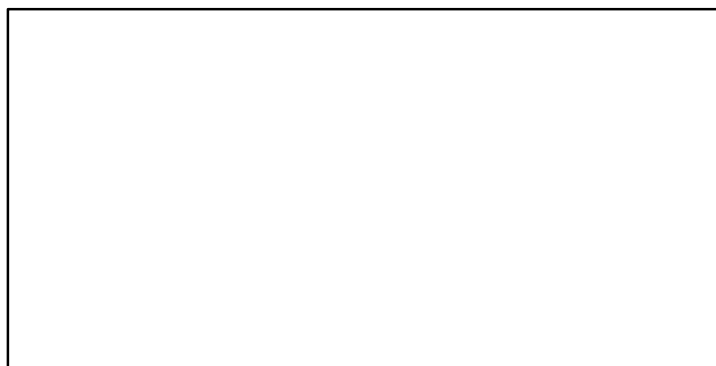
◆ Start Year ◆ End Year * No Data

American lobster Lobster Fishing Areas 3–14 [LOBSTERLFA3–14]

TB*



SSB*



TN *



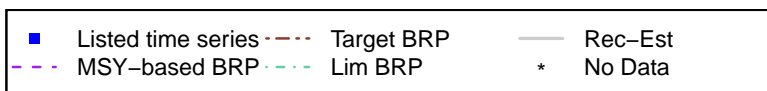
F*



ER*



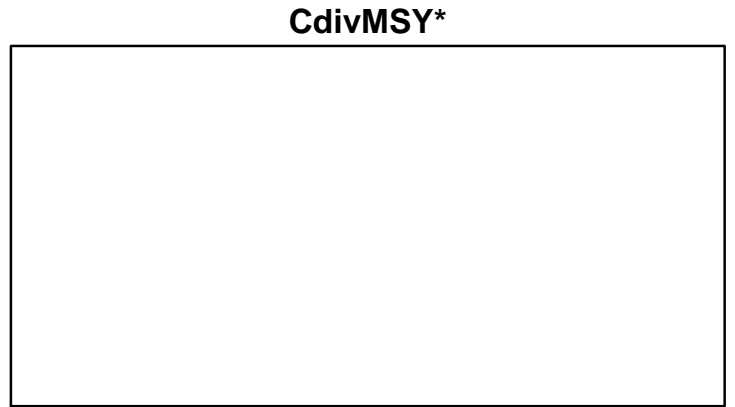
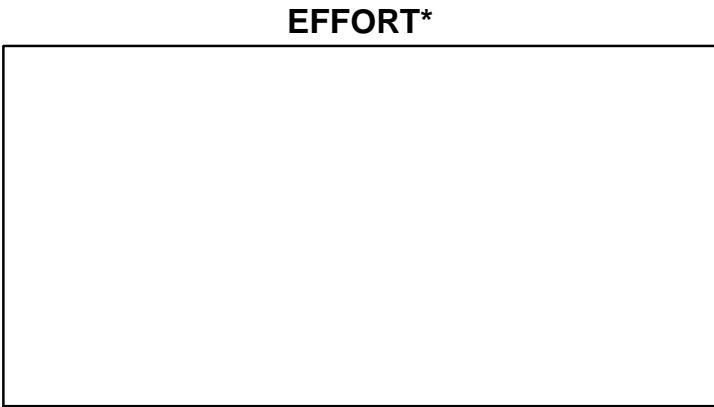
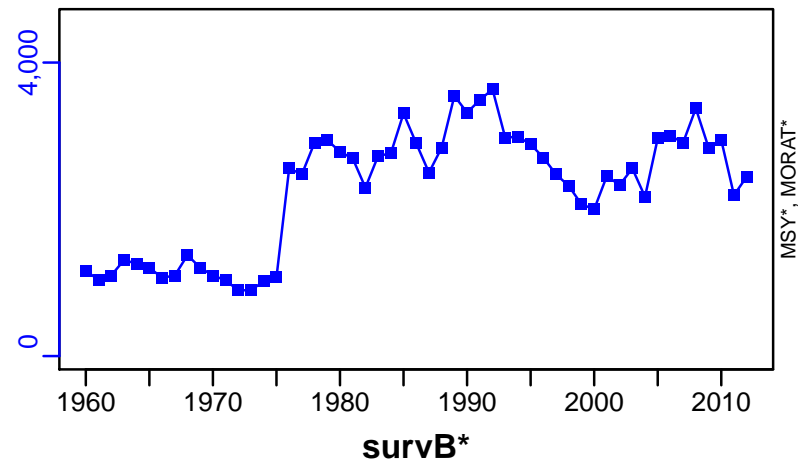
Recruits*



American lobster Lobster Fishing Areas 3–14 [LOBSTERLFA3–14]

TL–MT, TC*, RecC* (1960–2012–WATSON)

TAC*, Cpair*, Cadv*



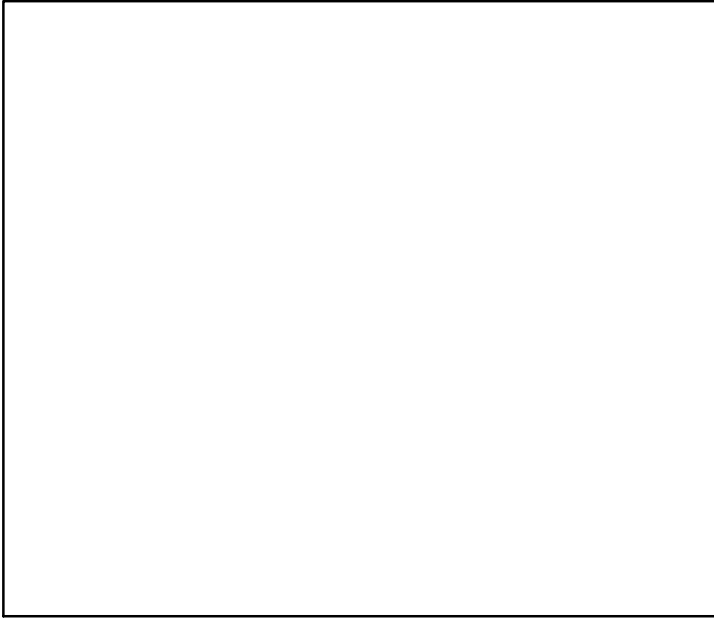
American lobster Lobster Fishing Area 34 [LOBSTERLFA34]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA34-1893-2012-CHING
Area	Lobster Fishing Area 34
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2012

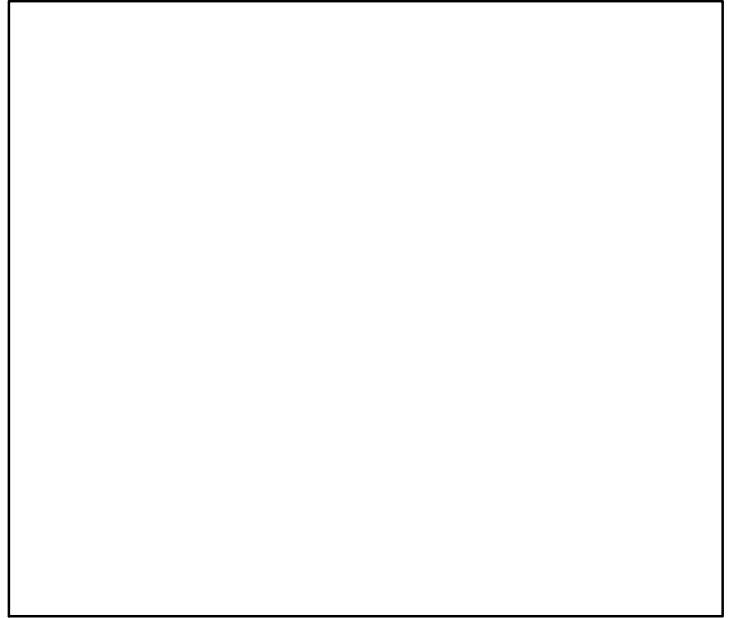
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2012	23,300		
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
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American lobster Lobster Fishing Area 34 [LOBSTERLFA34]

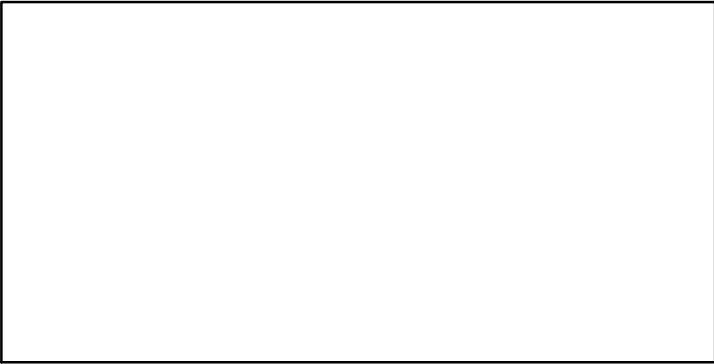
TB*



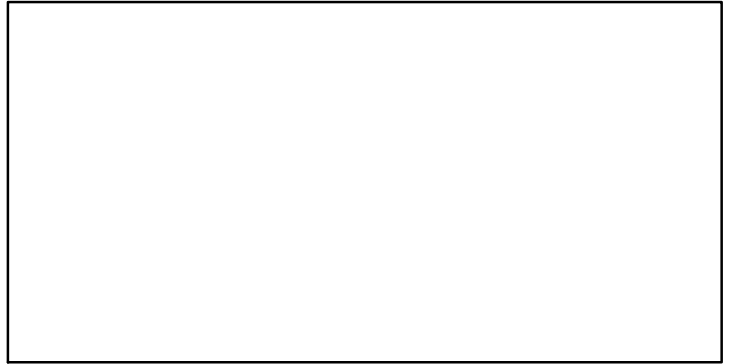
SSB*



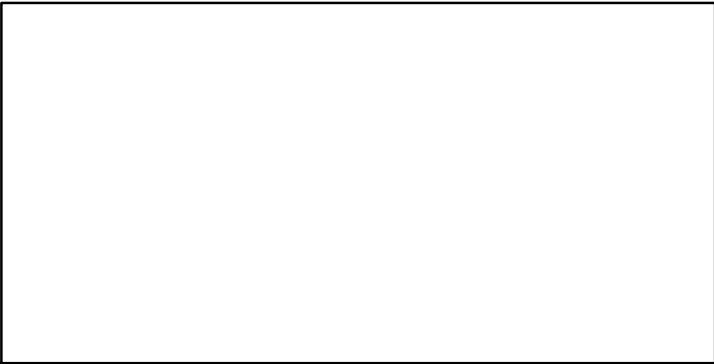
TN *



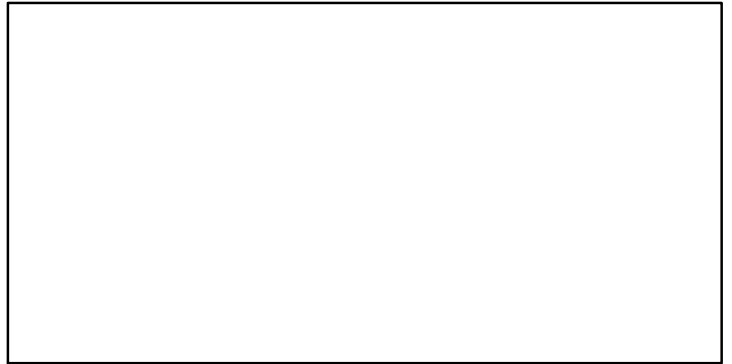
F*



ER*



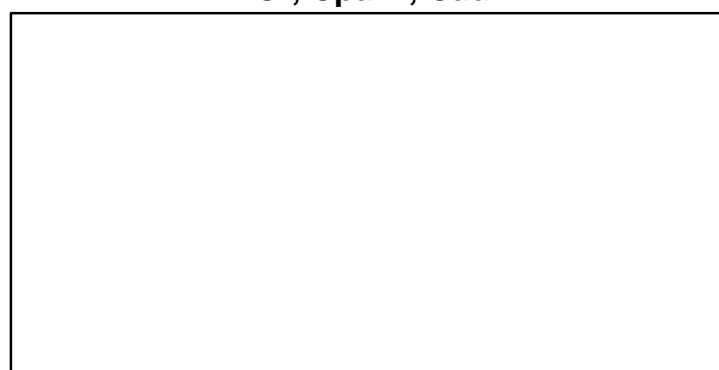
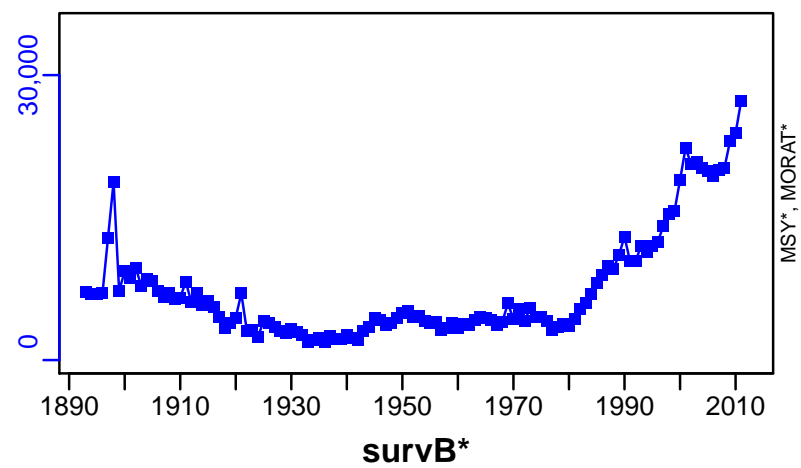
Recruits*



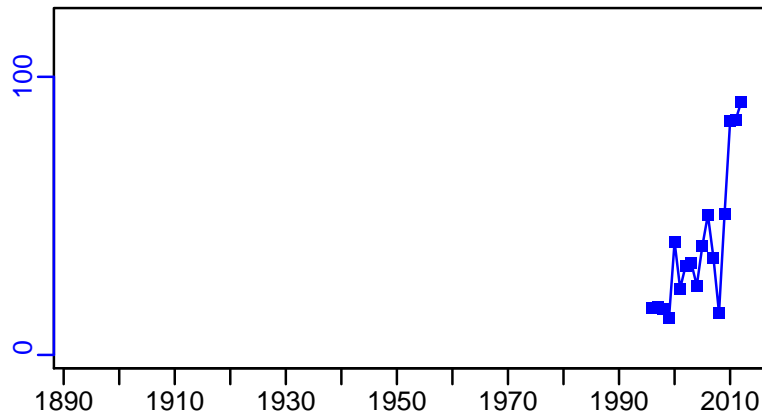
American lobster Lobster Fishing Area 34 [LOBSTERLFA34]

TL-MT, TC*, RecC* (1893-2012-CHING)

TAC*, Cpair*, Cadv*

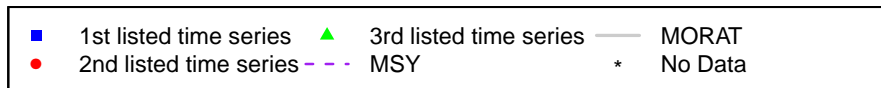
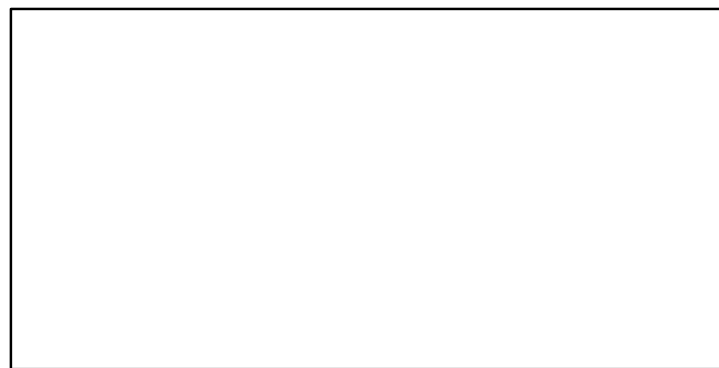
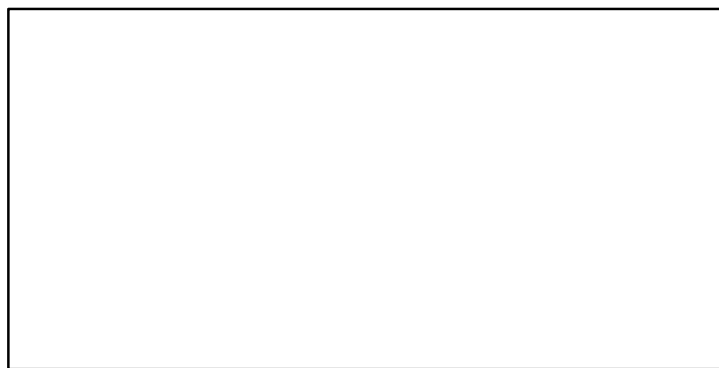


CPUE-E00/tow (1893-2012-CHING)



EFFORT*

CdivMSY*



American lobster Lobster Fishing Areas 35-38 [LOBSTERLFA35-38]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA35-38-1893-2012-CHING
Area	Lobster Fishing Areas 35-38
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	8470		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



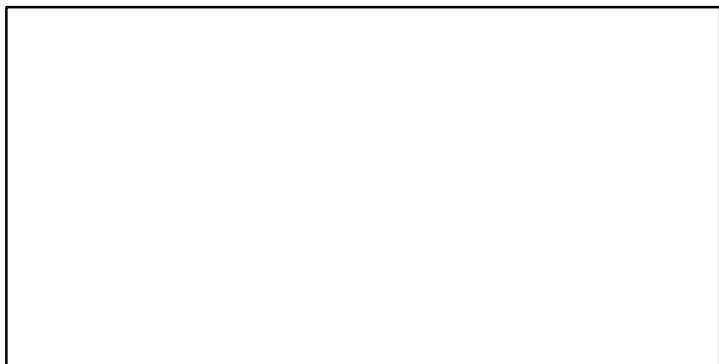
Production*



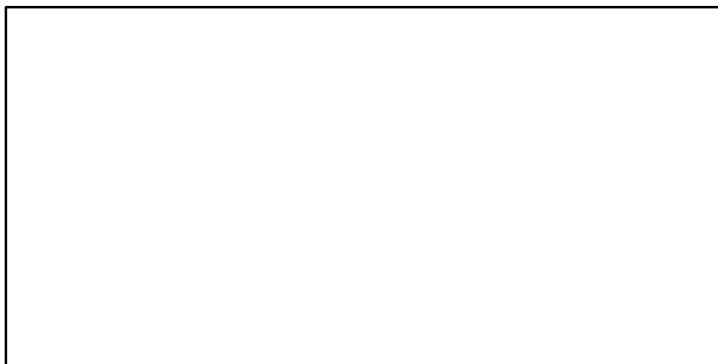
◆ Start Year ◆ End Year * No Data

American lobster Lobster Fishing Areas 35–38 [LOBSTERLFA35–38]

TB*



SSB*



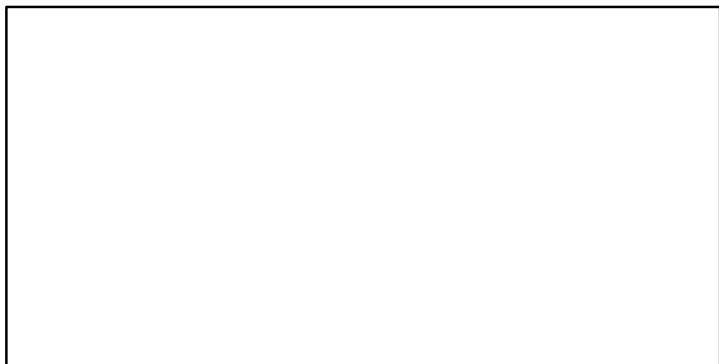
TN *



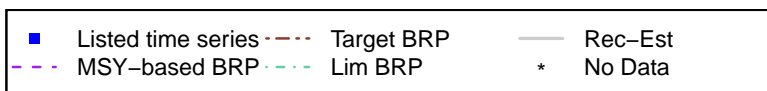
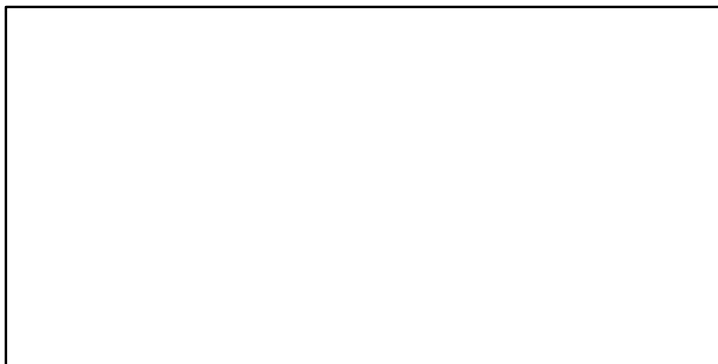
F*



ER*



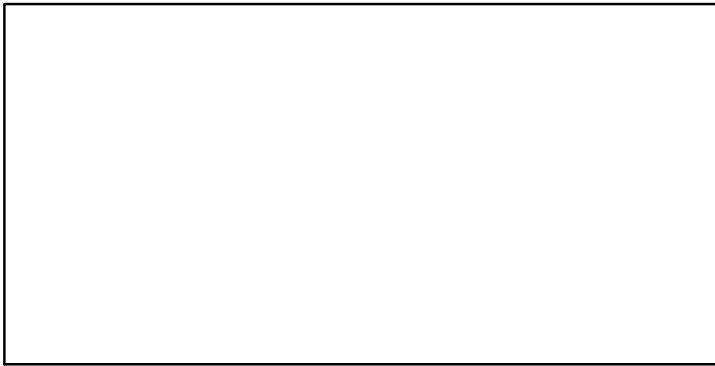
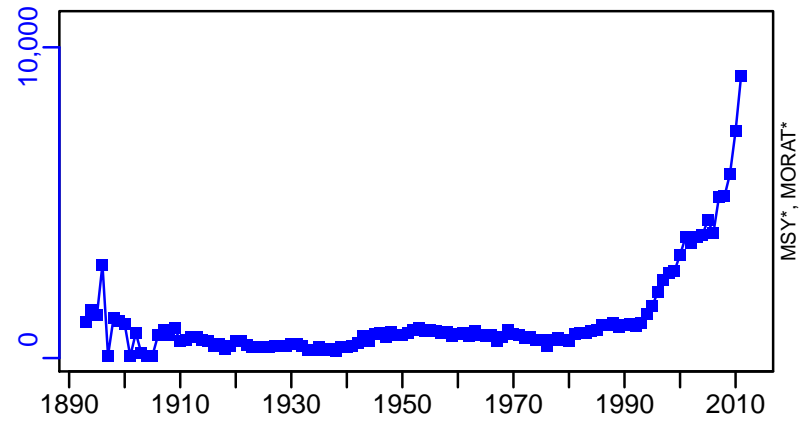
Recruits*



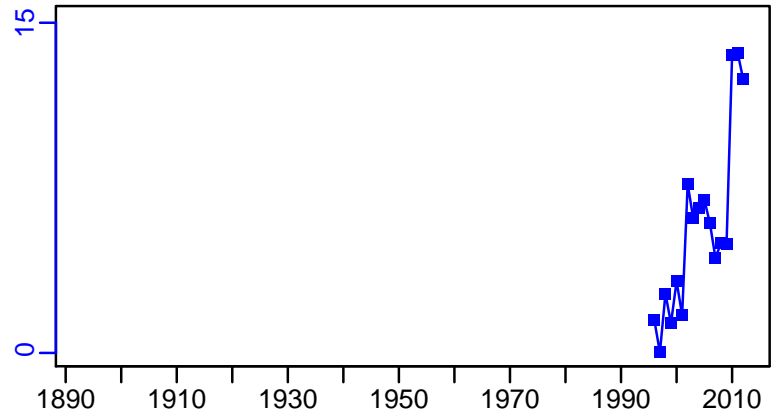
American lobster Lobster Fishing Areas 35–38 [LOBSTERLFA35–38]

TL–MT, TC*, RecC* (1893–2012–CHING)

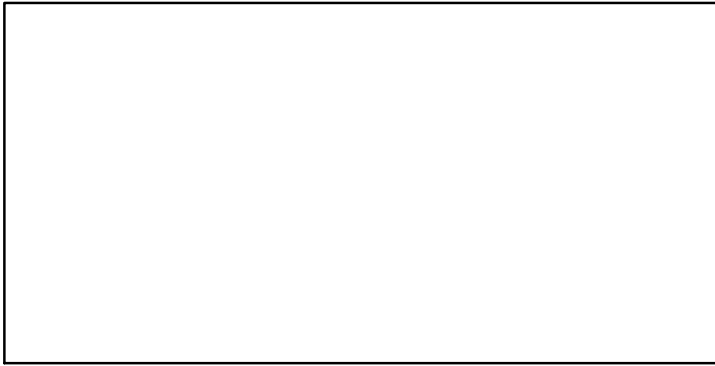
TAC*, Cpair*, Cadv*



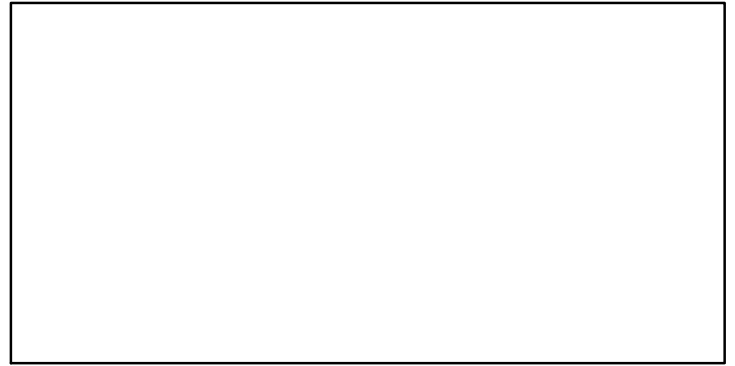
CPUE–E00/tow (1893–2012–CHING)



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

American lobster Lobster Fishing Area 41 [LOBSTERLFA41]

Metadata	
Scientific Name	Homarus americanus
Current Assess ID	DFO-MAR-LOBSTERLFA41-1969-2016-ASHBROOK
Area	Lobster Fishing Area 41
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2012, 2016

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	654		
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

American lobster Lobster Fishing Area 41 [LOBSTERLFA41]

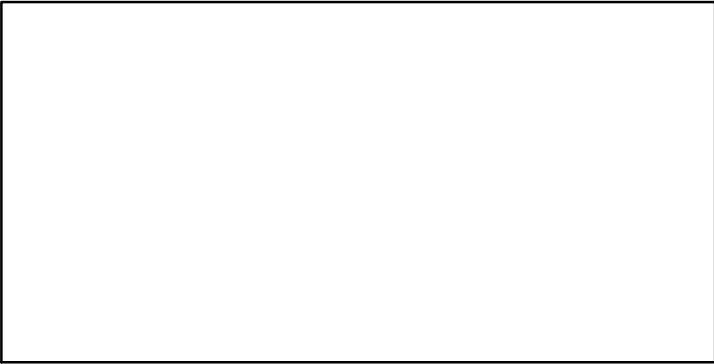
TB*



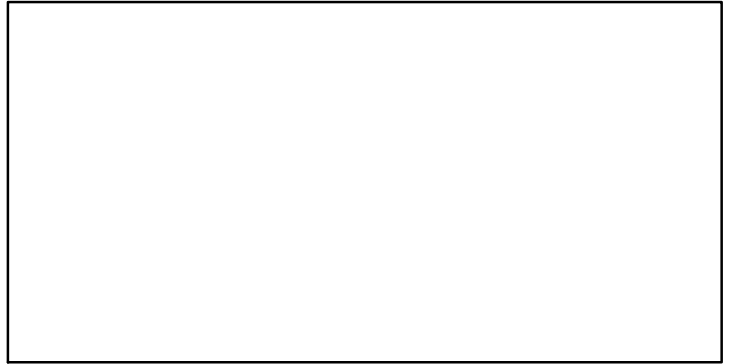
SSB*



TN *



F*



ER*



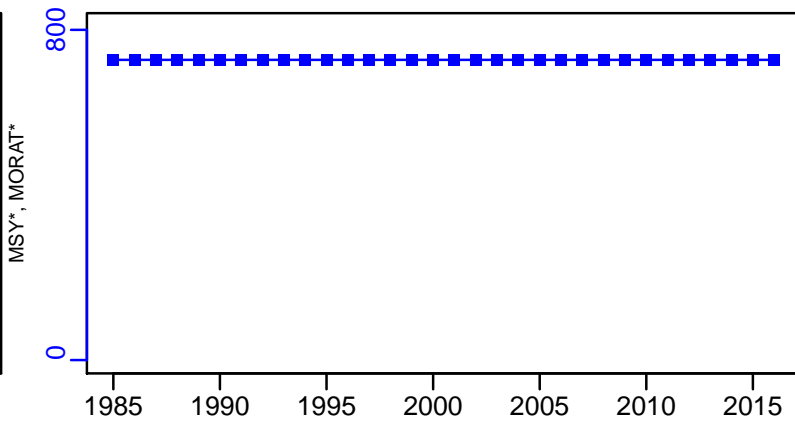
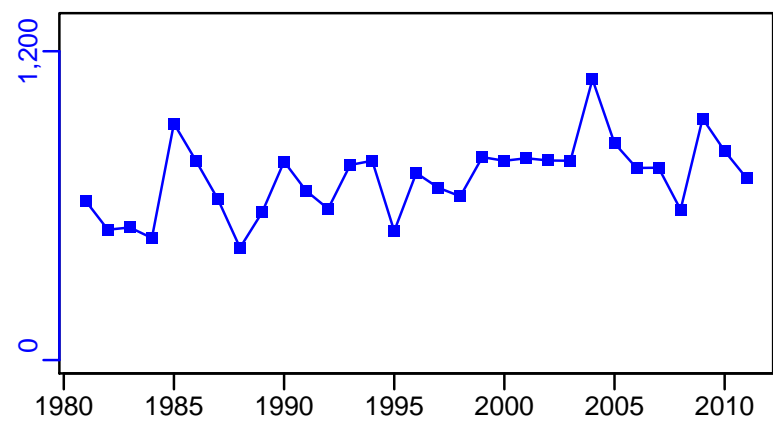
Recruits*



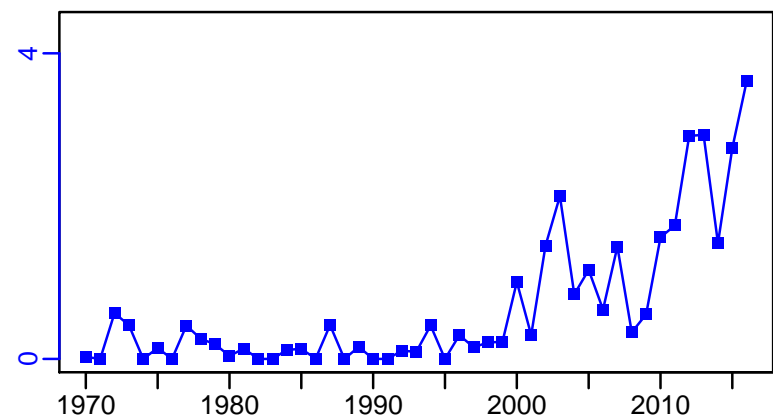
American lobster Lobster Fishing Area 41 [LOBSTERLFA41]

TL-MT, TC*, RecC* (1981-2012-WATSON)

TAC-MT, Cpair*, Cadv* (1969-2016-ASHBROOK)



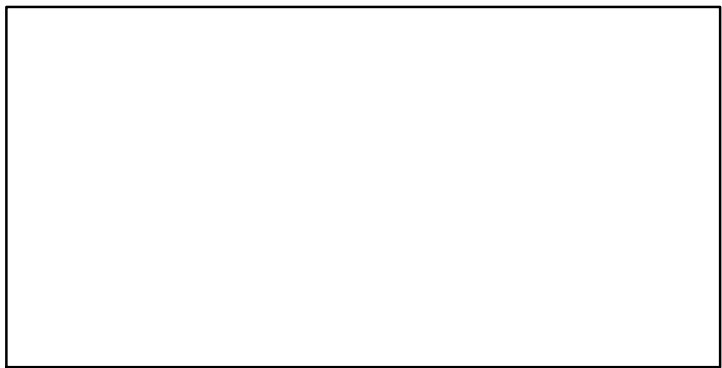
survB-MT (1969-2016-ASHBROOK)



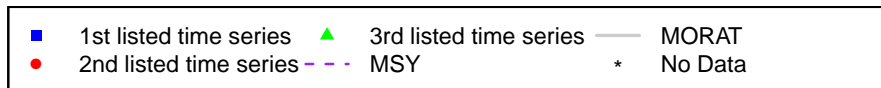
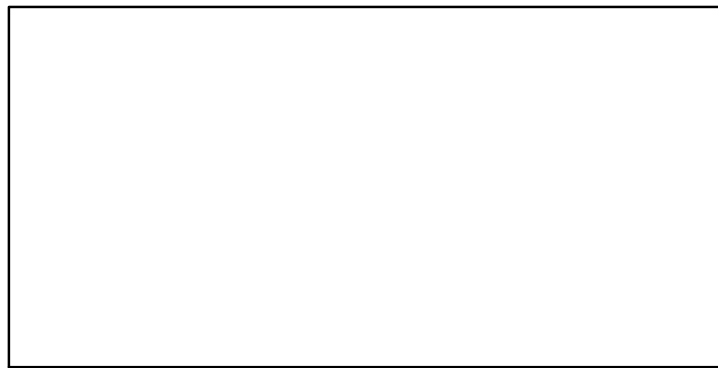
CPUE*



EFFORT*



CdivMSY*



Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

Metadata	
Scientific Name	Scomber scombrus
Current Assess ID	DFO-MACKNWATLSA3-4-1968-2014-WATSON
Area	Northwest Atlantic (NAFO Subareas 3 and 4)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 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	2014	13,400	-	-
SSB	SSB-MT	2014	12,500	-	1.37
TN	-	-	-	-	-
R	R-E00	2014	77,100,000	-	-
F	F-1/yr	2011	0.468	-	8+
ER	ER-calc-ratio	2014	0.554	-	-
TC	-	-	-		
TL	TL-MT	2014	7430		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

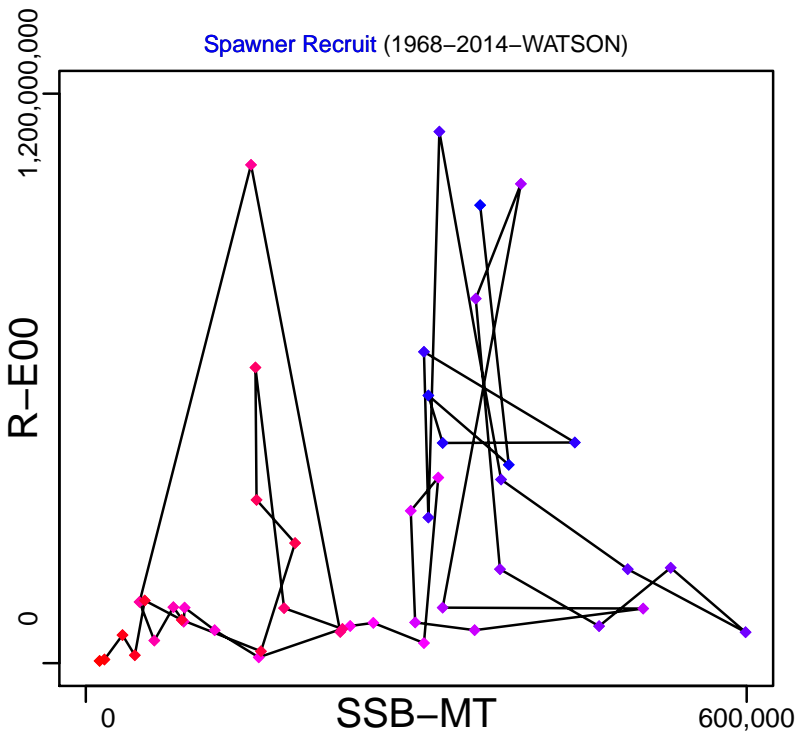
Kobe MSY*



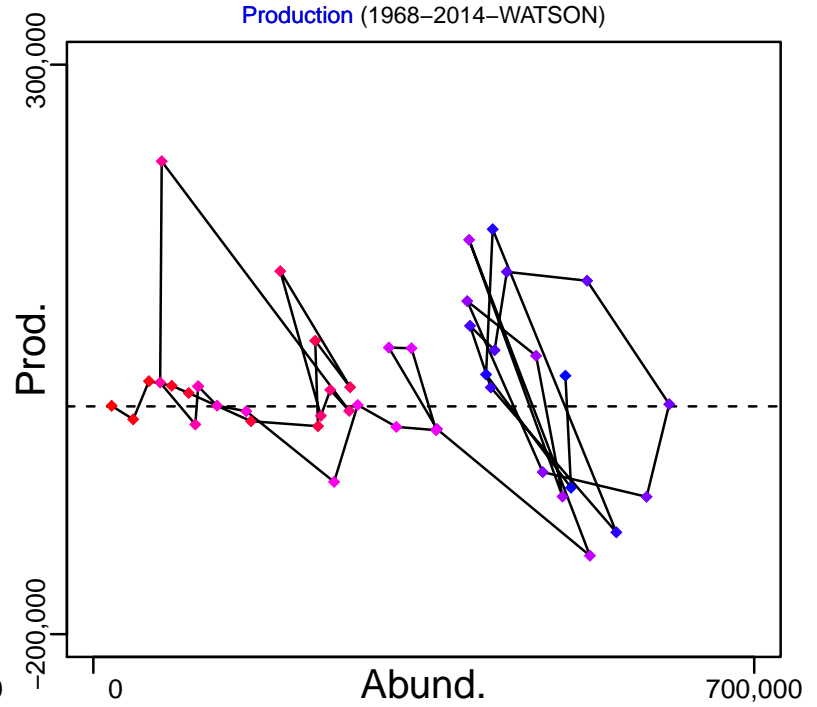
Kobe MGT*



Spawner Recruit (1968–2014–WATSON)



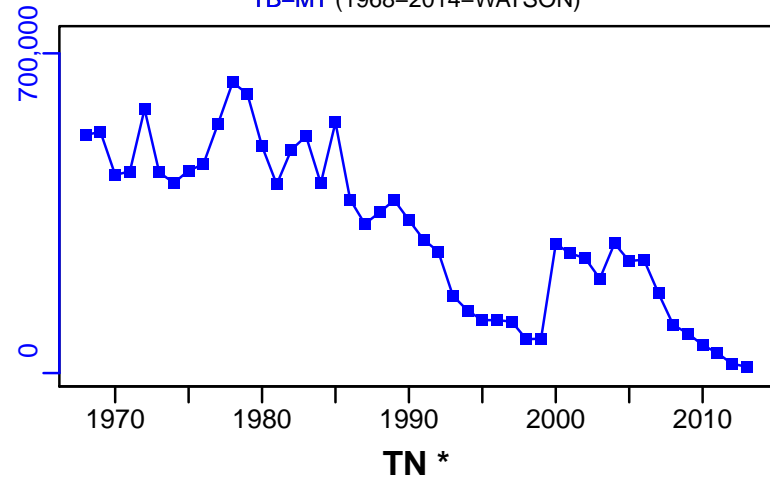
Production (1968–2014–WATSON)



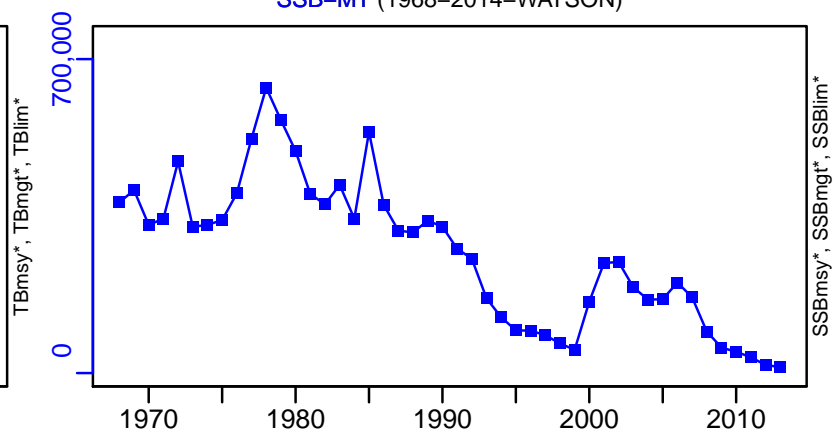
◆ Start Year ◆ End Year * No Data

Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

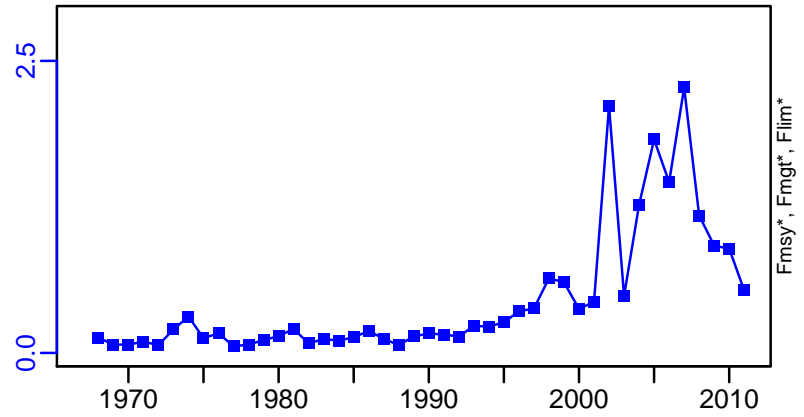
TB-MT (1968-2014-WATSON)



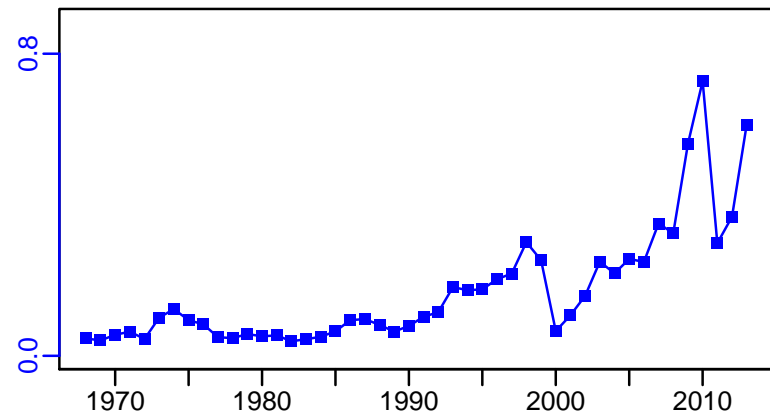
SSB-MT (1968-2014-WATSON)



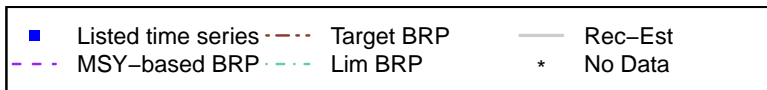
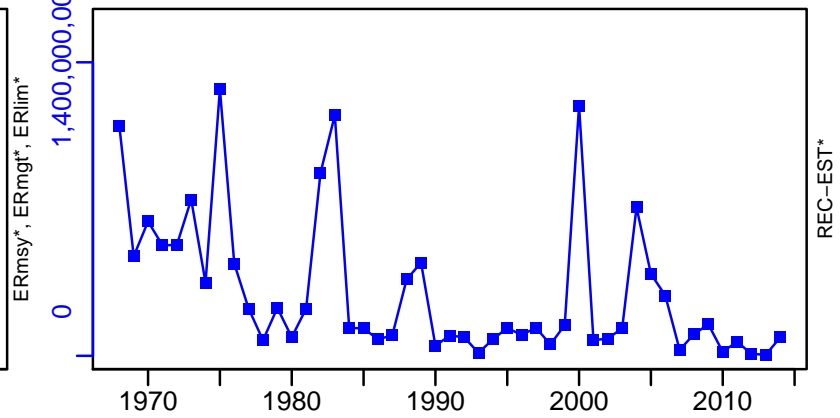
F-1/yr (1967-2011-CHING)



ER-calc-ratio (1968-2014-WATSON)

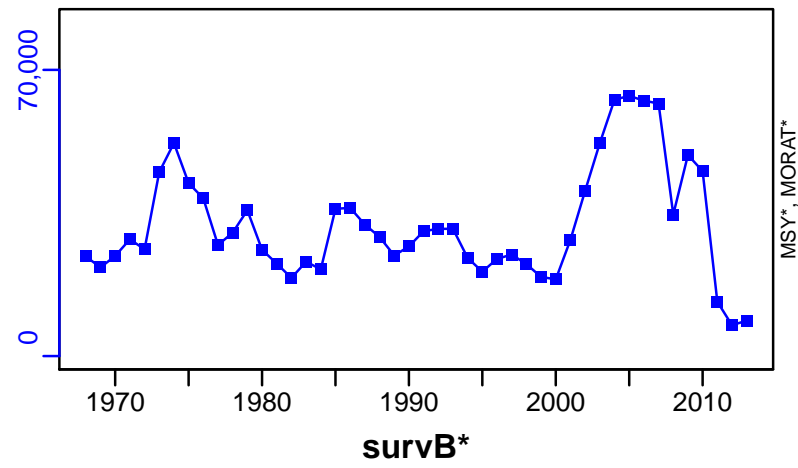


R-E00 (1968-2014-WATSON)



Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

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



TAC*, Cpair*, Cadv*



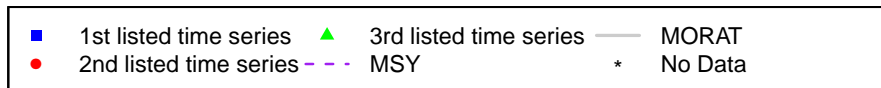
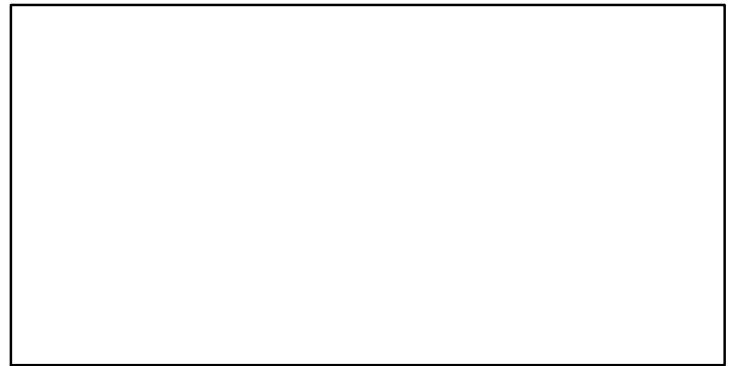
CPUE*



EFFORT*



CdivMSY*



Monkfish NAFO Divisions 3LNOPs [MONK3LNOPs]

Metadata	
Scientific Name	Lophius americanus
Current Assess ID	DFO-NFLD-MONK3LNOPs-1960-2017-ASHBROOK
Area	NAFO Divisions 3LNOPs
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland Region
Asmts in RAM	2017

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	2017	360		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

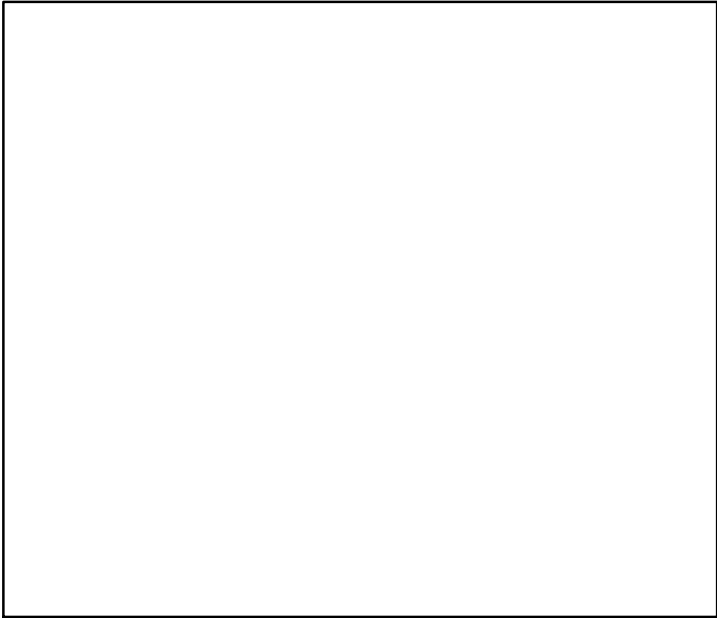
Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Monkfish NAFO Divisions 3LNOPs [MONK3LNOPs]

TB*



SSB*



TN *



F*



ER*



Recruits*



■ Listed time series

- - - MSY-based BRP

- - - Target BRP

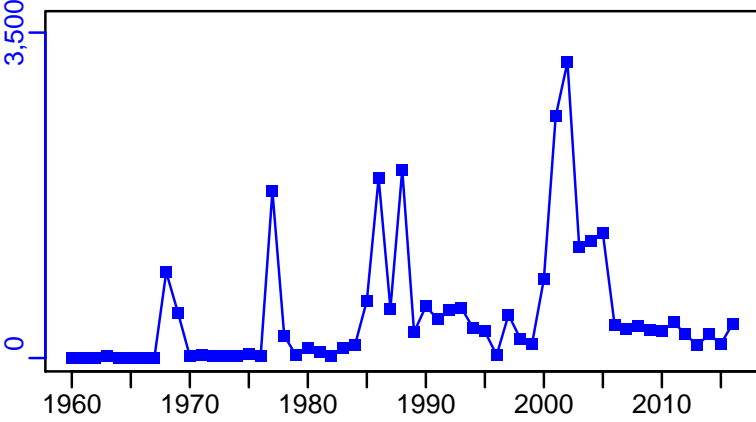
- · - · - Lim BRP

— Rec-Est

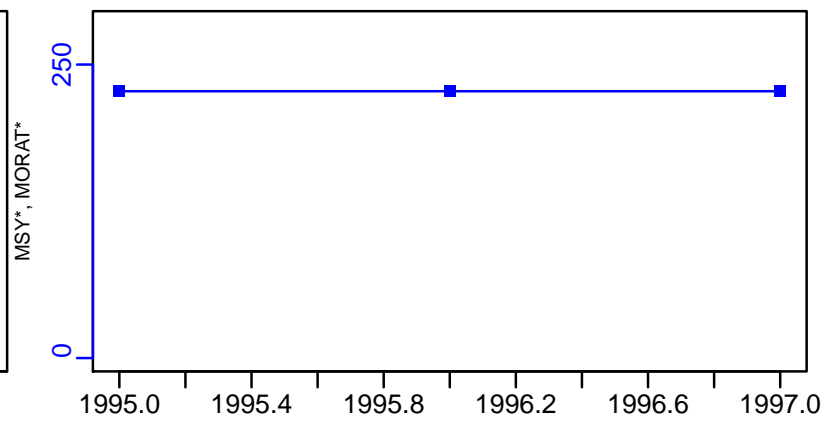
* No Data

Monkfish NAFO Divisions 3LNOPs [MONK3LNOPs]

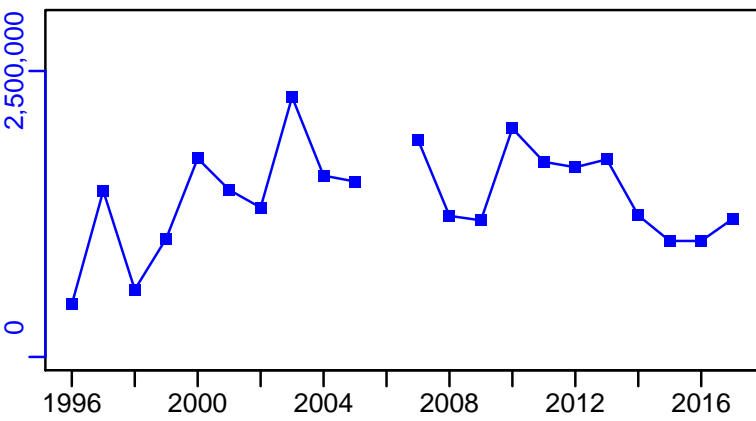
TL-MT, TC*, RecC* (1960-2017-ASHBROOK)



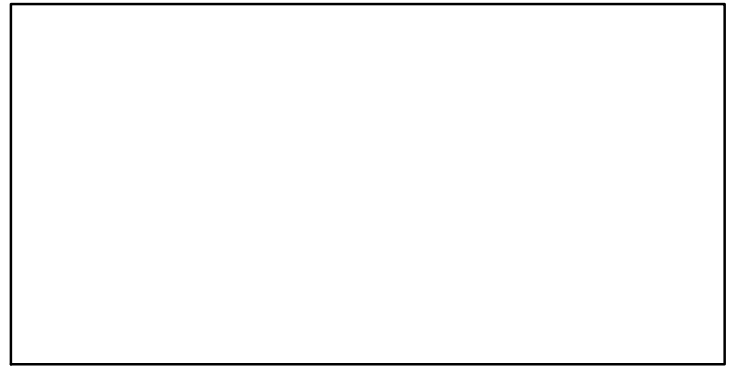
TAC-MT, Cpair*, Cadv* (1960-2017-ASHBROOK)



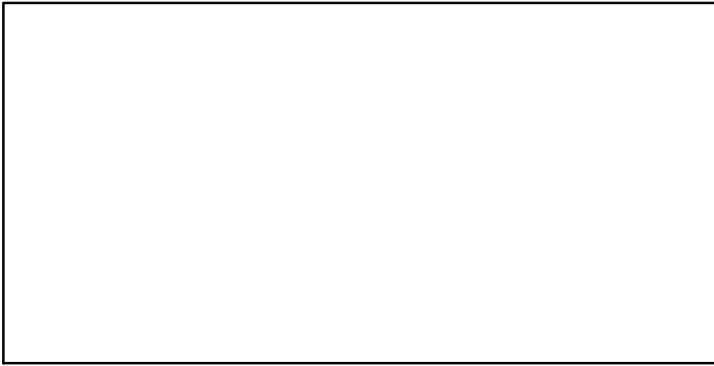
survB-E00 (1960-2017-ASHBROOK)



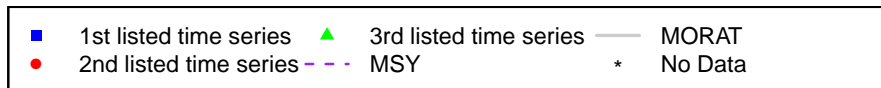
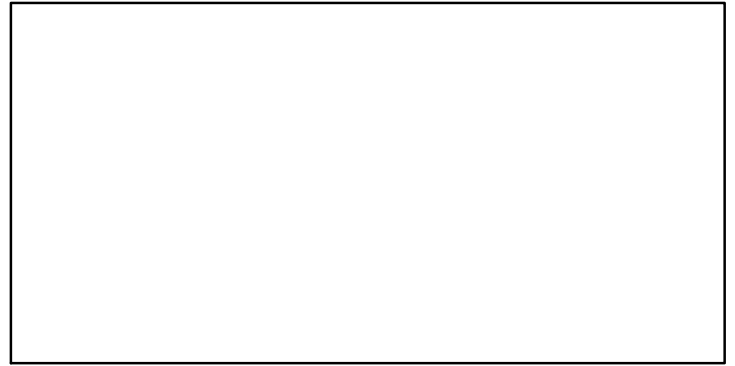
CPUE*



EFFORT*



CdivMSY*



Northern shrimp Gulf of St. Lawrence [PANDAL4RST]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-PANDAL4RST-1965-2012-WATSON
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2012, 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	124,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2011	0.34	-	-
ER	ER-calc-ratio	2011	0.277	-	-
TC	TC-E00	2012	6.01×10^9		
TL	TL-MT	2012	32,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



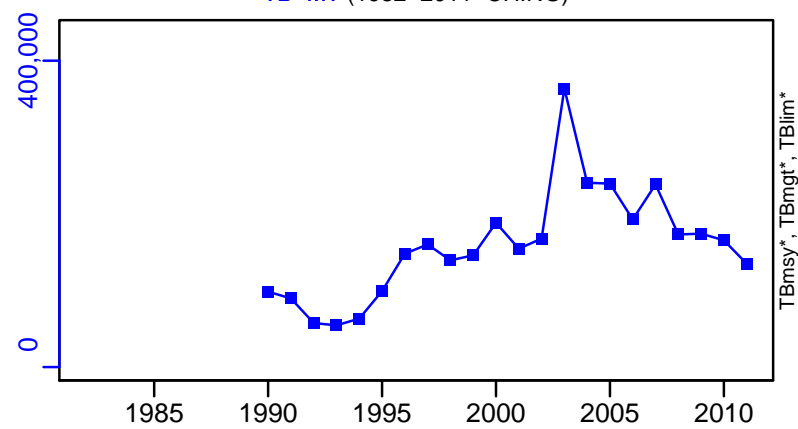
Production*



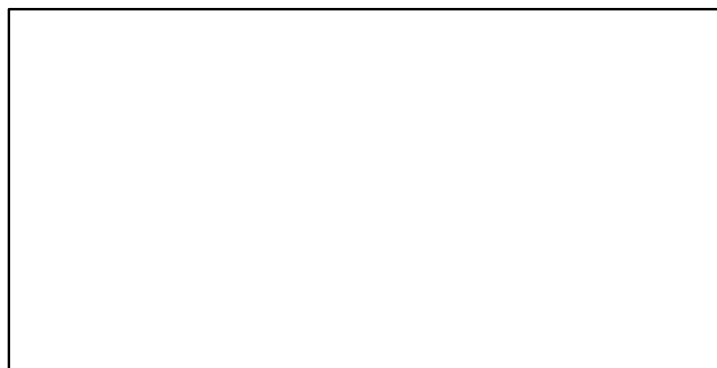
◆ Start Year ◆ End Year * No Data

Northern shrimp Gulf of St. Lawrence [PANDAL4RST]

TB-MT (1982-2011-CHING)



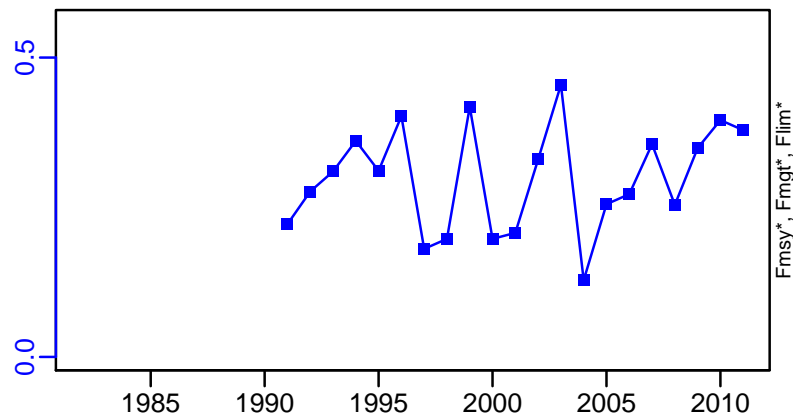
SSB*



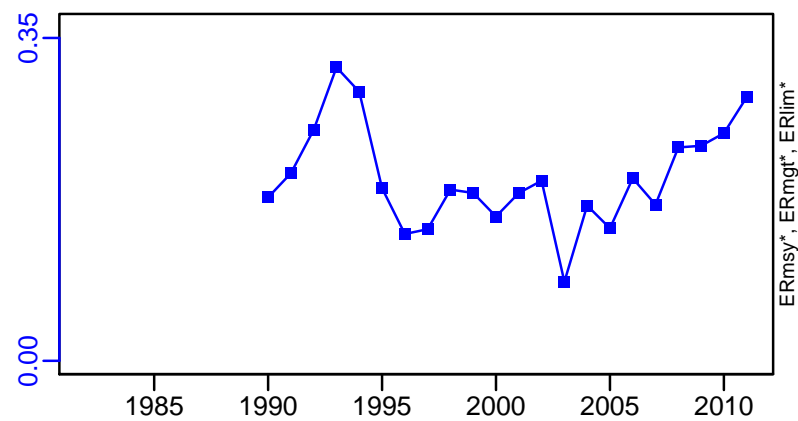
TN *



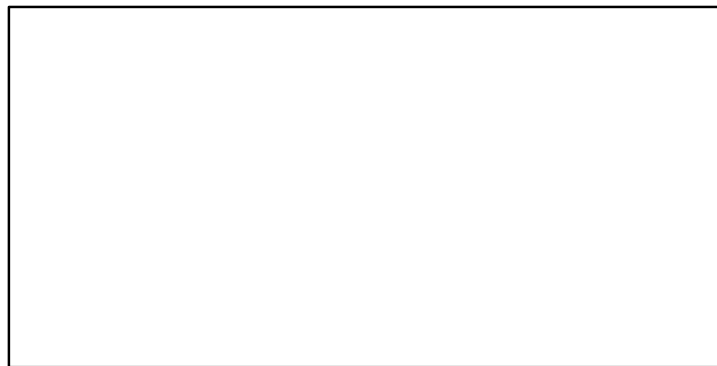
F-1/yr (1982-2011-CHING)



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

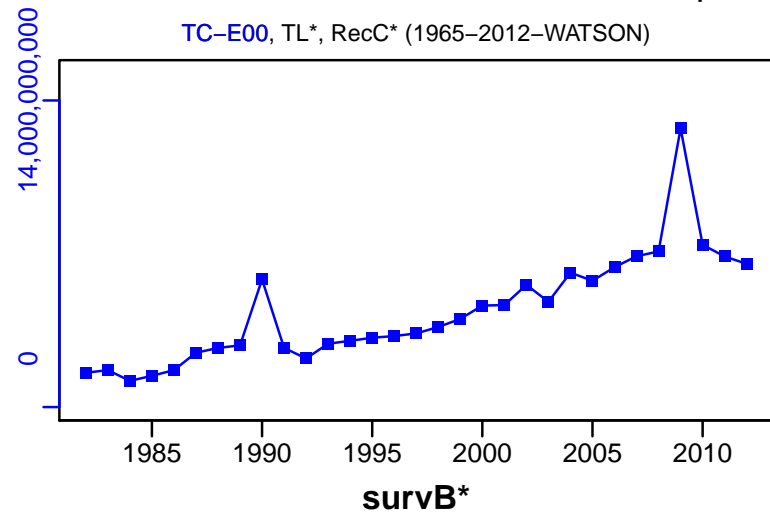


Recruits*

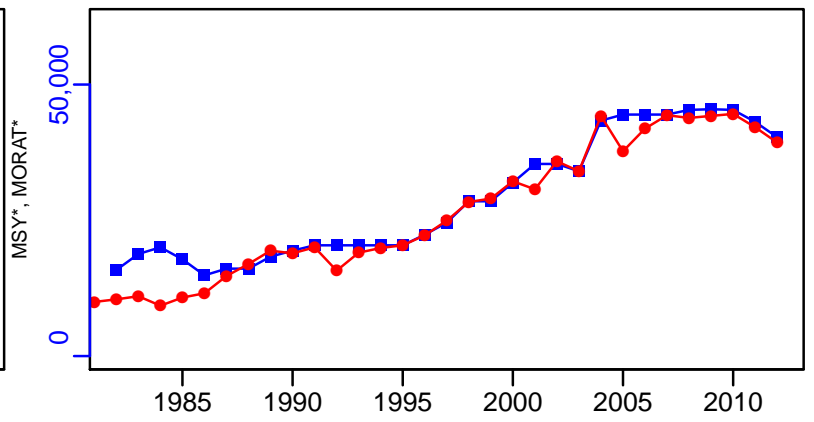


Northern shrimp Gulf of St. Lawrence [PANDAL4RST]

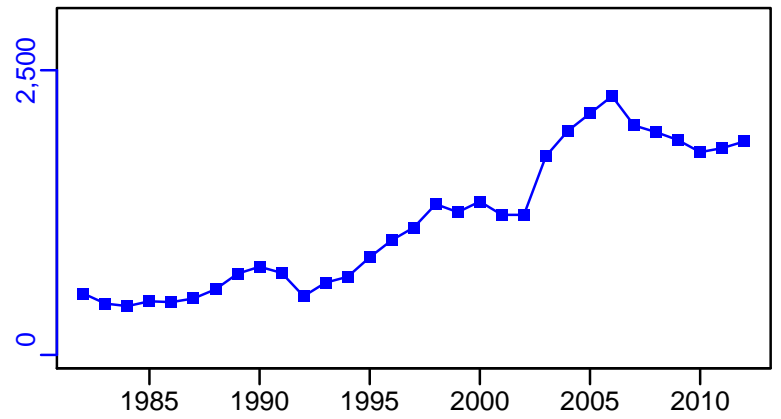
TC-E00, TL*, RecC* (1965-2012-WATSON)



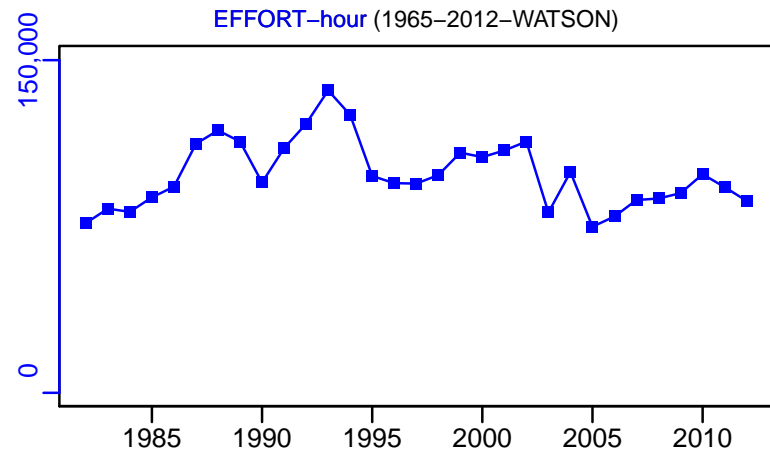
TAC-MT, Cpair-MT, Cadv* (1965-2012-WATSON)



CPUE-kg/hour (1965-2012-WATSON)



EFFORT-hour (1965-2012-WATSON)



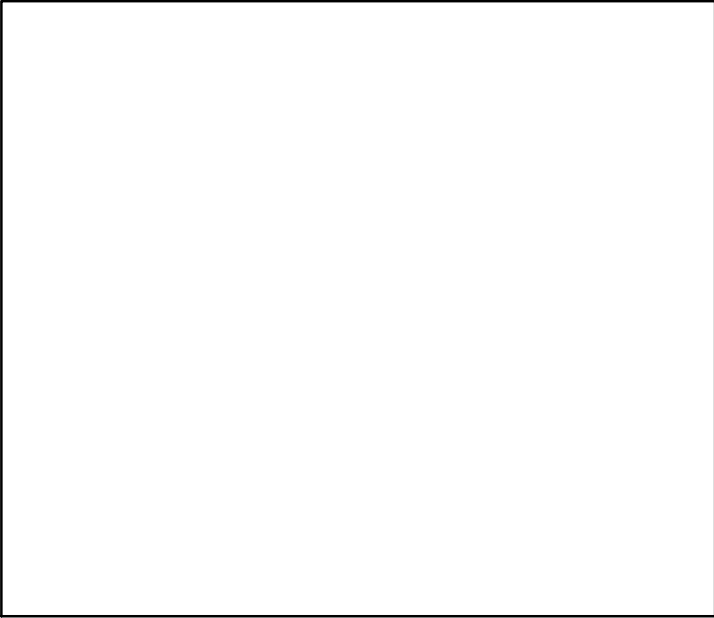
Northern shrimp Eastern Scotian Shelf (SFA 13-15) [PANDALSFA13-15]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-PANDALSFA13-15-1980-2012-WATSON
Area	Eastern Scotian Shelf (SFA 13-15)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2011, 2012

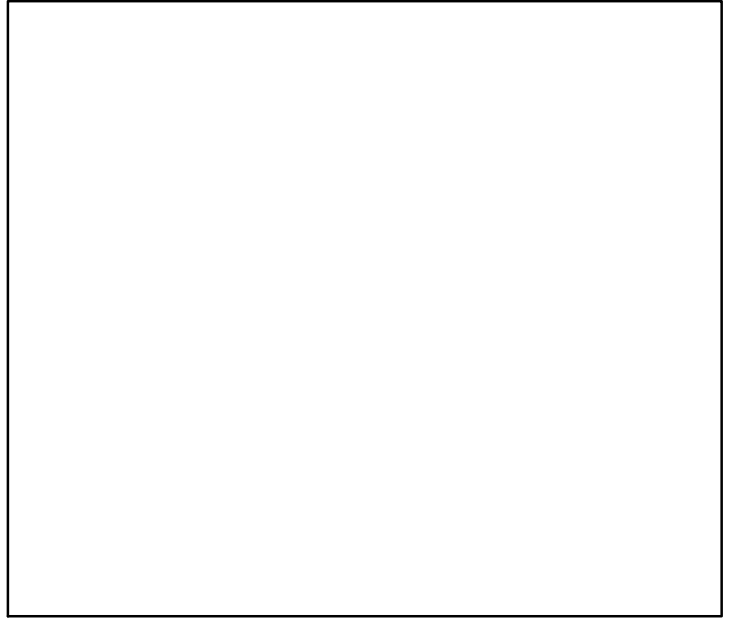
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	28,000	-	-
SSB	SSB-index	2011	16,800	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2012	0.15	Both	-
TC	TC-MT	2012	3650		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

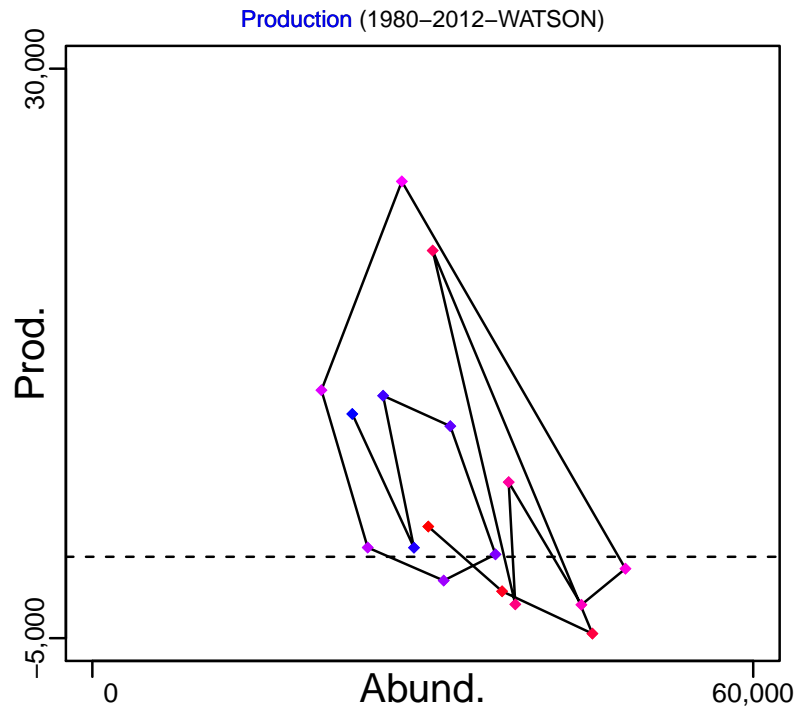
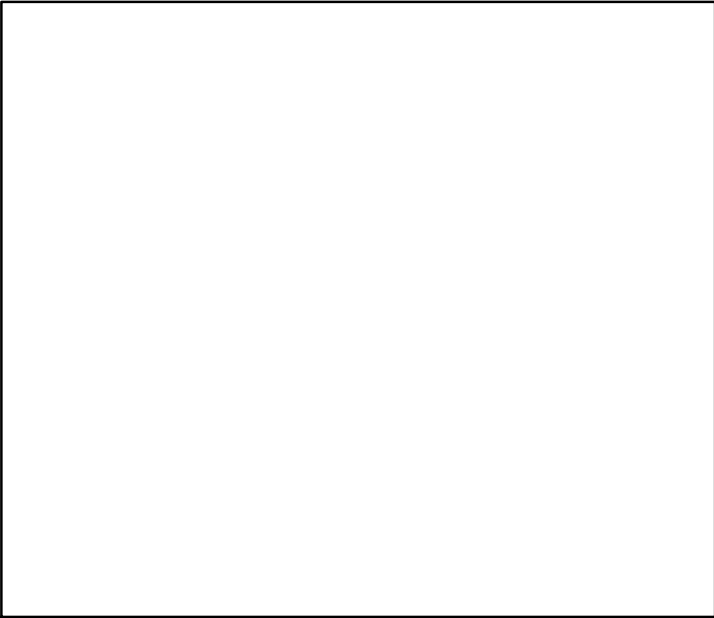
Kobe MSY*



