

# Canada West Coast Stocks

## v4.63 (Dec-07-2023)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgt
1. BIGSKA3CD [Big skate West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F
2. BIGSKA4B [Big skate Strait of Georgia]	TB SSB	ER F	TB SSB	ER F
3. BIGSKA5AB [Big skate Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F
4. BIGSKA5CDE [Big skate Hecate Strait]	TB SSB	ER F	TB SSB	ER F
5. BOCACBCW [Bocaccio British Columbia Waters]	TB SSB	ER F	TB SSB	ER F
6. CROCKWCVANISOGQCI [Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands]	TB SSB	ER F	TB SSB	ER F
7. ESOLEHS [English sole Hecate Strait]	TB SSB	ER F	TB SSB	ER F
8. EULAPCOASTCCDU [Eulachon Pacific Coast of Canada Central Coast Designatable Unit]	TB SSB	ER F	TB SSB	ER F
9. EULAPCOASTFRDU [Eulachon Pacific Coast of Canada Fraser River Designatable Unit]	TB SSB	ER F	TB SSB	ER F
10. EULAPCOASTNSDU [Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit]	TB SSB	ER F	TB SSB	ER F
11. HERRCC [Pacific herring Central Coast]	TB SSB	ER F	TB SSB	ER F
12. HERRHG [Pacific herring Haida Gwaii]	TB SSB	ER F	TB SSB	ER F
13. HERRPRD [Pacific herring Prince Rupert District]	TB SSB	ER F	TB SSB	ER F
14. HERRSOG [Pacific herring Strait of Georgia]	TB SSB	ER F	TB SSB	ER F
15. HERRWCVANI [Pacific herring West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F
16. LINGCODSOG [Lingcod Strait of Georgia]	TB SSB	ER F	TB SSB	ER F
17. LNOSEKA3CD [Longnose skate West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F
18. LNOSEKA4B [Longnose skate Strait of Georgia]	TB SSB	ER F	TB SSB	ER F
19. LNOSEKA5AB [Longnose skate Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F
20. LNOSEKA5CDE [Longnose skate Hecate Strait]	TB SSB	ER F	TB SSB	ER F
21. PANDALSMA14 [Ocean shrimp Shrimp Management Area 14]	TB SSB	ER F	TB SSB	ER F
22. PANDALSMA16 [Ocean shrimp Shrimp Management Area 16]	TB SSB	ER F	TB SSB	ER F
23. PANDALSMA18-19 [Ocean shrimp Shrimp Management Areas 18 and 19]	TB SSB	ER F	TB SSB	ER F
24. PANDALSMAFR [Ocean shrimp Shrimp Management Area FR]	TB SSB	ER F	TB SSB	ER F
25. PANDALSMAGTSE [Ocean shrimp Shrimp Management Area GTSE]	TB SSB	ER F	TB SSB	ER F
26. PANDALSMAPRD [Ocean shrimp Shrimp Management Area PRD]	TB SSB	ER F	TB SSB	ER F
27. PCOD5ABCD [Pacific cod British Columbia Waters Area 5ABCD]	TB SSB	ER F	TB SSB	ER F
28. PCODWCVANI [Pacific cod West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F
29. PERCHHG [Pacific Ocean perch Haida Gwaii]	TB SSB	ER F	TB SSB	ER F
30. PERCHWCVANI [Pacific ocean perch West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F
31. QROCKPCOASTIN [Quillback rockfish Pacific Coast of Canada (Inside)]	TB SSB	ER F	TB SSB	ER F

32. QROCKPCOASTOUT [Quillback rockfish Pacific Coast of Canada (Outside)]	TB SSB	ER F	TB SSB	ER F
33. RSOLE5AB [Rock sole Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F
34. RSOLEHSTR [Rock sole Hecate Strait]	TB SSB	ER F	TB SSB	ER F
35. RSROCKBCWN [Redstripe rockfish British Columbia Waters North]	TB SSB	ER F	TB SSB	ER F
36. RSROCKBCWS [Redstripe rockfish British Columbia Waters South]	TB SSB	ER F	TB SSB	ER F
37. SABLEFPCAN [Sablefish Pacific Coast of Canada]	TB SSB	ER F	TB SSB	ER F
38. SARDBC [Pacific sardine Pacific Coast of Canada]	TB SSB	ER F	TB SSB	ER F
39. SSHRIMPSMAGTSE [Sidestripe shrimp Shrimp Management Area GTSE]	TB SSB	ER F	TB SSB	ER F
40. SSHRIMPSMAPRD [Sidestripe shrimp Shrimp Management Area PRD]	TB SSB	ER F	TB SSB	ER F
41. SSSHRIMPSMA14 [Sidestripe shrimp Shrimp Management Area 14]	TB SSB	ER F	TB SSB	ER F
42. SSSHRIMPSMA16 [Sidestripe shrimp Shrimp Management Area 16]	TB SSB	ER F	TB SSB	ER F
43. SSSHRIMPSMA18-19 [Sidestripe shrimp Shrimp Management Areas 18 and 19]	TB SSB	ER F	TB SSB	ER F
44. SSSHRIMPSMAFR [Sidestripe shrimp Shrimp Management Area FR]	TB SSB	ER F	TB SSB	ER F
45. WPOLLBCWN [Walleye pollock British Columbia Waters North]	TB SSB	ER F	TB SSB	ER F
46. WPOLLBCWS [Walleye pollock British Columbia Waters South]	TB SSB	ER F	TB SSB	ER F
47. WROCKBCW [Widow rockfish British Columbia Waters]	TB SSB	ER F	TB SSB	ER F
48. YEYEROCKPCOASTIN [Yelloweye rockfish Pacific Coast of Canada (Inside)]	TB SSB	ER F	TB SSB	ER F

## Big skate West Coast of Vancouver Island [BIGSKA3CD]

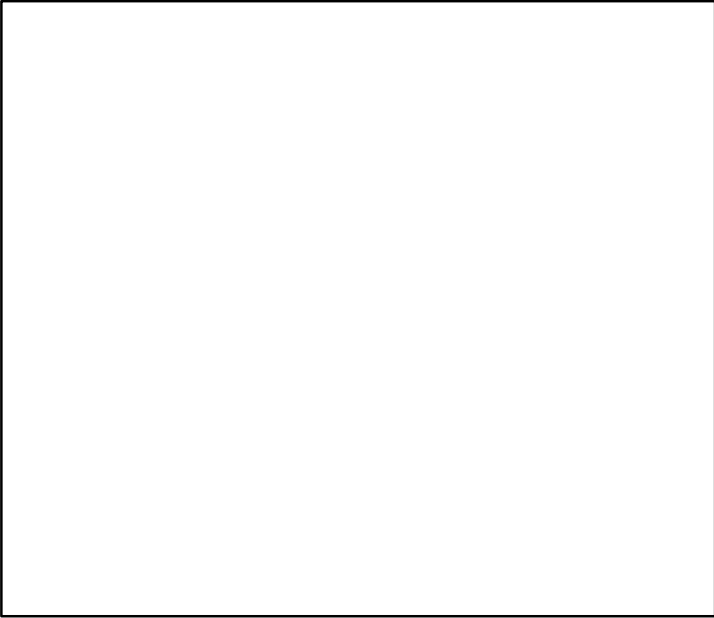
Metadata	
<b>Scientific Name</b>	Raja binoculata
<b>Current Assess ID</b>	DFO-PAC-BIGSKA3CD-1954-2011-OSGOOD
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2011

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

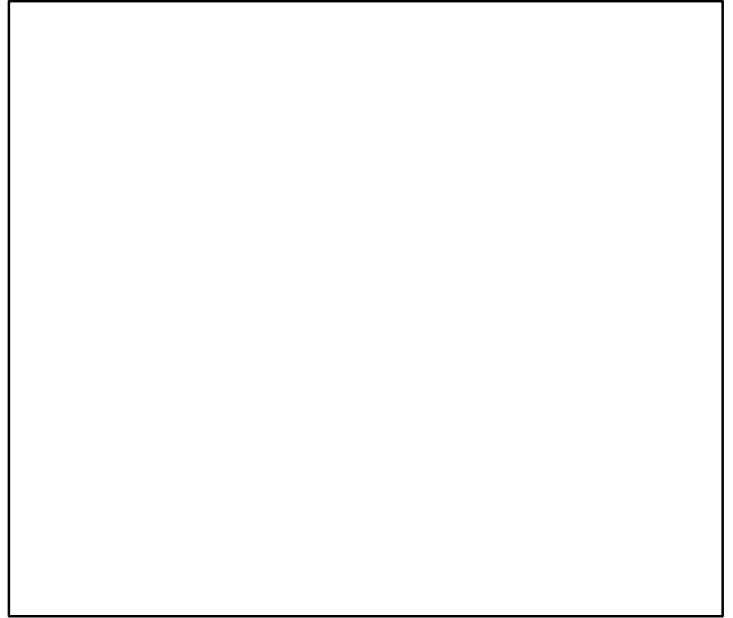
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2011	37		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Big skate West Coast of Vancouver Island [BIGSKA3CD]

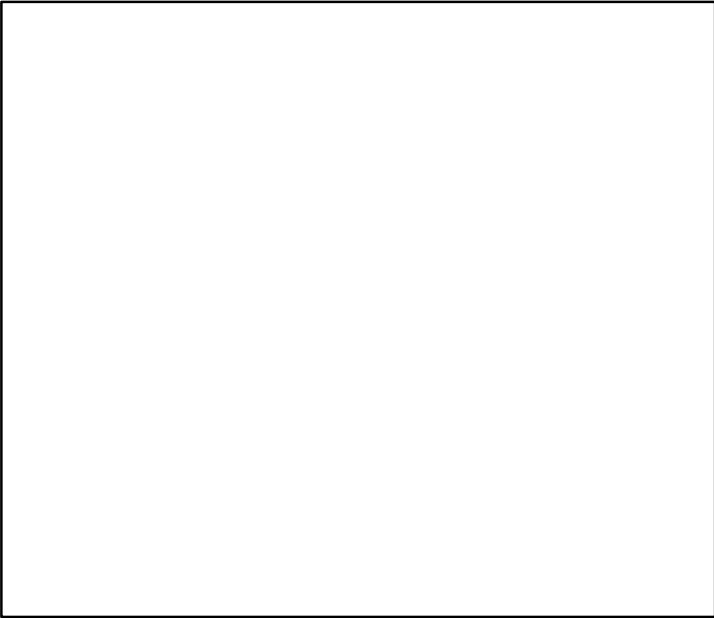
**Kobe MSY\***



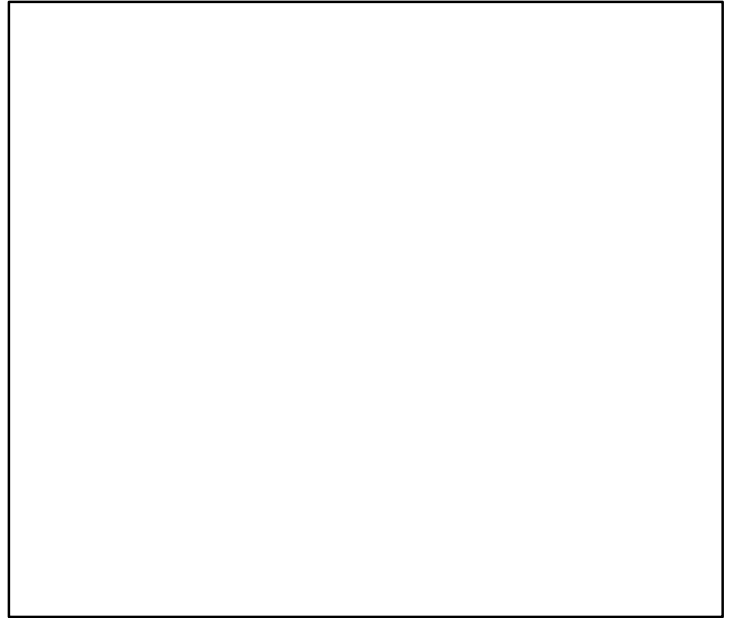
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Big skate West Coast of Vancouver Island [BIGSKA3CD]

TB\*



SSB\*



TN \*



F\*



ER\*



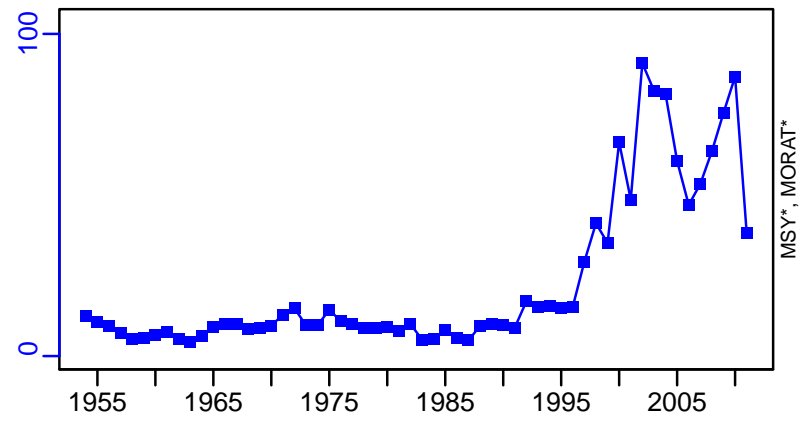
Recruits\*



Big skate West Coast of Vancouver Island [BIGSKA3CD]

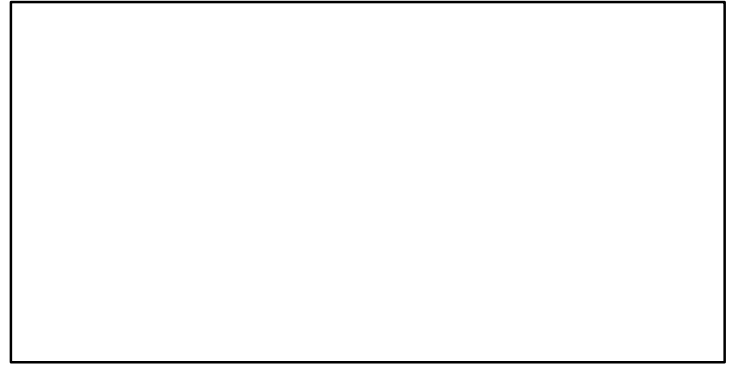
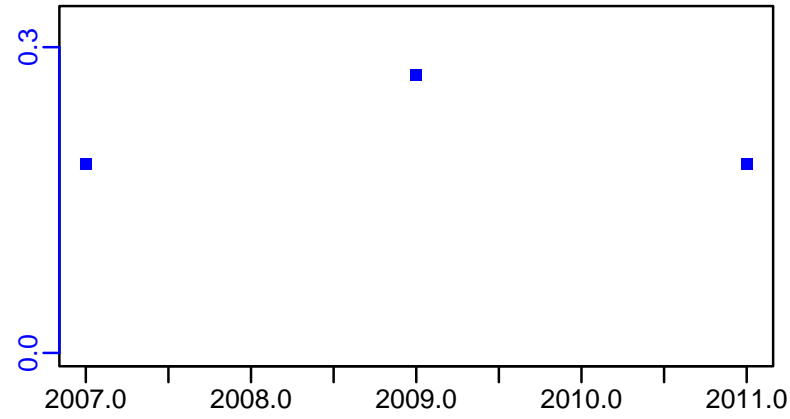
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)

TAC\*, Cpair\*, Cadv\*



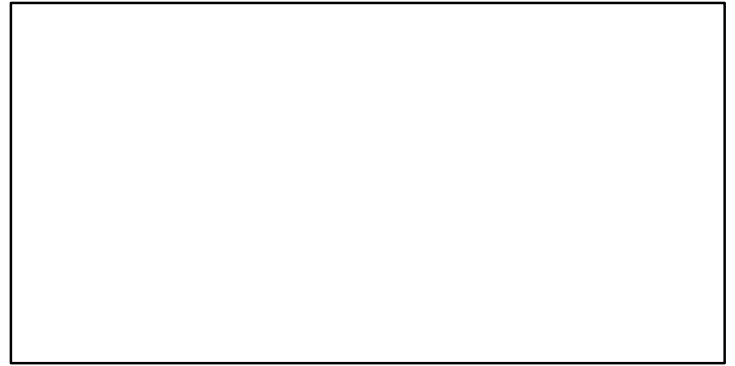
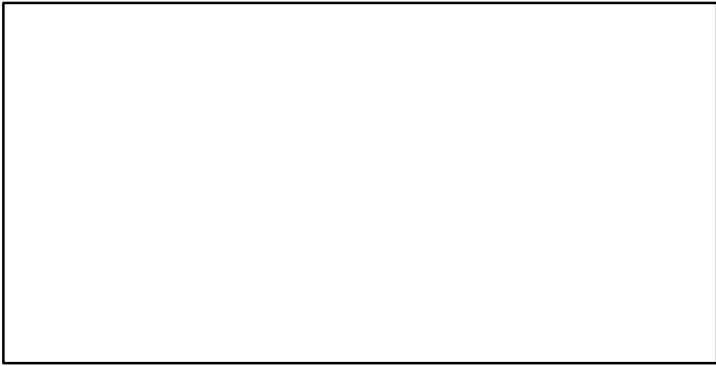
survB-fisherE02hooks (1954-2011-OSGOOD)

CPUE\*



EFFORT\*

CdivMSY\*



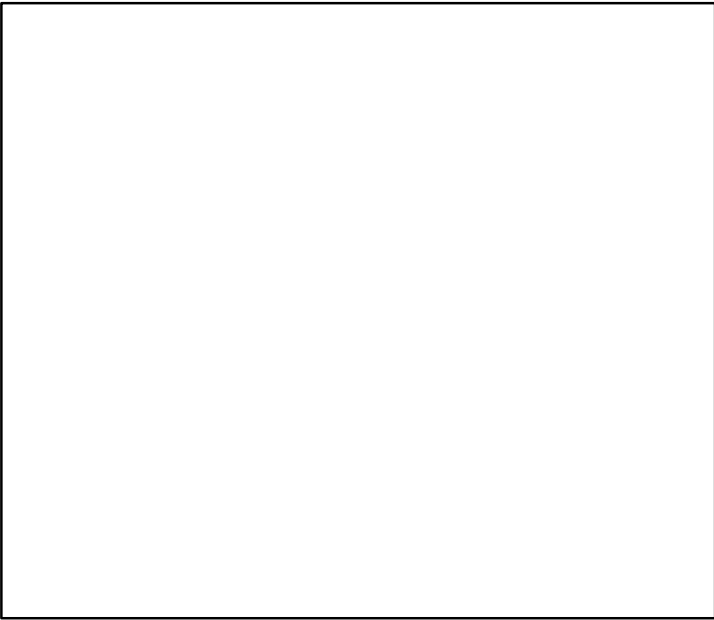
## Big skate Strait of Georgia [BIGSKA4B]

Metadata	
<b>Scientific Name</b>	Raja binoculata
<b>Current Assess ID</b>	DFO-PAC-BIGSKA4B-1996-2011-OSGOOD
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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	TC-MT	2011	10		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

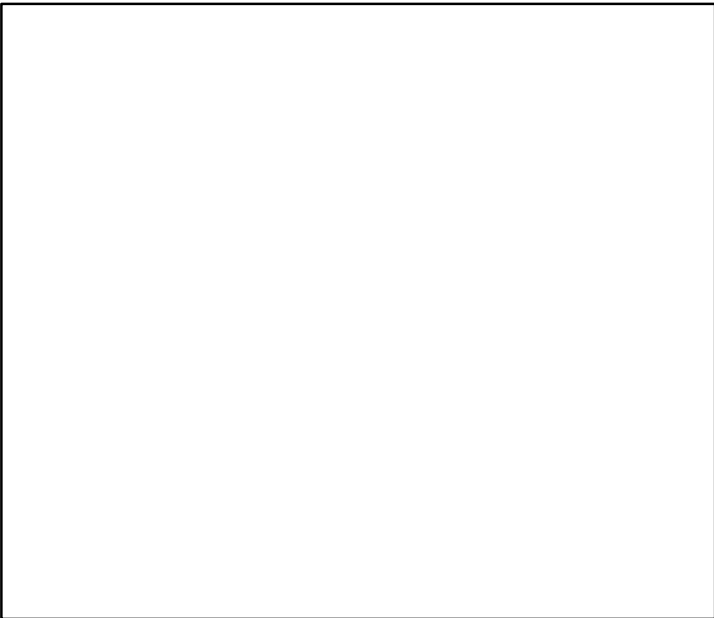
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

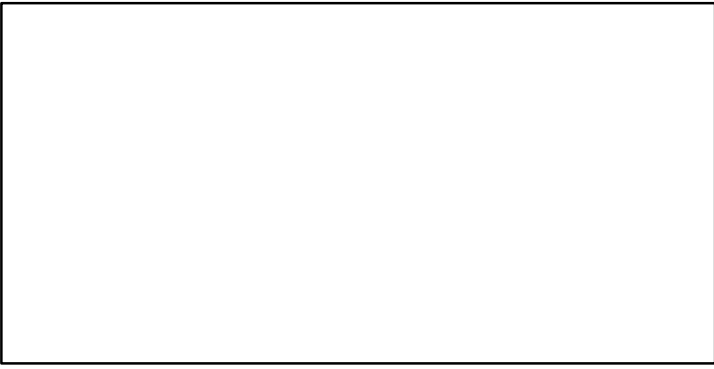


◆ Start Year ◆ End Year \* No Data



Big skate Strait of Georgia [BIGSKA4B]

TB\*



SSB\*



TN \*



F\*



ER\*



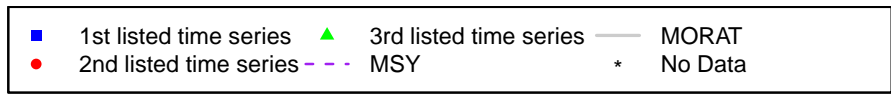
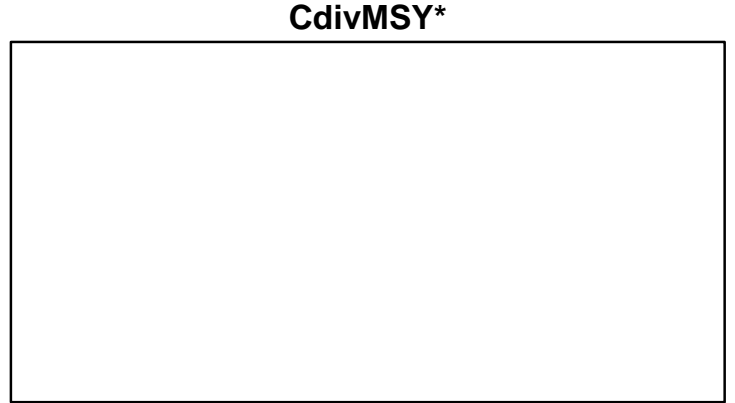
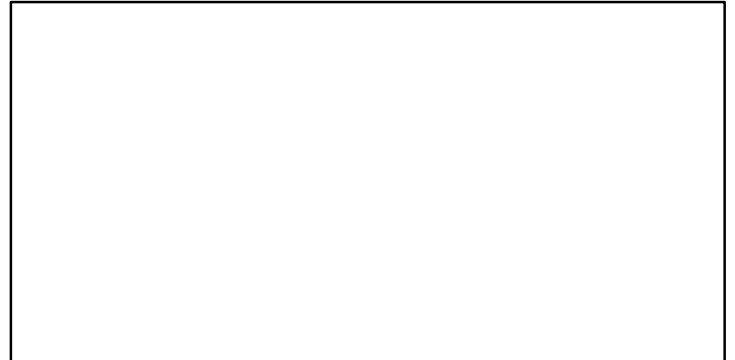
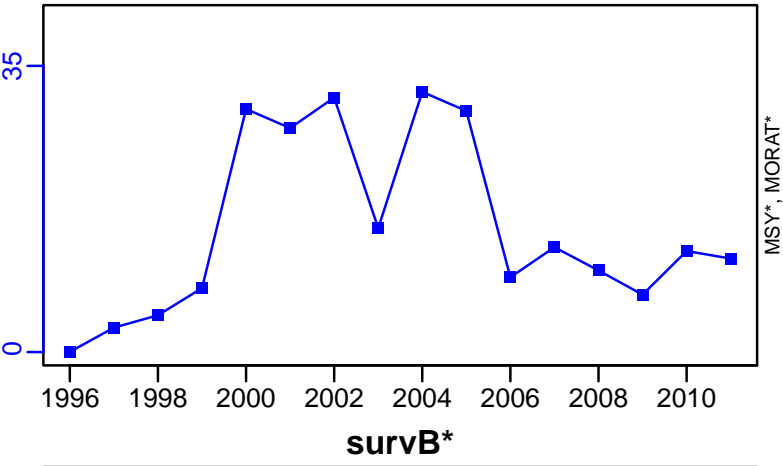
Recruits\*



Big skate Strait of Georgia [BIGSKA4B]

TC-MT, TL\*, RecC\* (1996-2011-OSGOOD)

TAC\*, Cpair\*, Cadv\*



## Big skate Queen Charlotte Sound [BIGSKA5AB]

Metadata	
<b>Scientific Name</b>	Raja binoculata
<b>Current Assess ID</b>	DFO-PAC-BIGSKA5AB-1954-2011-OSGOOD
<b>Area</b>	Queen Charlotte Sound
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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	TC-MT	2011	299		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Big skate Queen Charlotte Sound [BIGSKA5AB]

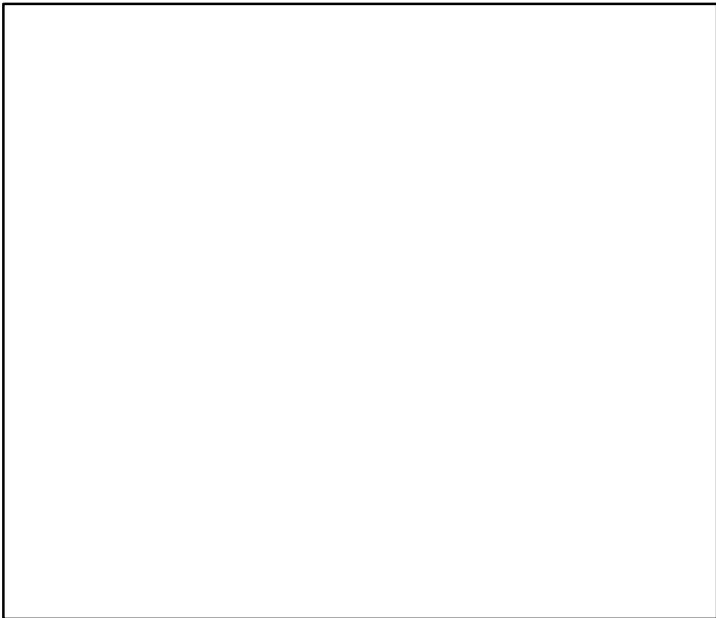
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Big skate Queen Charlotte Sound [BIGSKA5AB]

TB\*



SSB\*



TN \*



F\*



ER\*



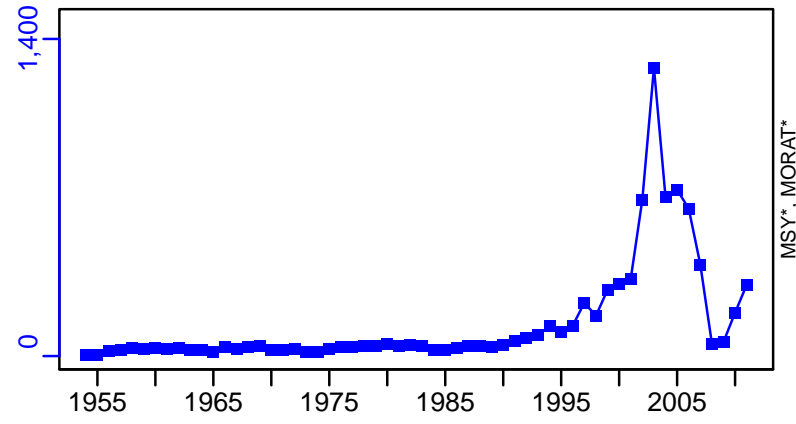
Recruits\*



Big skate Queen Charlotte Sound [BIGSKA5AB]

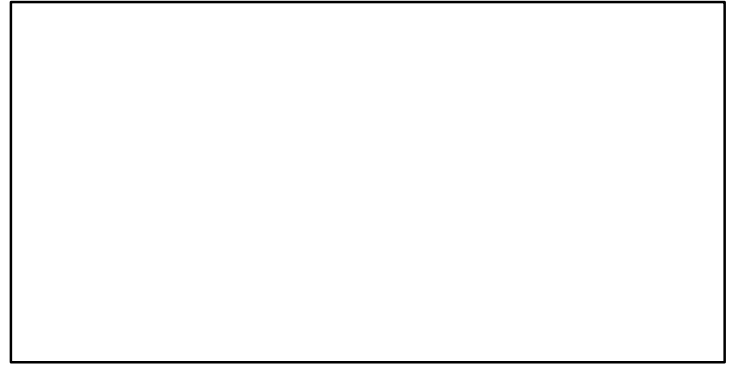
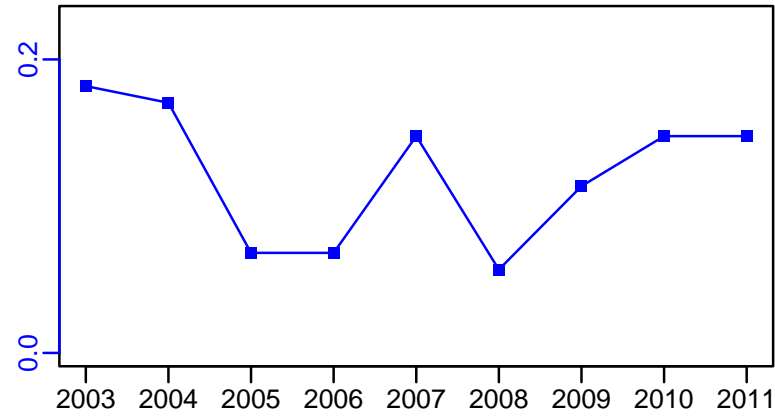
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)

TAC\*, Cpair\*, Cadv\*



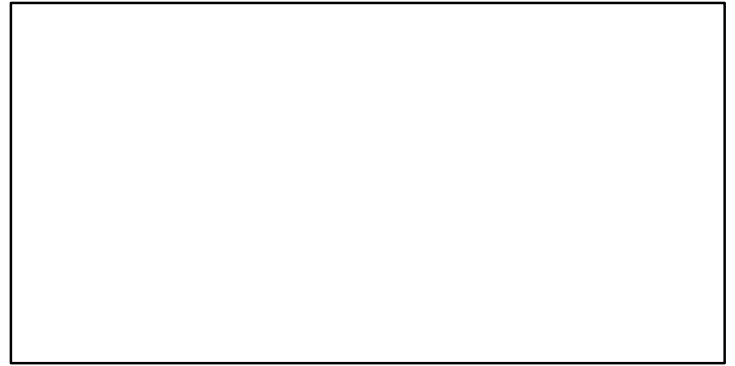
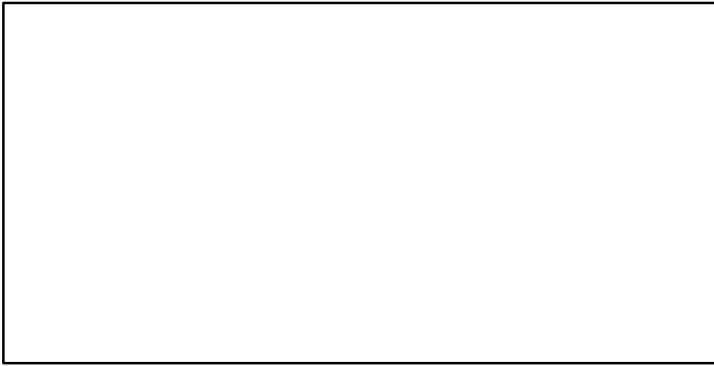
survB-fisherE02hooks (1954-2011-OSGOOD)

CPUE\*



EFFORT\*

CdivMSY\*



## Big skate Hecate Strait [BIGSKA5CDE]

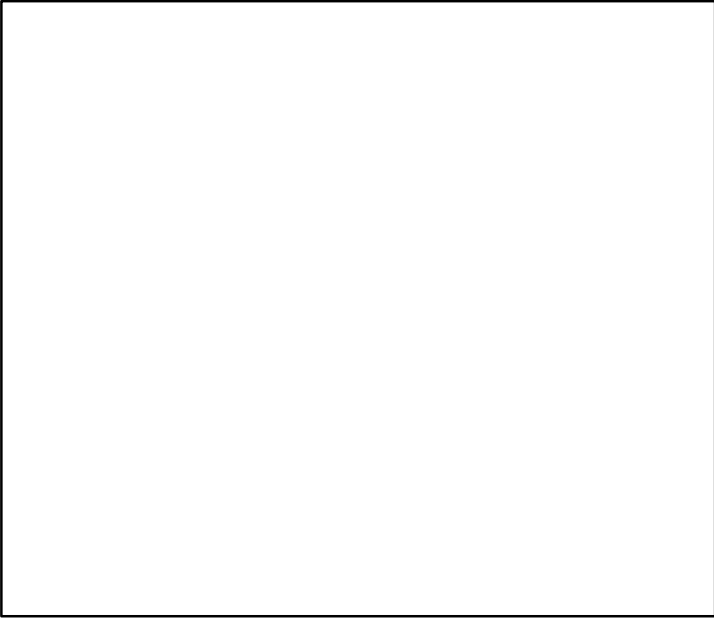
Metadata	
<b>Scientific Name</b>	Raja binoculata
<b>Current Assess ID</b>	DFO-PAC-BIGSKA5CDE-1954-2011-OSGOOD
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2011	351
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2011	628		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Big skate Hecate Strait [BIGSKA5CDE]

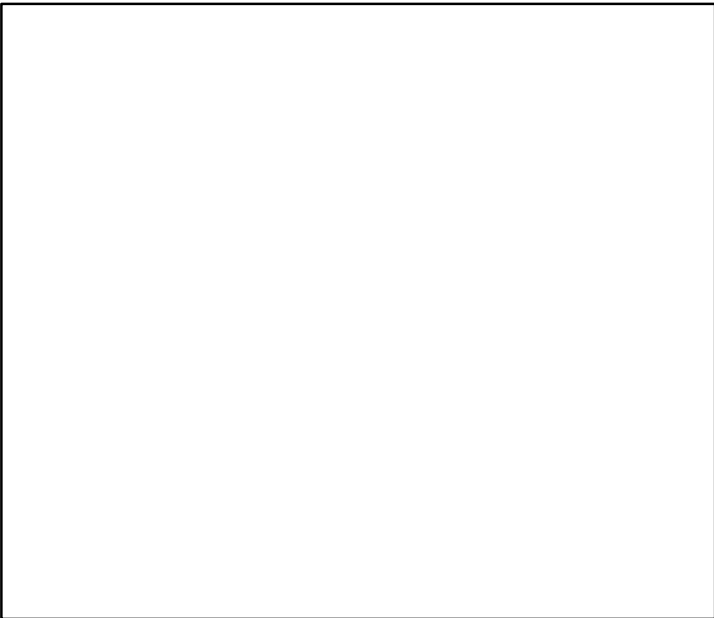
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

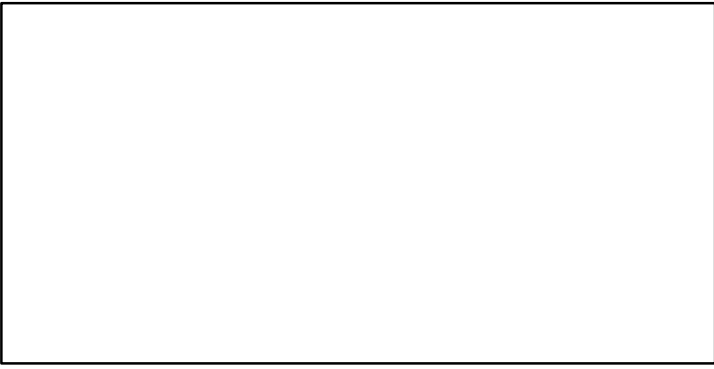


◆ Start Year ◆ End Year \* No Data



Big skate Hecate Strait [BIGSKA5CDE]

TB\*



SSB\*



TN \*



F\*



ER\*

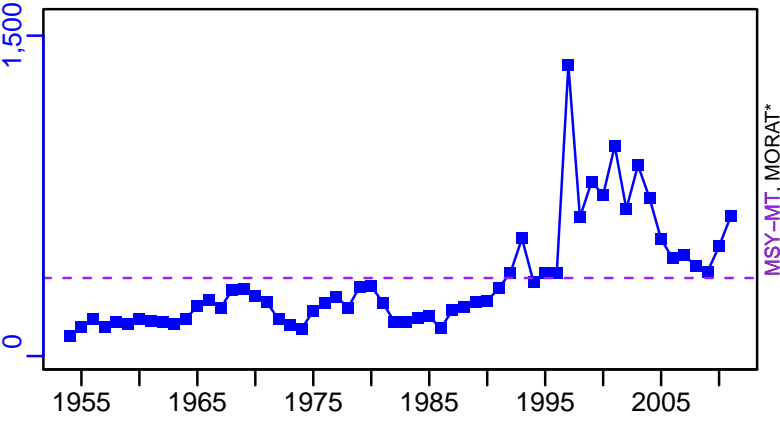


Recruits\*

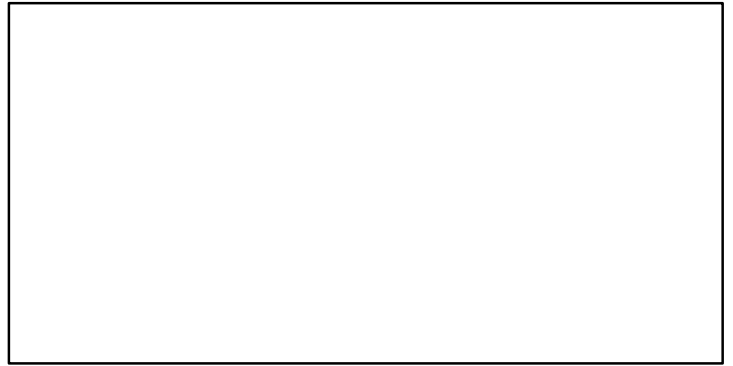


Big skate Hecate Strait [BIGSKA5CDE]

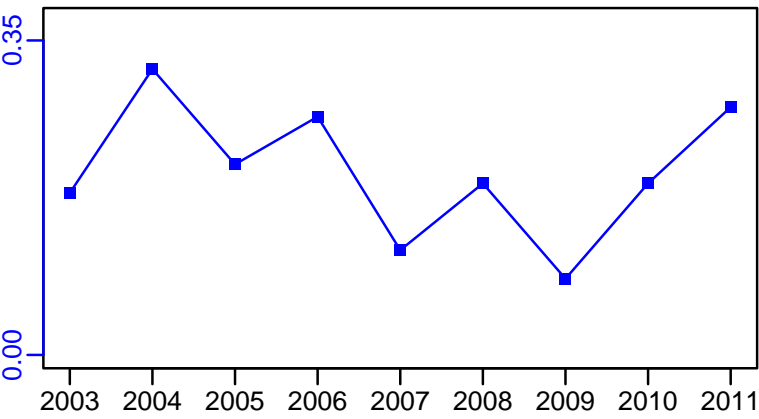
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



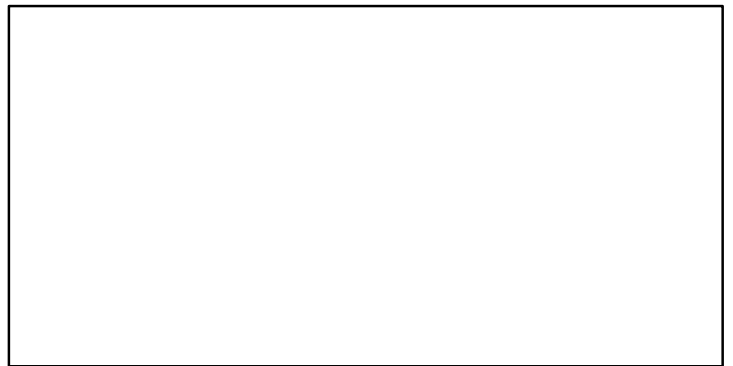
TAC\*, Cpair\*, Cadv\*



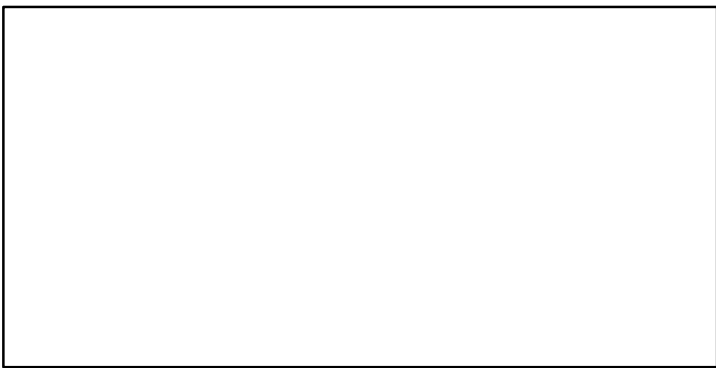
survB-fisherE02hooks (1954-2011-OSGOOD)



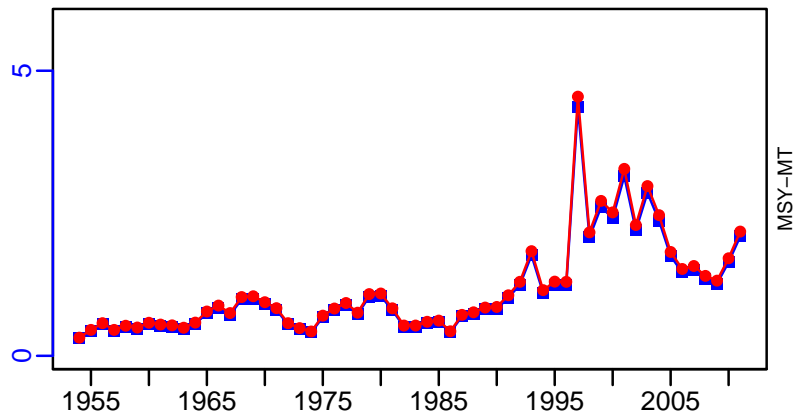
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1954-2011-OSGOOD)



## Bocaccio British Columbia Waters [BOCACBCW]

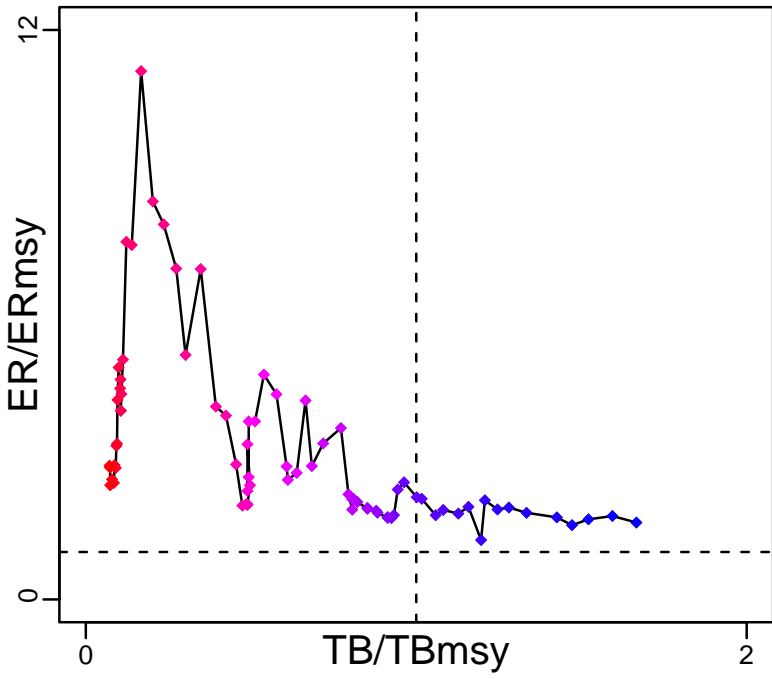
Metadata	
<b>Scientific Name</b>	Sebastes paucispinis
<b>Current Assess ID</b>	DFO-PAC-BOCACBCW-1935-2012-CHING
<b>Area</b>	British Columbia Waters
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2012	26,165
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

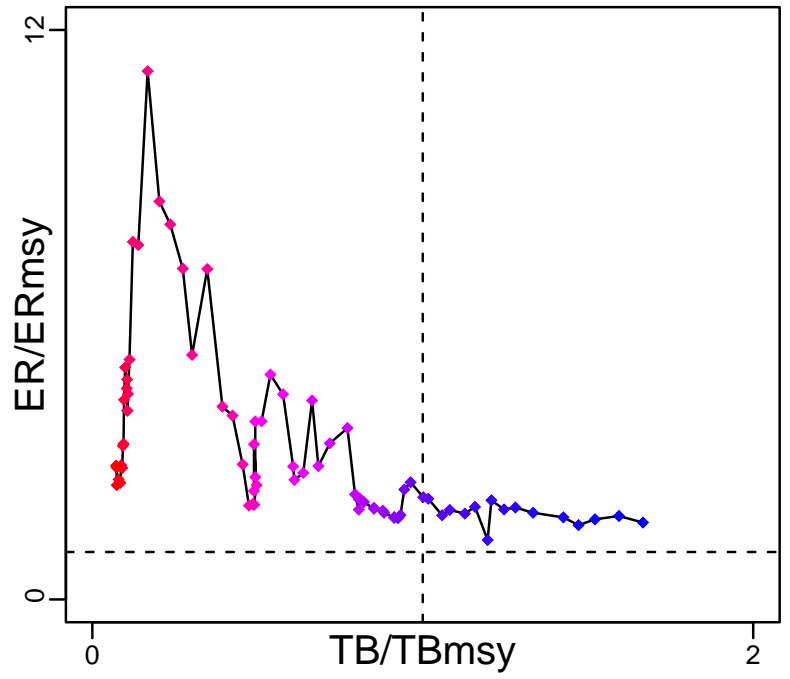
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	1880	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.073	-	-
<b>TC</b>	TC-MT	2012	138		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2012	0.072		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Bocaccio British Columbia Waters [BOCACBCW]

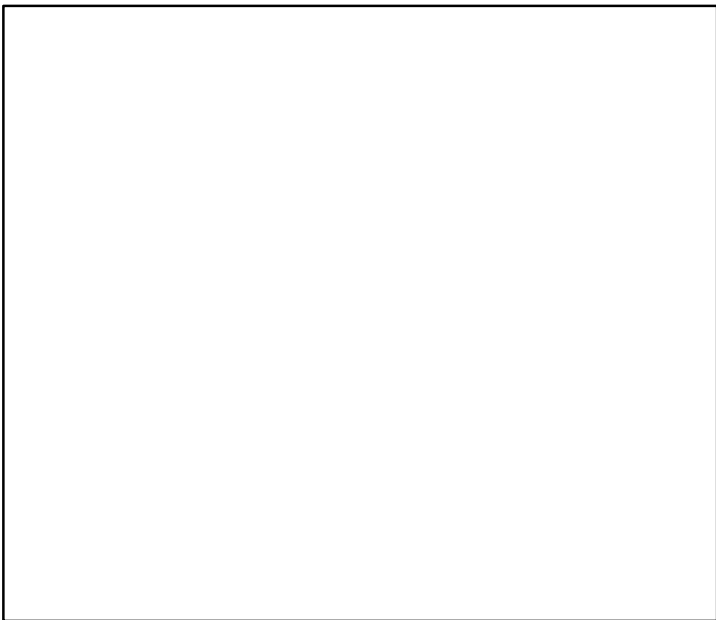
Kobe MSYpref (1935–2012–CHING)



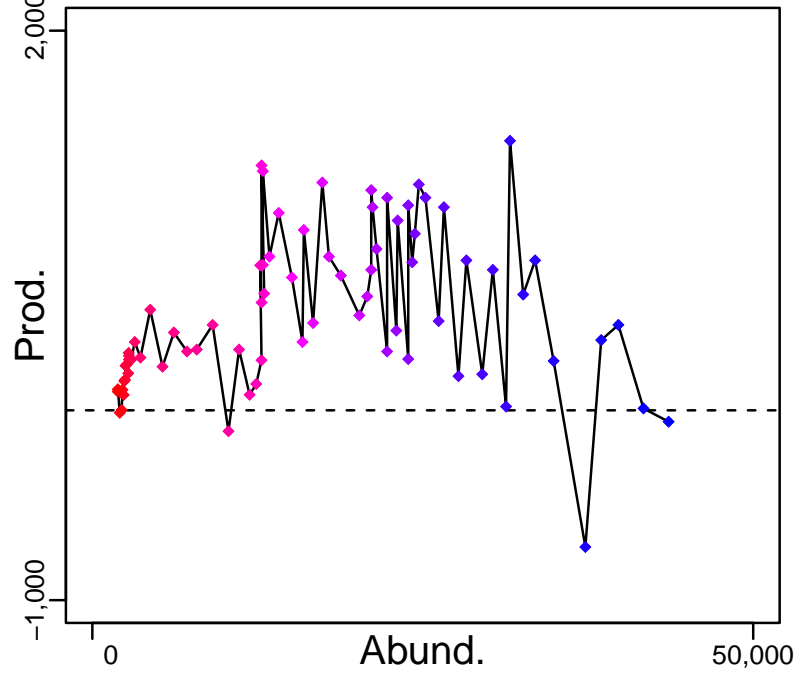
Kobe MGTpref (1935–2012–CHING)



Spawner Recruit\*



Production (1935–2012–CHING)

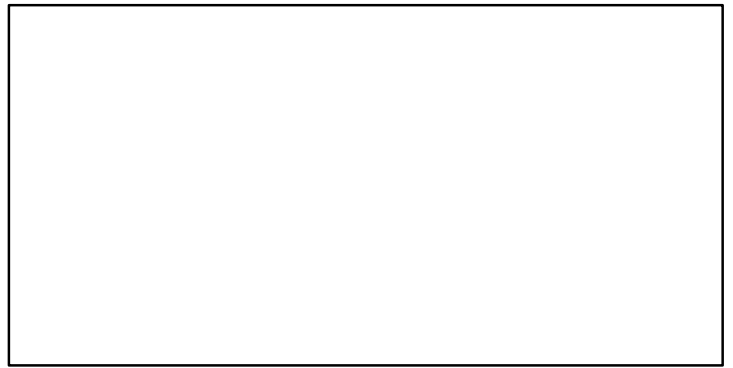
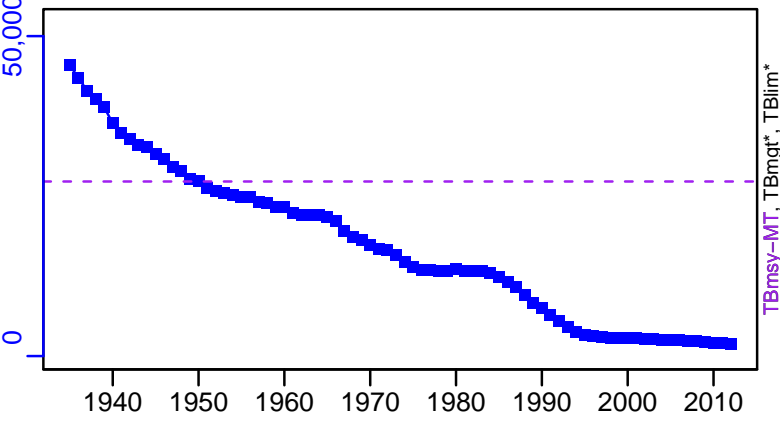


◆ Start Year ◆ End Year \* No Data

Bocaccio British Columbia Waters [BOCACBCW]

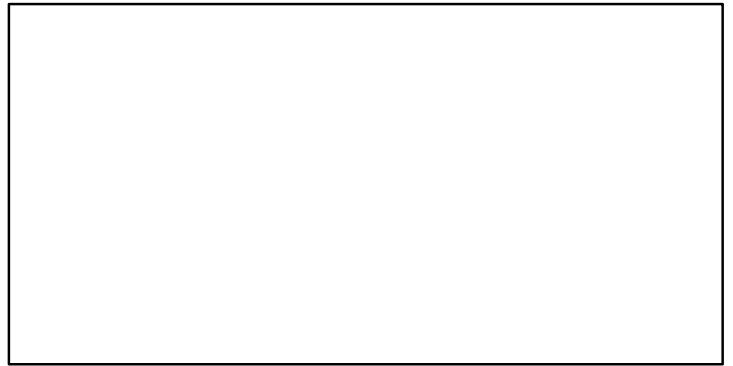
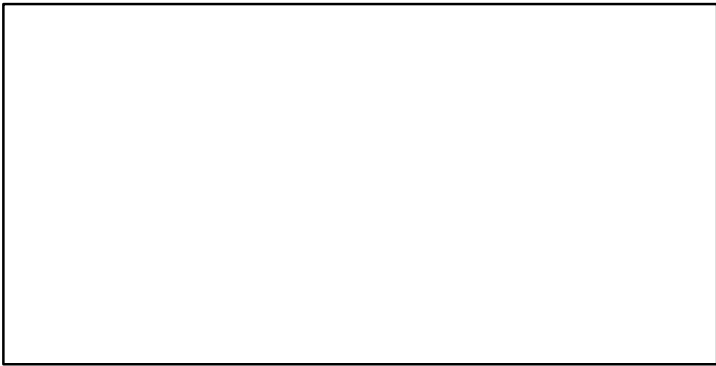
TB-MT (1935-2012-CHING)

SSB\*



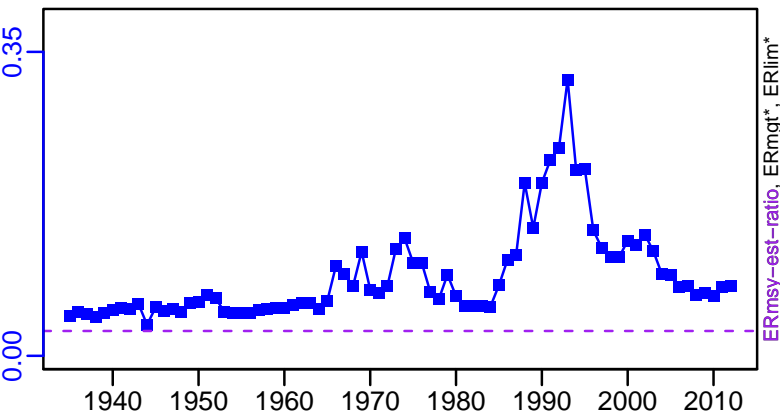
TN \*

F\*



ER-calc-ratio (1935-2012-CHING)

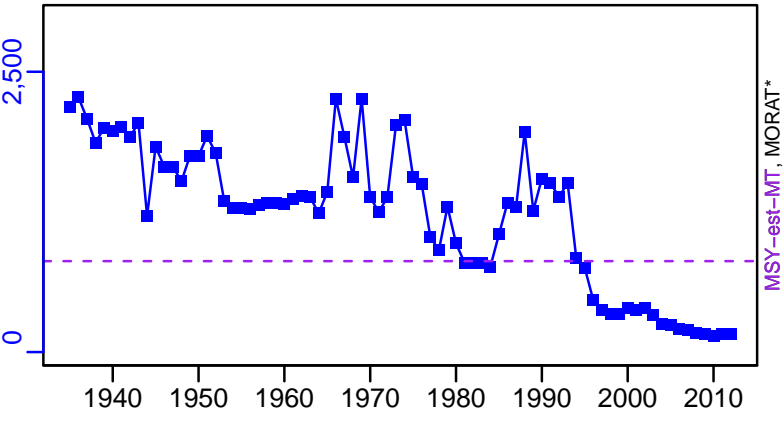
Recruits\*



Bocaccio British Columbia Waters [BOCACBCW]

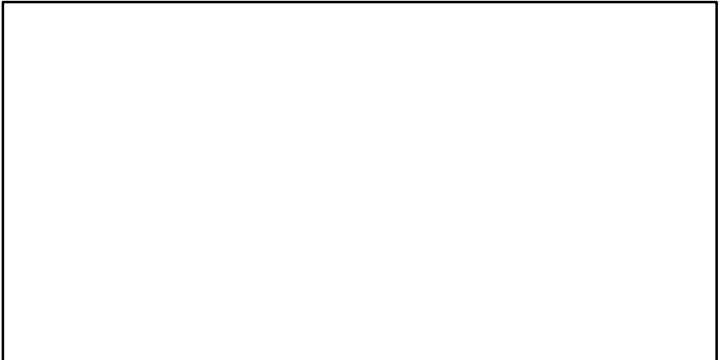
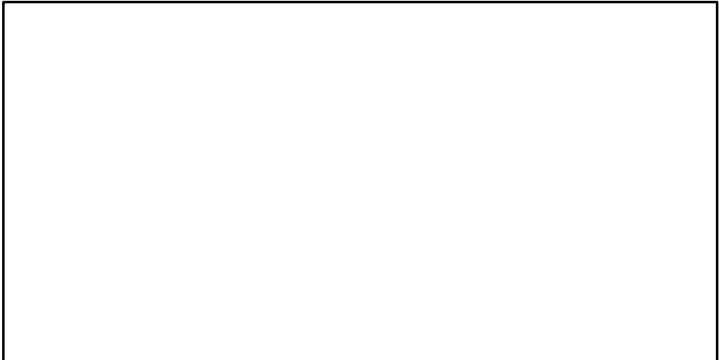
TC-MT, TL\*, RecC\* (1935-2012-CHING)

TAC\*, Cpair\*, Cadv\*



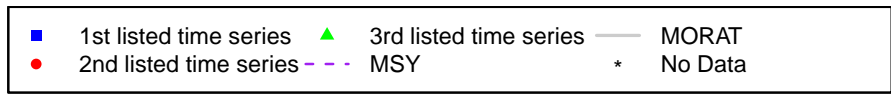
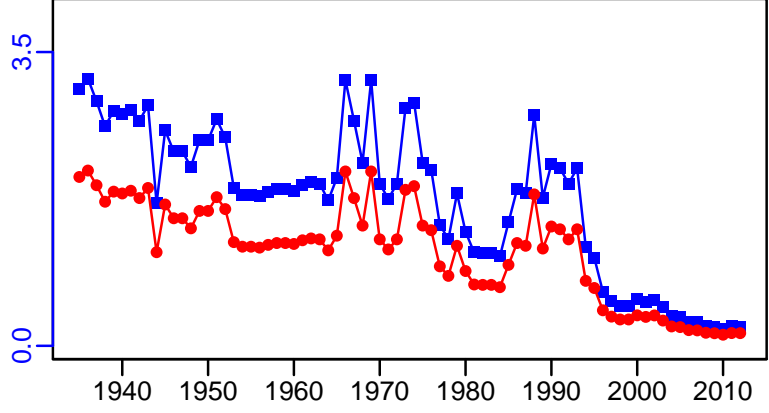
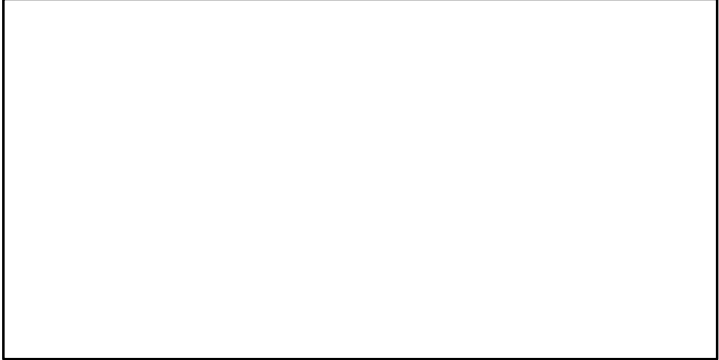
survB\*

CPUE\*



EFFORT\*

TC-MT/MSY-est-MT, CdivMEANC-ratio, (1935-2012-CHING)



## Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands [CROCKWCVANISOGQCI]

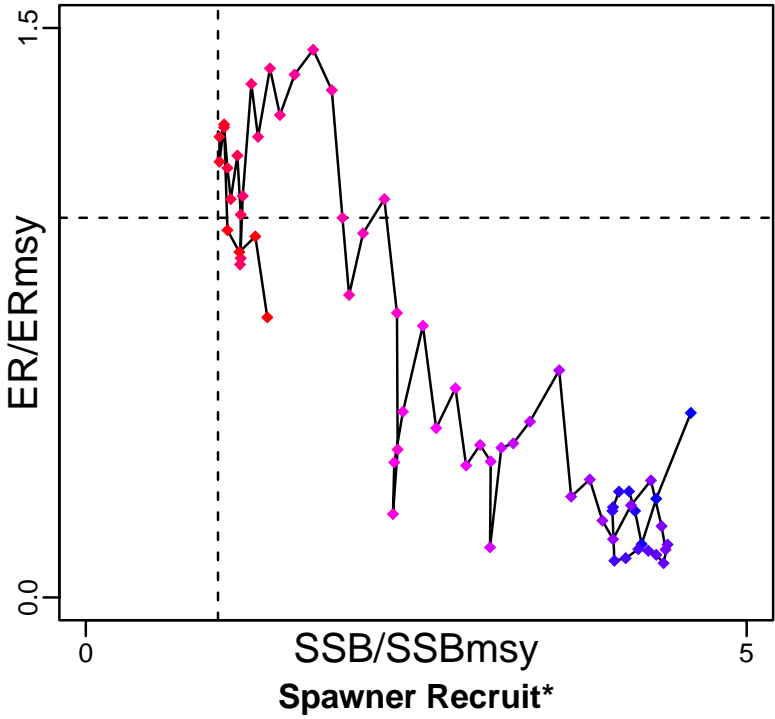
Metadata	
<b>Scientific Name</b>	Sebastes pinniger
<b>Current Assess ID</b>	DFO-CROCKWCVANISOGQCI-1945-2009-STANTON
<b>Area</b>	West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2009	5851
<b>SSBmsy</b>	SSBmsy-MT	2009	1988
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2009	0.122
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2009	714
<b>M</b>	M-1/yr	2009	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

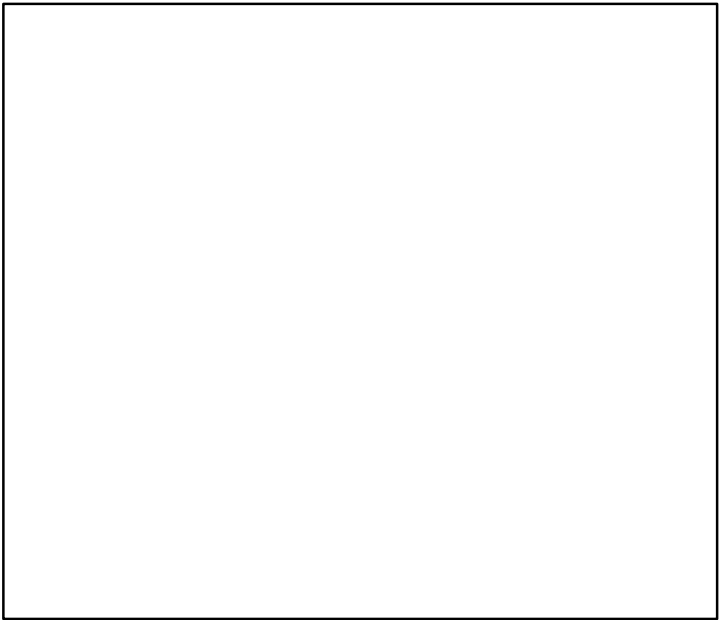
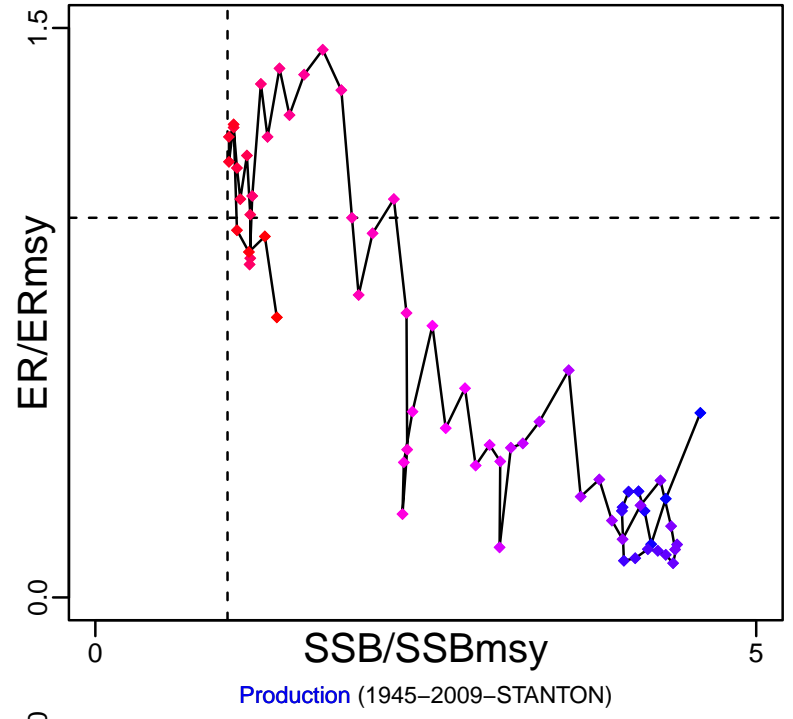
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2009	8890	-	14
<b>SSB</b>	SSB-MT	2009	2730	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2009	0.09	-	-
<b>TC</b>	TC-MT	2009	800	-	-
<b>TL</b>	-	-	-	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2009	1.519	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2009	1.373	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2009	0.738	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands [CROCKWCVANISOGQC]

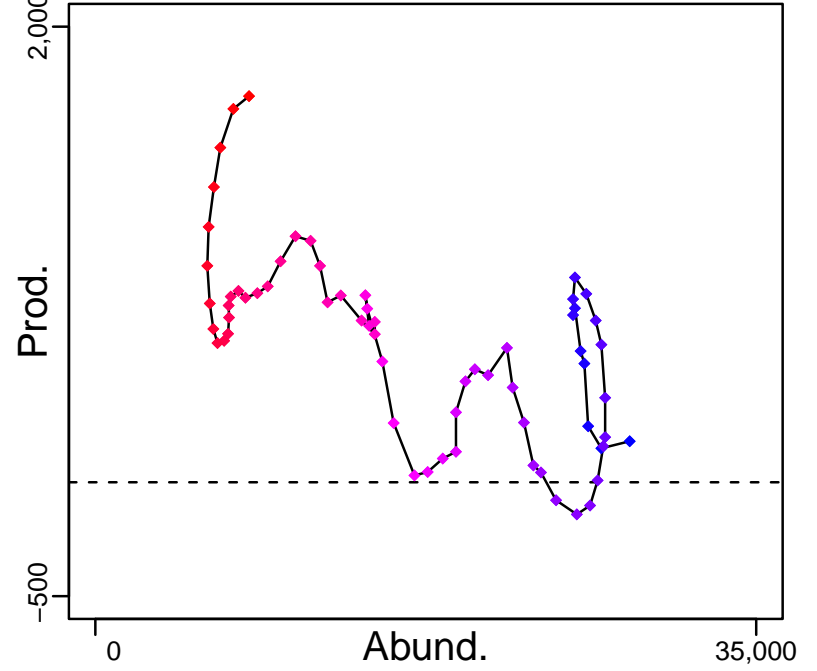
Kobe MSYpref (1945–2009–STANTON)



Kobe MGTpref (1945–2009–STANTON)



Production (1945–2009–STANTON)



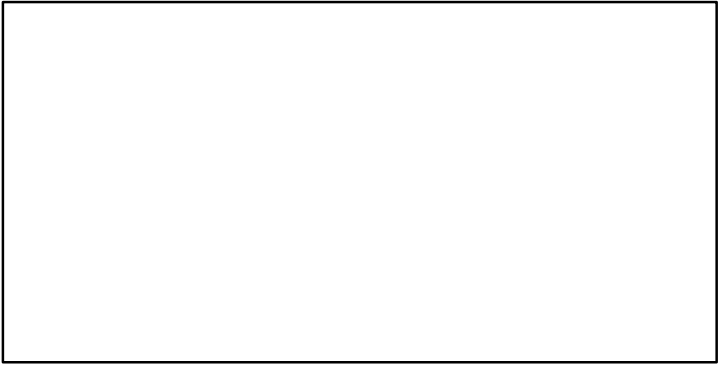
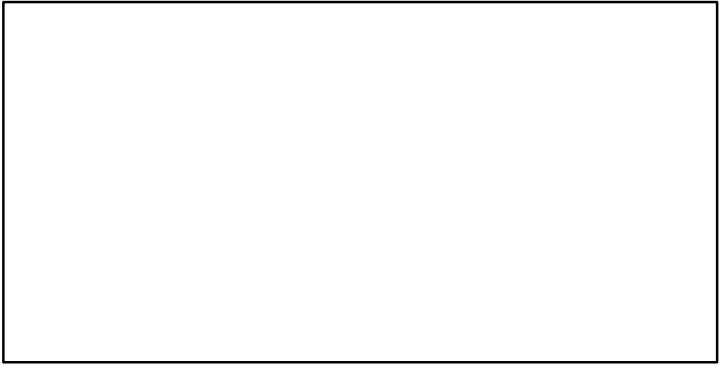
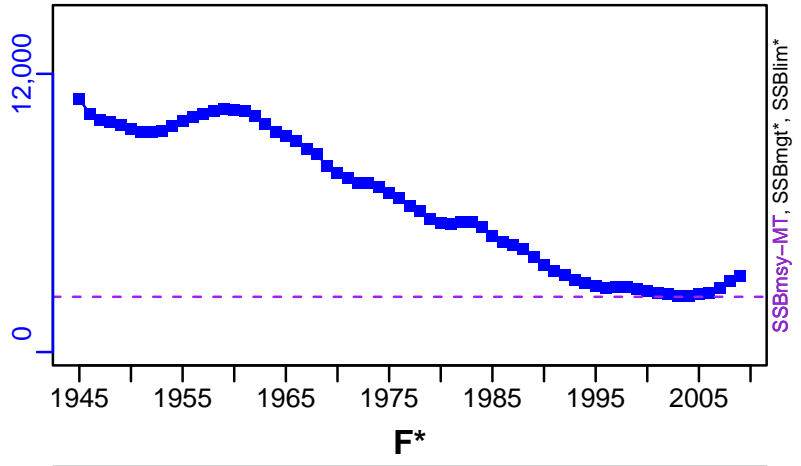
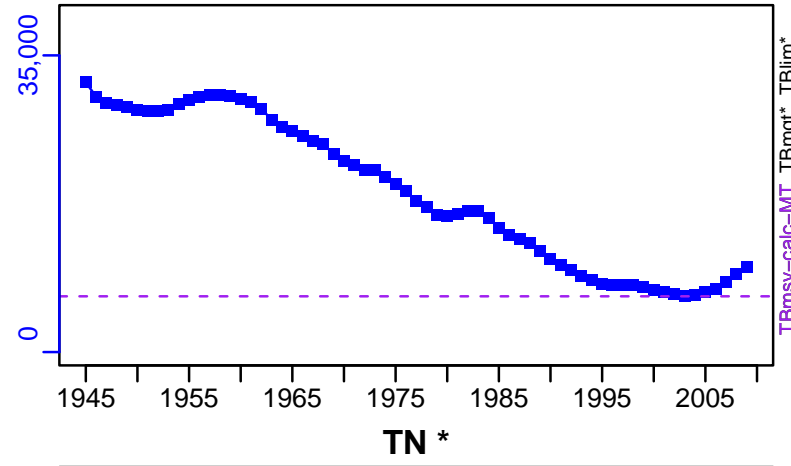
◆ Start Year ◆ End Year \* No Data



Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands [CROCKWCVANISOGQC]

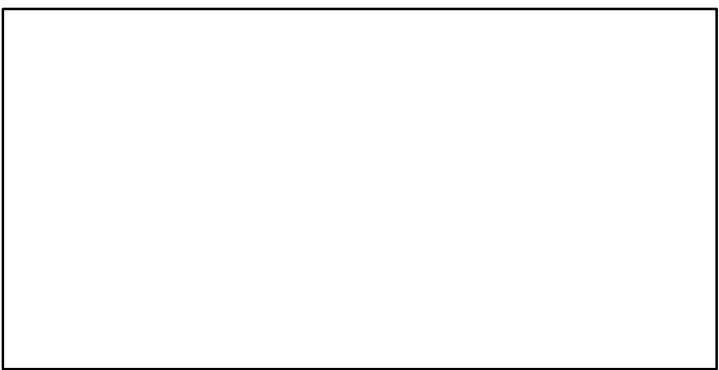
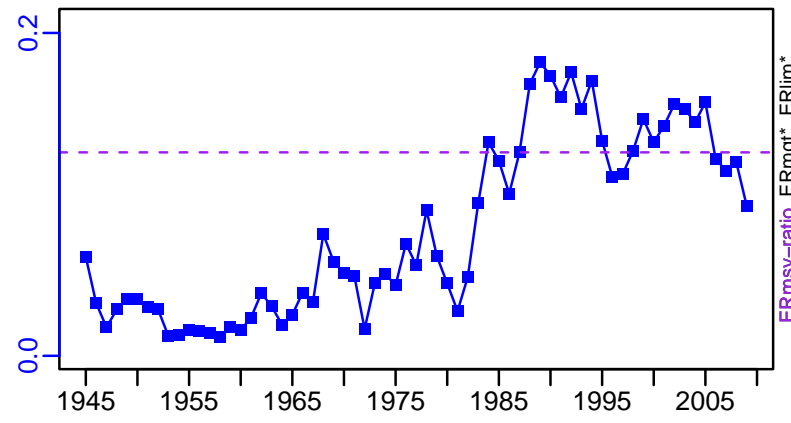
TB-MT (1945-2009-STANTON)

SSB-MT (1945-2009-STANTON)



ER-ratio (1945-2009-STANTON)

Recruits\*

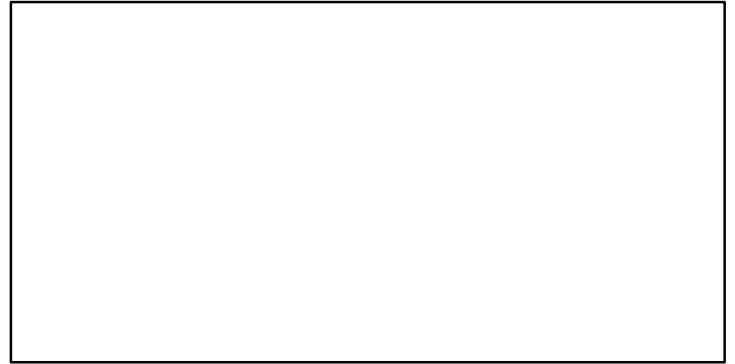
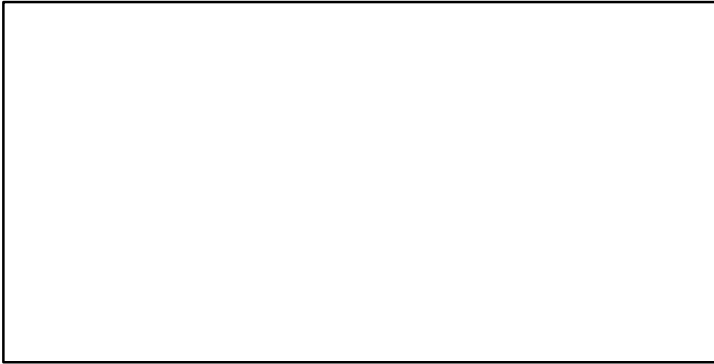
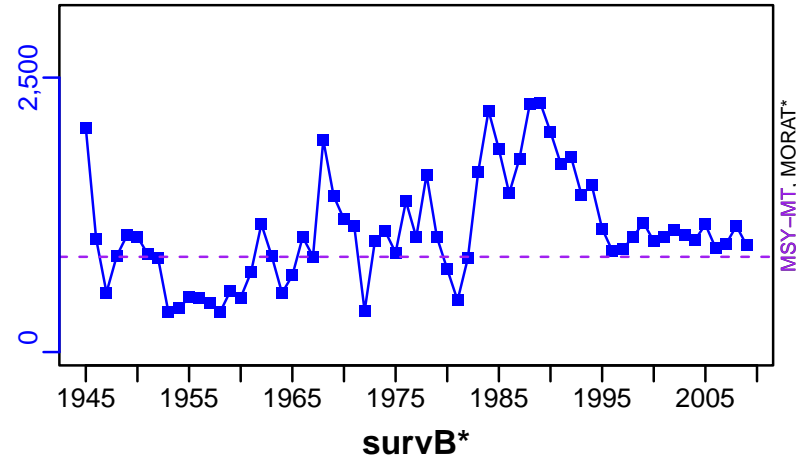


■ Listed time series	- - - Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

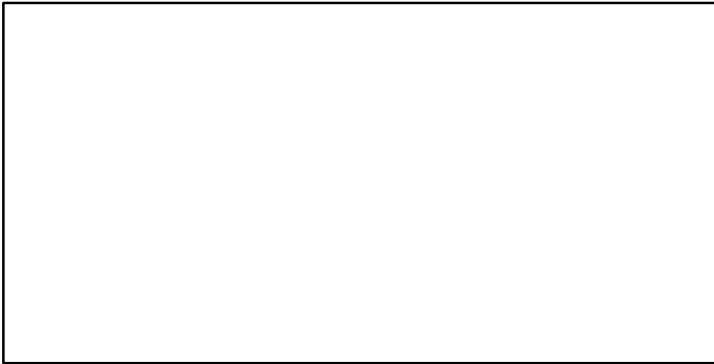
Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands [CROCKWCVANISOGQC]

TC-MT, TL\*, RecC\* (1945-2009-STANTON)

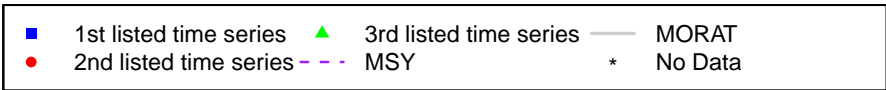
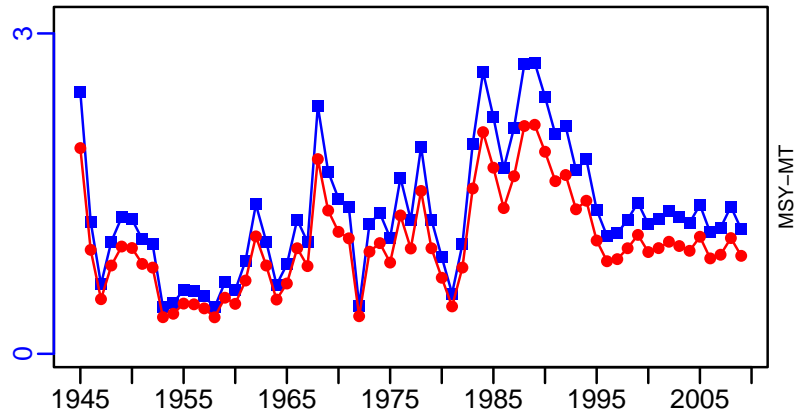
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2009-STANTON)



## English sole Hecate Strait [ESOLEHS]

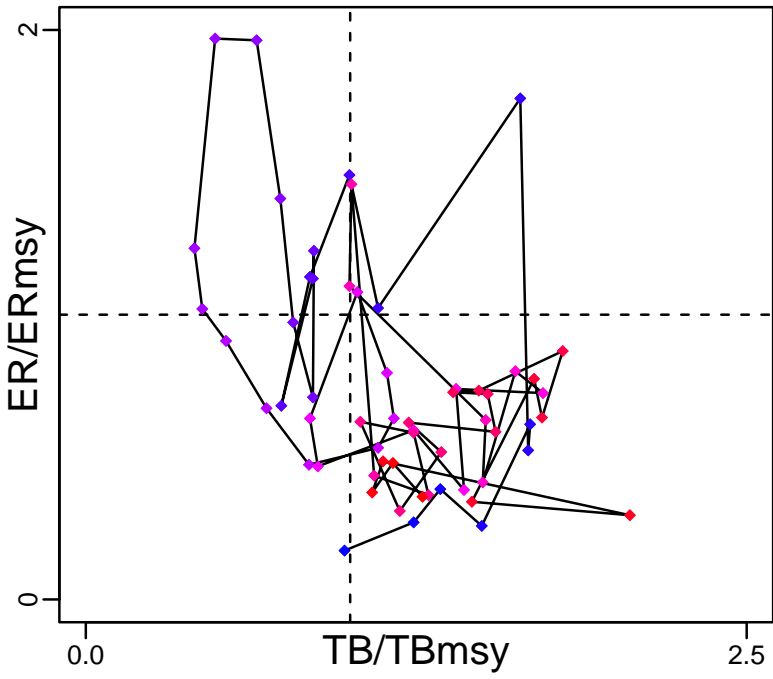
Metadata	
<b>Scientific Name</b>	Parophrys vetulus
<b>Current Assess ID</b>	DFO-PAC-ESOLEHS-1944-2001-COLLIE
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2001

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2001	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

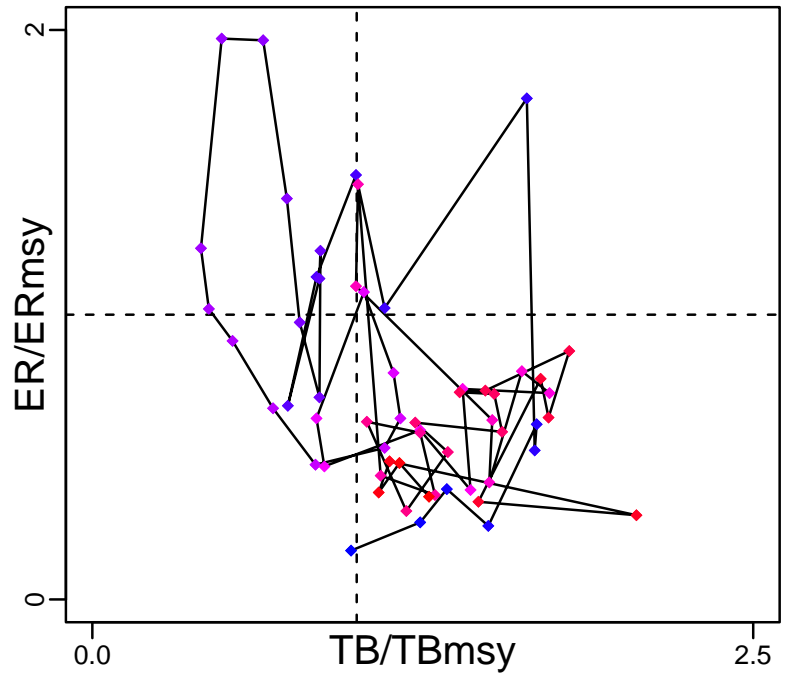
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2001	3410	-	4+
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-E00	2001	2,040,000	-	4
F	F-1/yr	2001	0.16	-	-
ER	ER-ratio	2001	0.122	-	-
TC	-	-	-	-	-
TL	TL-MT	2001	414	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

English sole Hecate Strait [ESOLEHS]

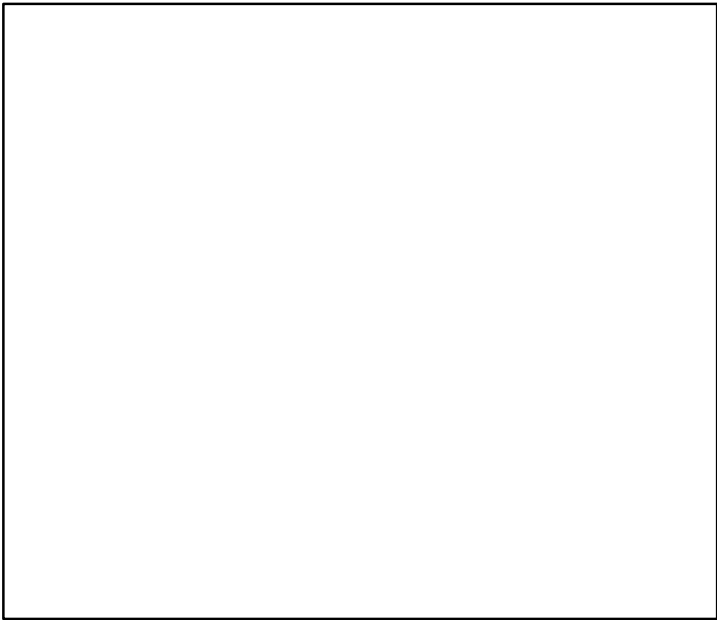
Kobe MSYpref (1944–2001–COLLIE)



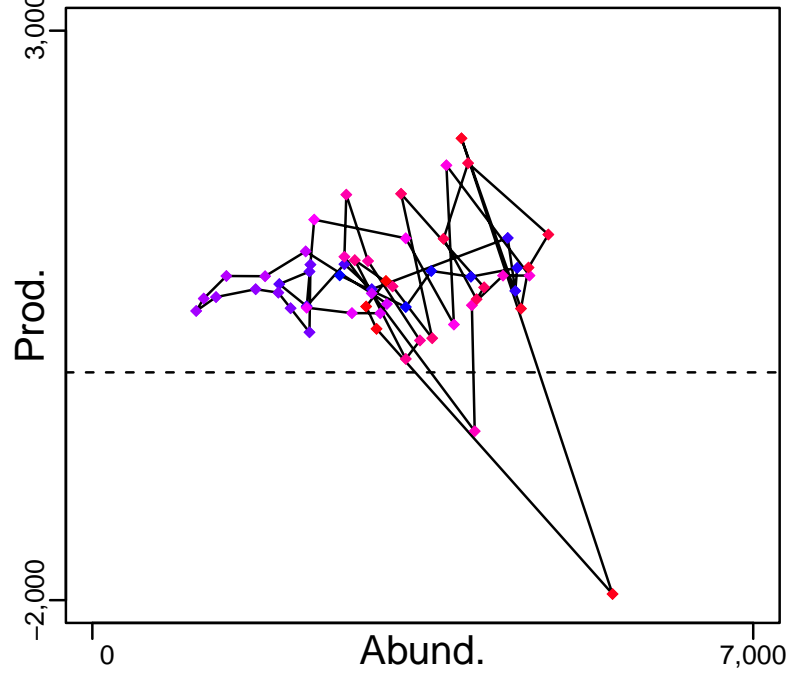
Kobe MGTpref (1944–2001–COLLIE)



Spawner Recruit\*



Production (1944–2001–COLLIE)

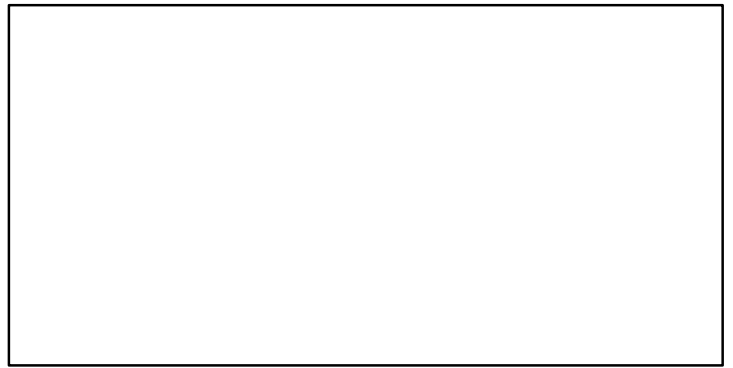
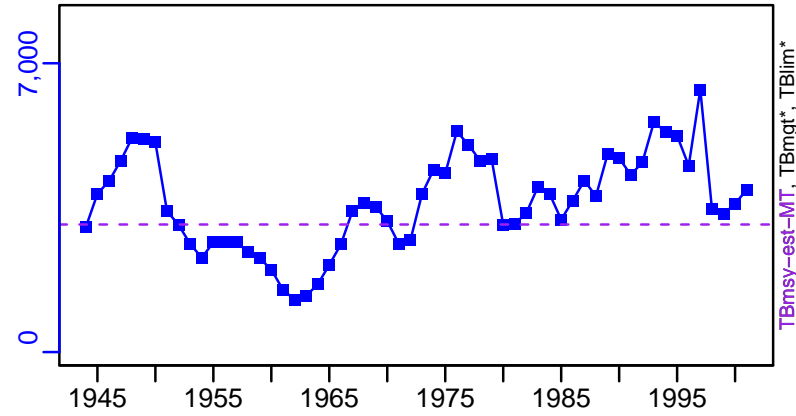


◆ Start Year ◆ End Year \* No Data

English sole Hecate Strait [ESOLEHS]

TB-MT (1944-2001-COLLIE)

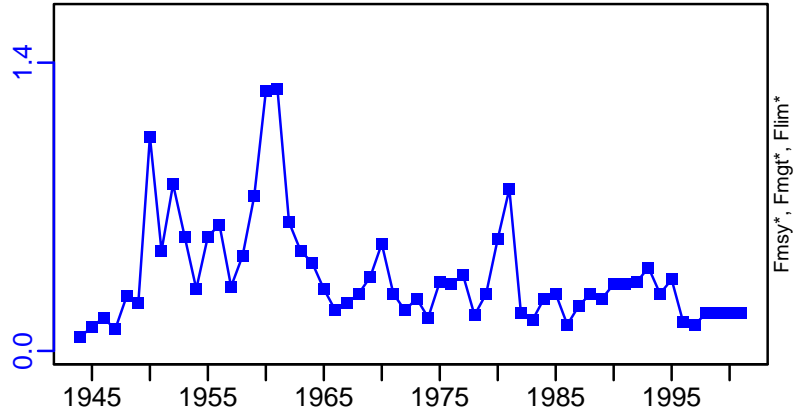
SSB\*



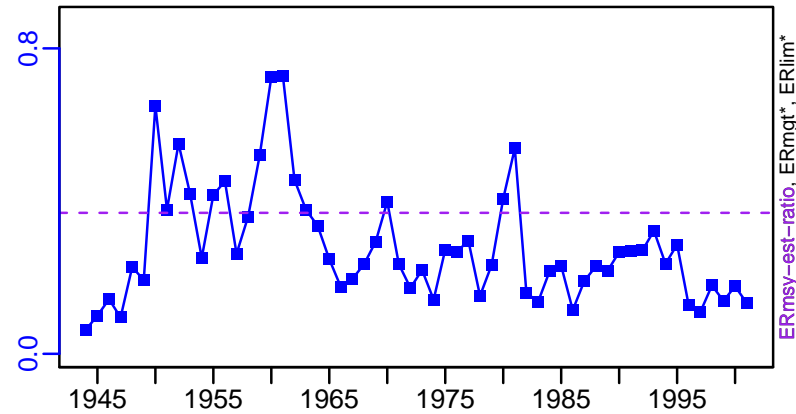
TN \*



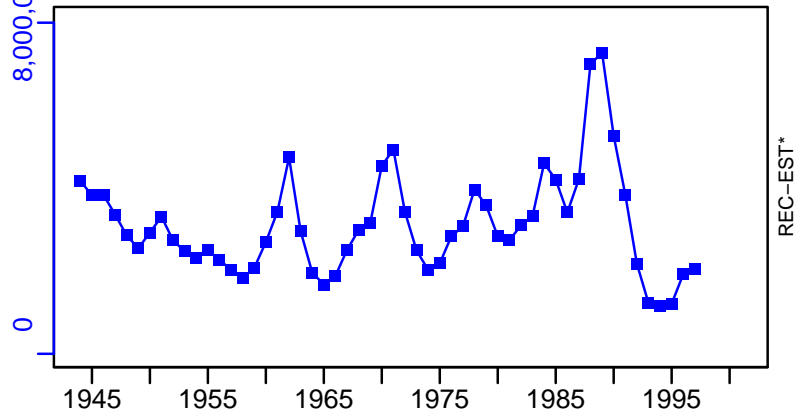
F-1/yr (1944-2001-COLLIE)



ER-ratio (1944-2001-COLLIE)



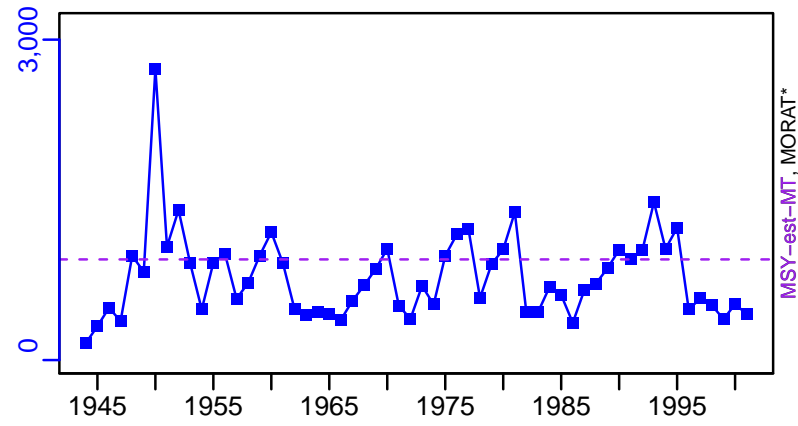
R-E00 (1944-2001-COLLIE)



