

# Canada West Coast Stocks

## v4.491 (Jan-06-2020)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		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. HERRPRD [Pacific herring Prince Rupert District]	TB SSB	ER F	TB SSB	ER F	
13. HERRQCI [Pacific herring Queen Charlotte Islands]	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. LNOSESKA3CD [Longnose skate West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F	
18. LNOSESKA4B [Longnose skate Strait of Georgia]	TB SSB	ER F	TB SSB	ER F	
19. LNOSESKA5AB [Longnose skate Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F	
20. LNOSESKA5CDE [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. PCOD5AB [Pacific cod Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F	
28. PCODHS [Pacific cod Hecate Strait]	TB SSB	ER F	TB SSB	ER F	
29. PCODWCVANI [Pacific cod West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F	
30. PERCHQCI [Pacific ocean perch Haida Gwaii]	TB SSB	ER F	TB SSB	ER F	
31. PERCHWCVANI [Pacific ocean perch West Coast of Vancouver Island]	TB SSB	ER F	TB SSB	ER F	
32. QROCKPCOASTIN [Quillback rockfish Pacific Coast of Canada (In-side)]	TB SSB	ER F	TB SSB	ER F	

33. QROCKPCOASTOUT [Quillback rockfish Pacific Coast of Canada (Outside)]	TB SSB	ER F	TB SSB	ER F
34. RSOLE5AB [Rock sole Queen Charlotte Sound]	TB SSB	ER F	TB SSB	ER F
35. RSOLEHSTR [Rock sole Hecate Strait]	TB SSB	ER F	TB SSB	ER F
36. SABLEFPCAN [Sablefish Pacific Coast of Canada]	TB SSB	ER F	TB SSB	ER F
37. SARDBC [Pacific sardine Pacific Coast of Canada]	TB SSB	ER F	TB SSB	ER F
38. SSHRIMPSMAGTSE [Sidestripe shrimp Shrimp Management Area GTSE]	TB SSB	ER F	TB SSB	ER F
39. SSHRIMPSMAPRD [Sidestripe shrimp Shrimp Management Area PRD]	TB SSB	ER F	TB SSB	ER F
40. SSSHRIMPSMA14 [Sidestripe shrimp Shrimp Management Area 14]	TB SSB	ER F	TB SSB	ER F
41. SSSHRIMPSMA16 [Sidestripe shrimp Shrimp Management Area 16]	TB SSB	ER F	TB SSB	ER F
42. SSSHRIMPSMA18-19 [Sidestripe shrimp Shrimp Management Areas 18 and 19]	TB SSB	ER F	TB SSB	ER F
43. SSSHRIMPSMAFR [Sidestripe shrimp Shrimp Management Area FR]	TB SSB	ER F	TB SSB	ER F
44. YEYEROCKPCOASTIN [Yelloweye rockfish Pacific Coast of Canada (Inside)]	TB SSB	ER F	TB SSB	ER F

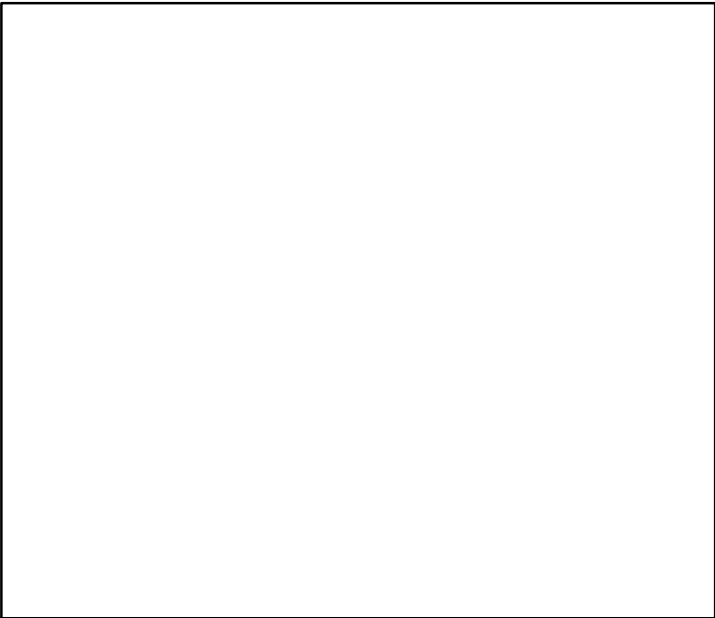
## Big skate West Coast of Vancouver Island [BIGSKA3CD]

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

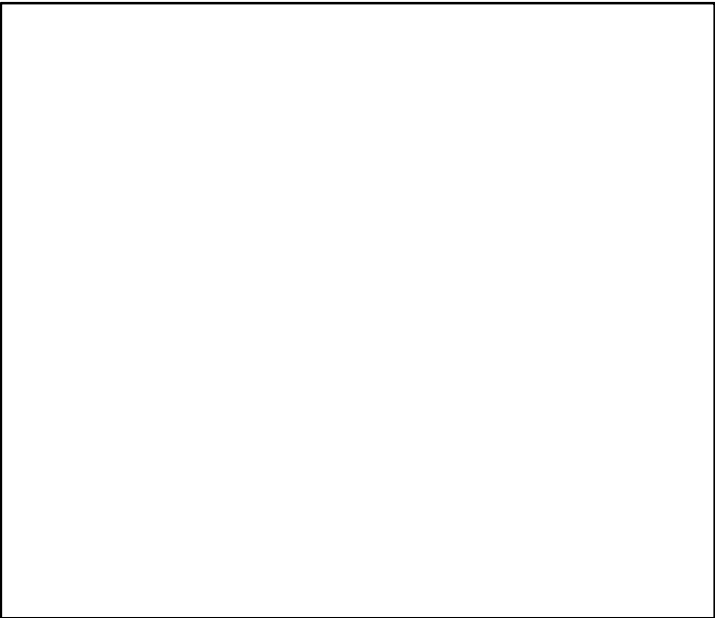
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

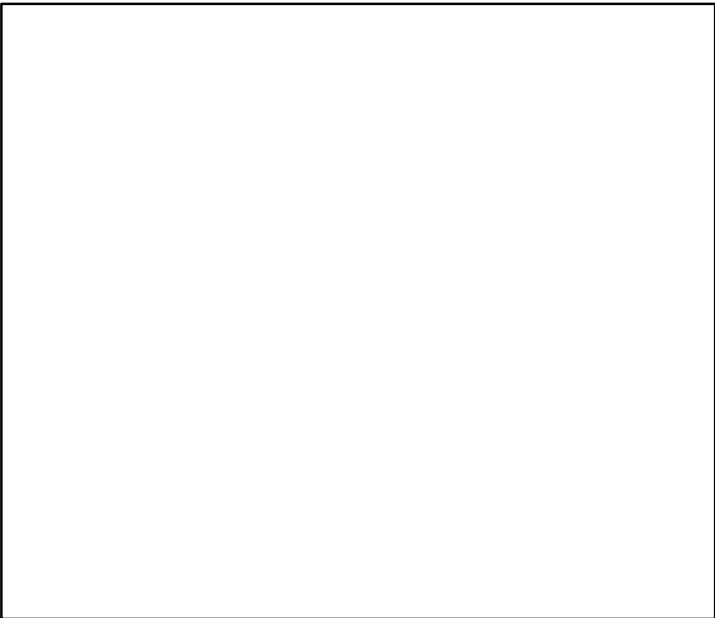
Kobe MSY\*



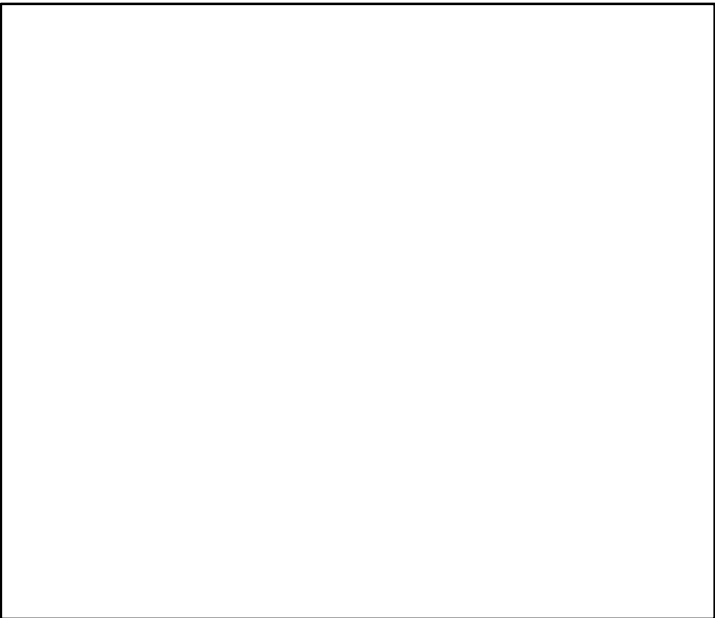
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

Big skate West Coast of Vancouver Island [BIGSKA3CD]

TB\*



SSB\*



TN \*



F\*



ER\*



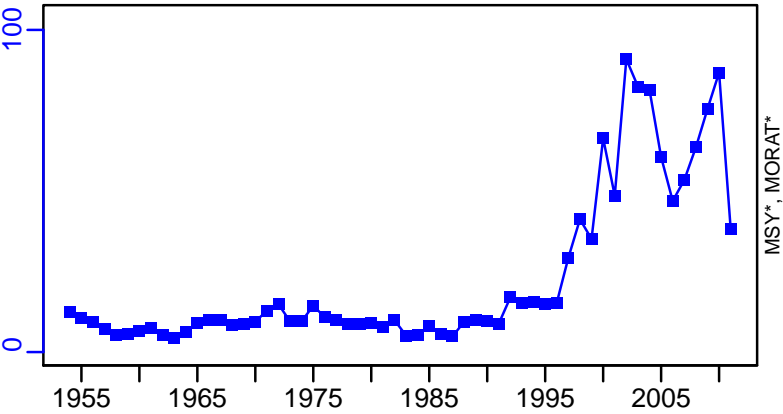
Recruits\*



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

Big skate West Coast of Vancouver Island [BIGSKA3CD]

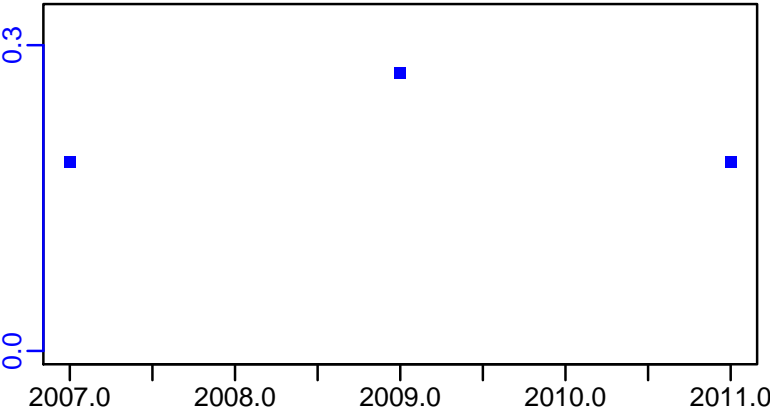
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



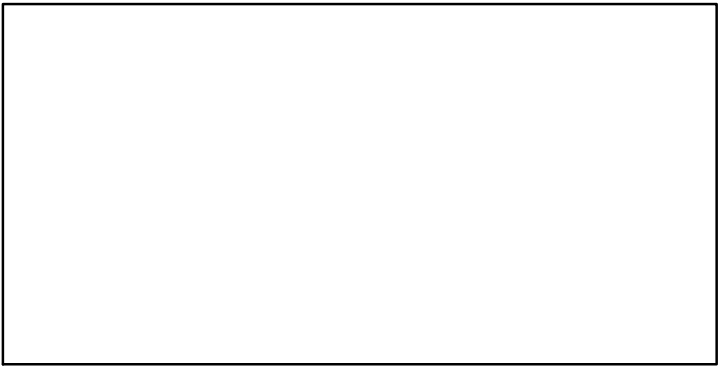
TAC\*, Cpair\*, Cadv\*



survB-fishperE02hooks (1954-2011-OSGOOD)



CPUE\*



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



TB\*



SSB\*



TN \*



F\*



ER\*



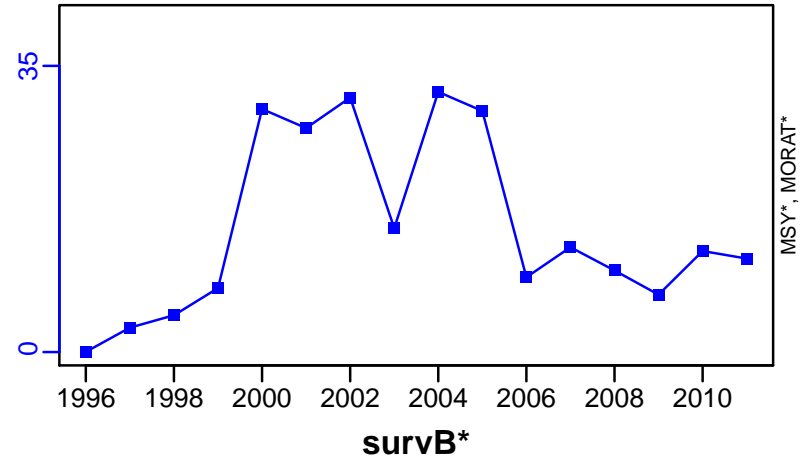
Recruits\*



# Big skate Strait of Georgia [BIGSKA4B]

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

TAC\*, Cpair\*, Cadv\*



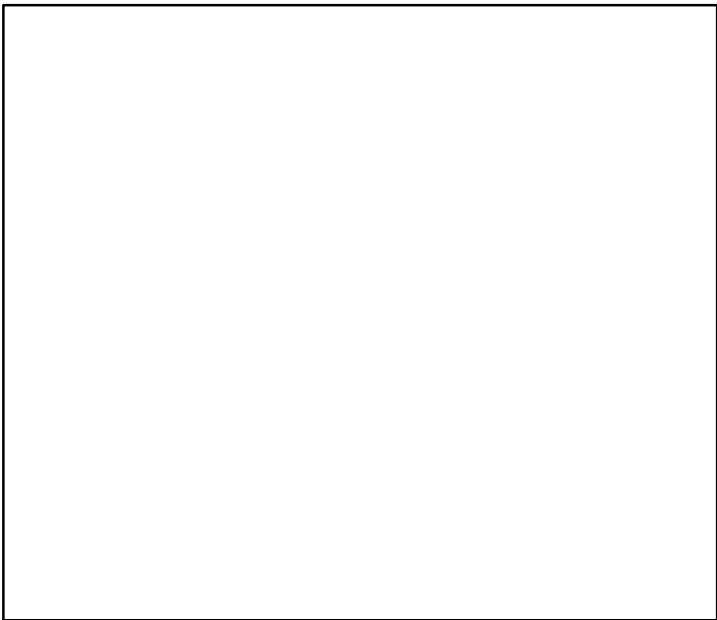
## Big skate Queen Charlotte Sound [BIGSKA5AB]

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

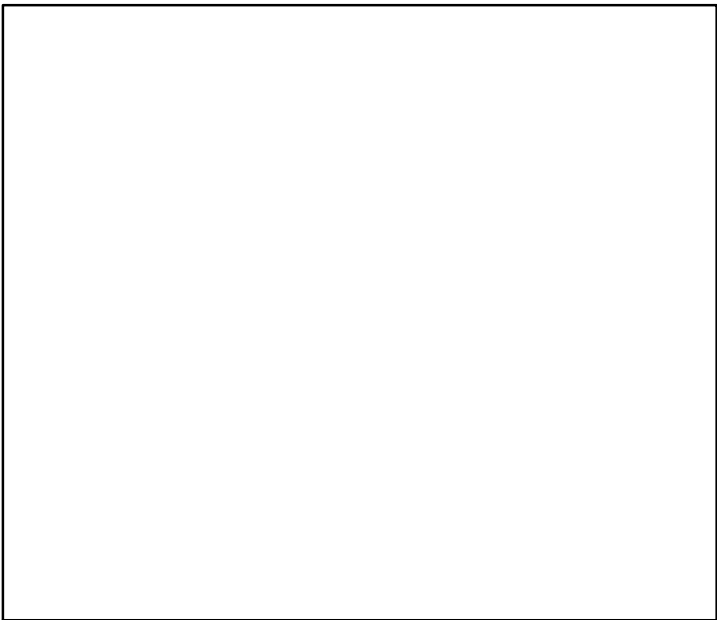
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

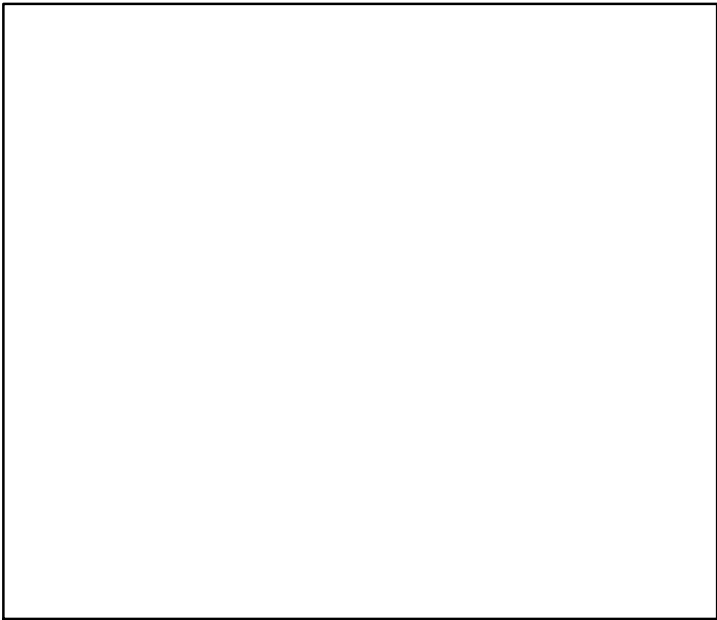
**Kobe MSY\***



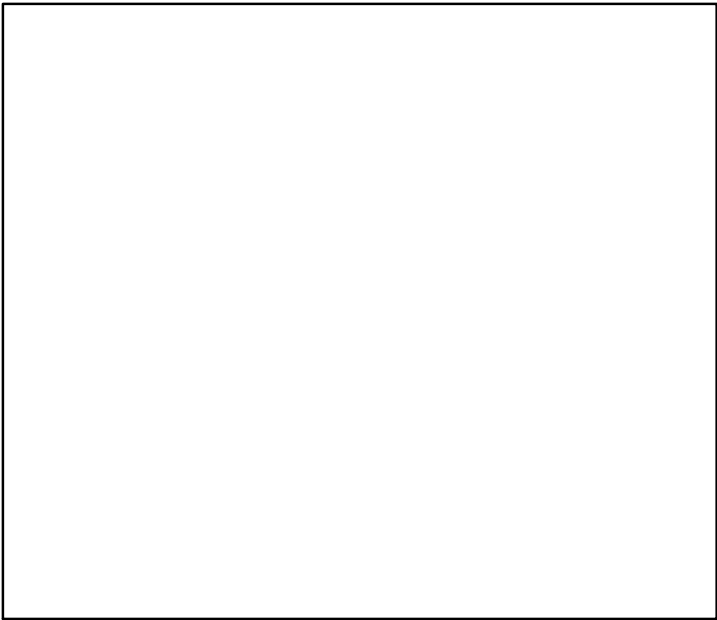
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

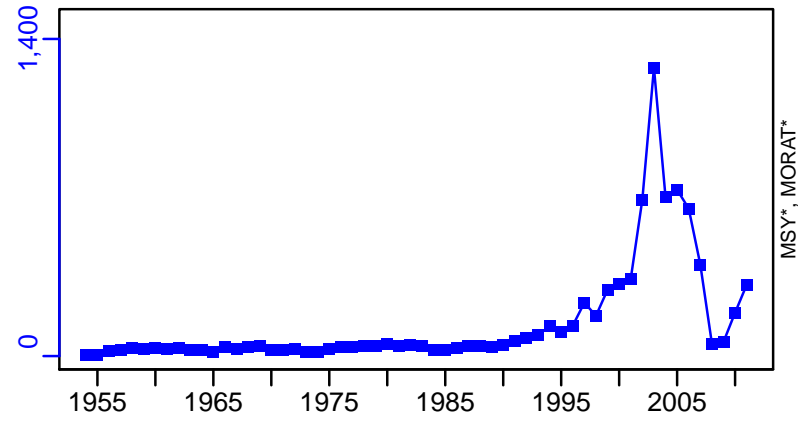


Recruits\*



# Big skate Queen Charlotte Sound [BIGSKA5AB]

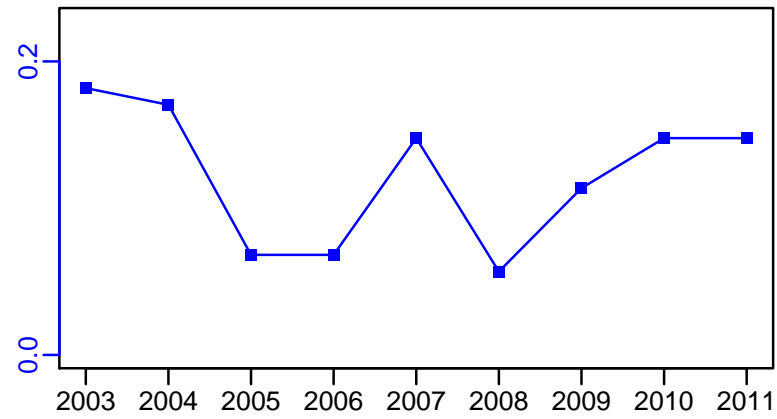
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



TAC\*, Cpair\*, Cadv\*



survB-fishperE02hooks (1954-2011-OSGOOD)



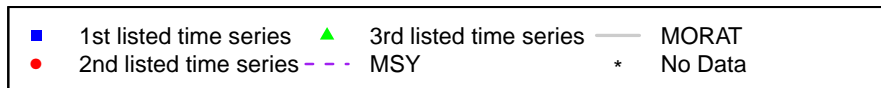
CPUE\*



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	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year ◆ End Year \* No Data



Big skate Hecate Strait [BIGSKA5CDE]

TB\*



SSB\*



TN \*



F\*



ER\*

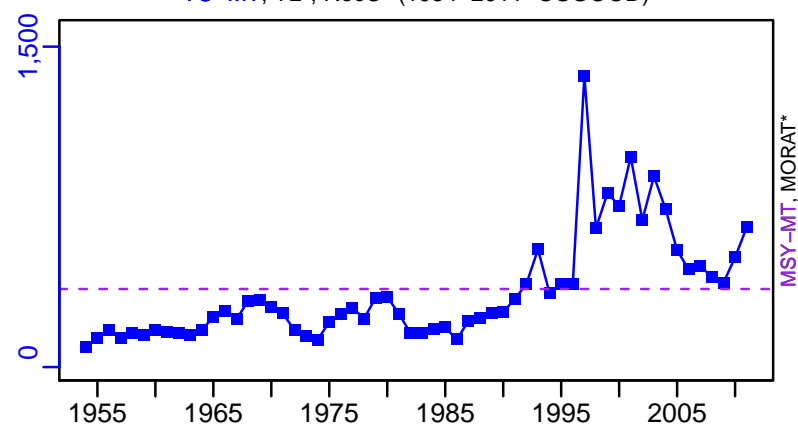


Recruits\*



# Big skate Hecate Strait [BIGSKA5CDE]

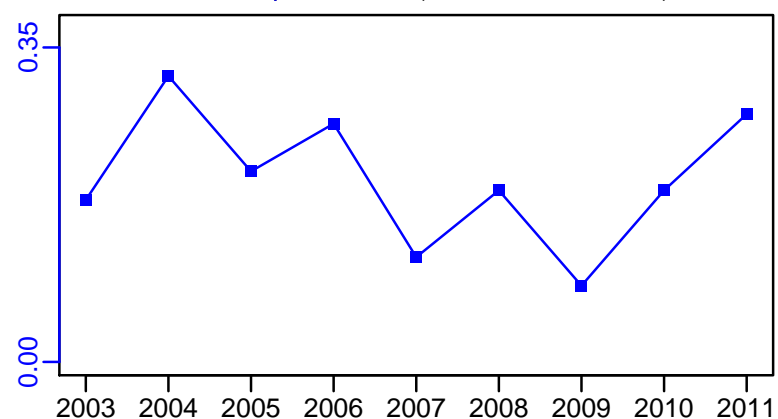
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



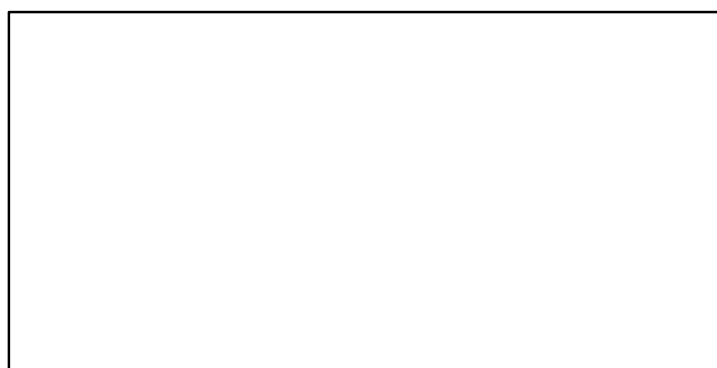
TAC\*, Cpair\*, Cadv\*



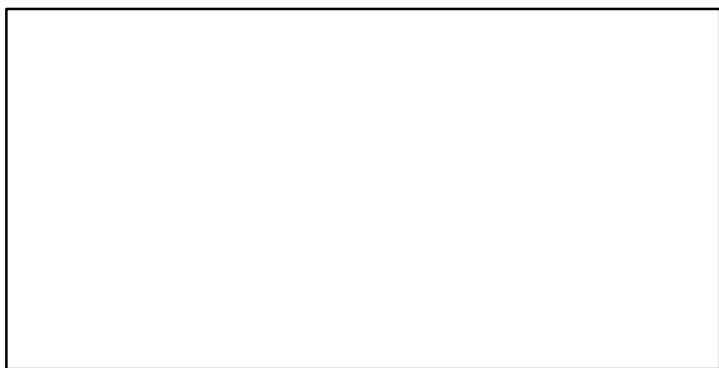
survB-fishperE02hooks (1954-2011-OSGOOD)



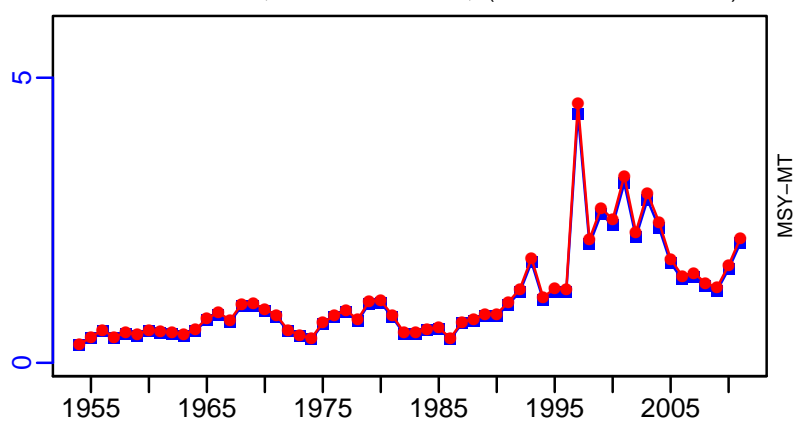
CPUE\*



EFFORT\*



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



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

## Bocaccio British Columbia Waters [BOCACCBW]

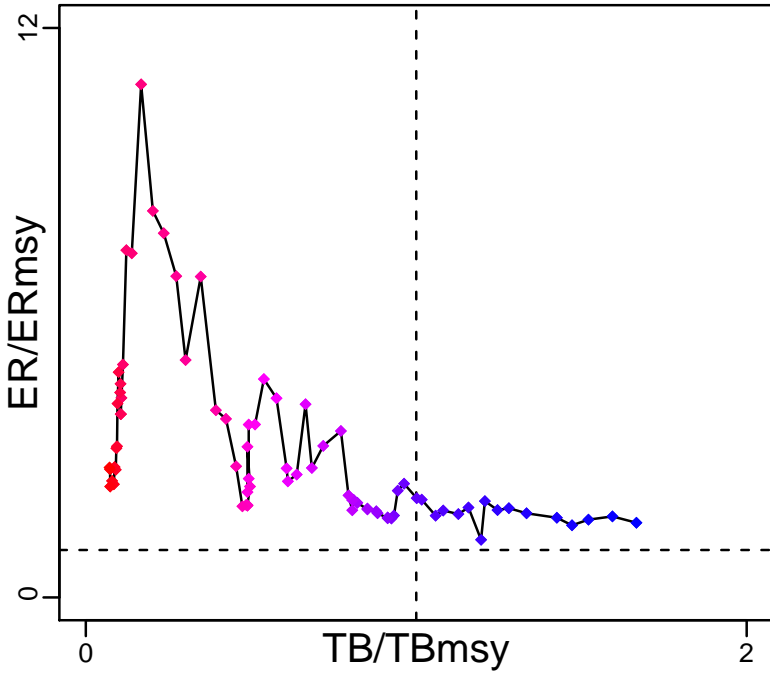
Metadata	
<b>Scientific Name</b>	Sebastes paucispinis
<b>Current Assess ID</b>	DFO-PAC-BOCACCBW-1935-2012-CHING
<b>Area</b>	British Columbia Waters
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<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>	ERmsy-est-ratio	2012	0.027
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	702
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

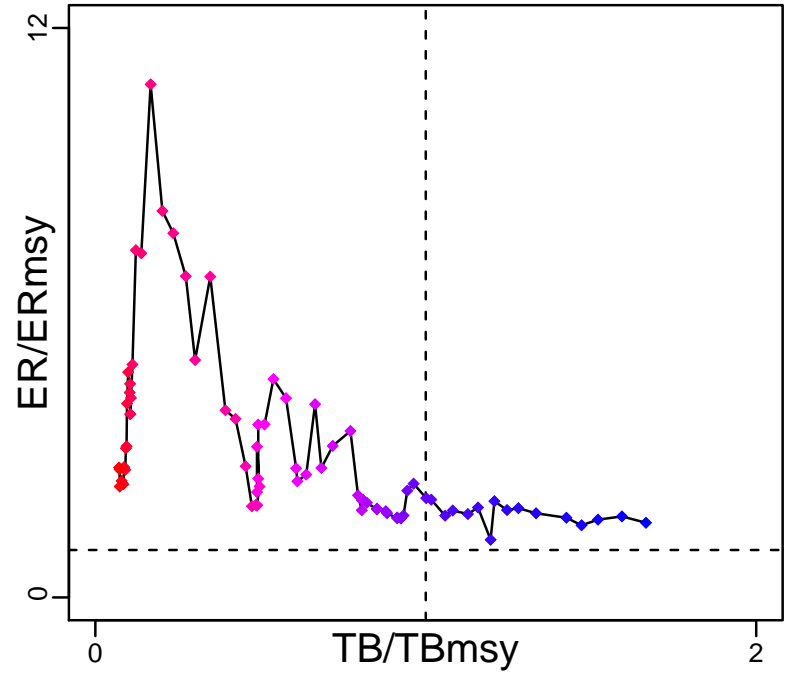
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	1880	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.073	-	-
<b>TC</b>	TC-MT	2012	138		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2012	0.072		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	2.737		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Bocaccio British Columbia Waters [BOCACCBCW]

Kobe MSYpref (1935–2012–CHING)



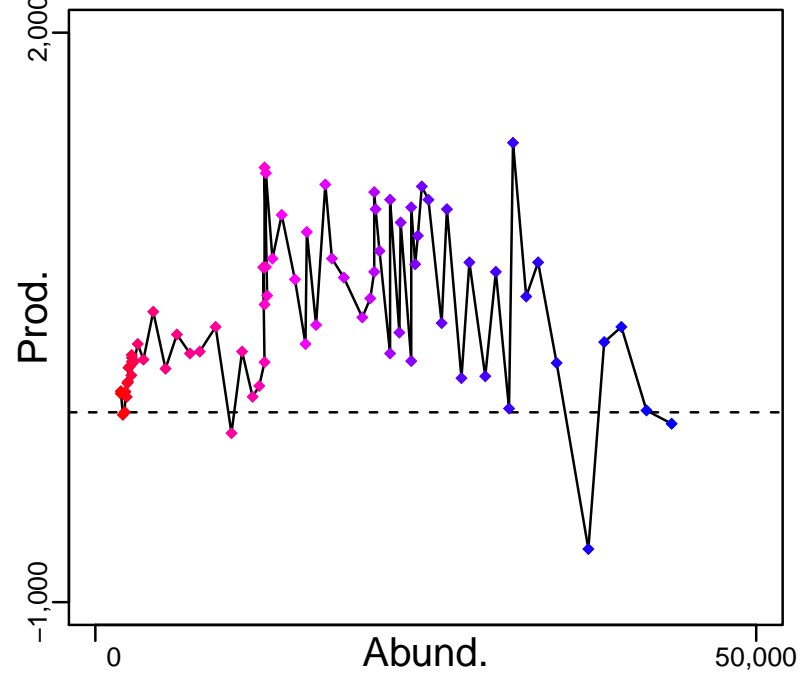
Kobe MGTpref (1935–2012–CHING)



Spawner Recruit\*



Production (1935–2012–CHING)

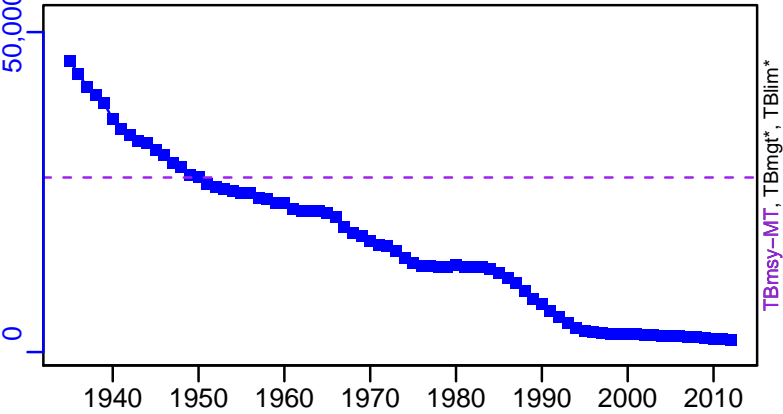


◆ Start Year ◆ End Year \* No Data

Bocaccio British Columbia Waters [BOCACCBCW]

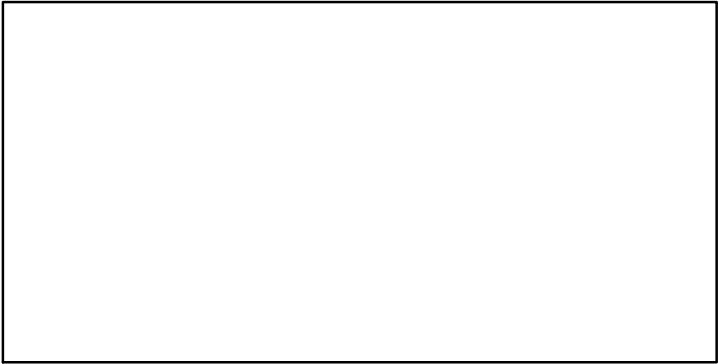
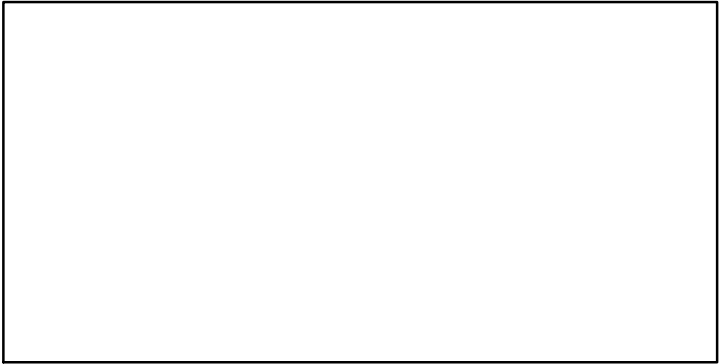
TB-MT (1935-2012-CHING)

SSB\*



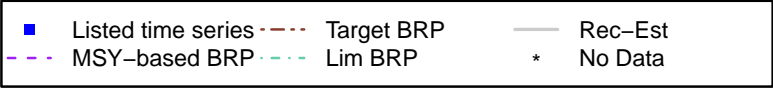
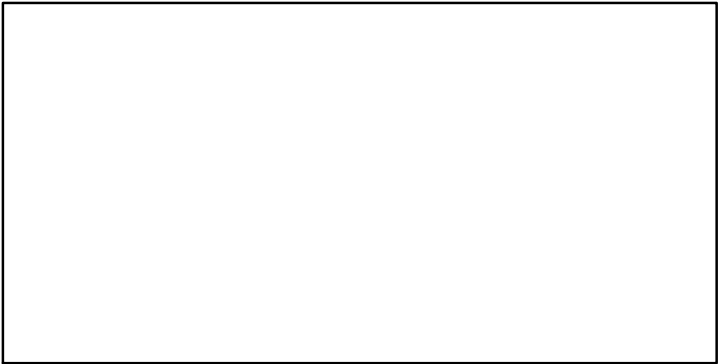
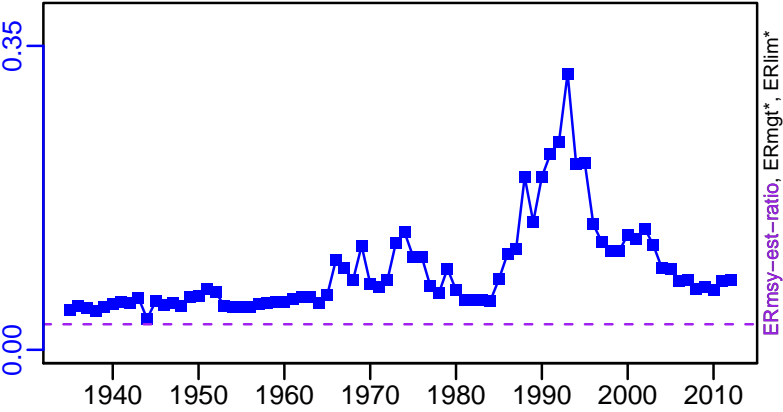
TN \*

F\*



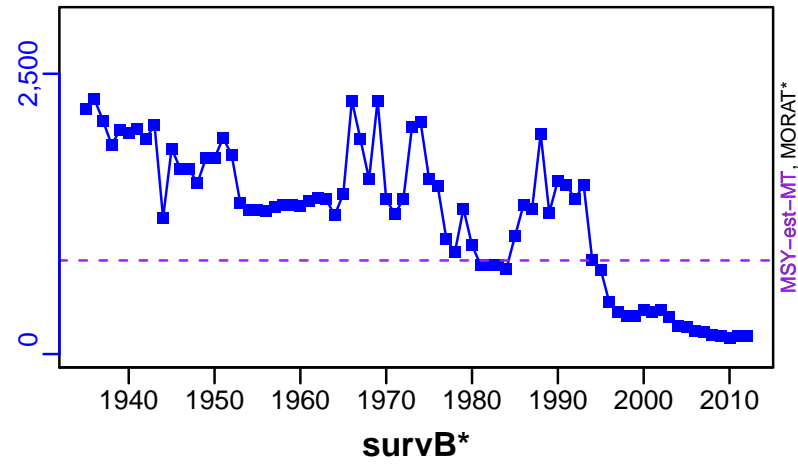
ER-calc-ratio (1935-2012-CHING)

Recruits\*



# Bocaccio British Columbia Waters [BOCACCBCW]

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



TAC\*, Cpair\*, Cadv\*



survB\*



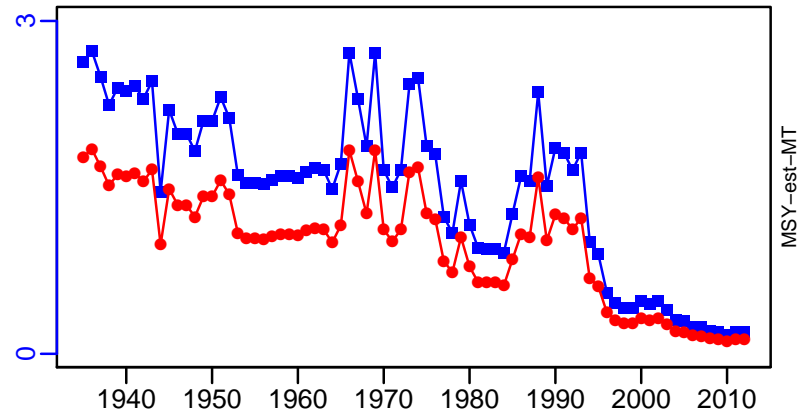
CPUE\*



EFFORT\*



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



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

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

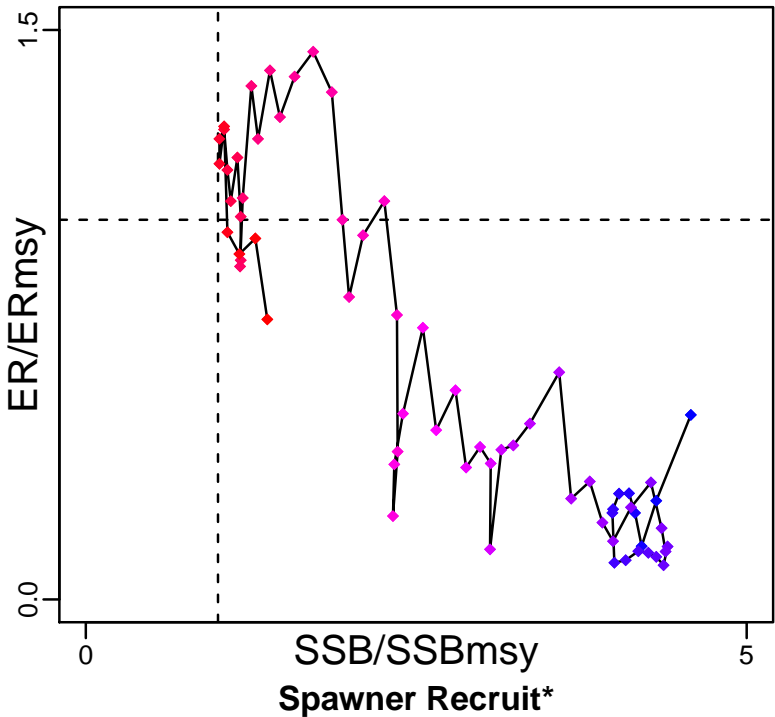
Metadata	
<b>Scientific Name</b>	Sebastes pinniger
<b>Current Assess ID</b>	DFO-CROCKWCVANISOGQCI-1945-2009-STANTON
<b>Area</b>	West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
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

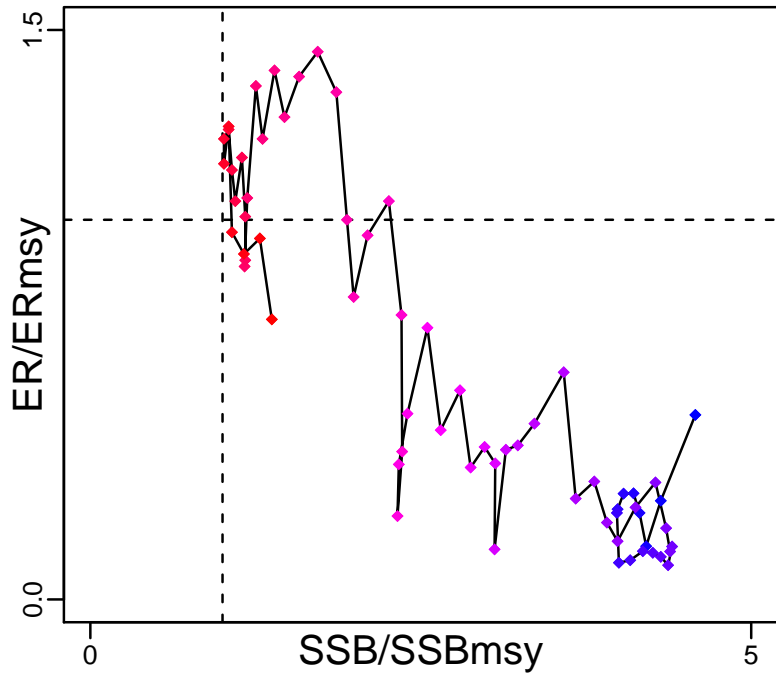
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2009	8890	-	14
<b>SSB</b>	SSB-MT	2009	2730	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2009	0.09	-	-
<b>TC</b>	TC-MT	2009	800		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2009	1.519		
<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 [CROCKWCVANISOGQCI]

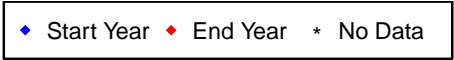
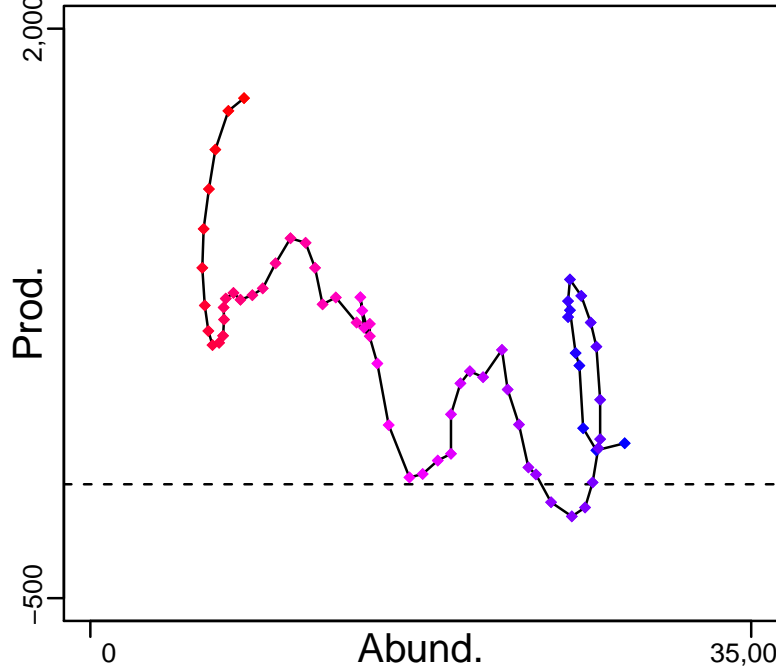
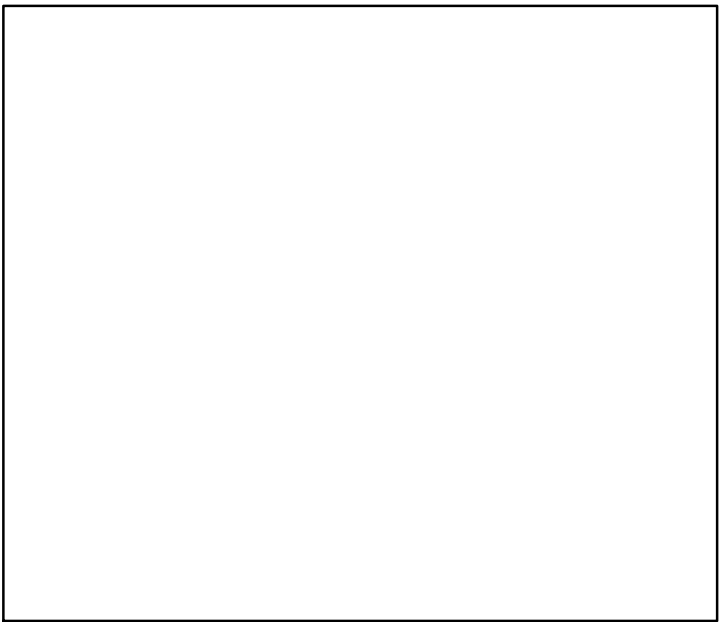
Kobe MSYpref (1945–2009–STANTON)



Kobe MGTpref (1945–2009–STANTON)



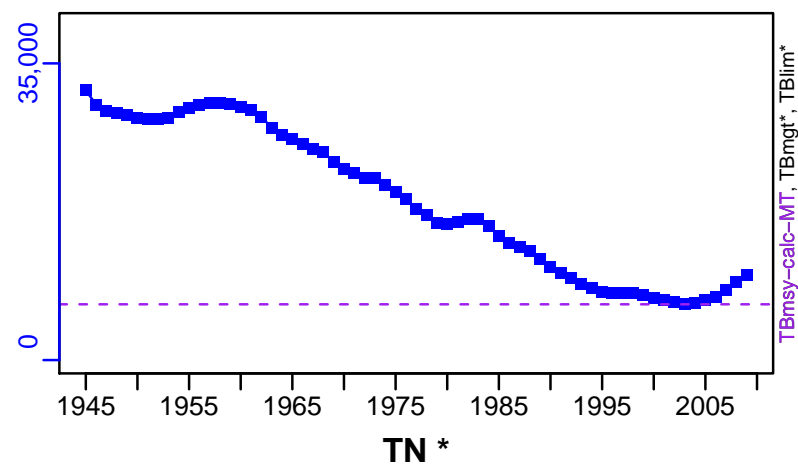
Production (1945–2009–STANTON)



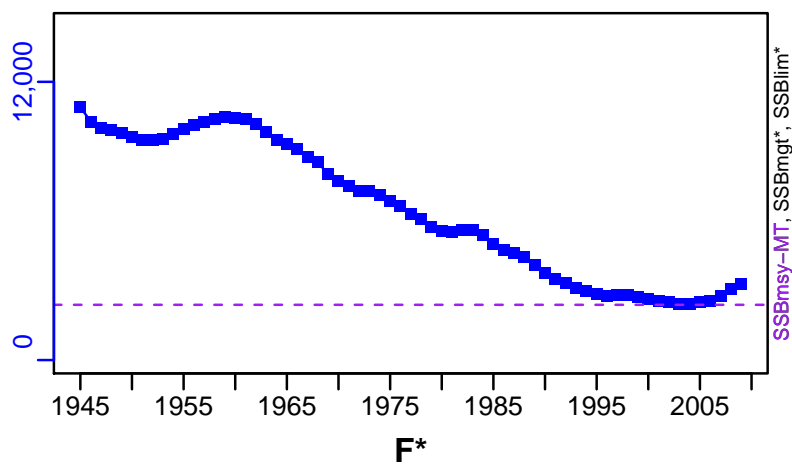


# Canary rockfish West Coast of Vancouver Island and Strait of Georgia and Queen Charlotte Islands [CROCKWCVANISOGQCI]

TB-MT (1945-2009-STANTON)



SSB-MT (1945-2009-STANTON)

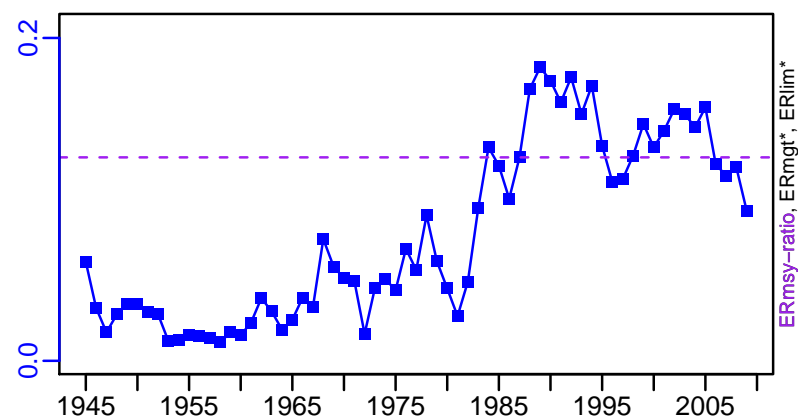


TN \*

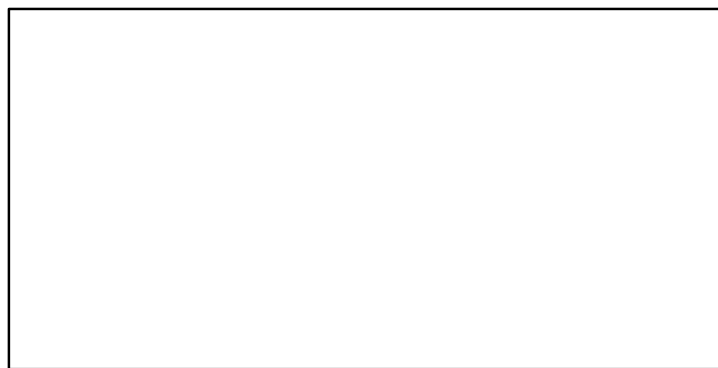
F\*



ER-ratio (1945-2009-STANTON)

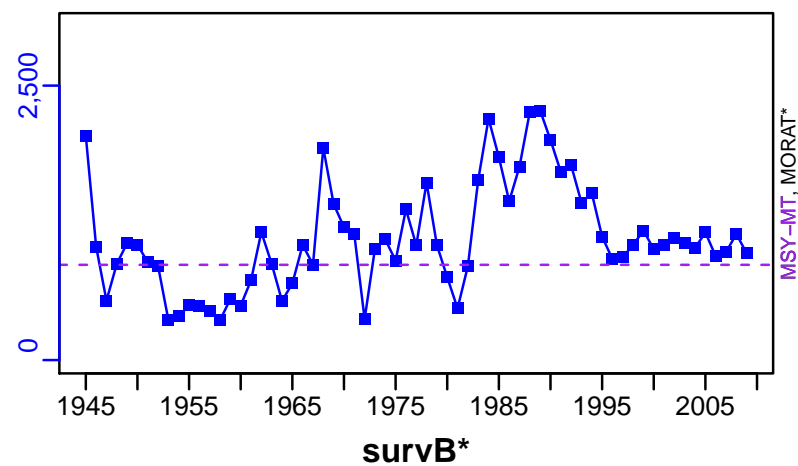


Recruits\*



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

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



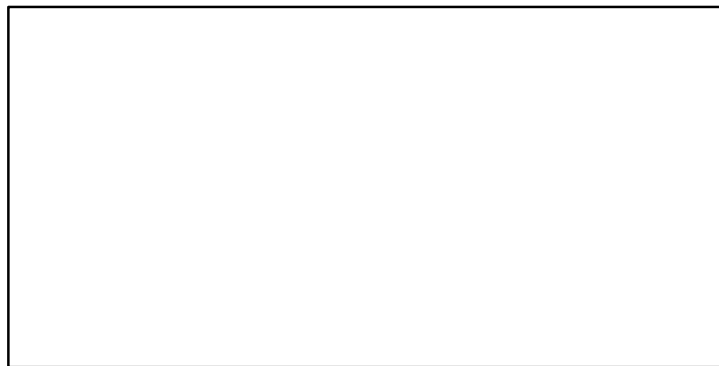
TAC\*, Cpair\*, Cadv\*



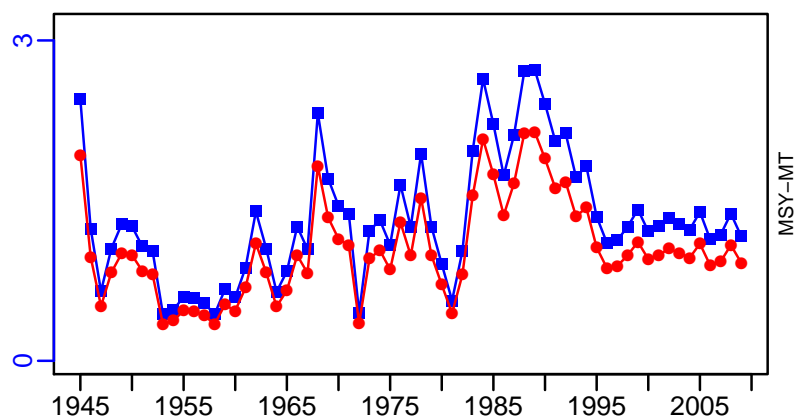
CPUE\*



EFFORT\*



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



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

## English sole Hecate Strait [ESOLEHS]

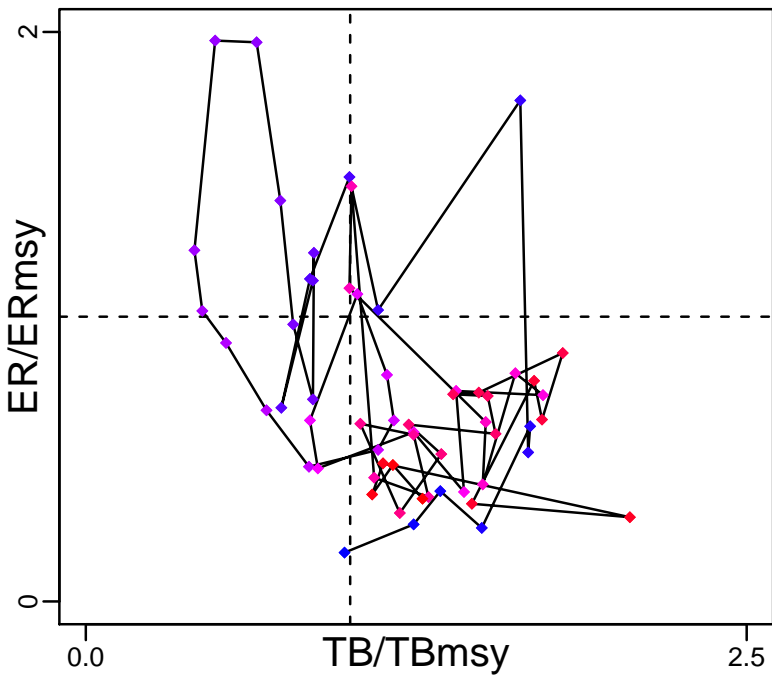
Metadata	
<b>Scientific Name</b>	Parophrys vetulus
<b>Current Assess ID</b>	DFO-PAC-ESOLEHS-1944-2001-COLLIE
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2001	2677
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2001	0.338
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2001	905
<b>M</b>	M-1/yr	2001	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