Kobe MGT*



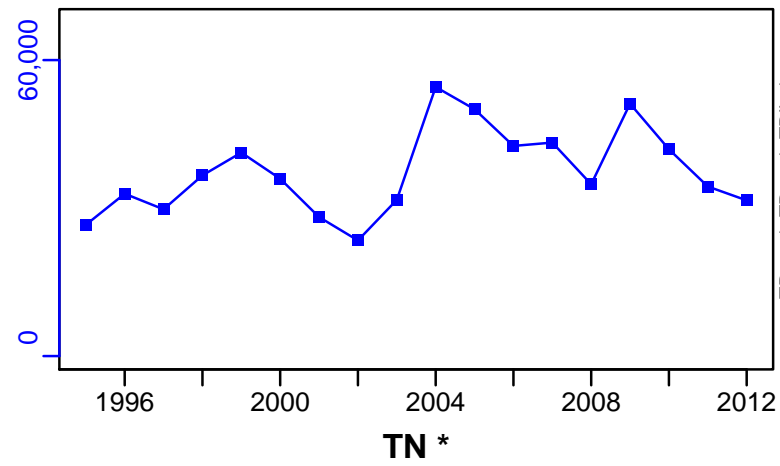
Spawner Recruit*



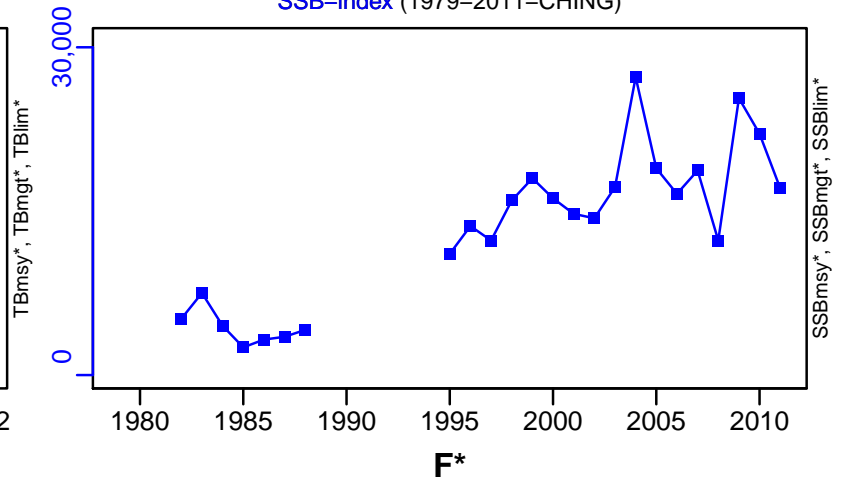
◆ Start Year ◆ End Year * No Data

Northern shrimp Eastern Scotian Shelf (SFA 13–15) [PANDALSFA13–15]

TB–MT (1980–2012–WATSON)



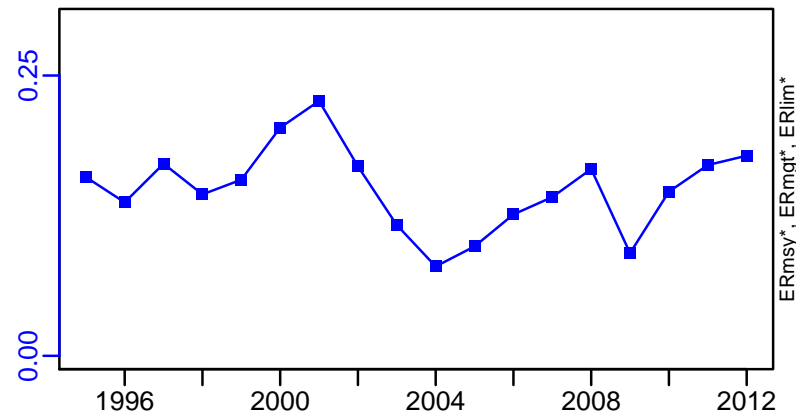
SSB–index (1979–2011–CHING)



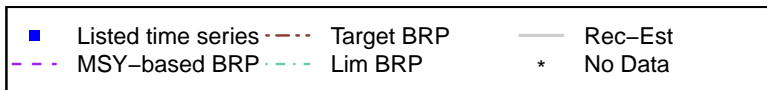
TN *

F*

ER–ratio (1980–2012–WATSON)



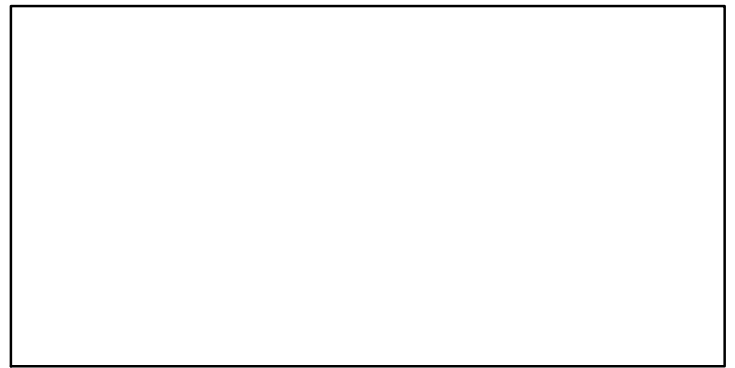
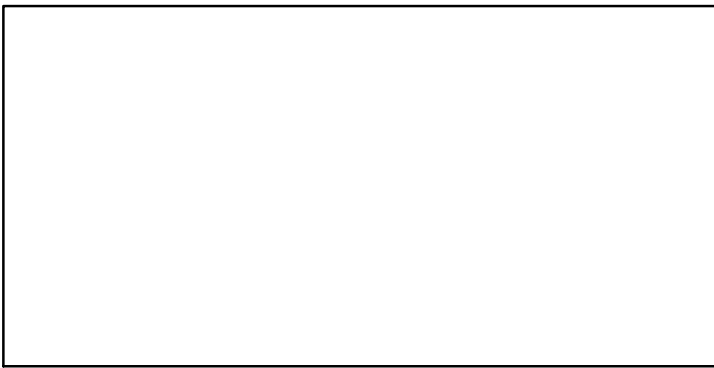
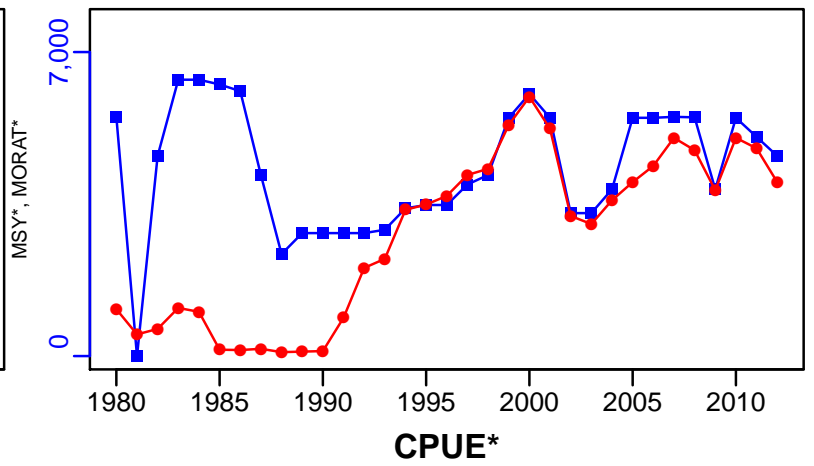
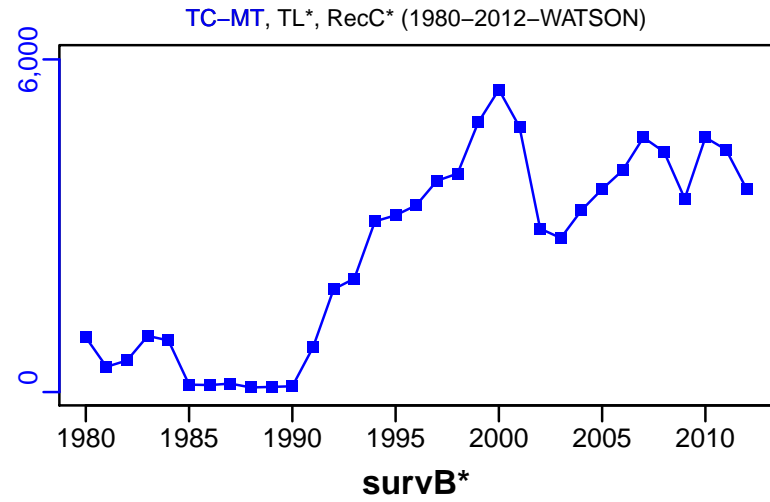
Recruits*



Northern shrimp Eastern Scotian Shelf (SFA 13–15) [PANDALSFA13–15]

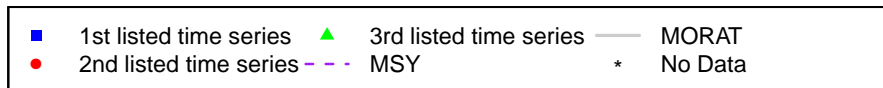
TC–MT, TL*, RecC* (1980–2012–WATSON)

TAC–MT, Cpair–MT, Cadv* (1980–2012–WATSON)



EFFORT*

CdivMSY*



Northern shrimp Shrimp Fishing Areas 2-3 [PANDALSFA2-3]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-ARCTIC-PANDALSFA2-3-1979-2015-WATSON
Area	Shrimp Fishing Areas 2-3
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Arctic Region
Asmts in RAM	2015, 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	2015	108,000	-	-
SSB	SSB-MT	2015	75,600	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2015	0.044	-	-
TC	TC-MT	2015	4760		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

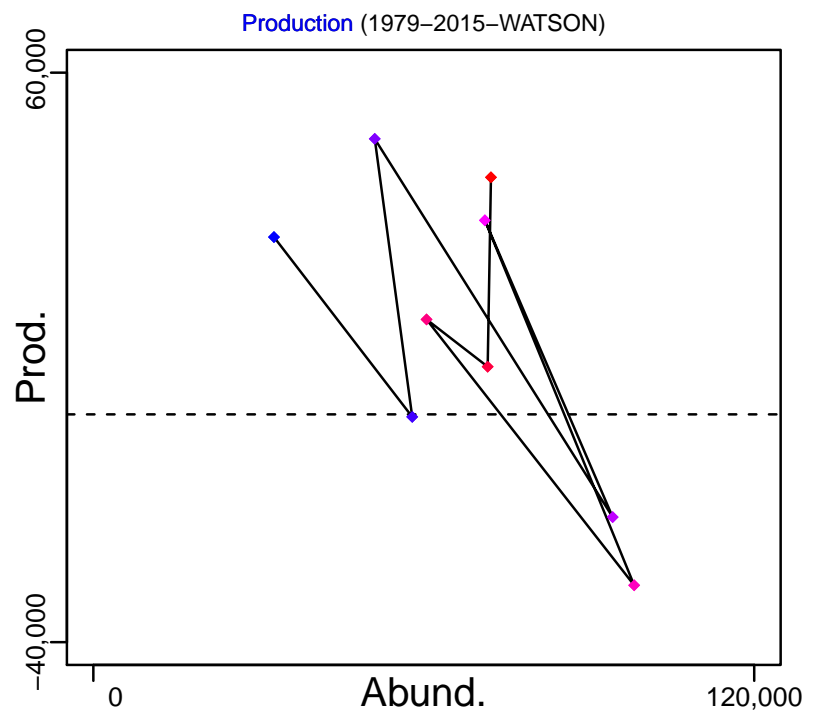
Kobe MSY*



Kobe MGT*



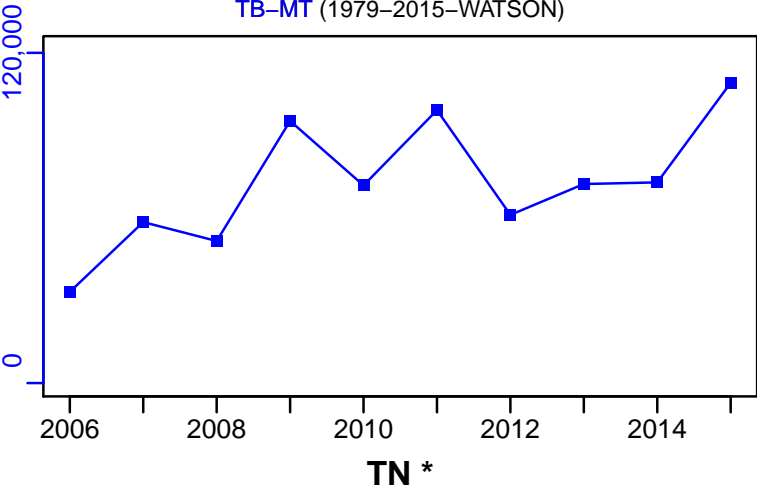
Spawner Recruit*



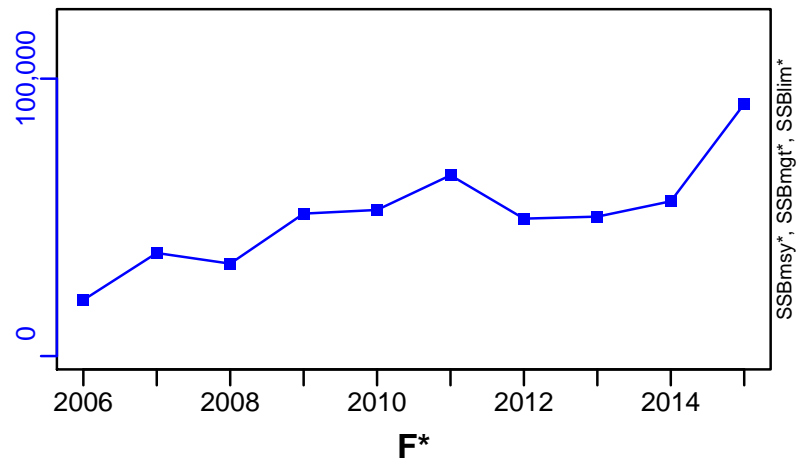
◆ Start Year ◆ End Year * No Data

Northern shrimp Shrimp Fishing Areas 2-3 [PANDALSFA2-3]

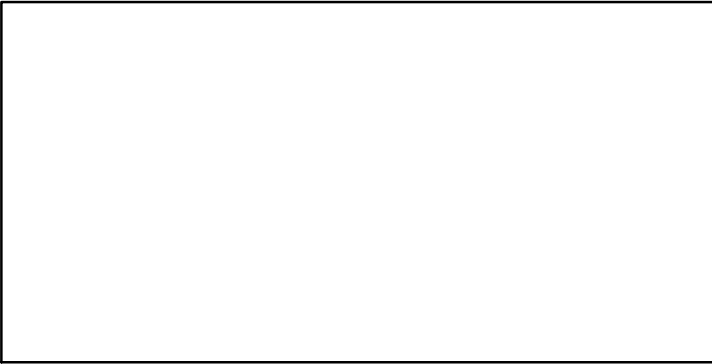
TB-MT (1979-2015-WATSON)



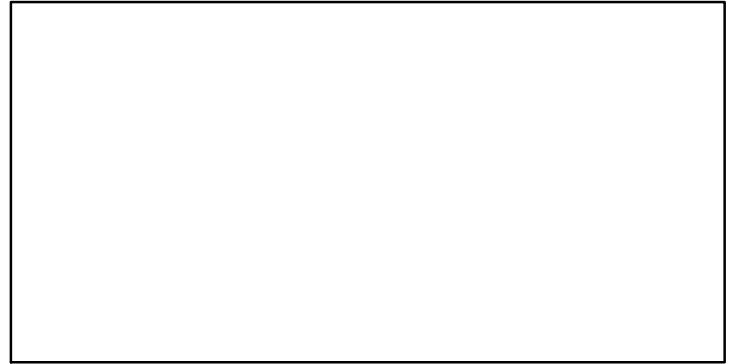
SSB-MT (1979-2015-WATSON)



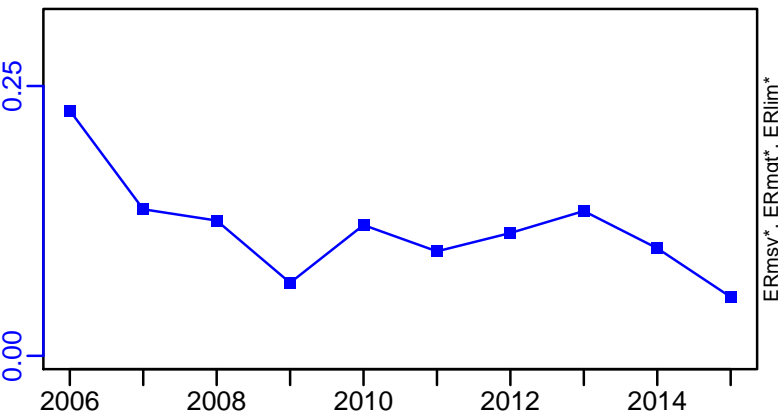
TN *



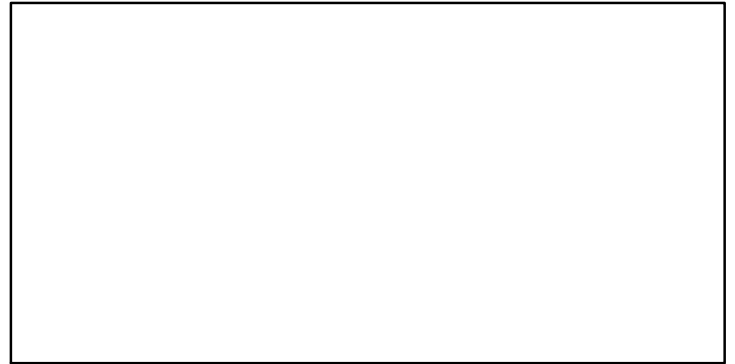
F*



ER-calc-ratio (1979-2015-WATSON)



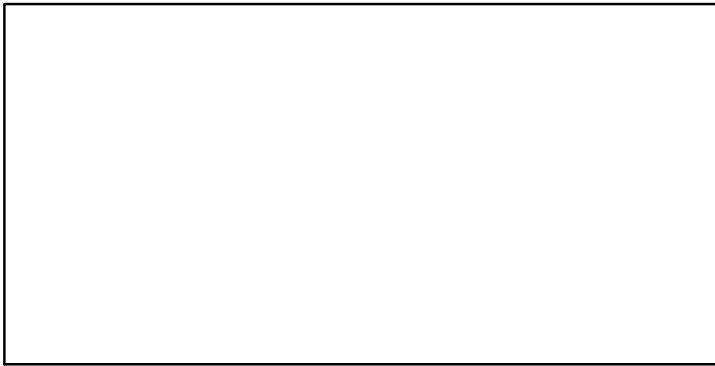
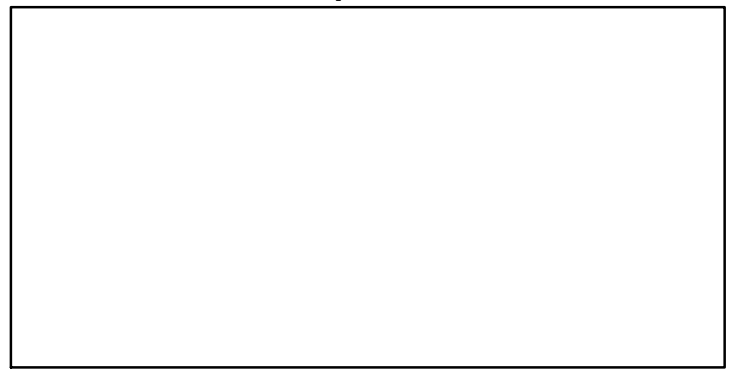
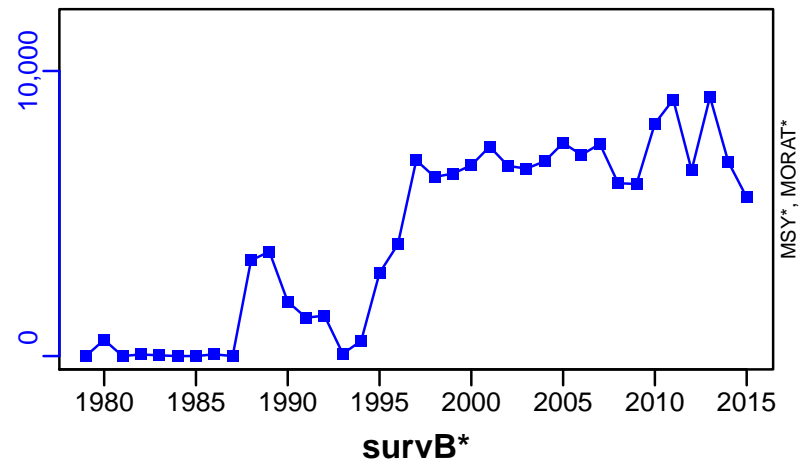
Recruits*



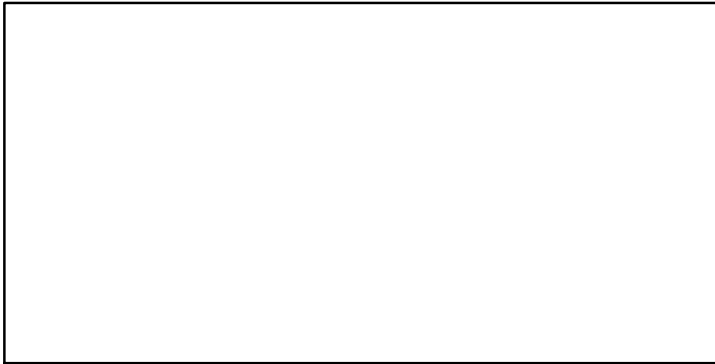
Northern shrimp Shrimp Fishing Areas 2-3 [PANDALSFA2-3]

TC-MT, TL*, RecC* (1979-2015-WATSON)

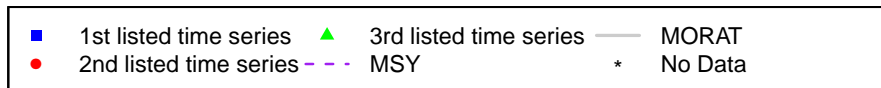
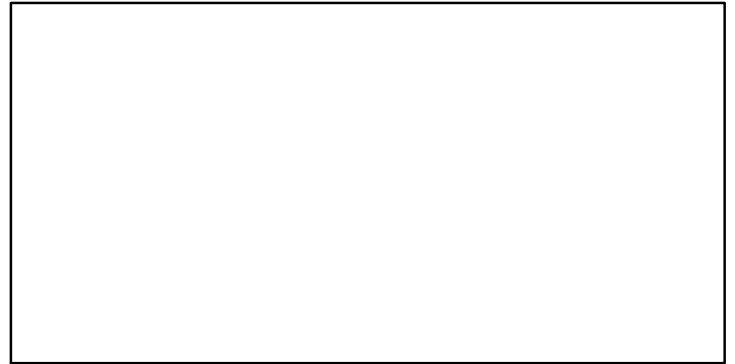
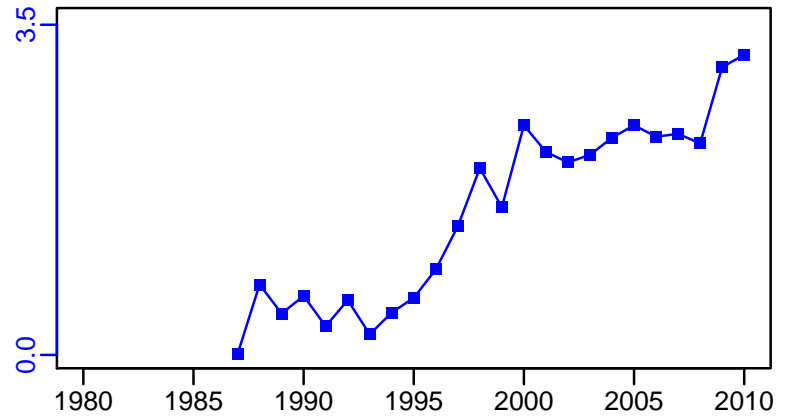
TAC*, Cpair*, Cadv*



EFFORT*



CPUE-MT/hour (1980-2010-CHING)



Northern shrimp Shrimp Fishing Area 4 [PANDALSFA4]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-PANDALSFA4-1977-2012-WATSON
Area	Shrimp Fishing Area 4
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
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	SSBlim-MT	2012	21,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	214,000	Both	-
SSB	SSB-MT	2012	110,000	-	-
TN	TN-E00	2012	4.54×10^{10}	-	-
R	R-E00	2012	6.06×10^9	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.061	-	-
TC	TC-MT	2012	13,100		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Northern shrimp Shrimp Fishing Area 4 [PANDALSFA4]

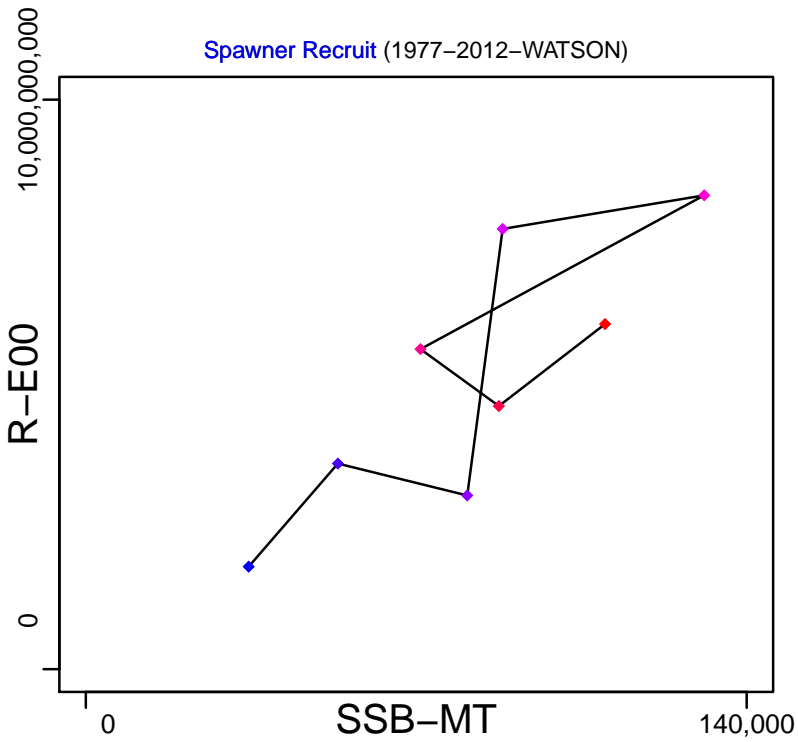
Kobe MSY*



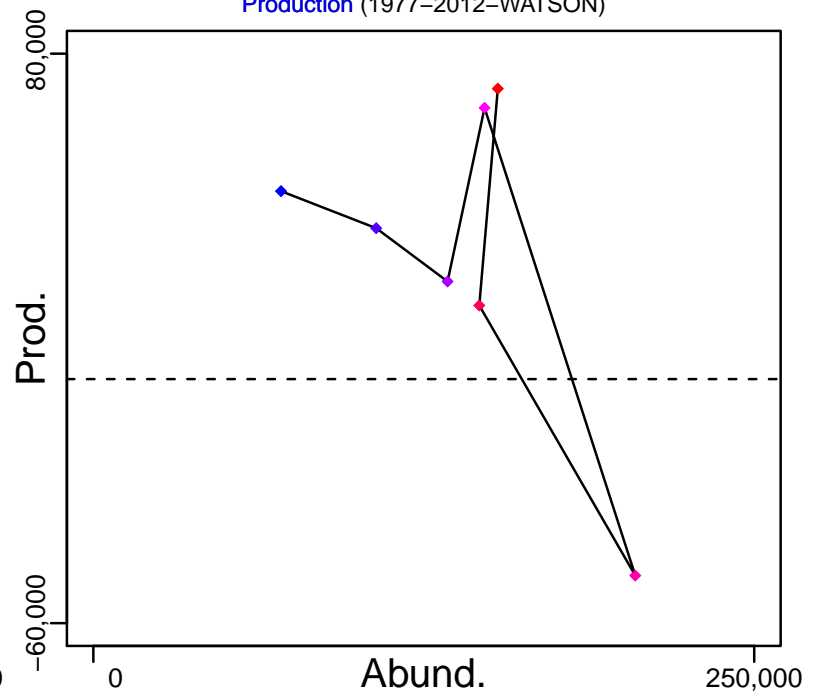
Kobe MGT*



Spawner Recruit (1977–2012–WATSON)



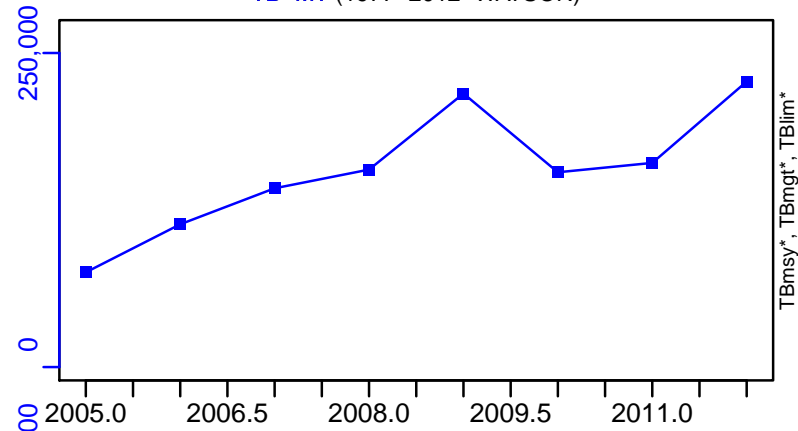
Production (1977–2012–WATSON)



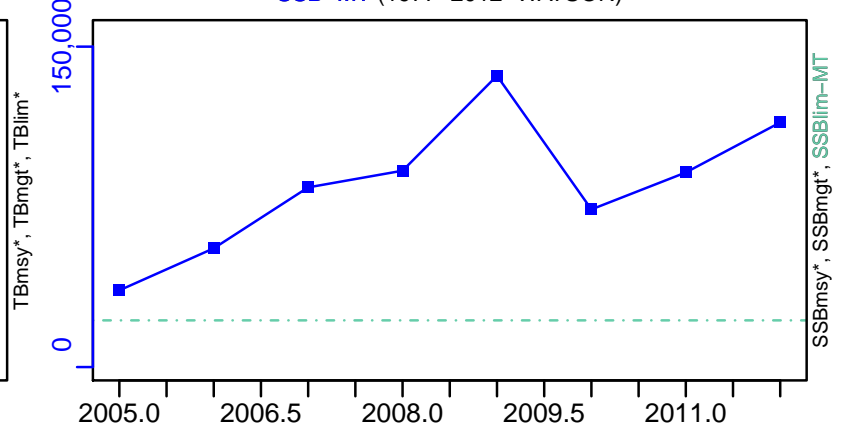
◆ Start Year ◆ End Year * No Data

Northern shrimp Shrimp Fishing Area 4 [PANDALSFA4]

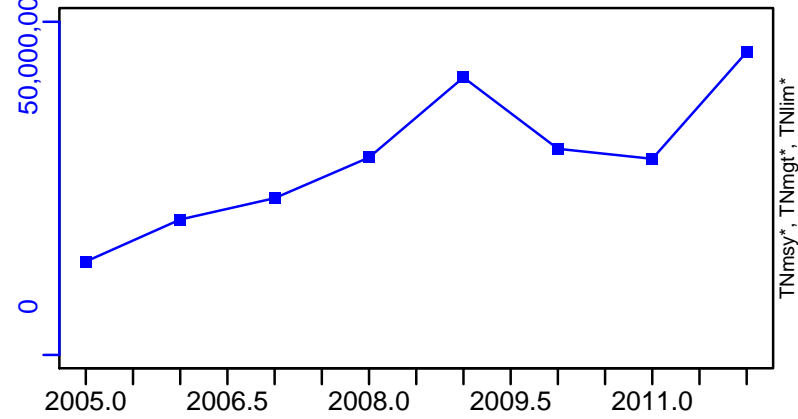
TB-MT (1977-2012-WATSON)



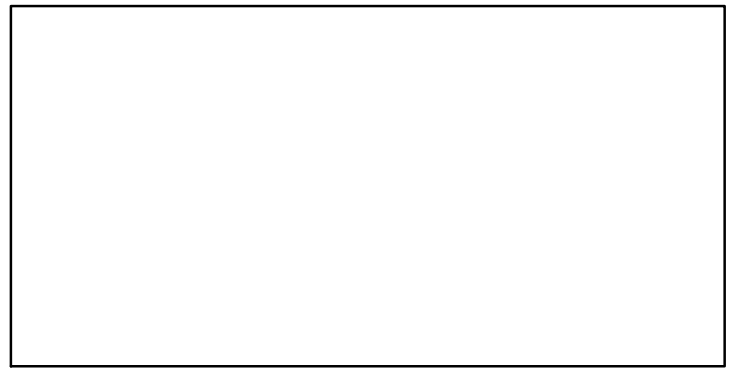
SSB-MT (1977-2012-WATSON)



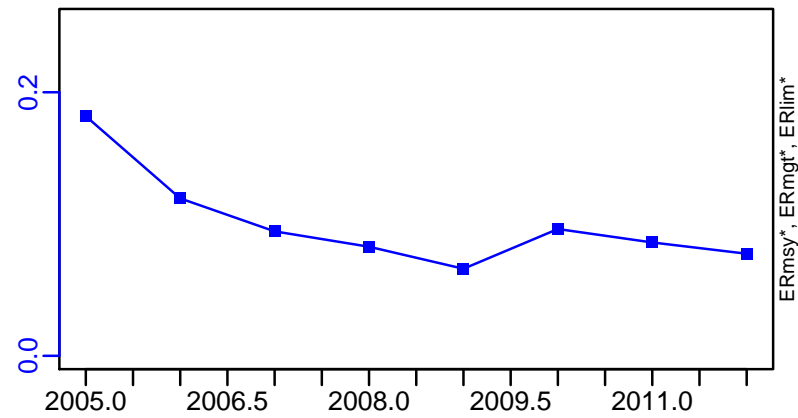
TN-E00 (1977-2012-WATSON)



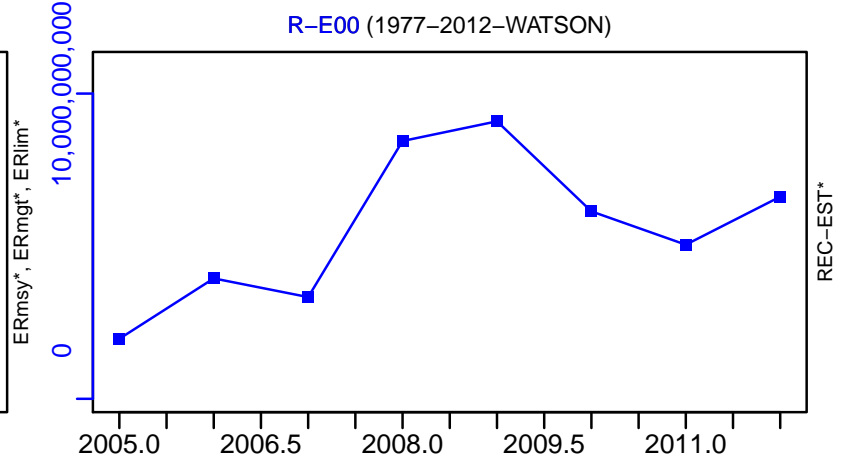
F*



ER-calc-ratio (1977-2012-WATSON)

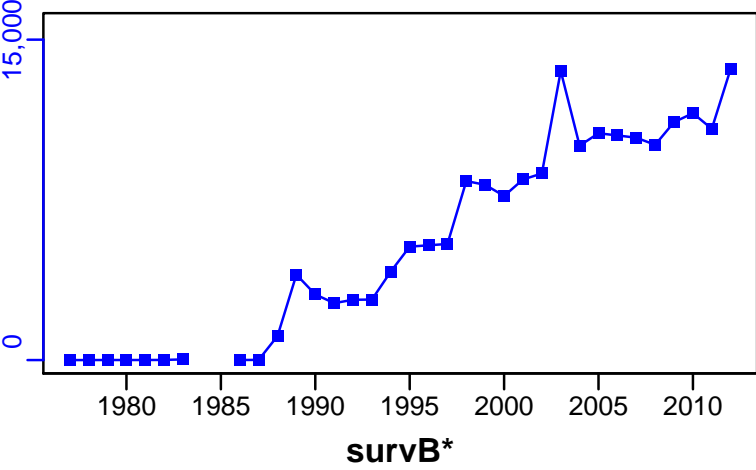


R-E00 (1977-2012-WATSON)

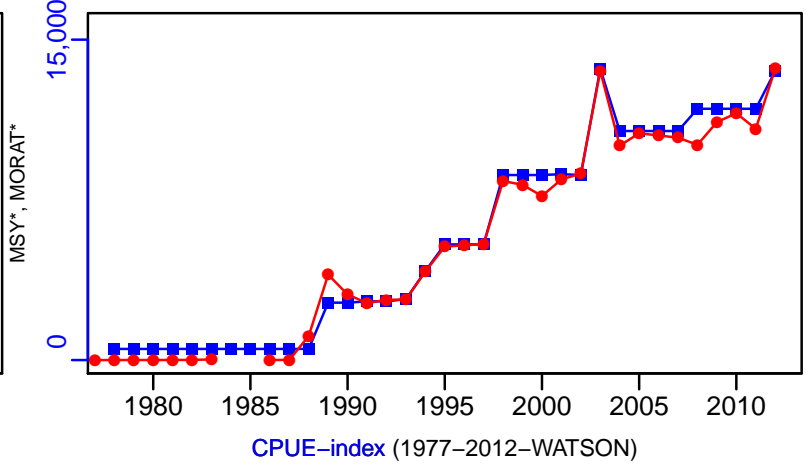


Northern shrimp Shrimp Fishing Area 4 [PANDALSFA4]

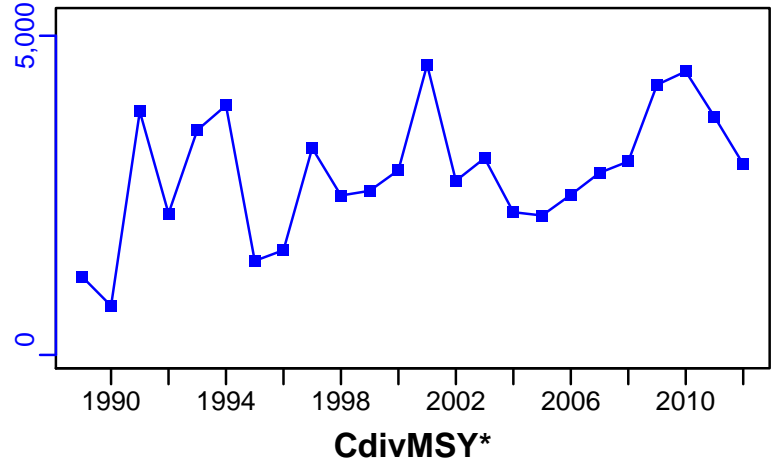
TC-MT, TL*, RecC* (1977-2012-WATSON)



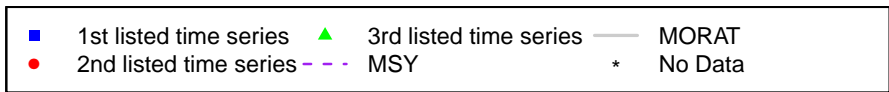
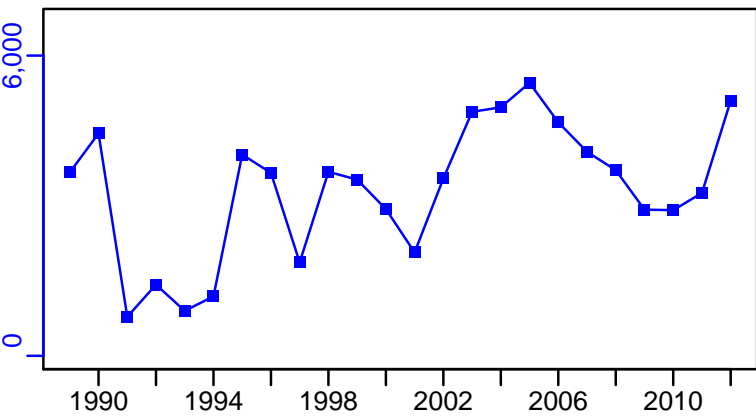
TAC-MT, Cpair-MT, Cadv* (1977-2012-WATSON)



CPUE-index (1977-2012-WATSON)



EFFORT-hour (1977-2012-WATSON)



Northern shrimp Shrimp Fishing Area 5 [PANDALSFA5]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-PANDALSFA5-1977-2012-WATSON
Area	Shrimp Fishing Area 5
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
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	SSBlim-MT	2012	14,300
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	176,000	Both	-
SSB	SSB-MT	2012	63,000	-	-
TN	TN-E00	2012	4.38×10^{10}	-	-
R	R-E00	2012	1.3×10^{10}	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.103	-	-
TC	TC-MT	2012	18,100		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Northern shrimp Shrimp Fishing Area 5 [PANDALSFA5]

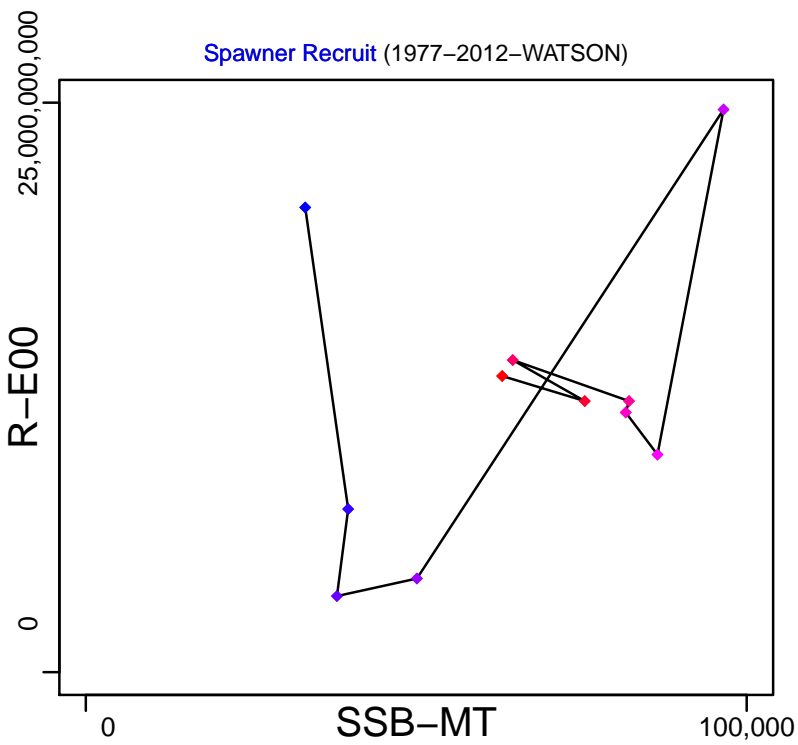
Kobe MSY*



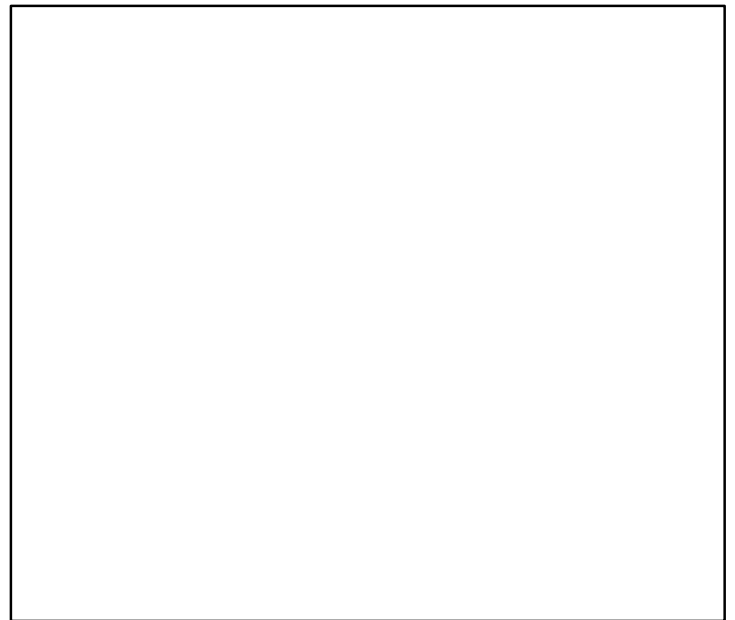
Kobe MGT*



Spawner Recruit (1977–2012–WATSON)



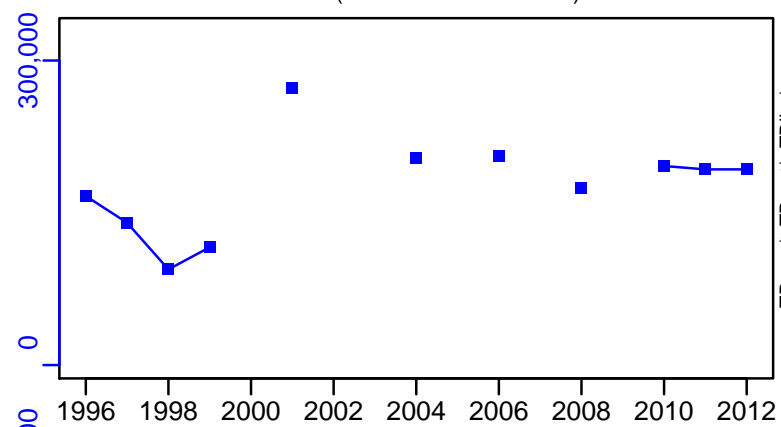
Production*



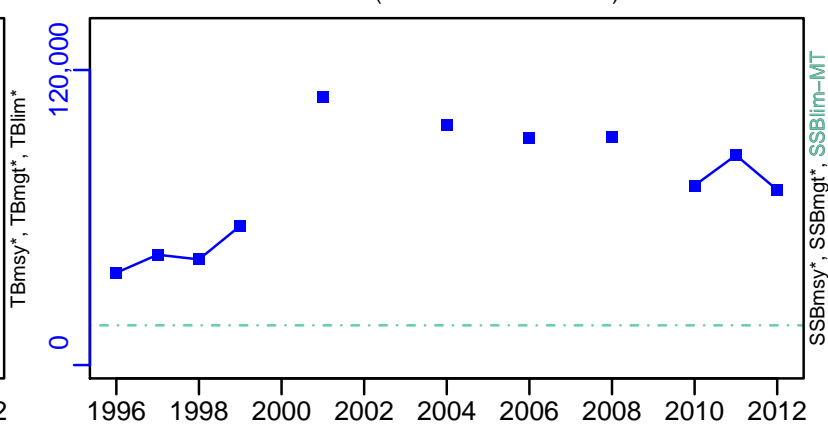
◆ Start Year ◆ End Year * No Data

Northern shrimp Shrimp Fishing Area 5 [PANDALSFA5]

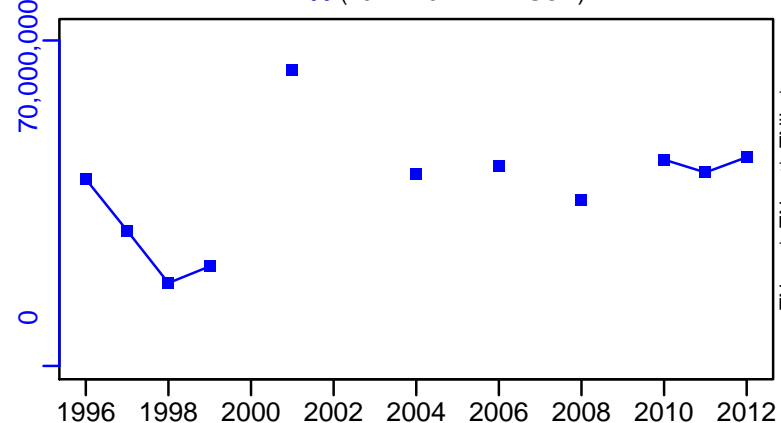
TB-MT (1977-2012-WATSON)



SSB-MT (1977-2012-WATSON)



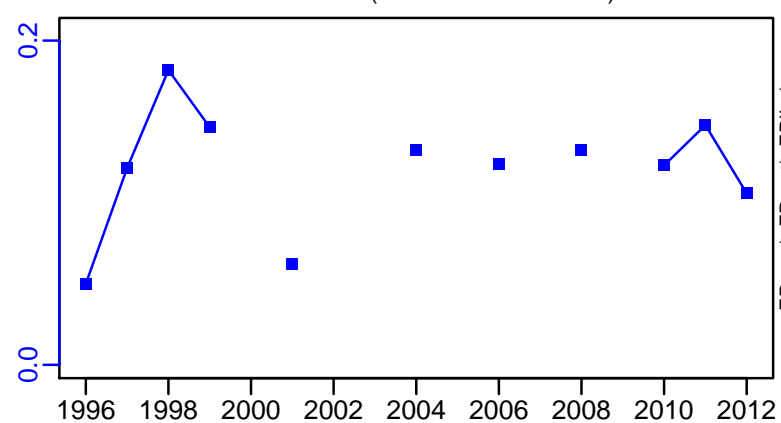
TN-E00 (1977-2012-WATSON)



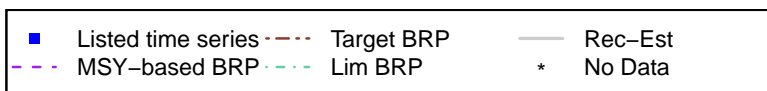
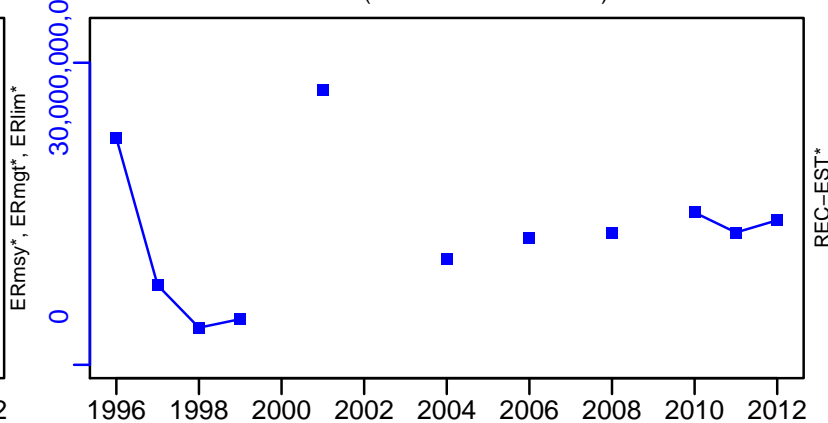
F*



ER-calc-ratio (1977-2012-WATSON)



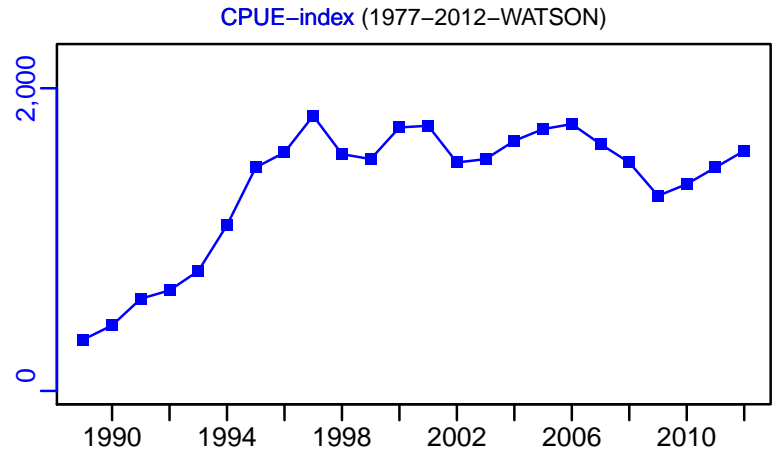
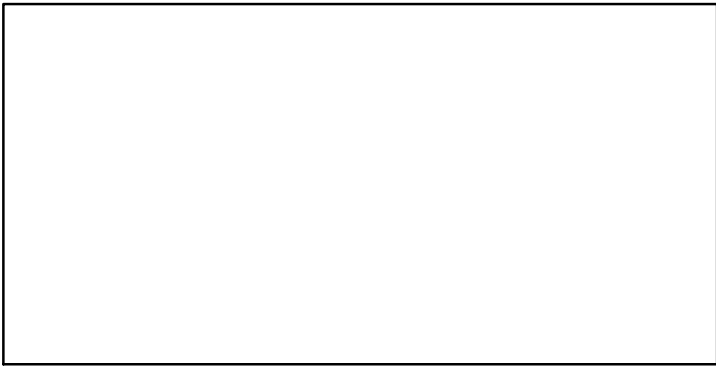
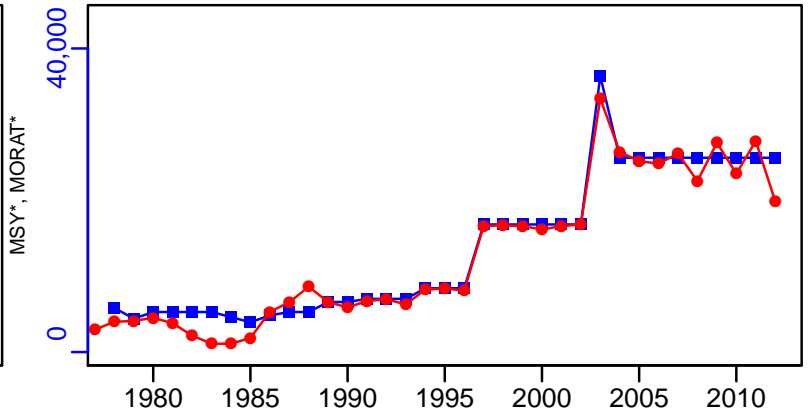
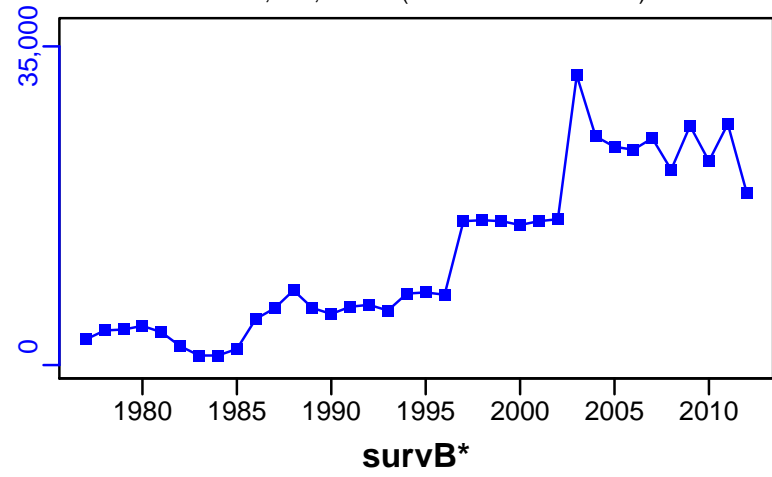
R-E00 (1977-2012-WATSON)



Northern shrimp Shrimp Fishing Area 5 [PANDALSFA5]

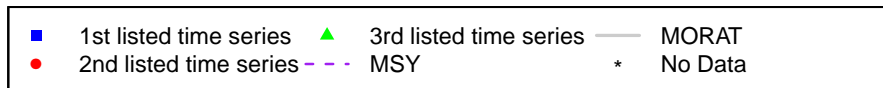
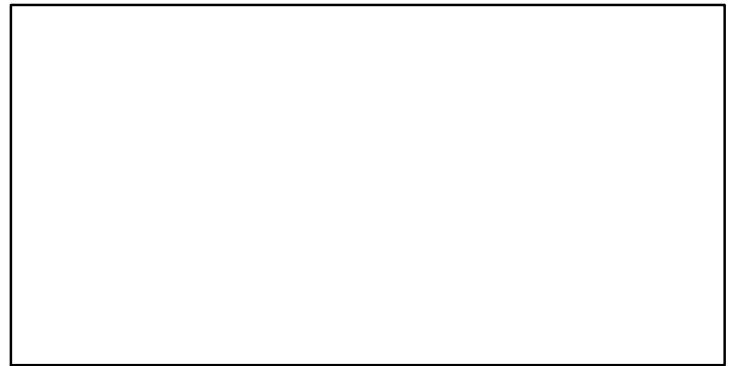
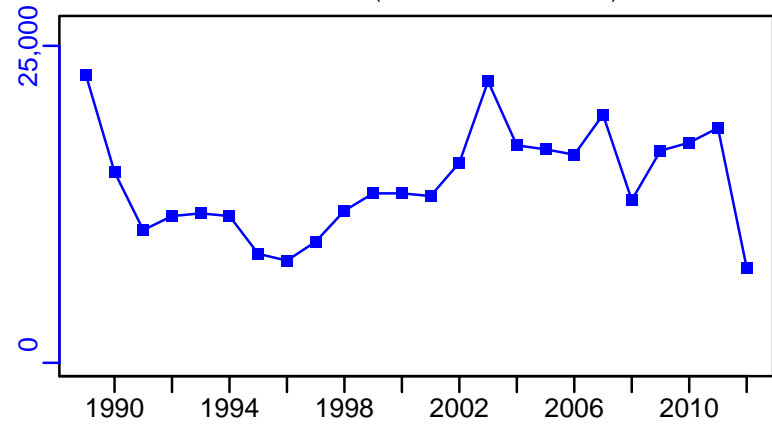
TC-MT, TL*, RecC* (1977-2012-WATSON)

TAC-MT, Cpair-MT, Cadv* (1977-2012-WATSON)



EFFORT-hour (1977-2012-WATSON)

CdivMSY*



Northern shrimp Shrimp Fishing Area 6 [PANDALSFA6]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	DFO-PANDALSFA6-1977-2012-WATSON
Area	Shrimp Fishing Area 6
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
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	SSBlim-MT	2012	79,600
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	395,000	Both	-
SSB	SSB-MT	2012	187,000	-	-
TN	TN-E00	2012	9.29×10^{10}	-	-
R	R-E00	2012	3.14×10^{10}	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.129	-	-
TC	TC-MT	2012	51,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Northern shrimp Shrimp Fishing Area 6 [PANDALSFA6]

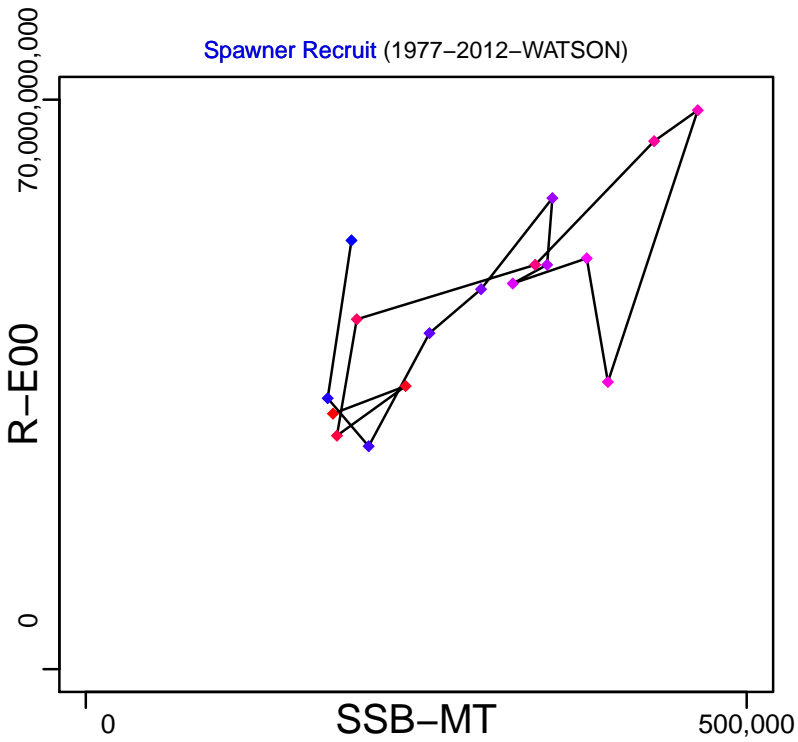
Kobe MSY*



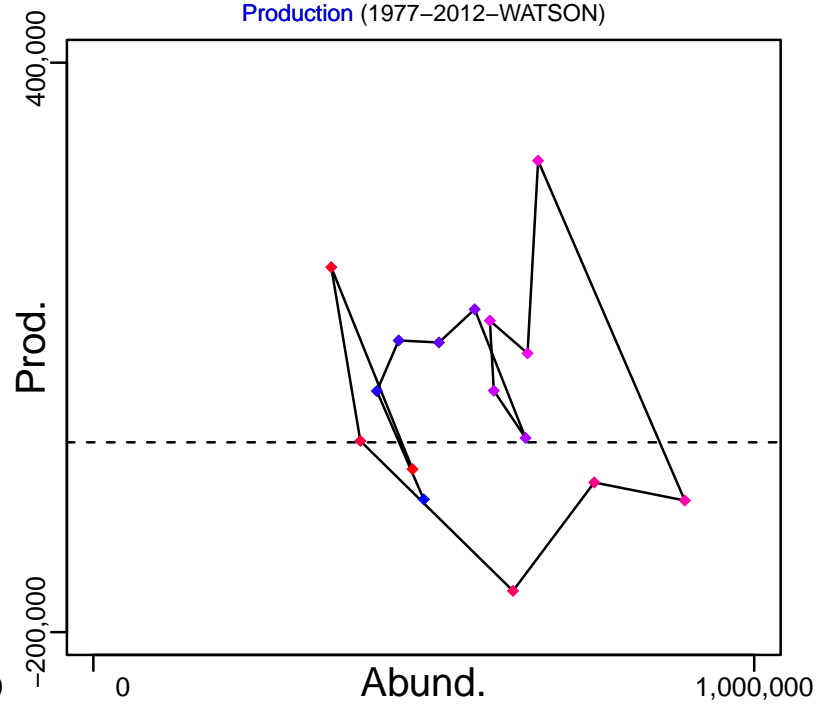
Kobe MGT*



Spawner Recruit (1977–2012–WATSON)

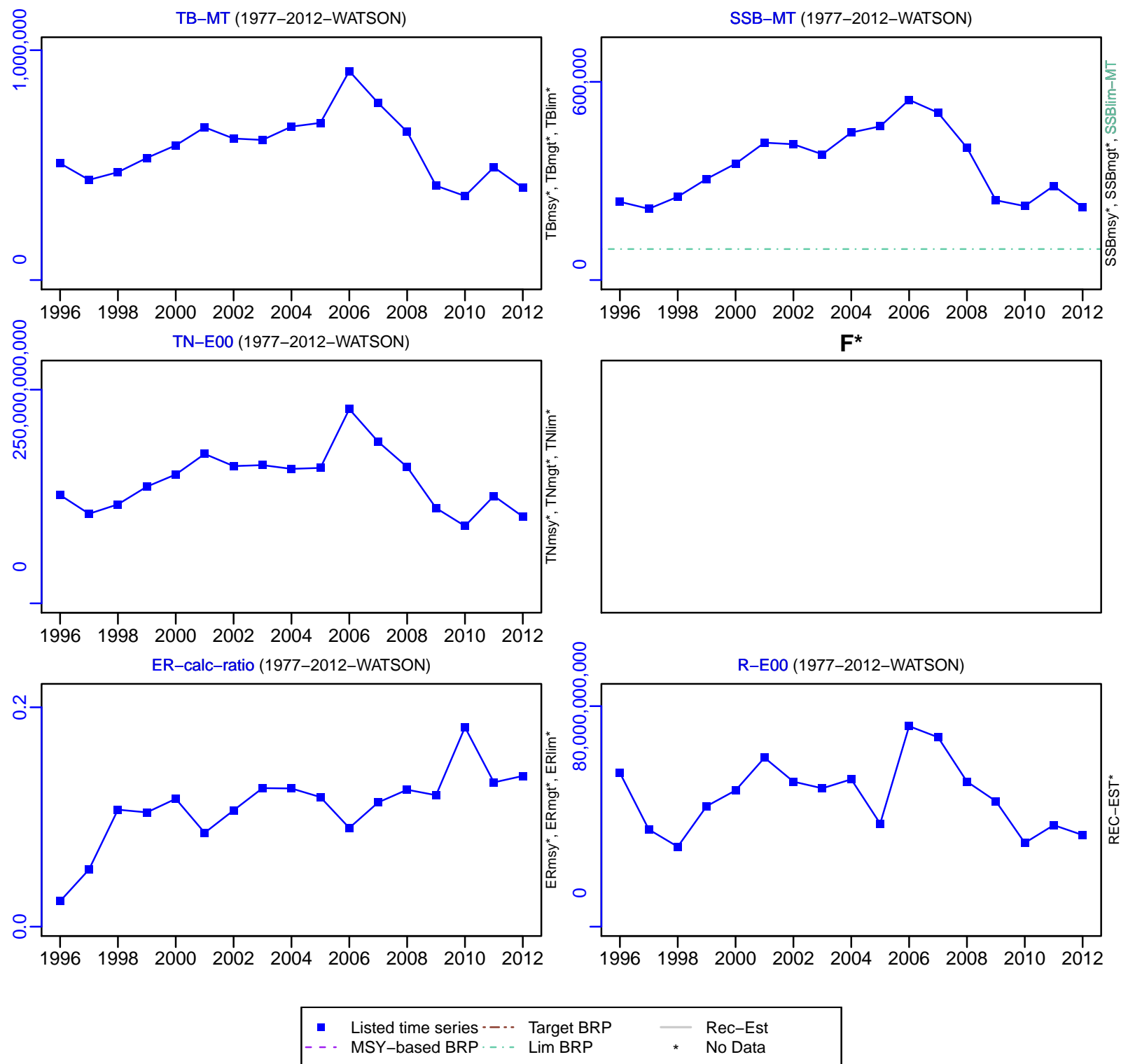


Production (1977–2012–WATSON)



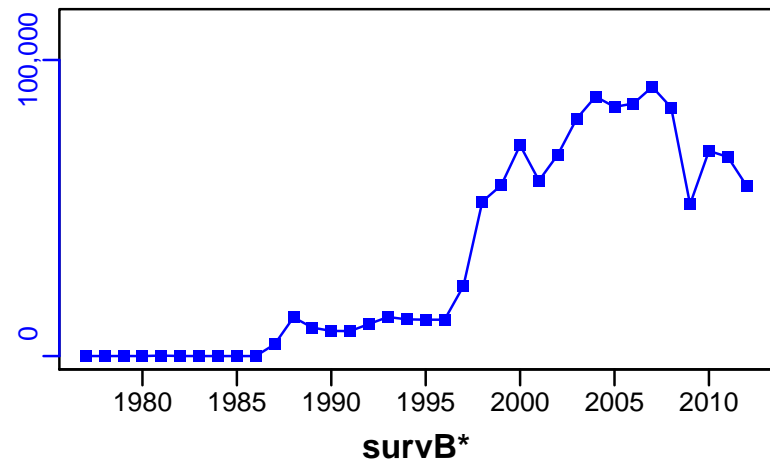
◆ Start Year ◆ End Year * No Data

Northern shrimp Shrimp Fishing Area 6 [PANDALSFA6]

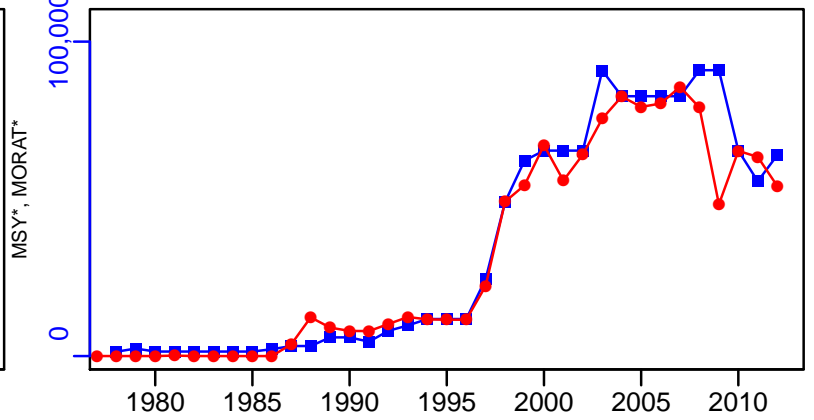


Northern shrimp Shrimp Fishing Area 6 [PANDALSFA6]

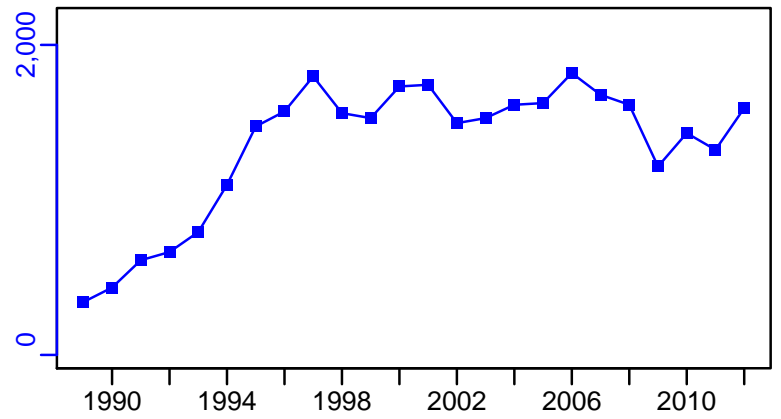
TC-MT, TL*, RecC* (1977-2012-WATSON)



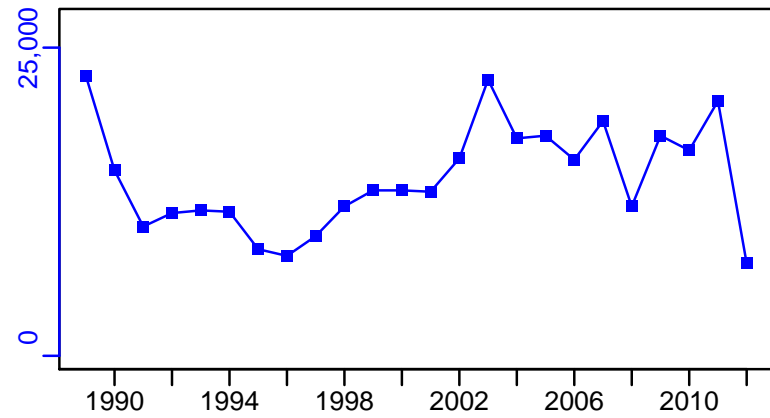
TAC-MT, Cpair-MT, Cadv* (1977-2012-WATSON)



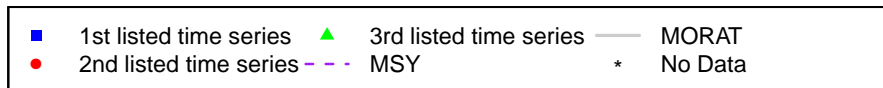
CPUE-index (1977-2012-WATSON)



EFFORT-hour (1977-2012-WATSON)



CdivMSY*



Pollock St. Pierre Bank [POLL3Ps]

Metadata	
Scientific Name	Pollachius virens
Current Assess ID	DFO-NFLD-POLL3Ps-1960-2013-OSGOOD
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	2013

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	2013	184		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



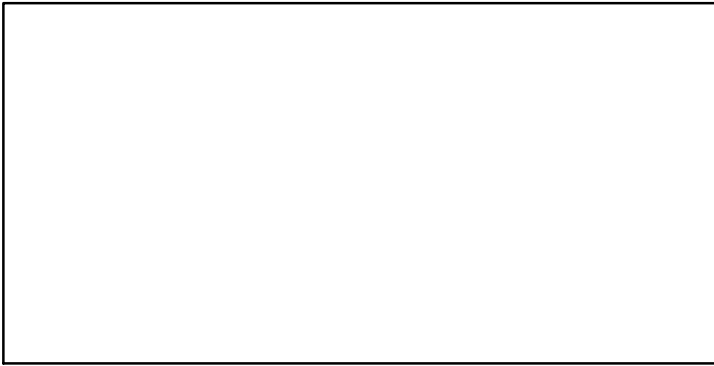
Production*



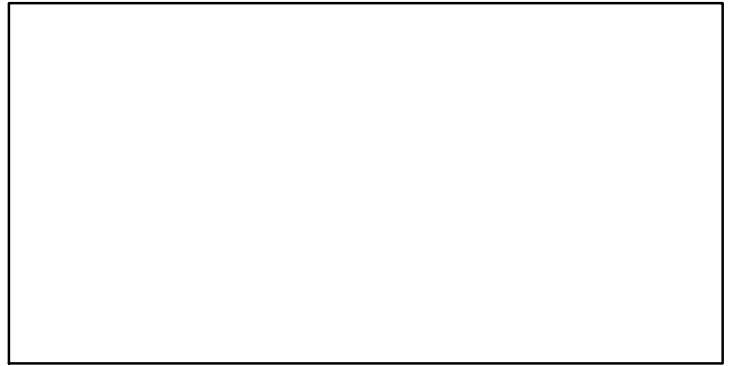
◆ Start Year ◆ End Year * No Data

Pollock St. Pierre Bank [POLL3Ps]