English sole Hecate Strait [ESOLEHS]

TL-MT, TC\*, RecC\* (1944-2001-COLLIE)

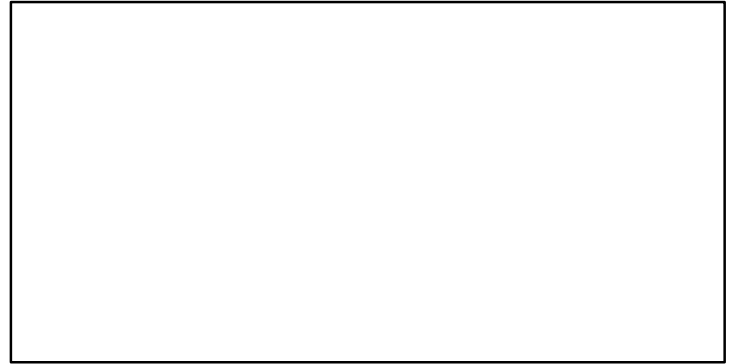
TAC\*, Cpair\*, Cadv\*



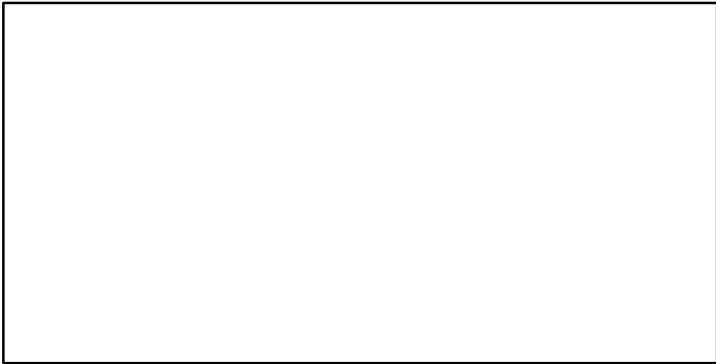
survB\*



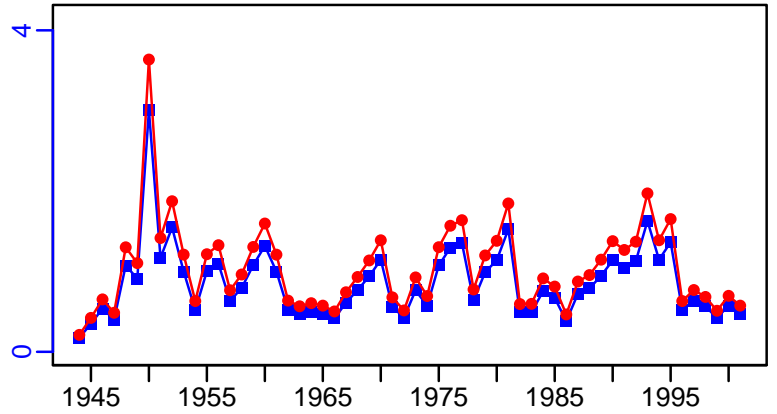
CPUE\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1944-2001-COLLIE)



**Eulachon Pacific Coast of Canada Central Coast Designatable Unit  
[EULAPCOASTCCDU]**

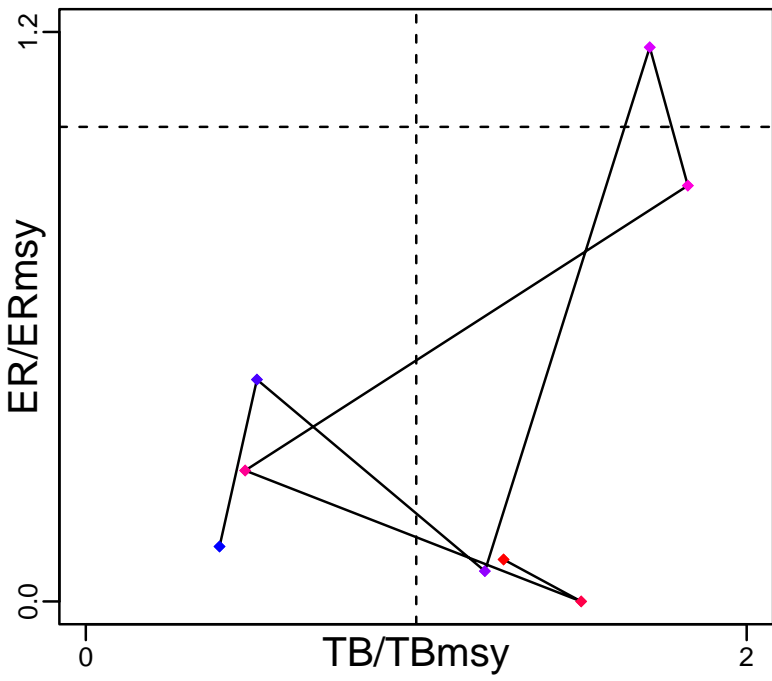
Metadata	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTCCDU-1951-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Central Coast Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2012

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

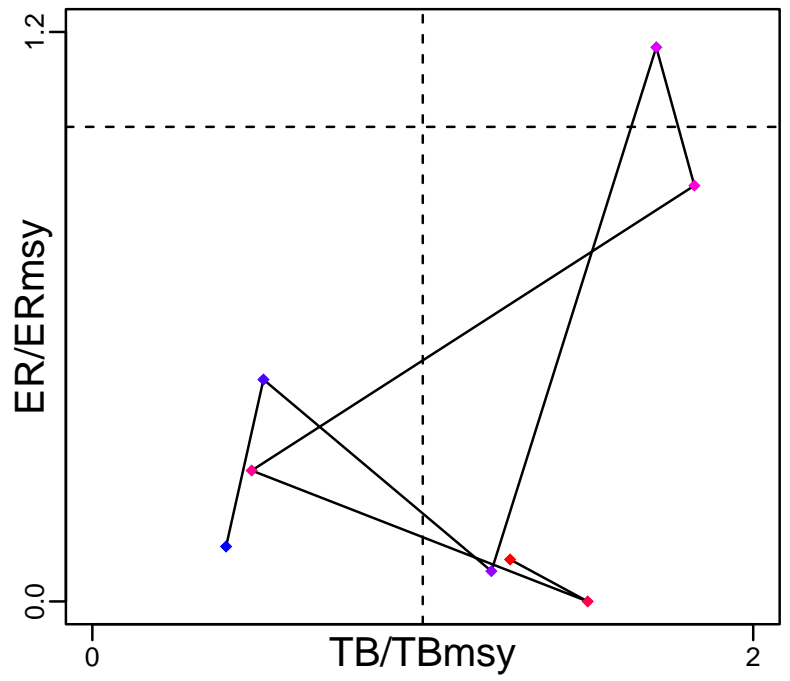
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	76	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-index	2012	14	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.07	-	-
<b>TC</b>	TC-MT	2012	4.2	-	-
<b>TL</b>	-	-	-	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Eulachon Pacific Coast of Canada Central Coast Designatable Unit [EULAPCOASTCCDU]

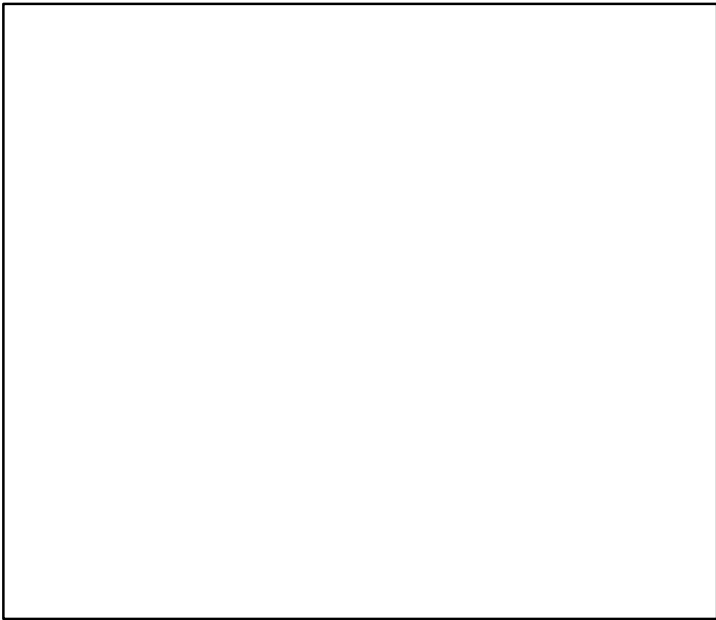
Kobe MSYpref (1951–2012–WATSON)



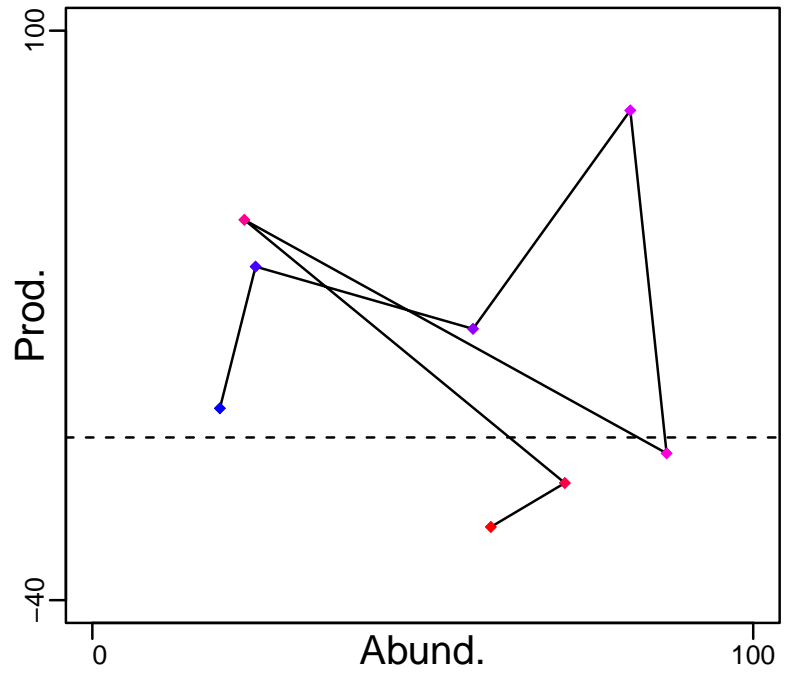
Kobe MGTpref (1951–2012–WATSON)



Spawner Recruit\*



Production (1951–2012–WATSON)



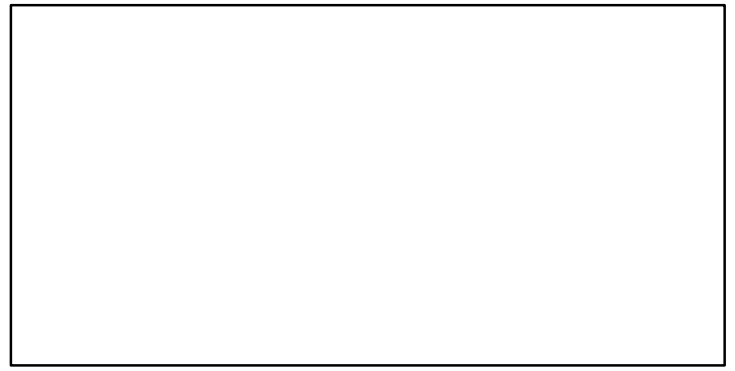
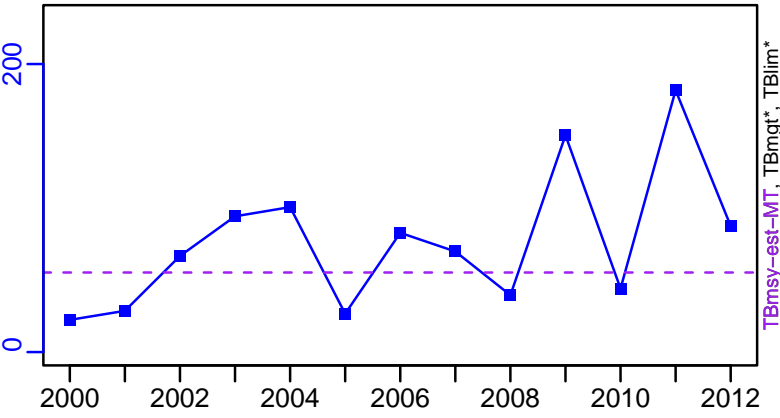
◆ Start Year ◆ End Year \* No Data



Eulachon Pacific Coast of Canada Central Coast Designatable Unit [EULAPCOASTCCDU]

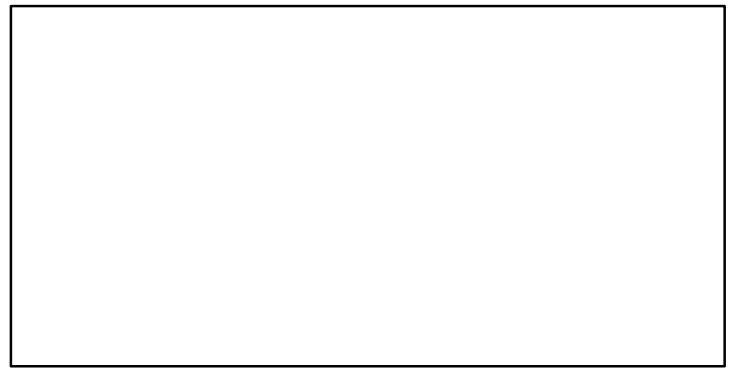
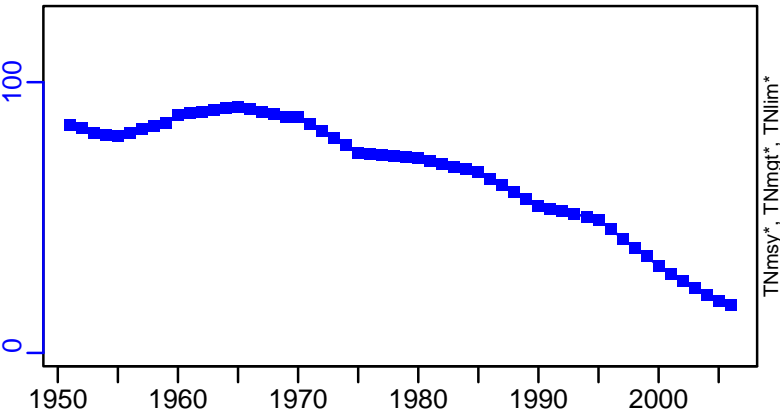
TB-MT (1951-2012-WATSON)

SSB\*



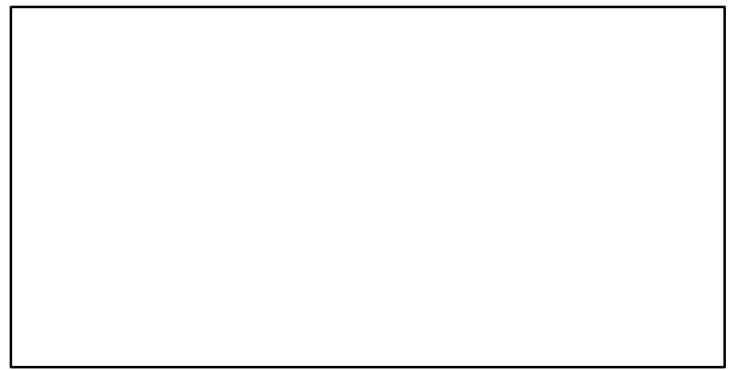
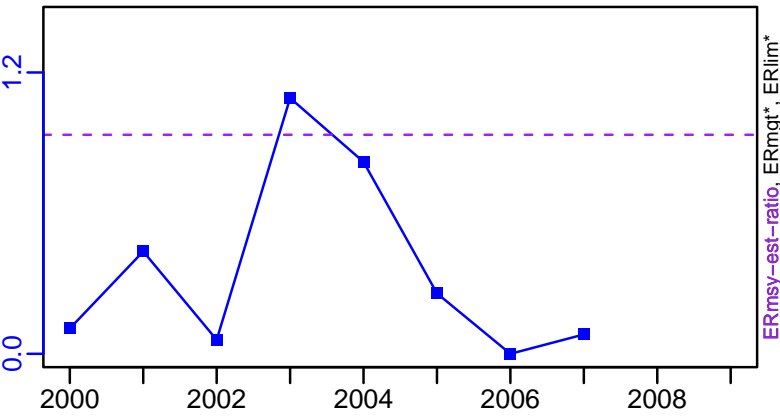
TN-index (1951-2012-WATSON)

F\*



ER-calc-ratio (1951-2012-WATSON)

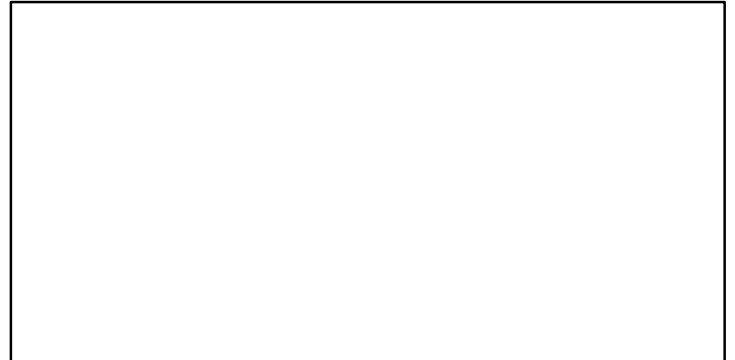
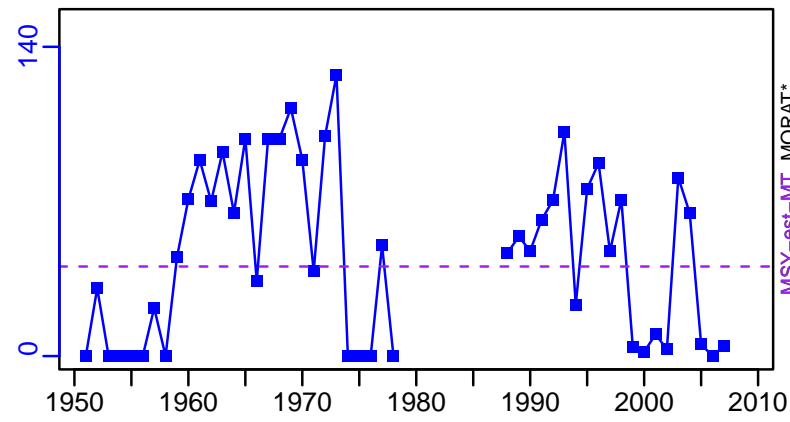
Recruits\*



Eulachon Pacific Coast of Canada Central Coast Designatable Unit [EULAPCOASTCCDU]

TC-MT, TL\*, RecC\* (1951-2012-WATSON)

TAC\*, Cpair\*, Cadv\*

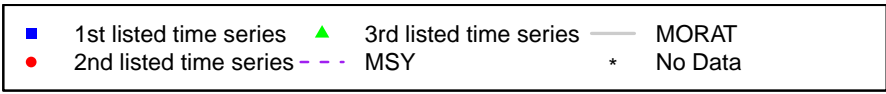
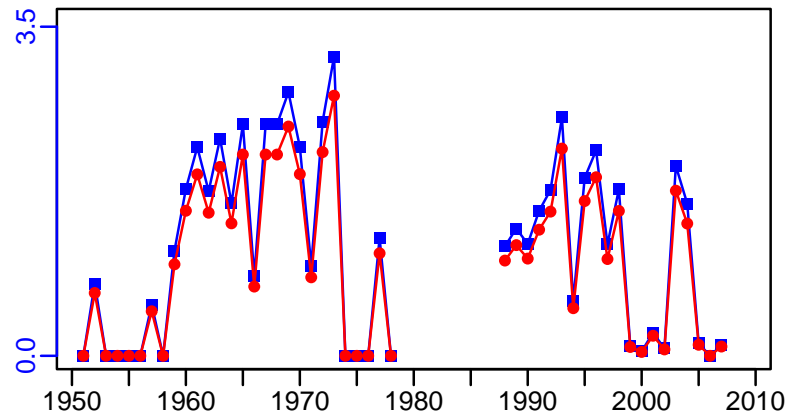


CPUE\*

EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1951-2012-WATSON)



**Eulachon Pacific Coast of Canada Fraser River Designatable Unit  
[EULAPCOASTFRDU]**

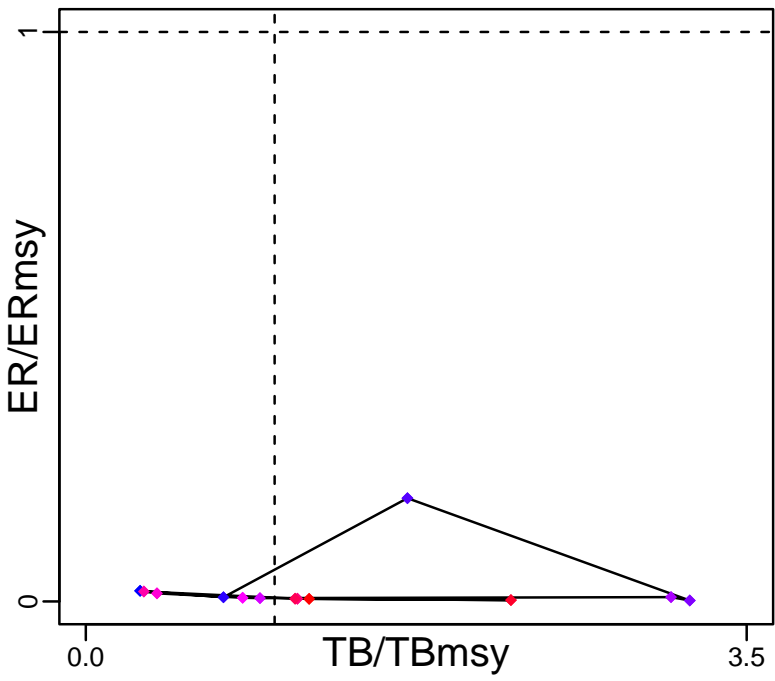
Metadata	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTFRDU-1900-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Fraser River Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	112
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

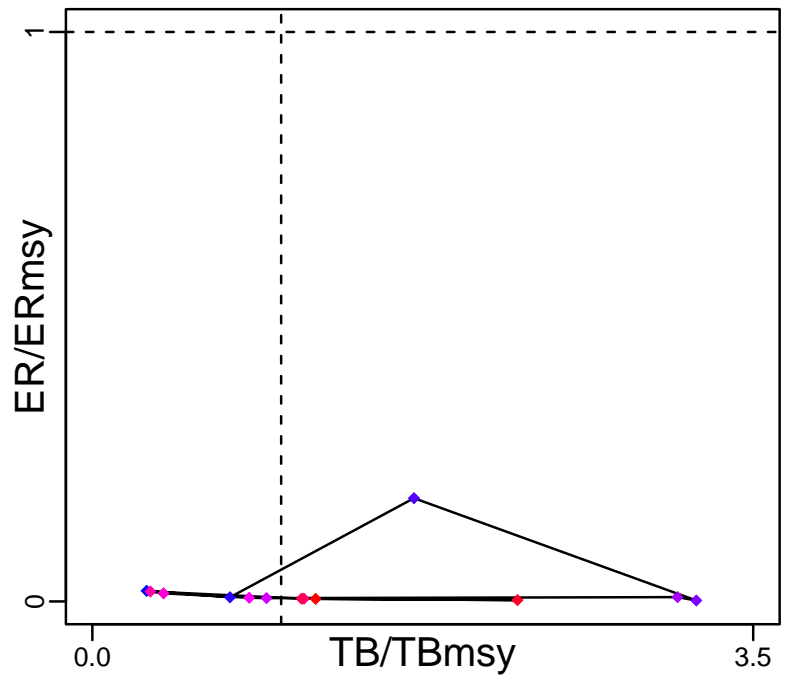
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	48	-	-
SSB	-	-	-	-	-
TN	TN-index	2012	6	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.002	-	-
TC	TC-MT	2012	0.1	-	-
TL	-	-	-	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Eulachon Pacific Coast of Canada Fraser River Designatable Unit [EULAPCOASTFRDU]

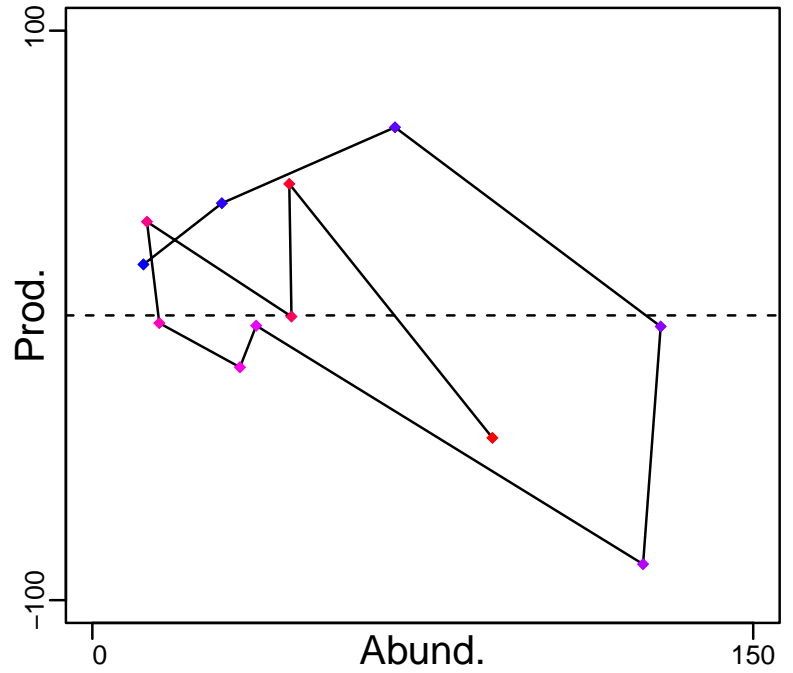
Kobe MSY<sub>pref</sub> (1900–2012–WATSON)



Kobe MGT<sub>pref</sub> (1900–2012–WATSON)



Production (1900–2012–WATSON)

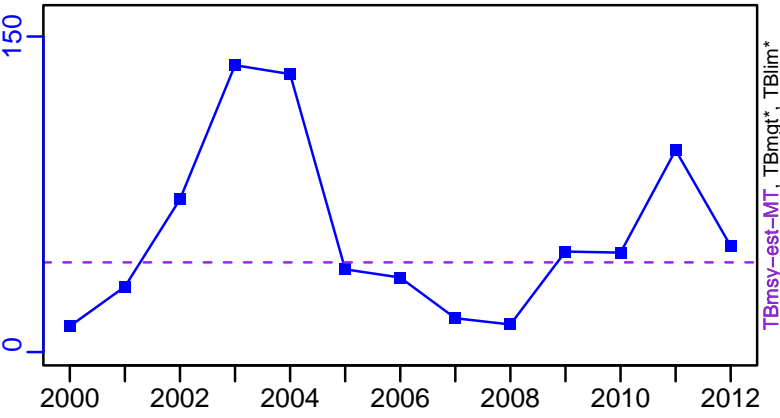


◆ Start Year ◆ End Year \* No Data

Eulachon Pacific Coast of Canada Fraser River Designatable Unit [EULAPCOASTFRDU]

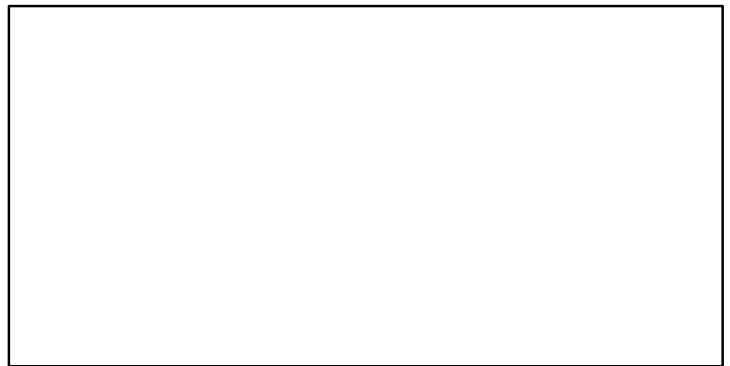
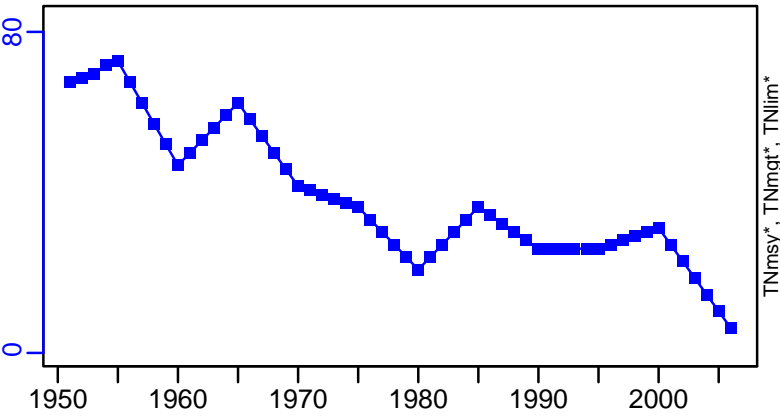
TB-MT (1900-2012-WATSON)

SSB\*



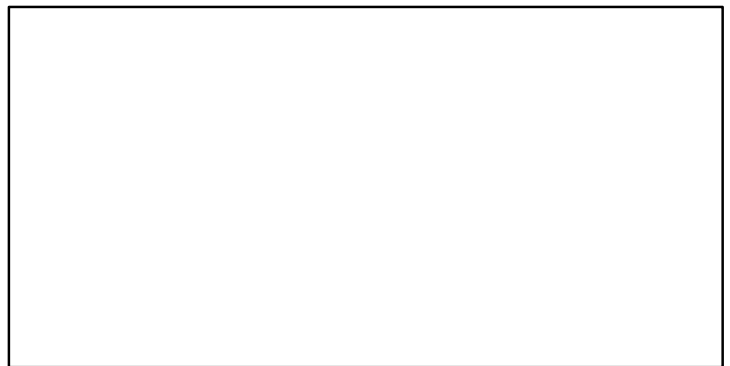
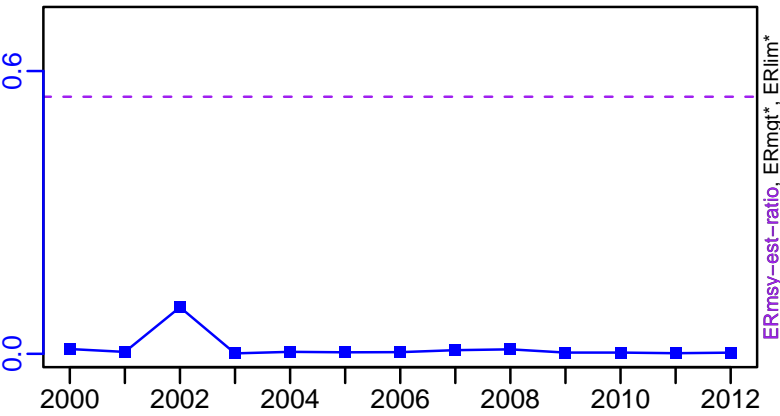
TN-index (1900-2012-WATSON)

F\*



ER-calc-ratio (1900-2012-WATSON)

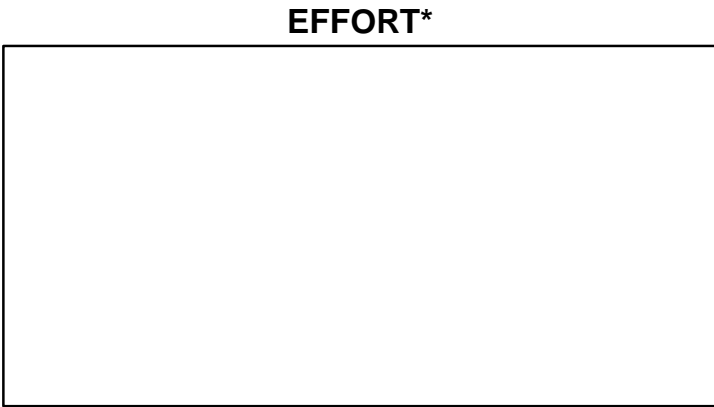
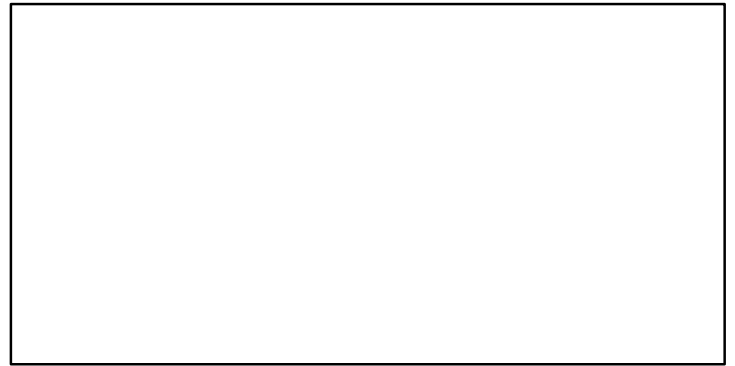
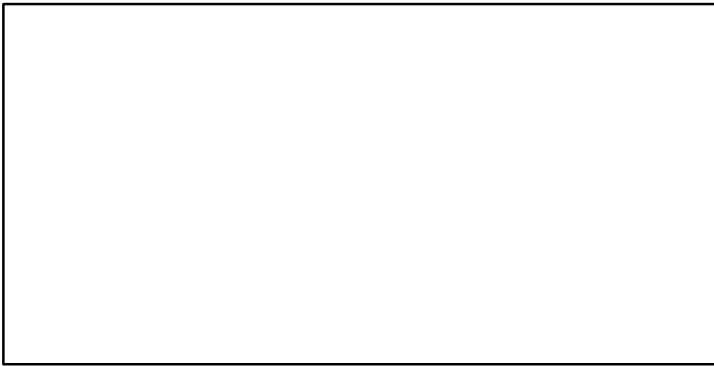
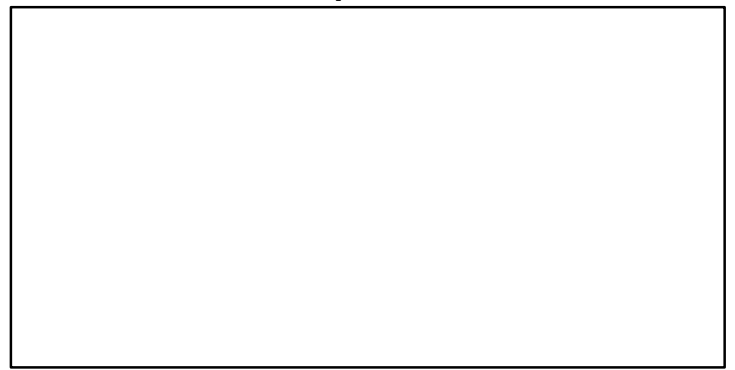
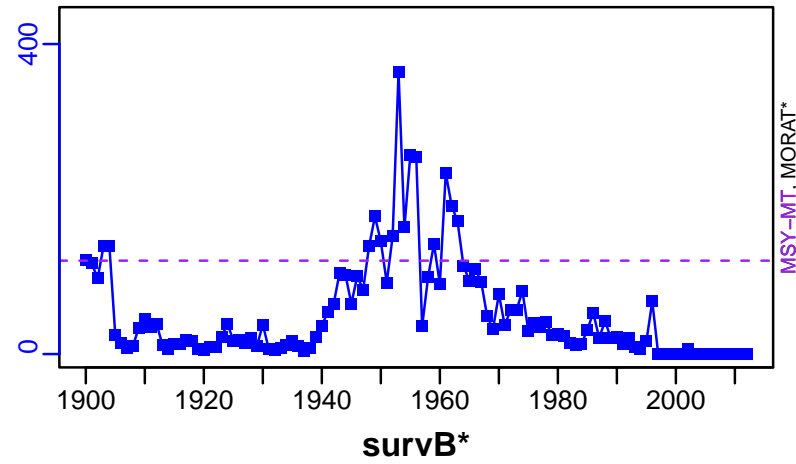
Recruits\*



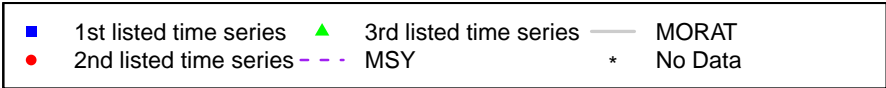
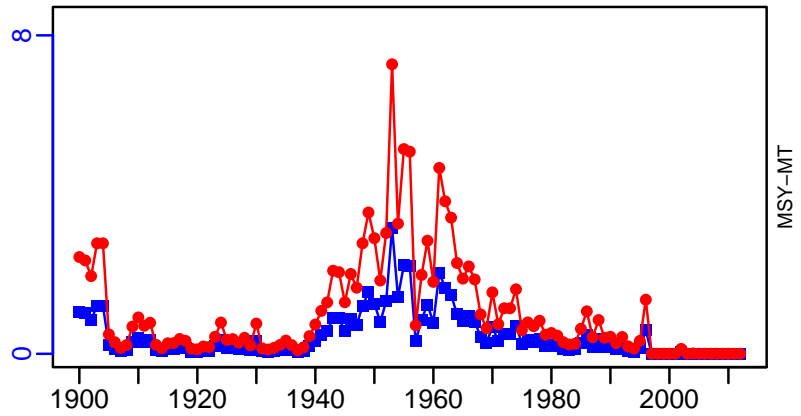
Eulachon Pacific Coast of Canada Fraser River Designatable Unit [EULAPCOASTFRDU]

TC-MT, TL\*, RecC\* (1900-2012-WATSON)

TAC\*, Cpair\*, Cadv\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1900-2012-WATSON)



**Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit  
[EULAPCOASTNSDU]**

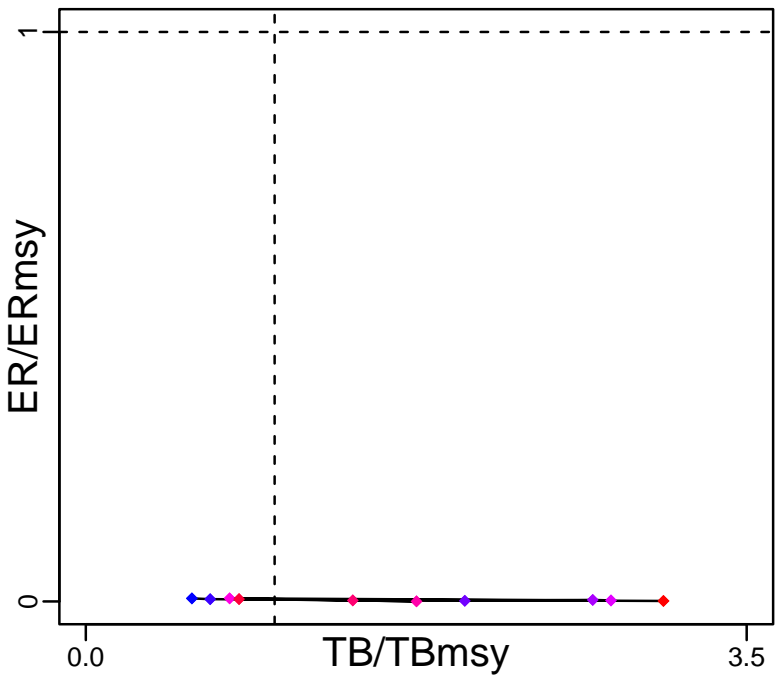
<b>Metadata</b>	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTNSDU-1951-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Nass / Skeena Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2012

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

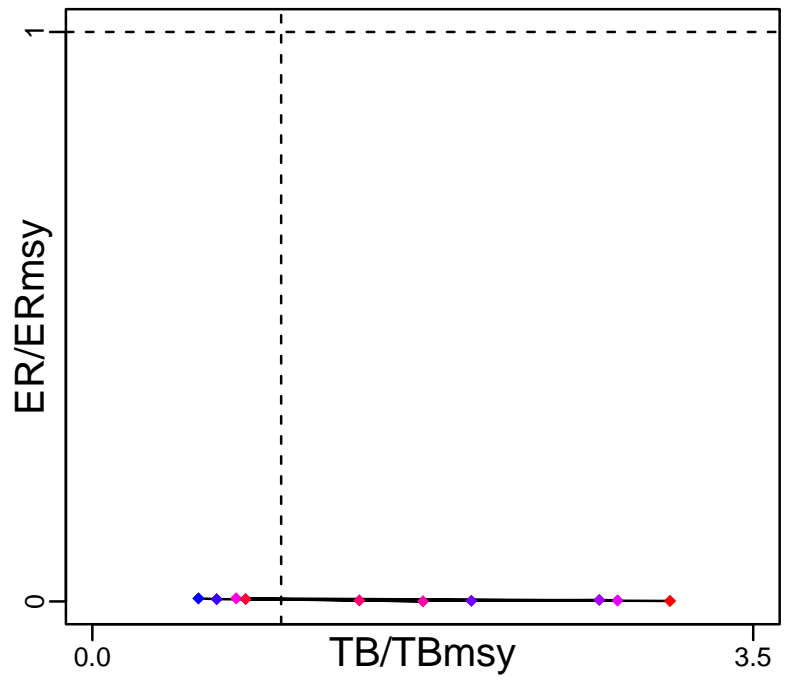
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	TB-MT	2012	71	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-index	2012	36	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.001	-	-
<b>TC</b>	TC-MT	2012	0.07	-	-
<b>TL</b>	-	-	-	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit [EULAPCOASTNSDU]

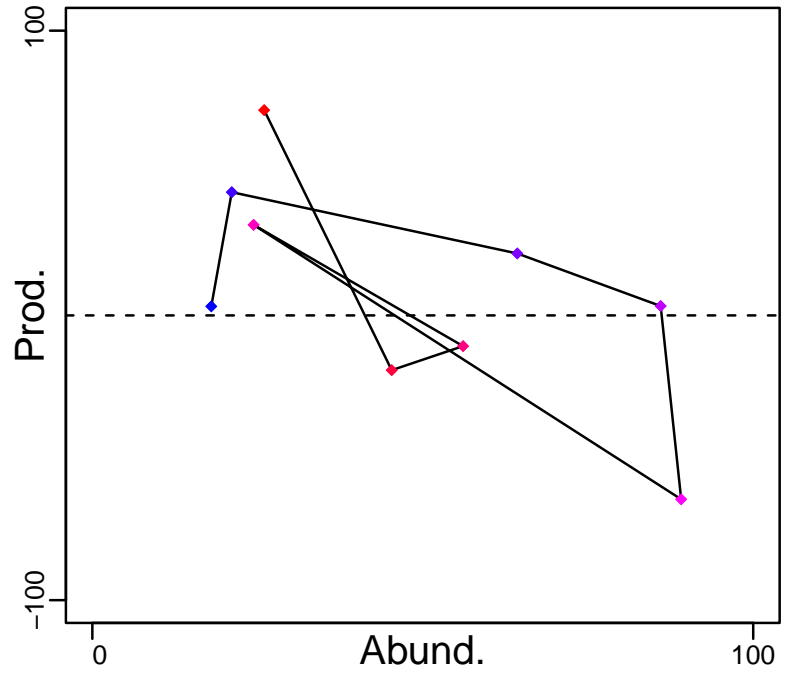
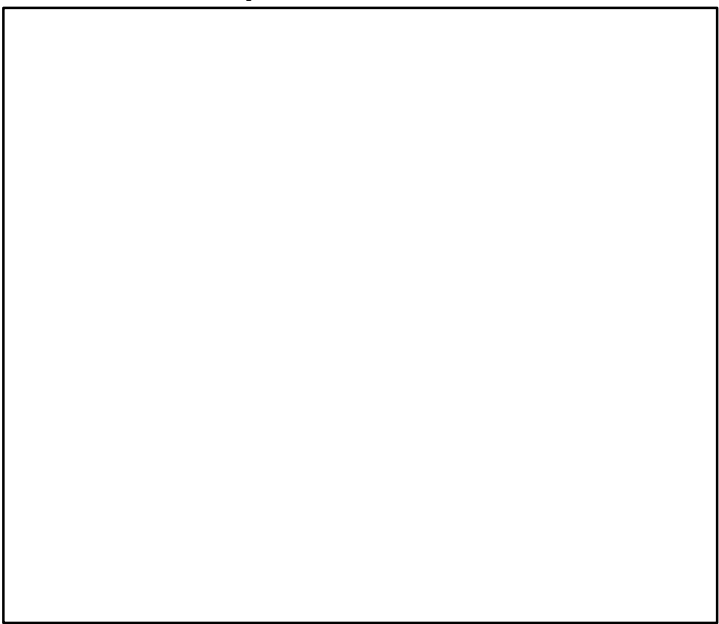
Kobe MSY<sub>pref</sub> (1951–2012–WATSON)



Kobe MGT<sub>pref</sub> (1951–2012–WATSON)



Production (1951–2012–WATSON)



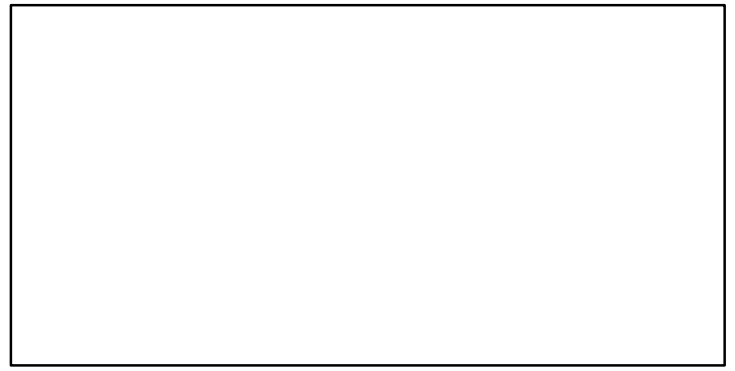
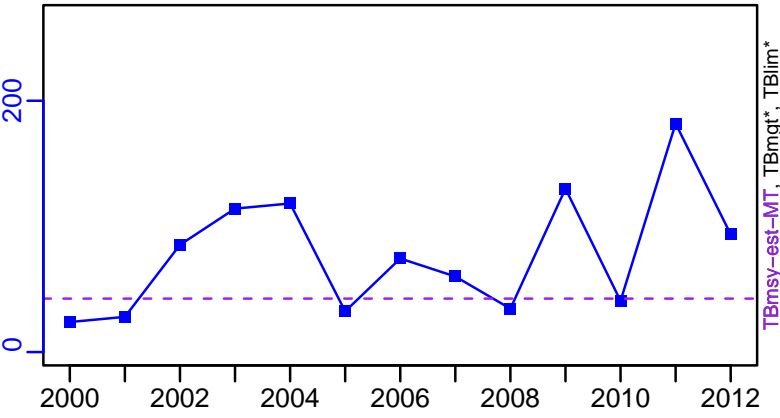
◆ Start Year ◆ End Year \* No Data



Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit [EULAPCOASTNSDU]

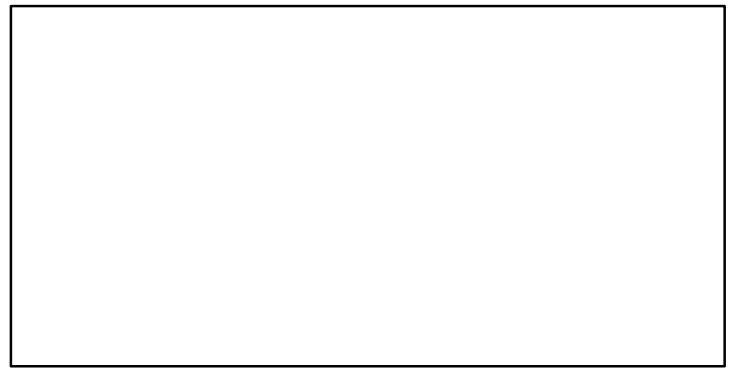
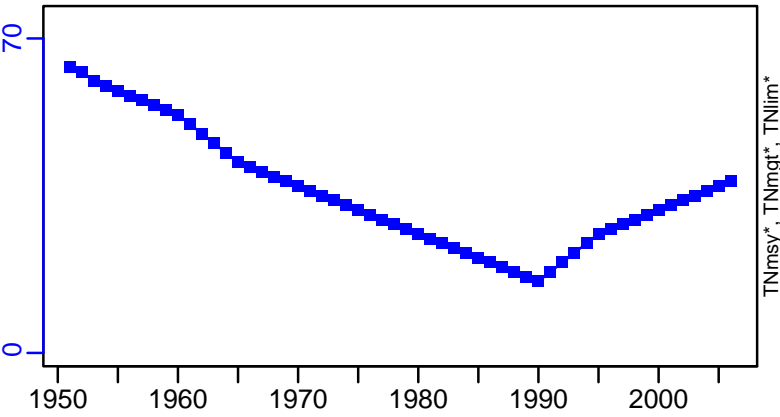
TB-MT (1951-2012-WATSON)

SSB\*



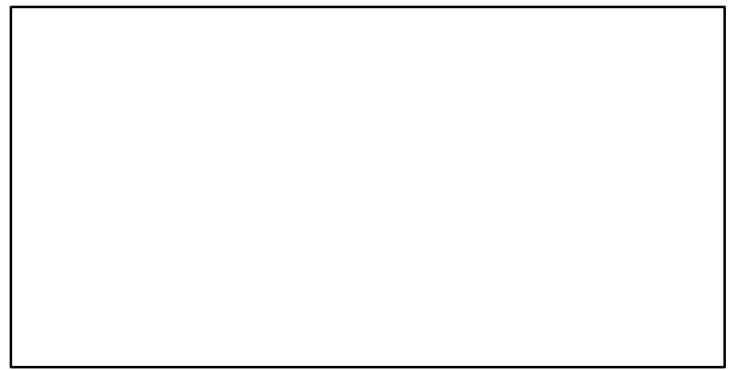
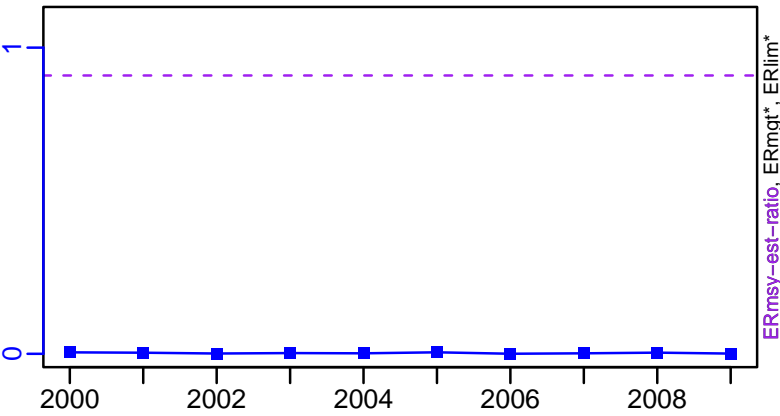
TN-index (1951-2012-WATSON)

F\*



ER-calc-ratio (1951-2012-WATSON)

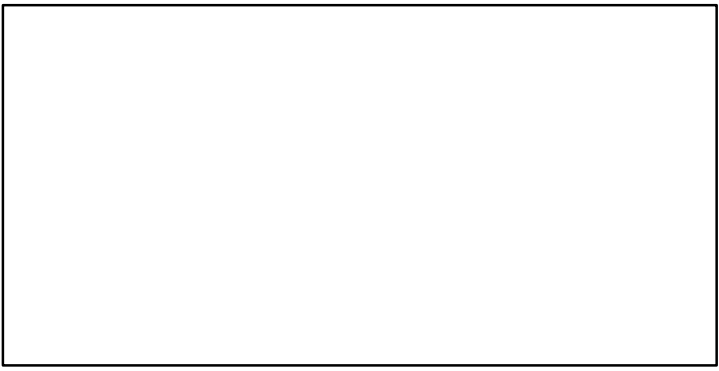
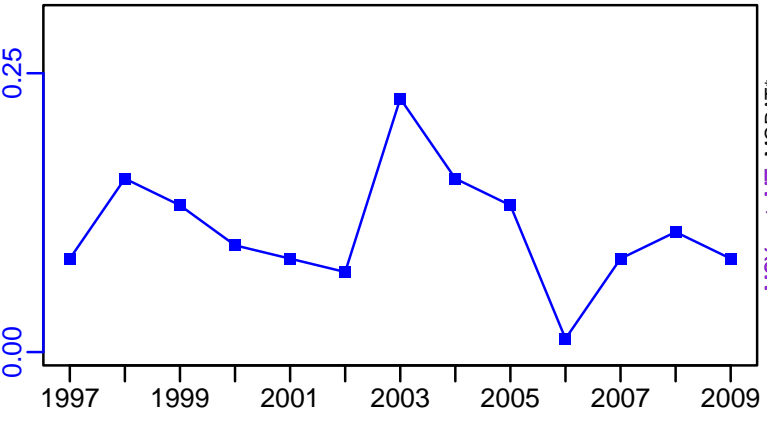
Recruits\*



Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit [EULAPCOASTNSDU]

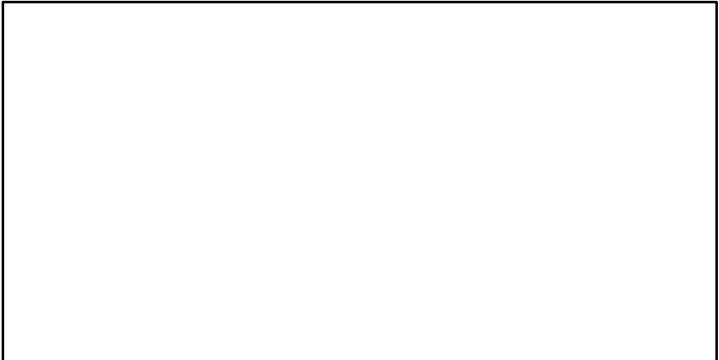
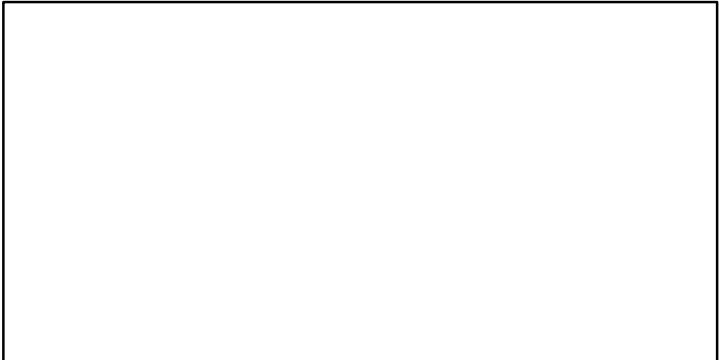
TC-MT, TL\*, RecC\* (1951-2012-WATSON)

TAC\*, Cpair\*, Cadv\*



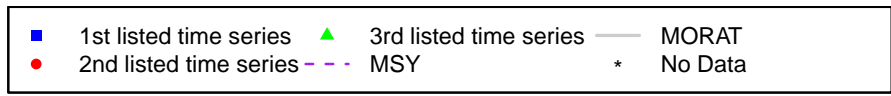
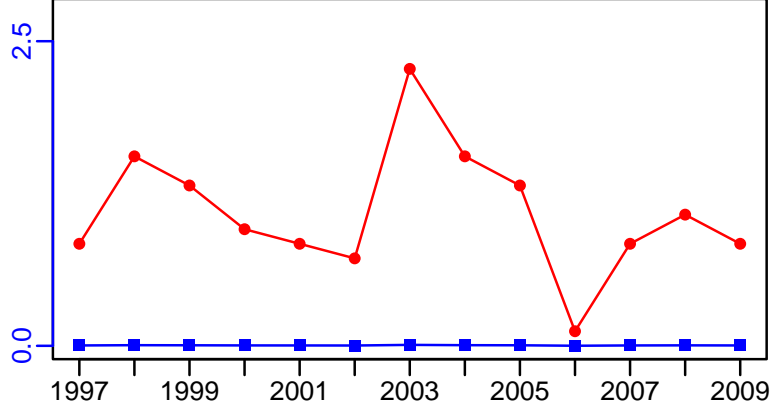
survB\*

CPUE\*



EFFORT\*

TC-MT/MSY-est-MT, CdivMEANC-ratio, (1951-2012-WATSON)



## Pacific herring Central Coast [HERRCC]

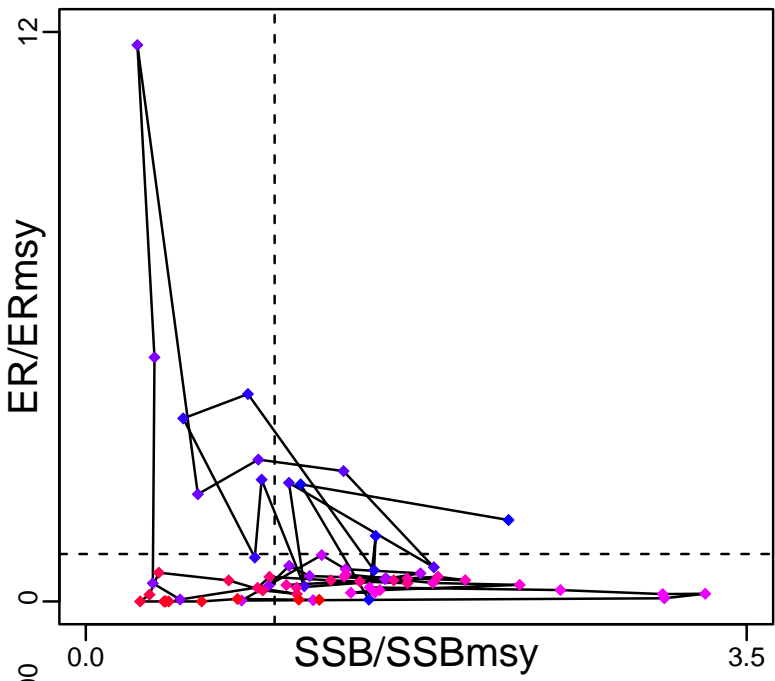
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRCC-1949-2018-ASHBROOK
<b>Area</b>	Central Coast
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2015, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2018	55,347
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

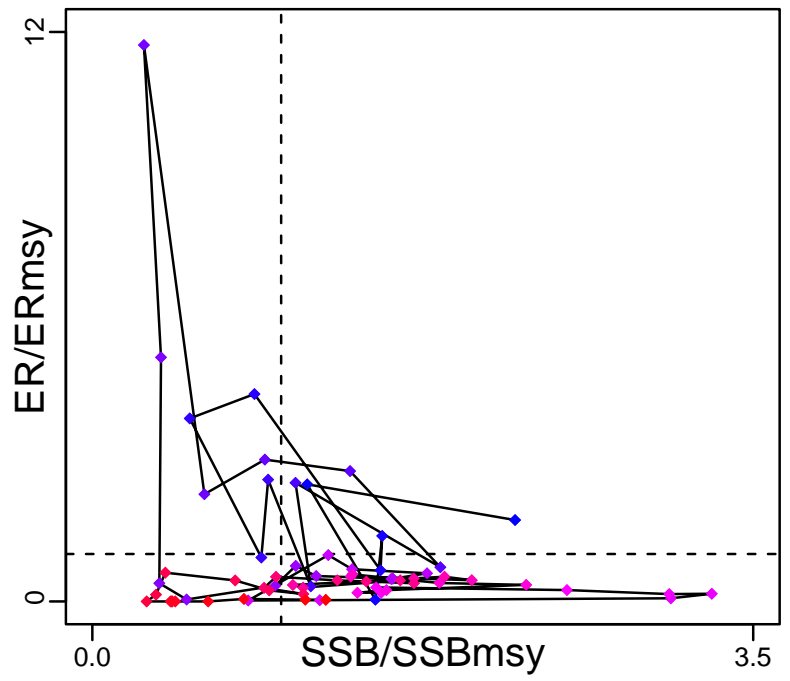
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	48,900	-	-
SSB	SSB-MT	2018	32,724	-	3+
TN	-	-	-	-	-
R	R-E00	2018	217,029,110	-	2
F	F-1/yr	2007	0.033	-	-
ER	ER-calc-ratio	2015	0.013	-	-
TC	TC-MT	2015	626		
TL	TL-MT	2018	500		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific herring Central Coast [HERRCC]

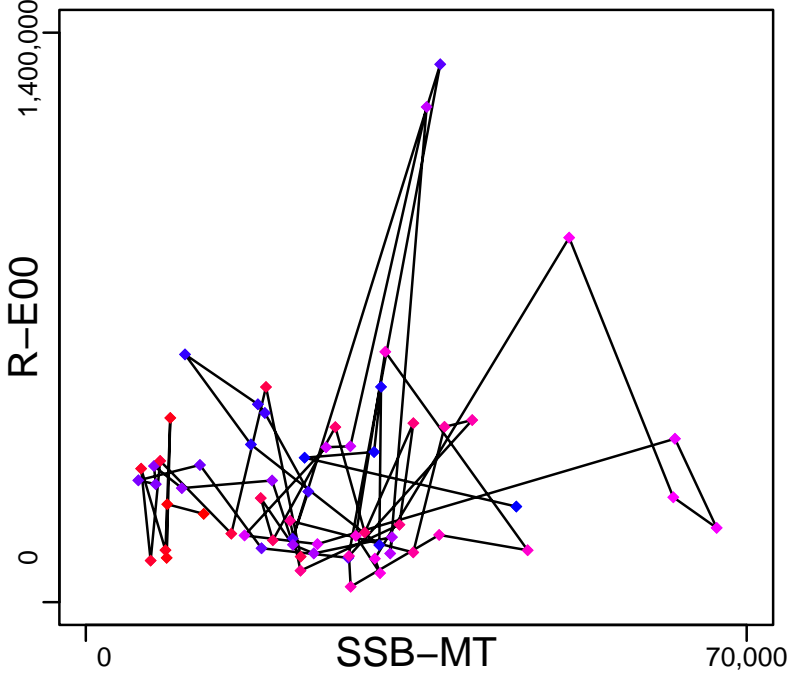
Kobe MSYpref (1949–2018–ASHBROOK)



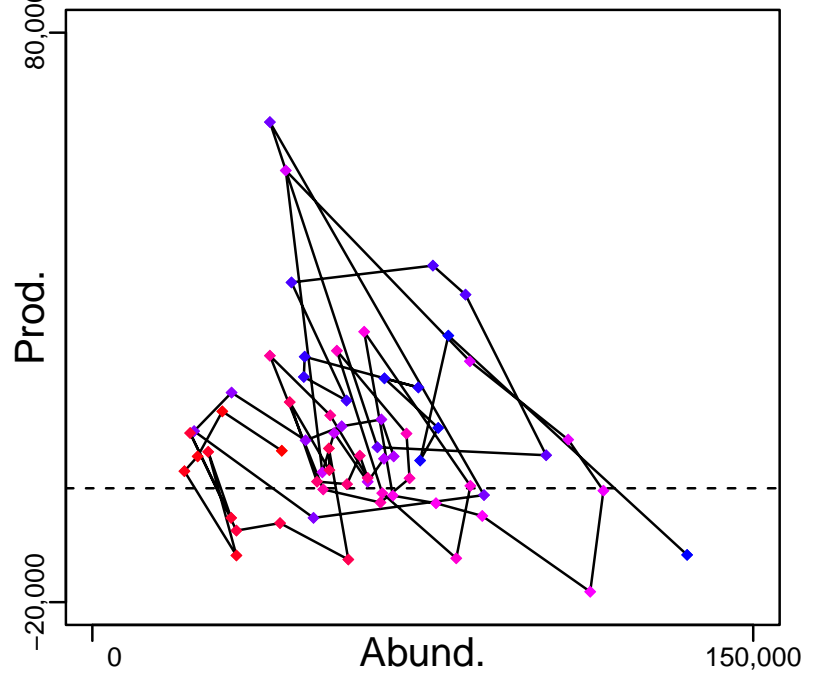
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



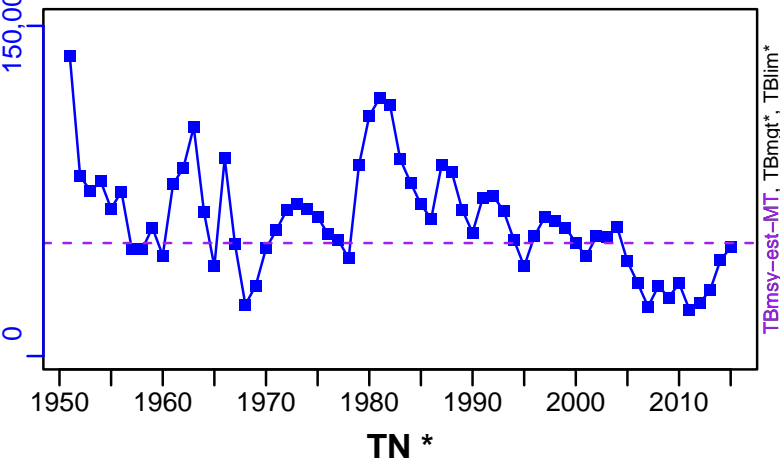
Production (1949–2018–ASHBROOK)



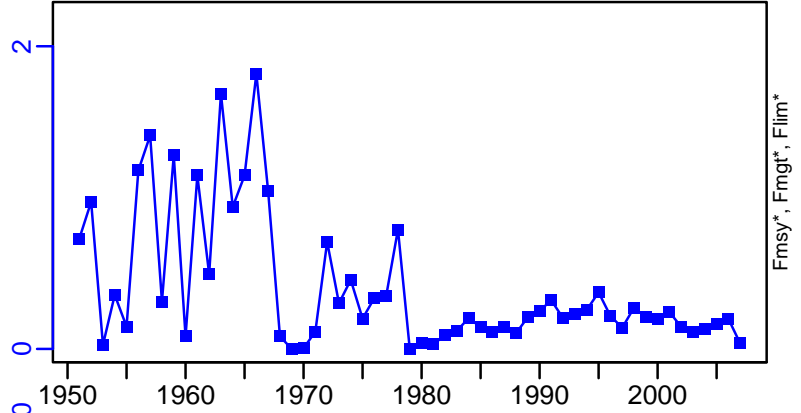
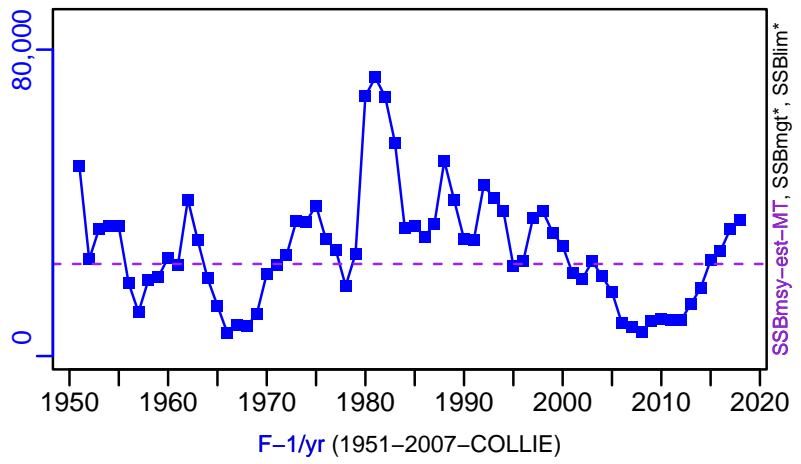
◆ Start Year ◆ End Year \* No Data

Pacific herring Central Coast [HERRCC]

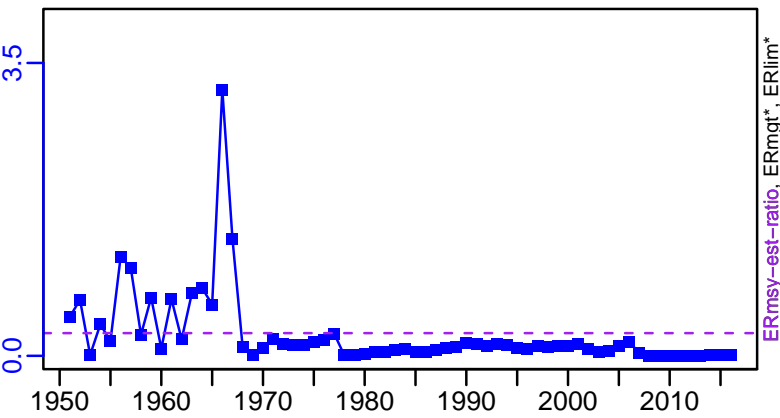
TB-MT (1951-2015-WATSON)



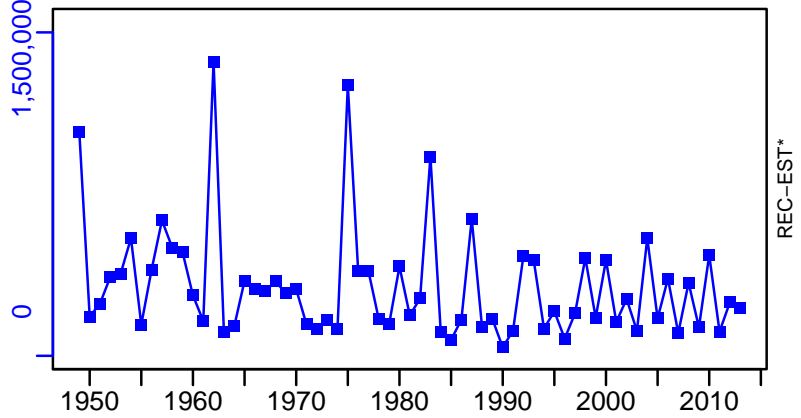
SSB-MT (1949-2018-ASHBROOK)



ER-calc-ratio (1949-2018-ASHBROOK)



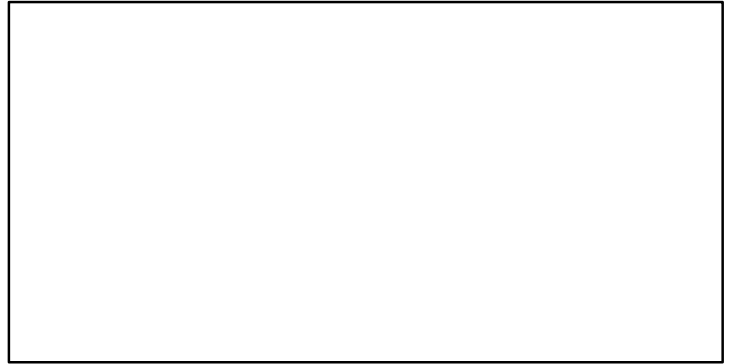
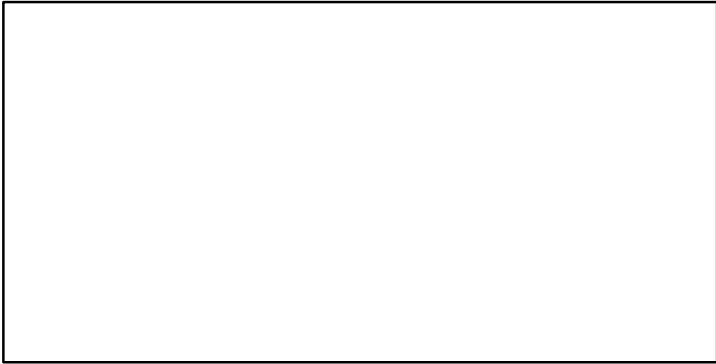
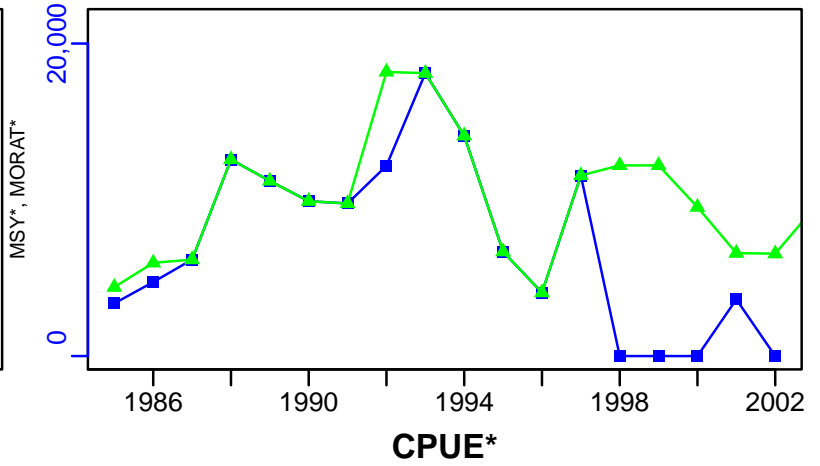
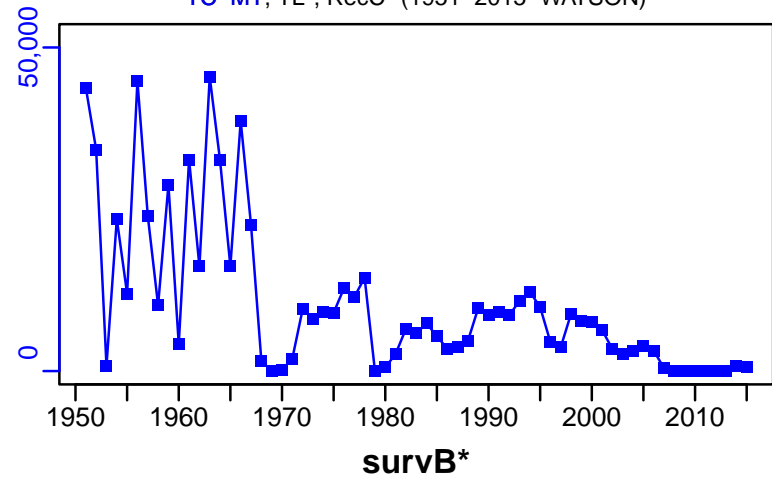
R-E00 (1949-2018-ASHBROOK)



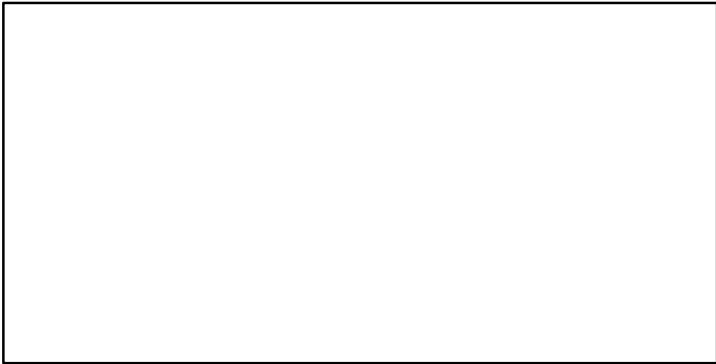
Pacific herring Central Coast [HERRCC]

TC-MT, TL\*, RecC\* (1951-2015-WATSON)

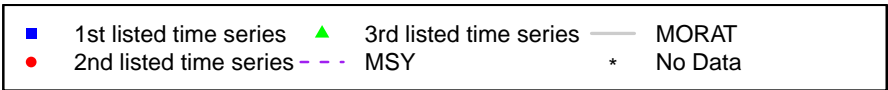
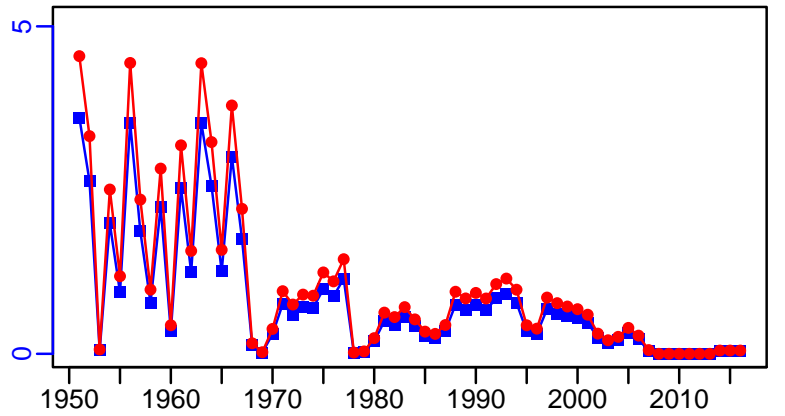
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1949-2018-ASHBROOK)



## Pacific herring Haida Gwaii [HERRHG]

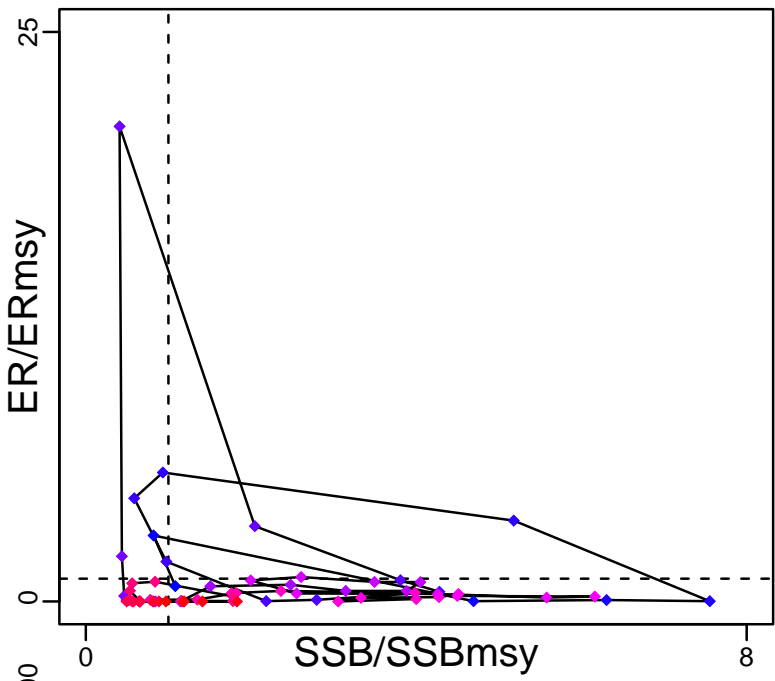
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRHG-1949-2018-ASHBROOK
<b>Area</b>	Haida Gwaii
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2015, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2018	23,098
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

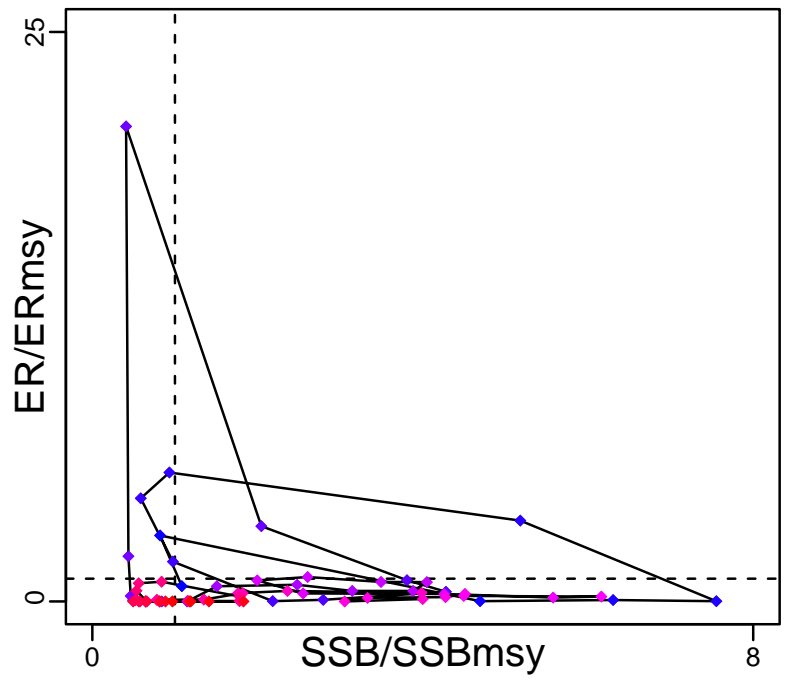
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	27,200	-	-
SSB	SSB-MT	2018	4477	-	3+
TN	-	-	-	-	-
R	R-E00	2018	147,346,390	-	2
F	F-1/yr	2007	0	-	-
ER	ER-calc-ratio	2015	0	-	-
TC	TC-MT	2015	0		
TL	TL-MT	2018	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific herring Haida Gwaii [HERRHG]

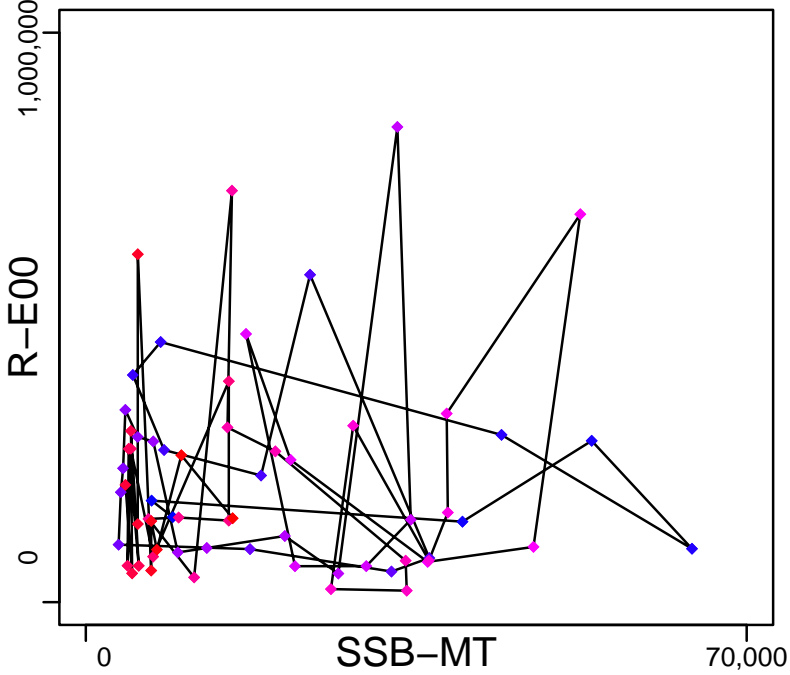
Kobe MSYpref (1949–2018–ASHBROOK)



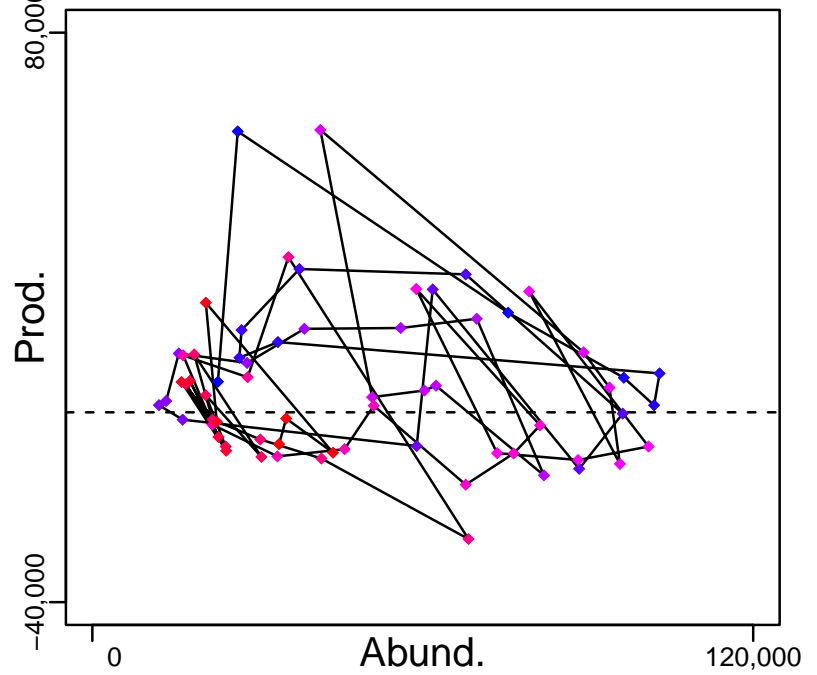
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)



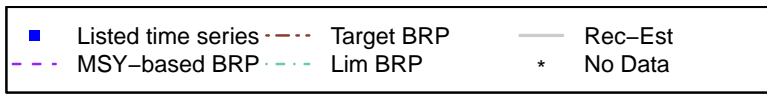
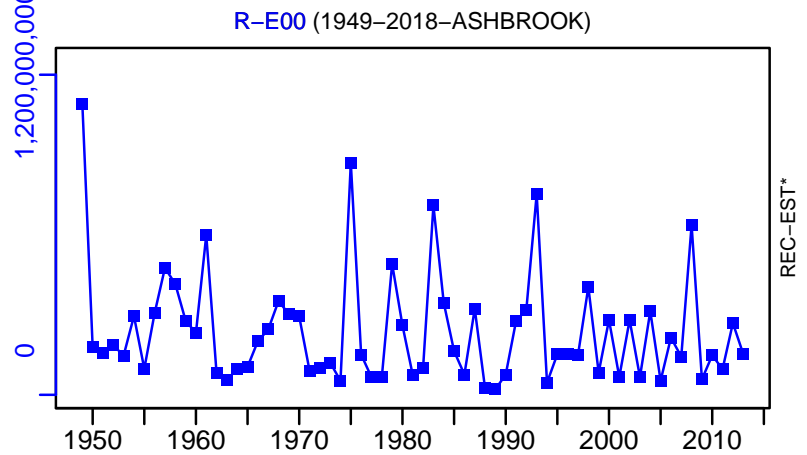
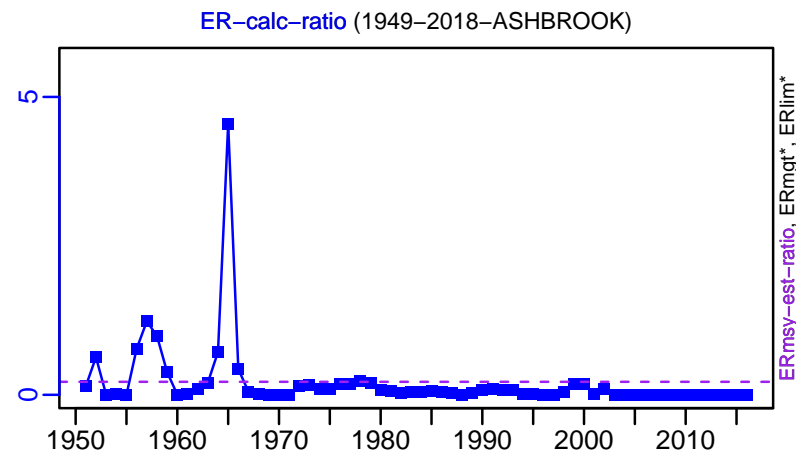
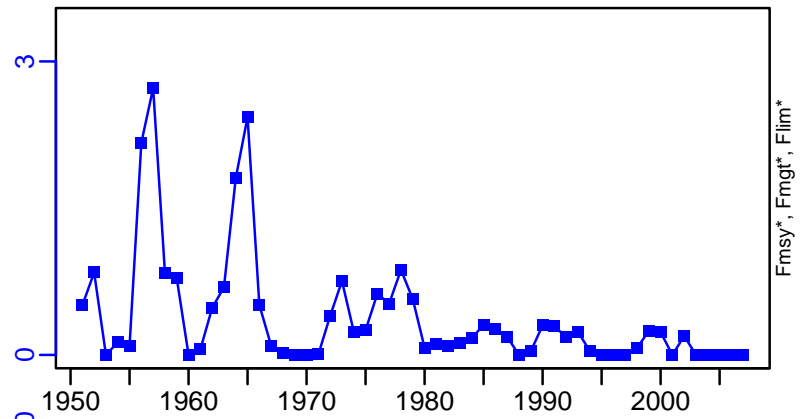
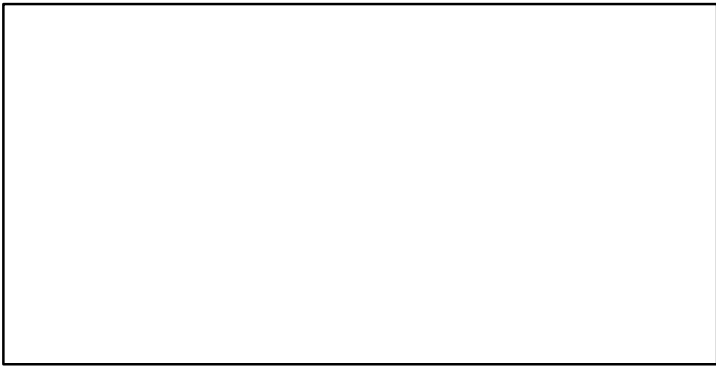
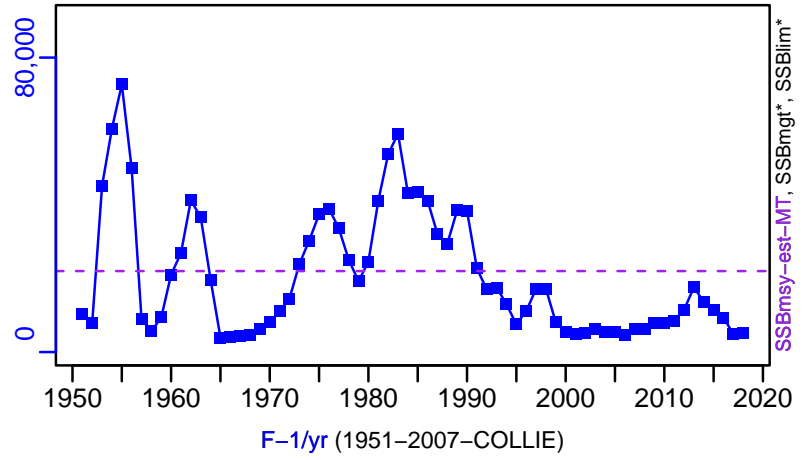
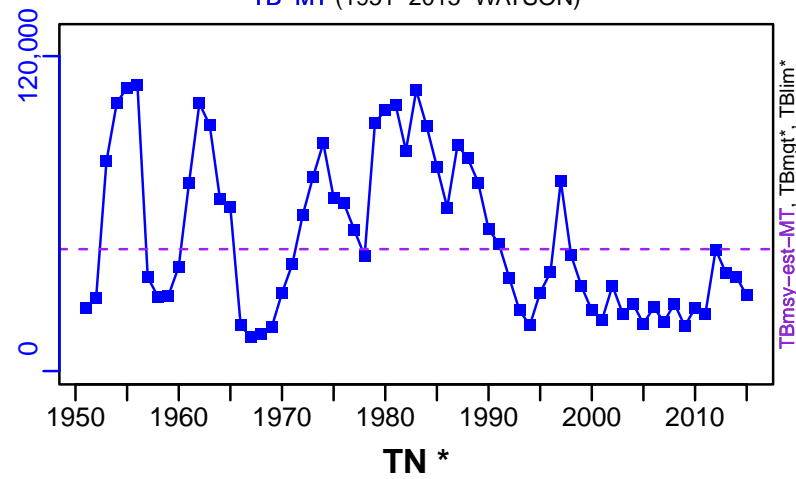
◆ Start Year ◆ End Year \* No Data



Pacific herring Haida Gwaii [HERRHG]

TB-MT (1951-2015-WATSON)