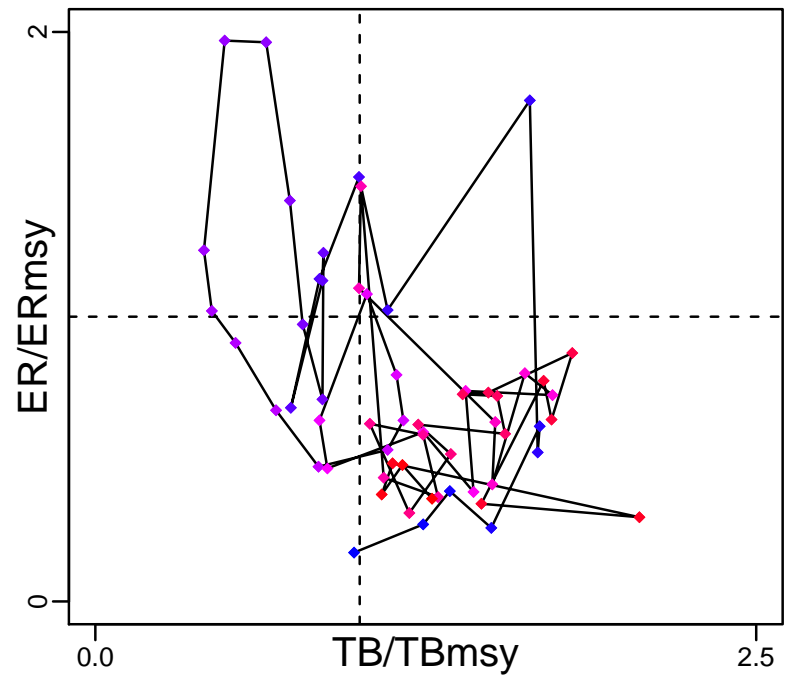
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2001	3410	-	4+
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2001	2,040,000	-	4
<b>F</b>	F-1/yr	2001	0.16	-	-
<b>ER</b>	ER-ratio	2001	0.122	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2001	414		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2001	1.274		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2001	0.361		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# English sole Hecate Strait [ESOLEHS]

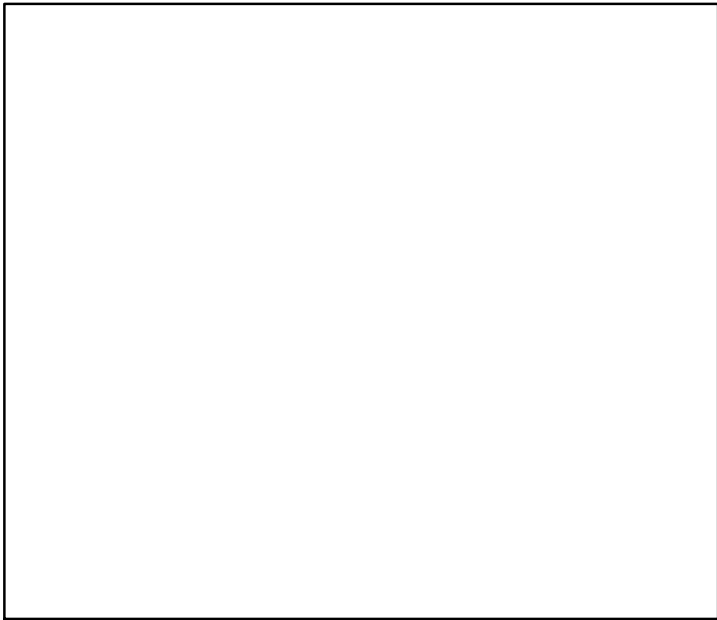
Kobe MSYpref (1944–2001–COLLIE)



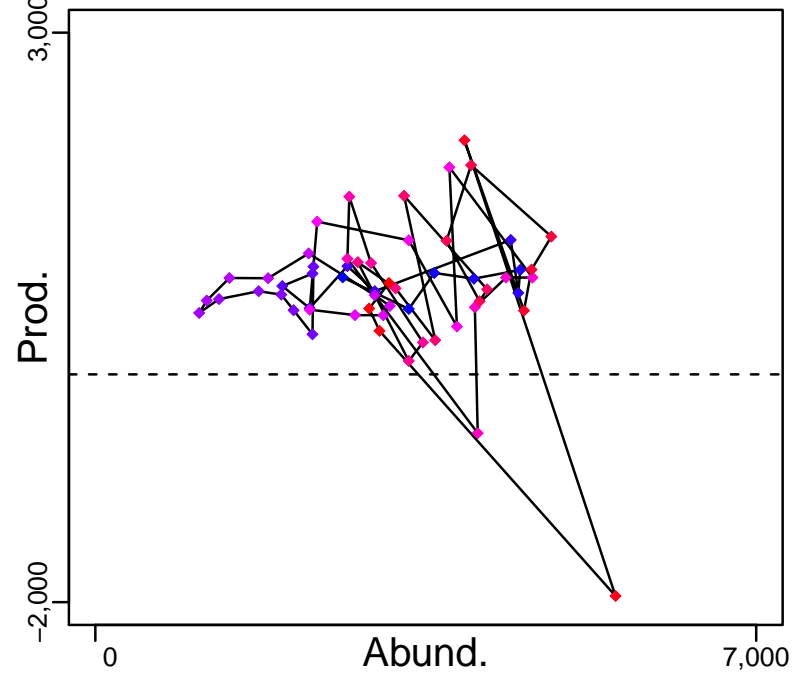
Kobe MGTpref (1944–2001–COLLIE)



Spawner Recruit\*



Production (1944–2001–COLLIE)

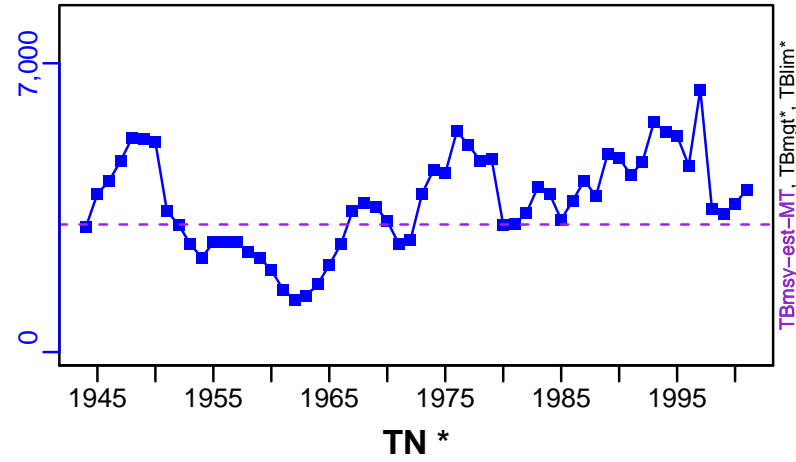


◆ Start Year ◆ End Year \* No Data

# English sole Hecate Strait [ESOLEHS]

TB-MT (1944-2001-COLLIE)

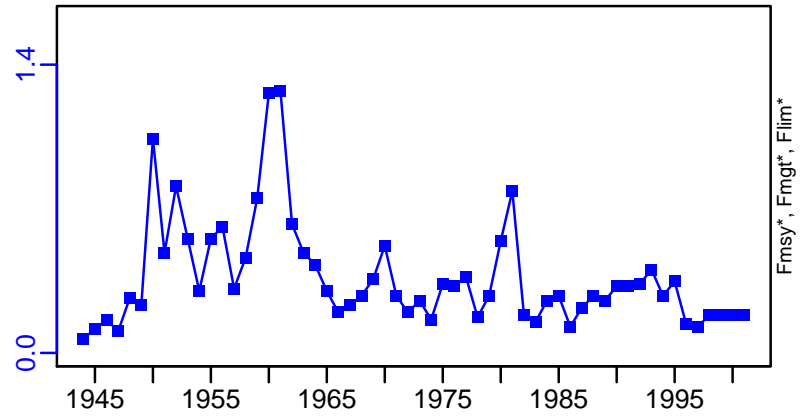
SSB\*



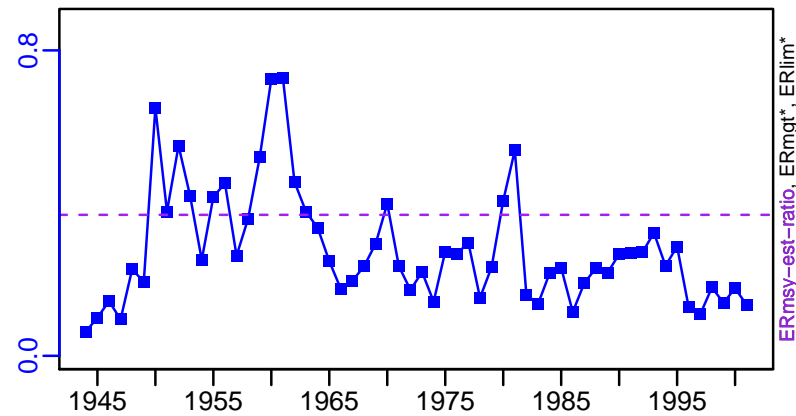
TN \*



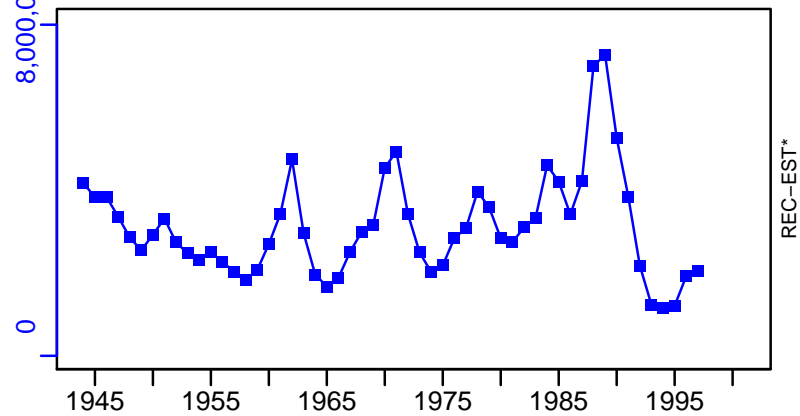
F-1/yr (1944-2001-COLLIE)



ER-ratio (1944-2001-COLLIE)

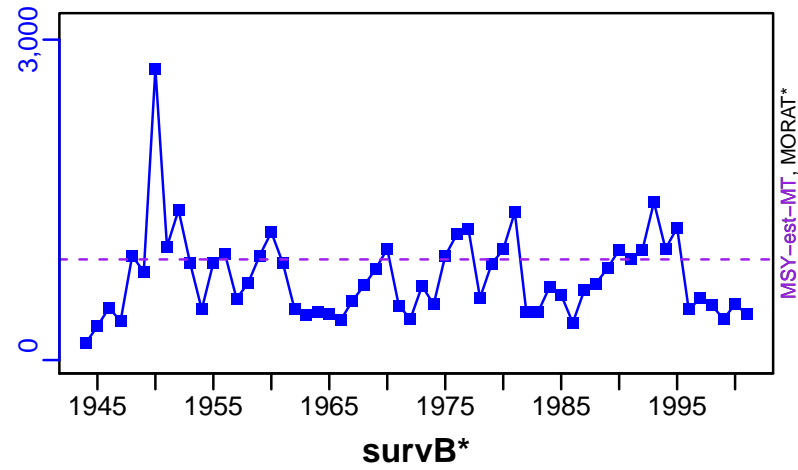


R-E00 (1944-2001-COLLIE)



# English sole Hecate Strait [ESOLEHS]

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



TAC\*, Cpair\*, Cadv\*



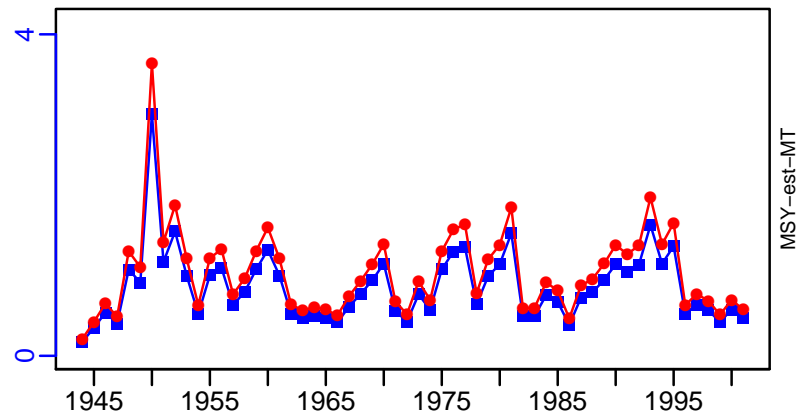
CPUE\*



EFFORT\*



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



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

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

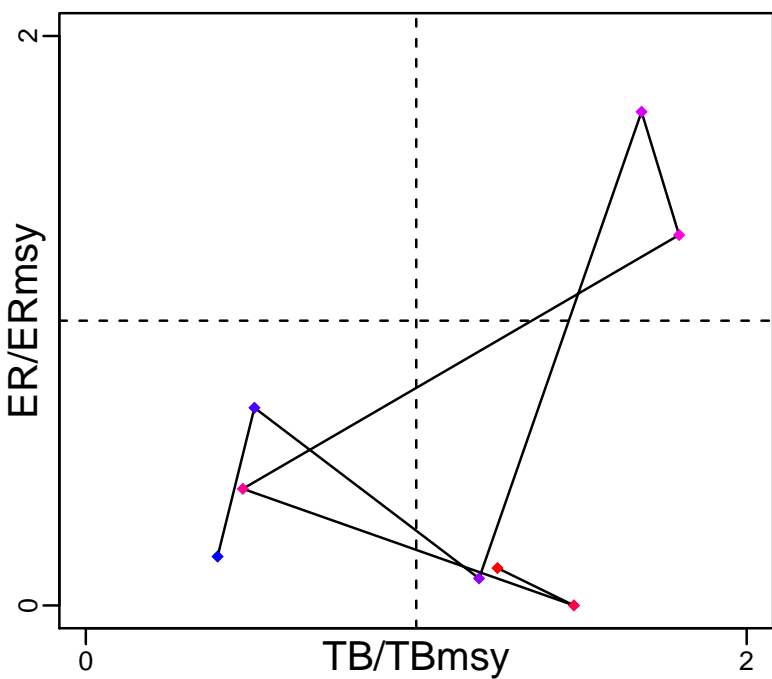
Metadata	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTCCDU-1951-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Central Coast Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	48
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.531
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	26
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

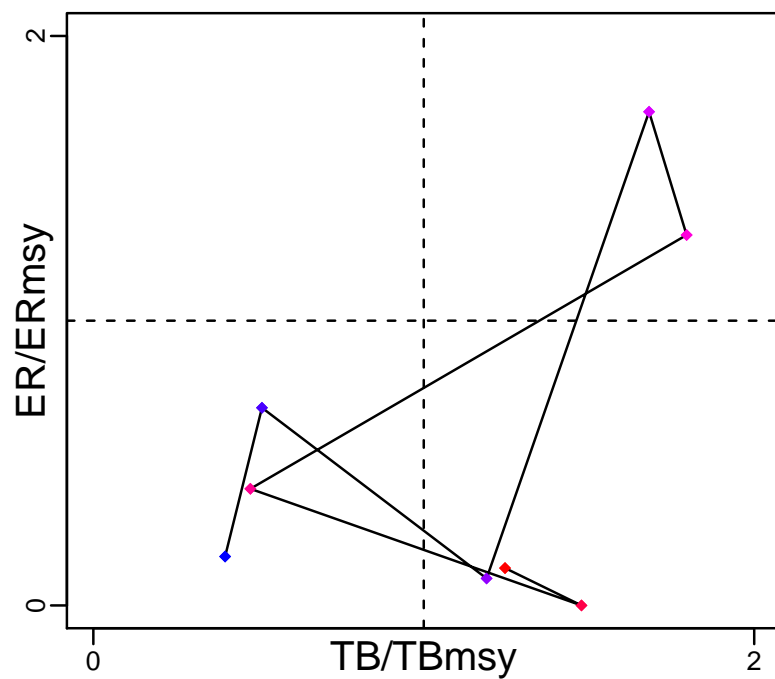
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	76	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-index	2012	14	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.07	-	-
<b>TC</b>	TC-MT	2012	4.2		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2012	1.562		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.131		
<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]

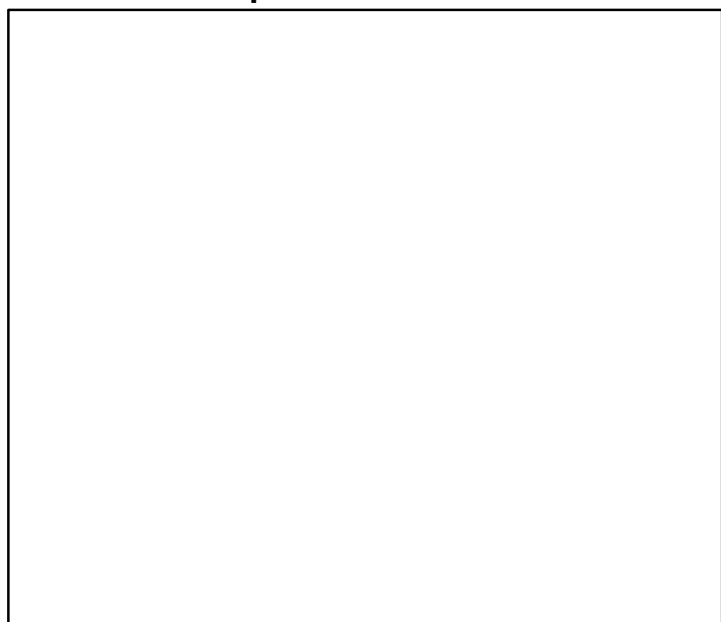
Kobe MSY<sub>pref</sub> (1951–2012–WATSON)



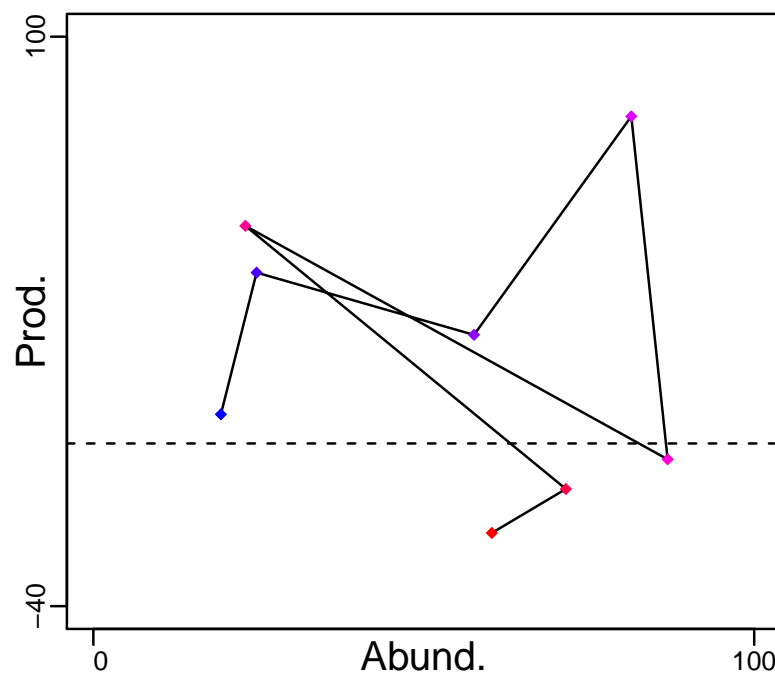
Kobe MGT<sub>pref</sub> (1951–2012–WATSON)



Spawner Recruit\*



Production (1951–2012–WATSON)

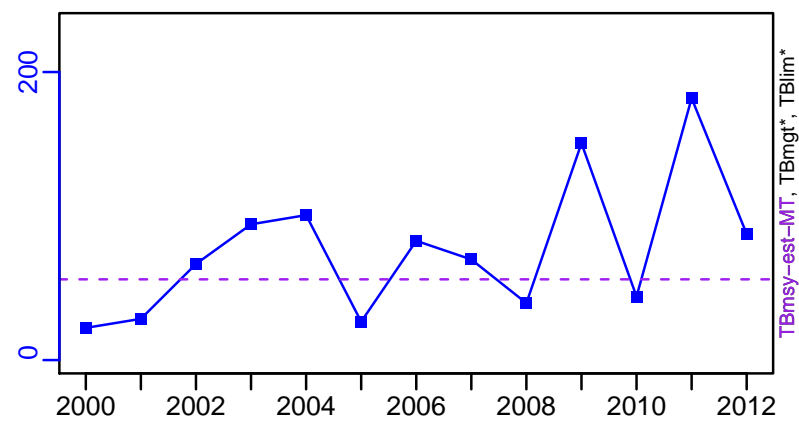


◆ Start Year ◆ End Year \* No Data



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

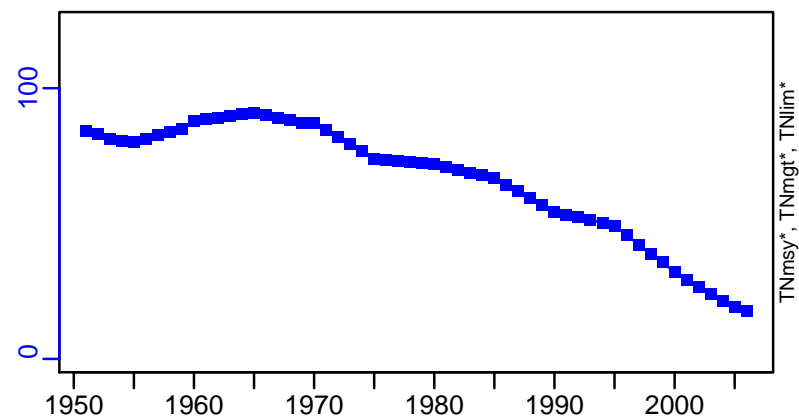
TB-MT (1951-2012-WATSON)



SSB\*



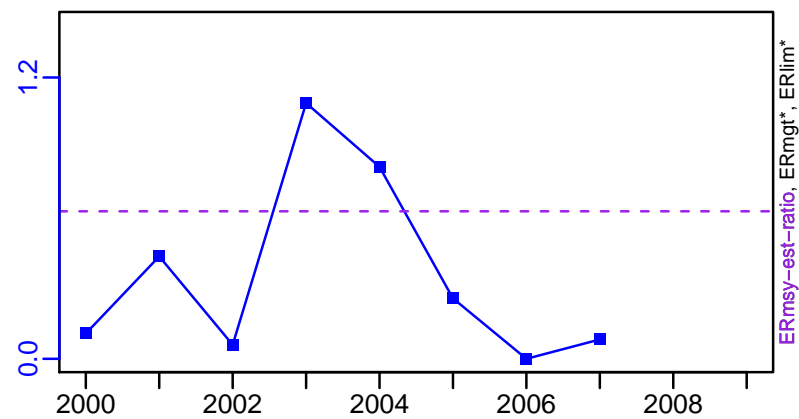
TN-index (1951-2012-WATSON)



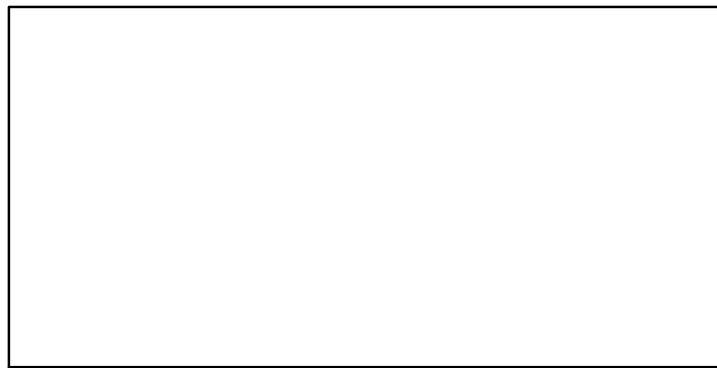
F\*



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



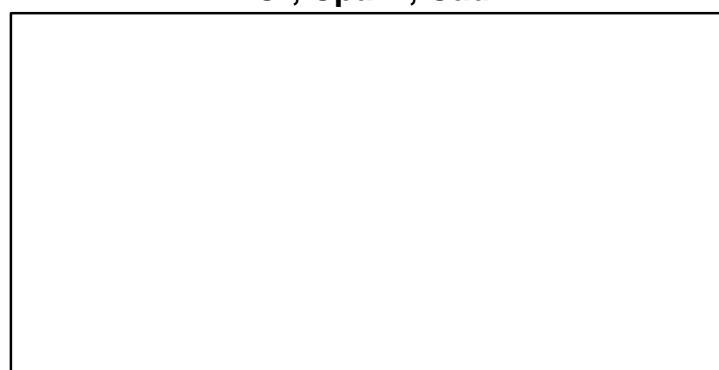
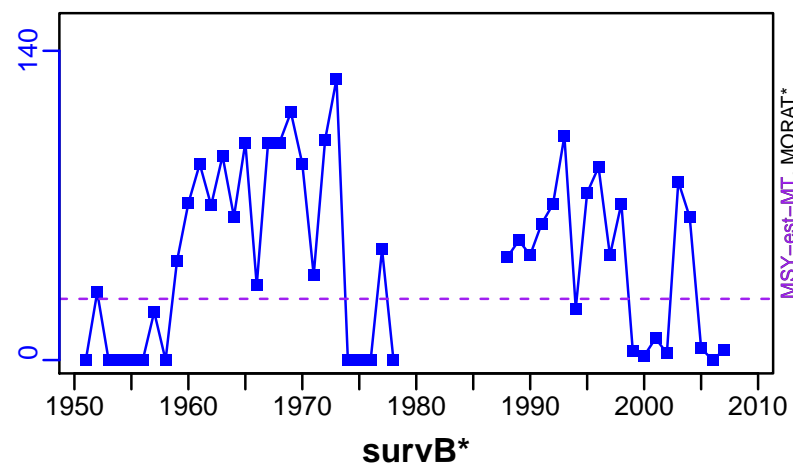
Recruits\*



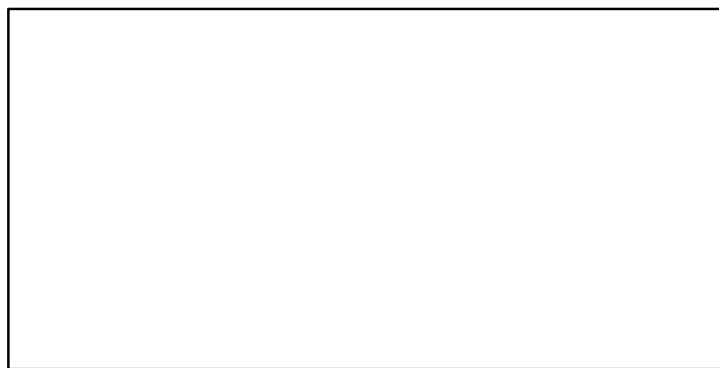
# Eulachon Pacific Coast of Canada Central Coast Designatable Unit [EULAPCOASTCCDU]

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

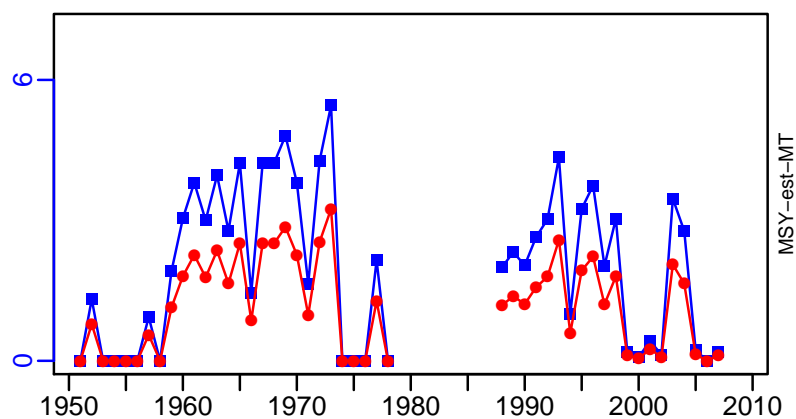
TAC\*, Cpair\*, Cadv\*



EFFORT\*



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



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

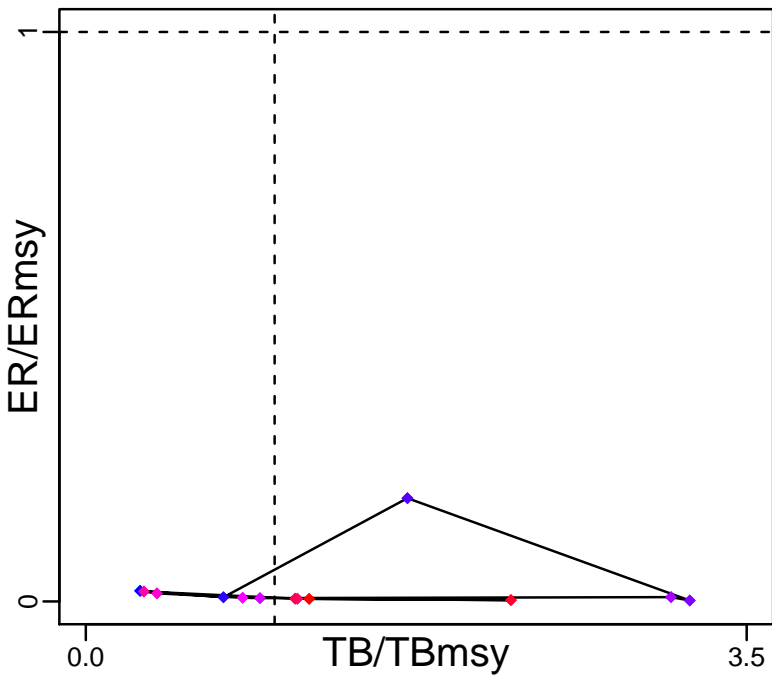
Metadata	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTFRDU-1900-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Fraser River Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	40
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.462
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	112
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

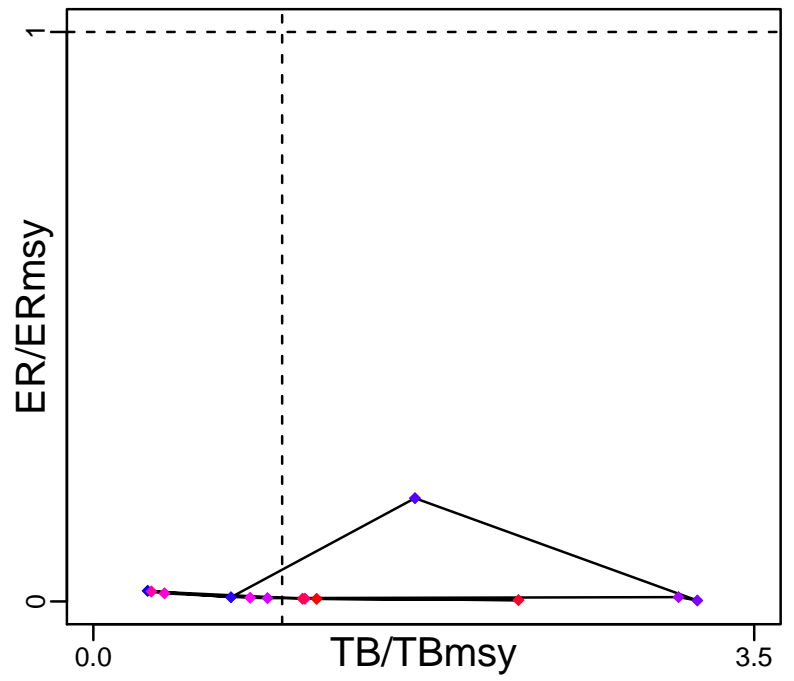
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	48	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-index	2012	6	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.002	-	-
<b>TC</b>	TC-MT	2012	0.1		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2012	1.183		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.005		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

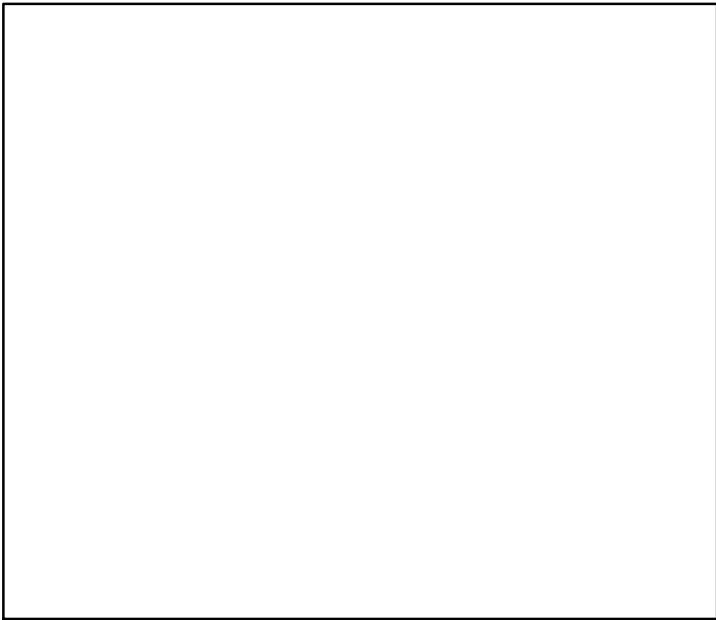
Kobe MSY<sub>pref</sub> (1900–2012–WATSON)



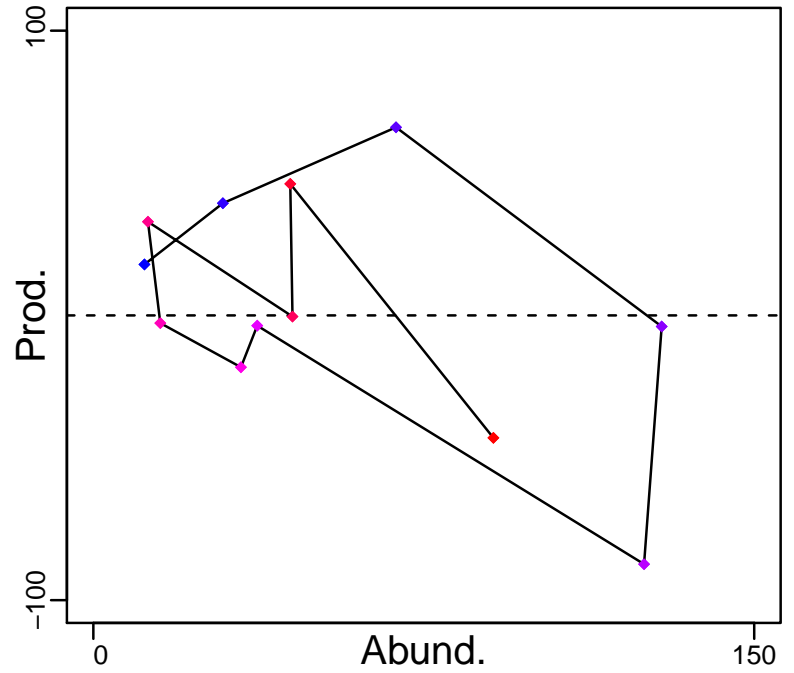
Kobe MGT<sub>pref</sub> (1900–2012–WATSON)



Spawner Recruit\*



Production (1900–2012–WATSON)

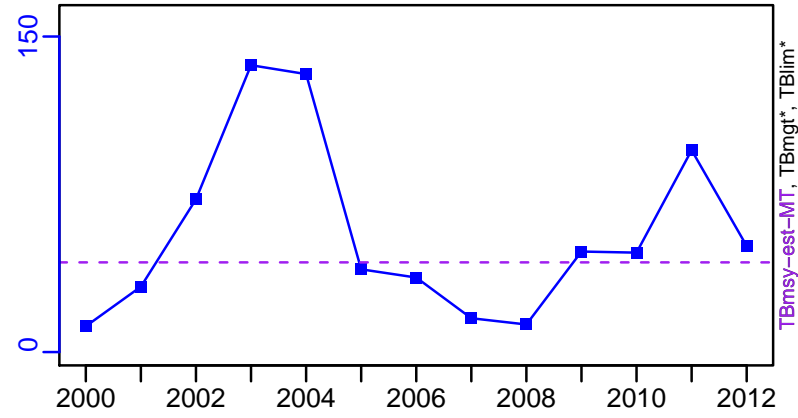


◆ Start Year ◆ End Year \* No Data

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

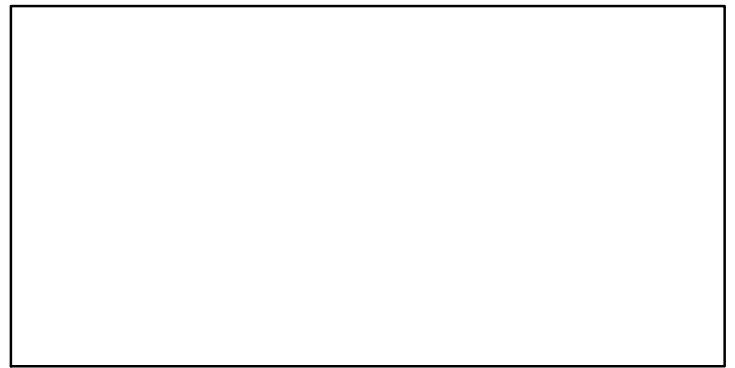
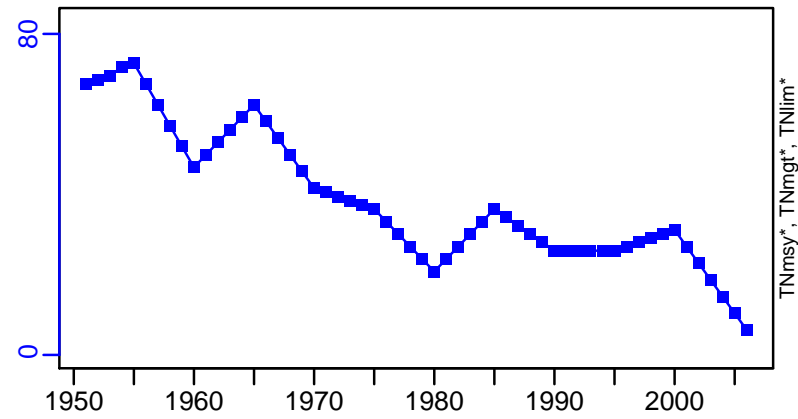
TB-MT (1900-2012-WATSON)

SSB\*



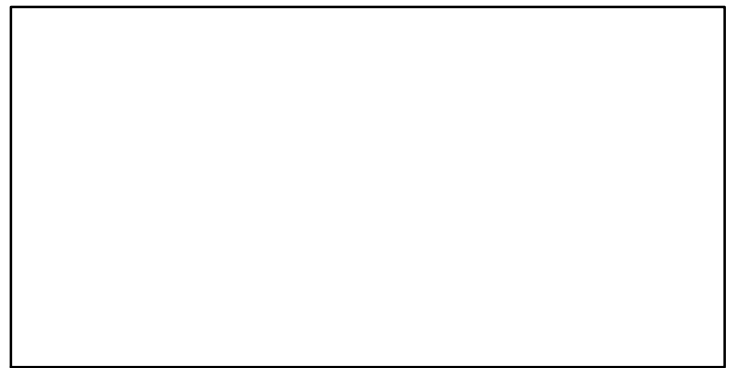
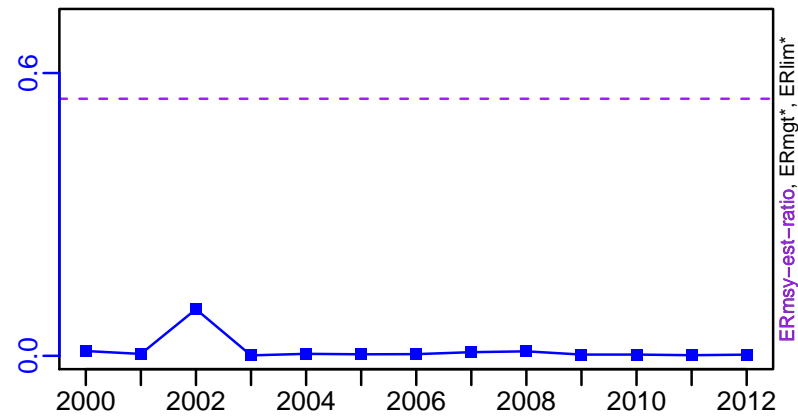
TN-index (1900-2012-WATSON)

F\*



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

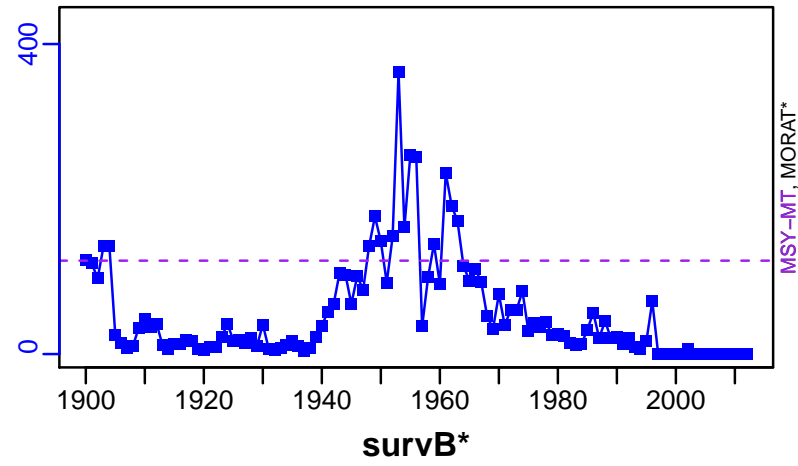
Recruits\*



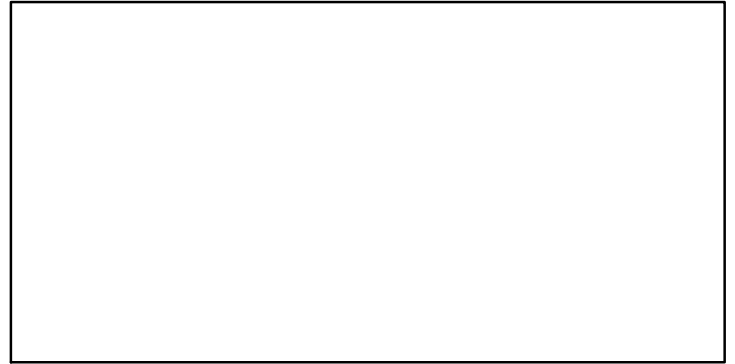
# Eulachon Pacific Coast of Canada Fraser River Designatable Unit [EULAPCOASTFRDU]

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

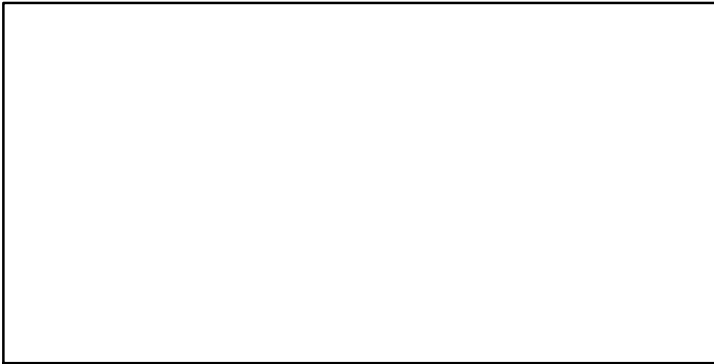
TAC\*, Cpair\*, Cadv\*



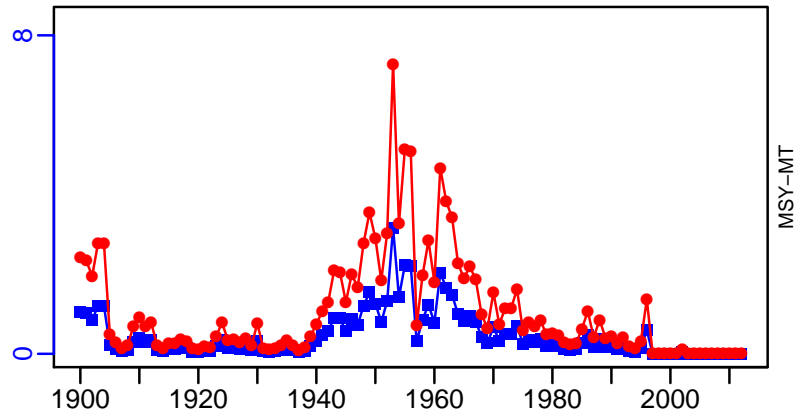
CPUE\*



EFFORT\*



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



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

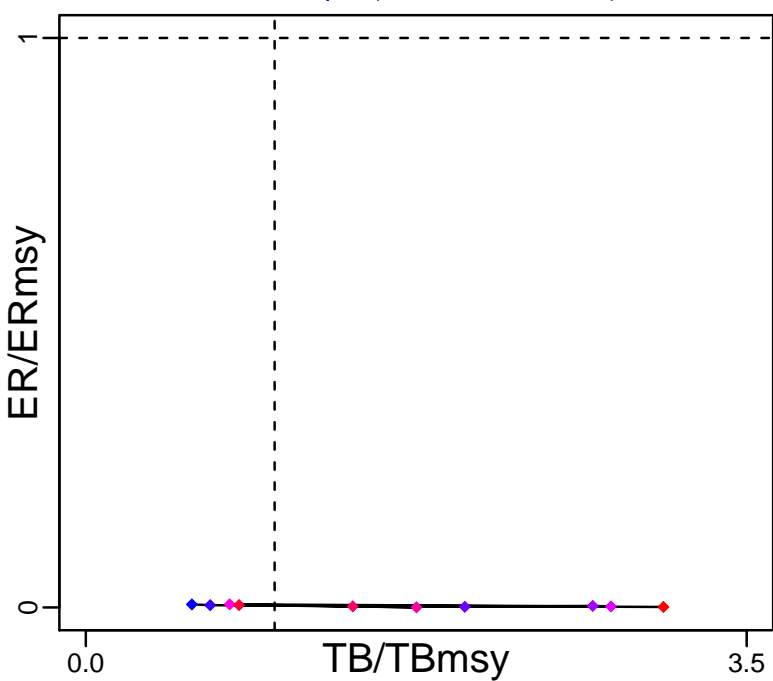
Metadata	
<b>Scientific Name</b>	Thaleichthys pacificus
<b>Current Assess ID</b>	DFO-EULAPCOASTNSDU-1951-2012-WATSON
<b>Area</b>	Pacific Coast of Canada Nass / Skeena Designatable Unit
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	32
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.835
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	27
<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	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>	TB-MT/TBmsy-est-MT	2012	2.204		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.001		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

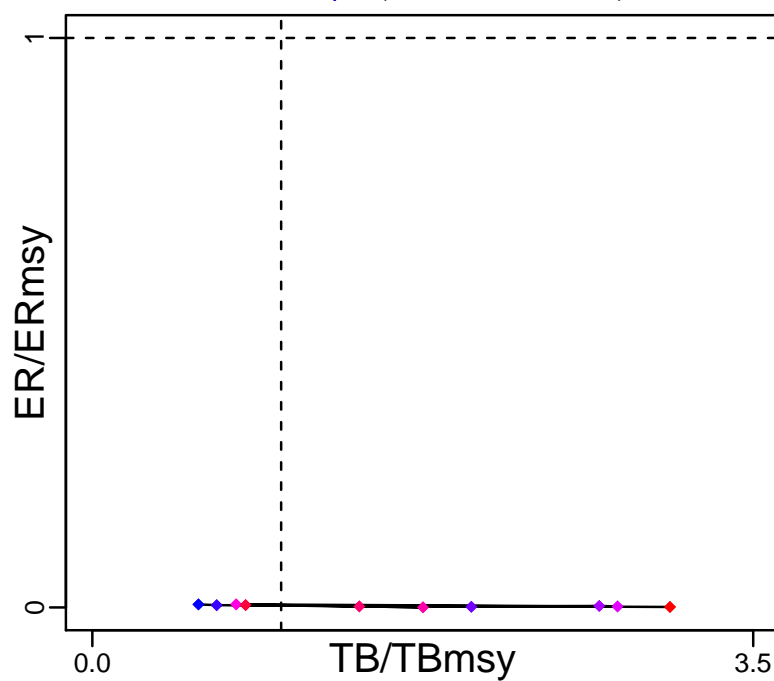
# Eulachon Pacific Coast of Canada Nass / Skeena Designatable Unit [EULAPCOASTNSDU]

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

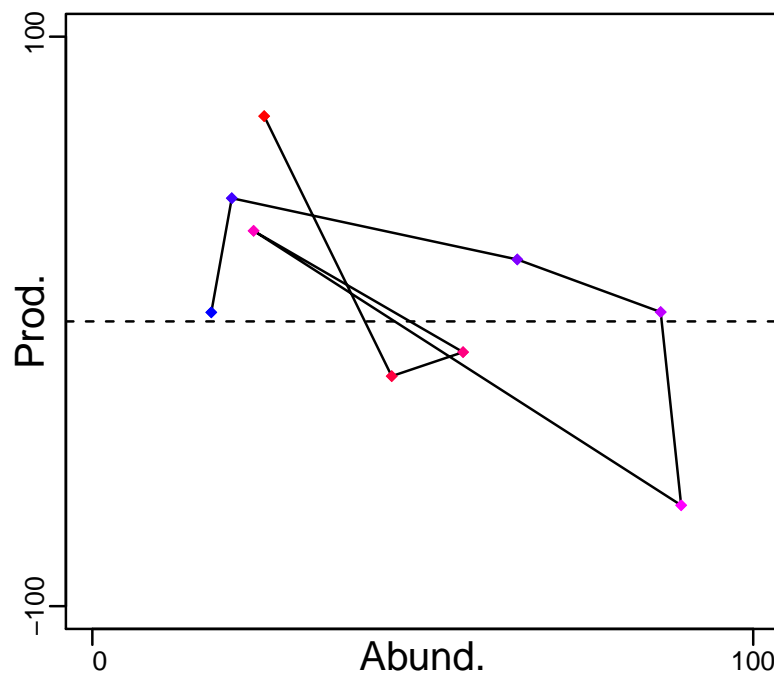


Spawner Recruit\*

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



Production (1951–2012–WATSON)

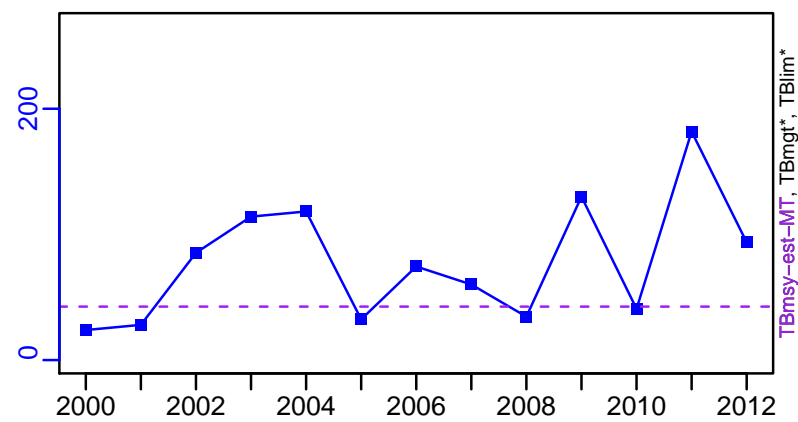


◆ Start Year ◆ End Year \* No Data



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

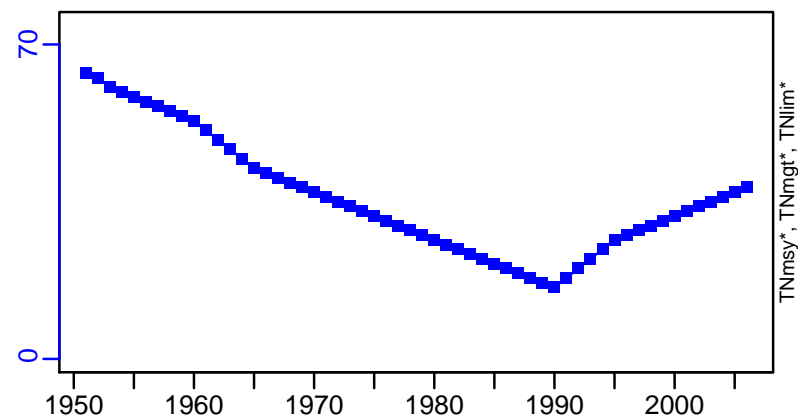
TB-MT (1951-2012-WATSON)



SSB\*



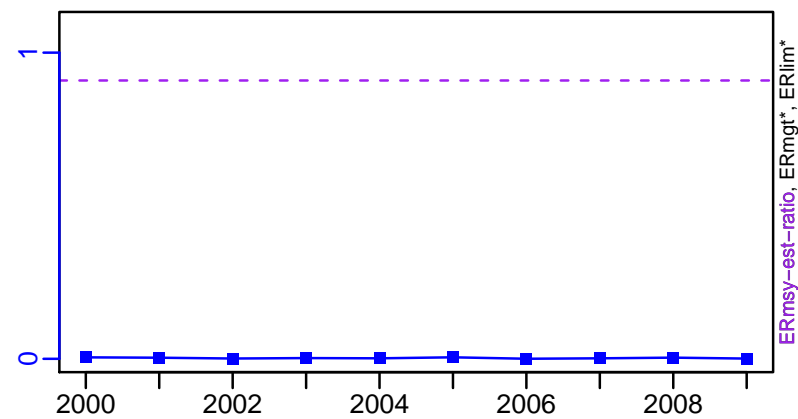
TN-index (1951-2012-WATSON)



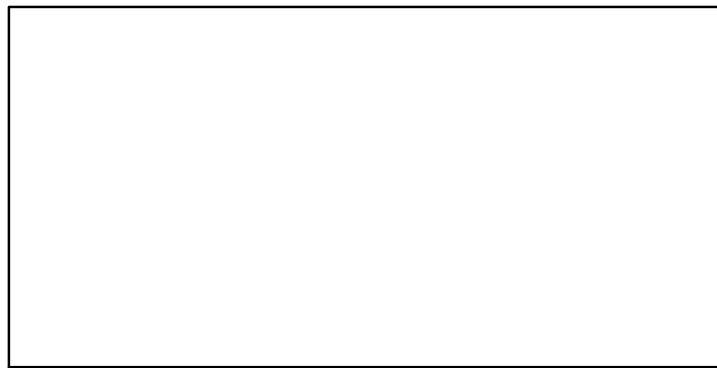
F\*



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



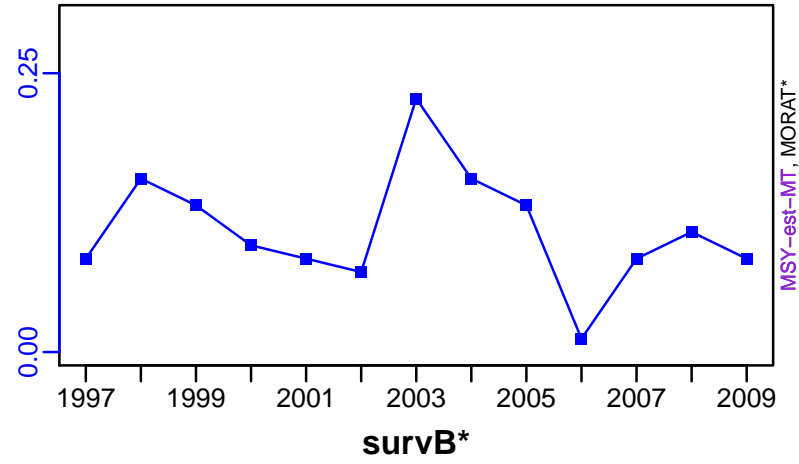
Recruits\*



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

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

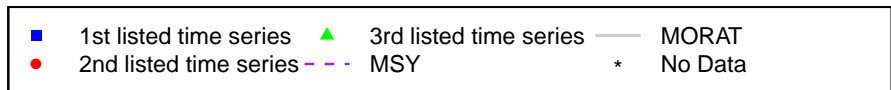
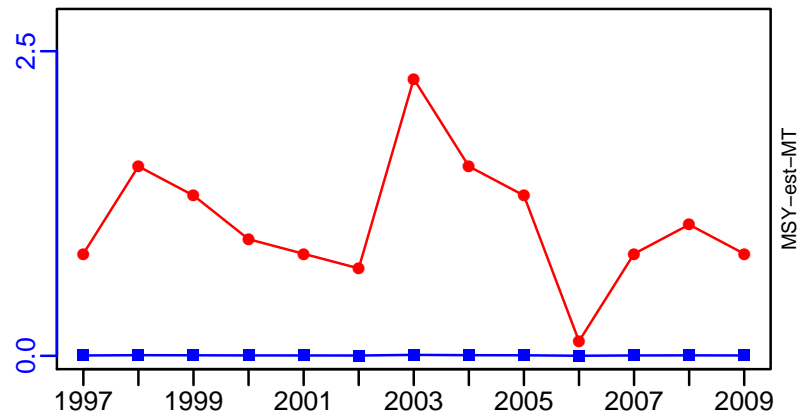
TAC\*, Cpair\*, Cadv\*