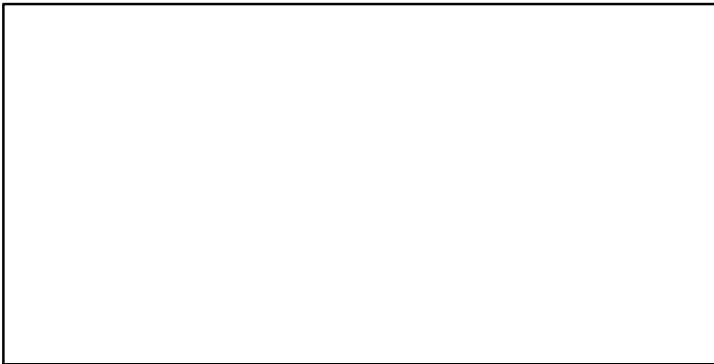
TB*



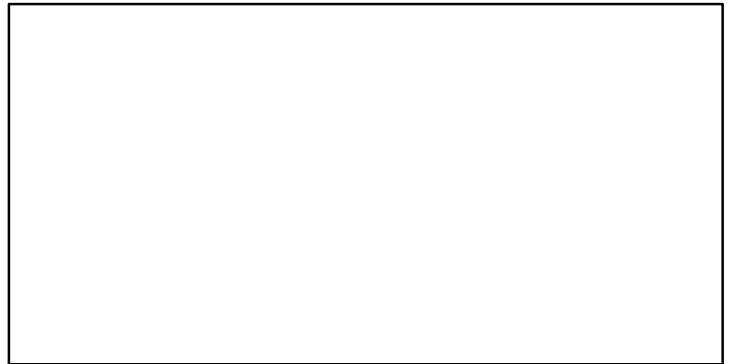
SSB*



TN *



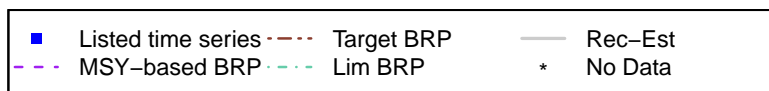
F*



ER*

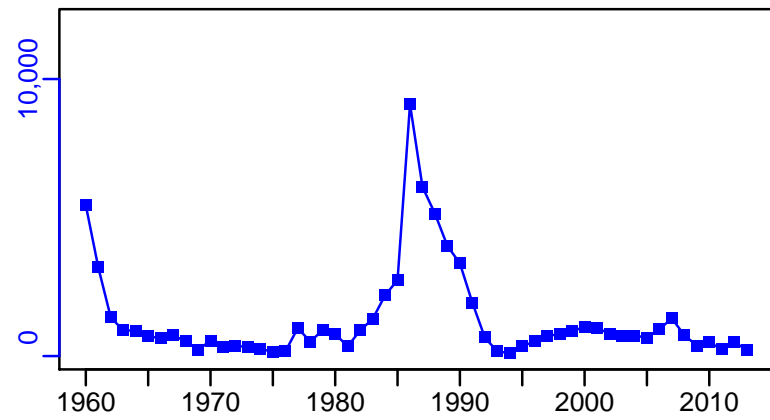


Recruits*

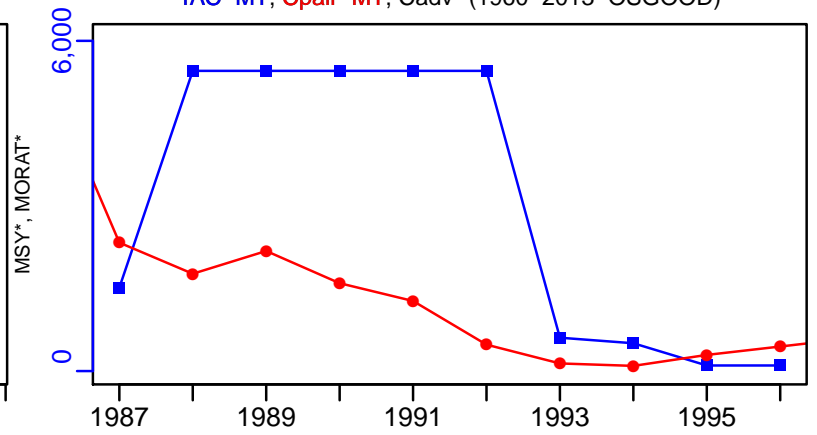


Pollock St. Pierre Bank [POLL3Ps]

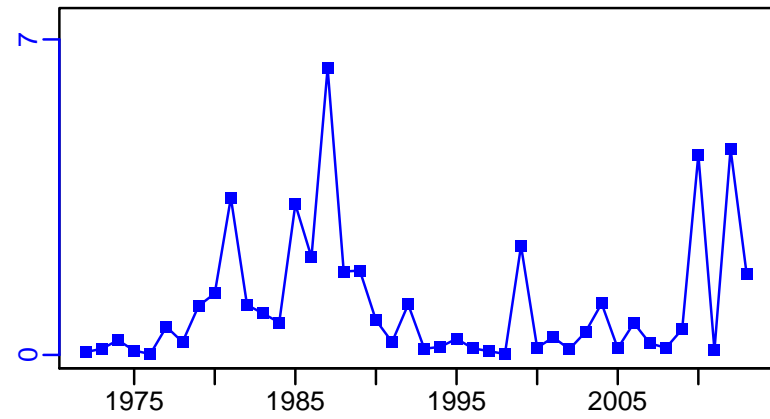
TL-MT, TC*, RecC* (1960-2013-OSGOOD)



TAC-MT, Cpair-MT, Cadv* (1960-2013-OSGOOD)



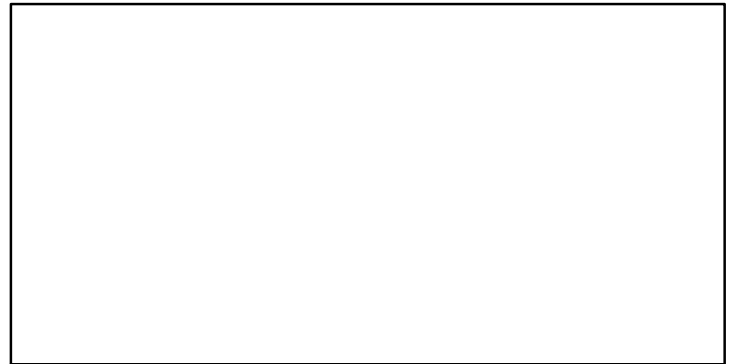
survB-kg/tow (1960-2013-OSGOOD)



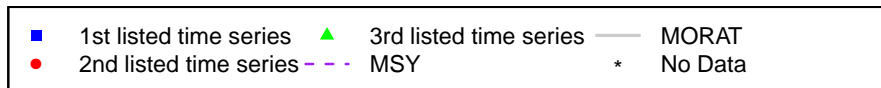
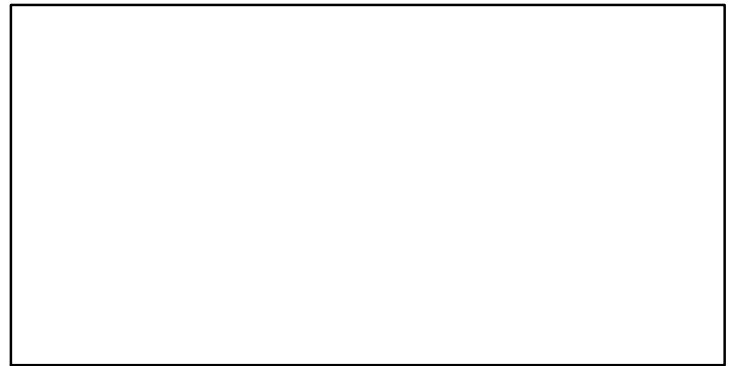
EFFORT*



CPUE*



CdivMSY*



Pollock Scotian Shelf and Bay of Fundy [POLL4VWX]

Metadata	
Scientific Name	Pollachius virens
Current Assess ID	DFO-MAR-POLL4VWX-1982-2011-OSGOOD
Area	Scotian Shelf and Bay of Fundy
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	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	1430		
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

Pollock Scotian Shelf and Bay of Fundy [POLL4VWX]

TB*



SSB*



TN *



F*



ER*

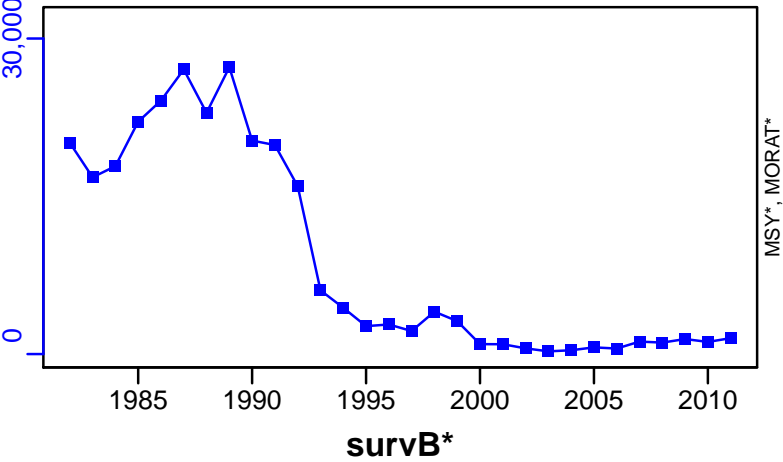


Recruits*



Pollock Scotian Shelf and Bay of Fundy [POLL4VWX]

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



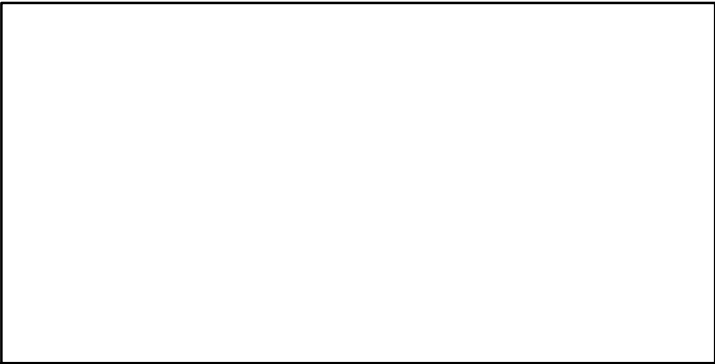
TAC*, Cpair*, Cadv*



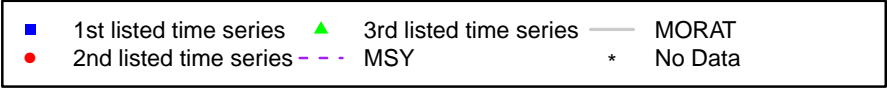
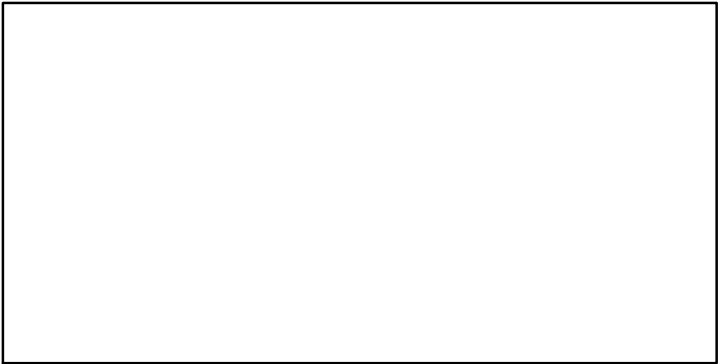
CPUE*



EFFORT*



CdivMSY*



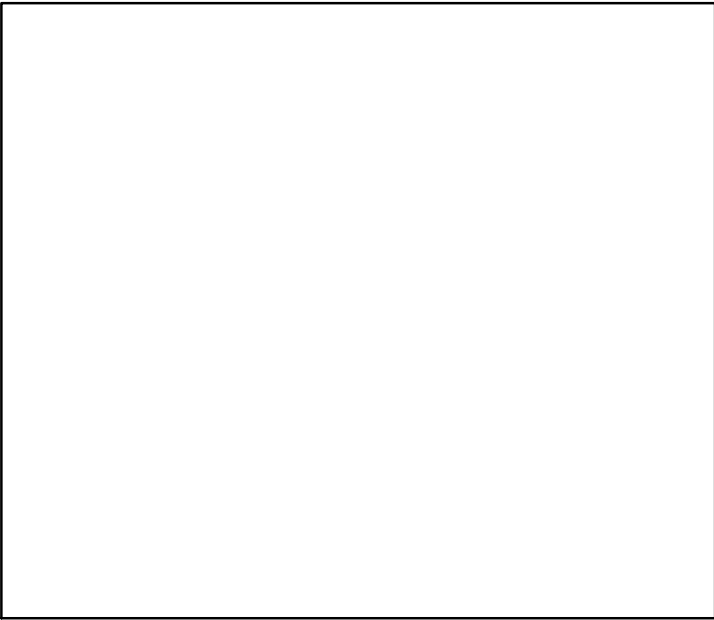
Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]

Metadata	
Scientific Name	Lamna nasus
Current Assess ID	DFO-PORSHARATL-1960-2014-OSGOOD
Area	Canadian Atlantic Ocean
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-E00	2014	34,573
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-E00	2014	27,658
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2014	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2014	12,900	-	-
TN	TN-E00	2014	199,000	Both	-
R	R-E00	2014	26,500	Both	1
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	81		
TL	TL-MT	2014	9		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-E00/SSBmsy-E00	2014	0.373		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-E00/SSBmgt-E00	2014	0.466		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

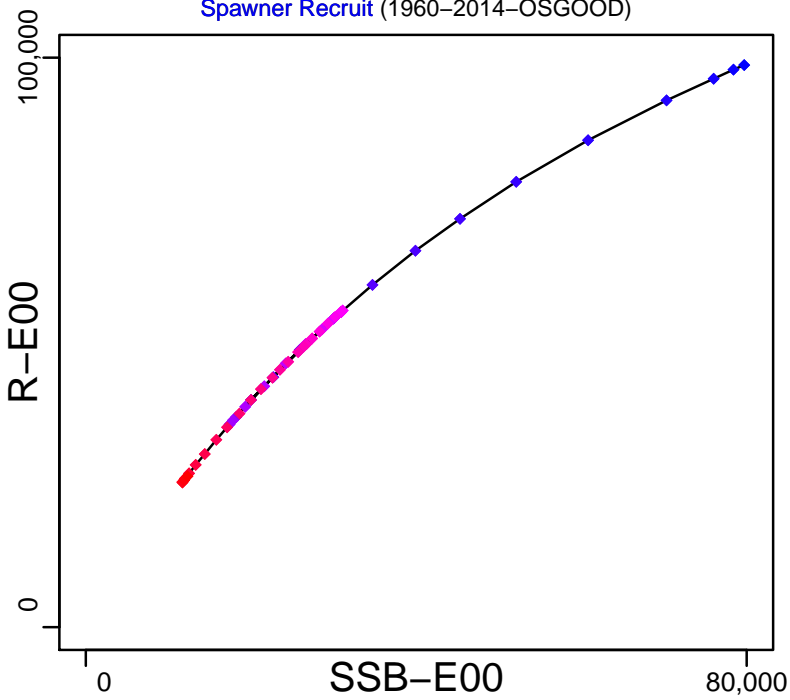
Kobe MSY*



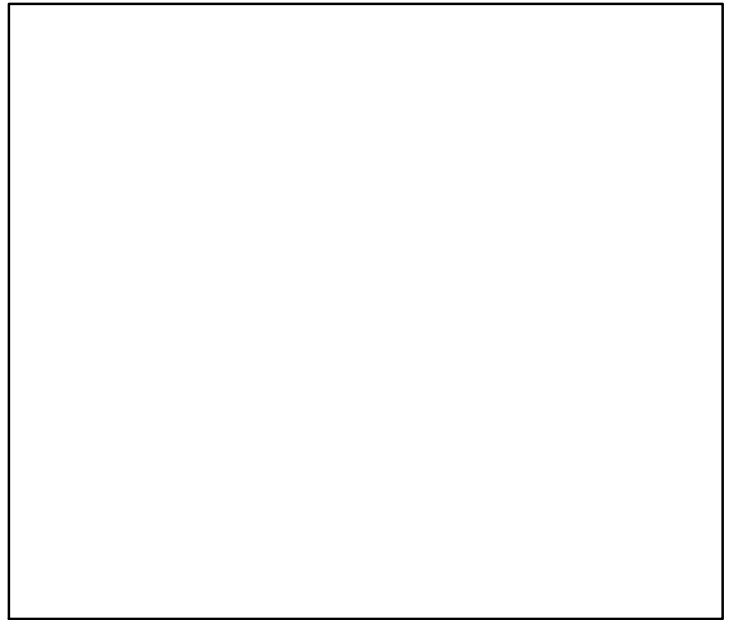
Kobe MGT*



Spawner Recruit (1960–2014–OSGOOD)



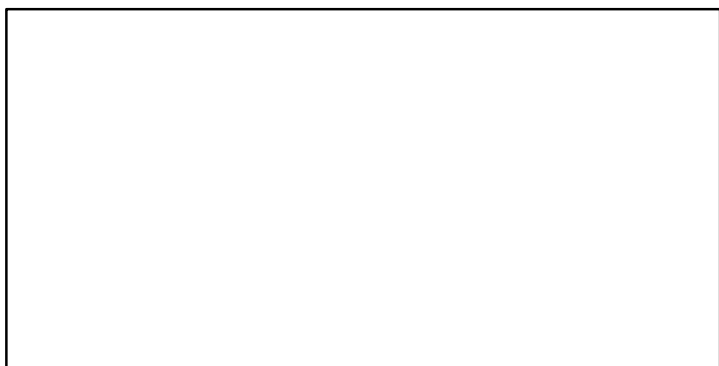
Production*



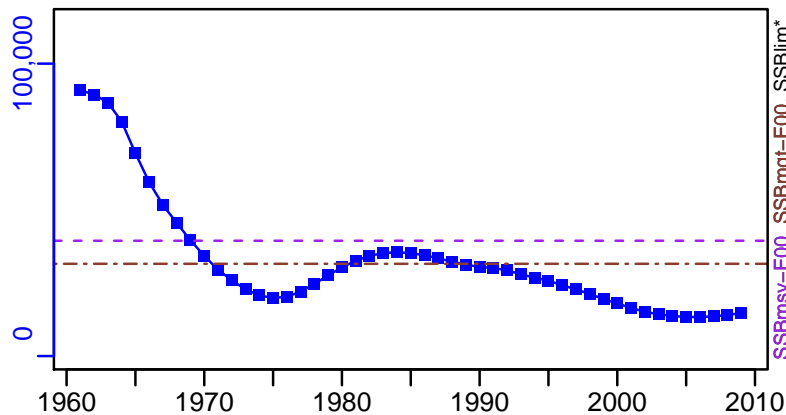
◆ Start Year ◆ End Year * No Data

Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]

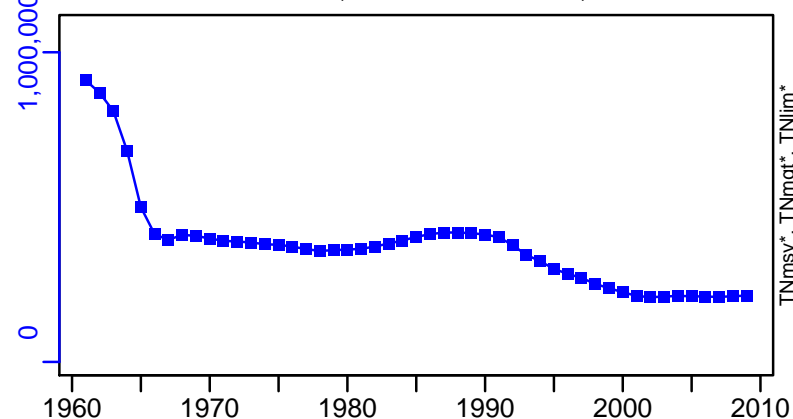
TB*



SSB-E00 (1960–2014–OSGOOD)



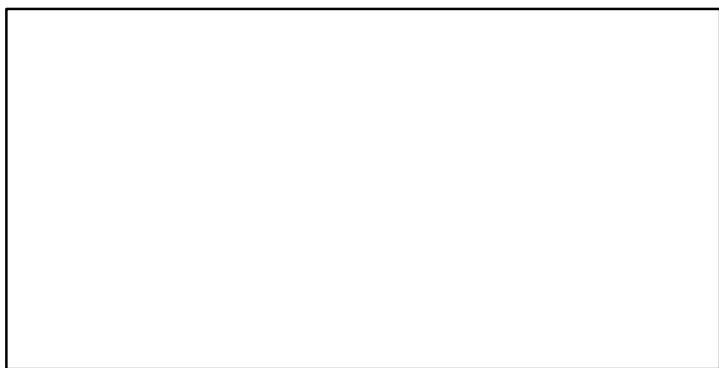
TN-E00 (1960–2014–OSGOOD)



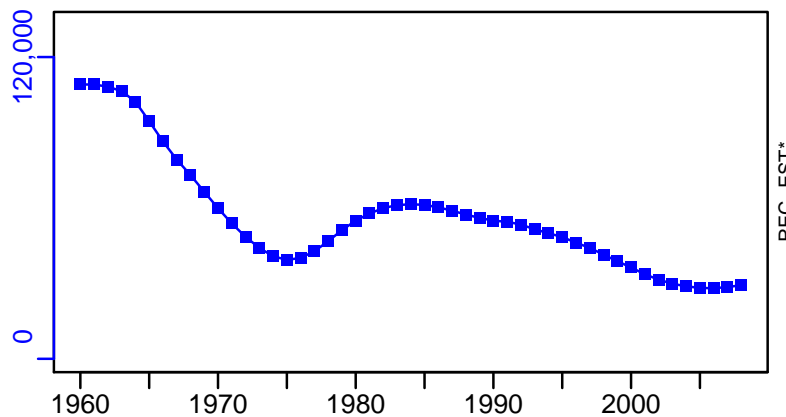
F*



ER*

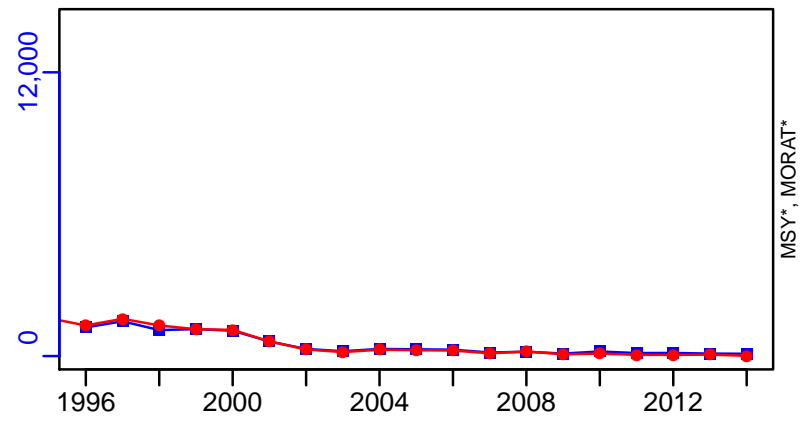


R-E00 (1960–2014–OSGOOD)



Porbeagle shark Canadian Atlantic Ocean [PORSHARATL]

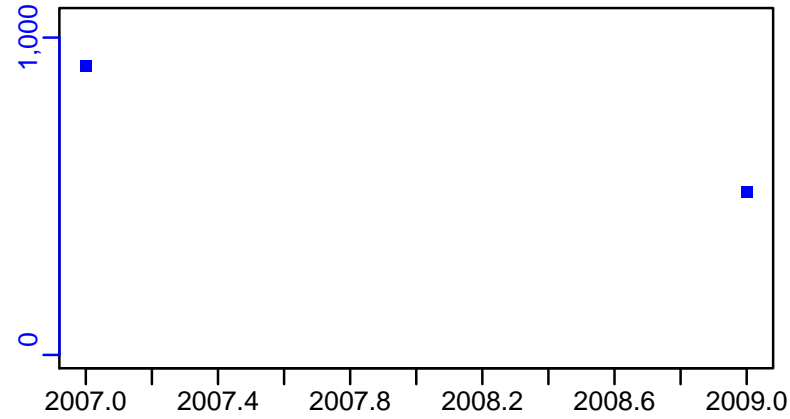
TC-MT, TL-MT, RecC* (1960-2014-OSGOOD)



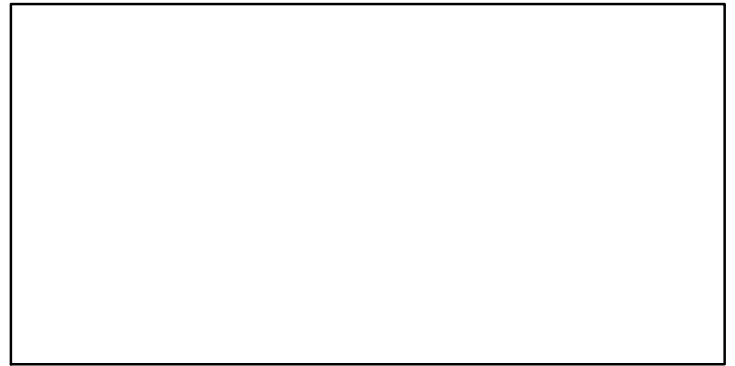
TAC*, Cpair*, Cadv*



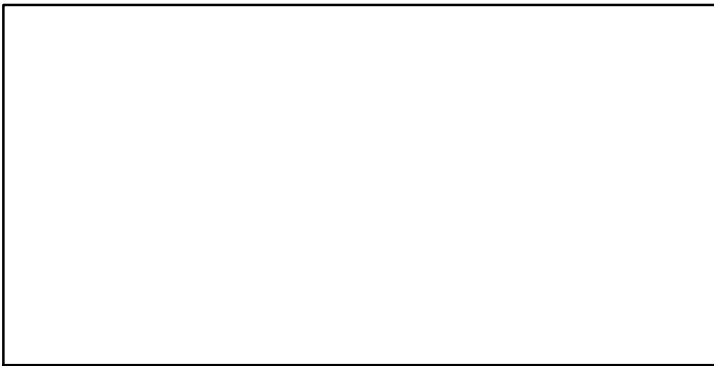
survB-E00 (1960-2014-OSGOOD)



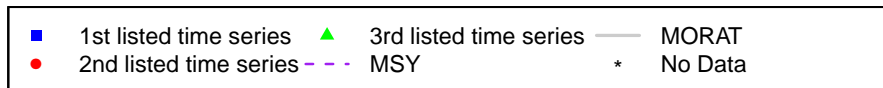
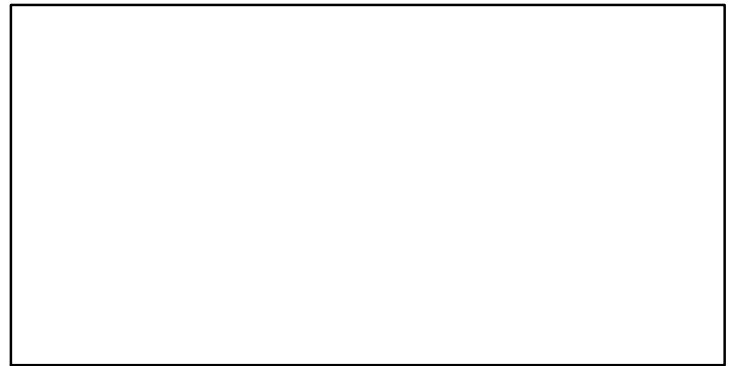
CPUE*



EFFORT*



CdivMSY*



Deepwater redfish NAFO Divisions 2J3K-3LNO [REDDEEP2J3K-3LNO]

Metadata	
Scientific Name	Sebastes mentella
Current Assess ID	DFO-REDDEEP2J3K-3LNO-1960-2010-WATSON
Area	NAFO Divisions 2J3K-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	MSY-MT	2010	22,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	159,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2010	0.006	-	-
TC	TC-MT	2010	1000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

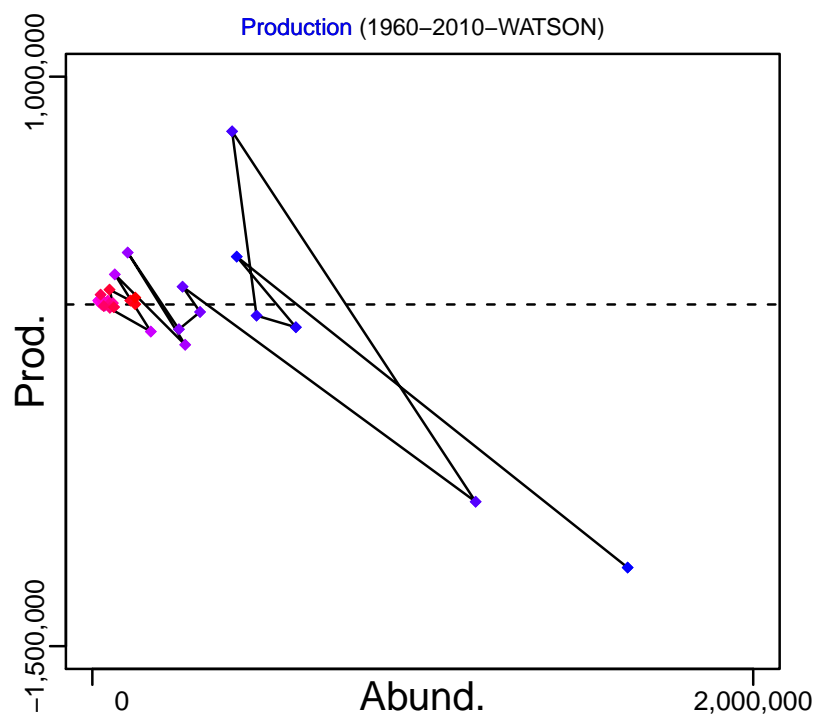
Kobe MSY*



Kobe MGT*



Spawner Recruit*

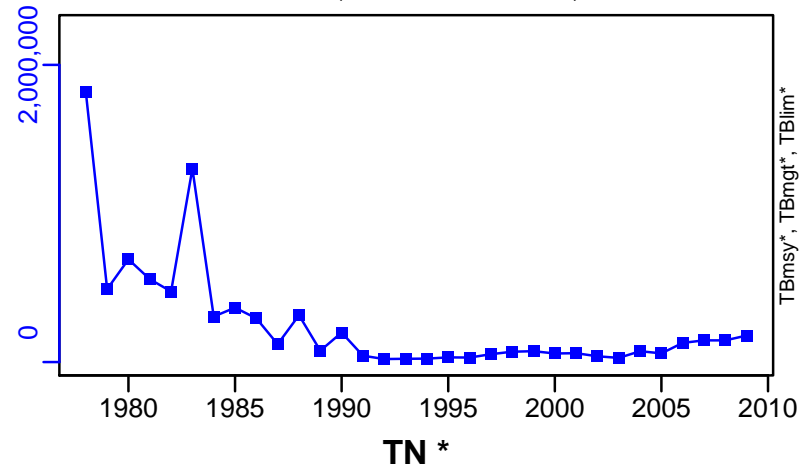


◆ Start Year ◆ End Year * No Data

Deepwater redfish NAFO Divisions 2J3K-3LNO [REDDEEP2J3K-3LNO]

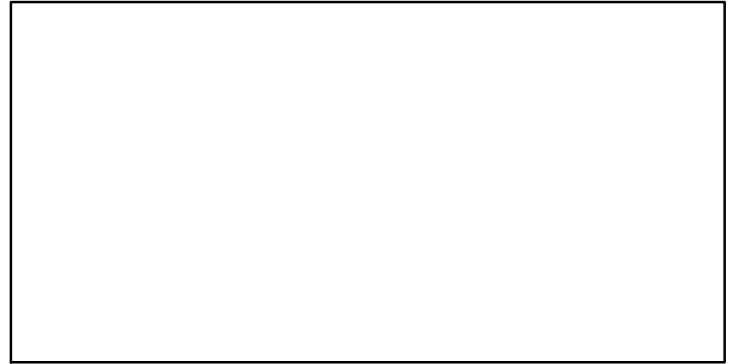
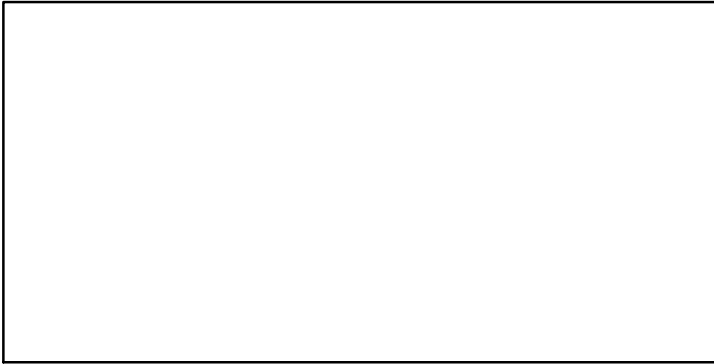
TB-MT (1960-2010-WATSON)

SSB*



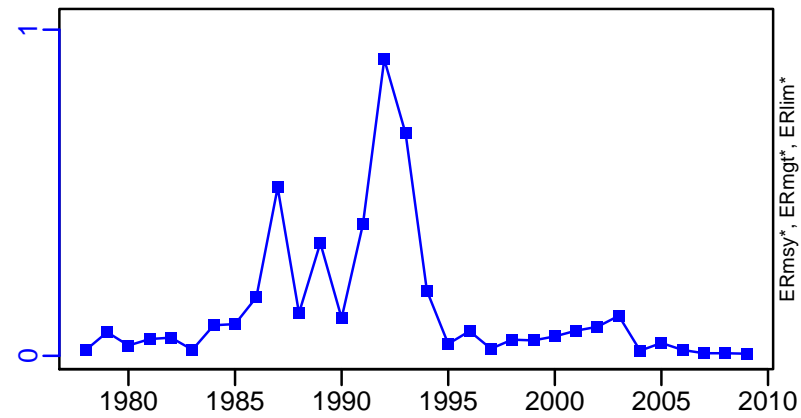
TN *

F*



ER-calc-ratio (1960-2010-WATSON)

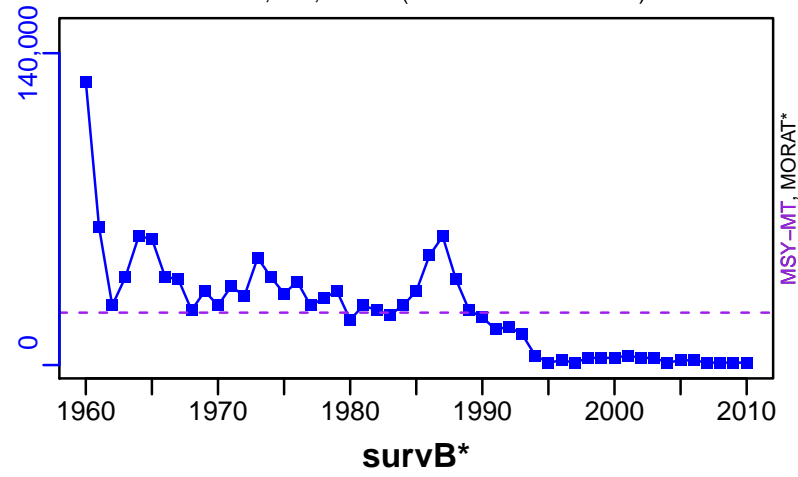
Recruits*



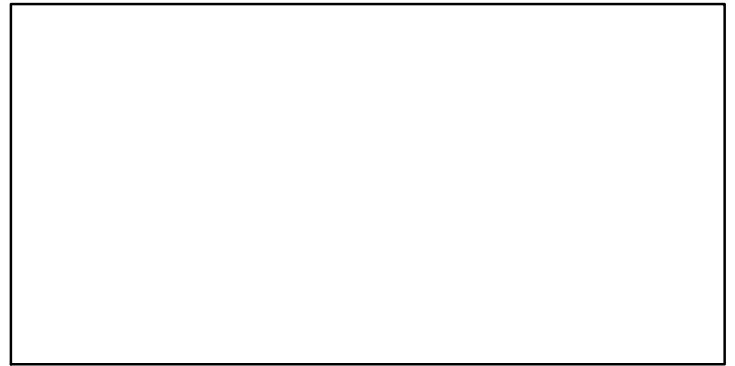
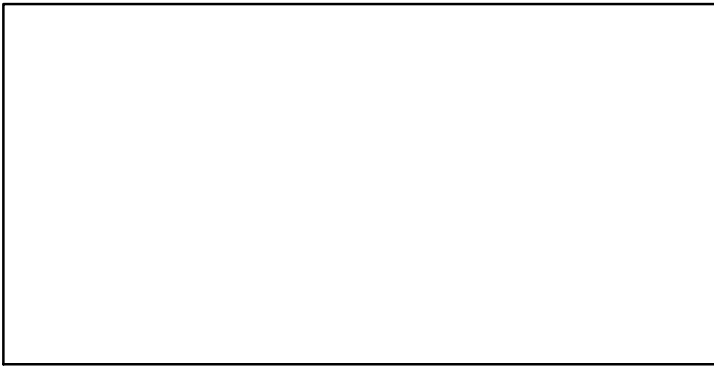
Deepwater redfish NAFO Divisions 2J3K-3LNO [REDDEEP2J3K-3LNO]

TC-MT, TL*, RecC* (1960-2010-WATSON)

TAC*, Cpair*, Cadv*



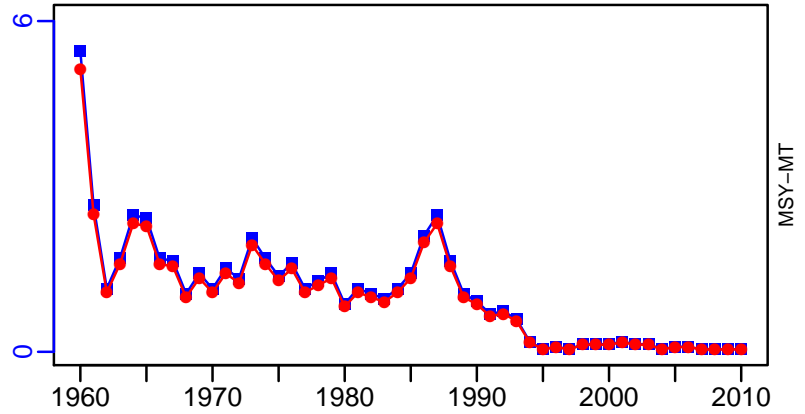
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2010-WATSON)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

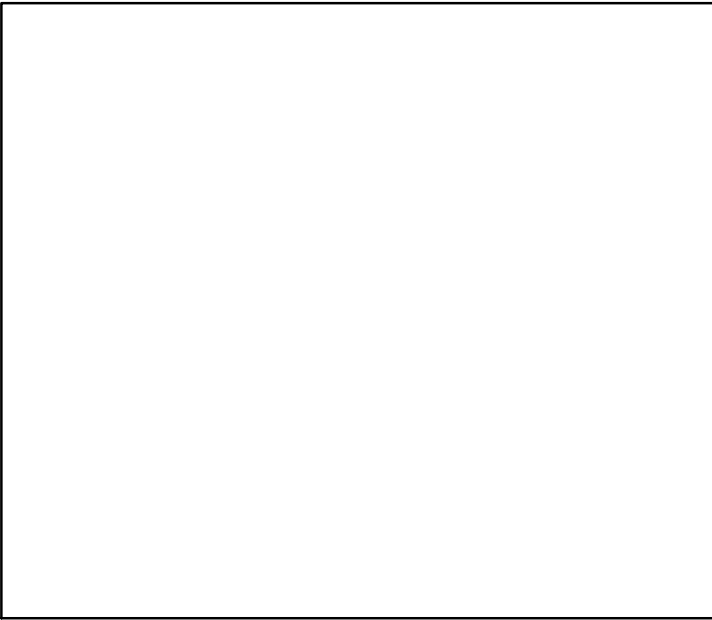
Deepwater redfish Units 1 and 2 [REDDEEPUT12]

Metadata	
Scientific Name	Sebastes mentella
Current Assess ID	DFO-REDDEEPUT12-1960-2010-WATSON
Area	Units 1 and 2
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	MSY-MT	2010	21,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	115,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2010	0.026	-	-
TC	TC-MT	2010	3000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

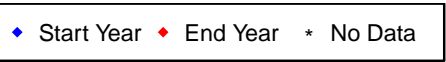
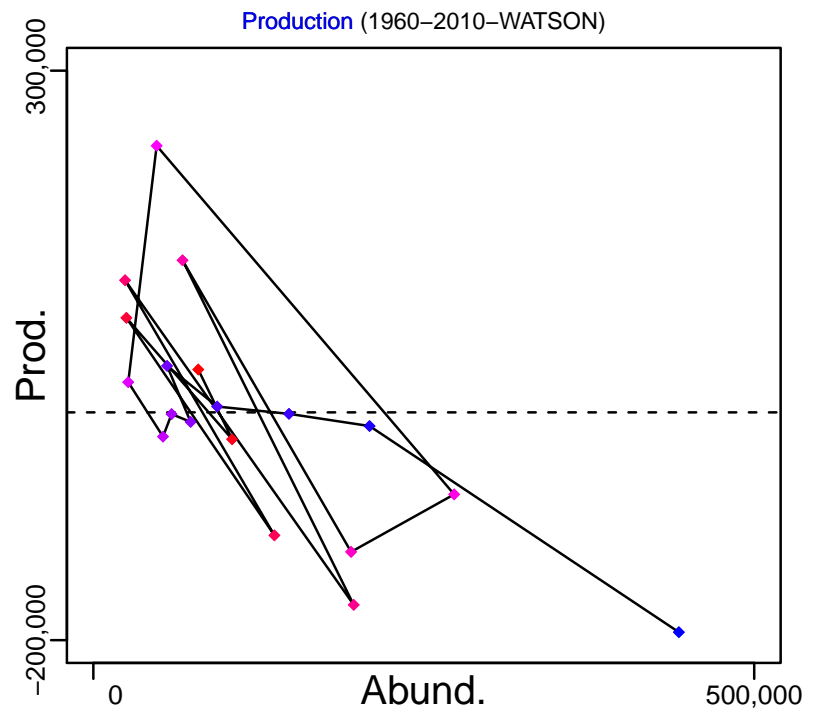
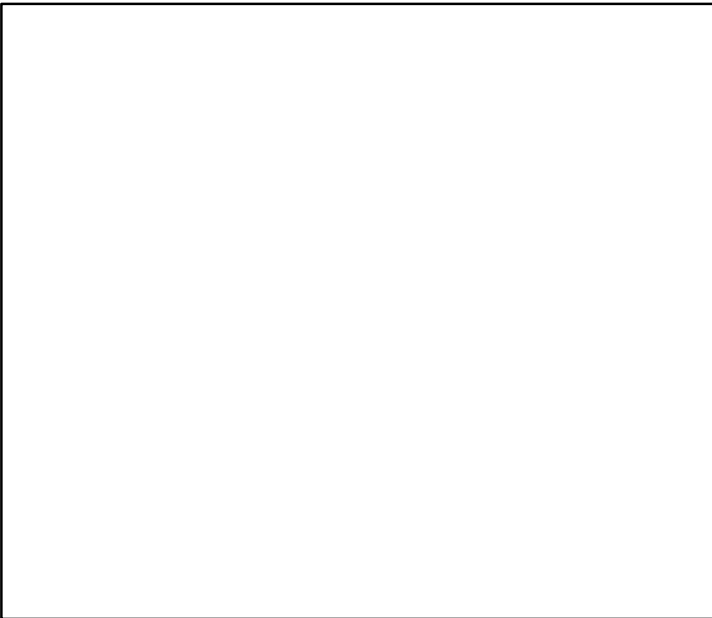
Kobe MSY*



Kobe MGT*



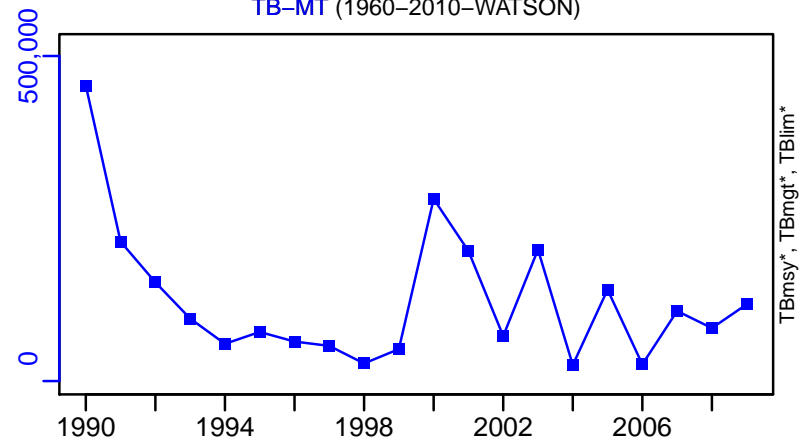
Spawner Recruit*



Deepwater redfish Units 1 and 2 [REDDEEPUT12]

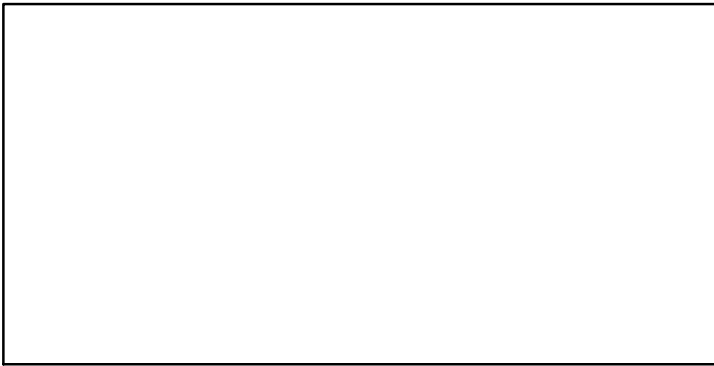
TB-MT (1960-2010-WATSON)

SSB*



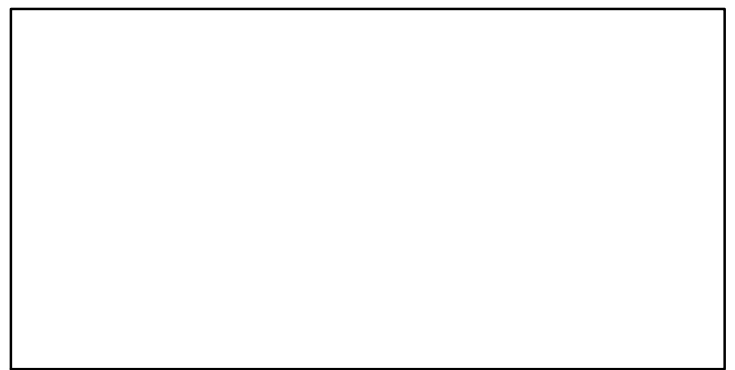
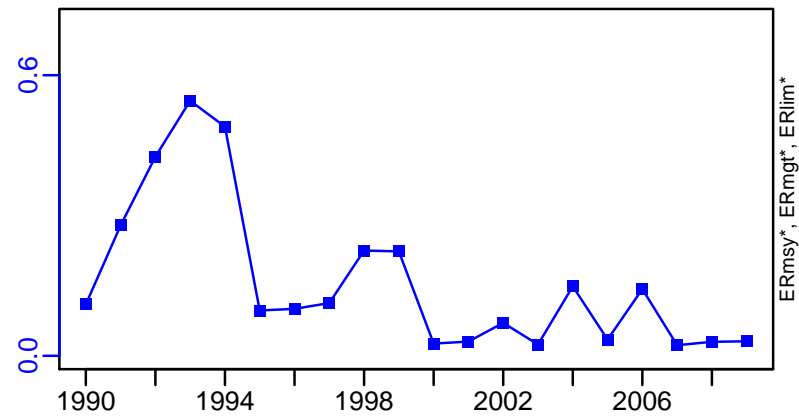
TN *

F*



ER-calc-ratio (1960-2010-WATSON)

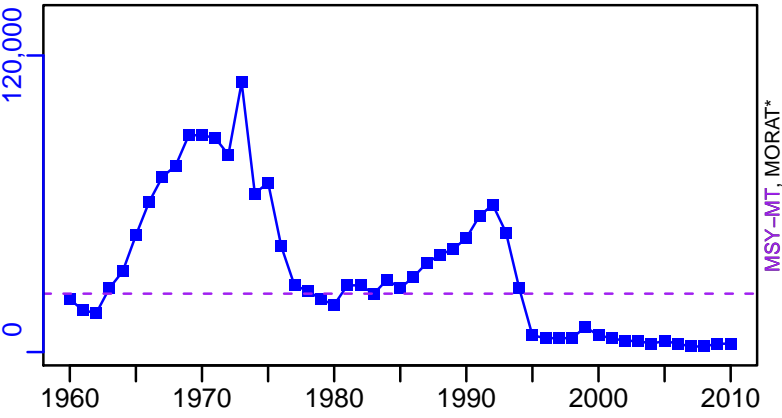
Recruits*



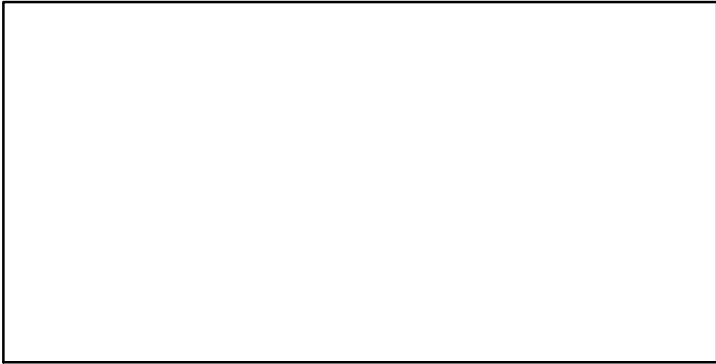
Deepwater redfish Units 1 and 2 [REDDEEPUT12]

TC-MT, TL*, RecC* (1960-2010-WATSON)

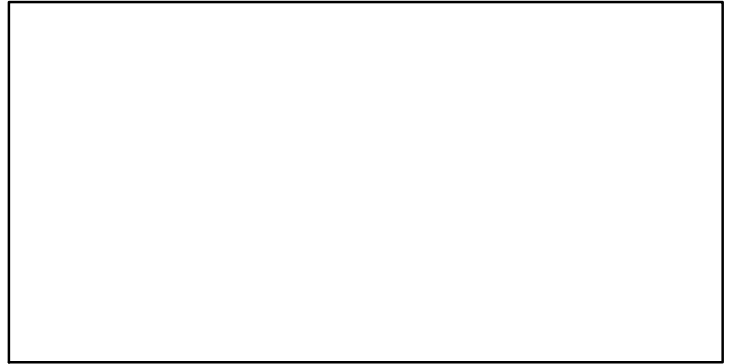
TAC*, Cpair*, Cadv*



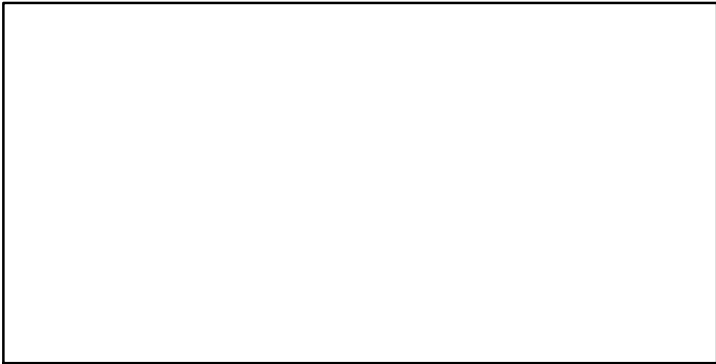
survB*



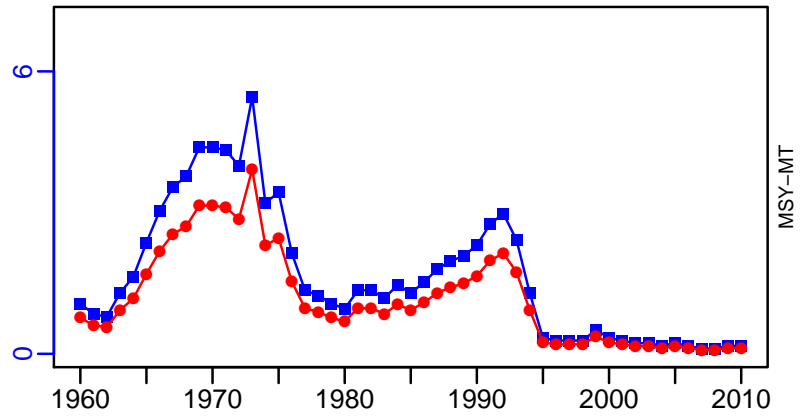
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2010-WATSON)



- 1st listed time series
- 2nd listed time series
- 3rd listed time series
- MORAT
- MSY
- No Data

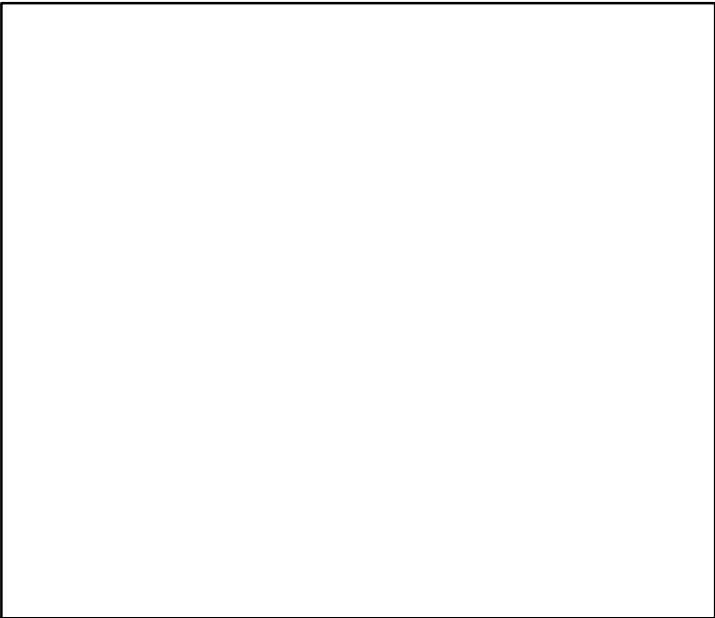
Redfish species West Greenland [REDFISHSPP1]

Metadata	
Scientific Name	Sebastes spp
Current Assess ID	NAFO-SC-REDFISHSPP1-1965-2004-PREFONTAINE
Area	West Greenland
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2004

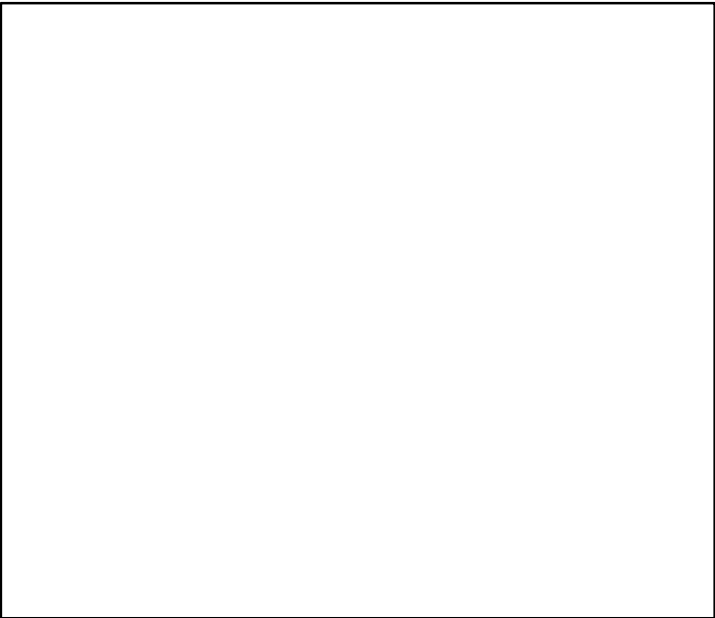
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2004	500		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

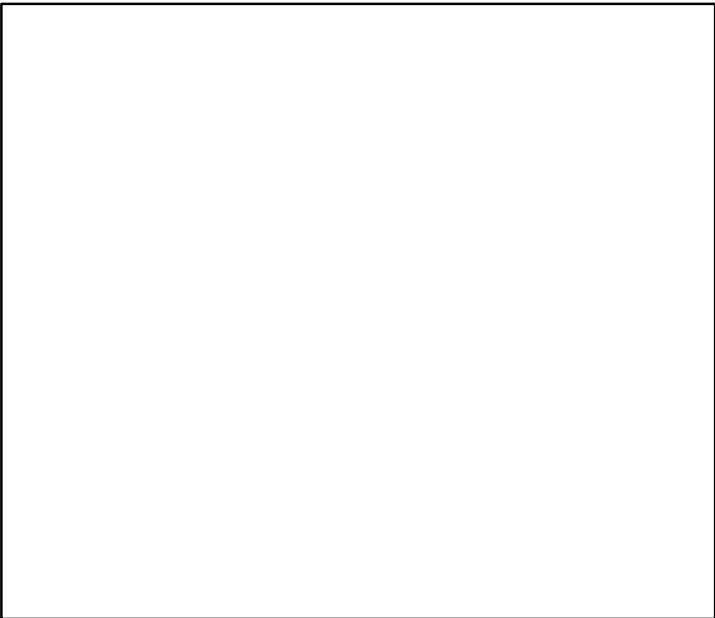
Kobe MSY*



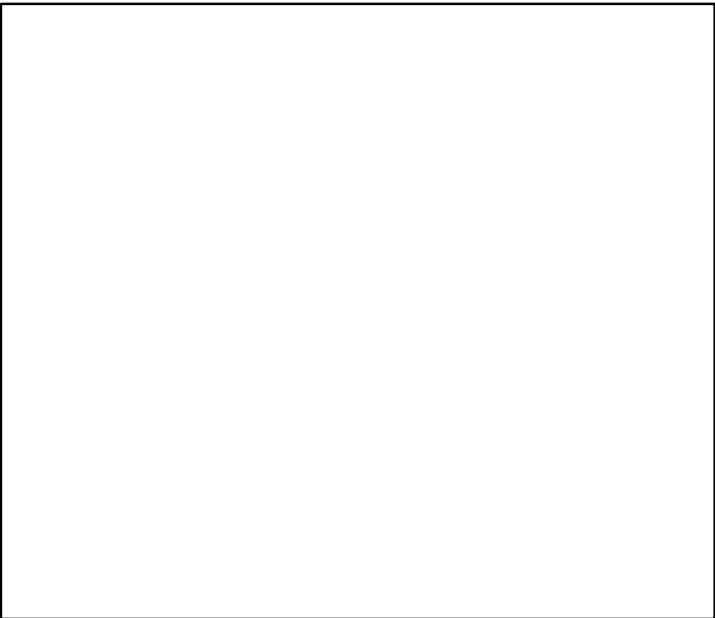
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Redfish species West Greenland [REDFISHSPP1]

TB*



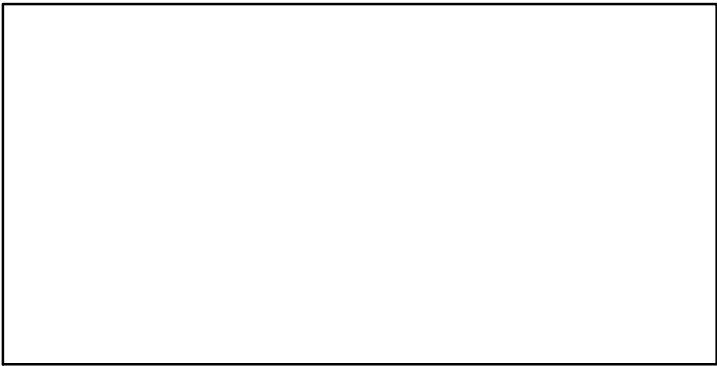
SSB*



TN *



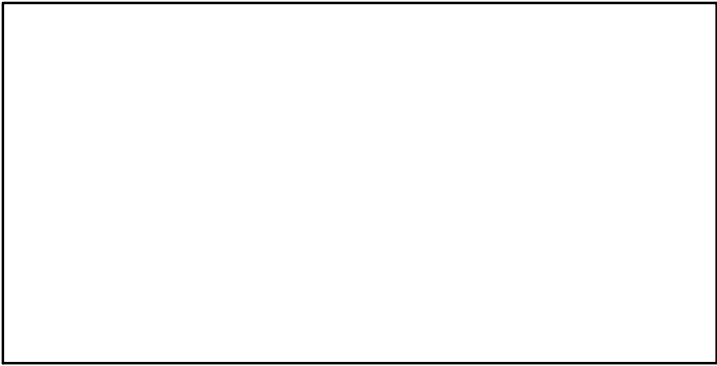
F*



ER*



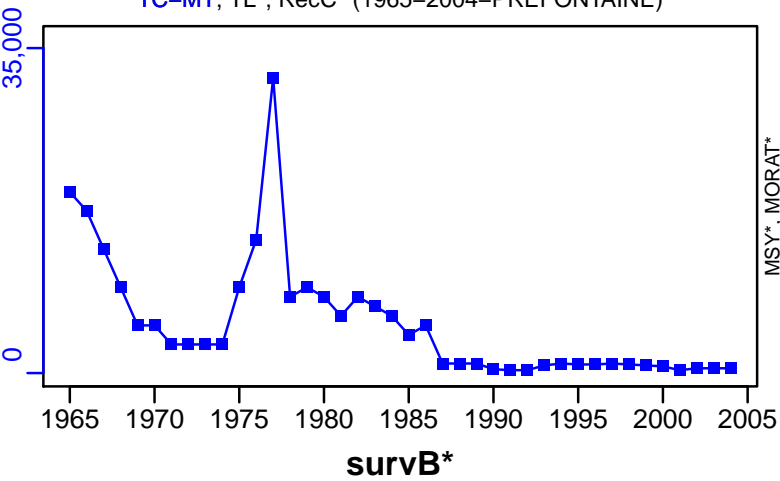
Recruits*



■ Listed time series	- - - Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Redfish species West Greenland [REDFISHSPP1]

TC-MT, TL*, RecC* (1965-2004-PREFONTAINE)



TAC*, Cpair*, Cadv*



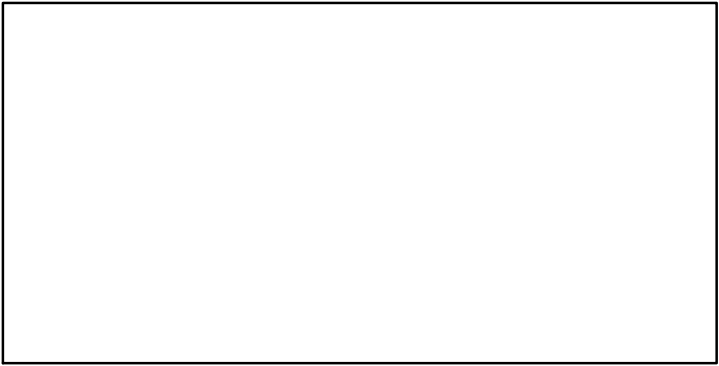
CPUE*



EFFORT*



CdivMSY*



Redfish species N and SW Grand Banks [REDFISHSPP3LN]

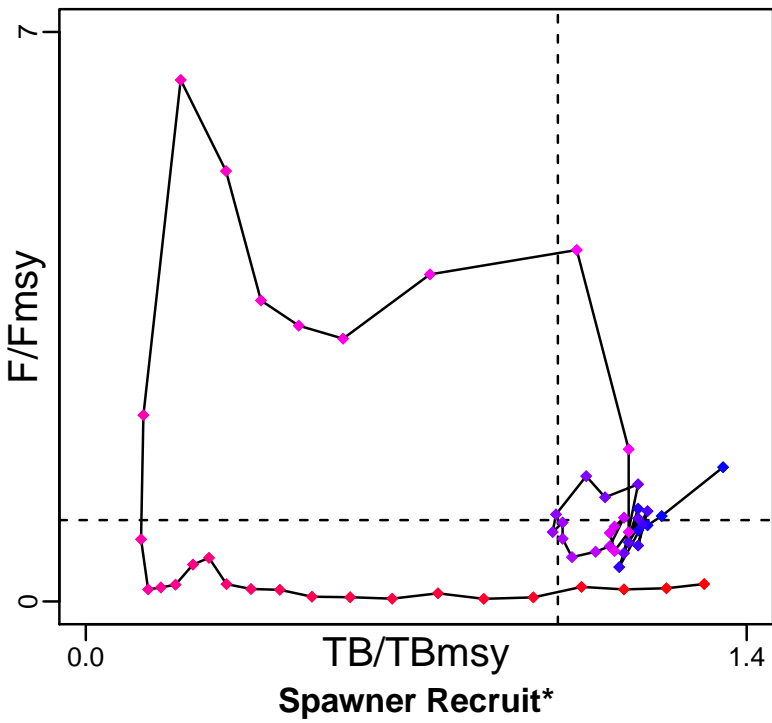
Metadata	
Scientific Name	Sebastes spp
Current Assess ID	NAFO-SC-REDFISHSPP3LN-1959-2013-WATSON
Area	N and SW Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2008, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2008	141,900
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2008	0.172
ERmsy	ERmsy-ratio	2008	0.172
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2008	24,440
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

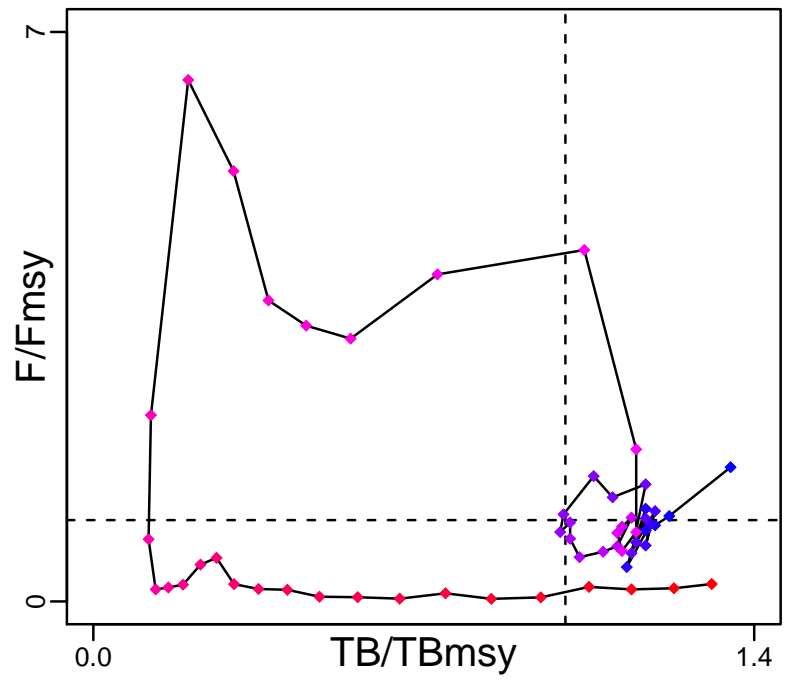
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2008	267,000	-	ALL AGES
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2008	0.007	Both	-
ER	ER-ratio	2008	0.006	-	-
TC	TC-MT	2013	6000		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2013	1.31		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2013	0.214		
ER/ERmsy	ER-ratio/ERmsy-ratio	2008	0.037		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Redfish species N and SW Grand Banks [REDFISHSPP3LN]

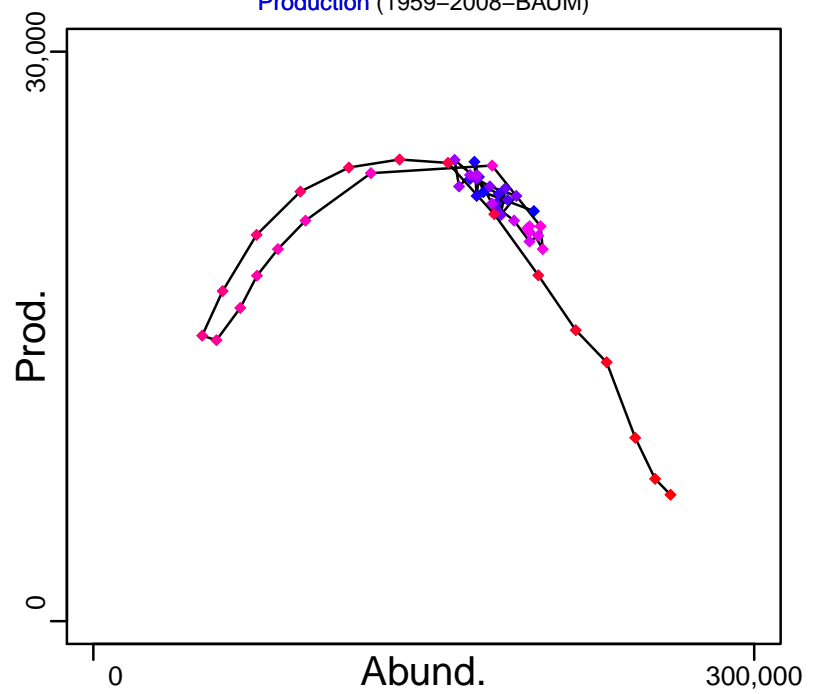
Kobe MSYpref (1959–2013–WATSON)



Kobe MGTpref (1959–2013–WATSON)

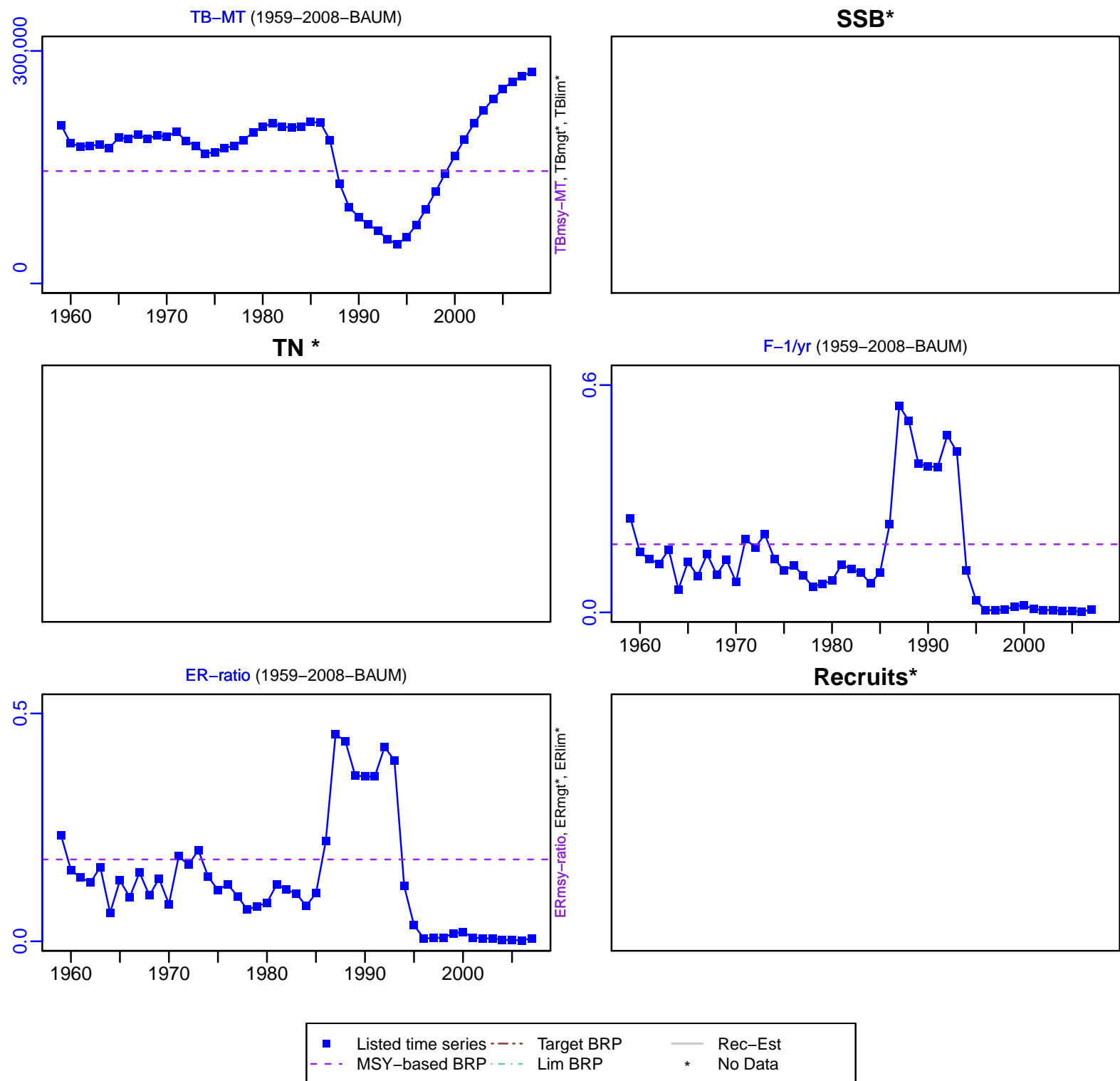


Production (1959–2008–BAUM)