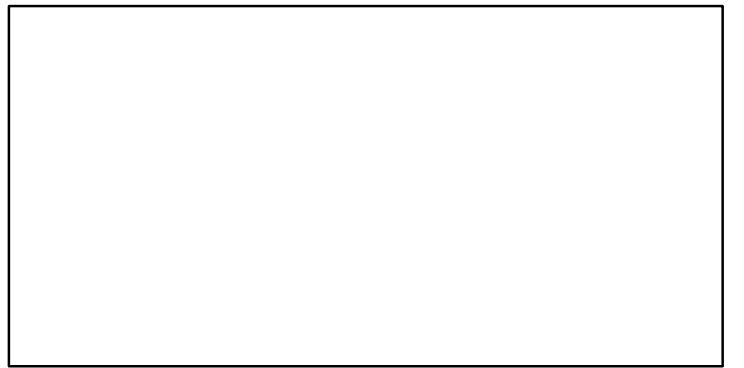
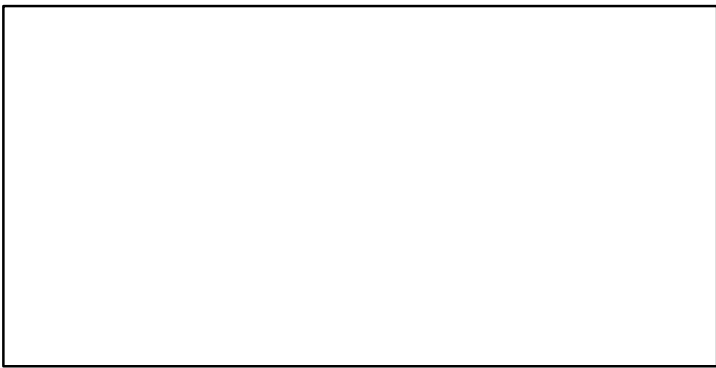
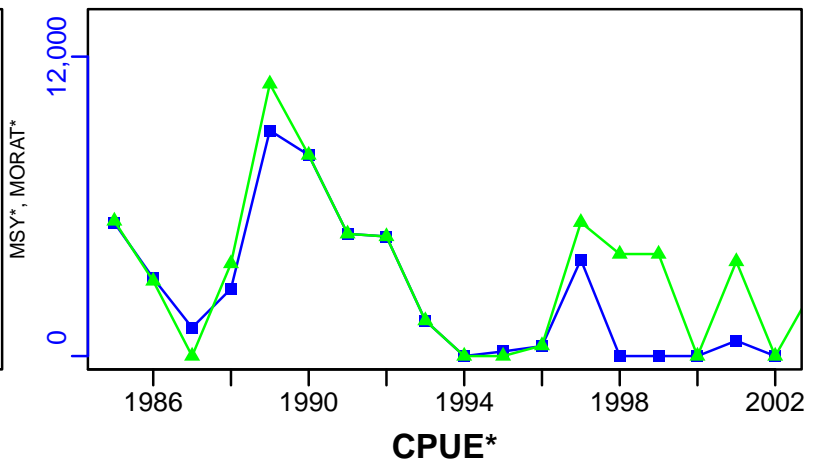
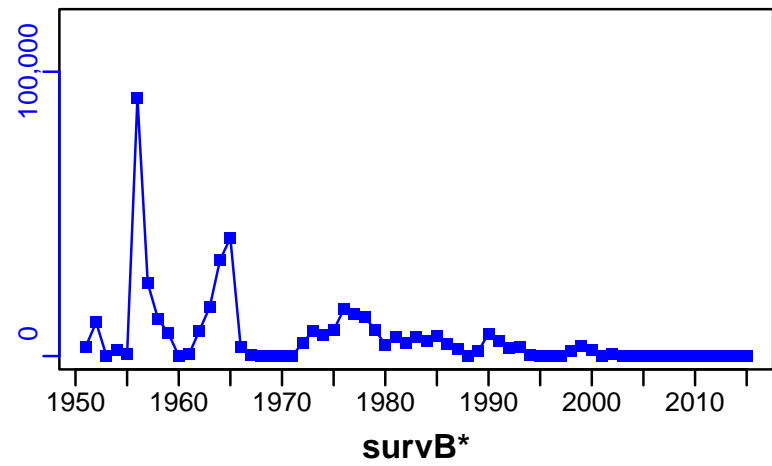
SSB-MT (1949-2018-ASHBROOK)



Pacific herring Haida Gwaii [HERRHG]

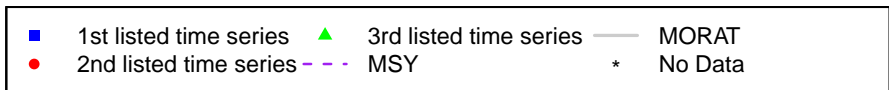
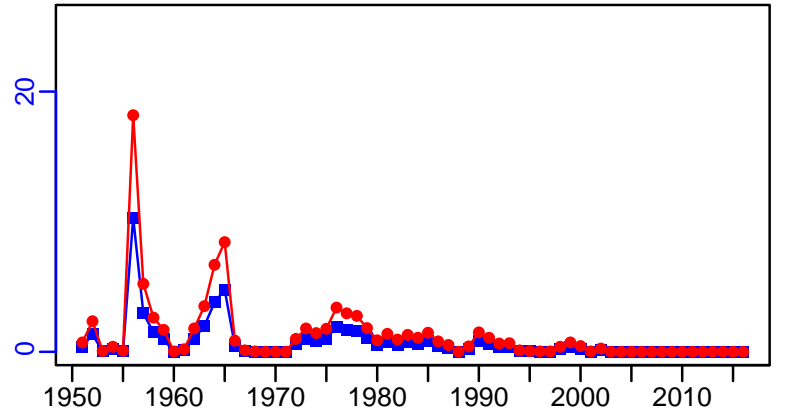
TC-MT, TL\*, RecC\* (1951-2015-WATSON)

TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*

TL-MT/MSY-est-MT, CdivMEANC-ratio, (1949-2018-ASHBROOK)



## Pacific herring Prince Rupert District [HERRPRD]

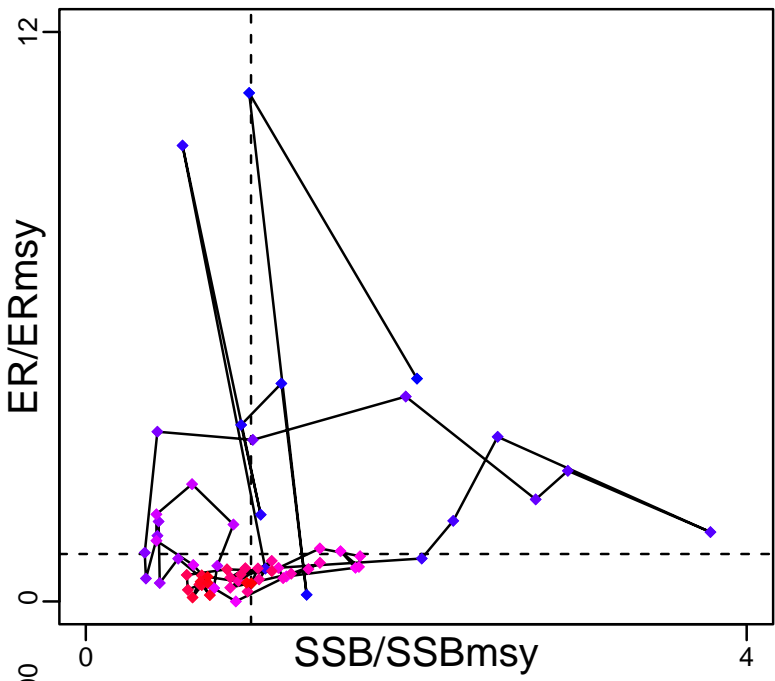
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRPRD-1949-2018-ASHBROOK
<b>Area</b>	Prince Rupert District
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2015, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	61,097
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

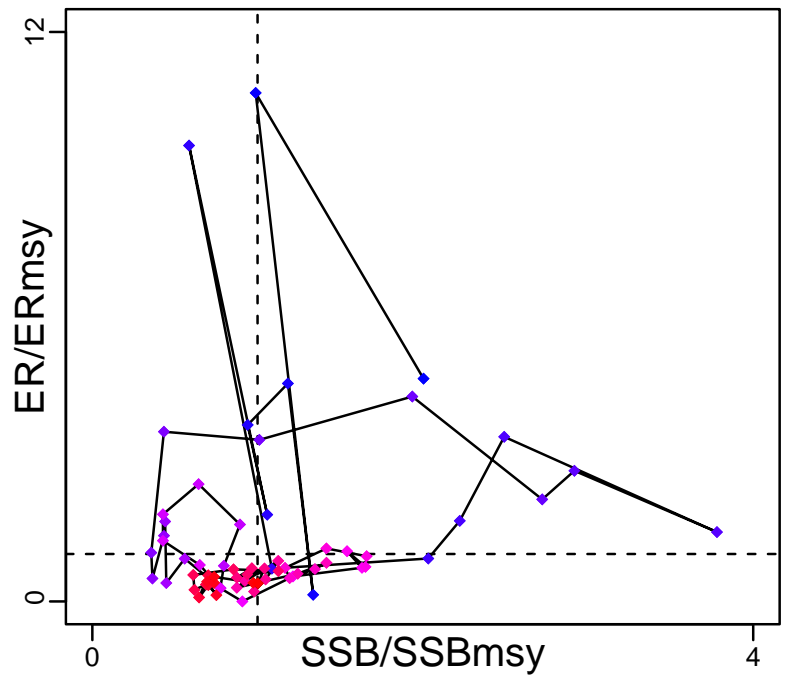
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	56,300	-	-
<b>SSB</b>	SSB-MT	2018	25,000	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	164,215,680	-	2
<b>F</b>	F-1/yr	2007	0.04	-	-
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-
<b>TC</b>	TC-MT	2015	2160		
<b>TL</b>	TL-MT	2018	1910		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific herring Prince Rupert District [HERRPRD]

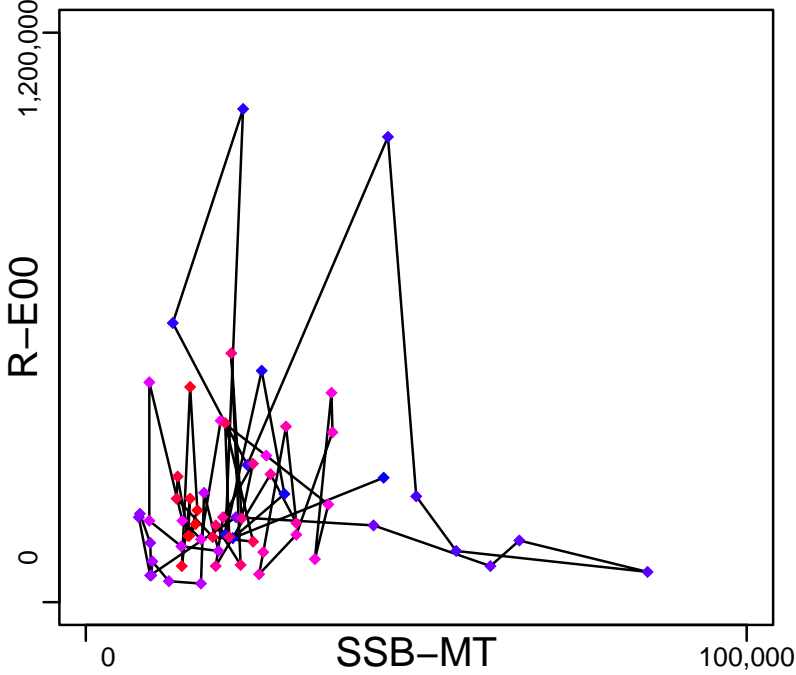
Kobe MSYpref (1949–2018–ASHBROOK)



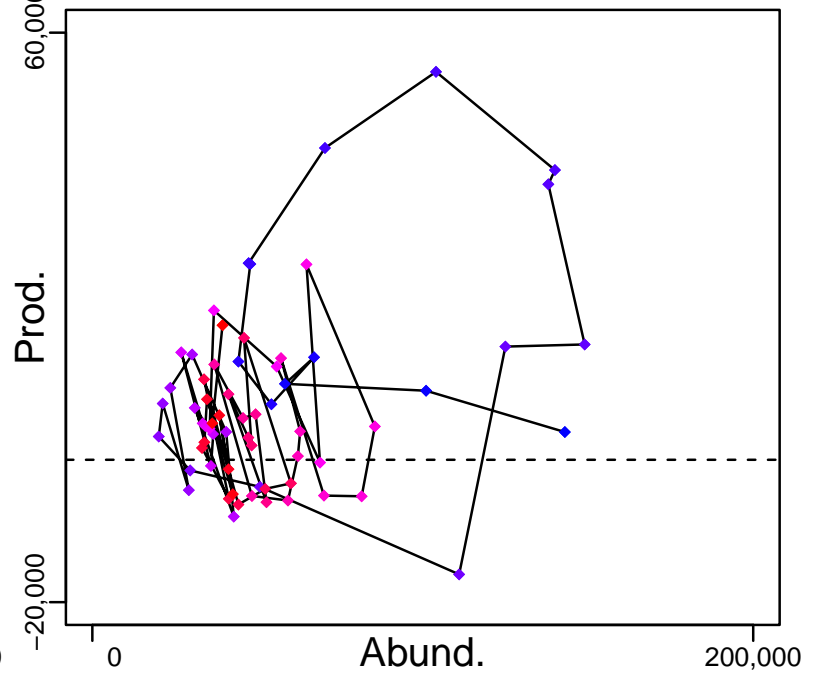
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)

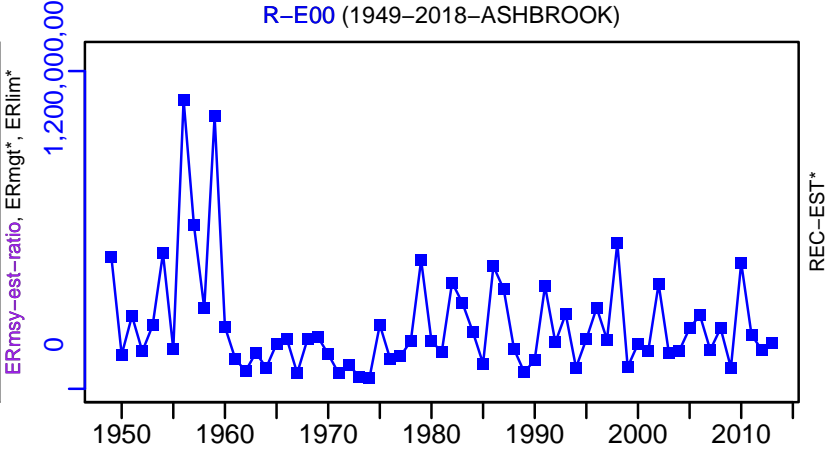
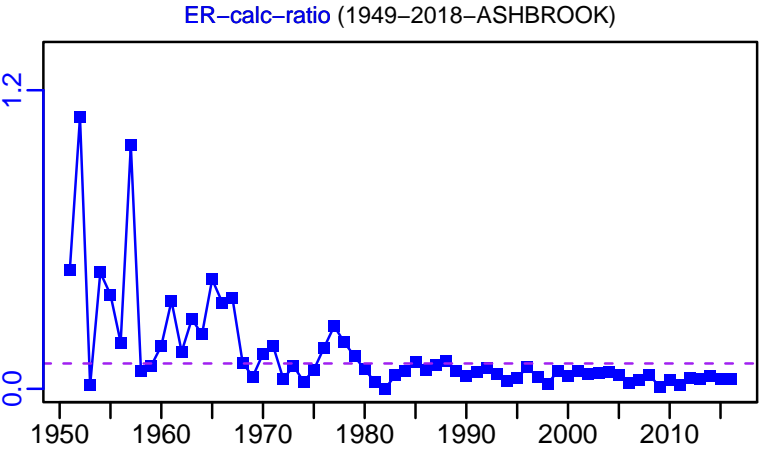
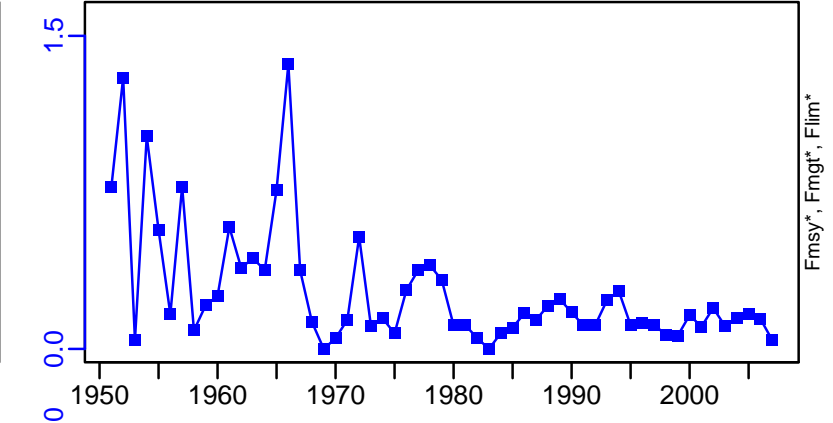
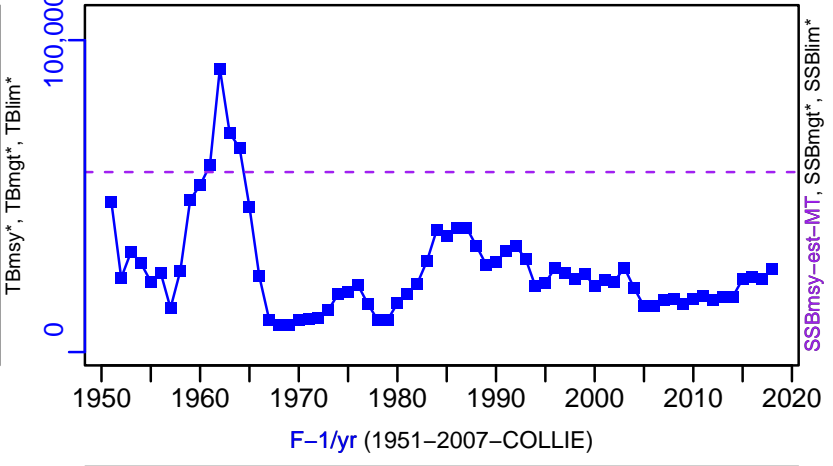
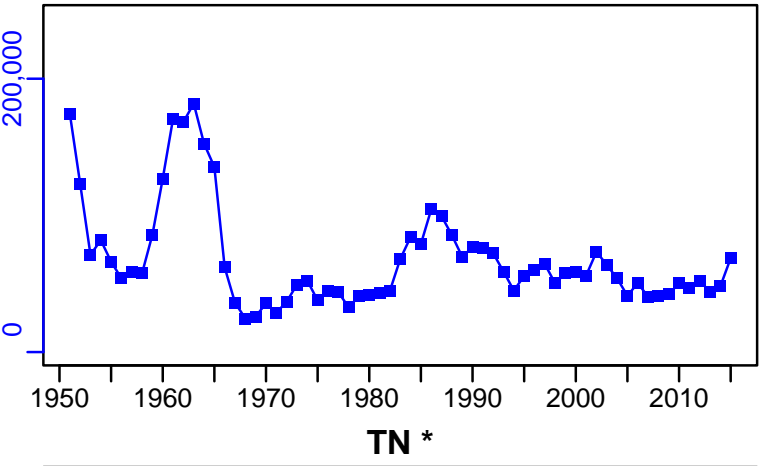


◆ Start Year ◆ End Year \* No Data

Pacific herring Prince Rupert District [HERRPRD]

TB-MT (1951-2015-WATSON)

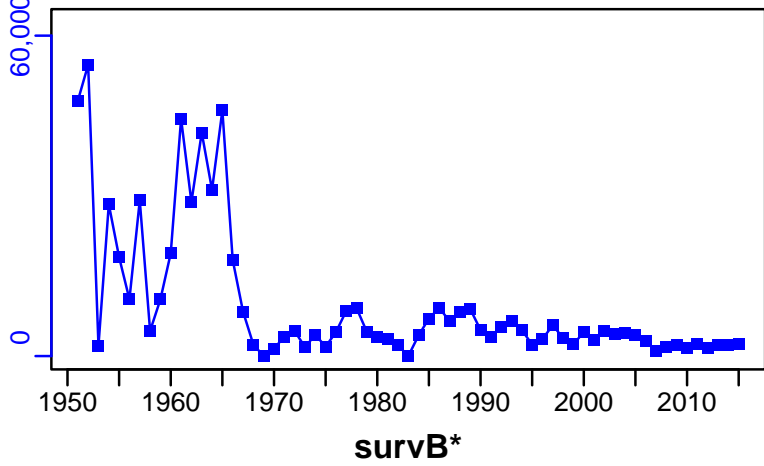
SSB-MT (1949-2018-ASHBROOK)



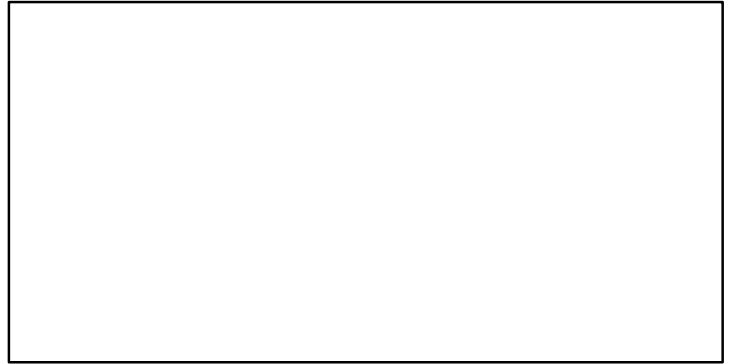
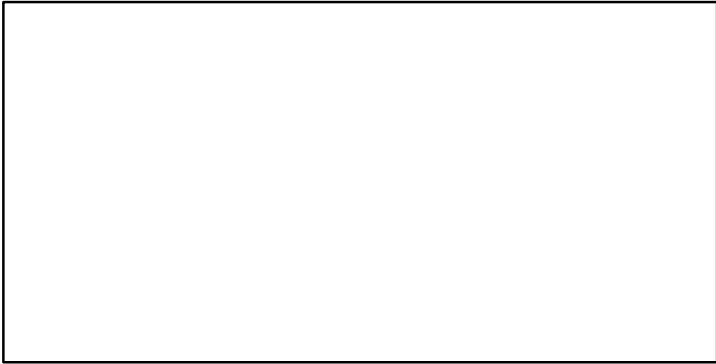
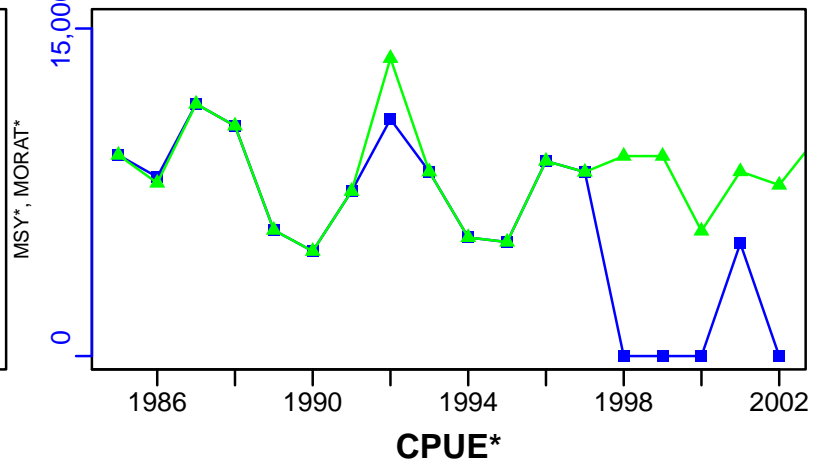
■ Listed time series    - - - Target BRP    — Rec-Est  
- - - MSY-based BRP    - - - Lim BRP    \* No Data

Pacific herring Prince Rupert District [HERRPRD]

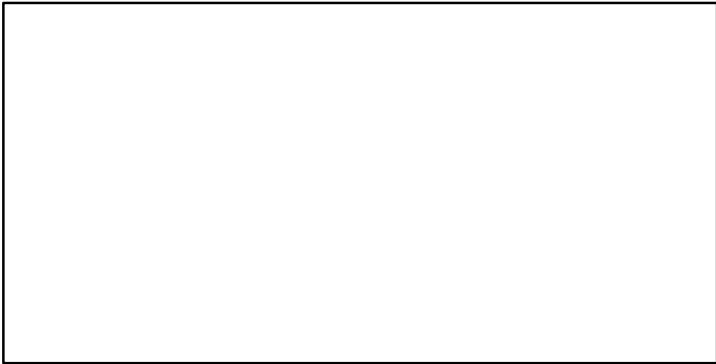
TC-MT, TL\*, RecC\* (1951-2015-WATSON)



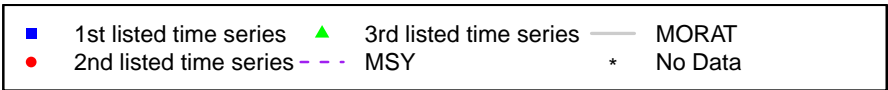
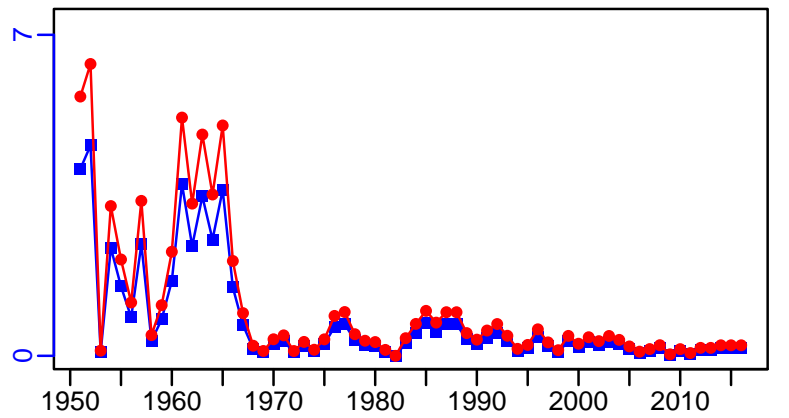
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1949-2018-ASHBROOK)



## Pacific herring Strait of Georgia [HERRSOG]

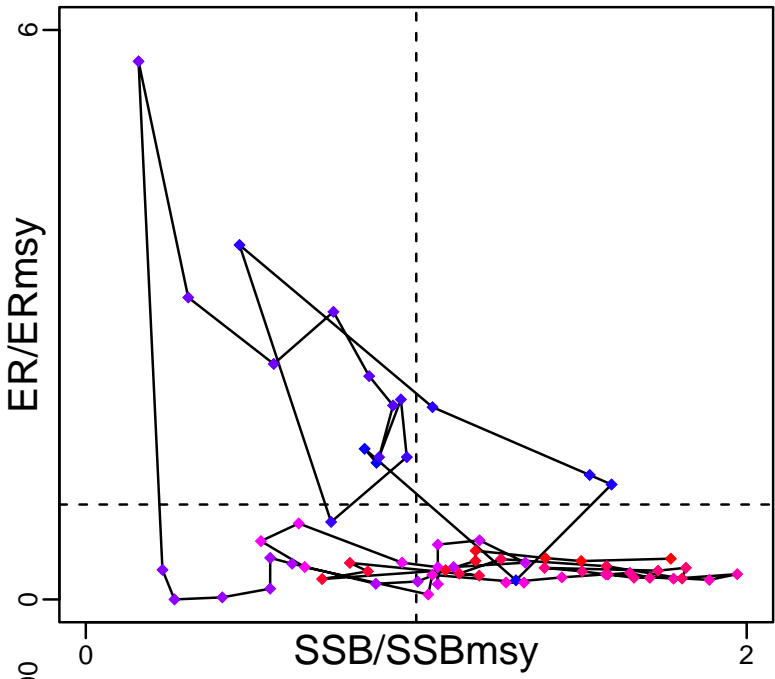
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRSOG-1949-2018-ASHBROOK
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2015, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2018	138,795
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

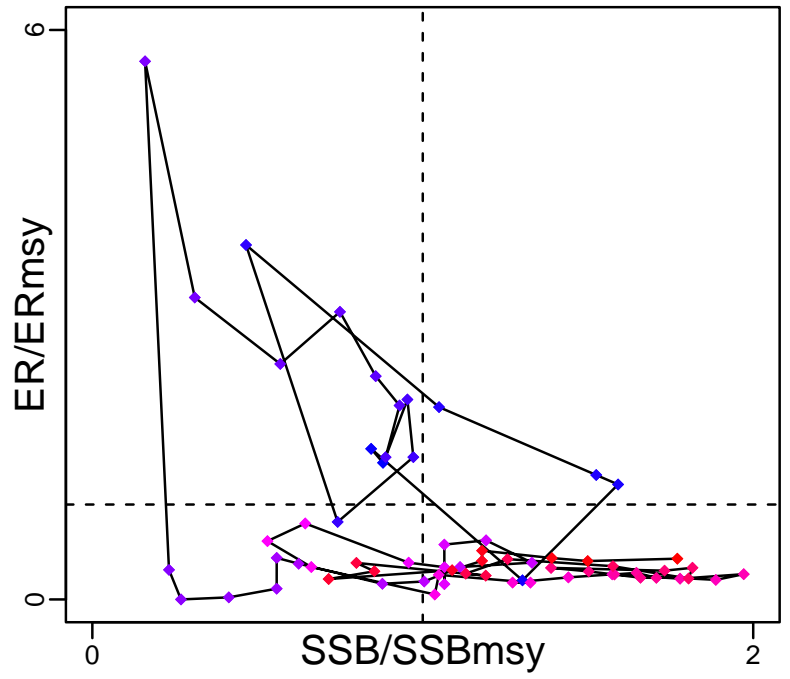
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	232,000	-	-
SSB	SSB-MT	2018	126,134	-	3+
TN	-	-	-	-	-
R	R-E00	2018	1,908,760,000	-	2
F	F-1/yr	2007	0.113	-	-
ER	ER-calc-ratio	2015	0.086	-	-
TC	TC-MT	2015	20,000		
TL	TL-MT	2018	25,806		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific herring Strait of Georgia [HERRSOG]

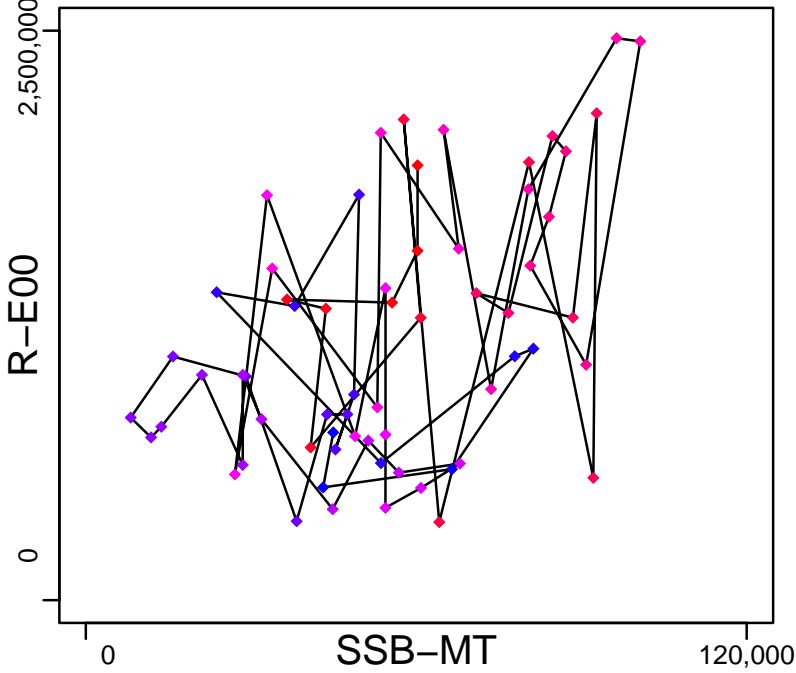
Kobe MSYpref (1949–2018–ASHBROOK)



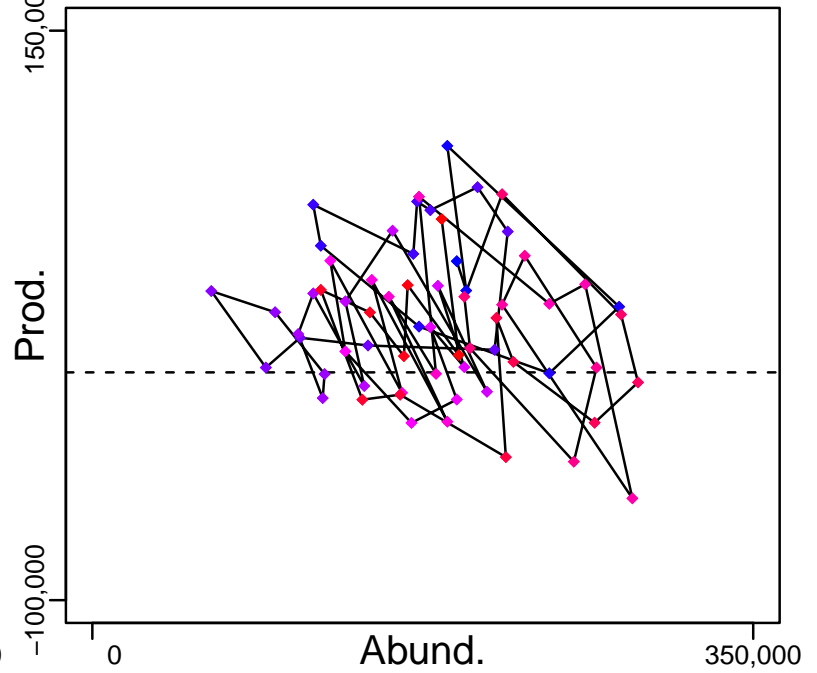
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)

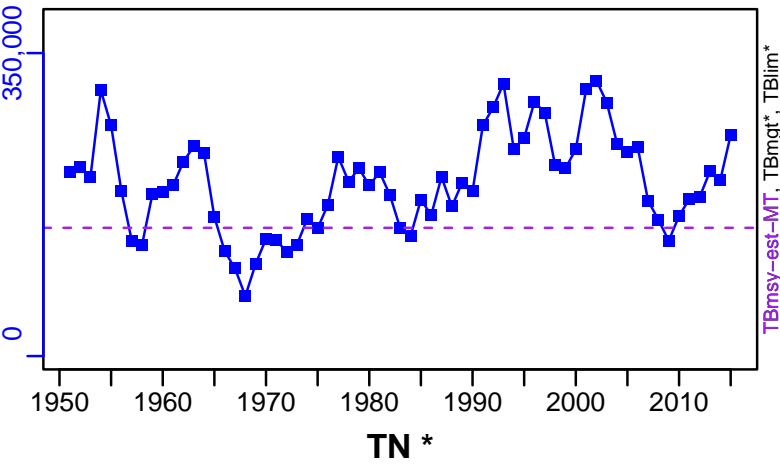


◆ Start Year ◆ End Year \* No Data

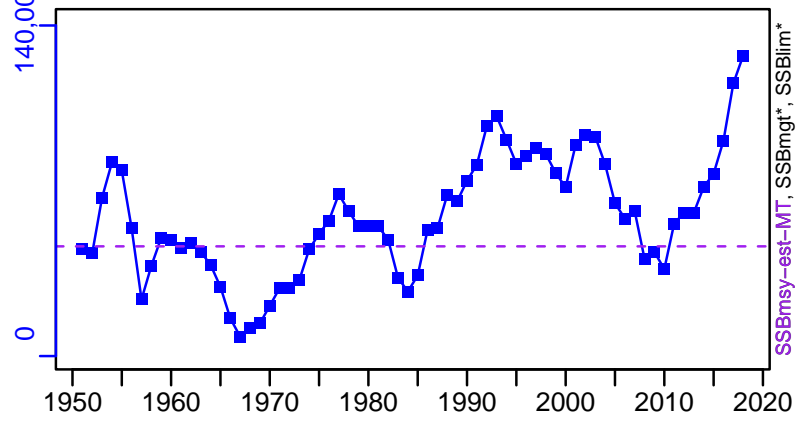


Pacific herring Strait of Georgia [HERRSOG]

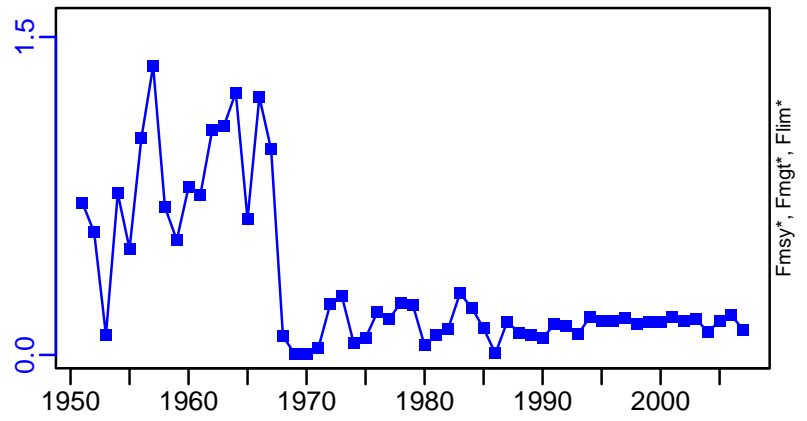
TB-MT (1951-2015-WATSON)



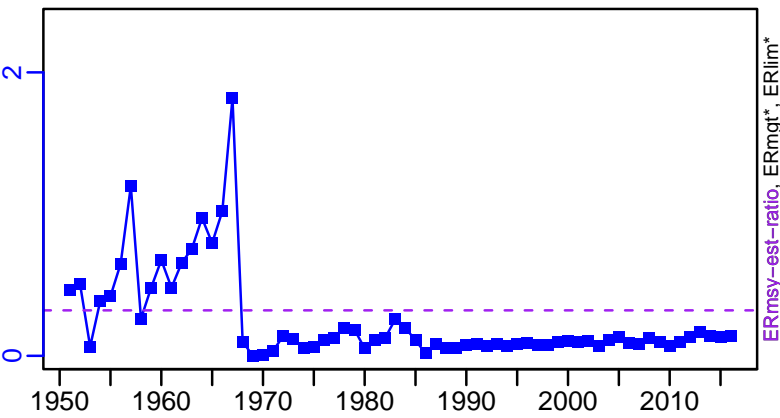
SSB-MT (1949-2018-ASHBROOK)



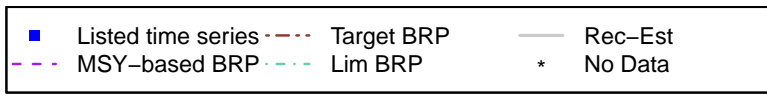
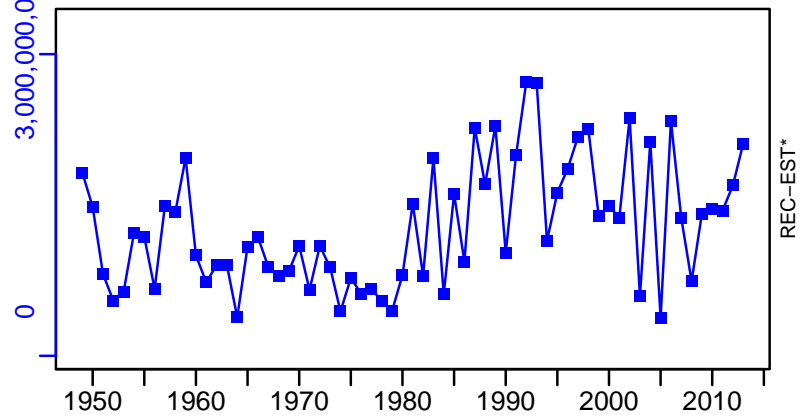
F-1/yr (1951-2007-COLLIE)



ER-calc-ratio (1949-2018-ASHBROOK)

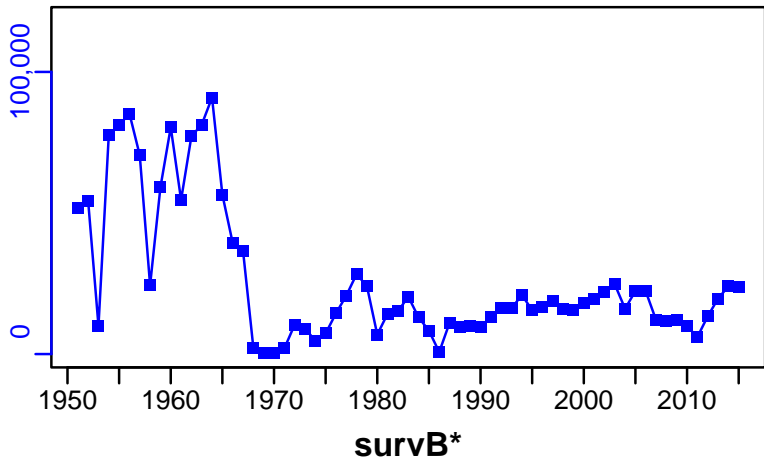


R-E00 (1949-2018-ASHBROOK)

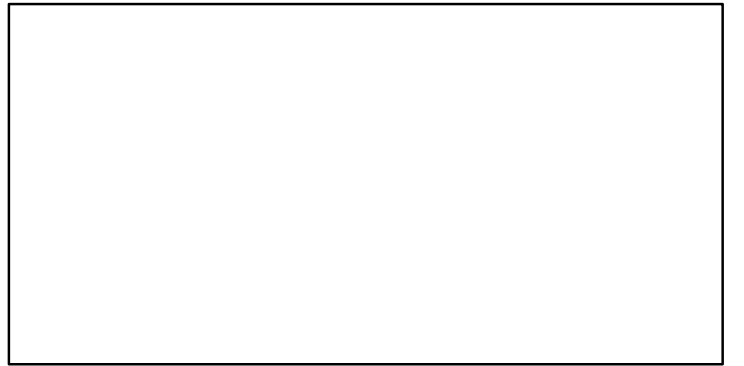
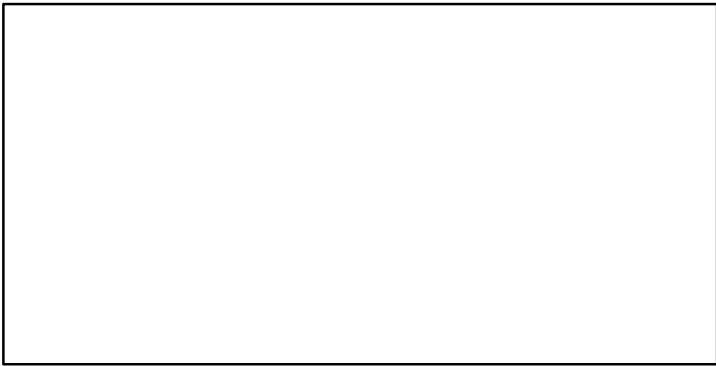
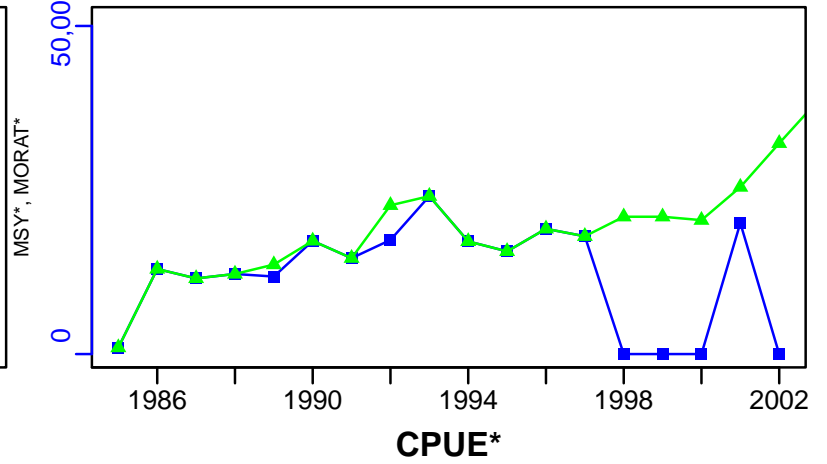


Pacific herring Strait of Georgia [HERRSOG]

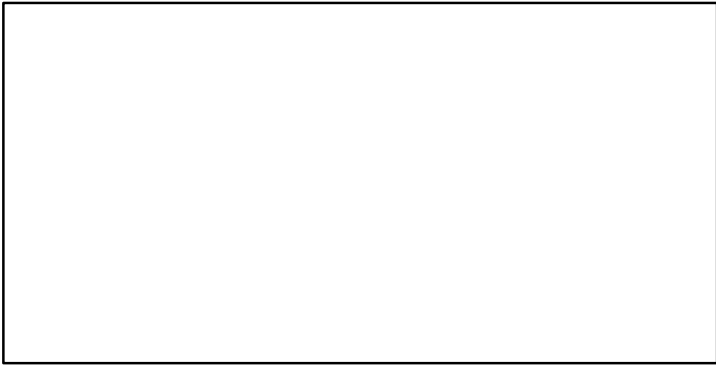
TC-MT, TL\*, RecC\* (1951-2015-WATSON)



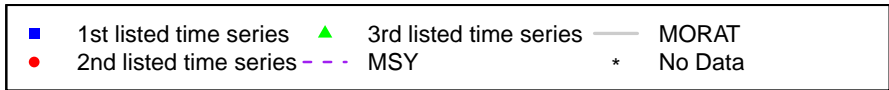
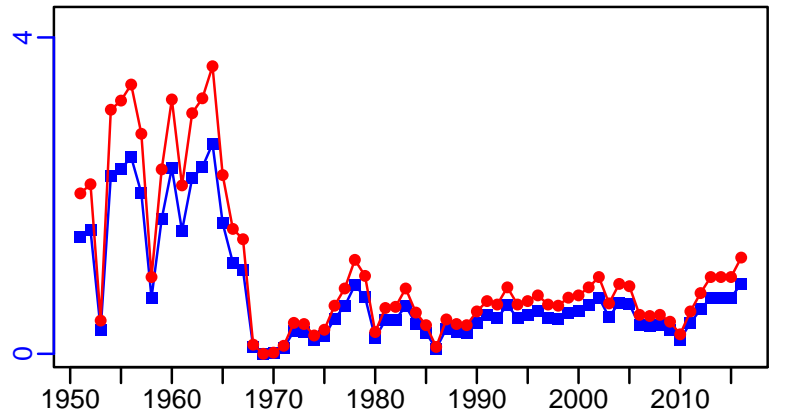
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1949-2018-ASHBROOK)



## Pacific herring West Coast of Vancouver Island [HERRWCVANI]

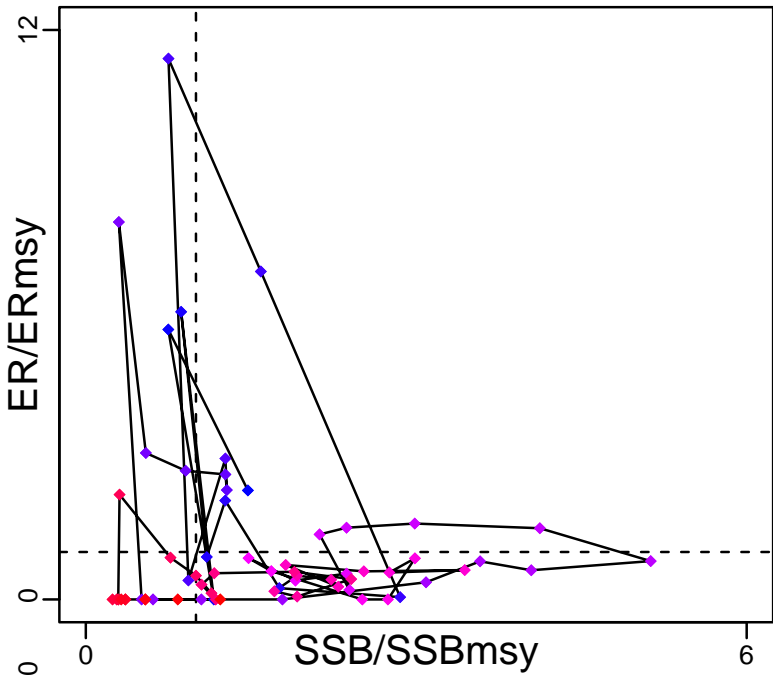
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRWCVANI-1949-2018-ASHBROOK
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2015, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	46,890
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

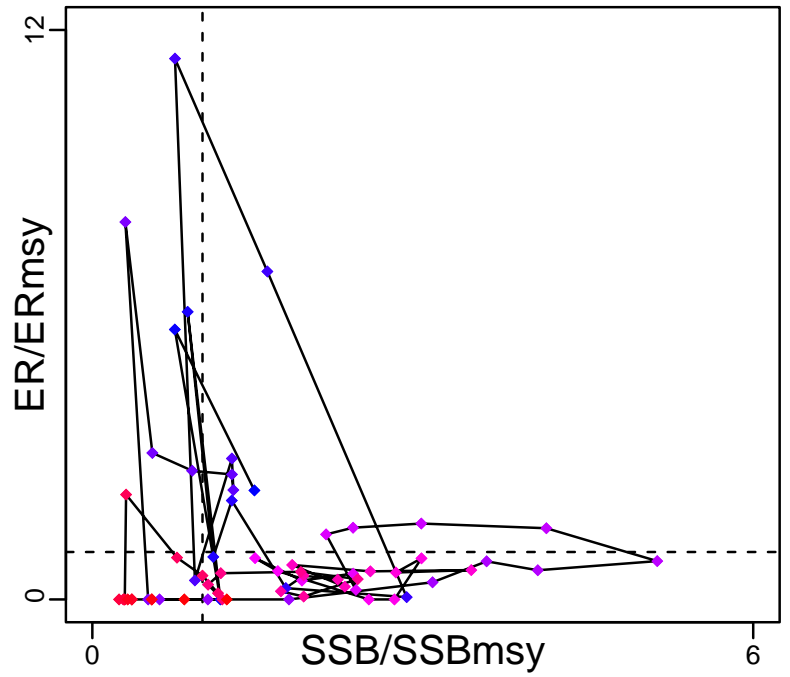
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	56,400	-	-
<b>SSB</b>	SSB-MT	2018	20,403	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	167,741,930	-	2
<b>F</b>	F-1/yr	2007	0	-	-
<b>ER</b>	ER-calc-ratio	2015	0	-	-
<b>TC</b>	TC-MT	2015	0		
<b>TL</b>	TL-MT	2018	0		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific herring West Coast of Vancouver Island [HERRWCVANI]

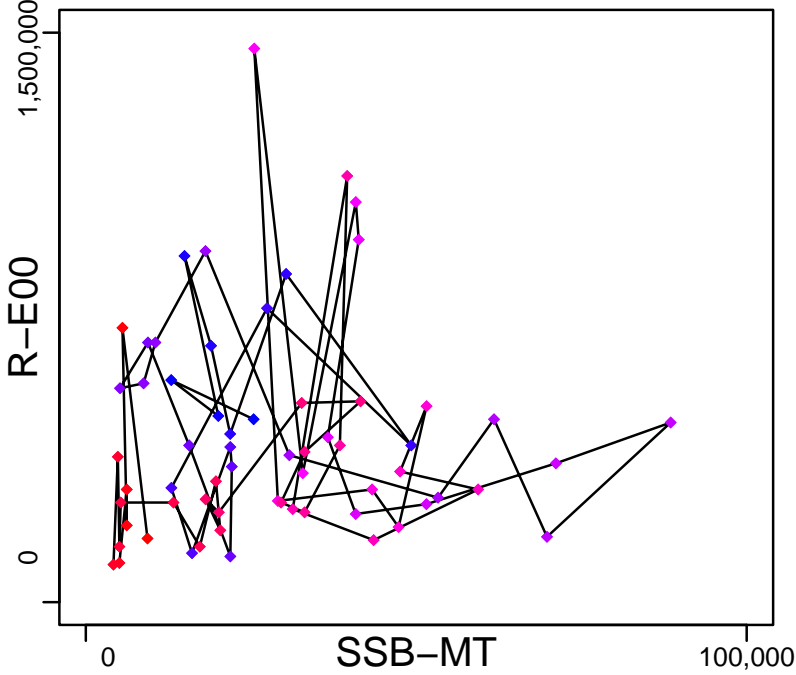
Kobe MSYpref (1949–2018–ASHBROOK)



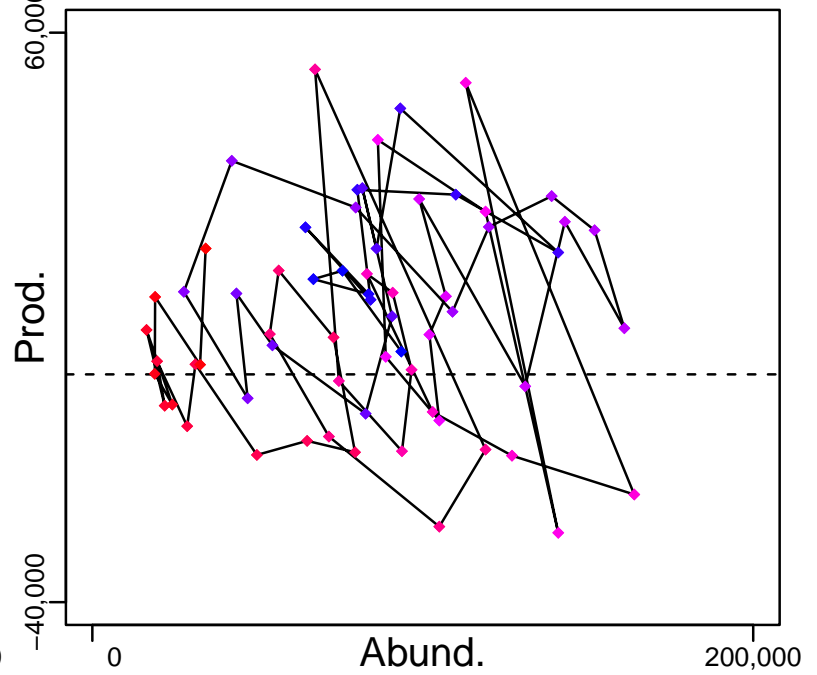
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)

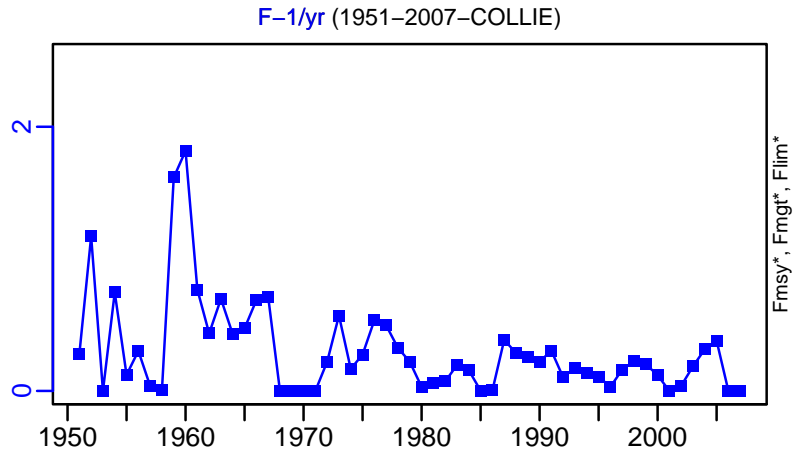
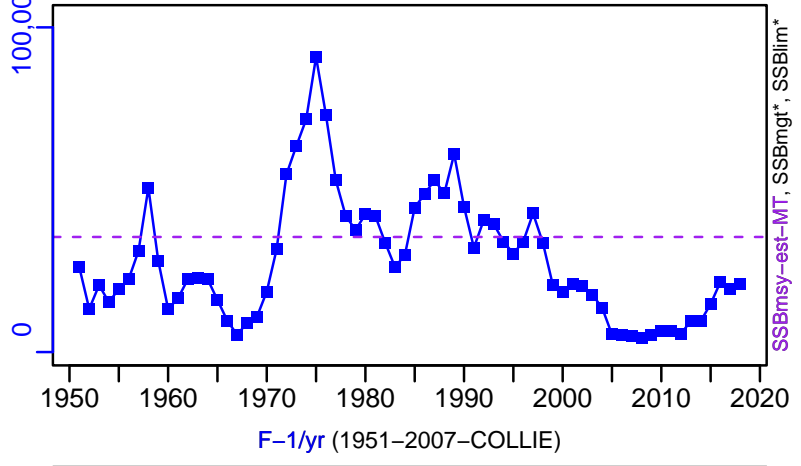
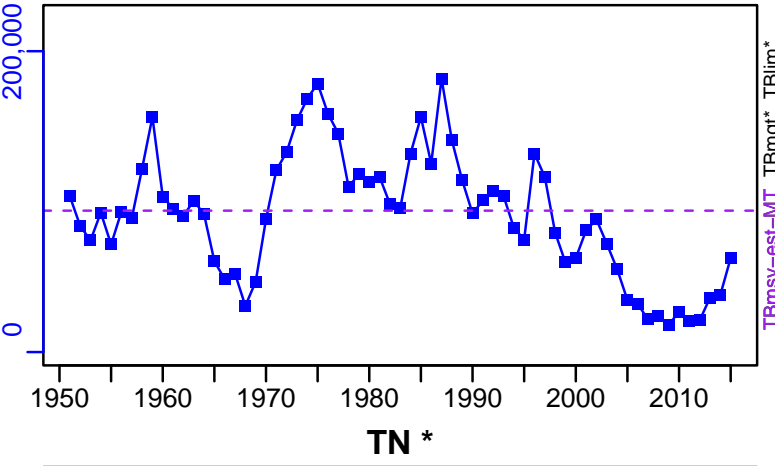


◆ Start Year ◆ End Year \* No Data

Pacific herring West Coast of Vancouver Island [HERRWCVANI]

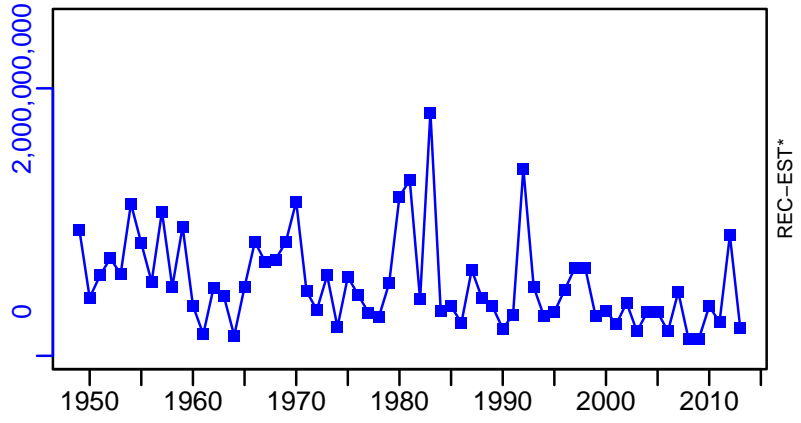
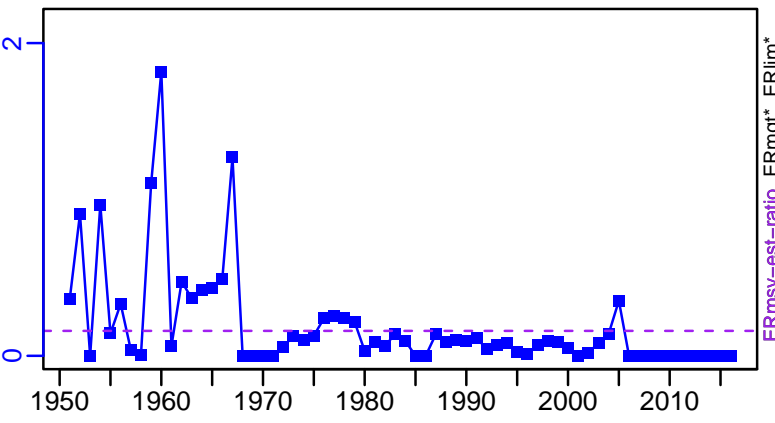
TB-MT (1951-2015-WATSON)

SSB-MT (1949-2018-ASHBROOK)



ER-calc-ratio (1949-2018-ASHBROOK)

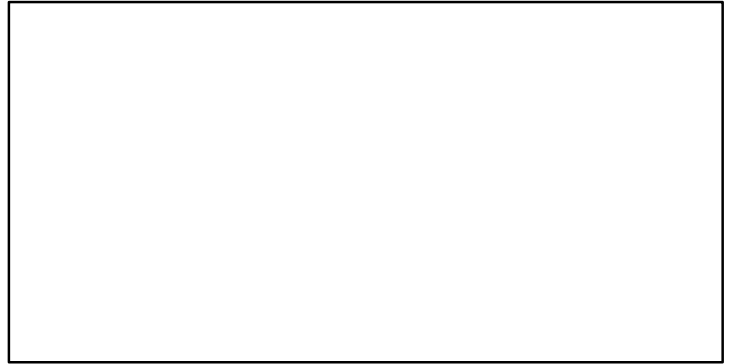
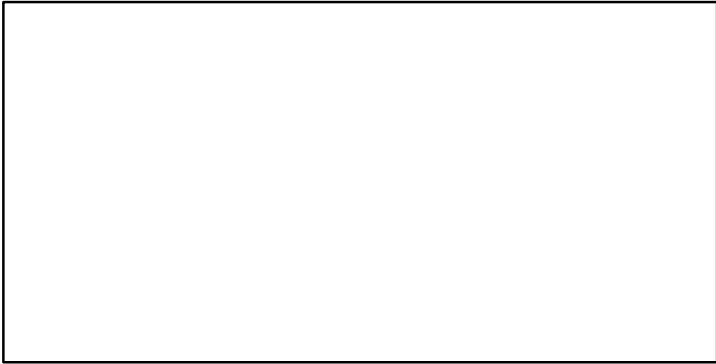
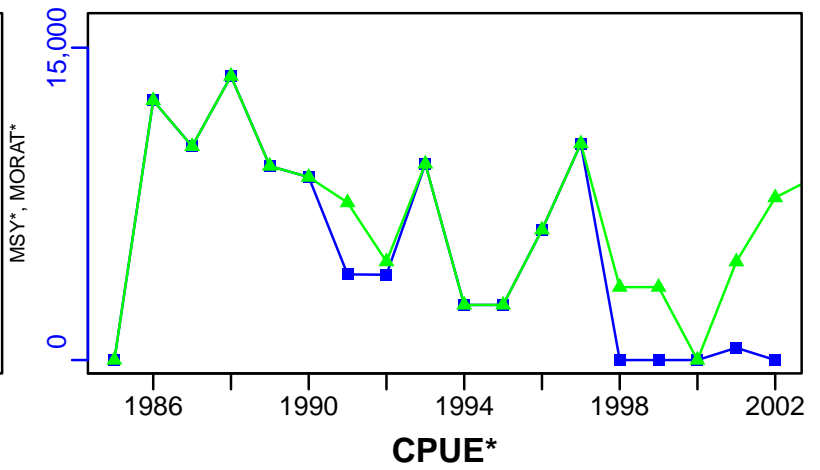
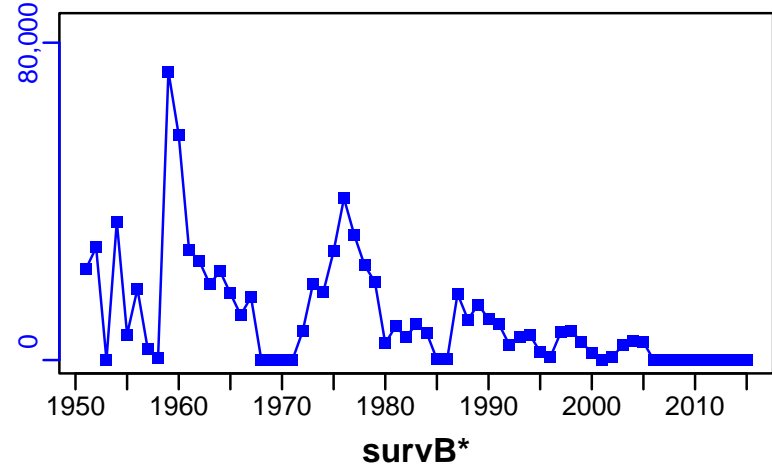
R-E00 (1949-2018-ASHBROOK)



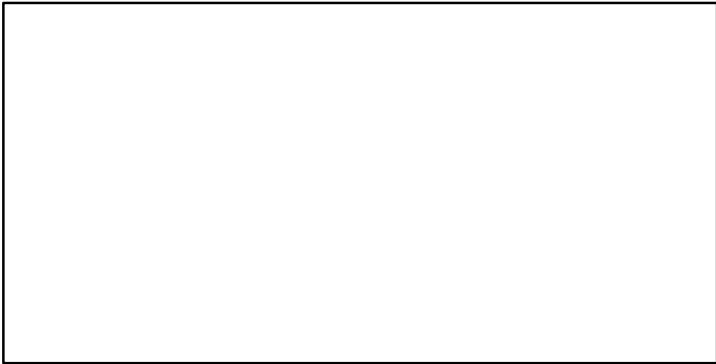
Pacific herring West Coast of Vancouver Island [HERRWCVANI]

TC-MT, TL\*, RecC\* (1951-2015-WATSON)

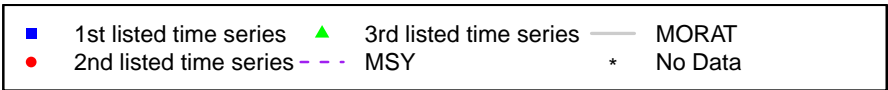
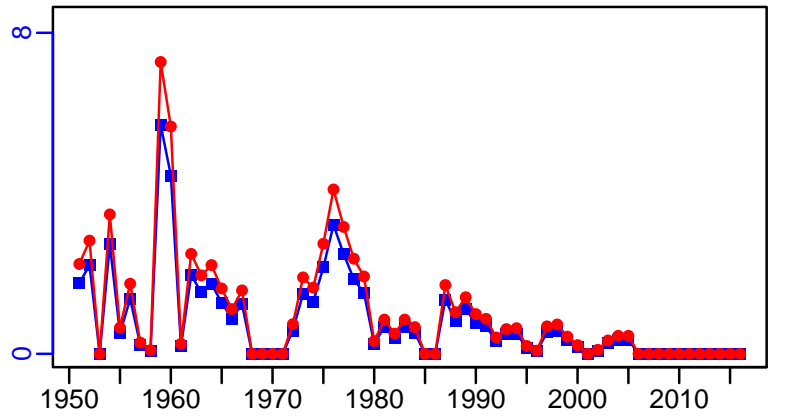
TAC-MT, Cpair\*, **Cadvised-MT** (1951-2015-WATSON)



**EFFORT\***



TL-MT/MSY-est-MT, **CdivMEANC-ratio**, (1949-2018-ASHBROOK)



## Lingcod Strait of Georgia [LINGCODSOG]

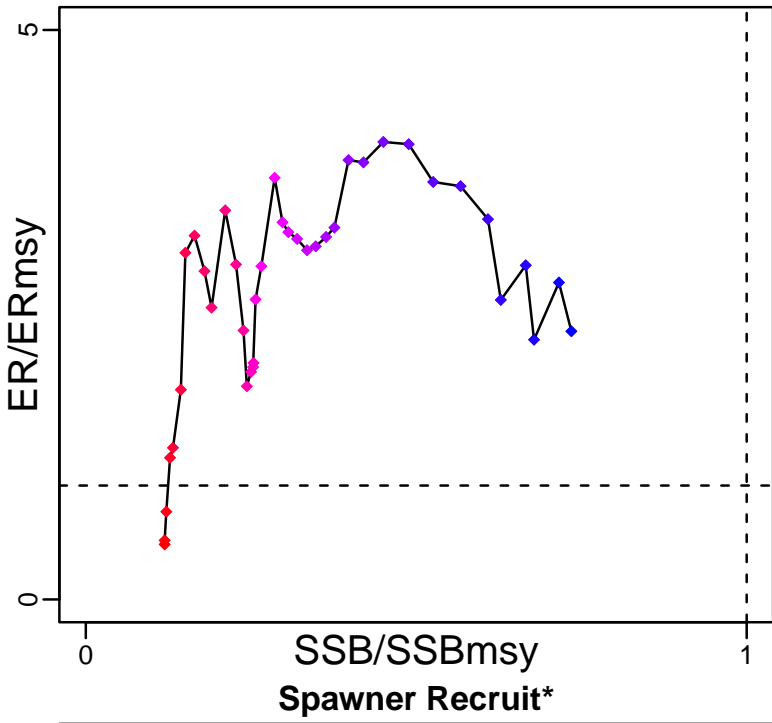
Metadata	
<b>Scientific Name</b>	Ophiodon elongatus
<b>Current Assess ID</b>	DFO-PAC-LINGCODSOG-1927-2014-OSGOOD
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	15,924
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	12,739
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	763
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

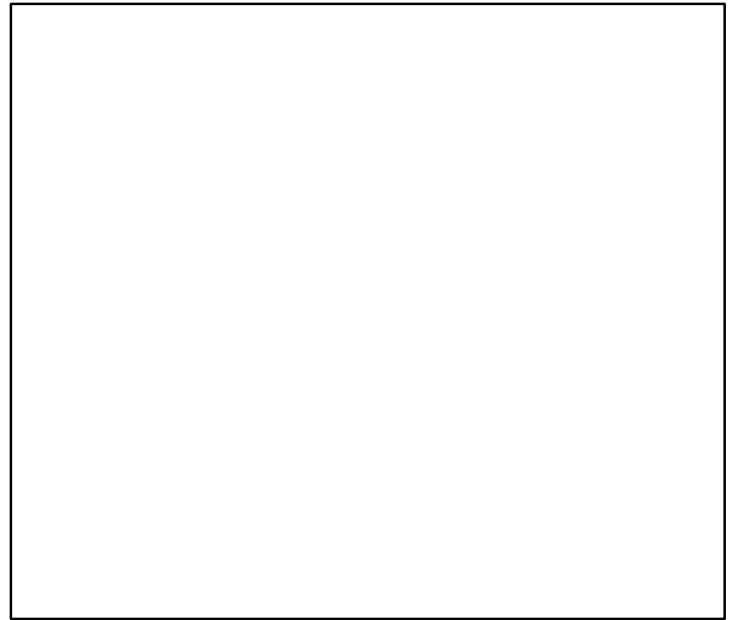
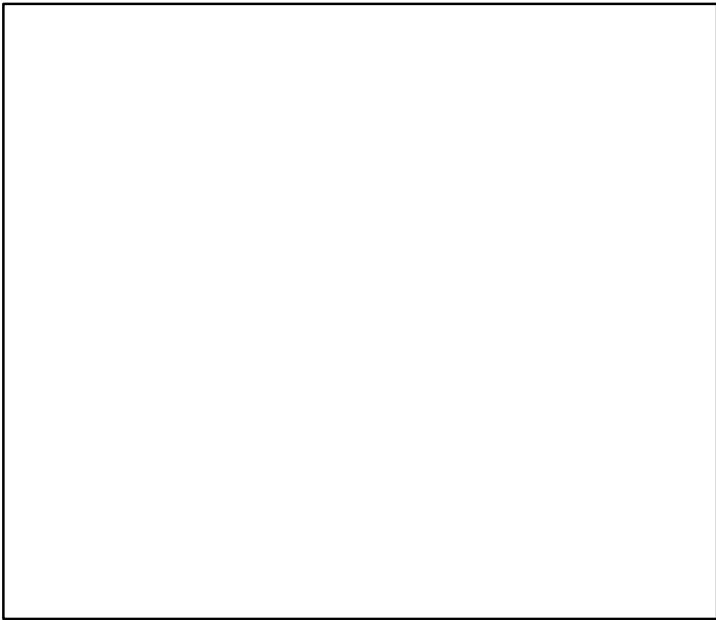
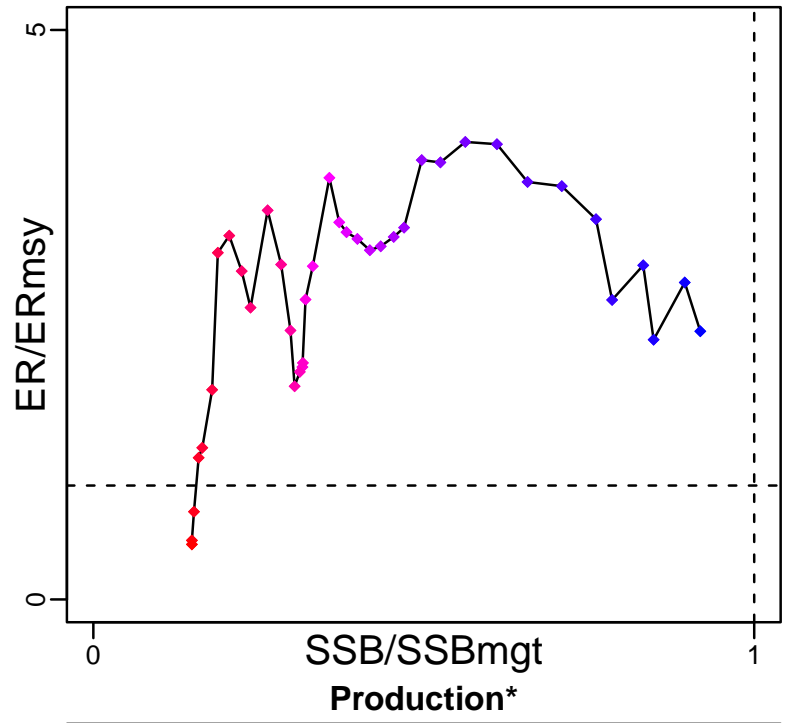
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	7120	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2014	44		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	0.447		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.559		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Lingcod Strait of Georgia [LINGCODSOG]

Kobe MSYpref (1927-2014-OSGOOD)



Kobe MGTpref (1927-2014-OSGOOD)



◆ Start Year ◆ End Year \* No Data

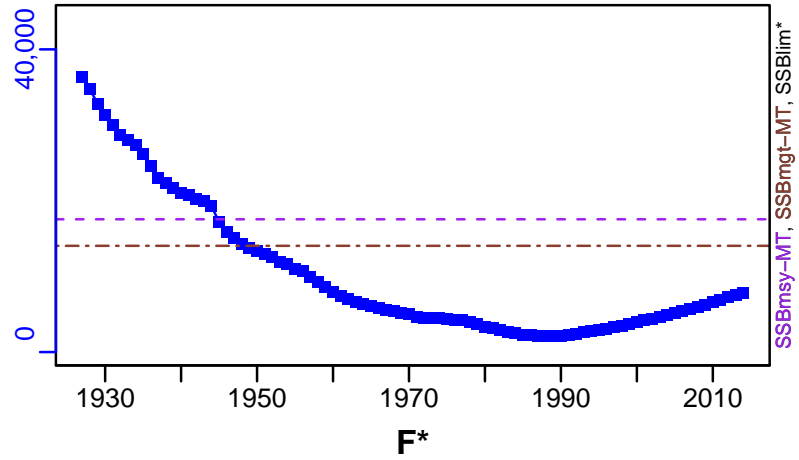


Lingcod Strait of Georgia [LINGCODSOG]

TB\*



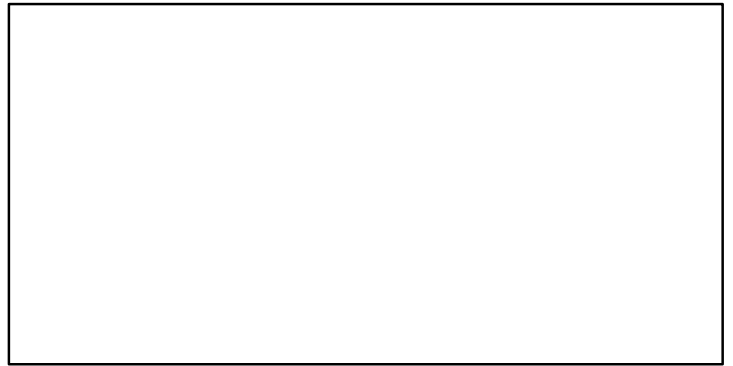
SSB-MT (1927-2014-OSGOOD)



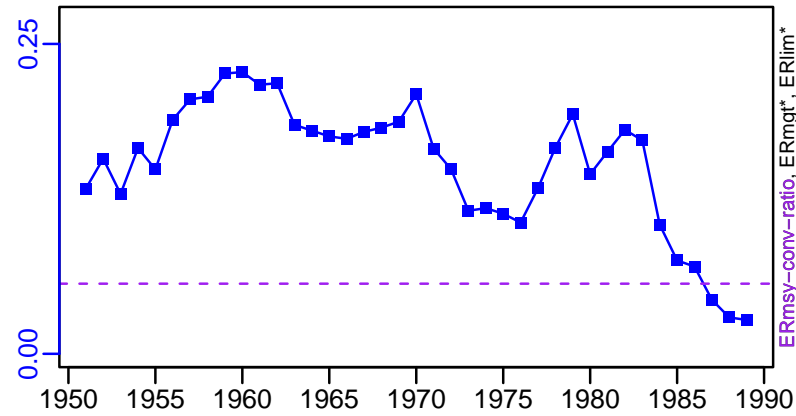
TN \*



F\*



ER-calc-ratio (1927-2014-OSGOOD)



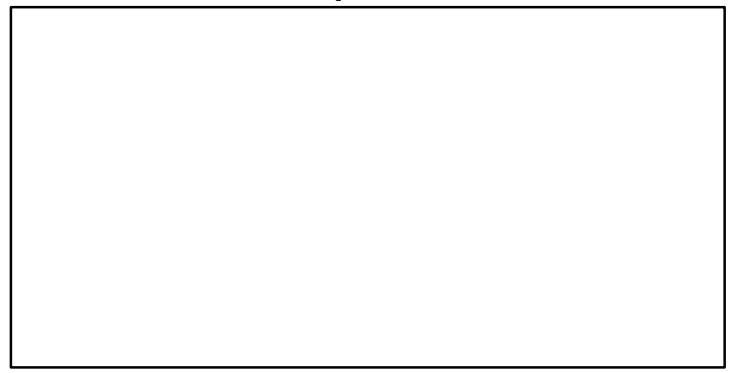
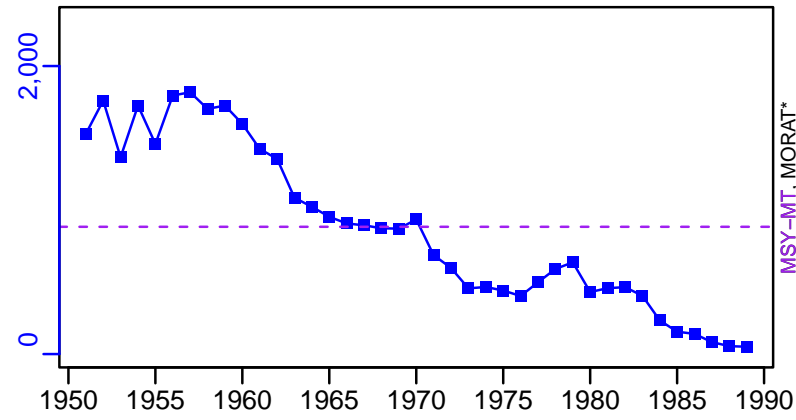
Recruits\*



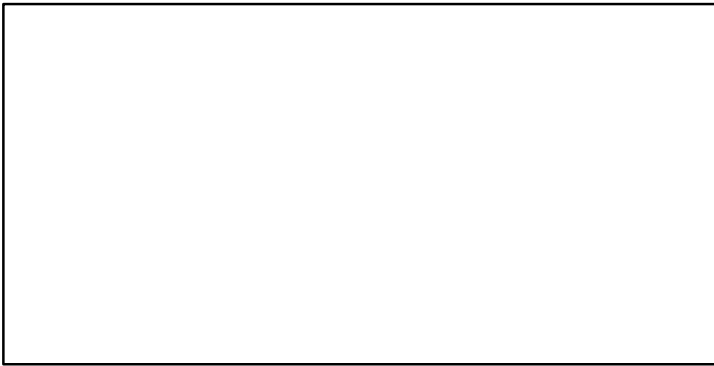
Lingcod Strait of Georgia [LINGCODSOG]

TC-MT, TL\*, RecC\* (1927-2014-OSGOOD)

TAC\*, Cpair\*, Cadv\*



survB\*



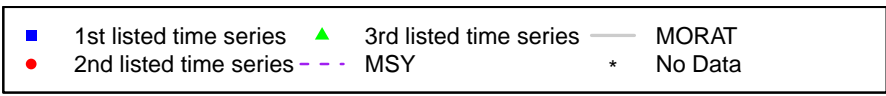
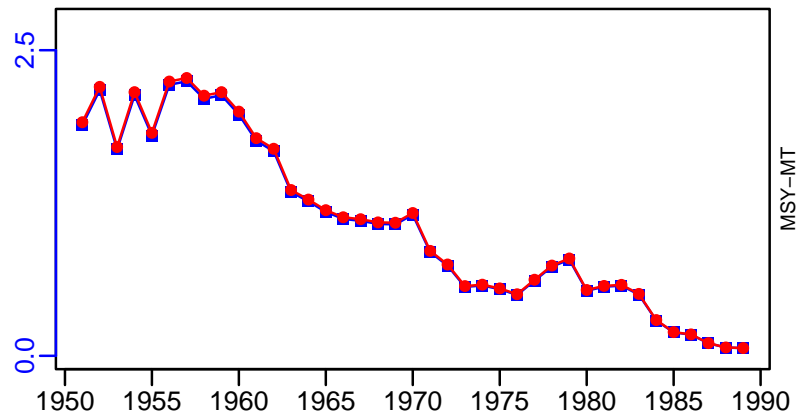
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1927-2014-OSGOOD)



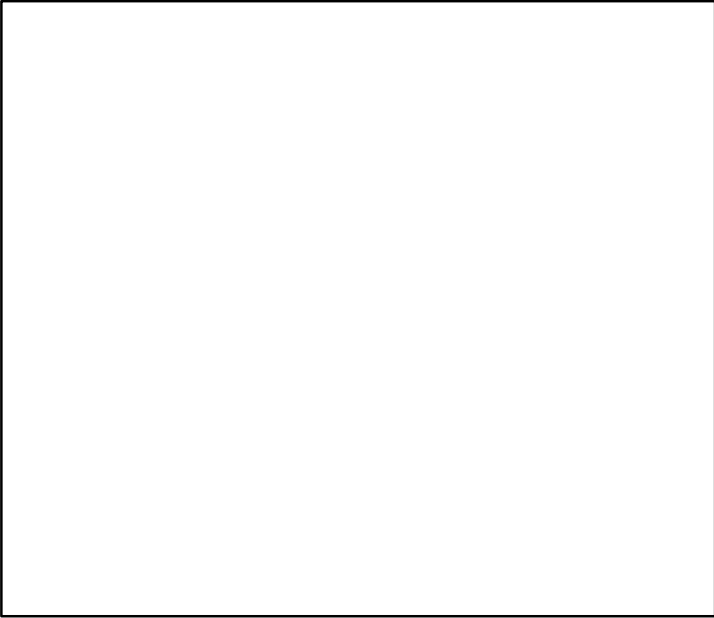
## Longnose skate West Coast of Vancouver Island [LNOSESKA3CD]

Metadata	
<b>Scientific Name</b>	Raja rhina
<b>Current Assess ID</b>	DFO-PAC-LNOSESKA3CD-1954-2011-OSGOOD
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2011

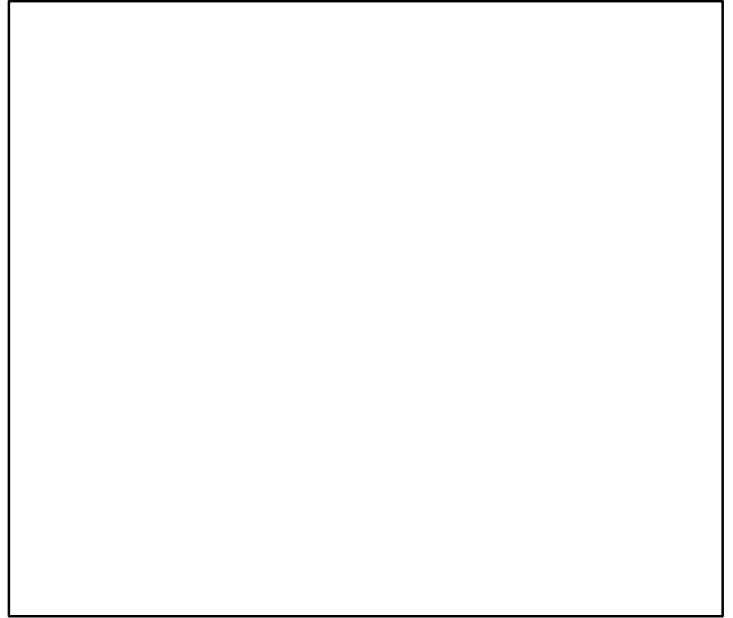
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2011	286		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

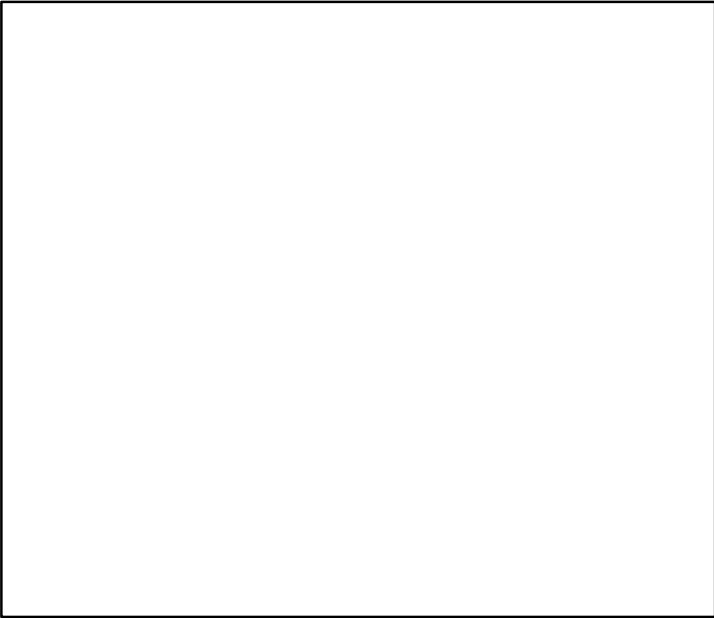
**Kobe MSY\***



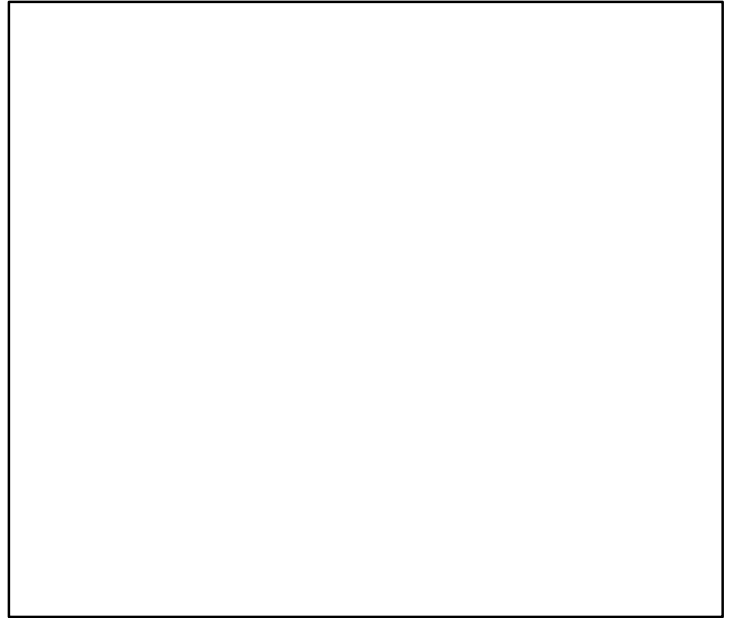
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Longnose skate West Coast of Vancouver Island [LNOSESKA3CD]

**TB\***



**SSB\***



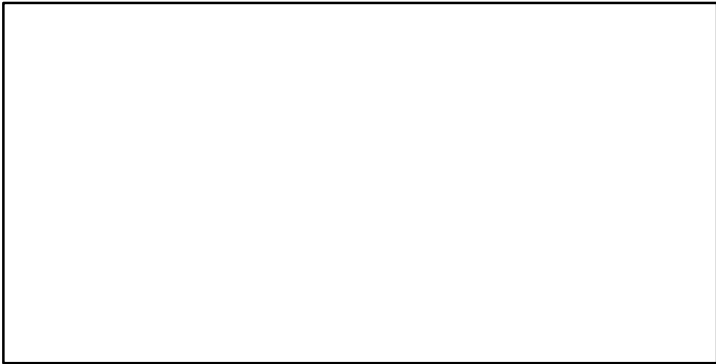
**TN \***



**F\***



**ER\***



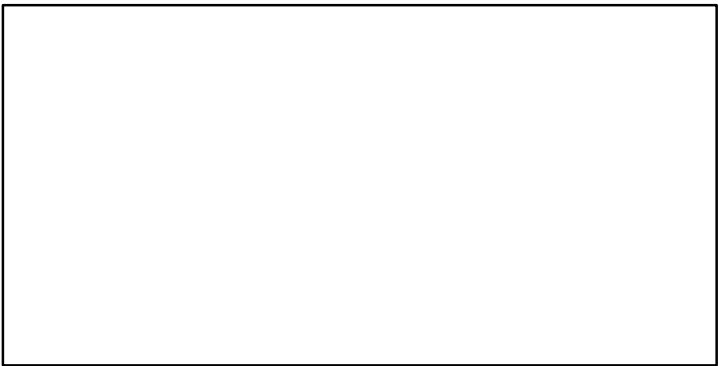
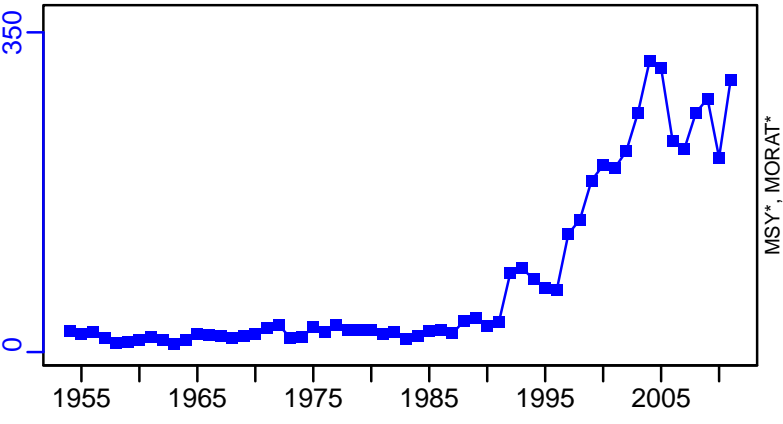
**Recruits\***



Longnose skate West Coast of Vancouver Island [LNOSESKA3CD]

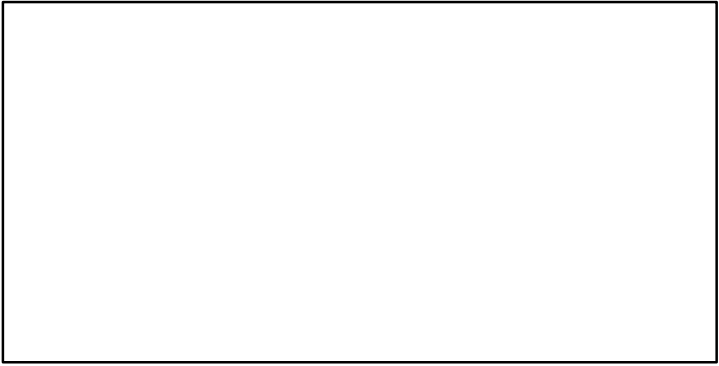
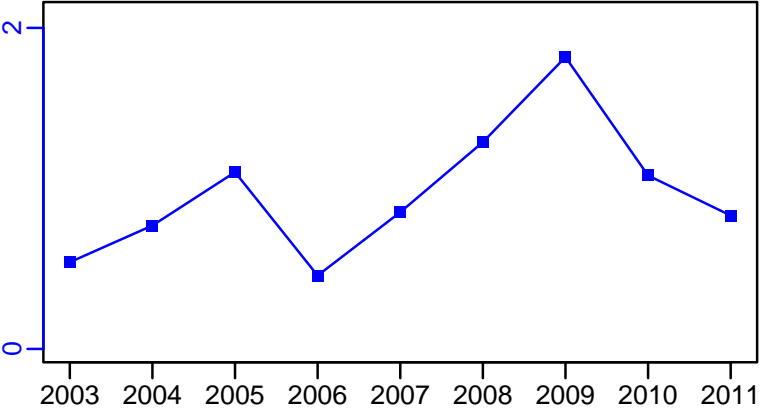
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)

TAC\*, Cpair\*, Cadv\*



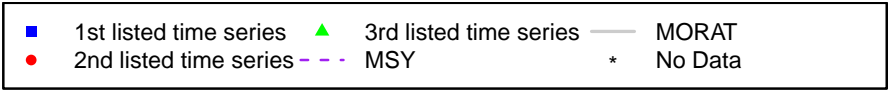
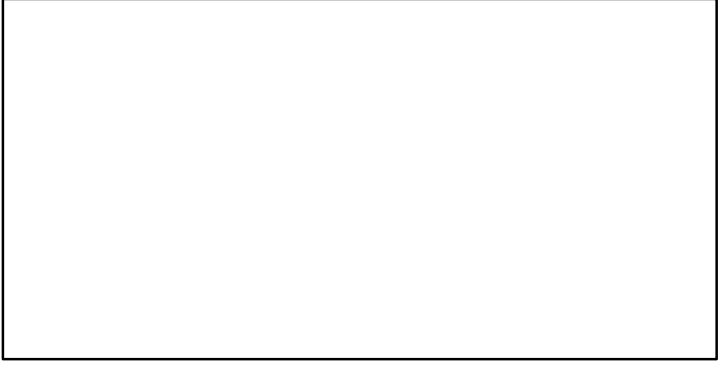
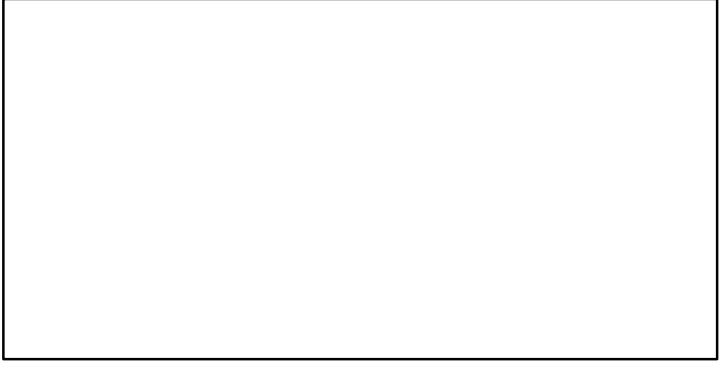
survB-fisherE02hooks (1954-2011-OSGOOD)