EFFORT\*



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



## Pacific herring Central Coast [HERRCC]

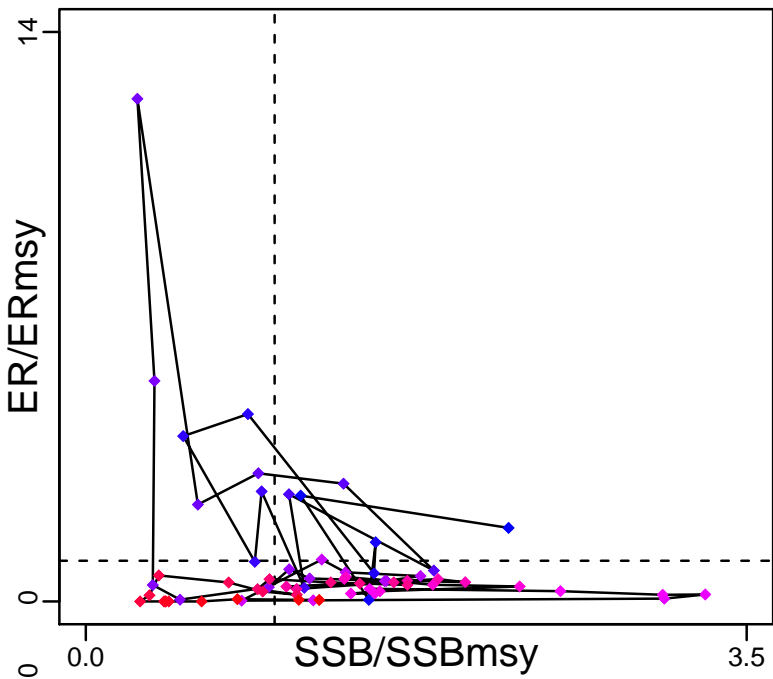
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRCC-1949-2018-ASHBROOK
<b>Area</b>	Central Coast
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	50,821
<b>SSBmsy</b>	SSBmsy-est-MT	2018	22,868
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2018	0.261
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	55,347
<b>MSY</b>	MSY-est-MT	2018	12,614
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

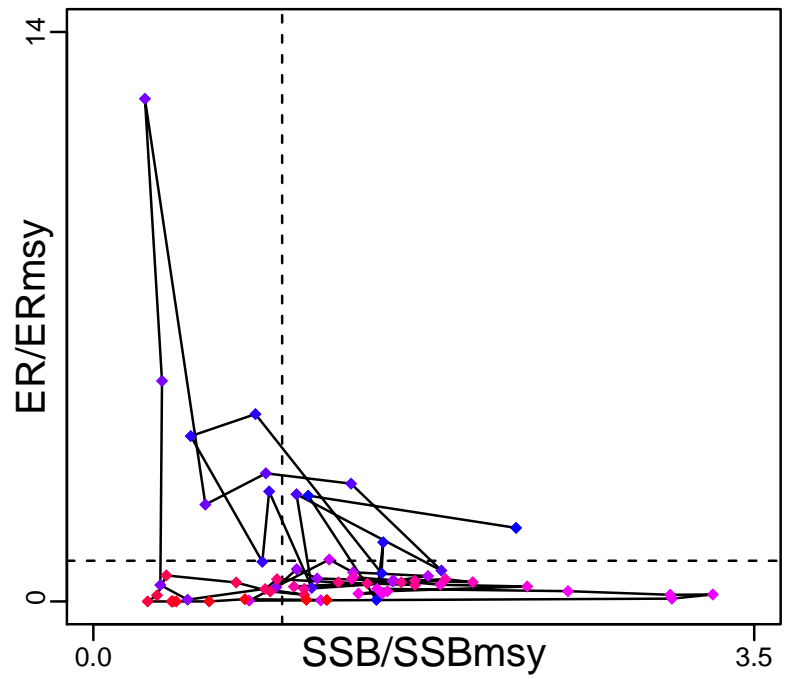
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	48,900	-	-
<b>SSB</b>	SSB-MT	2018	32,724	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	217,029,110	-	2
<b>F</b>	F-1/yr	2007	0.033	-	-
<b>ER</b>	ER-calc-ratio	2018	0.009	-	-
<b>TC</b>	TC-MT	2015	626		
<b>TL</b>	TL-MT	2018	500		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.962		
<b>SSB/SSBmsy</b>	SSB-MT/(SSB0-MT*0.368)	2018	1.607		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2018	0.036		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific herring Central Coast [HERRCC]

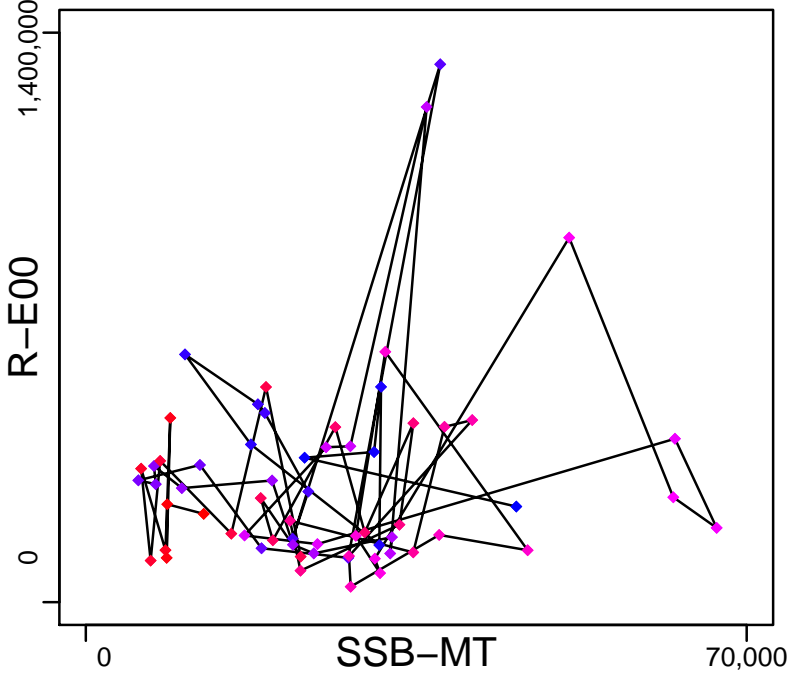
Kobe MSYpref (1949–2018–ASHBROOK)



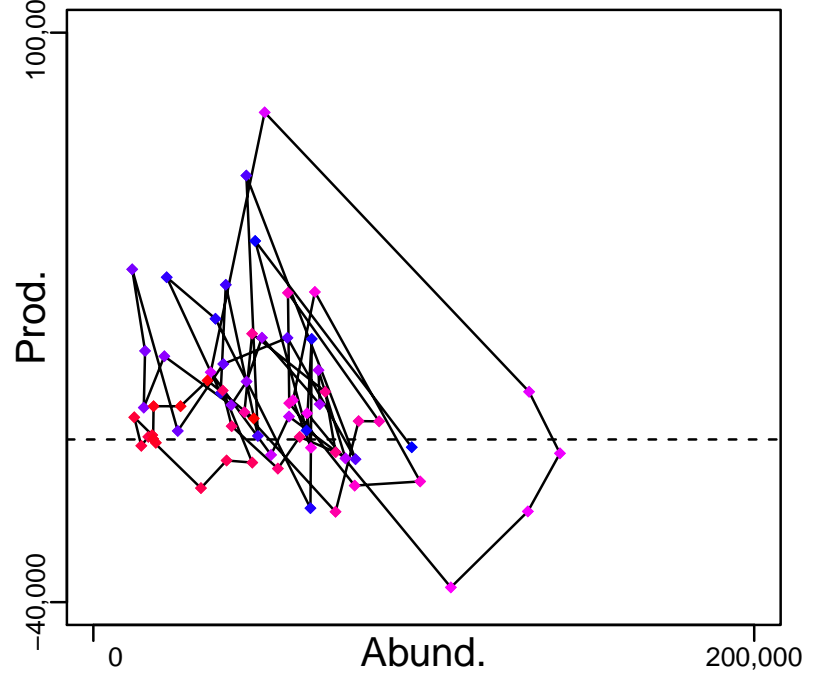
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



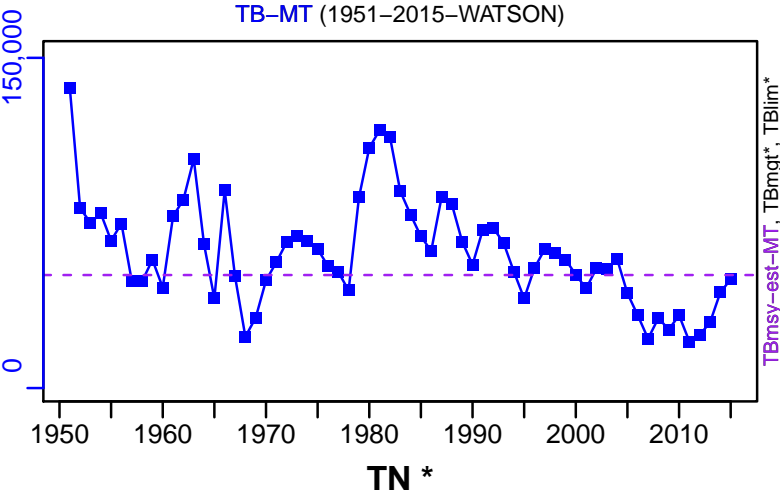
Production (1949–2018–ASHBROOK)



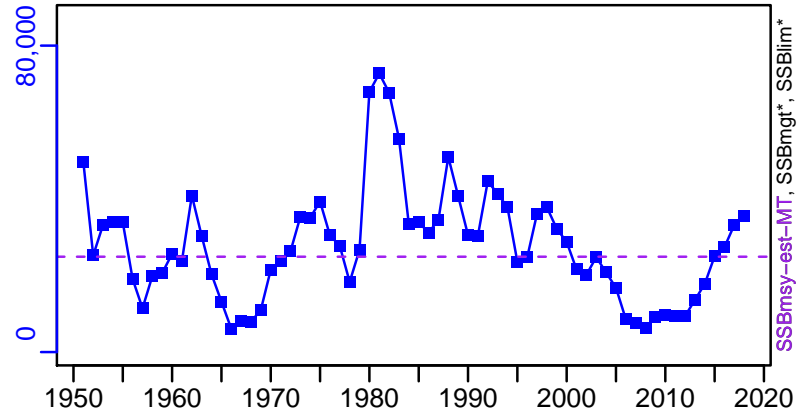
◆ Start Year ◆ End Year \* No Data

# Pacific herring Central Coast [HERRCC]

TB-MT (1951–2015–WATSON)



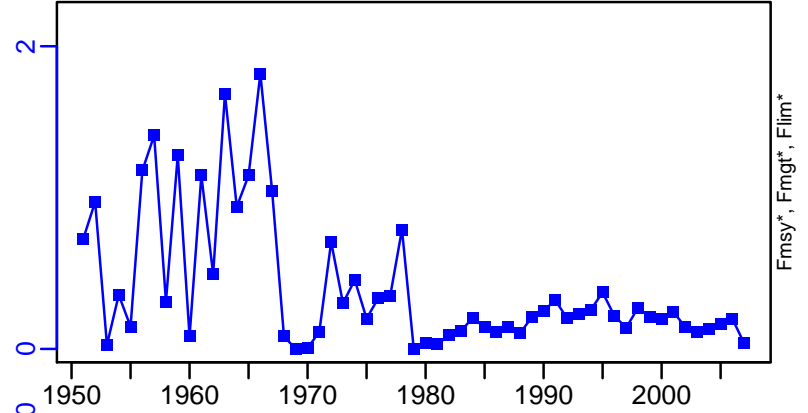
SSB-MT (1949–2018–ASHBROOK)



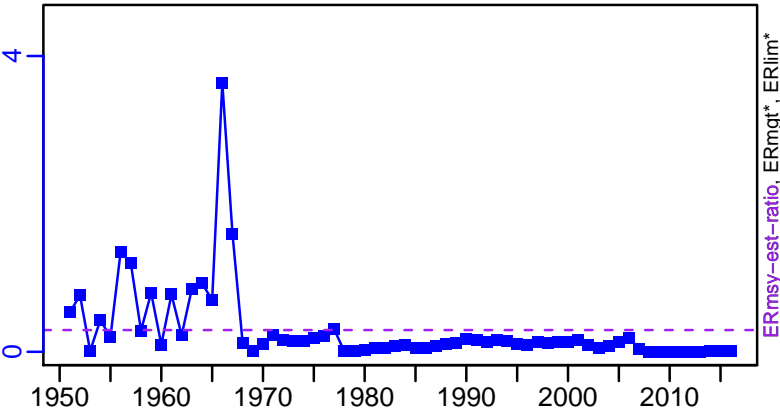
TN \*



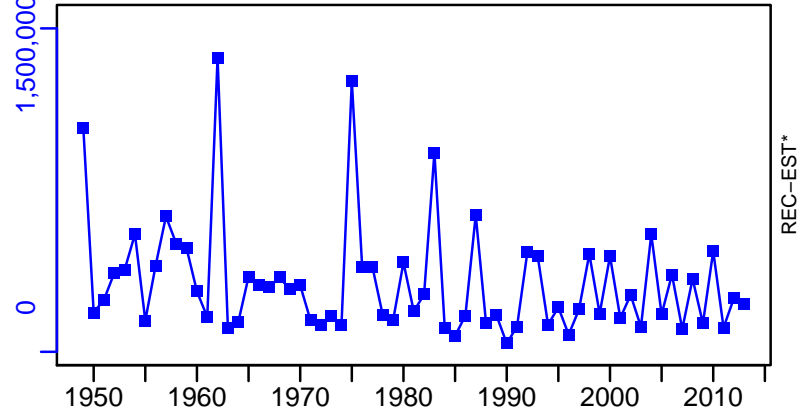
F-1/yr (1951–2007–COLLIE)



ER-calc-ratio (1949–2018–ASHBROOK)

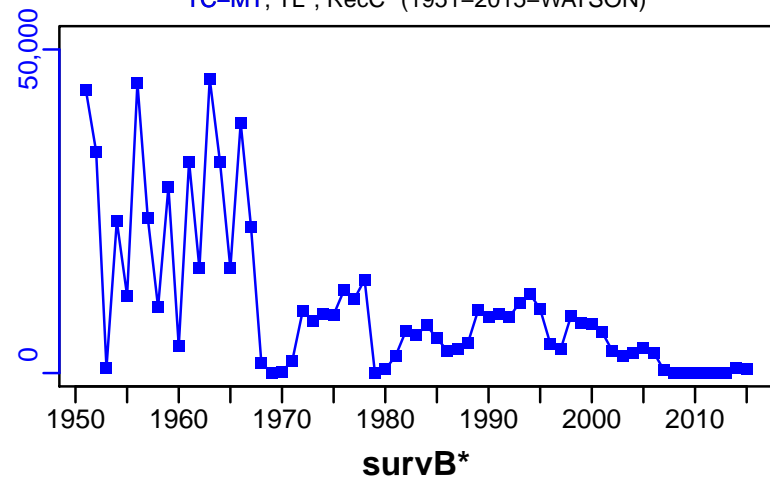


R-E00 (1949–2018–ASHBROOK)

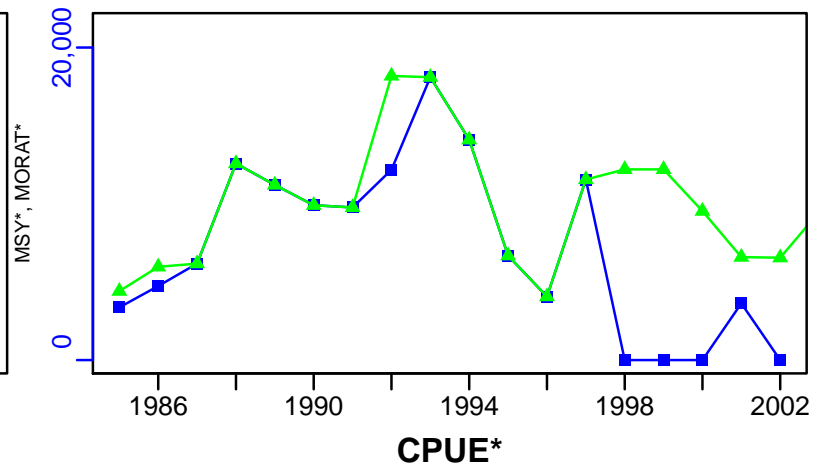


# Pacific herring Central Coast [HERRCC]

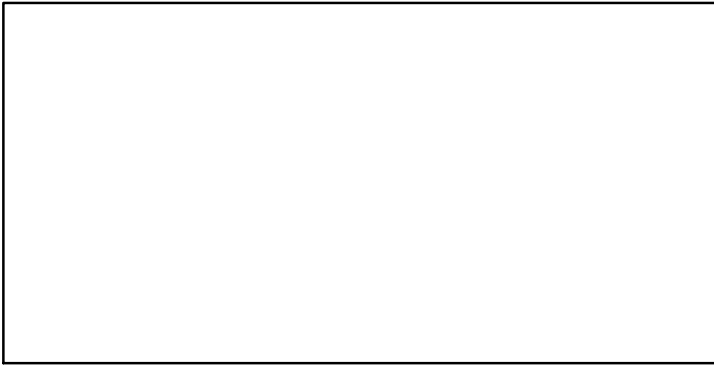
TC-MT, TL\*, RecC\* (1951-2015-WATSON)



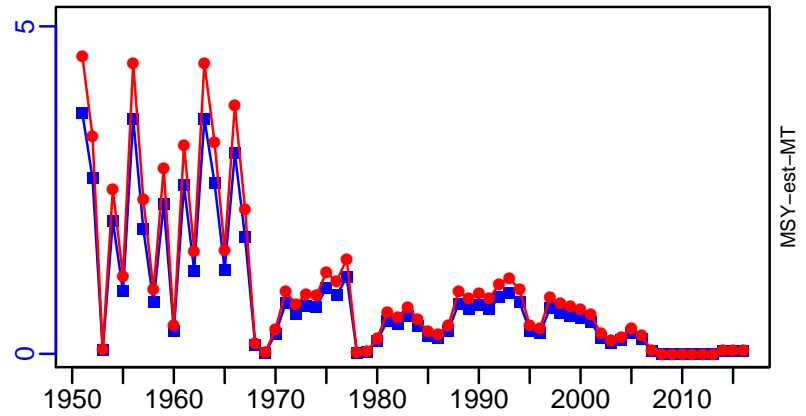
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



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



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

## Pacific herring Prince Rupert District [HERRPRD]

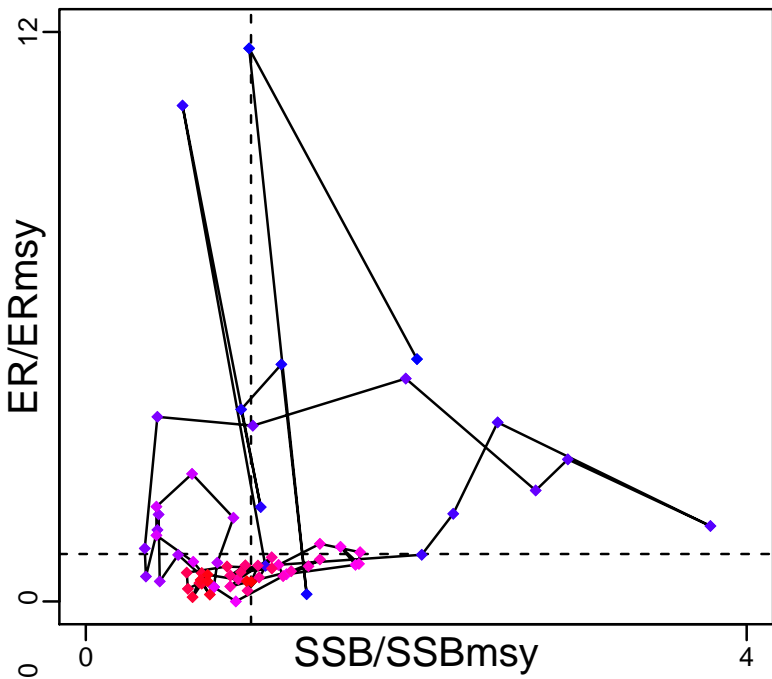
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRPRD-1949-2018-ASHBROOK
<b>Area</b>	Prince Rupert District
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2018	69,013
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2018	0.097
<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>	MSY-est-MT	2018	14,107
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

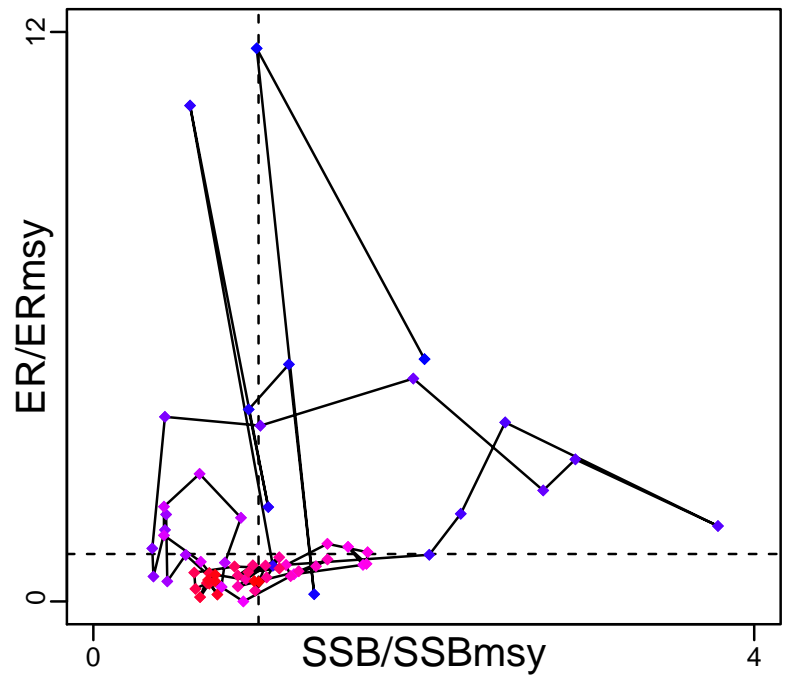
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	56,300	-	-
<b>SSB</b>	SSB-MT	2018	25,000	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	164,215,680	-	2
<b>F</b>	F-1/yr	2007	0.04	-	-
<b>ER</b>	ER-calc-ratio	2018	0.04	-	-
<b>TC</b>	TC-MT	2015	2160		
<b>TL</b>	TL-MT	2018	1910		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/(SSB0-MT*0.368)	2018	1.112		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2018	0.415		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific herring Prince Rupert District [HERRPRD]

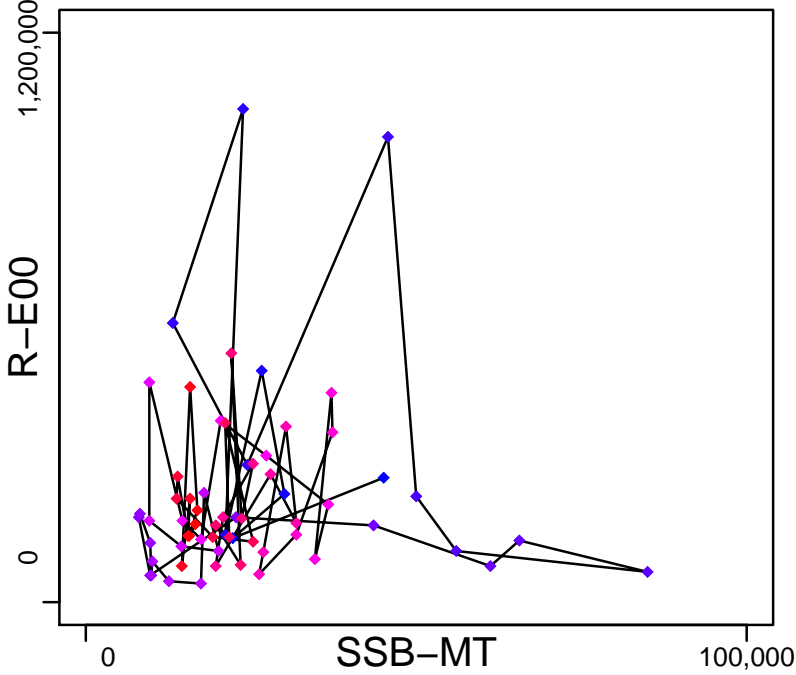
Kobe MSYpref (1949–2018–ASHBROOK)



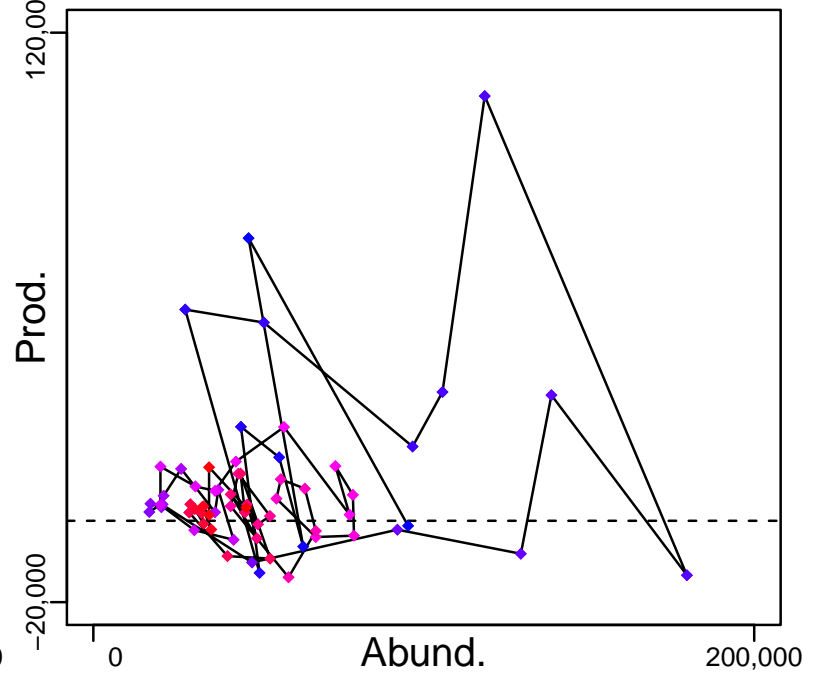
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)

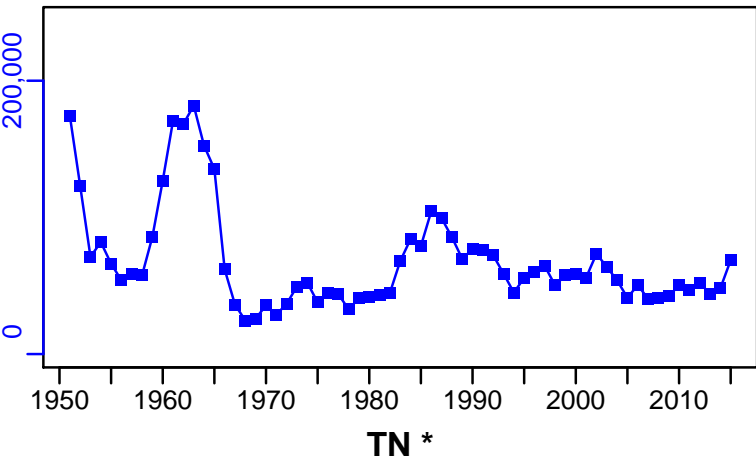


◆ Start Year ◆ End Year \* No Data

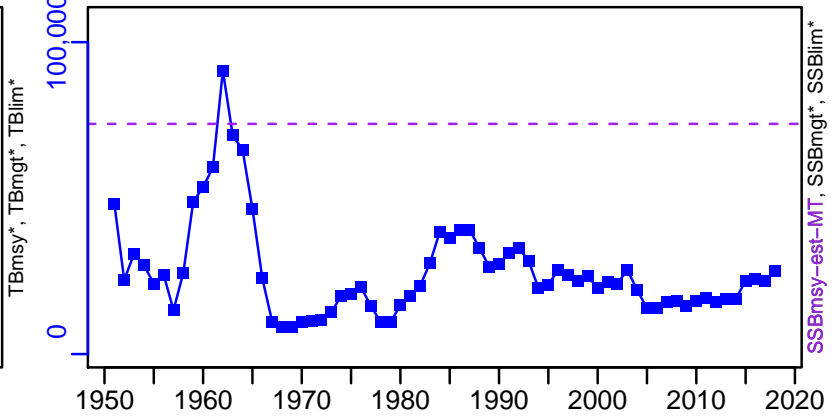


# Pacific herring Prince Rupert District [HERRPRD]

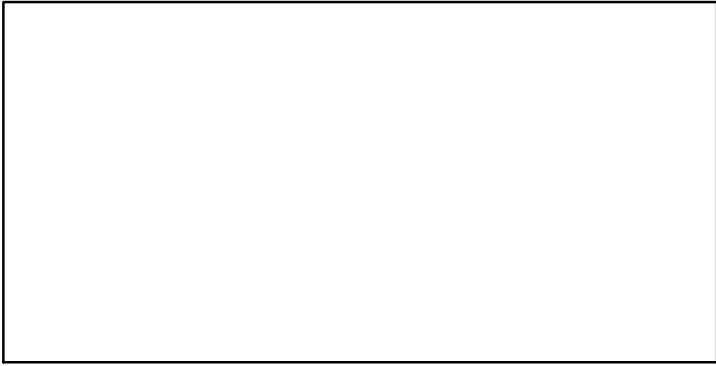
TB-MT (1951-2015-WATSON)



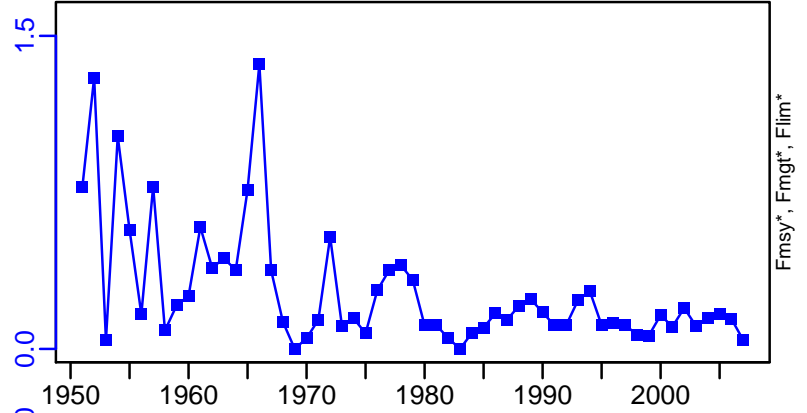
SSB-MT (1949-2018-ASHBROOK)



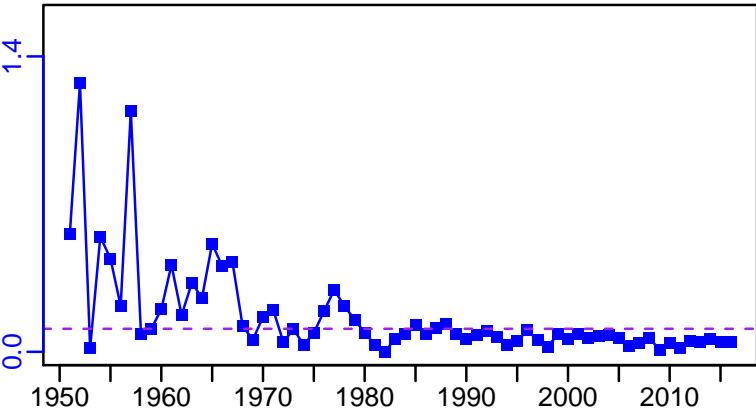
TN \*



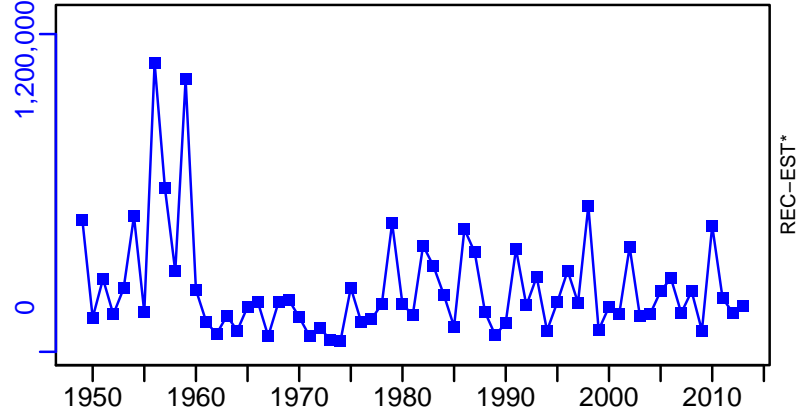
F-1/yr (1951-2007-COLLIE)



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

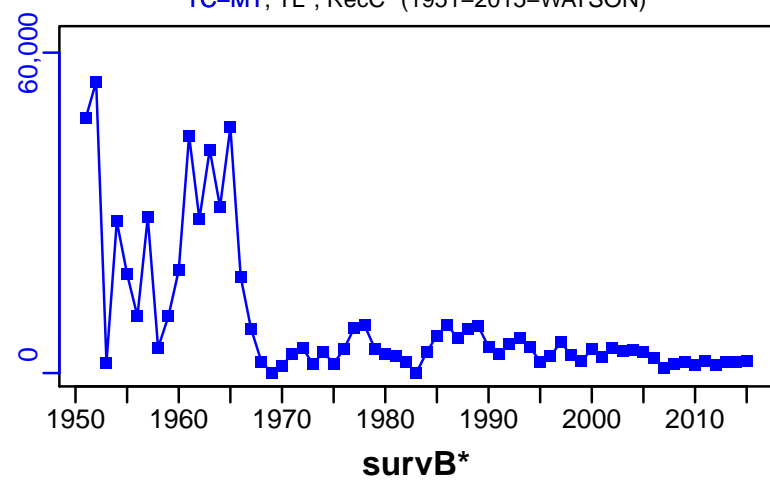


R-E00 (1949-2018-ASHBROOK)

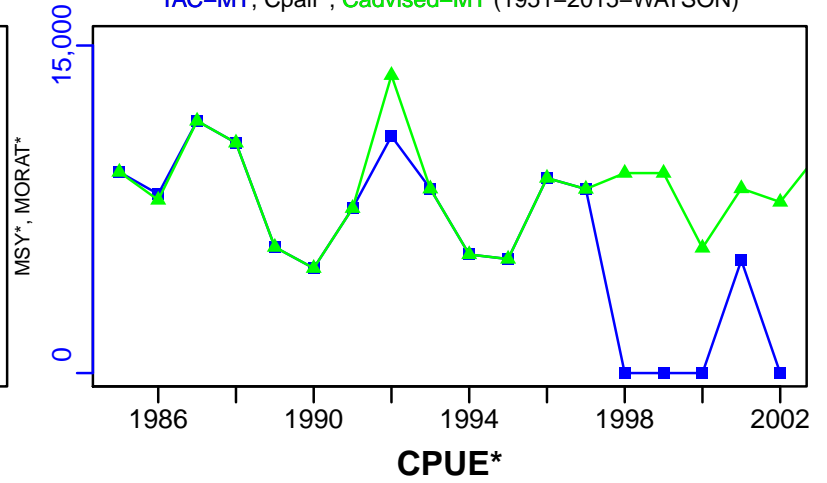


# Pacific herring Prince Rupert District [HERRPRD]

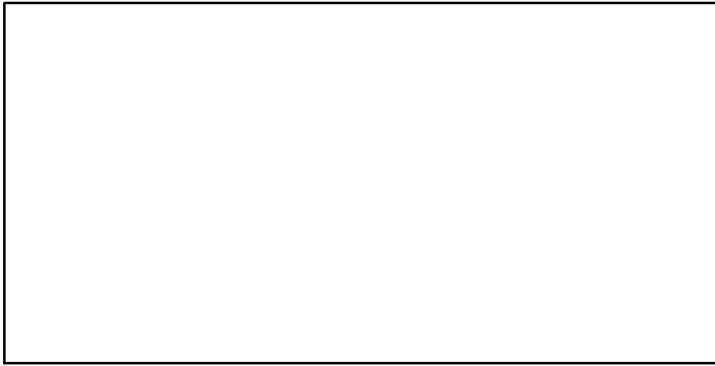
TC-MT, TL\*, RecC\* (1951-2015-WATSON)



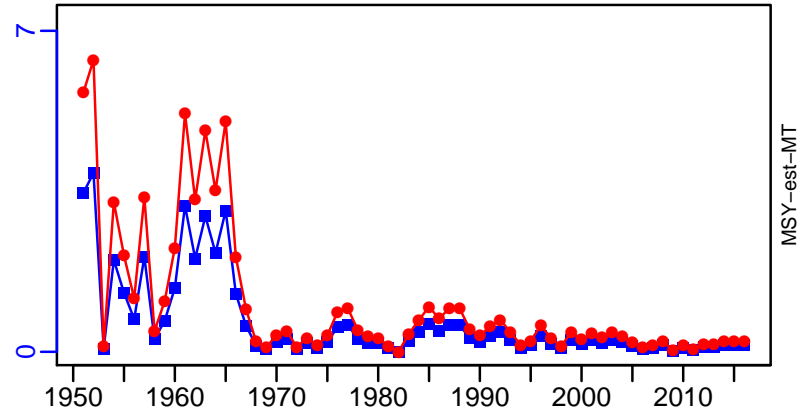
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



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



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

## Pacific herring Queen Charlotte Islands [HERRQCI]

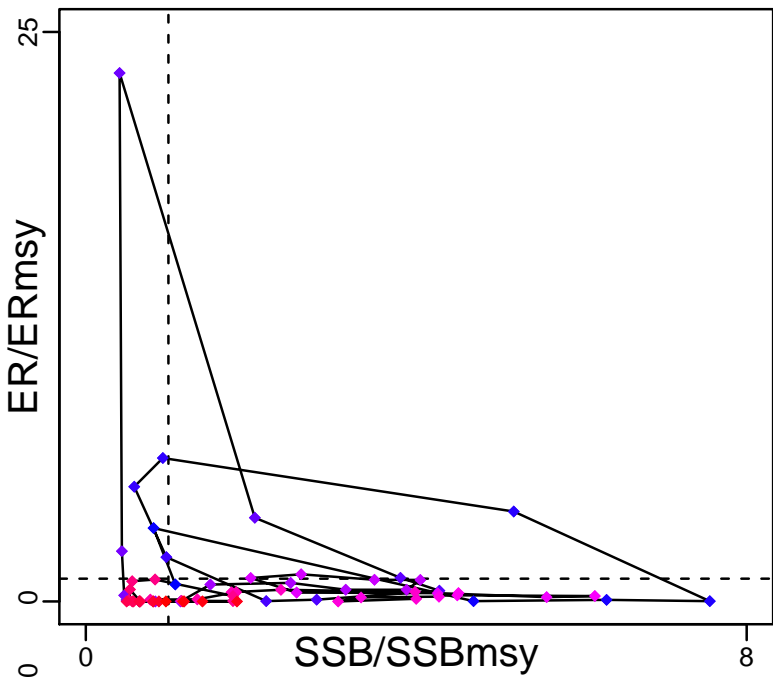
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRQCI-1949-2018-ASHBROOK
<b>Area</b>	Queen Charlotte Islands
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	43,856
<b>SSBmsy</b>	SSBmsy-est-MT	2018	20,461
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2018	0.211
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	23,098
<b>MSY</b>	MSY-est-MT	2018	9126
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

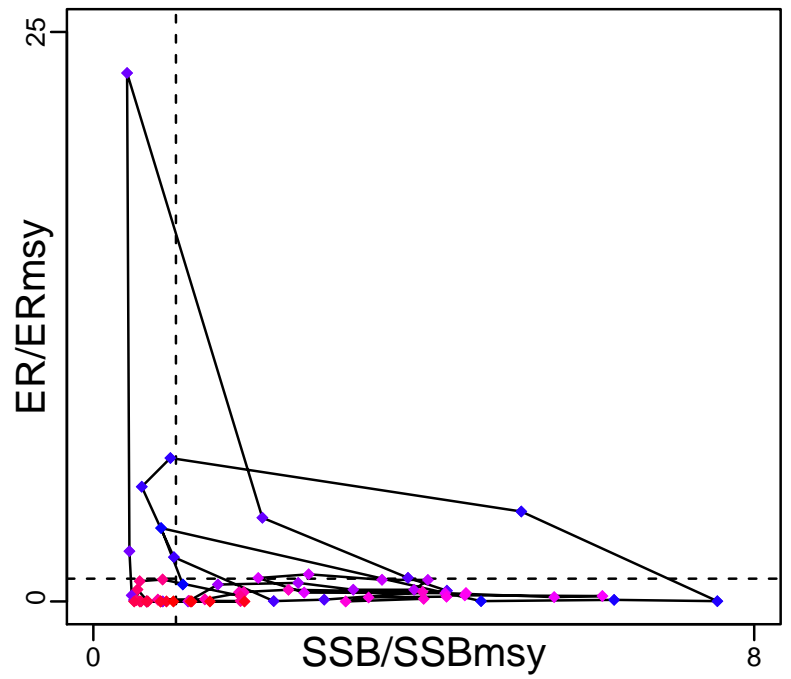
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	27,200	-	-
<b>SSB</b>	SSB-MT	2018	4477	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	147,346,390	-	2
<b>F</b>	F-1/yr	2007	0	-	-
<b>ER</b>	ER-calc-ratio	2018	0	-	-
<b>TC</b>	TC-MT	2015	0		
<b>TL</b>	TL-MT	2018	0		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.62		
<b>SSB/SSBmsy</b>	SSB-MT/(SSB0-MT*0.368)	2018	0.527		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2018	0		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pacific herring Queen Charlotte Islands [HERRQCI]

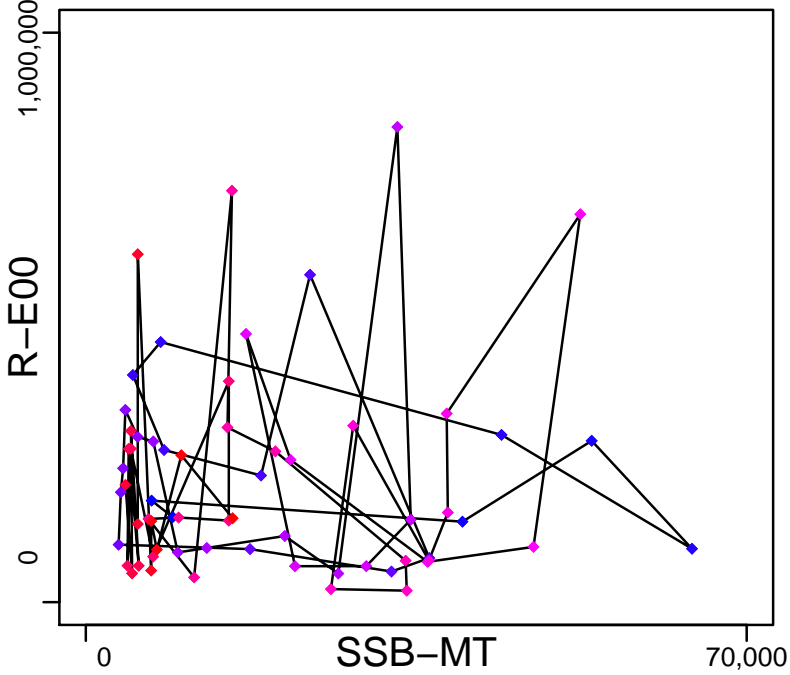
Kobe MSYpref (1949–2018–ASHBROOK)



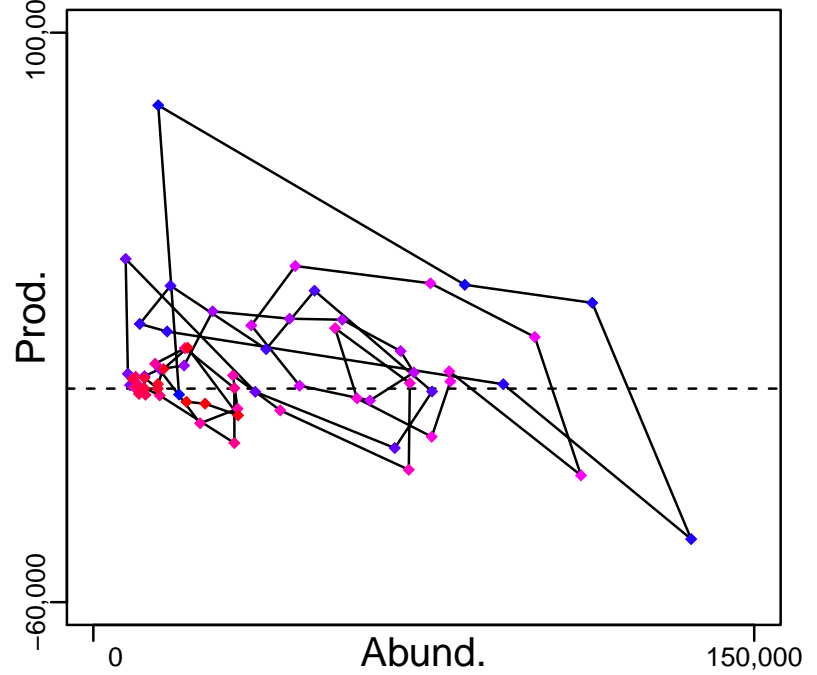
Kobe MGTpref (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



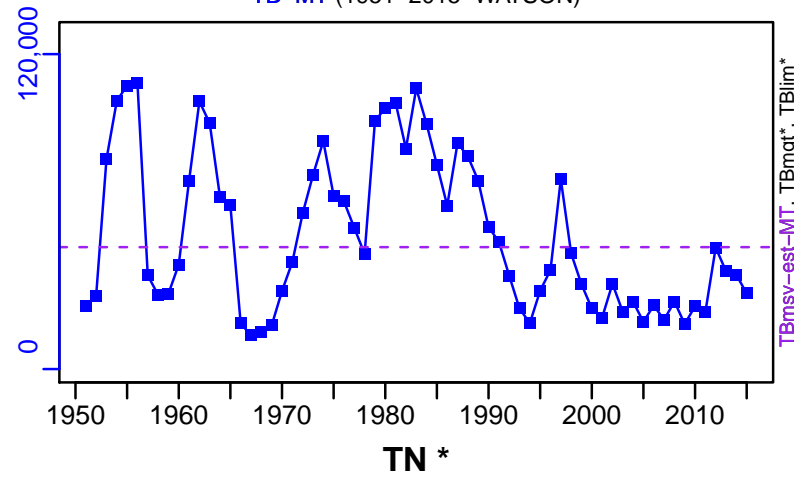
Production (1949–2018–ASHBROOK)



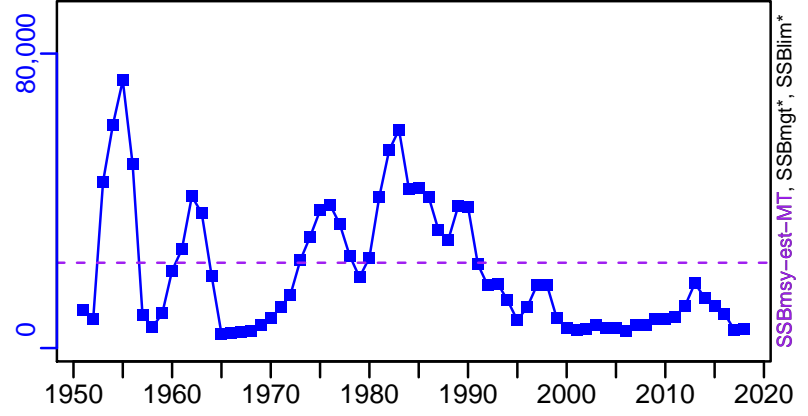
◆ Start Year ◆ End Year \* No Data

# Pacific herring Queen Charlotte Islands [HERRQCI]

TB-MT (1951-2015-WATSON)



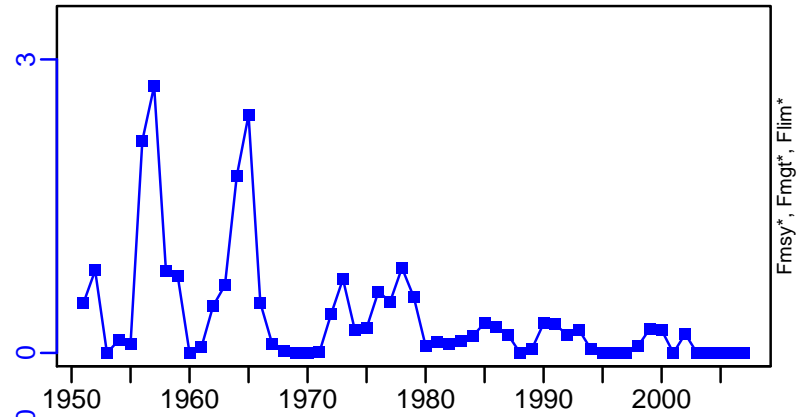
SSB-MT (1949-2018-ASHBROOK)



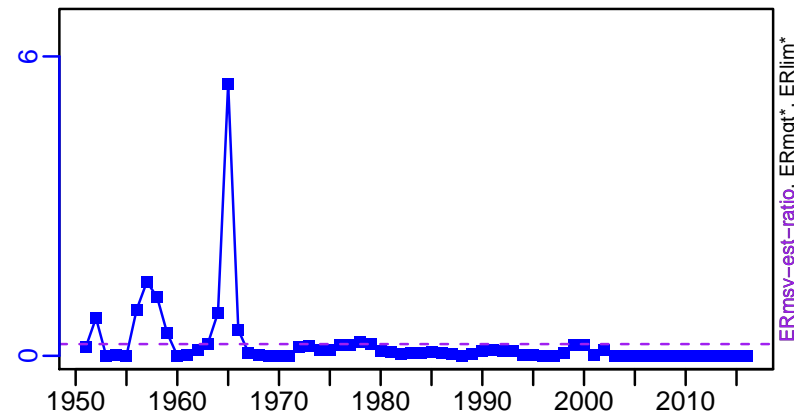
TN \*



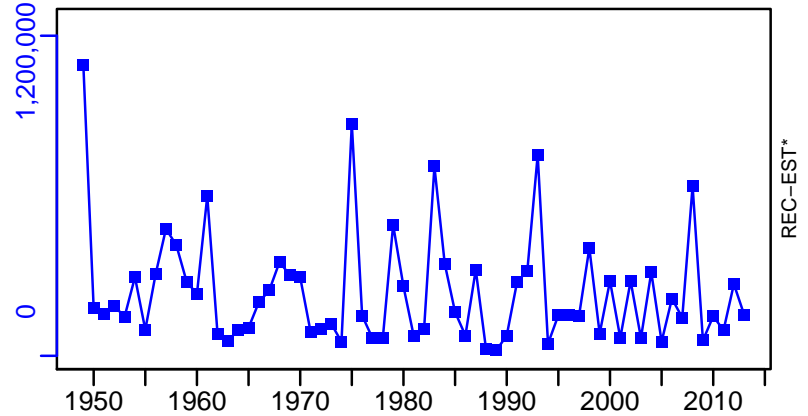
F-1/yr (1951-2007-COLLIE)



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



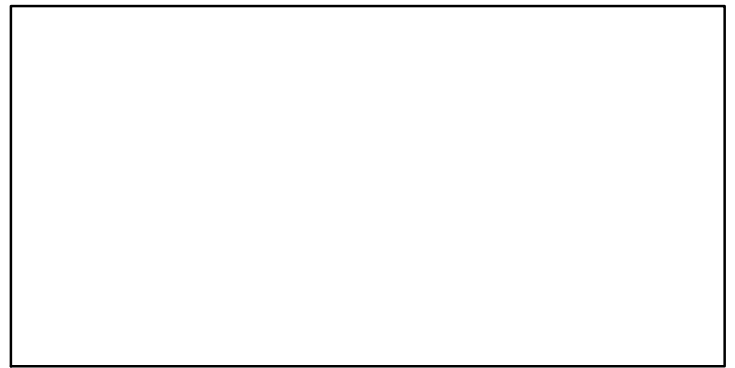
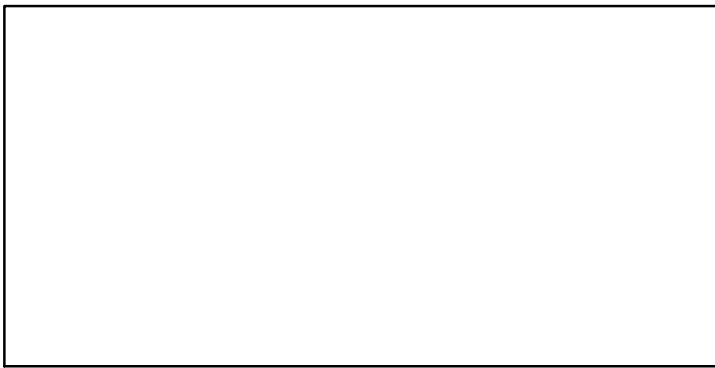
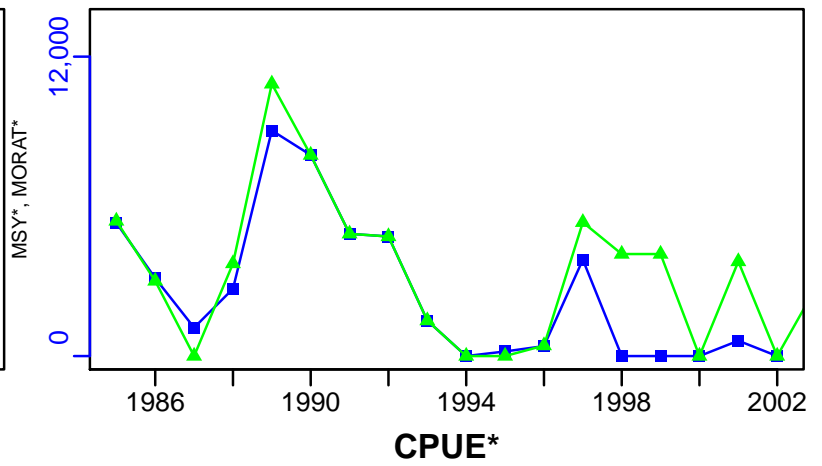
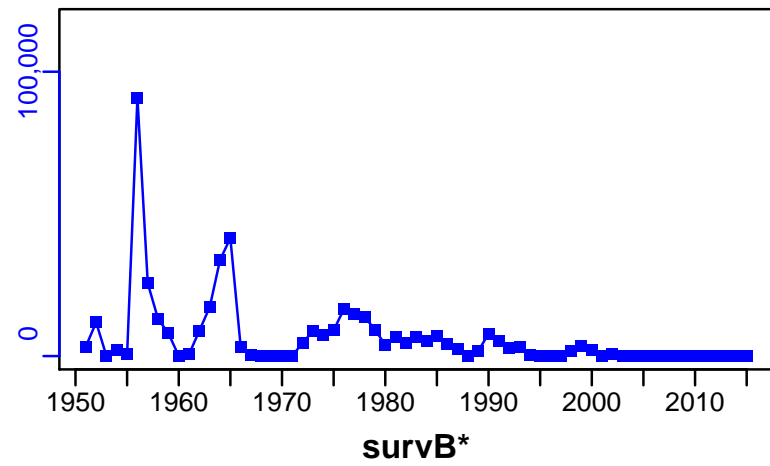
R-E00 (1949-2018-ASHBROOK)



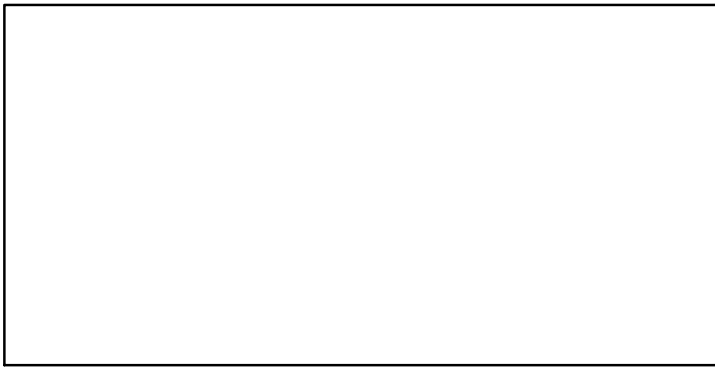
# Pacific herring Queen Charlotte Islands [HERRQCI]

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

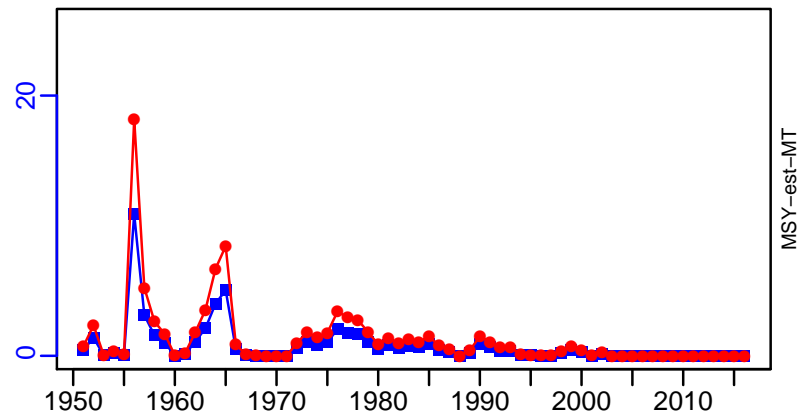
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



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



## Pacific herring Strait of Georgia [HERRSOG]

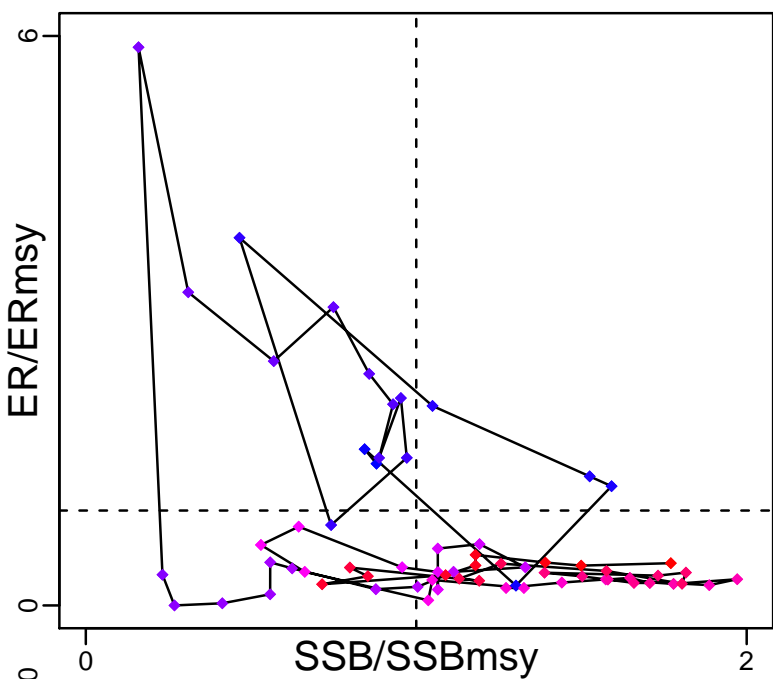
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRSOG-1949-2018-ASHBROOK
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	134,545
<b>SSBmsy</b>	SSBmsy-est-MT	2018	46,716
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2018	0.303
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2018	138,795
<b>MSY</b>	MSY-est-MT	2018	29,942
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