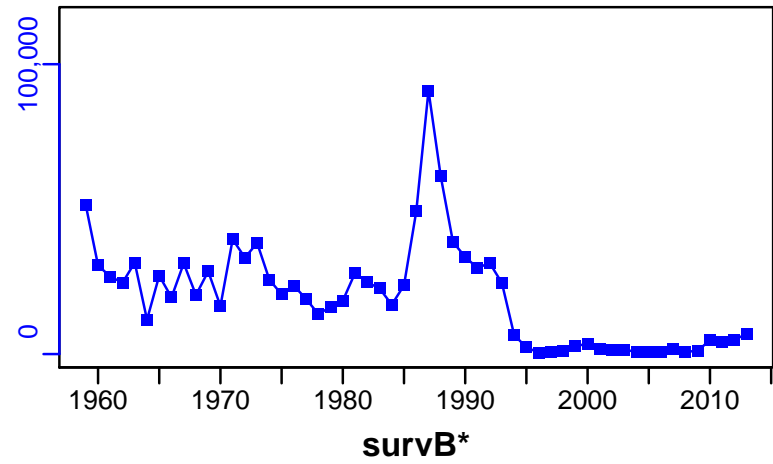
◆ Start Year ◆ End Year * No Data

Redfish species N and SW Grand Banks [REDFISHSPP3LN]

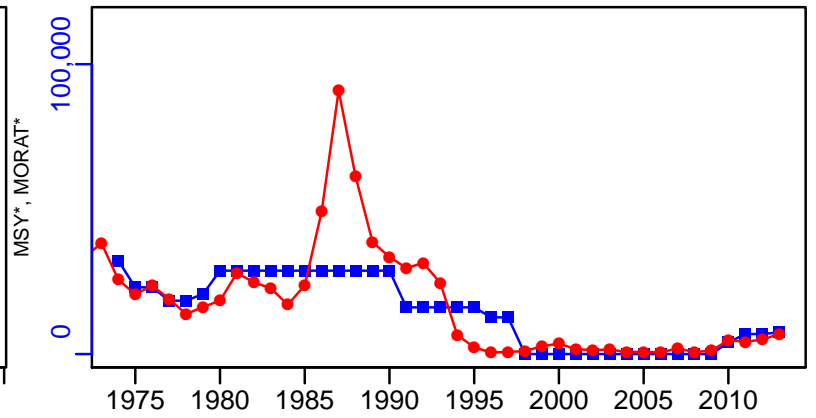


Redfish species N and SW Grand Banks [REDFISHSPP3LN]

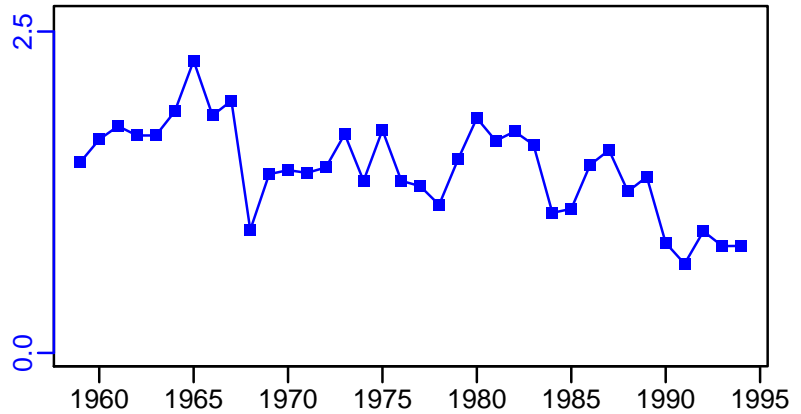
TC-MT, TL*, RecC* (1959-2013-WATSON)



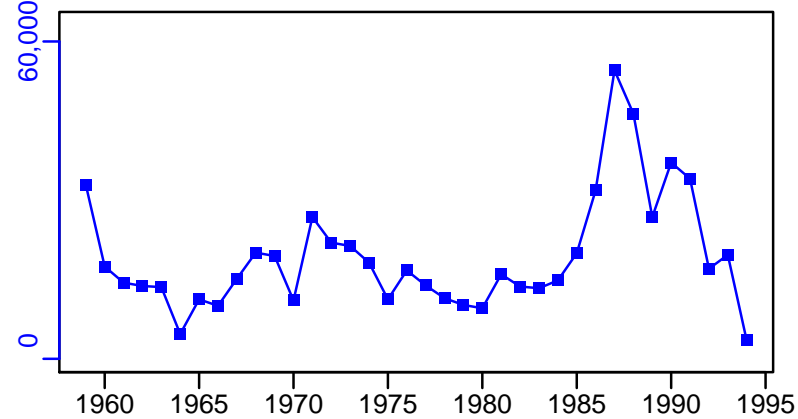
TAC-MT, Cpair-MT, Cadv* (1959-2013-WATSON)



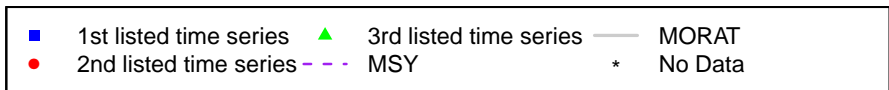
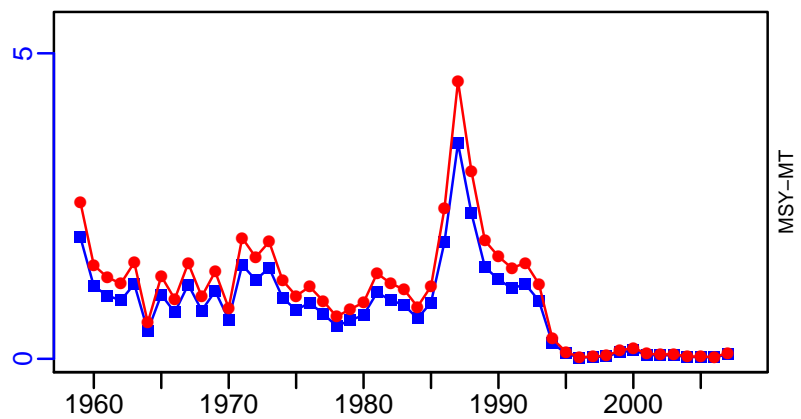
CPUE-MT/hour (1959-2013-WATSON)



EFFORT-hour (1959-2013-WATSON)



TC-MT/MSY-MT, CdivMEANC-ratio, (1959-2008-BAUM)

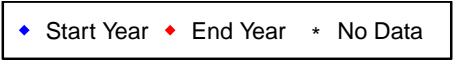
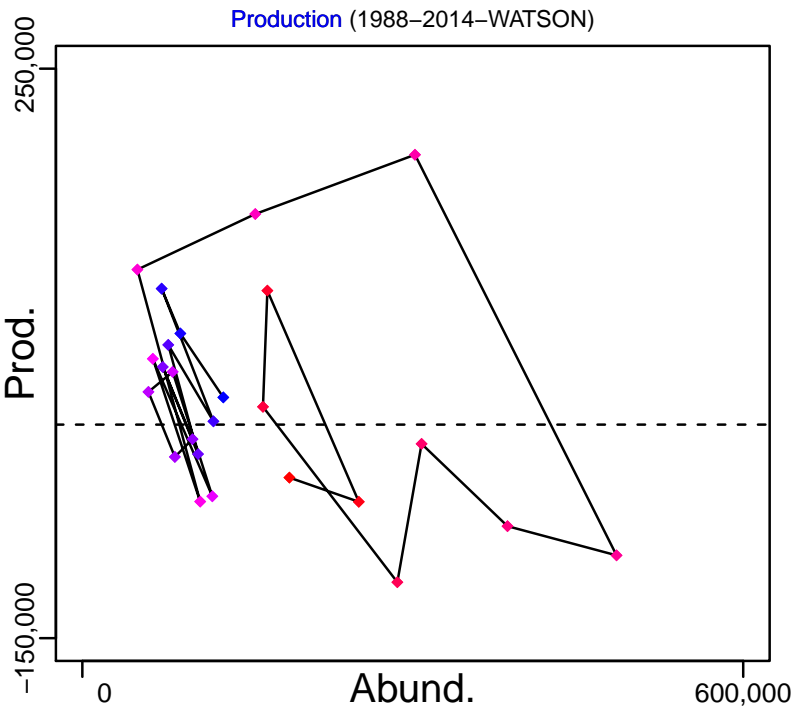
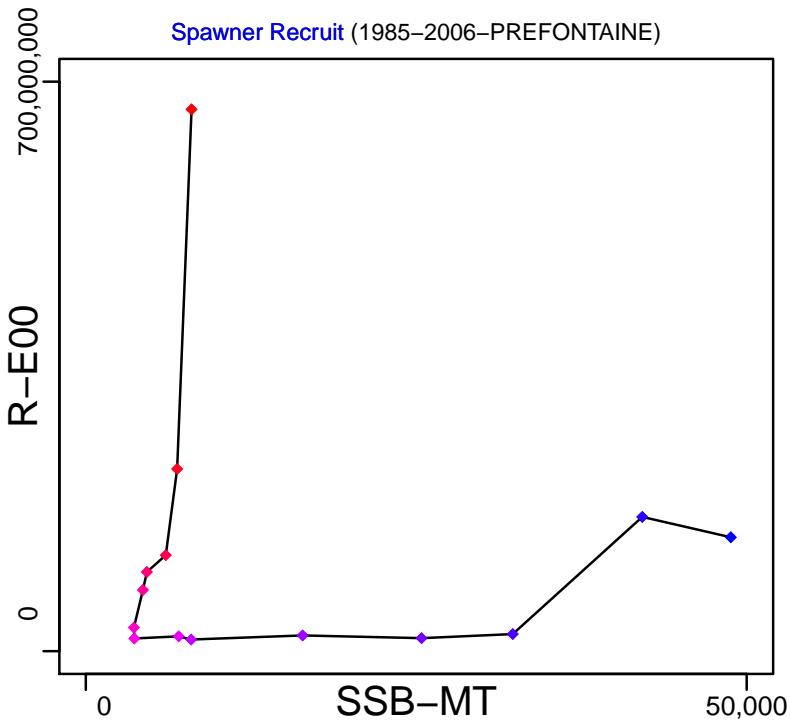


Redfish species Flemish Cap [REDFISHSPP3M]

Metadata	
Scientific Name	Sebastes spp
Current Assess ID	NAFO-SC-REDFISHSPP3M-1988-2014-WATSON
Area	Flemish Cap
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2006, 2014

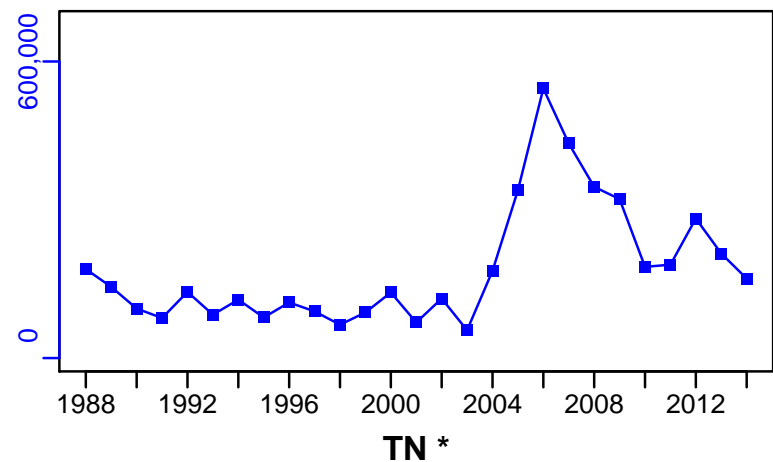
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2006	0.1
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	143,000	Both	-
SSB	SSB-MT	2014	63,000	Females	13+
TN	-	-	-	-	-
R	R-E00	2006	6.66×10^8	-	4
F	F-1/yr	2006	0.046	-	6 to 16
ER	ER-calc-ratio	2014	0.052	-	-
TC	TC-MT	2014	7400		
TL	TL-MT	2006	4120		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

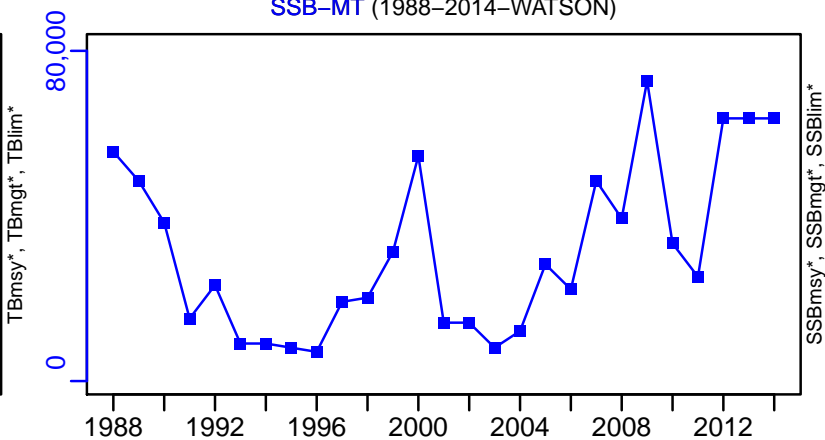


Redfish species Flemish Cap [REDFISHSPP3M]

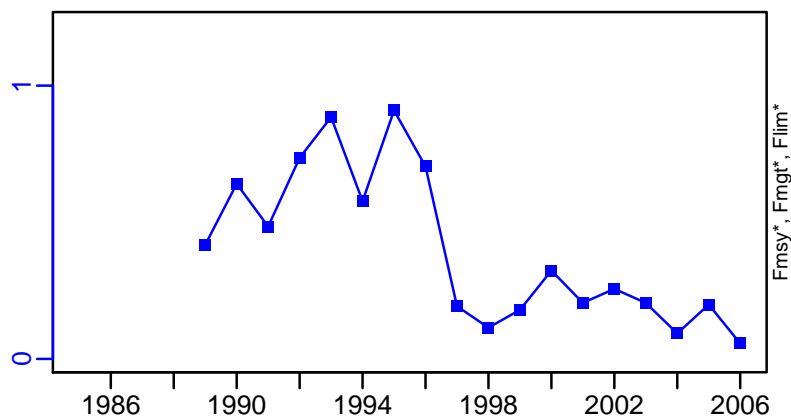
TB-MT (1988–2014–WATSON)



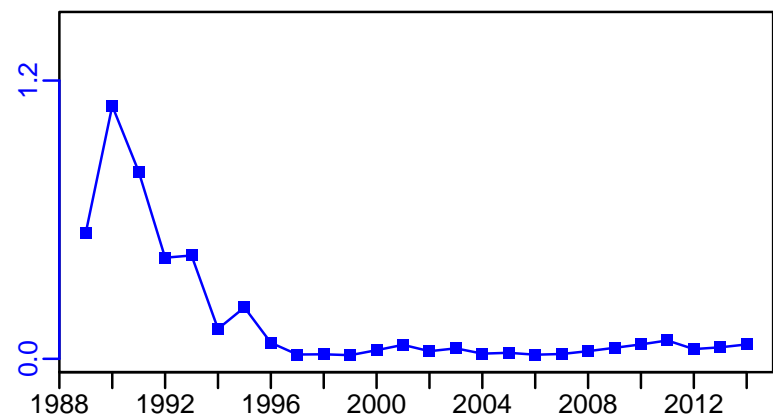
SSB-MT (1988–2014–WATSON)



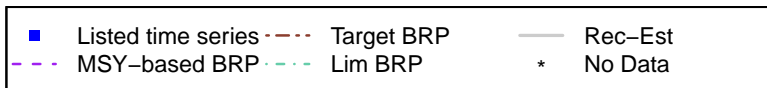
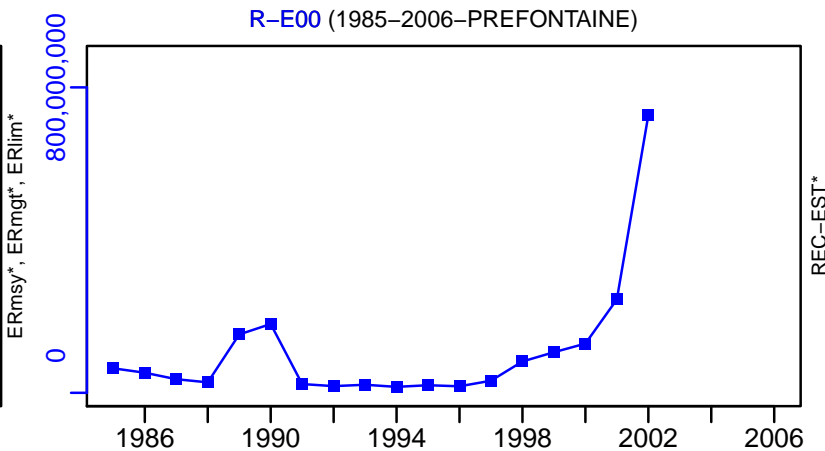
F-1/yr (1985–2006–PREFONTAINE)



ER-calc-ratio (1988–2014–WATSON)

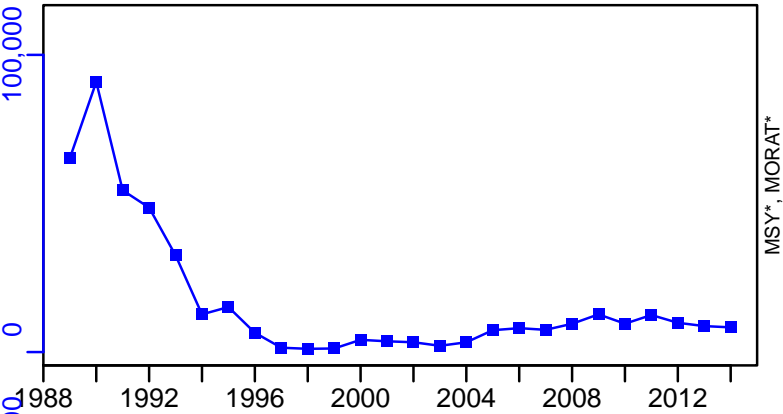


R-E00 (1985–2006–PREFONTAINE)



Redfish species Flemish Cap [REDFISHSPP3M]

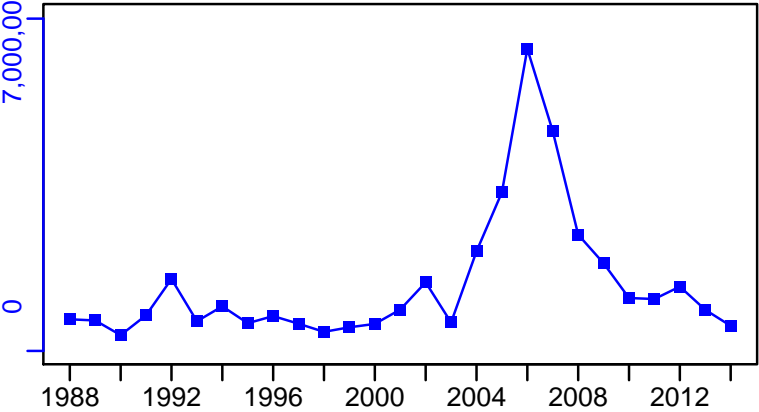
TC-MT, TL*, RecC* (1988-2014-WATSON)



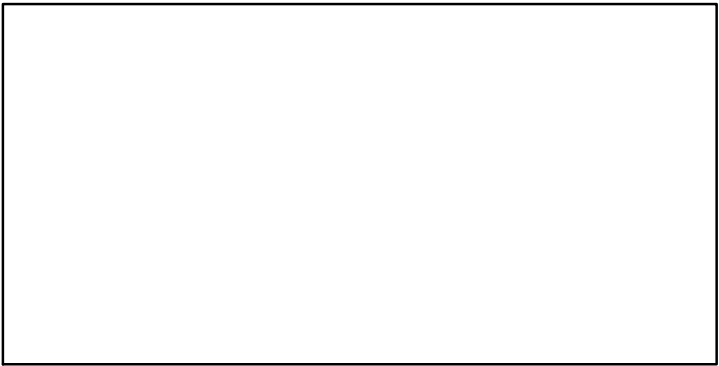
TAC*, Cpair*, Cadv*



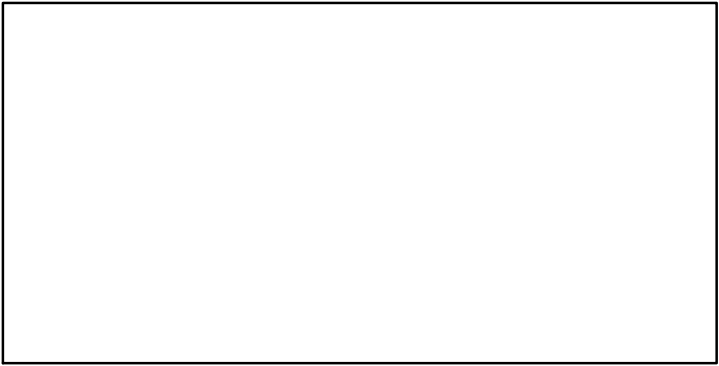
survB-E00 (1988-2014-WATSON)



CPUE*



CdivMSY*



Redfish species Gulf of St. Lawrence and Cabot Strait [REDFISHSPP3Pn4RSTVn]

Metadata	
Scientific Name	Sebastes spp
Current Assess ID	DFO-QUE-REDFISHSPP3Pn4RSTVn-1953-2000-PREFONTAINE
Area	Gulf of St. Lawrence and Cabot Strait
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Quebec Region
Asmts in RAM	2000

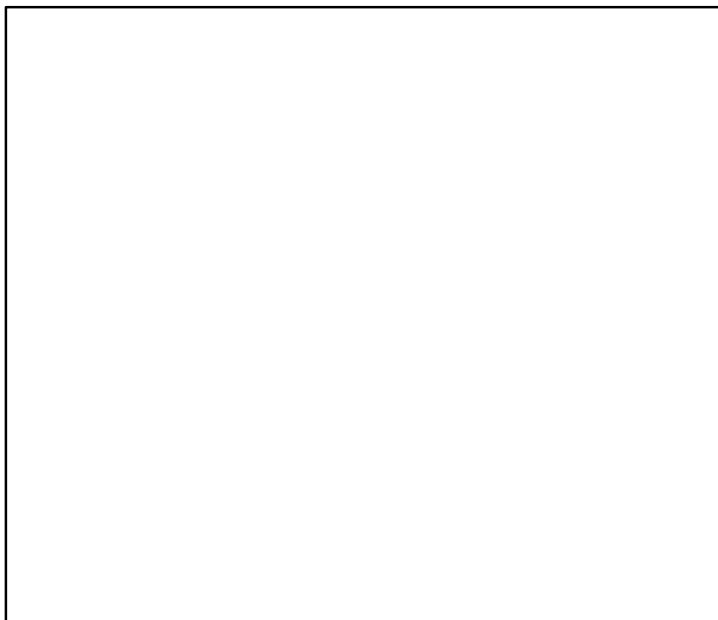
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2000	764		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

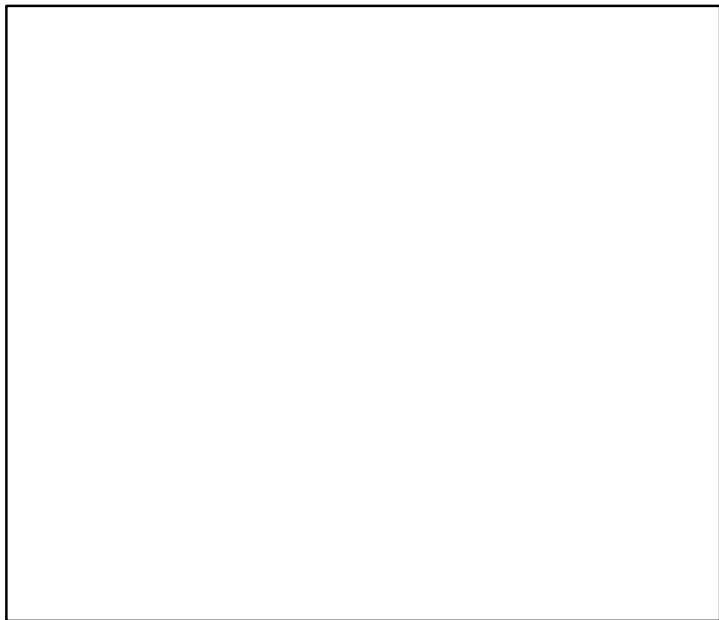
Kobe MSY*



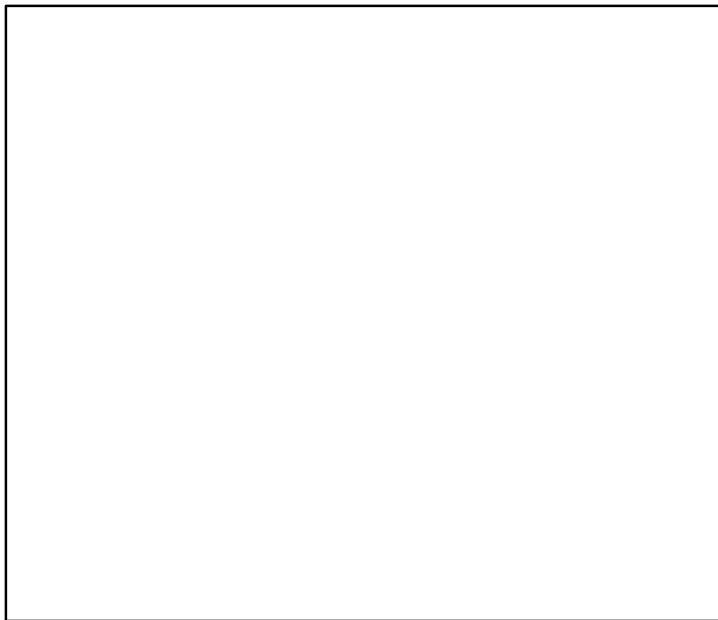
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

TB*



SSB*



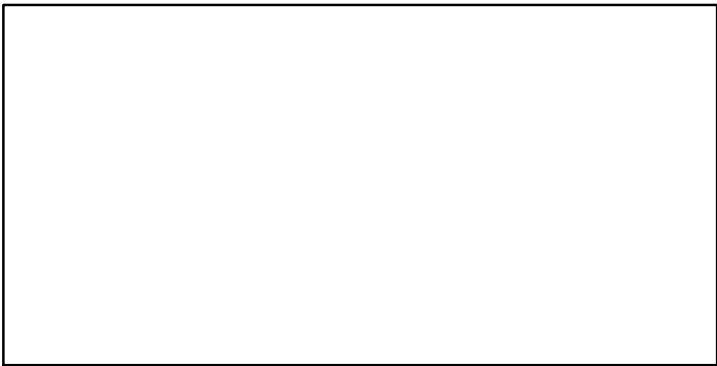
TN *



F*



ER*

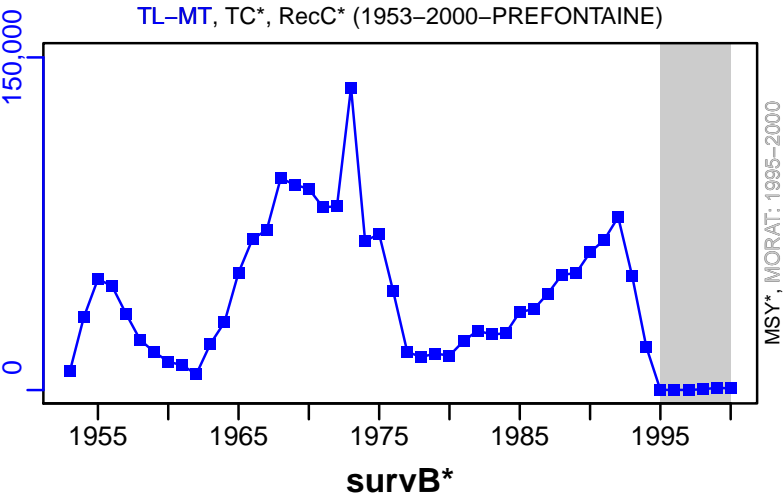


Recruits*



Redfish species Gulf of St. Lawrence and Cabot Strait [REDFISHSPP3Pn4RSTVn]

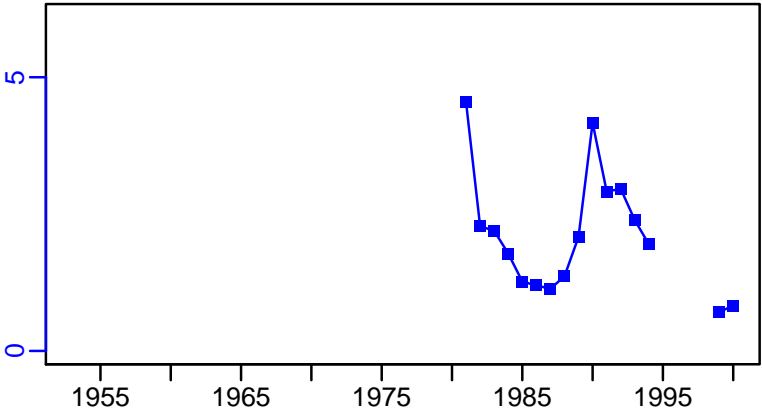
TL-MT, TC*, RecC* (1953-2000-PREFONTAINE)



TAC*, Cpair*, Cadv*



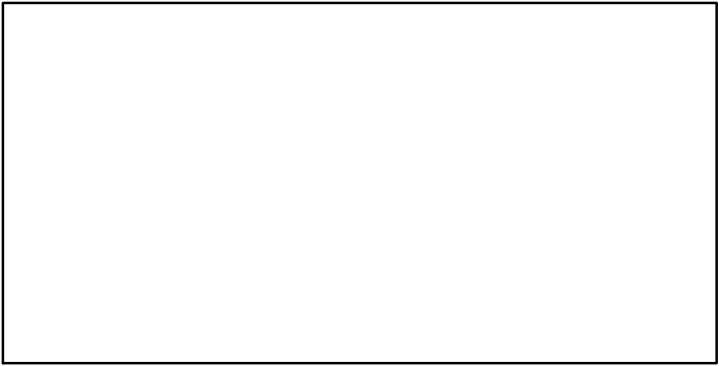
CPUEstand-1-C/E (1953-2000-PREFONTAINE)



EFFORT*



CdivMSY*



Rock crab Southern Gulf of St. Lawrence [ROCKCRABLFA23-26]

Metadata	
Scientific Name	Cancer irroratus
Current Assess ID	DFO-SG-ROCKCRABLFA23-26-1985-2010-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf 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	4520		
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

TB*



SSB*



TN *



F*



ER*

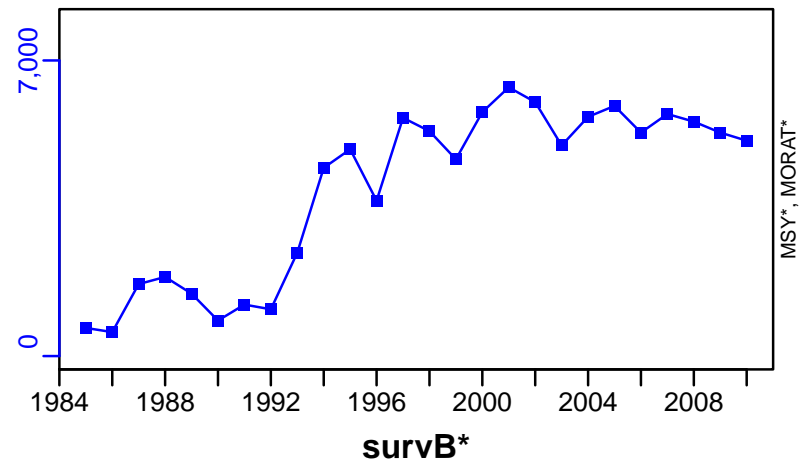


Recruits*



Rock crab Southern Gulf of St. Lawrence [ROCKCRABLFA23-26]

TL-MT, TC*, RecC* (1985-2010-OSGOOD)



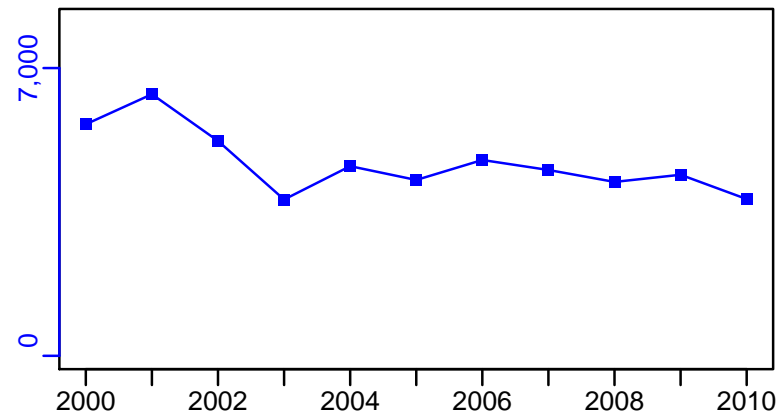
TAC*, Cpair*, Cadv*



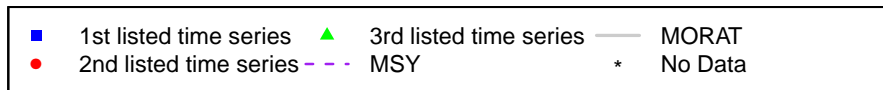
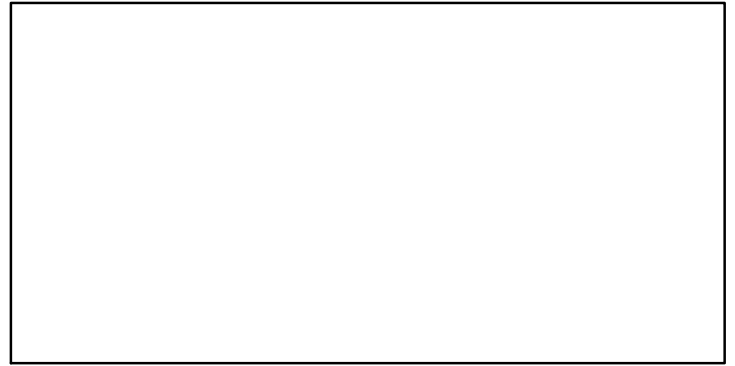
CPUE*



EFFORT-trips (1985-2010-OSGOOD)



CdivMSY*



Rock crab Quebec Coastal Waters [ROCKCRABQCW]

Metadata	
Scientific Name	Cancer irroratus
Current Assess ID	DFO-QUE-ROCKCRABQCW-1998-2012-OSGOOD
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	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	1580		
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

Rock crab Quebec Coastal Waters [ROCKCRABQCW]

TB*



SSB*



TN *



F*



ER*

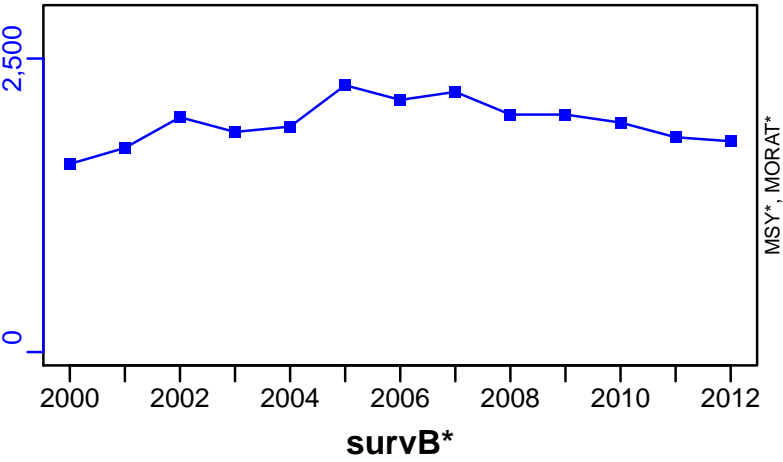


Recruits*



Rock crab Quebec Coastal Waters [ROCKCRABQCW]

TL-MT, TC*, RecC* (1998-2012-OSGOOD)



TAC*, Cpair*, Cadv*



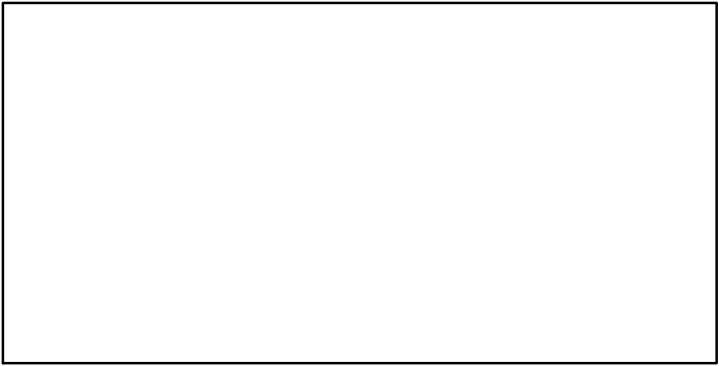
CPUE*



EFFORT*



CdivMSY*

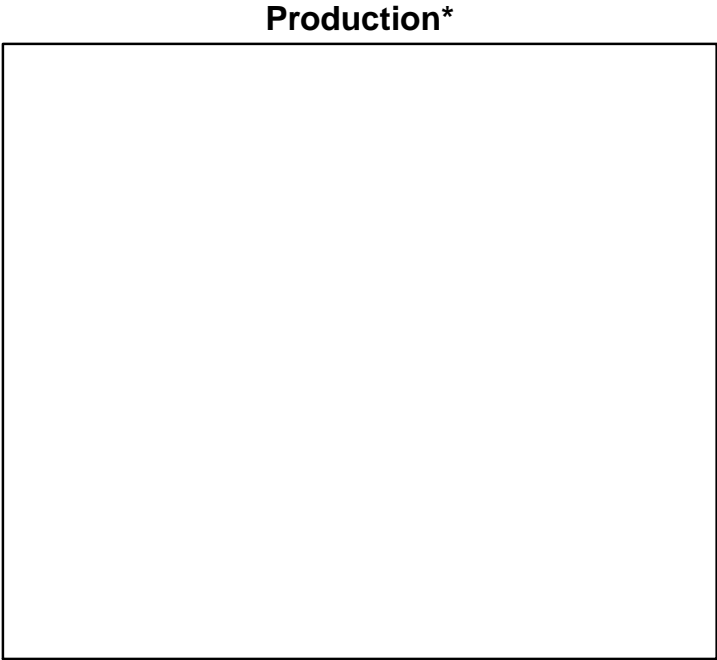
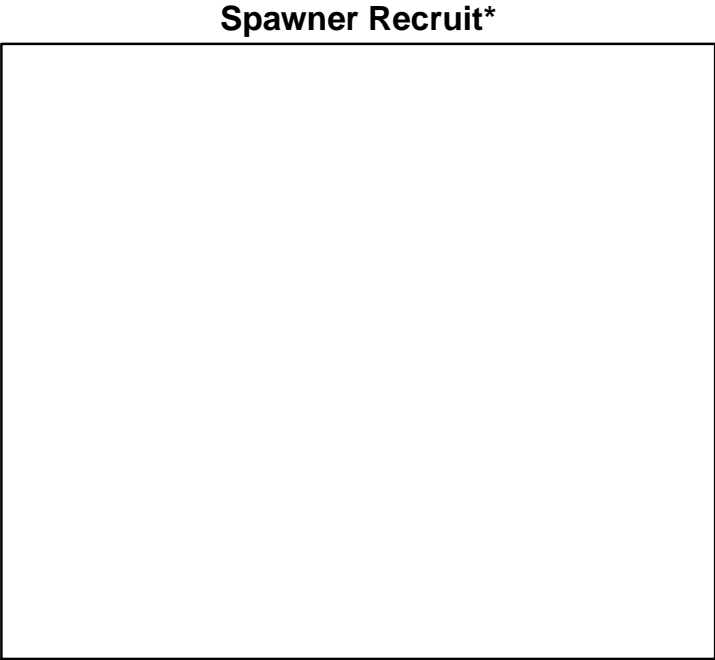
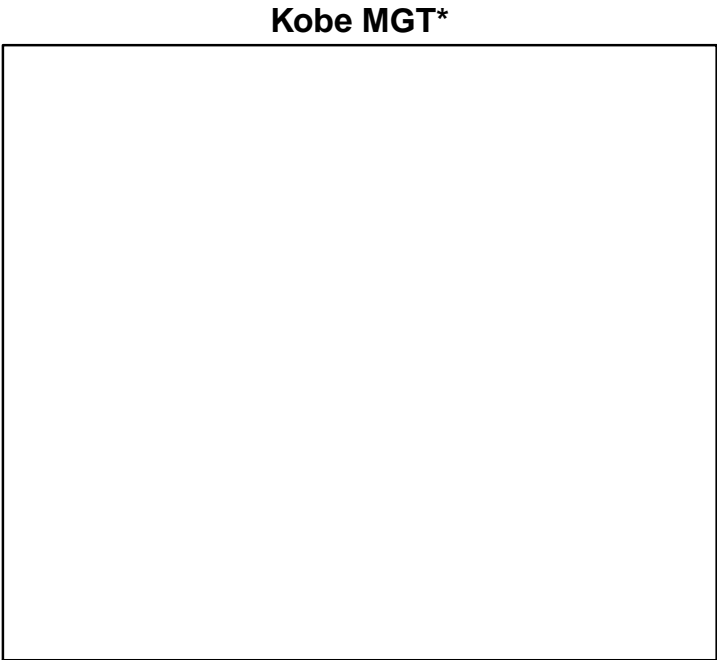
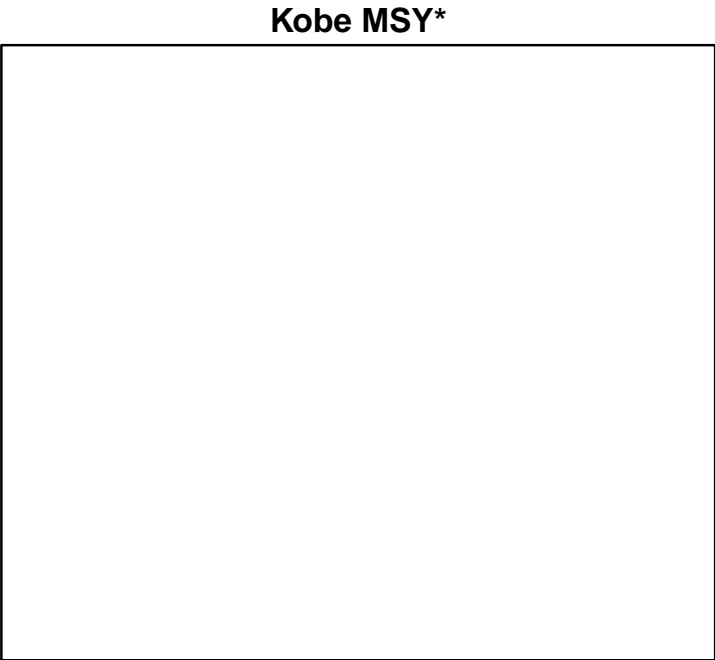


Sea scallop St. Pierre Bank [SCALL3Ps]

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	-	-	-		



◆ Start Year ♦ End Year * No Data

Sea scallop St. Pierre Bank [SCALL3Ps]

TB*



SSB*



TN *



F*



ER*



Recruits*

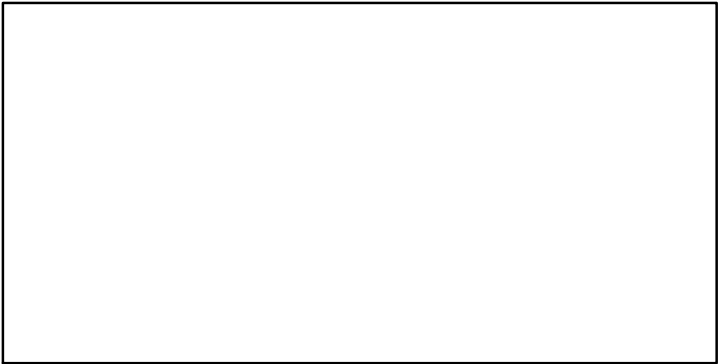
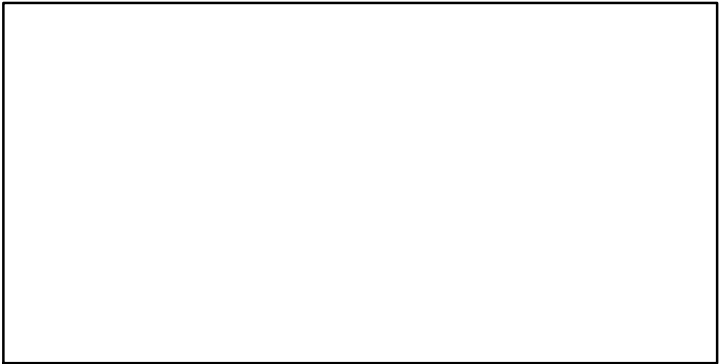
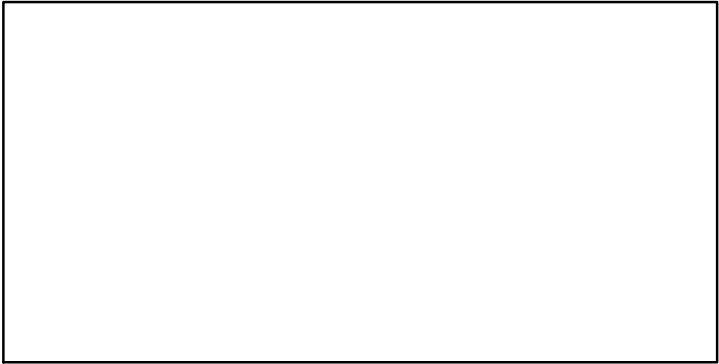
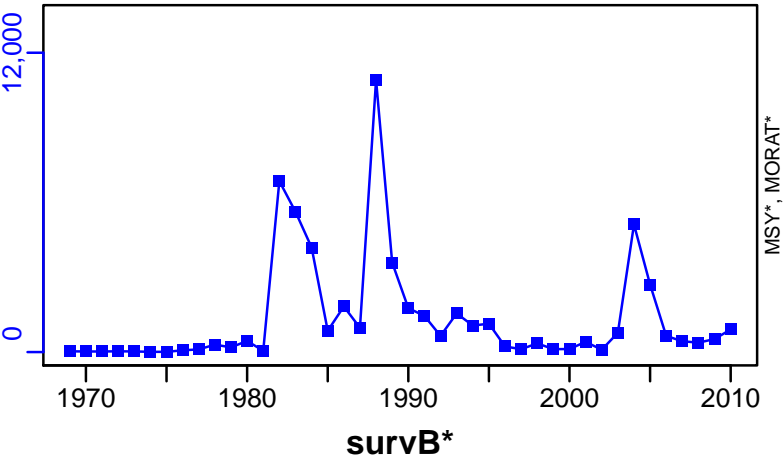


■ Listed time series	- - - Target BRP	— Rec-Est
- - - MSY-based BRP	· · · Lim BRP	* No Data

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	-	-	-		

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*



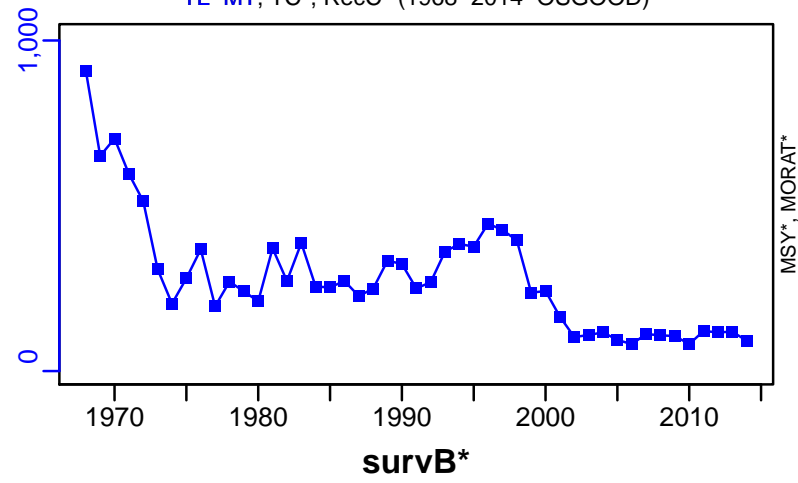
Recruits*



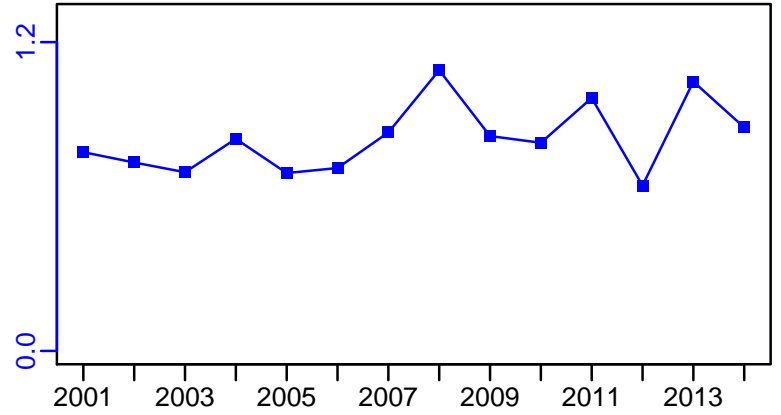
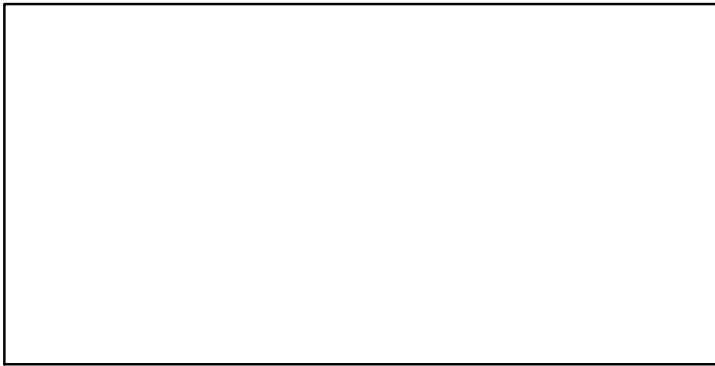
Sea scallop Southern Gulf of St. Lawrence [SCALL4T]

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

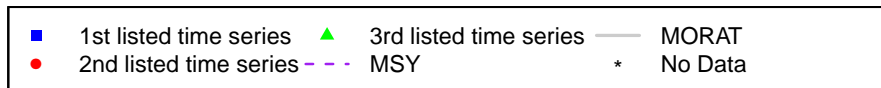
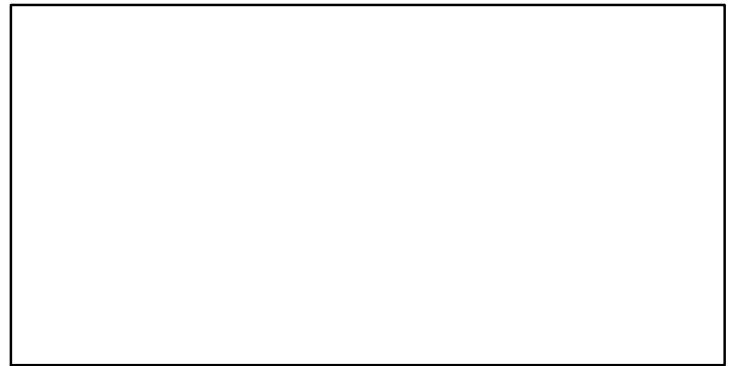
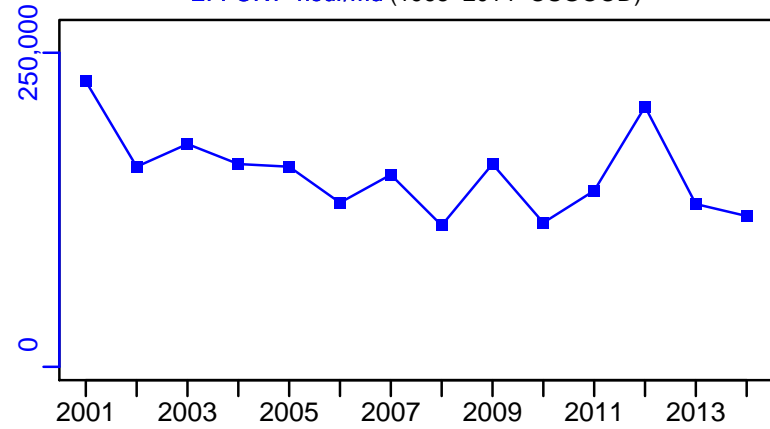
TAC*, Cpair*, Cadv*



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



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

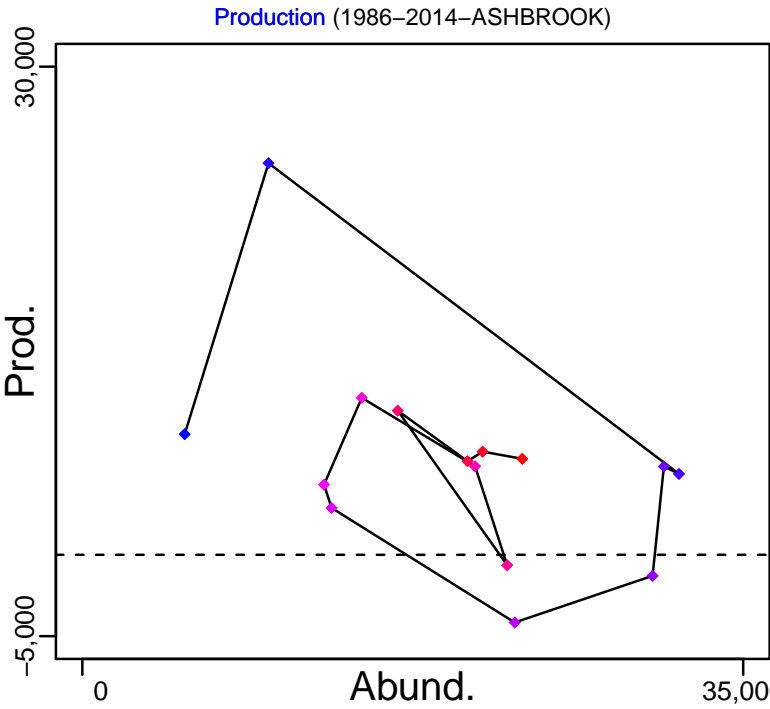
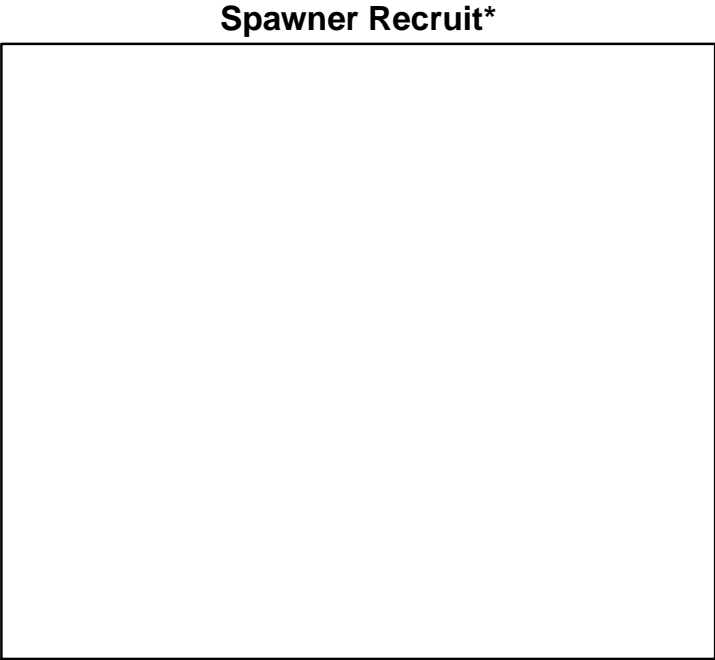


Sea scallop Georges Bank [SCALLGB]

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	-	-	-

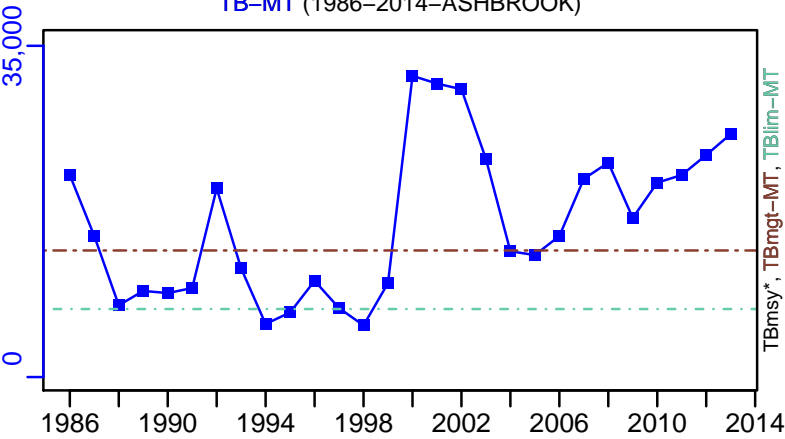
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	25,500	Both	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2014	5270	Both	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.183	-	-
TC	-	-	-		
TL	TL-MT	2014	5020		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	TB-MT/TBmgt-MT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



◆ Start Year ◆ End Year * No Data

Sea scallop Georges Bank [SCALLGB]

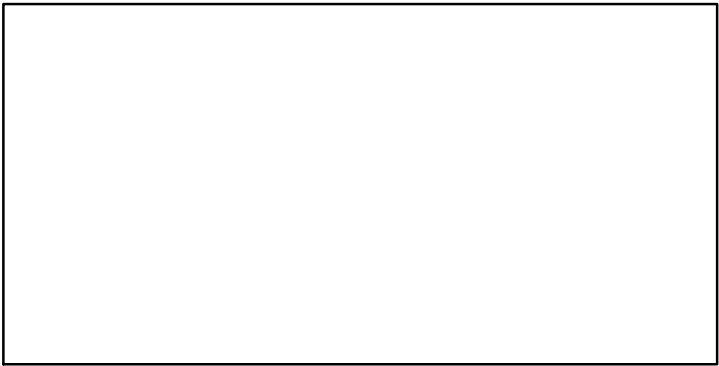
TB-MT (1986-2014-ASHBROOK)



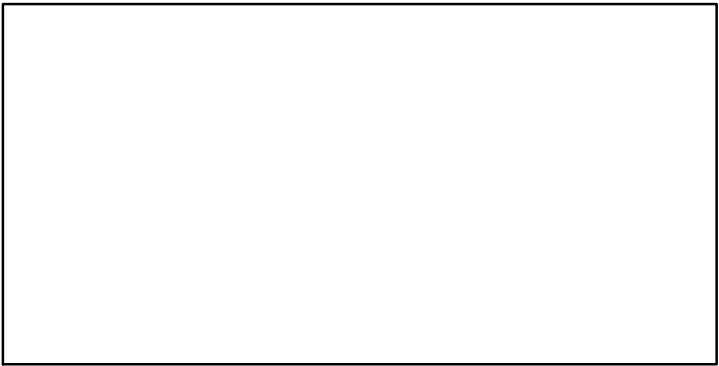
SSB*



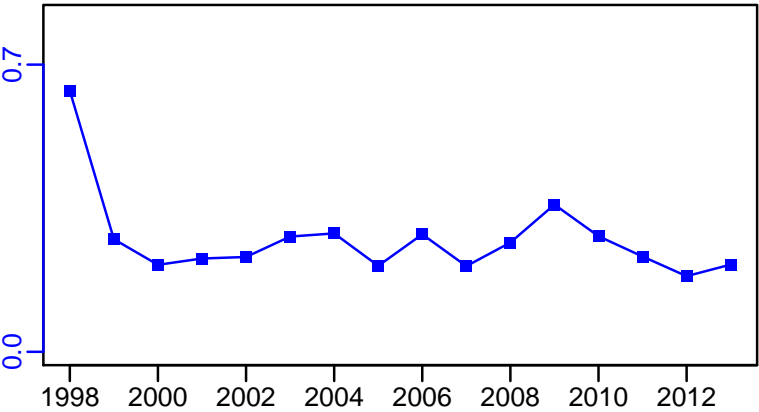
TN *



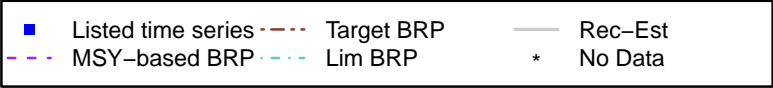
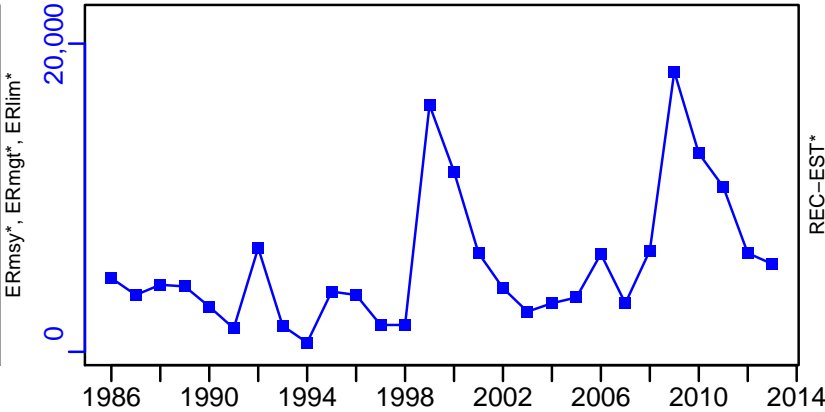
F*



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

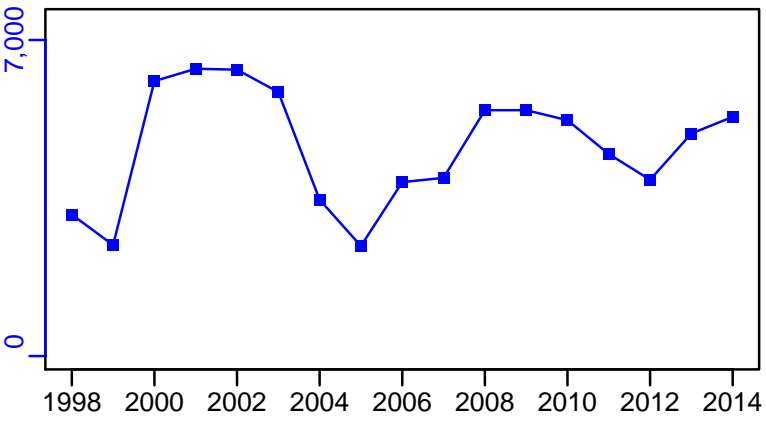


R-MT (1986-2014-ASHBROOK)

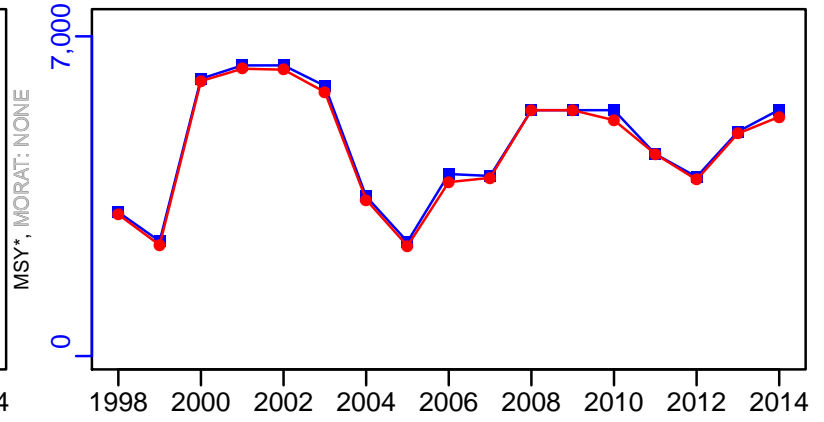


Sea scallop Georges Bank [SCALLGB]

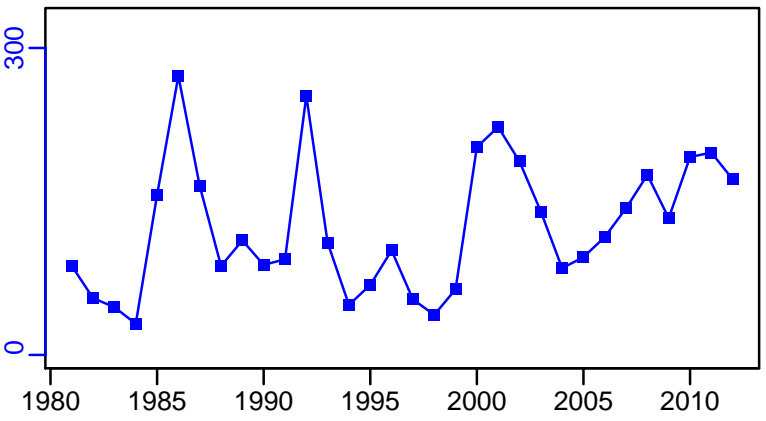
TL-MT, TC*, RecC* (1986-2014-ASHBROOK)



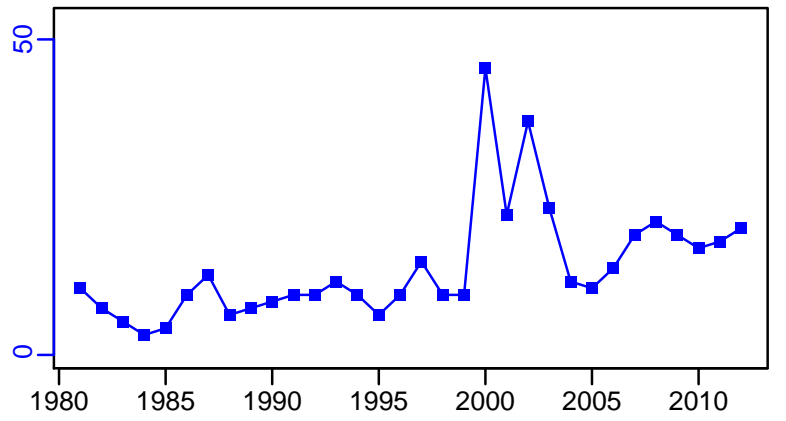
TAC-MT, Cpair-MT, Cadv* (1986-2014-ASHBROOK)



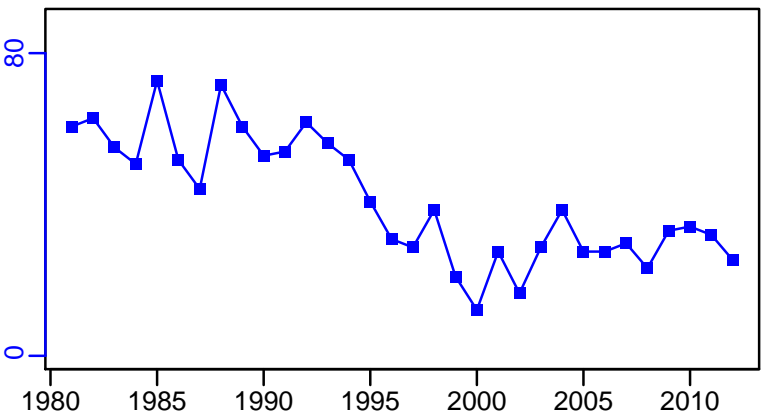
survB-E00/tow (1981-2012-ASHBROOK)



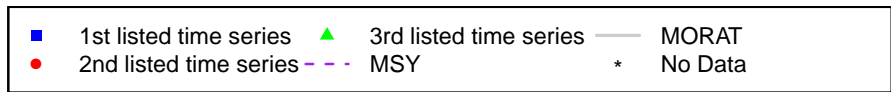
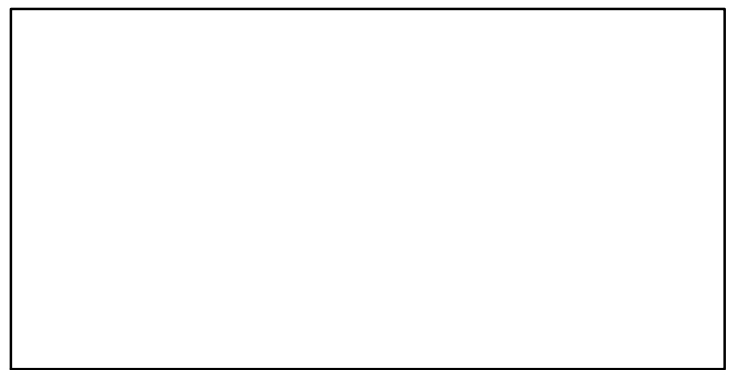
CPUE-kg/hm (1981-2012-ASHBROOK)



EFFORT-hm (1981-2012-ASHBROOK)



CdivMSY*

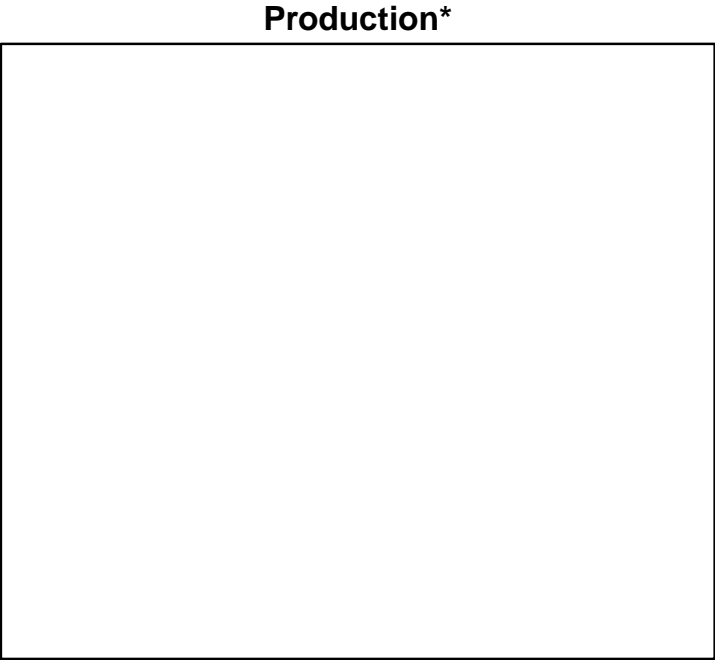
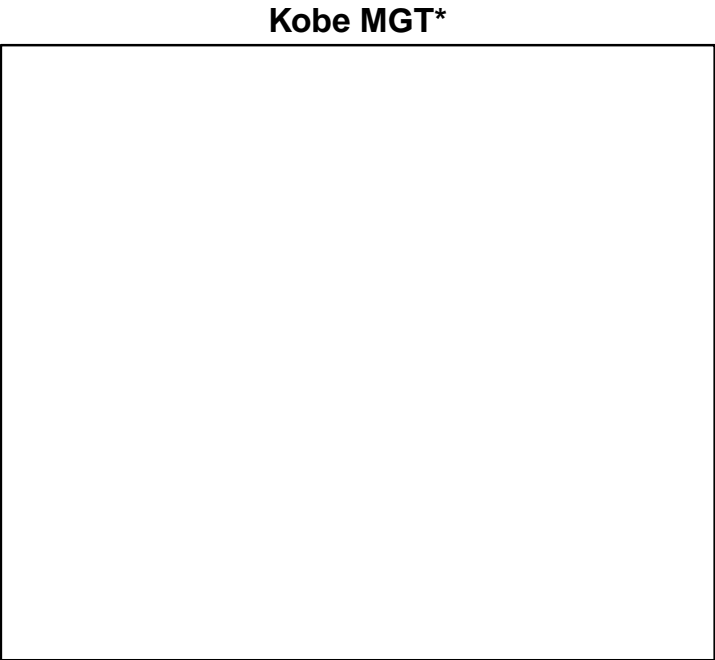
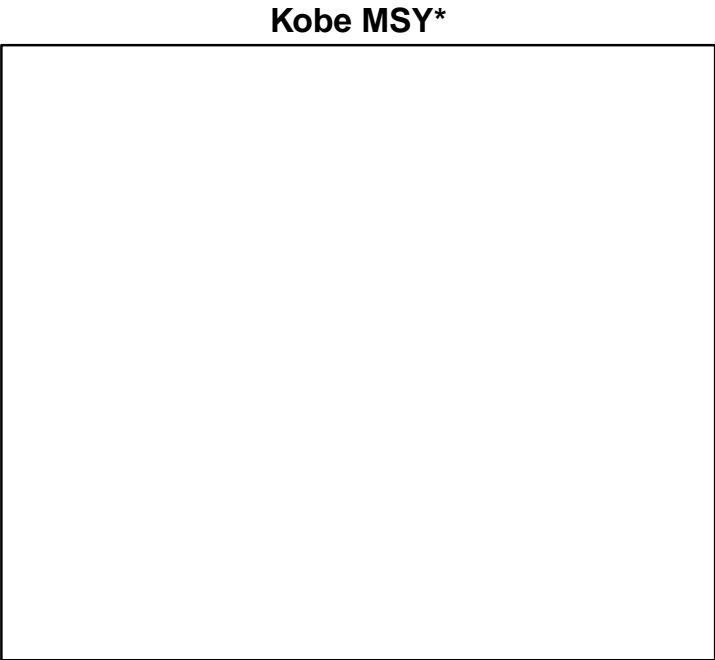