CPUE\*



EFFORT\*

CdivMSY\*



## Longnose skate Strait of Georgia [LNOSESKA4B]

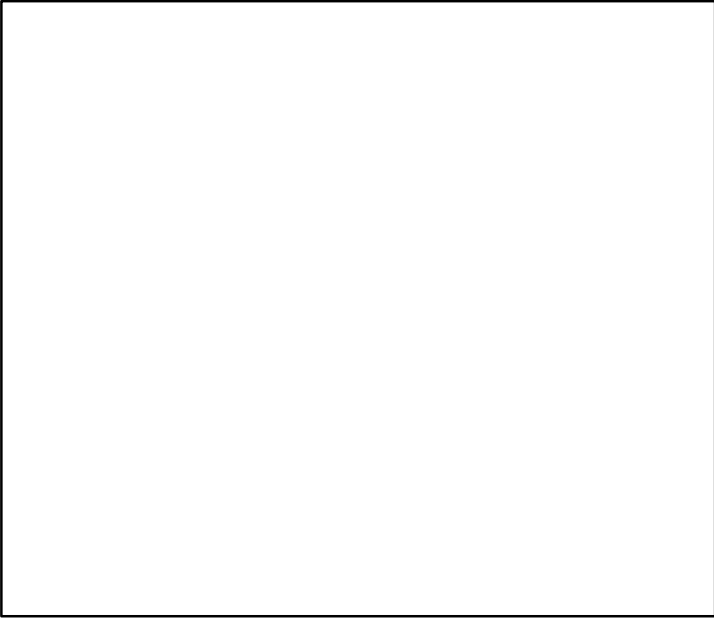
Metadata	
<b>Scientific Name</b>	Raja rhina
<b>Current Assess ID</b>	DFO-PAC-LNOSESKA4B-1996-2011-OSGOOD
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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	TC-MT	2011	1.5		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Longnose skate Strait of Georgia [LNOSESKA4B]

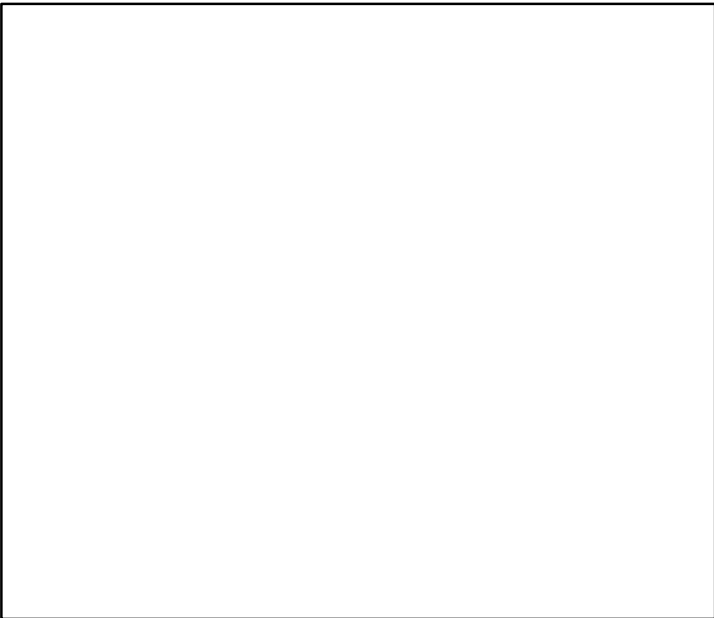
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***

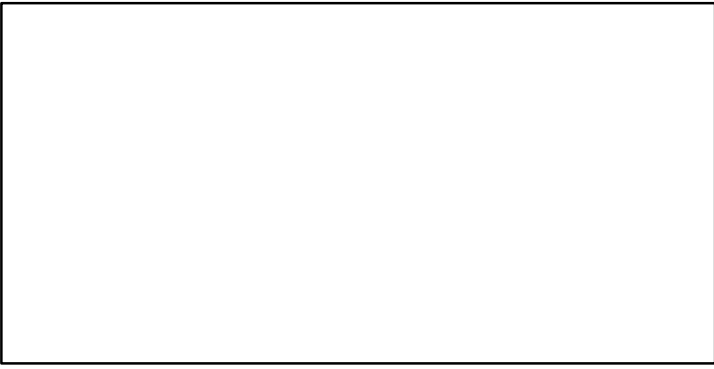


◆ Start Year ◆ End Year \* No Data



Longnose skate Strait of Georgia [LNOSESKA4B]

**TB\***



**SSB\***



**TN \***



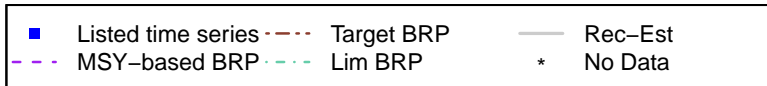
**F\***



**ER\***



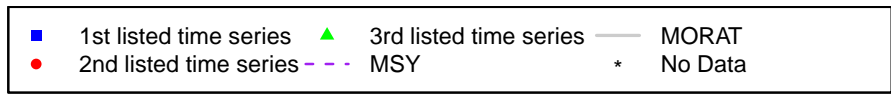
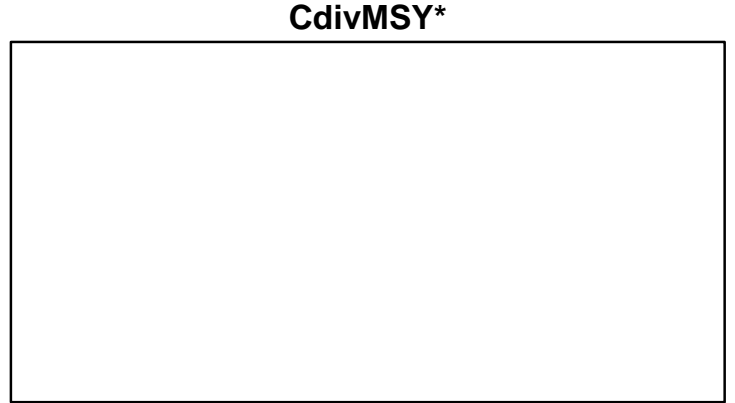
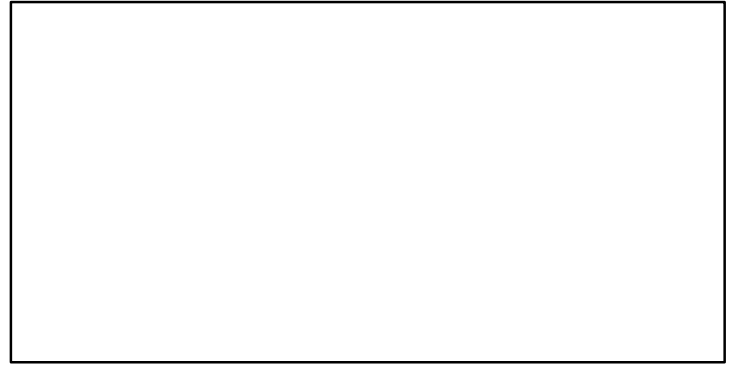
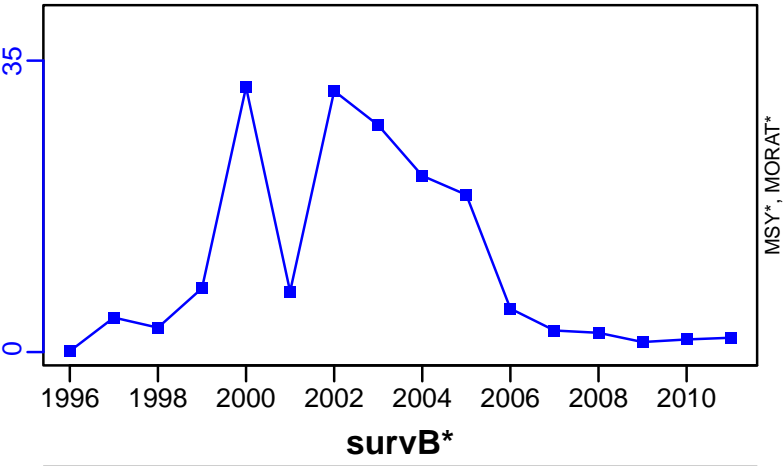
**Recruits\***



Longnose skate Strait of Georgia [LNOSESKA4B]

TC-MT, TL\*, RecC\* (1996-2011-OSGOOD)

TAC\*, Cpair\*, Cadv\*



## Longnose skate Queen Charlotte Sound [LNOSESKA5AB]

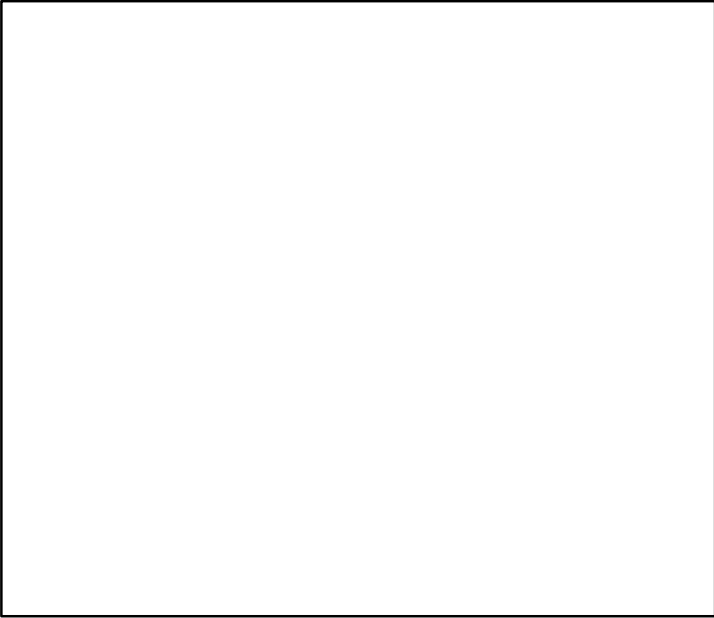
Metadata	
<b>Scientific Name</b>	Raja rhina
<b>Current Assess ID</b>	DFO-PAC-LNOSESKA5AB-1954-2012-OSGOOD
<b>Area</b>	Queen Charlotte Sound
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2012

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

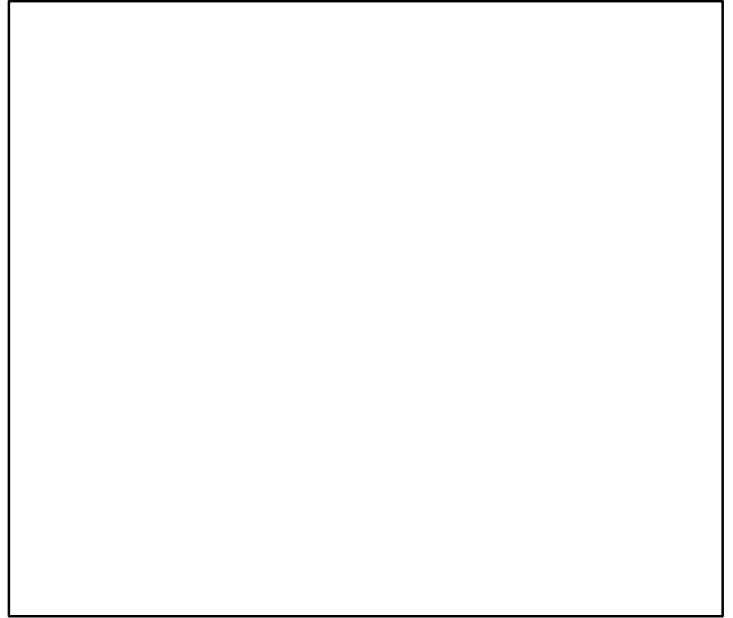
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2012	115		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Longnose skate Queen Charlotte Sound [LNOSESKA5AB]

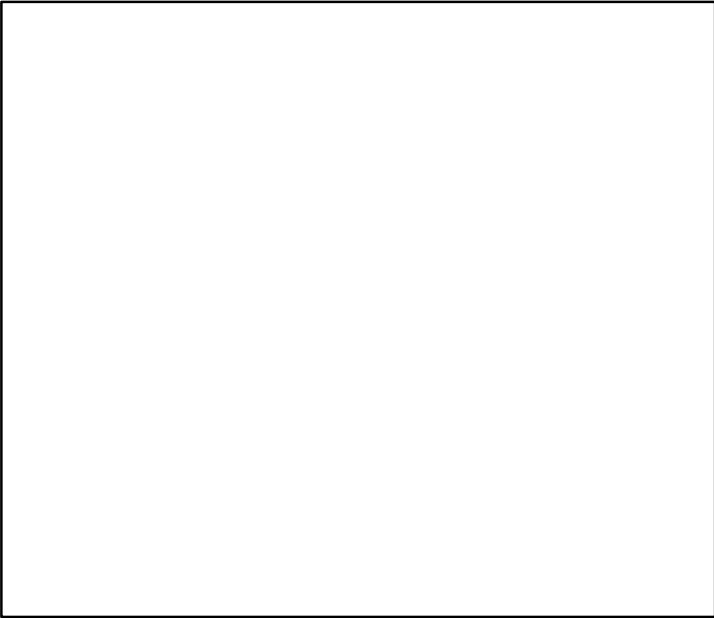
**Kobe MSY\***



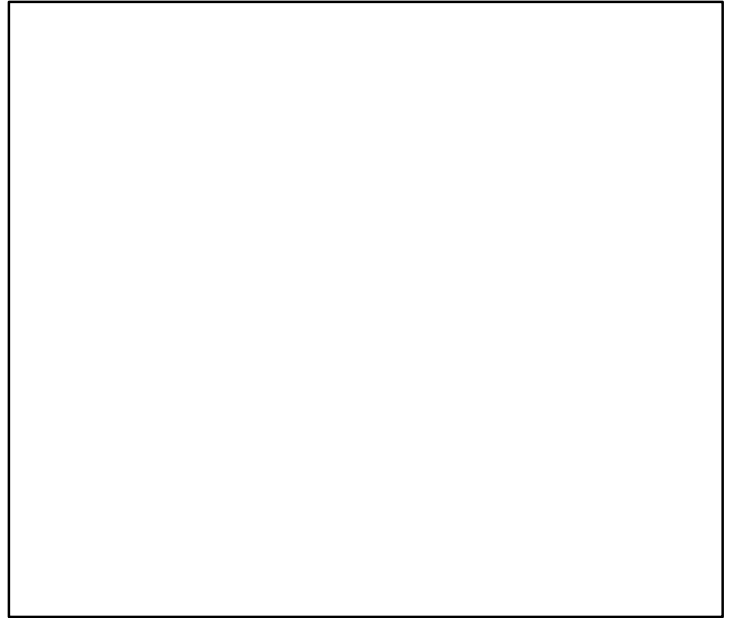
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Longnose skate Queen Charlotte Sound [LNOSEKA5AB]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



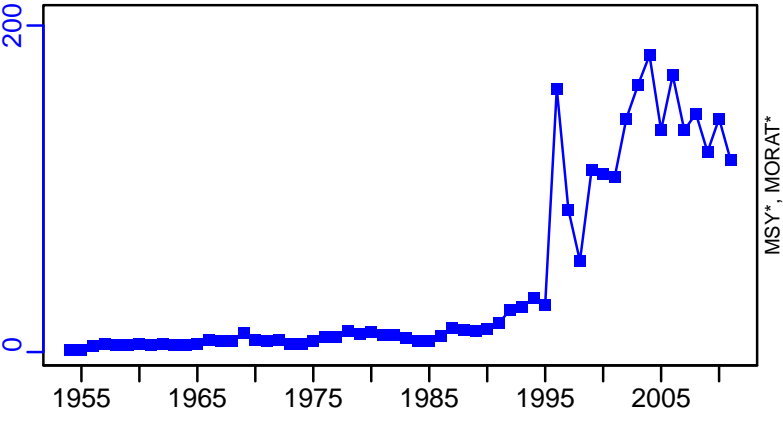
**Recruits\***



Longnose skate Queen Charlotte Sound [LNOSESKA5AB]

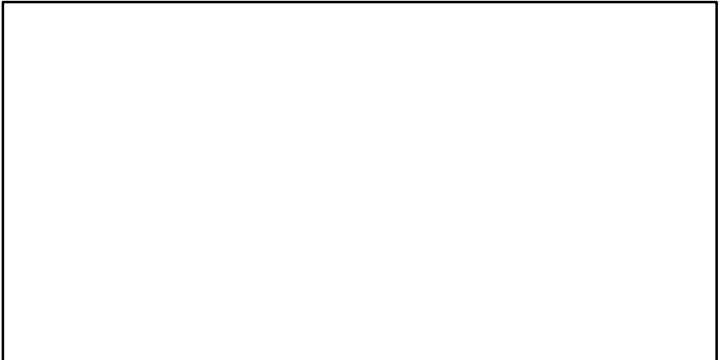
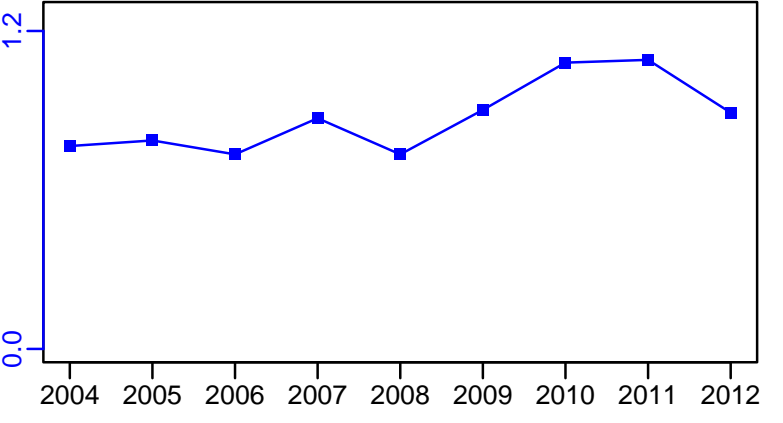
TC-MT, TL\*, RecC\* (1954-2012-OSGOOD)

TAC\*, Cpair\*, Cadv\*



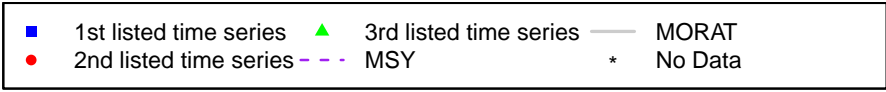
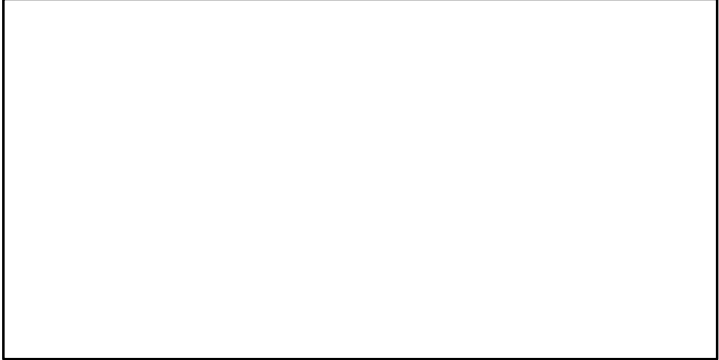
survB-fisherE02hooks (1954-2012-OSGOOD)

CPUE\*



EFFORT\*

CdivMSY\*



## Longnose skate Hecate Strait [LNOSESKA5CDE]

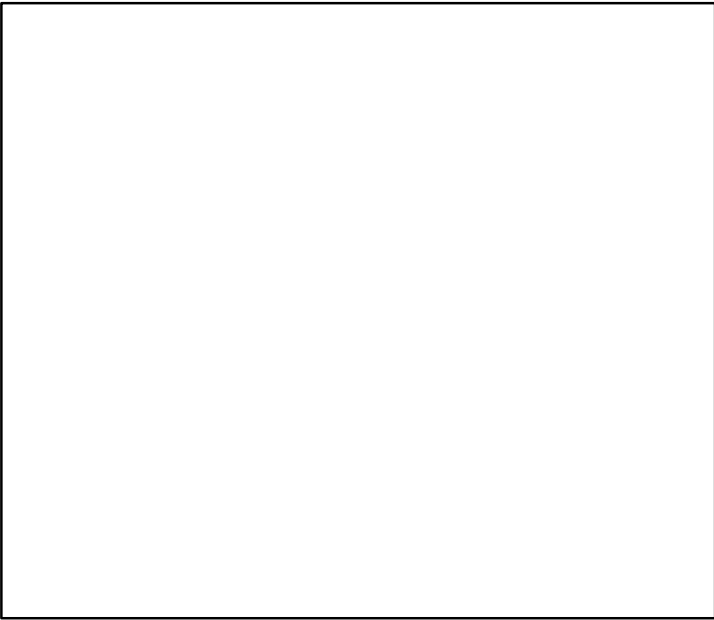
Metadata	
<b>Scientific Name</b>	Raja rhina
<b>Current Assess ID</b>	DFO-PAC-LNOSESKA5CDE-1954-2011-OSGOOD
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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	TC-MT	2011	73		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Longnose skate Hecate Strait [LNOSESKA5CDE]

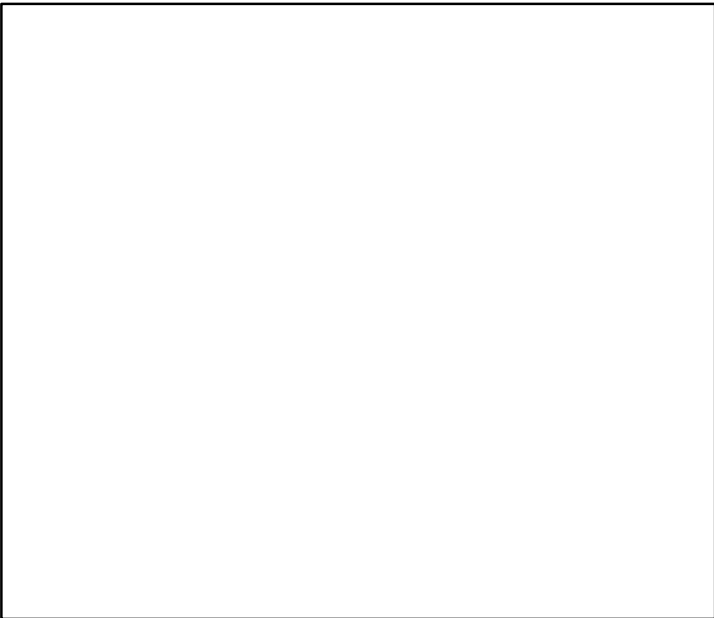
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

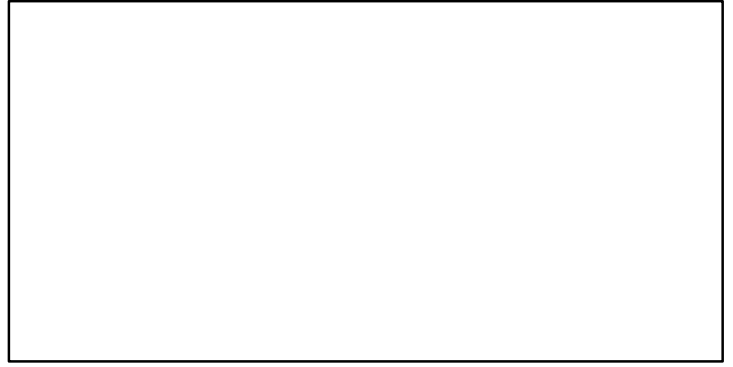


Longnose skate Hecate Strait [LNOSESKA5CDE]

TB\*



SSB\*



TN \*



F\*



ER\*

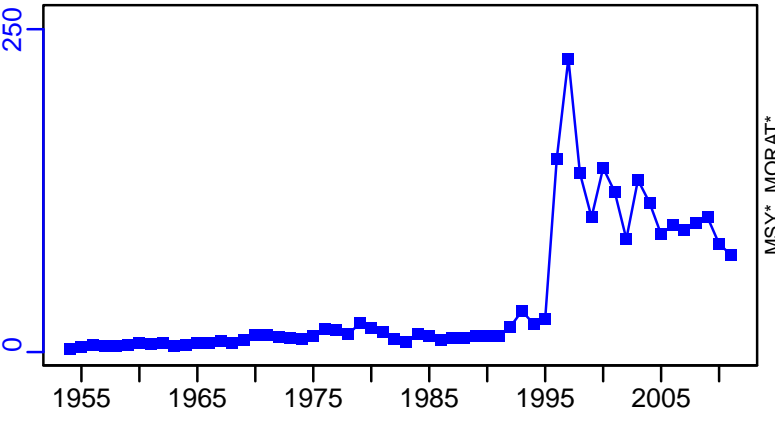


Recruits\*

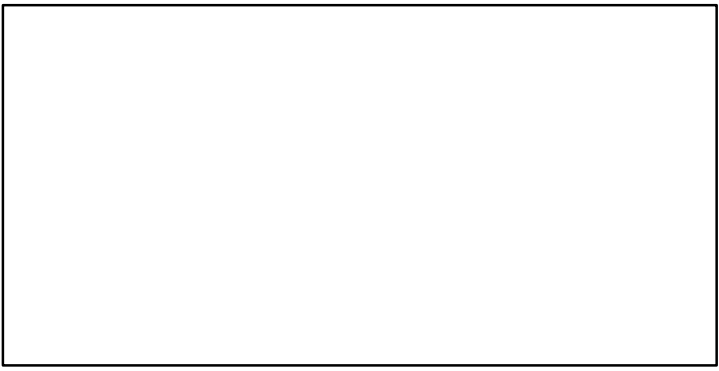


Longnose skate Hecate Strait [LNOSESKA5CDE]

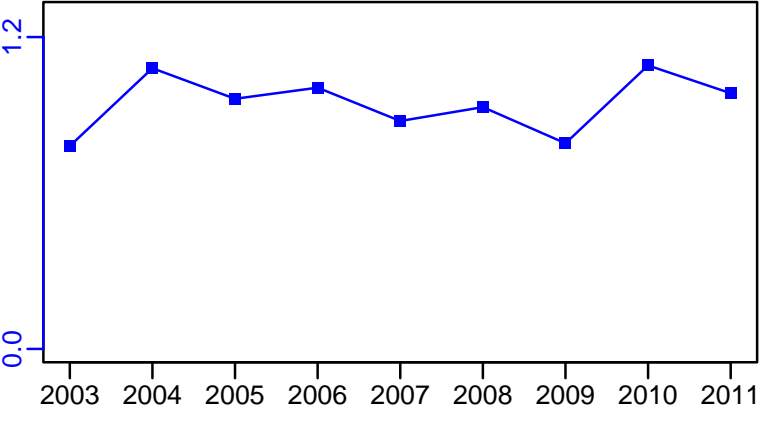
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



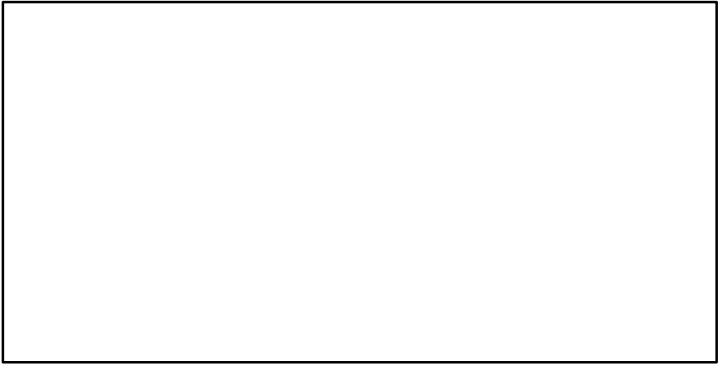
TAC\*, Cpair\*, Cadv\*



survB-fisherE02hooks (1954-2011-OSGOOD)



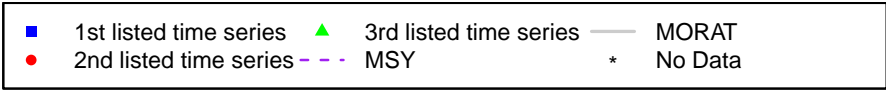
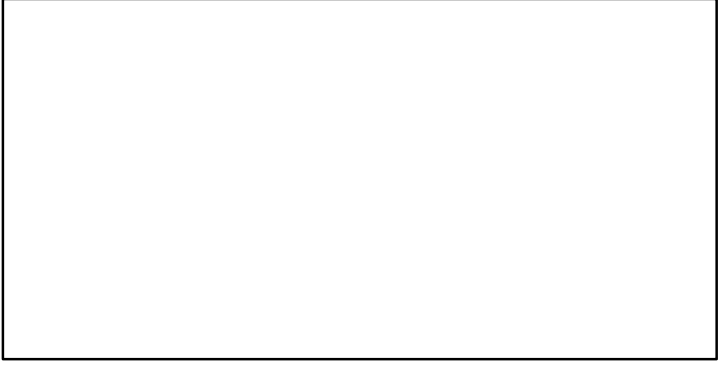
CPUE\*



EFFORT\*



CdivMSY\*



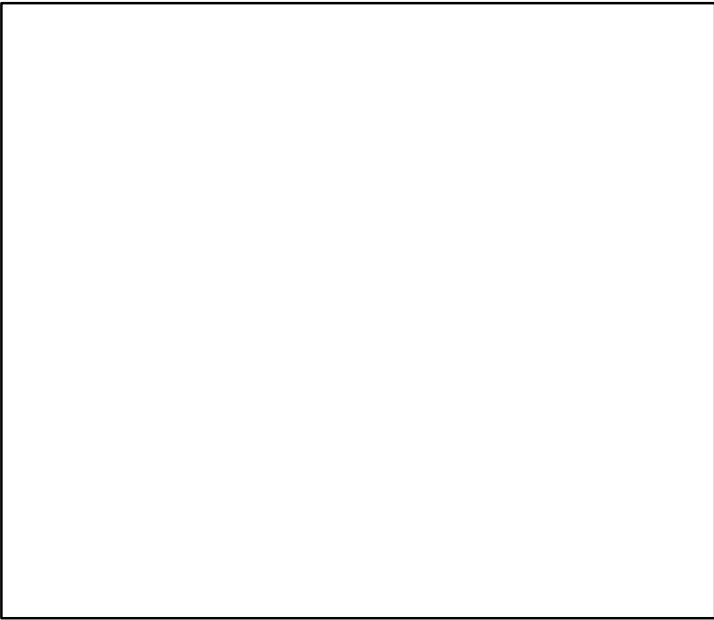
## Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA14-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 14
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	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	60	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

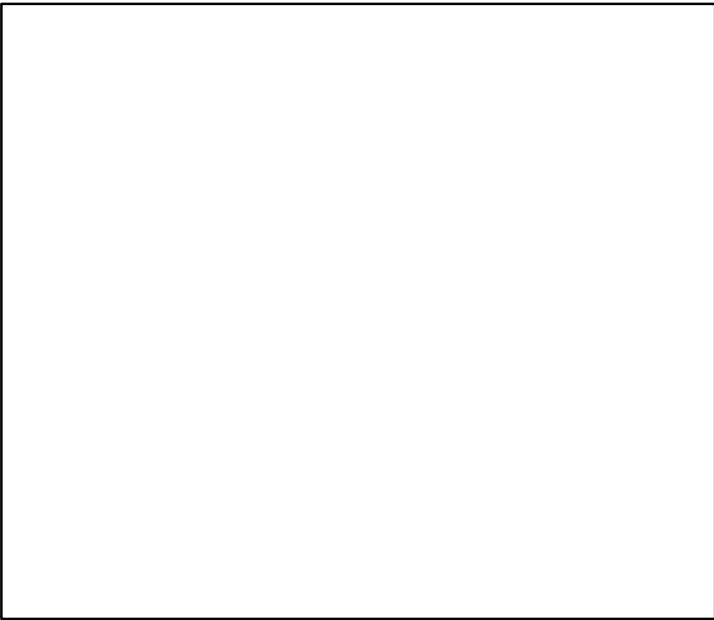
**Kobe MSY\***



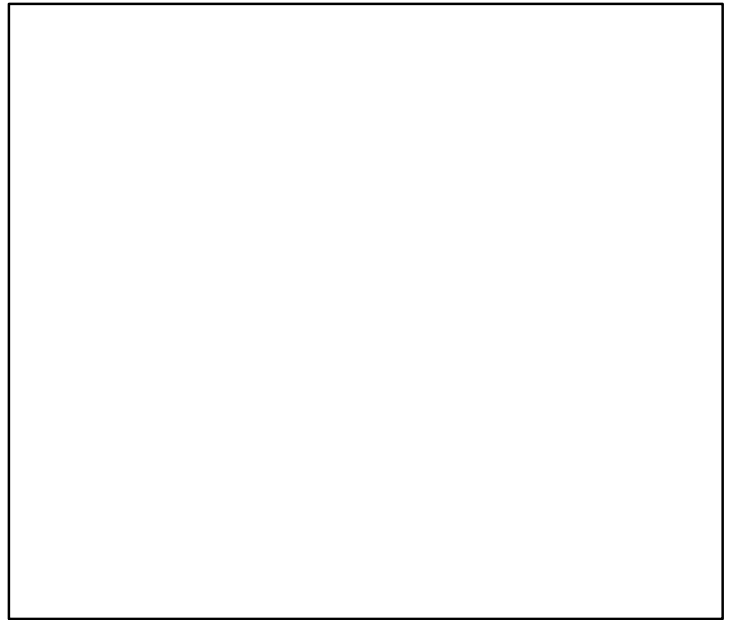
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

**TB\***



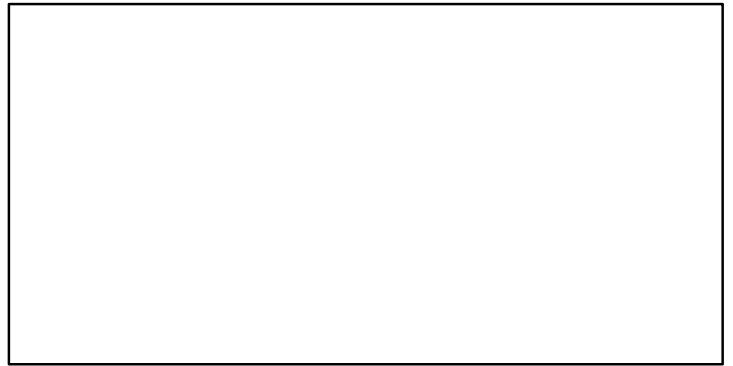
**SSB\***



**TN \***



**F\***



**ER\***

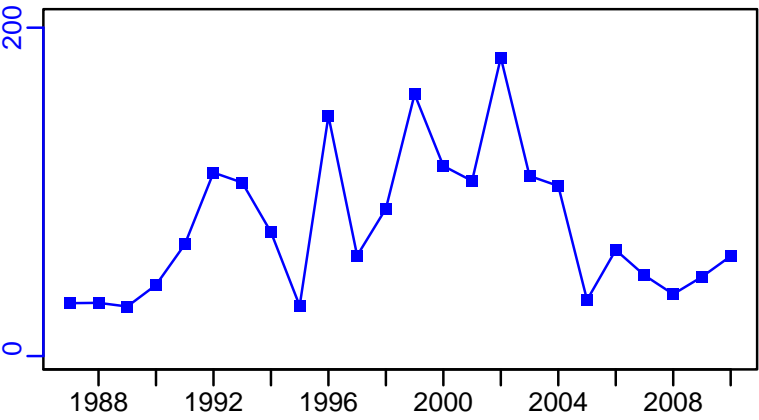


**Recruits\***

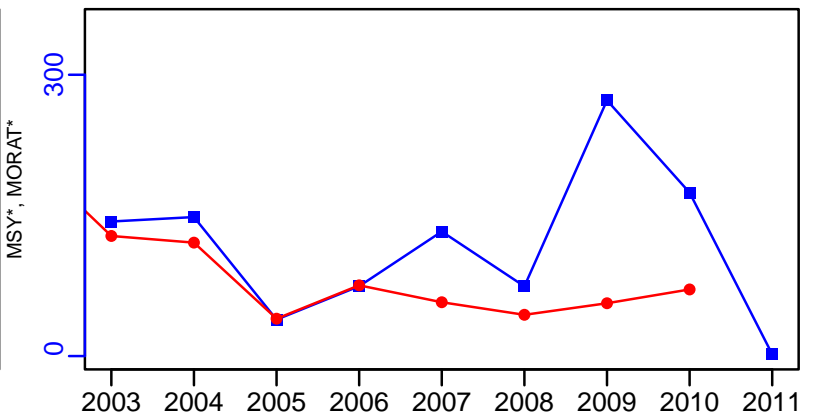


Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

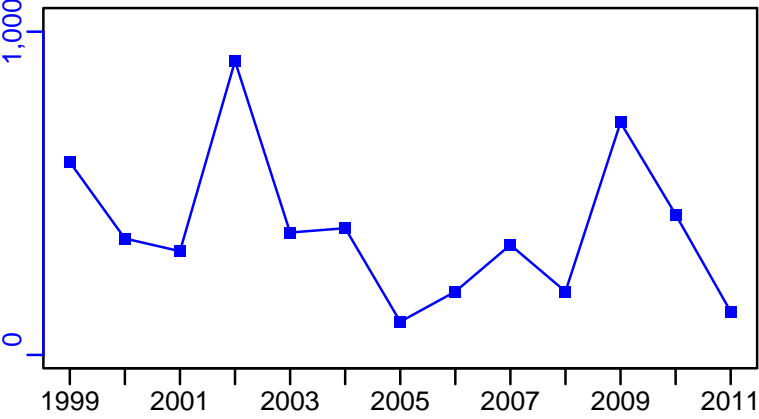
TL-MT, TC\*, RecC\* (1987-2011-WATSON)



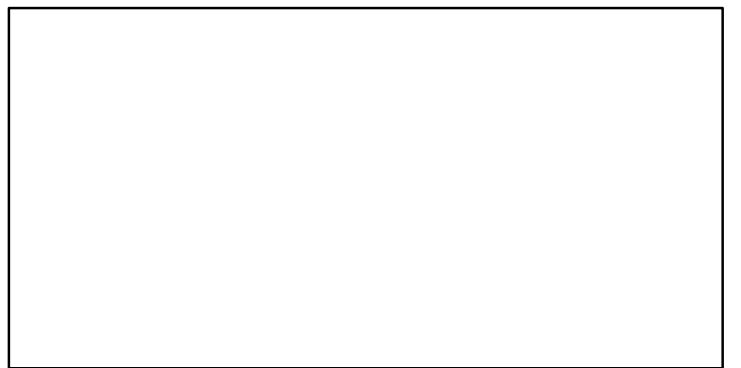
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



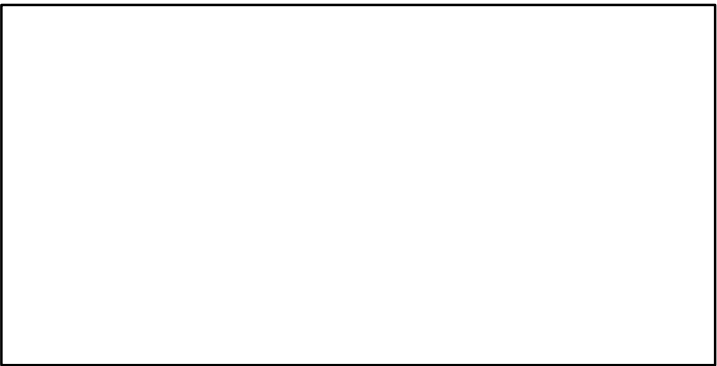
survB-MT (1987-2011-WATSON)



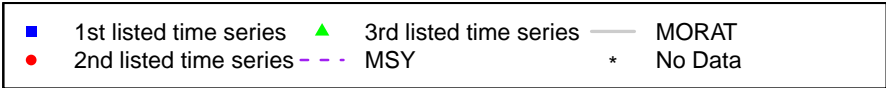
CPUE\*



EFFORT\*



CdivMSY\*



## Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

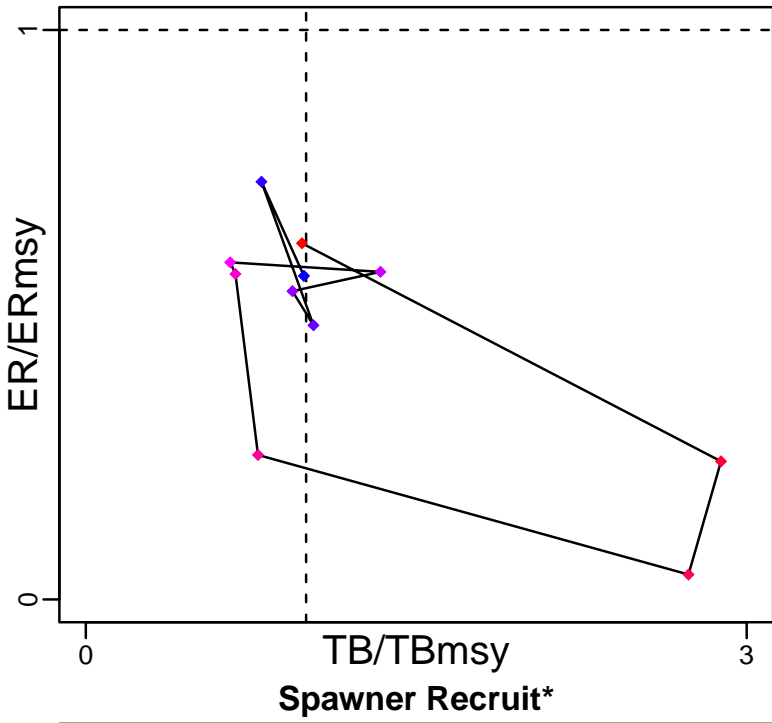
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA16-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 16
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

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

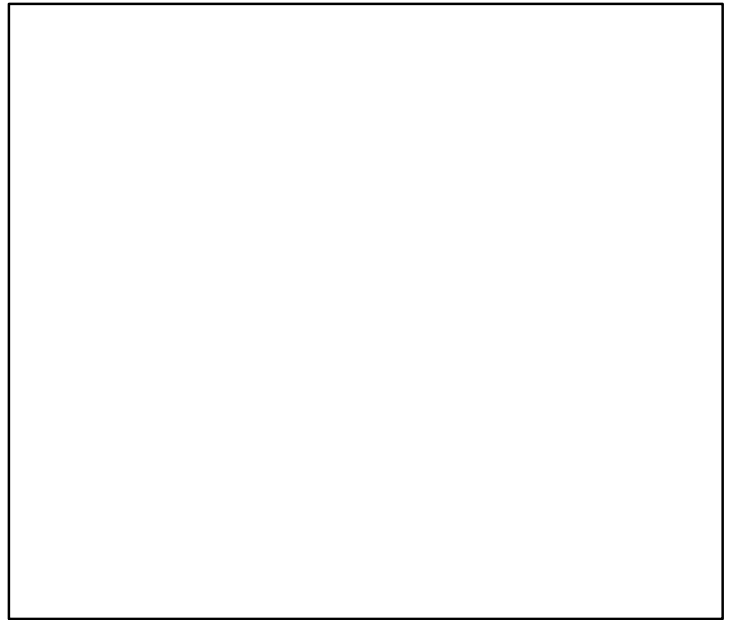
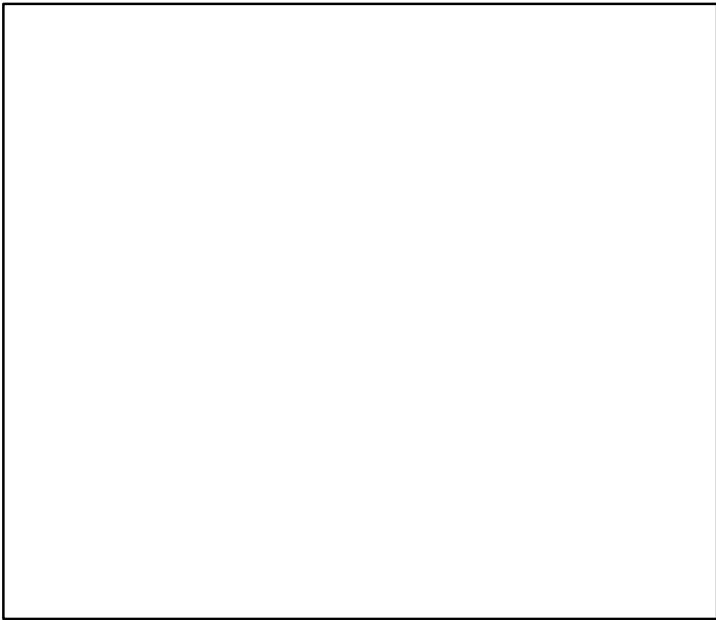
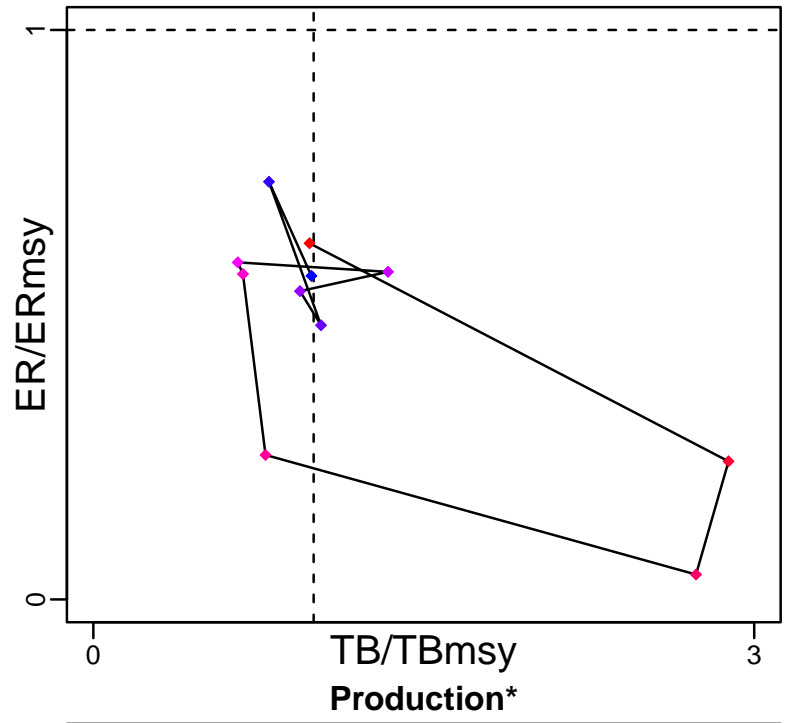
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	94	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0.318	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	36	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

Kobe MSYpref (1987-2011-WATSON)



Kobe MGTpref (1987-2011-WATSON)



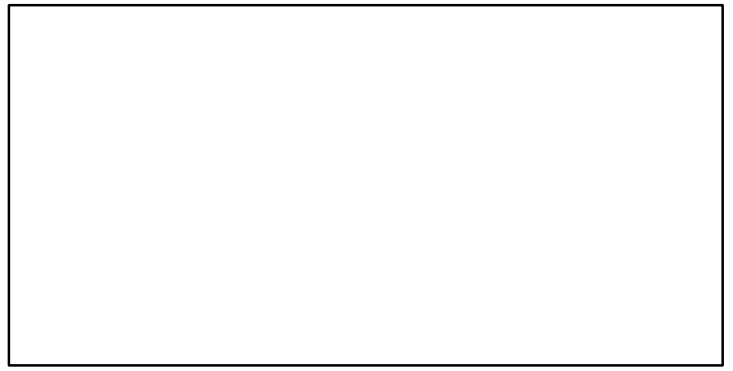
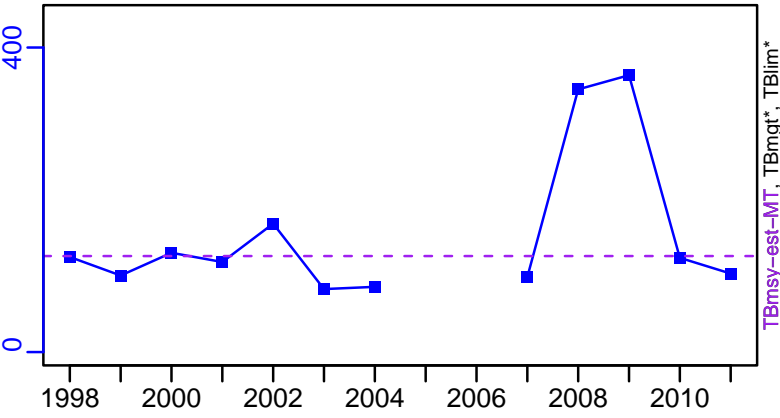
◆ Start Year ◆ End Year \* No Data



Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

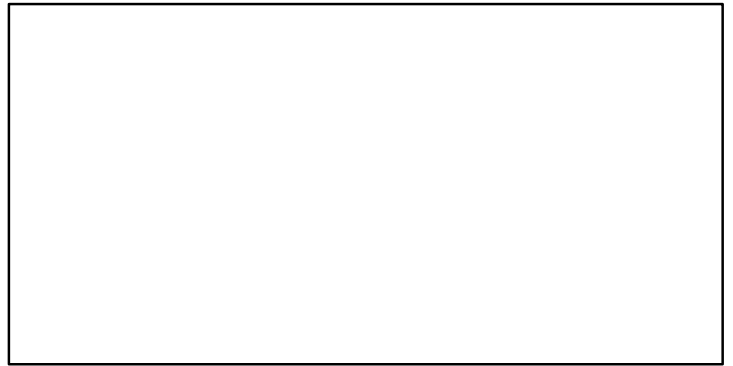
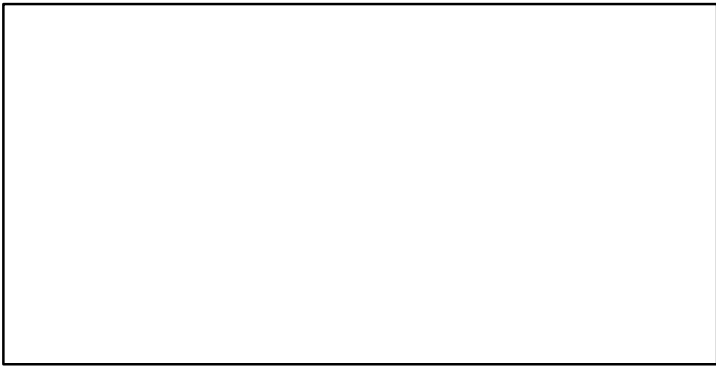
TB-MT (1987-2011-WATSON)

SSB\*



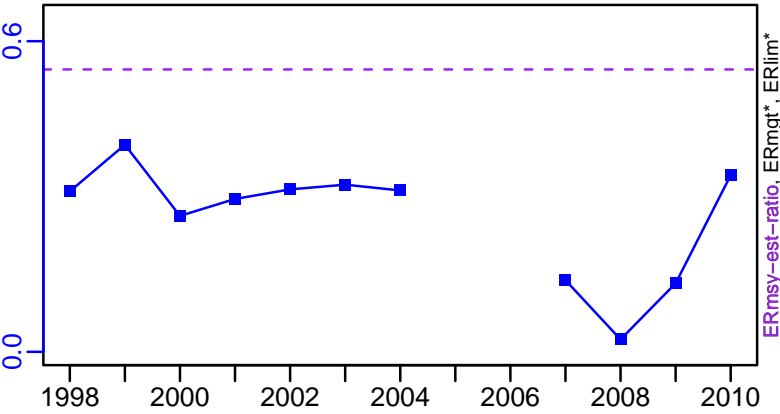
TN \*

F\*



ER-calc-ratio (1987-2011-WATSON)

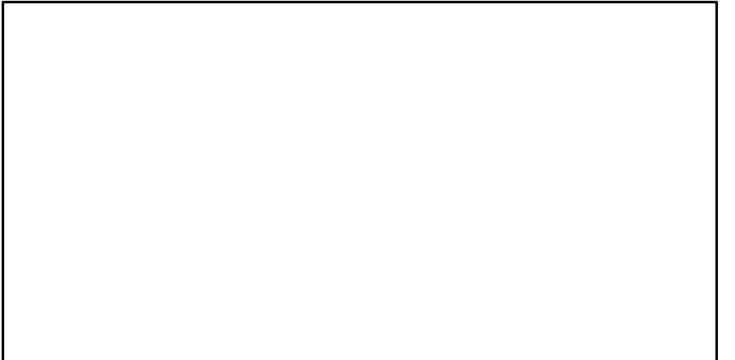
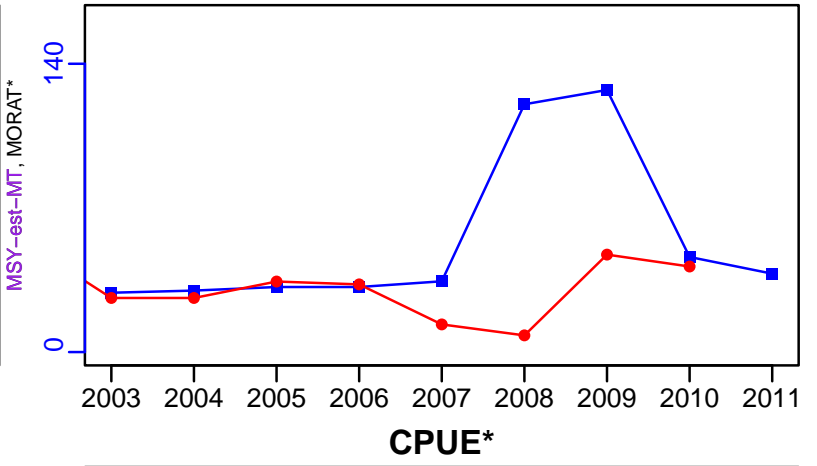
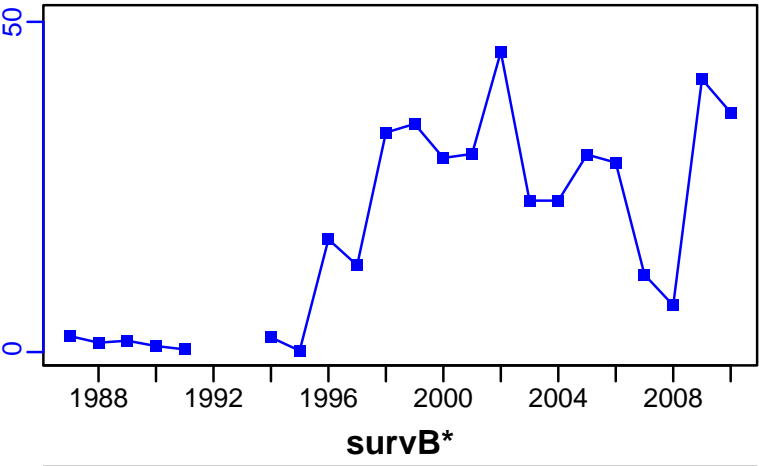
Recruits\*



Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

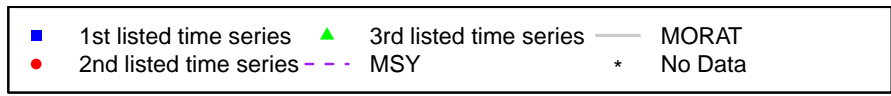
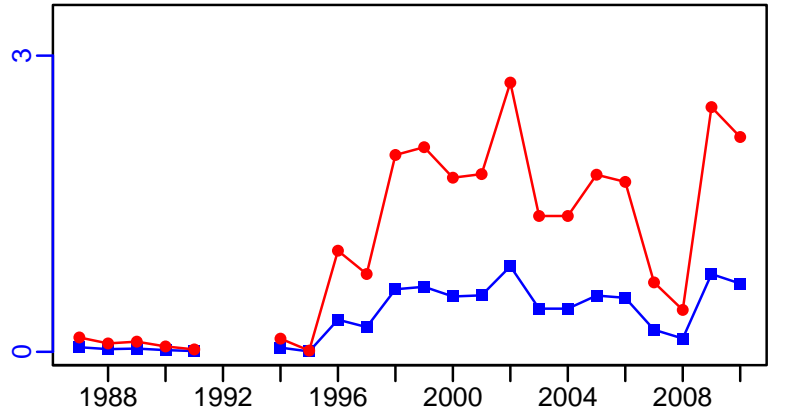
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987-2011-WATSON)



## Ocean shrimp Shrimp Management Areas 18 and 19 [PANDALSMA18-19]

Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA18-19-1987-2011-WATSON
<b>Area</b>	Shrimp Management Areas 18 and 19
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

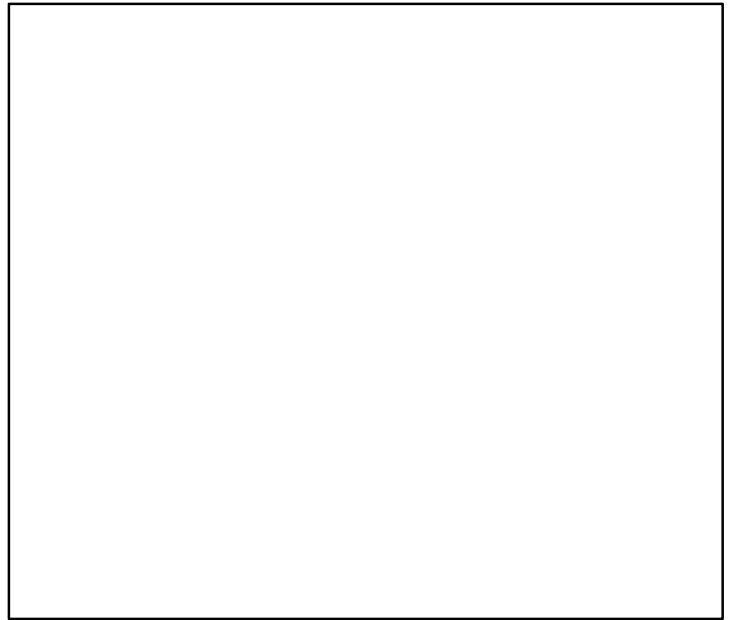
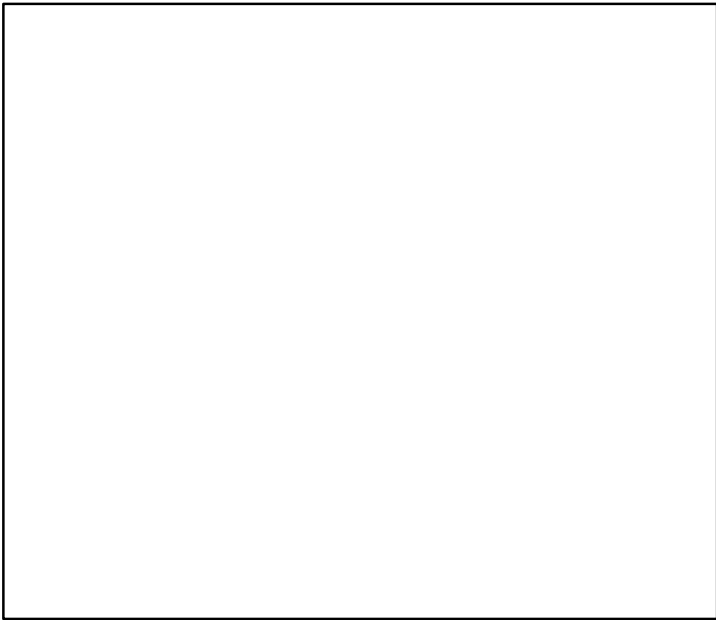
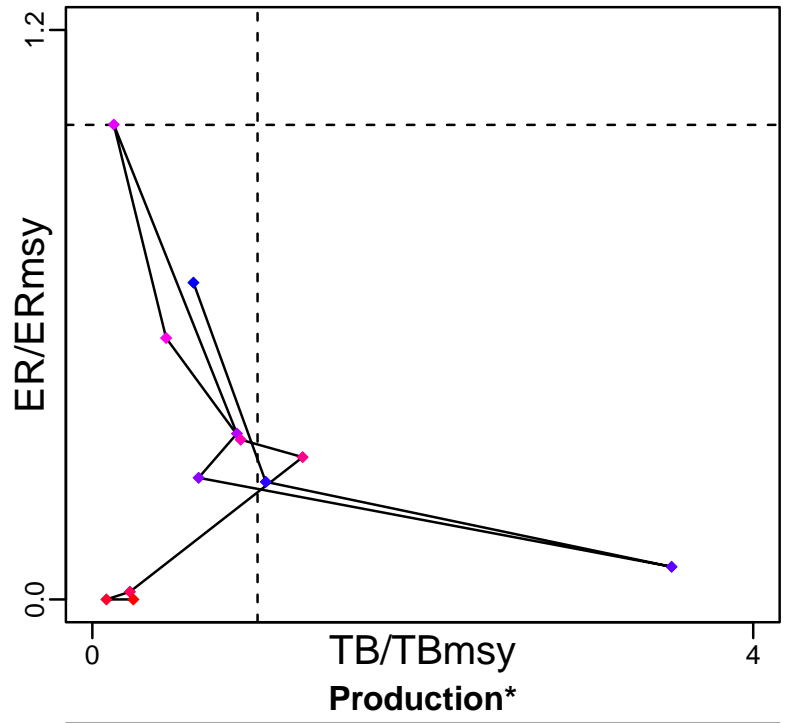
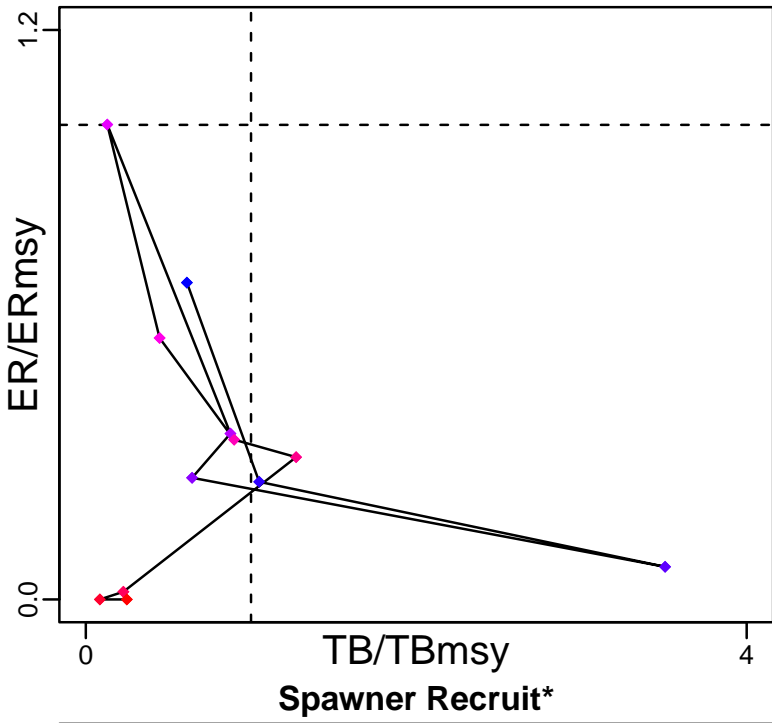
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	56	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	0	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Ocean shrimp Shrimp Management Areas 18 and 19 [PANDALSMA18-19]

Kobe MSYpref (1987-2011-WATSON)

Kobe MGTpref (1987-2011-WATSON)

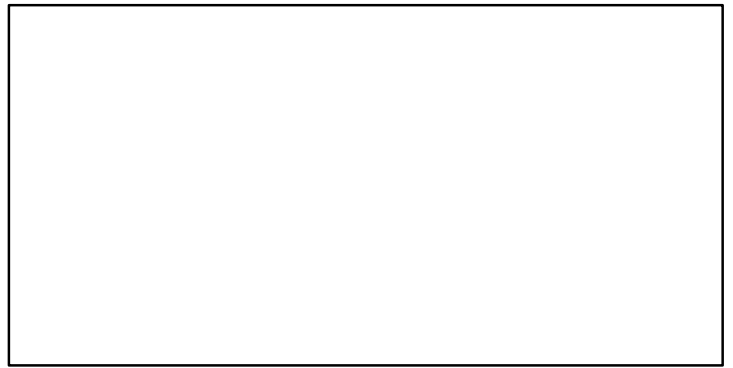
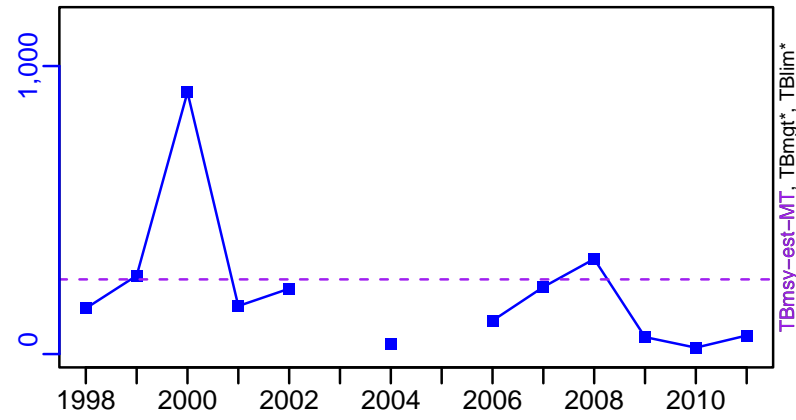


◆ Start Year ◆ End Year \* No Data

Ocean shrimp Shrimp Management Areas 18 and 19 [PANDALSMA18-19]

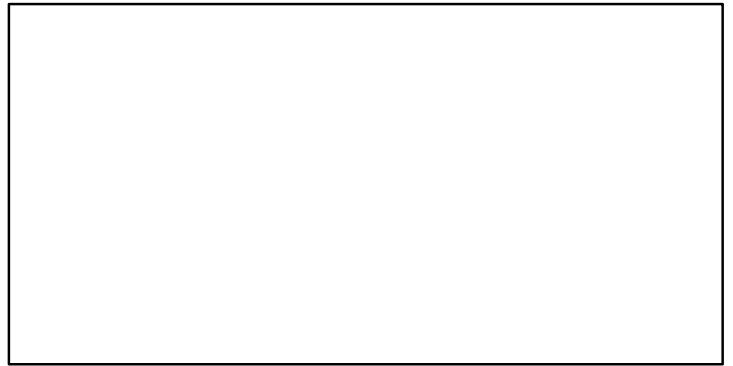
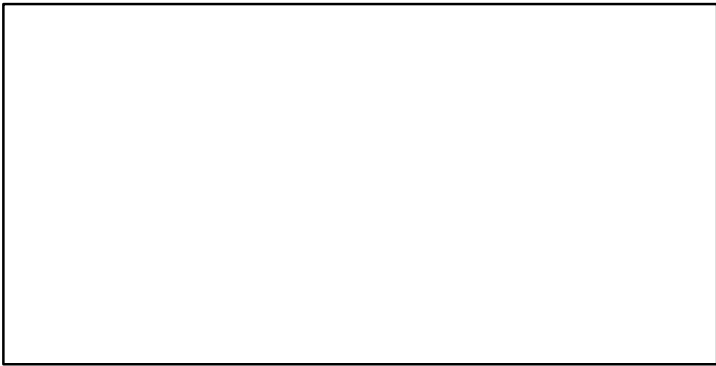
TB-MT (1987-2011-WATSON)

SSB\*



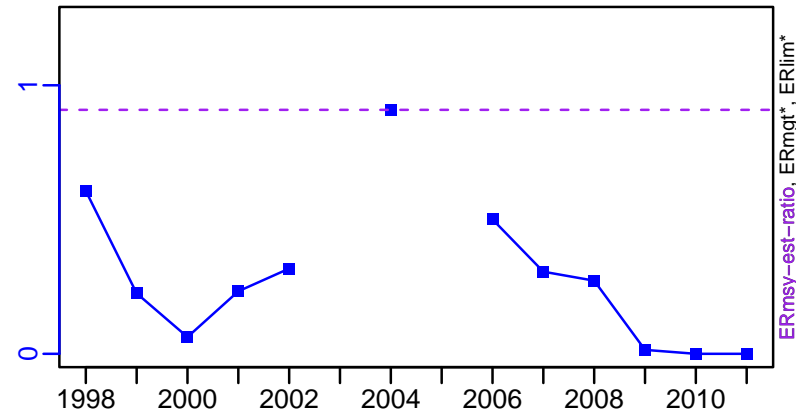
TN \*

F\*



ER-calc-ratio (1987-2011-WATSON)

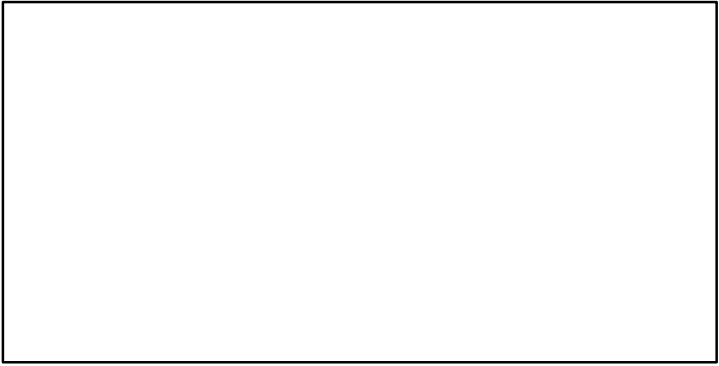
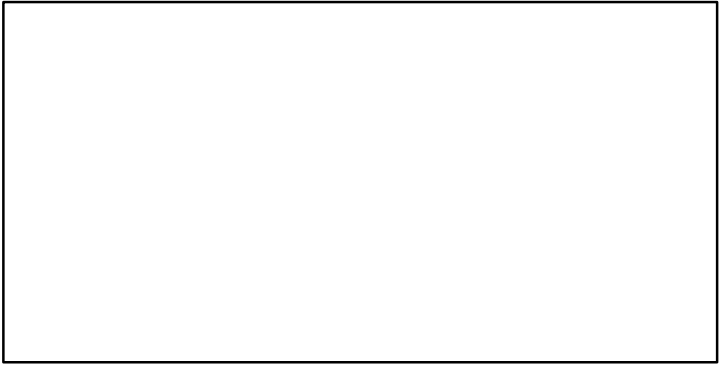
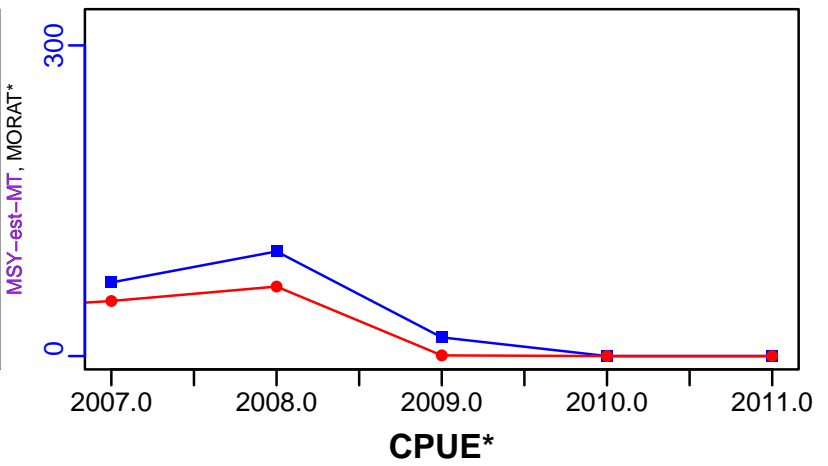
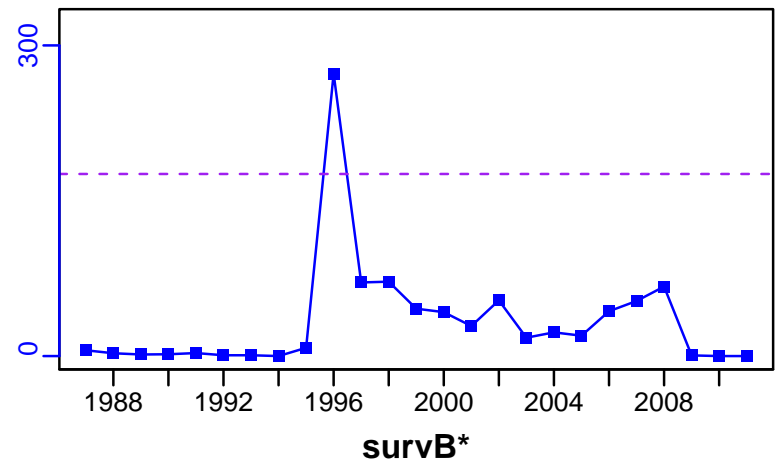
Recruits\*



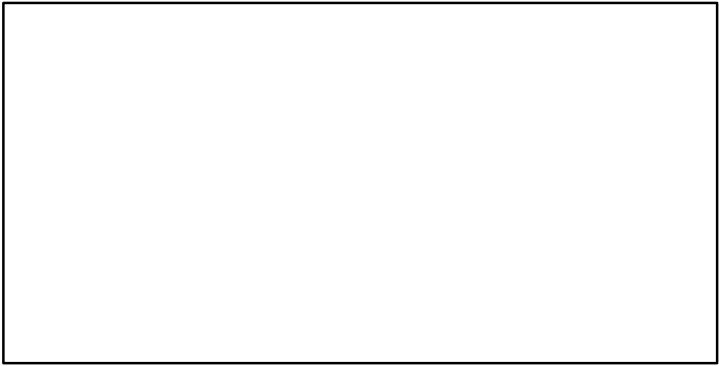
Ocean shrimp Shrimp Management Areas 18 and 19 [PANDALSMA18-19]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

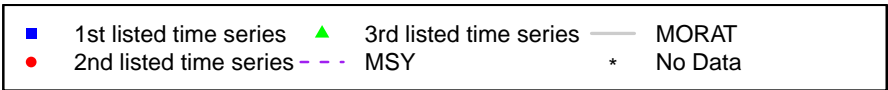
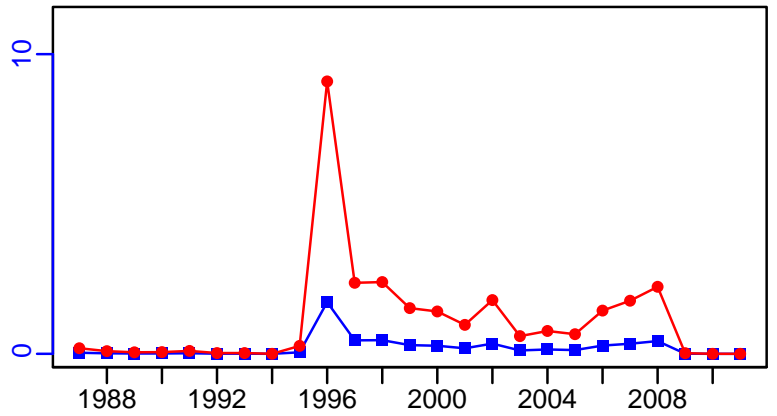
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987-2011-WATSON)



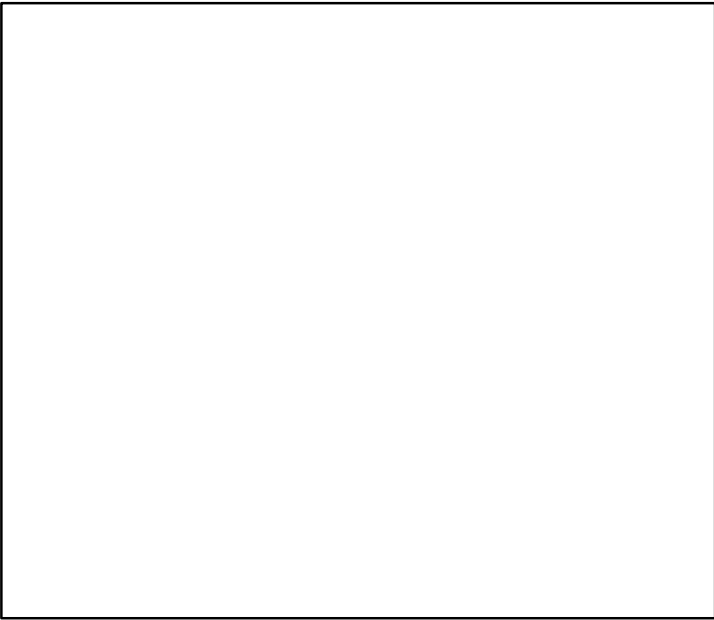
## Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAFR-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area FR
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	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	72	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

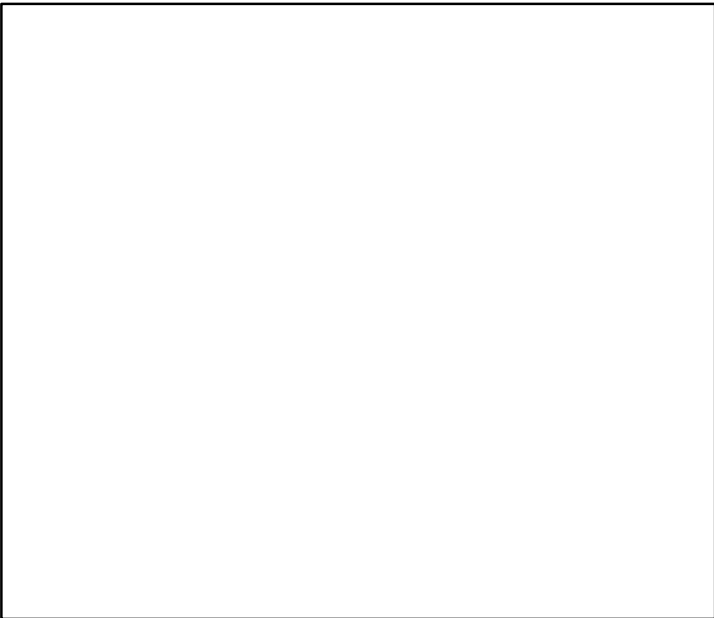
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

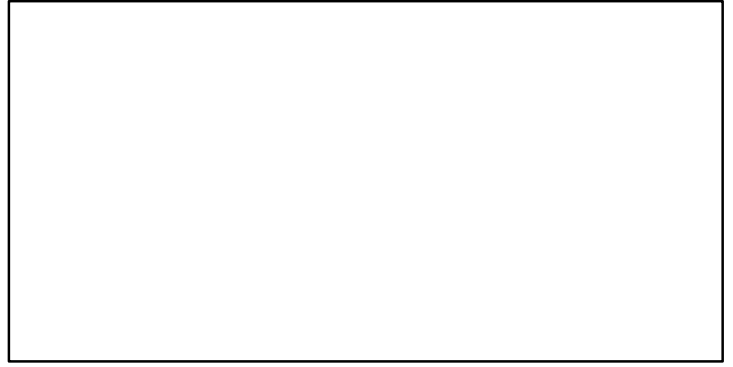


Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



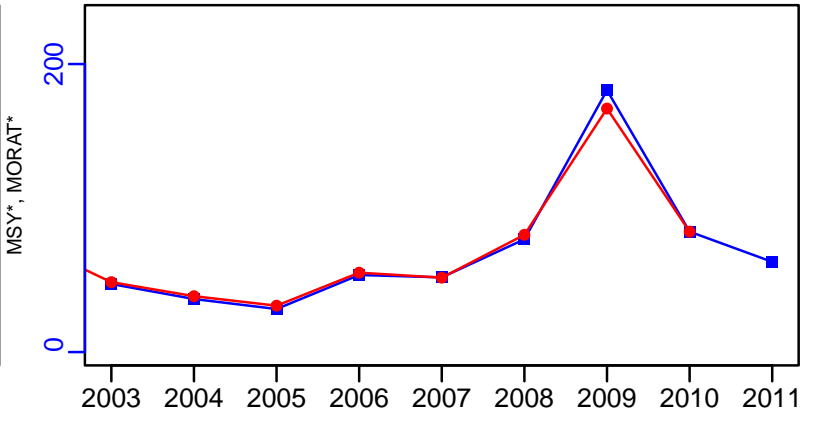
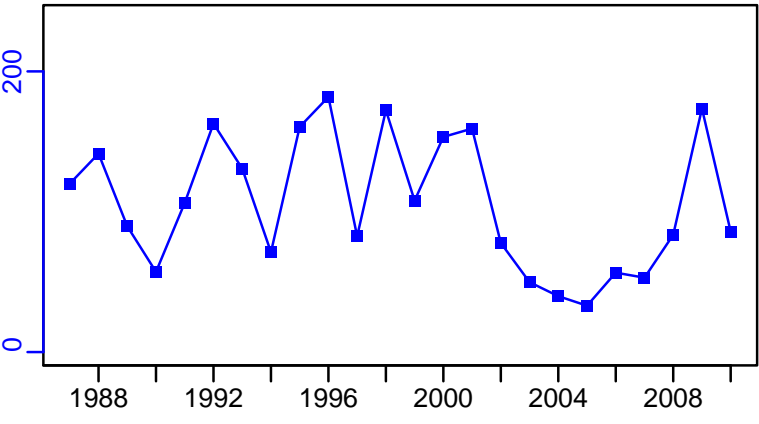
**Recruits\***



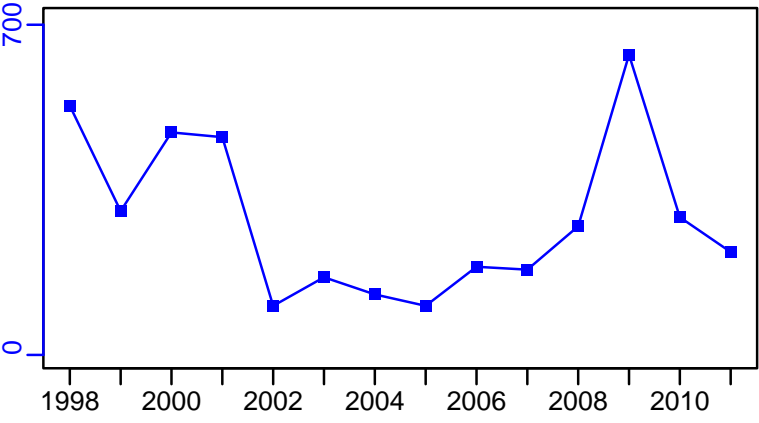
Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

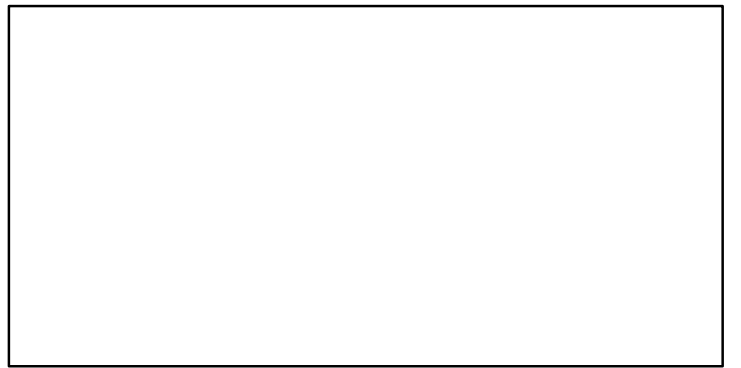
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



survB-MT (1987-2011-WATSON)



CPUE\*



EFFORT\*



CdivMSY\*



## Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

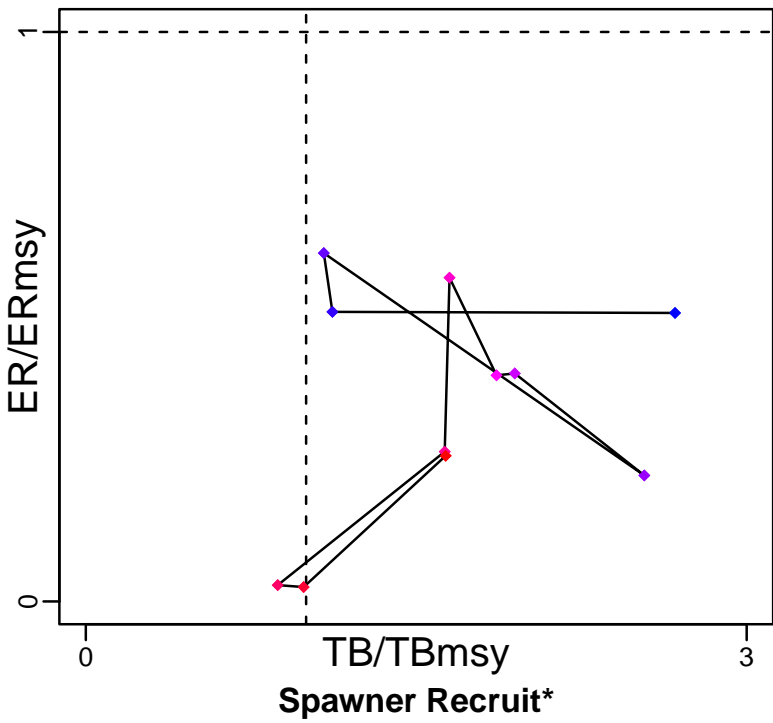
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAGTSE-1990-2012-WATSON
<b>Area</b>	Shrimp Management Area GTSE
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2012

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

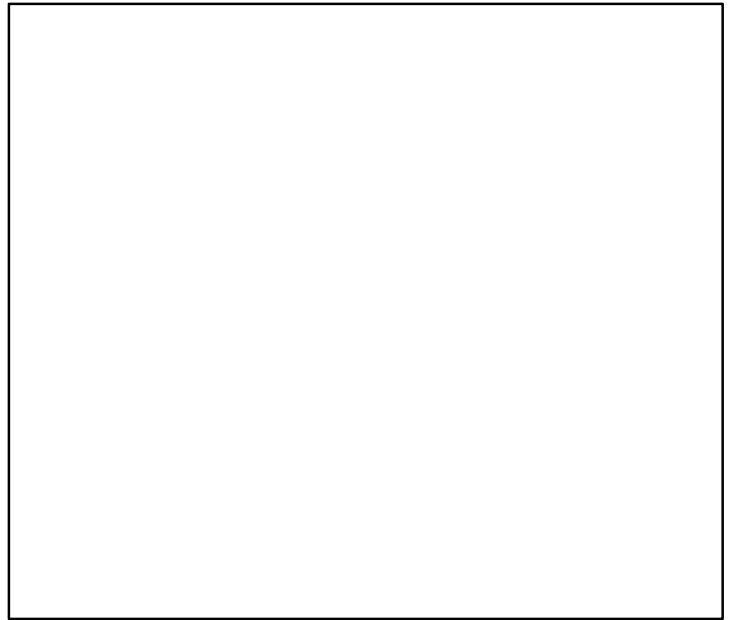
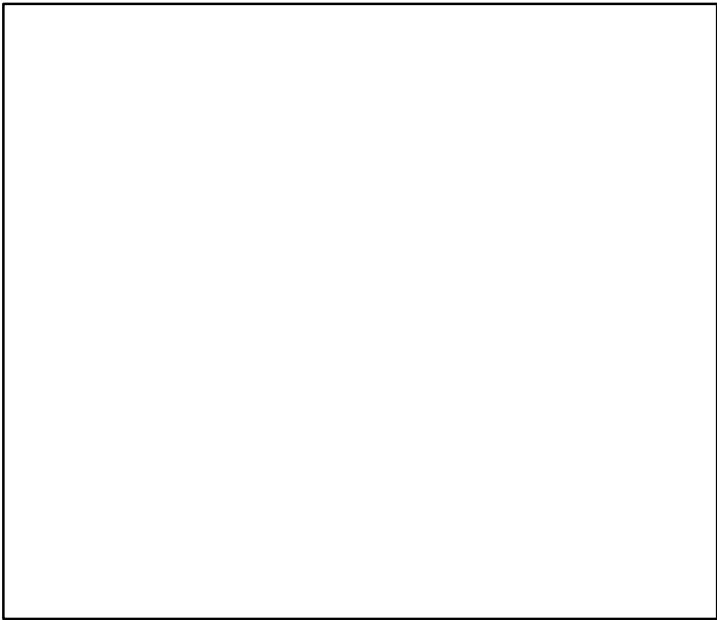
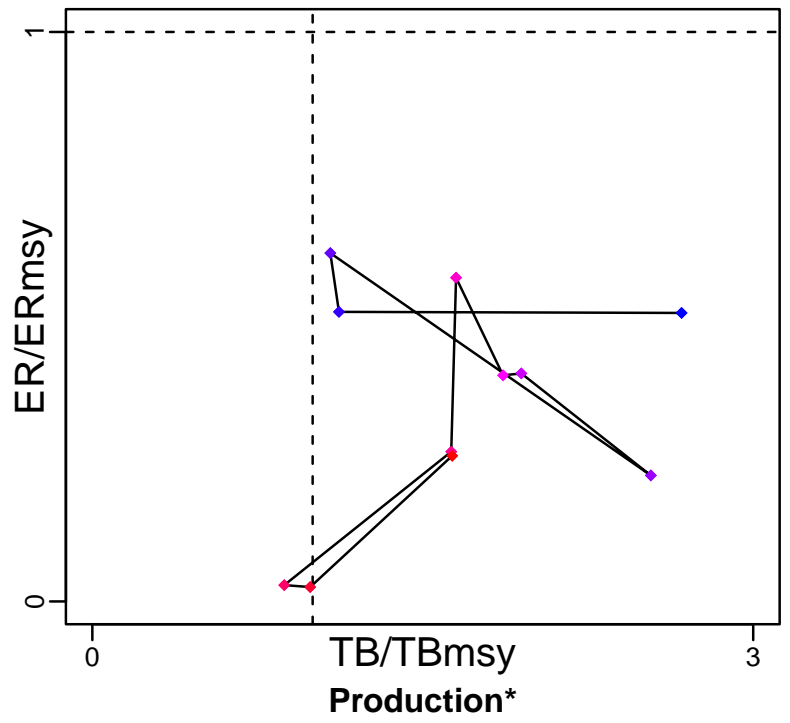
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	243	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2012	0.147	-	-
TC	-	-	-	-	-
TL	TL-MT	2012	55	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

Kobe MSYpref (1990–2012–WATSON)



Kobe MGTpref (1990–2012–WATSON)

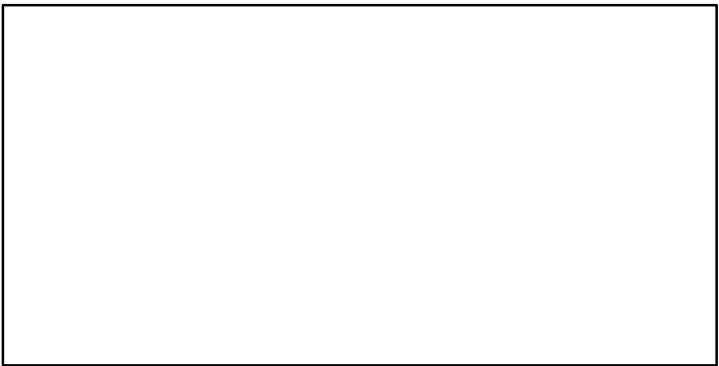
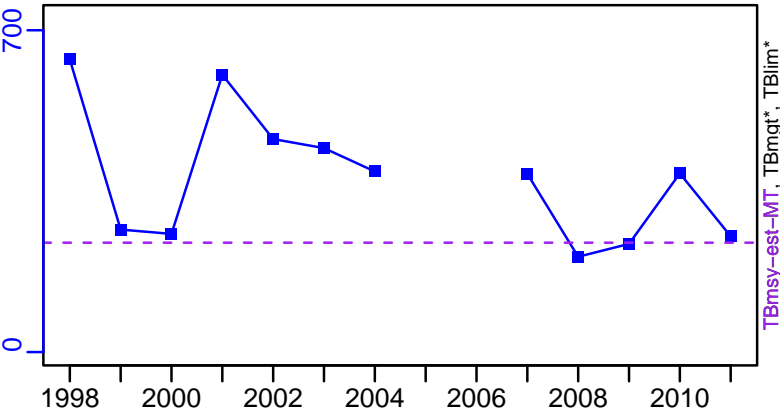