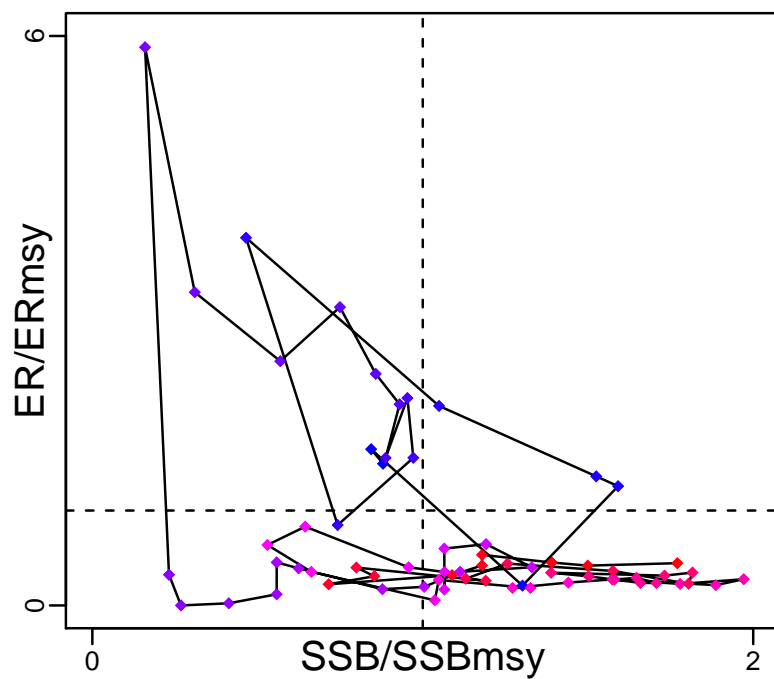
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	232,000	-	-
<b>SSB</b>	SSB-MT	2018	126,134	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	1,908,760,000	-	2
<b>F</b>	F-1/yr	2007	0.113	-	-
<b>ER</b>	ER-calc-ratio	2018	0.135	-	-
<b>TC</b>	TC-MT	2015	20,000		
<b>TL</b>	TL-MT	2018	25,806		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	1.724		
<b>SSB/SSBmsy</b>	SSB-MT/(SSB0-MT*0.368)	2018	2.47		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2018	0.445		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pacific herring Strait of Georgia [HERRSOG]

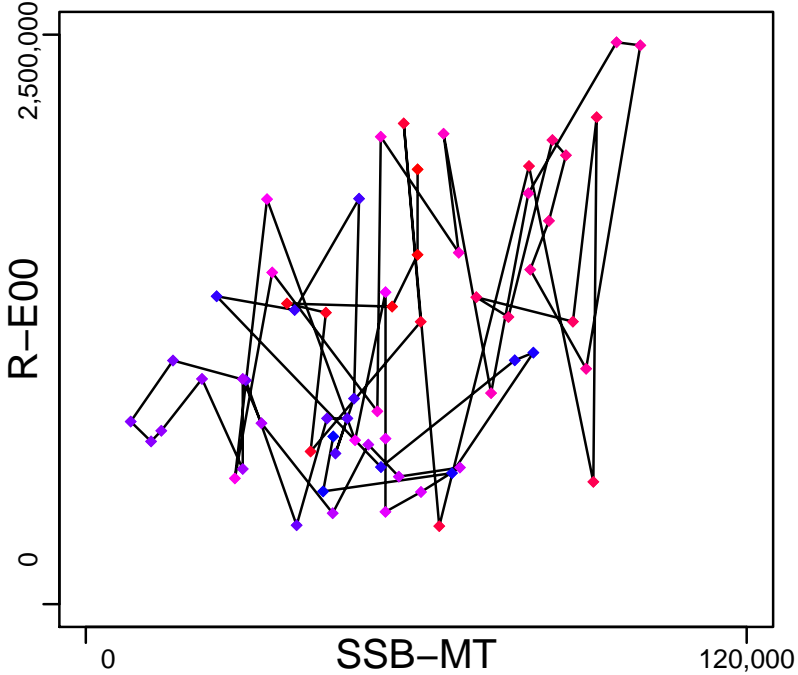
Kobe MSY<sub>pref</sub> (1949–2018–ASHBROOK)



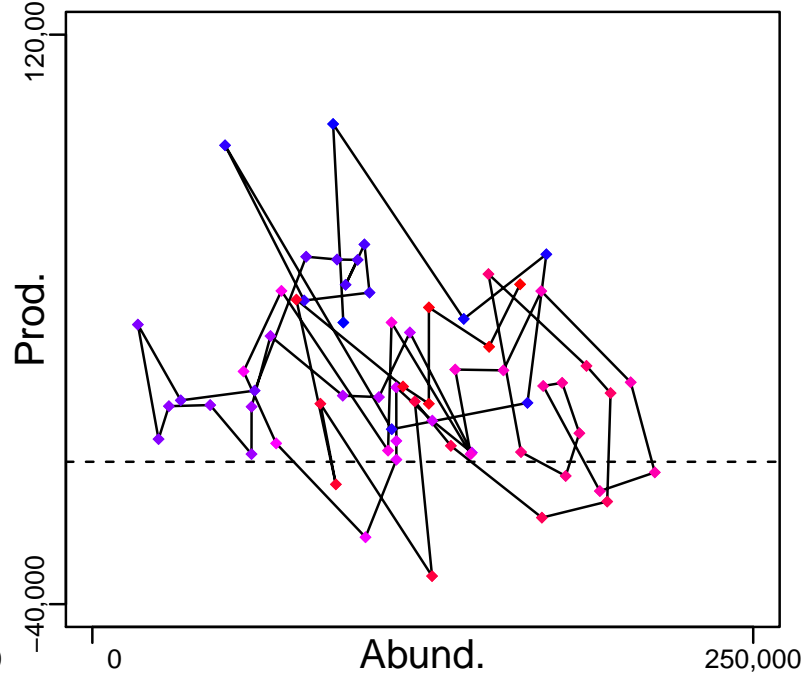
Kobe MGT<sub>pref</sub> (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



Production (1949–2018–ASHBROOK)

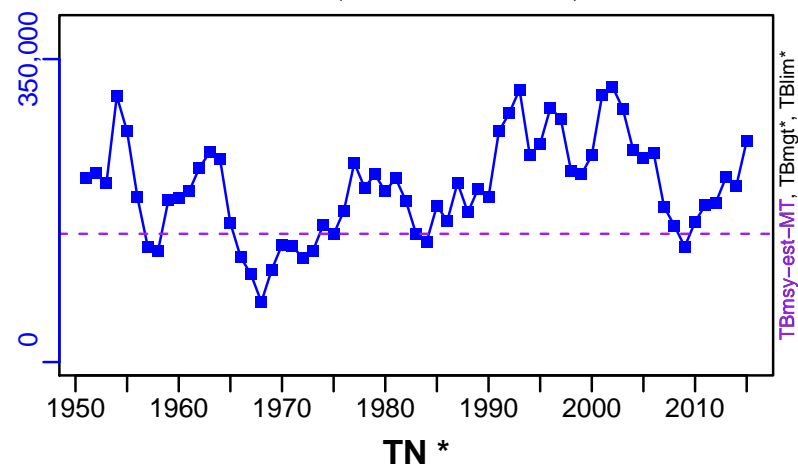


◆ Start Year ◆ End Year \* No Data

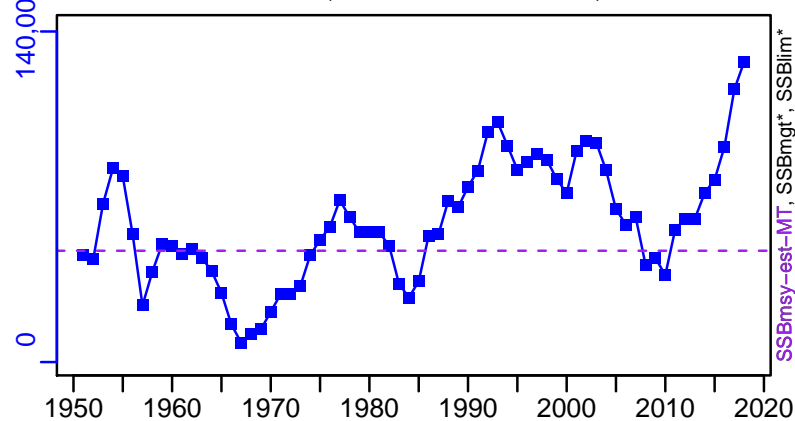


# Pacific herring Strait of Georgia [HERRSOG]

TB-MT (1951-2015-WATSON)



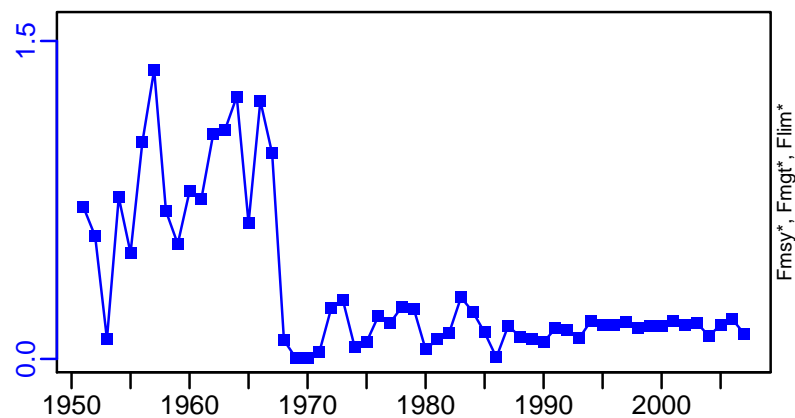
SSB-MT (1949-2018-ASHBROOK)



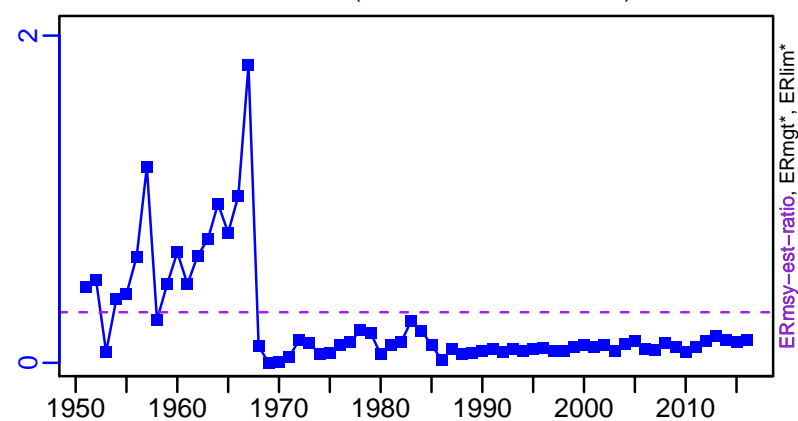
TN \*



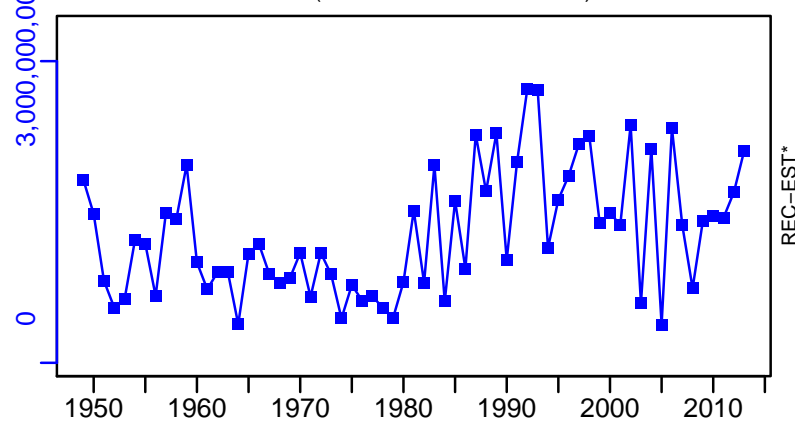
F-1/yr (1951-2007-COLLIE)



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

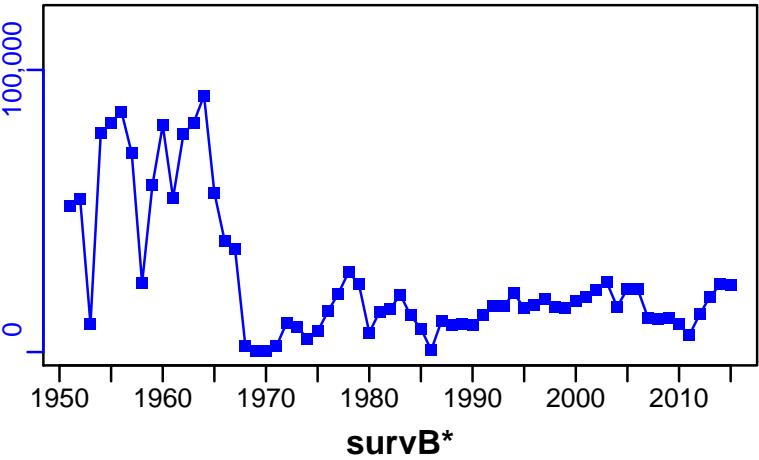


R-E00 (1949-2018-ASHBROOK)

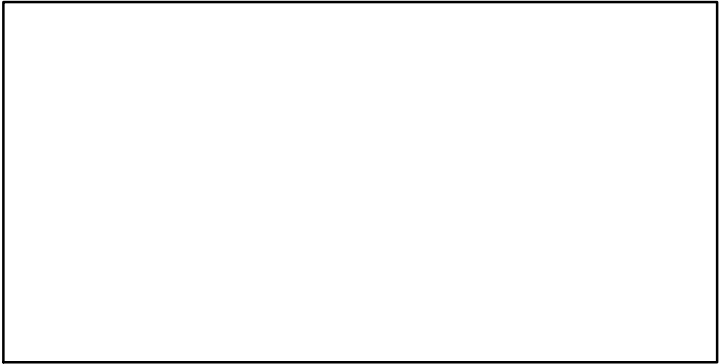
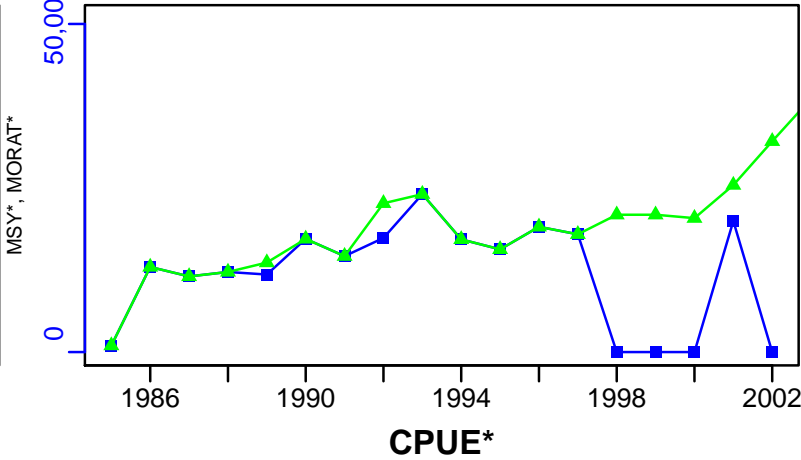


Pacific herring Strait of Georgia [HERRSOG]

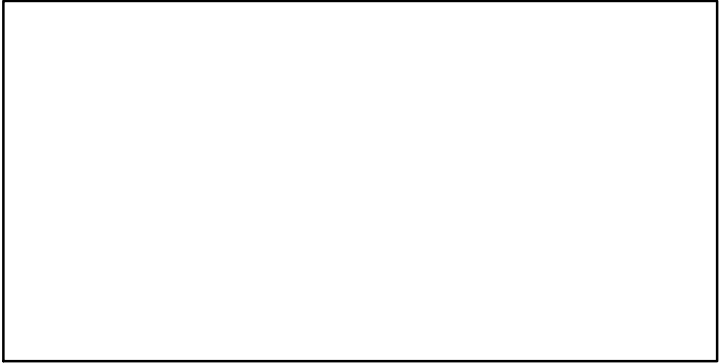
TC-MT, TL\*, RecC\* (1951-2015-WATSON)



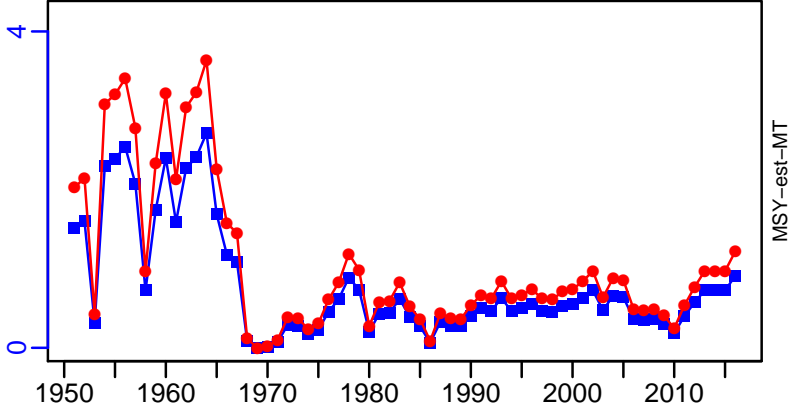
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



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



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

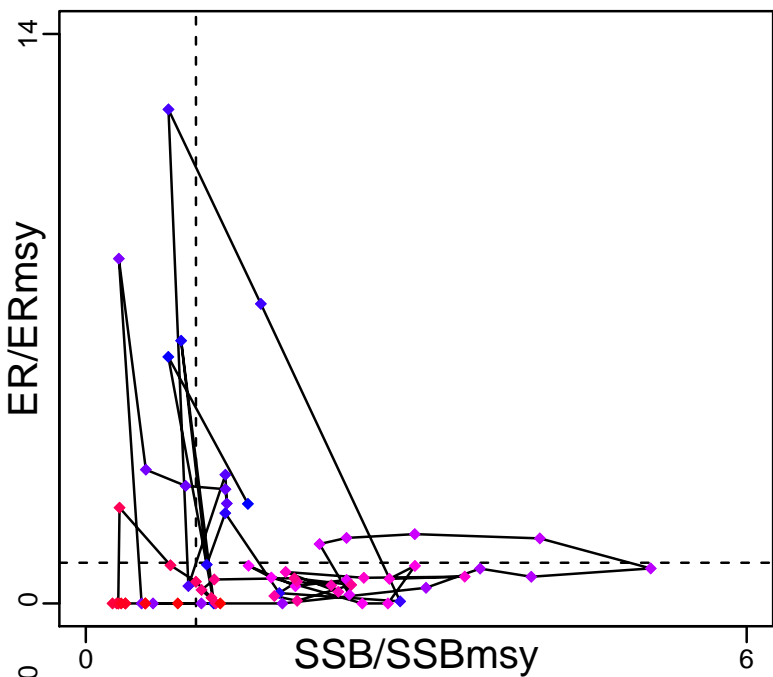
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	DFO-PAC-HERRWCVANI-1949-2018-ASHBROOK
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	84,789
<b>SSBmsy</b>	SSBmsy-est-MT	2018	36,575
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2018	0.162
<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>	MSY-est-MT	2018	12,523
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

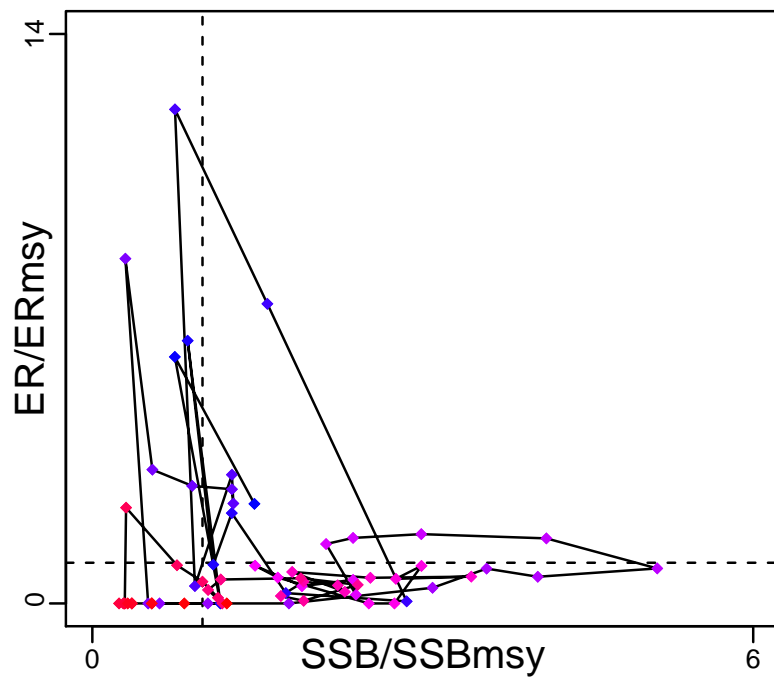
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	56,400	-	-
<b>SSB</b>	SSB-MT	2018	20,403	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2018	167,741,930	-	2
<b>F</b>	F-1/yr	2007	0	-	-
<b>ER</b>	ER-calc-ratio	2018	0	-	-
<b>TC</b>	TC-MT	2015	0		
<b>TL</b>	TL-MT	2018	0		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.665		
<b>SSB/SSBmsy</b>	SSB-MT/(SSB0-MT*0.368)	2018	1.182		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2018	0		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific herring West Coast of Vancouver Island [HERRWCVANI]

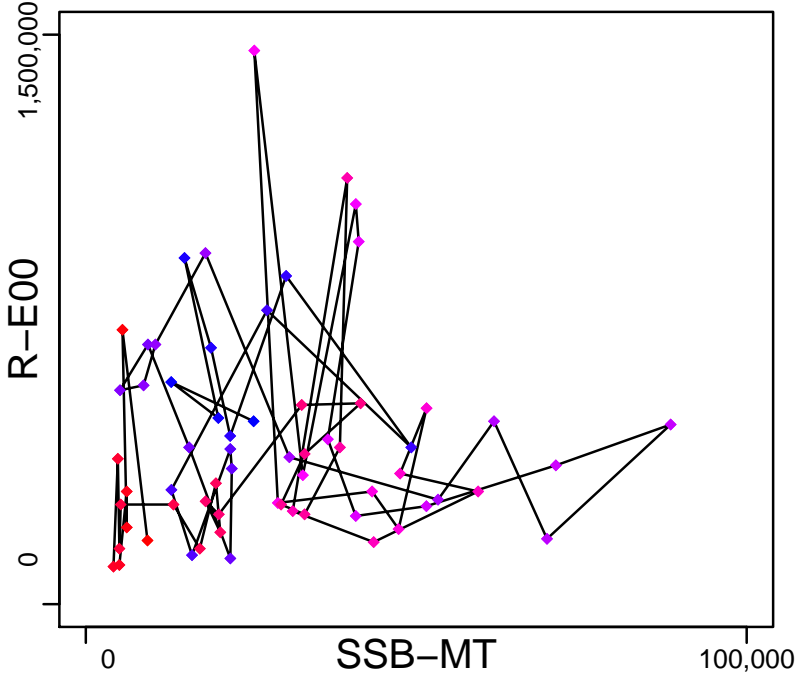
Kobe MSY<sub>pref</sub> (1949–2018–ASHBROOK)



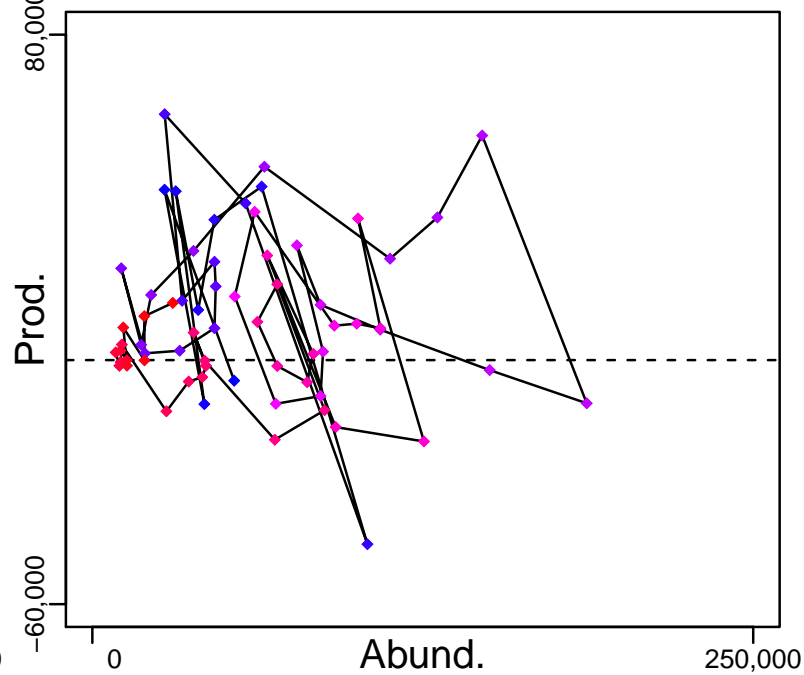
Kobe MGT<sub>pref</sub> (1949–2018–ASHBROOK)



Spawner Recruit (1949–2018–ASHBROOK)



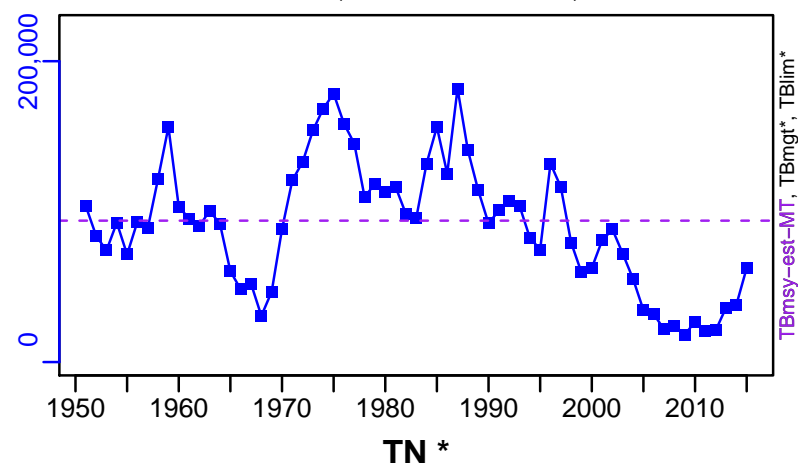
Production (1949–2018–ASHBROOK)



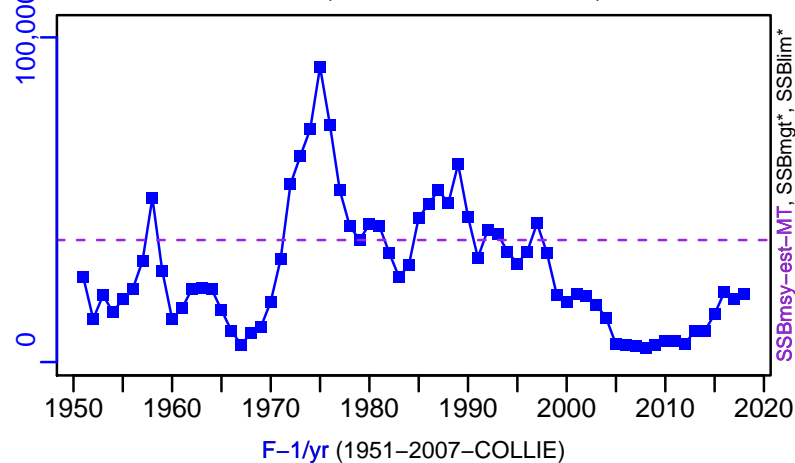
◆ Start Year ◆ End Year \* No Data

# Pacific herring West Coast of Vancouver Island [HERRWCVANI]

TB-MT (1951-2015-WATSON)



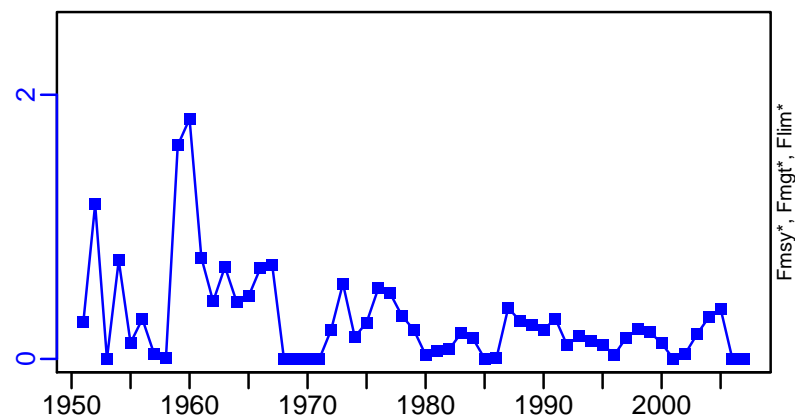
SSB-MT (1949-2018-ASHBROOK)



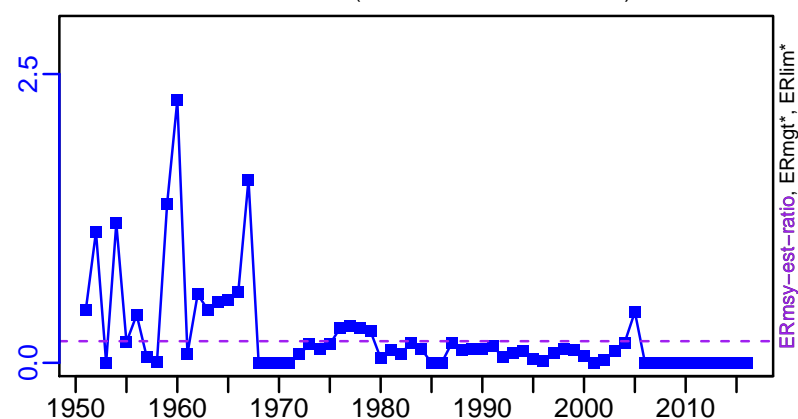
TN \*



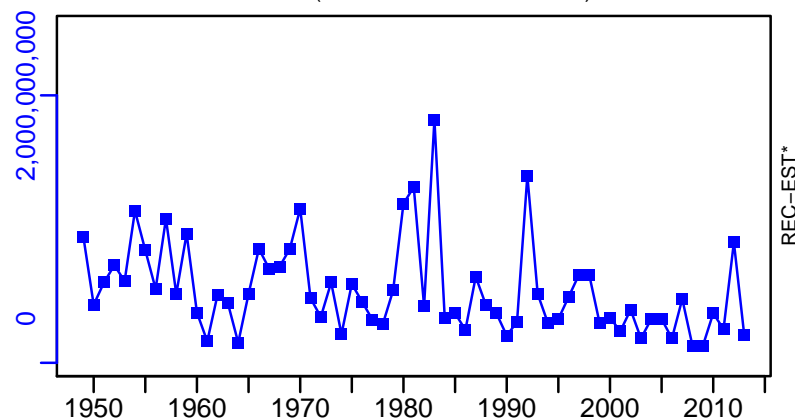
F-1/yr (1951-2007-COLLIE)



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



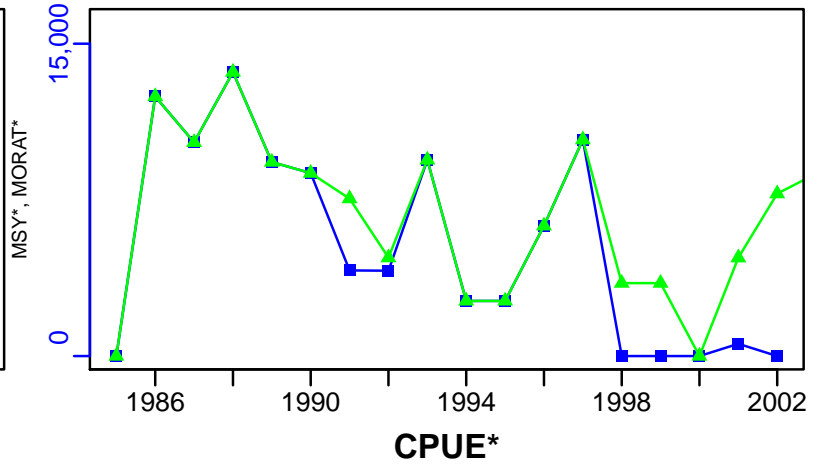
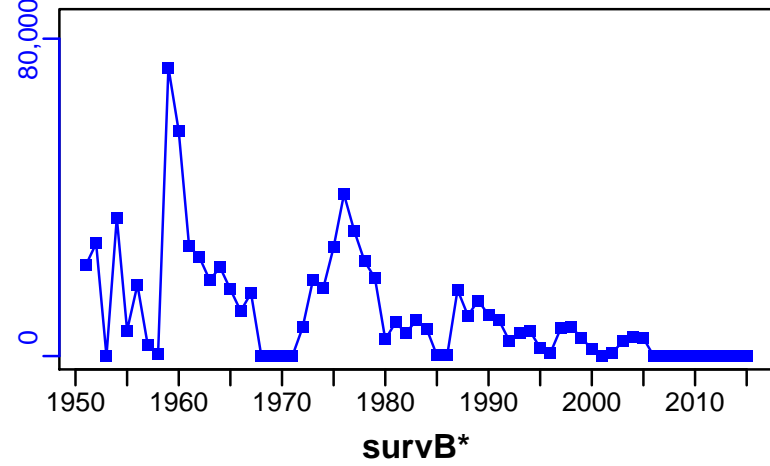
R-E00 (1949-2018-ASHBROOK)



# Pacific herring West Coast of Vancouver Island [HERRWCVANI]

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

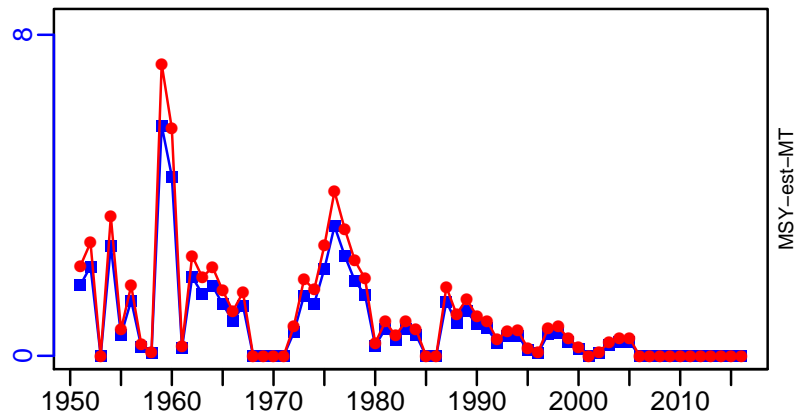
TAC-MT, Cpair\*, Cadvised-MT (1951-2015-WATSON)



EFFORT\*



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



## Lingcod Strait of Georgia [LINGCODSOG]

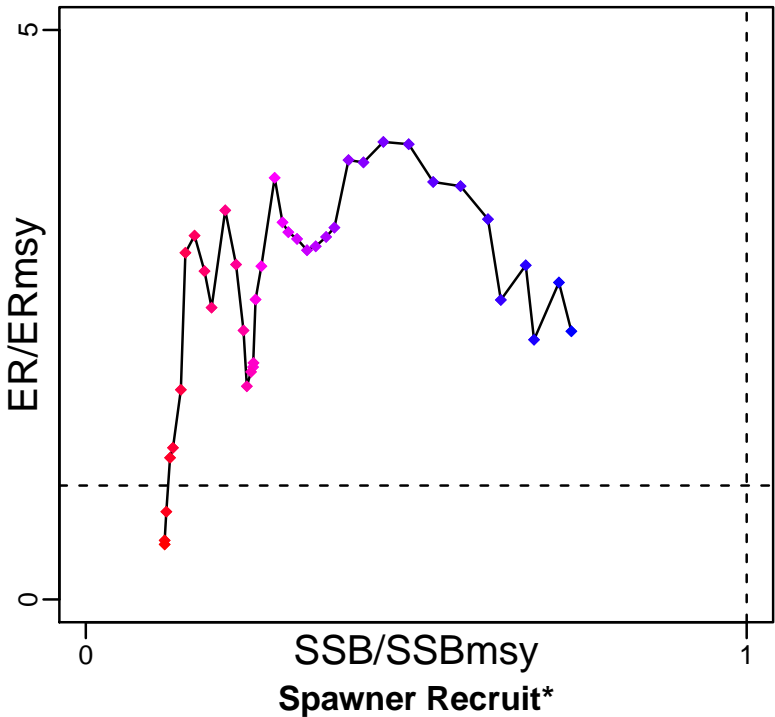
Metadata	
<b>Scientific Name</b>	Ophiodon elongatus
<b>Current Assess ID</b>	DFO-PAC-LINGCODSOG-1927-2014-OSGOOD
<b>Area</b>	Strait of Georgia
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<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>	ERmsy-conv-ratio	2014	0.03
<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>	-	-	-

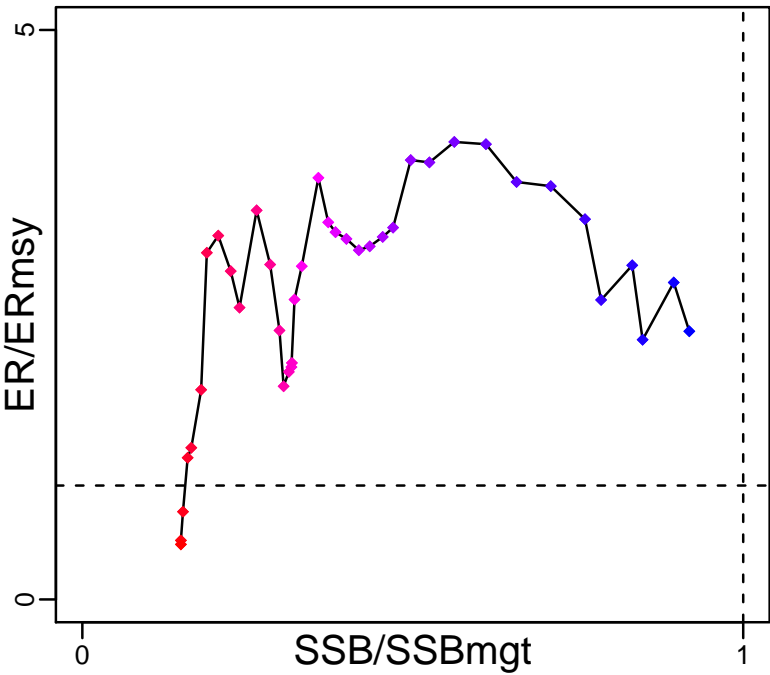
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	7120	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2014	0.015	-	-
<b>TC</b>	TC-MT	2014	44		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	0.447		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2014	0.483		
<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]

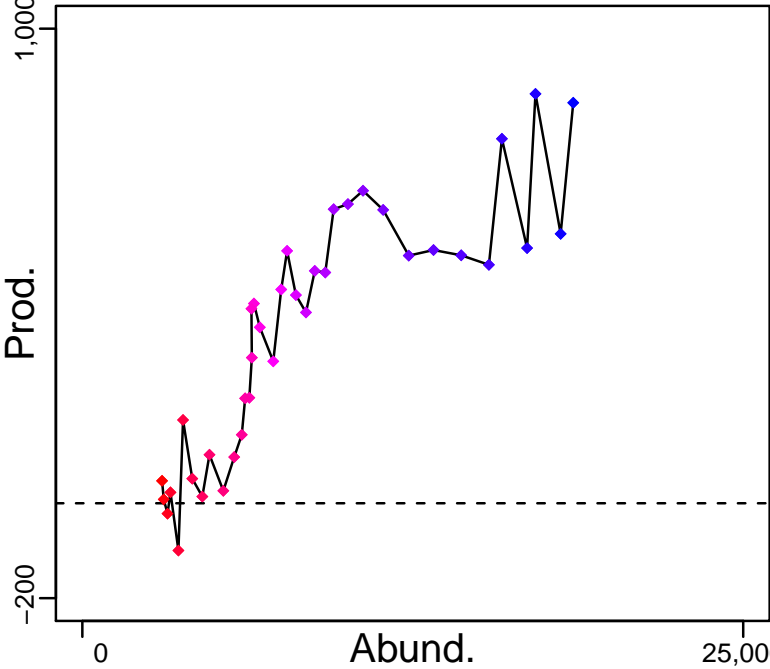
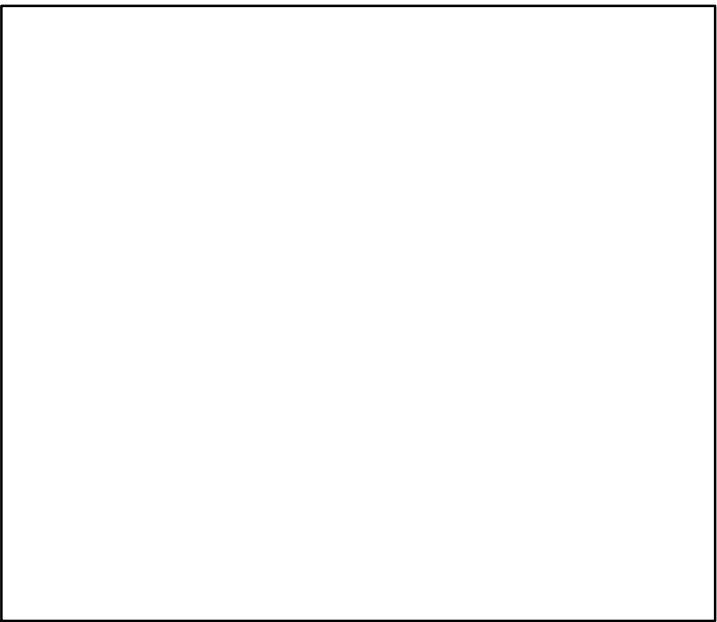
Kobe MSYpref (1927–2014–OSGOOD)



Kobe MGTpref (1927–2014–OSGOOD)



Production (1927–2014–OSGOOD)



◆ Start Year ◆ End Year \* No Data

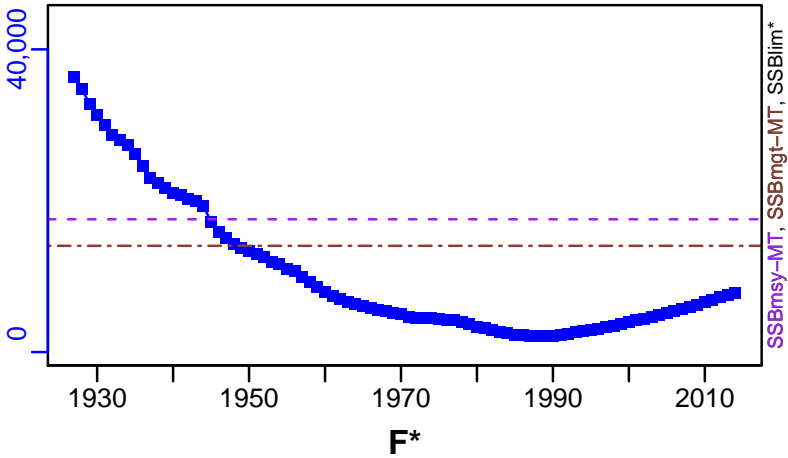


Lingcod Strait of Georgia [LINGCODSOG]

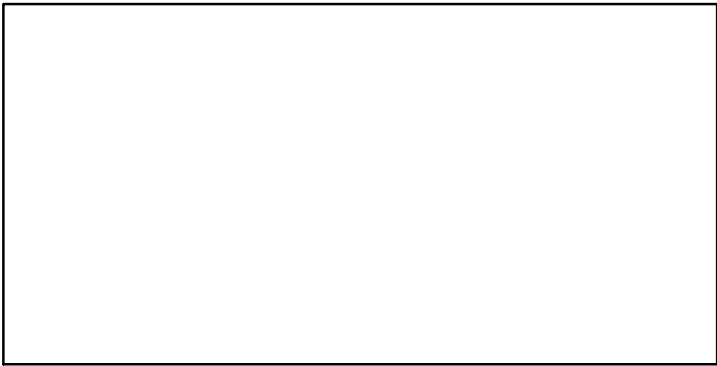
TB\*



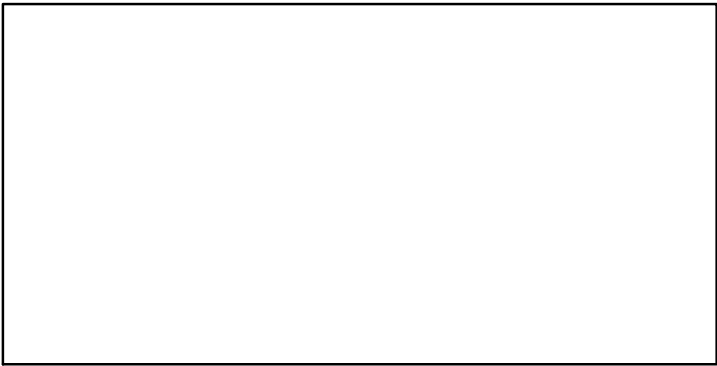
SSB-MT (1927-2014-OSGOOD)



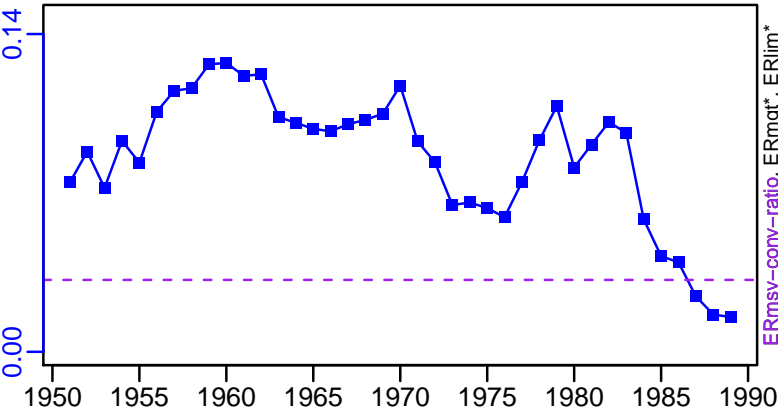
TN \*



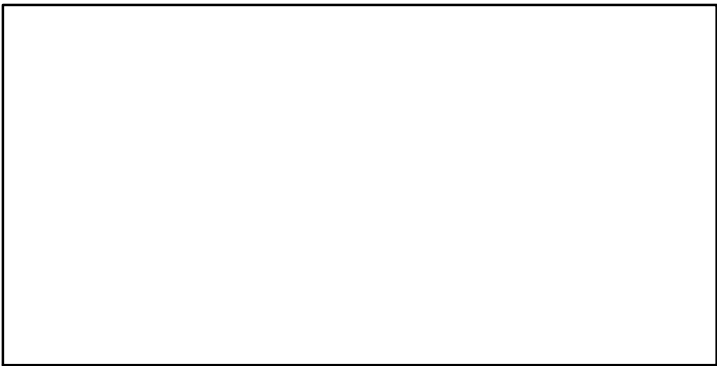
F\*



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

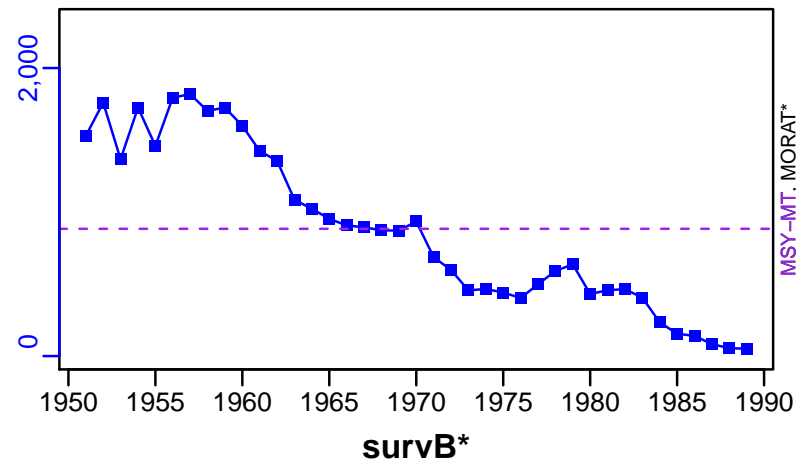


Recruits\*



# Lingcod Strait of Georgia [LINGCODSOG]

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



TAC\*, Cpair\*, Cadv\*



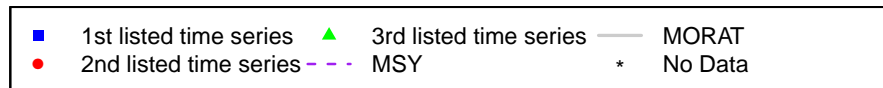
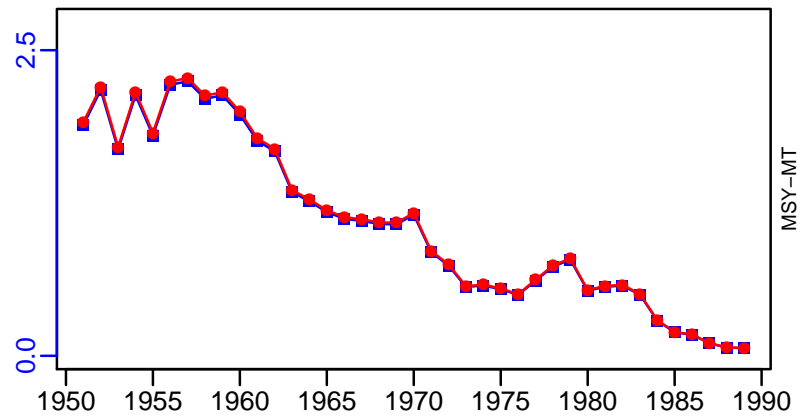
CPUE\*



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

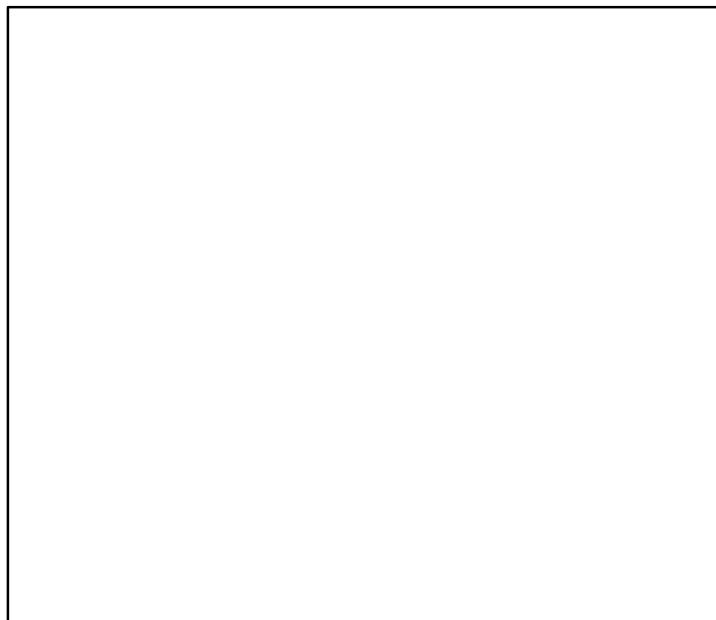
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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 \***



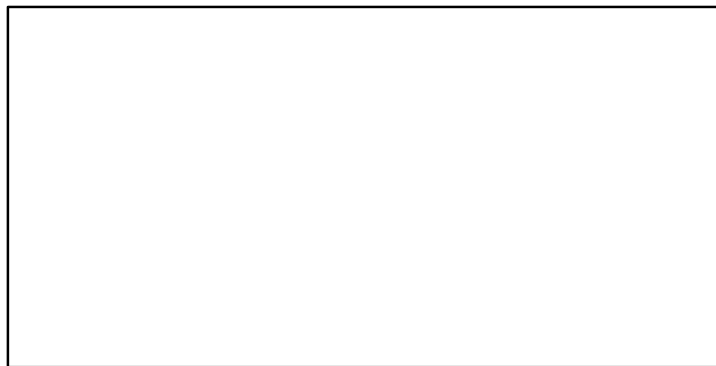
**F\***



**ER\***

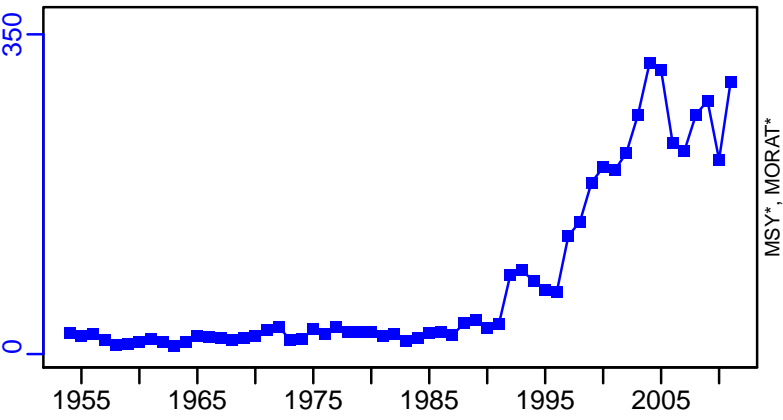


**Recruits\***



# Longnose skate West Coast of Vancouver Island [LNOSESKA3CD]

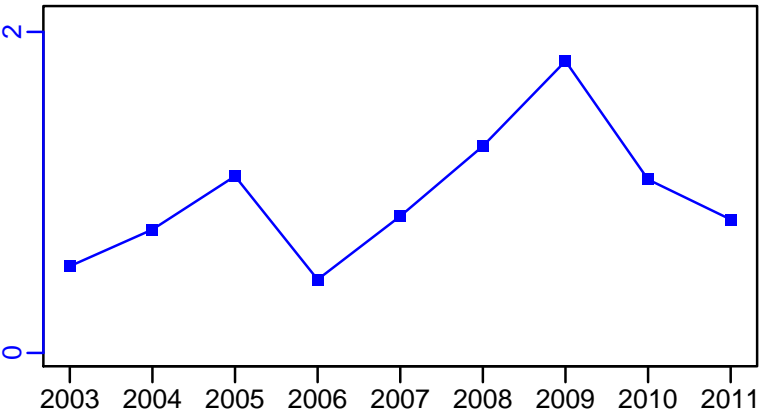
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



TAC\*, Cpair\*, Cadv\*



survB-fishperE02hooks (1954-2011-OSGOOD)



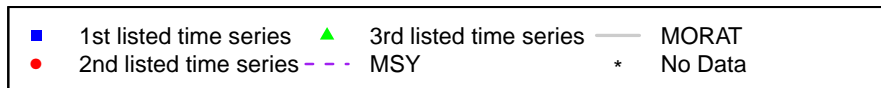
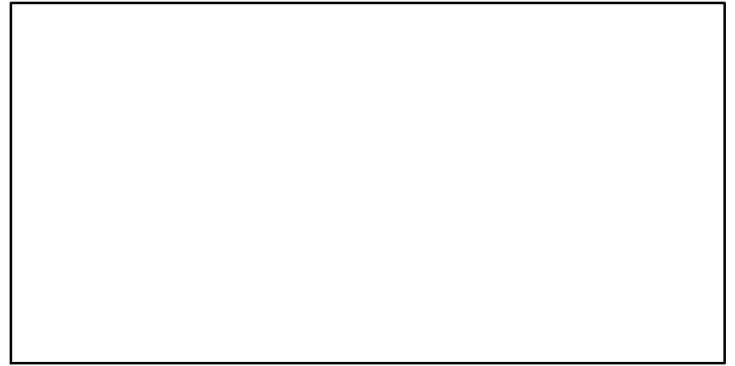
CPUE\*



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	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data



TB\*



SSB\*



TN \*



F\*



ER\*



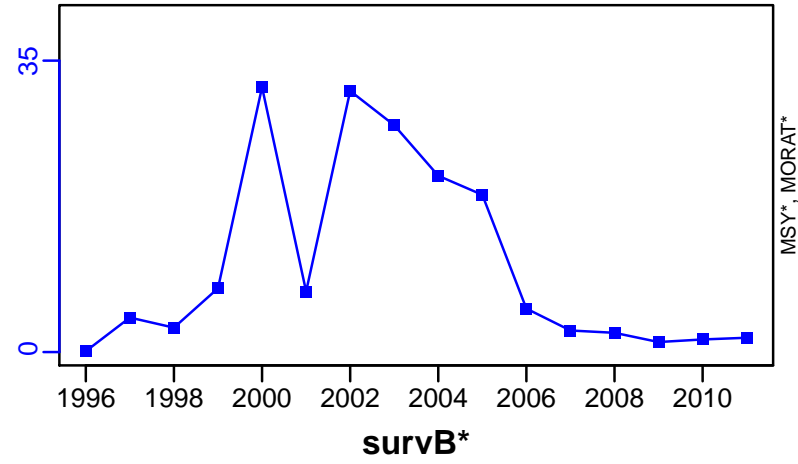
Recruits\*



# Longnose skate Strait of Georgia [LNOSESKA4B]

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

TAC\*, Cpair\*, Cadv\*



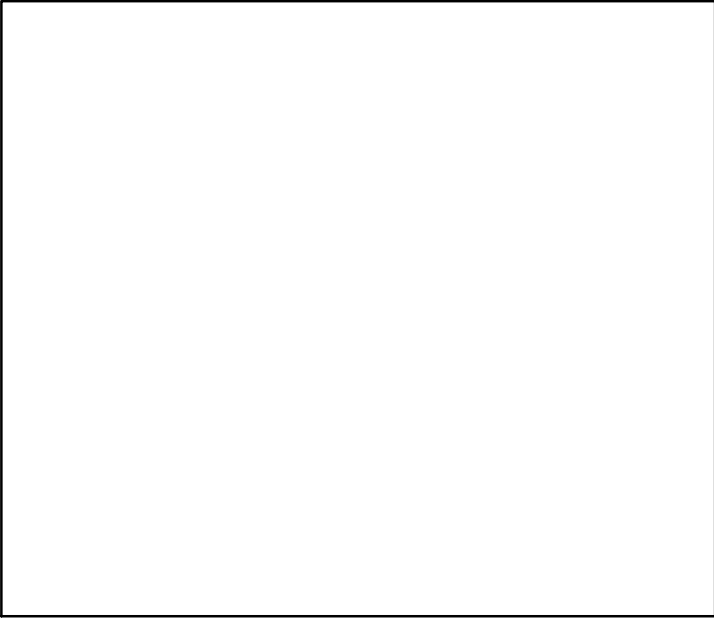
## Longnose skate Queen Charlotte Sound [LNOSESKA5AB]