Sea scallop North Brown Bank [SCALLNBB]

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	-	-	-		

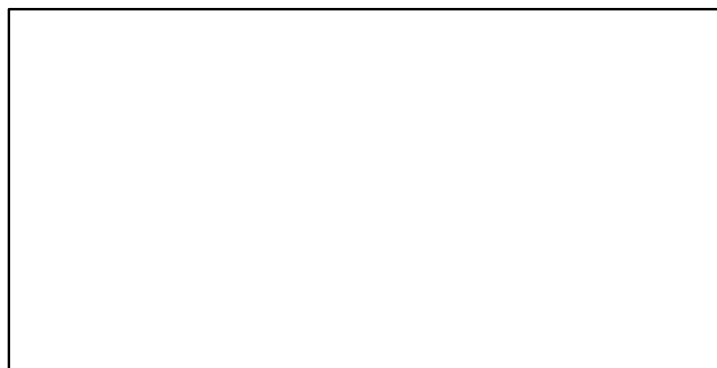
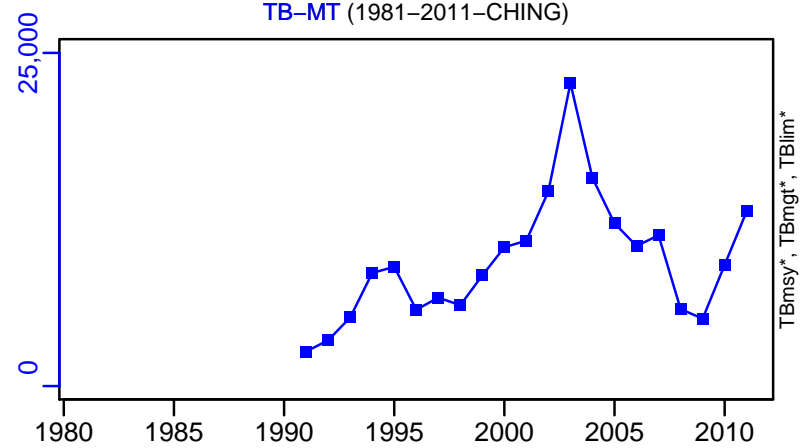


◆ Start Year ◆ End Year * No Data

Sea scallop North Brown Bank [SCALLNBB]

TB-MT (1981-2011-CHING)

SSB*



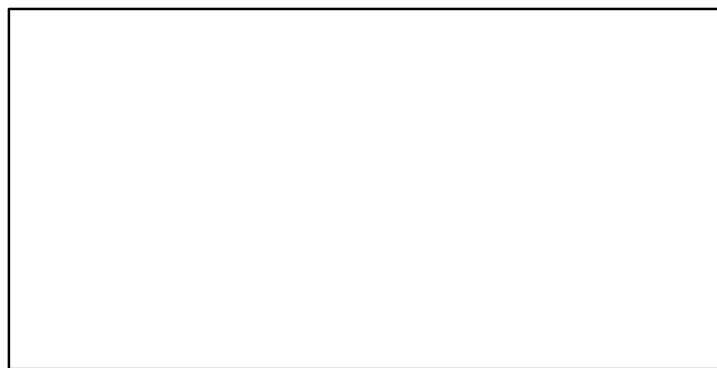
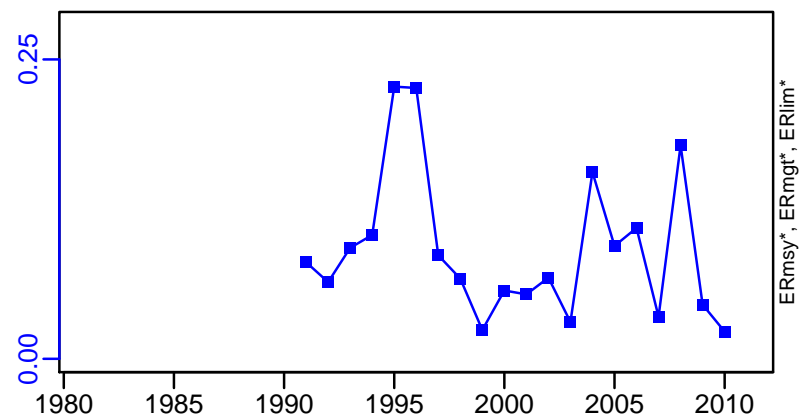
TN *

F*



ER-ratio (1981-2011-CHING)

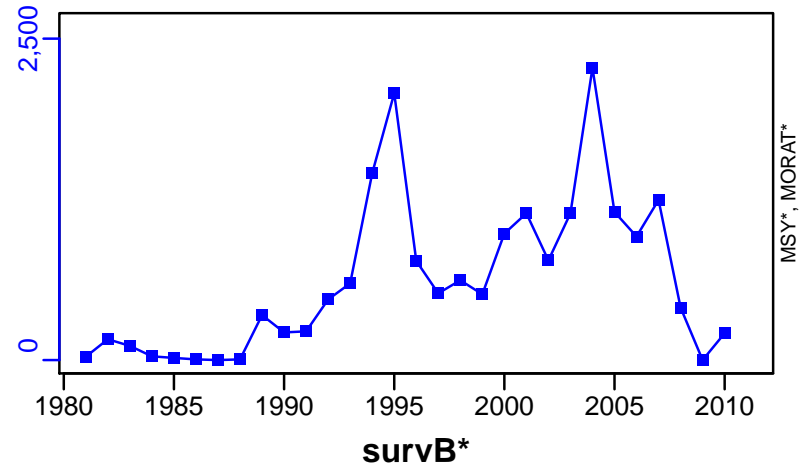
Recruits*



Sea scallop North Brown Bank [SCALLNBB]

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

TAC*, Cpair*, Cadv*



Sea scallop Scallop Fishing Areas 16-20 [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*



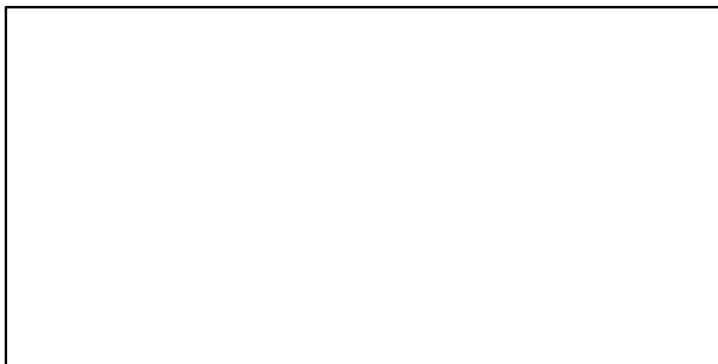
◆ Start Year ◆ End Year * No Data

Sea scallop Scallop Fishing Areas 16–20 [SCALLSFA16–20]

TB*



SSB*



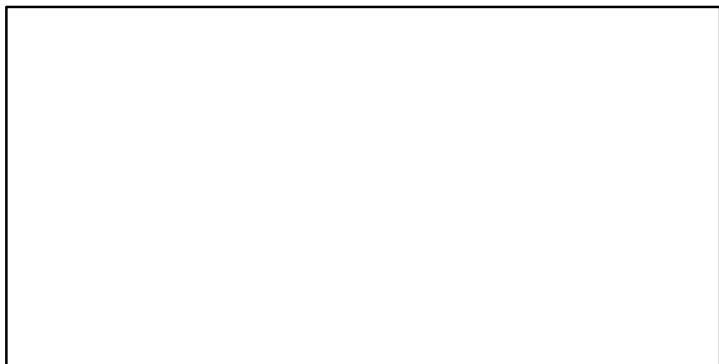
TN *



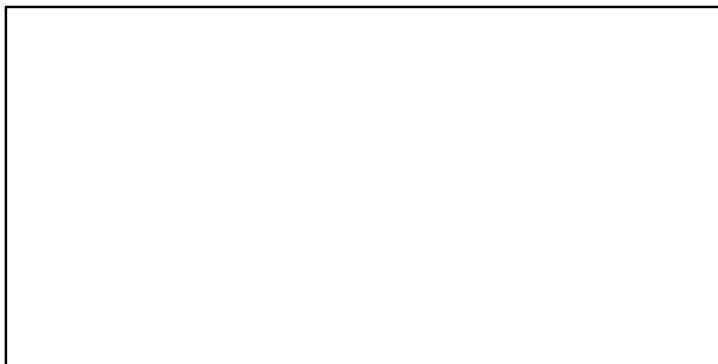
F*



ER*



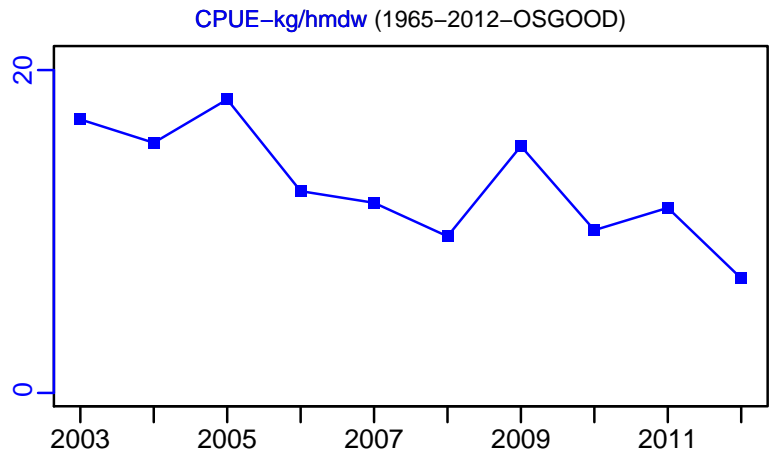
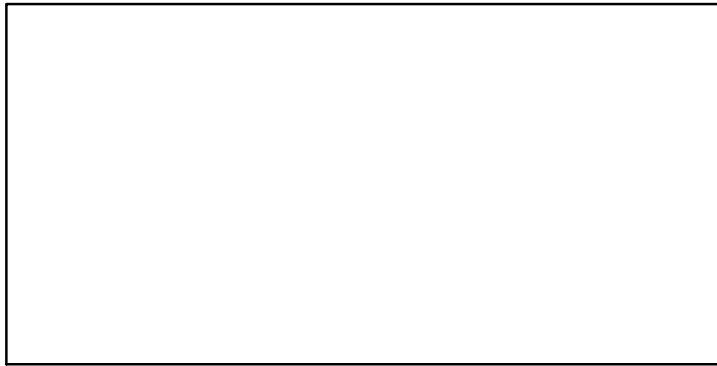
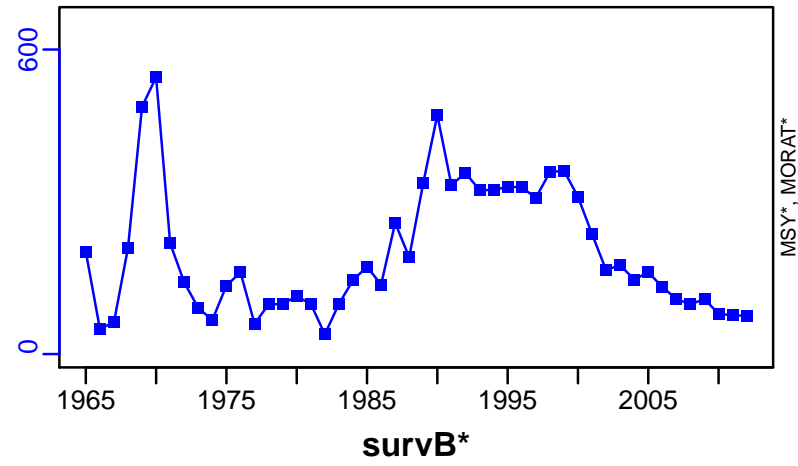
Recruits*



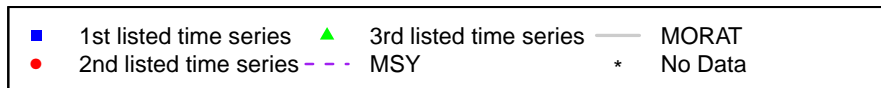
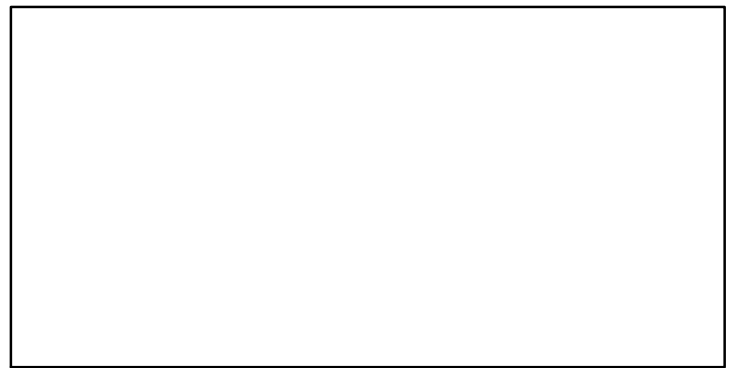
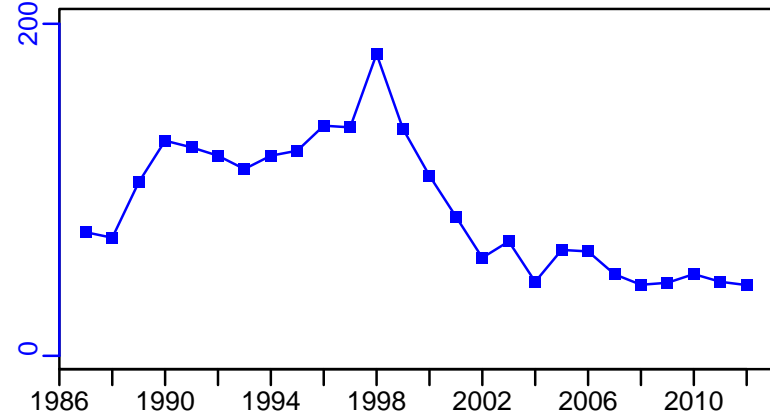
Sea scallop Scallop Fishing Areas 16–20 [SCALLSFA16–20]

TL–MT, TC*, RecC* (1965–2012–OSGOOD)

TAC*, Cpair*, Cadv*



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*



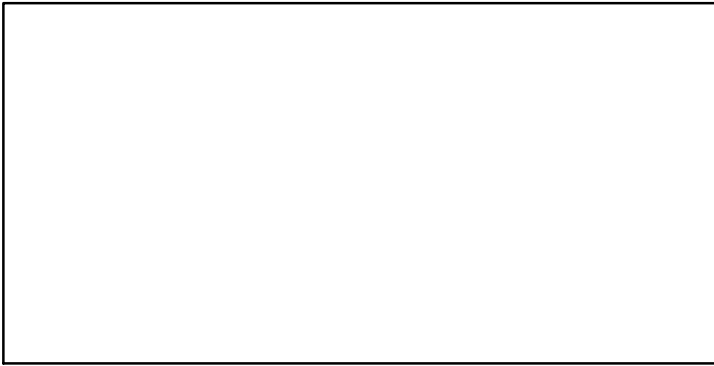
Production*



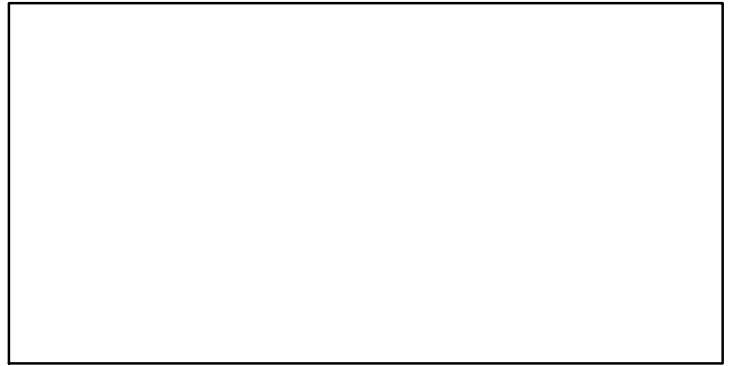
◆ Start Year ◆ End Year * No Data

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

TB*



SSB*



TN *



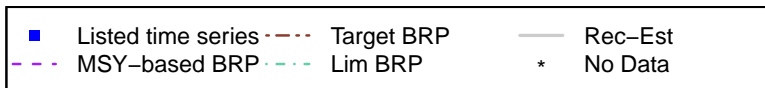
F*



ER*



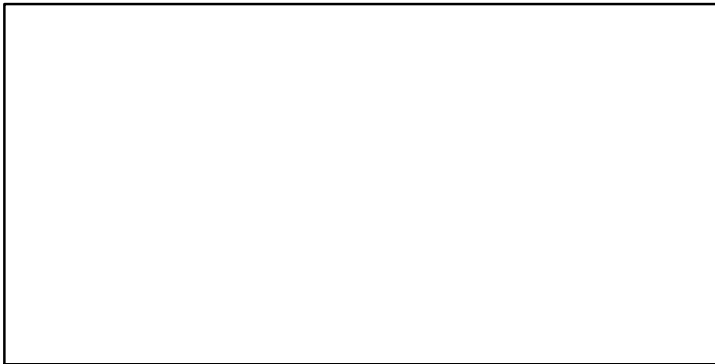
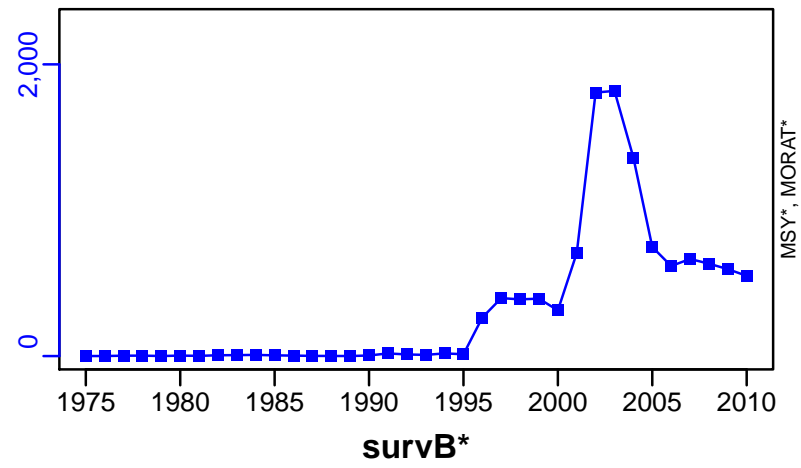
Recruits*



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*



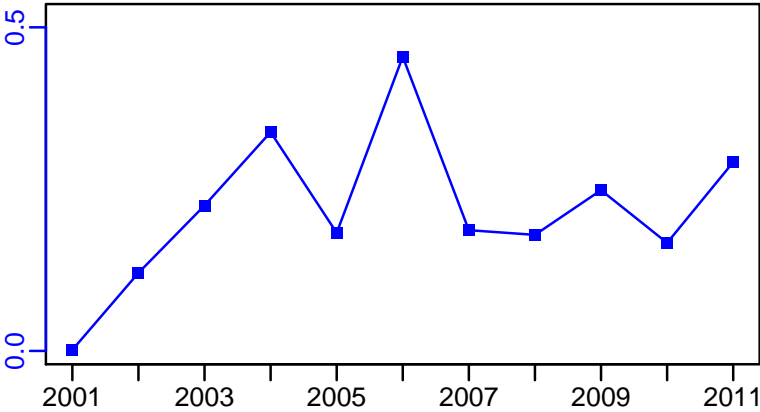
SSB*



TN *



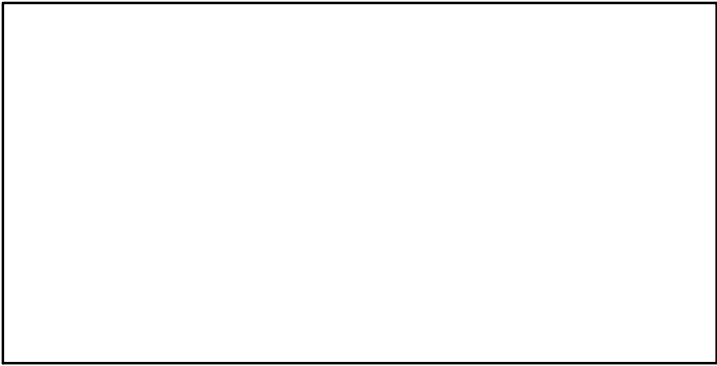
F-1/yr (2001-2011-CHING)



ER*



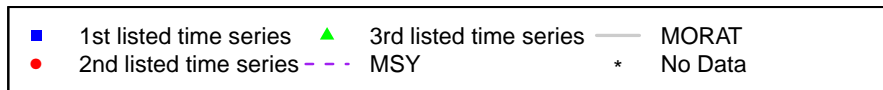
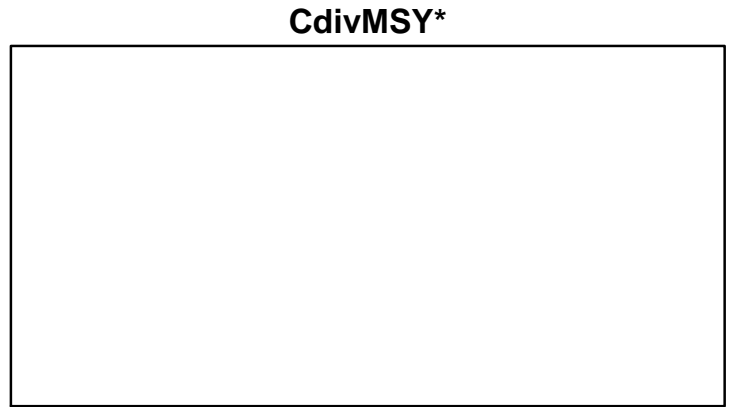
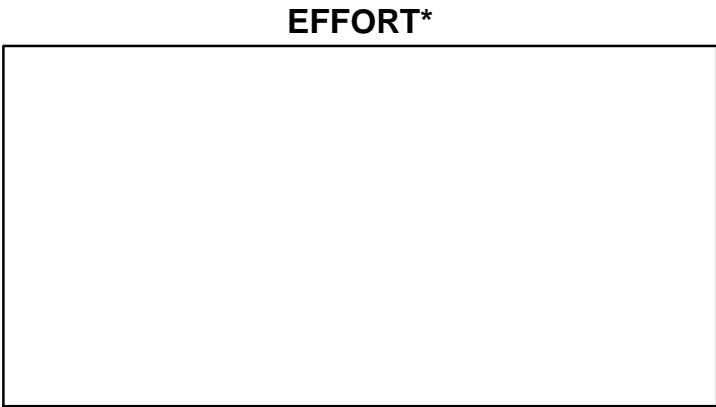
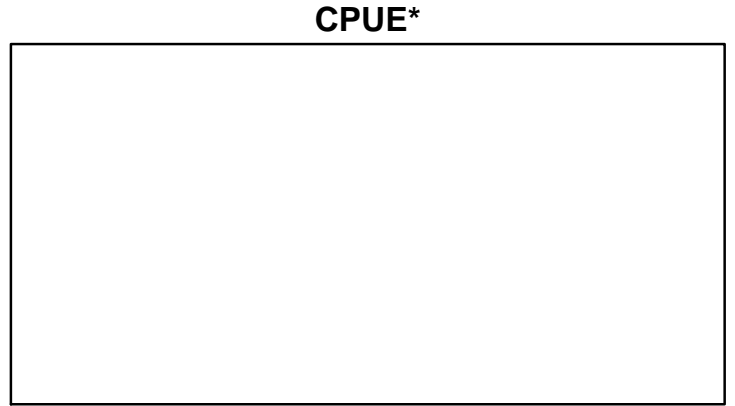
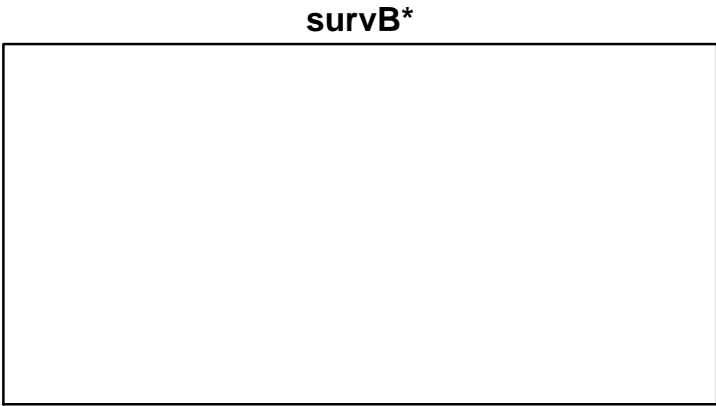
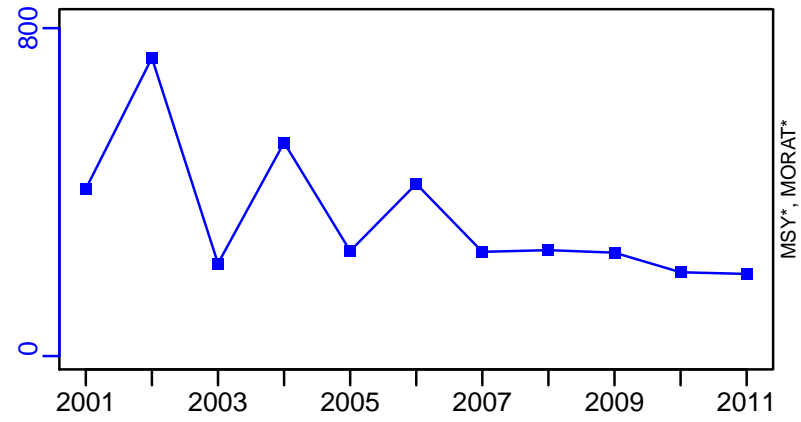
Recruits*



Sea scallop West Scallop Fishing Area 29 [SCALLWSFA29]

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

TAC*, Cpair*, Cadv*



Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]

Metadata	
Scientific Name	Squalus acanthias
Current Assess ID	DFO-MAR-SDOG4VWX5-1922-2013-OSGOOD
Area	Scotian Shelf, Bay of Fundy and Georges Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	742
M	M-1/yr	2013	0.1
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2013	1790	-	-
TN	TN-E00	2013	792,000	Both	0+
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2013	993		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



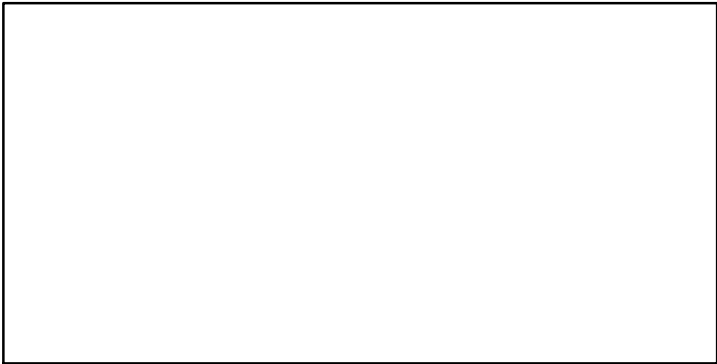
Production*



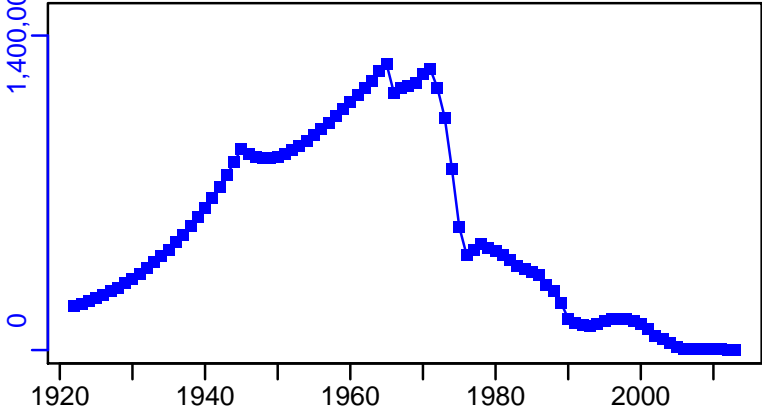
◆ Start Year ◆ End Year * No Data

Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]

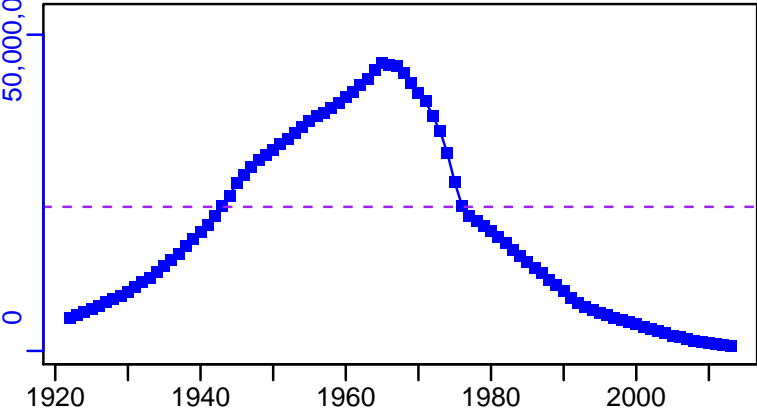
TB*



SSB-E00 (1922-2013-OSGOOD)



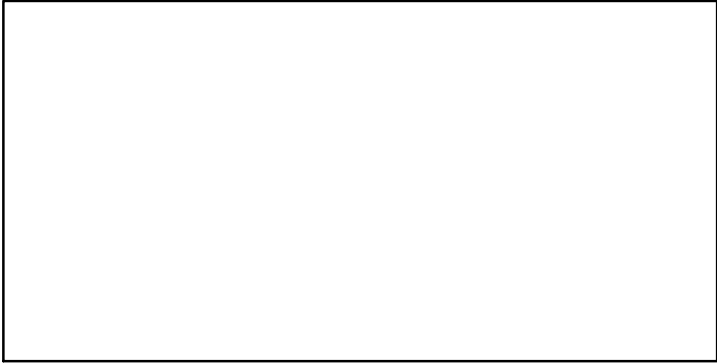
TN-E00 (1922-2013-OSGOOD)



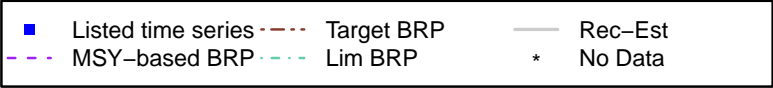
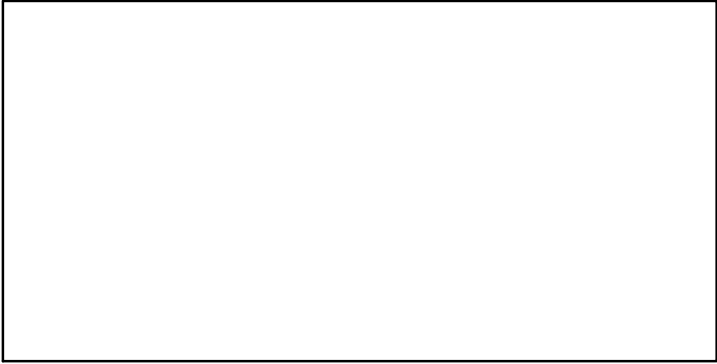
F*



ER*

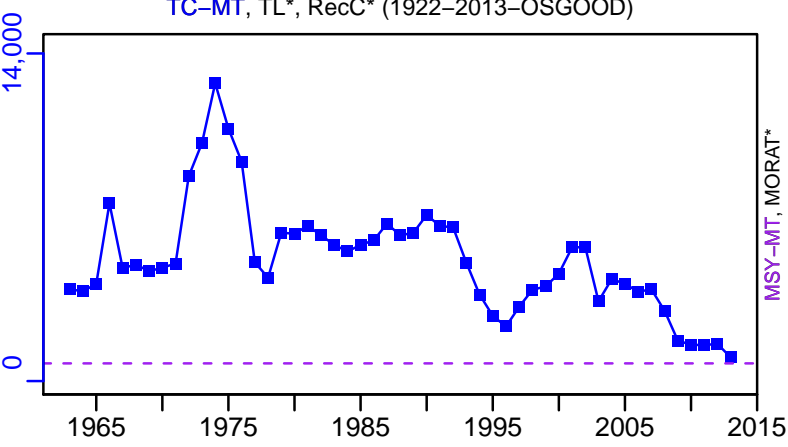


Recruits*

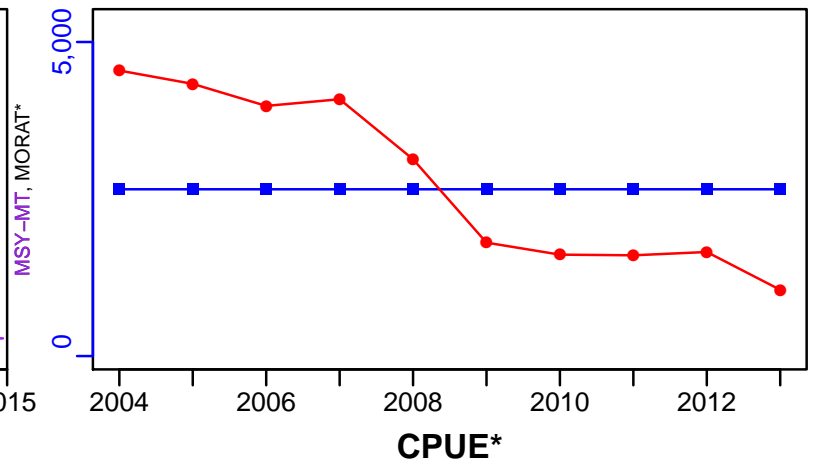


Spiny dogfish Scotian Shelf, Bay of Fundy and Georges Bank [SDOG4VWX5]

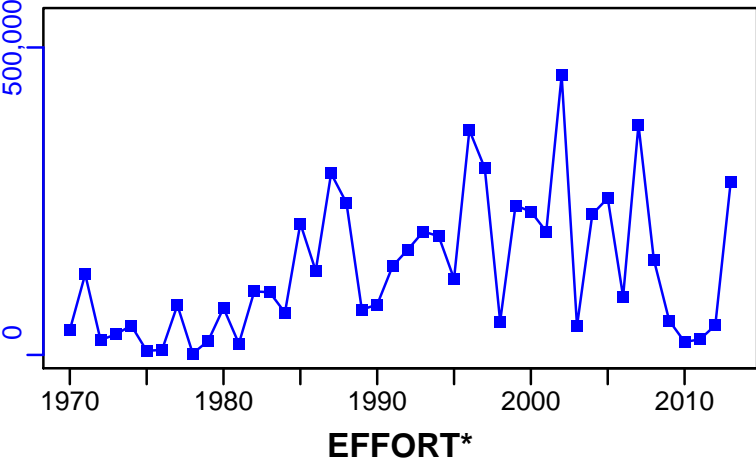
TC-MT, TL*, RecC* (1922-2013-OSGOOD)



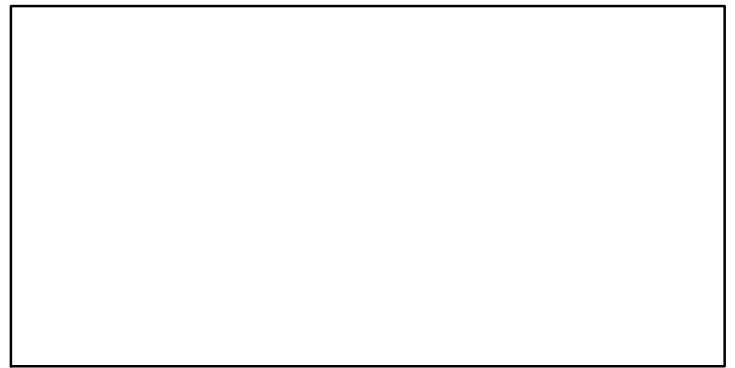
TAC-MT, Cpair-MT, Cadv* (1922-2013-OSGOOD)



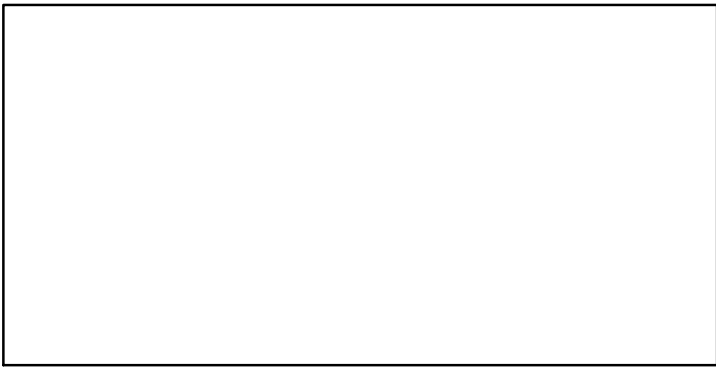
survB-MT (1922-2013-OSGOOD)



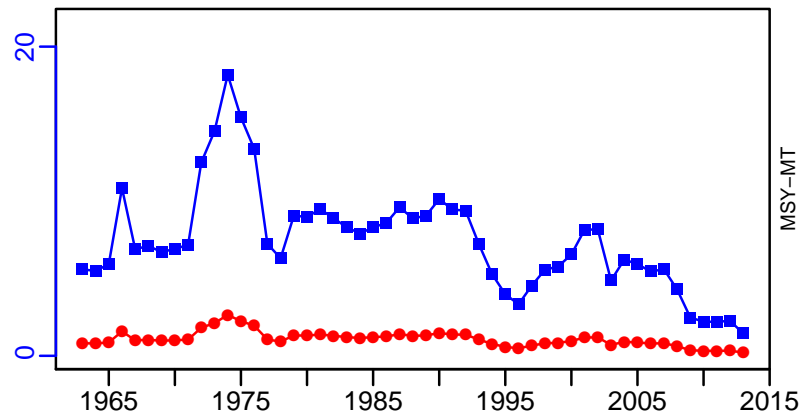
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1922-2013-OSGOOD)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]

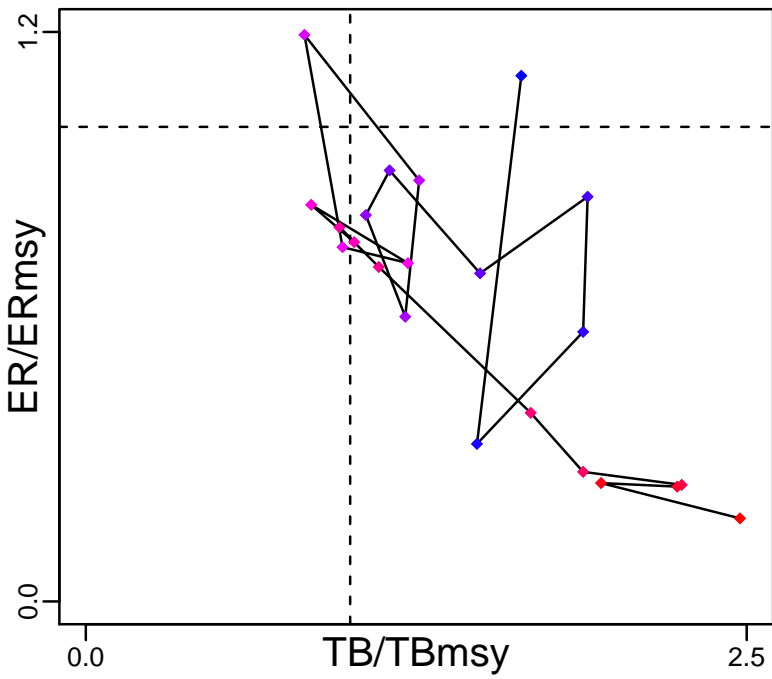
Metadata	
Scientific Name	Merluccius bilinearis
Current Assess ID	DFO-MAR-SHAKE4VWX-1969-2015-OSGOOD
Area	Scotian Shelf and Bay of Fundy
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2015	59,000
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2015	0.32
ERmsy	ERmsy-calc-ratio	2015	0.271
TBmgt	TBmgt-MT	2015	47,200
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	16,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

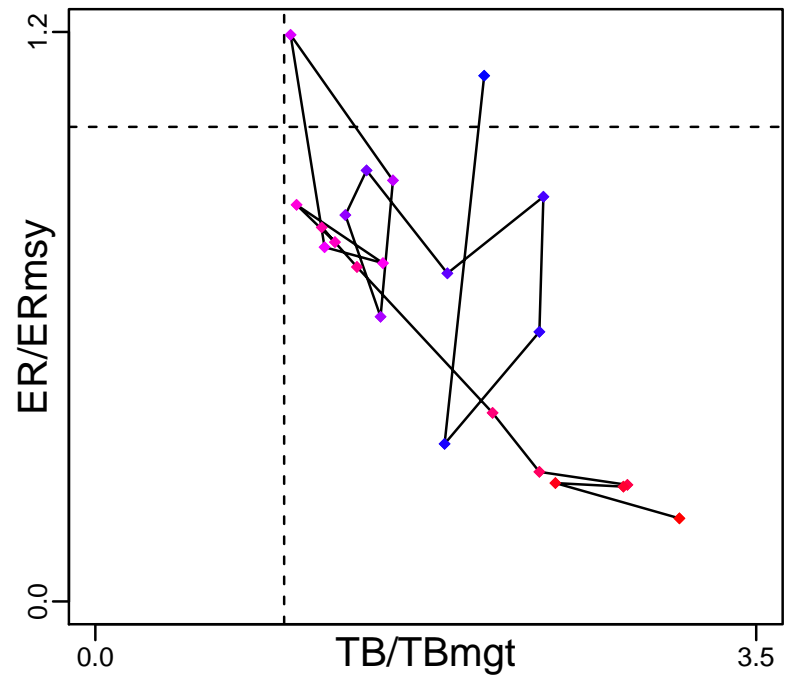
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	122,000	Both	0+
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-E00	2015	2.56×10^8	Both	-
F	F-1/yr	2015	0.048	-	-
ER	ER-calc-ratio	2015	0.047	-	-
TC	-	-	-		
TL	TL-MT	2015	6930		
TB/TBmsy	TB-MT/TBmsy-MT	2015	2.068		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.149		
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2015	0.175		
TB/TBmgt	TB-MT/TBmgt-MT	2015	2.585		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]

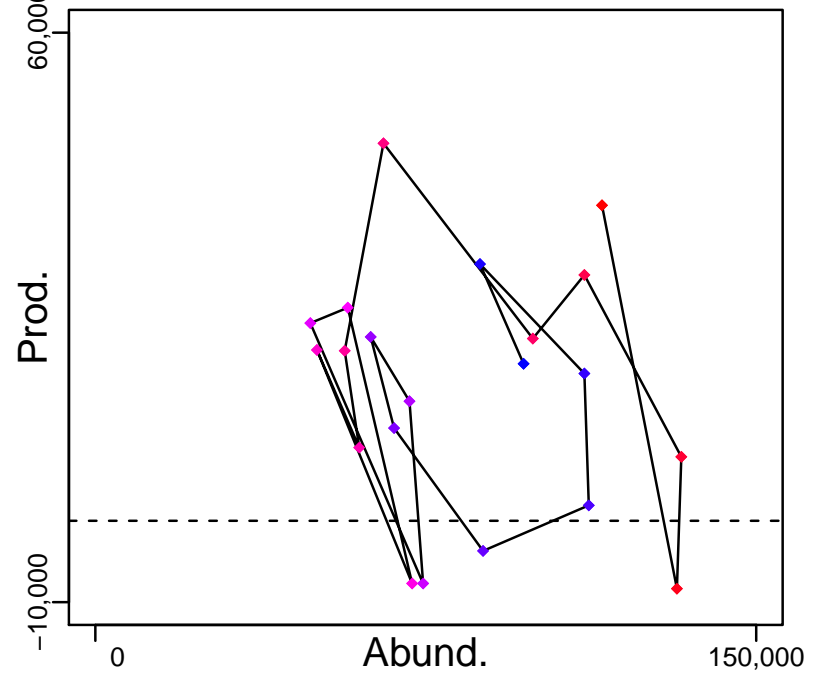
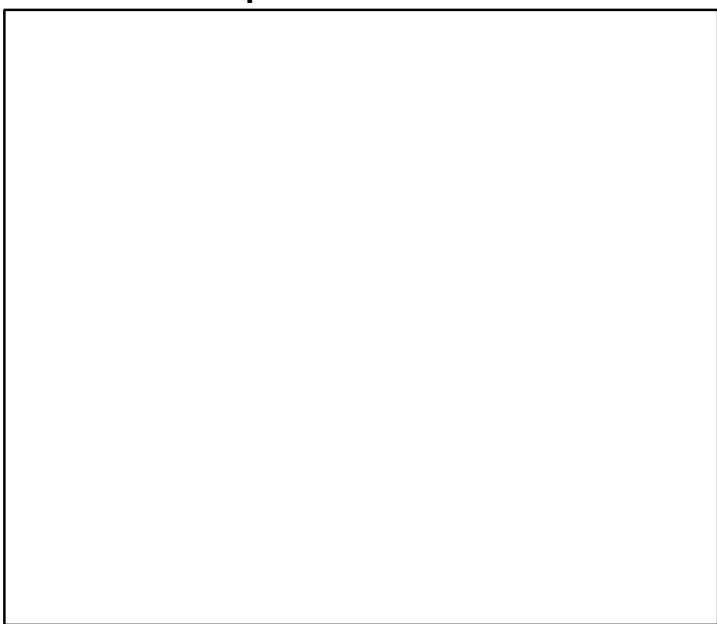
Kobe MSYpref (1969–2015–OSGOOD)



Kobe MGTpref (1969–2015–OSGOOD)



Production (1969–2015–OSGOOD)

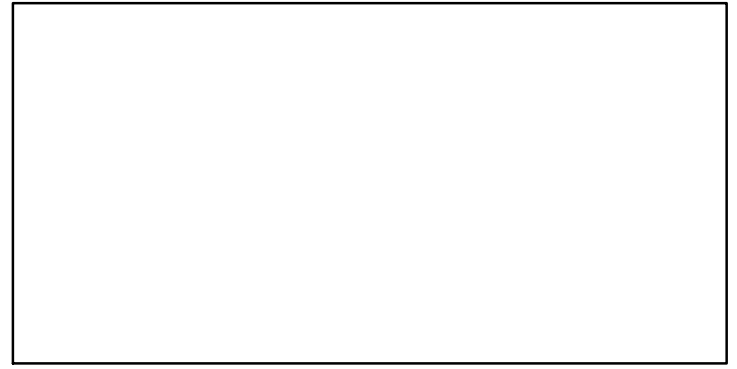
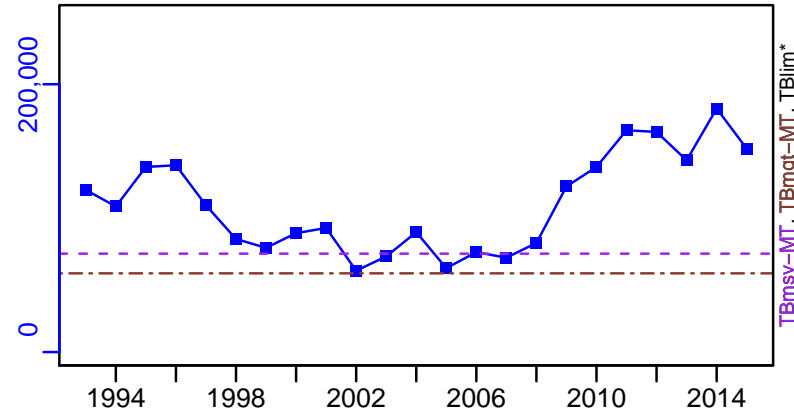


◆ Start Year ◆ End Year * No Data

Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]

TB-MT (1969-2015-OSGOOD)

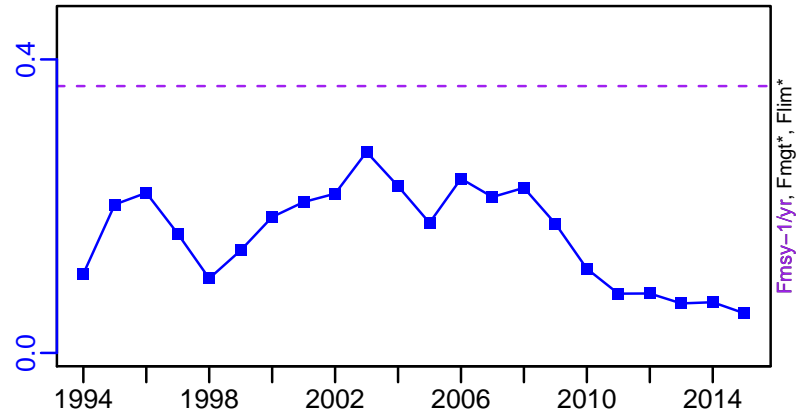
SSB*



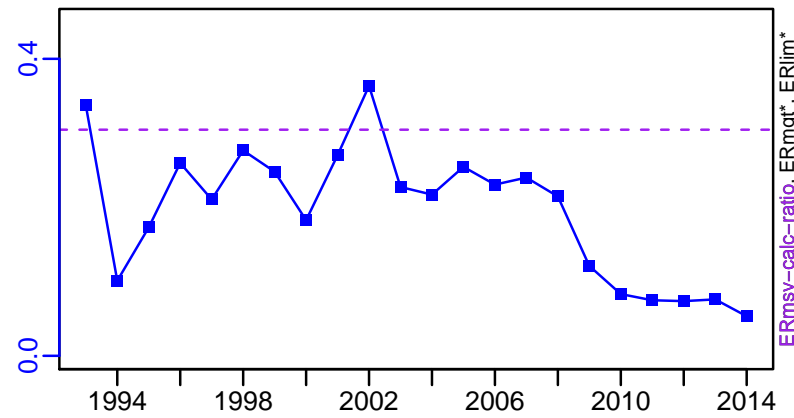
TN *



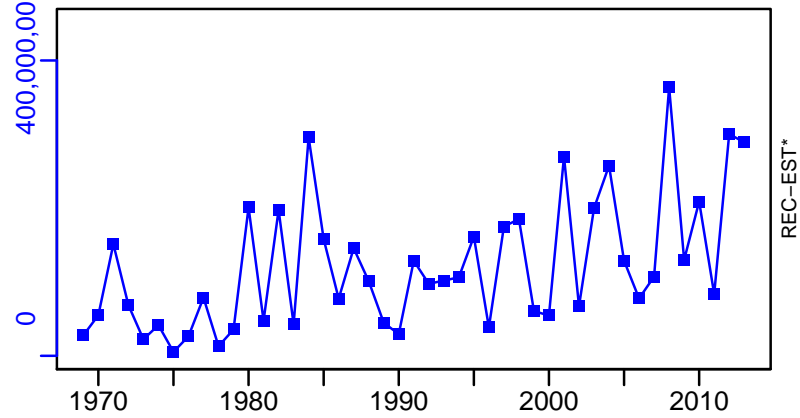
F-1/yr (1969-2015-OSGOOD)



ER-calc-ratio (1969-2015-OSGOOD)

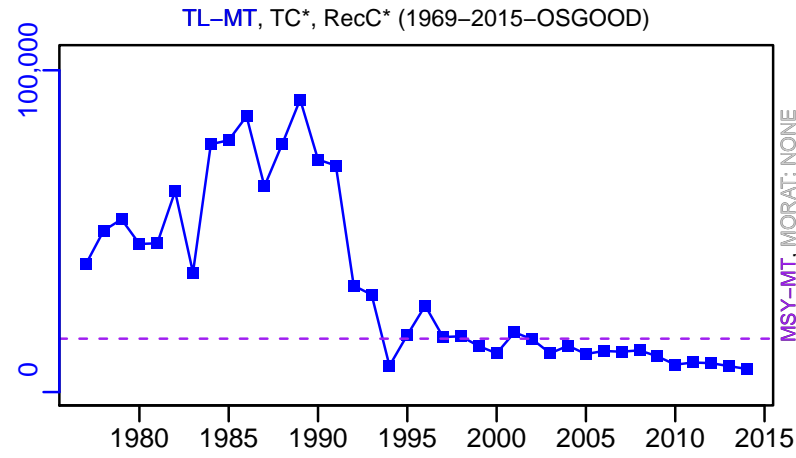


R-E00 (1969-2015-OSGOOD)

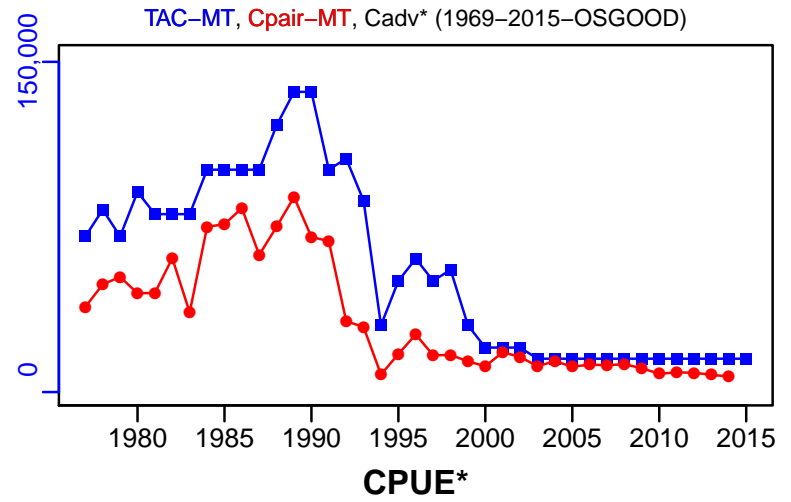


Silver hake Scotian Shelf and Bay of Fundy [SHAKE4VWX]

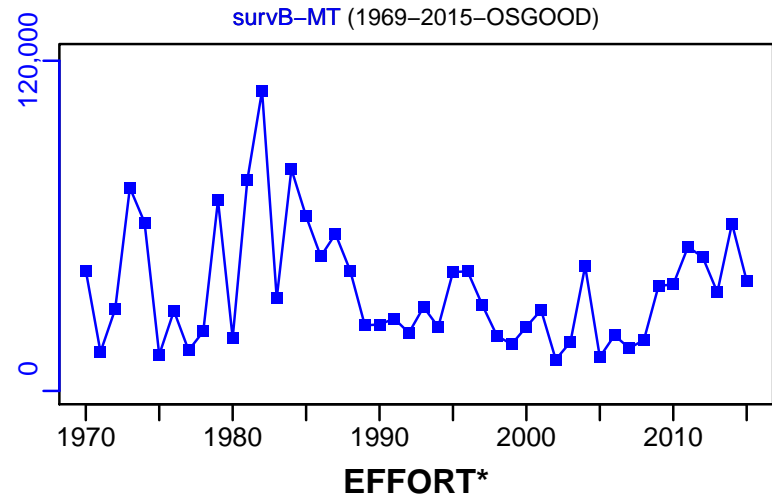
TL-MT, TC*, RecC* (1969–2015–OSGOOD)



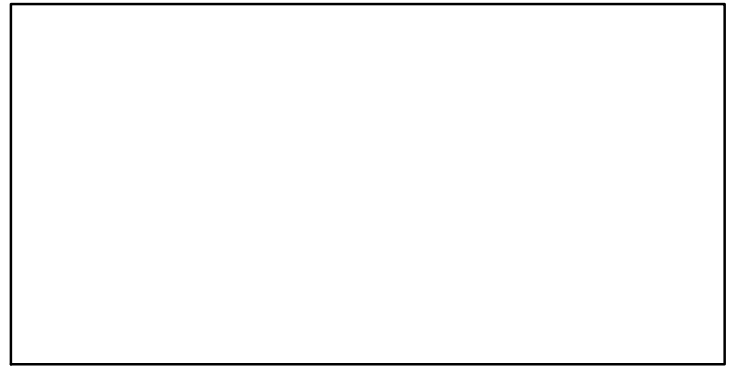
TAC-MT, Cpair-MT, Cadv* (1969–2015–OSGOOD)



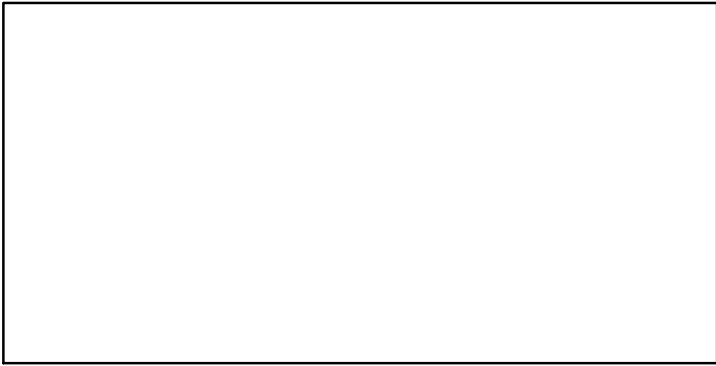
survB-MT (1969–2015–OSGOOD)



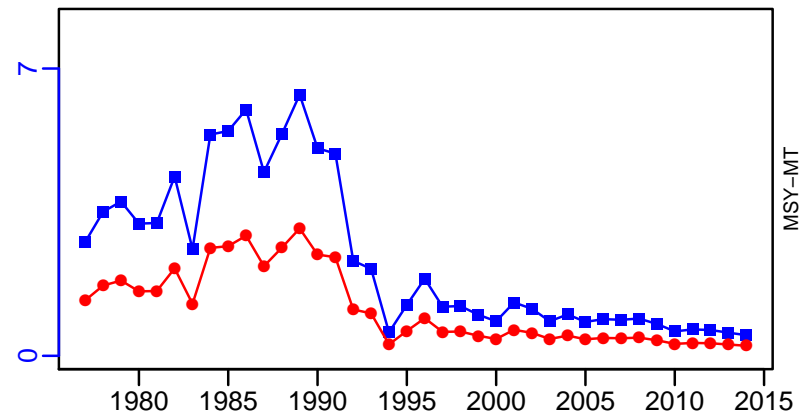
CPUE*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1969–2015–OSGOOD)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Smooth skate NAFO Division 2J3K [SMOOTHSKA2J3K]

Metadata	
Scientific Name	Malacoraja senta
Current Assess ID	DFO-NFLD-SMOOTHSKA2J3K-1981-2012-OSGOOD
Area	NAFO Division 2J3K
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Newfoundland 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	TC-MT	2012	0.021		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



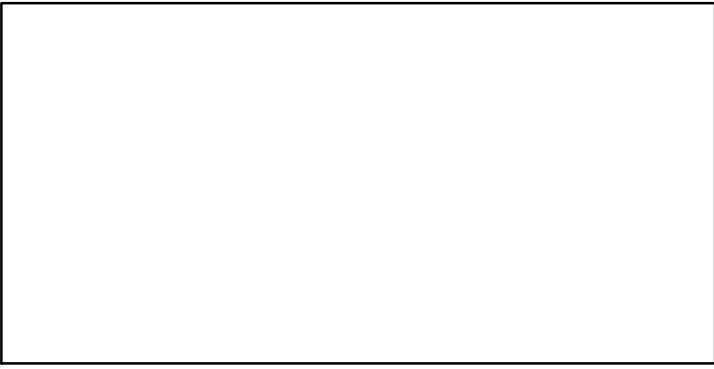
Production*



◆ Start Year ◆ End Year * No Data

Smooth skate NAFO Division 2J3K [SMOOTHSKA2J3K]

TB*



SSB*



TN *



F*



ER*

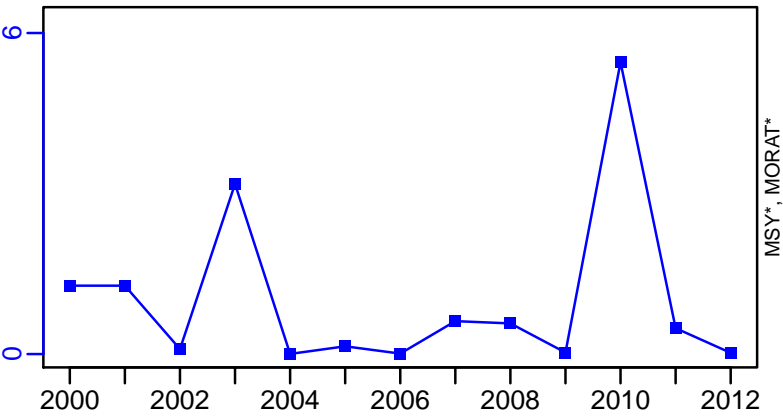


Recruits*



Smooth skate NAFO Division 2J3K [SMOOTHSKA2J3K]

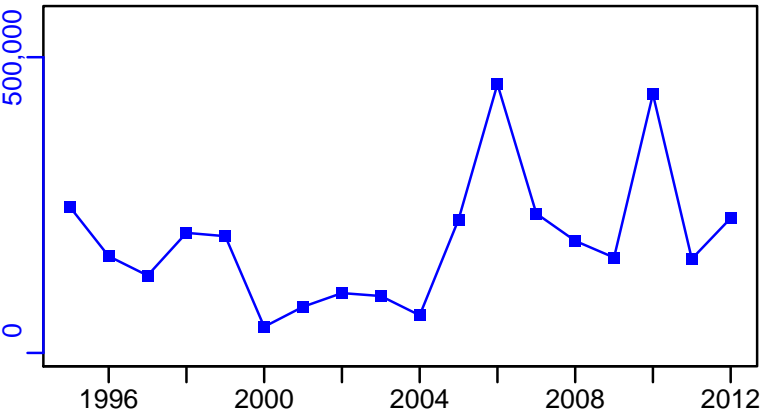
TC-MT, TL*, RecC* (1981-2012-OSGOOD)



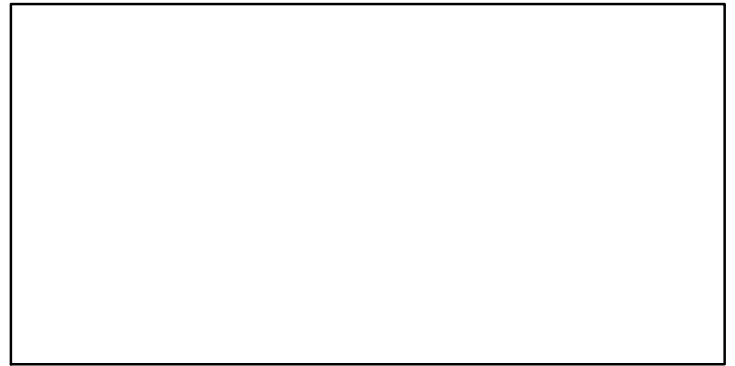
TAC*, Cpair*, Cadv*



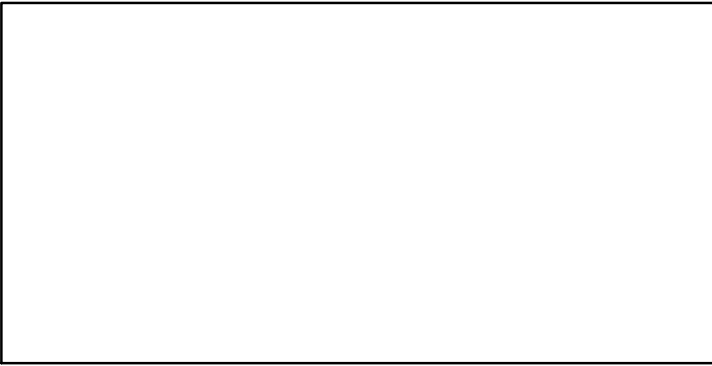
survB-MT (1981-2012-OSGOOD)



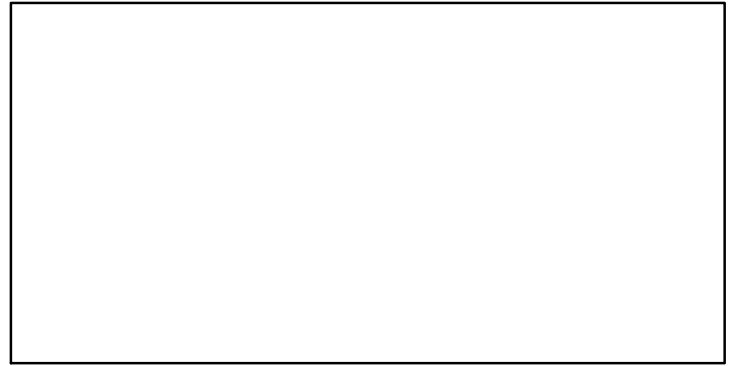
CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Smooth skate Southern Gulf of St. Lawrence [SMOOTHSKA4T]

Metadata	
Scientific Name	Malacoraja senta
Current Assess ID	DFO-NFLD-SMOOTHSKA4T-1971-2010-OSGOOD
Area	Southern Gulf of St. Lawrence
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	MSY-MT	2010	120
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	24		
TL	TL-MT	2010	0.56		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

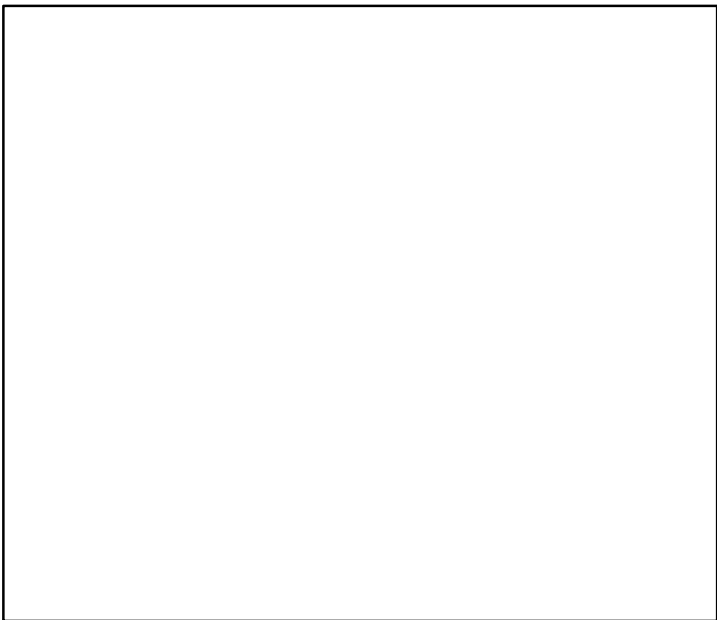
Kobe MSY*



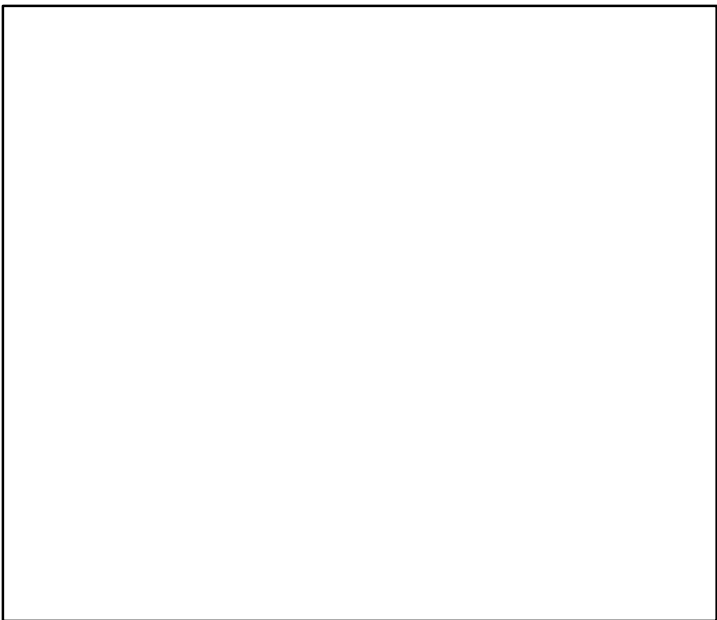
Kobe MGT*



Spawner Recruit*



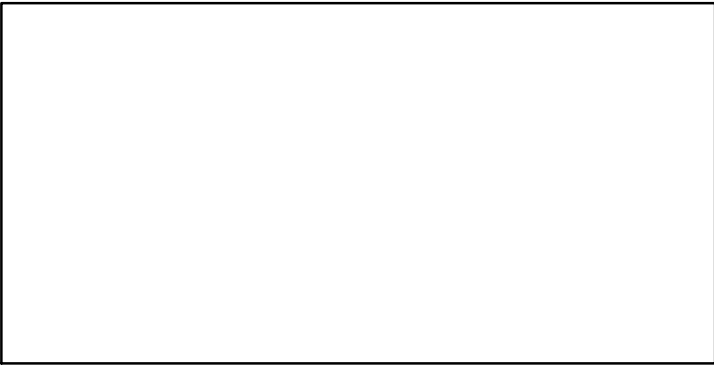
Production*



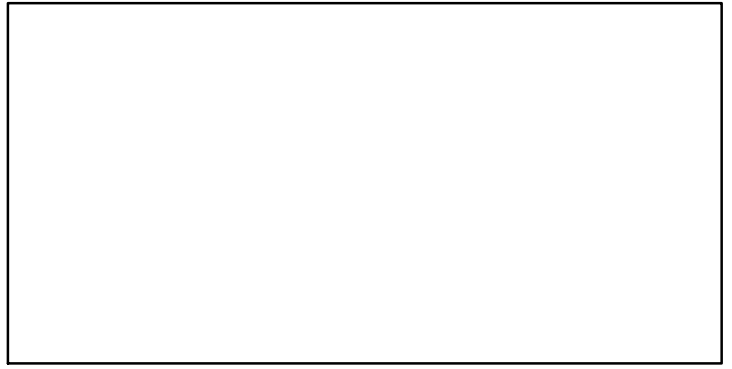
◆ Start Year ◆ End Year * No Data

Smooth skate Southern Gulf of St. Lawrence [SMOOTHSKA4T]