◆ Start Year ◆ End Year \* No Data

Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

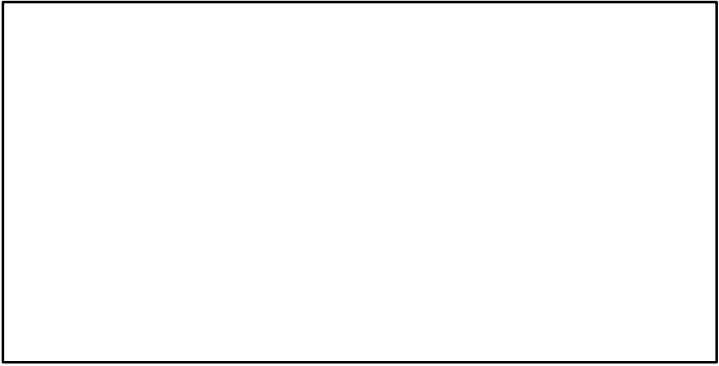
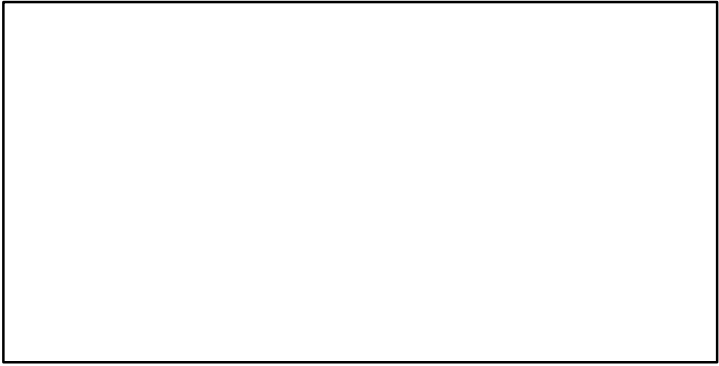
TB-MT (1990-2012-WATSON)

SSB\*



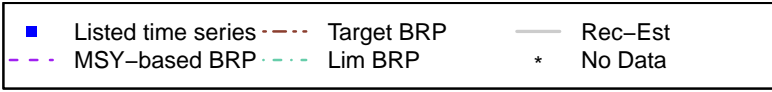
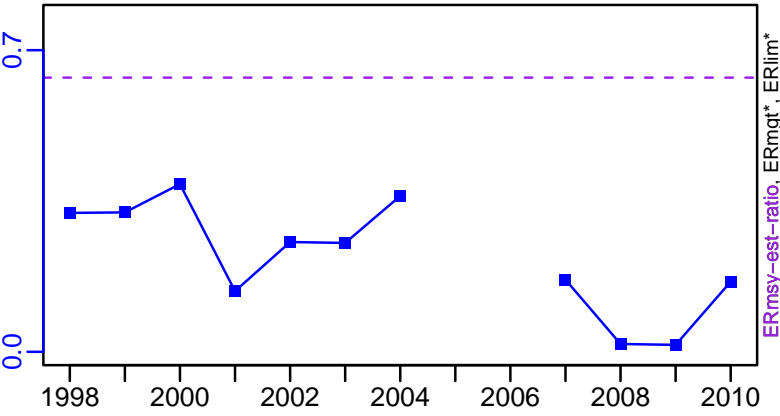
TN \*

F\*



ER-calc-ratio (1990-2012-WATSON)

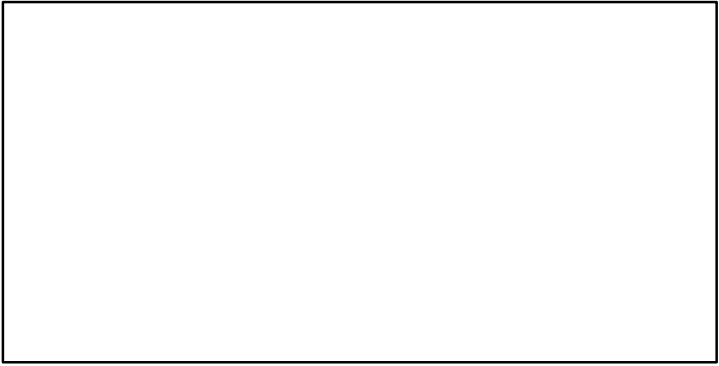
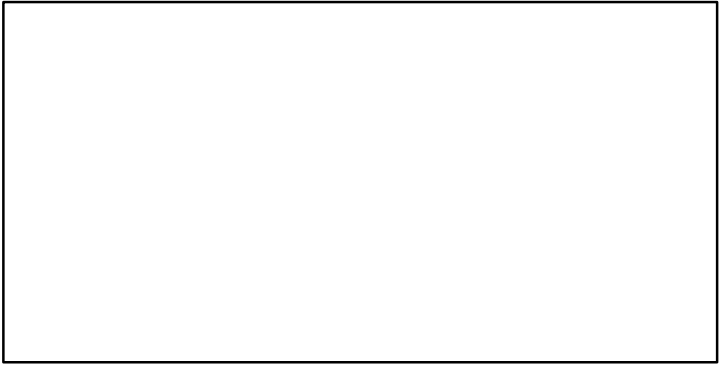
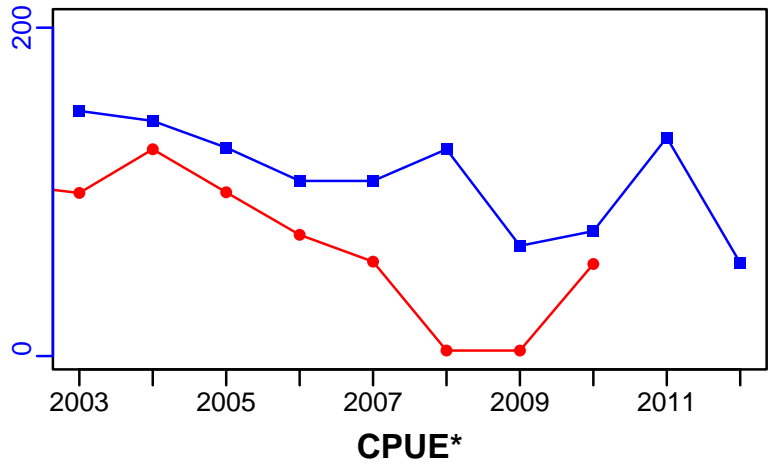
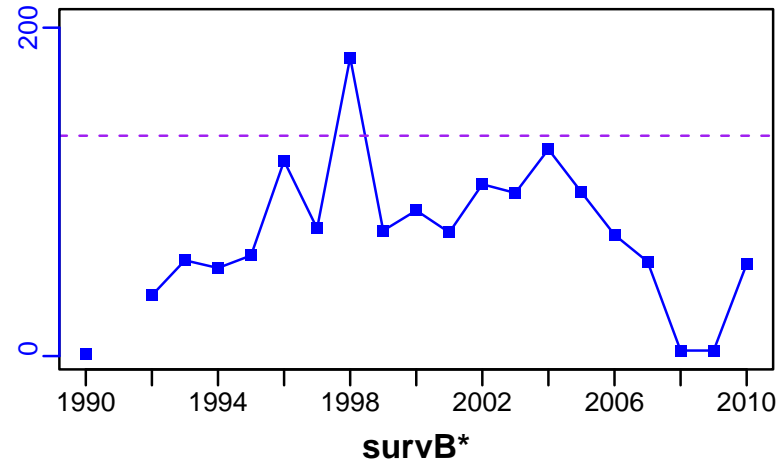
Recruits\*



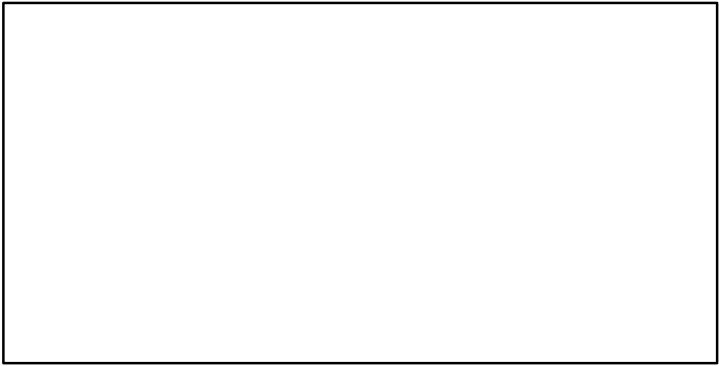
Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

TL-MT, TC\*, RecC\* (1990-2012-WATSON)

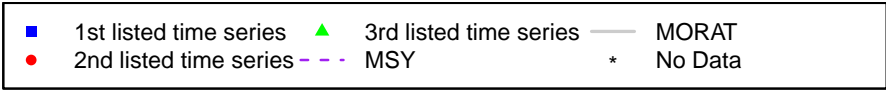
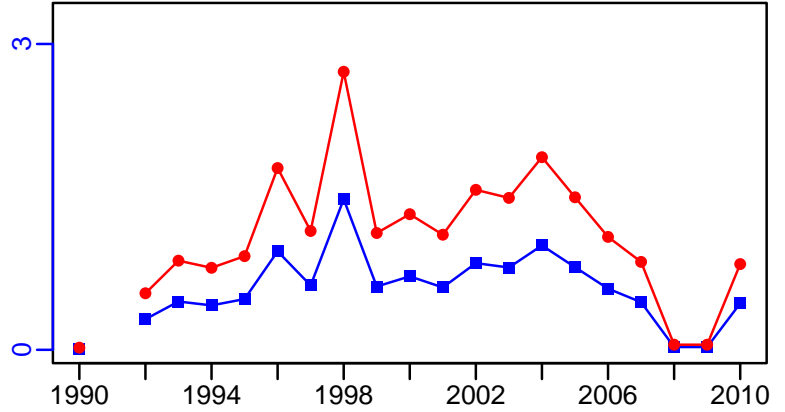
TAC-MT, Cpair-MT, Cadv\* (1990-2012-WATSON)



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1990-2012-WATSON)



## Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

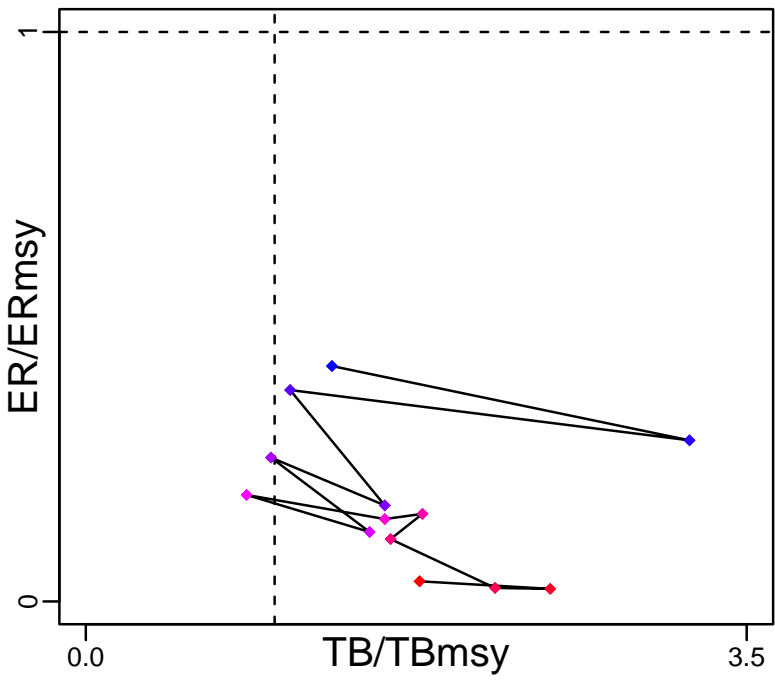
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAPRD-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area PRD
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

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

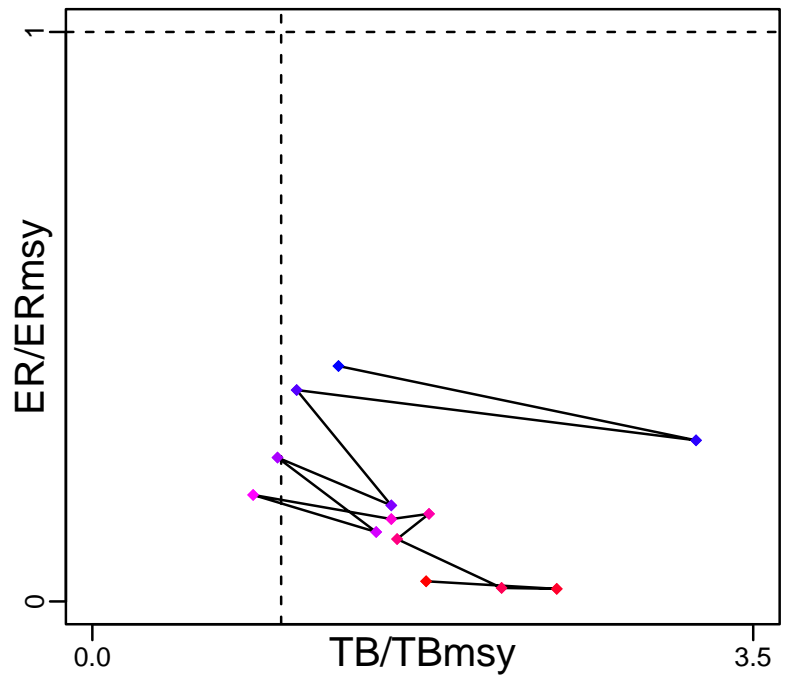
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	1210	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0.023	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	26	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

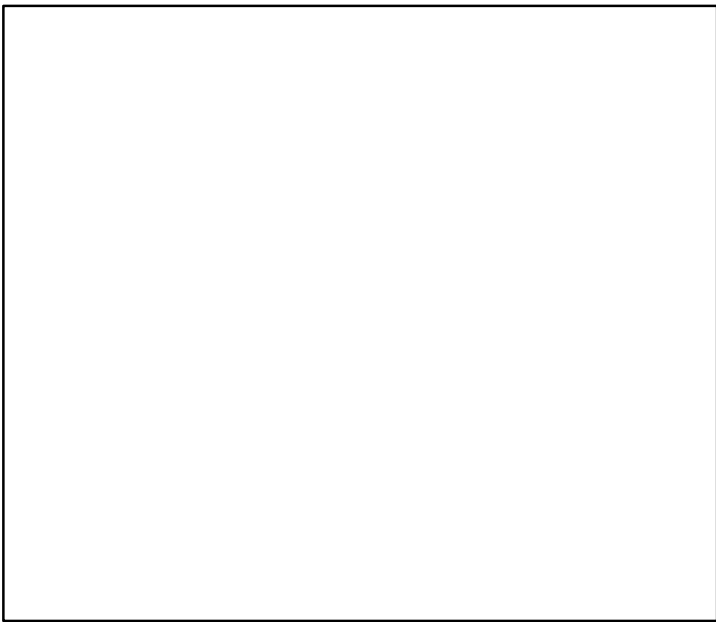
Kobe MSYpref (1987-2011-WATSON)



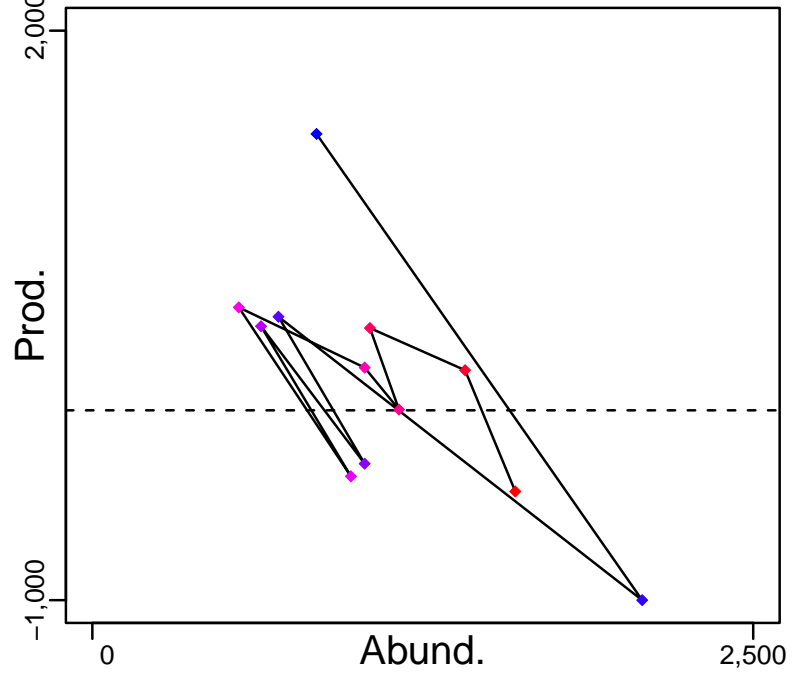
Kobe MGTpref (1987-2011-WATSON)



Spawner Recruit\*



Production (1987-2011-WATSON)



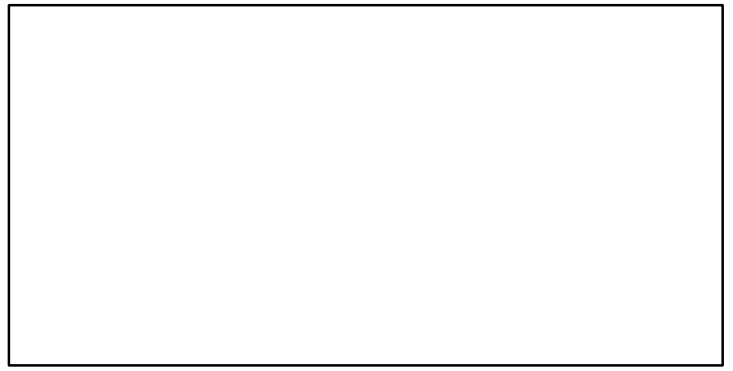
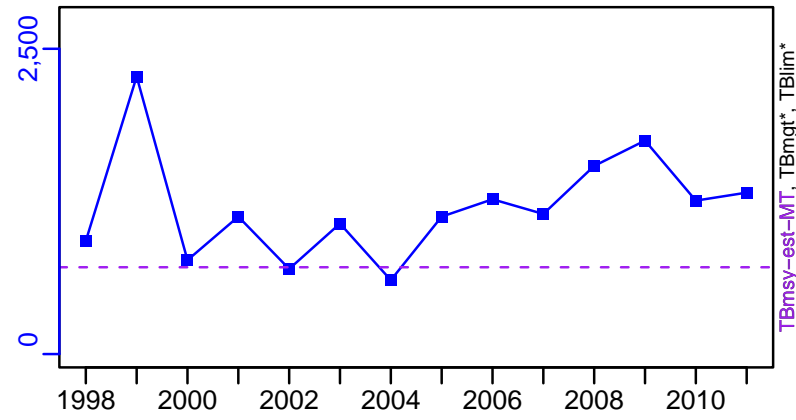
◆ Start Year ◆ End Year \* No Data



Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

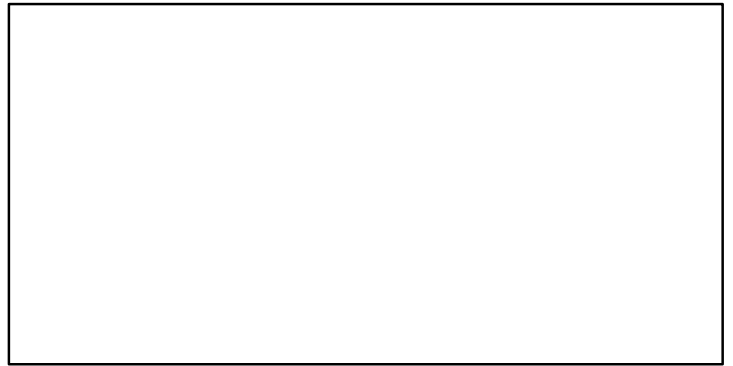
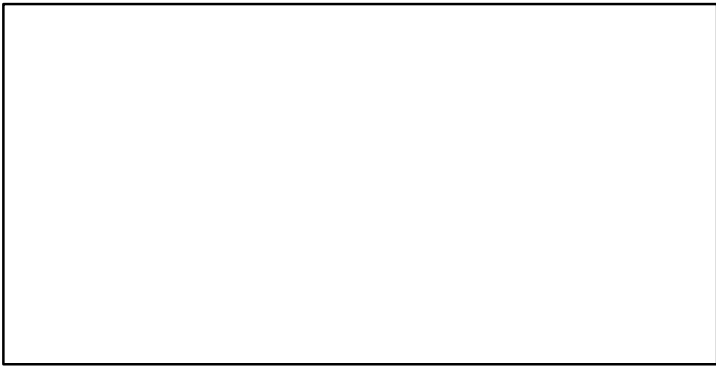
TB-MT (1987-2011-WATSON)

SSB\*



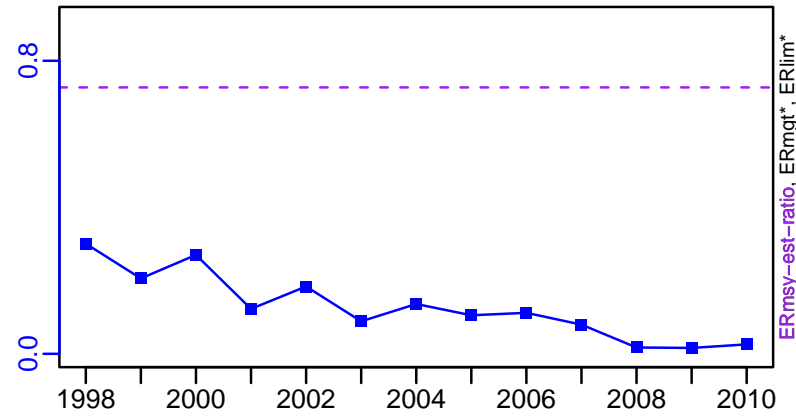
TN \*

F\*



ER-calc-ratio (1987-2011-WATSON)

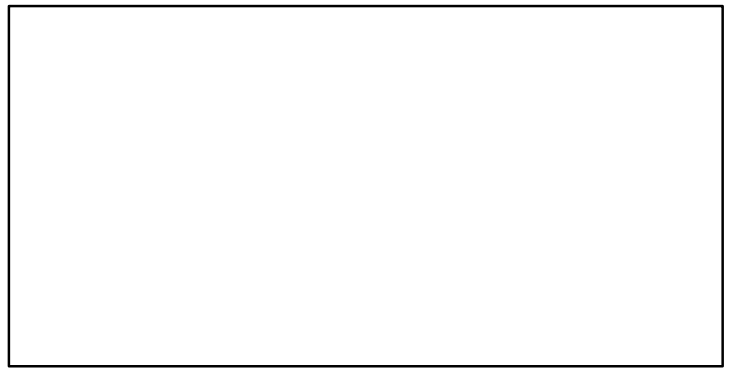
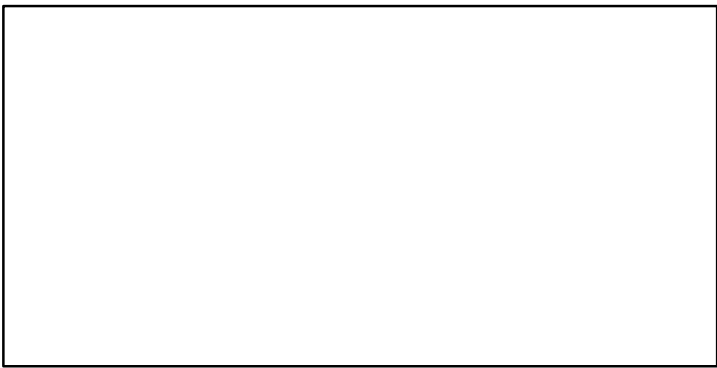
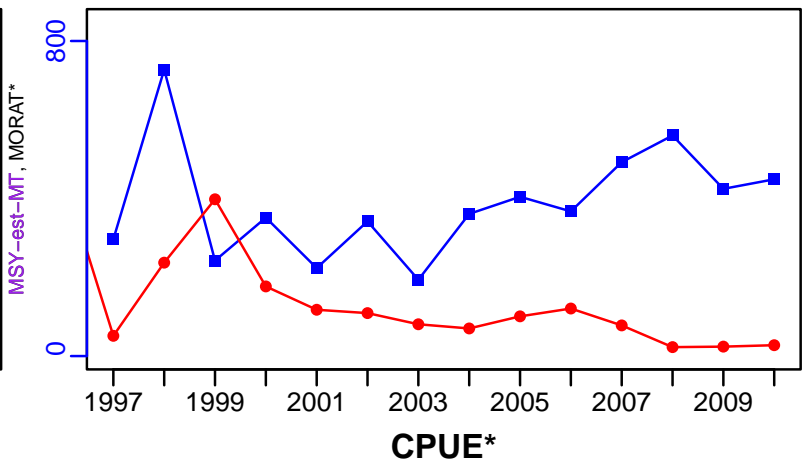
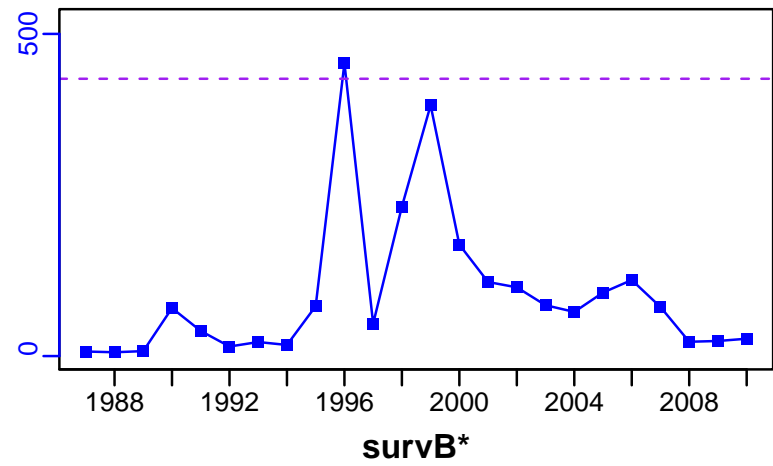
Recruits\*



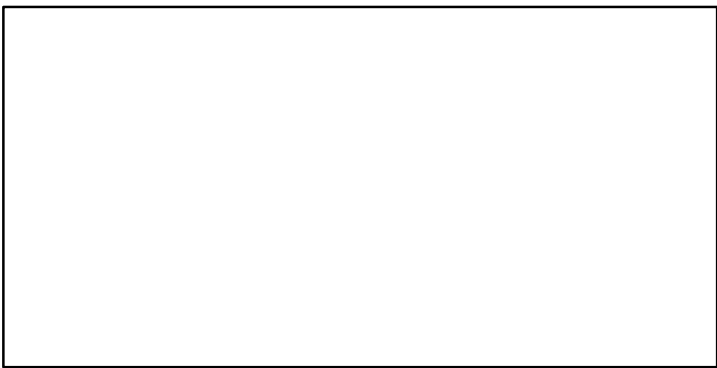
Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

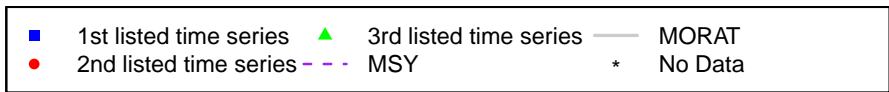
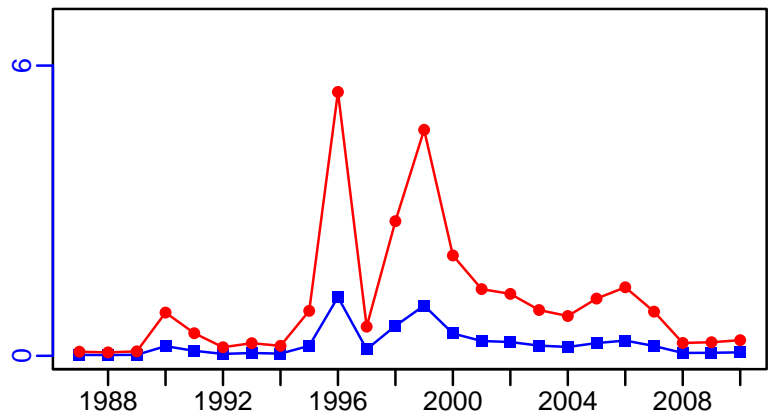
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987-2011-WATSON)



## Pacific cod British Columbia Waters Area 5ABCD [PCOD5ABCD]

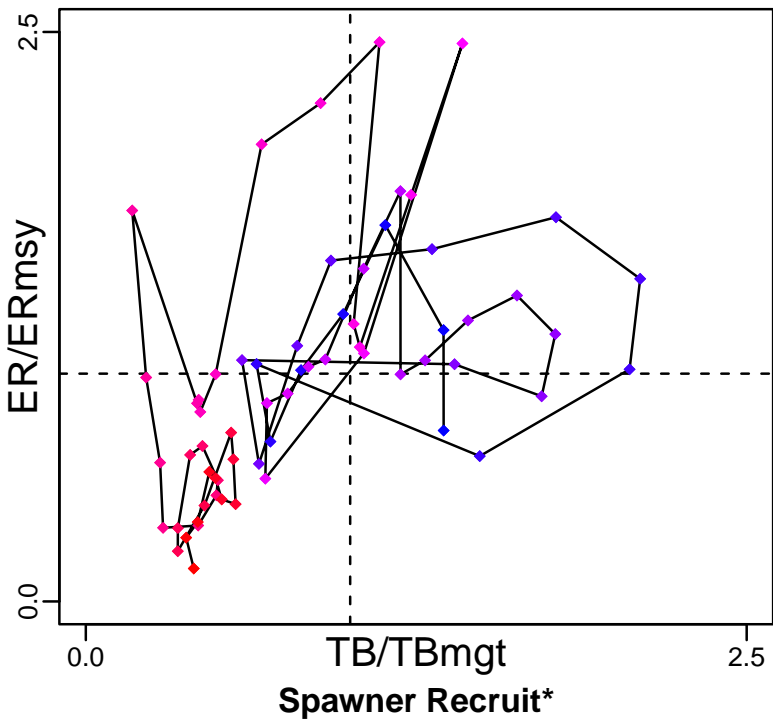
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	DFO-PAC-PCOD5ABCD-1953-2019-ASHBROOK
<b>Area</b>	British Columbia Waters Area 5ABCD
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2019

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	TBmgt-MT	2019	33,780
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2019	26,073
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2019	9762
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

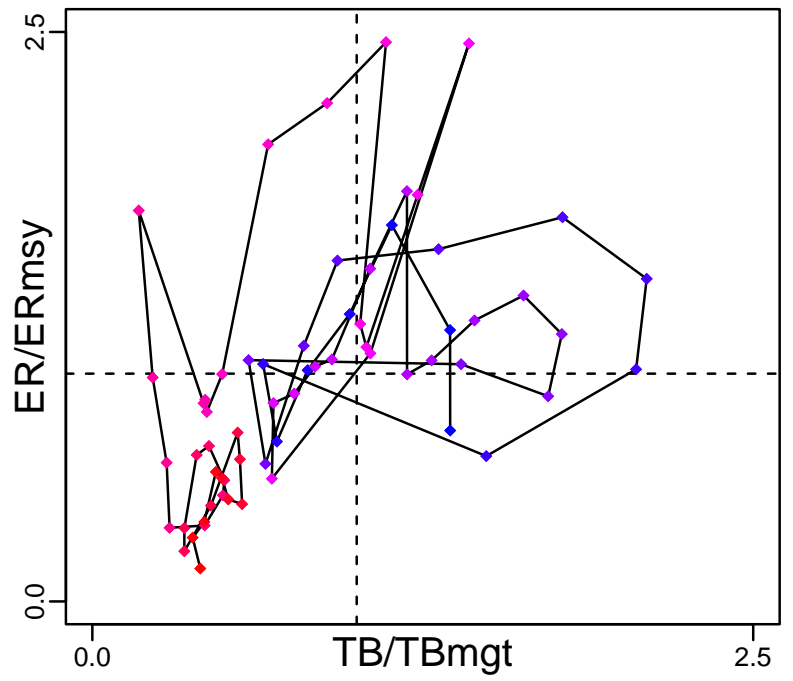
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2019	15,687	-	2+
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2019	2,875,481	-	2+
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2019	0.016	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2019	215	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2019	0.464	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Pacific cod British Columbia Waters Area 5ABCD [PCOD5ABCD]

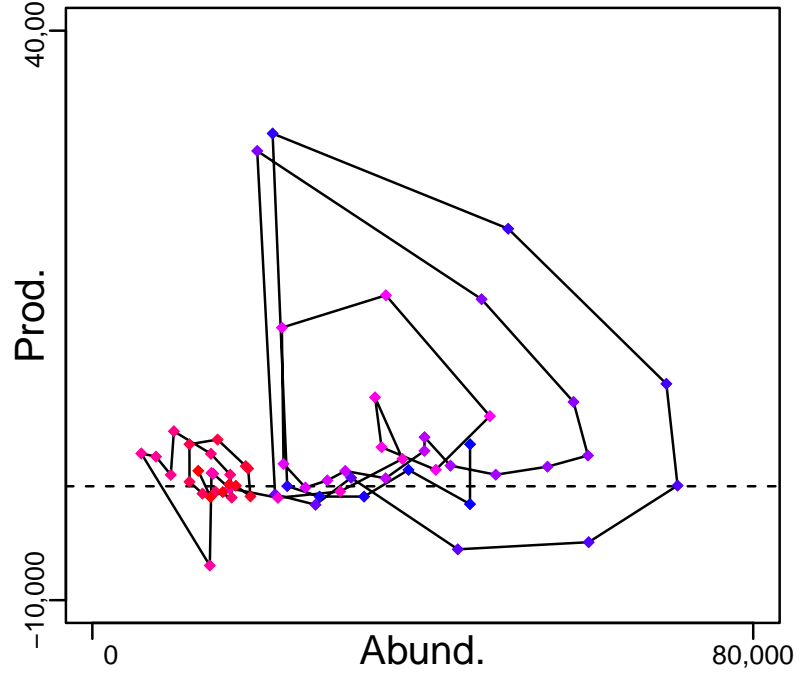
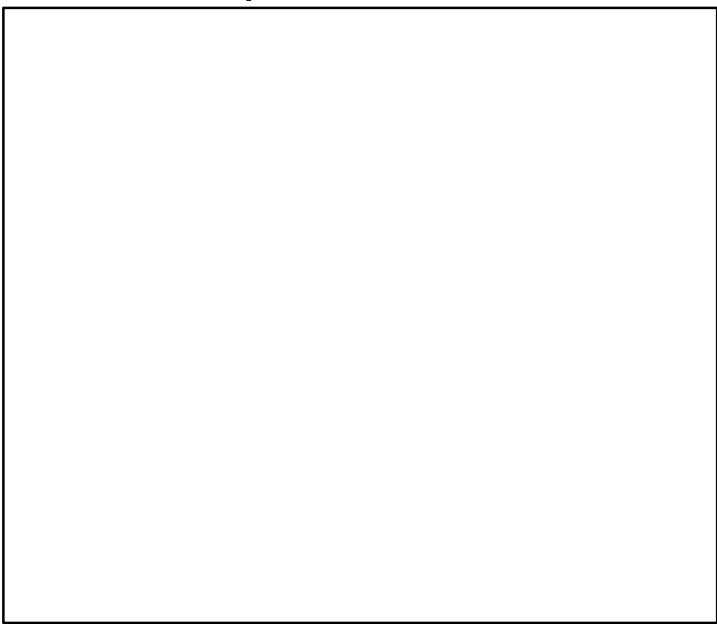
Kobe MSYpref (1953–2019–ASHBROOK)



Kobe MGTpref (1953–2019–ASHBROOK)



Production (1953–2019–ASHBROOK)

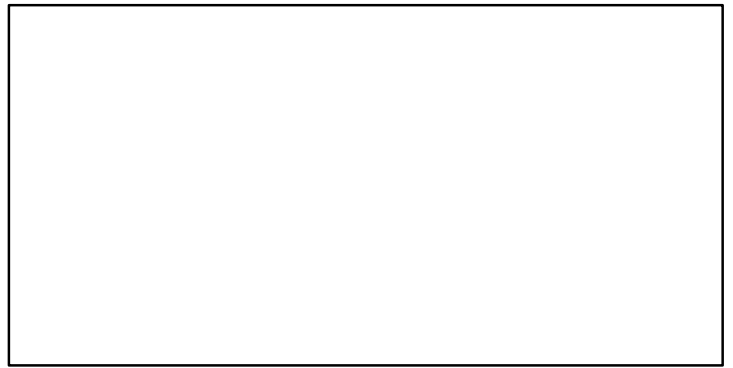
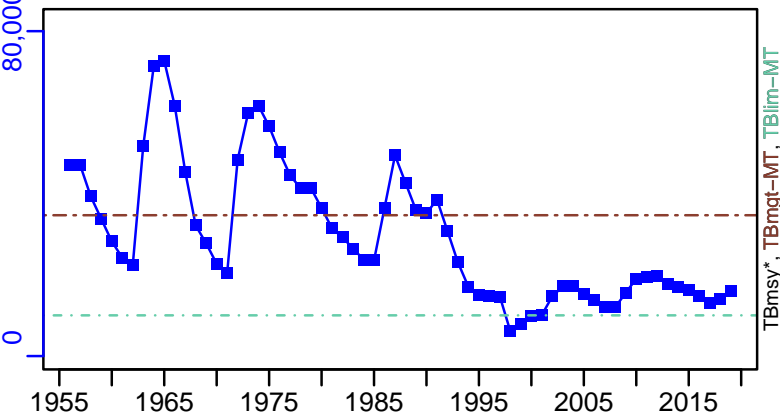


◆ Start Year ◆ End Year \* No Data

Pacific cod British Columbia Waters Area 5ABCD [PCOD5ABCD]

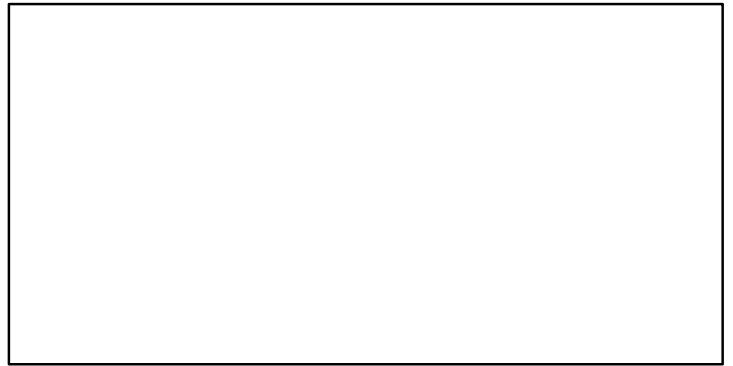
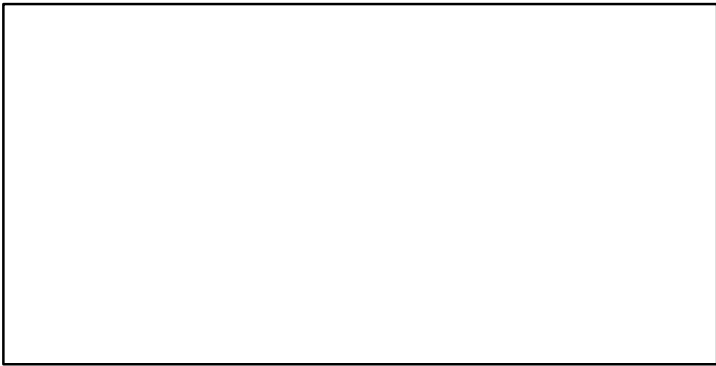
TB-MT (1953-2019-ASHBROOK)

SSB\*



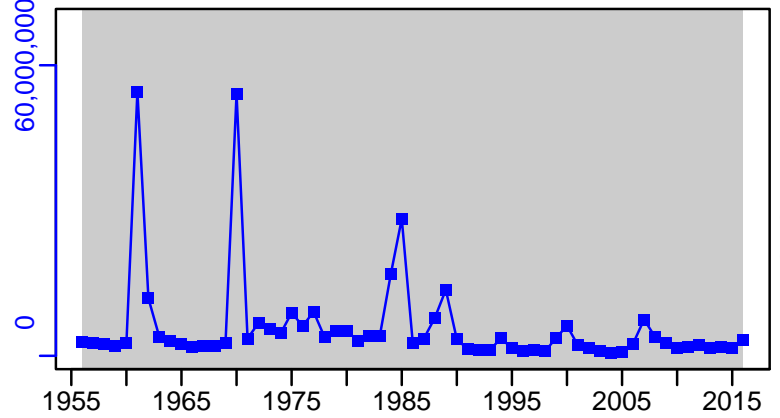
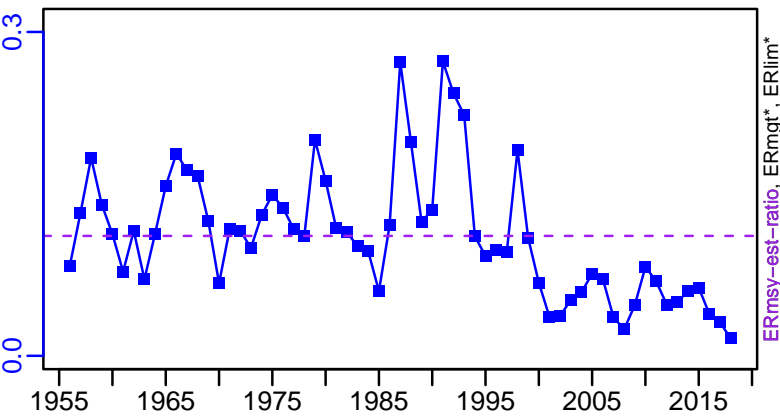
TN \*

F\*



ER-calc-ratio (1953-2019-ASHBROOK)

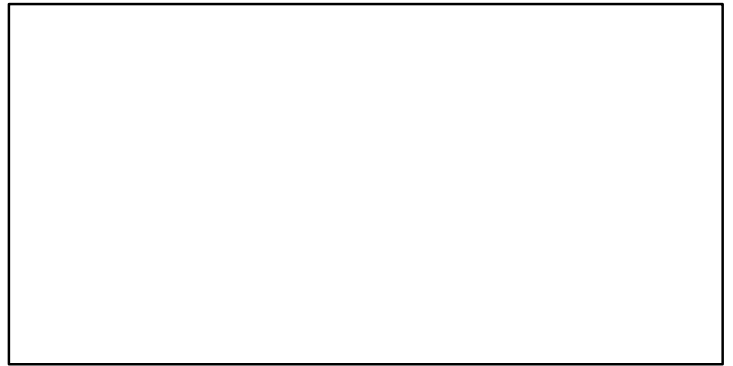
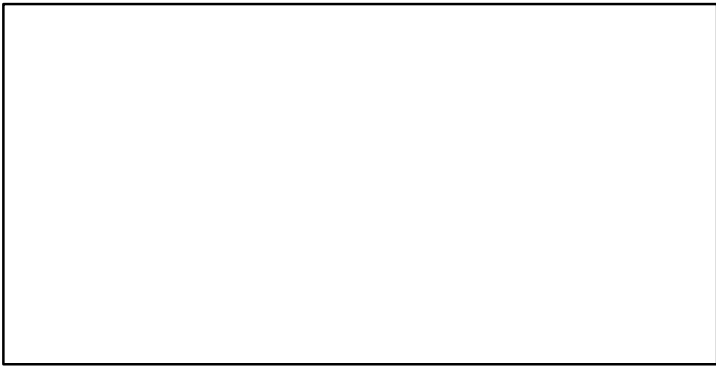
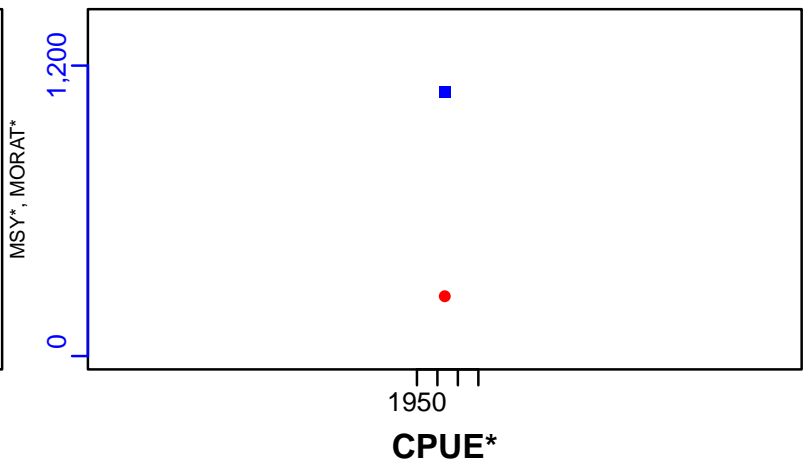
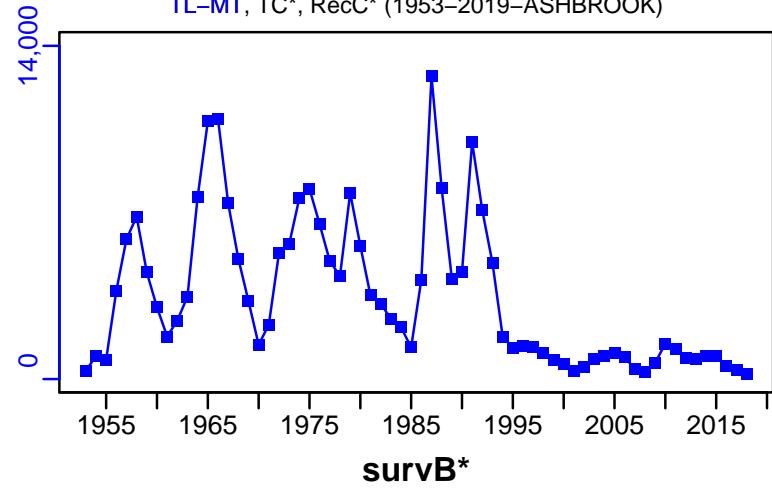
R-E00 (1953-2019-ASHBROOK)



Pacific cod British Columbia Waters Area 5ABCD [PCOD5ABCD]

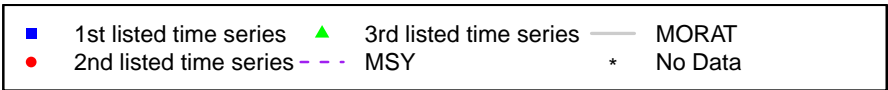
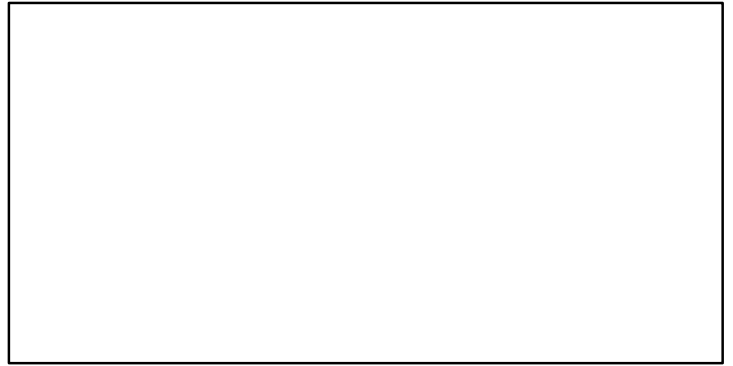
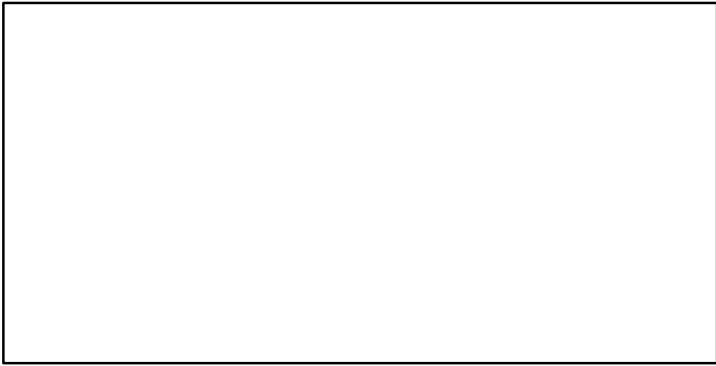
TL-MT, TC\*, RecC\* (1953-2019-ASHBROOK)

TAC-MT, Cpair-MT, Cadv\* (1953-2019-ASHBROOK)



EFFORT\*

CdivMSY\*



## Pacific cod West Coast of Vancouver Island [PCODWCVANI]

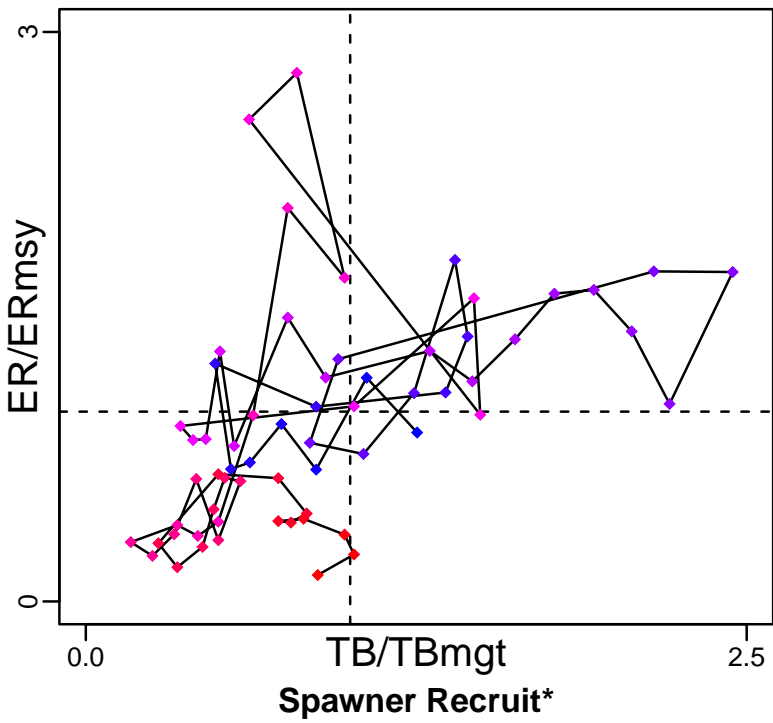
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	DFO-PAC-PCODWCVANI-1953-2019-ASHBROOK
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2019, 2002

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2002	6731
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2002	0.226
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	TBmgt-MT	2019	24,982
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2019	14,549
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2002	0.579
<b>TBlim</b>	TBlim-MT	2019	8108
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

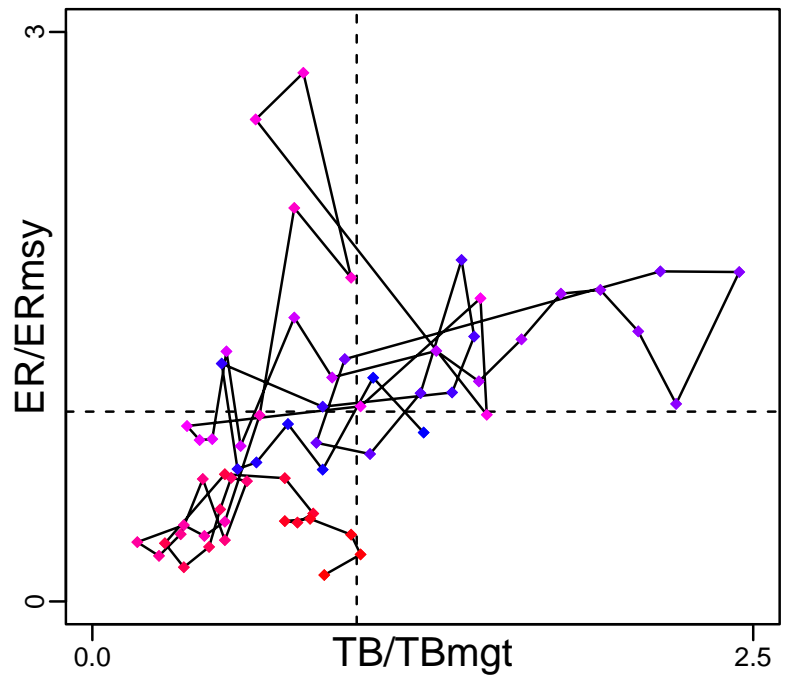
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2019	16,817	-	2+
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-E00	2002	5,140,000	-	-
<b>R</b>	R-E00	2019	2,875,481	-	2+
<b>F</b>	F-1/yr	2002	0.106	Both	2+
<b>ER</b>	ER-calc-ratio	2019	0.008	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2019	165	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2002	1.037	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2002	0.469	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2019	0.673	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Pacific cod West Coast of Vancouver Island [PCODWCVANI]

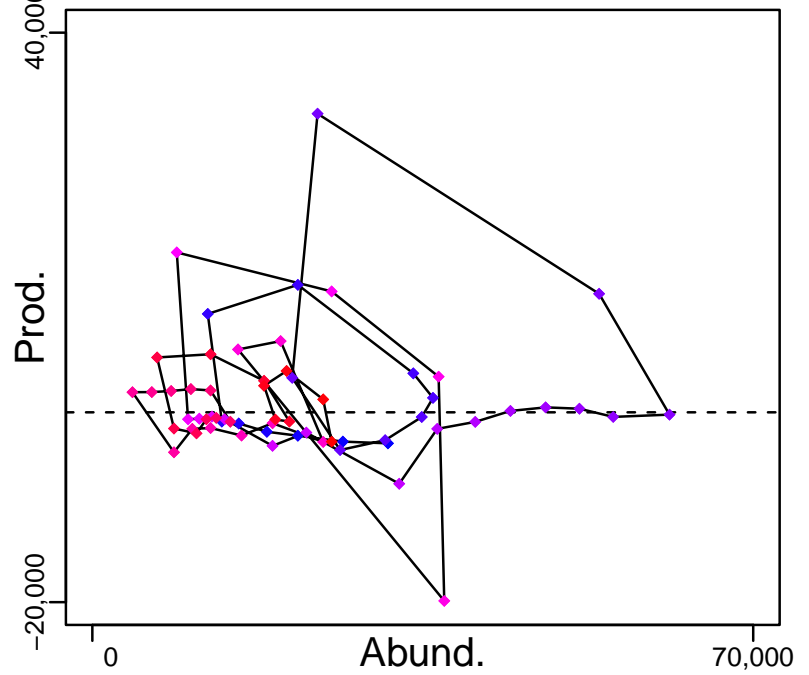
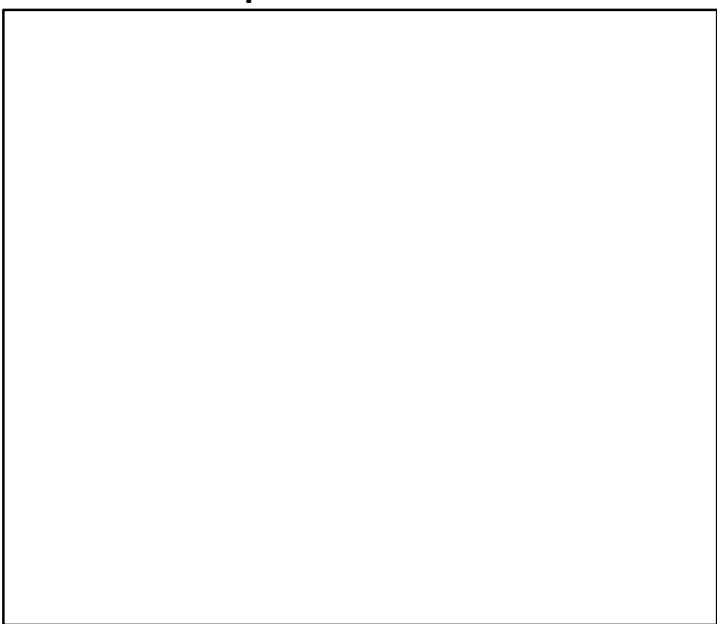
Kobe MSYpref (1953–2019–ASHBROOK)



Kobe MGTpref (1953–2019–ASHBROOK)



Production (1953–2019–ASHBROOK)



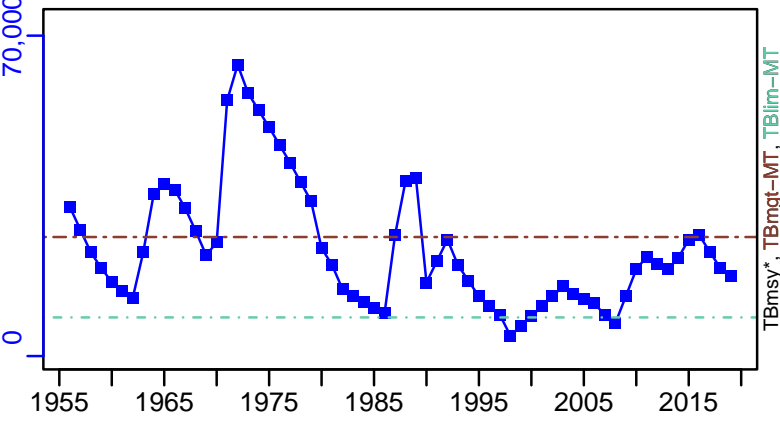
◆ Start Year ◆ End Year \* No Data



Pacific cod West Coast of Vancouver Island [PCODWCVANI]

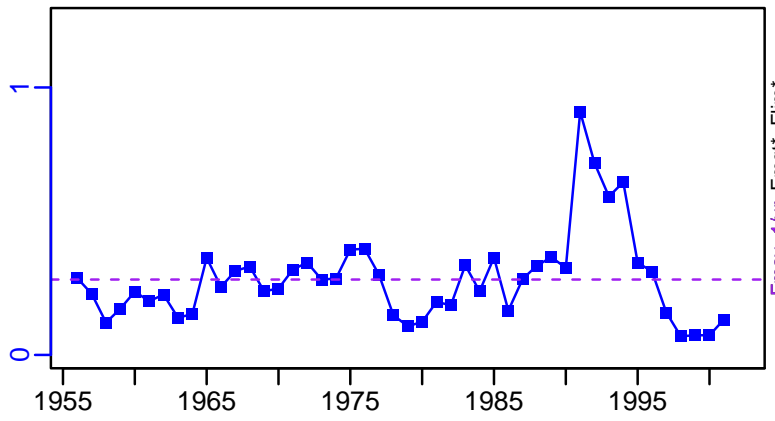
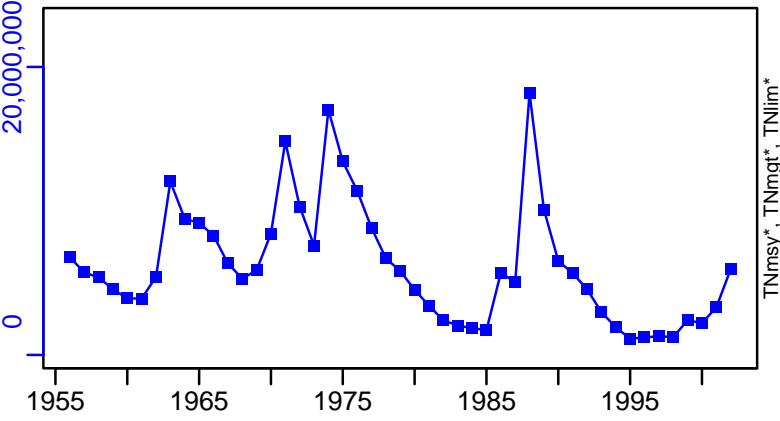
TB-MT (1953-2019-ASHBROOK)

SSB\*



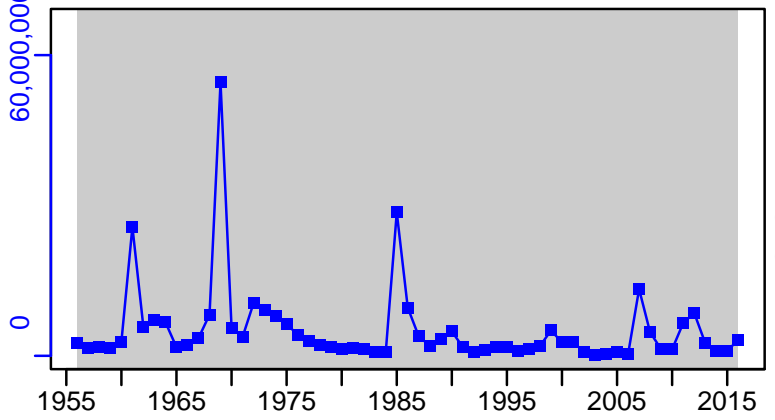
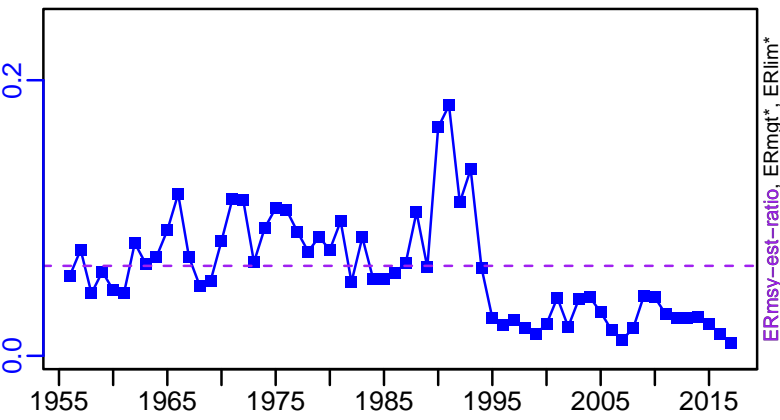
TN-E00 (1956-2002-COLLIE)

F-1/yr (1956-2002-COLLIE)



ER-calc-ratio (1953-2019-ASHBROOK)

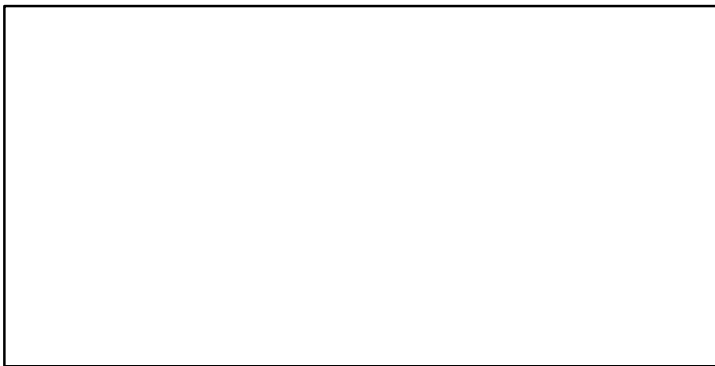
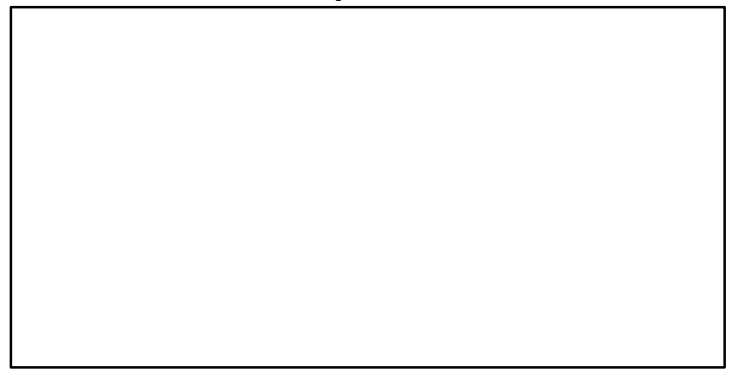
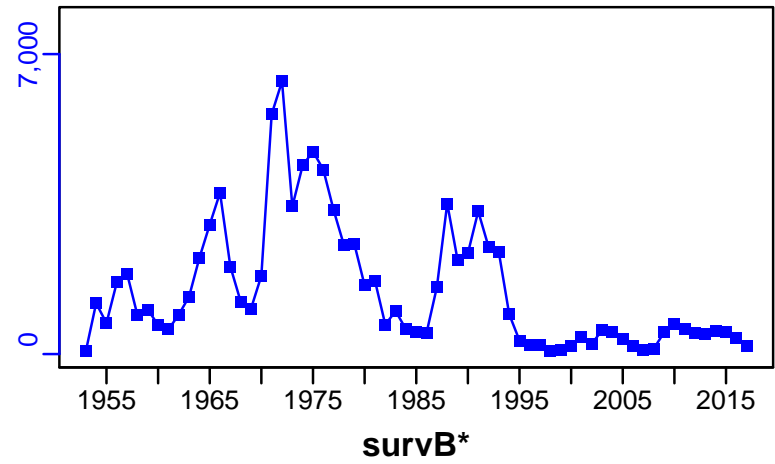
R-E00 (1953-2019-ASHBROOK)



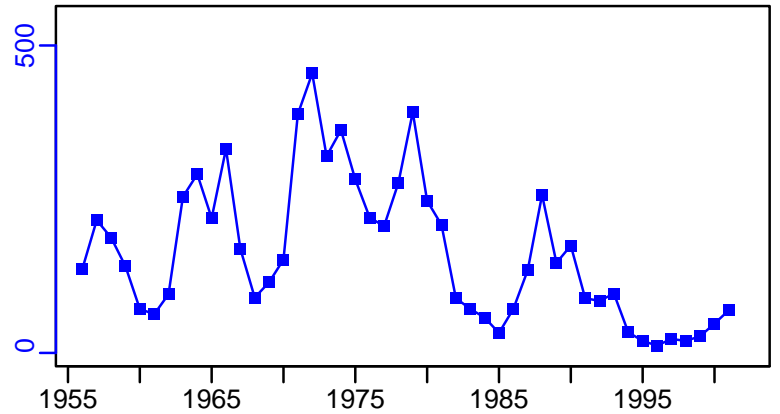
Pacific cod West Coast of Vancouver Island [PCODWCVANI]

TL-MT, TC\*, RecC\* (1953-2019-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



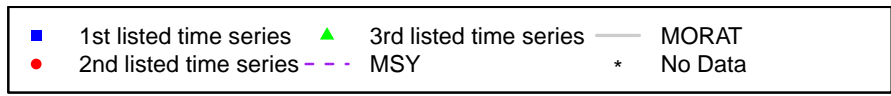
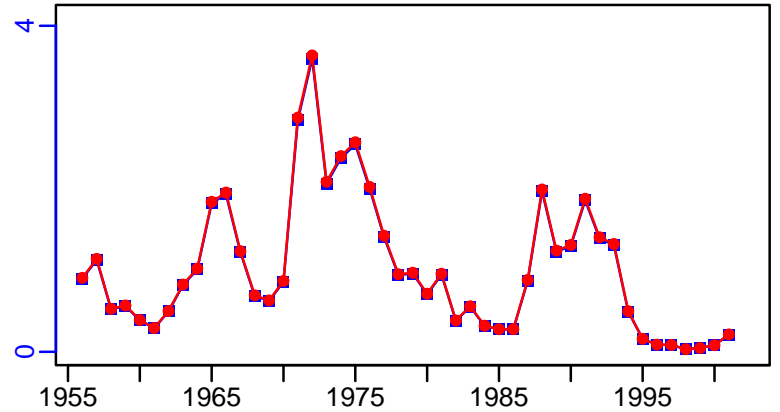
CPUE<sub>raw</sub>-C/E (1956-2002-COLLIE)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1956-2002-COLLIE)



## Pacific Ocean perch Haida Gwaii [PERCHHG]

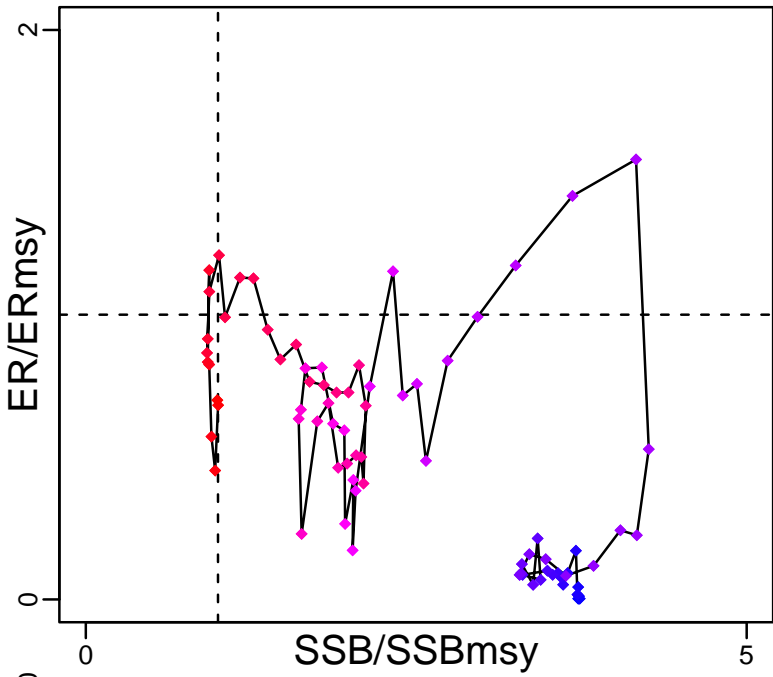
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	DFO-PAC-PERCHHG-1939-2017-ASHBROOK
<b>Area</b>	Haida Gwaii
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2017, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2017	47,982
<b>SSBmsy</b>	SSBmsy-MT	2017	24,116
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2017	0.08
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2017	160,337
<b>SSB0</b>	SSB0-MT	2017	89,993
<b>MSY</b>	MSY-MT	2017	3843
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

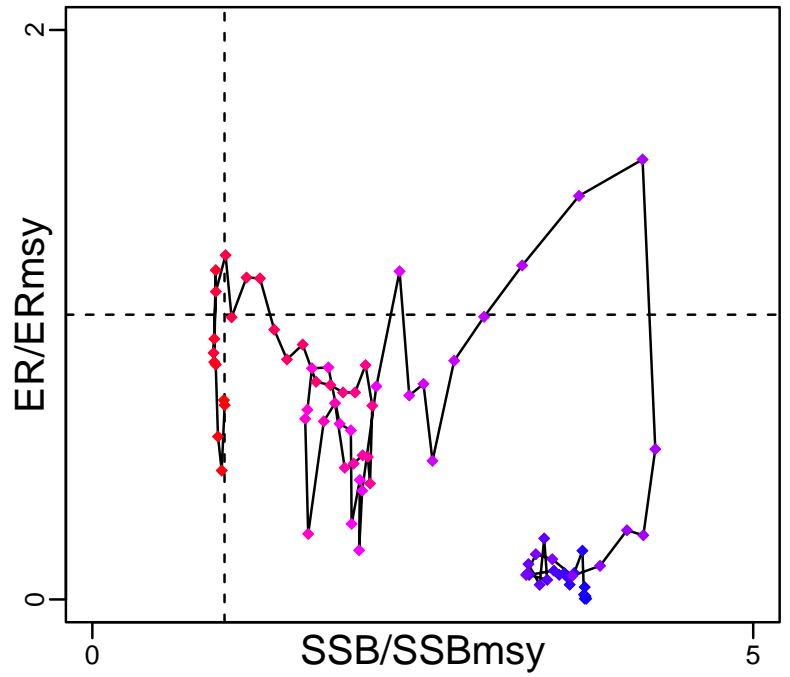
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2017	47,272	Both	-
<b>SSB</b>	SSB-MT	2017	24,302	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2017	8,720,469	Both	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2017	0.056	Both	-
<b>TC</b>	TC-MT	2013	584		
<b>TL</b>	TL-MT	2017	2279		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2017	0.985		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2017	1.008		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2017	0.7		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific Ocean perch Haida Gwaii [PERCHHG]

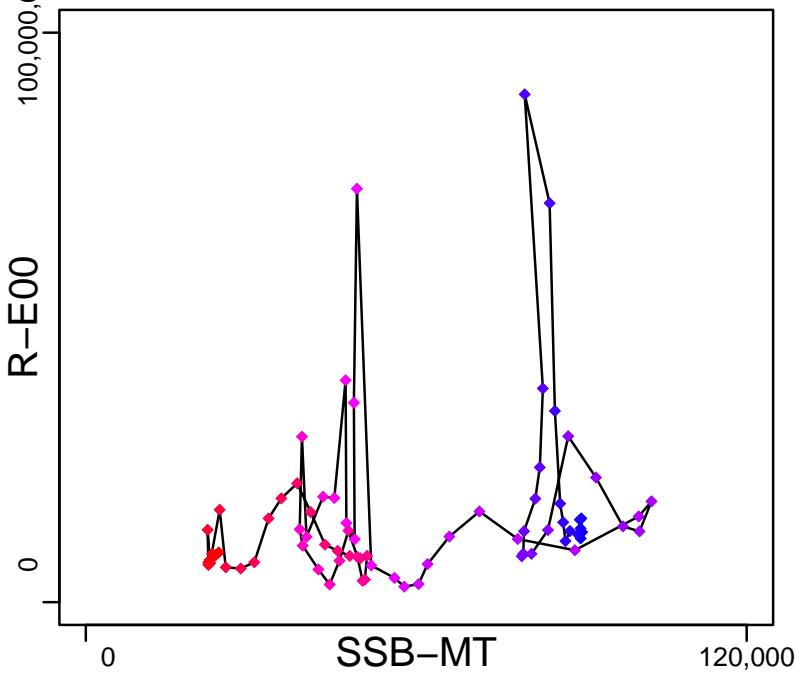
Kobe MSYpref (1939–2017–ASHBROOK)



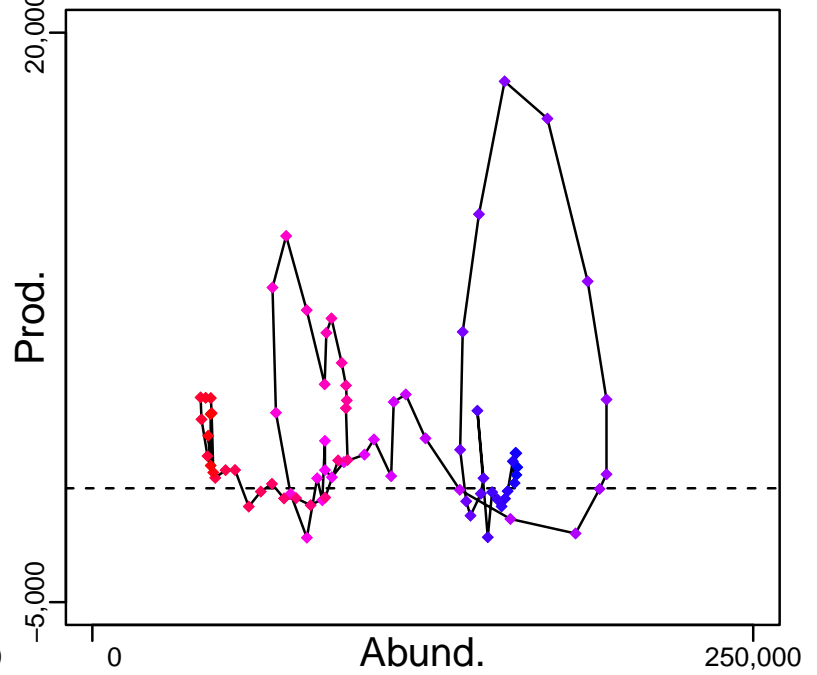
Kobe MGTpref (1939–2017–ASHBROOK)



Spawner Recruit (1939–2017–ASHBROOK)



Production (1939–2017–ASHBROOK)

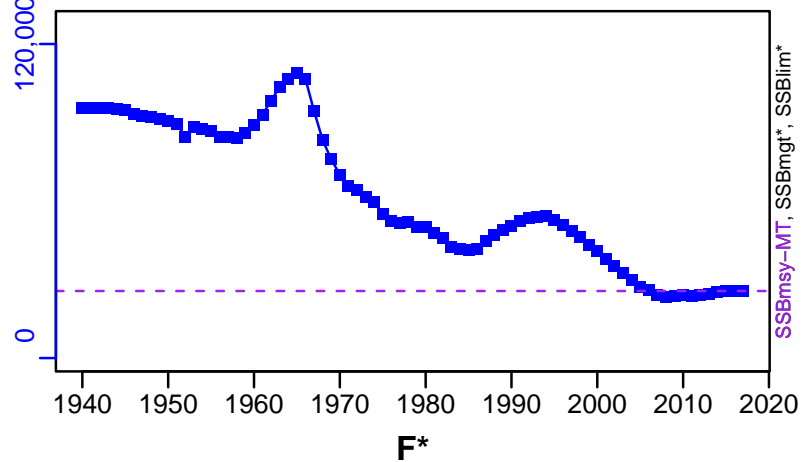
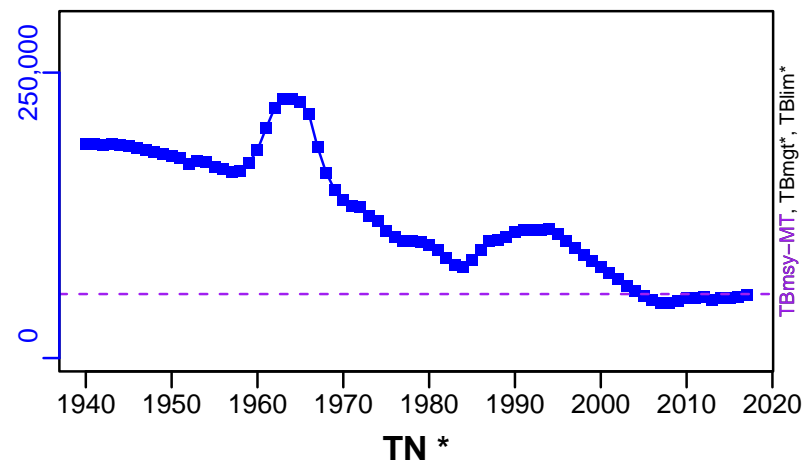


◆ Start Year ◆ End Year \* No Data

Pacific Ocean perch Haida Gwaii [PERCHHG]

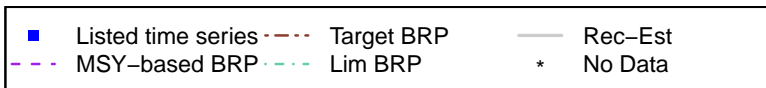
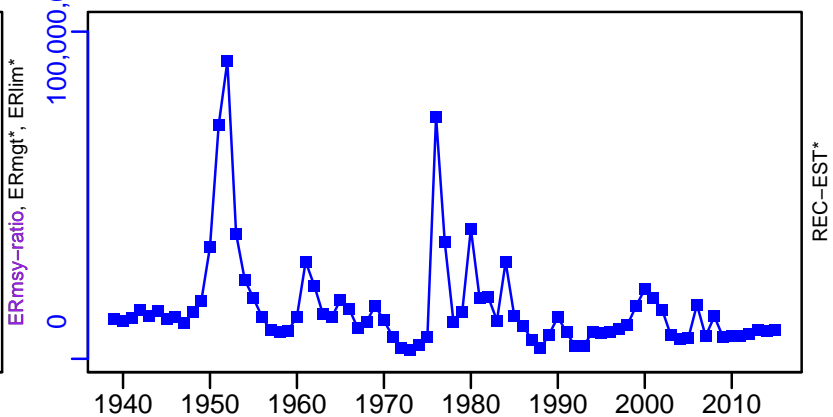
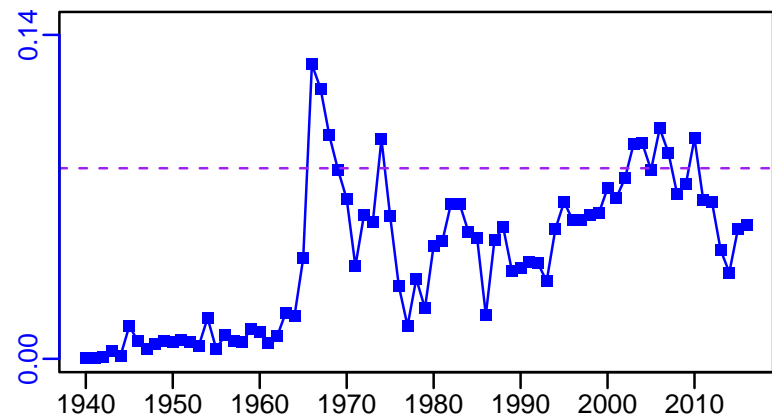
TB-MT (1939-2017-ASHBROOK)

SSB-MT (1939-2017-ASHBROOK)



ER-ratio (1939-2017-ASHBROOK)

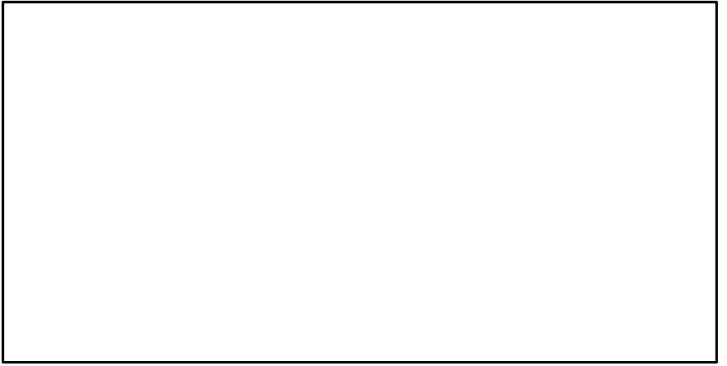
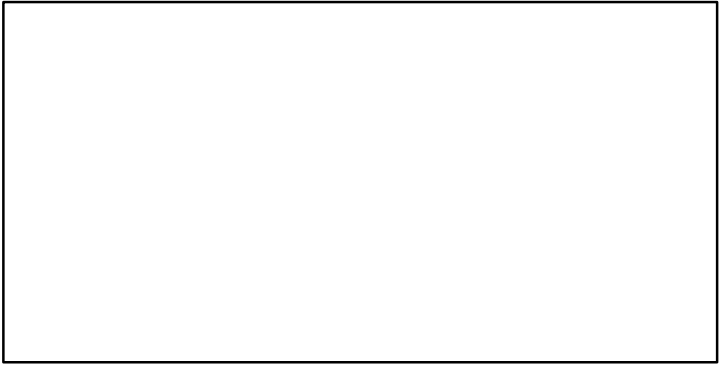
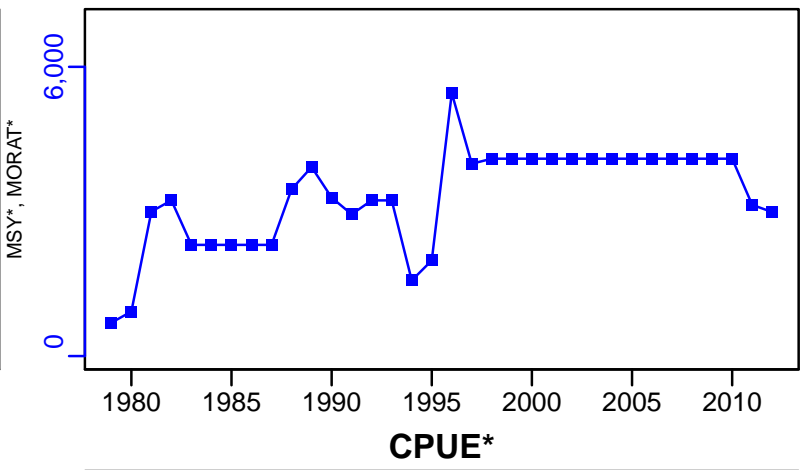
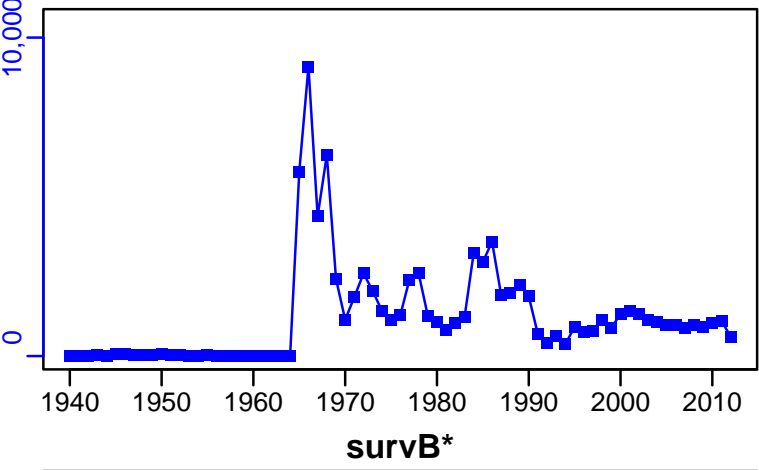
R-E00 (1939-2017-ASHBROOK)



Pacific Ocean perch Haida Gwaii [PERCHHG]

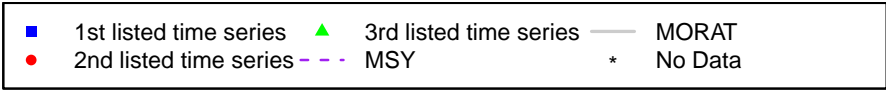
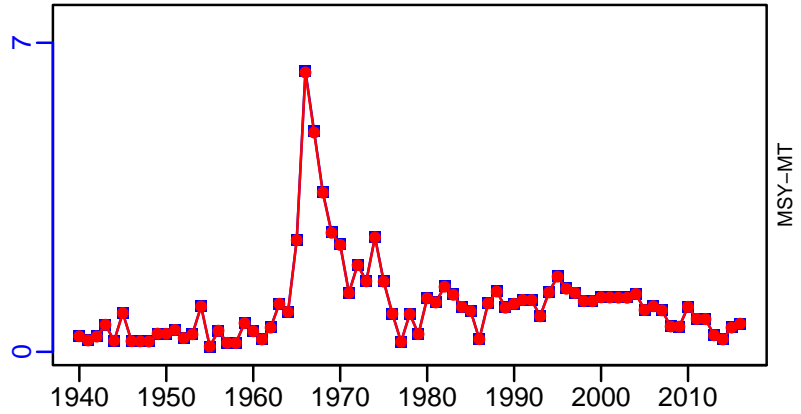
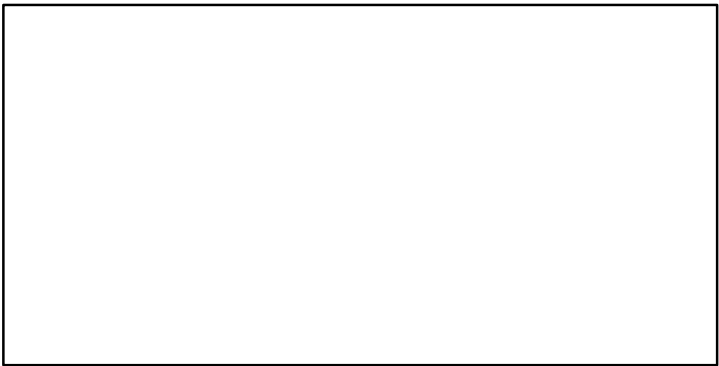
TC-MT, TL\*, RecC\* (1939-2013-WATSON)

TAC-MT, Cpair\*, Cadv\* (1939-2013-WATSON)



EFFORT\*

TL-MT/MSY-MT, CdivMEANC-ratio, (1939-2017-ASHBROOK)



## Pacific ocean perch West Coast of Vancouver Island [PERCHWCVANI]

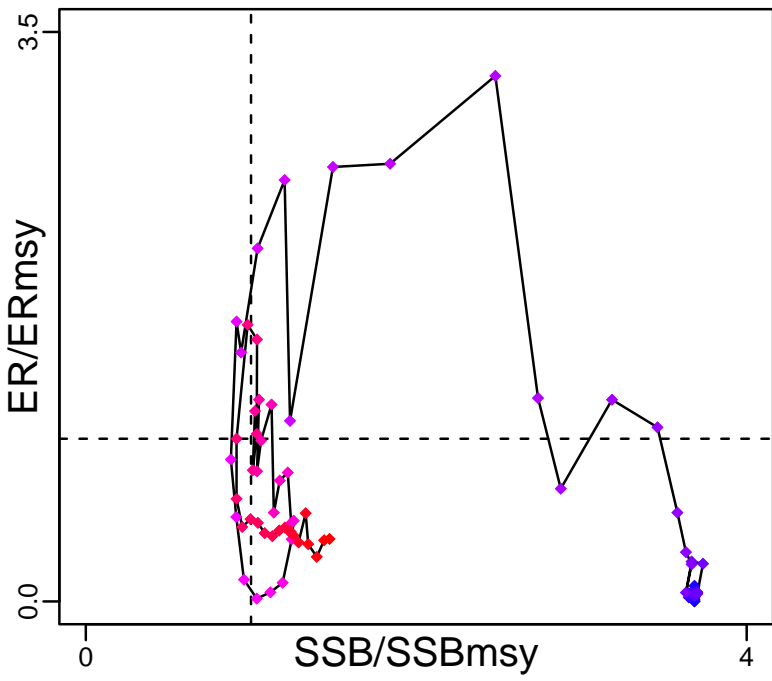
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	DFO-PERCHWCVANI-1939-2013-WATSON
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2013	11,729
<b>SSBmsy</b>	SSBmsy-MT	2013	5809
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2013	0.091
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	21,442
<b>MSY</b>	MSY-MT	2013	1048
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2013	2324
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

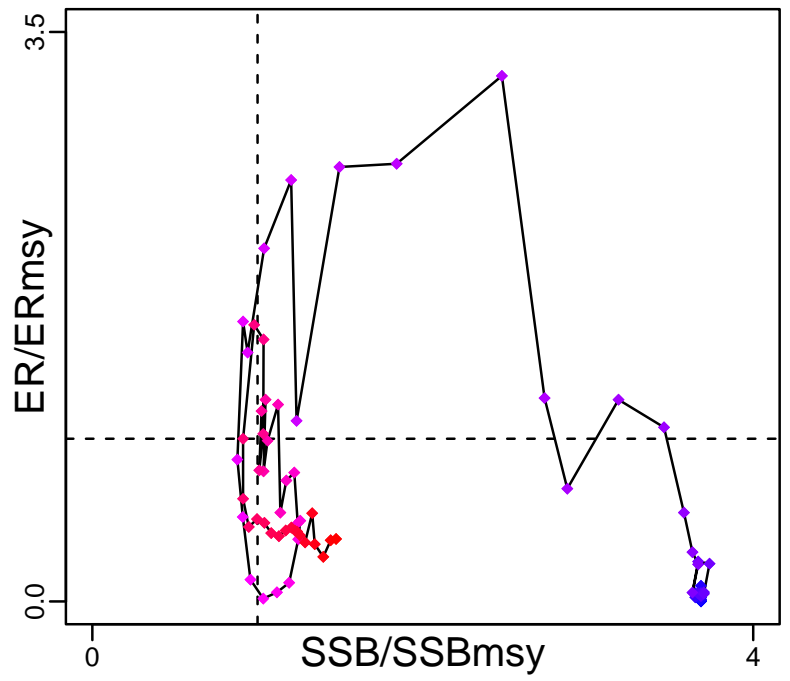
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	16,400	Both	-
<b>SSB</b>	SSB-MT	2013	8740	Females	10 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	3,160,000	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2013	0.035	-	-
<b>TC</b>	TC-MT	2013	382		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2013	1.53		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.505		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2013	0.384		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific ocean perch West Coast of Vancouver Island [PERCHWCVANI]

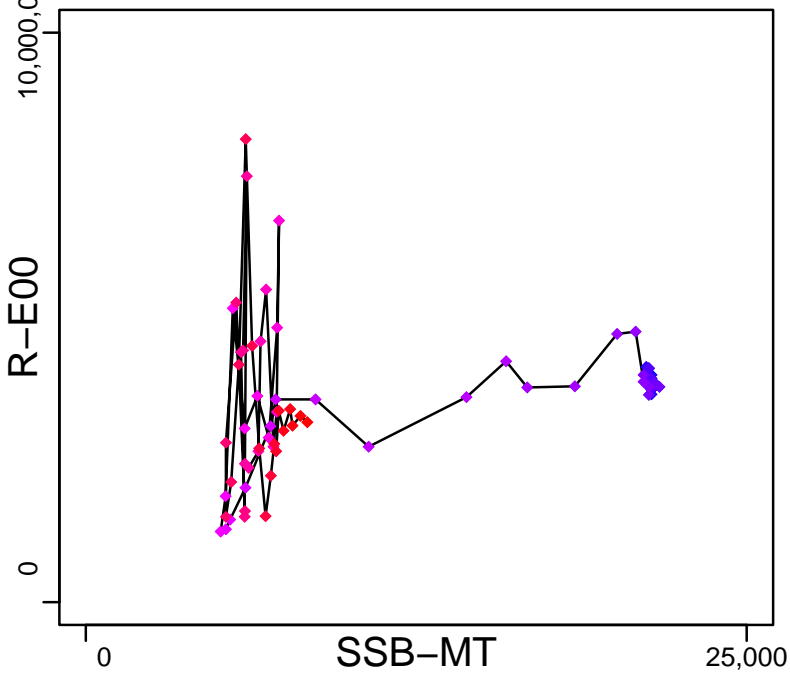
Kobe MSYpref (1939–2013–WATSON)