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

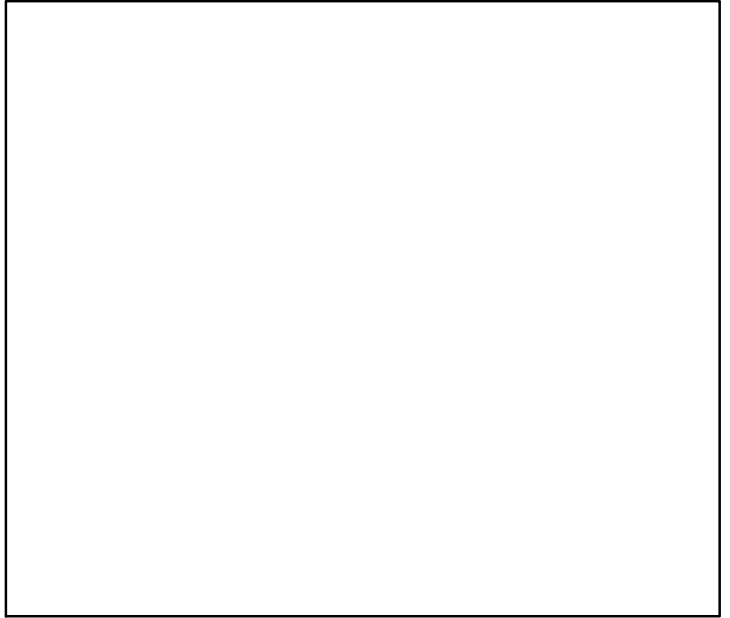
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

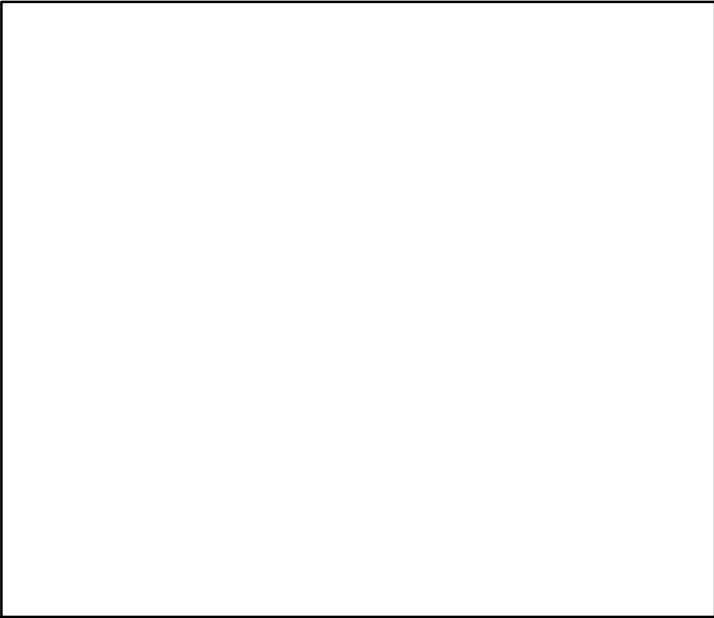
**Kobe MSY\***



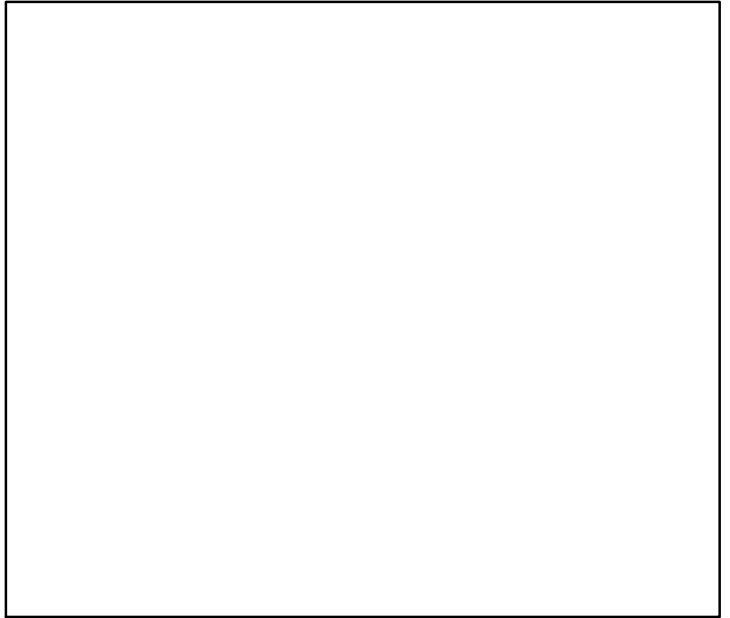
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

Longnose skate Queen Charlotte Sound [LNOSESKA5AB]

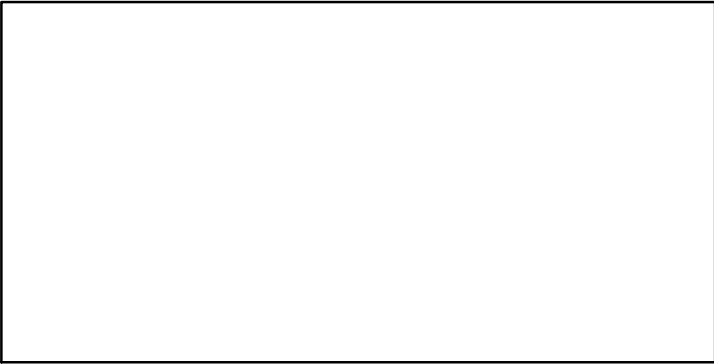
**TB\***



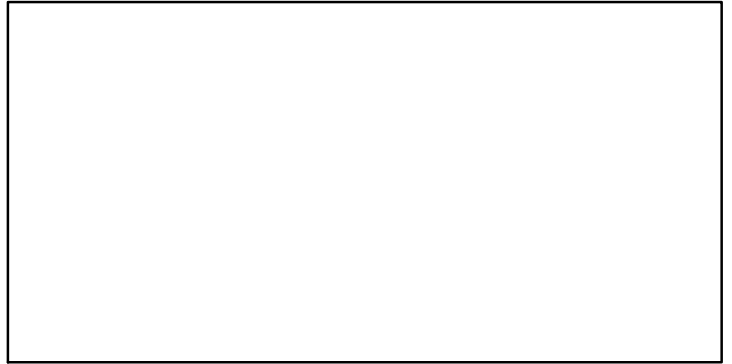
**SSB\***



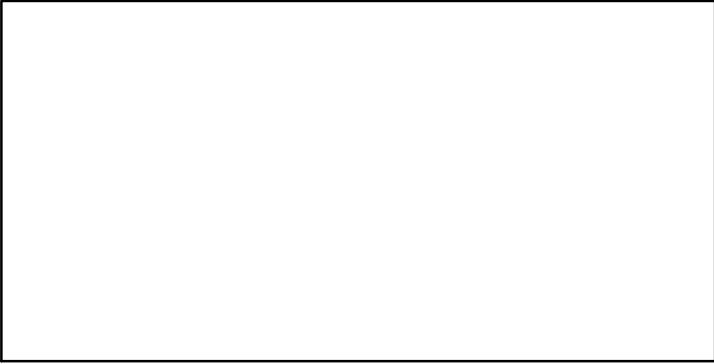
**TN \***



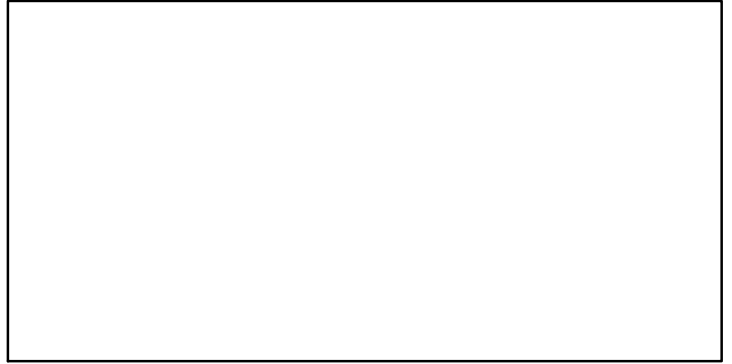
**F\***



**ER\***



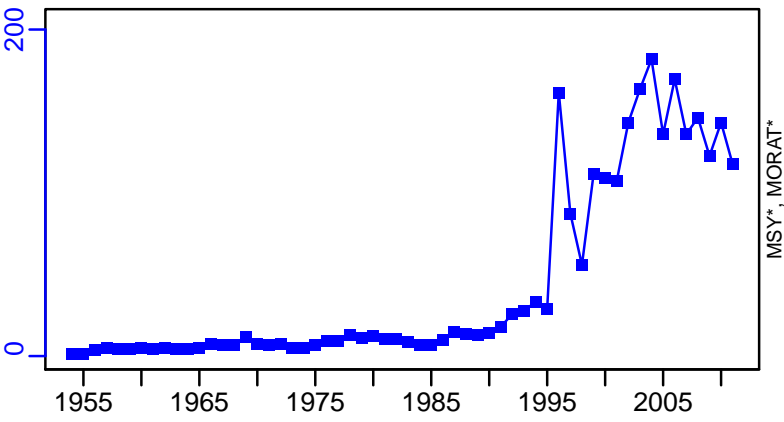
**Recruits\***



# Longnose skate Queen Charlotte Sound [LNOSEKA5AB]

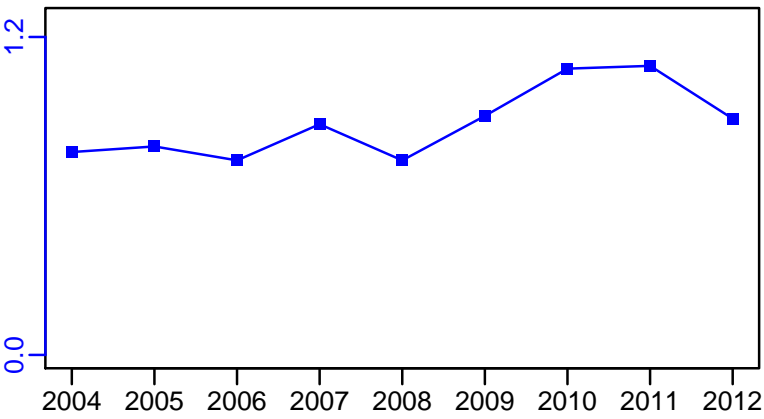
TC-MT, TL\*, RecC\* (1954-2012-OSGOOD)

TAC\*, Cpair\*, Cadv\*



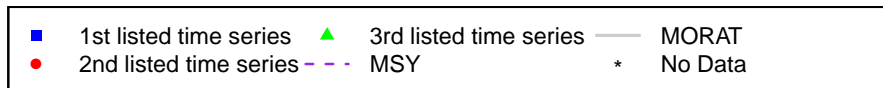
survB-fishperE02hooks (1954-2012-OSGOOD)

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

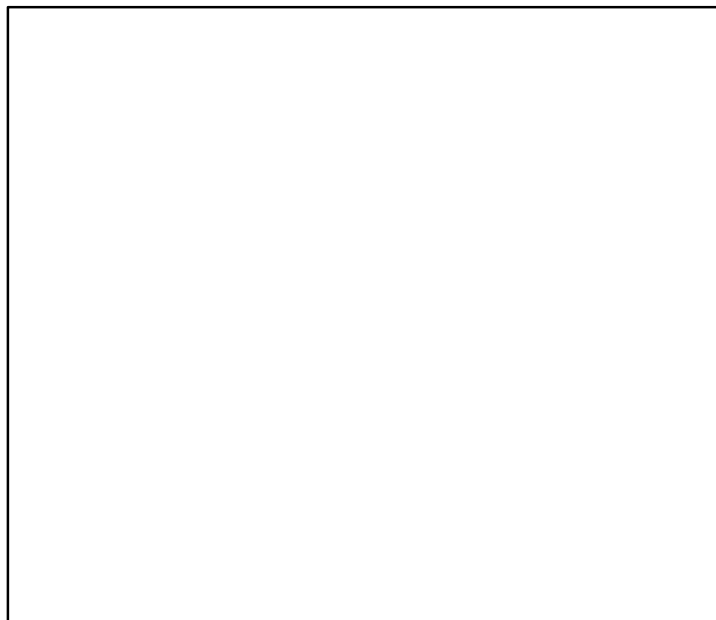
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data



Longnose skate Hecate Strait [LNOSESKA5CDE]

TB\*



SSB\*



TN \*



F\*



ER\*

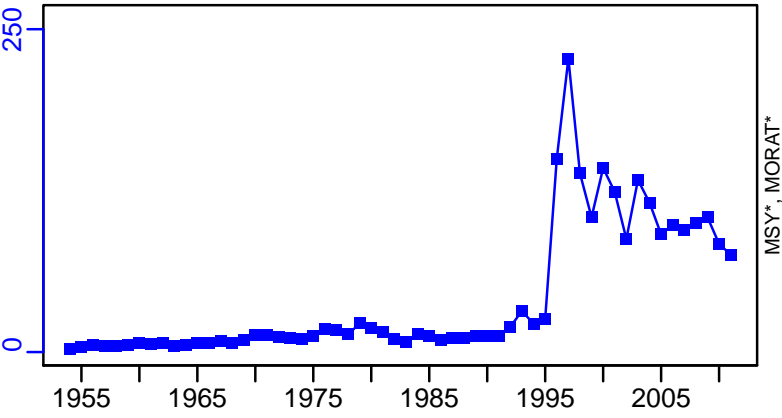


Recruits\*



# Longnose skate Hecate Strait [LNOSESKA5CDE]

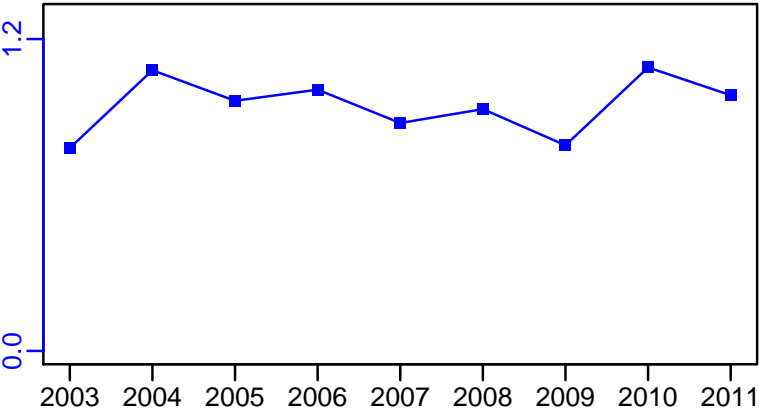
TC-MT, TL\*, RecC\* (1954-2011-OSGOOD)



TAC\*, Cpair\*, Cadv\*



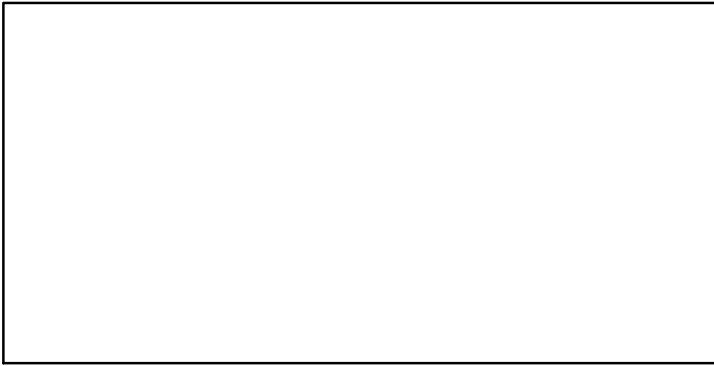
survB-fishperE02hooks (1954-2011-OSGOOD)



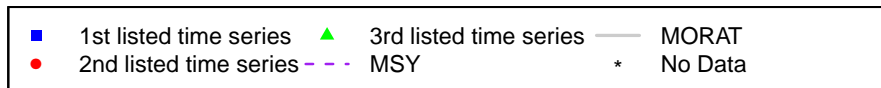
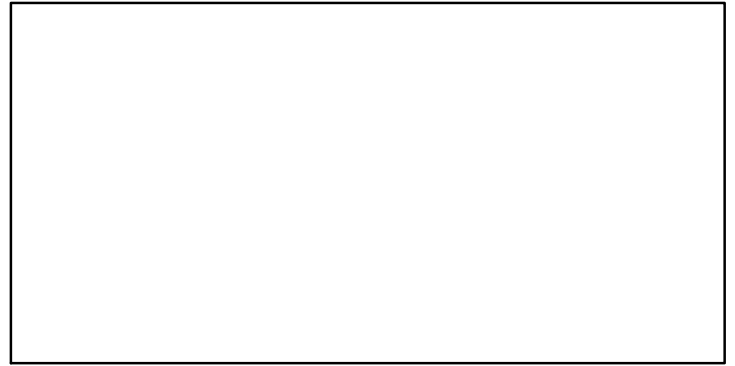
CPUE\*



EFFORT\*



CdivMSY\*



## Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

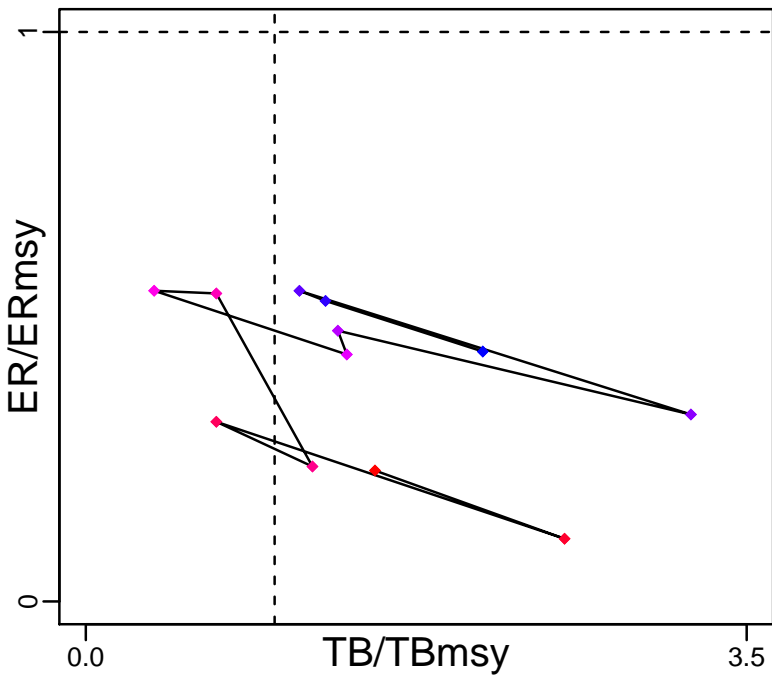
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA14-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 14
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	275
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.619
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	170
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

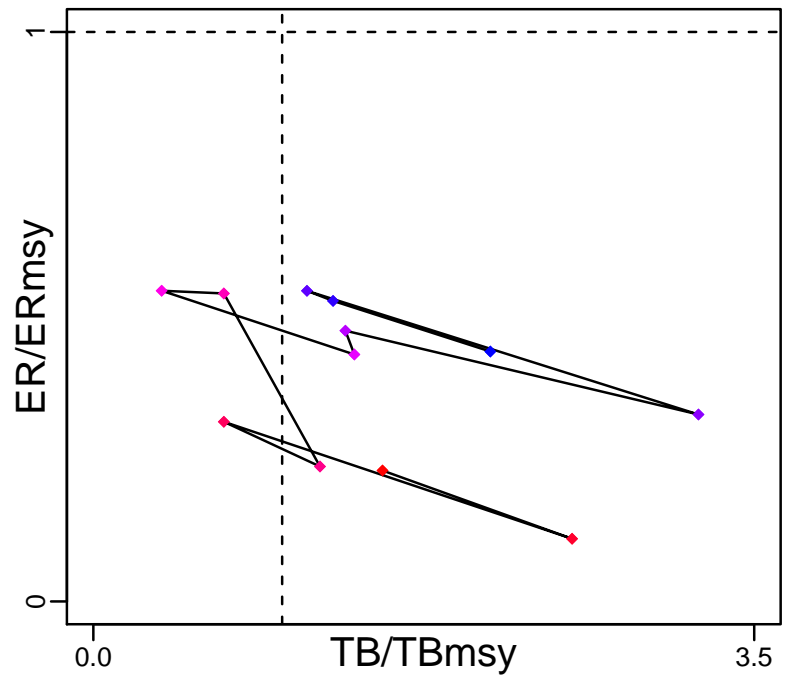
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	130	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.142	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	60		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	0.473		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.23		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

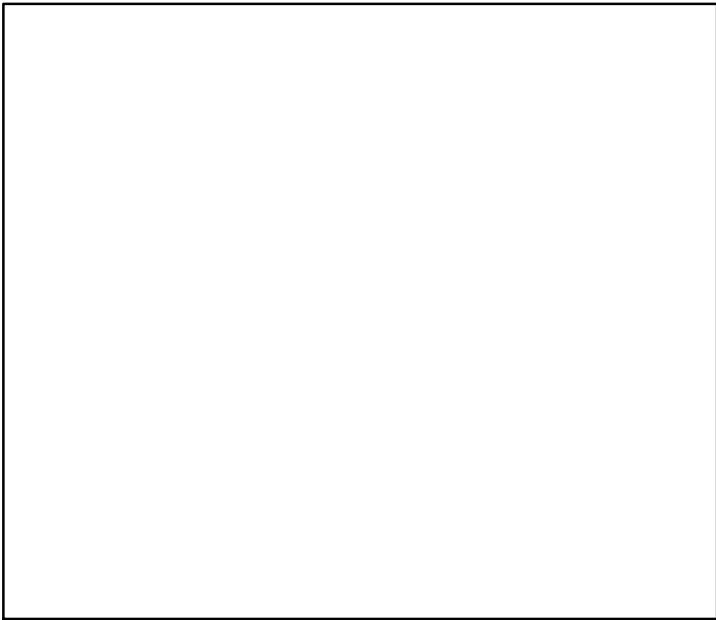
Kobe MSY<sub>pref</sub> (1987–2011–WATSON)



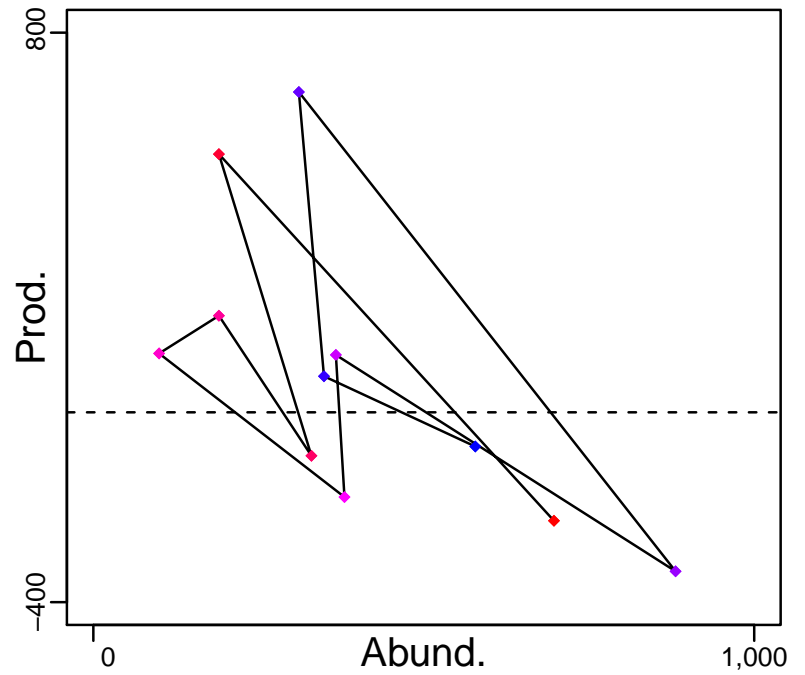
Kobe MGT<sub>pref</sub> (1987–2011–WATSON)



Spawner Recruit\*



Production (1987–2011–WATSON)

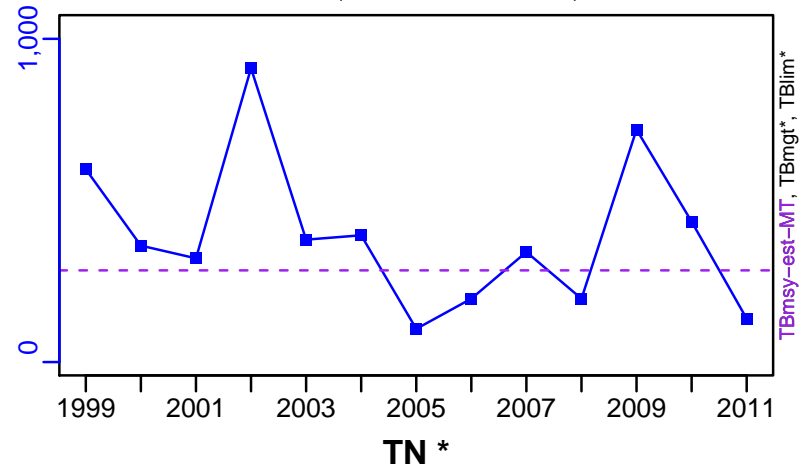


◆ Start Year ◆ End Year \* No Data

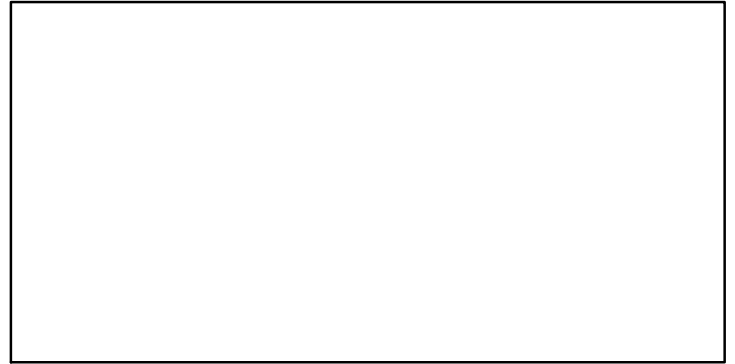
# Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

TB-MT (1987-2011-WATSON)

SSB\*

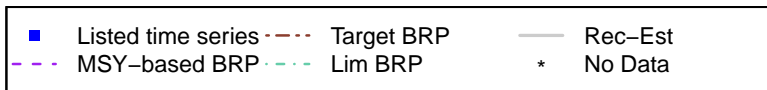
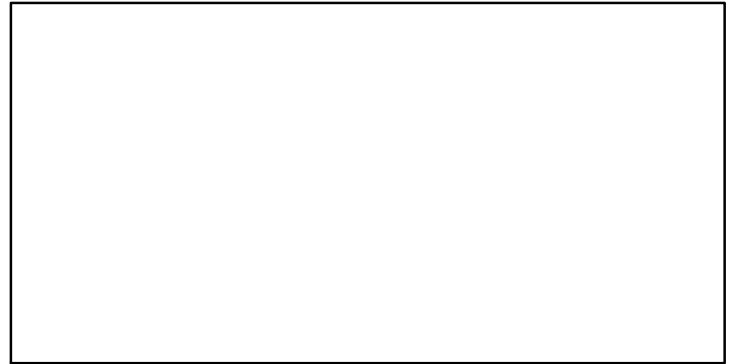
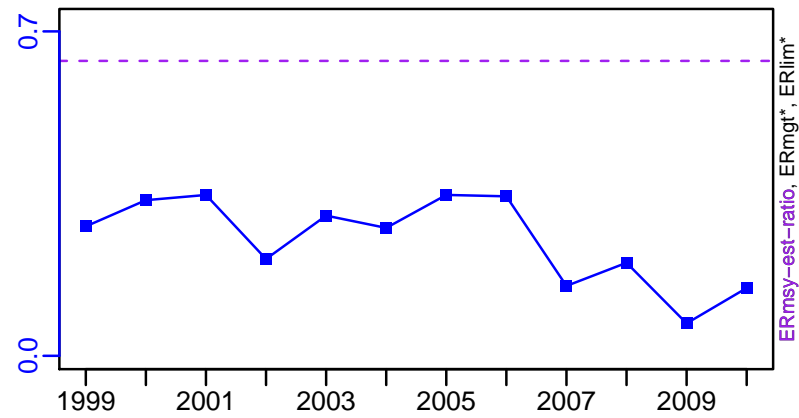


F\*



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

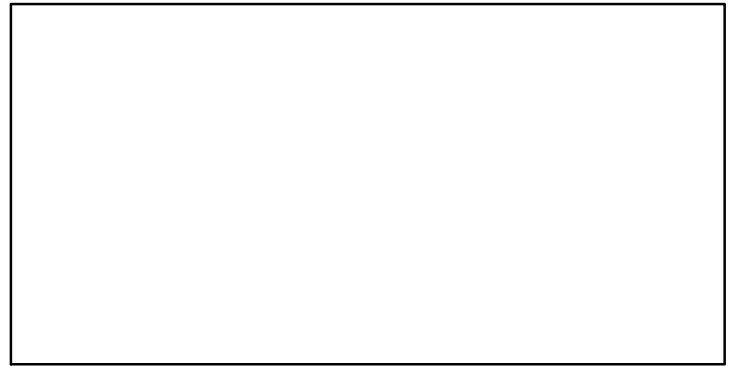
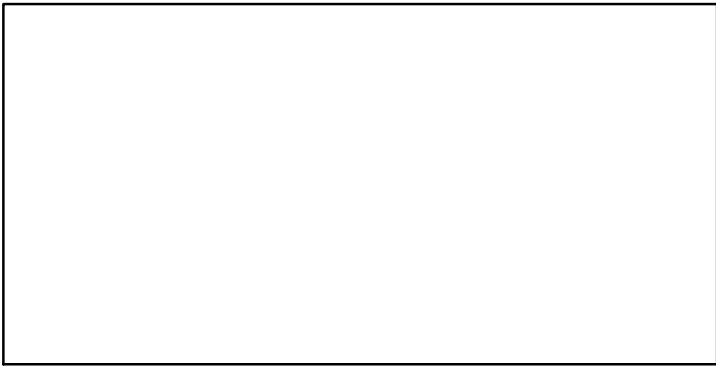
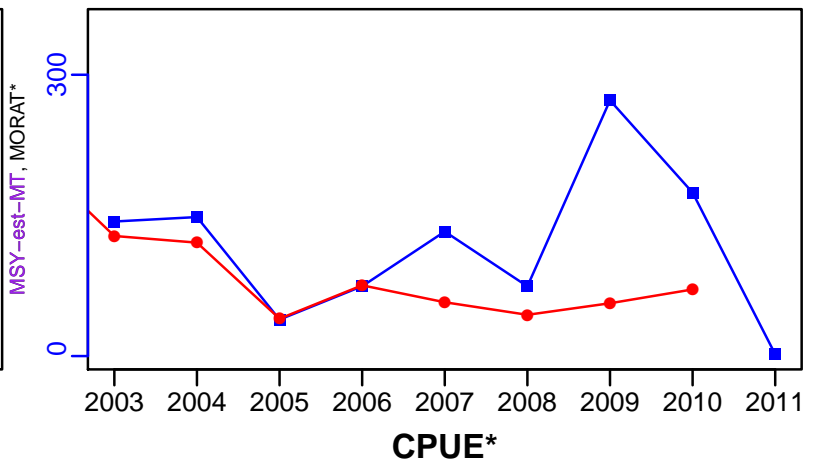
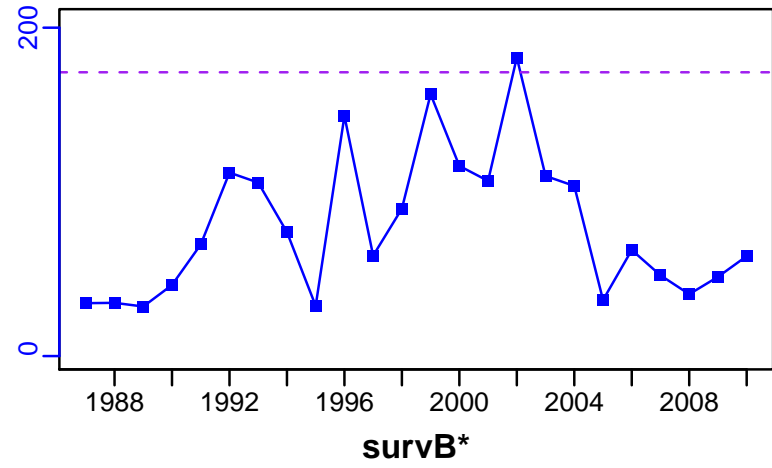
Recruits\*



# Ocean shrimp Shrimp Management Area 14 [PANDALSMA14]

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

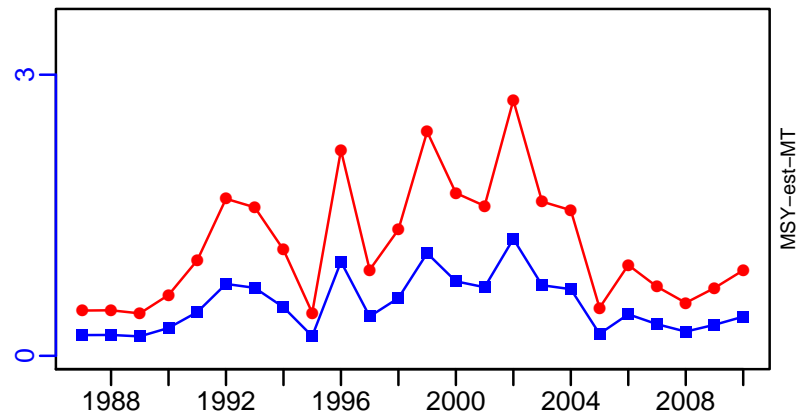
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



## Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

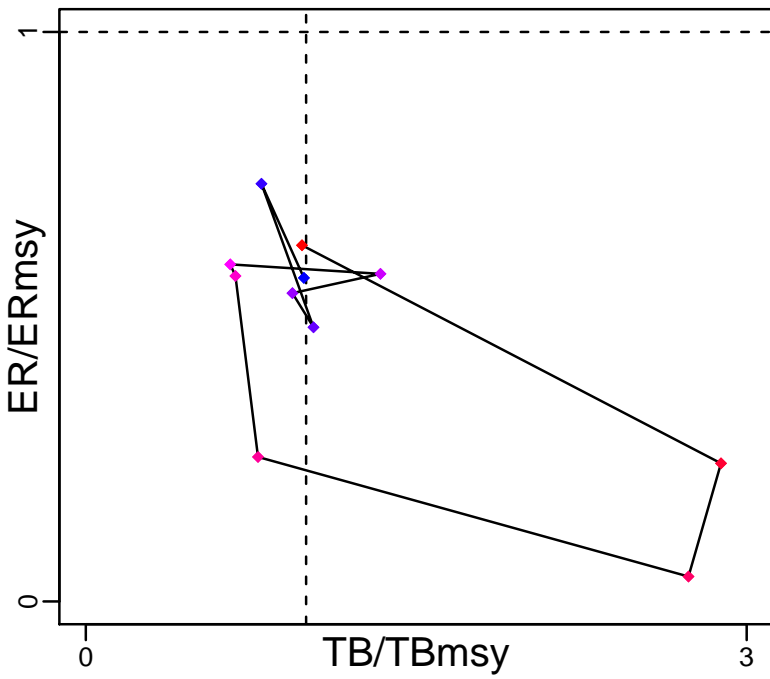
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA16-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 16
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	115
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.508
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	58
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

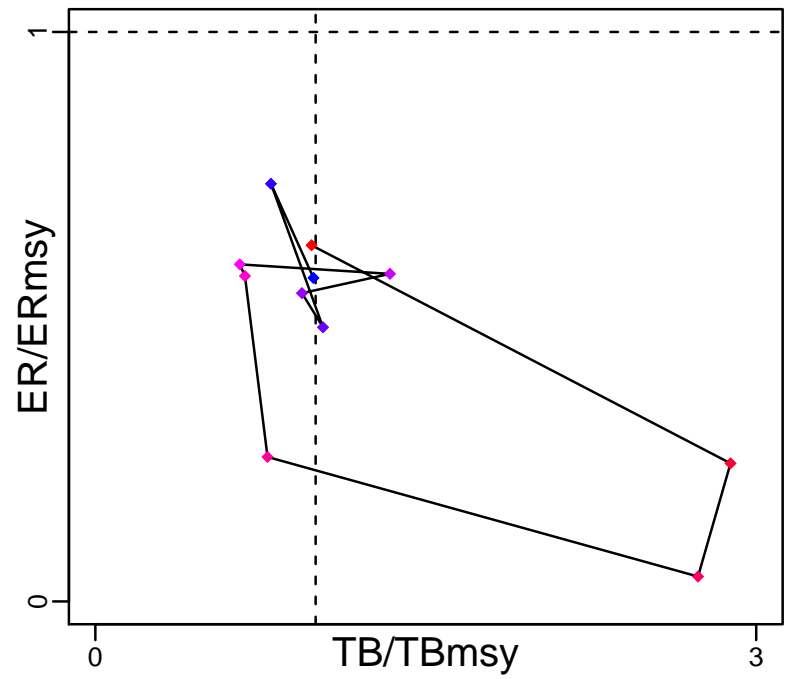
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	94	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.318	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	36		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	0.817		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.625		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

Kobe MSY<sub>pref</sub> (1987–2011–WATSON)



Kobe MGT<sub>pref</sub> (1987–2011–WATSON)



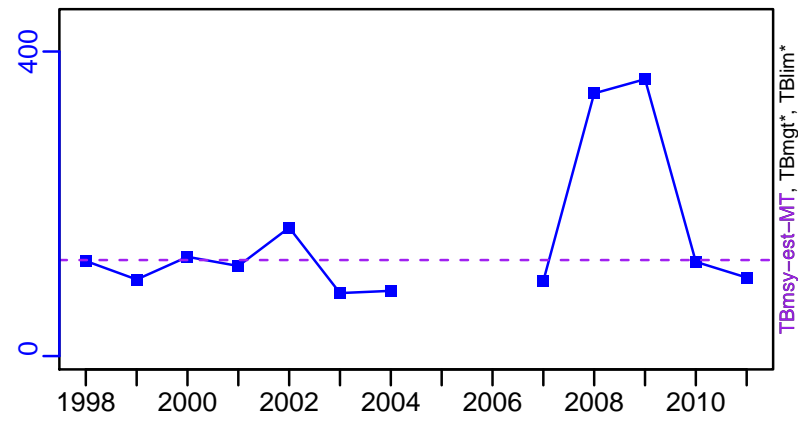
◆ Start Year ◆ End Year \* No Data



# Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

TB-MT (1987-2011-WATSON)

SSB\*



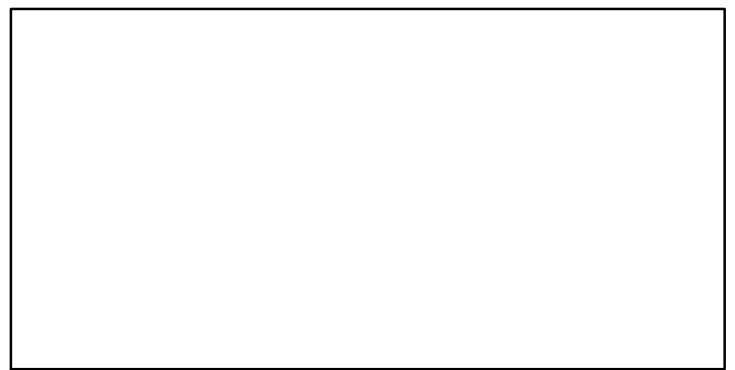
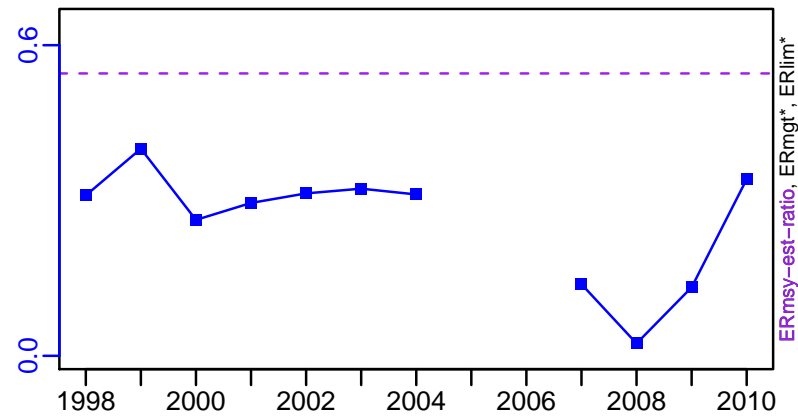
TN \*

F\*



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

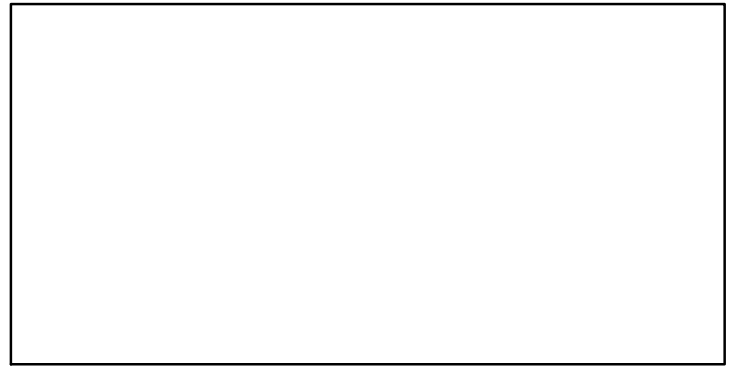
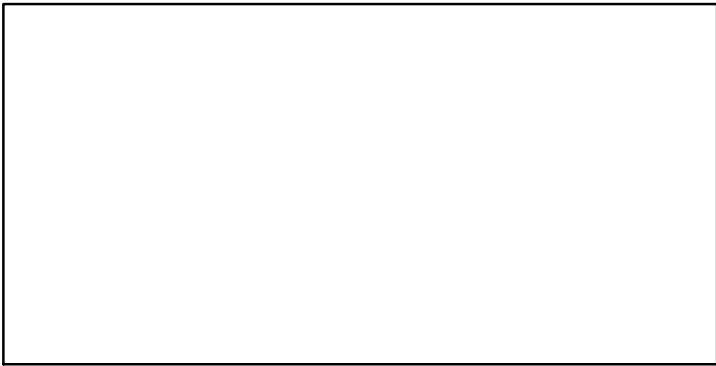
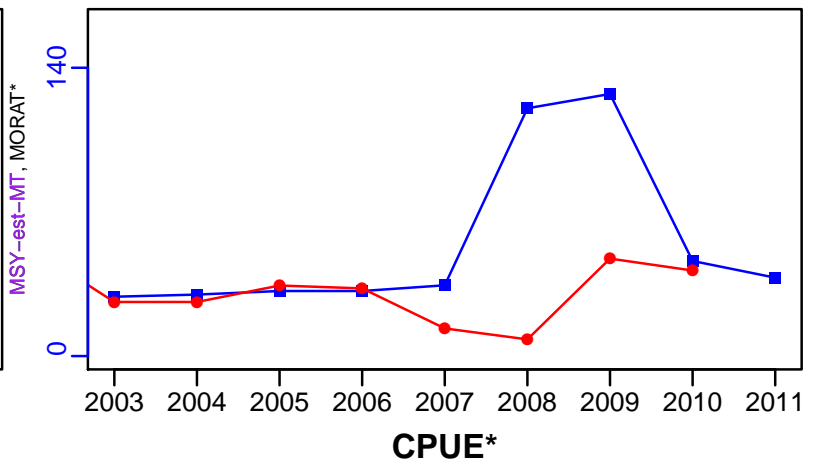
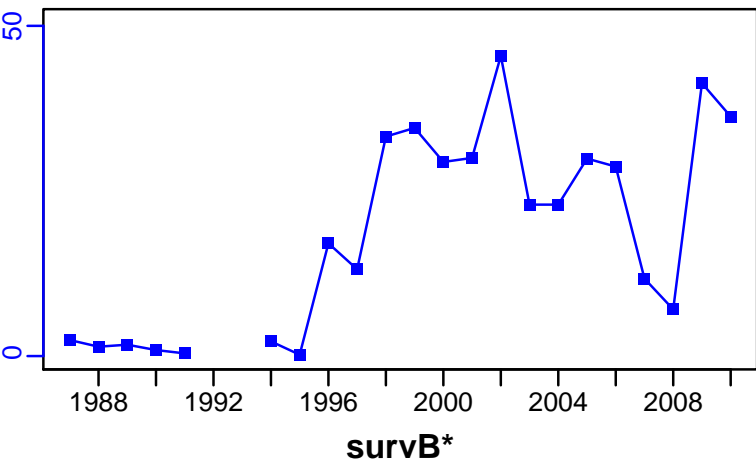
Recruits\*



# Ocean shrimp Shrimp Management Area 16 [PANDALSMA16]

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

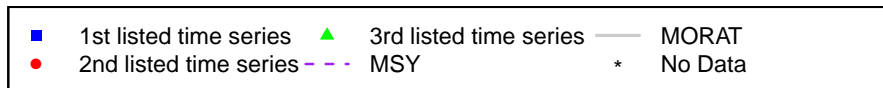
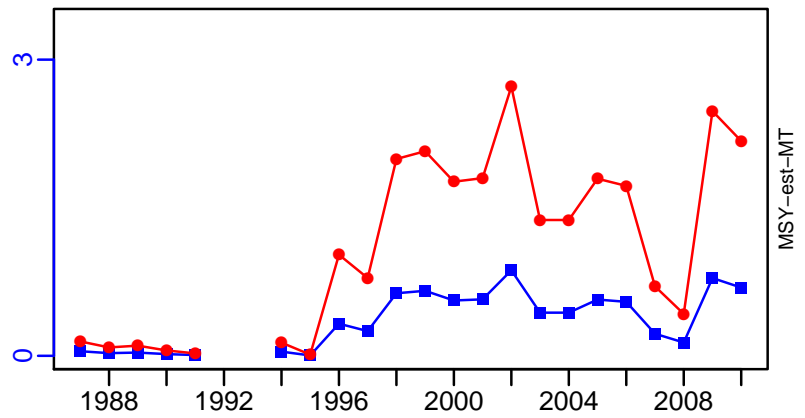
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



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

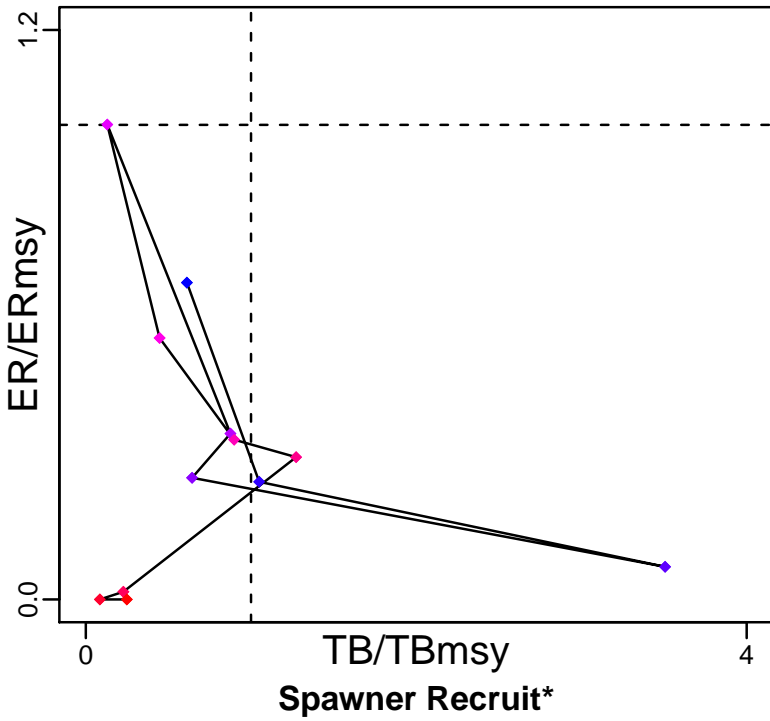
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMA18-19-1987-2011-WATSON
<b>Area</b>	Shrimp Management Areas 18 and 19
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	224
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.731
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	164
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

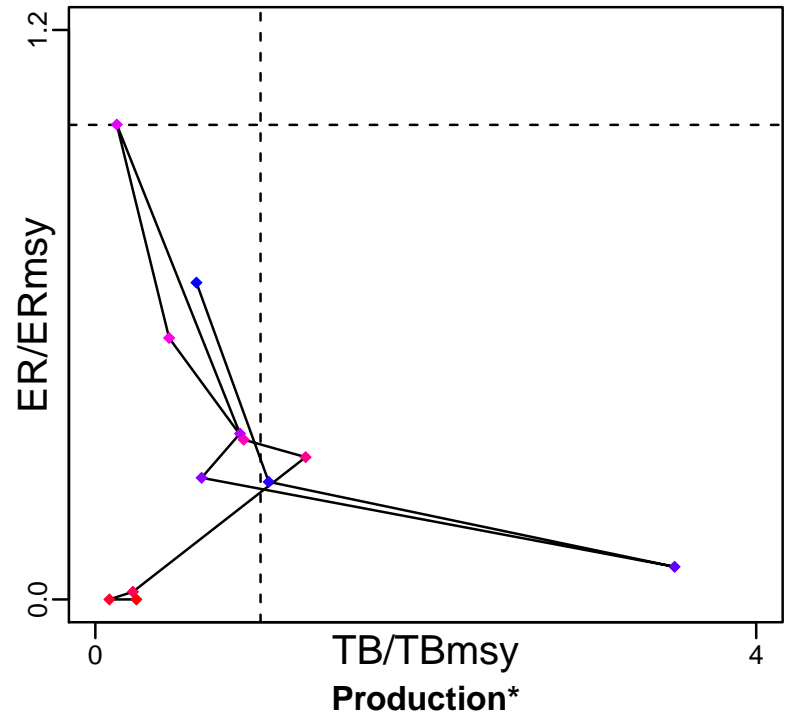
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	56	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	0		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	0.248		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

Kobe MSYpref (1987-2011-WATSON)



Kobe MGTpref (1987-2011-WATSON)

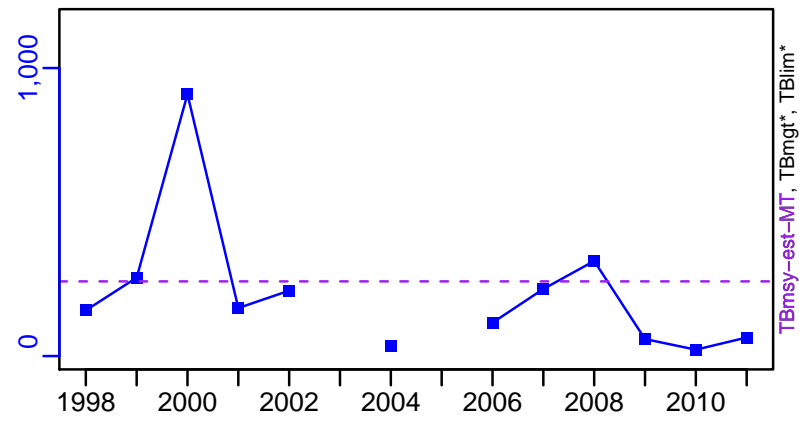


◆ Start Year ◆ End Year \* No Data

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

TB-MT (1987-2011-WATSON)

SSB\*



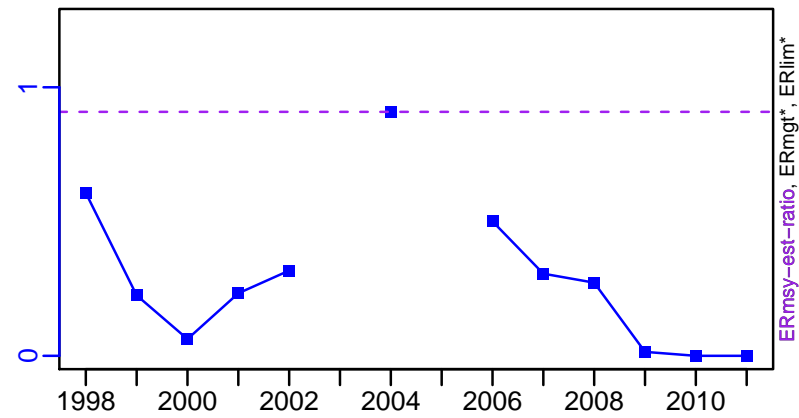
TN \*

F\*



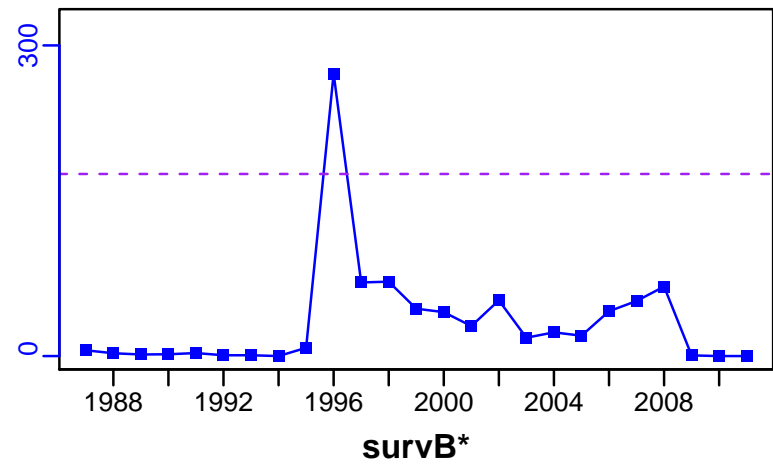
ER-calc-ratio (1987-2011-WATSON)

Recruits\*

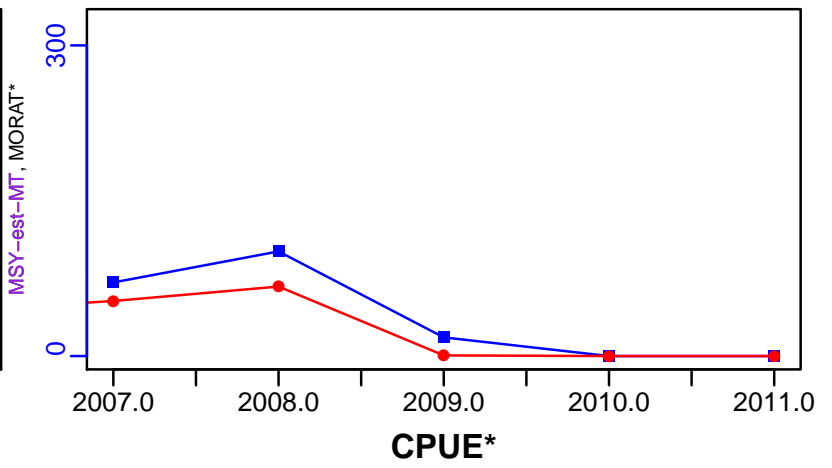


# Ocean shrimp Shrimp Management Areas 18 and 19 [PANDALSMA18-19]

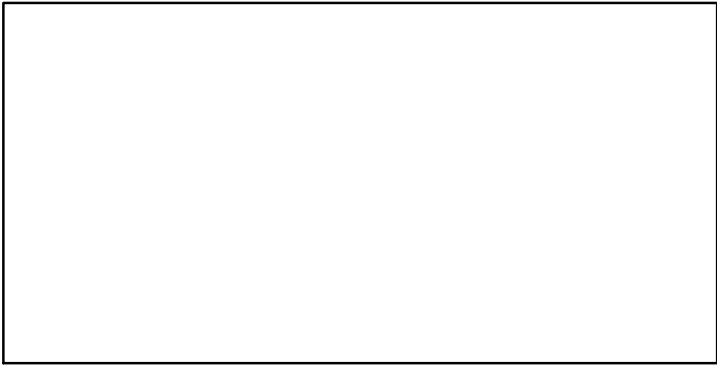
TL-MT, TC\*, RecC\* (1987-2011-WATSON)



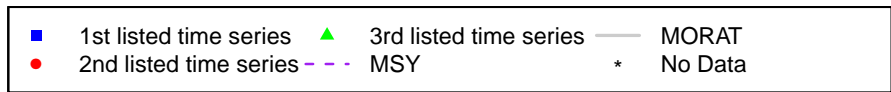
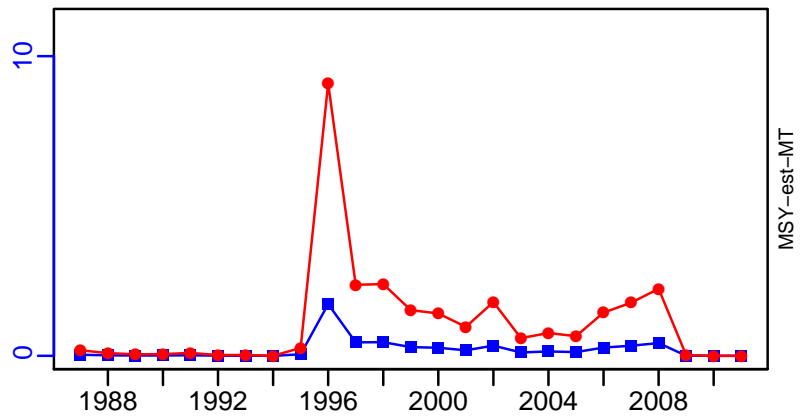
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



## Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

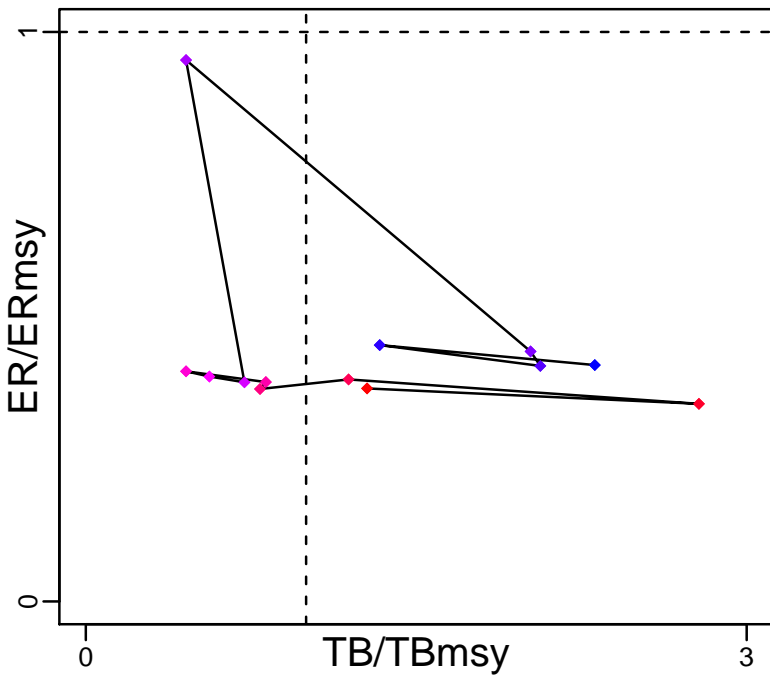
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAFR-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area FR
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	226
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.668
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	151
<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	2011	216	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.25	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	72		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	0.954		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.374		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

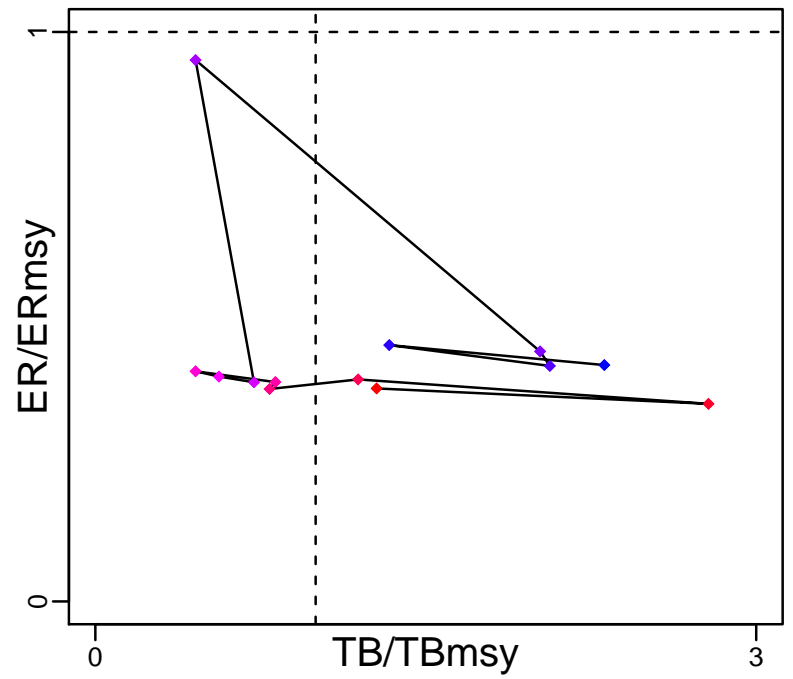
# Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

Kobe MSY<sub>pref</sub> (1987–2011–WATSON)

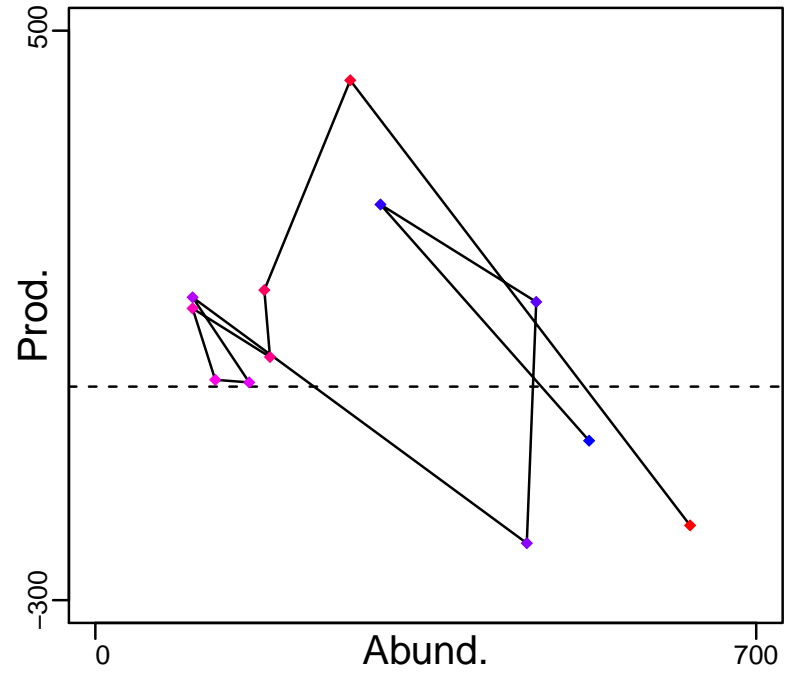


Spawner Recruit\*

Kobe MGT<sub>pref</sub> (1987–2011–WATSON)



Production (1987–2011–WATSON)



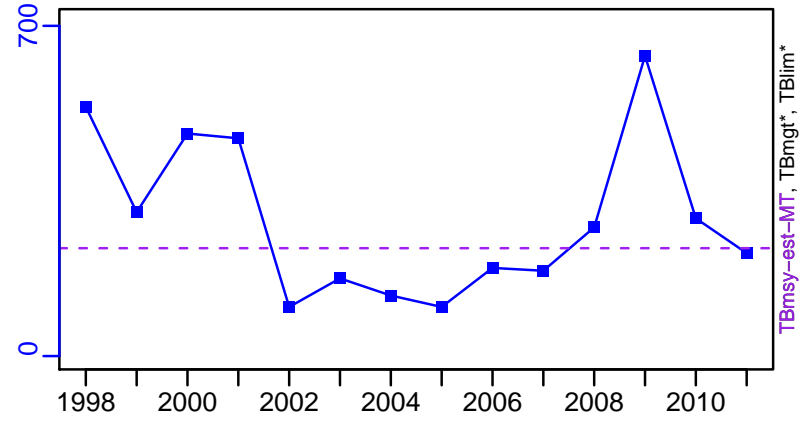
◆ Start Year ◆ End Year \* No Data



# Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

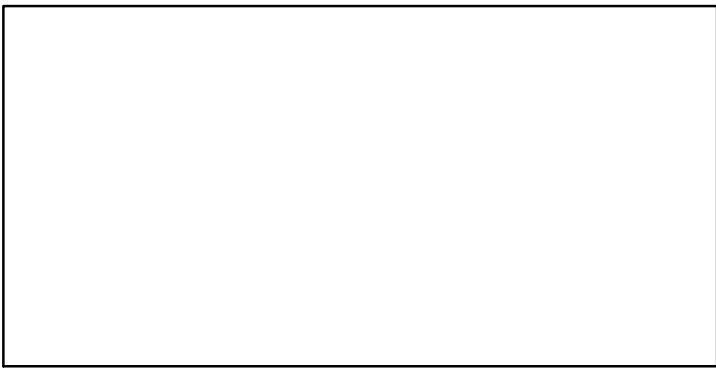
TB-MT (1987-2011-WATSON)

SSB\*



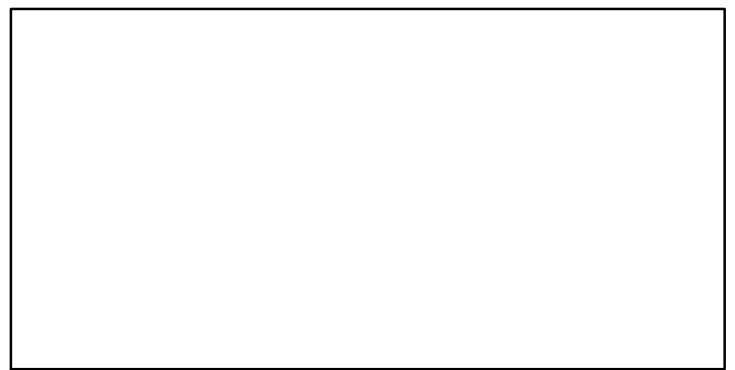
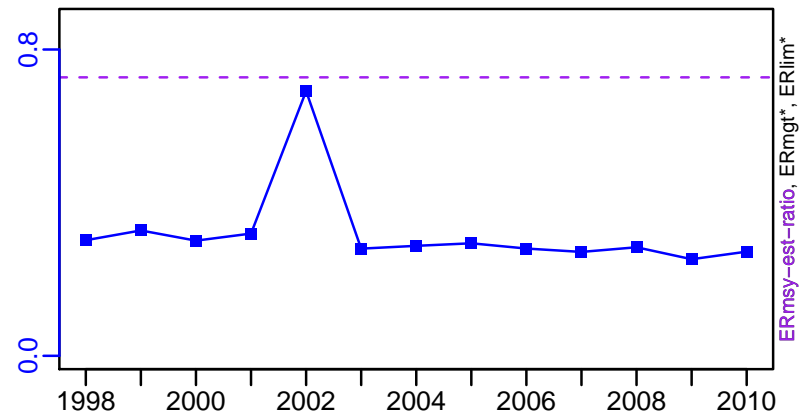
TN \*

F\*



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

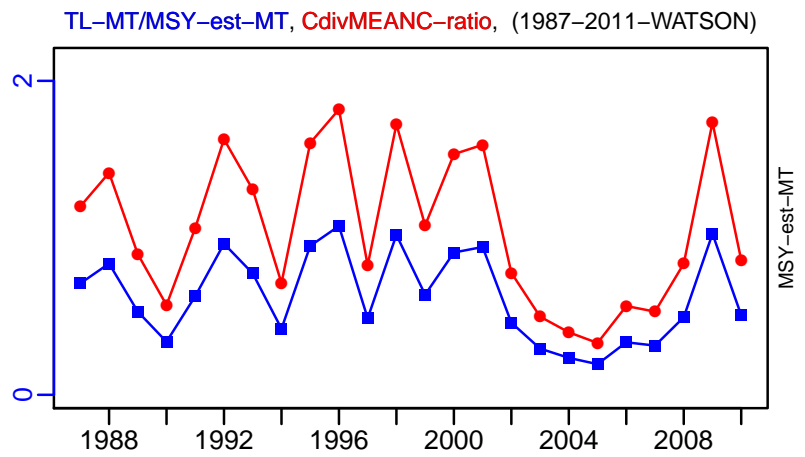
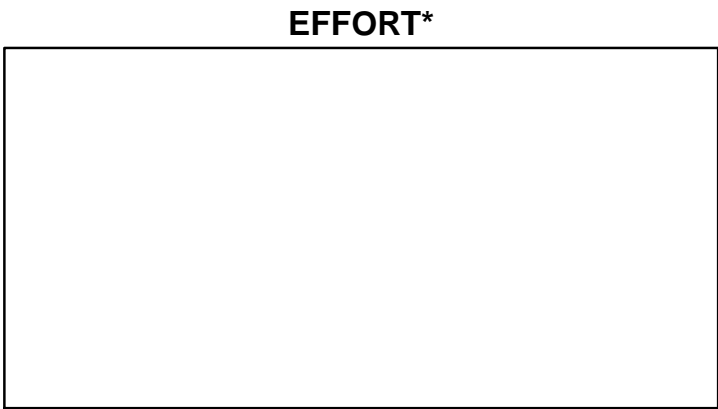
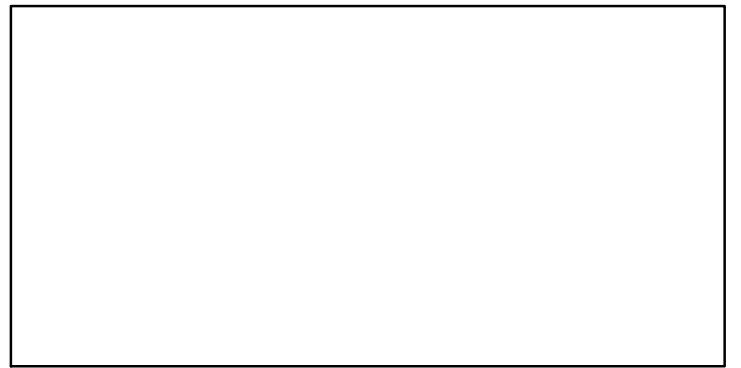
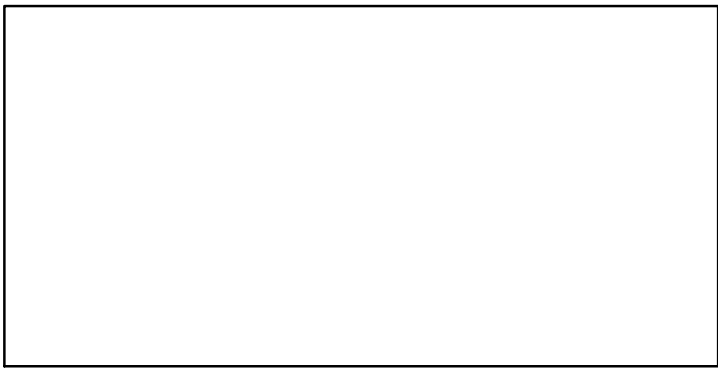
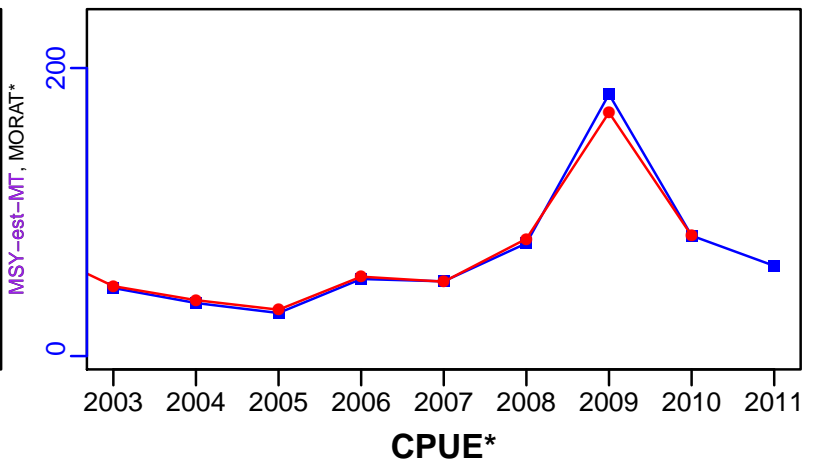
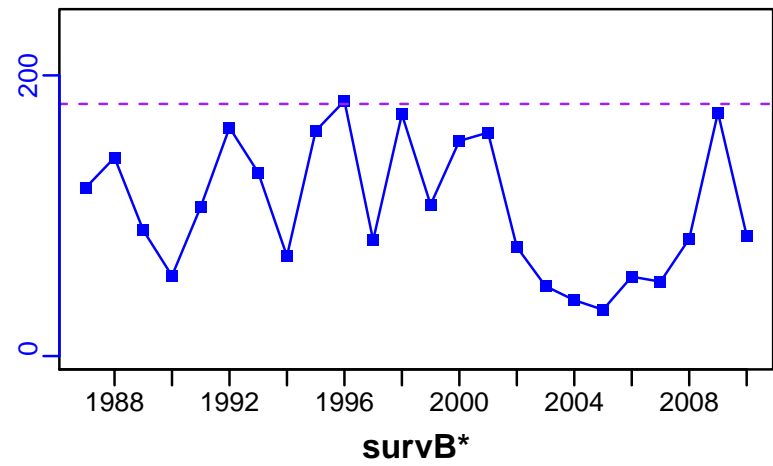
Recruits\*



# Ocean shrimp Shrimp Management Area FR [PANDALSMAFR]

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

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



## Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

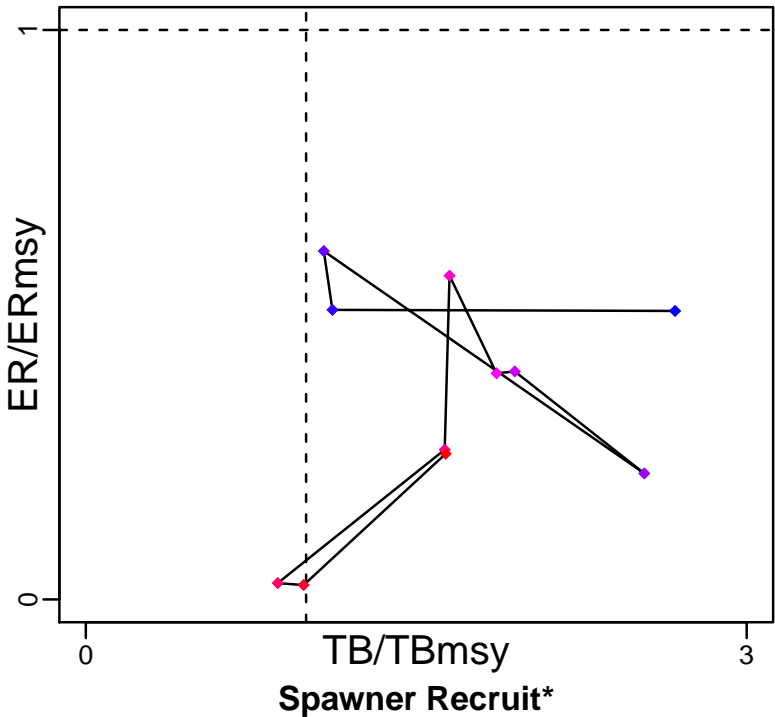
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAGTSE-1990-2012-WATSON
<b>Area</b>	Shrimp Management Area GTSE
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	230
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.575
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	132
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

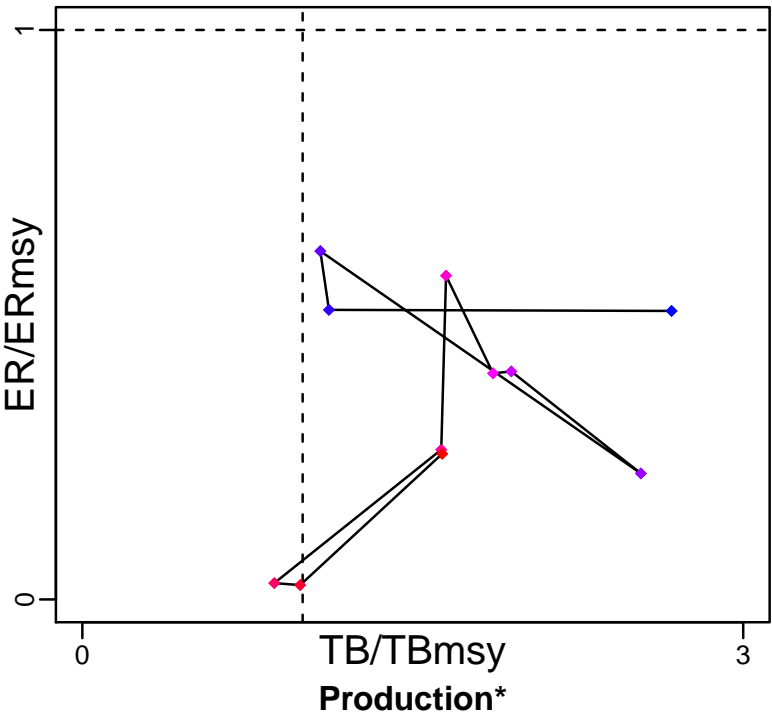
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2012	243	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2012	0.147	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2012	55		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2012	1.059		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.256		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

Kobe MSYpref (1990–2012–WATSON)



Kobe MGTpref (1990–2012–WATSON)

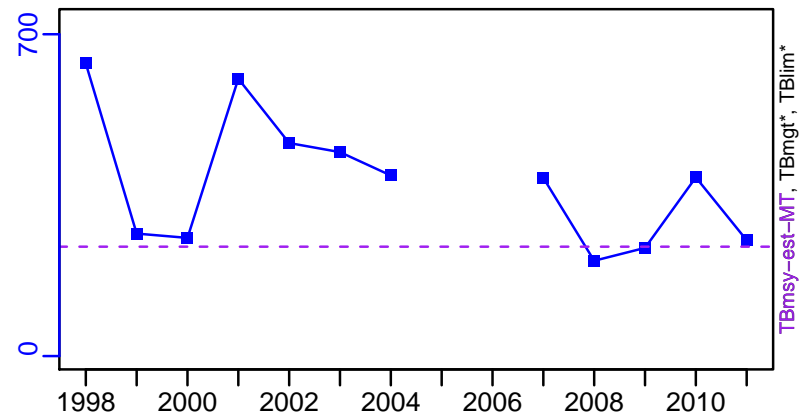


◆ Start Year ◆ End Year \* No Data

# Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

TB-MT (1990-2012-WATSON)

SSB\*



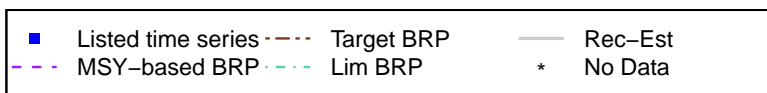
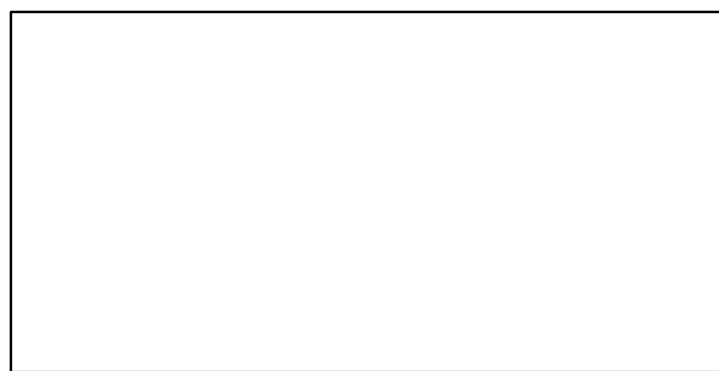
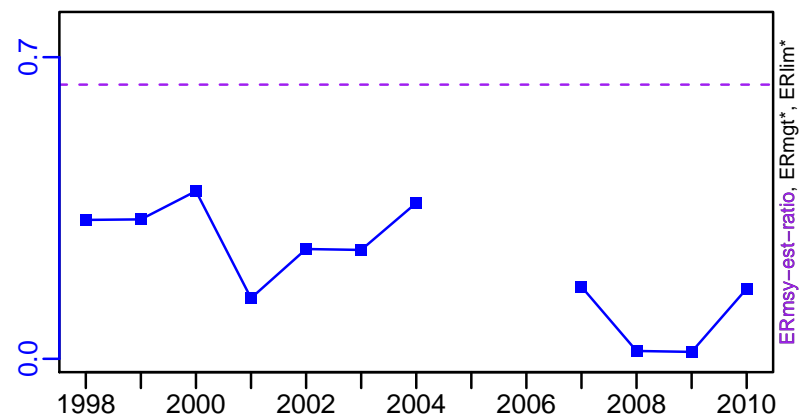
TN \*

F\*



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

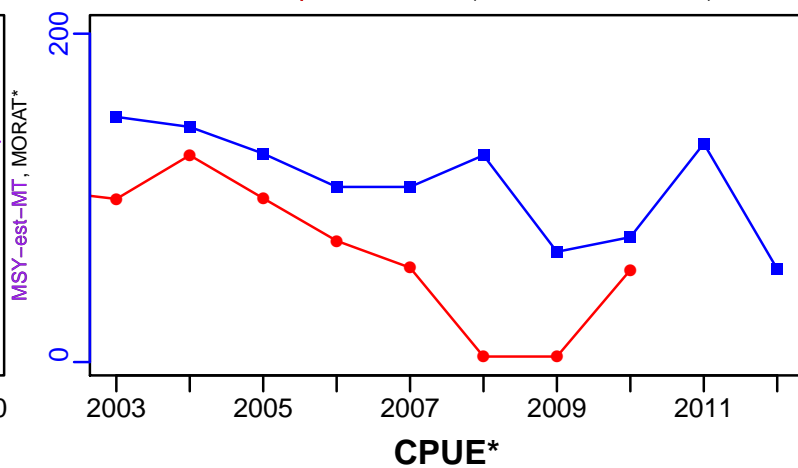
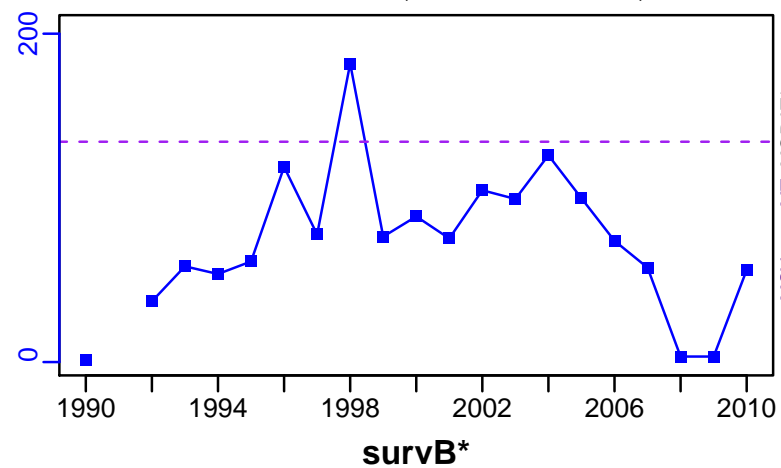
Recruits\*



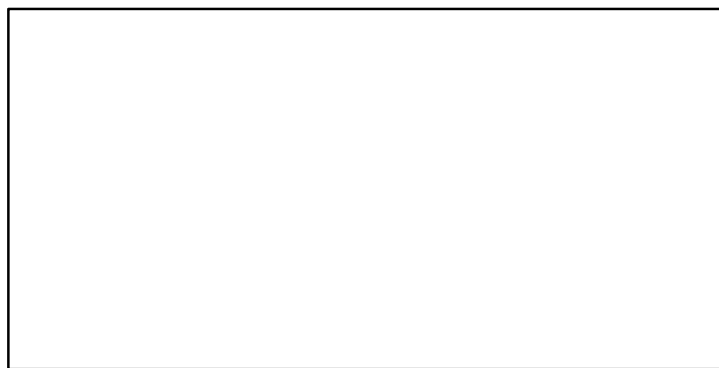
# Ocean shrimp Shrimp Management Area GTSE [PANDALSMAGTSE]

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

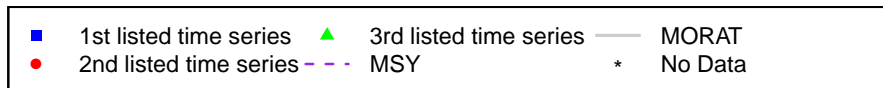
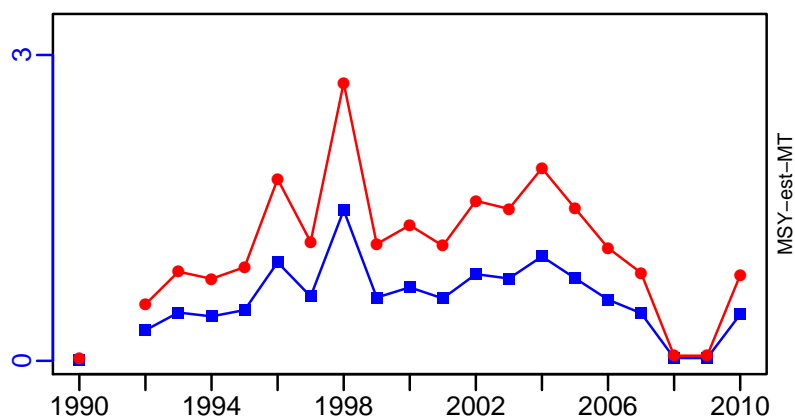
TAC-MT, Cpair-MT, Cadv\* (1990-2012-WATSON)



EFFORT\*



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



## Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

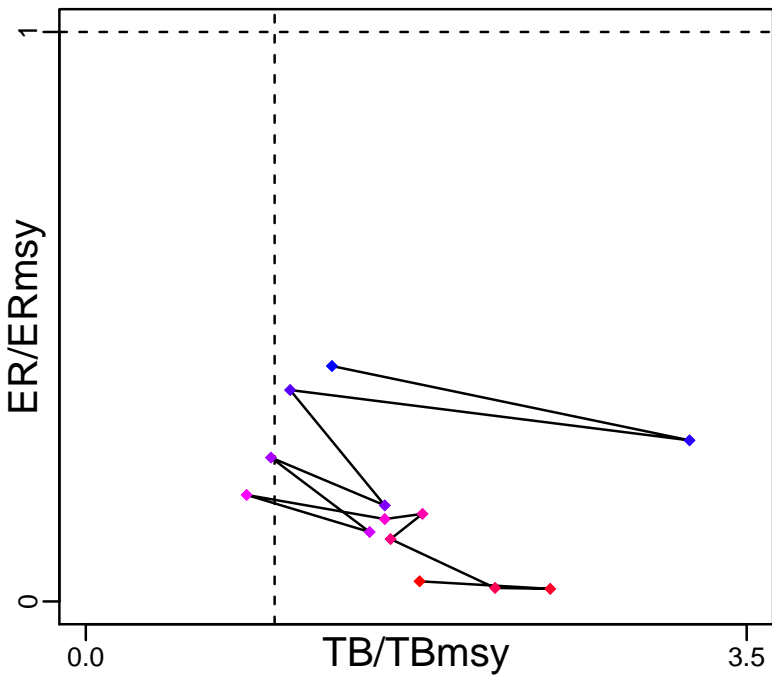
Metadata	
<b>Scientific Name</b>	Pandalus jordani
<b>Current Assess ID</b>	DFO-PANDALSMAPRD-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area PRD
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	651
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.639
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	416
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

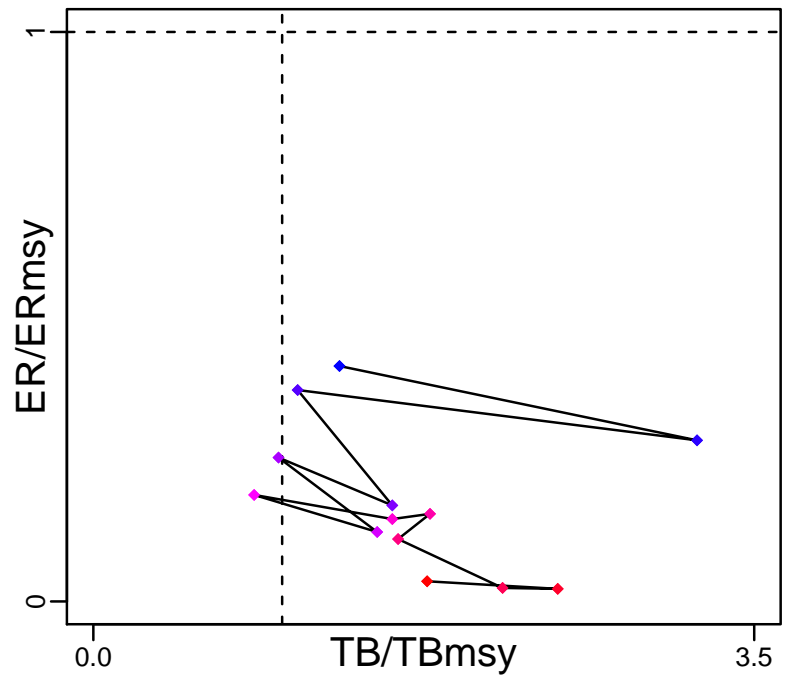
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	1210	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.023	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	26		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.86		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.035		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

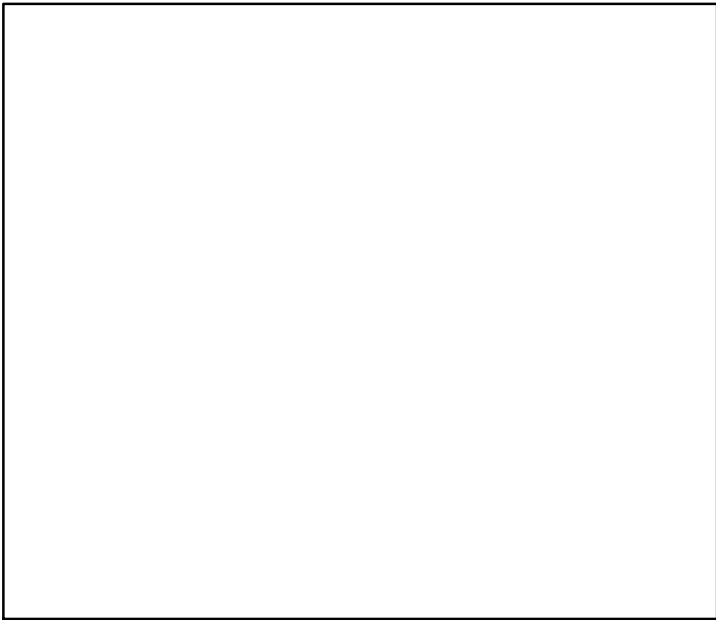
Kobe MSYpref (1987–2011–WATSON)



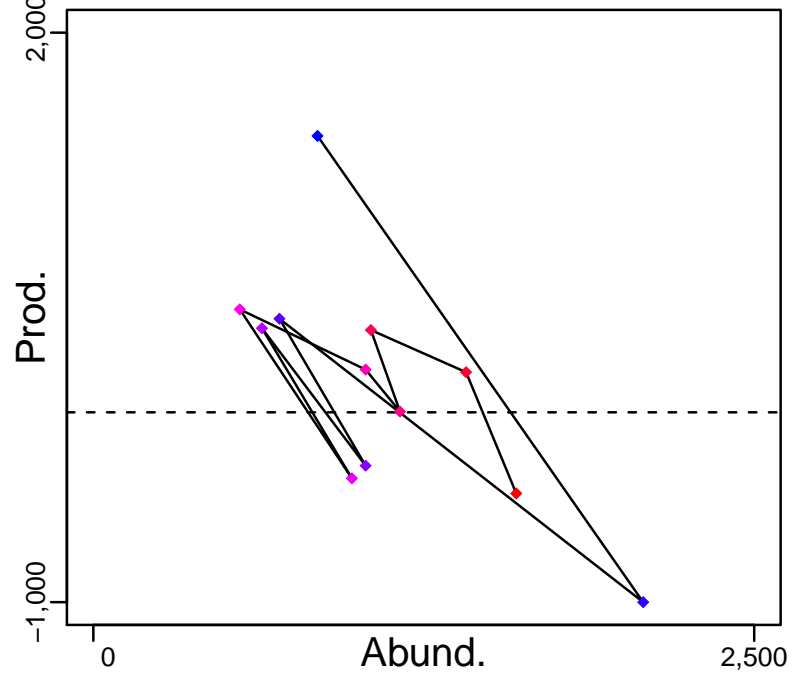
Kobe MGTpref (1987–2011–WATSON)



Spawner Recruit\*



Production (1987–2011–WATSON)

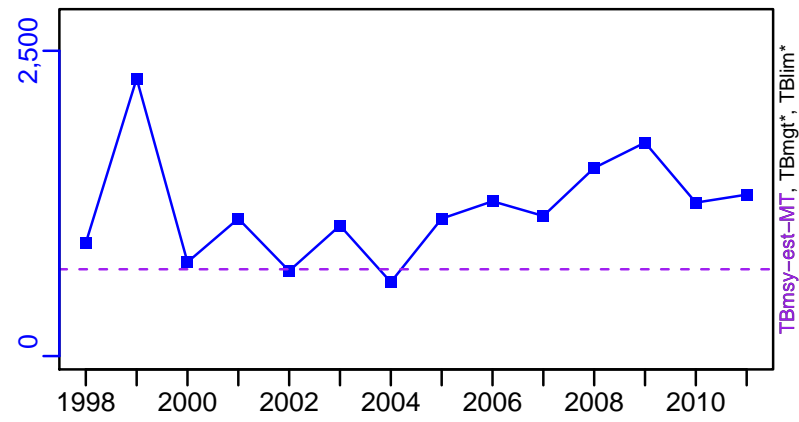


◆ Start Year ◆ End Year \* No Data



# Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

TB-MT (1987-2011-WATSON)



SSB\*



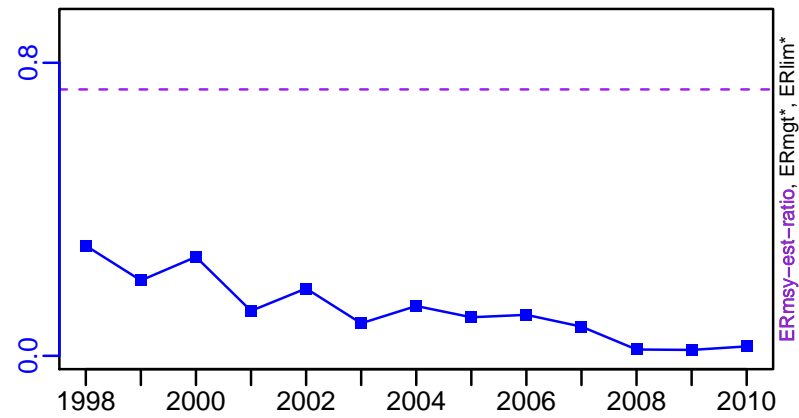
TN \*



F\*



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



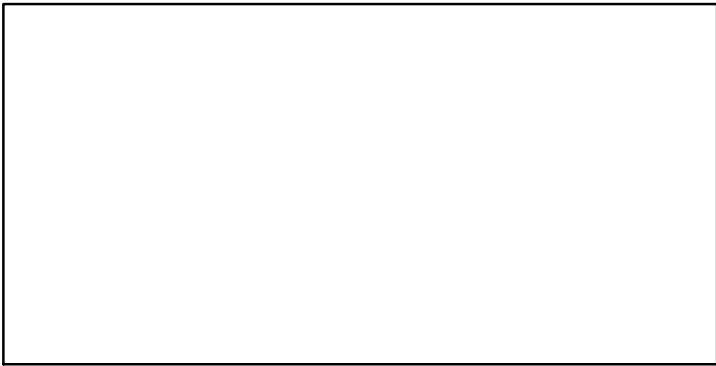
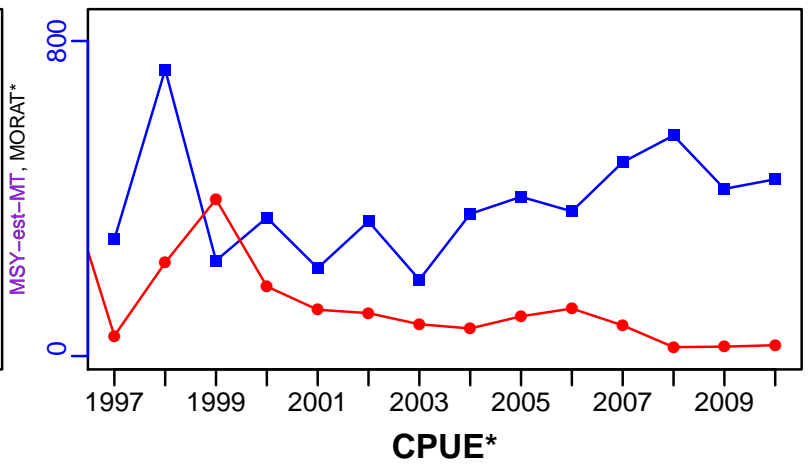
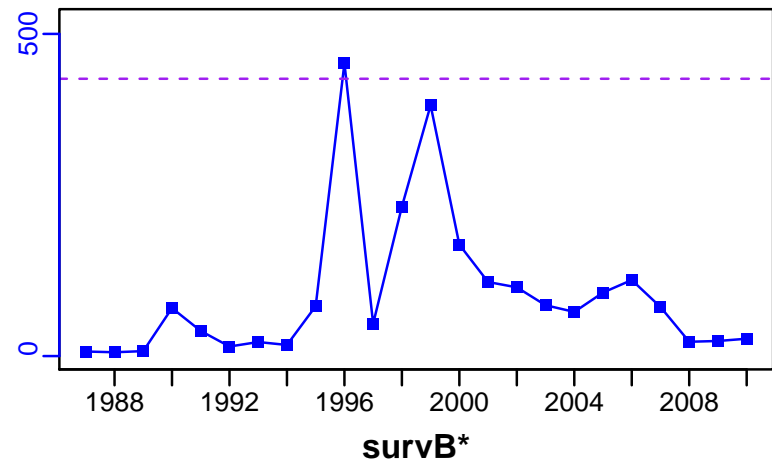
Recruits\*



# Ocean shrimp Shrimp Management Area PRD [PANDALSMAPRD]

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

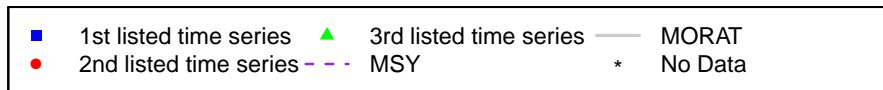
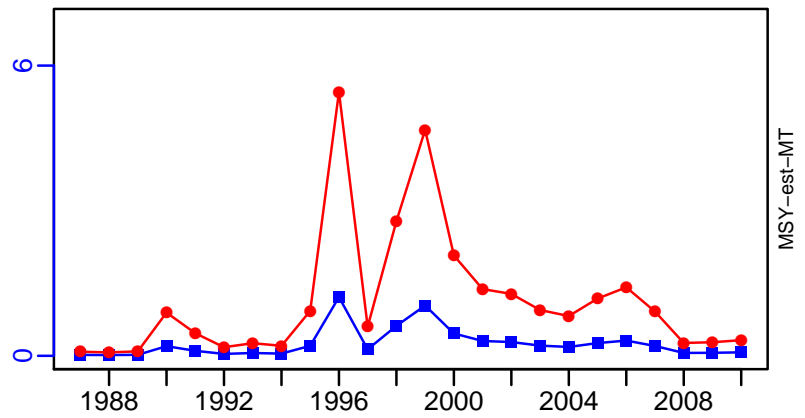
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



**EFFORT\***



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



## Pacific cod Queen Charlotte Sound [PCOD5AB]

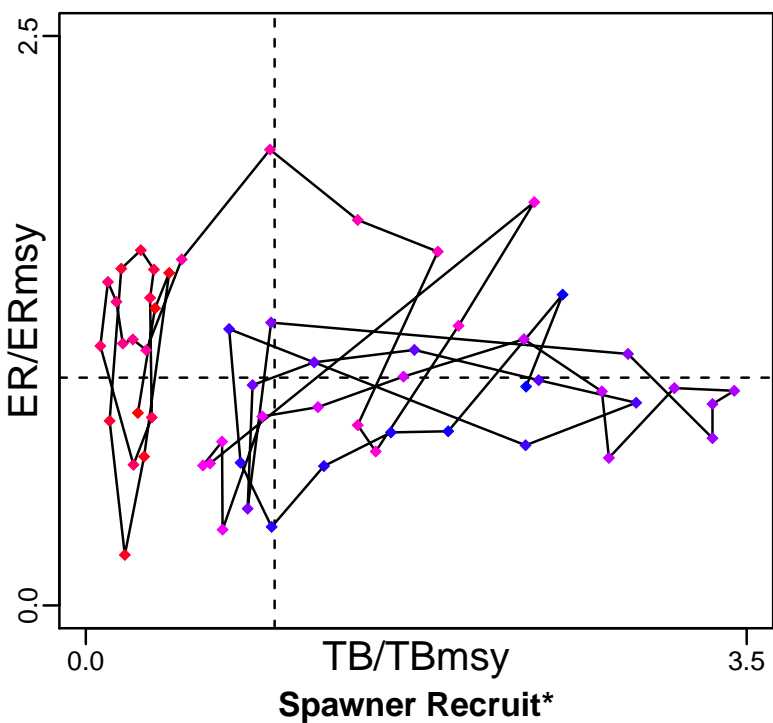
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	DFO-PAC-PCOD5AB-1945-2014-OSGOOD
<b>Area</b>	Queen Charlotte Sound
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2014	5946
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-conv-ratio	2014	0.22
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	9416
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	763
<b>M</b>	M-1/yr	2014	0.426
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2014	0.21
<b>ERlim</b>	-	-	-

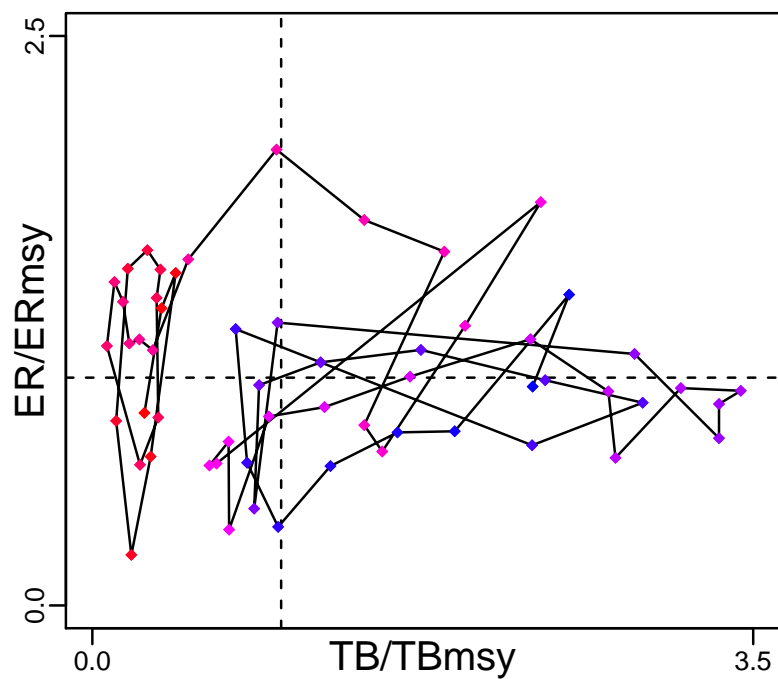
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	1340	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	459,000	Both	-
<b>F</b>	F-1/yr	2014	0.334	-	-
<b>ER</b>	ER-calc-ratio	2014	0.186	-	-
<b>TC</b>	TC-MT	2014	178		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2014	0.387		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2014	0.845		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific cod Queen Charlotte Sound [PCOD5AB]

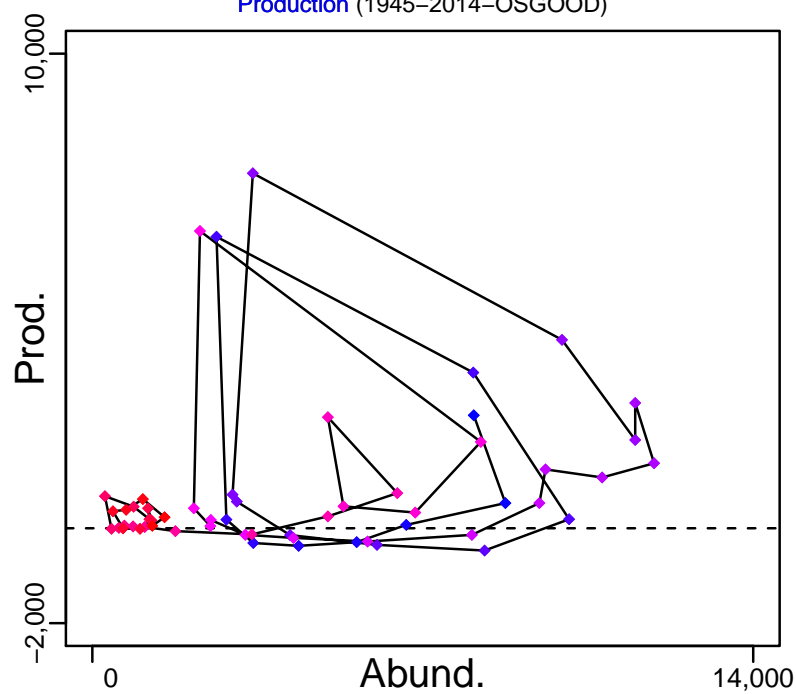
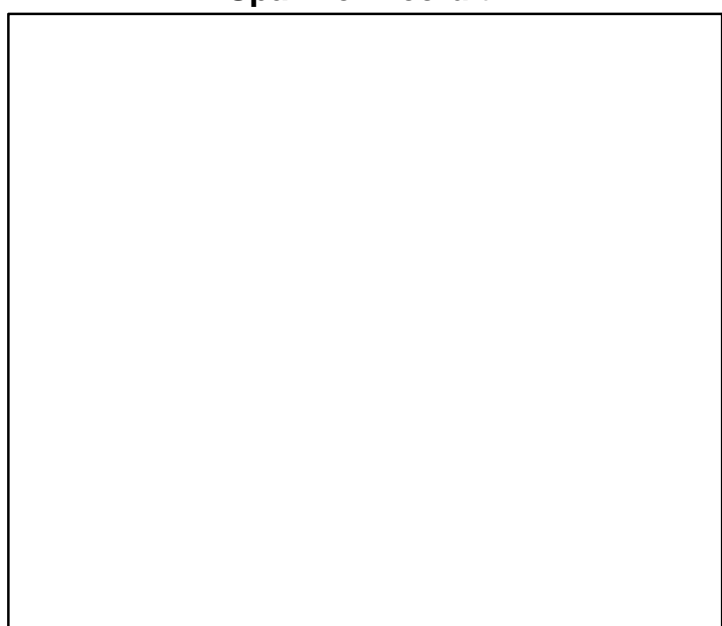
Kobe MSYpref (1945–2014–OSGOOD)



Kobe MGTpref (1945–2014–OSGOOD)



Production (1945–2014–OSGOOD)

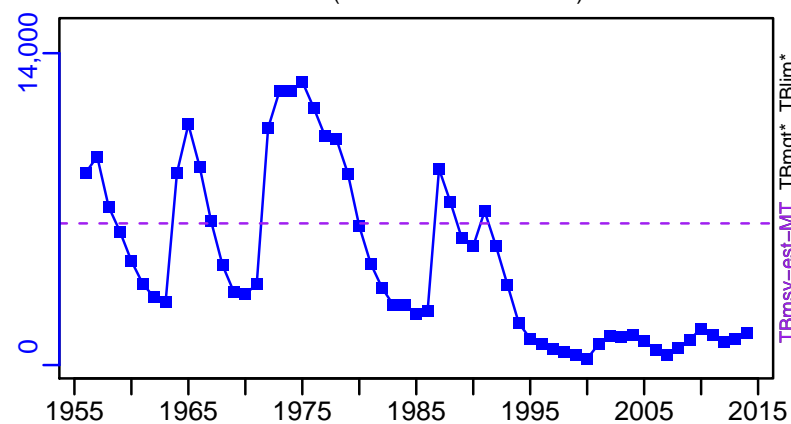


◆ Start Year ◆ End Year \* No Data

# Pacific cod Queen Charlotte Sound [PCOD5AB]

TB-MT (1945-2014-OSGOOD)

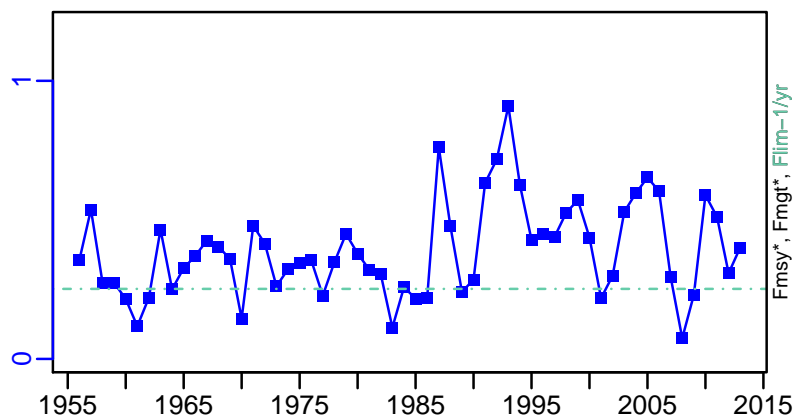
SSB\*



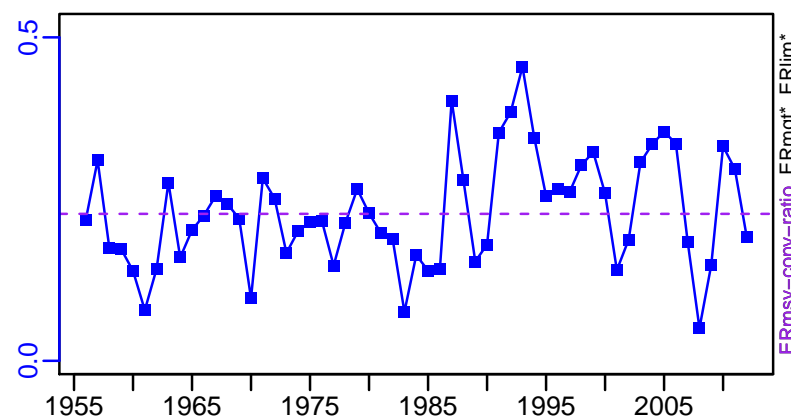
TN \*



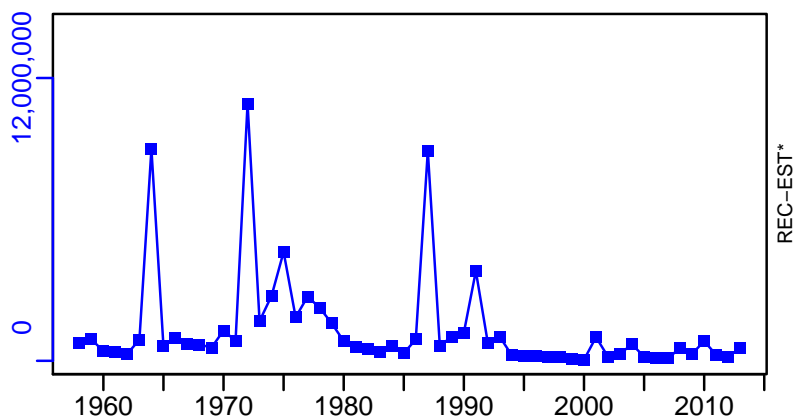
F-1/yr (1945-2014-OSGOOD)



ER-calc-ratio (1945-2014-OSGOOD)

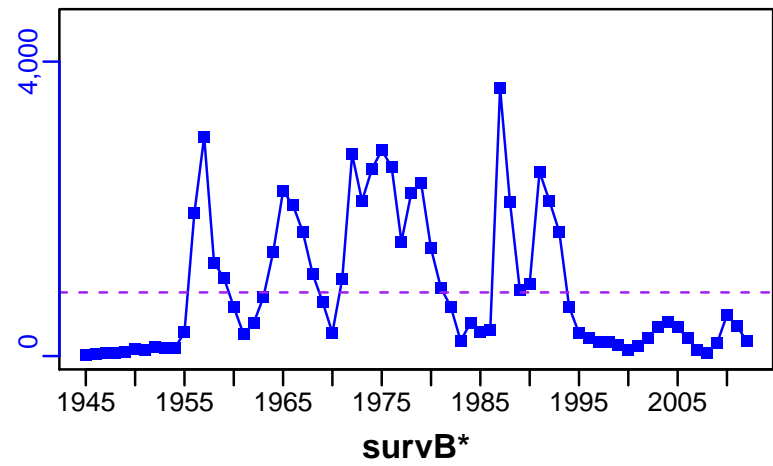


R-E00 (1945-2014-OSGOOD)

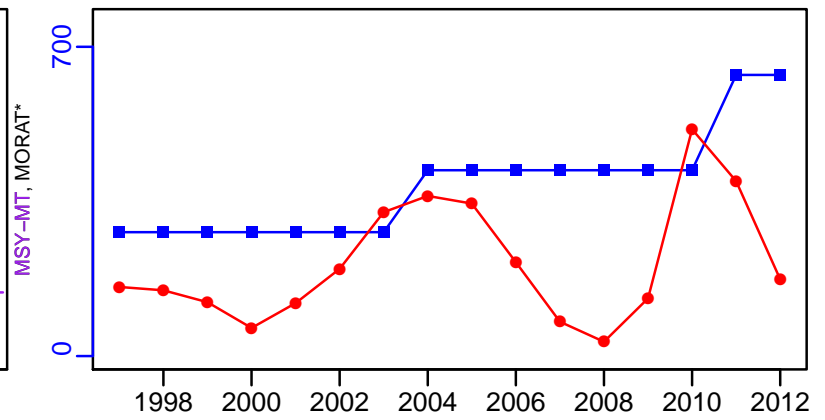


# Pacific cod Queen Charlotte Sound [PCOD5AB]

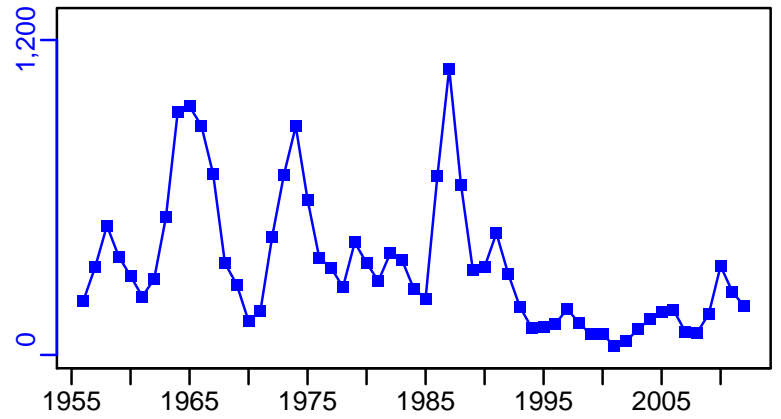
TC-MT, TL\*, RecC\* (1945-2014-OSGOOD)