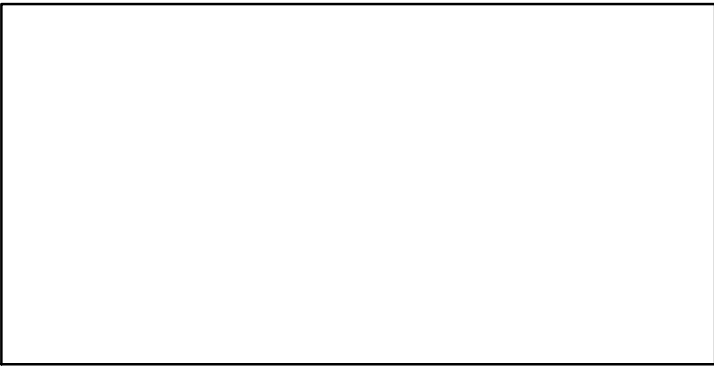
TB*



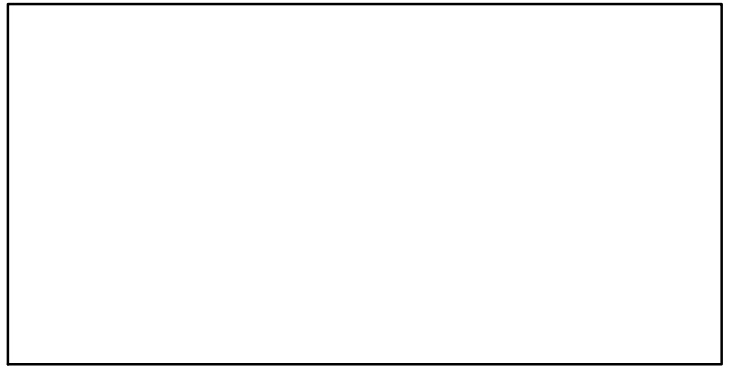
SSB*



TN *



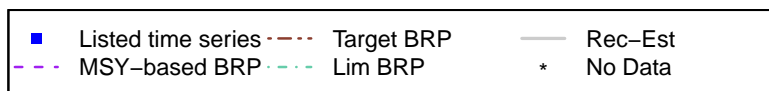
F*



ER*

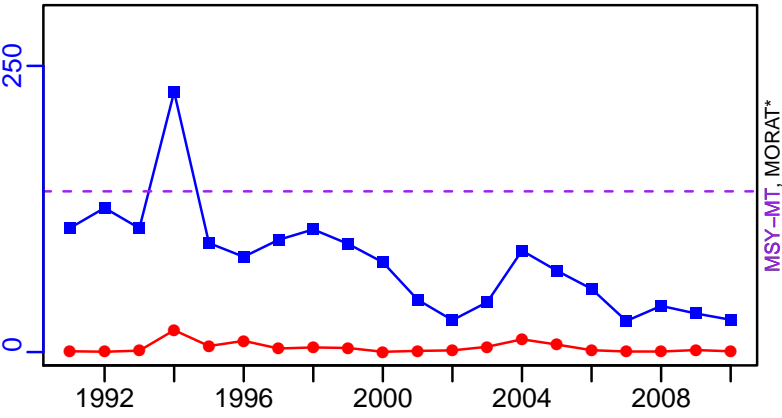


Recruits*



Smooth skate Southern Gulf of St. Lawrence [SMOOTHKA4T]

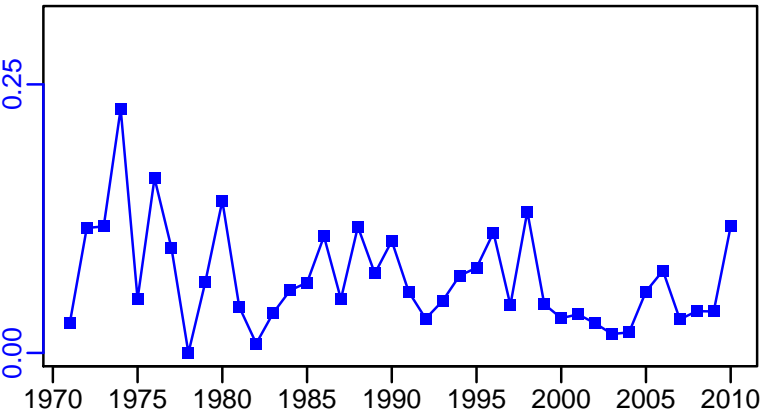
TC-MT, TL-MT, RecC* (1971-2010-OSGOOD)



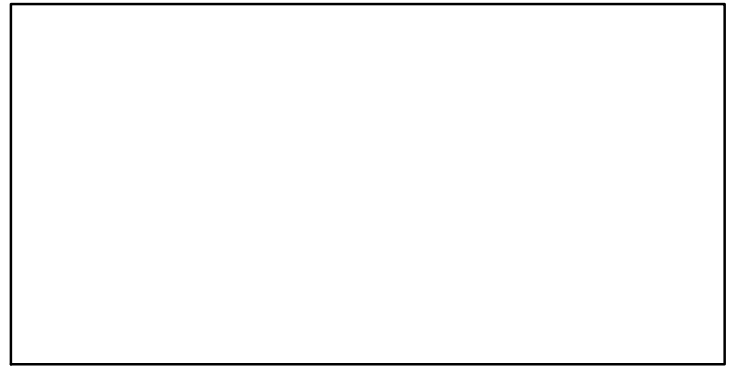
TAC*, Cpair*, Cadv*



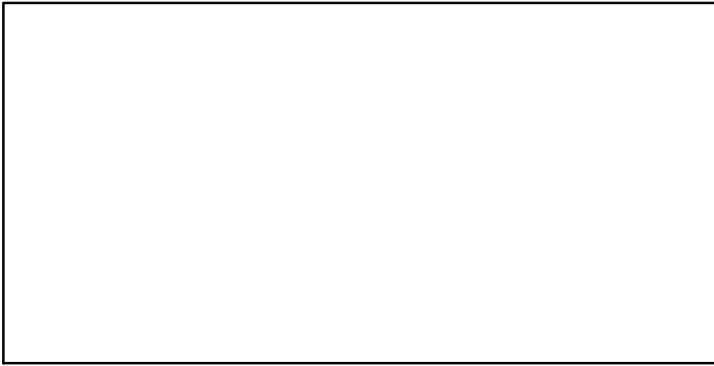
survB-kg/tow (1971-2010-OSGOOD)



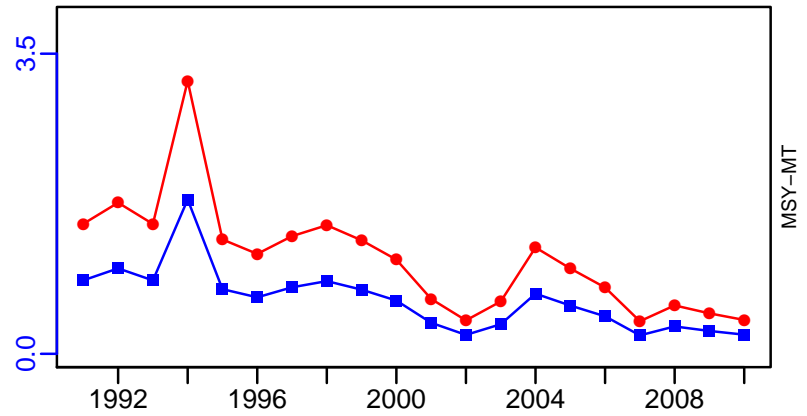
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1971-2010-OSGOOD)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Snow crab Division 2HJ [SNOWCRAB2HJ]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRAB2HJ-1995-2013-WATSON
Area	Division 2HJ
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2013

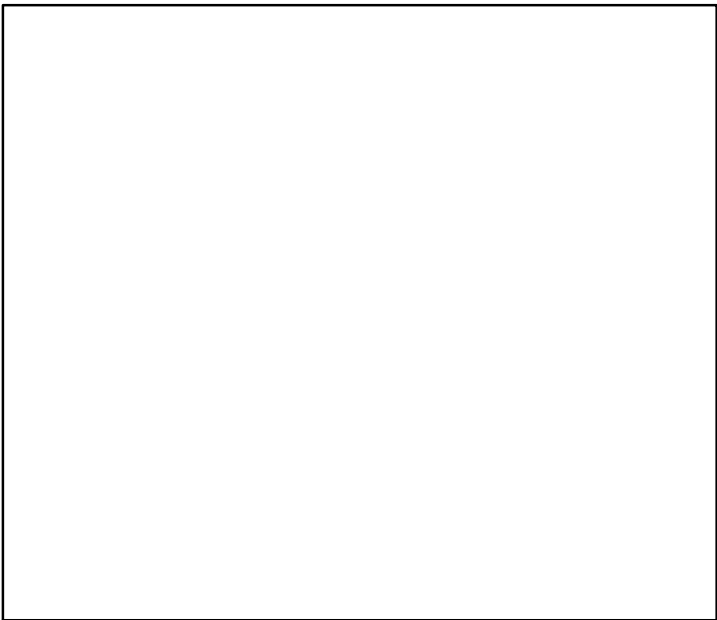
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	TN-E00	2013	6,350,000	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2013	1380		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

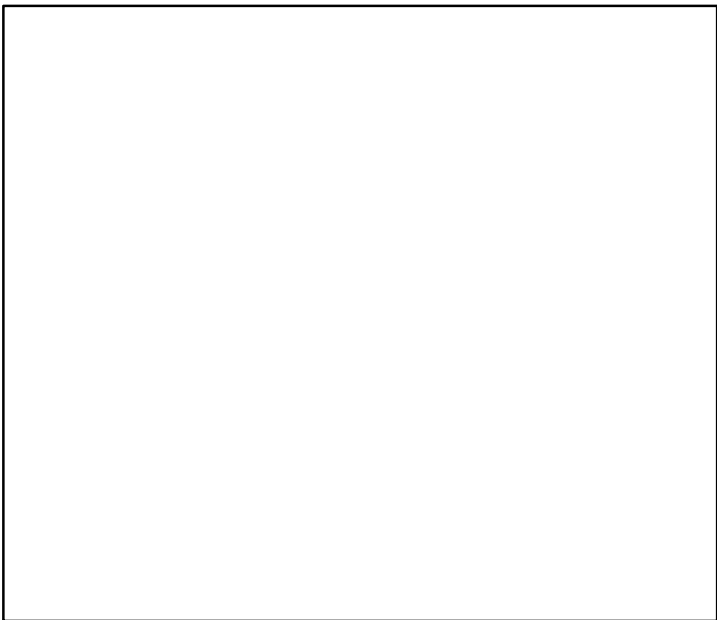
Kobe MSY*



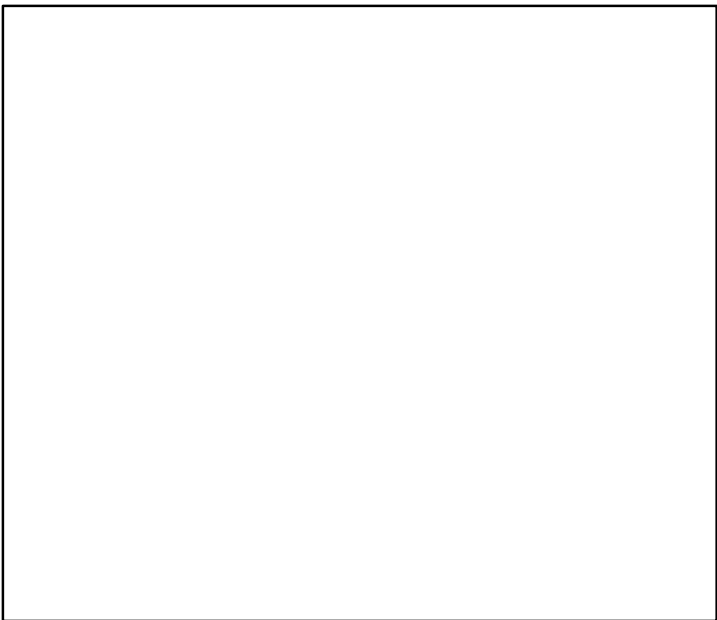
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Snow crab Division 2HJ [SNOWCRAB2HJ]

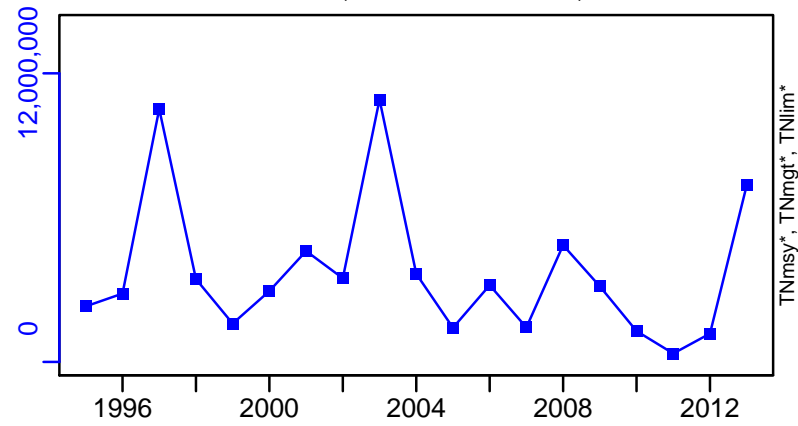
TB*



SSB*



TN-E00 (1995–2013–WATSON)



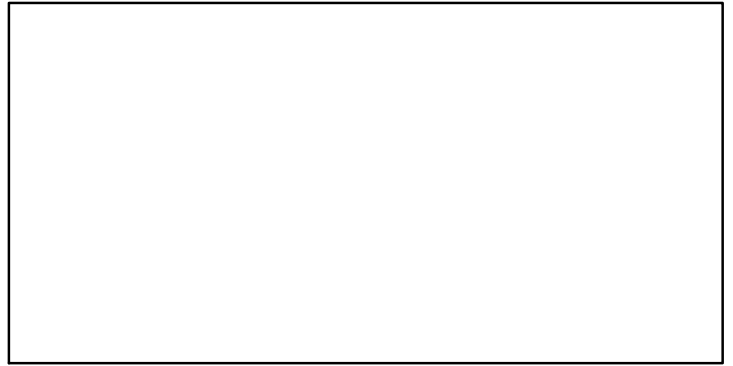
F*



ER*

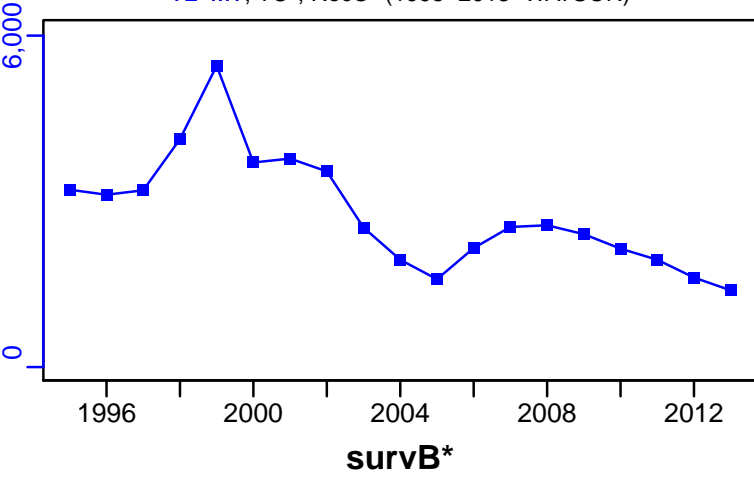


Recruits*

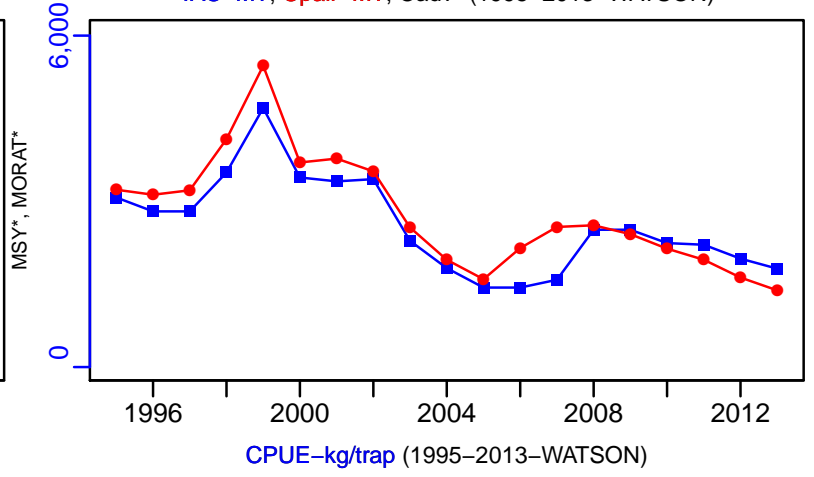


Snow crab Division 2HJ [SNOWCRAB2HJ]

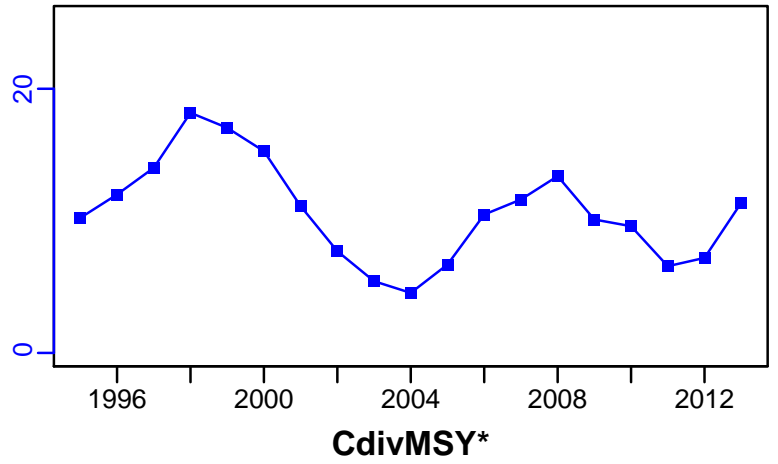
TL-MT, TC*, RecC* (1995-2013-WATSON)



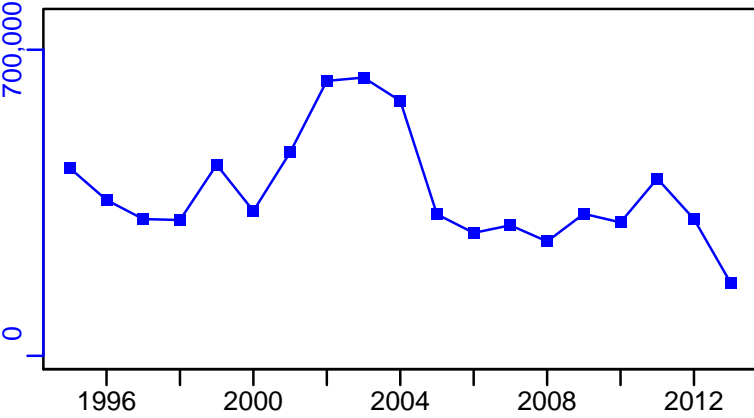
TAC-MT, Cpair-MT, Cadv* (1995-2013-WATSON)



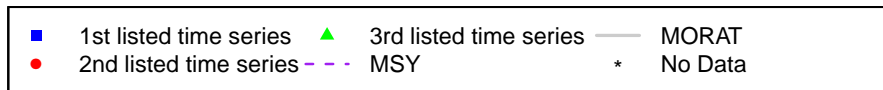
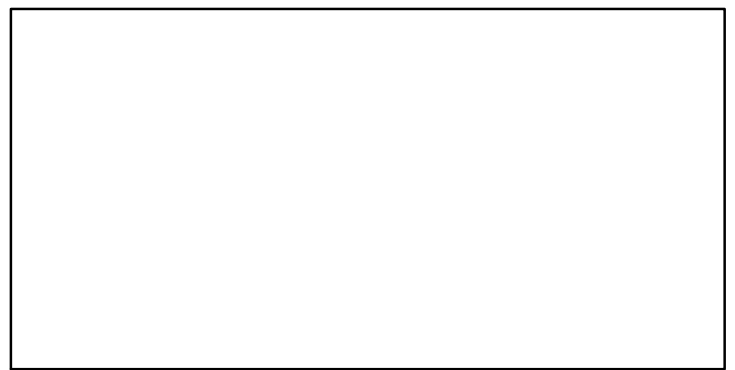
CPUE-kg/trap (1995-2013-WATSON)



EFFORT-traphauls (1995-2013-WATSON)



CdivMSY*



Snow crab Division 3K [SNOWCRAB3K]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRAB3K-1995-2013-WATSON
Area	Division 3K
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2008, 2013

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	2008	14,300	-	-
SSB	-	-	-	-	-
TN	TN-E00	2013	3,310,000	-	-
R	R-MT	2008	7170	-	-
F	-	-	-	-	-
ER	ER-ratio	2008	0.811	-	-
TC	-	-	-		
TL	TL-MT	2013	8520		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Snow crab Division 3K [SNOWCRAB3K]

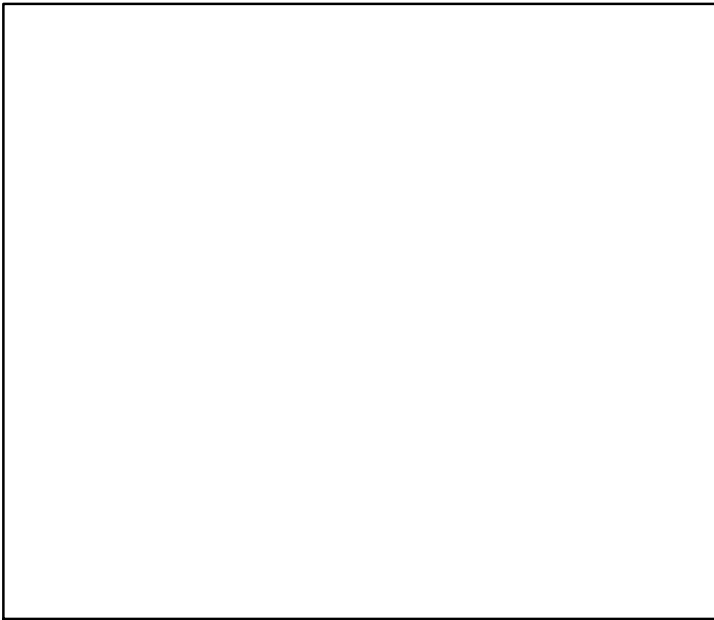
Kobe MSY*



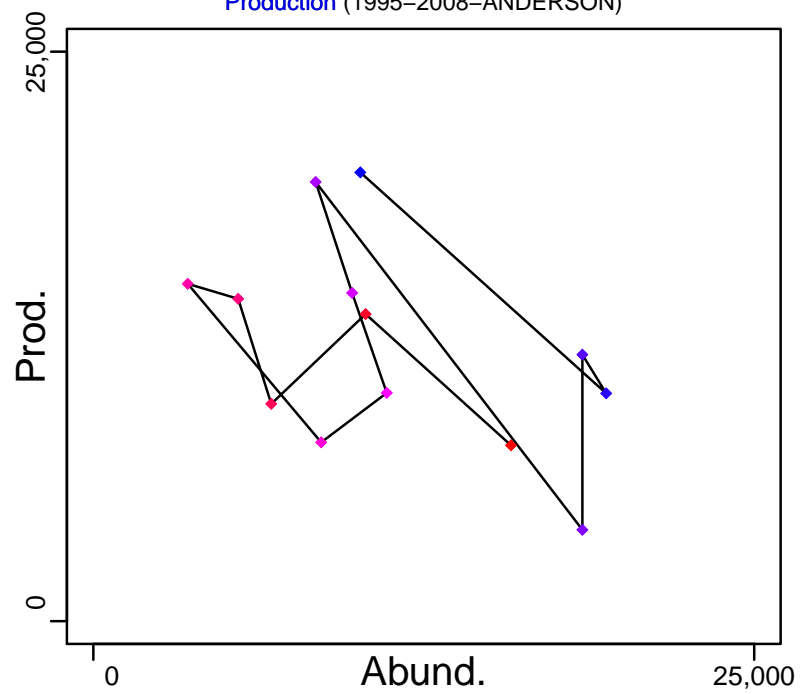
Kobe MGT*



Spawner Recruit*



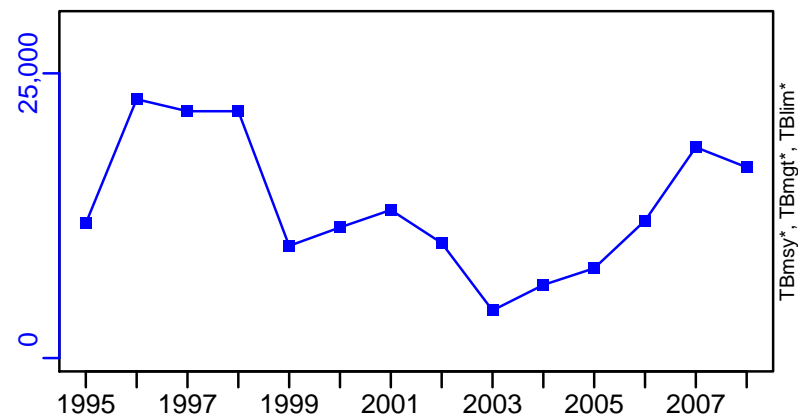
Production (1995–2008–ANDERSON)



◆ Start Year ◆ End Year * No Data

Snow crab Division 3K [SNOWCRAB3K]

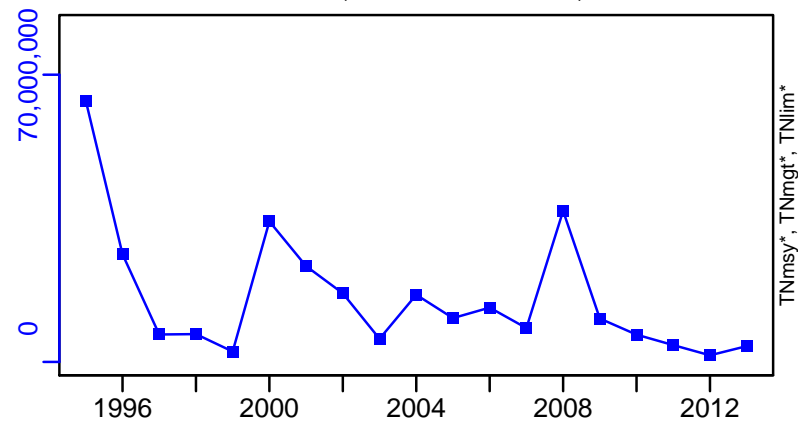
TB-MT (1995–2008–ANDERSON)



SSB*



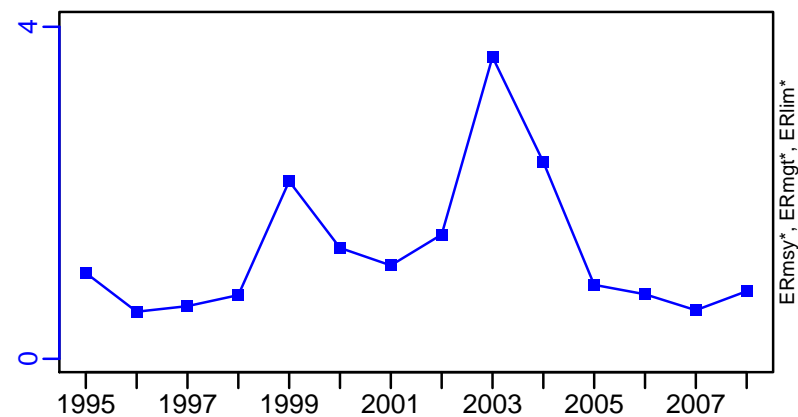
TN-E00 (1995–2013–WATSON)



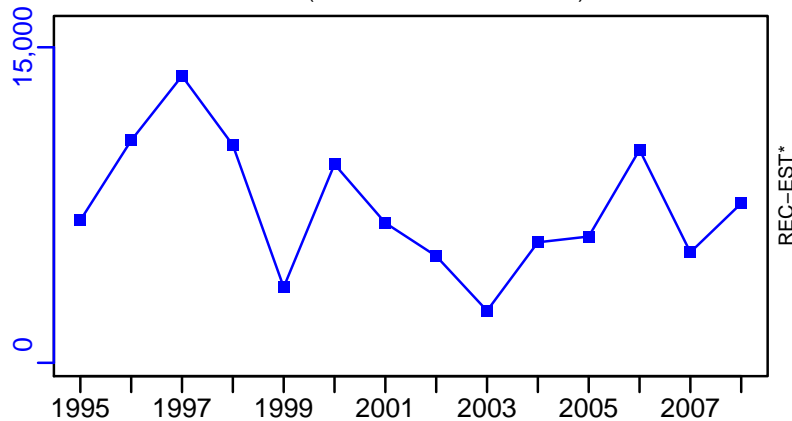
F*



ER-ratio (1995–2008–ANDERSON)

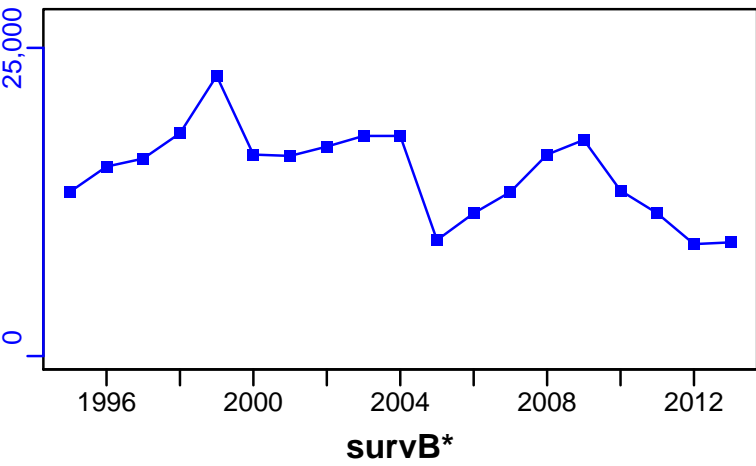


R-MT (1995–2008–ANDERSON)

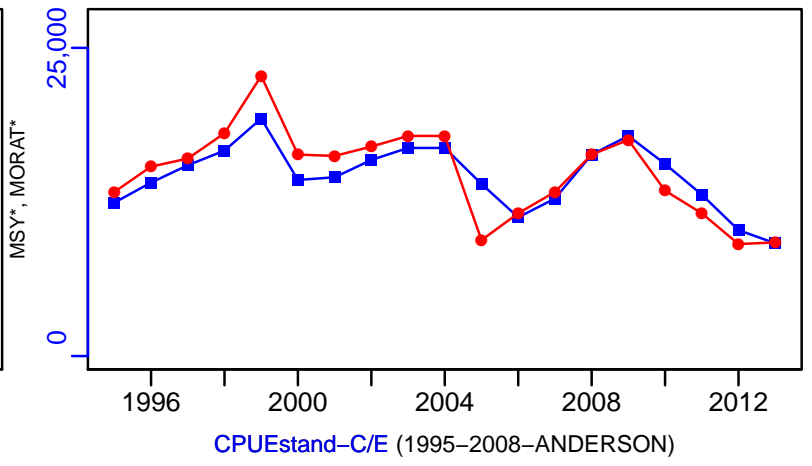


Snow crab Division 3K [SNOWCRAB3K]

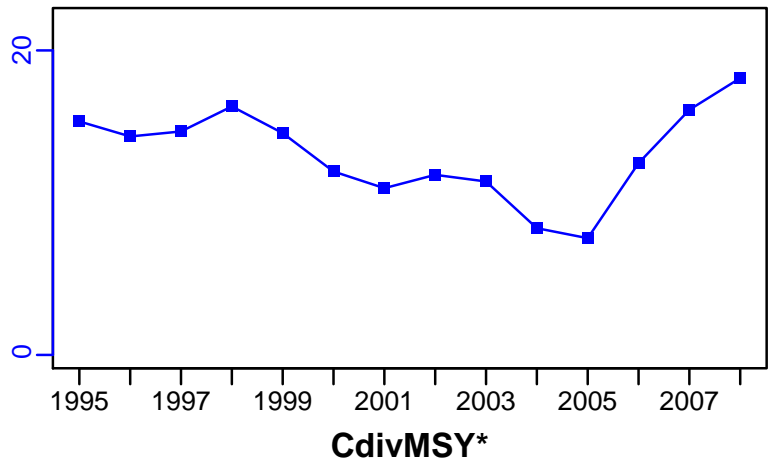
TL-MT, TC*, RecC* (1995-2013-WATSON)



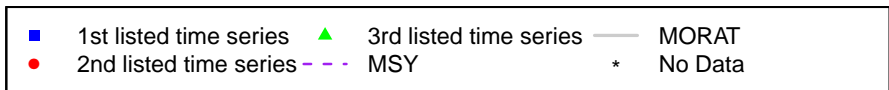
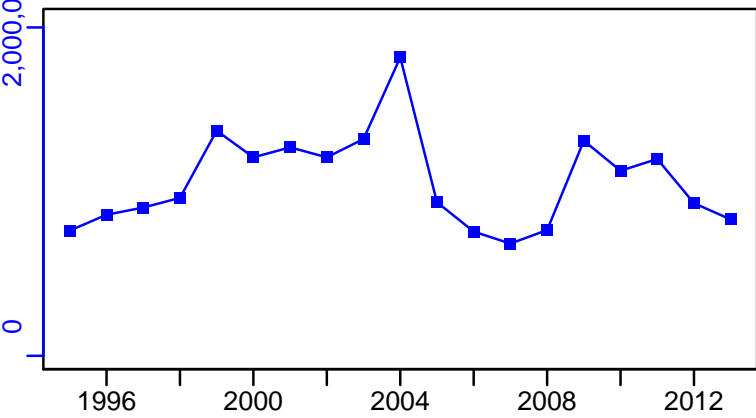
TAC-MT, Cpair-MT, Cadv* (1995-2013-WATSON)



CPUStand-C/E (1995-2008-ANDERSON)



EFFORT-A1-traphauls (1995-2013-WATSON)



Snow crab Division 3LNO [SNOWCRAB3LNO]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRAB3LNO-1995-2013-WATSON
Area	Division 3LNO
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2013

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	TN-E00	2013	8,270,000	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2013	33,900		
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

Snow crab Division 3LNO [SNOWCRAB3LNO]

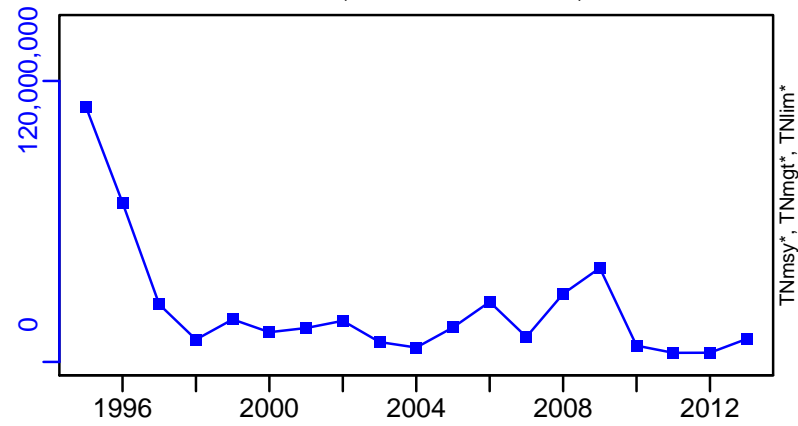
TB*



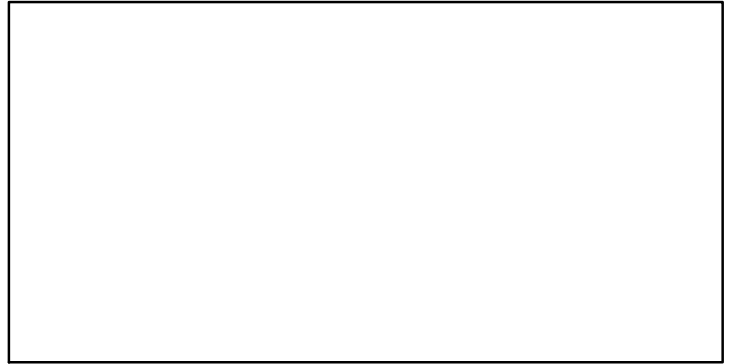
SSB*



TN-E00 (1995–2013–WATSON)



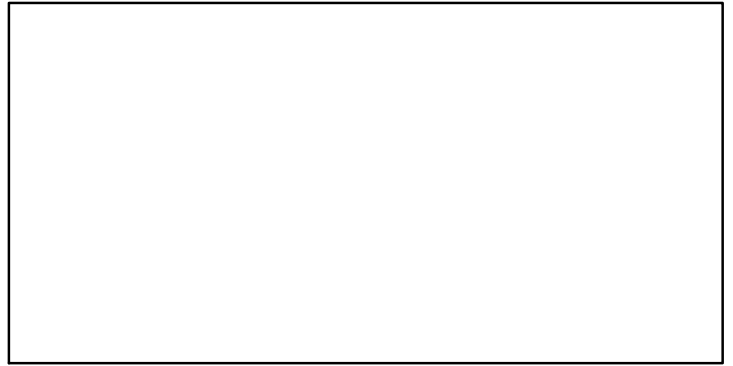
F*



ER*

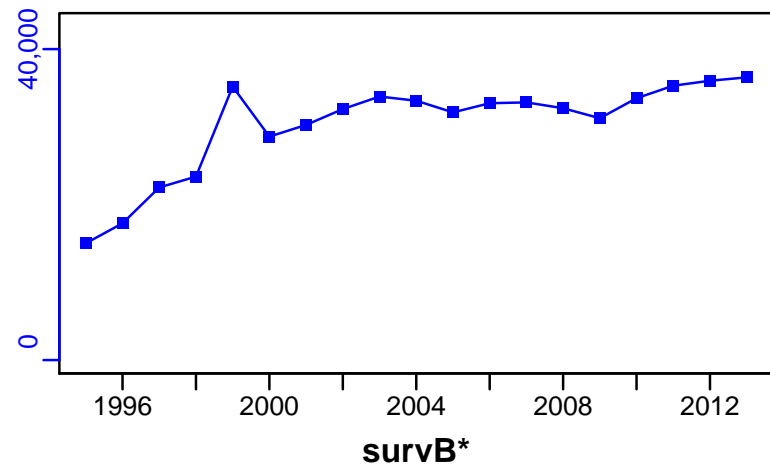


Recruits*

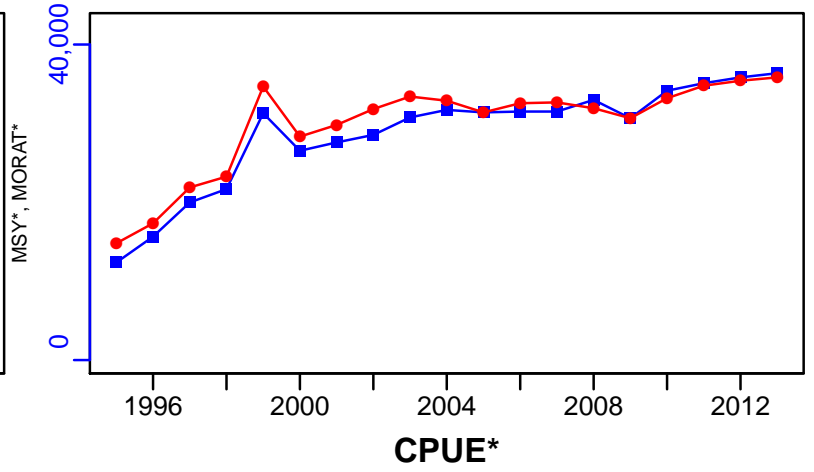


Snow crab Division 3LNO [SNOWCRAB3LNO]

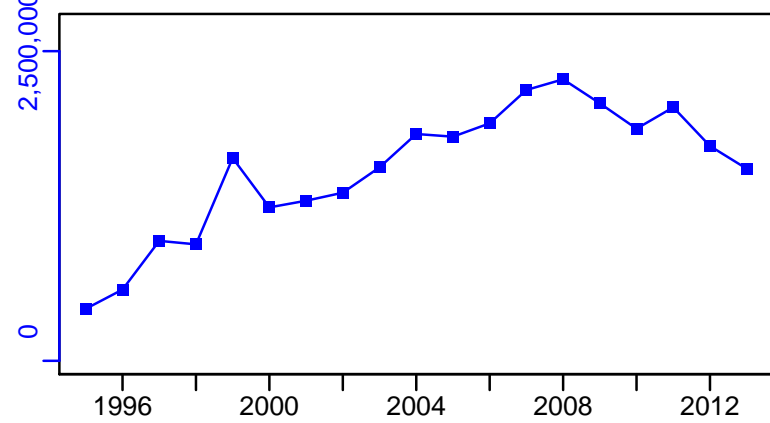
TL-MT, TC*, RecC* (1995-2013-WATSON)



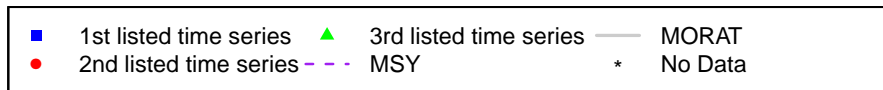
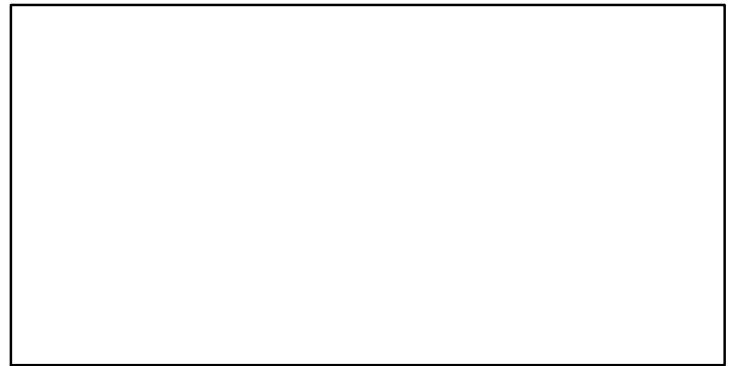
TAC-MT, Cpair-MT, Cadv* (1995-2013-WATSON)



EFFORT-A1-traphauls (1995-2013-WATSON)



CdivMSY*



Snow crab St. Pierre Bank [SNOWCRAB3Ps]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRAB3Ps-1995-2013-WATSON
Area	St. Pierre Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2008, 2013

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	2008	354	-	-
SSB	-	-	-	-	-
TN	TN-E00	2013	768,000	-	-
R	R-MT	2008	1020	-	-
F	-	-	-	-	-
ER	ER-ratio	2008	8.97	-	-
TC	-	-	-		
TL	TL-MT	2013	6050		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

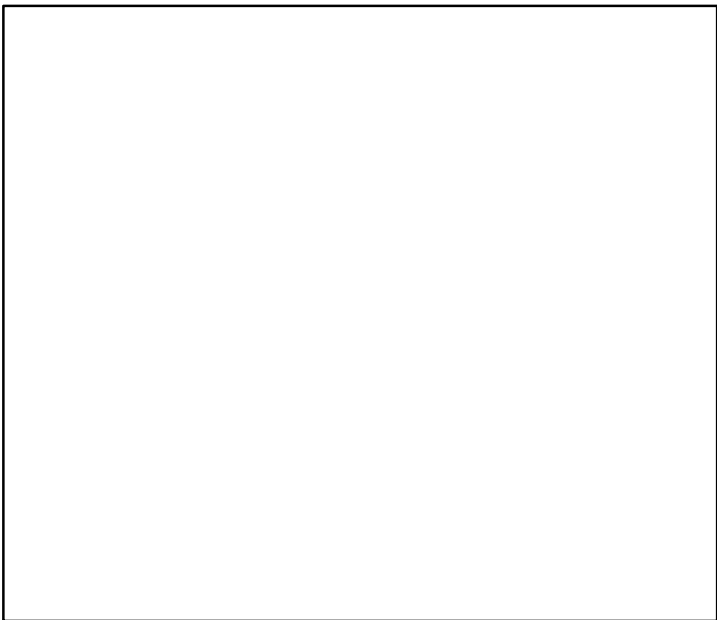
Kobe MSY*



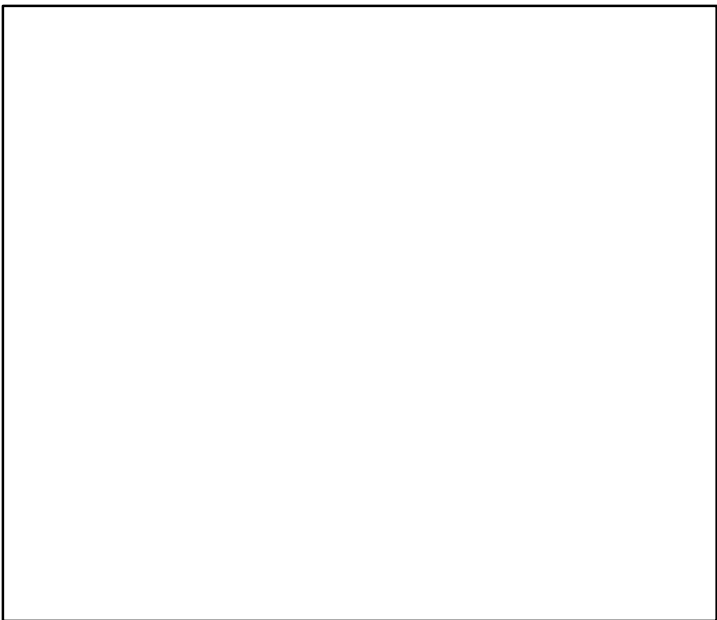
Kobe MGT*



Spawner Recruit*



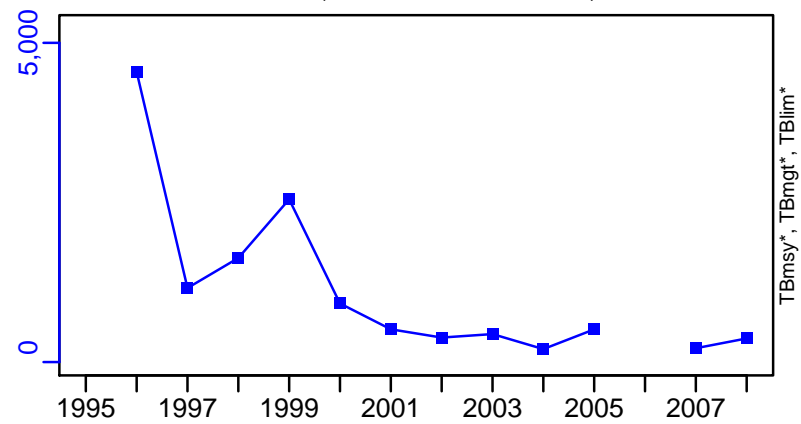
Production*



◆ Start Year ◆ End Year * No Data

Snow crab St. Pierre Bank [SNOWCRAB3Ps]

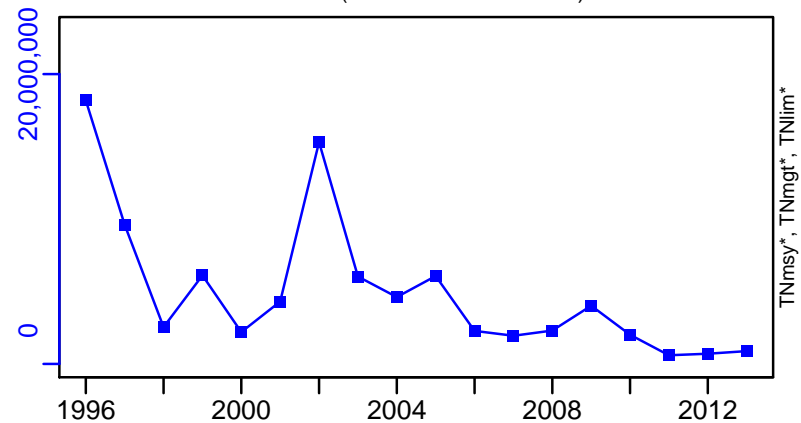
TB-MT (1995–2008–ANDERSON)



SSB*



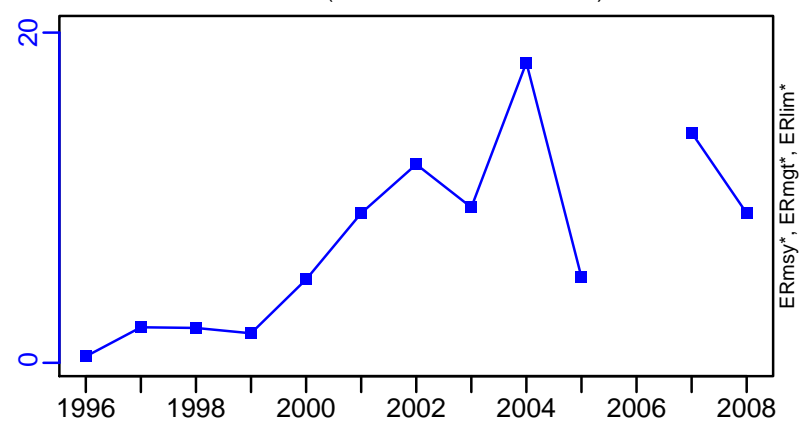
TN-E00 (1995–2013–WATSON)



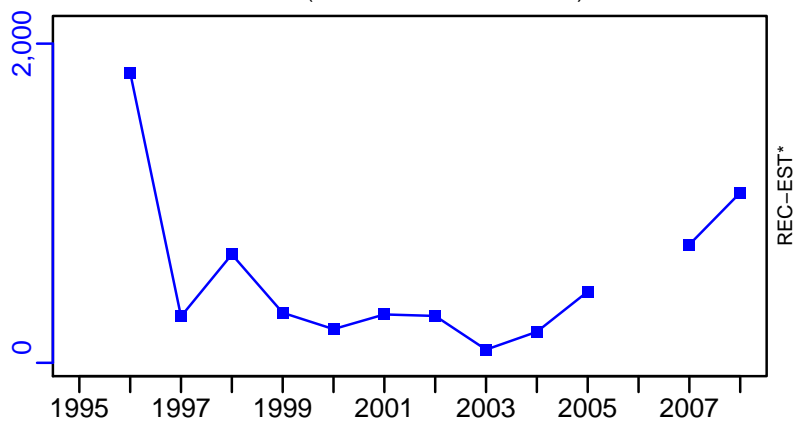
F*



ER-ratio (1995–2008–ANDERSON)

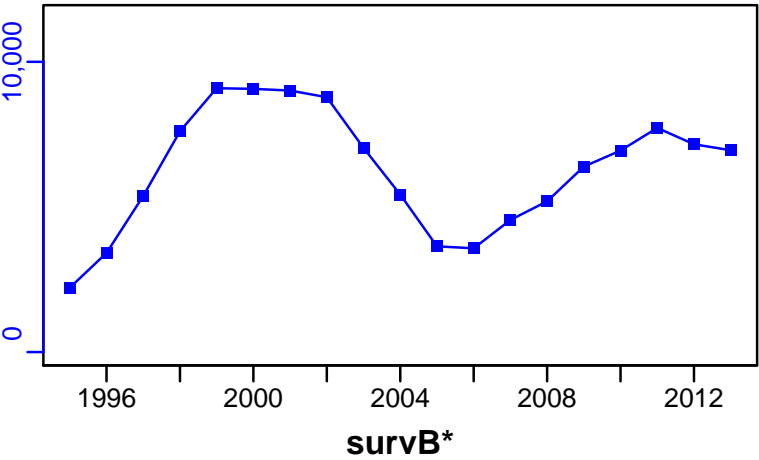


R-MT (1995–2008–ANDERSON)

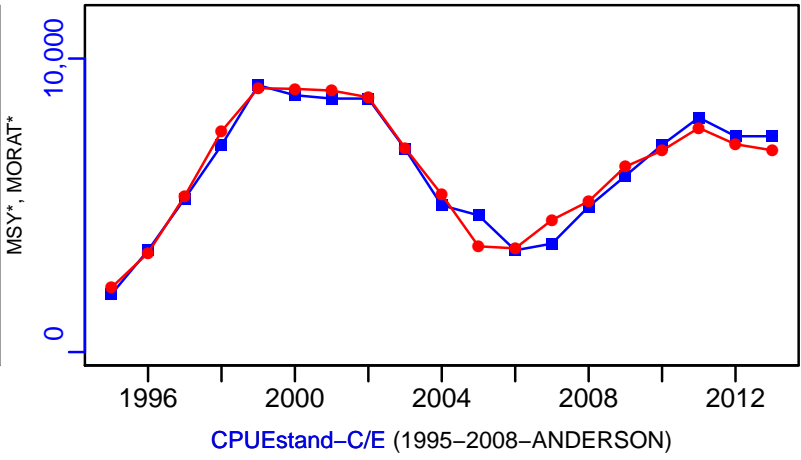


Snow crab St. Pierre Bank [SNOWCRAB3Ps]

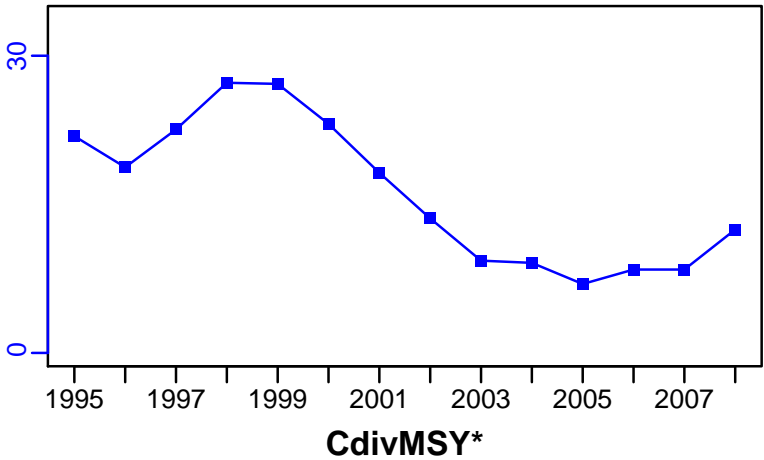
TL-MT, TC*, RecC* (1995-2013-WATSON)



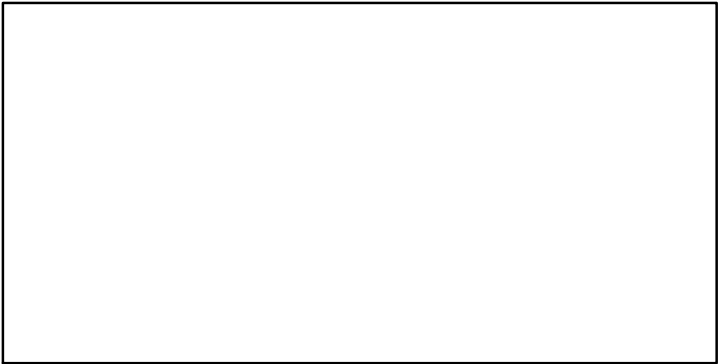
TAC-MT, Cpair-MT, Cadv* (1995-2013-WATSON)



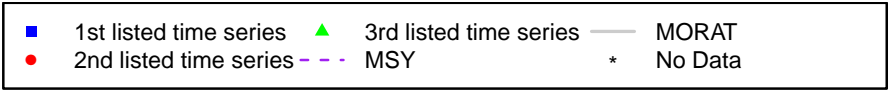
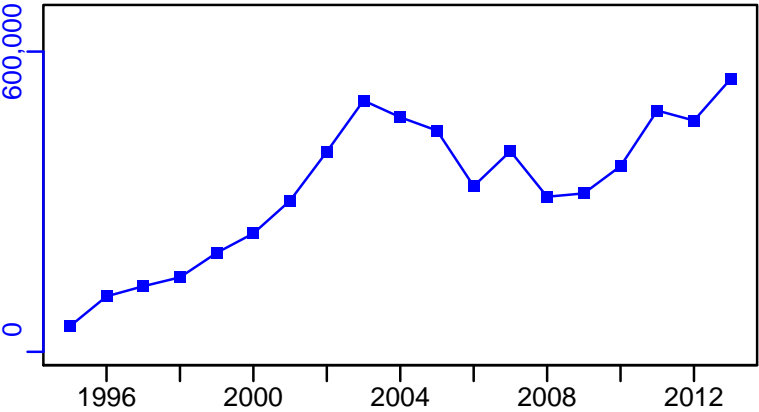
CPUStand-C/E (1995-2008-ANDERSON)



CdivMSY*



EFFORT-A1-traphauls (1995-2013-WATSON)



Snow crab Division 4R3Pn [SNOWCRAB4R3Pn]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRAB4R3Pn-1995-2013-WATSON
Area	Division 4R3Pn
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2013

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	TN-E00	2013	3.4×10^7	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2013	891		
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

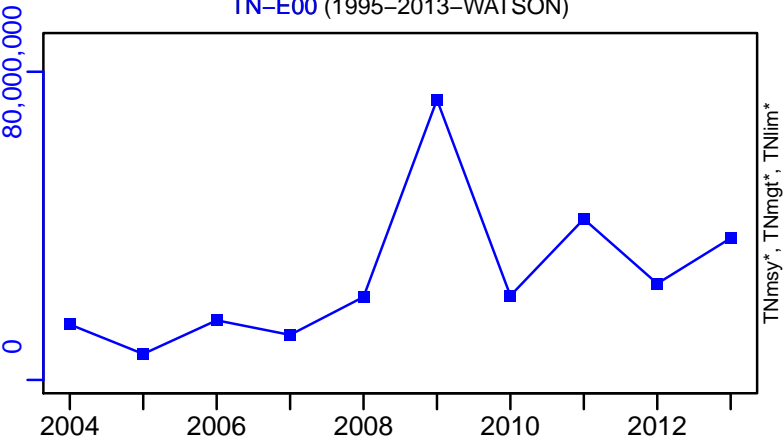
TB*



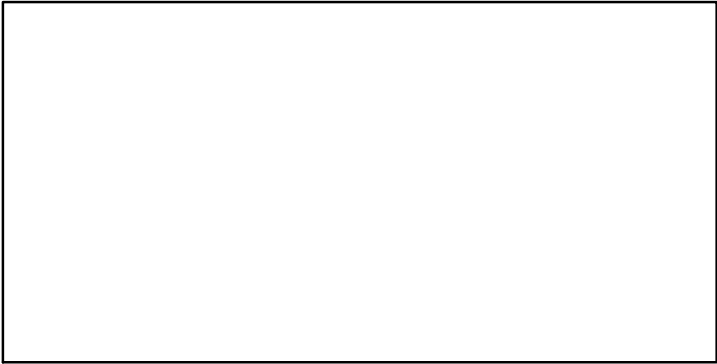
SSB*



TN-E00 (1995-2013-WATSON)



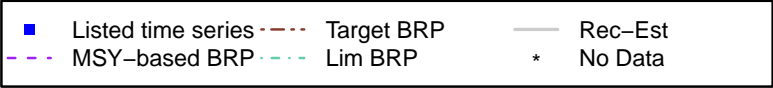
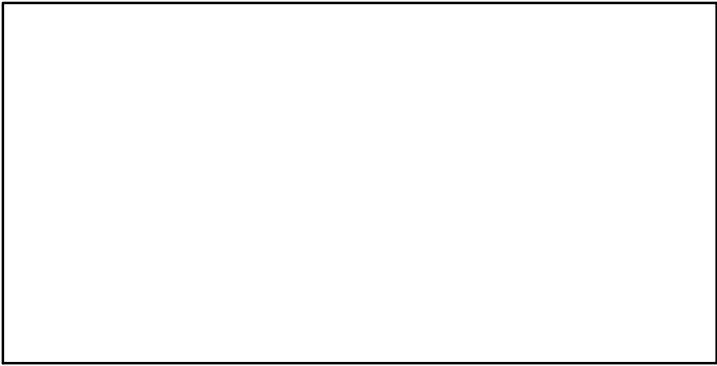
F*



ER*

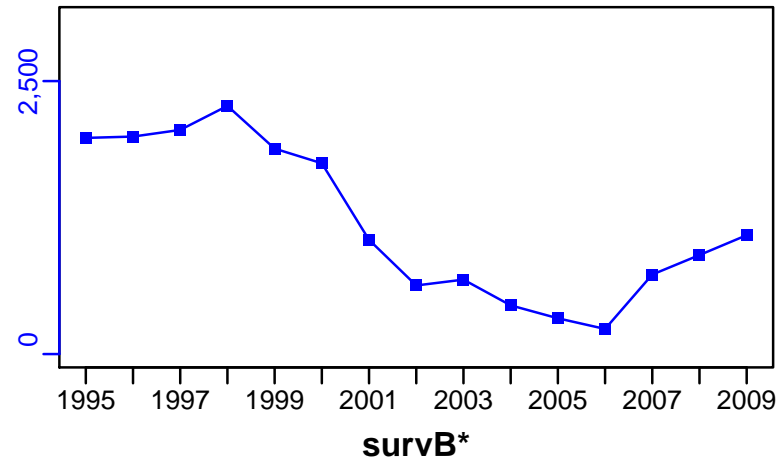


Recruits*

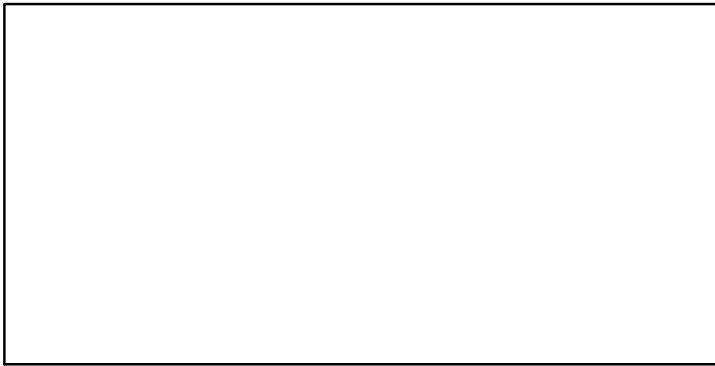
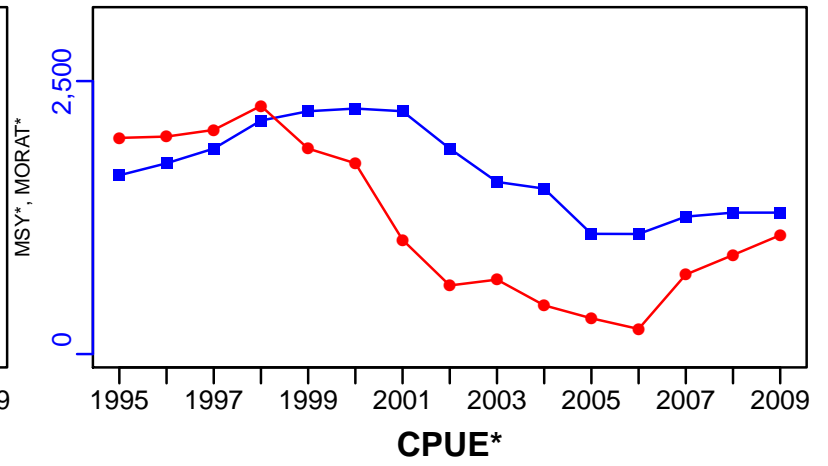


Snow crab Division 4R3Pn [SNOWCRAB4R3Pn]

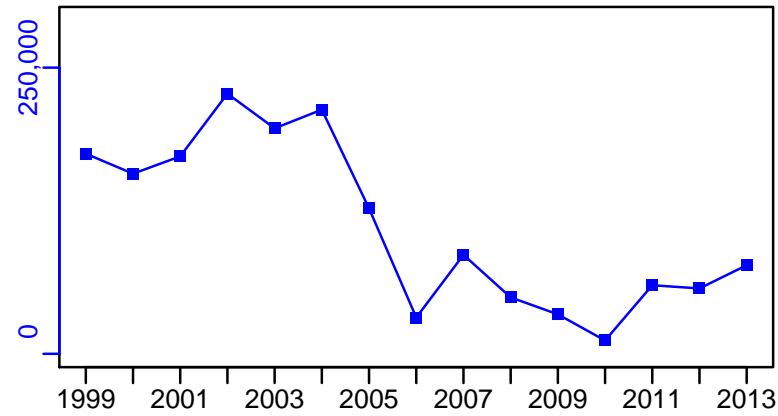
TL-MT, TC*, RecC* (1995-2013-WATSON)



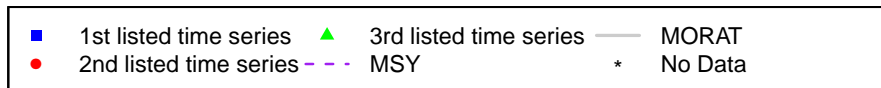
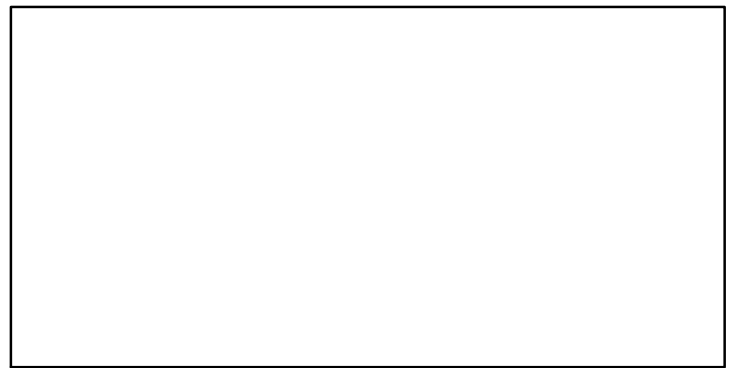
TAC-MT, Cpair-MT, Cadv* (1995-2013-WATSON)



EFFORT-A1-traphauls (1995-2013-WATSON)



CdivMSY*



Snow crab Northern Gulf of St. Lawrence [SNOWCRABSCMA12-17]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-QUE-SNOWCRABSCMA12-17-1979-2011-CHING
Area	Northern 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	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	7490		
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

TB*



SSB*



TN *



F*



ER*

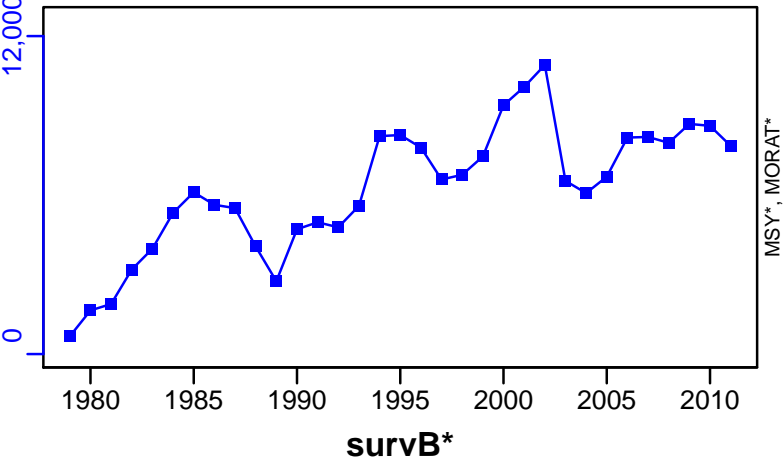


Recruits*

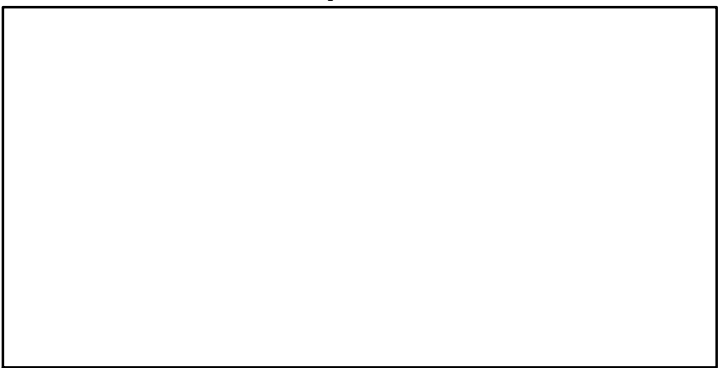


Snow crab Northern Gulf of St. Lawrence [SNOWCRABSCMA12-17]

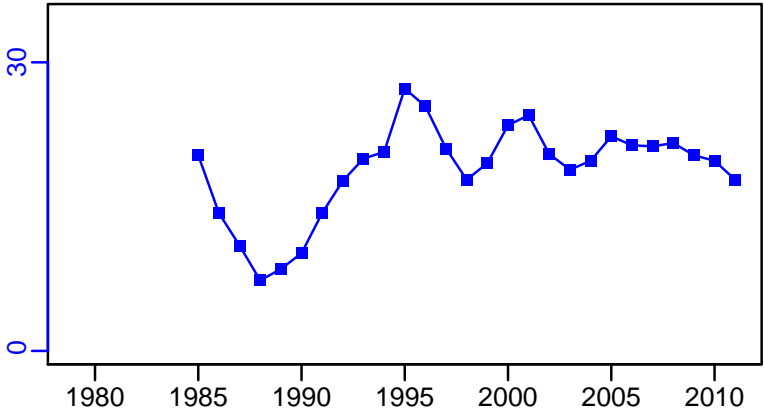
TL-MT, TC*, RecC* (1979-2011-CHING)



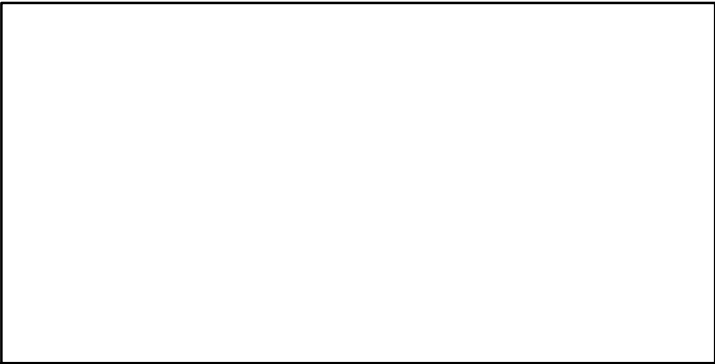
TAC*, Cpair*, Cadv*



CPUE-index (1979-2011-CHING)



EFFORT*

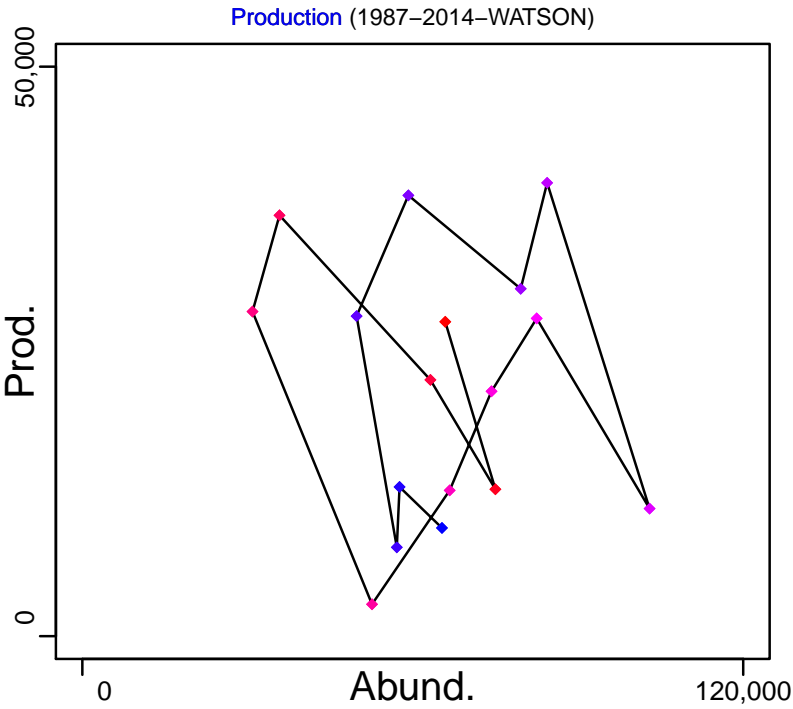


Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]

Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	DFO-SNOWCRABSGSL-1987-2014-WATSON
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2007, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.38
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	67,500	Males	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-MT	2014	43,600	Males	-
F	-	-	-	-	-
ER	ER-ratio	2014	0.371	-	-
TC	-	-	-		
TL	TL-MT	2014	24,400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

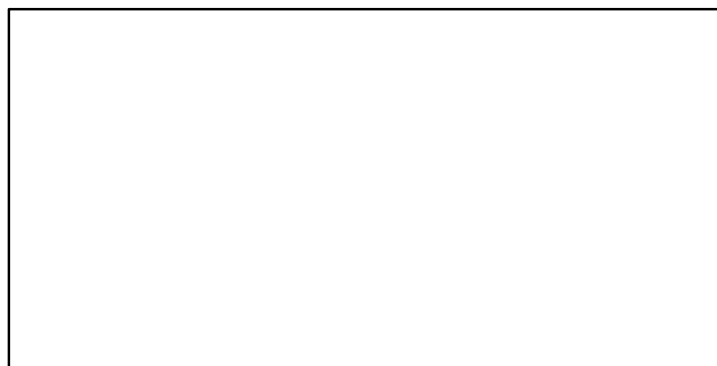
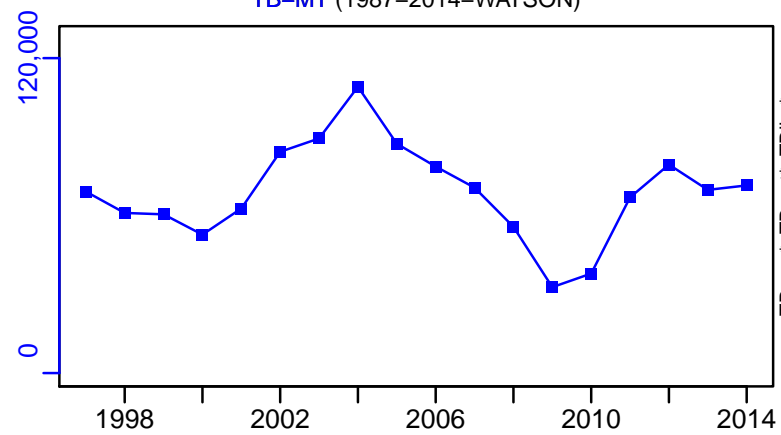