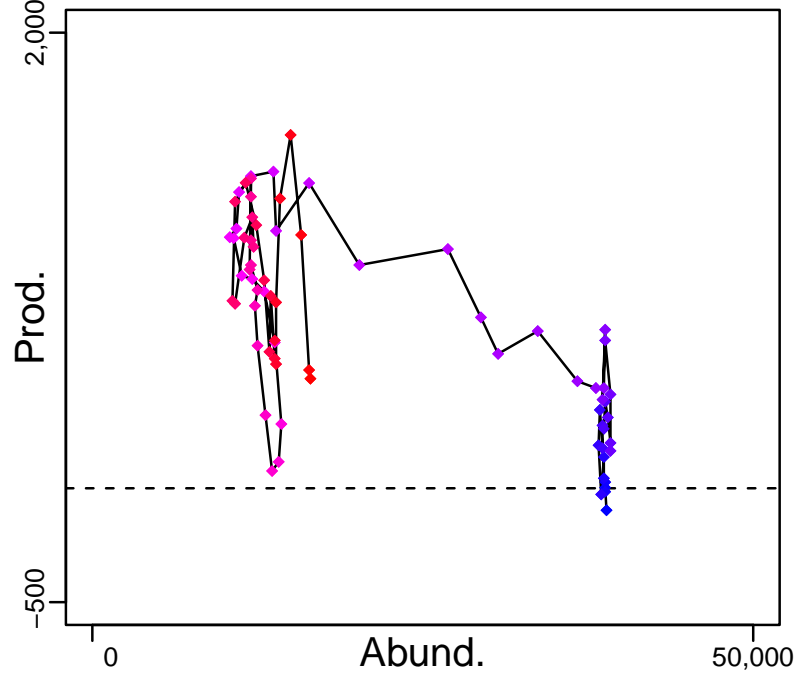
Kobe MGTpref (1939–2013–WATSON)



Spawner Recruit (1939–2013–WATSON)



Production (1939–2013–WATSON)



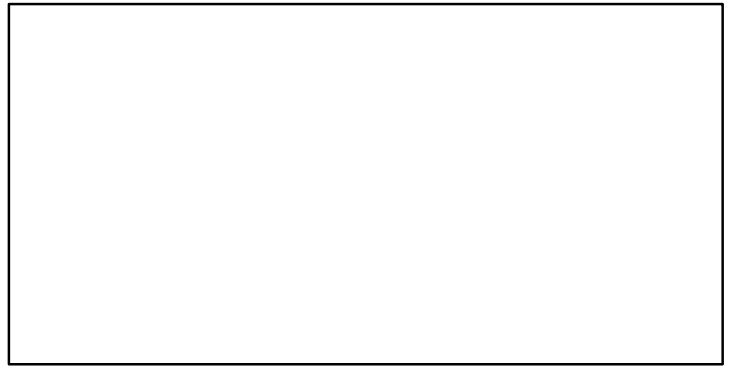
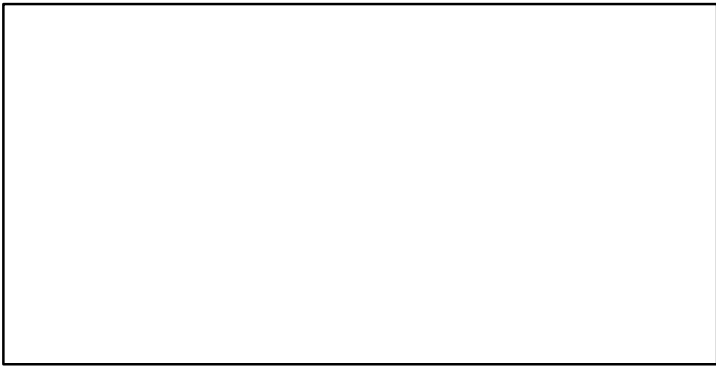
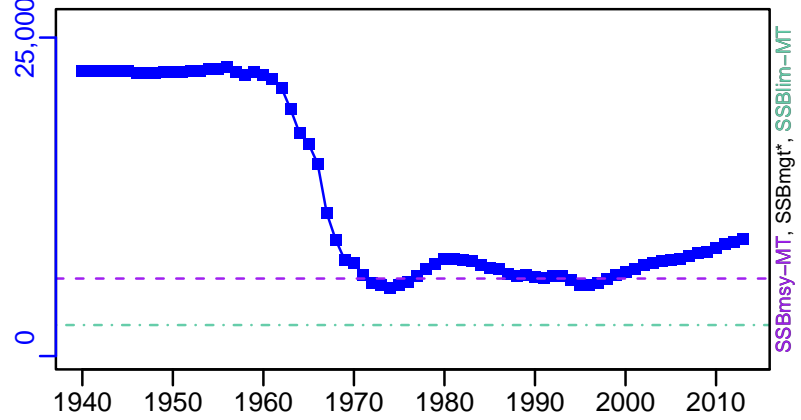
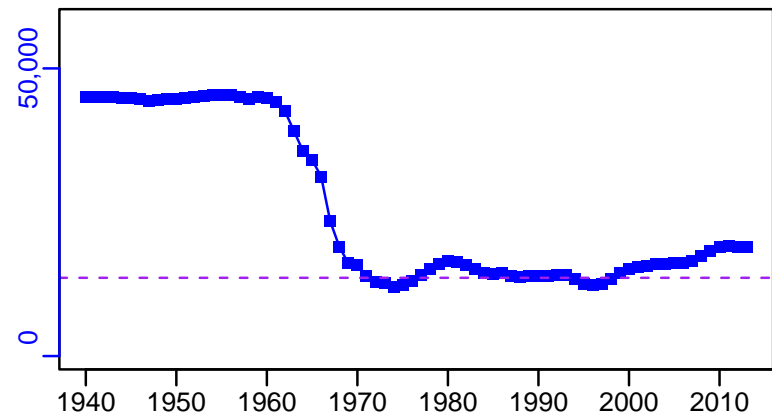
◆ Start Year ◆ End Year \* No Data



Pacific ocean perch West Coast of Vancouver Island [PERCHWCVANI]

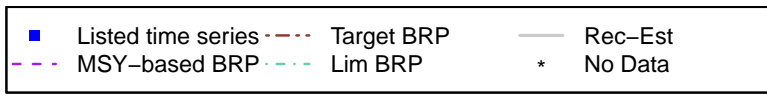
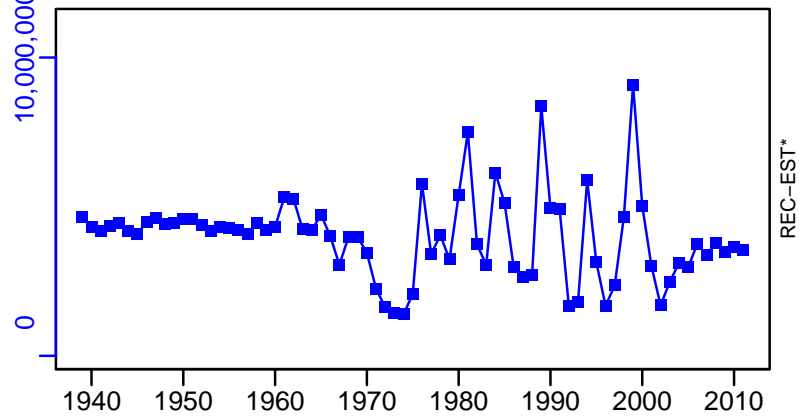
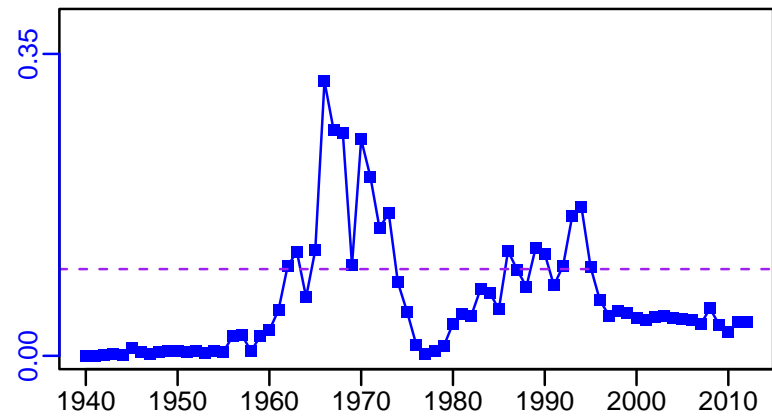
TB-MT (1939-2013-WATSON)

SSB-MT (1939-2013-WATSON)



ER-ratio (1939-2013-WATSON)

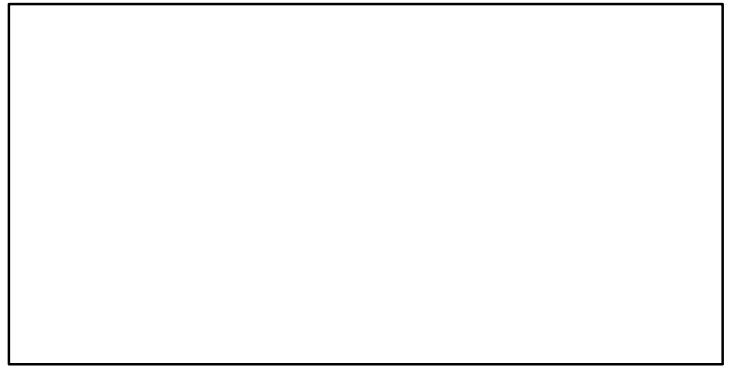
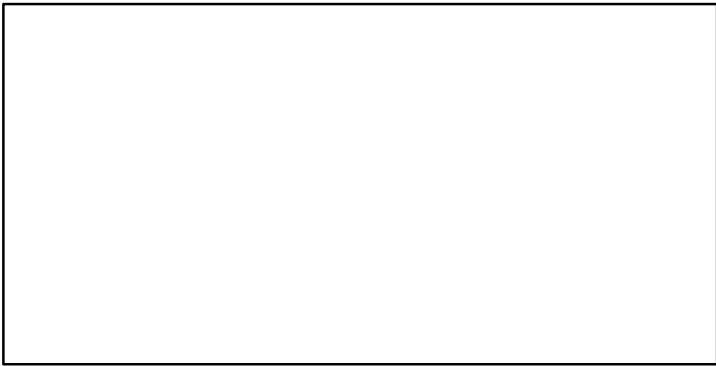
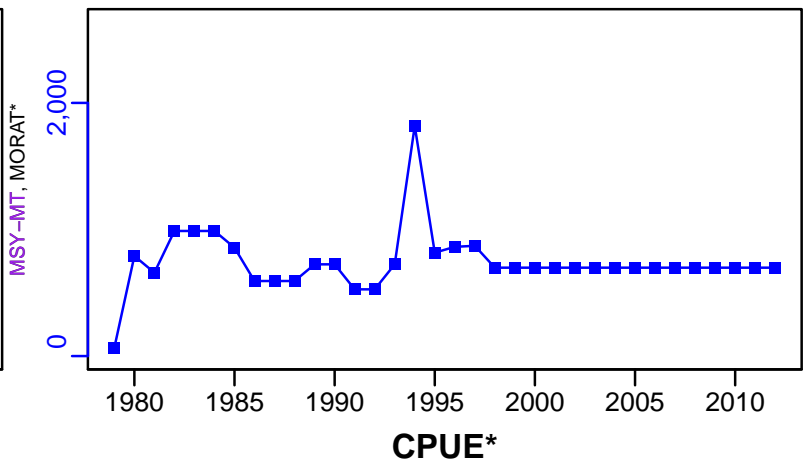
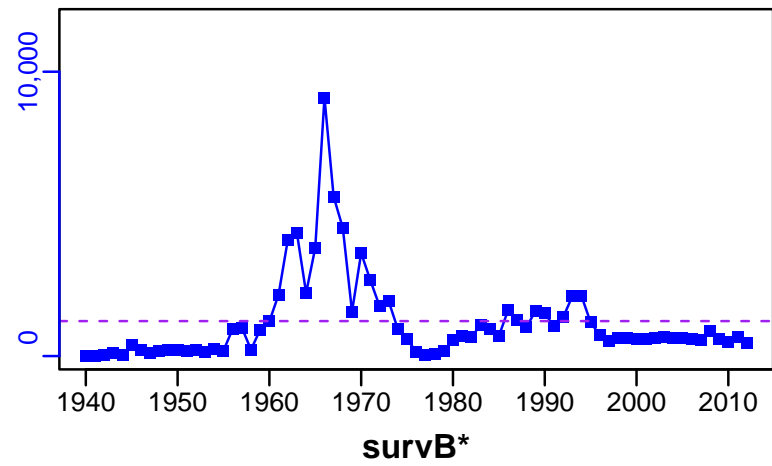
R-E00 (1939-2013-WATSON)



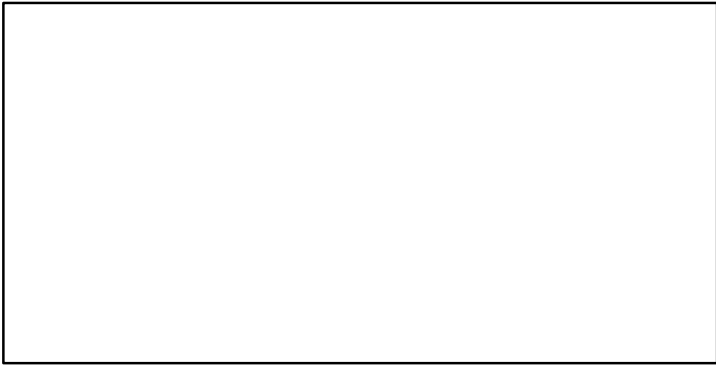
Pacific ocean perch West Coast of Vancouver Island [PERCHWCVANI]

TC-MT, TL\*, RecC\* (1939-2013-WATSON)

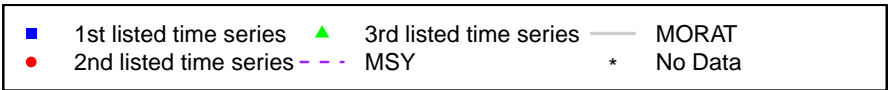
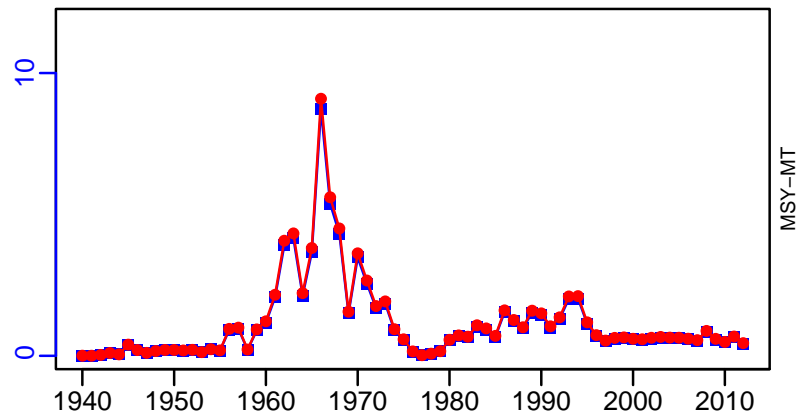
TAC-MT, Cpair\*, Cadv\* (1939-2013-WATSON)



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1939-2013-WATSON)



## Quillback rockfish Pacific Coast of Canada (Inside) [QROCKPCOASTIN]

Metadata	
<b>Scientific Name</b>	Sebastes maliger
<b>Current Assess ID</b>	DFO-QROCKPCOASTIN-1918-2010-WATSON
<b>Area</b>	Pacific Coast of Canada (Inside)
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	144
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	34		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

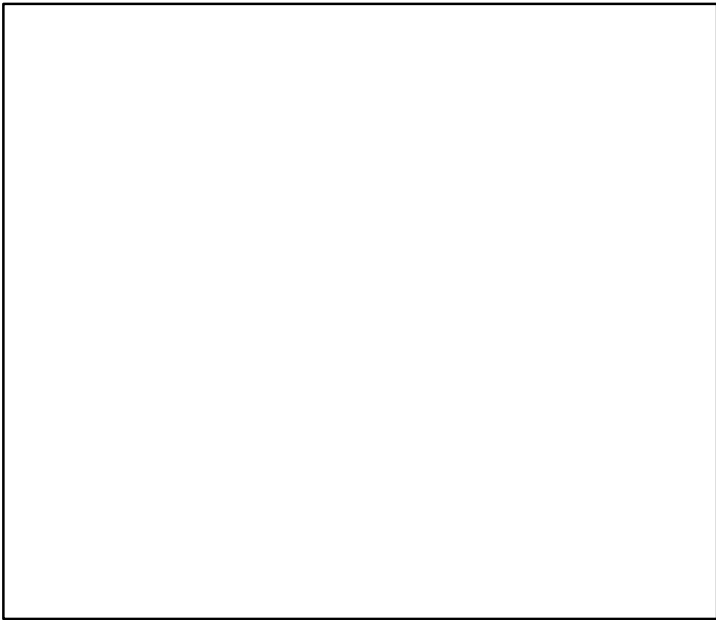
**Kobe MSY\***



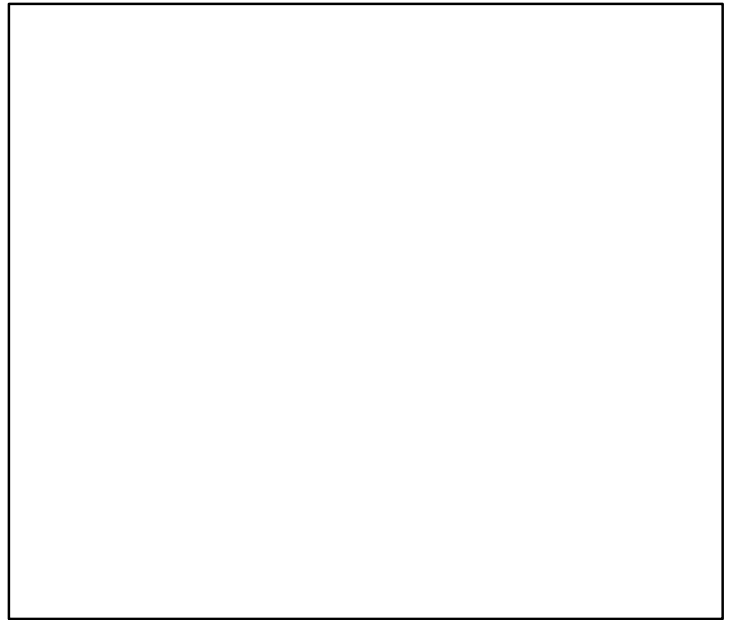
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



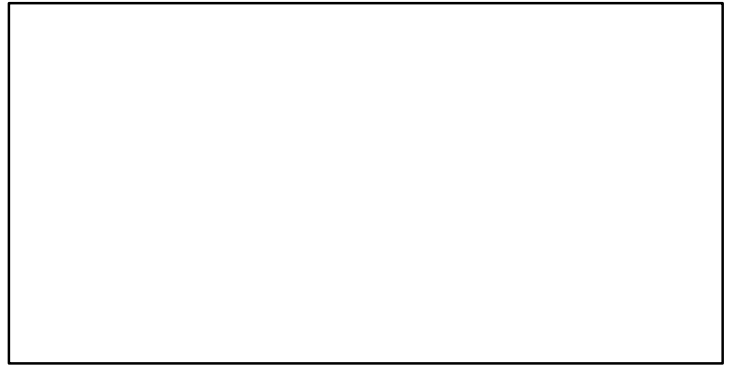
◆ Start Year ◆ End Year \* No Data

Quillback rockfish Pacific Coast of Canada (Inside) [QROCKPCOASTIN]

**TB\***



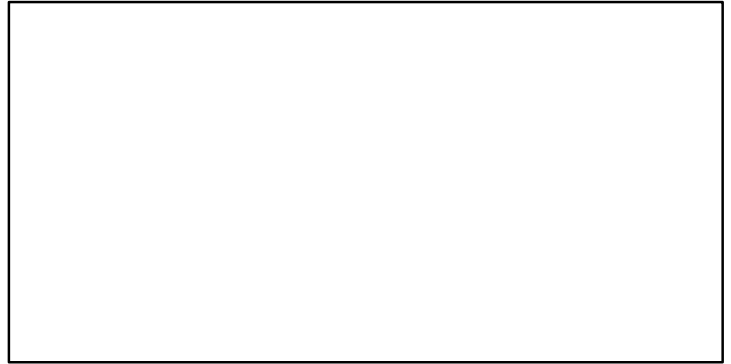
**SSB\***



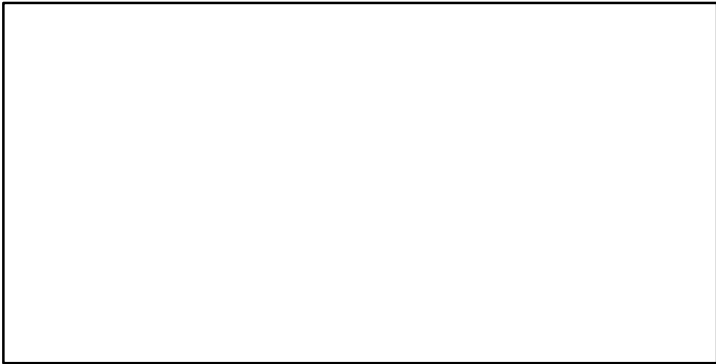
**TN \***



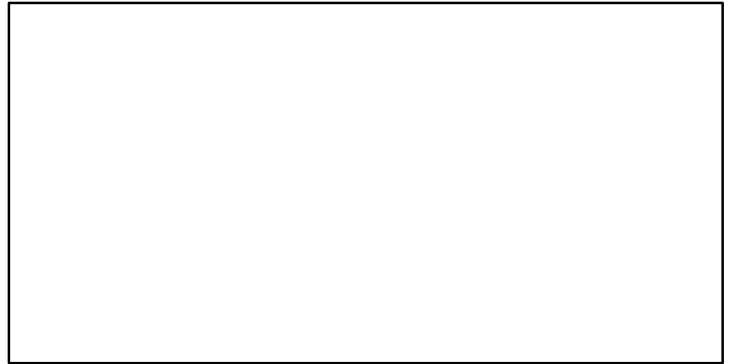
**F\***



**ER\***



**Recruits\***

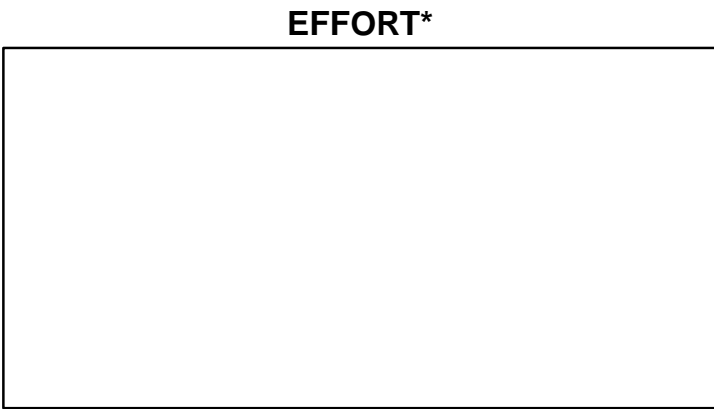
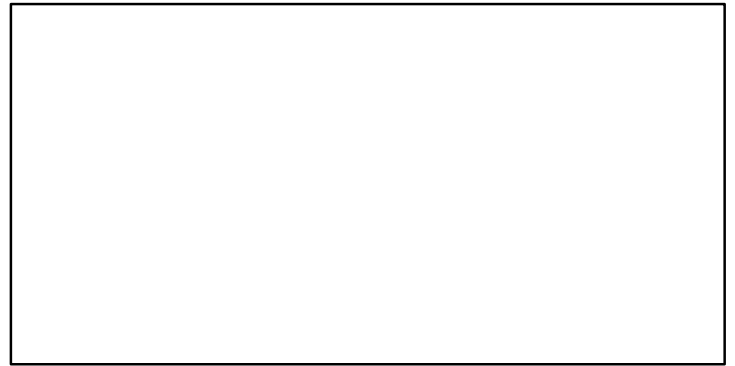
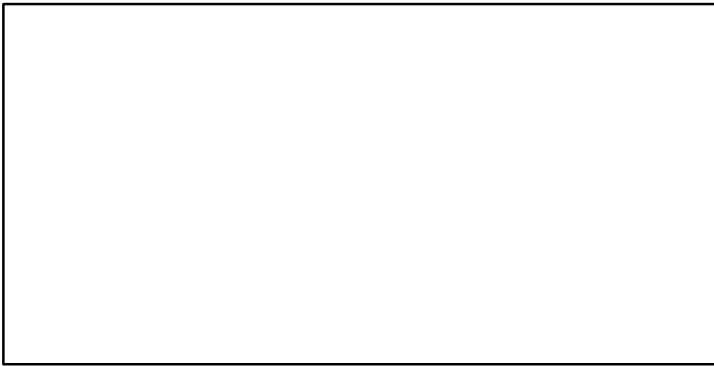
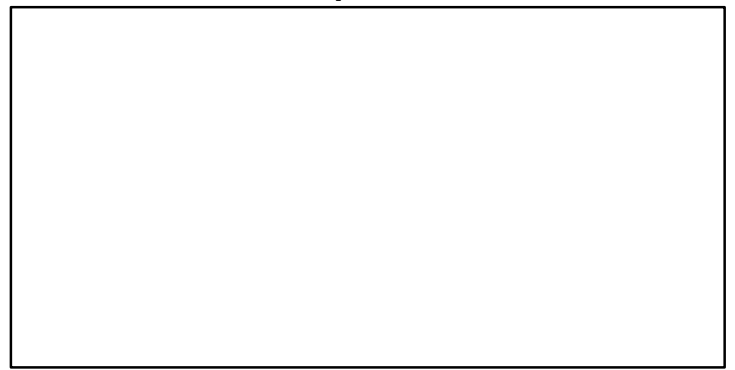
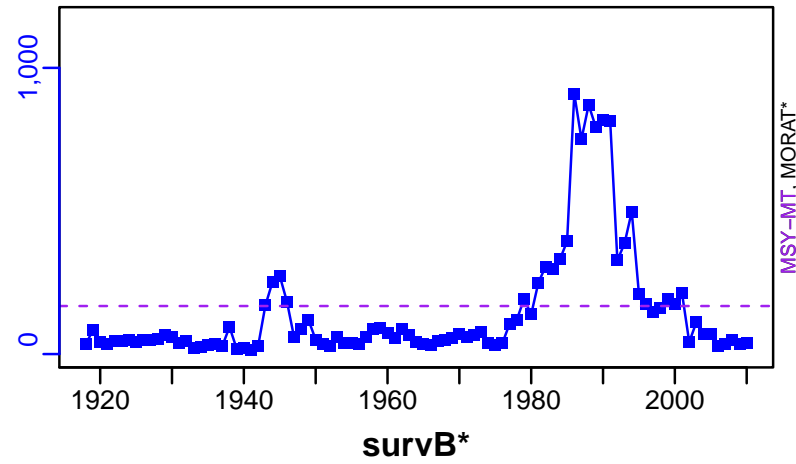


■ Listed time series	- - - Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

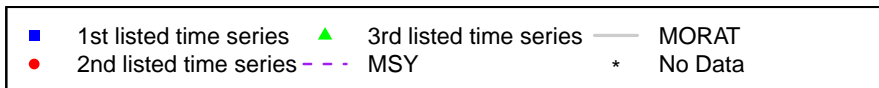
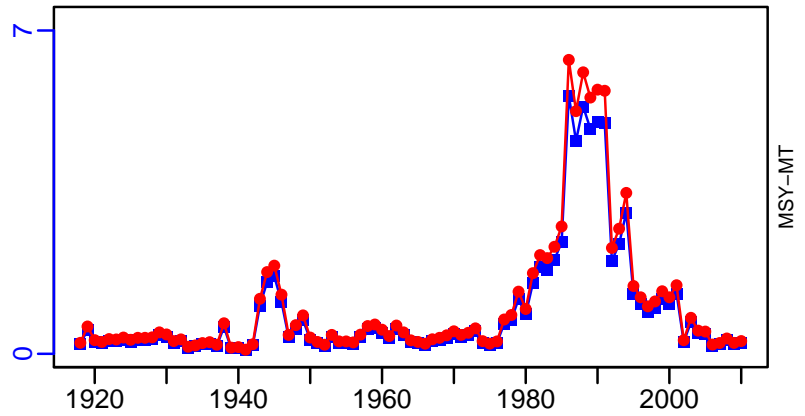
Quillback rockfish Pacific Coast of Canada (Inside) [QRCKPCOASTIN]

TC-MT, TL\*, RecC\* (1918-2010-WATSON)

TAC\*, Cpair\*, Cadv\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1918-2010-WATSON)



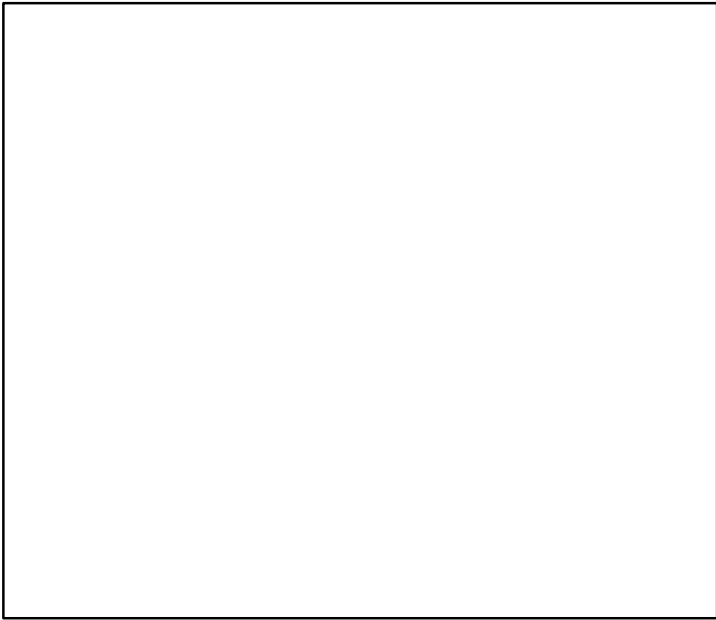
## Quillback rockfish Pacific Coast of Canada (Outside) [QROCKPCOASTOUT]

Metadata	
<b>Scientific Name</b>	Sebastes maliger
<b>Current Assess ID</b>	DFO-QROCKPCOASTOUT-1918-2010-WATSON
<b>Area</b>	Pacific Coast of Canada (Outside)
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2010

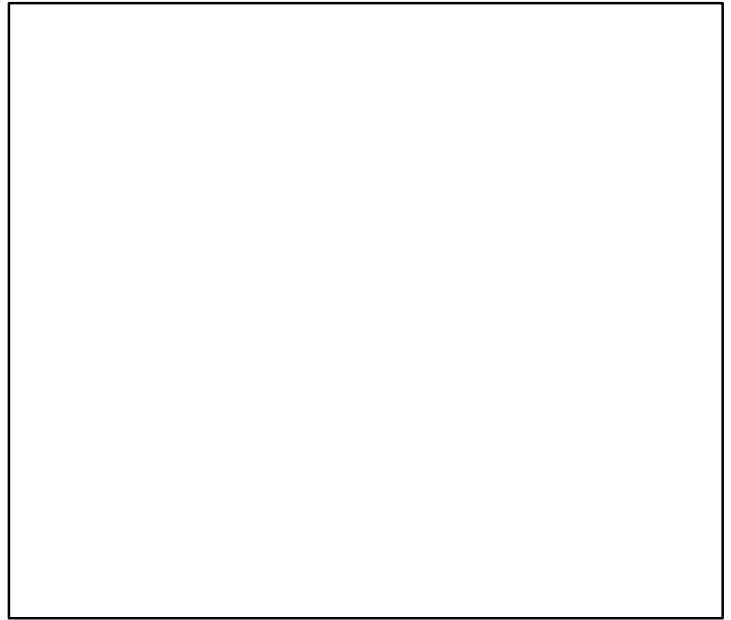
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	462
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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

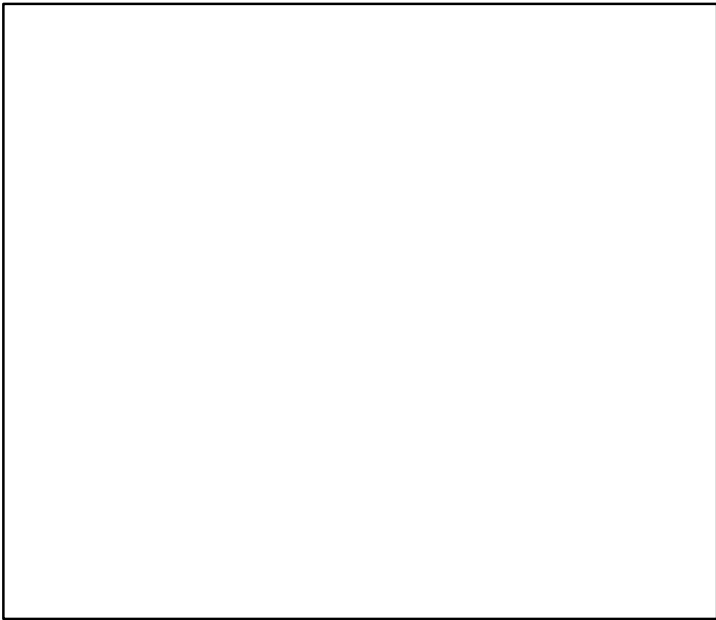
**Kobe MSY\***



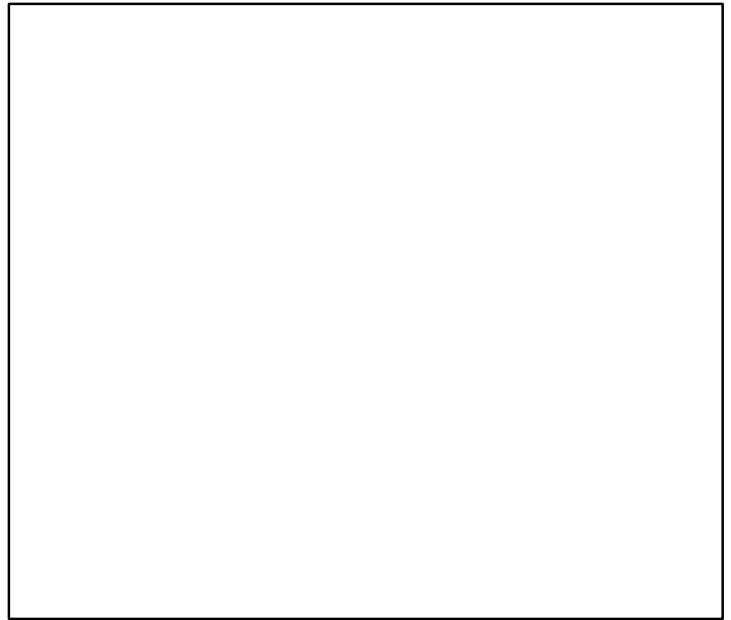
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

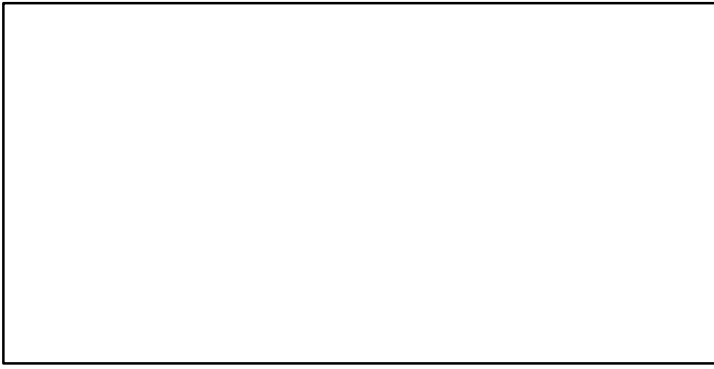


◆ Start Year ◆ End Year \* No Data



Quillback rockfish Pacific Coast of Canada (Outside) [QROCKPCOASTOUT]

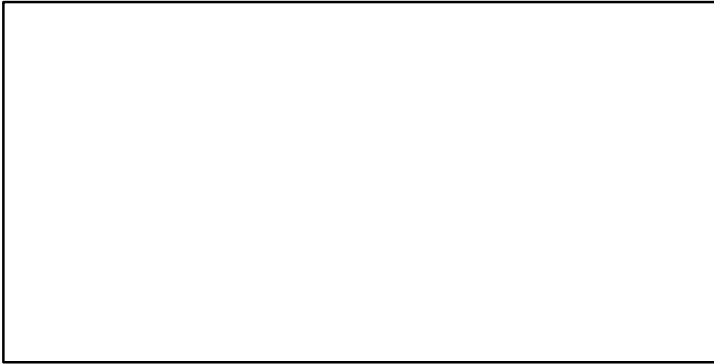
**TB\***



**SSB\***



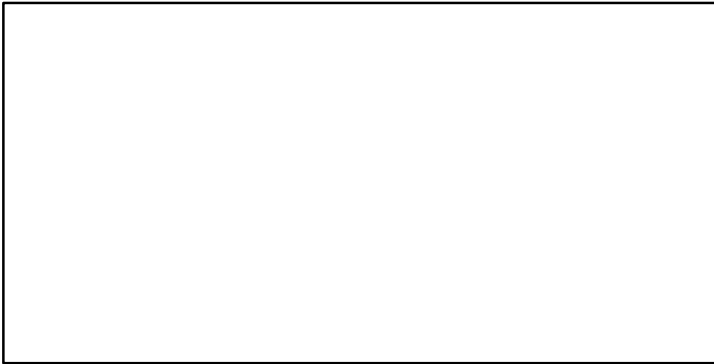
**TN \***



**F\***



**ER\***



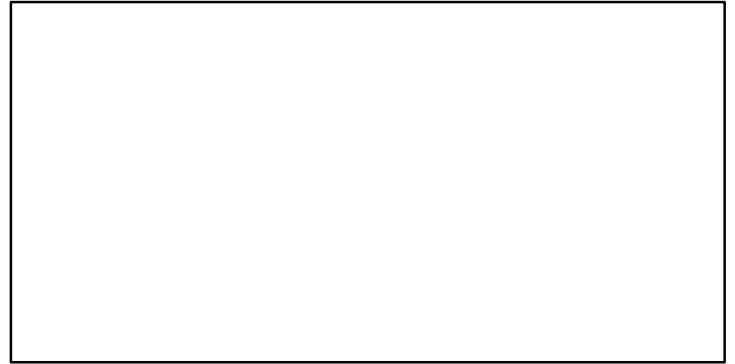
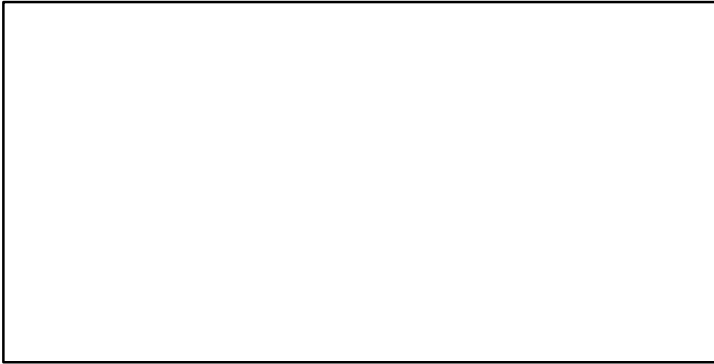
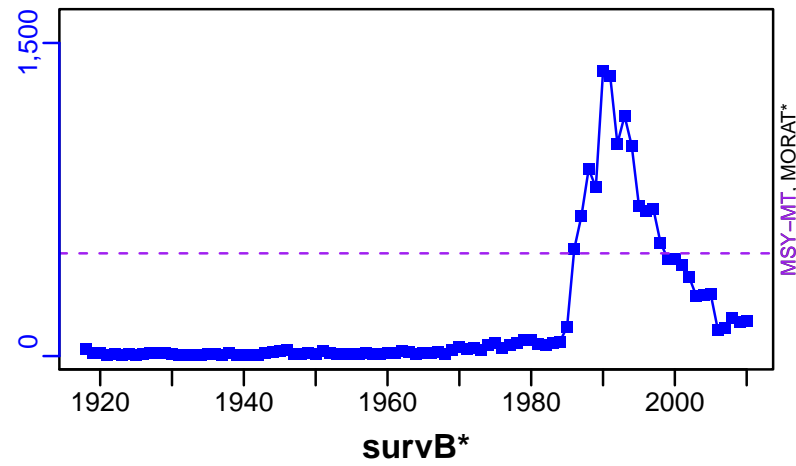
**Recruits\***



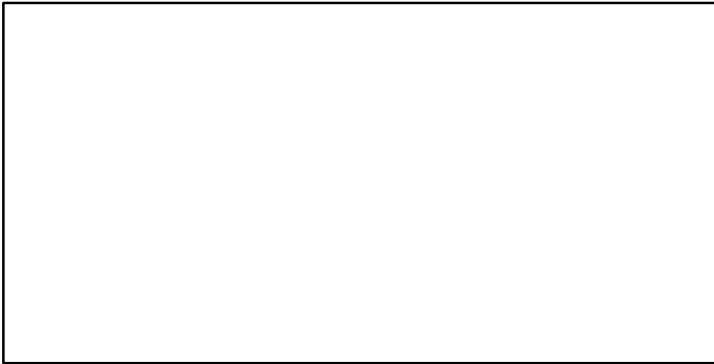
Quillback rockfish Pacific Coast of Canada (Outside) [QROCKPCOASTOUT]

TC-MT, TL\*, RecC\* (1918-2010-WATSON)

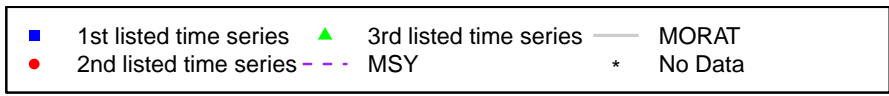
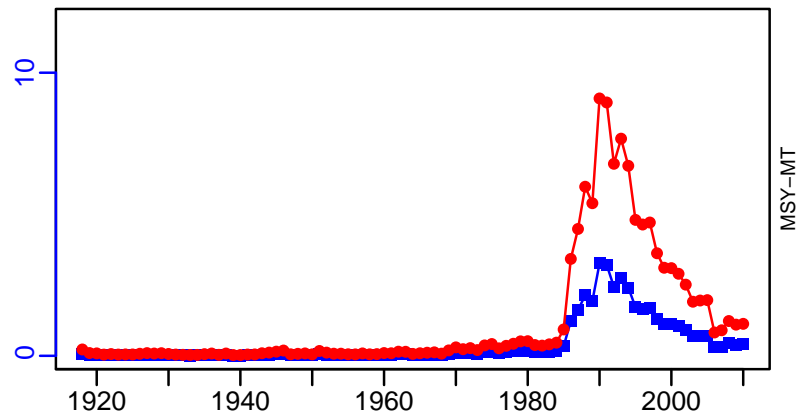
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1918-2010-WATSON)



## Rock sole Queen Charlotte Sound [RSOLE5AB]

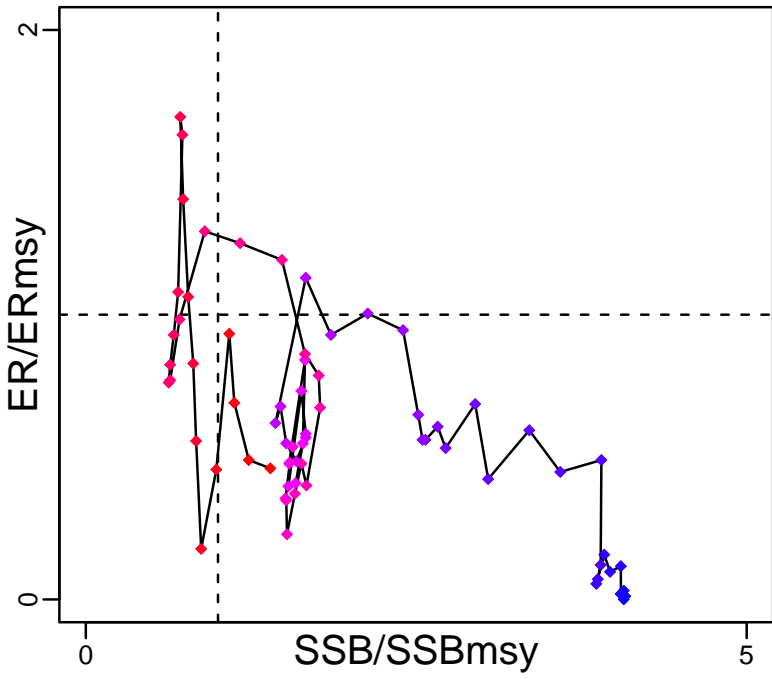
Metadata	
<b>Scientific Name</b>	Lepidopsetta bilineata
<b>Current Assess ID</b>	DFO-PAC-RSOLE5AB-1944-2014-OSGOOD
<b>Area</b>	Queen Charlotte Sound
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	2192
<b>SSBmsy</b>	SSBmsy-MT	2014	1833
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.239
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	1467
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.188
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	7479
<b>MSY</b>	MSY-MT	2014	524
<b>M</b>	M-1/yr	2014	0.251
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

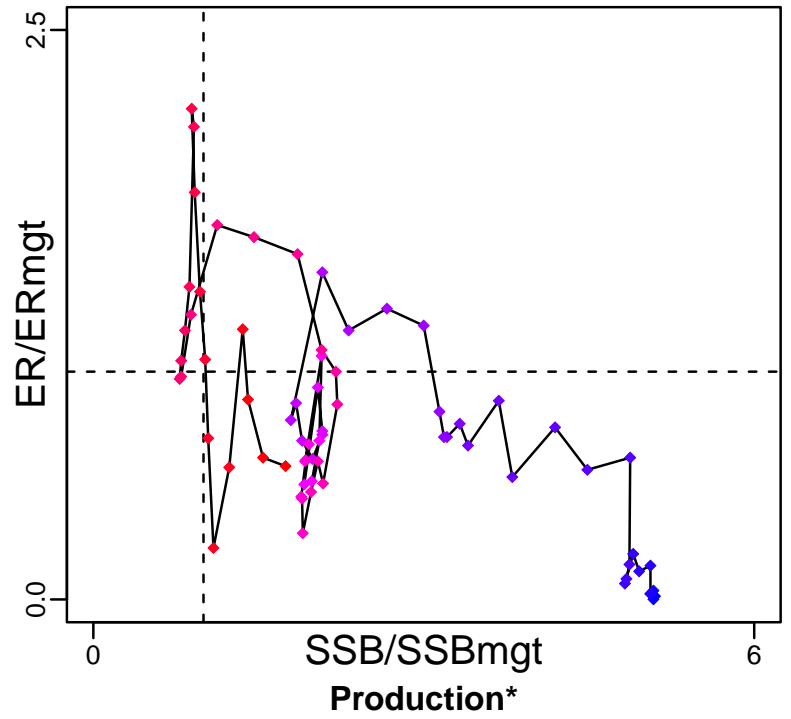
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	2780	Females	5.6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	2,630,000	Females	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.11	Females	-
<b>TC</b>	TC-MT	2014	362		
<b>TL</b>	TL-MT	2014	337		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.517		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2014	0.46		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.895		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Rock sole Queen Charlotte Sound [RSOLE5AB]

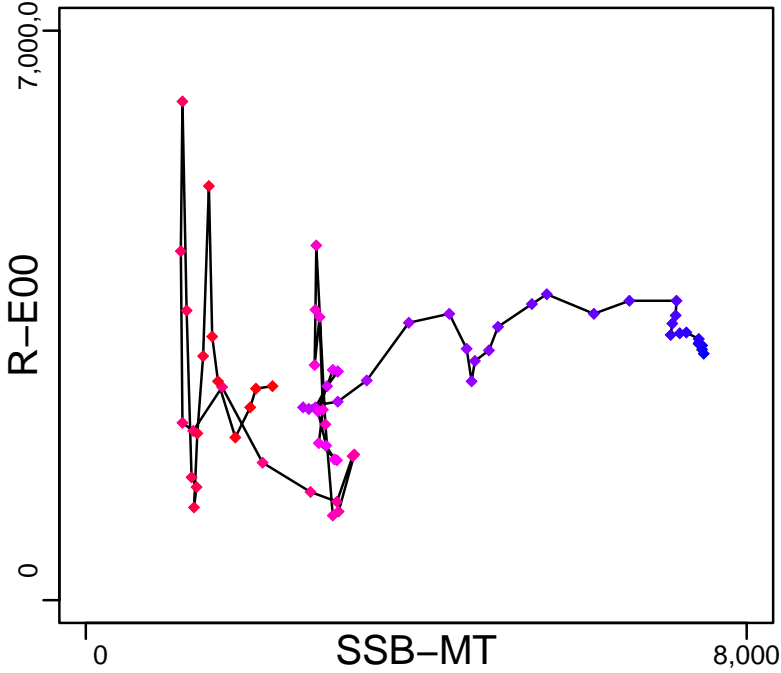
Kobe MSYpref (1944–2014–OSGOOD)



Kobe MGTpref (1944–2014–OSGOOD)



Spawner Recruit (1944–2014–OSGOOD)



Production\*



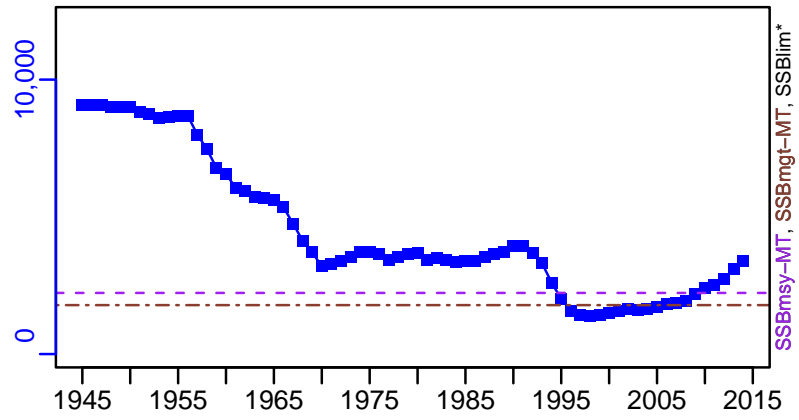
◆ Start Year ◆ End Year \* No Data

Rock sole Queen Charlotte Sound [RSOLE5AB]

TB\*



SSB-MT (1944-2014-OSGOOD)



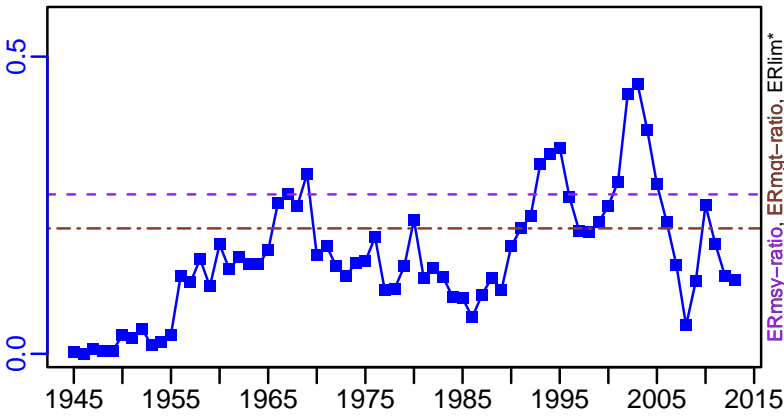
TN \*



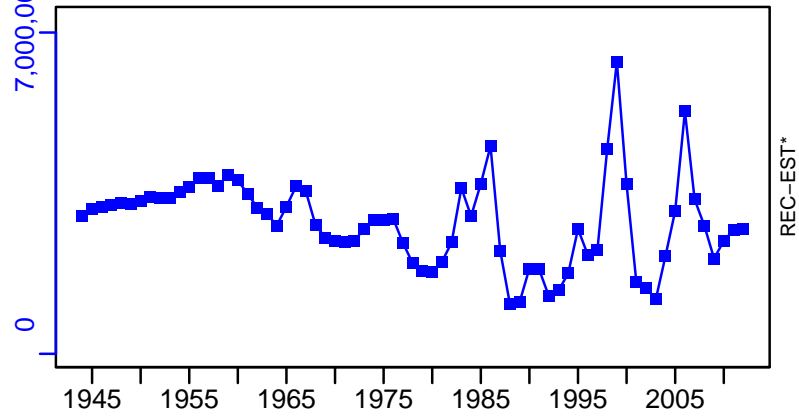
F\*



ER-ratio (1944-2014-OSGOOD)

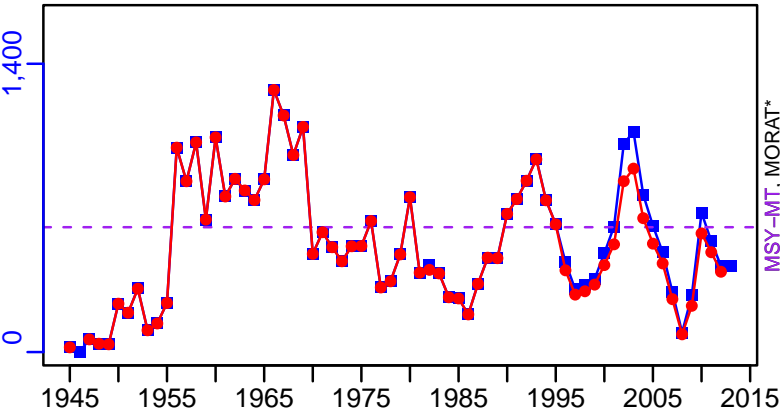


R-E00 (1944-2014-OSGOOD)

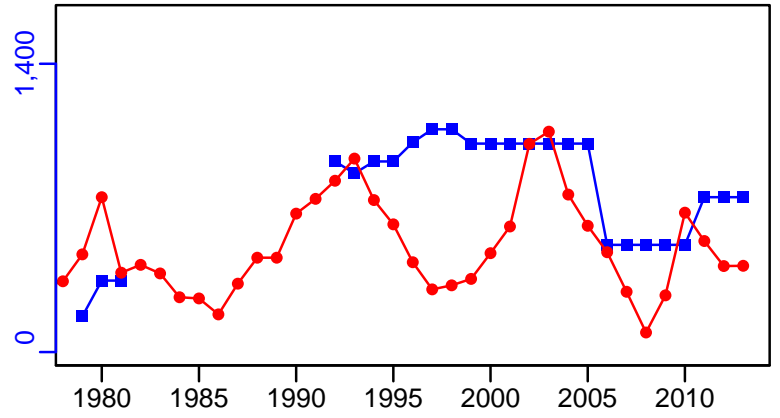


Rock sole Queen Charlotte Sound [RSOLE5AB]

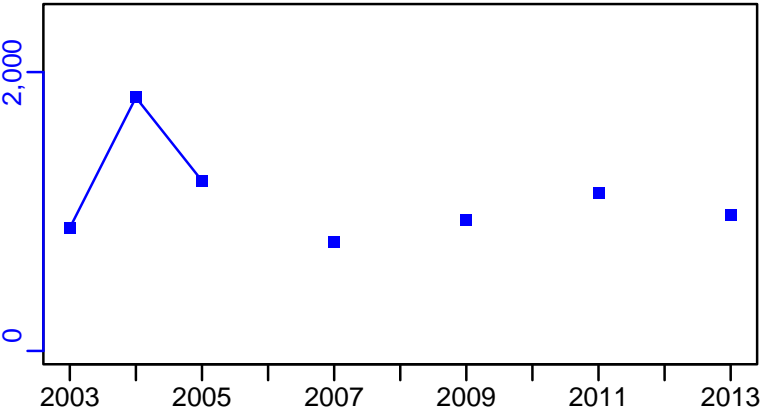
TC-MT, TL-MT, RecC\* (1944-2014-OSGOOD)



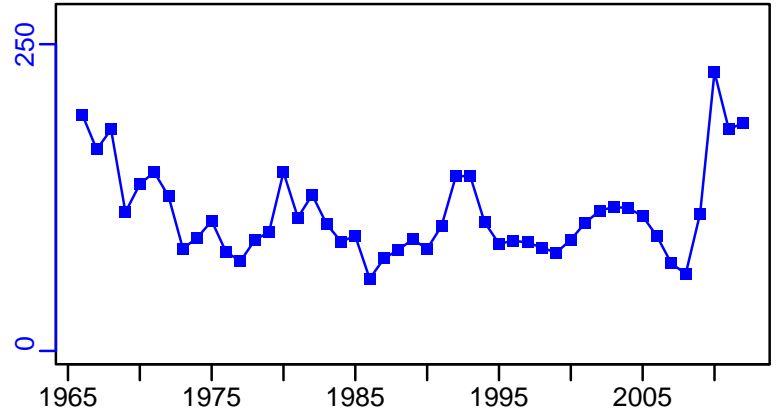
TAC-MT, Cpair-MT, Cadv\* (1944-2014-OSGOOD)



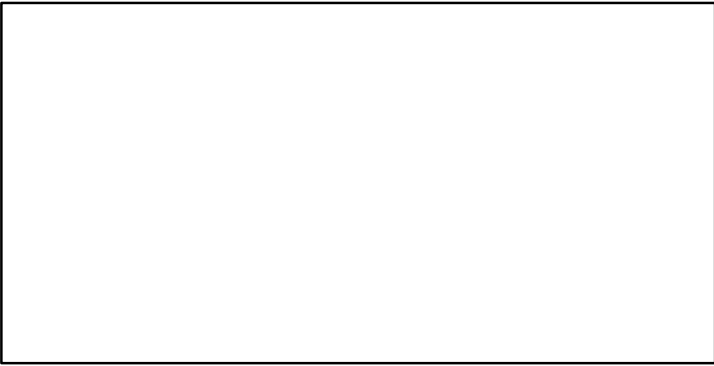
survB-MT (1944-2014-OSGOOD)



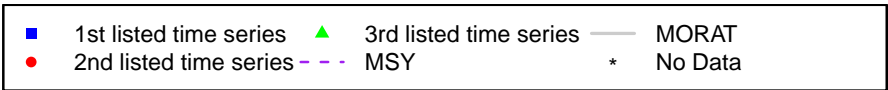
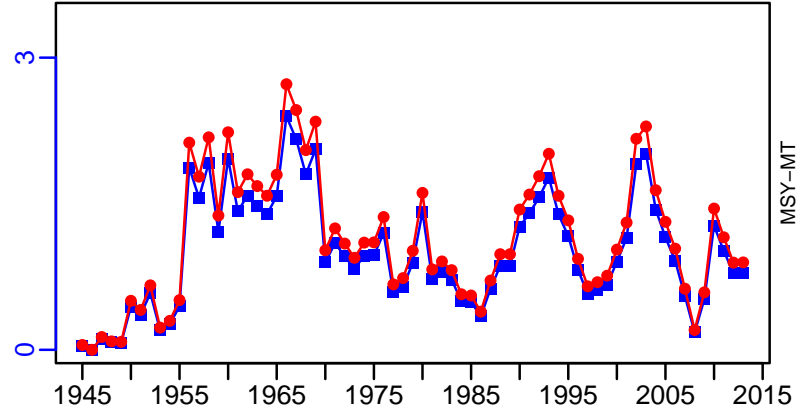
CPUE-kg/hour (1944-2014-OSGOOD)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1944-2014-OSGOOD)



## Rock sole Hecate Strait [RSOLEHSTR]

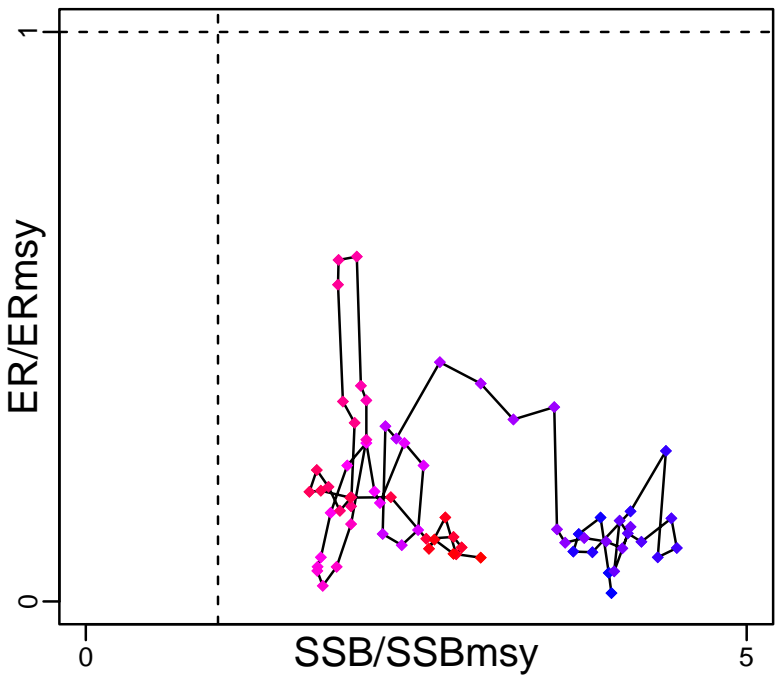
Metadata	
<b>Scientific Name</b>	Lepidopsetta bilineata
<b>Current Assess ID</b>	DFO-PAC-RSOLEHSTR-1945-2014-OSGOOD
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2001, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	3738
<b>SSBmsy</b>	SSBmsy-MT	2014	4853
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.507
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	3883
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.122
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	19,329
<b>MSY</b>	MSY-MT	2014	1895
<b>M</b>	M-1/yr	2014	0.251
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

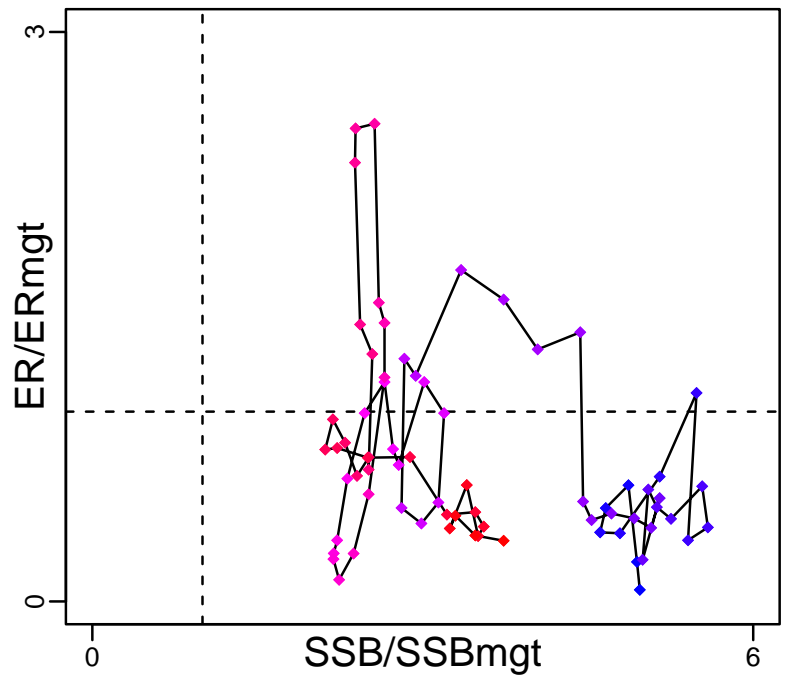
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2001	4850	-	4+
<b>SSB</b>	SSB-MT	2014	15,400	Females	5.6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	17,000	-	-
<b>F</b>	F-1/yr	2001	0.126	-	-
<b>ER</b>	ER-ratio	2014	0.039	Females	-
<b>TC</b>	TC-MT	2014	594		
<b>TL</b>	TL-MT	2014	500		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	3.173		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2014	0.077		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	3.966		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Rock sole Hecate Strait [RSOLEHSTR]

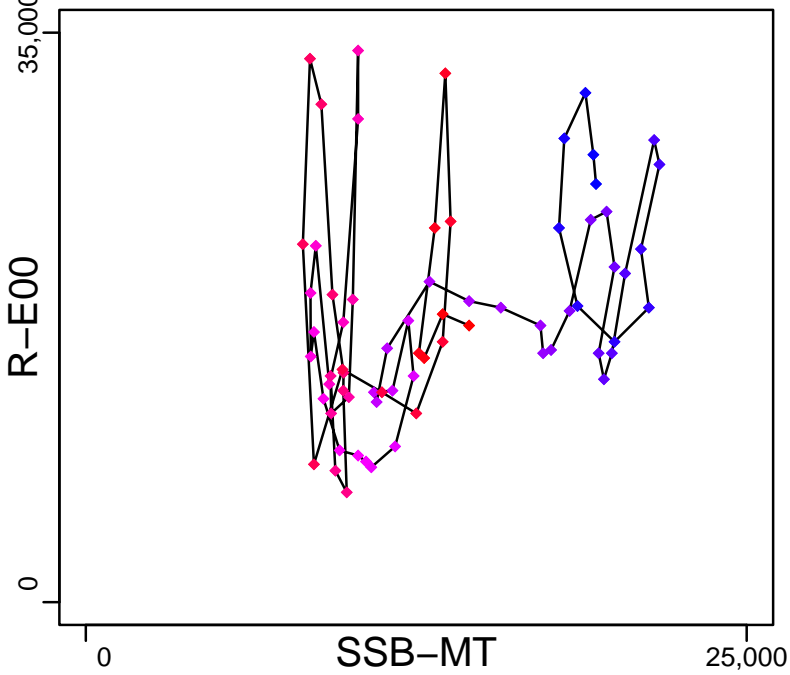
Kobe MSYpref (1945–2014–OSGOOD)



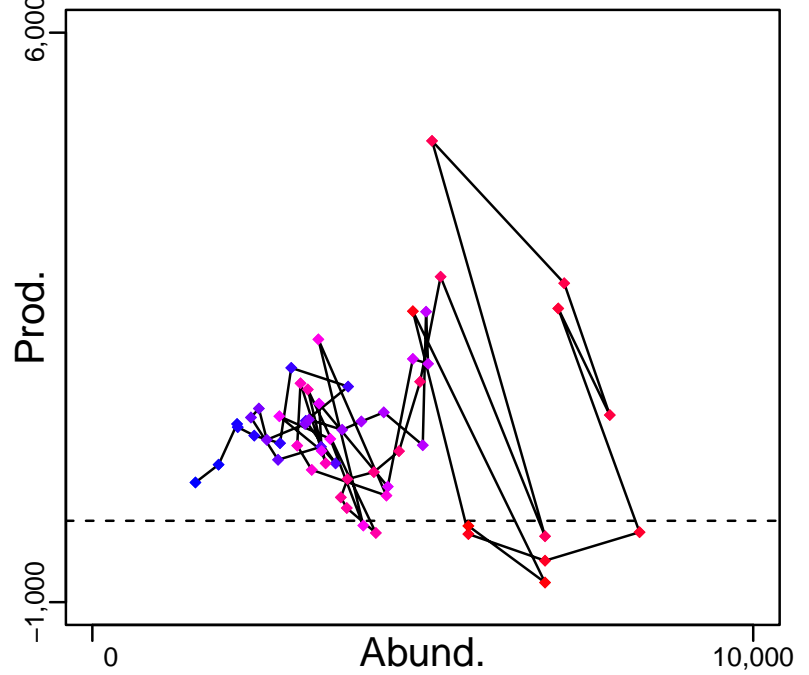
Kobe MGTpref (1945–2014–OSGOOD)



Spawner Recruit (1945–2014–OSGOOD)



Production (1945–2014–OSGOOD)



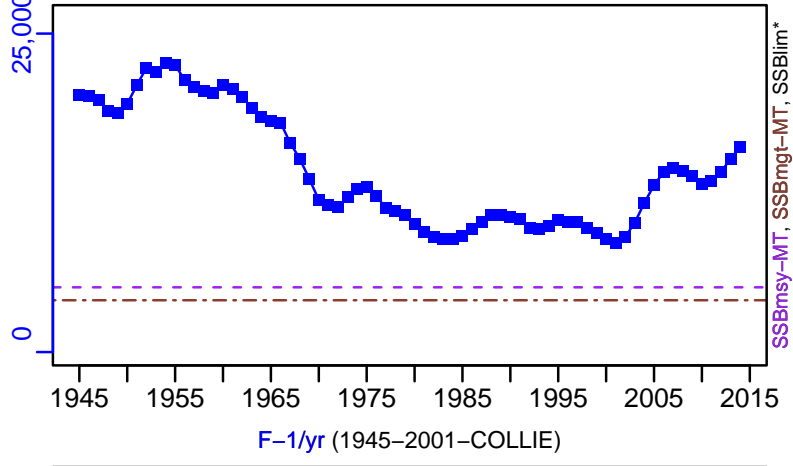
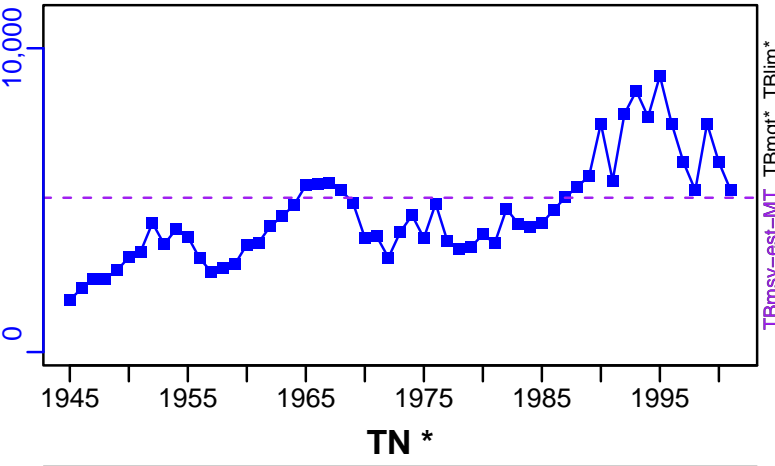
◆ Start Year ◆ End Year \* No Data



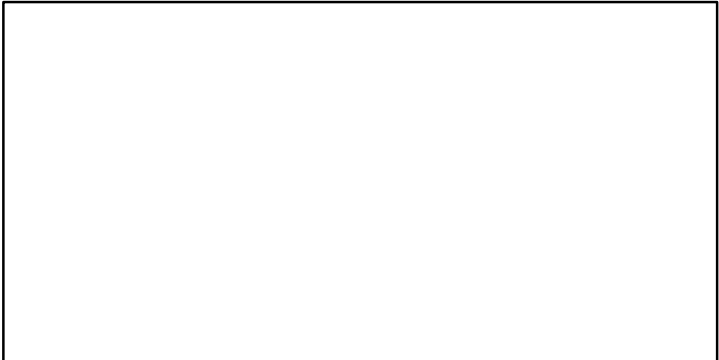
Rock sole Hecate Strait [RSOLEHSTR]

TB-MT (1945-2001-COLLIE)

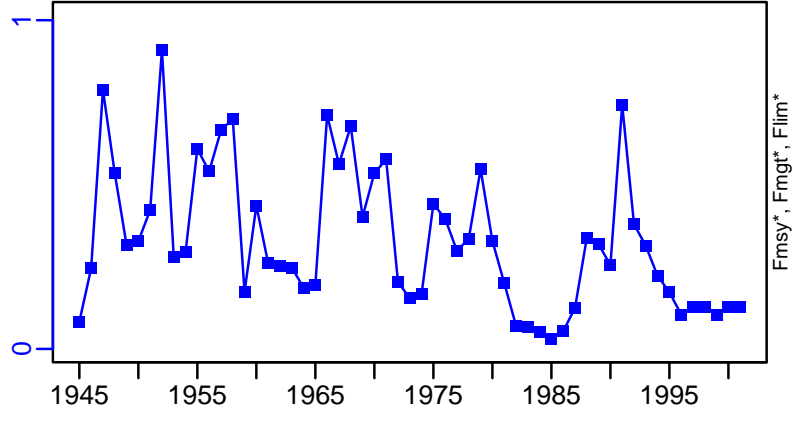
SSB-MT (1945-2014-OSGOOD)



TN \*

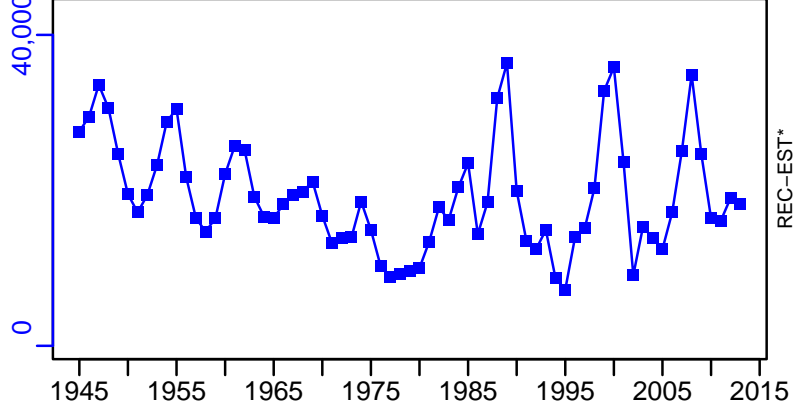
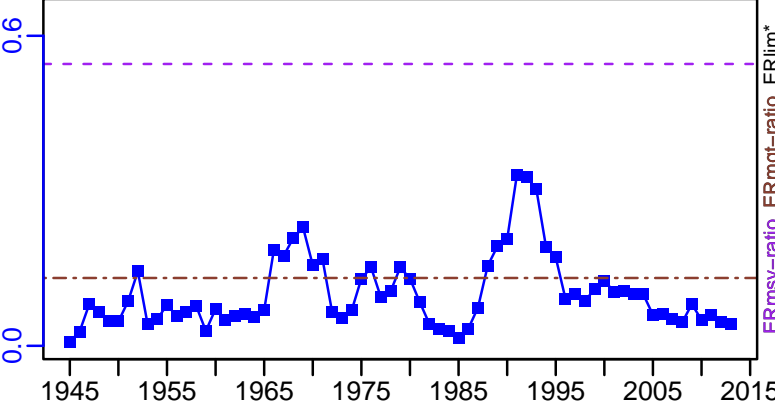


F-1/yr (1945-2001-COLLIE)



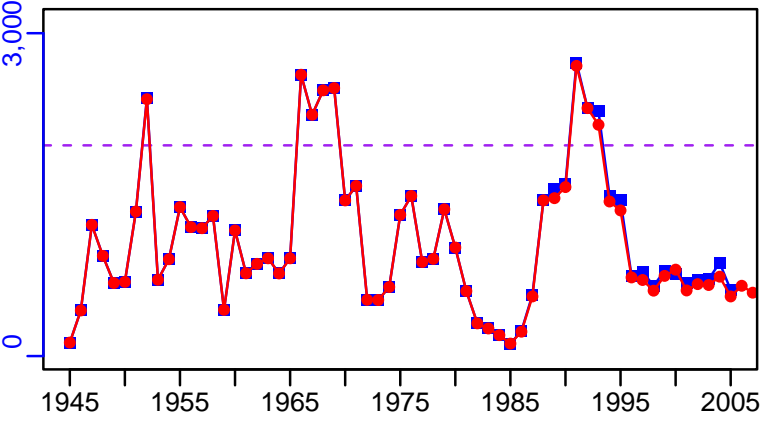
ER-ratio (1945-2014-OSGOOD)

R-E00 (1945-2014-OSGOOD)

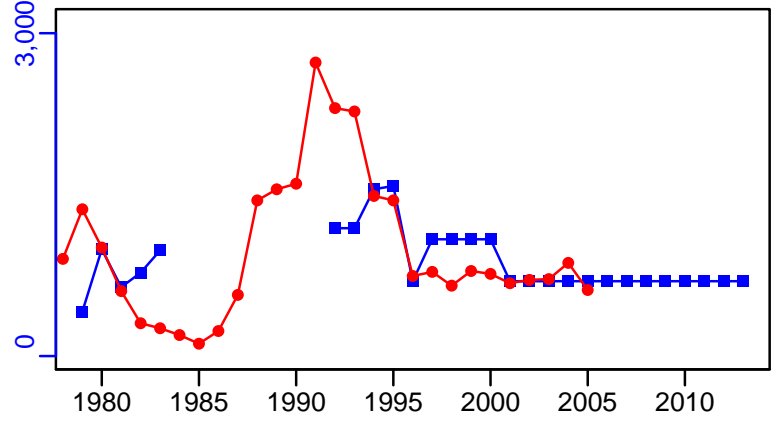


Rock sole Hecate Strait [RSOLEHSTR]

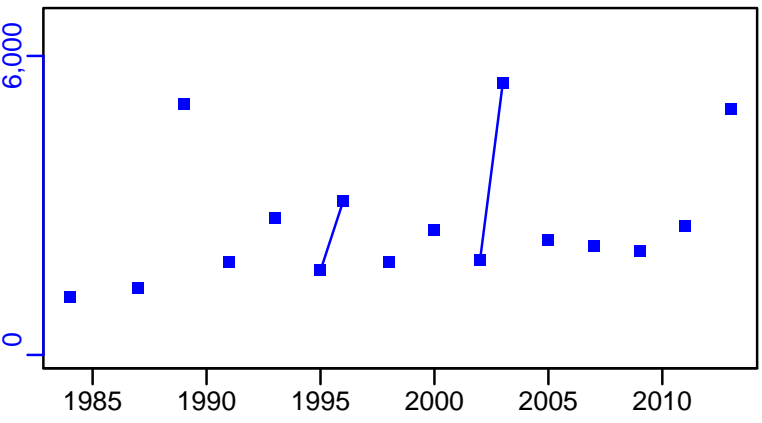
TC-MT, TL-MT, RecC\* (1945-2014-OSGOOD)



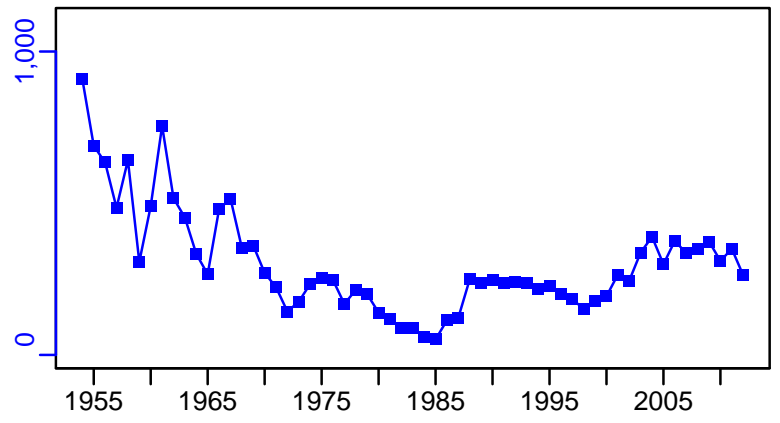
TAC-MT, Cpair-MT, Cadv\* (1945-2014-OSGOOD)



survB-MT (1945-2014-OSGOOD)



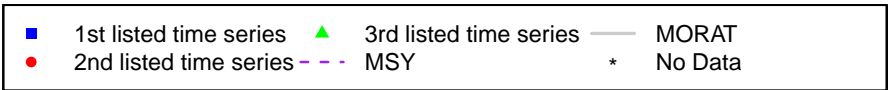
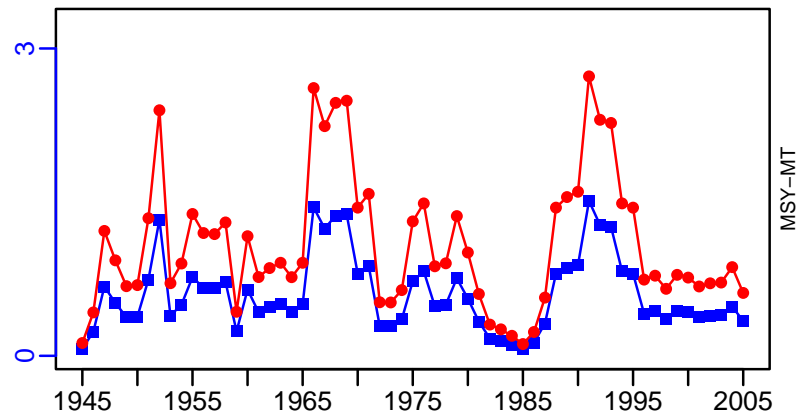
CPUE-kg/hour (1945-2014-OSGOOD)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2014-OSGOOD)



## Redstripe rockfish British Columbia Waters North [RSROCKBCWN]

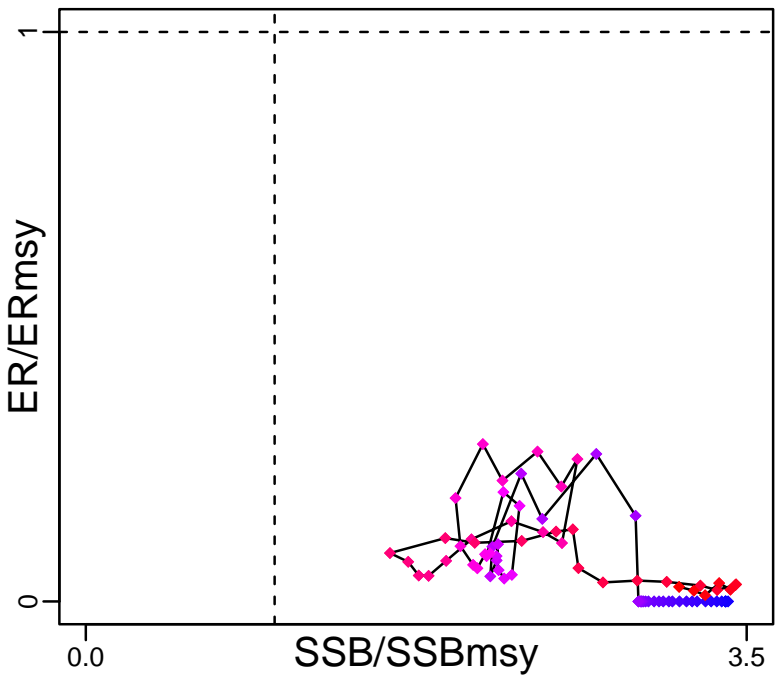
Metadata	
<b>Scientific Name</b>	Sebastes proriger
<b>Current Assess ID</b>	DFO-PAC-RSROCKBCWN-1939-2018-ASHBROOK
<b>Area</b>	British Columbia Waters North
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2018

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2018	848
<b>SSBmsy</b>	SSBmsy-MT	2018	2135
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2018	0.638
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	7216
<b>MSY</b>	MSY-calc-MT	2018	541
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

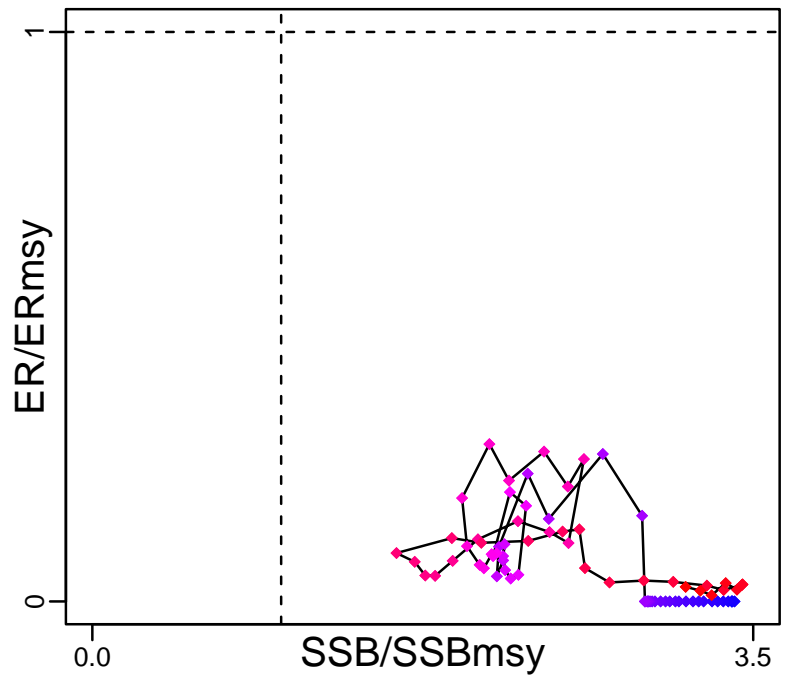
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2018	7455	Both	-
<b>SSB</b>	SSB-MT	2018	6500	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	2,608,148	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2018	0.016	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2018	170	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2018	8.791	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2018	3.044	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2018	0.026	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Redstripe rockfish British Columbia Waters North [RSROCKBCWN]

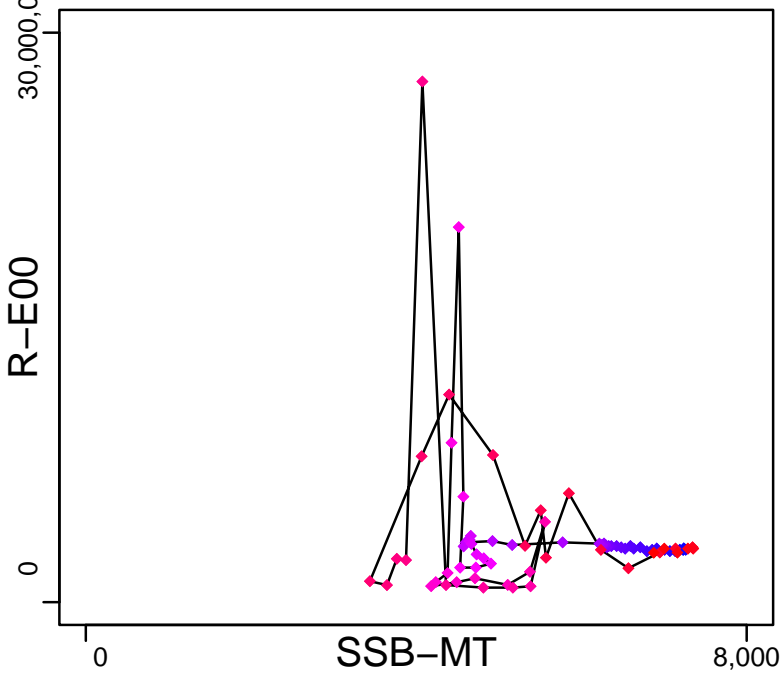
Kobe MSYpref (1939–2018–ASHBROOK)



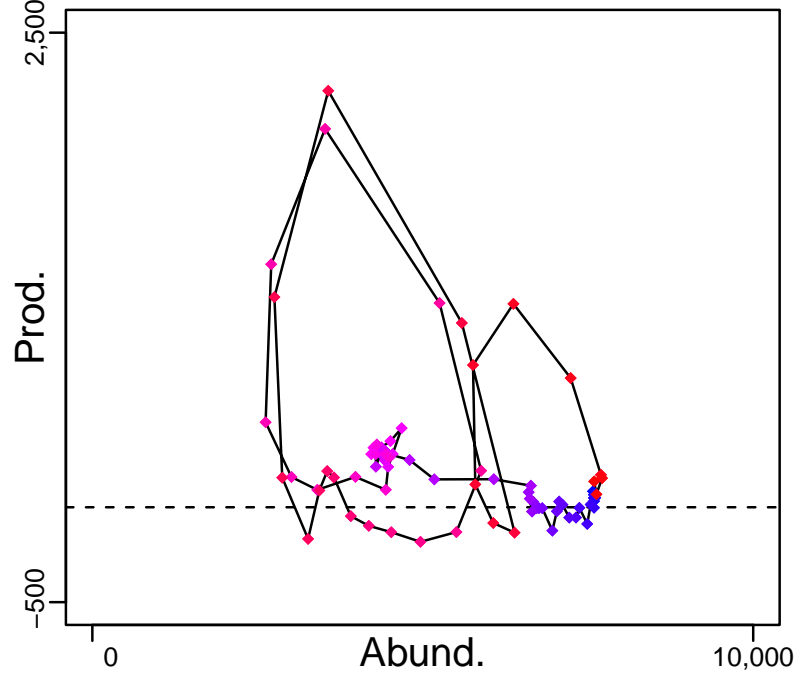
Kobe MGTpref (1939–2018–ASHBROOK)



Spawner Recruit (1939–2018–ASHBROOK)



Production (1939–2018–ASHBROOK)

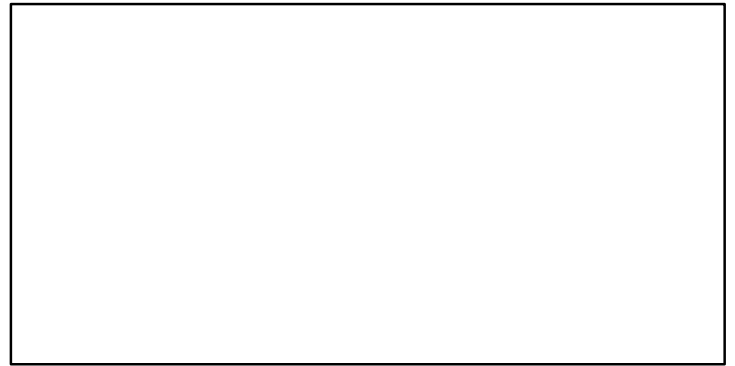
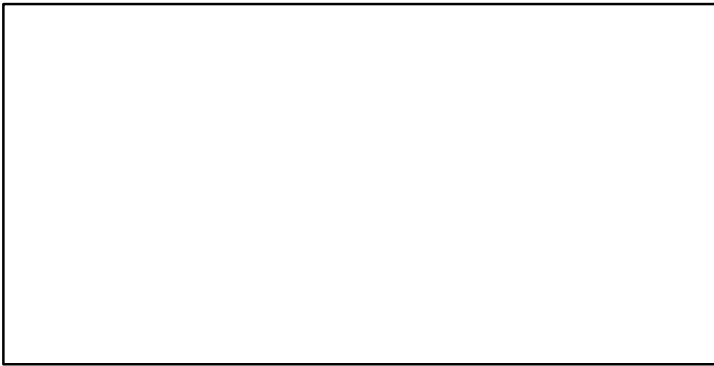
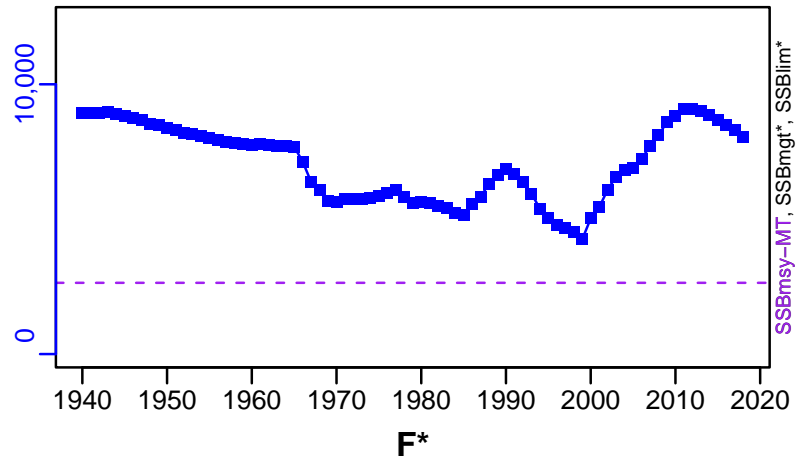
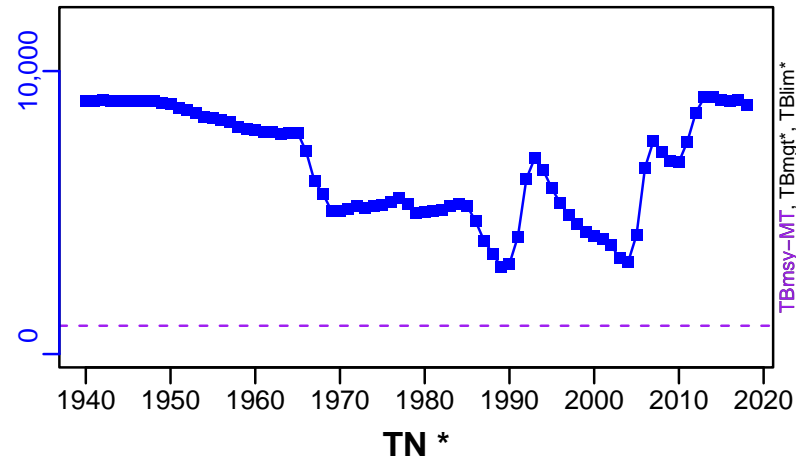


◆ Start Year ◆ End Year \* No Data

Redstripe rockfish British Columbia Waters North [RSROCKBCWN]