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



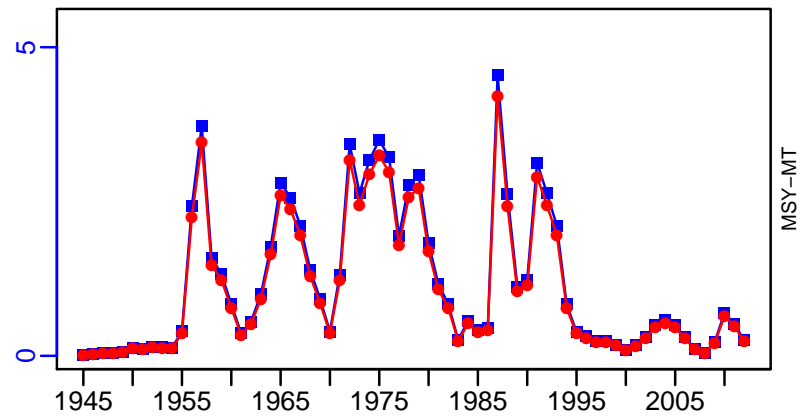
CPUE-kg/hour (1945-2014-OSGOOD)



EFFORT\*



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



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

## Pacific cod Hecate Strait [PCODHS]

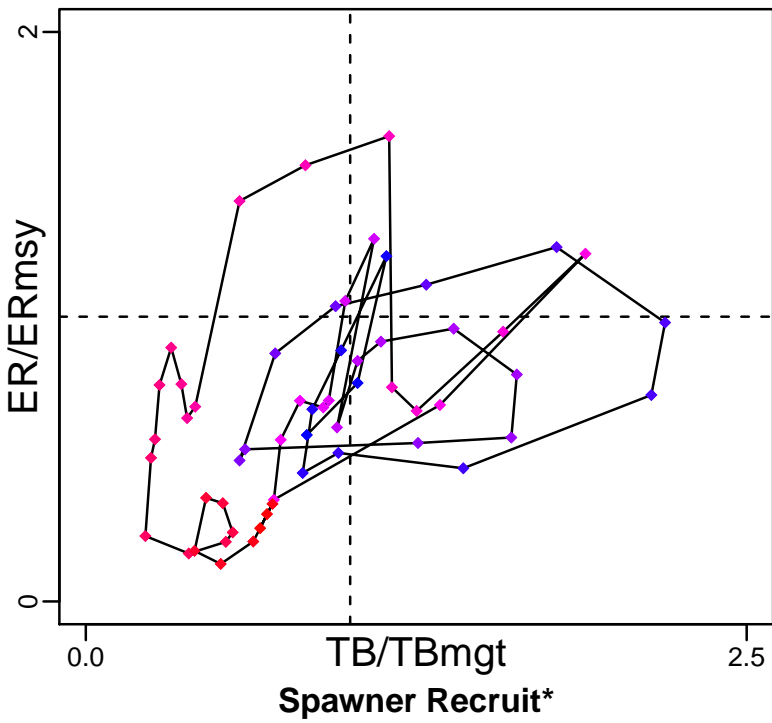
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	DFO-PAC-PCODHS-1944-2014-OSGOOD
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2014, 2005

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2005	8861
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2005	0.354
<b>ERmsy</b>	ERmsy-conv-ratio	2014	0.215
<b>TBmgt</b>	TBmgt-MT	2014	19,258
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	41,949
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	3313
<b>M</b>	M-1/yr	2014	0.393
<b>TBlim</b>	TBlim-MT	2014	12,182
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2014	0.22
<b>ERlim</b>	-	-	-

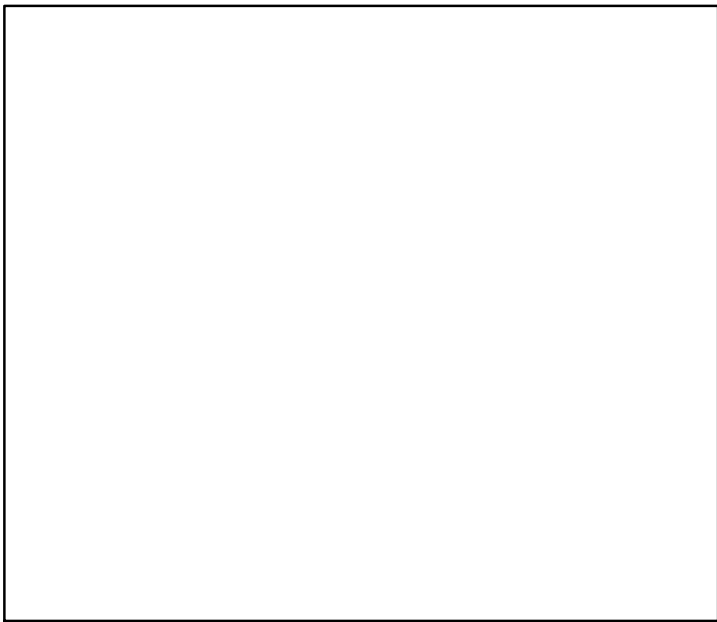
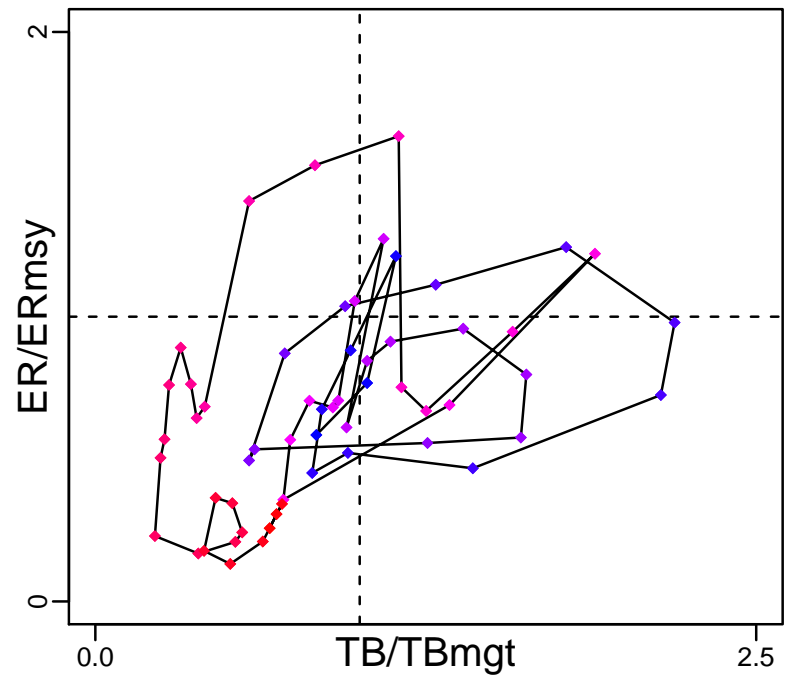
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	16,800	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-E00	2005	5,550,000	-	-
<b>R</b>	R-E00	2014	0	Both	-
<b>F</b>	F-1/yr	2014	0.053	-	-
<b>ER</b>	ER-calc-ratio	2014	0.055	-	-
<b>TC</b>	TC-MT	2014	701		
<b>TL</b>	TL-MT	2005	400		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2005	1.196		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2005	0.219		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2014	0.257		
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2014	0.872		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific cod Hecate Strait [PCODHS]

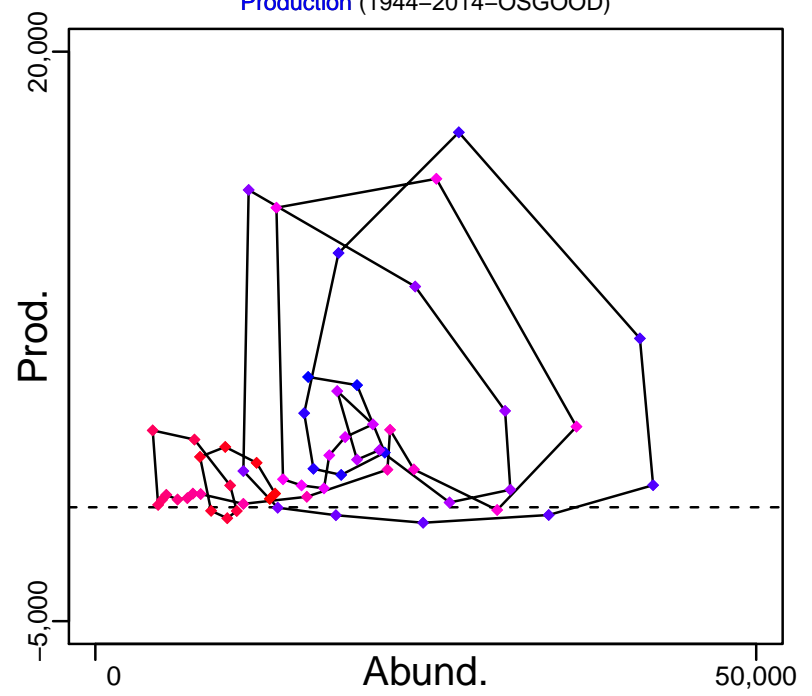
Kobe MSYpref (1944–2014–OSGOOD)



Kobe MGTpref (1944–2014–OSGOOD)



Production (1944–2014–OSGOOD)

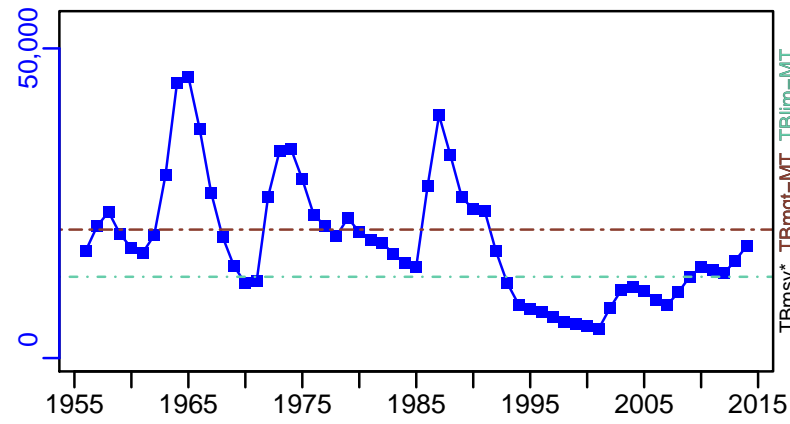


◆ Start Year ◆ End Year \* No Data



# Pacific cod Hecate Strait [PCODHS]

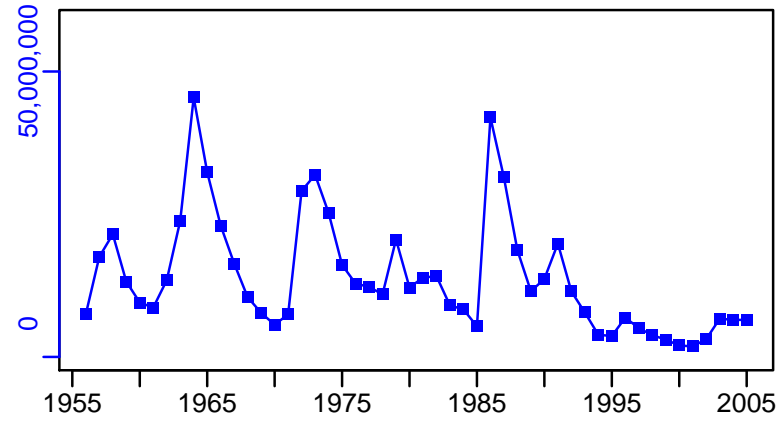
TB-MT (1944-2014-OSGOOD)



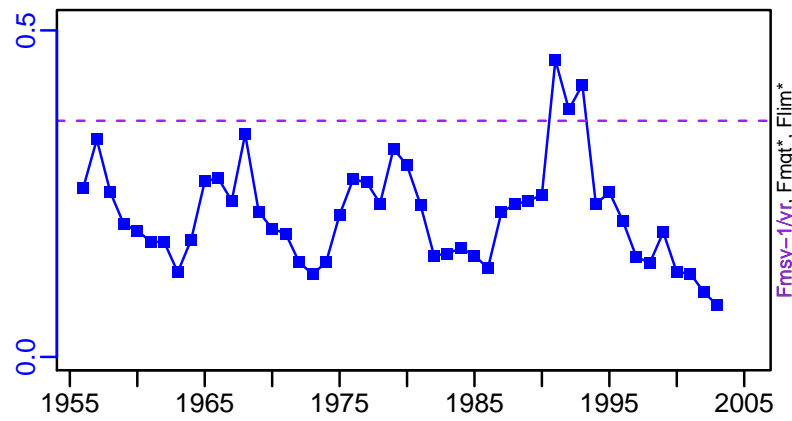
SSB\*



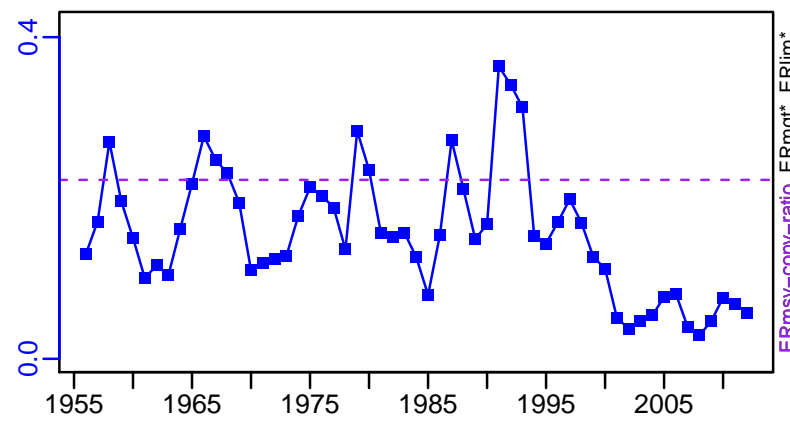
TN-E00 (1956-2005-COLLIE)



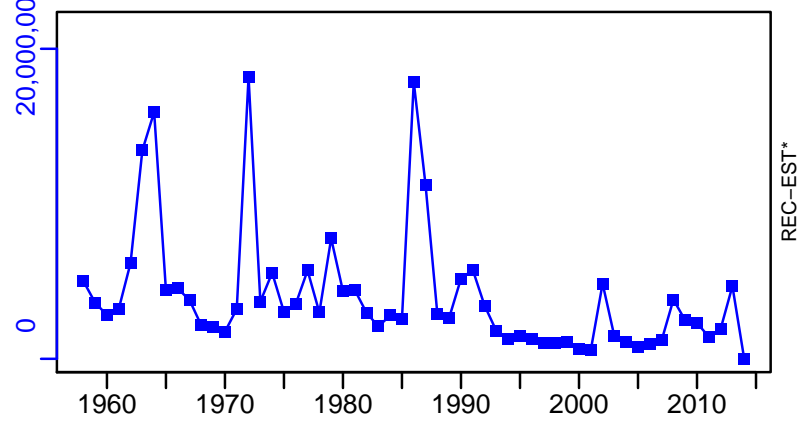
F-1/yr (1956-2005-COLLIE)



ER-calc-ratio (1944-2014-OSGOOD)

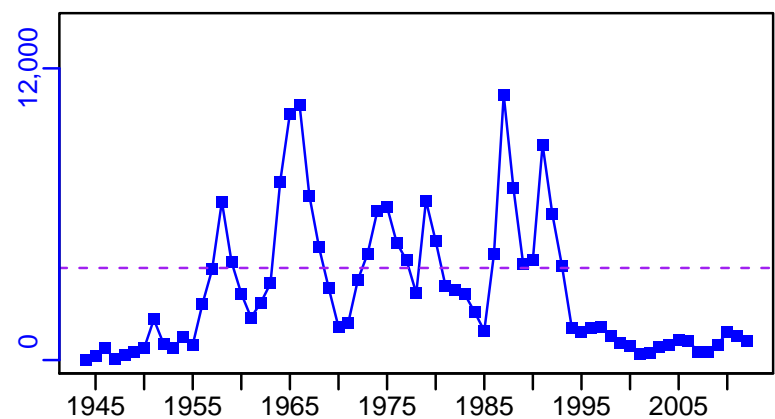


R-E00 (1944-2014-OSGOOD)

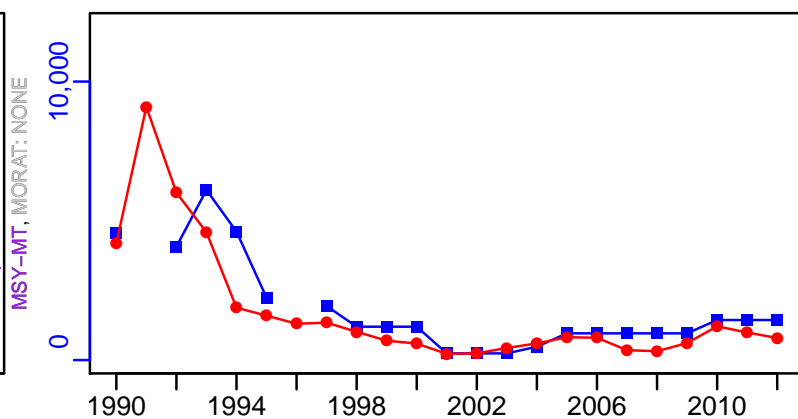


# Pacific cod Hecate Strait [PCODHS]

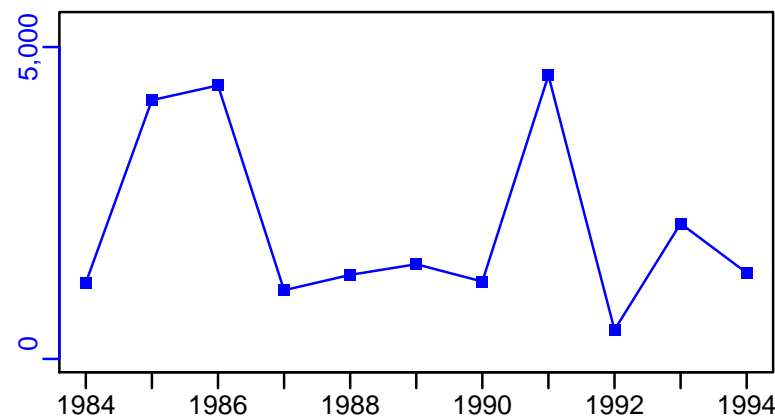
TC-MT, TL\*, RecC\* (1944-2014-OSGOOD)



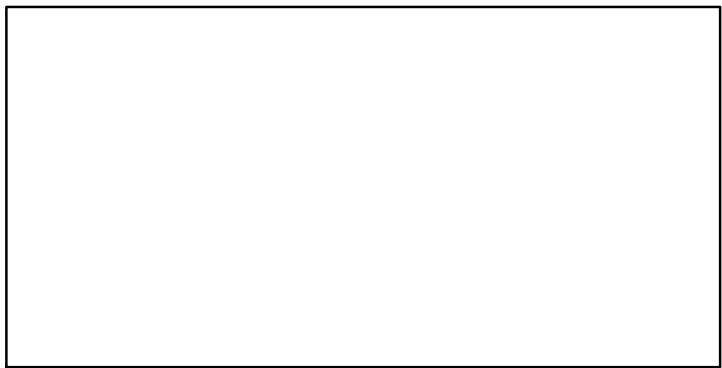
TAC-MT, Cpair-MT, Cadv\* (1944-2014-OSGOOD)



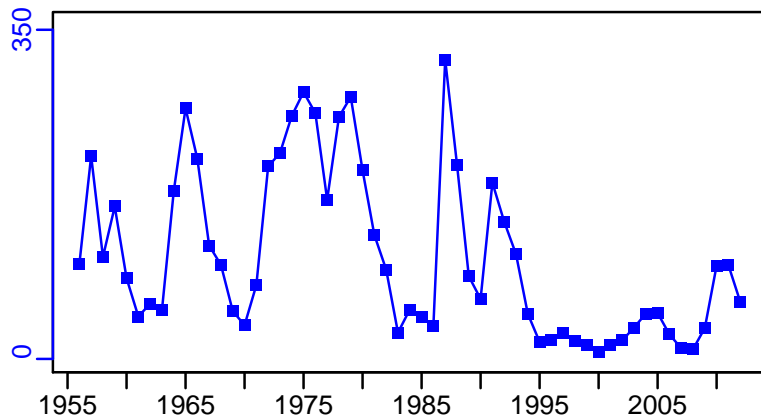
survB-MT (1944-2014-OSGOOD)



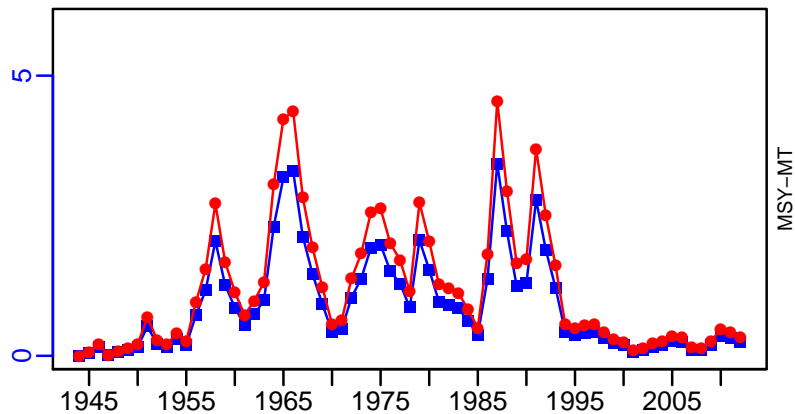
**EFFORT\***



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



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



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

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

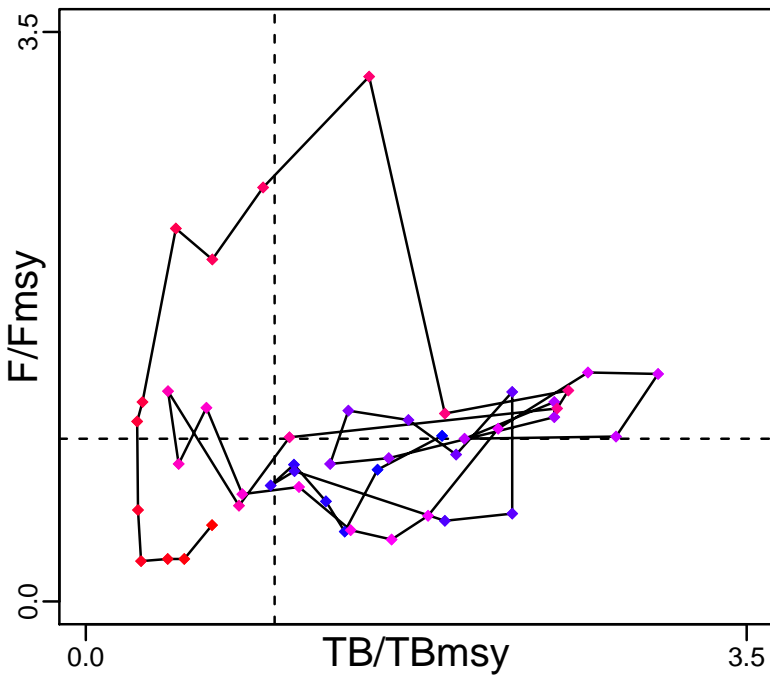
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	DFO-PAC-PCODWCVANI-1956-2002-COLLIE
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	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>	ERmsy-est-ratio	2002	0.255
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2002	1715
<b>M</b>	M-1/yr	2002	0.579
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

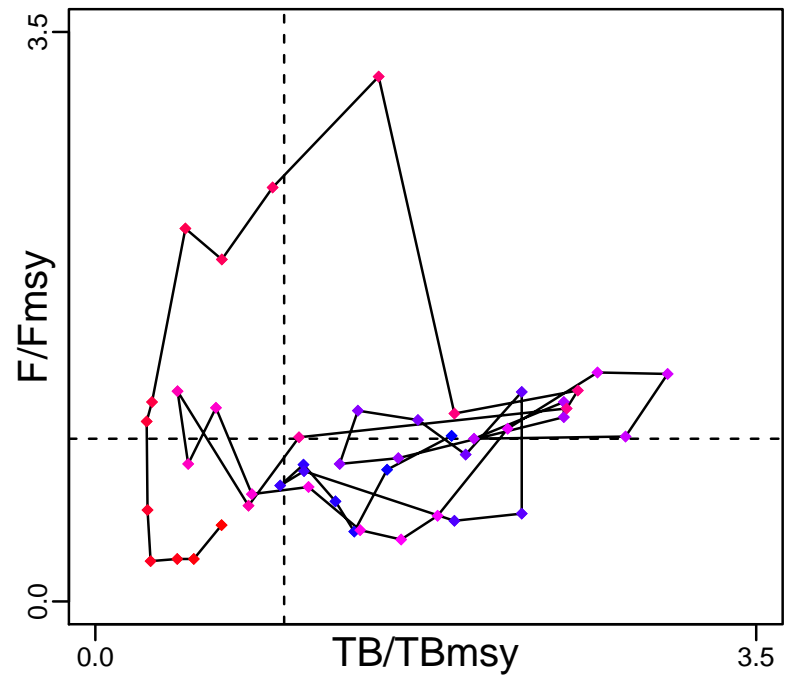
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2002	6980	-	2+
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	TN-E00	2002	5,140,000	-	-
<b>R</b>	R-E00	2002	2,190,000	-	2
<b>F</b>	F-1/yr	2002	0.106	Both	2+
<b>ER</b>	ER-ratio	2002	0.075	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2002	339		
<b>TB/TBmsy</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>	ER-ratio/ERmsy-est-ratio	2002	0.296		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pacific cod West Coast of Vancouver Island [PCODWCVANI]

Kobe MSYpref (1956–2002–COLLIE)



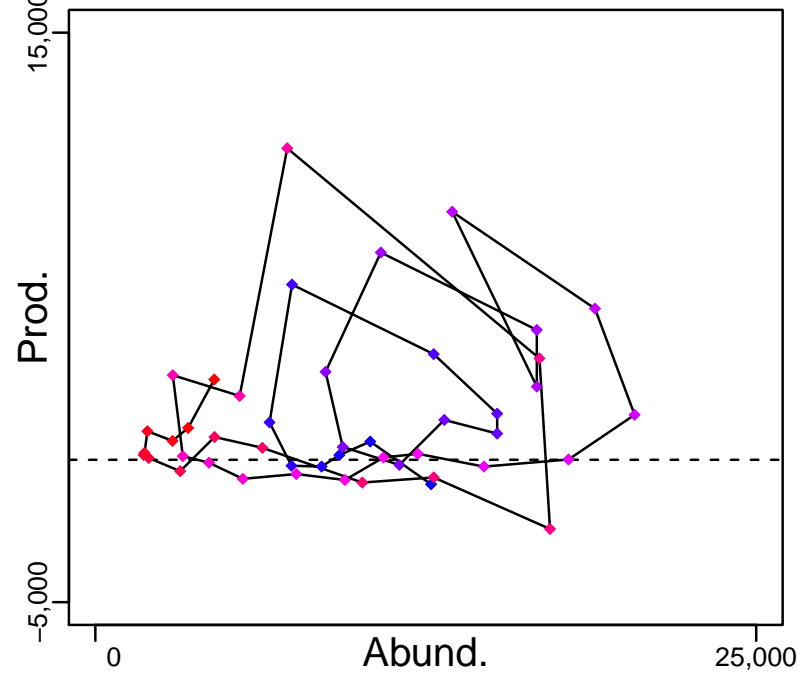
Kobe MGTpref (1956–2002–COLLIE)



Spawner Recruit\*



Production (1956–2002–COLLIE)

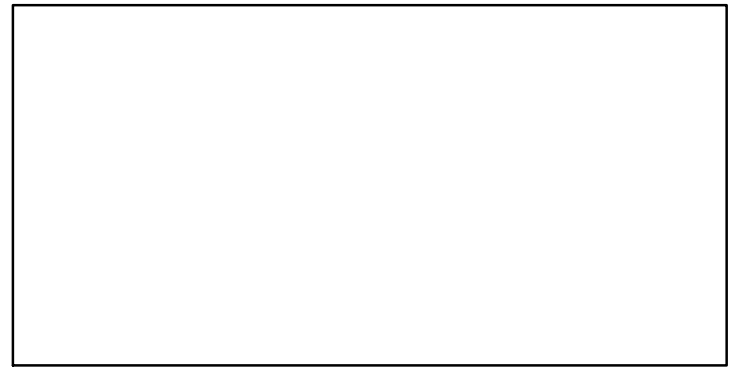
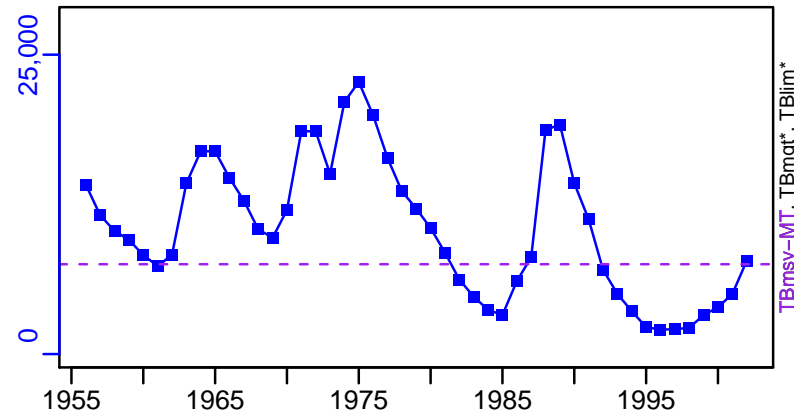


◆ Start Year ◆ End Year \* No Data

# Pacific cod West Coast of Vancouver Island [PCODWCVANI]

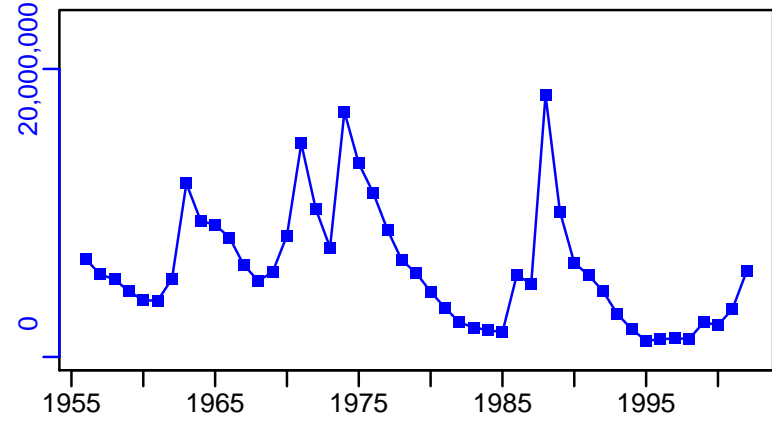
TB-MT (1956-2002-COLLIE)

SSB\*

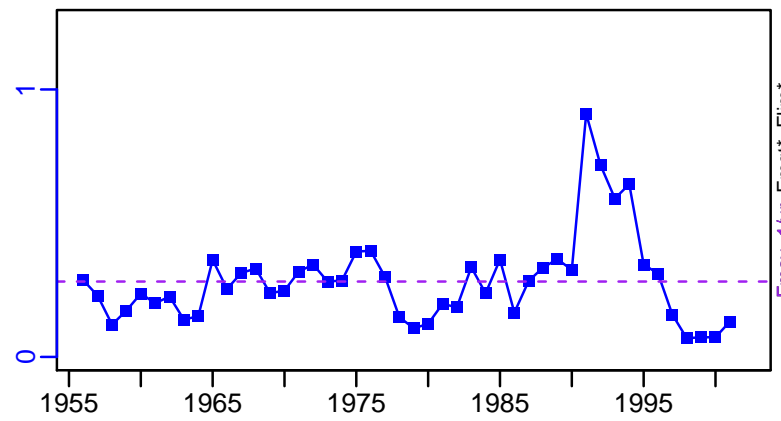


TN-E00 (1956-2002-COLLIE)

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



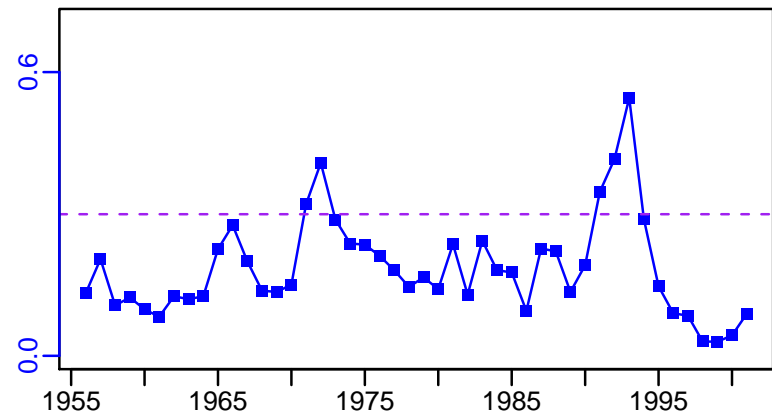
TNmngt\*, TNlim\*



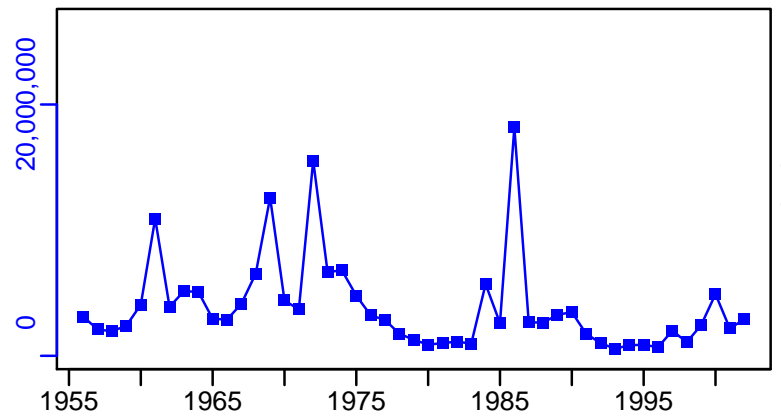
Fmngt\*, Flim\*

ER-ratio (1956-2002-COLLIE)

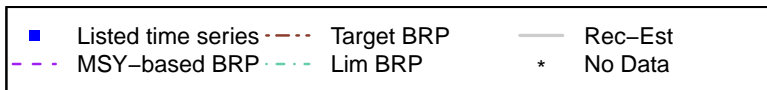
R-E00 (1956-2002-COLLIE)



ERmsy-est-ratio, ERmngt\*, ERlim\*

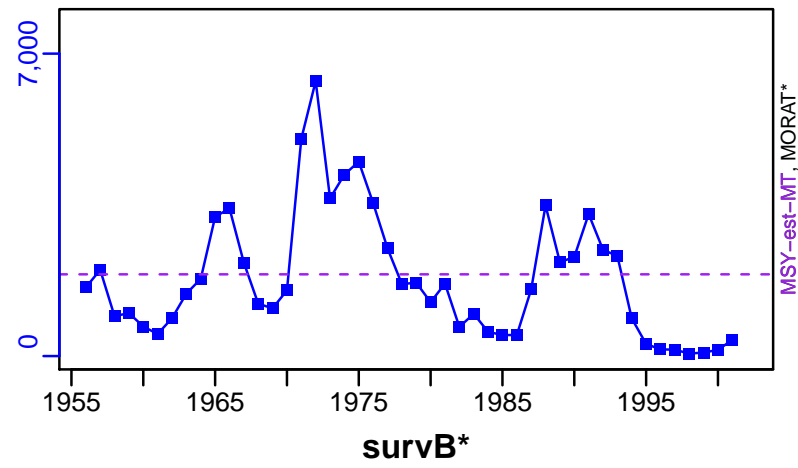


REC-EST\*



# Pacific cod West Coast of Vancouver Island [PCODWCVANI]

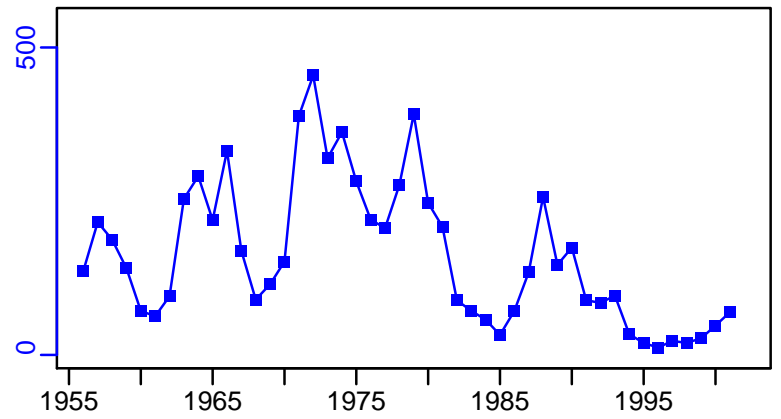
TL-MT, TC\*, RecC\* (1956-2002-COLLIE)



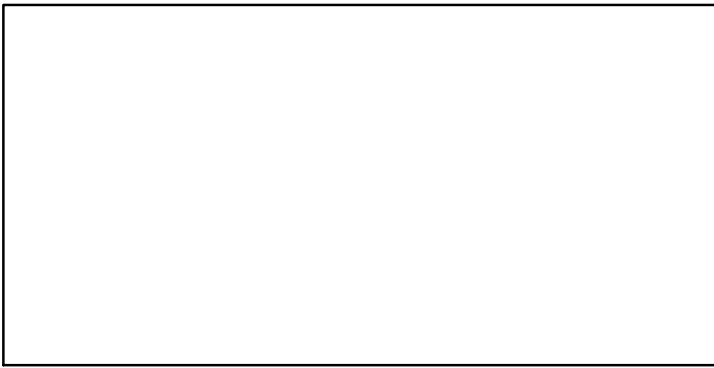
TAC\*, Cpair\*, Cadv\*



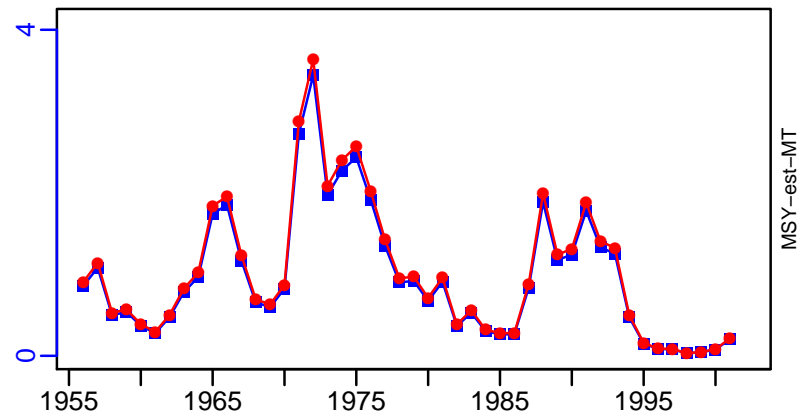
CPUE<sub>raw</sub>-C/E (1956-2002-COLLIE)



EFFORT\*



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



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

## Pacific ocean perch Haida Gwaii [PERCHQCI]

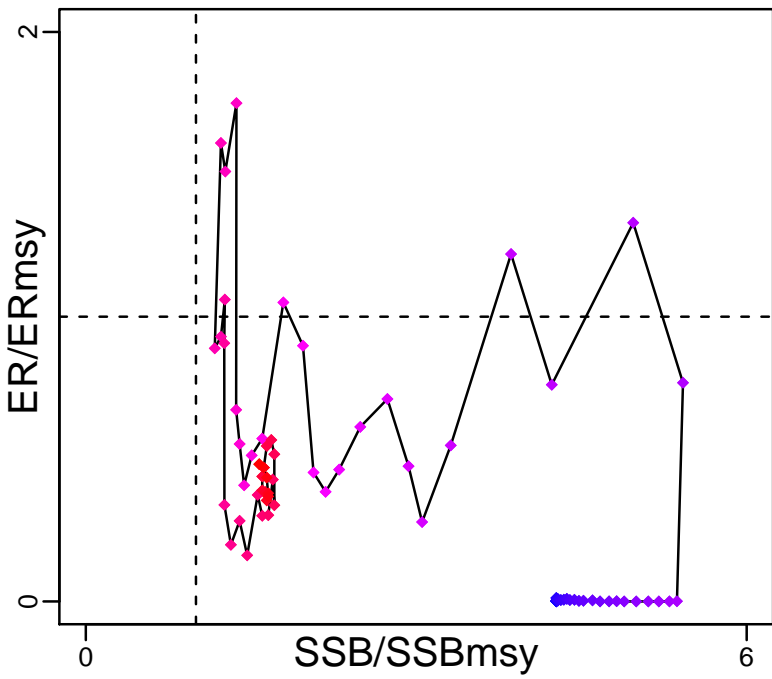
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	DFO-PERCHQCI-1939-2013-WATSON
<b>Area</b>	Haida Gwaii
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts in RAM</b>	2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2013	14,056
<b>SSBmsy</b>	SSBmsy-MT	2013	7304
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2013	0.109
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	31,242
<b>MSY</b>	MSY-MT	2013	1488
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

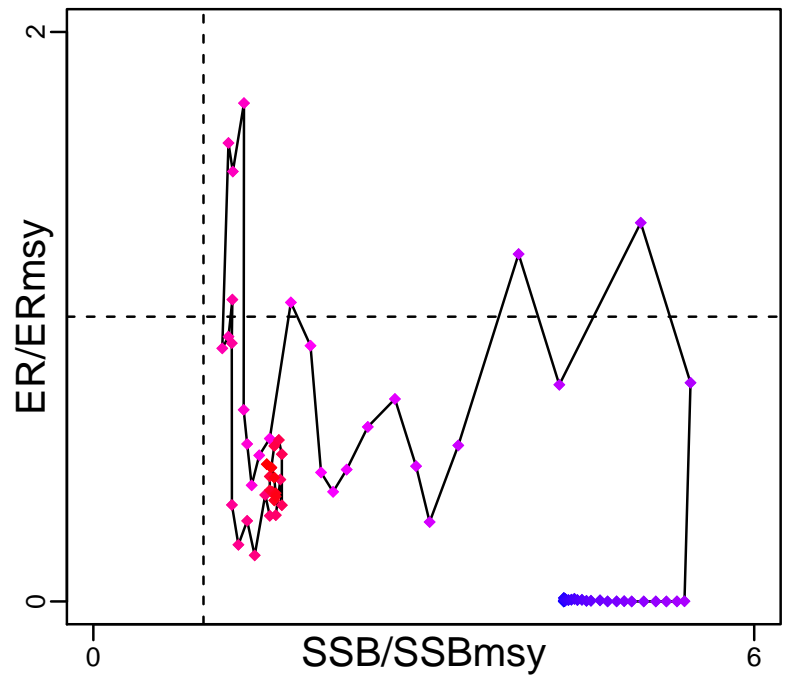
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	19,300	Both	-
<b>SSB</b>	SSB-MT	2013	11,300	Females	10 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	4,020,000	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2013	0.053	-	-
<b>TC</b>	TC-MT	2013	584		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2013	1.53		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.547		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2013	0.482		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pacific ocean perch Haida Gwaii [PERCHQCI]

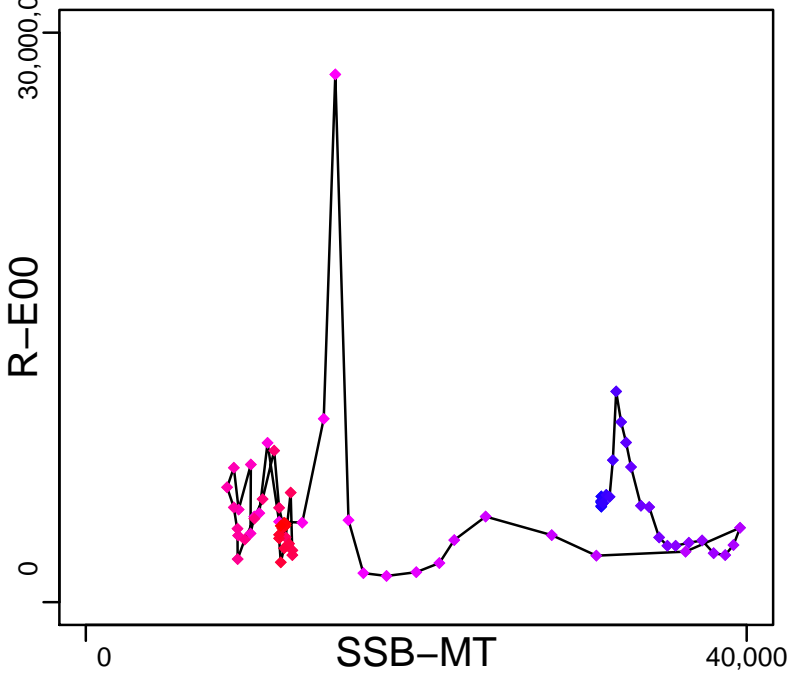
Kobe MSY<sub>pref</sub> (1939–2013–WATSON)



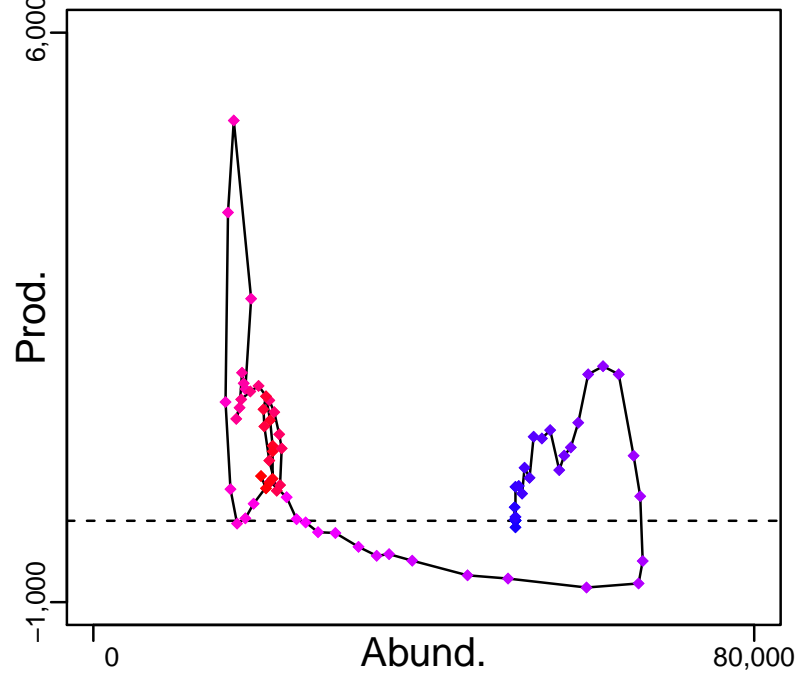
Kobe MGT<sub>pref</sub> (1939–2013–WATSON)



Spawner Recruit (1939–2013–WATSON)



Production (1939–2013–WATSON)

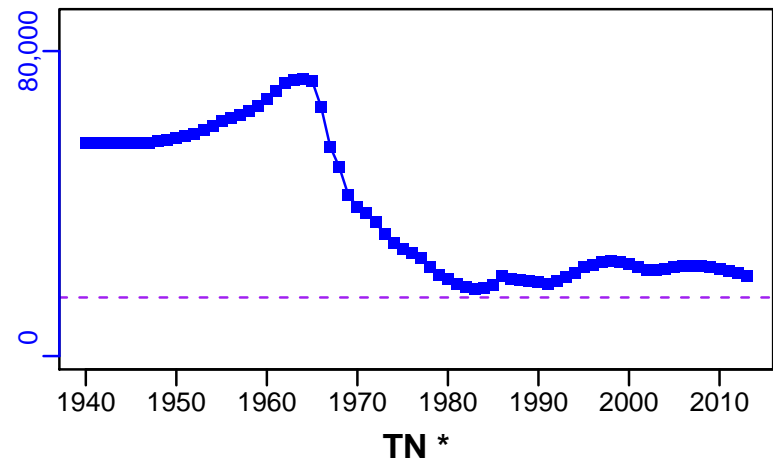


◆ Start Year ◆ End Year \* No Data

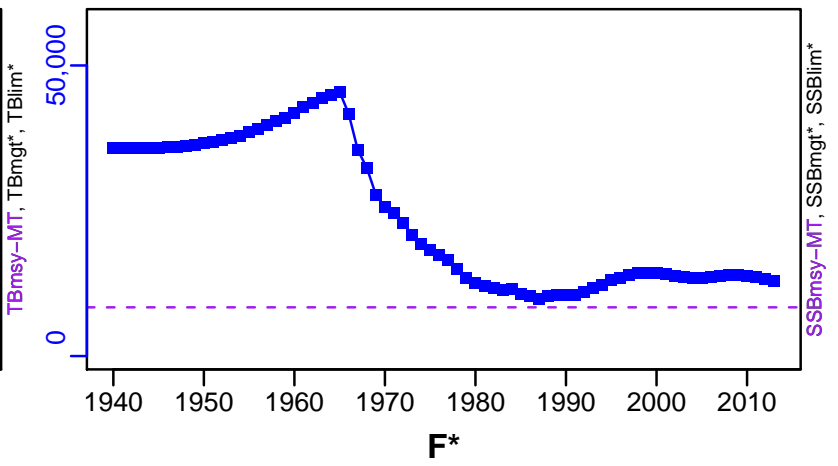


# Pacific ocean perch Haida Gwaii [PERCHQCI]

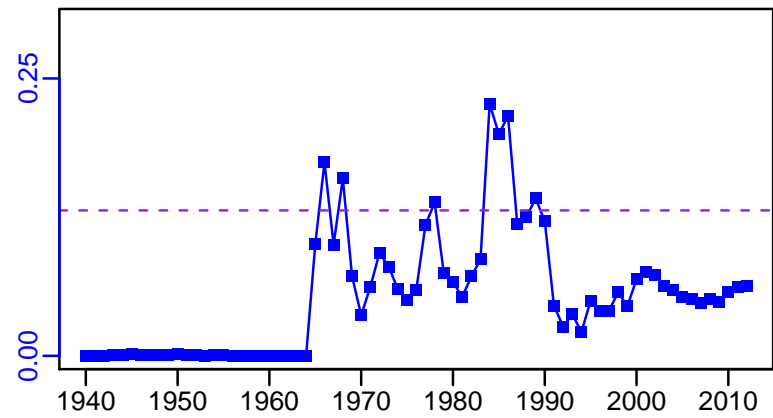
TB-MT (1939-2013-WATSON)



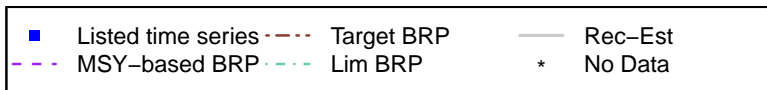
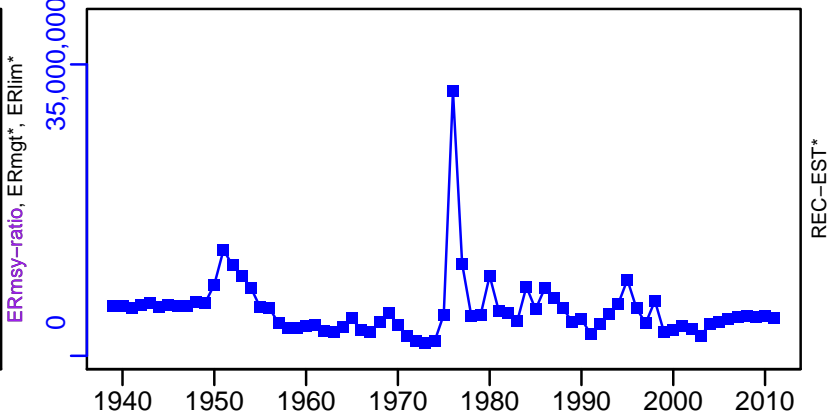
SSB-MT (1939-2013-WATSON)



ER-ratio (1939-2013-WATSON)



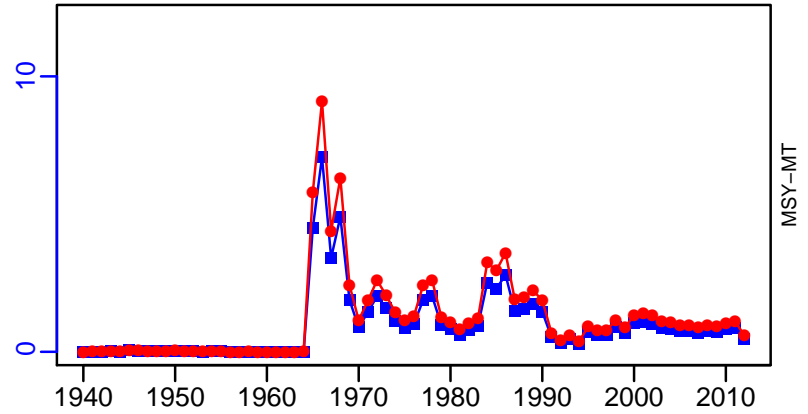
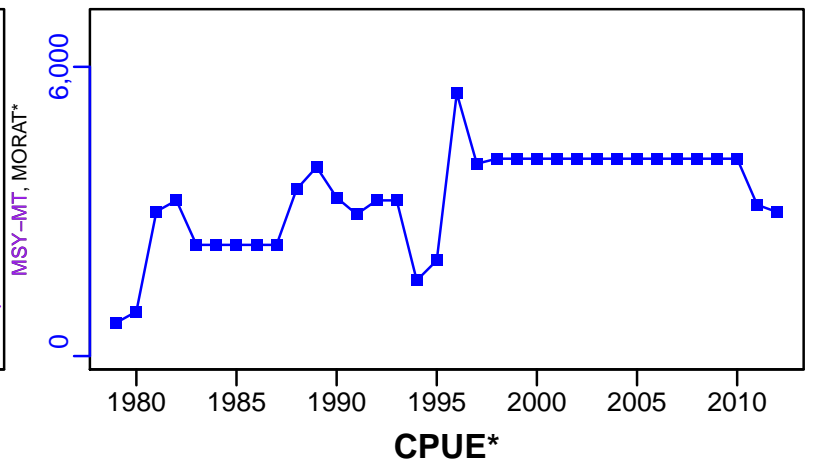
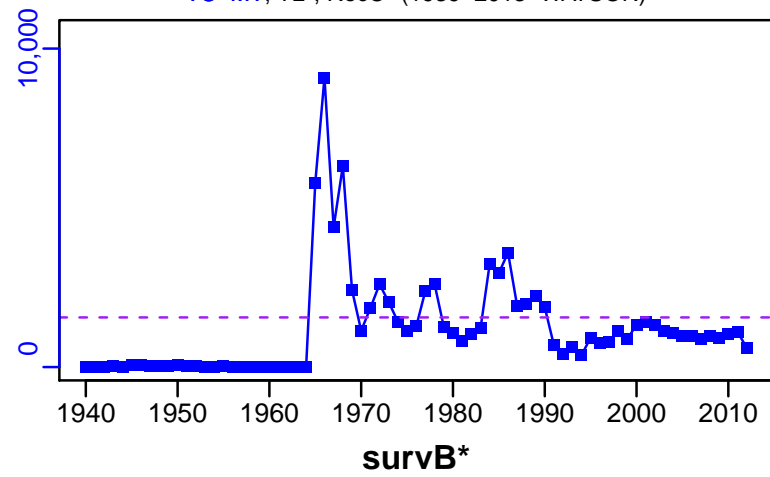
R-E00 (1939-2013-WATSON)



# Pacific ocean perch Haida Gwaii [PERCHQCI]

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

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



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

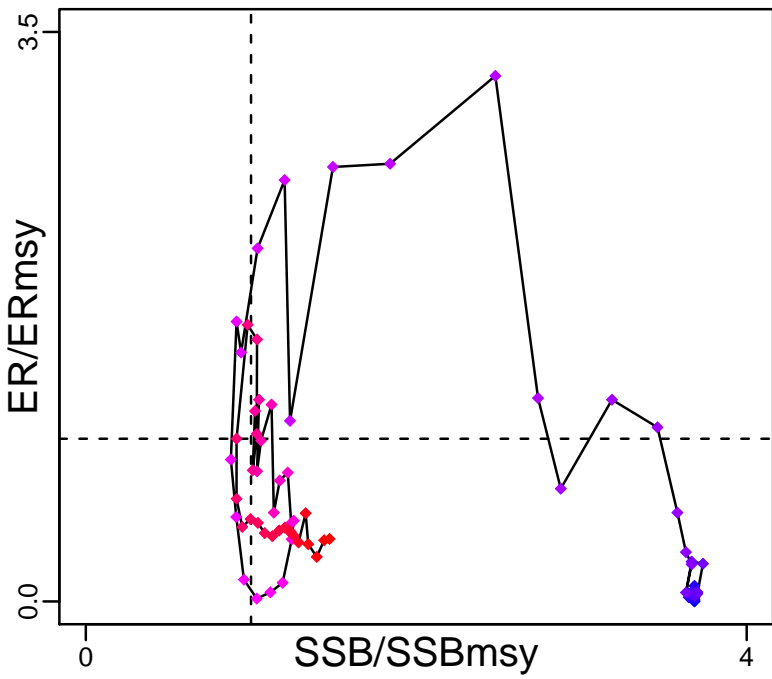
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	DFO-PERCHWCVANI-1939-2013-WATSON
<b>Area</b>	West Coast of Vancouver Island
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