◆ Start Year ◆ End Year * No Data

Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]

TB-MT (1987-2014-WATSON)

SSB*



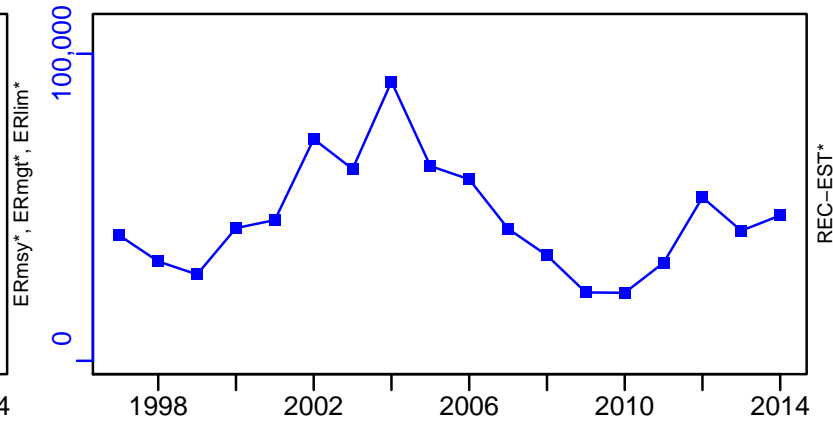
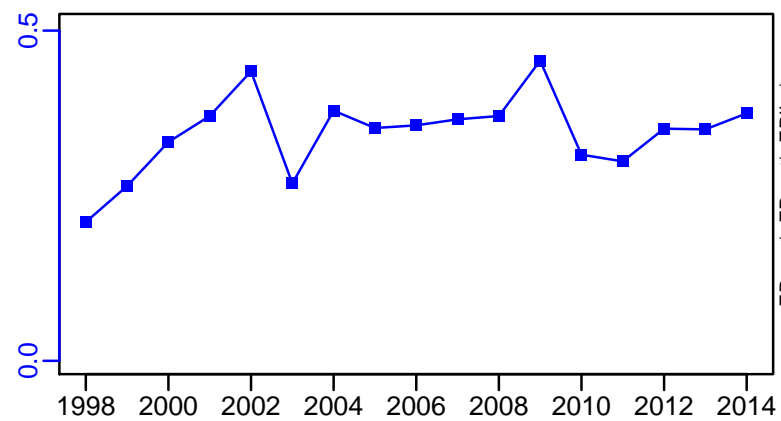
TN *

F*



ER-ratio (1987-2014-WATSON)

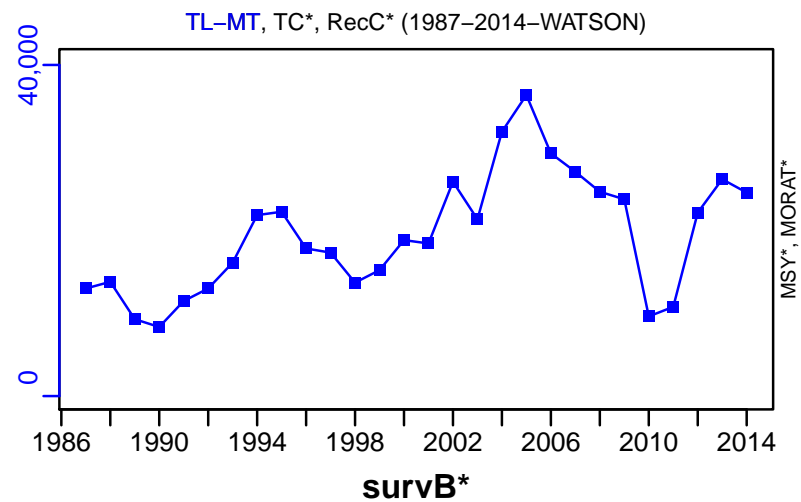
R-MT (1987-2014-WATSON)



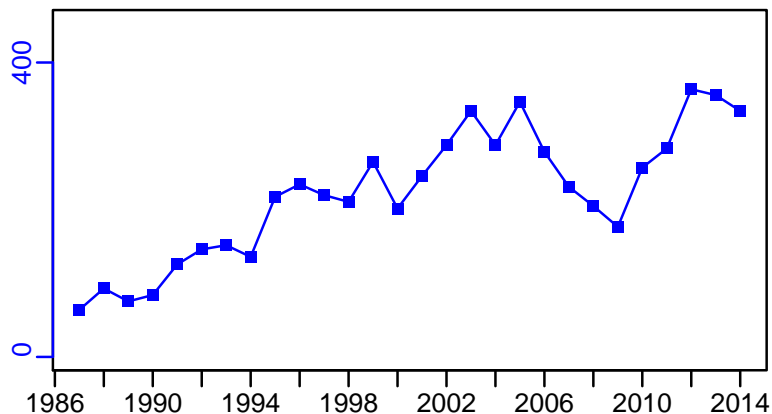
Snow crab Southern Gulf of St. Lawrence [SNOWCRABSGSL]

TL-MT, TC*, RecC* (1987-2014-WATSON)

TAC*, Cpair*, Cadv*

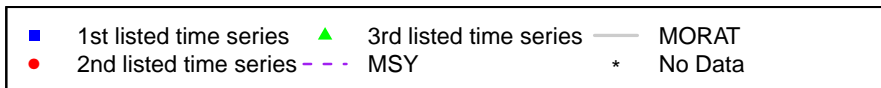
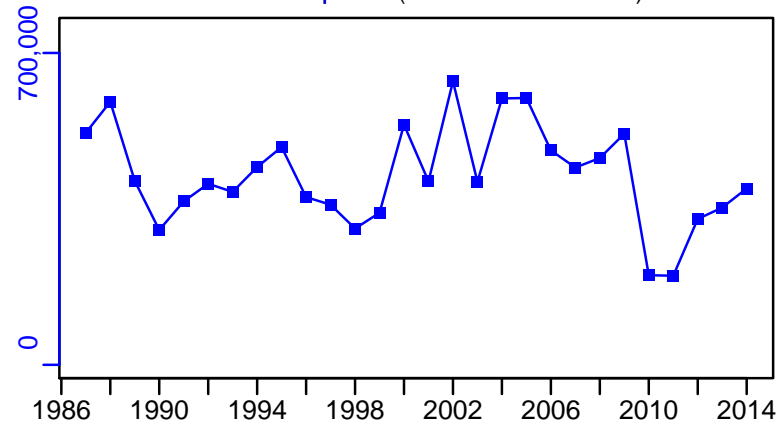


CPUE-kg/trap (1987-2014-WATSON)



EFFORT-traphauls (1987-2014-WATSON)

CdivMSY*



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*



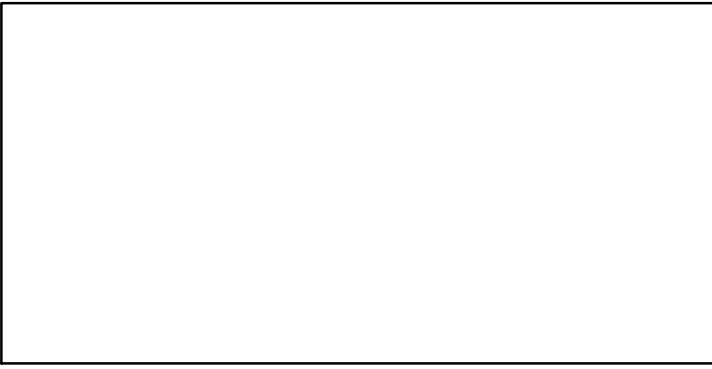
Production*



◆ Start Year ◆ End Year * No Data

Softshell clam Quebec Coastal Waters [SSCLAMQCW]

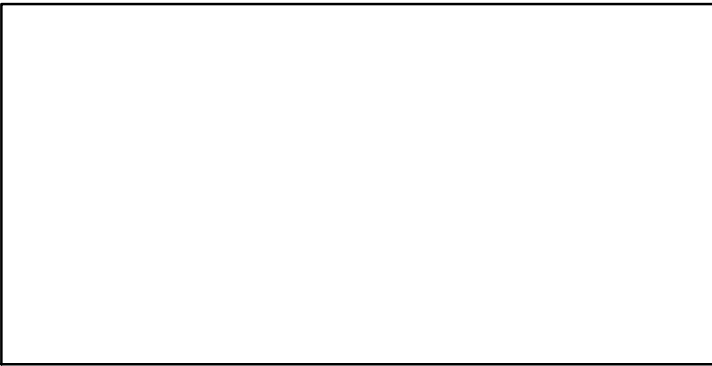
TB*



SSB*



TN *



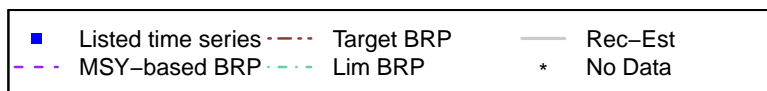
F*



ER*

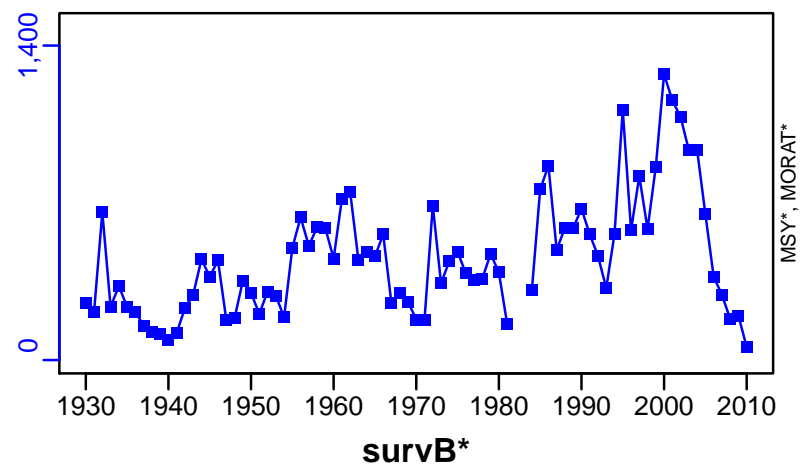


Recruits*



Softshell clam Quebec Coastal Waters [SSCLAMQCW]

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



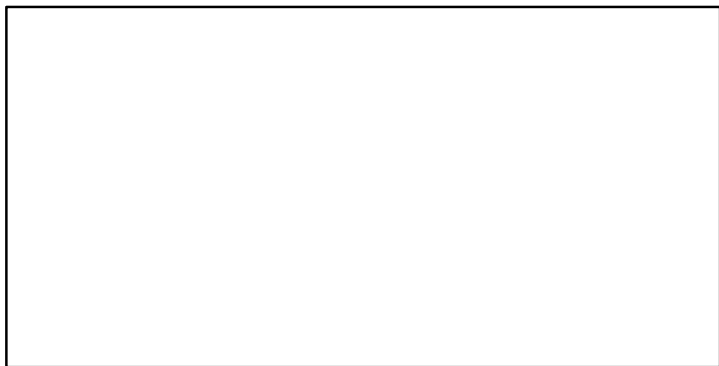
TAC*, Cpair*, Cadv*



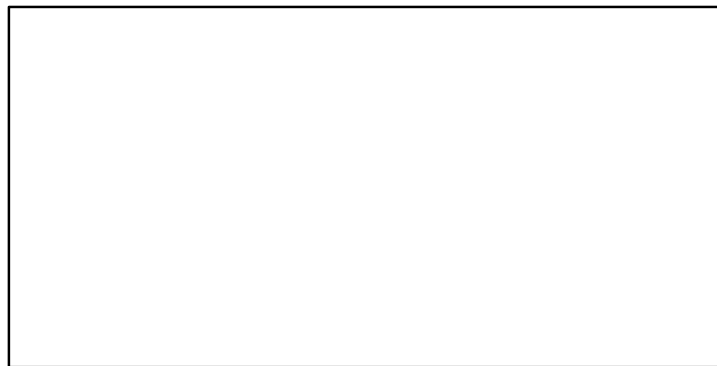
CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Aesop shrimp Shrimp Fishing Areas 2-3 [STRSHRIMPSFA2-3]

Metadata	
Scientific Name	Pandalus montagui
Current Assess ID	DFO-ARCTIC-STRSHRIMPSFA2-3-1979-2010-CHING
Area	Shrimp Fishing Areas 2-3
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Arctic 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	218		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



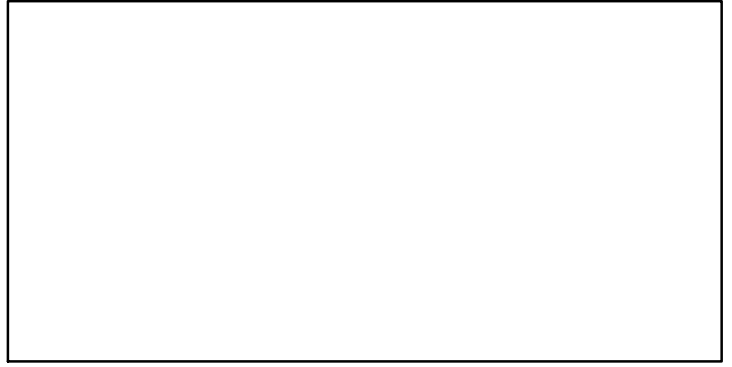
◆ Start Year ◆ End Year * No Data

Aesop shrimp Shrimp Fishing Areas 2–3 [STRSHRIMPSFA2–3]

TB*



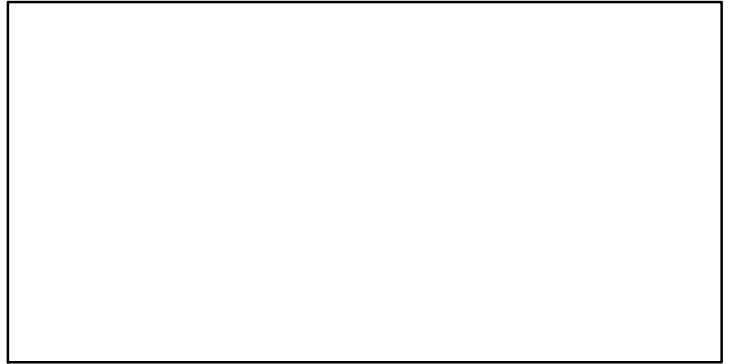
SSB*



TN *



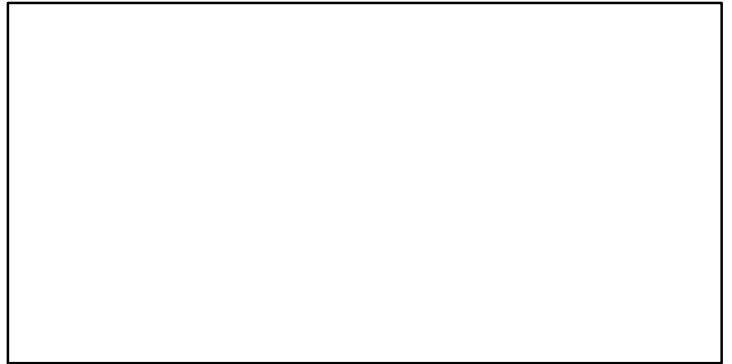
F*



ER*



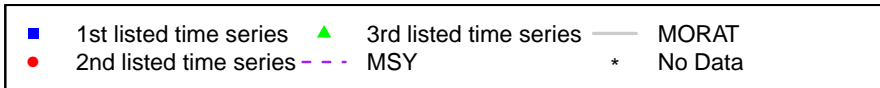
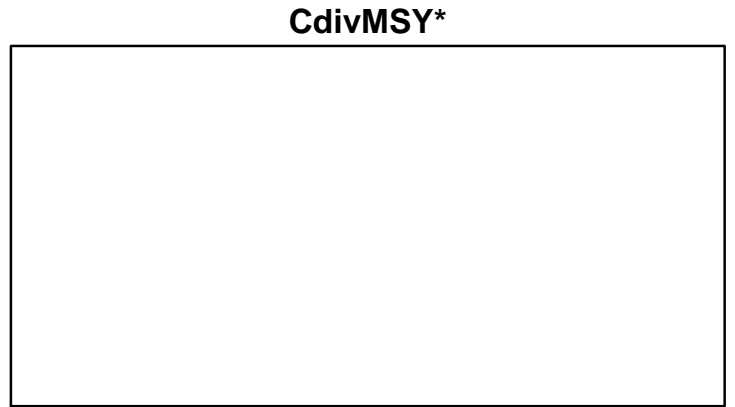
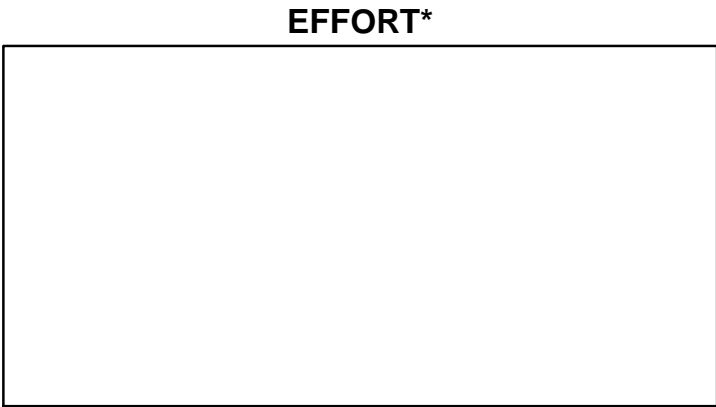
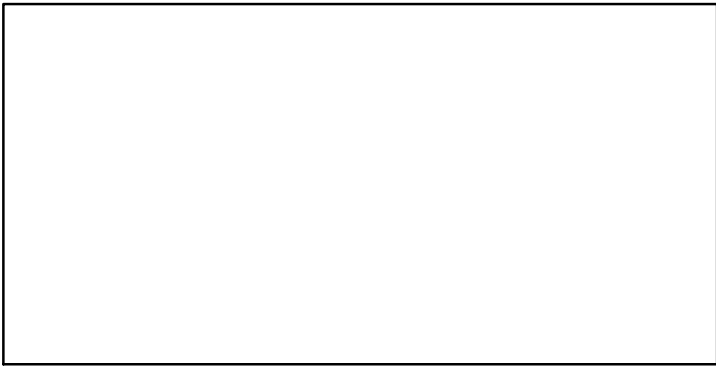
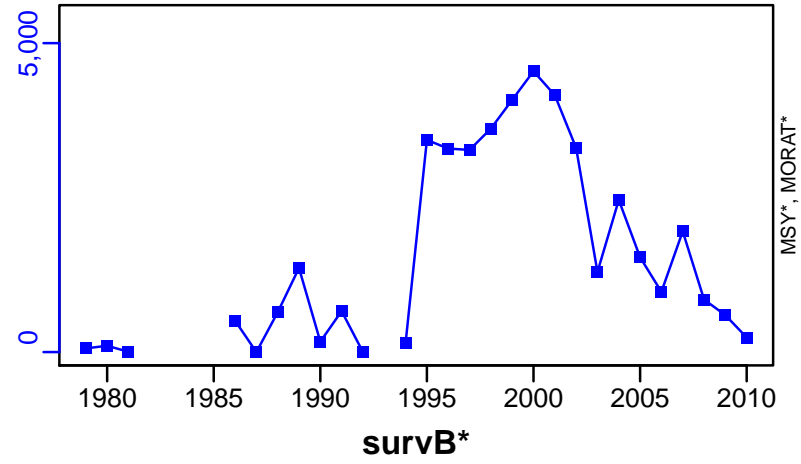
Recruits*



Aesop shrimp Shrimp Fishing Areas 2-3 [STRSHRIMPSFA2-3]

TC-MT, TL*, RecC* (1979-2010-CHING)

TAC*, Cpair*, Cadv*



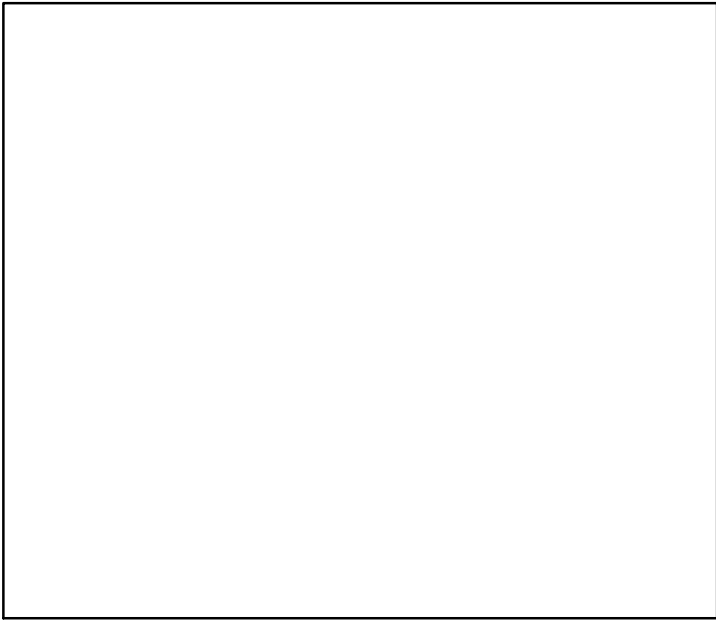
Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]

Metadata	
Scientific Name	Amblyraja radiata
Current Assess ID	NAFO-SC-TSKA3LNOPs-1960-2014-OSGOOD
Area	Grand Bank and St Pierre Bank
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2014

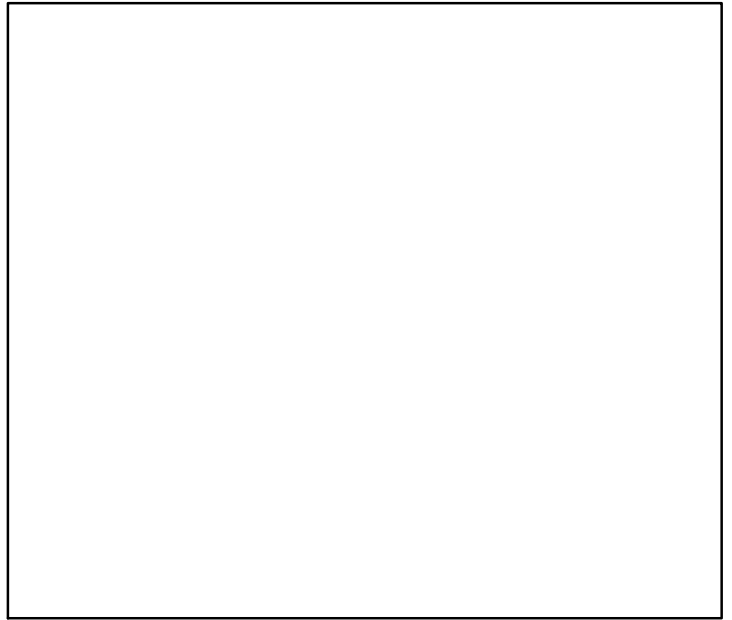
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2014	6653
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-index	2014	1.74	Both	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	4640		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

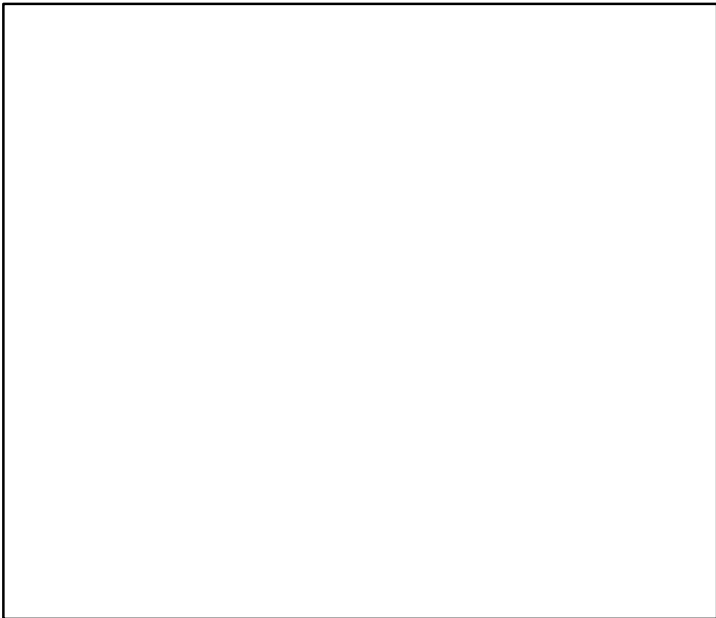
Kobe MSY*



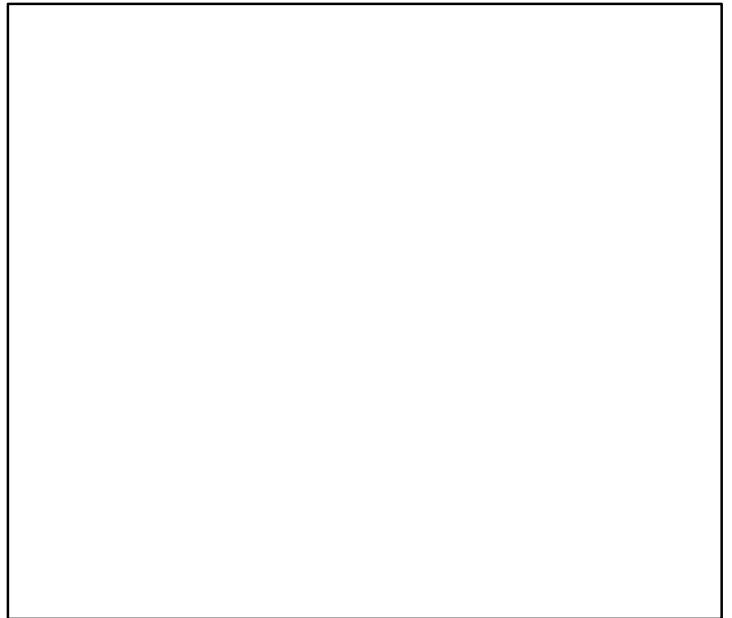
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]

TB*



SSB*



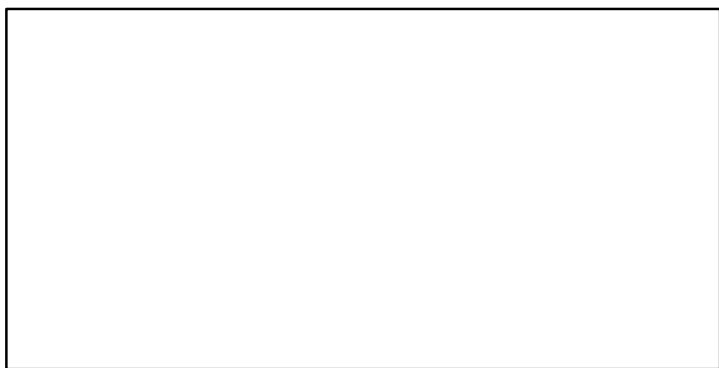
TN *



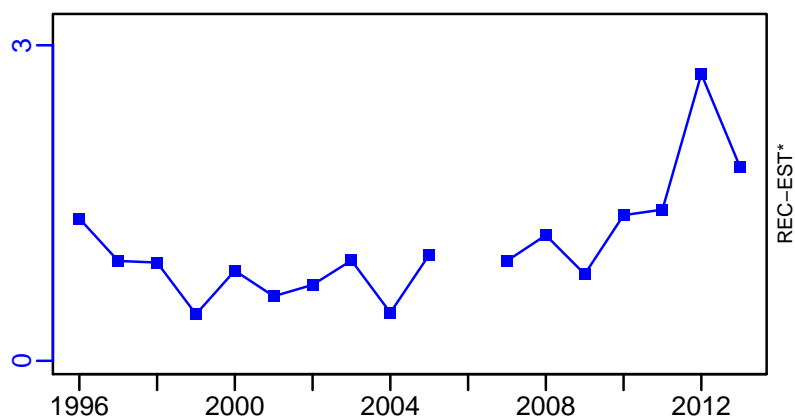
F*



ER*

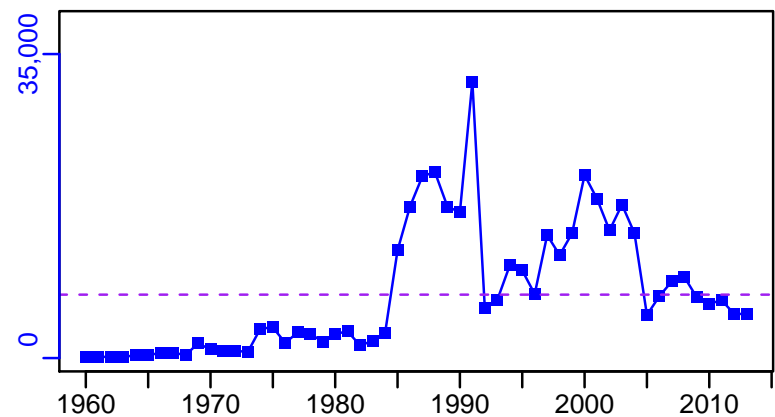


R-index (1960–2014–OSGOOD)

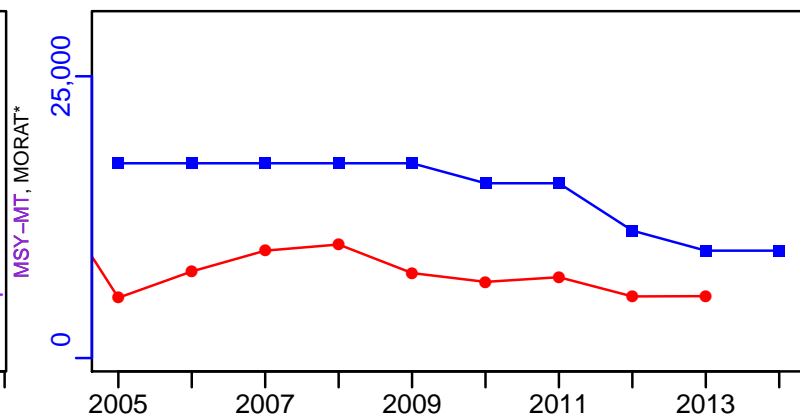


Thorny skate Grand Bank and St Pierre Bank [TSKA3LNOPs]

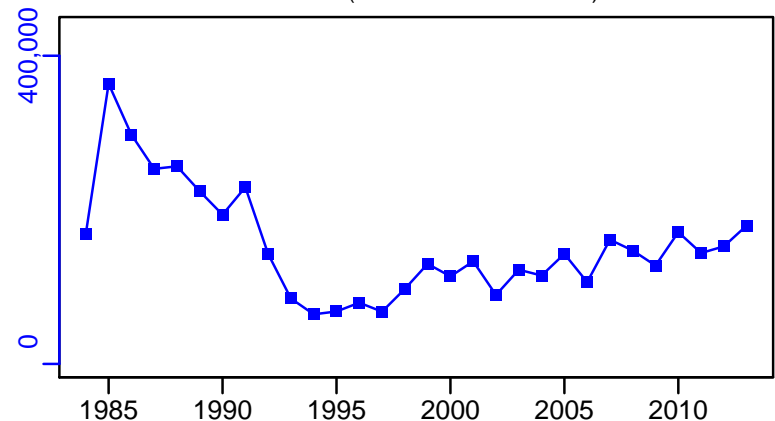
TL-MT, TC*, RecC* (1960–2014–OSGOOD)



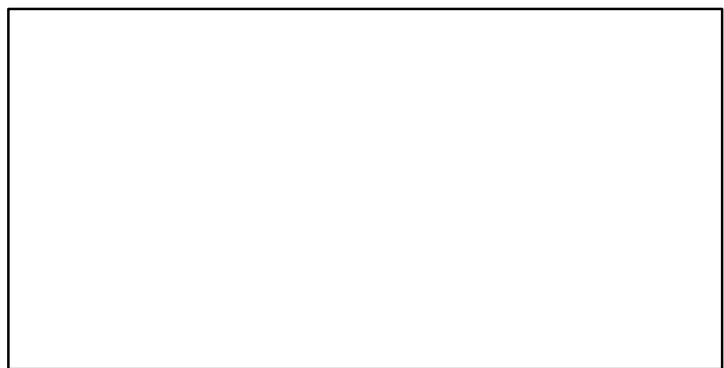
TAC-MT, Cpair-MT, Cadv* (1960–2014–OSGOOD)



survB-MT (1960–2014–OSGOOD)



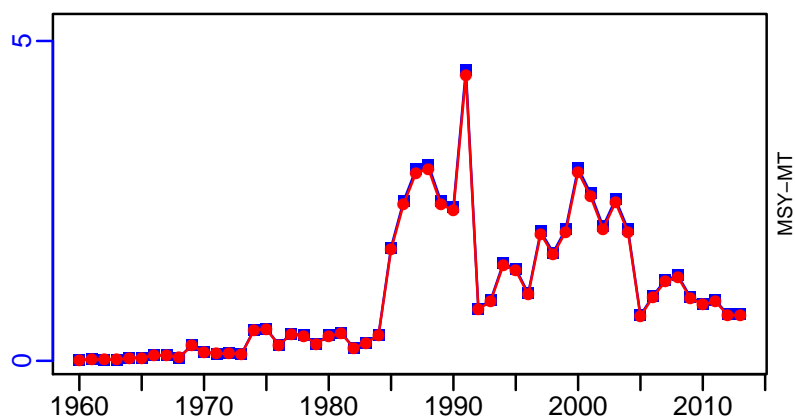
EFFORT*



CPUE*



TL-MT/MSY-MT, CdivMEANC-ratio, (1960–2014–OSGOOD)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

Thorny skate Southern Gulf of St. Lawrence [TSKA4T]

Metadata	
Scientific Name	Amblyraja radiata
Current Assess ID	DFO-SG-TSKA4T-1971-2010-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf 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	42		
TL	TL-MT	2010	1.22		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

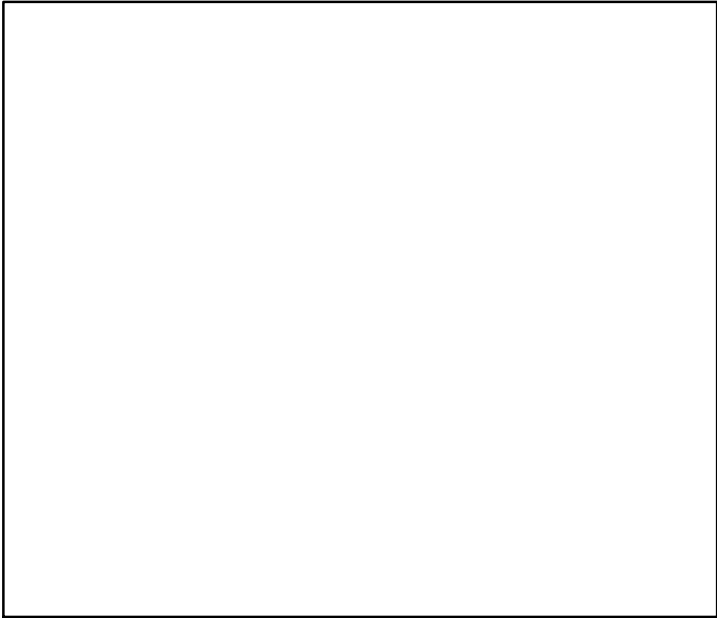
Kobe MSY*



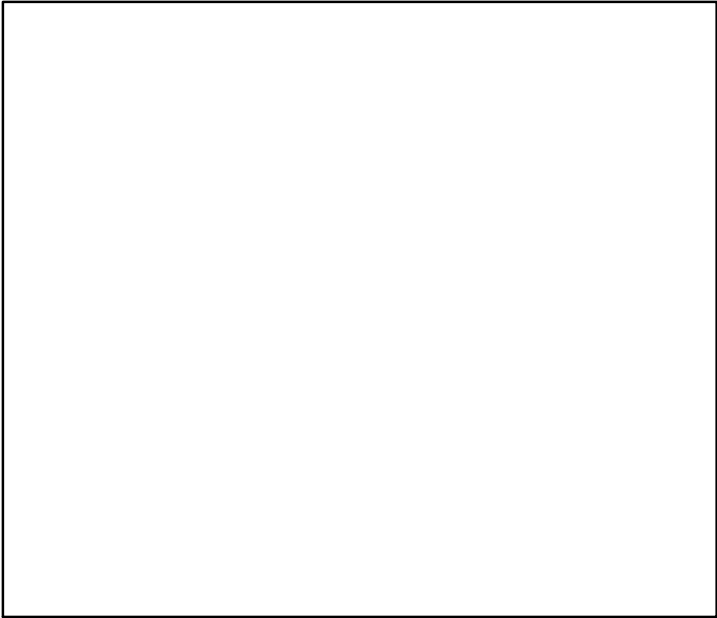
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



F*



ER*

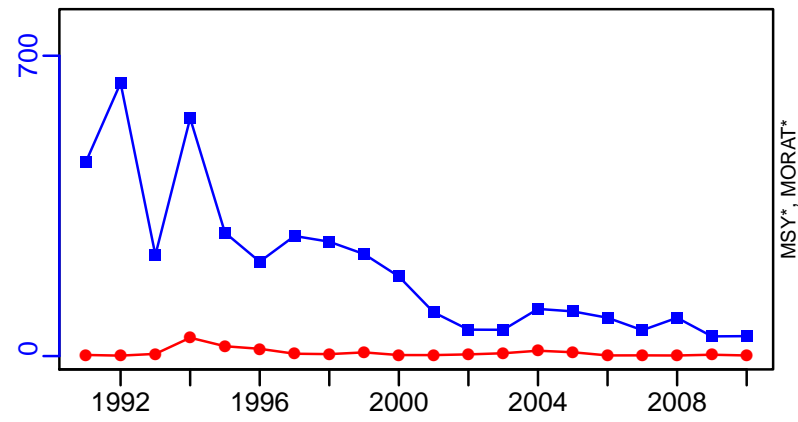


Recruits*



Thorny skate Southern Gulf of St. Lawrence [TSKA4T]

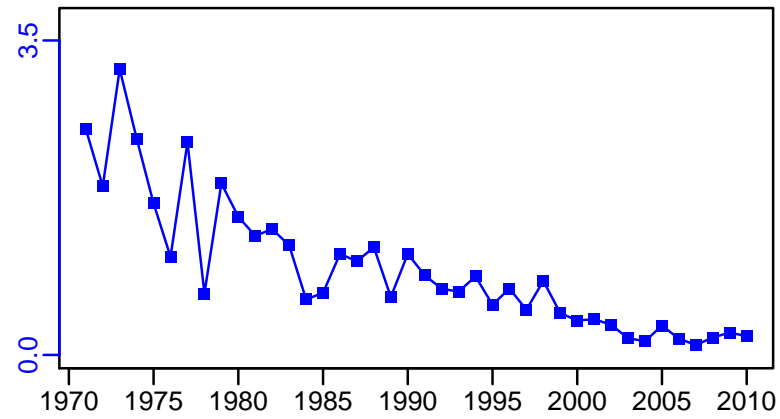
TC-MT, TL-MT, RecC* (1971-2010-OSGOOD)



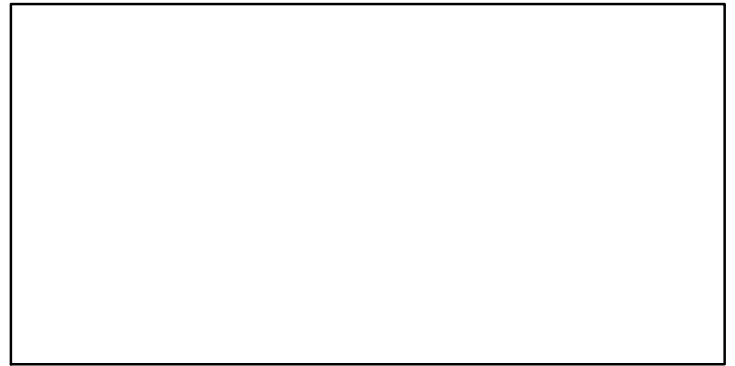
TAC*, Cpair*, Cadv*



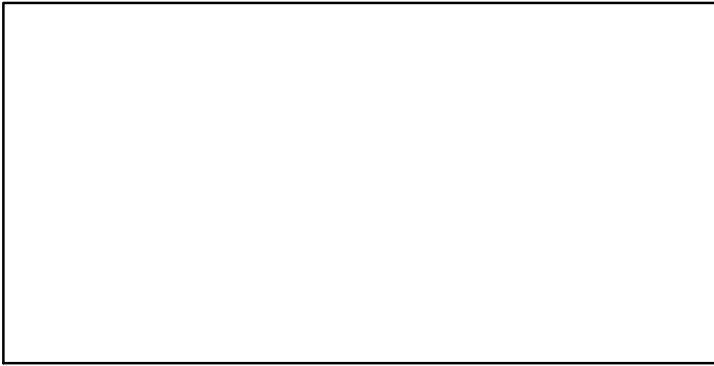
survB-kg/tow (1971-2010-OSGOOD)



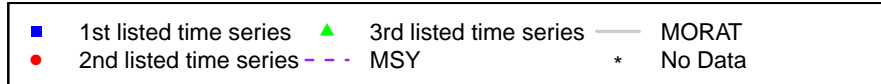
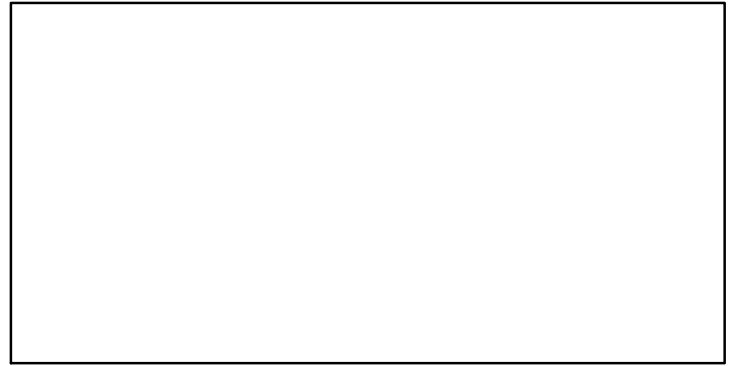
CPUE*



EFFORT*



CdivMSY*



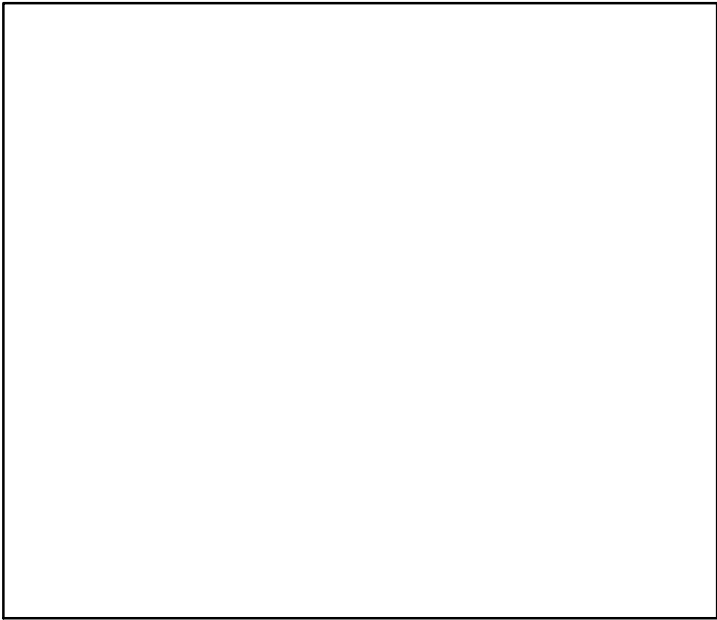
White hake St. Pierre Bank [WHAKE3Ps]

Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	NAFO-SC-WHAKE3Ps-1960-2017-ASHBROOK
Area	St. Pierre Bank
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2017

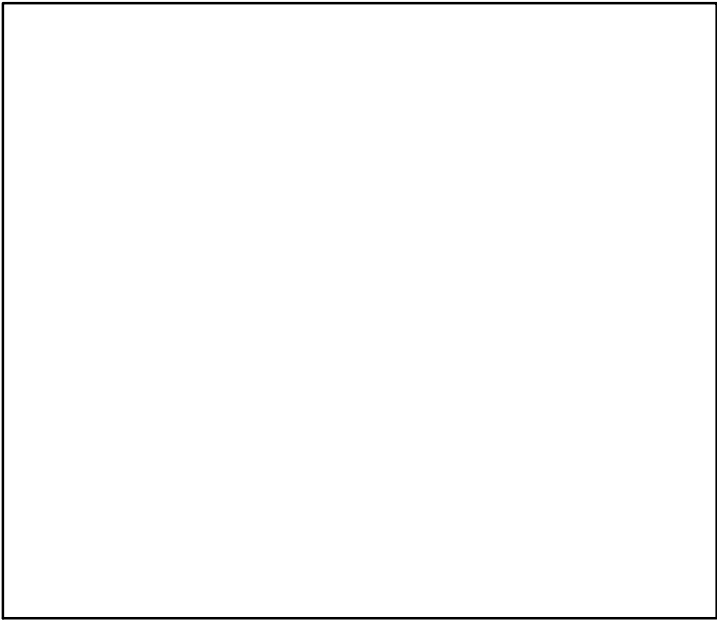
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	445		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

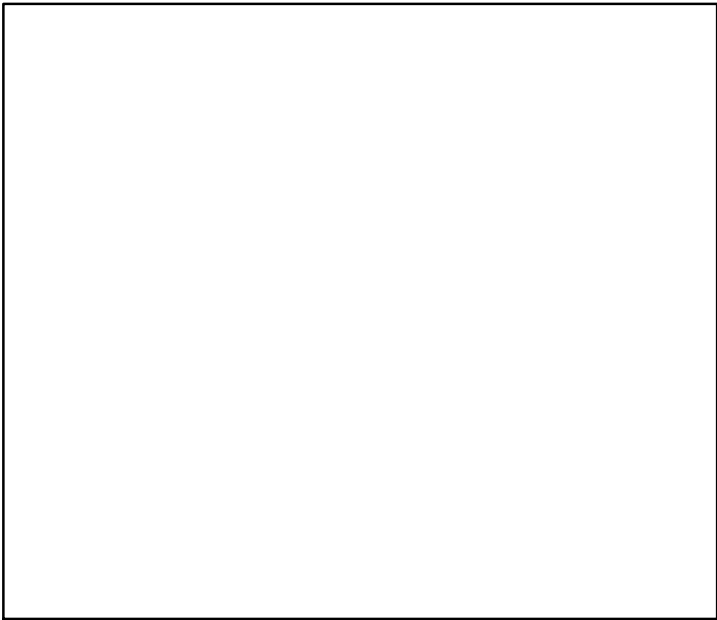
Kobe MSY*



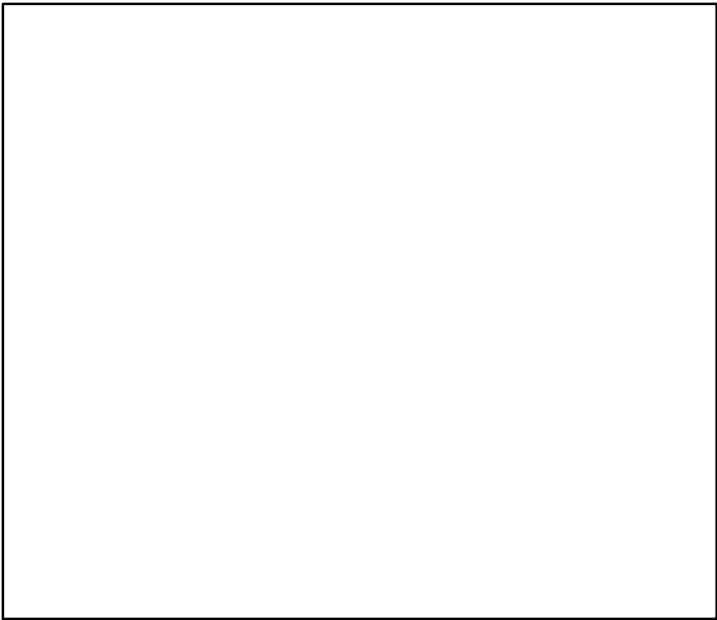
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

White hake St. Pierre Bank [WHAKE3Ps]

TB*



SSB*



TN *



F*



ER*



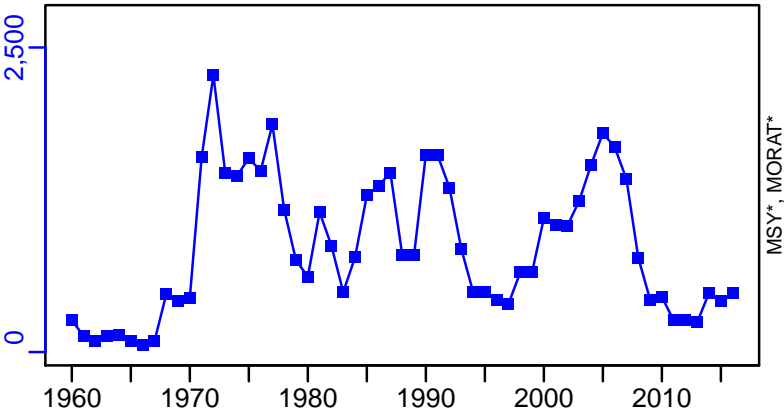
Recruits*



■ Listed time series	- - - Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

White hake St. Pierre Bank [WHAKE3Ps]

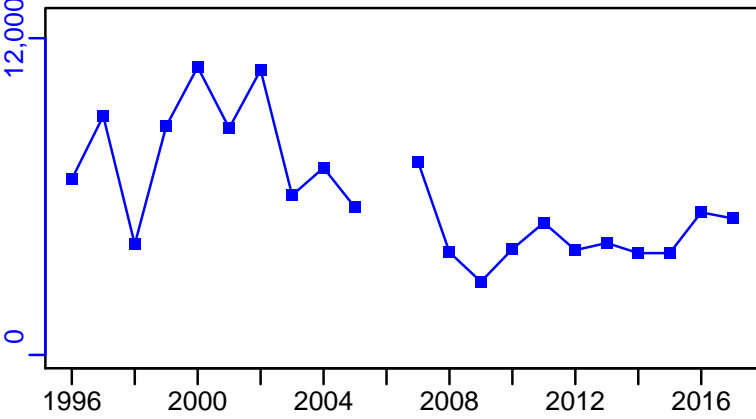
TL-MT, TC*, RecC* (1960-2017-ASHBROOK)



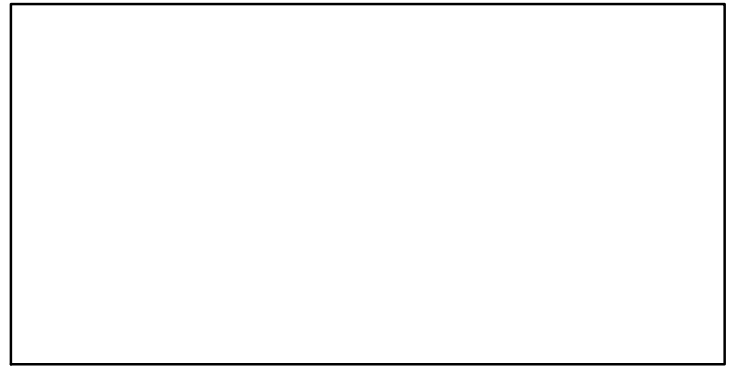
TAC*, Cpair*, Cadv*



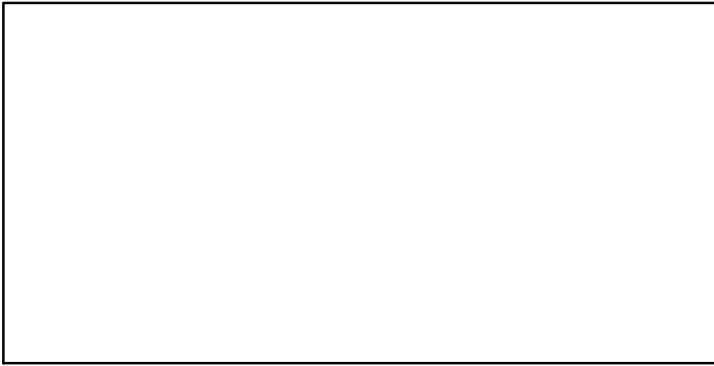
survB-MT (1960-2017-ASHBROOK)



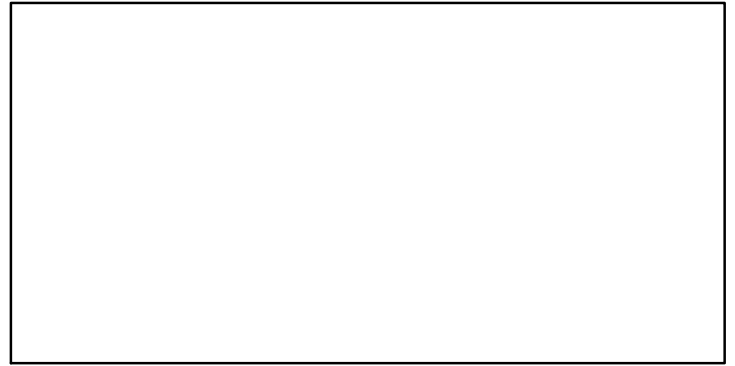
CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

White hake Northern Gulf of St. Lawrence [WHAKE4RS]

Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	DFO-QUE-WHAKE4RS-1960-2014-OSGOOD
Area	Northern 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	10		
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

TB*



SSB*



TN *



F*



ER*

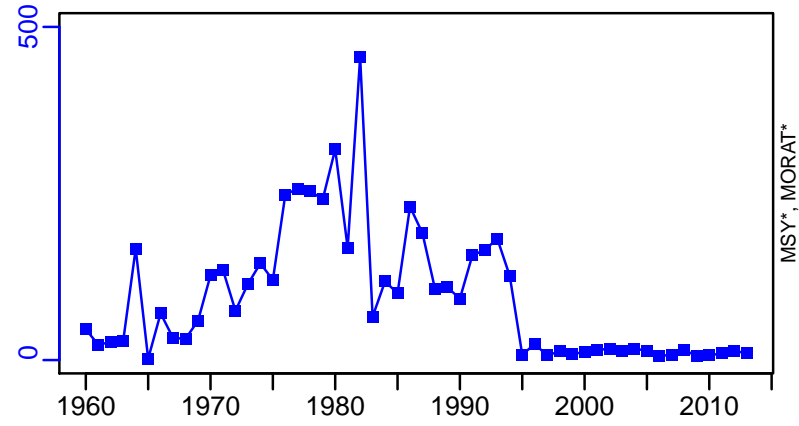


Recruits*



White hake Northern Gulf of St. Lawrence [WHAKE4RS]

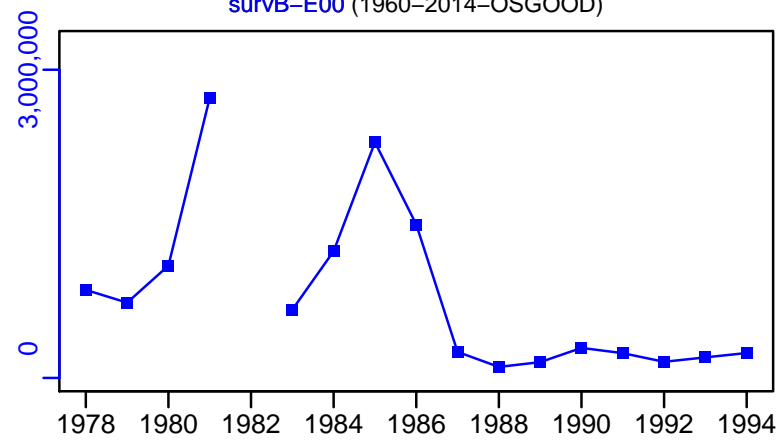
TL-MT, TC*, RecC* (1960–2014–OSGOOD)



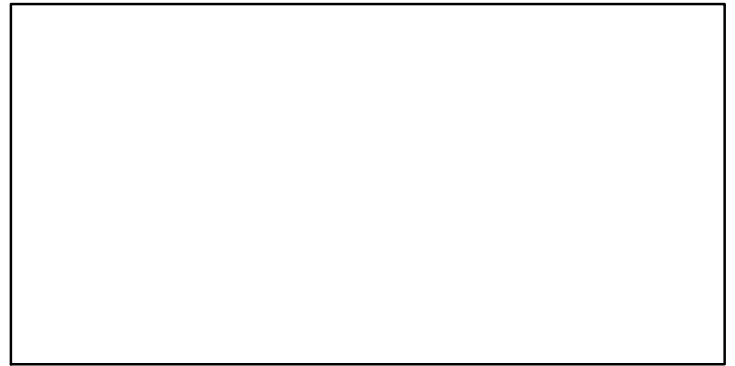
TAC*, Cpair*, Cadv*



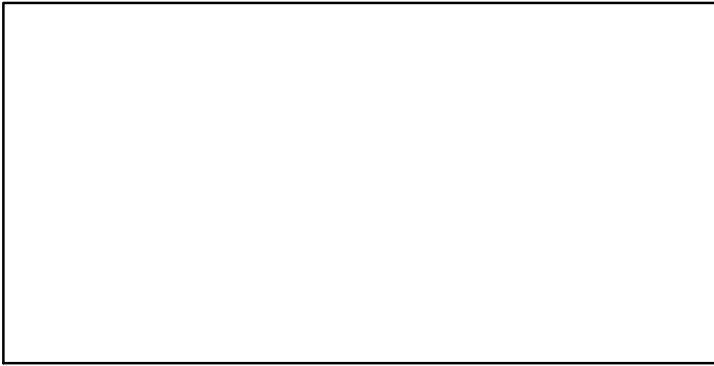
survB-E00 (1960–2014–OSGOOD)



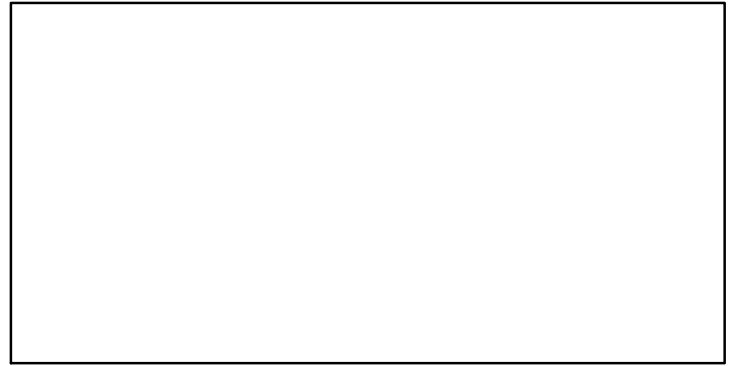
CPUE*



EFFORT*



CdivMSY*



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data

White hake Southern Gulf of St. Lawrence [WHAKE4T]

Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	DFO-SG-WHAKE4T-1960-2013-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2013	1.078
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	21,900	Both	1+
SSB	SSB-MT	2013	4120	Both	4+
TN	TN-E00	2013	93,900,000	Both	1+
R	R-E00	2013	71,800,000	Both	-
F	F-1/yr	2013	0.035	Both	6+
ER	ER-calc-ratio	2013	0.001	-	-
TC	-	-	-		
TL	TL-MT	2013	15		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

White hake Southern Gulf of St. Lawrence [WHAKE4T]

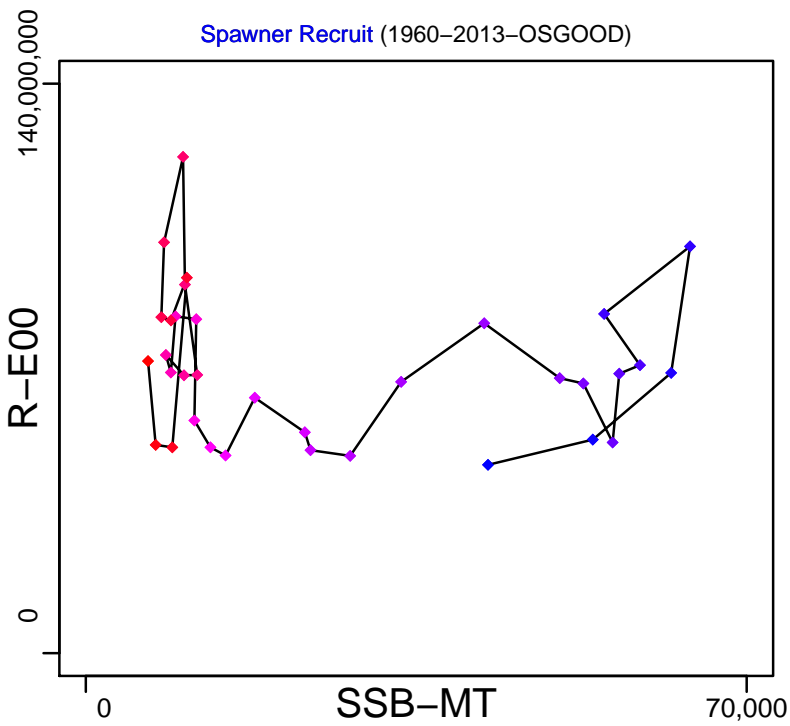
Kobe MSY*



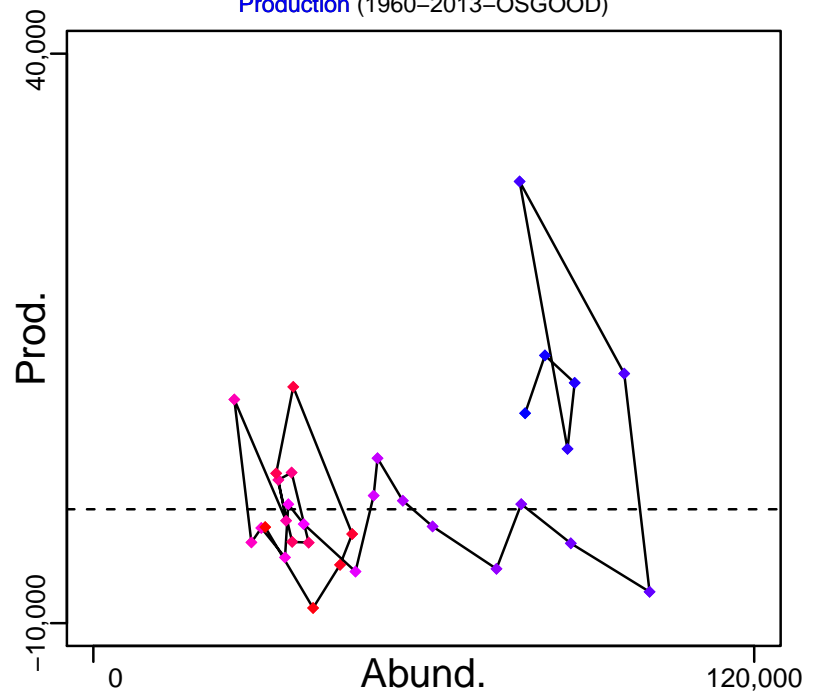
Kobe MGT*



Spawner Recruit (1960–2013–OSGOOD)



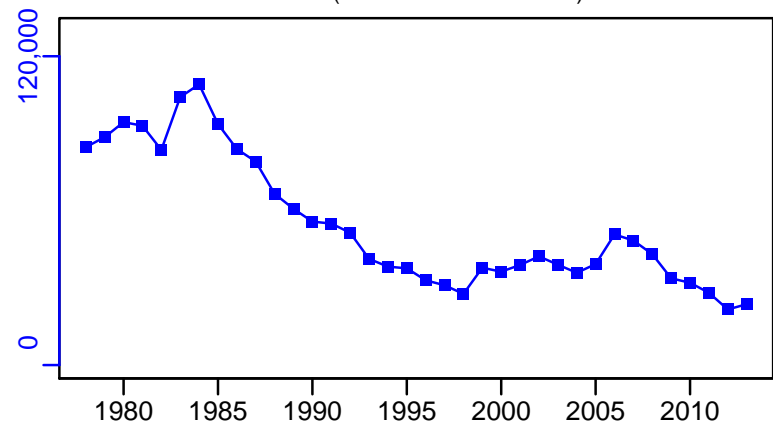
Production (1960–2013–OSGOOD)



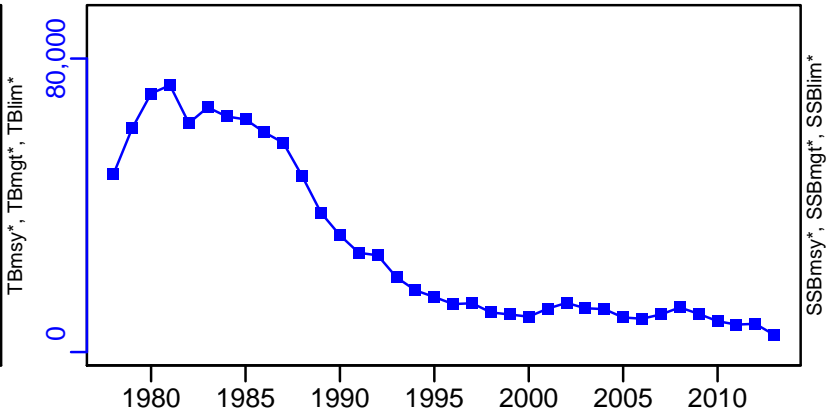
◆ Start Year ◆ End Year * No Data

White hake Southern Gulf of St. Lawrence [WHAKE4T]

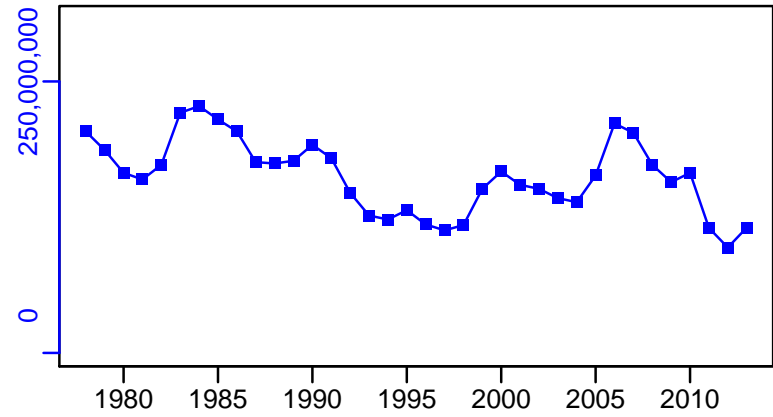
TB-MT (1960-2013-OSGOOD)



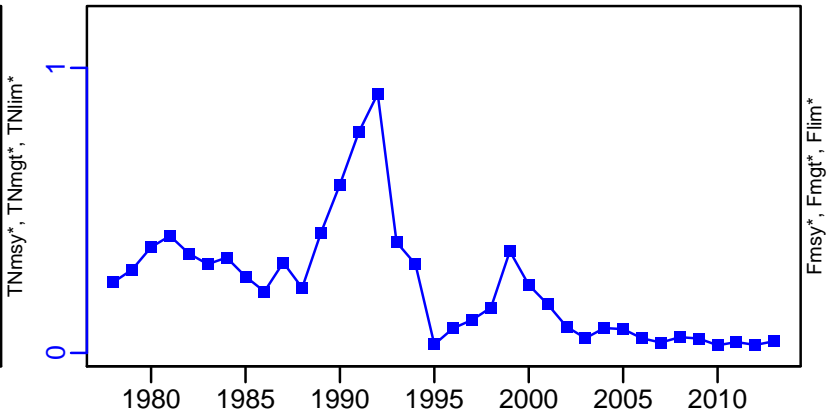
SSB-MT (1960-2013-OSGOOD)



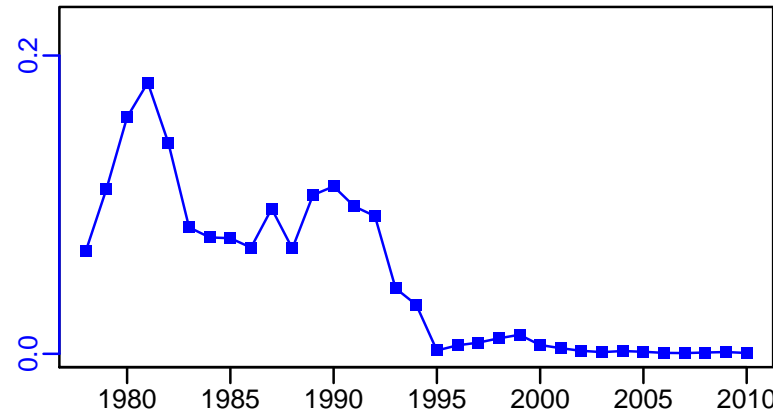
TN-E00 (1960-2013-OSGOOD)



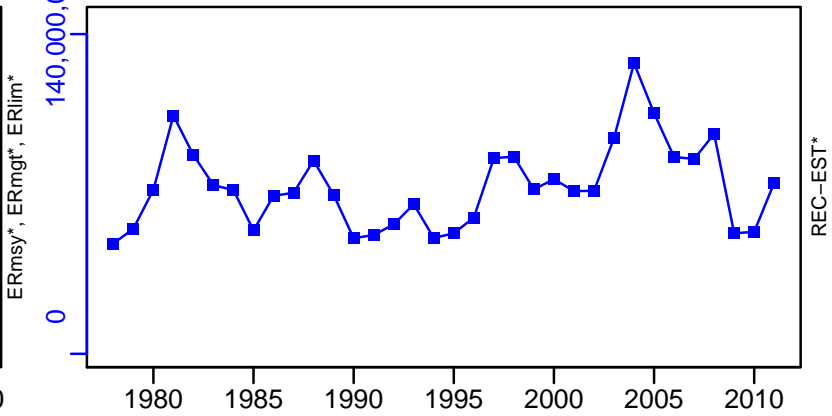
F-1/yr (1960-2013-OSGOOD)



ER-calc-ratio (1960-2013-OSGOOD)



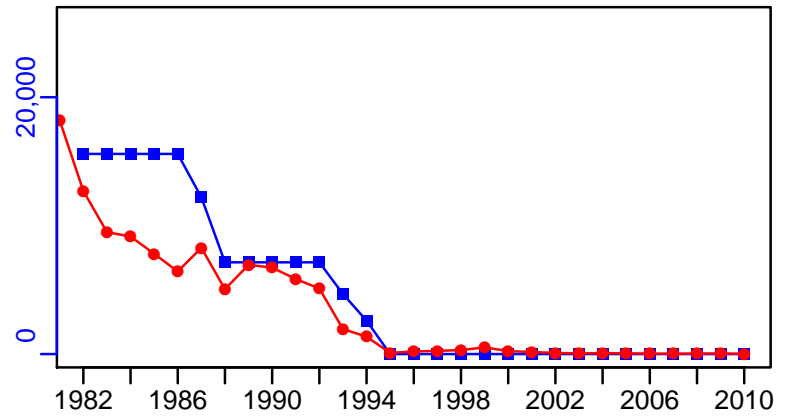
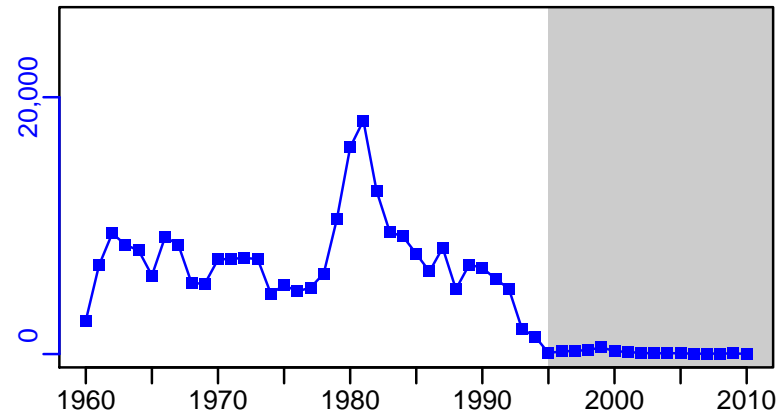
R-E00 (1960-2013-OSGOOD)