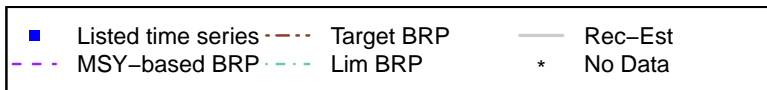
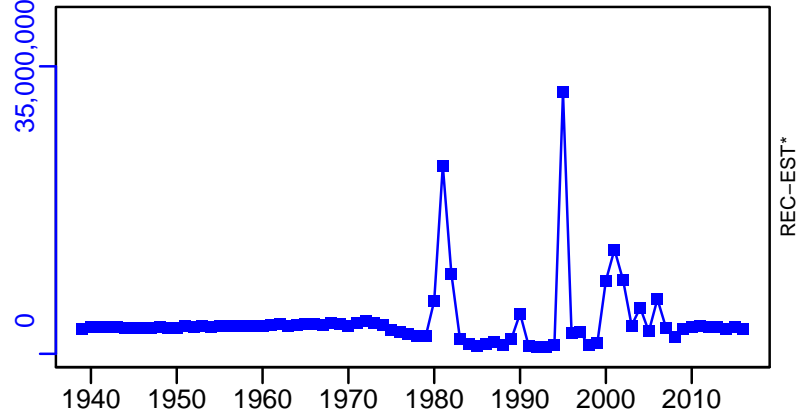
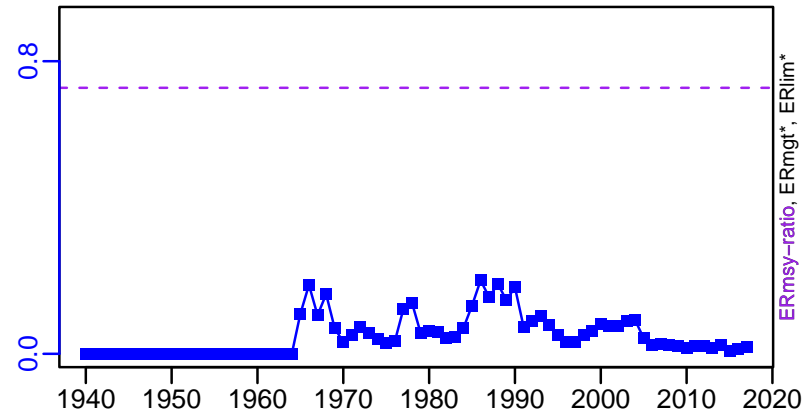
TB-MT (1939-2018-ASHBROOK)

SSB-MT (1939-2018-ASHBROOK)



ER-ratio (1939-2018-ASHBROOK)

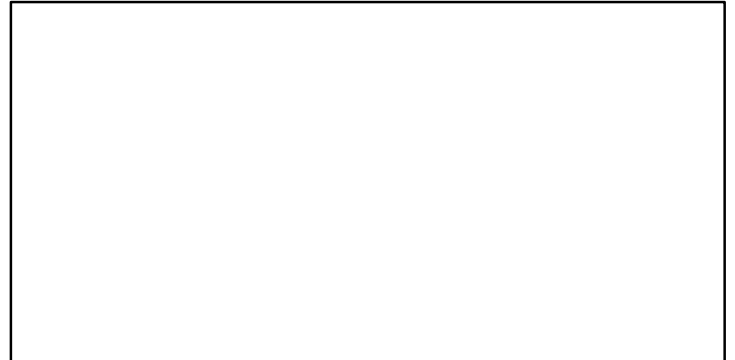
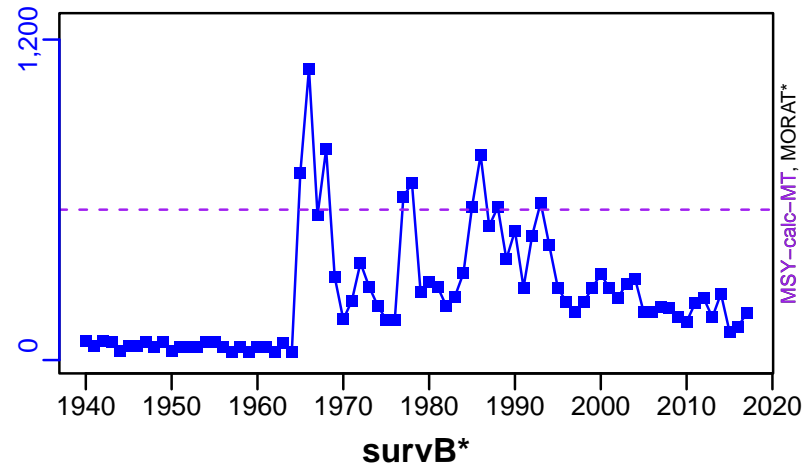
R-E00 (1939-2018-ASHBROOK)



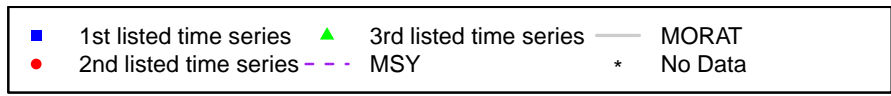
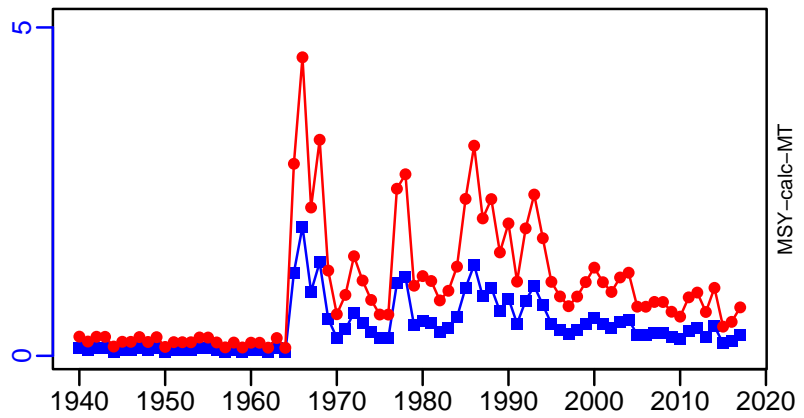
Redstripe rockfish British Columbia Waters North [RSROCKBCWN]

TL-MT, TC\*, RecC\* (1939-2018-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



TL-MT/MSY-calc-MT, CdivMEANC-ratio, (1939-2018-ASHBROOK)



## Redstripe rockfish British Columbia Waters South [RSROCKBCWS]

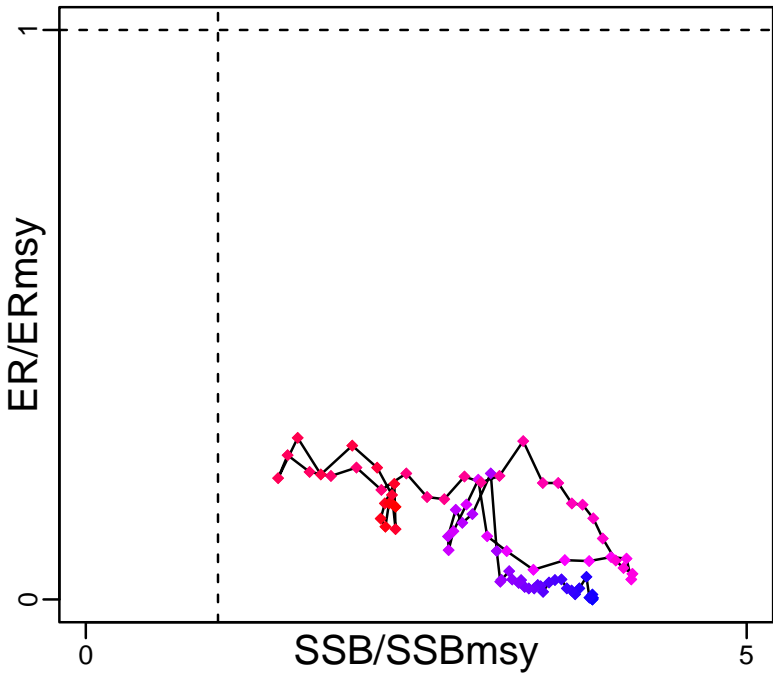
Metadata	
<b>Scientific Name</b>	Sebastes proriger
<b>Current Assess ID</b>	DFO-PAC-RSROCKBCWS-1939-2018-ASHBROOK
<b>Area</b>	British Columbia Waters South
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2018

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2018	5043
<b>SSBmsy</b>	SSBmsy-MT	2018	6830
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2018	0.3
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	26,149
<b>MSY</b>	MSY-calc-MT	2018	1513
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

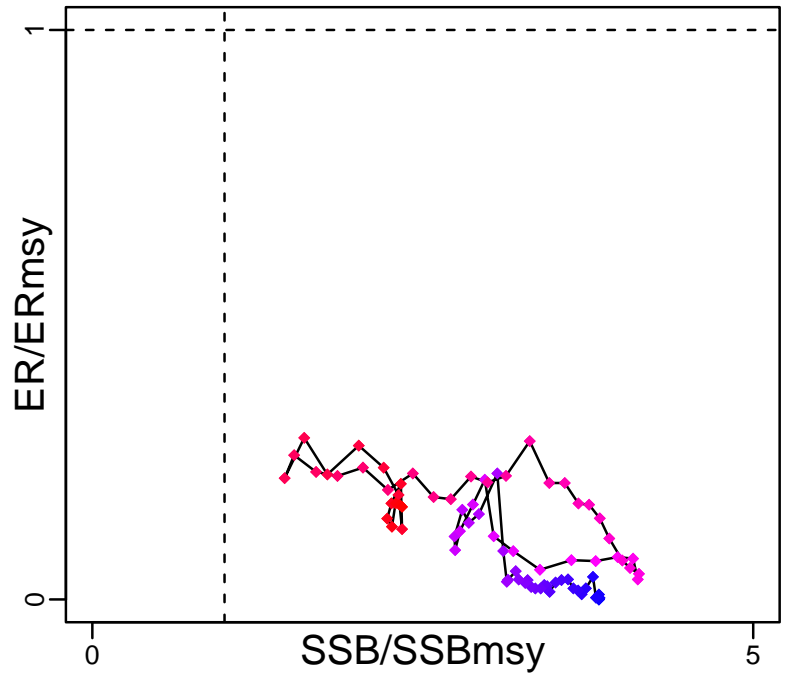
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2018	15,665	Both	-
<b>SSB</b>	SSB-MT	2018	16,235	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	10,994,945	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2018	0.049	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2018	1023	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2018	3.106	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2018	2.377	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2018	0.163	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Redstripe rockfish British Columbia Waters South [RSROCKBCWS]

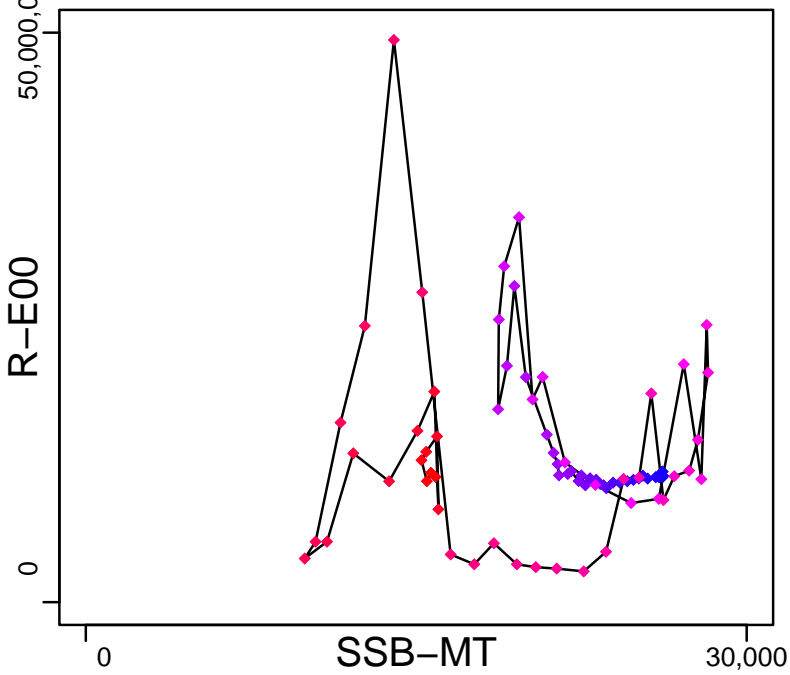
Kobe MSYpref (1939–2018–ASHBROOK)



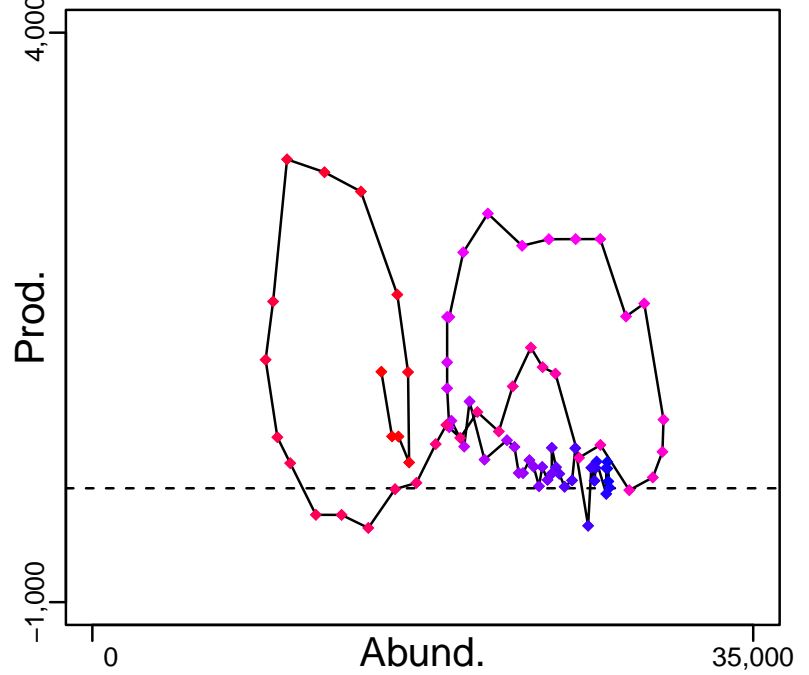
Kobe MGTpref (1939–2018–ASHBROOK)



Spawner Recruit (1939–2018–ASHBROOK)



Production (1939–2018–ASHBROOK)



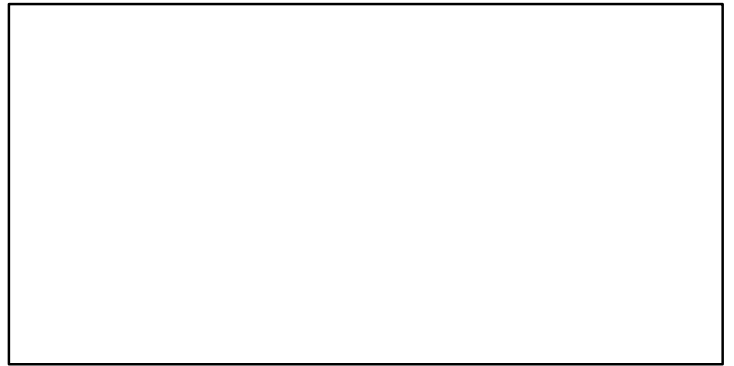
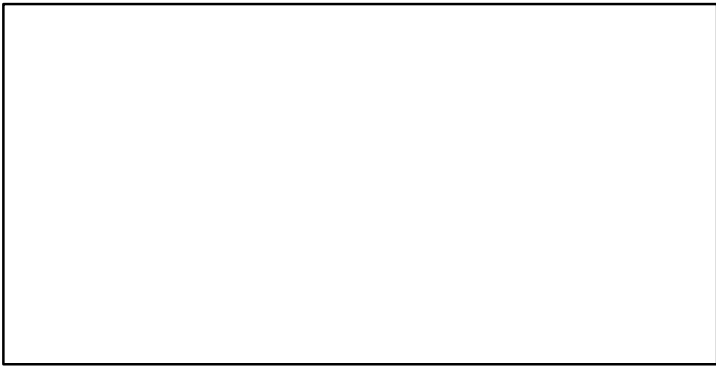
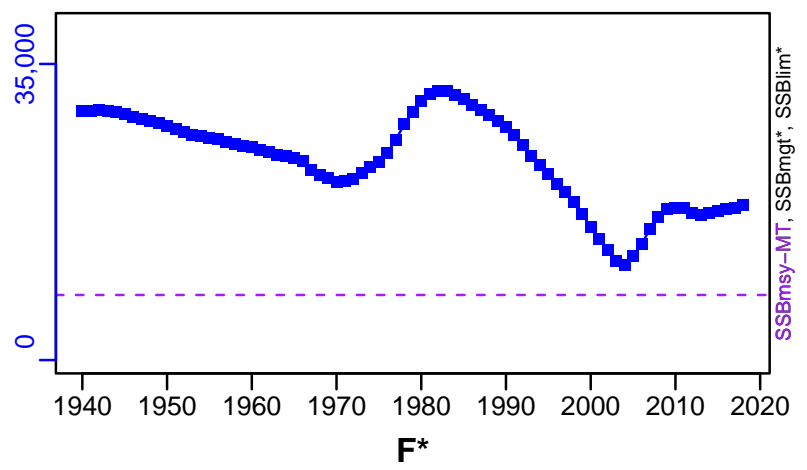
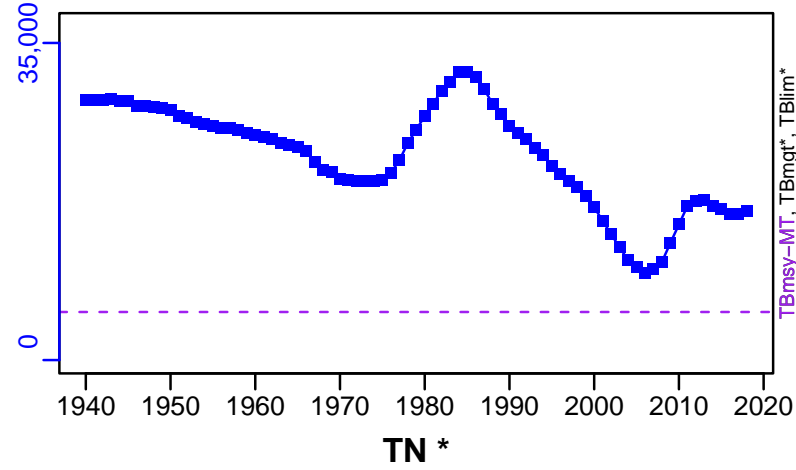
◆ Start Year ◆ End Year \* No Data



### Redstripe rockfish British Columbia Waters South [RSROCKBCWS]

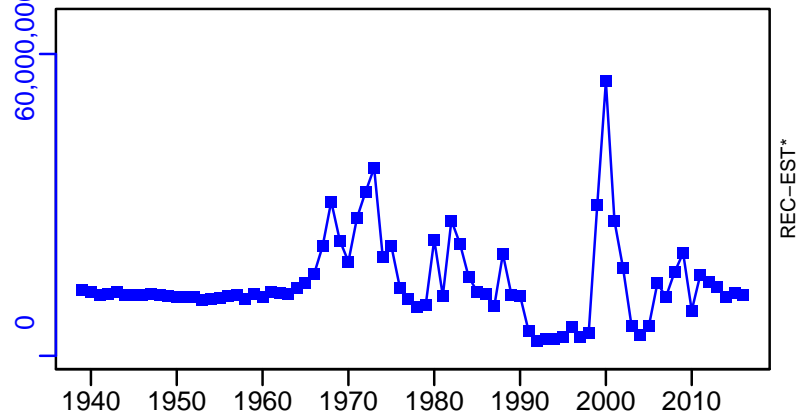
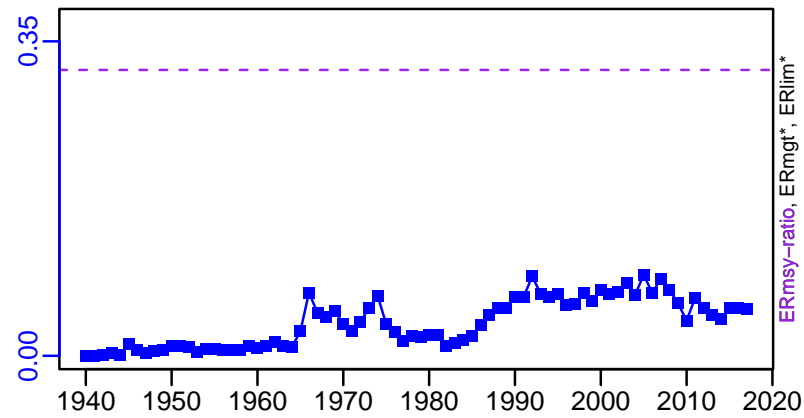
**TB-MT** (1939–2018–ASHBROOK)

**SSB-MT** (1939–2018–ASHBROOK)



**ER-ratio** (1939–2018–ASHBROOK)

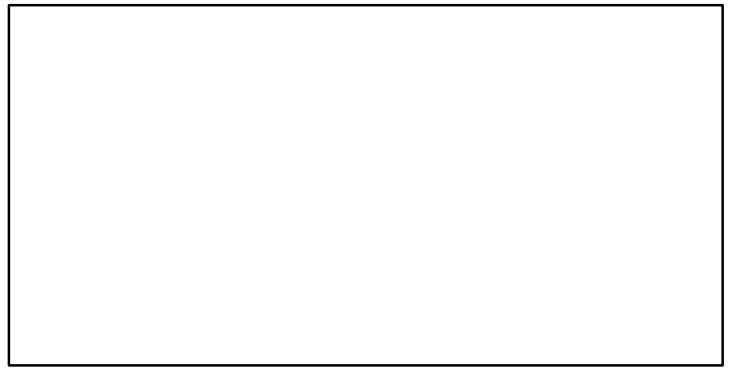
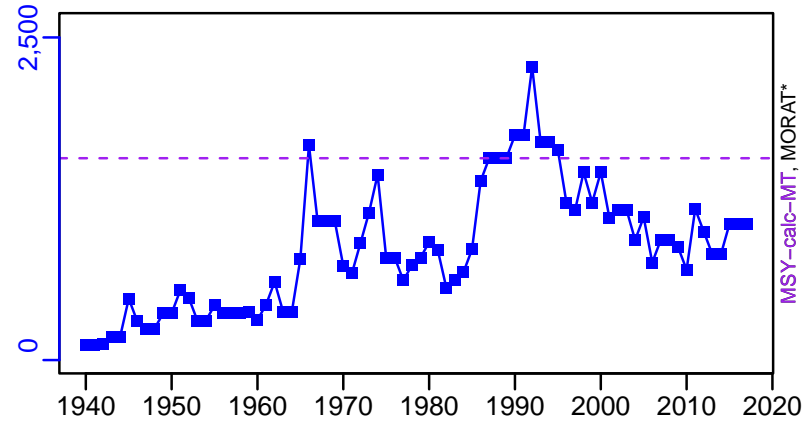
**R-E00** (1939–2018–ASHBROOK)



Redstripe rockfish British Columbia Waters South [RSROCKBCWS]

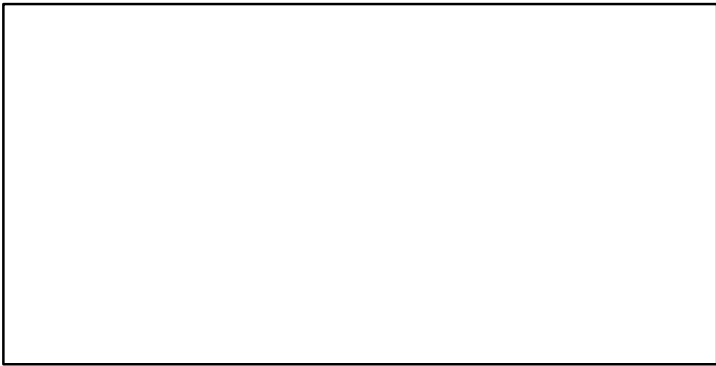
TL-MT, TC\*, RecC\* (1939-2018-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



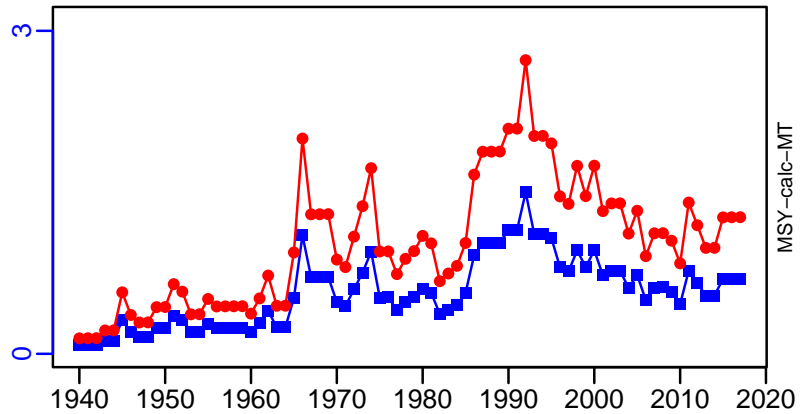
survB\*

CPUE\*



EFFORT\*

TL-MT/MSY-calc-MT, CdivMEANC-ratio, (1939-2018-ASHBROOK)



## Sablefish Pacific Coast of Canada [SABLEFPCAN]

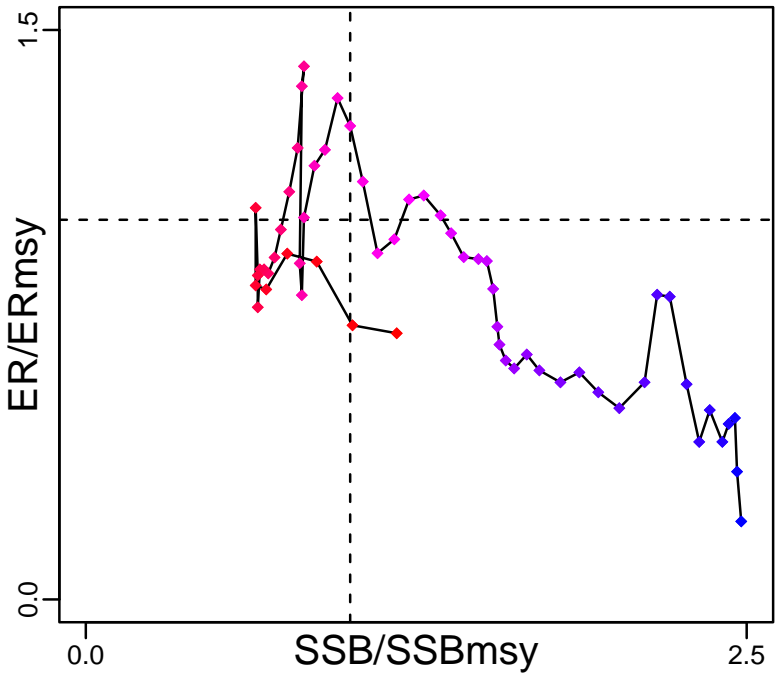
Metadata	
<b>Scientific Name</b>	Anoplopoma fimbria
<b>Current Assess ID</b>	DFO-PAC-SABLEFPCAN-1962-2021-HIVELY
<b>Area</b>	Pacific Coast of Canada
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2010, 2021

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2021	53,846
<b>SSBmsy</b>	SSBmsy-MT	2021	22,820
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2021	0.065
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2010	114,770
<b>MSY</b>	MSY-MT	2021	3500
<b>M</b>	M-1/yr	2010	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

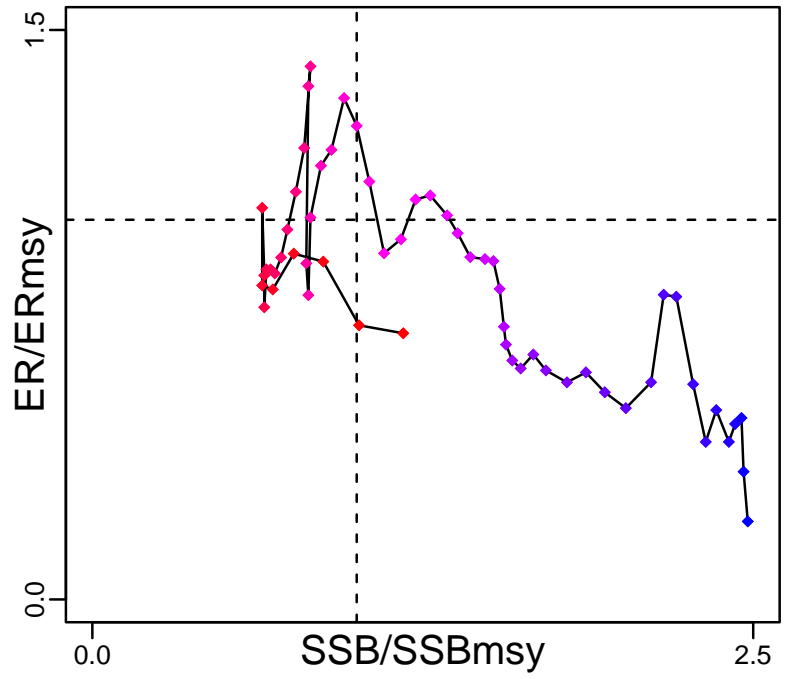
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2021	99,032	-	-
<b>SSB</b>	SSB-MT	2021	26,840	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2021	3,295,935	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2021	0.046	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2021	2910	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2021	1.839	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2021	1.176	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2021	0.701	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Sablefish Pacific Coast of Canada [SABLEFPCAN]

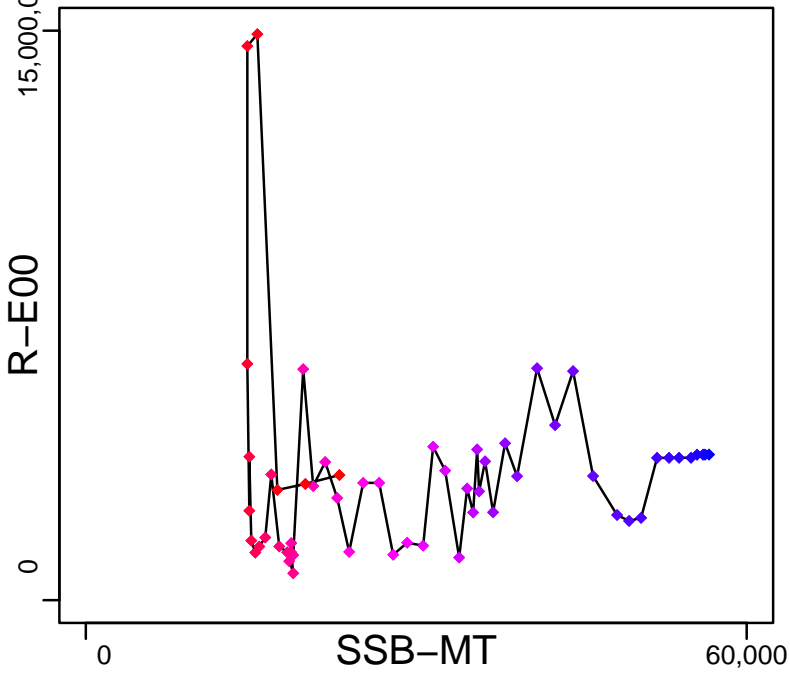
Kobe MSYpref (1962–2021–HIVELY)



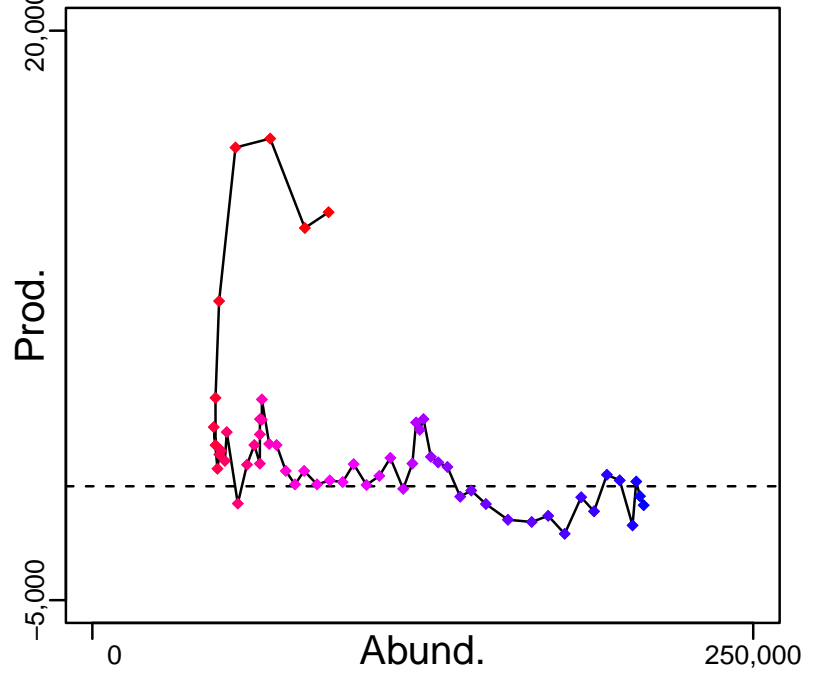
Kobe MGTpref (1962–2021–HIVELY)



Spawner Recruit (1962–2021–HIVELY)



Production (1962–2021–HIVELY)

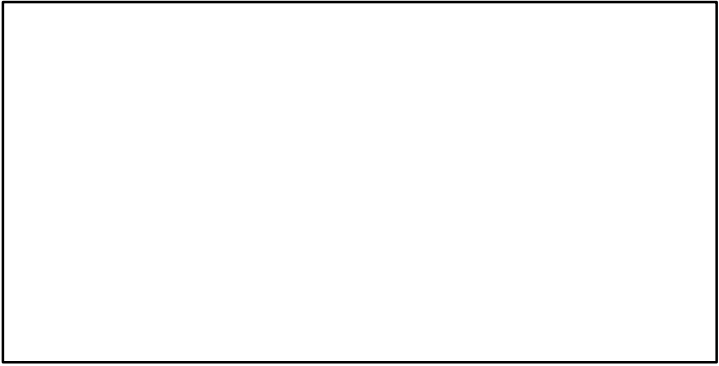
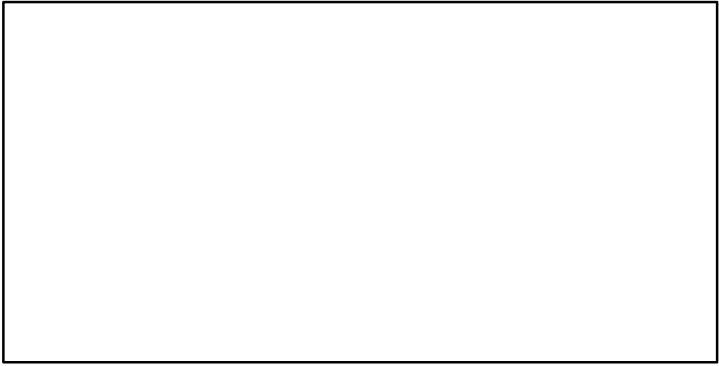
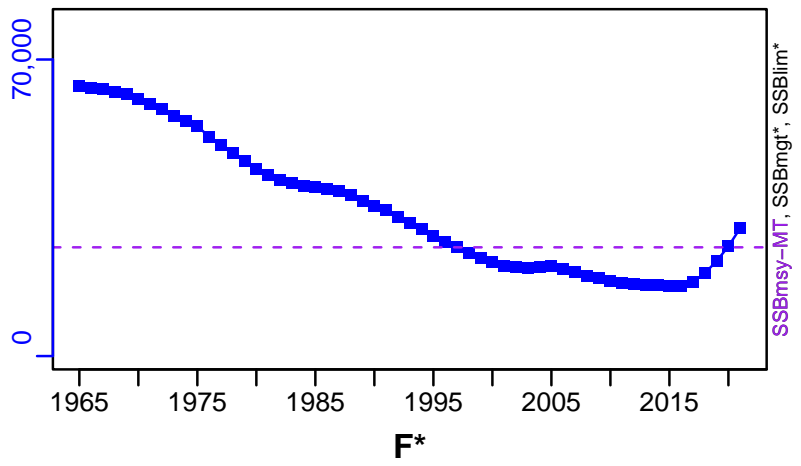
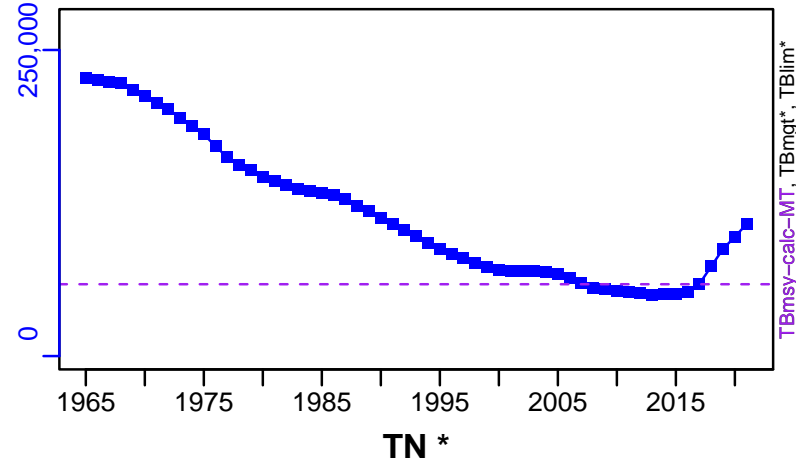


◆ Start Year ◆ End Year \* No Data

Sablefish Pacific Coast of Canada [SABLEFPCAN]

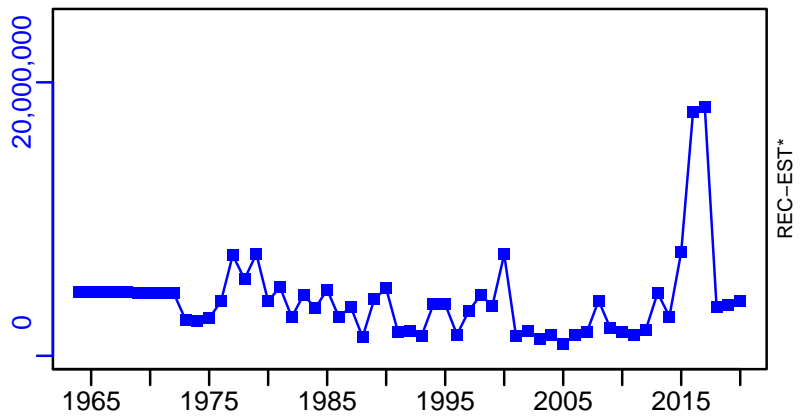
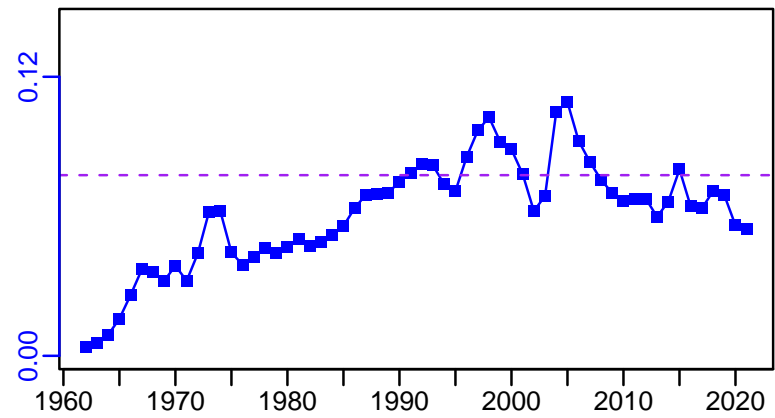
TB-MT (1962-2021-HIVELY)

SSB-MT (1962-2021-HIVELY)



ER-ratio (1962-2021-HIVELY)

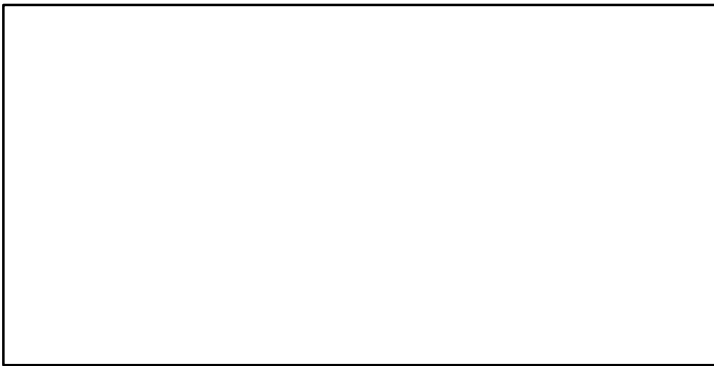
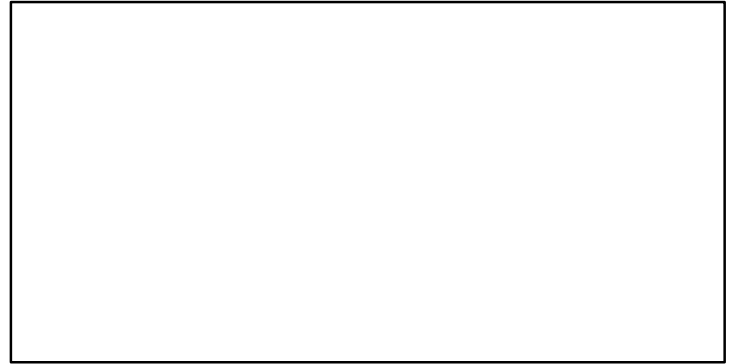
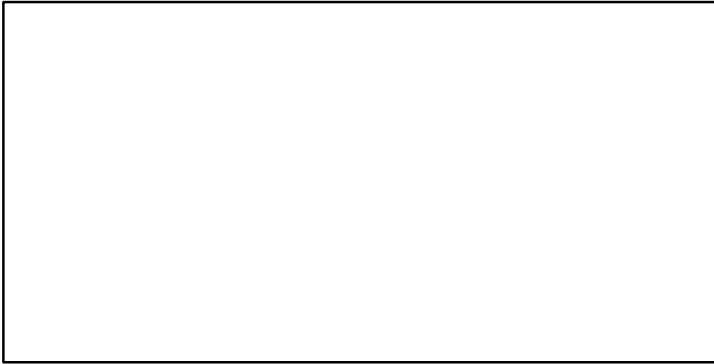
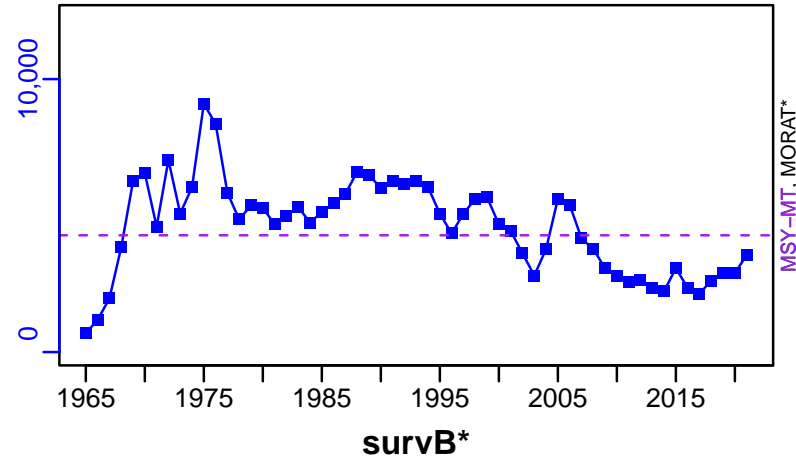
R-E00 (1962-2021-HIVELY)



Sablefish Pacific Coast of Canada [SABLEFPCAN]

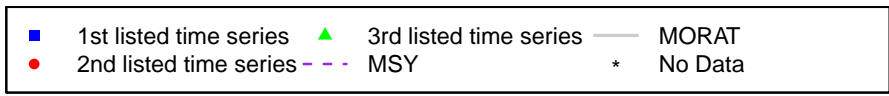
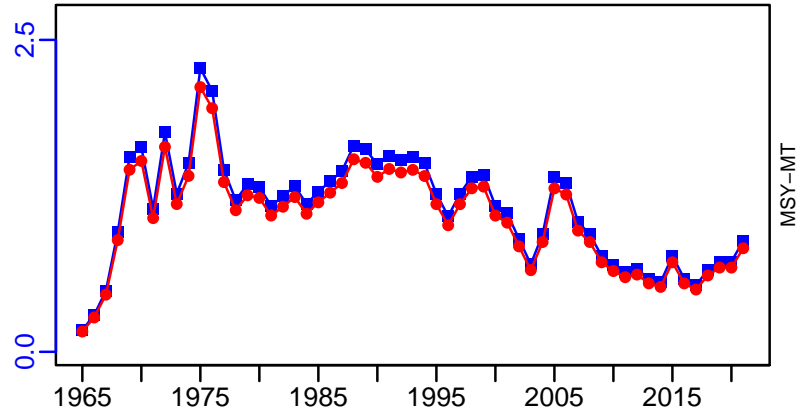
TL-MT, TC\*, RecC\* (1962-2021-HIVELY)

TAC\*, Cpair\*, Cadv\*



EFFORT\*

TL-MT/MSY-MT, CdivMEANC-ratio, (1962-2021-HIVELY)



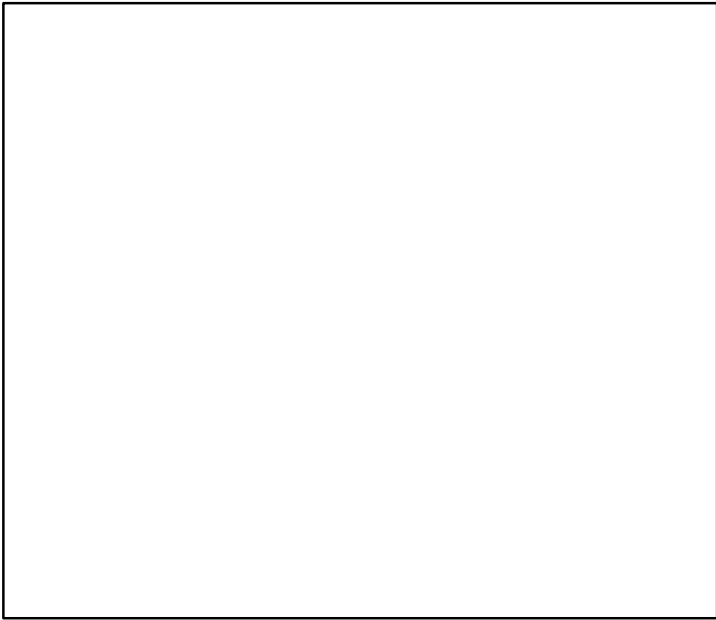
## Pacific sardine Pacific Coast of Canada [SARDBC]

Metadata	
<b>Scientific Name</b>	Sardinops sagax
<b>Current Assess ID</b>	DFO-PAC-SARDBC-2002-2012-OSGOOD
<b>Area</b>	Pacific Coast of Canada
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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	19,100	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

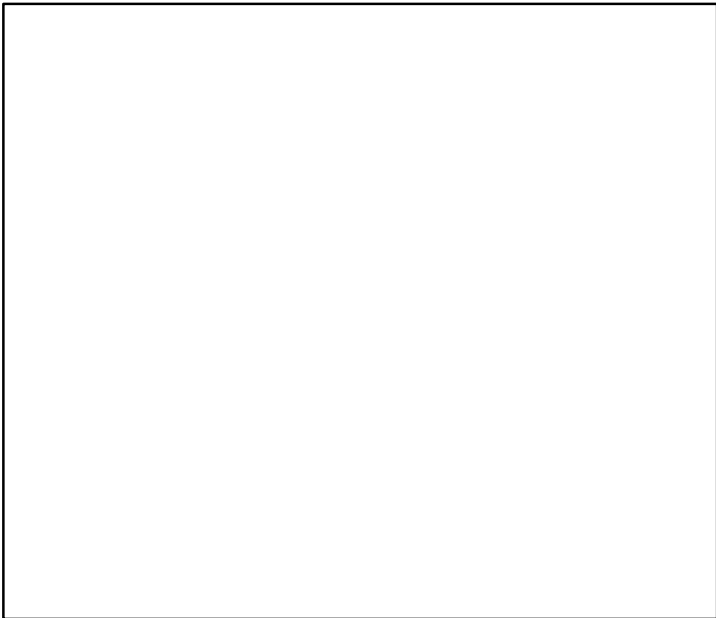
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

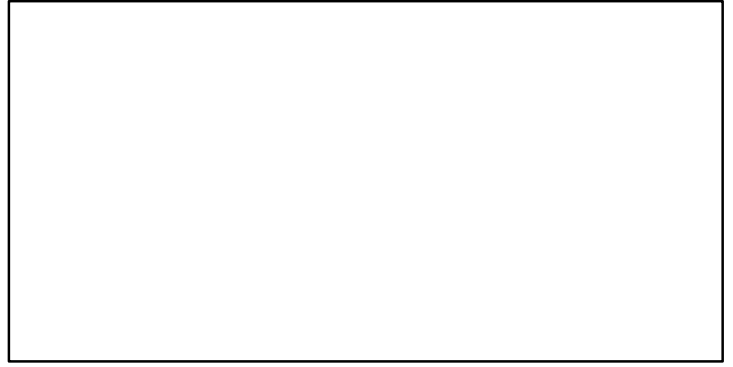


Pacific sardine Pacific Coast of Canada [SARDBC]

**TB\***



**SSB\***



**TN \***



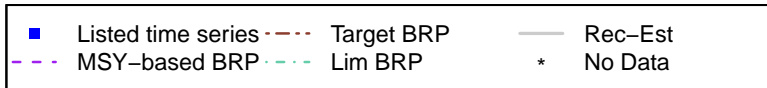
**F\***



**ER\***



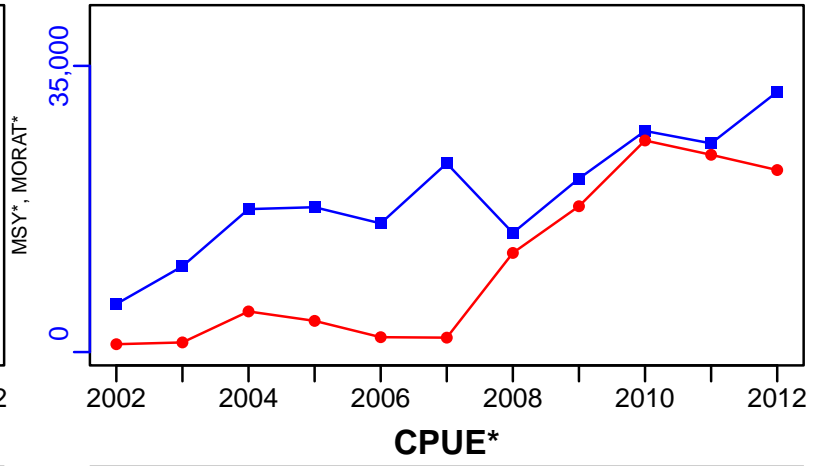
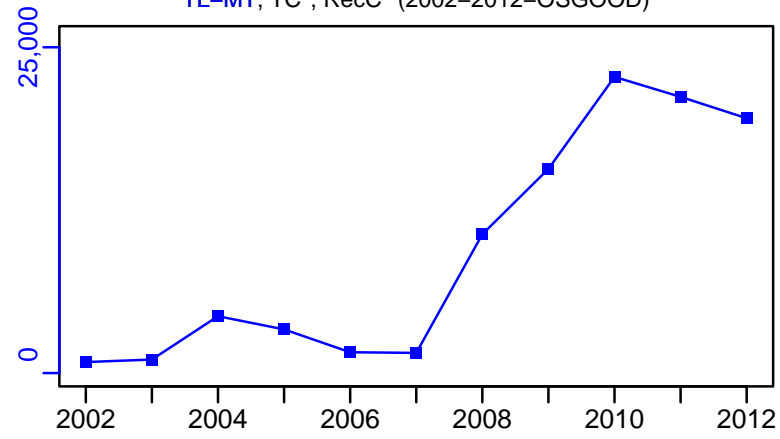
**Recruits\***



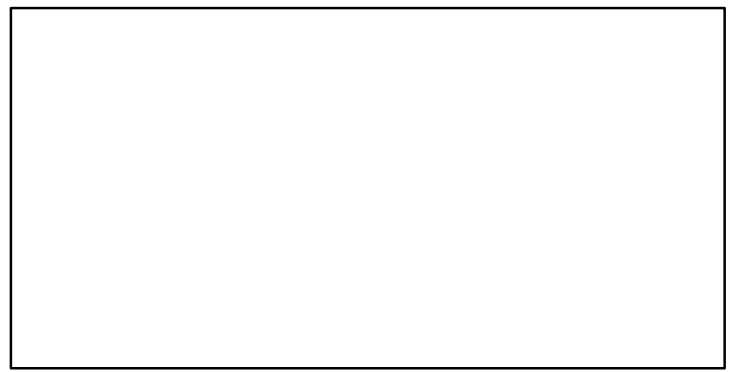
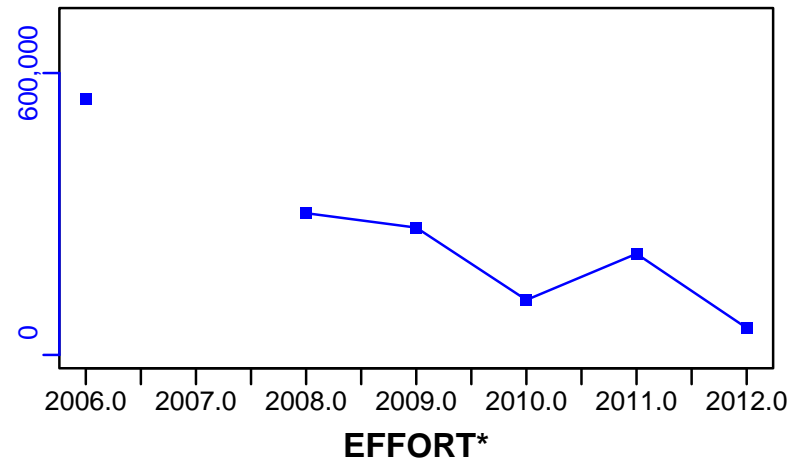
Pacific sardine Pacific Coast of Canada [SARDBC]

TL-MT, TC\*, RecC\* (2002-2012-OSGOOD)

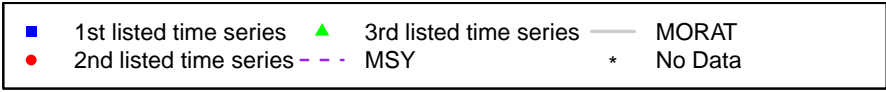
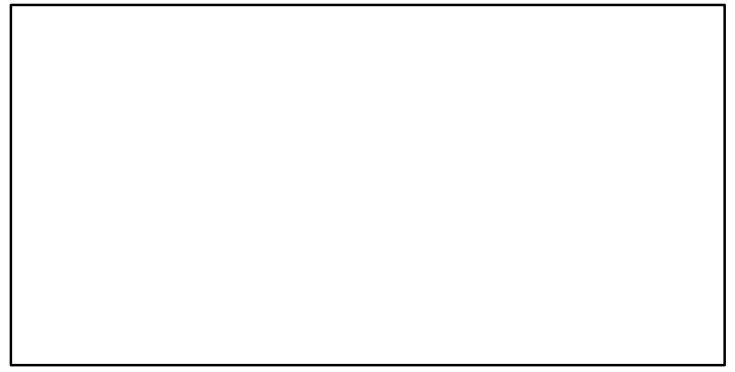
TAC-MT, Cpair-MT, Cadv\* (2002-2012-OSGOOD)



survB-MT (2002-2012-OSGOOD)



CdivMSY\*



## Sidestripe shrimp Shrimp Management Area GTSE [SSHRIMPSMAGTSE]

Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSHRIMPSMAGTSE-1992-2011-WATSON
<b>Area</b>	Shrimp Management Area GTSE
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	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	177	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0.051	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	16	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

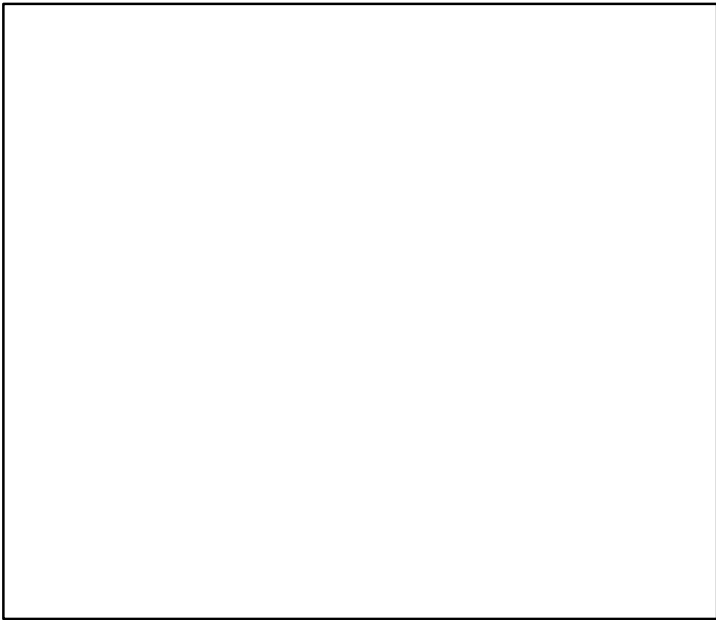
**Kobe MSY\***



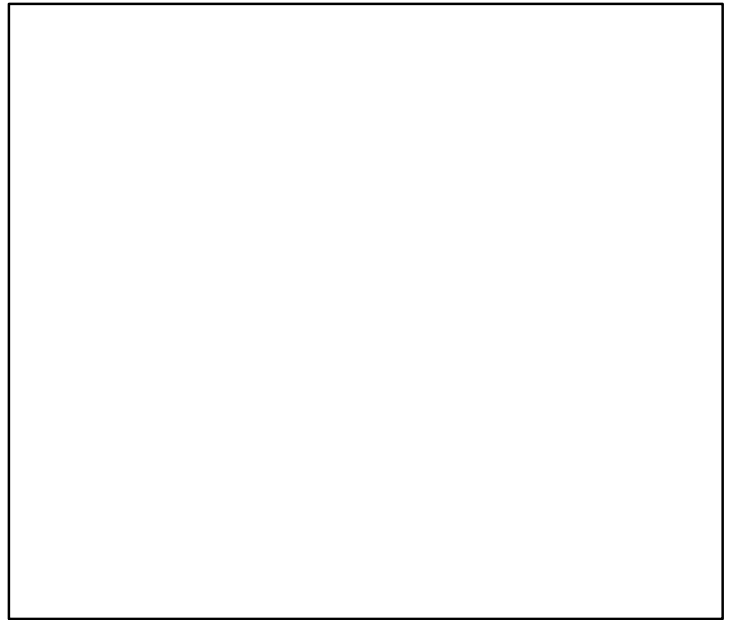
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

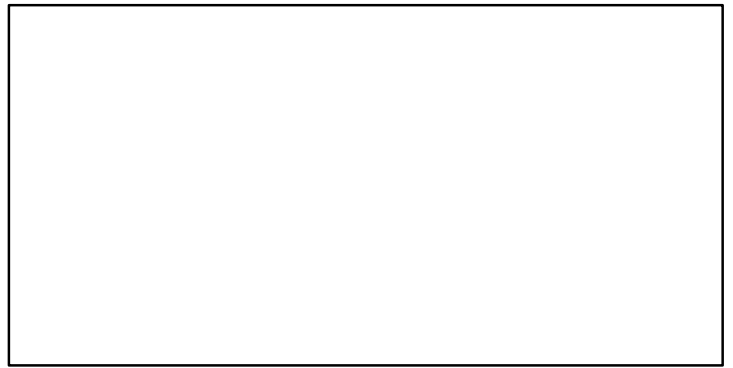
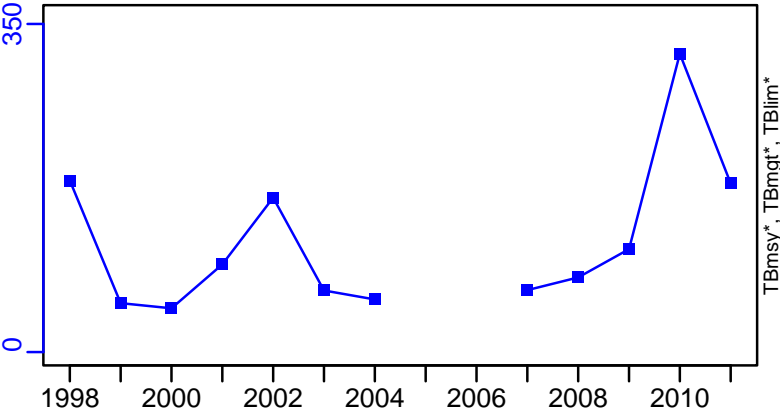


◆ Start Year ◆ End Year \* No Data

Sidestripe shrimp Shrimp Management Area GTSE [SSHRIMPSMAGTSE]

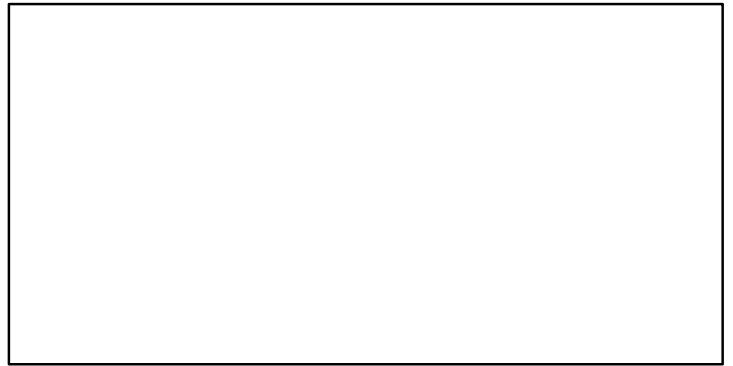
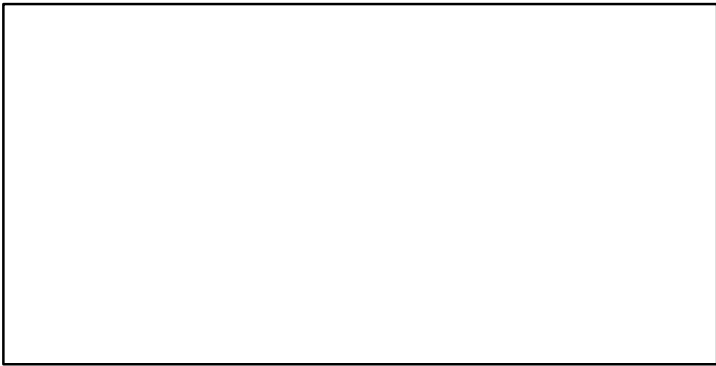
TB-MT (1992-2011-WATSON)

SSB\*



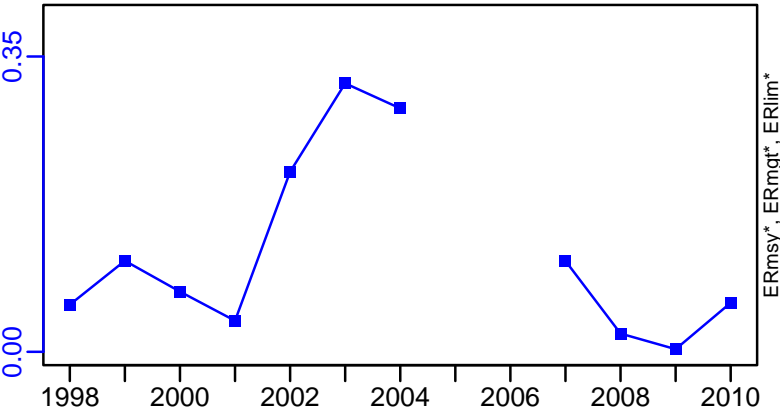
TN \*

F\*



ER-calc-ratio (1992-2011-WATSON)

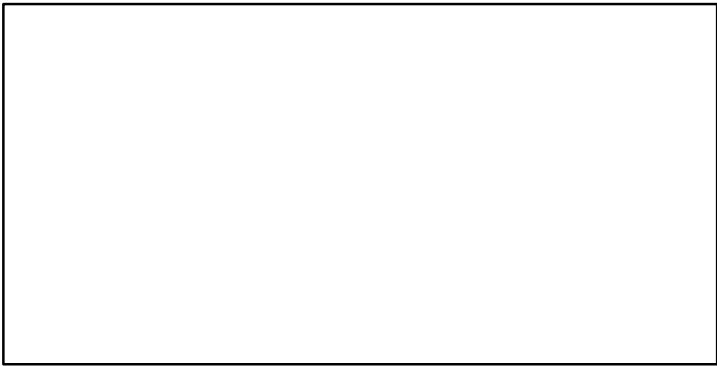
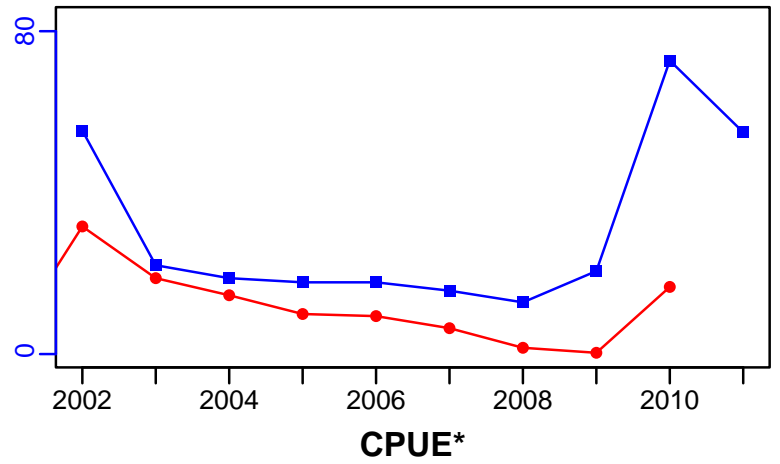
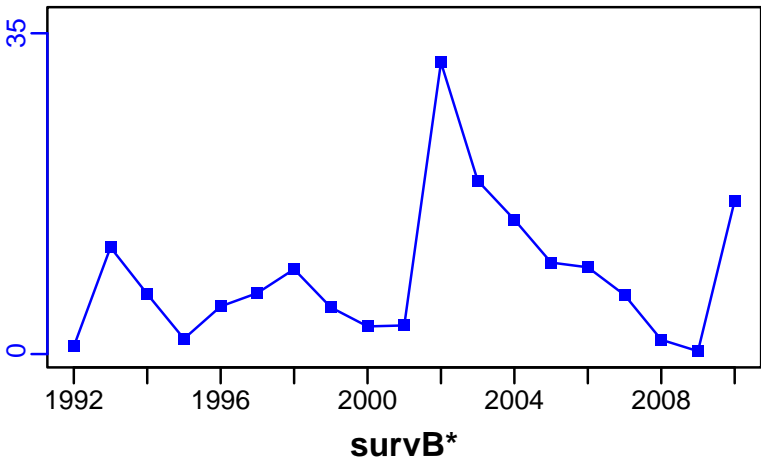
Recruits\*



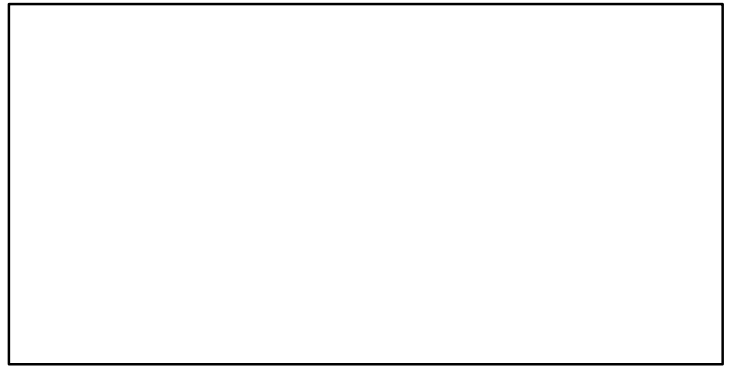
Sidestripe shrimp Shrimp Management Area GTSE [SSHRIMPSMAGTSE]

TL-MT, TC\*, RecC\* (1992-2011-WATSON)

TAC-MT, Cpair-MT, Cadv\* (1992-2011-WATSON)



**EFFORT\***



**CdivMSY\***



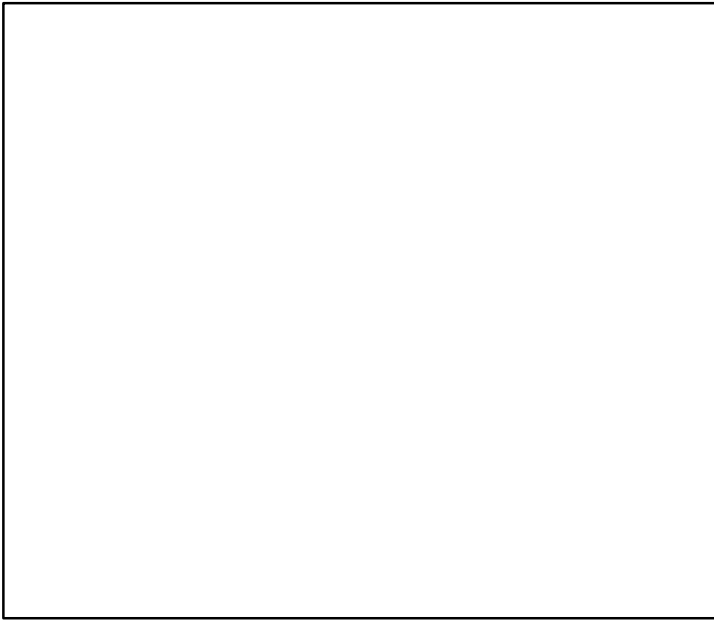
## Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSHRIMPSMAPRD-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area PRD
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

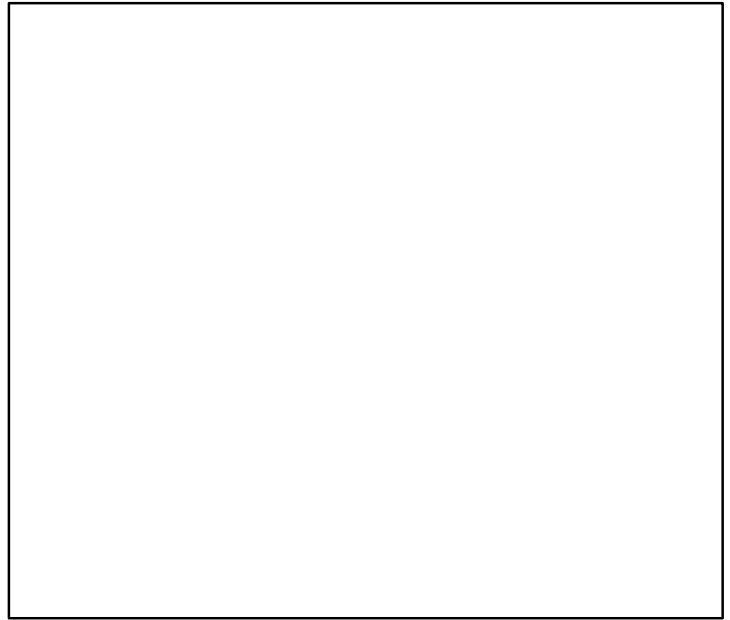
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	53	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

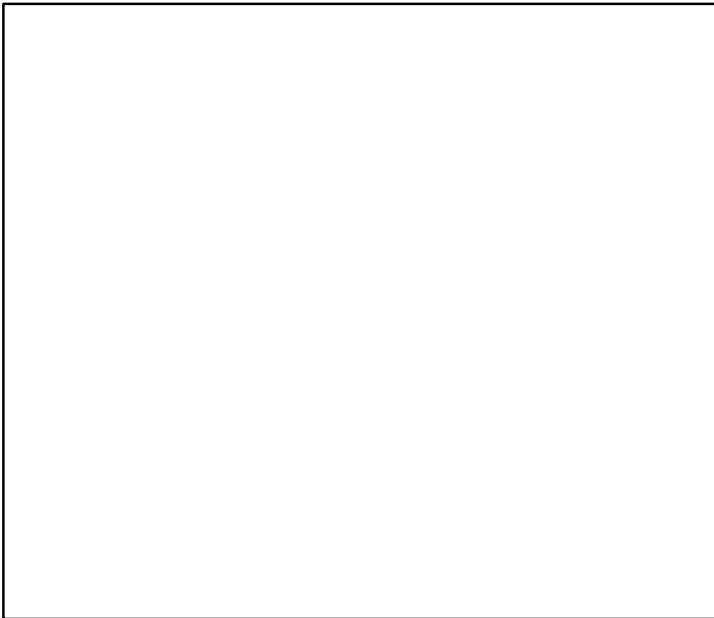
**Kobe MSY\***



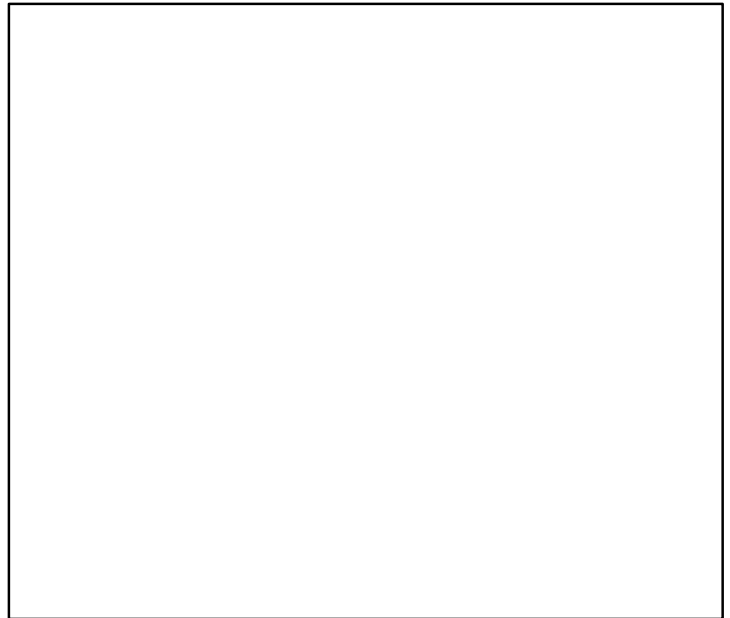
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

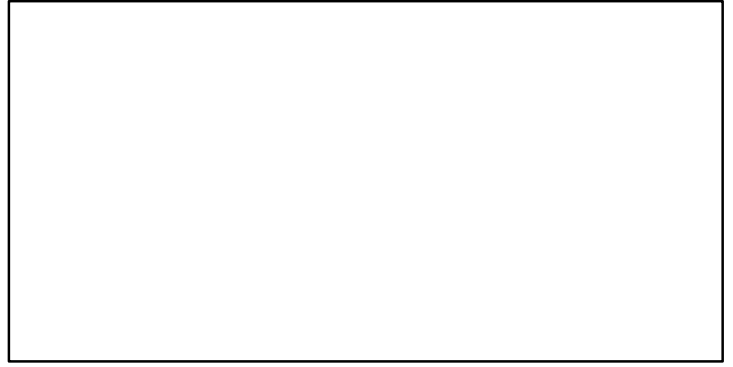


Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

**TB\***



**SSB\***



**TN \***



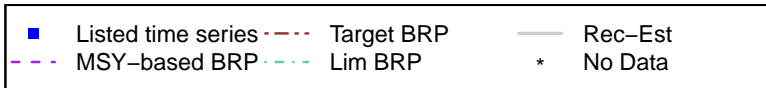
**F\***



**ER\***

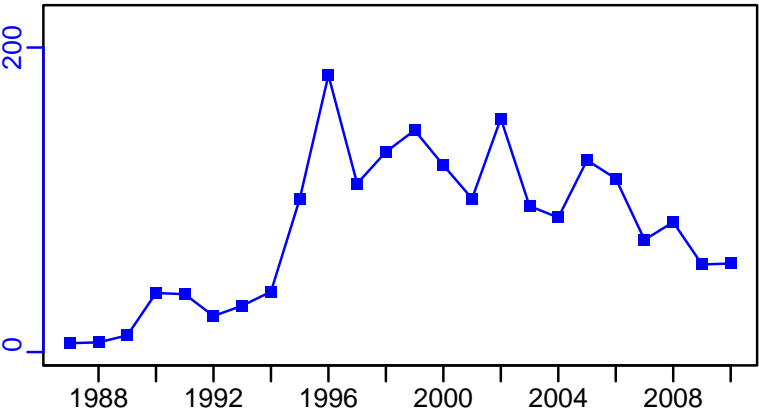


**Recruits\***

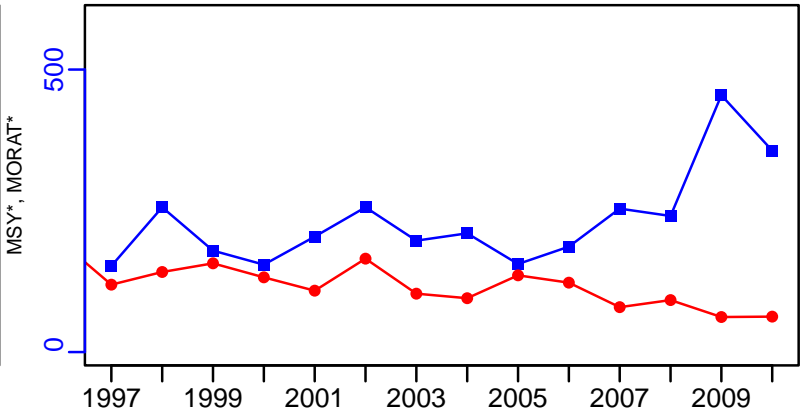


Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

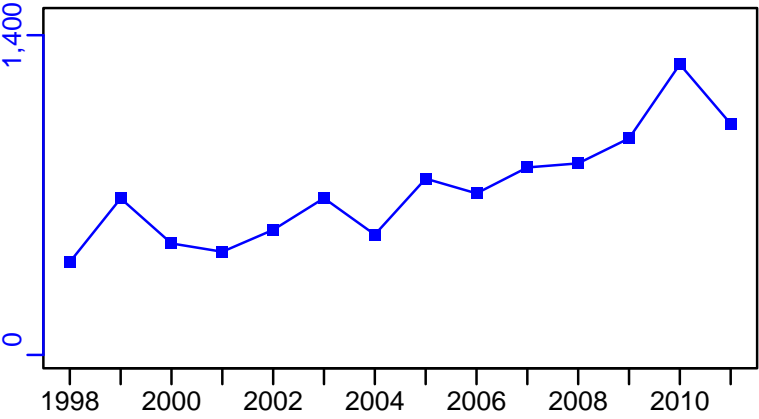
TL-MT, TC\*, RecC\* (1987-2011-WATSON)



TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



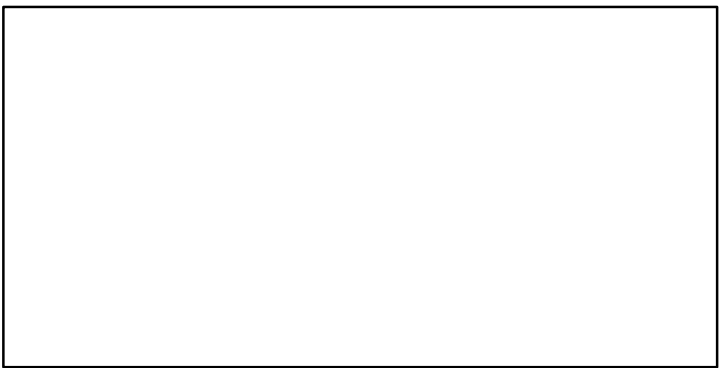
survB-MT (1987-2011-WATSON)



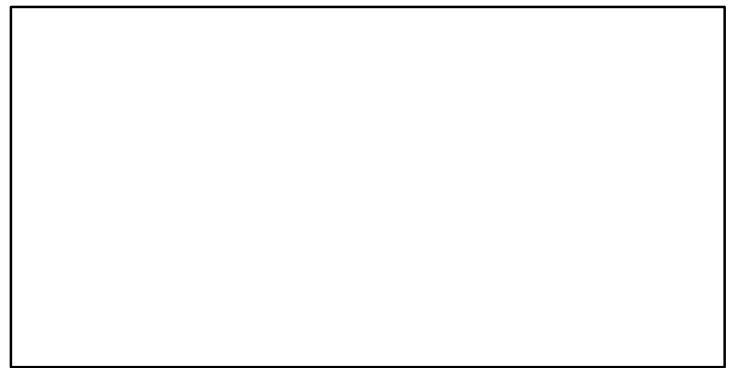
CPUE\*



EFFORT\*



CdivMSY\*



## Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA14-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 14
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

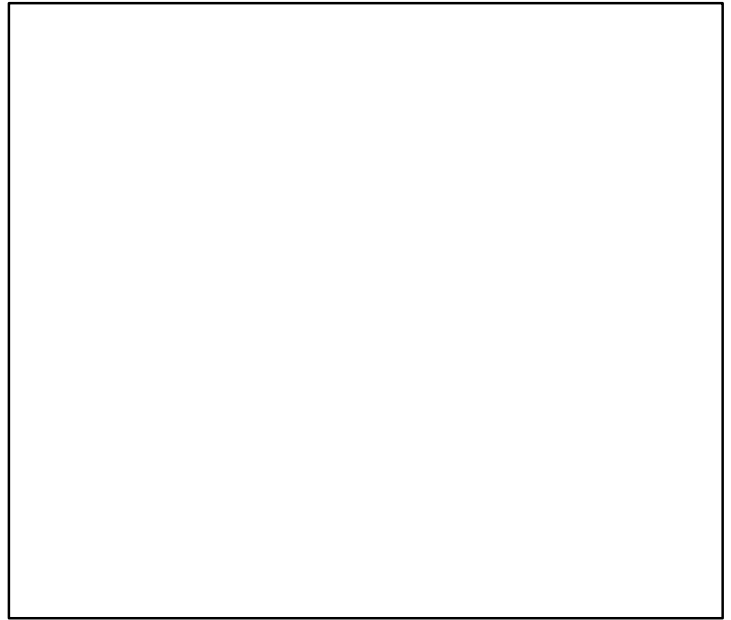
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	10	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

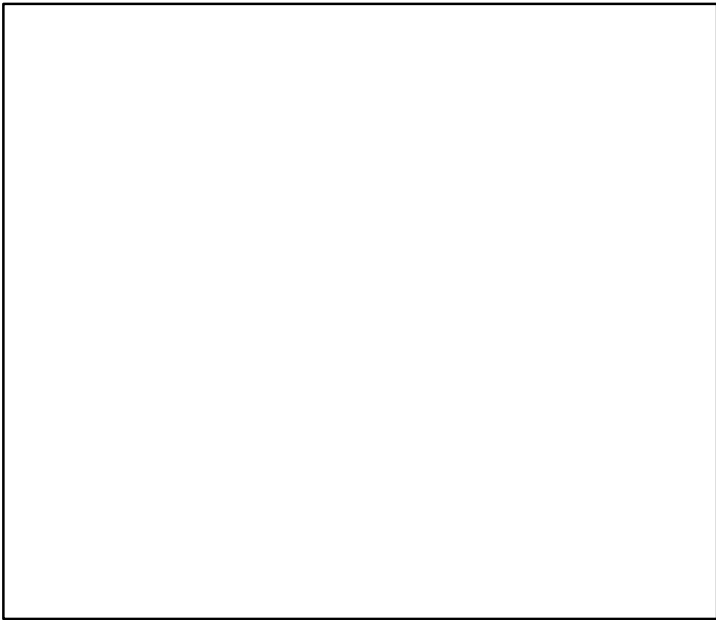
**Kobe MSY\***



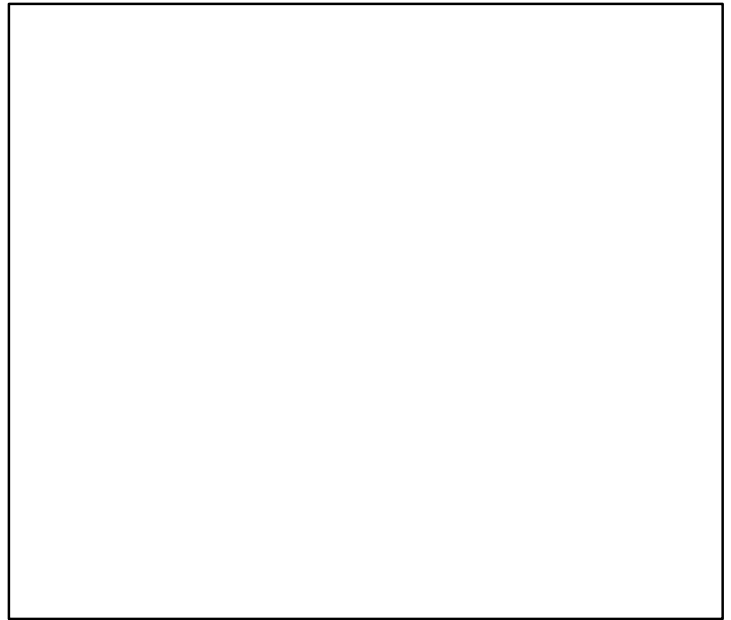
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



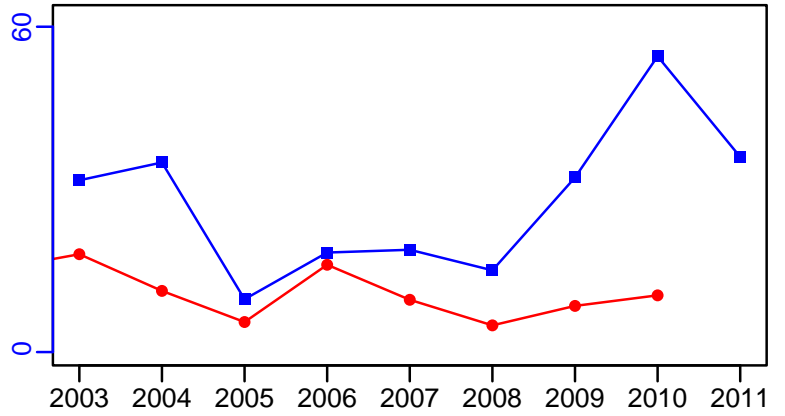
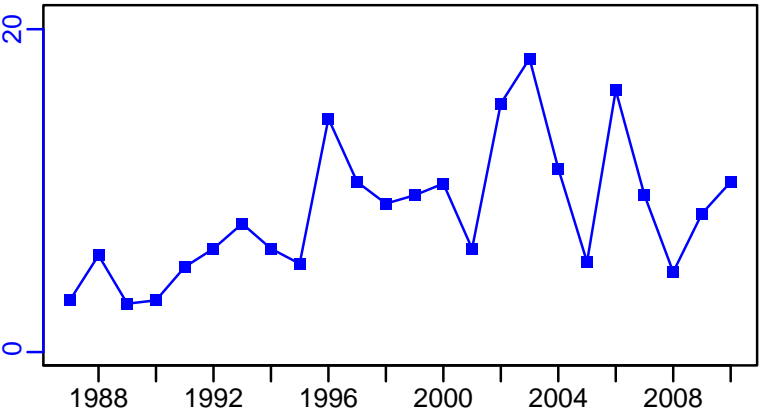
**Recruits\***



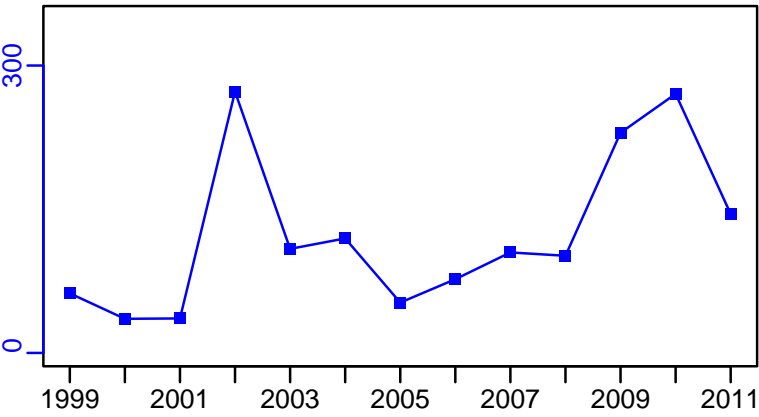
Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

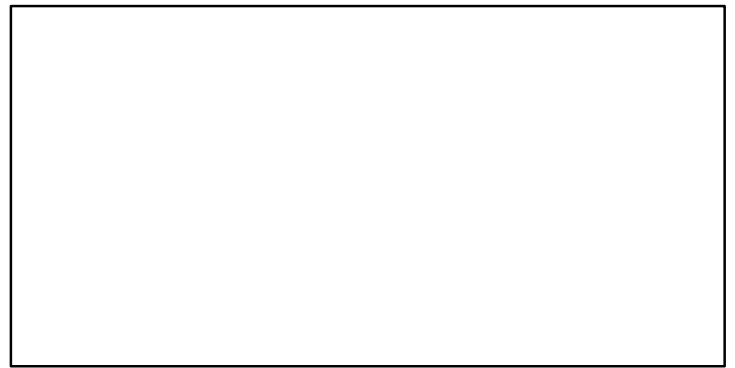
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



survB-MT (1987-2011-WATSON)



CPUE\*



EFFORT\*



CdivMSY\*



## Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA16-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 16
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

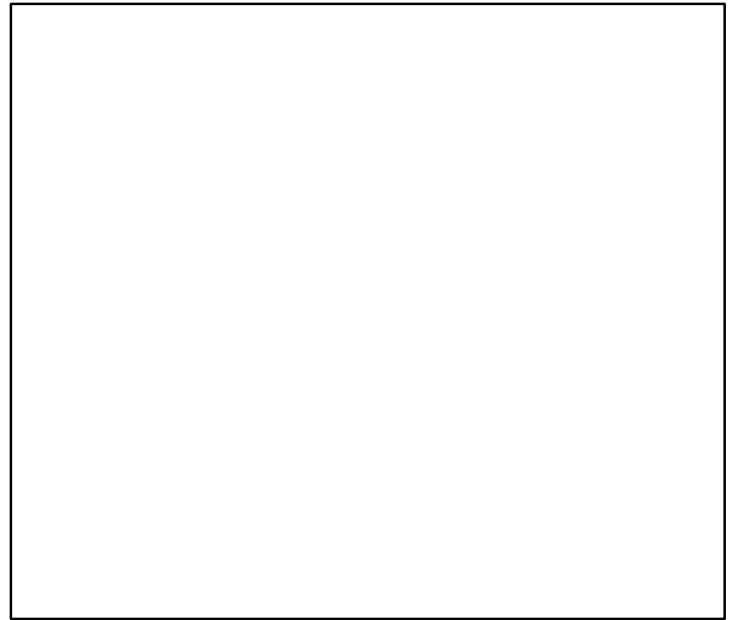
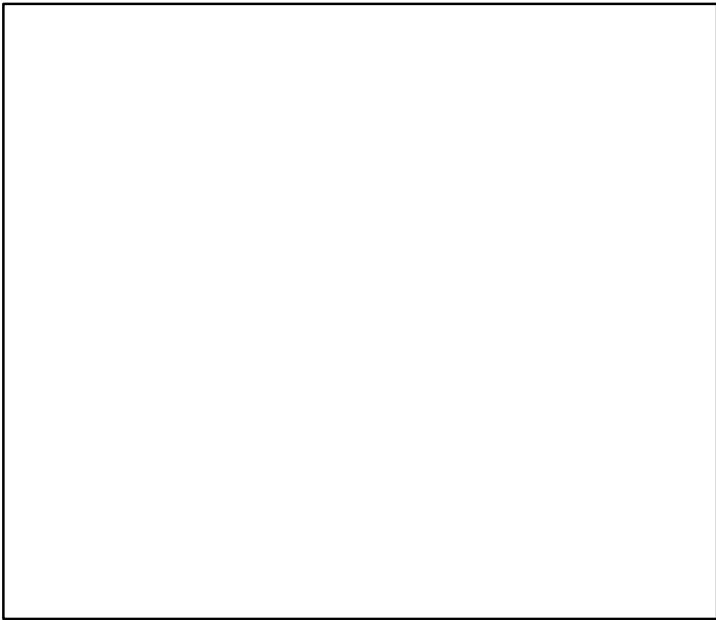
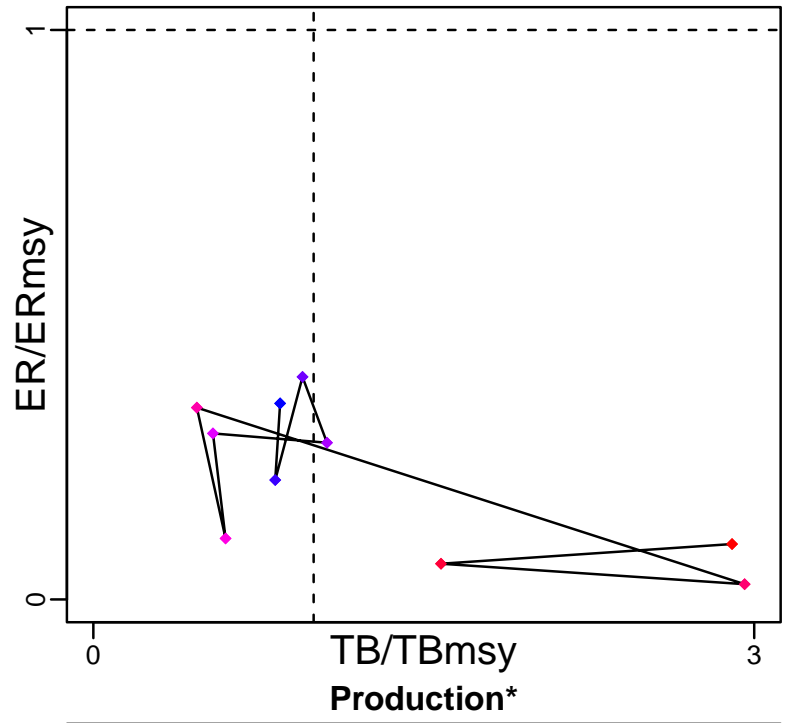
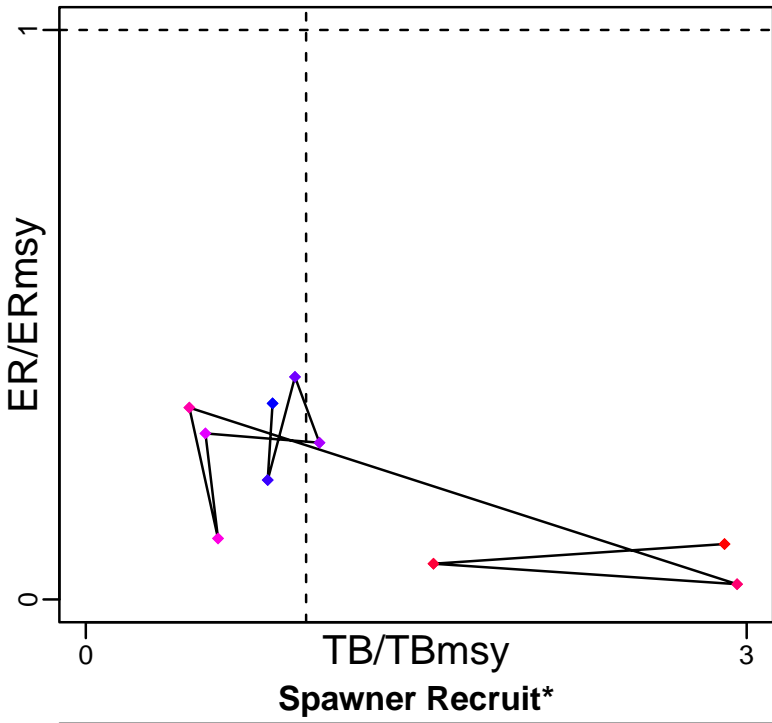
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	34	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0.062	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	6	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

Kobe MSYpref (1987-2011-WATSON)

Kobe MGTpref (1987-2011-WATSON)



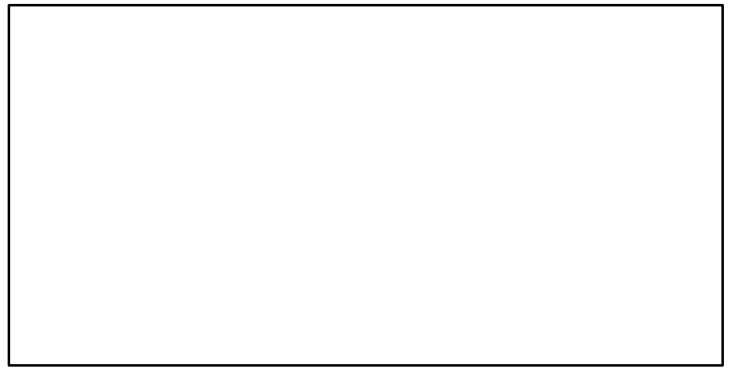
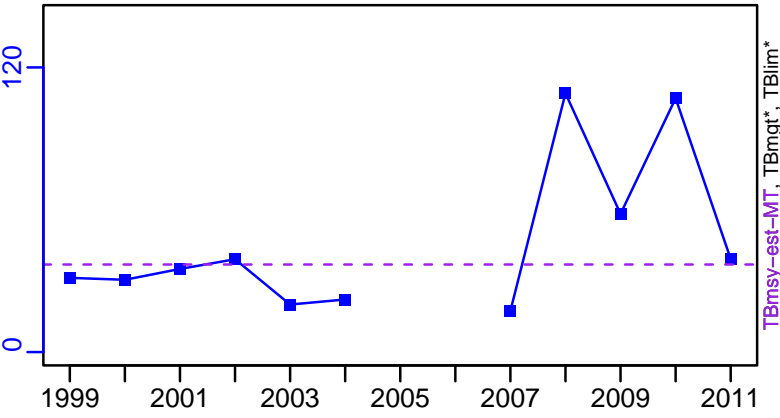
◆ Start Year ◆ End Year \* No Data



Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

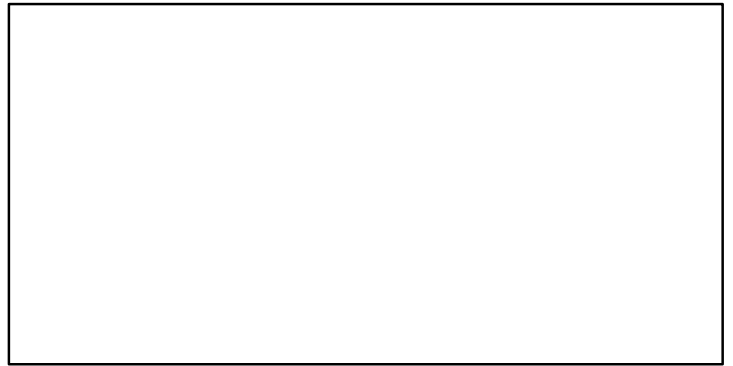
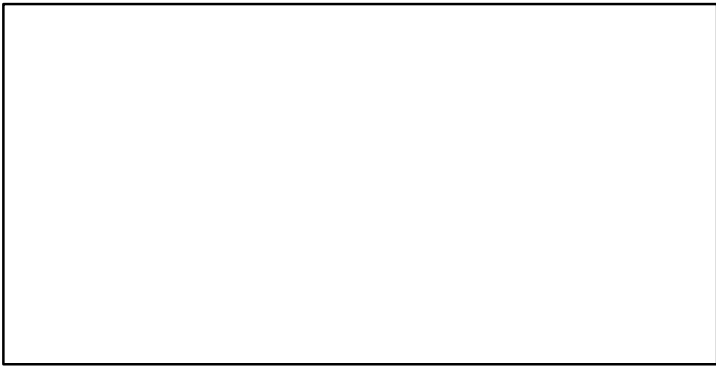
TB-MT (1987-2011-WATSON)

SSB\*



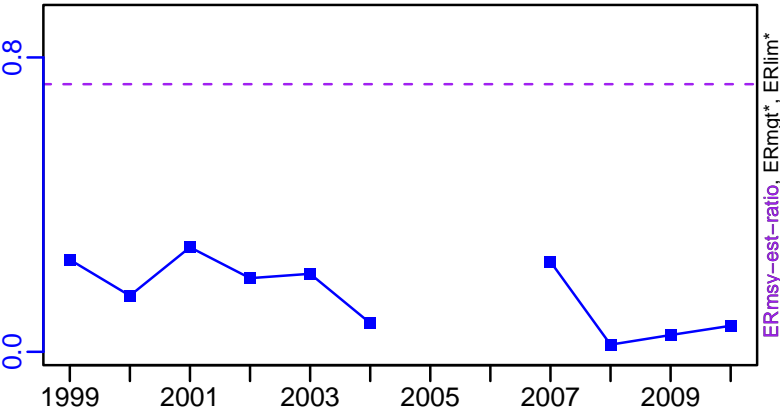
TN \*

F\*



ER-calc-ratio (1987-2011-WATSON)

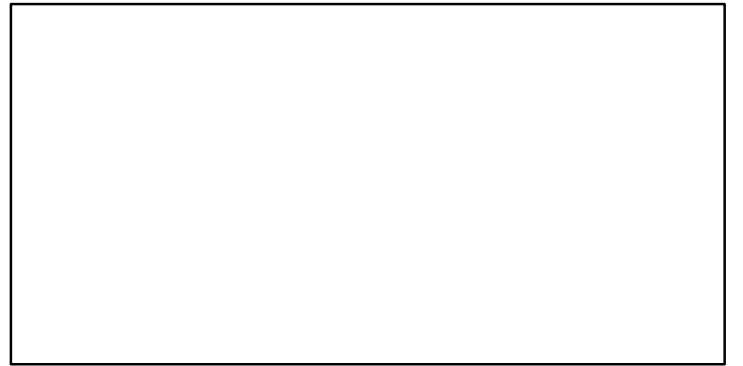
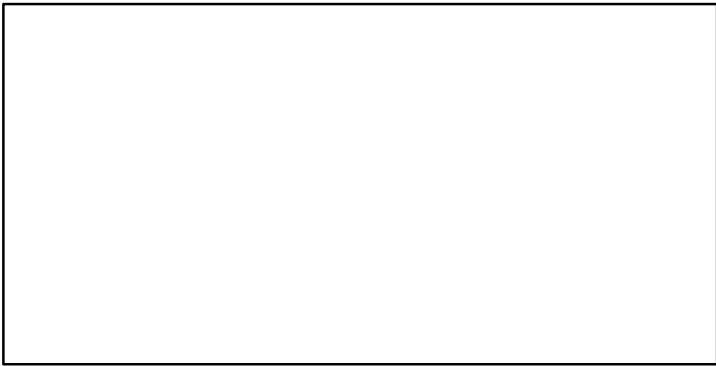
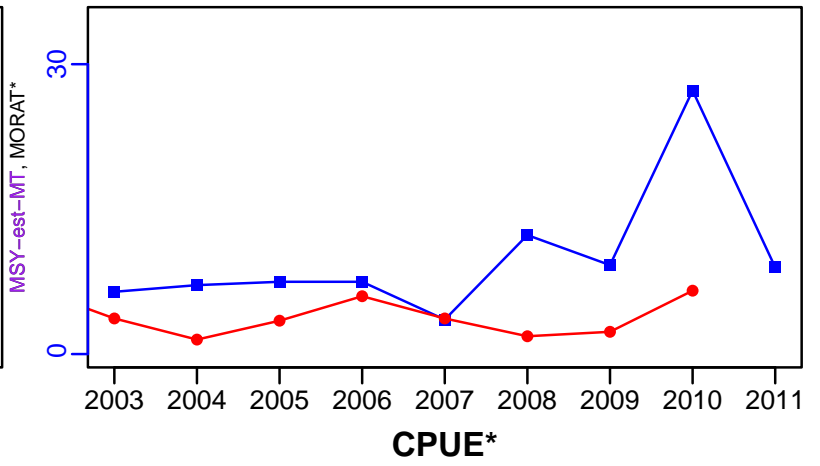
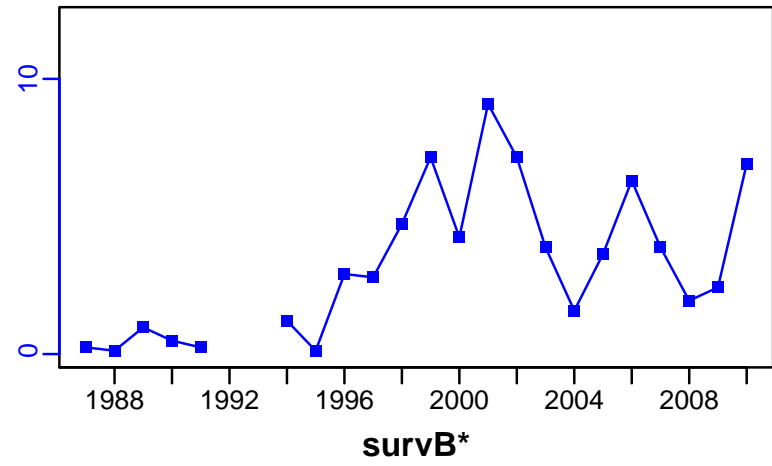
Recruits\*



### Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

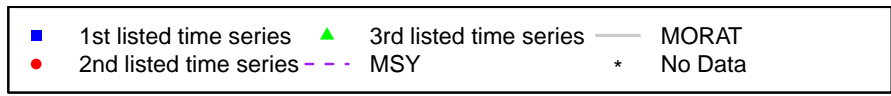
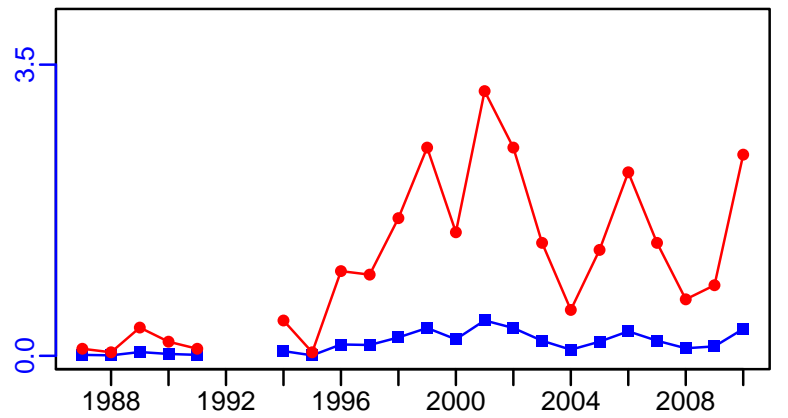
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987-2011-WATSON)



## Sidestripe shrimp Shrimp Management Areas 18 and 19 [SSSHRIMPSMA18-19]

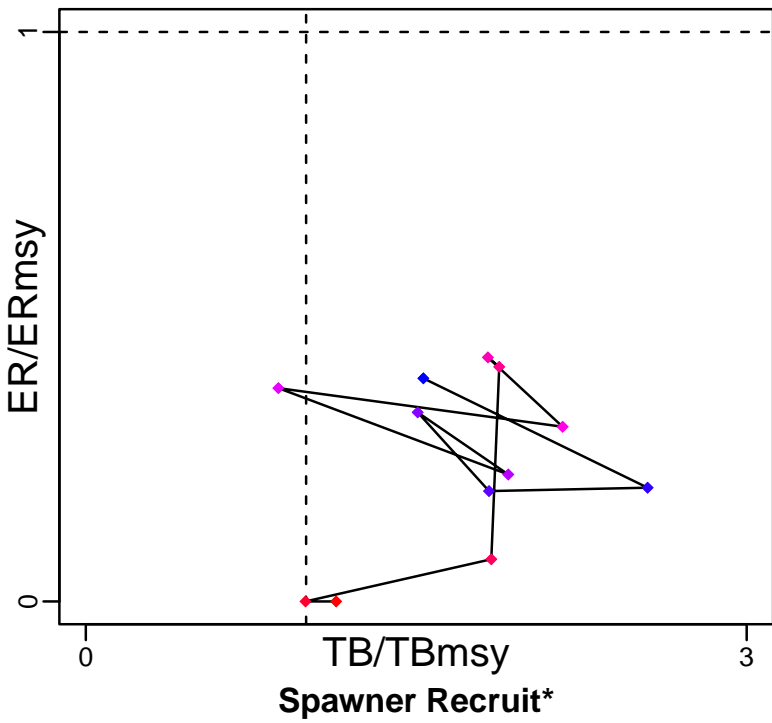
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA18-19-1987-2011-WATSON
<b>Area</b>	Shrimp Management Areas 18 and 19
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

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

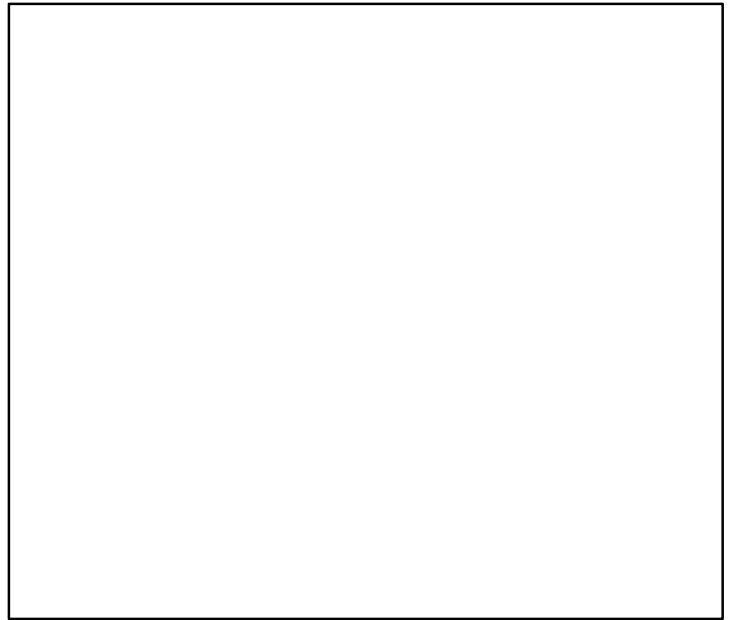
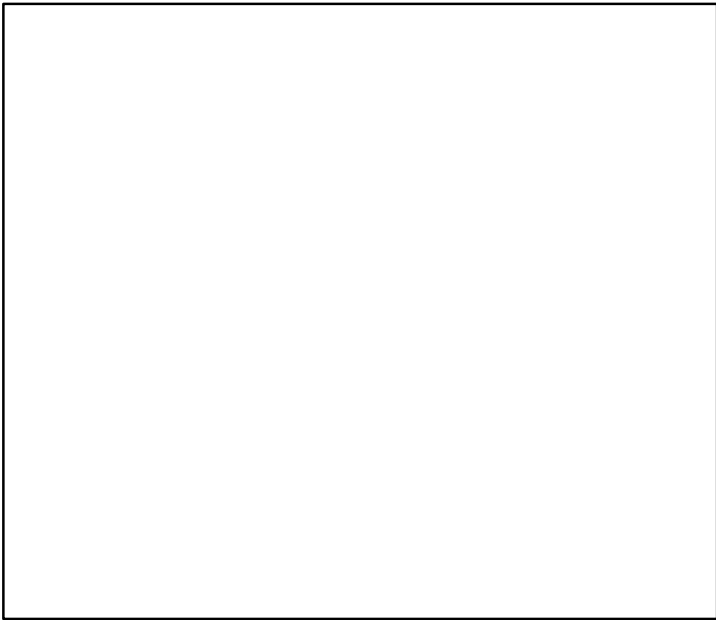
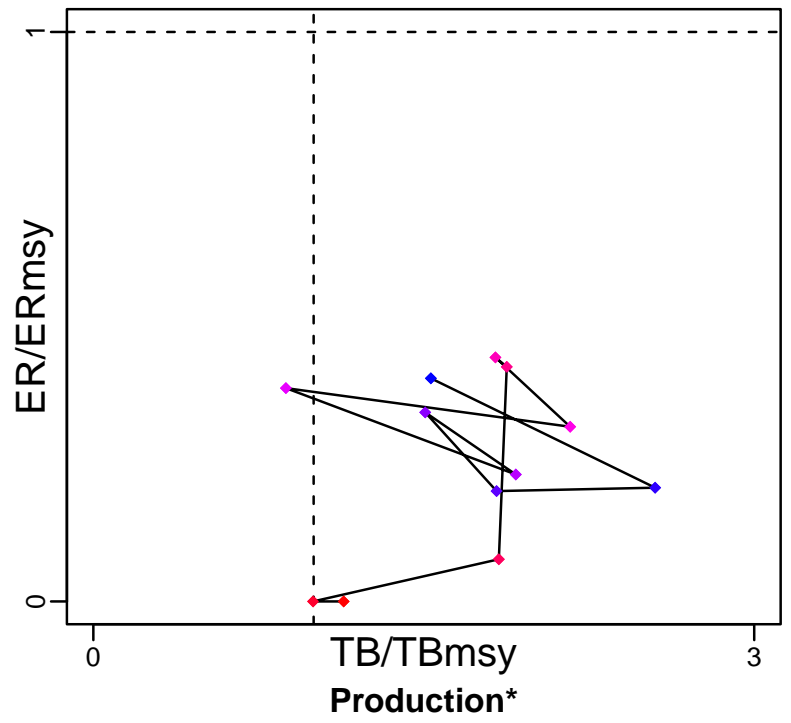
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	22	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	0	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Sidestripe shrimp Shrimp Management Areas 18 and 19 [SSSHRIMPSMA18-19]

Kobe MSYpref (1987-2011-WATSON)



Kobe MGTpref (1987-2011-WATSON)

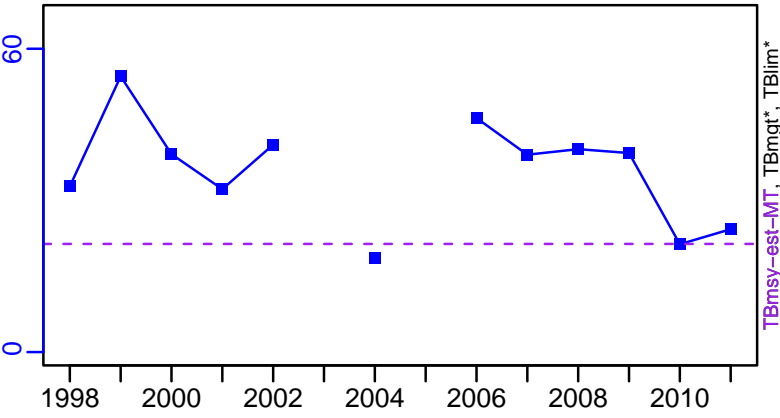


◆ Start Year ◆ End Year \* No Data

Sidestripe shrimp Shrimp Management Areas 18 and 19 [SSSHRIMPSMA18-19]

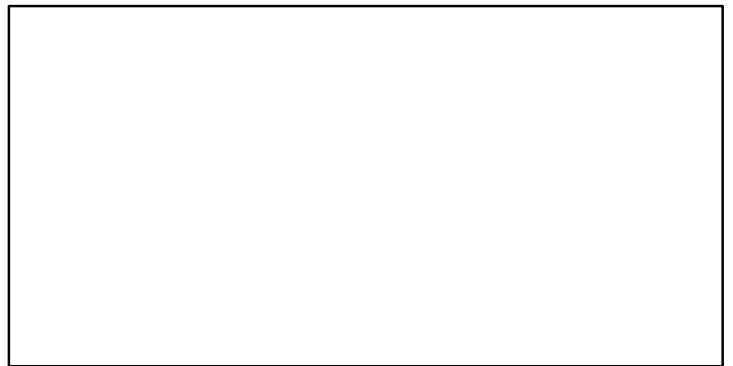
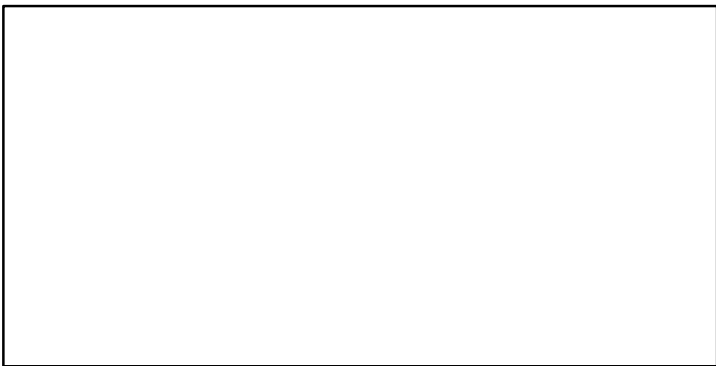
TB-MT (1987-2011-WATSON)

SSB\*



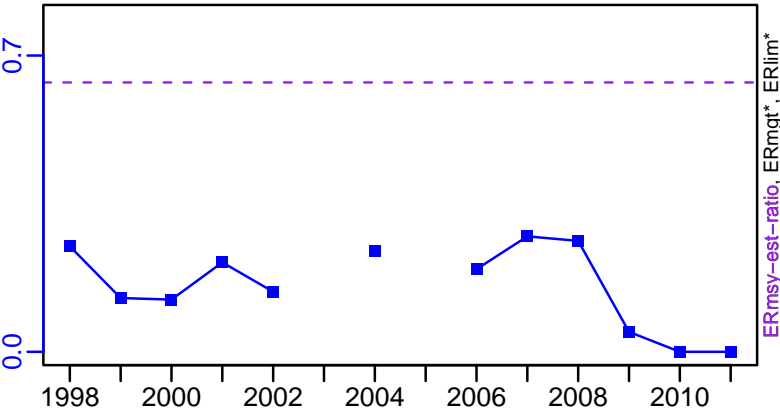
TN \*

F\*



ER-calc-ratio (1987-2011-WATSON)

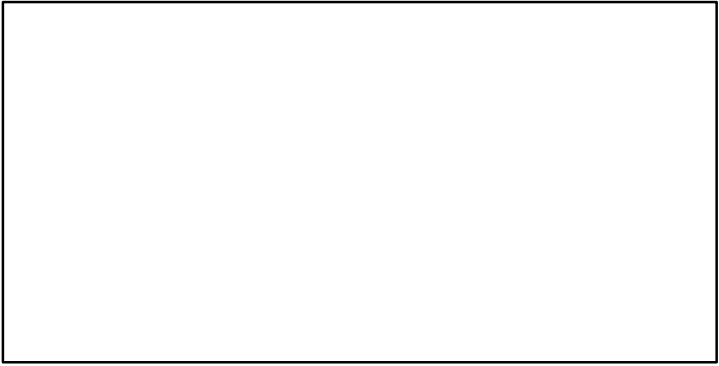
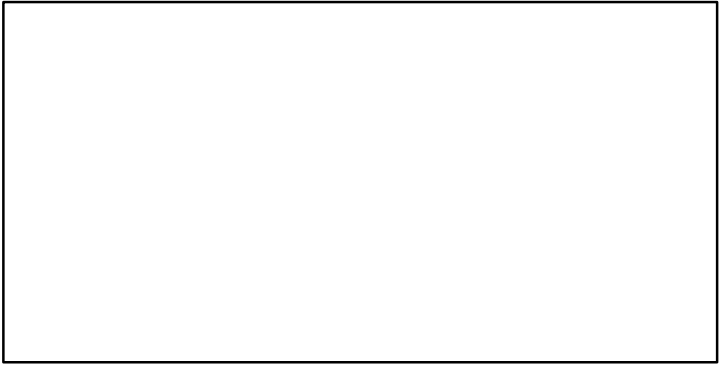
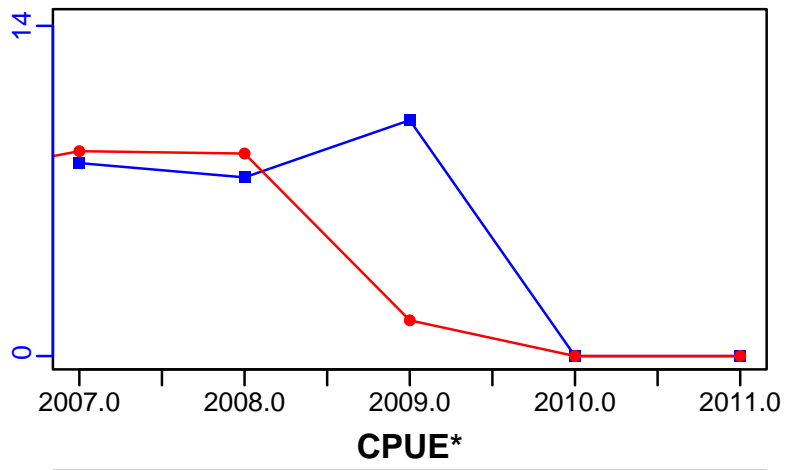
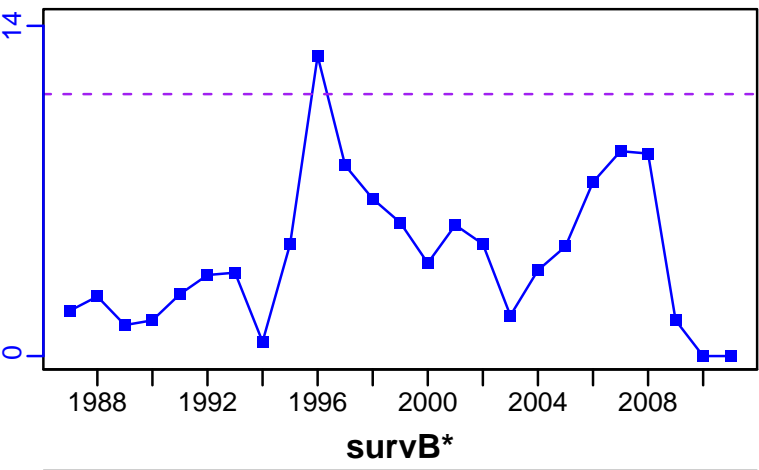
Recruits\*



Sidestripe shrimp Shrimp Management Areas 18 and 19 [SSSHRIMPSMA18-19]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

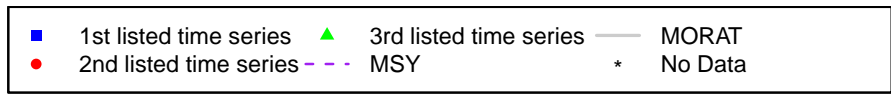
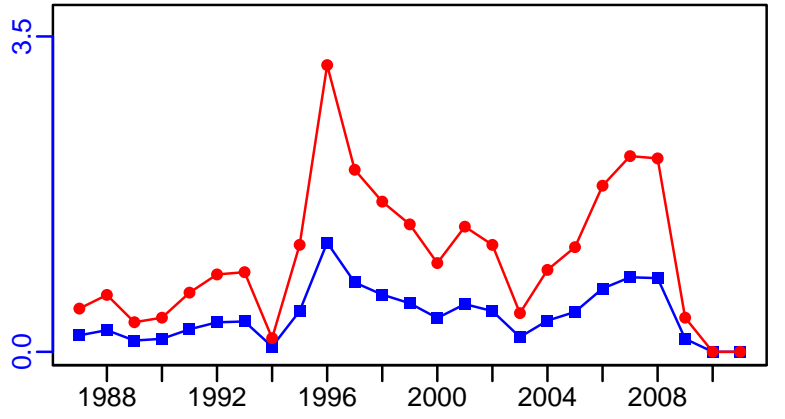
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987-2011-WATSON)



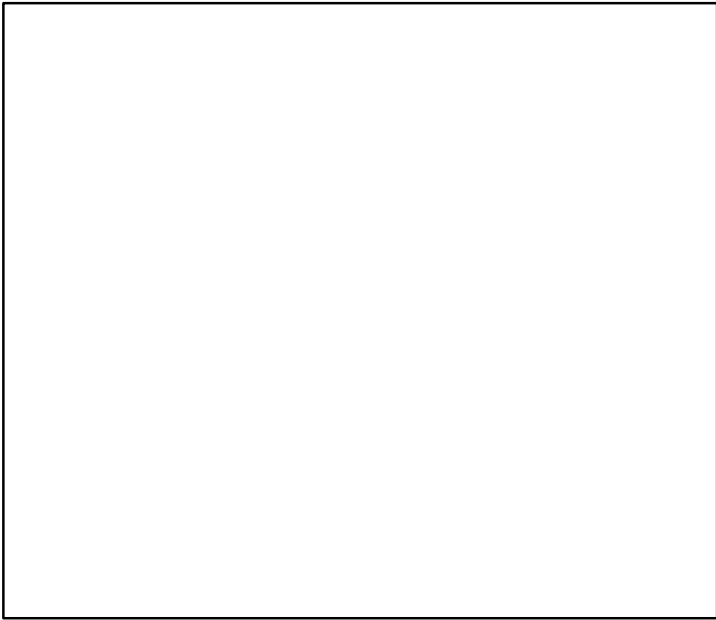
## Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMAFR-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area FR
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

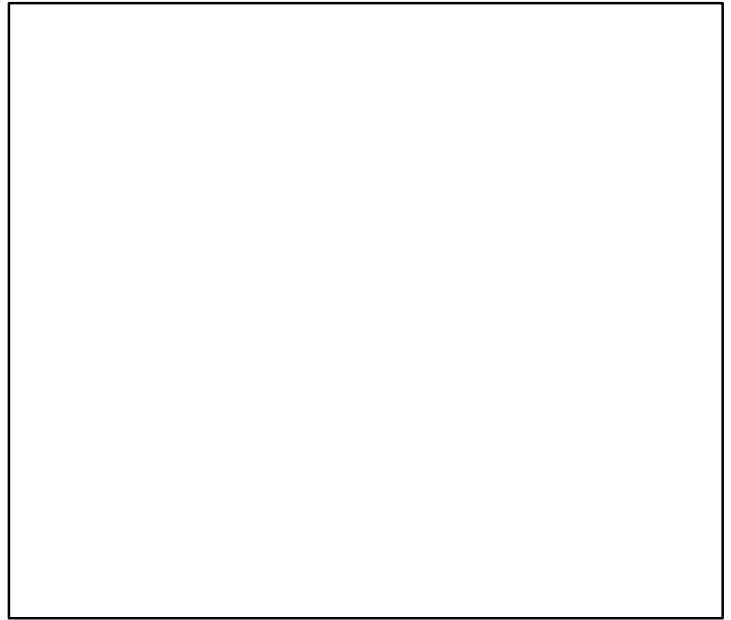
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	38	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

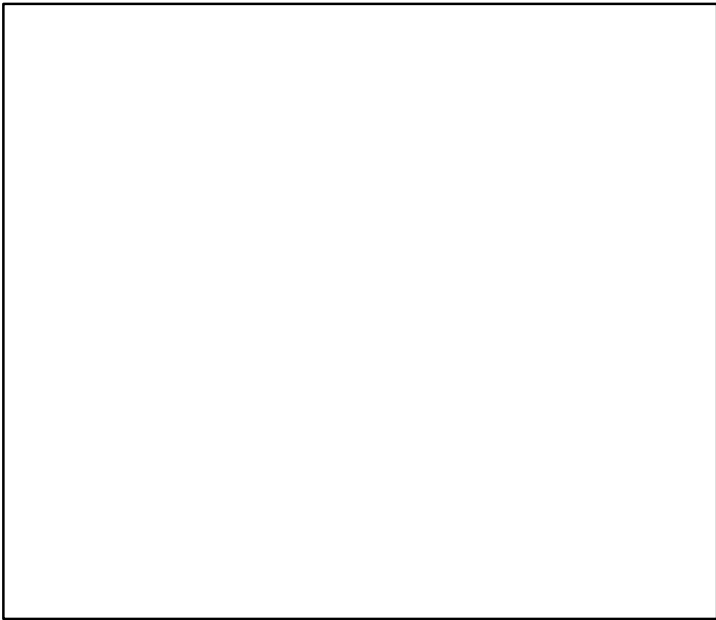
**Kobe MSY\***



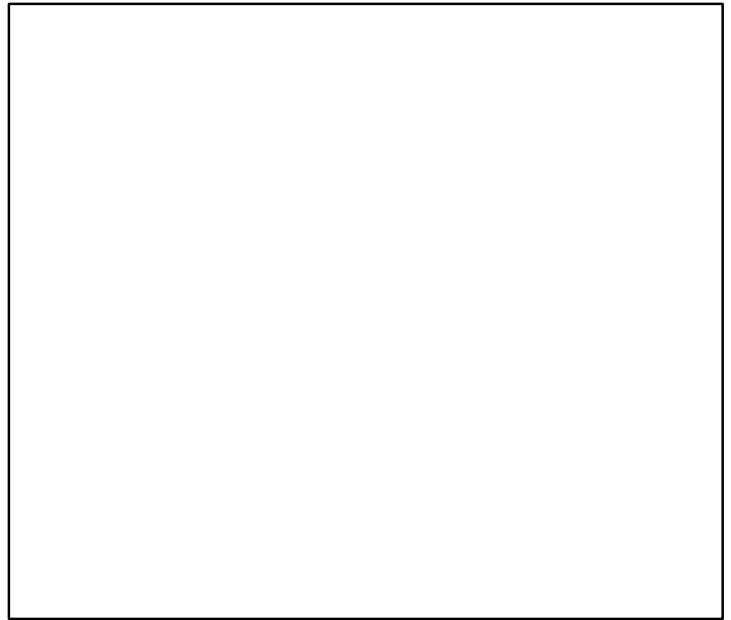
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

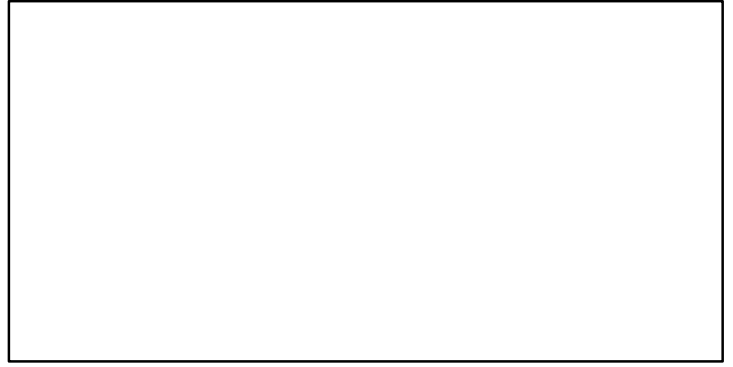


Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



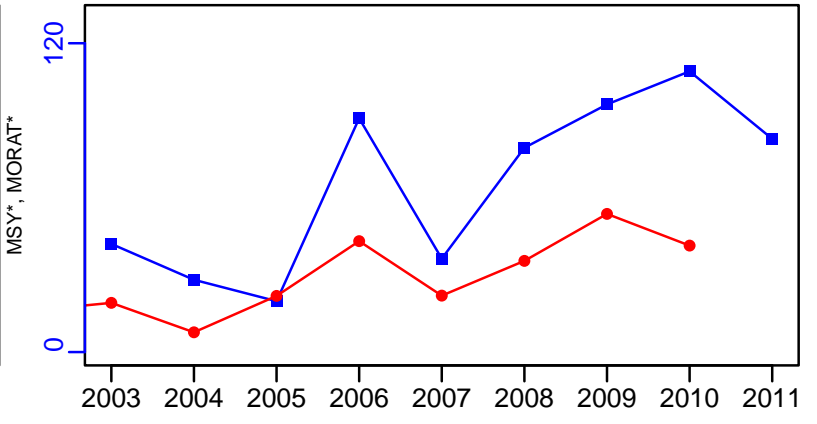
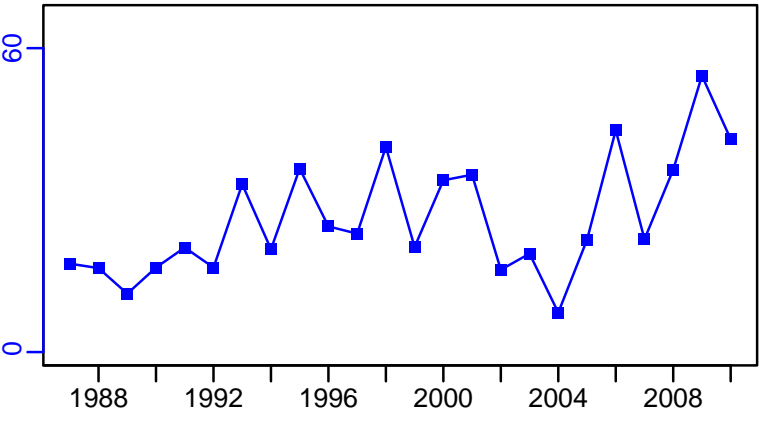
**Recruits\***



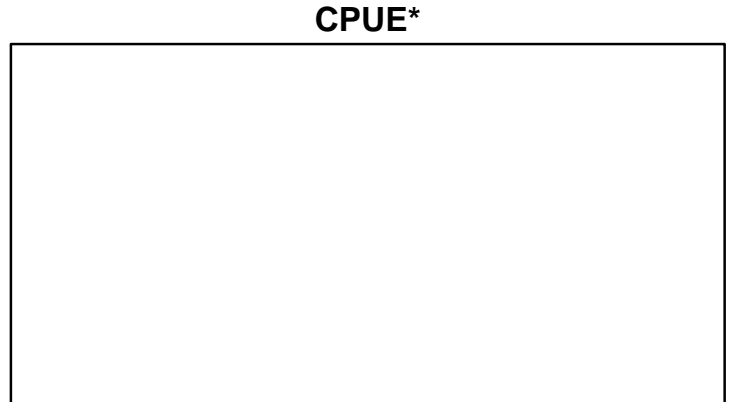
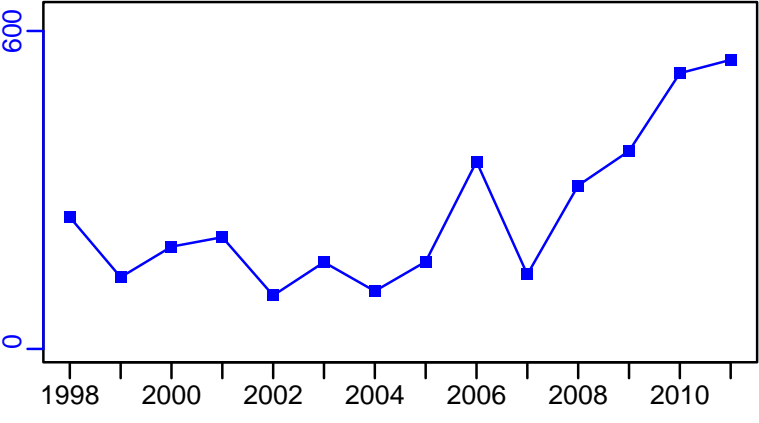
Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

TL-MT, TC\*, RecC\* (1987-2011-WATSON)

TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



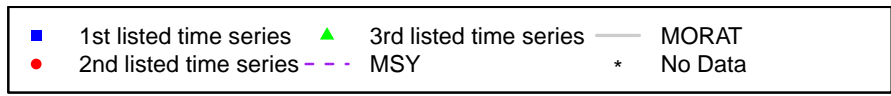
survB-MT (1987-2011-WATSON)



EFFORT\*



CdivMSY\*



## Walleye pollock British Columbia Waters North [WPOLLBCWN]

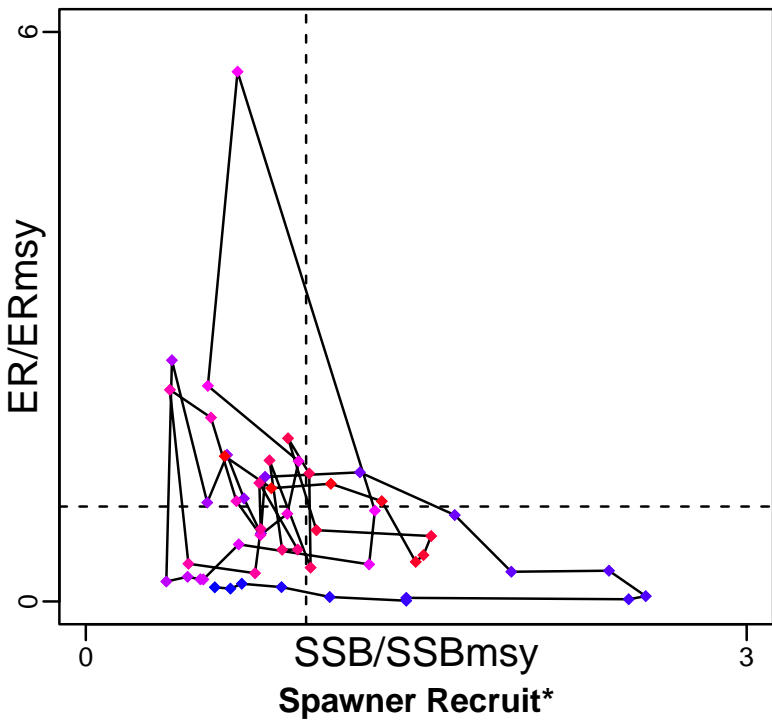
Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	DFO-PAC-WPOLLBCWN-1966-2018-ASHBROOK
<b>Area</b>	British Columbia Waters North
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2018

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2018	7837
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2018	5727
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2018	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2018	2864
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

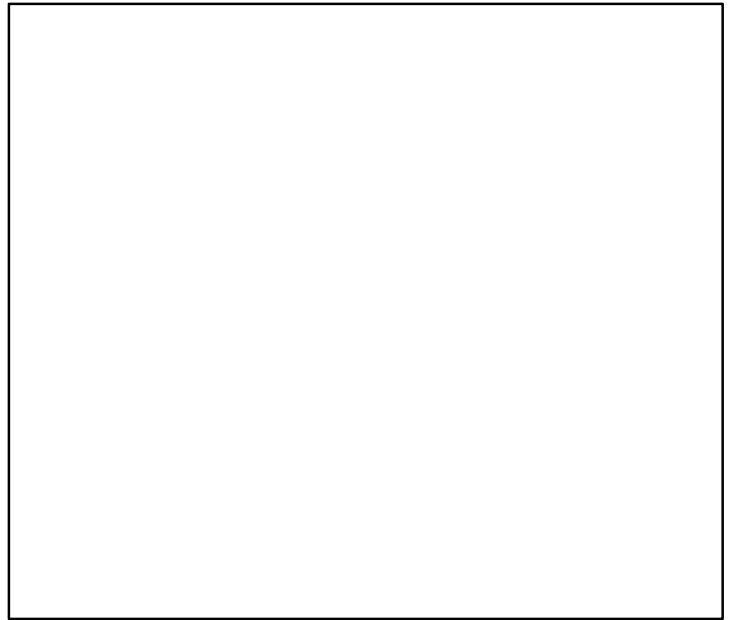
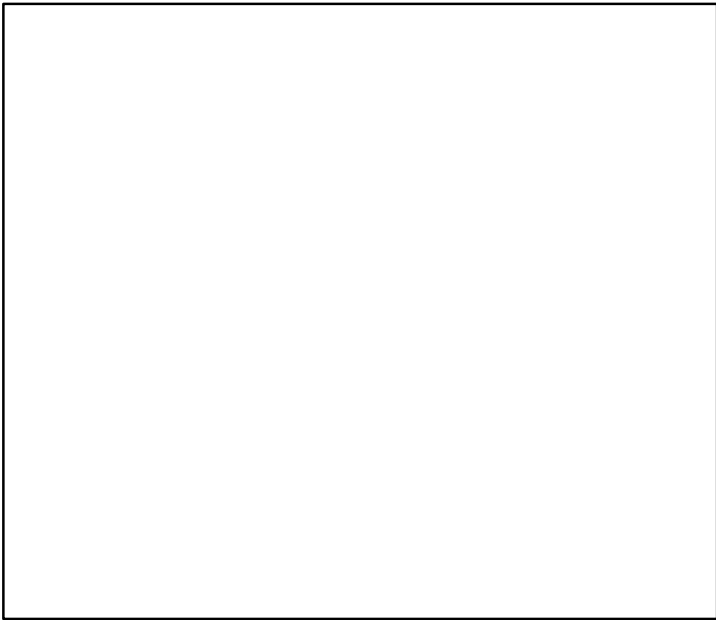
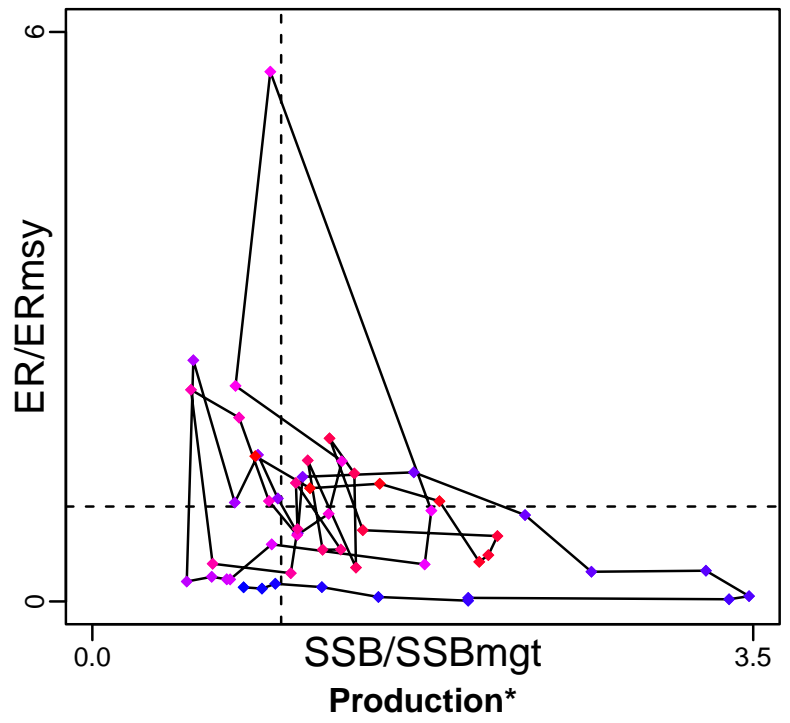
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2018	4943	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2018	1165	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2018	0.631	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2018	0.863	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Walleye pollock British Columbia Waters North [WPOLLBCWN]

Kobe MSYpref (1966-2018-ASHBROOK)



Kobe MGTpref (1966-2018-ASHBROOK)



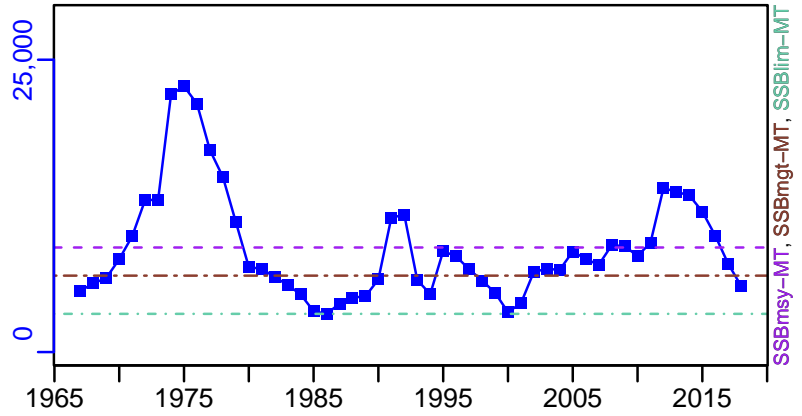
◆ Start Year ◆ End Year \* No Data

Walleye pollock British Columbia Waters North [WPOLLBCWN]

TB\*



SSB-MT (1966-2018-ASHBROOK)



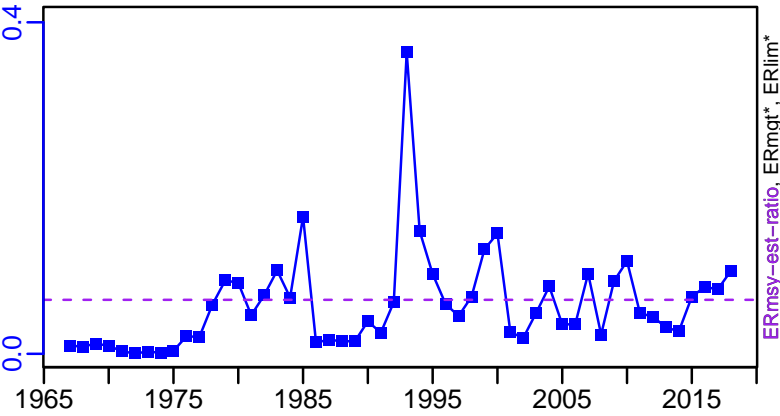
TN \*



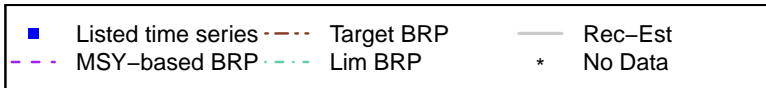
F\*



ER-calc-ratio (1966-2018-ASHBROOK)



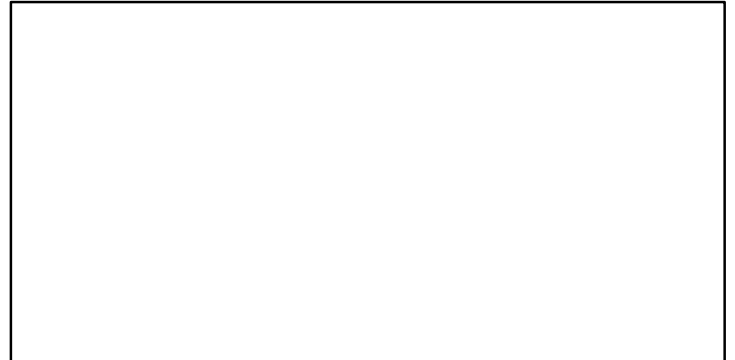
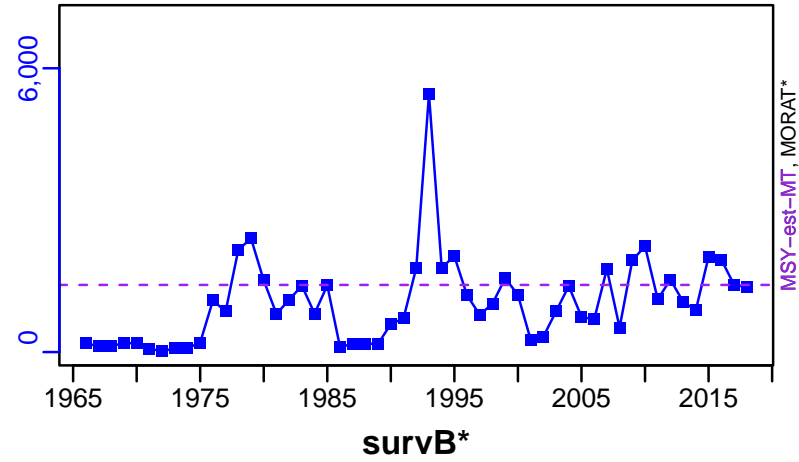
Recruits\*



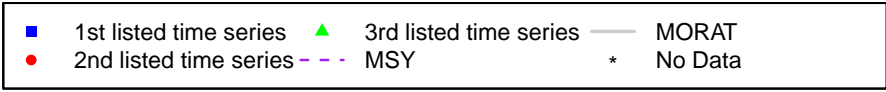
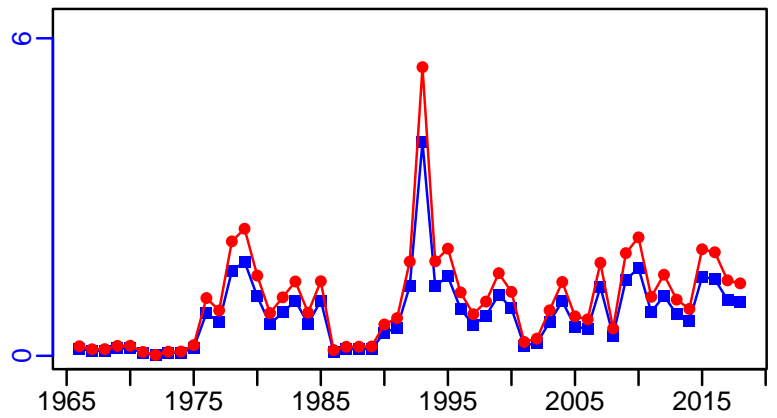
Walleye pollock British Columbia Waters North [WPOLLBCWN]

TL-MT, TC\*, RecC\* (1966-2018-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1966-2018-ASHBROOK)



## Walleye pollock British Columbia Waters South [WPOLLBCWS]

Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	DFO-PAC-WPOLLBCWS-1966-2018-ASHBROOK
<b>Area</b>	British Columbia Waters South
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2018

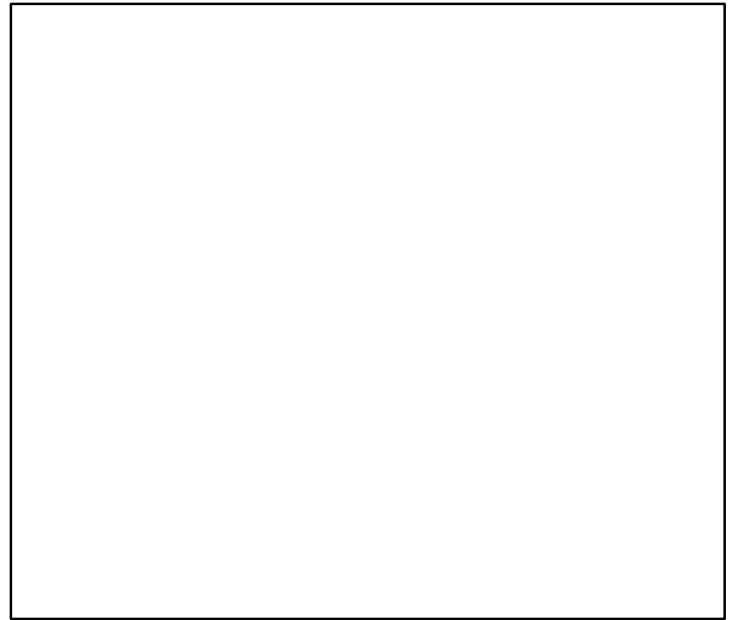
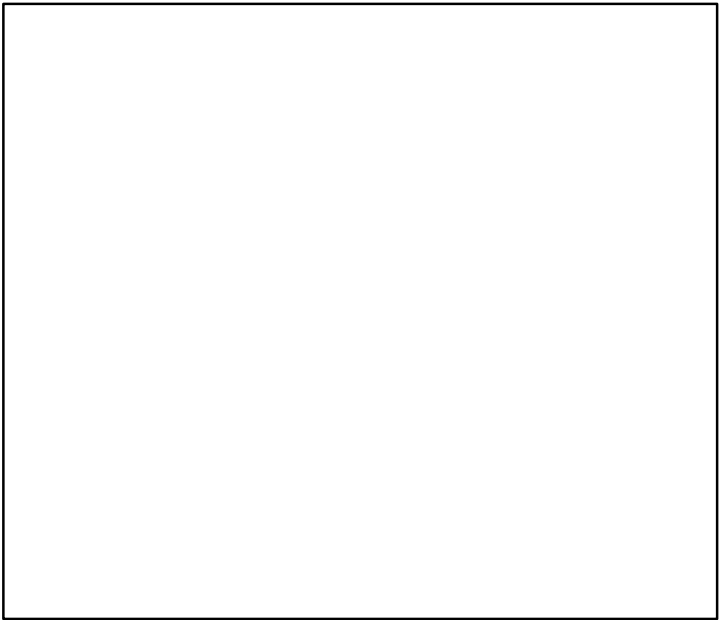
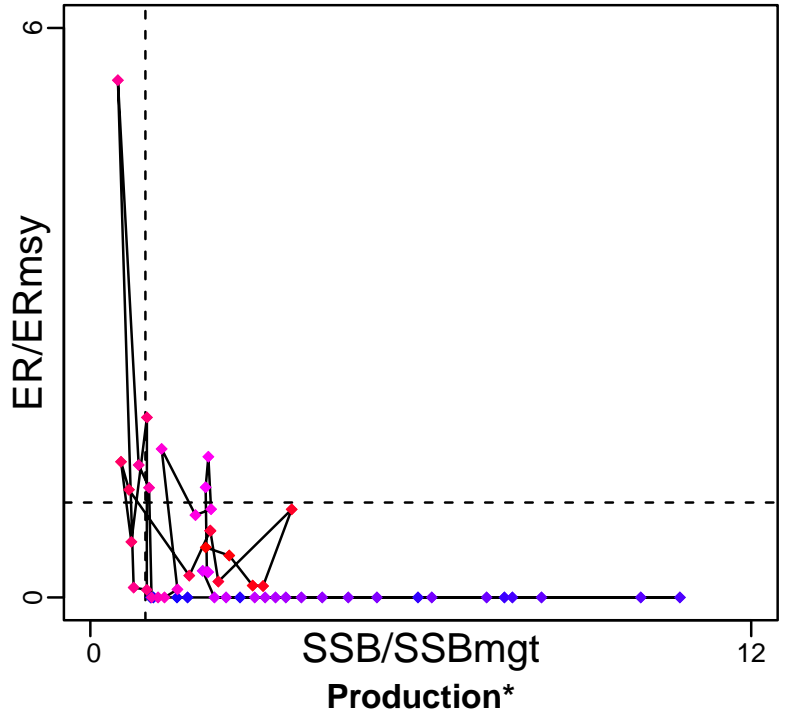
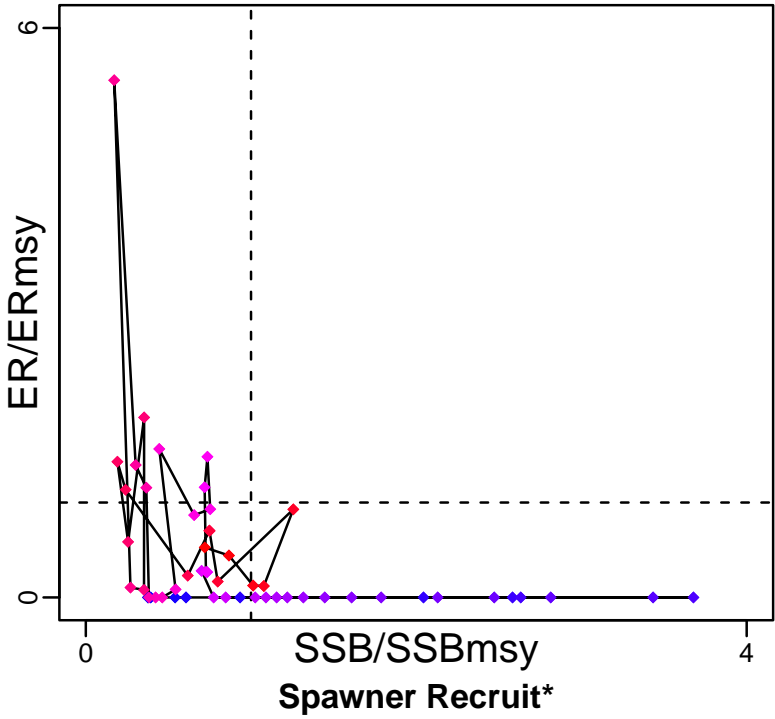
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2018	33,487
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2018	11,504
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2018	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2018	5752
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2018	24,113	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2018	1608	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2018	0.72	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2018	2.096	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Walleye pollock British Columbia Waters South [WPOLLBCWS]

Kobe MSYpref (1966–2018–ASHBROOK)

Kobe MGTpref (1966–2018–ASHBROOK)



◆ Start Year ◆ End Year \* No Data

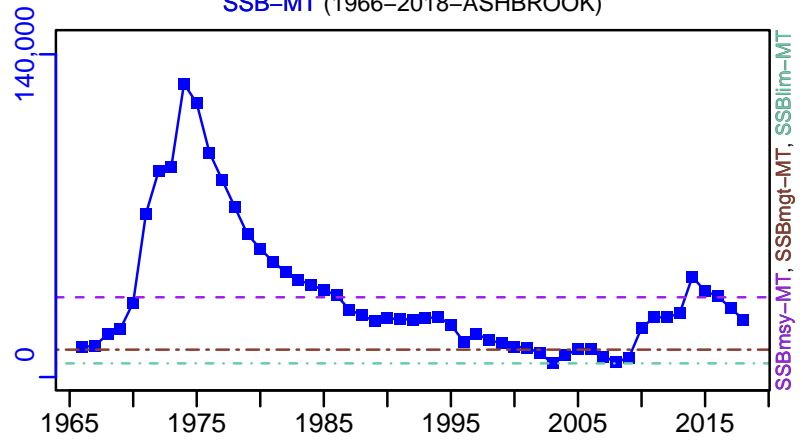


Walleye pollock British Columbia Waters South [WPOLLBCWS]

TB\*



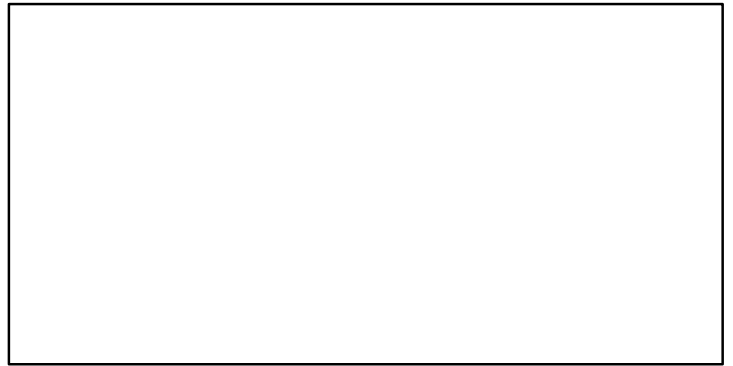
SSB-MT (1966-2018-ASHBROOK)



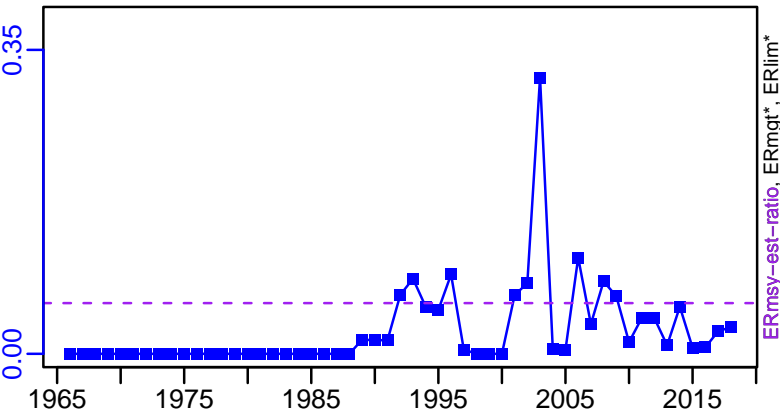
TN \*



F\*



ER-calc-ratio (1966-2018-ASHBROOK)



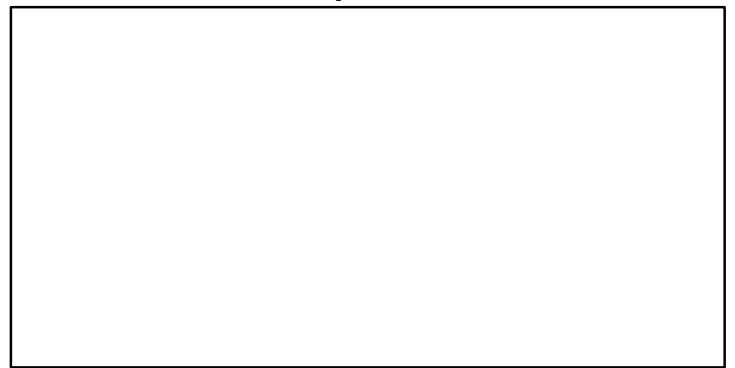
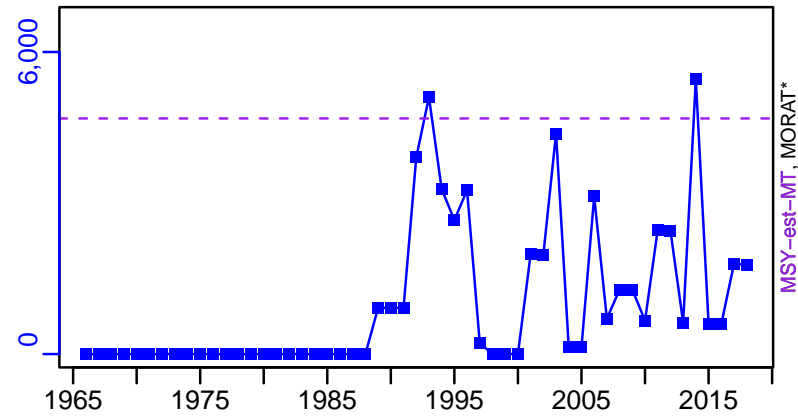
Recruits\*



Walleye pollock British Columbia Waters South [WPOLLBCWS]

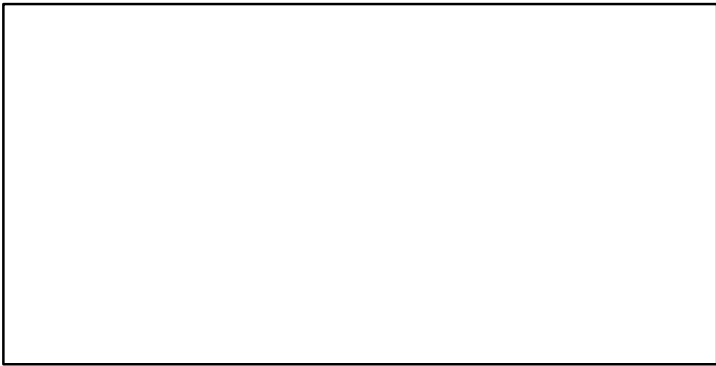
TL-MT, TC\*, RecC\* (1966-2018-ASHBROOK)

TAC\*, Cpair\*, Cadv\*



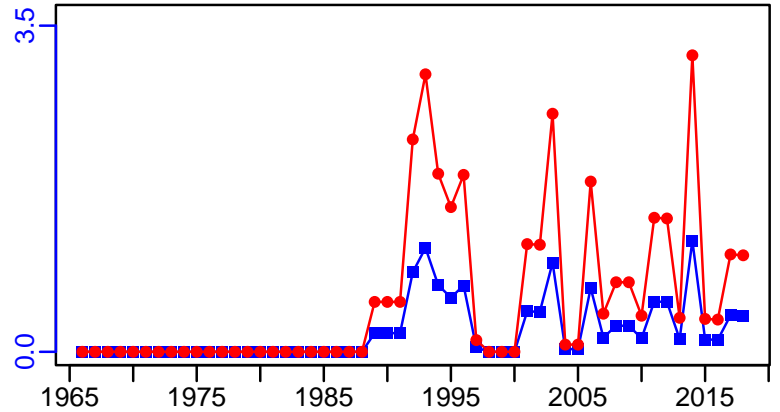
survB\*

CPUE\*



EFFORT\*

TL-MT/MSY-est-MT, CdivMEANC-ratio, (1966-2018-ASHBROOK)



## Widow rockfish British Columbia Waters [WROCKBCW]

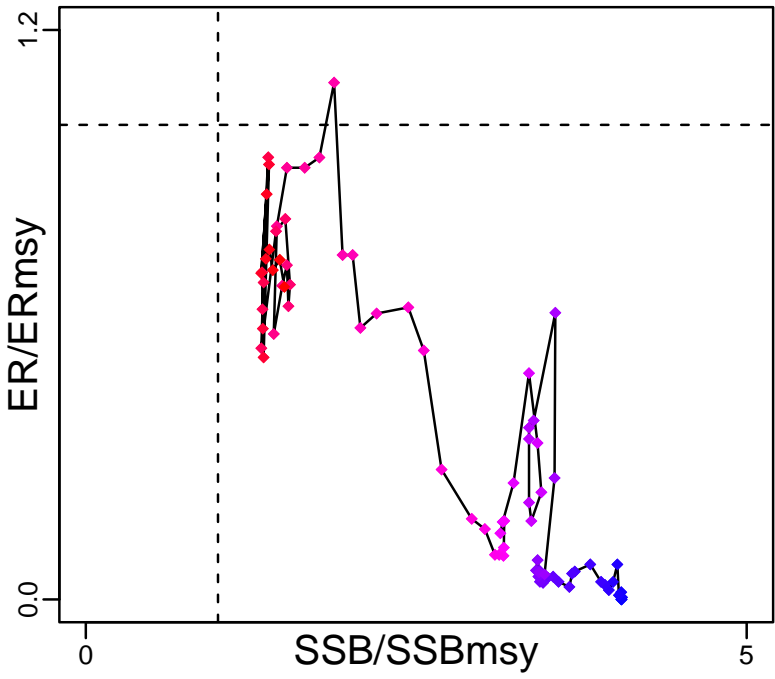
Metadata	
<b>Scientific Name</b>	Sebastes entomelas
<b>Current Assess ID</b>	DFO-PAC-WROCKBCW-1939-2018-ASHBROOK
<b>Area</b>	British Columbia Waters
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2018

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2018	12,899
<b>SSBmsy</b>	SSBmsy-MT	2018	7373
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2018	0.148
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	29,951
<b>MSY</b>	MSY-MT	2018	1909
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

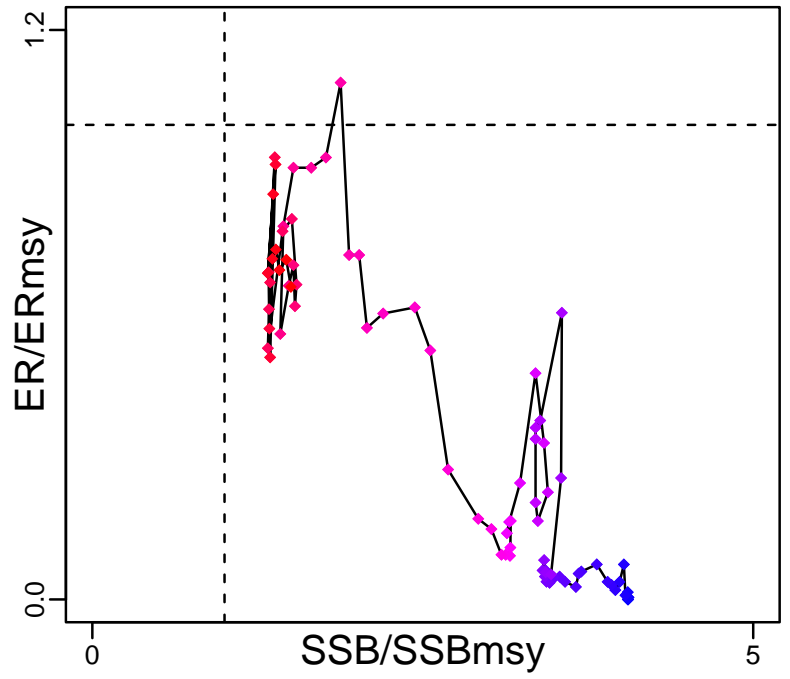
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2018	11,077	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	2,782,219	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2018	0.098	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2018	1909	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2018	1.502	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2018	0.659	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

Widow rockfish British Columbia Waters [WROCKBCW]

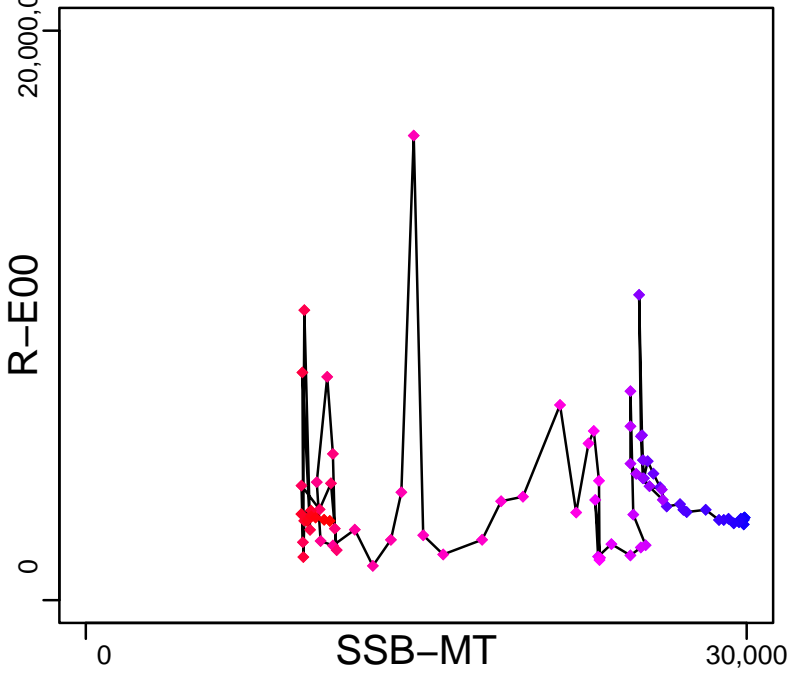
Kobe MSYpref (1939–2018–ASHBROOK)



Kobe MGTpref (1939–2018–ASHBROOK)



Spawner Recruit (1939–2018–ASHBROOK)



Production\*



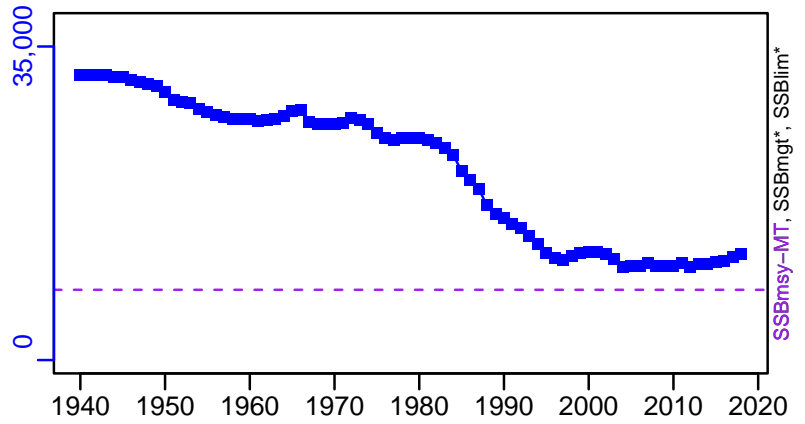
◆ Start Year ◆ End Year \* No Data

Widow rockfish British Columbia Waters [WROCKBCW]

TB\*



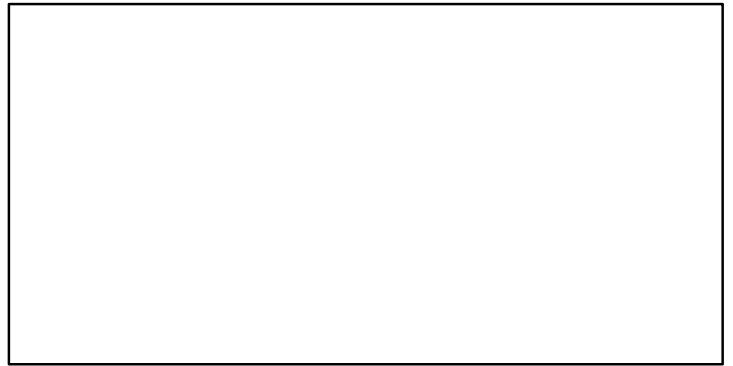
SSB-MT (1939-2018-ASHBROOK)



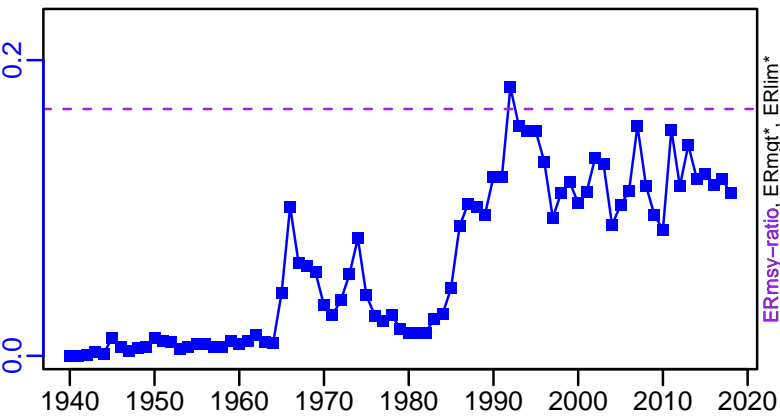
TN \*



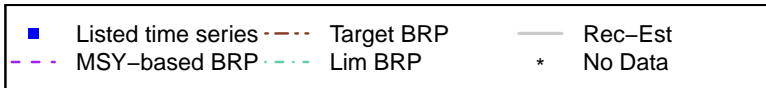
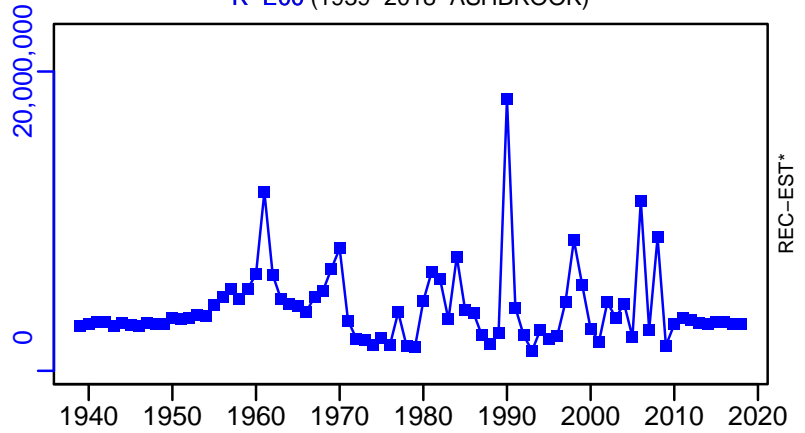
F\*



ER-ratio (1939-2018-ASHBROOK)



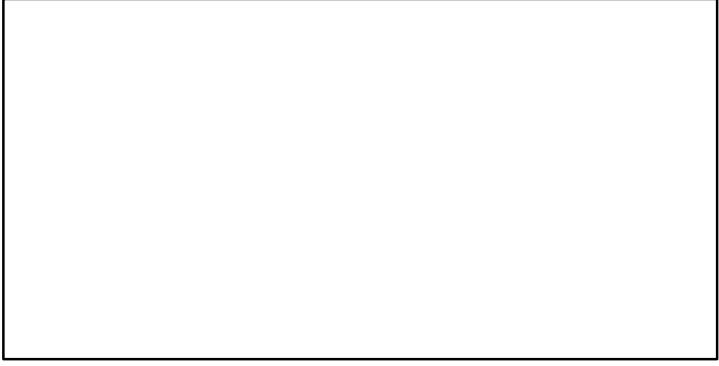
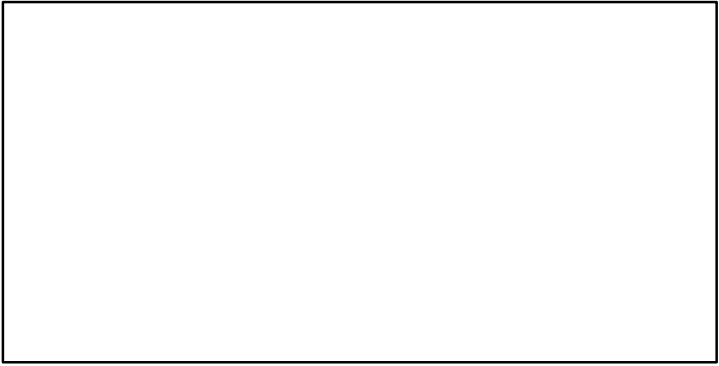
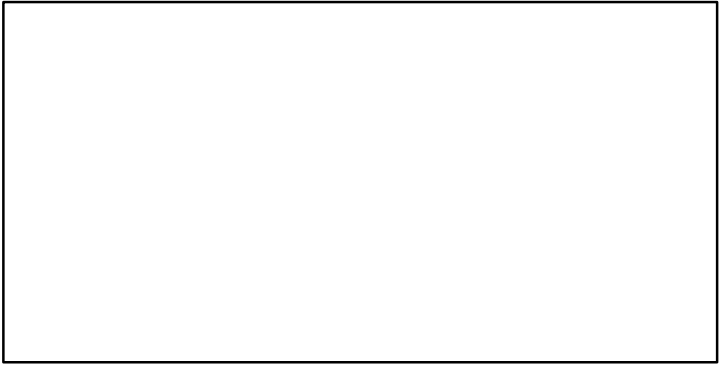
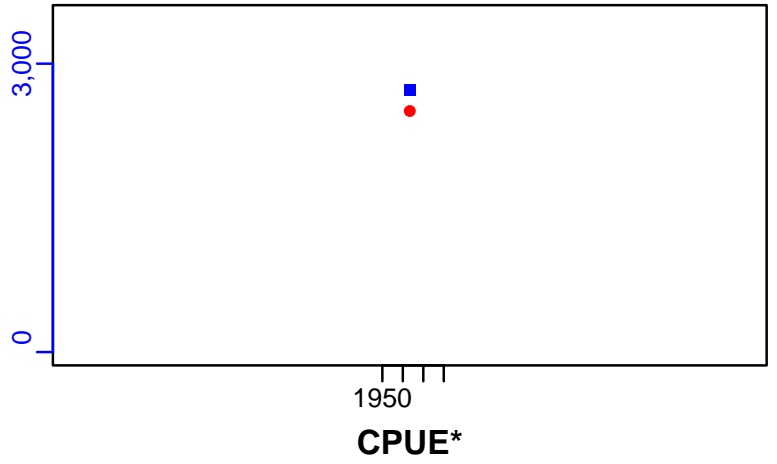
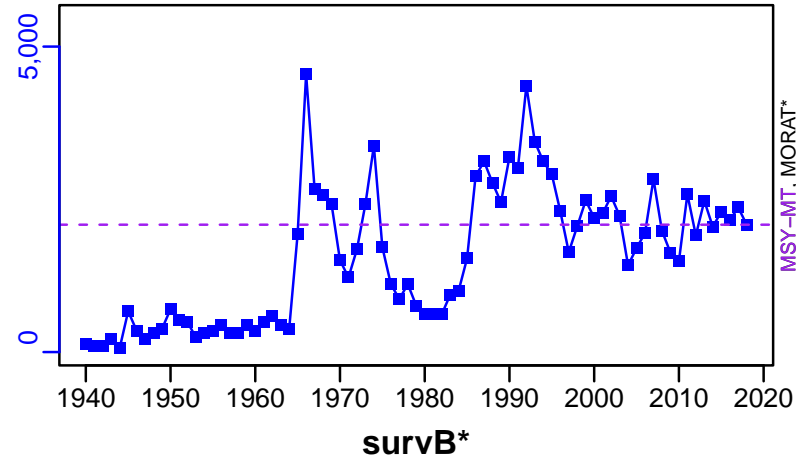
R-E00 (1939-2018-ASHBROOK)



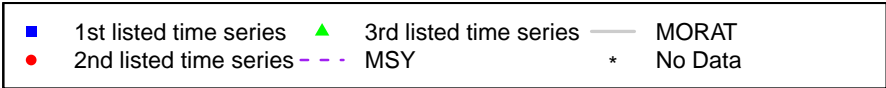
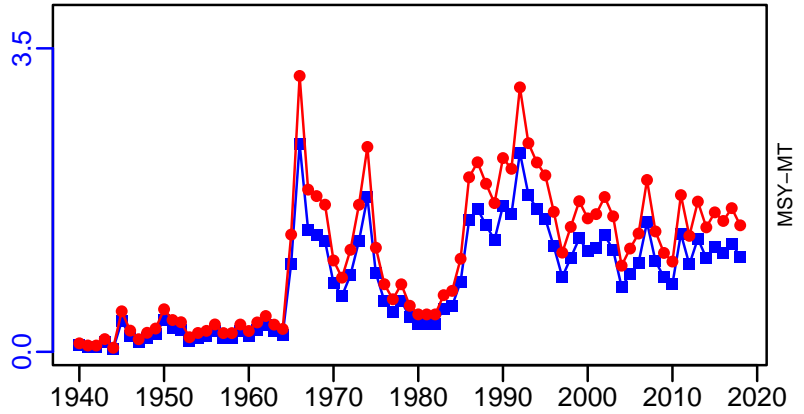
Widow rockfish British Columbia Waters [WROCKBCW]

TL-MT, TC\*, RecC\* (1939-2018-ASHBROOK)

TAC-MT, Cpair-MT, Cadv\* (1939-2018-ASHBROOK)



TL-MT/MSY-MT, CdivMEANC-ratio, (1939-2018-ASHBROOK)



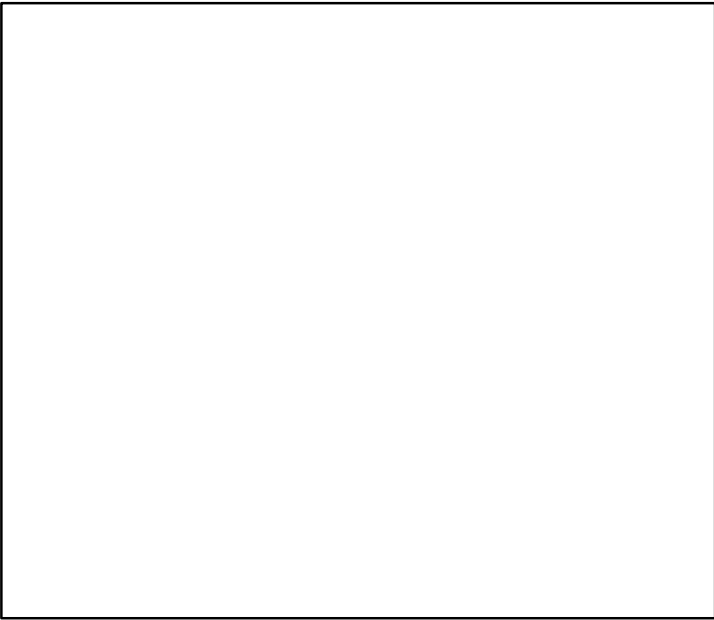
## Yelloweye rockfish Pacific Coast of Canada (Inside) [YEYEROCKPCOASTIN]

Metadata	
<b>Scientific Name</b>	Sebastes ruberrimus
<b>Current Assess ID</b>	DFO-YEYEROCKPCOASTIN-1918-2009-WATSON
<b>Area</b>	Pacific Coast of Canada (Inside)
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2009

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	2009	8		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

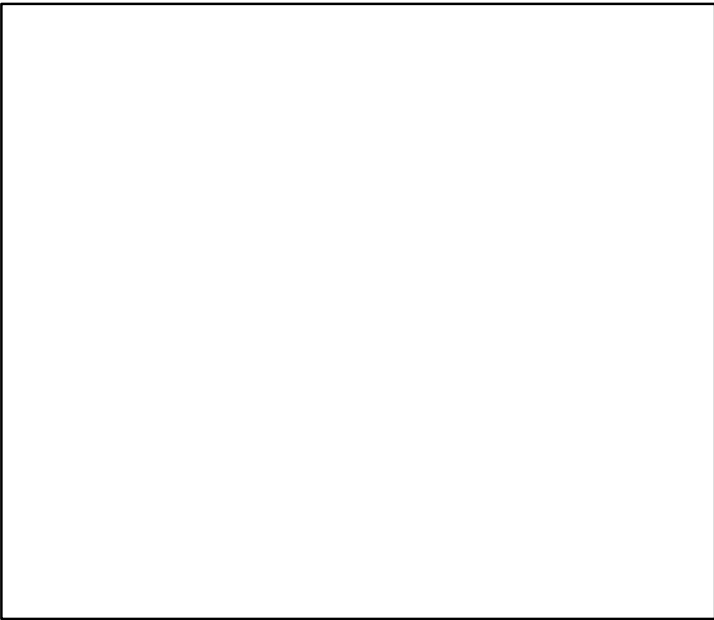
**Kobe MSY\***



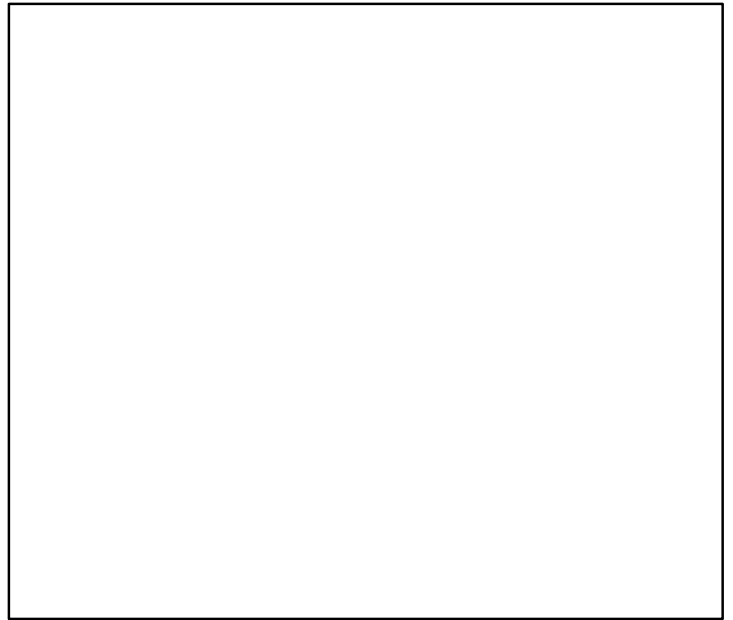
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

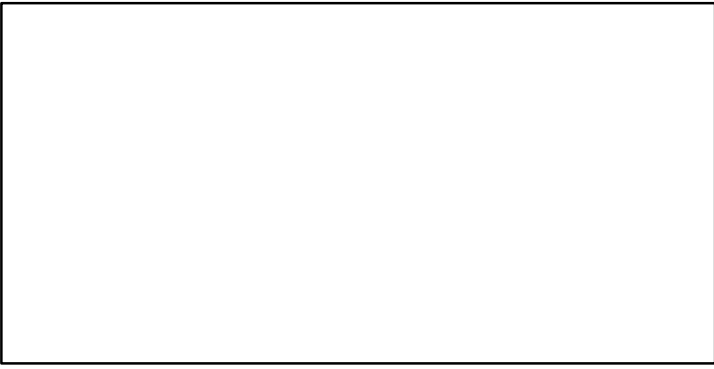


◆ Start Year ◆ End Year \* No Data



Yelloweye rockfish Pacific Coast of Canada (Inside) [YEYEROCKPCOASTIN]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



**Recruits\***



Yelloweye rockfish Pacific Coast of Canada (Inside) [YEYEROCKPCOASTIN]

TC-MT, TL\*, RecC-MT (1918-2009-WATSON)

TAC\*, Cpair\*, Cadv\*