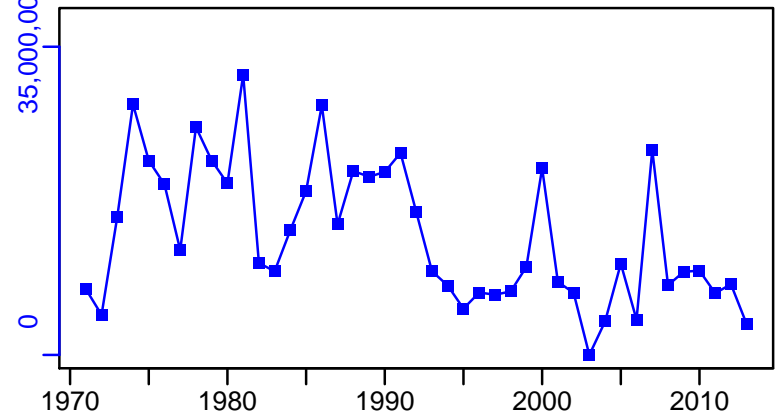
White hake Southern Gulf of St. Lawrence [WHAKE4T]

TL-MT, TC*, RecC* (1960-2013-OSGOOD)

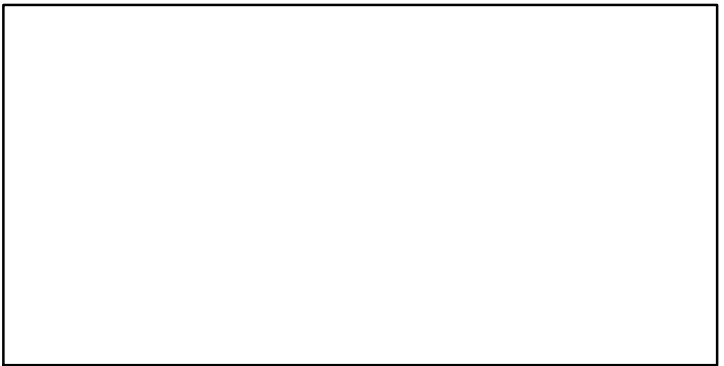
TAC-MT, Cpair-MT, Cadv* (1960-2013-OSGOOD)



survB-E00 (1960-2013-OSGOOD)



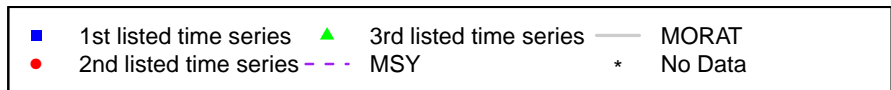
EFFORT*



CPUE*



CdivMSY*



White hake Scotian Shelf, Bay of Fundy and Georges Bank [WHAKE4VWX5]

Metadata	
Scientific Name	Urophycis tenuis
Current Assess ID	DFO-MAR-WHAKE4VWX5-1964-2005-PREFONTAINE
Area	Scotian Shelf, Bay of Fundy and Georges Bank
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Maritimes Region
Asmts in RAM	2005

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	2005	2060		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



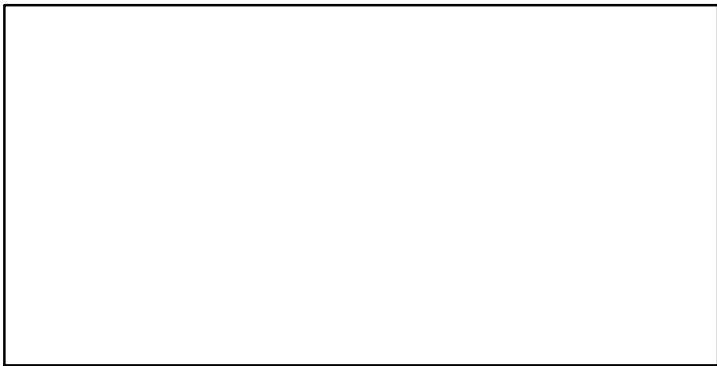
Production*



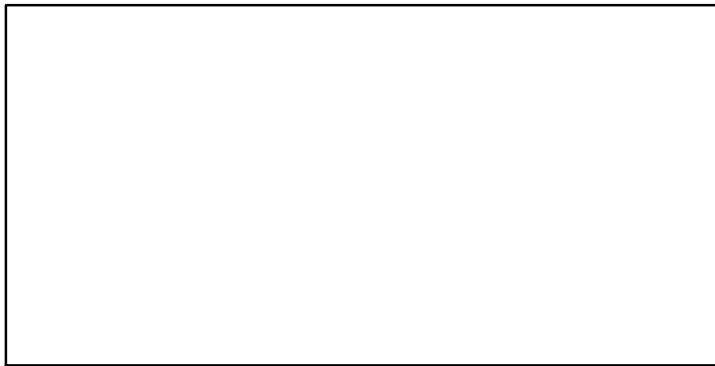
◆ Start Year ◆ End Year * No Data

White hake Scotian Shelf, Bay of Fundy and Georges Bank [WHAKE4VWX5]

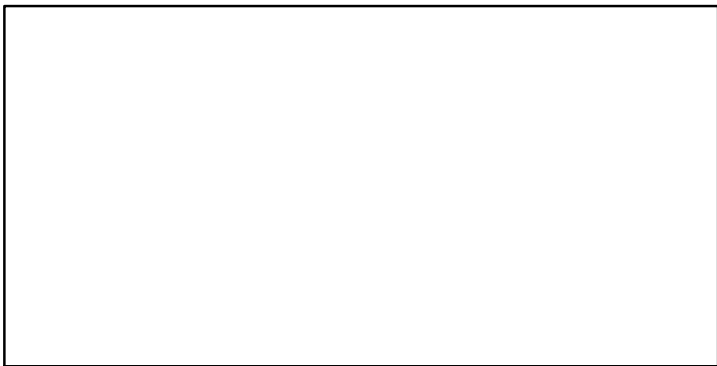
TB*



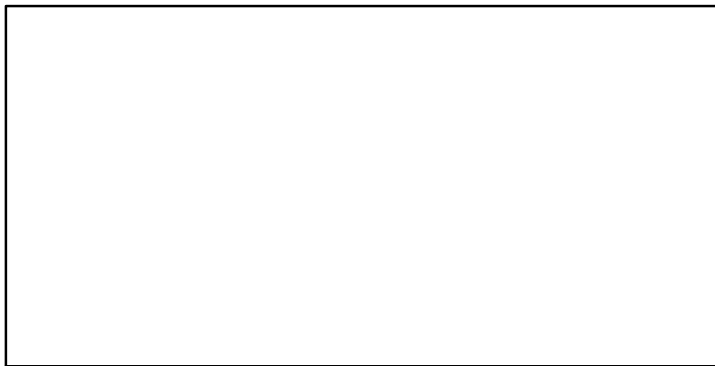
SSB*



TN *



F*



ER*

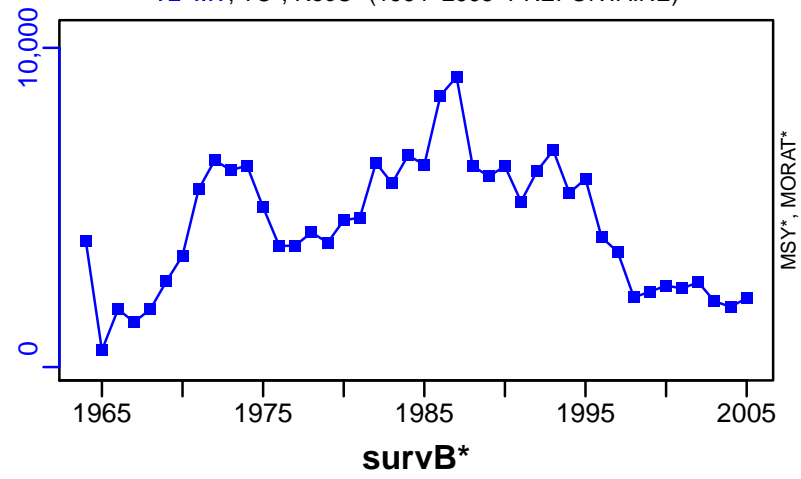


Recruits*



White hake Scotian Shelf, Bay of Fundy and Georges Bank [WHAKE4VWX5]

TL-MT, TC*, RecC* (1964-2005-PREFONTAINE)



TAC*, Cpair*, Cadv*



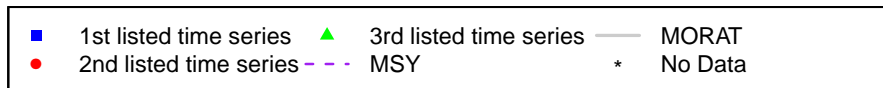
CPUE*



EFFORT*



CdivMSY*



Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]

Metadata	
Scientific Name	Pseudopleuronectes americanus
Current Assess ID	DFO-SG-WINFLOUN4T-1960-2012-OSGOOD
Area	Southern Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2011, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2012	0.835
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2012	49,500	Both	3+
TN	TN-E00	2012	2.52×10^9	Both	3+
R	R-E00	2012	1,540,000	Both	-
F	F-1/yr	2011	0.02	-	6+
ER	ER-calc-ratio	2012	0.583	-	-
TC	TC-E00	2012	1.47×10^9		
TL	TL-MT	2012	302		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]

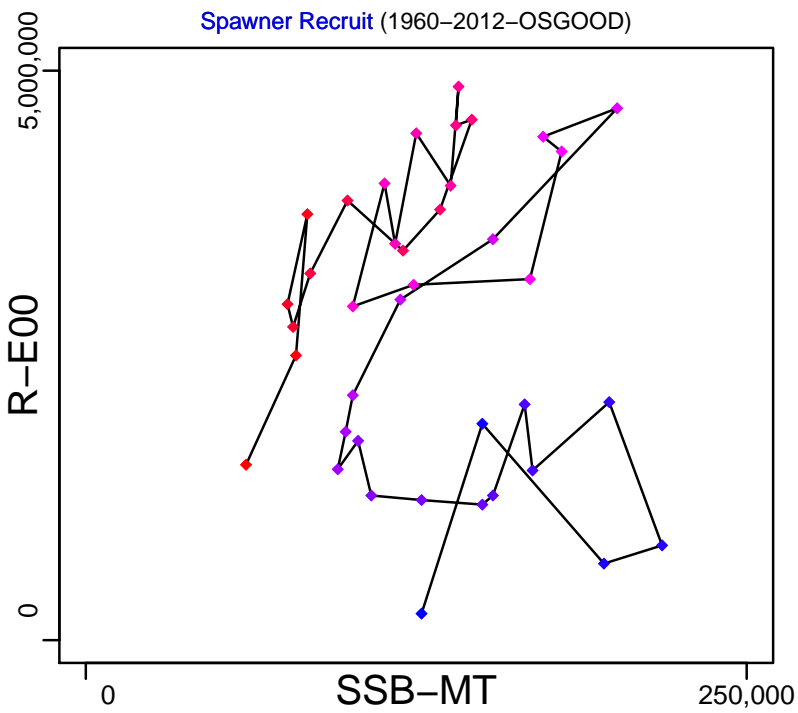
Kobe MSY*



Kobe MGT*



Spawner Recruit (1960–2012–OSGOOD)



Production*



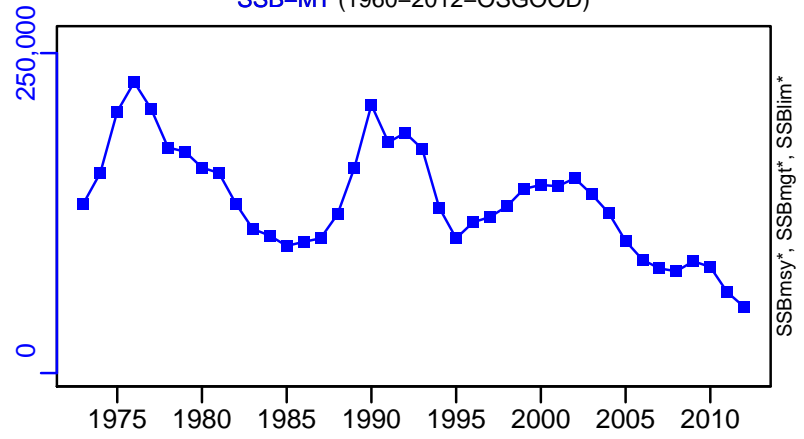
◆ Start Year ◆ End Year * No Data

Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]

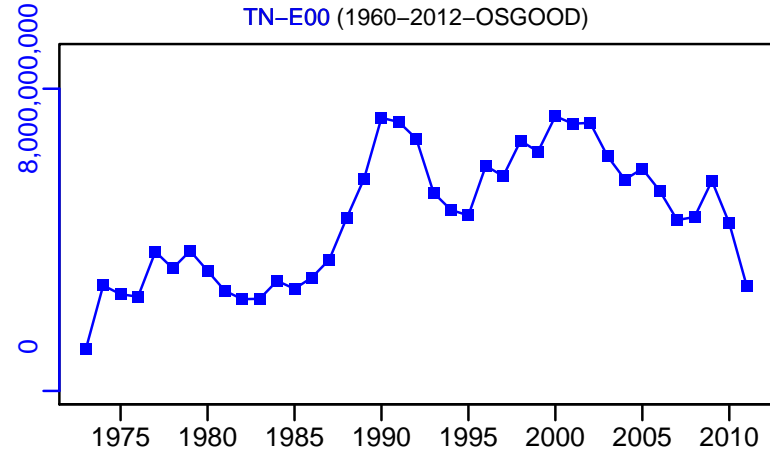
TB*



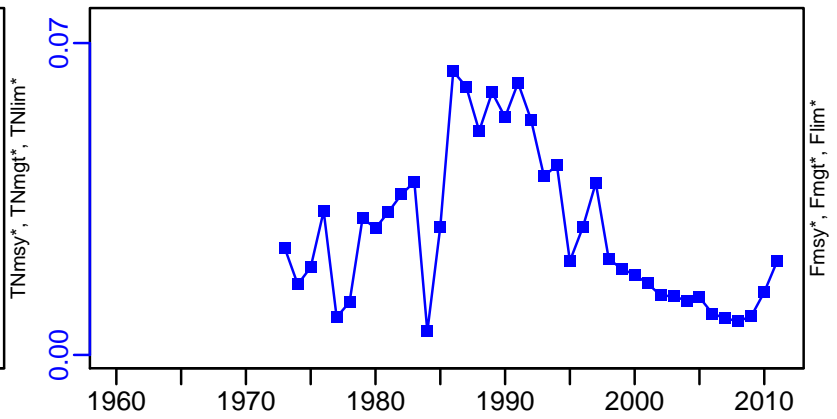
SSB-MT (1960-2012-OSGOOD)



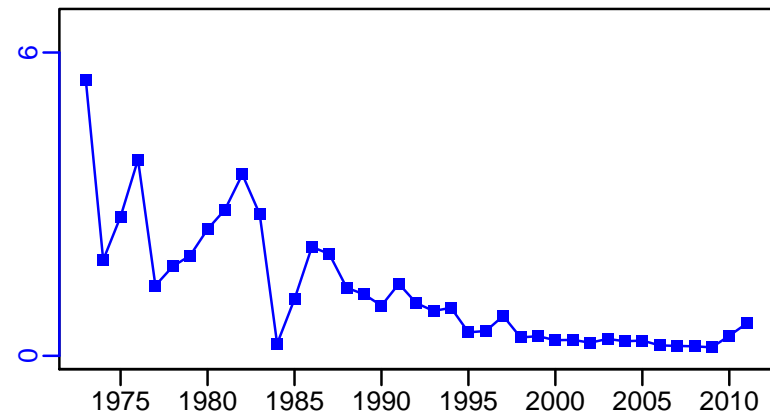
TN-E00 (1960-2012-OSGOOD)



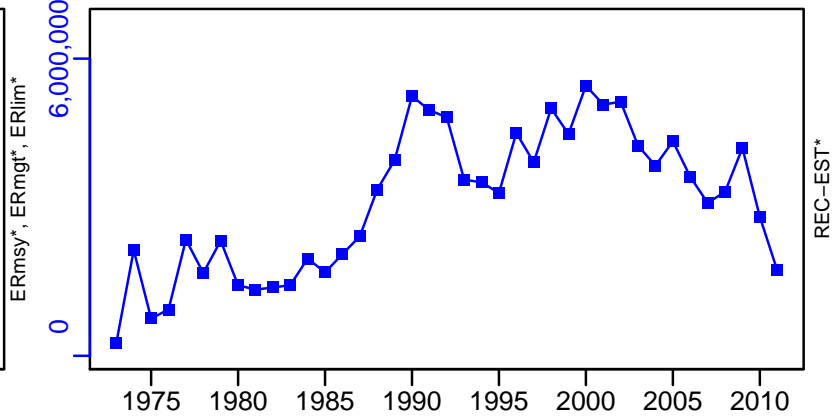
F-1/yr (1960-2011-CHING)



ER-calc-ratio (1960-2012-OSGOOD)

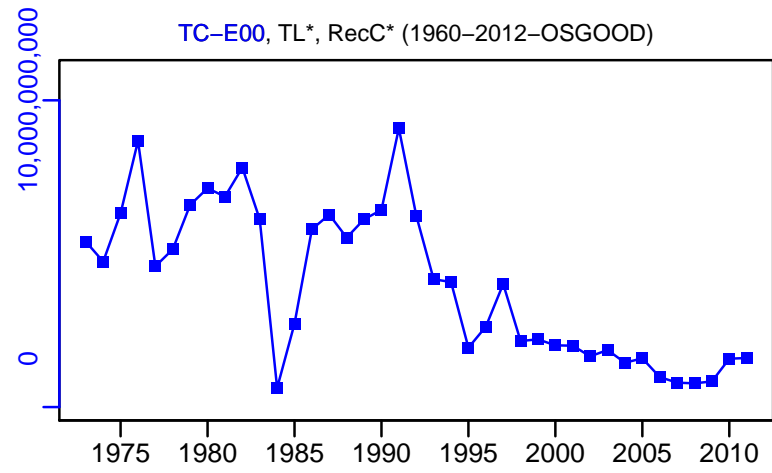


R-E00 (1960-2012-OSGOOD)

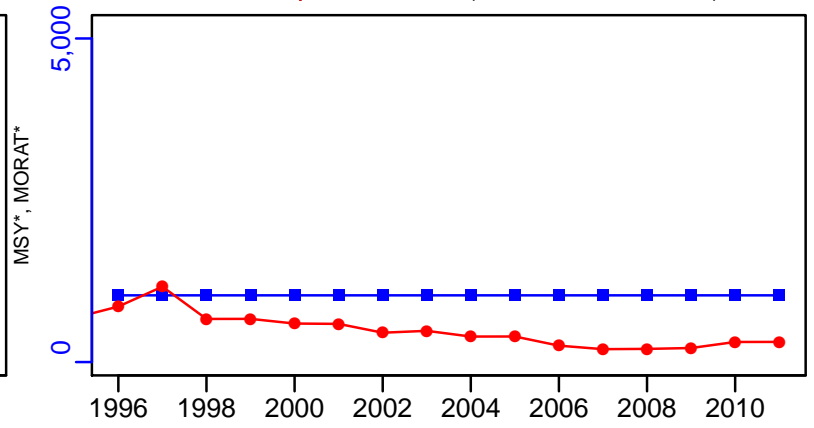


Winter flounder Southern Gulf of St. Lawrence [WINFLOUN4T]

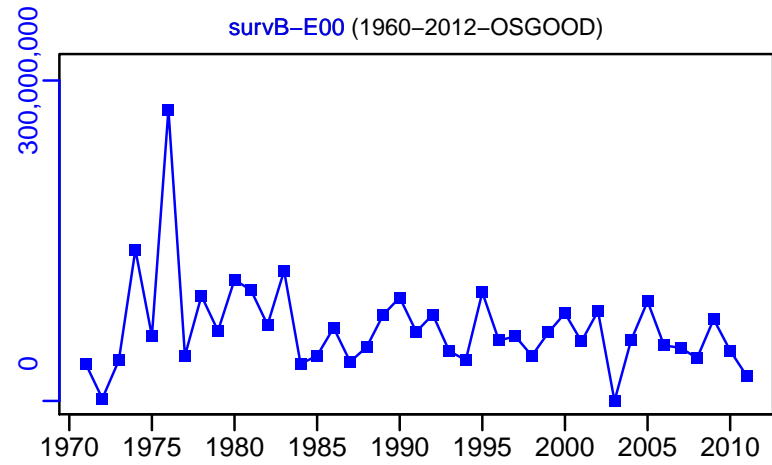
TC-E00, TL*, RecC* (1960-2012-OSGOOD)



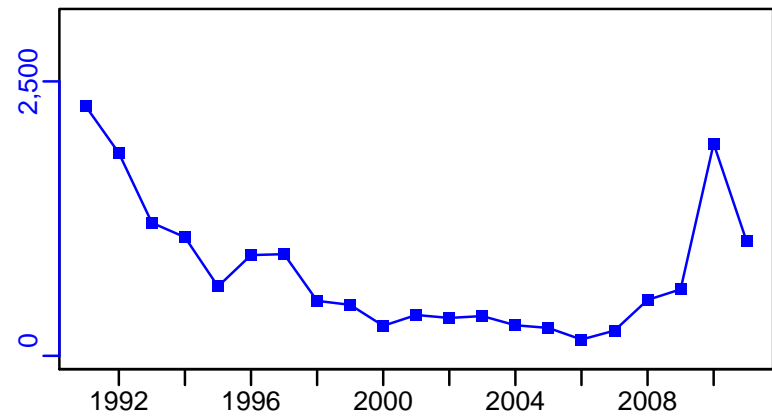
TAC-MT, Cpair-MT, Cadv* (1960-2012-OSGOOD)



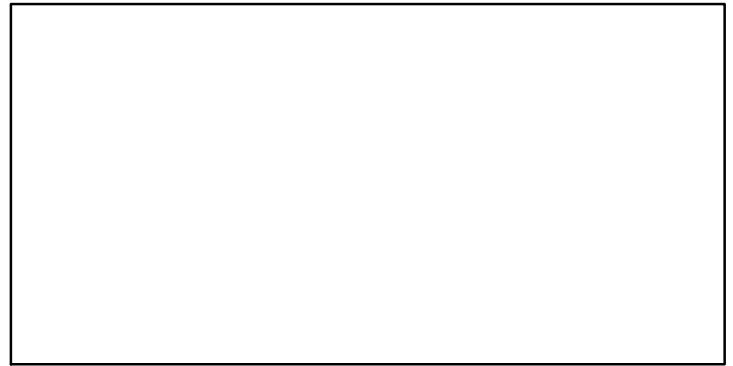
survB-E00 (1960-2012-OSGOOD)



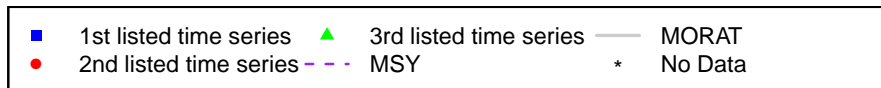
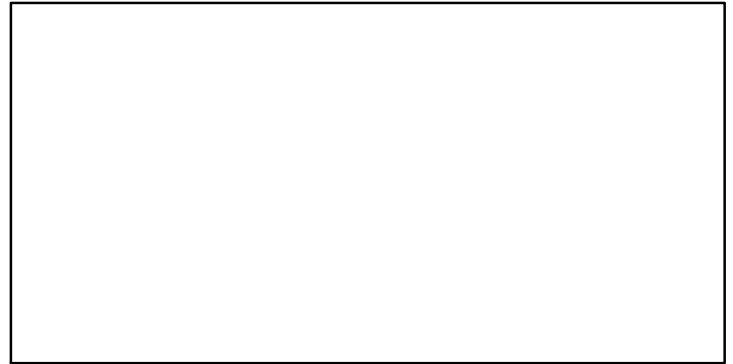
EFFORT-day (1960-2012-OSGOOD)



CPUE*



CdivMSY*



Witch flounder St. Pierre Bank [WITFLOUN3Ps]

Metadata	
Scientific Name	Glyptocephalus cynoglossus
Current Assess ID	DFO-NFLD-WITFLOUN3Ps-1974-2013-OSGOOD
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	2013

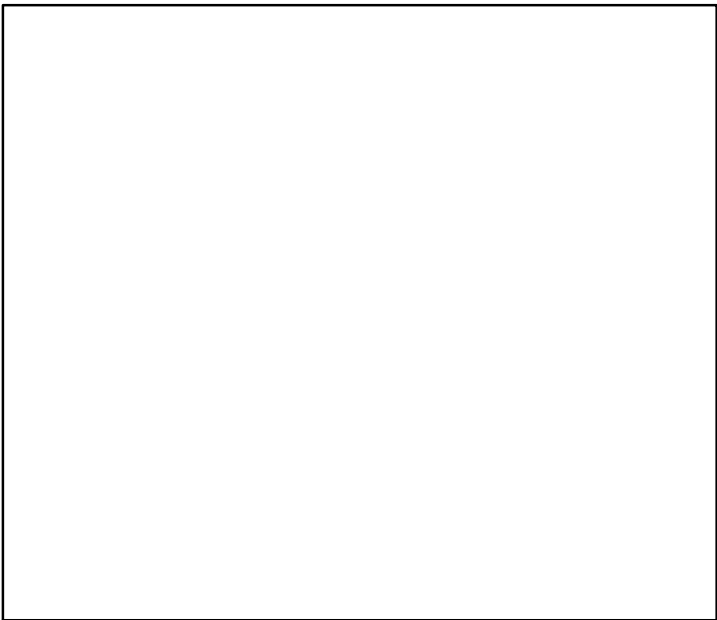
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2013	267		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

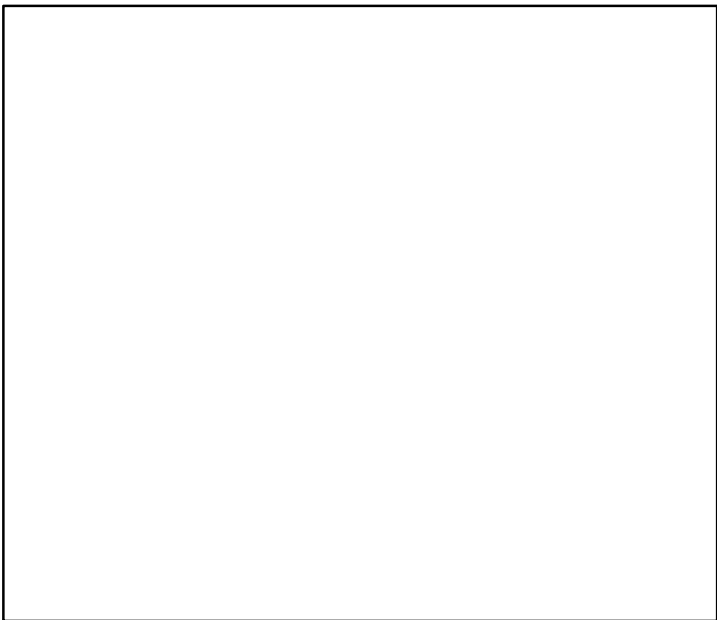
Kobe MSY*



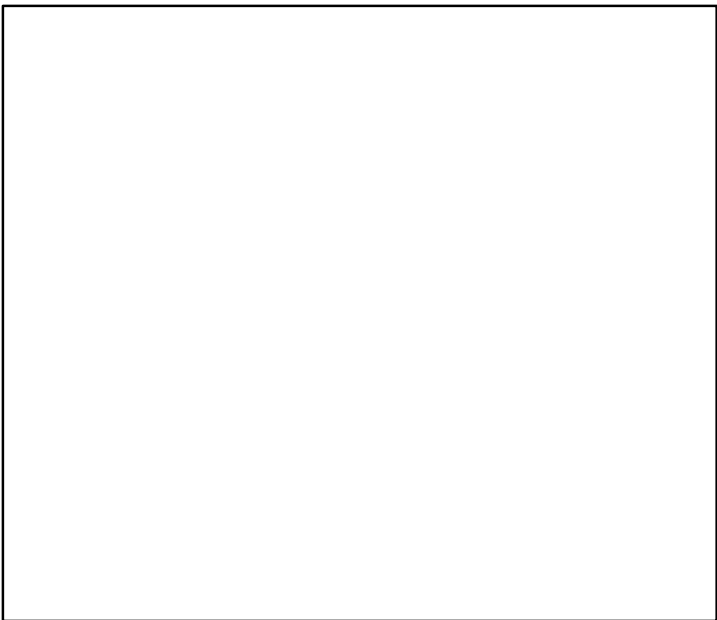
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



F*



ER*



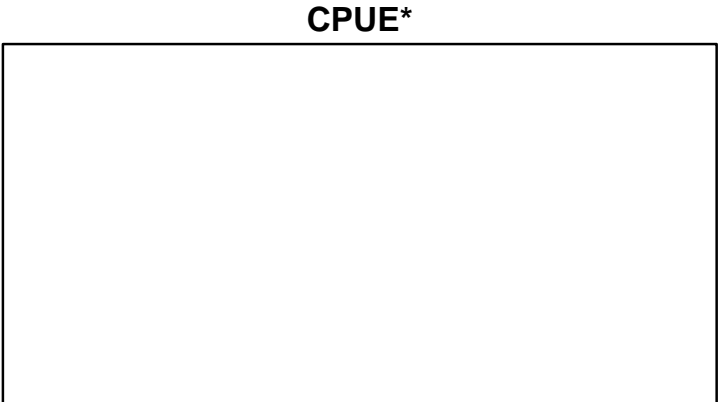
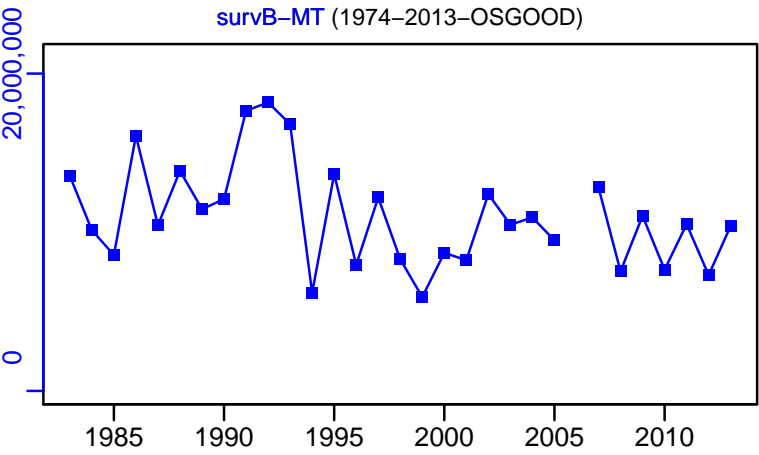
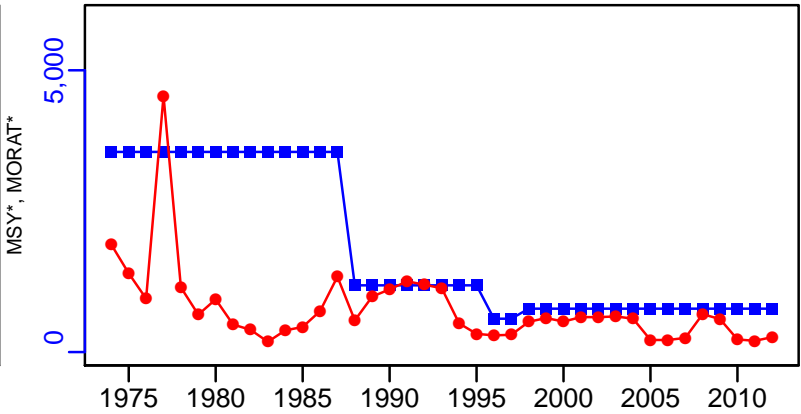
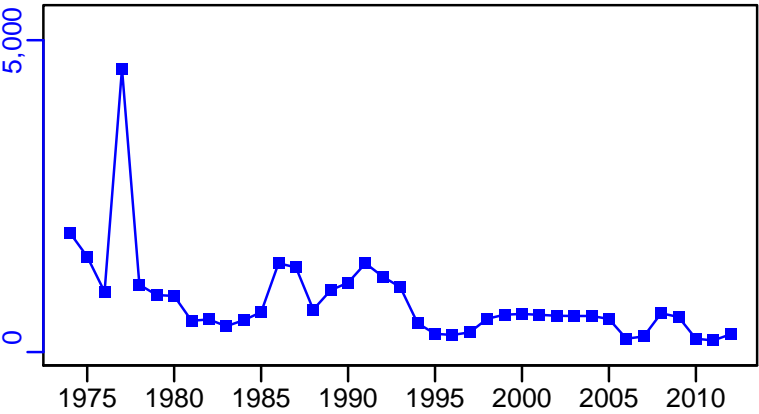
Recruits*



Witch flounder St. Pierre Bank [WITFLOUN3Ps]

TL-MT, TC*, RecC* (1974-2013-OSGOOD)

TAC-MT, Cpair-MT, Cadv* (1974-2013-OSGOOD)



EFFORT*



CdivMSY*



Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]

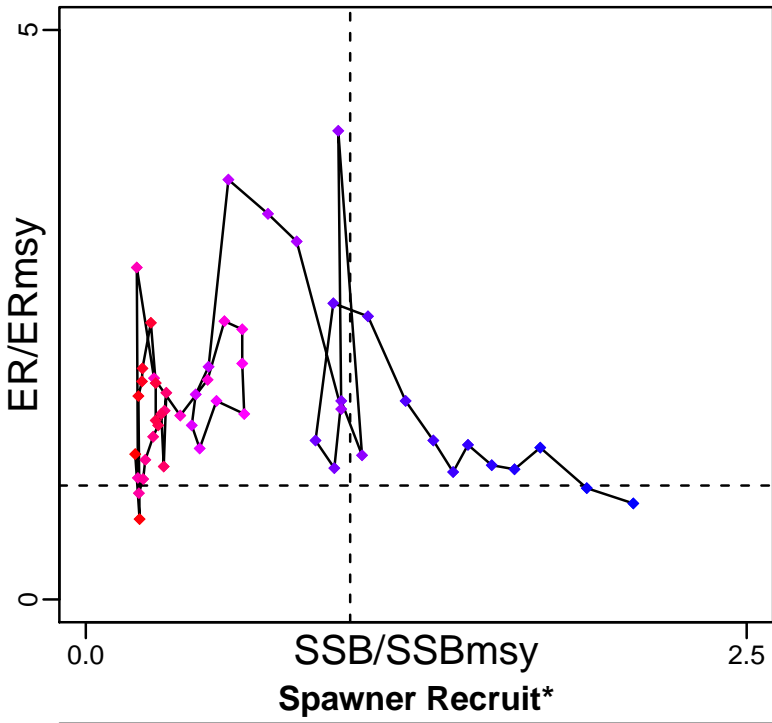
Metadata	
Scientific Name	Glyptocephalus cynoglossus
Current Assess ID	DFO-SG-WITFLOUN4RST-1960-2011-OSGOOD
Area	Gulf of St. Lawrence
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans - Southern Gulf Region
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	28,429
SSBmsy	SSBmsy-MT	2011	26,700
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2011	0.07
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2011	26,700
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2011	0.07
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2011	1990
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

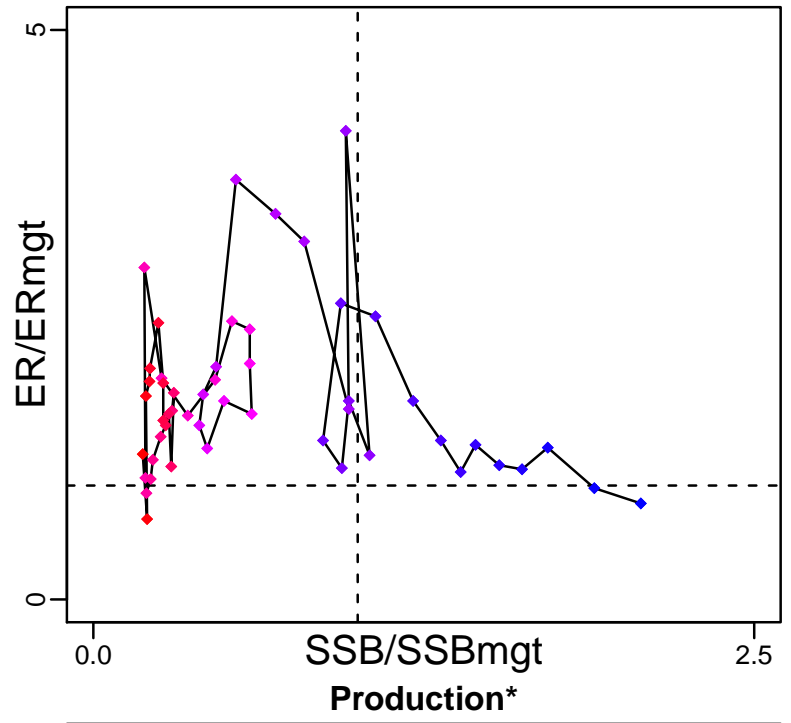
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2011	4990	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2011	0.089	Both	-
TC	-	-	-		
TL	TL-MT	2011	442		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.187		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	1.276		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2011	0.187		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]

Kobe MSYpref (1960–2011–OSGOOD)



Kobe MGTpref (1960–2011–OSGOOD)



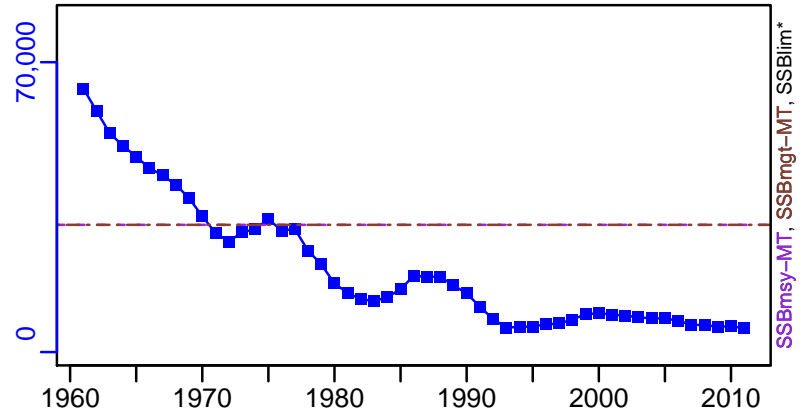
◆ Start Year ◆ End Year * No Data

Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]

TB*



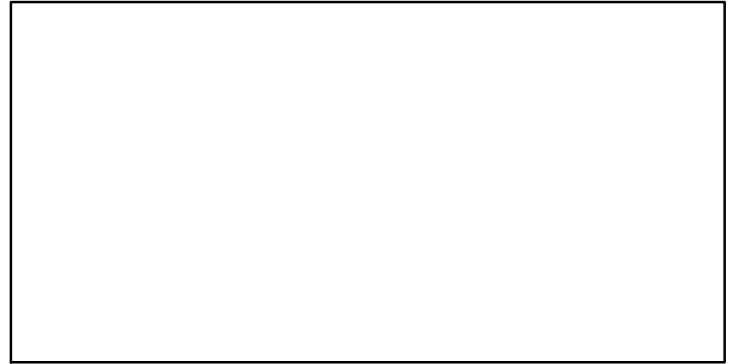
SSB-MT (1960-2011-OSGOOD)



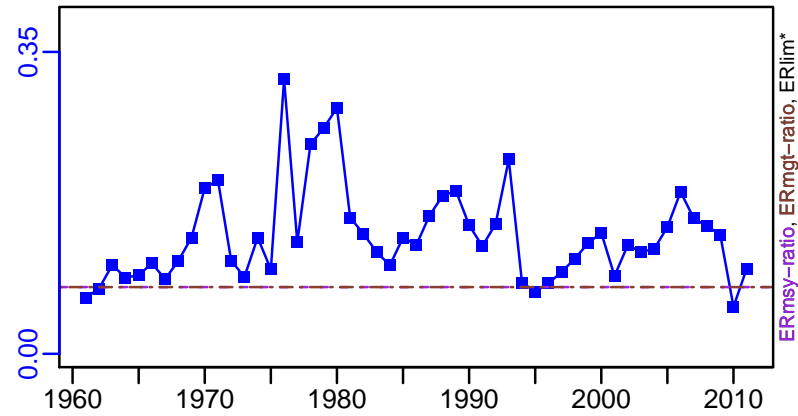
TN *



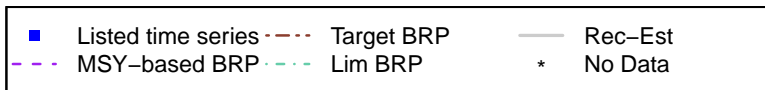
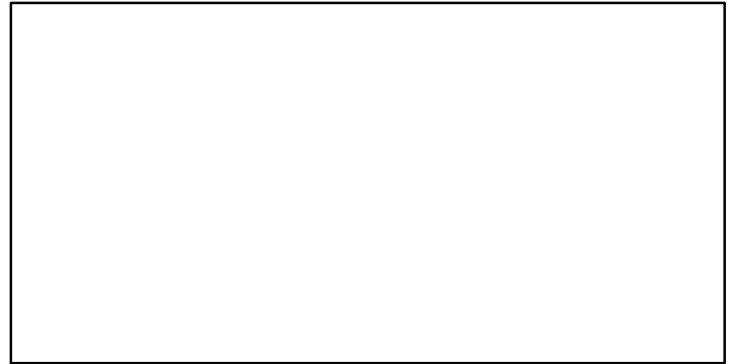
F*



ER-ratio (1960-2011-OSGOOD)

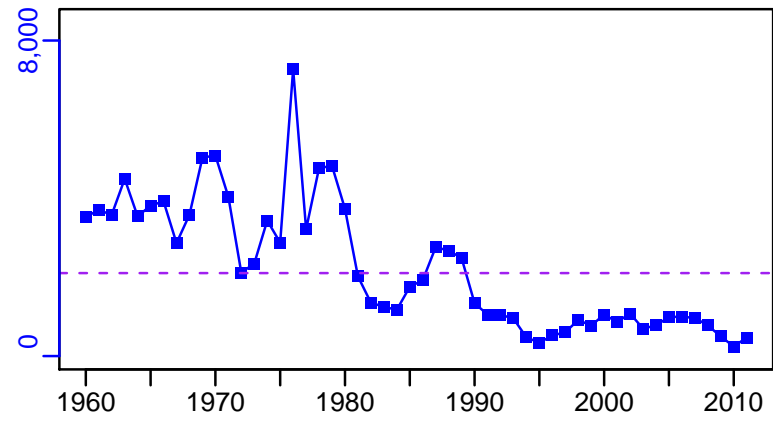


Recruits*

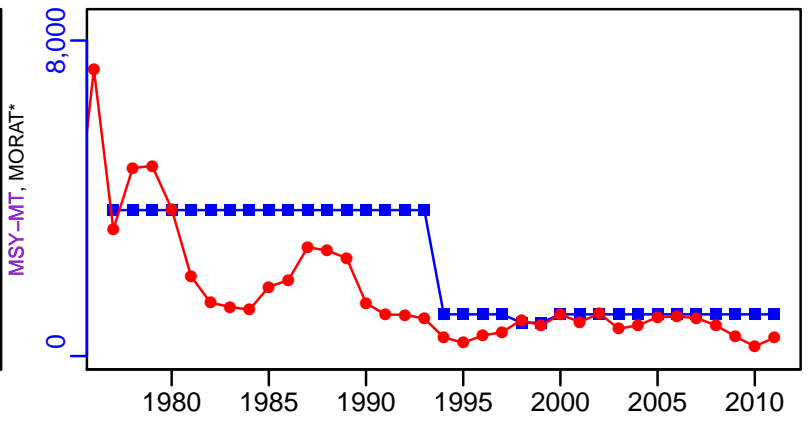


Witch flounder Gulf of St. Lawrence [WITFLOUN4RST]

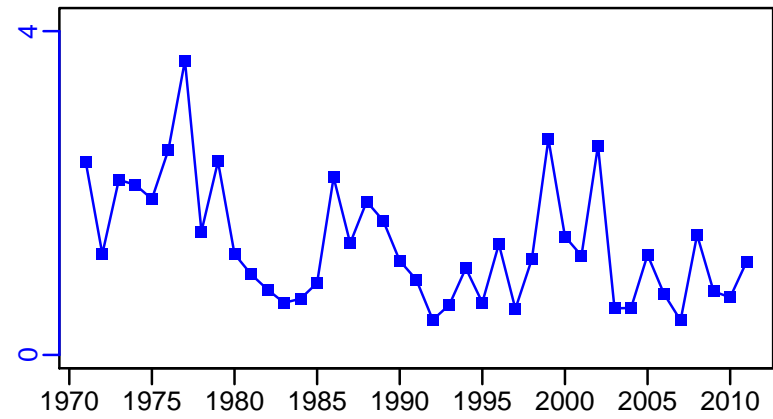
TL-MT, TC*, RecC* (1960-2011-OSGOOD)



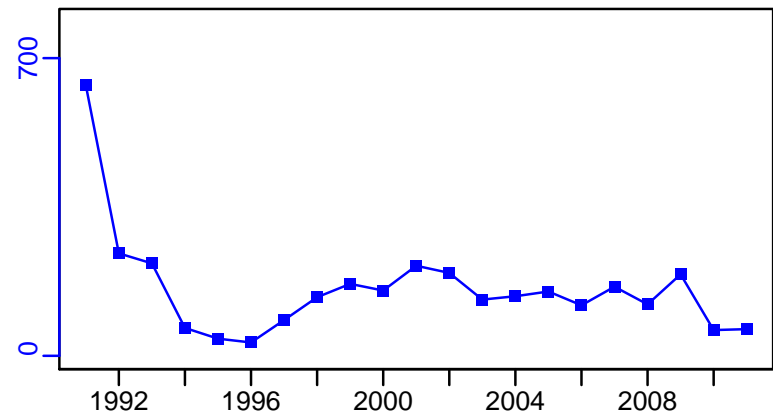
TAC-MT, Cpair-MT, Cadv* (1960-2011-OSGOOD)



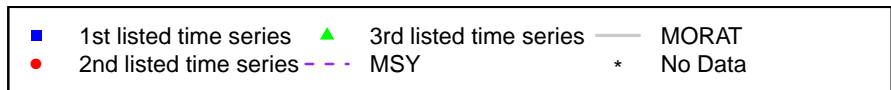
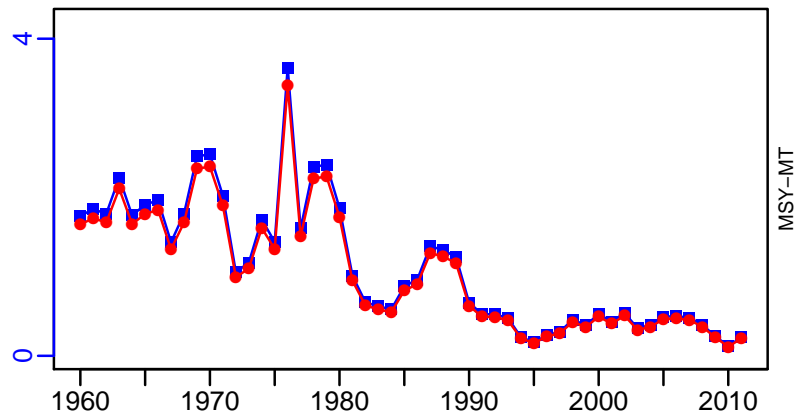
survB-kg/tow (1960-2011-OSGOOD)



EFFORT-day (1960-2011-OSGOOD)



TL-MT/MSY-MT, CdivMEANC-ratio, (1960-2011-OSGOOD)



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	-	-	-		

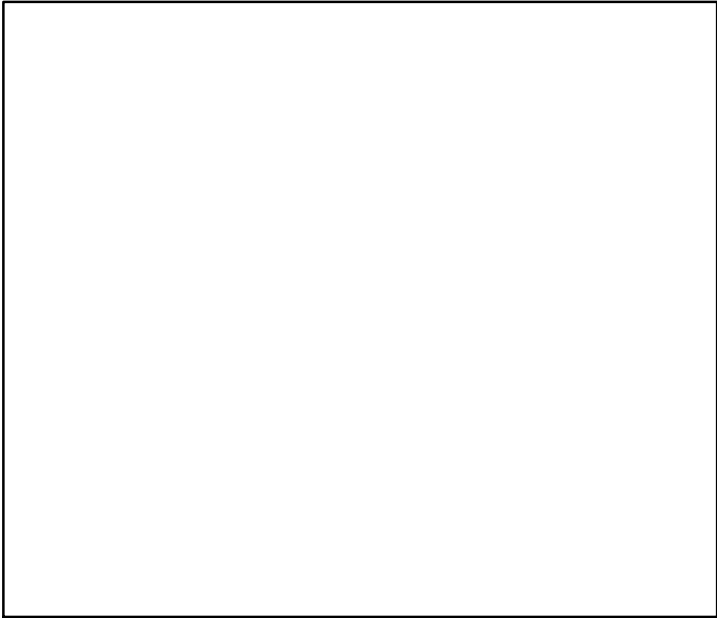
Kobe MSY*



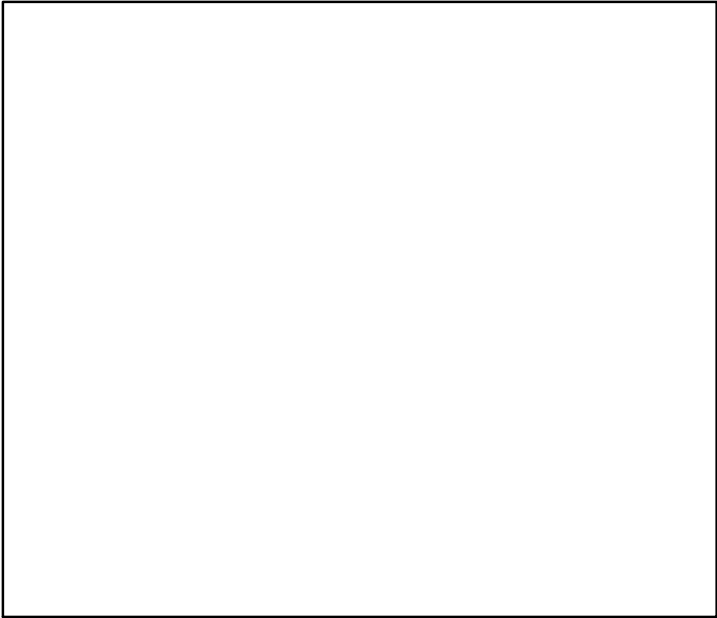
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Waved whelk Quebec Coastal Waters [WWHELKQCW]

TB*



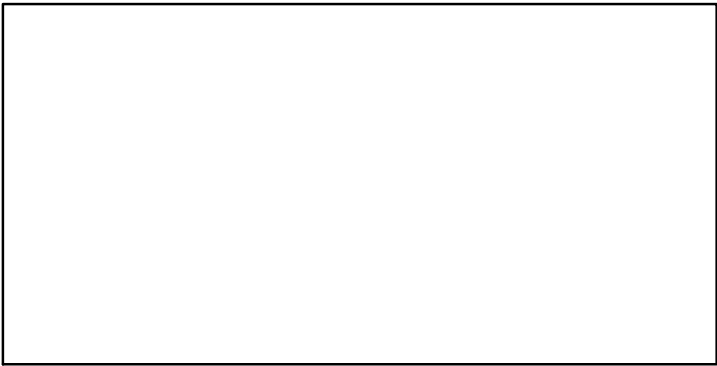
SSB*



TN *



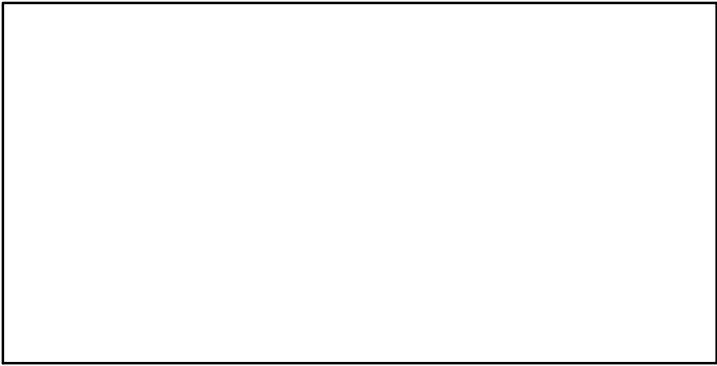
F*



ER*



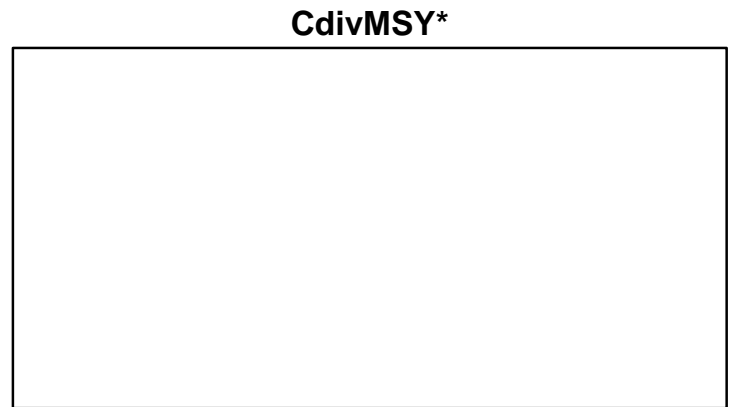
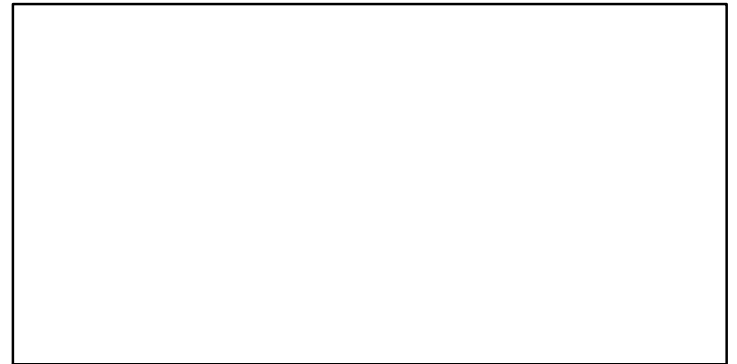
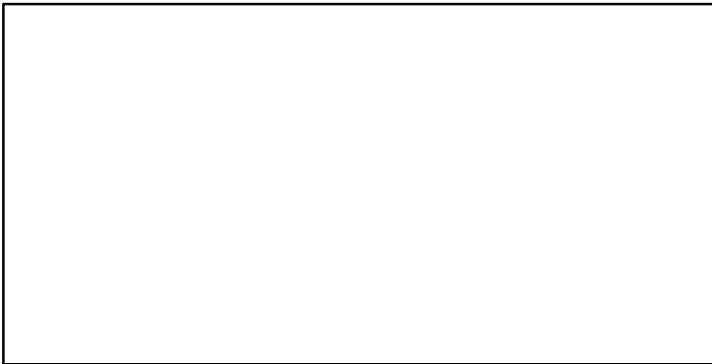
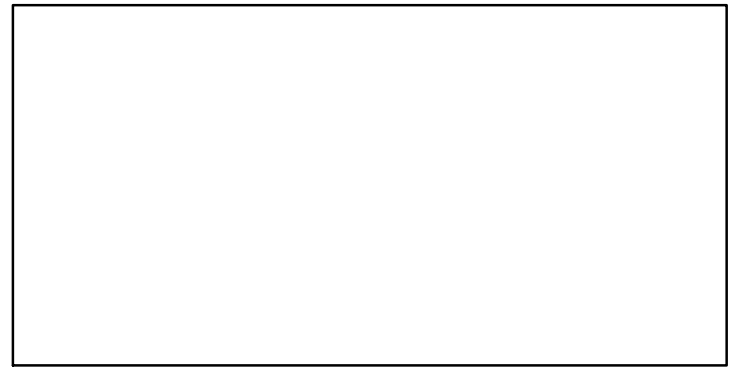
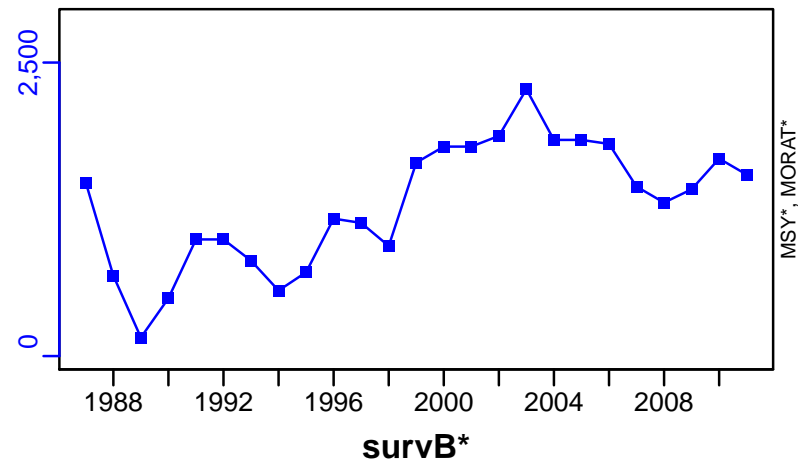
Recruits*



Waved whelk Quebec Coastal Waters [WWHELKQCW]

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

TAC*, Cpair*, Cadv*



Yellowtail flounder Grand Banks [YELL3LNO]

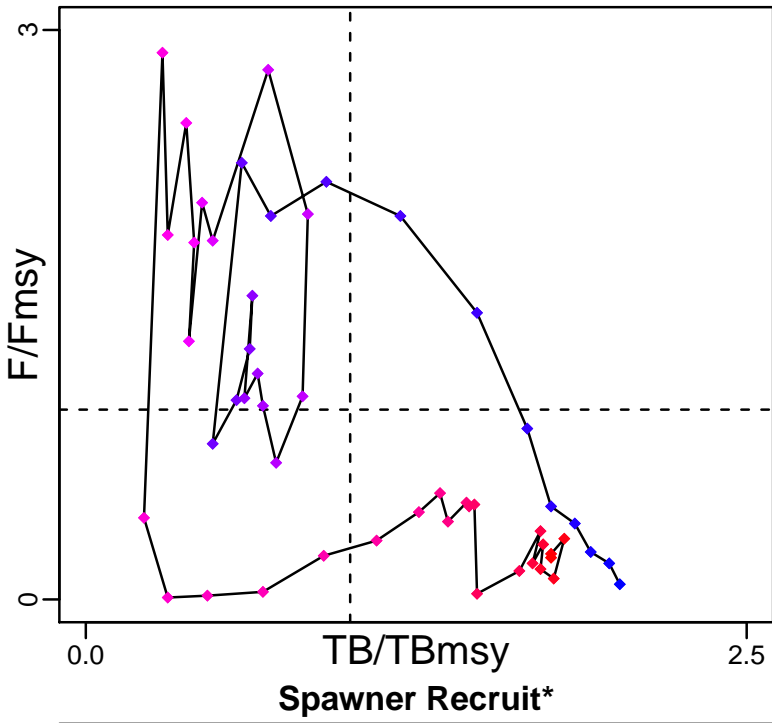
Metadata	
Scientific Name	Limanda ferruginea
Current Assess ID	NAFO-SC-YELL3LNO-1960-2015-WATSON
Area	Grand Banks
Management Authority	Northwest Atlantic Fisheries Organization
Assessor	NAFO Scientific Council
Asmts in RAM	2009, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2009	73,580
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2009	0.26
ERmsy	ERmsy-ratio	2009	0.256
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	18,730
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

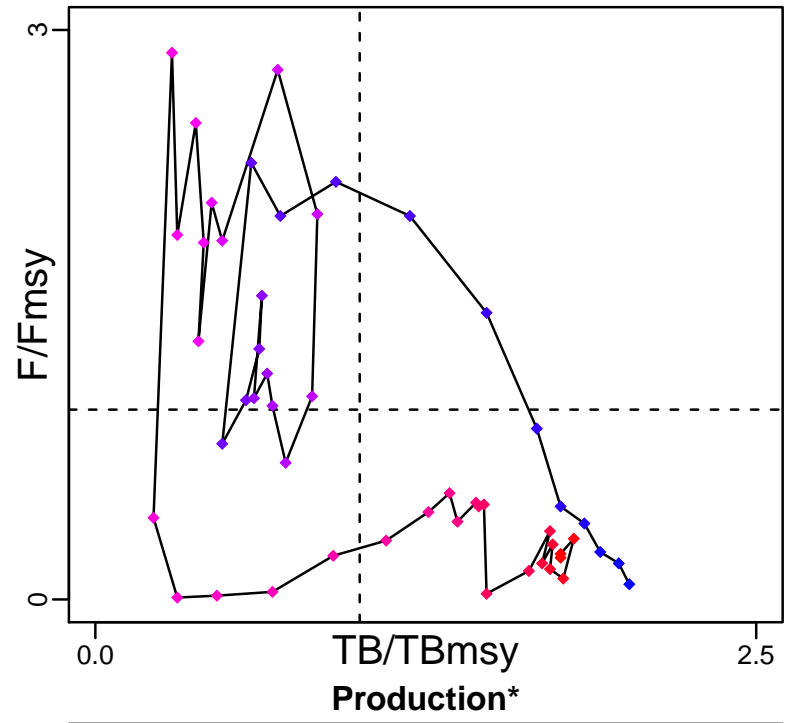
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	120,000	-	-
SSB	SSB-MT	2015	162,000	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2009	0.126	-	-
ER	ER-ratio	2009	0.039	-	-
TC	TC-MT	2015	7990		
TL	-	-	-		
TB/TBmsy	TBdivTBmsy-dimensionless	2015	1.76		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2015	0.22		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.151		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Yellowtail flounder Grand Banks [YELL3LNO]

Kobe MSYpref (1960–2015–WATSON)



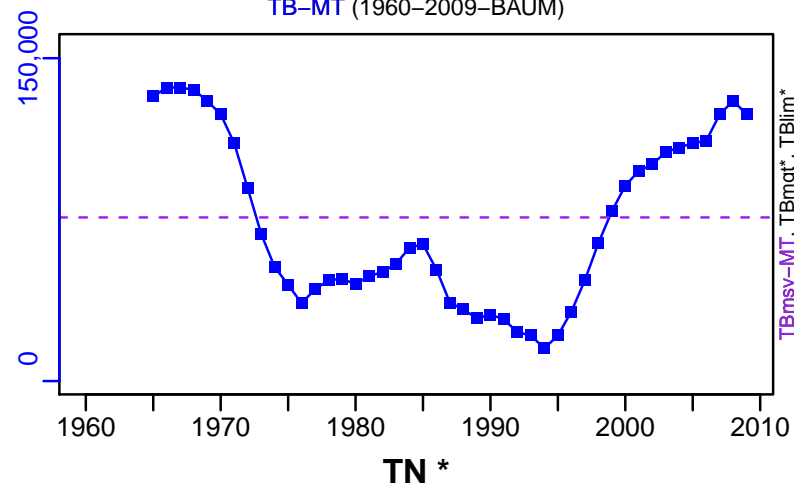
Kobe MGTpref (1960–2015–WATSON)



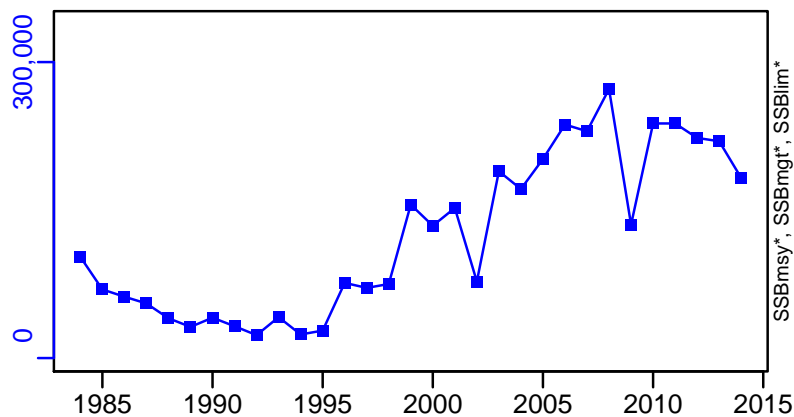
◆ Start Year ◆ End Year * No Data

Yellowtail flounder Grand Banks [YELL3LNO]

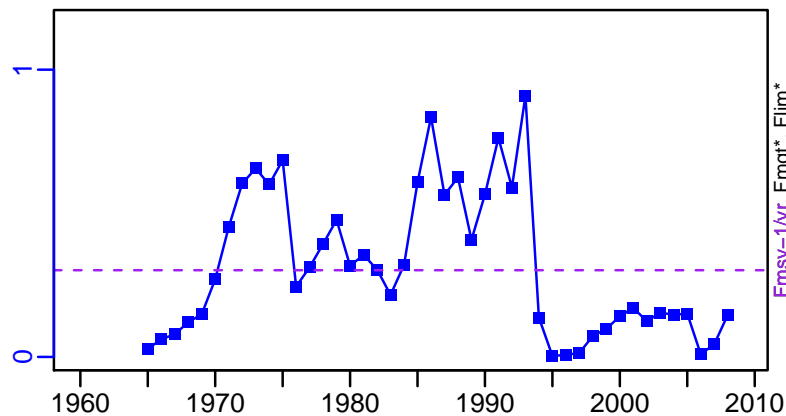
TB-MT (1960–2009–BAUM)



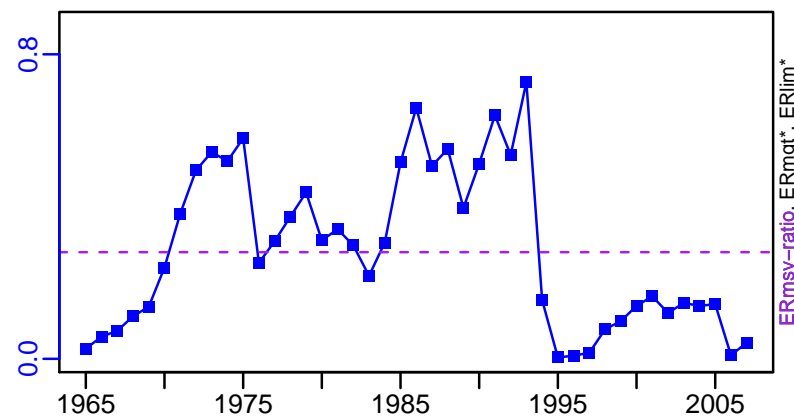
SSB-MT (1960–2015–WATSON)



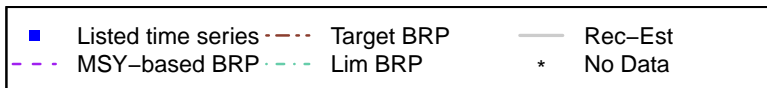
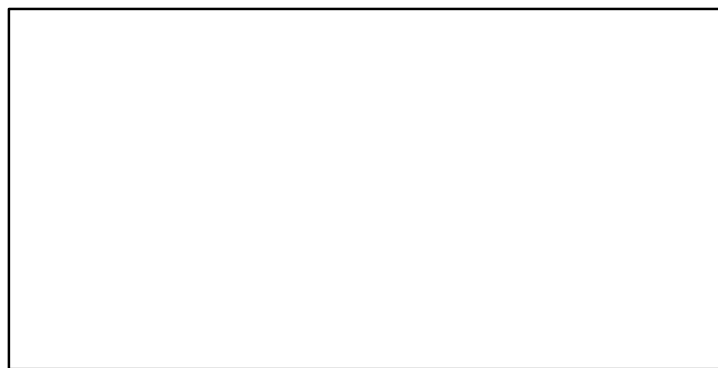
F-1/yr (1960–2009–BAUM)



ER-ratio (1960–2009–BAUM)

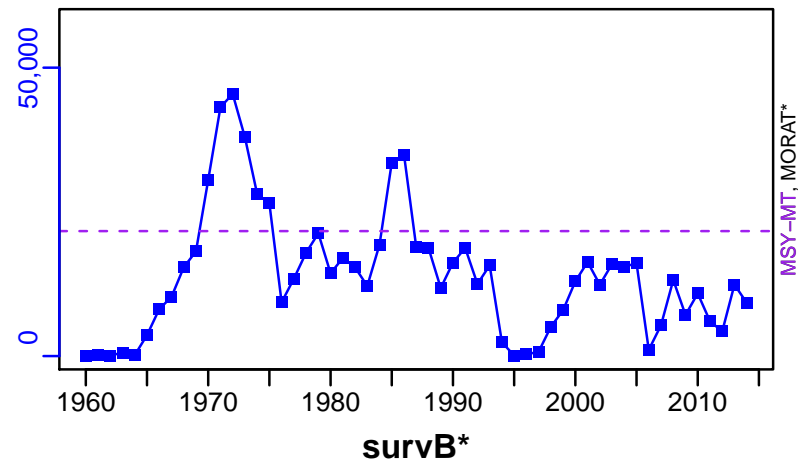


Recruits*

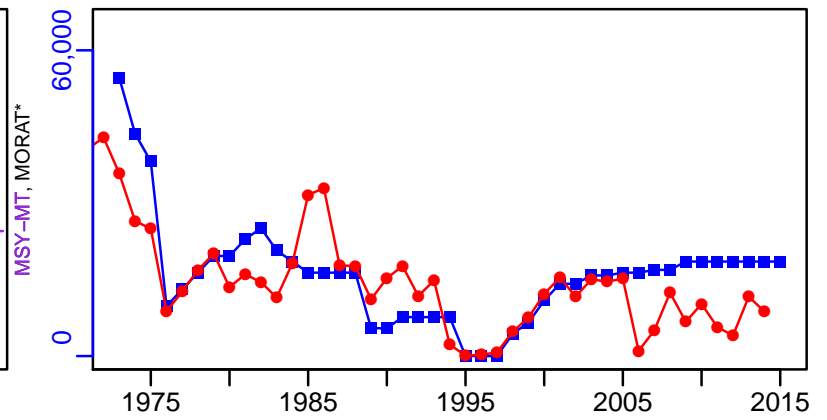


Yellowtail flounder Grand Banks [YELL3LNO]

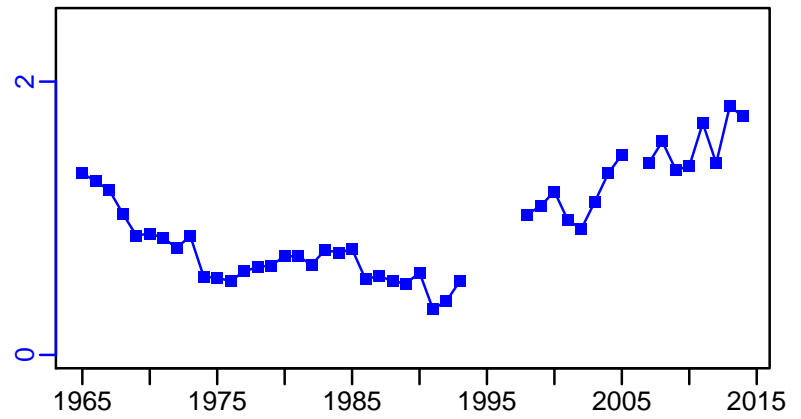
TC-MT, TL*, RecC* (1960-2015-WATSON)



TAC-MT, Cpair-MT, Cadv* (1960-2015-WATSON)



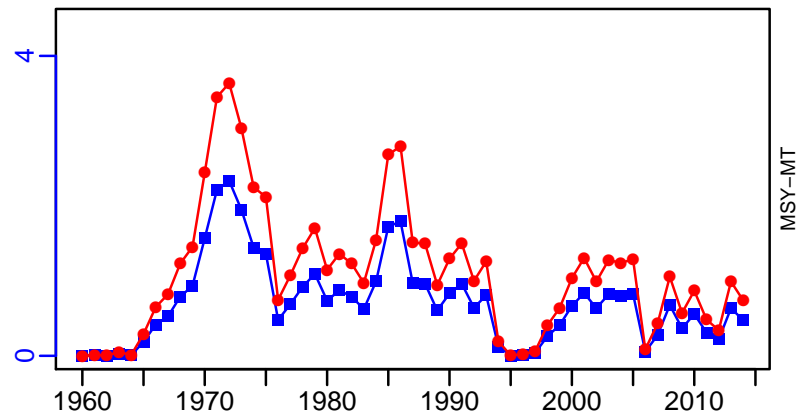
CPUE-index (1960-2015-WATSON)



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960-2015-WATSON)



■ 1st listed time series ▲ 3rd listed time series — MORAT
● 2nd listed time series - - - MSY * No Data