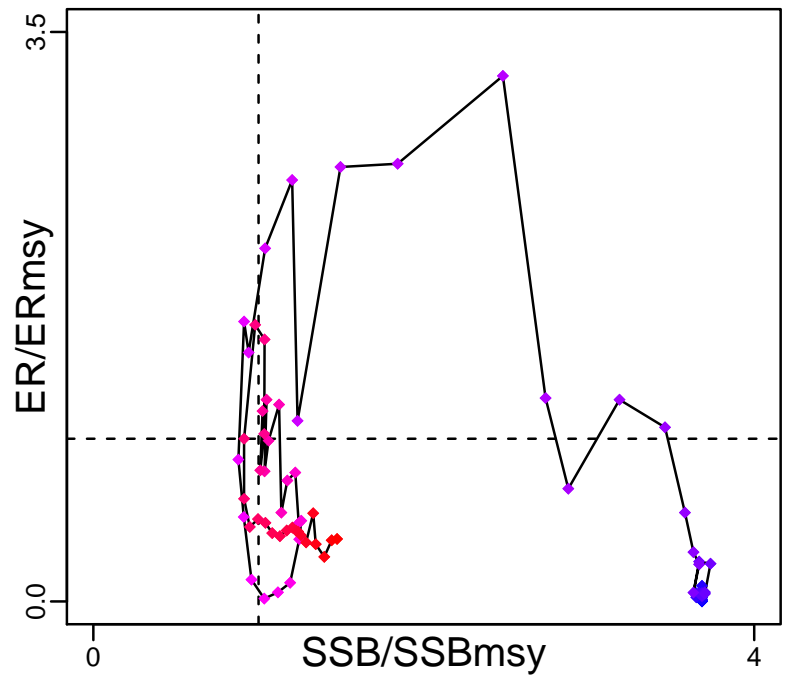
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	16,400	Both	-
<b>SSB</b>	SSB-MT	2013	8740	Females	10 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	3,160,000	-	1
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2013	0.035	-	-
<b>TC</b>	TC-MT	2013	382		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	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]

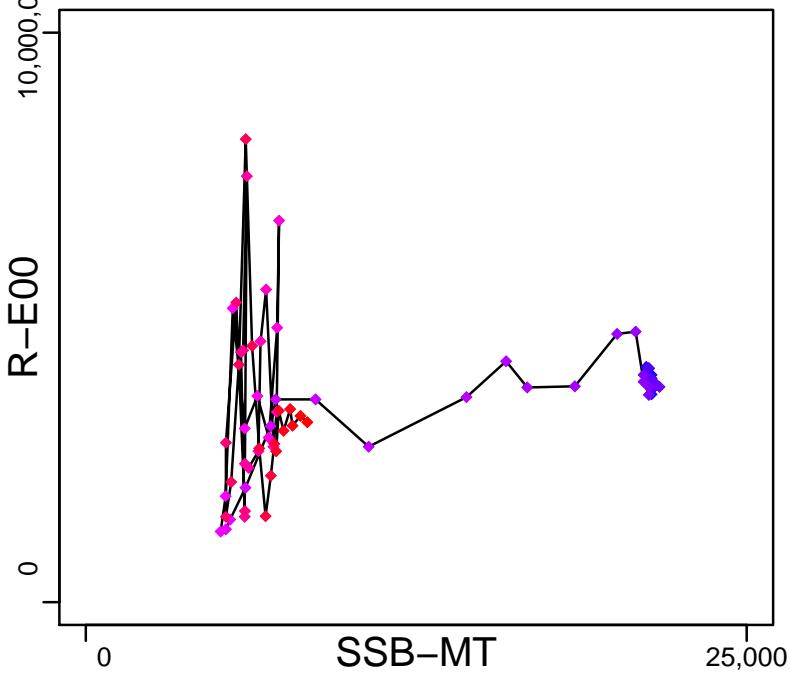
Kobe MSYpref (1939–2013–WATSON)



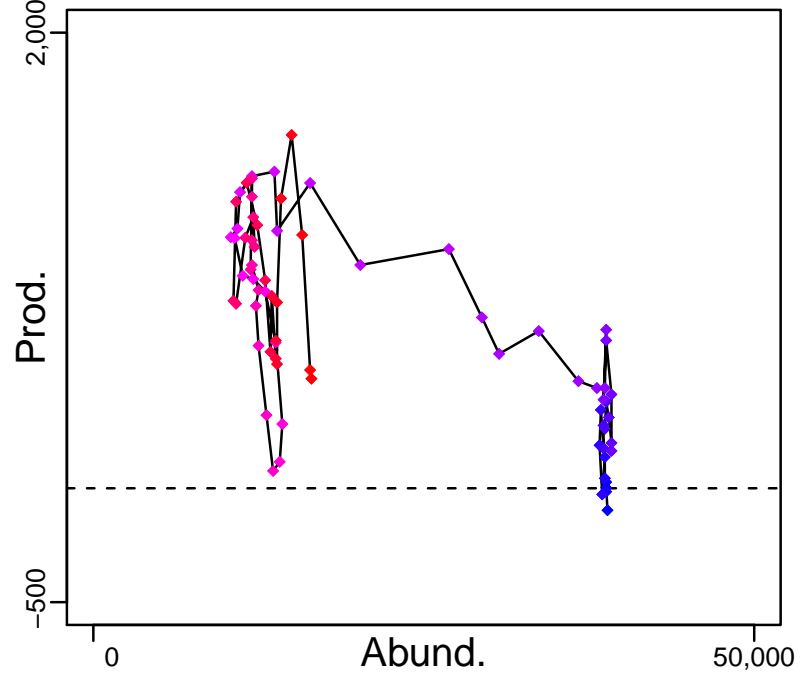
Kobe MGTpref (1939–2013–WATSON)



Spawner Recruit (1939–2013–WATSON)



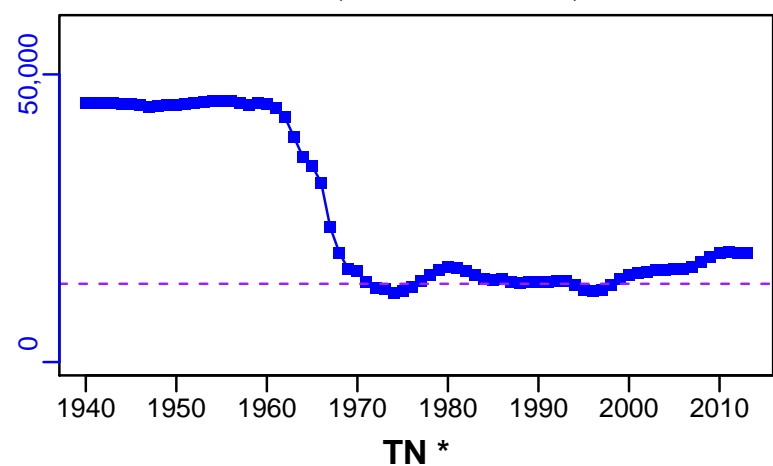
Production (1939–2013–WATSON)



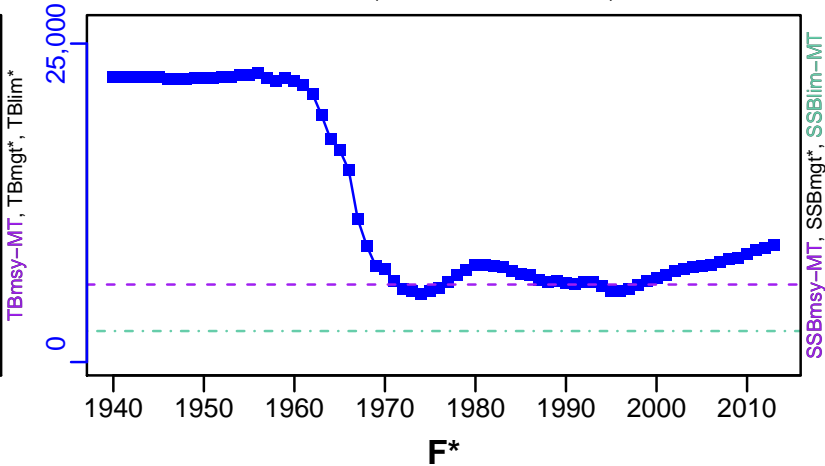
◆ Start Year ◆ End Year \* No Data

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

TB-MT (1939-2013-WATSON)



SSB-MT (1939-2013-WATSON)



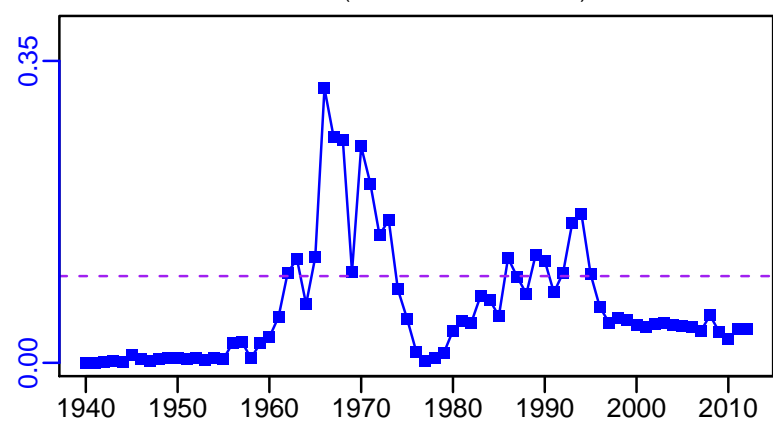
TN \*



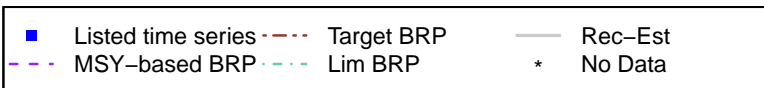
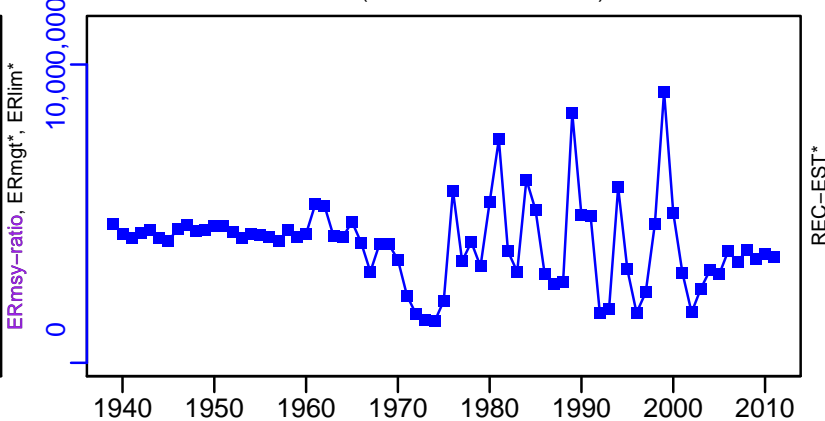
F\*



ER-ratio (1939-2013-WATSON)



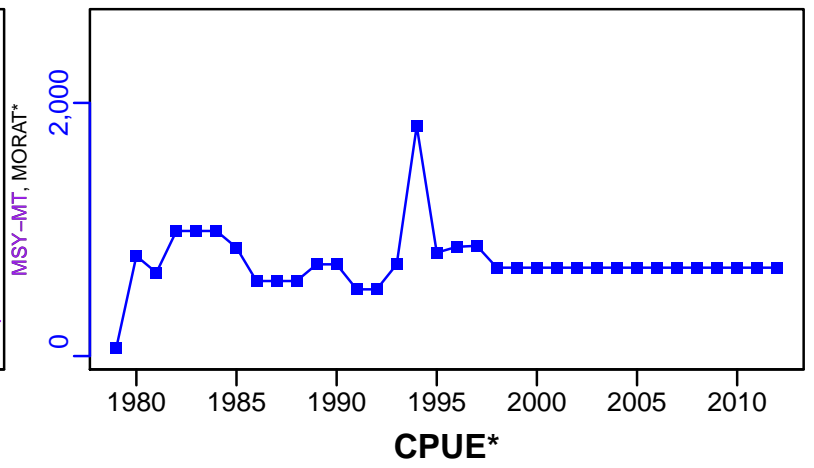
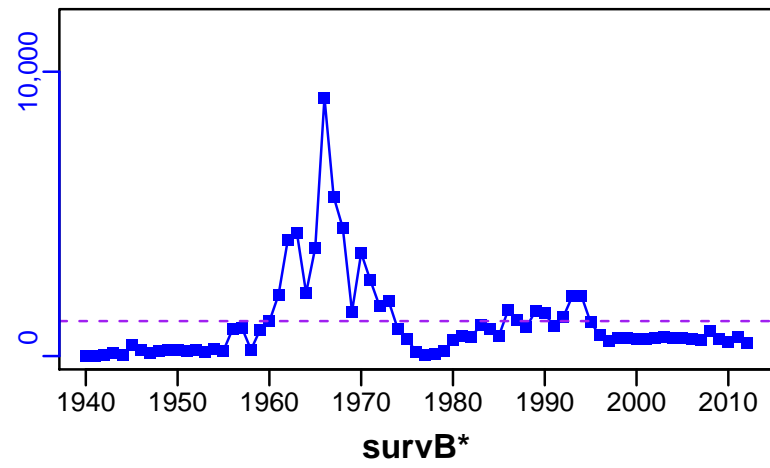
R-E00 (1939-2013-WATSON)



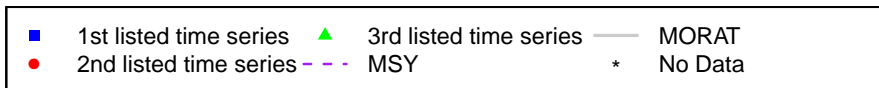
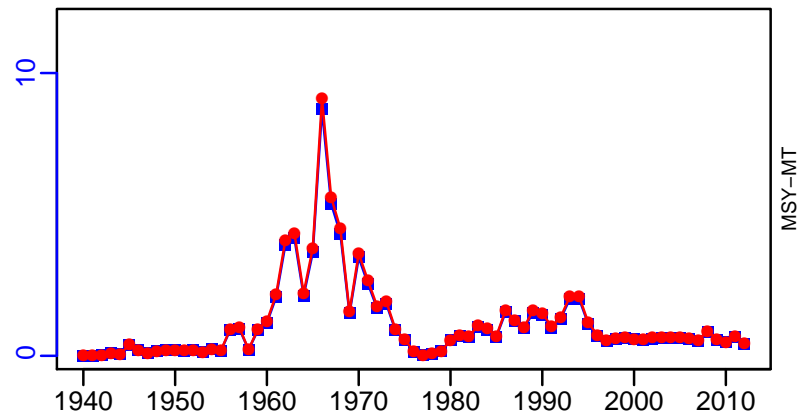
# Pacific ocean perch West Coast of Vancouver Island [PERCHWCVANI]

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

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



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\***

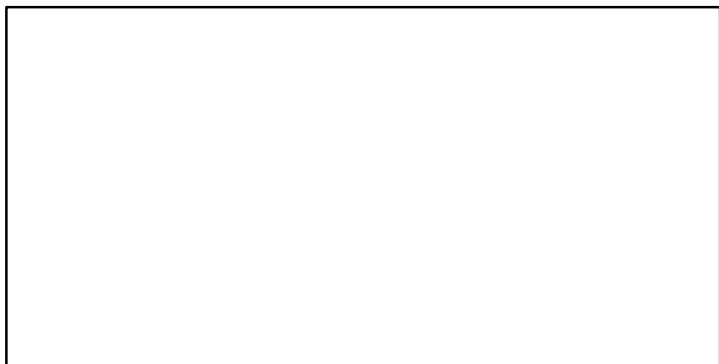


◆ Start Year ◆ End Year \* No Data

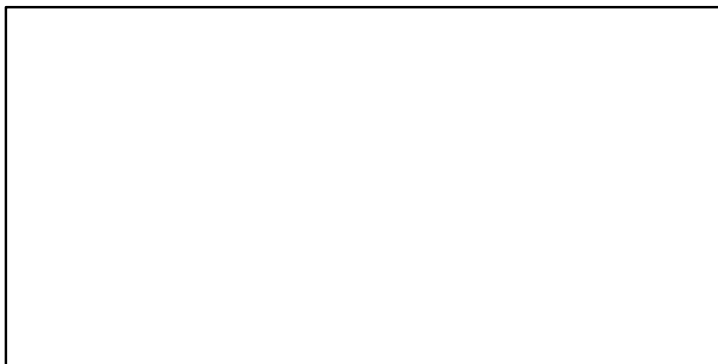


Quillback rockfish Pacific Coast of Canada (Inside) [QROCKPCOASTIN]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***

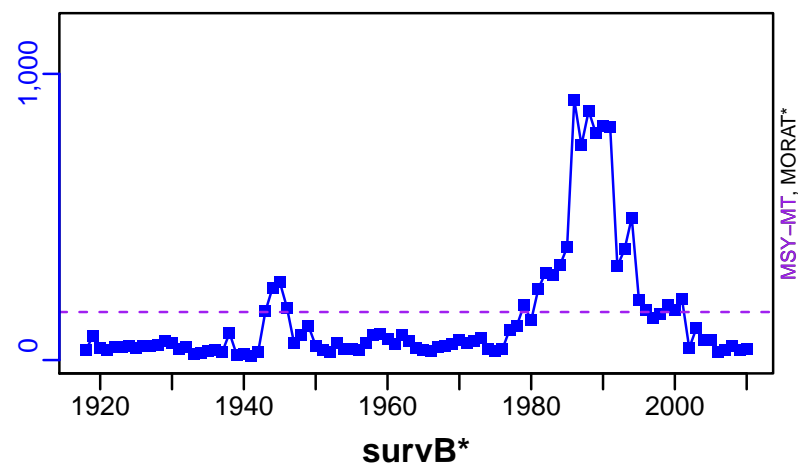


**Recruits\***



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

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



TAC\*, Cpair\*, Cadv\*



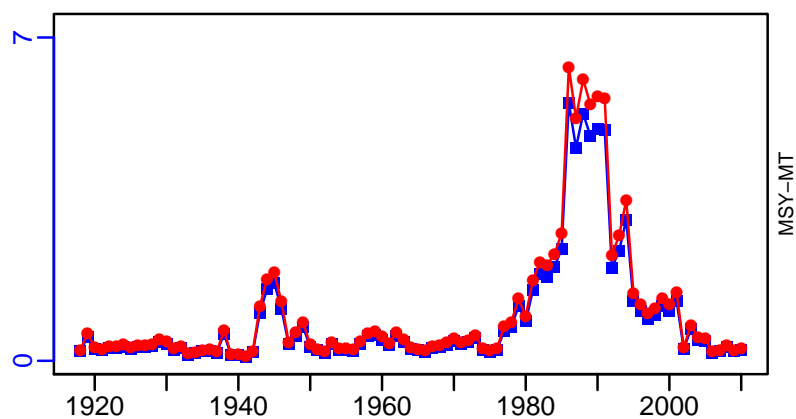
CPUE\*



EFFORT\*



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



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

## 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

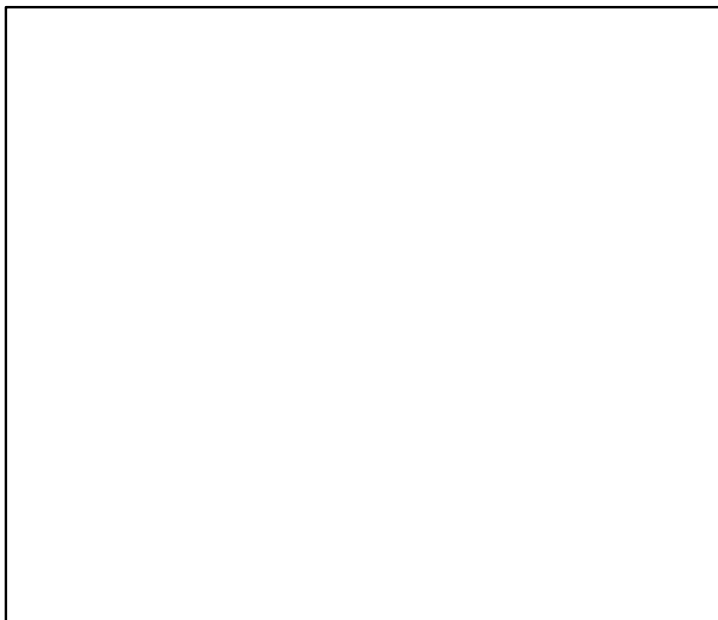
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	462
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

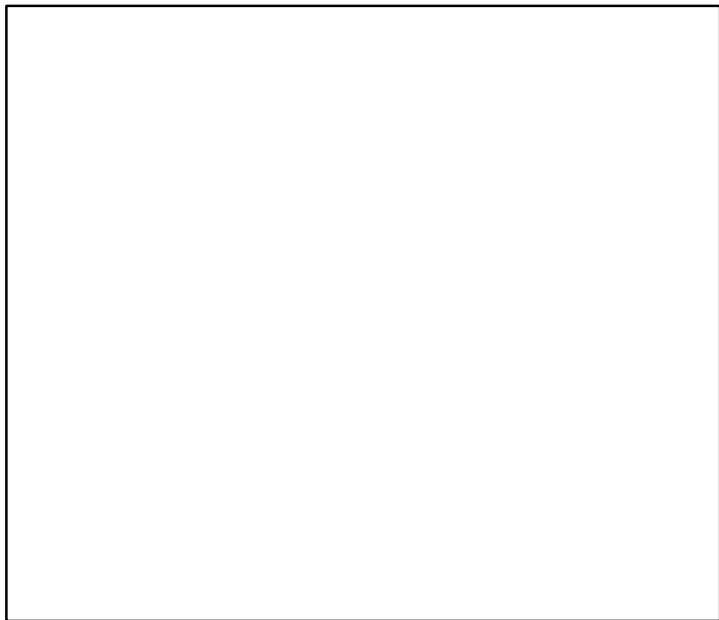
**Kobe MSY\***



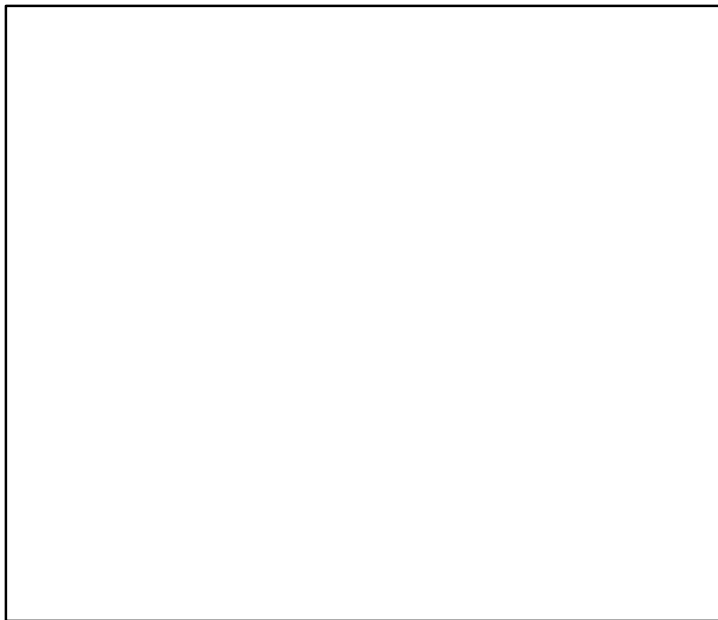
**Kobe MGT\***



**Spawner Recruit\***



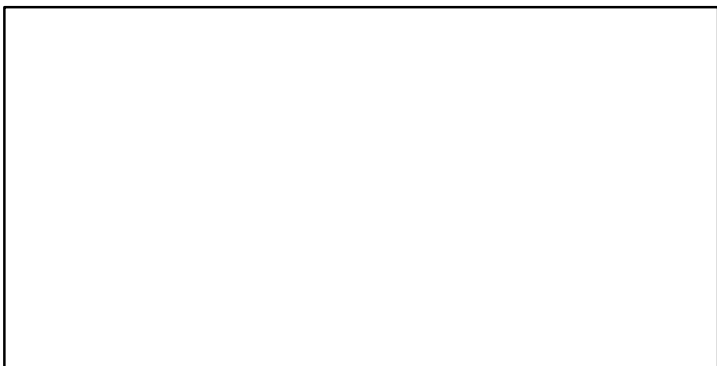
**Production\***



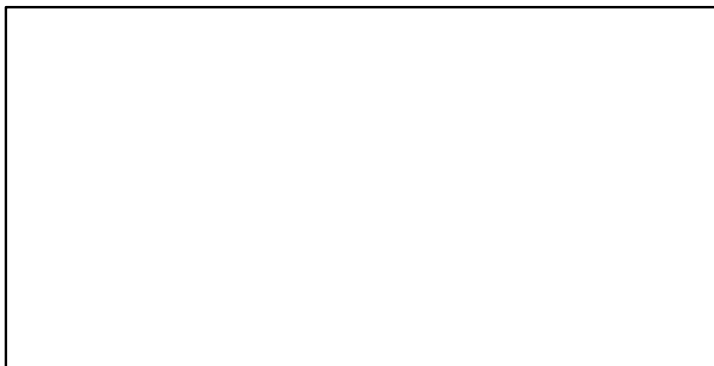
◆ Start Year ◆ End Year \* No Data

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

**TB\***



**SSB\***



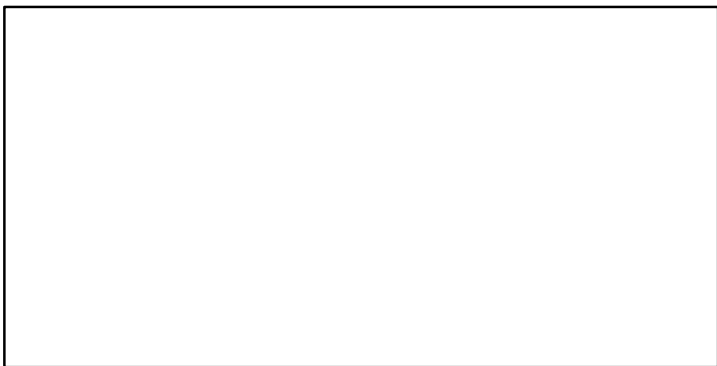
**TN \***



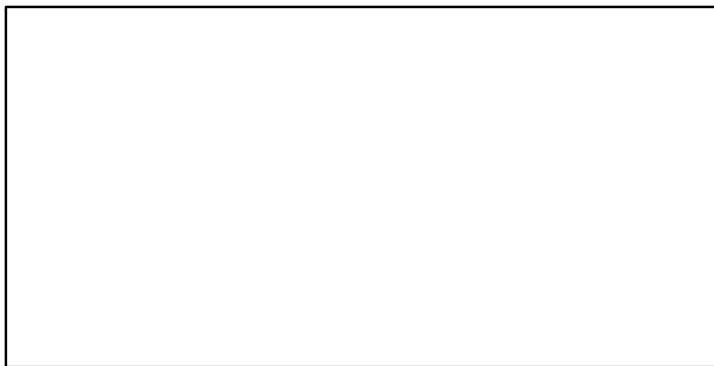
**F\***



**ER\***

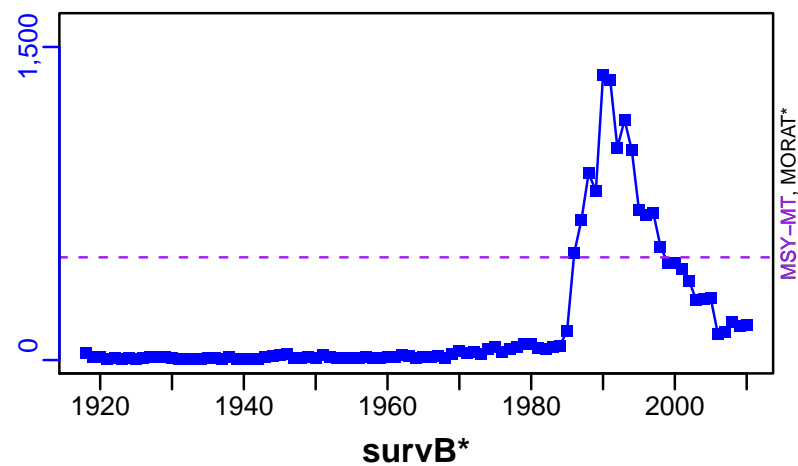


**Recruits\***



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

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



TAC\*, Cpair\*, Cadv\*



survB\*



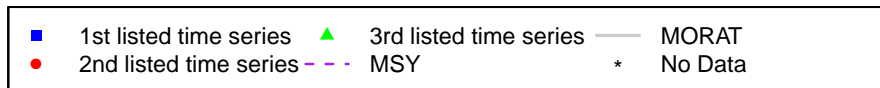
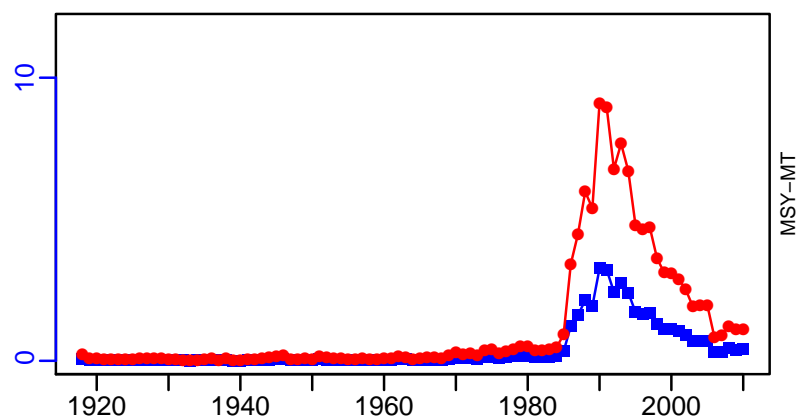
CPUE\*



EFFORT\*



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



## Rock sole Queen Charlotte Sound [RSOLE5AB]

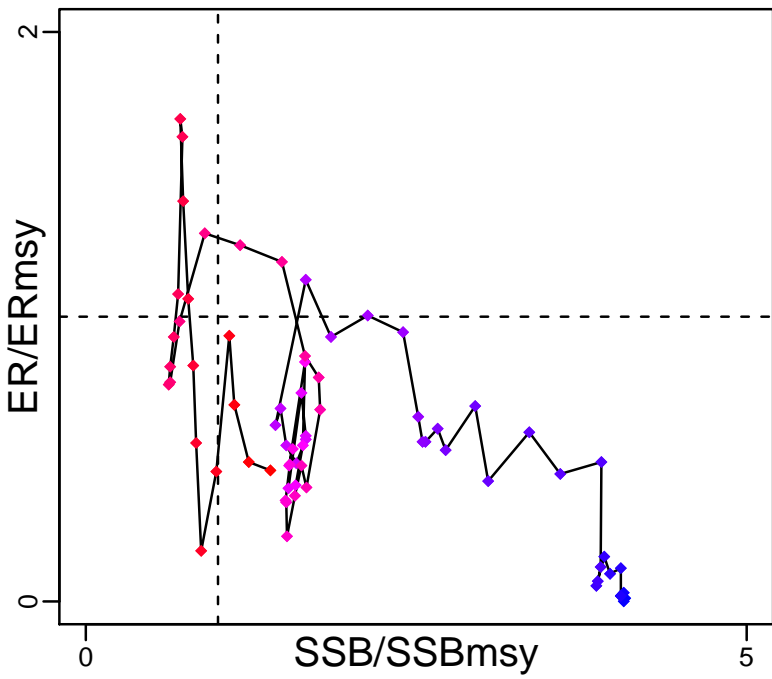
Metadata	
<b>Scientific Name</b>	Lepidopsetta bilineata
<b>Current Assess ID</b>	DFO-PAC-RSOLE5AB-1944-2014-OSGOOD
<b>Area</b>	Queen Charlotte Sound
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific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

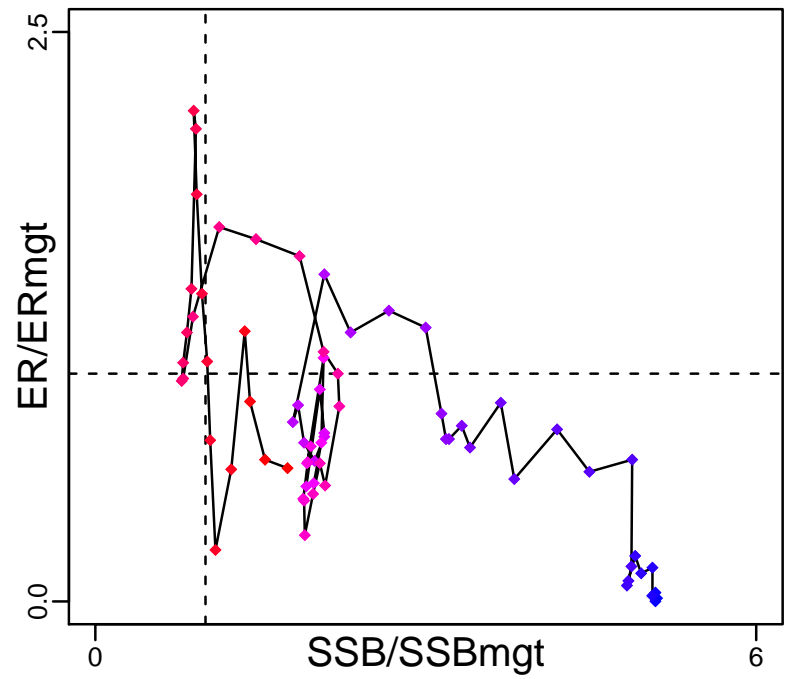
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	2780	Females	5.6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	2,630,000	Females	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.11	Females	-
<b>TC</b>	TC-MT	2014	362		
<b>TL</b>	TL-MT	2014	337		
<b>TB/TBmsy</b>	-	-	-		
<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]

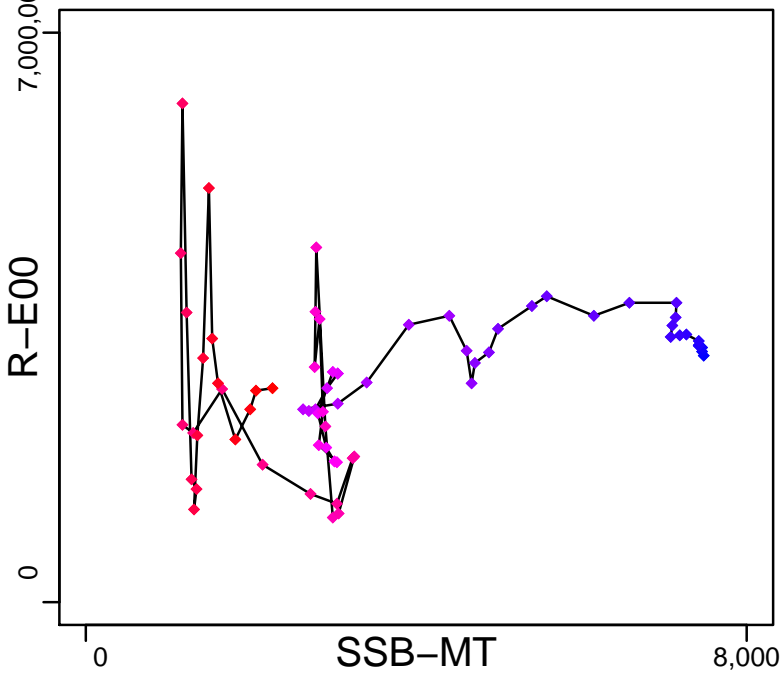
Kobe MSYpref (1944–2014–OSGOOD)



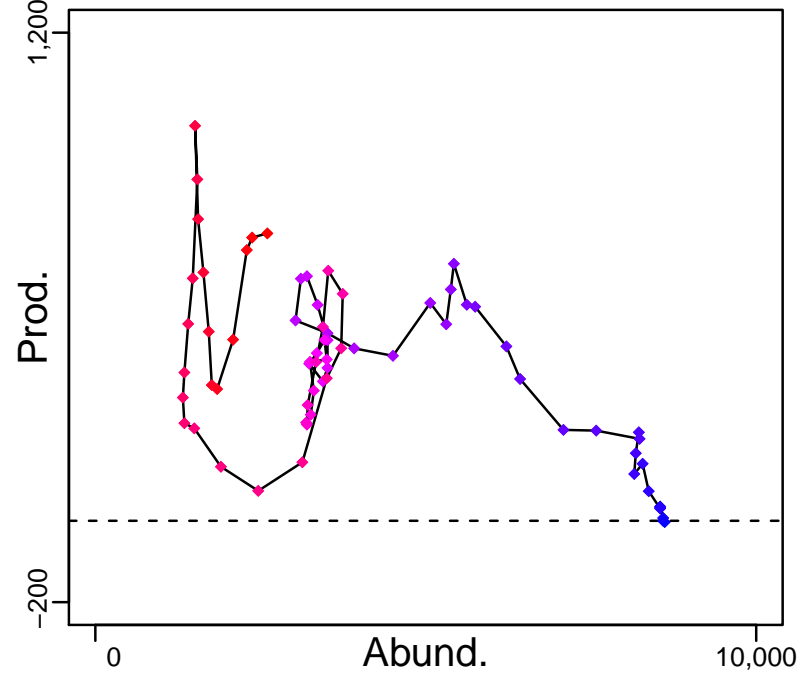
Kobe MGTpref (1944–2014–OSGOOD)



Spawner Recruit (1944–2014–OSGOOD)



Production (1944–2014–OSGOOD)



◆ Start Year ◆ End Year \* No Data

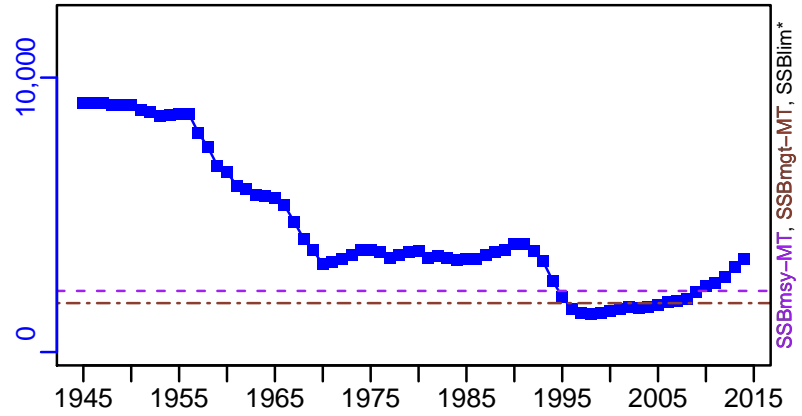


# Rock sole Queen Charlotte Sound [RSOLE5AB]

TB\*



SSB-MT (1944–2014–OSGOOD)



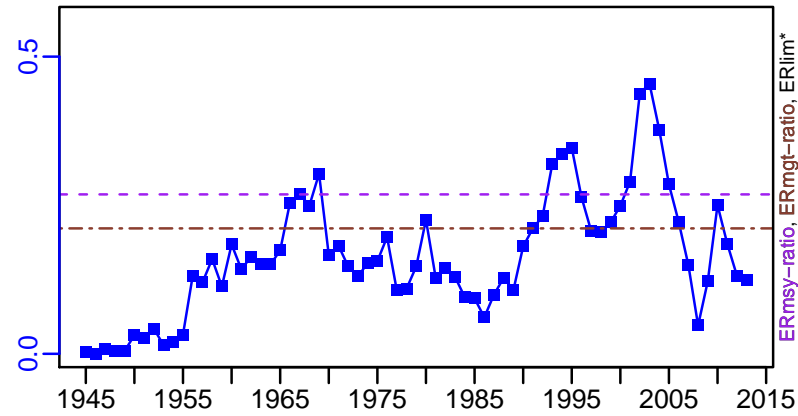
TN \*



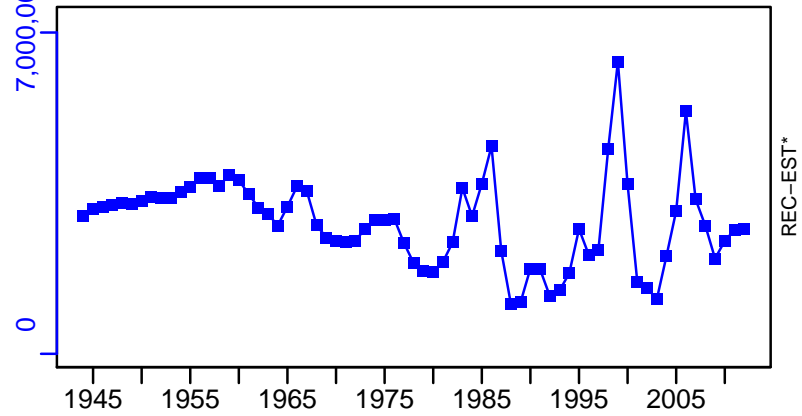
F\*



ER-ratio (1944–2014–OSGOOD)



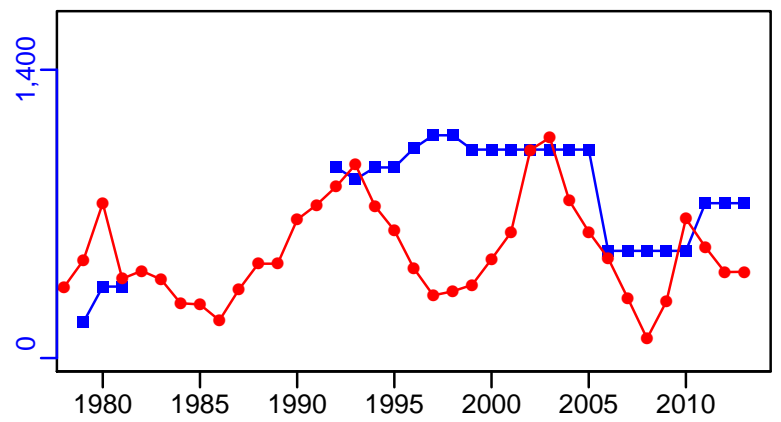
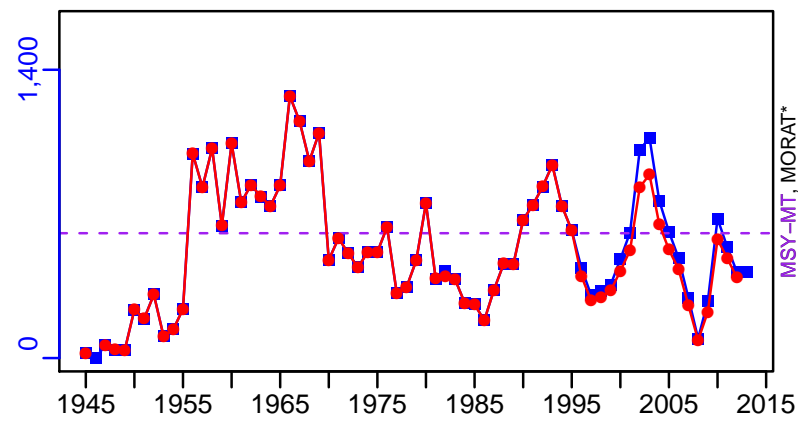
R-E00 (1944–2014–OSGOOD)



# Rock sole Queen Charlotte Sound [RSOLE5AB]

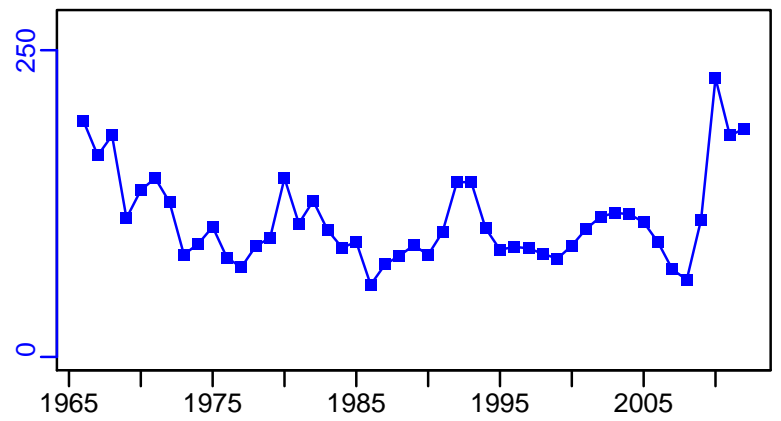
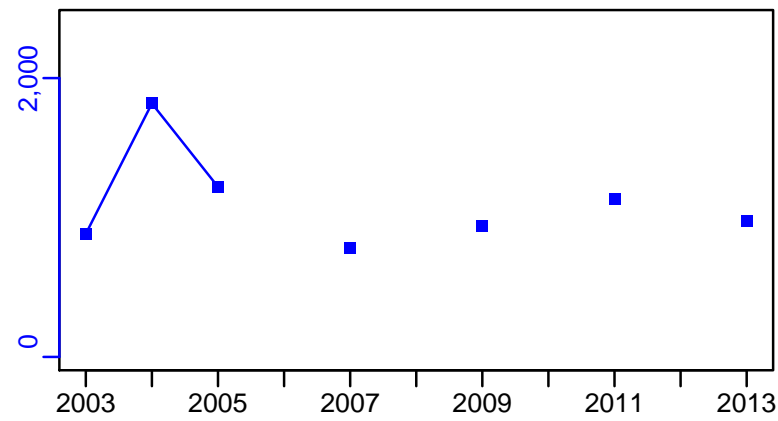
TC-MT, TL-MT, RecC\* (1944-2014-OSGOOD)

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



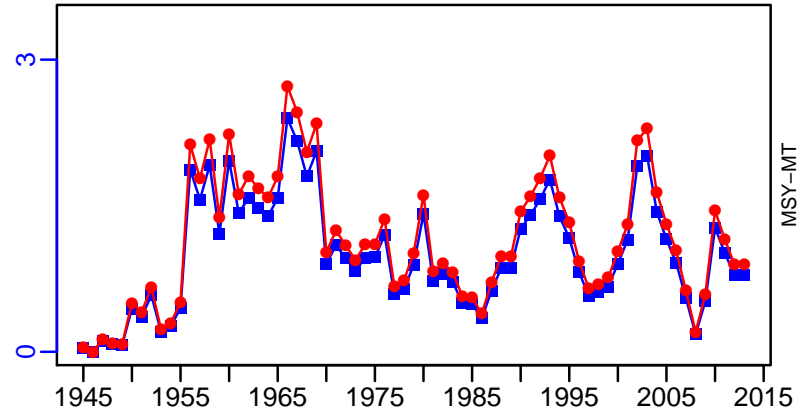
survB-MT (1944-2014-OSGOOD)

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



**EFFORT\***

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



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

## Rock sole Hecate Strait [RSOLEHSTR]

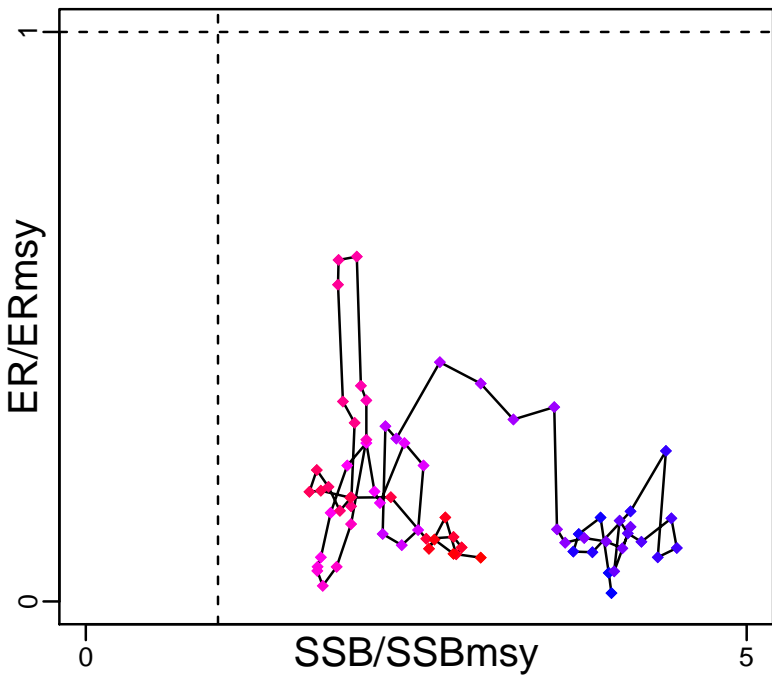
Metadata	
<b>Scientific Name</b>	Lepidopsetta bilineata
<b>Current Assess ID</b>	DFO-PAC-RSOLEHSTR-1945-2014-OSGOOD
<b>Area</b>	Hecate Strait
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region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

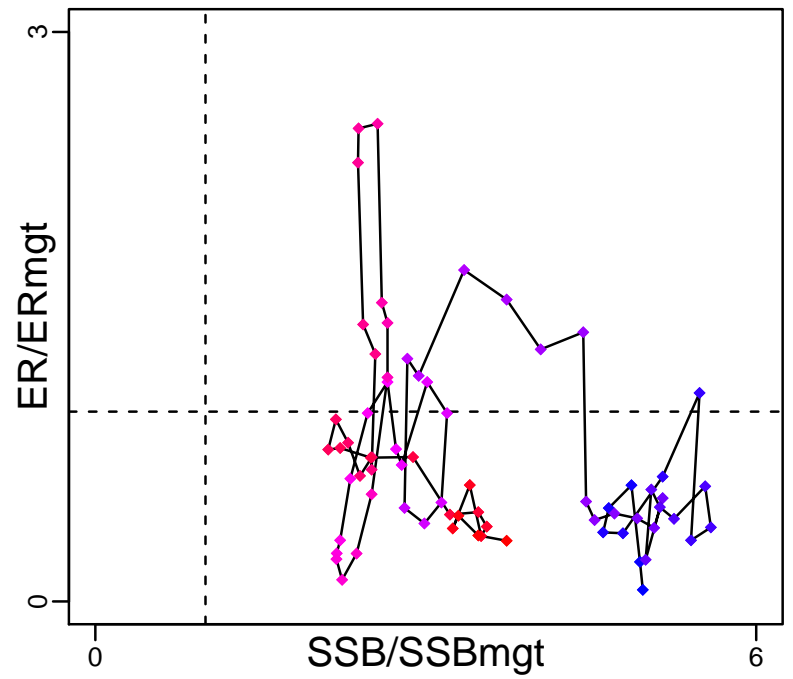
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2001	4850	-	4+
<b>SSB</b>	SSB-MT	2014	15,400	Females	5.6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	17,000	-	-
<b>F</b>	F-1/yr	2001	0.126	-	-
<b>ER</b>	ER-ratio	2014	0.039	Females	-
<b>TC</b>	TC-MT	2014	594		
<b>TL</b>	TL-MT	2014	500		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2001	1.048		
<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]

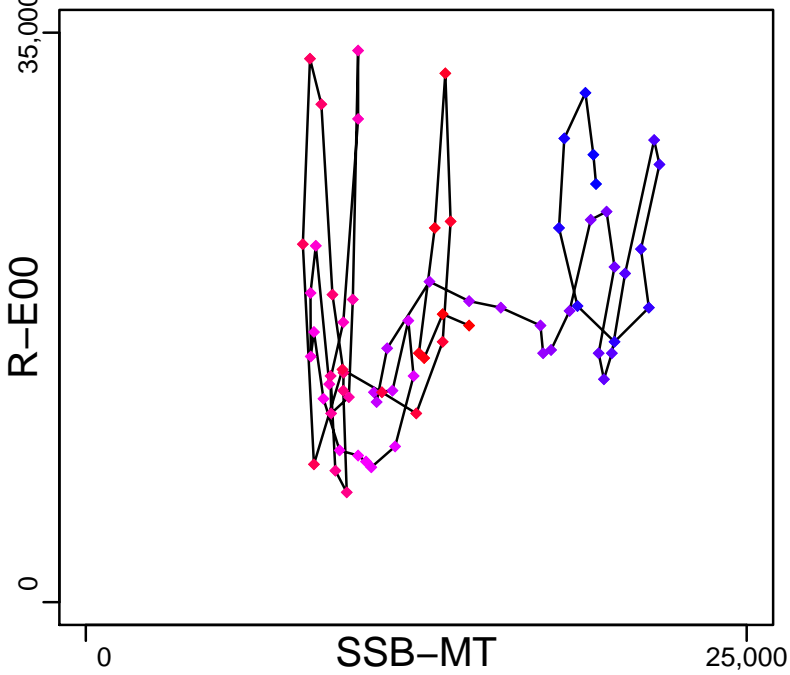
Kobe MSYpref (1945–2014–OSGOOD)



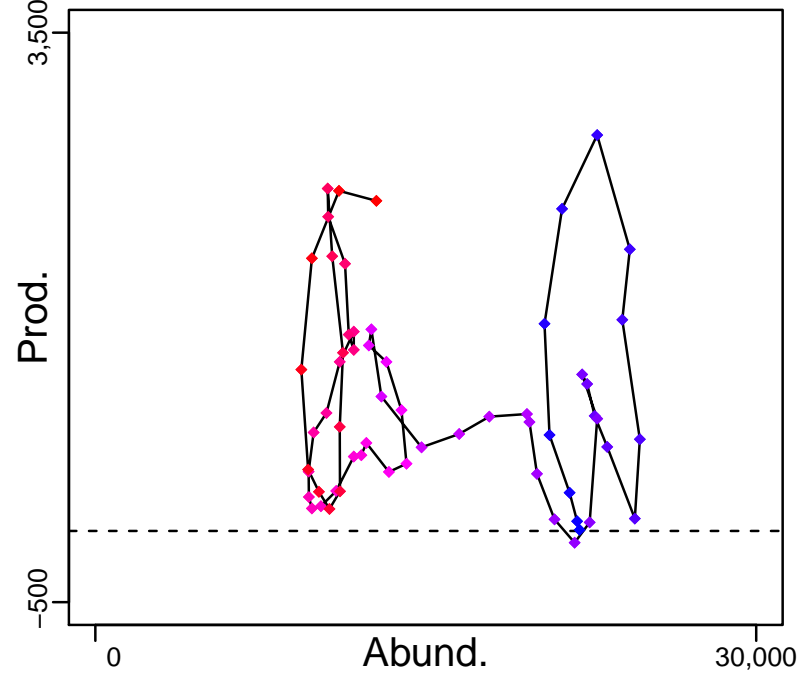
Kobe MGTpref (1945–2014–OSGOOD)



Spawner Recruit (1945–2014–OSGOOD)



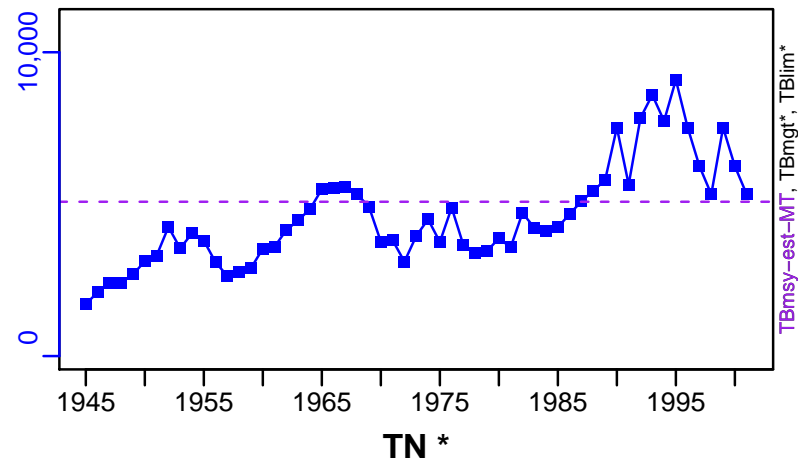
Production (1945–2014–OSGOOD)



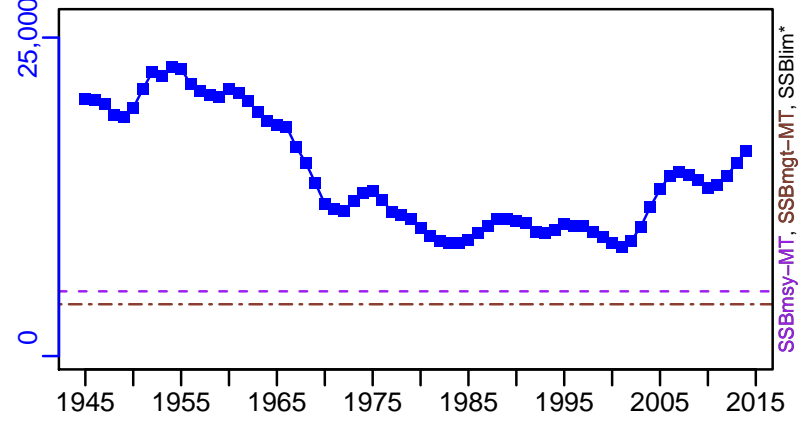
◆ Start Year ◆ End Year \* No Data

# Rock sole Hecate Strait [RSOLEHSTR]

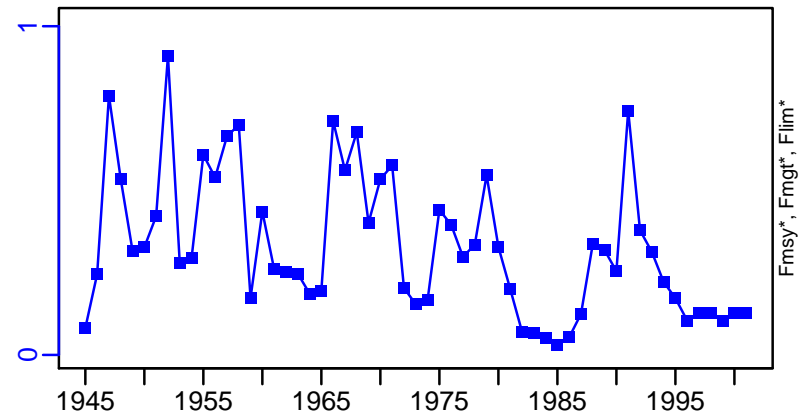
TB-MT (1945–2001–COLLIE)



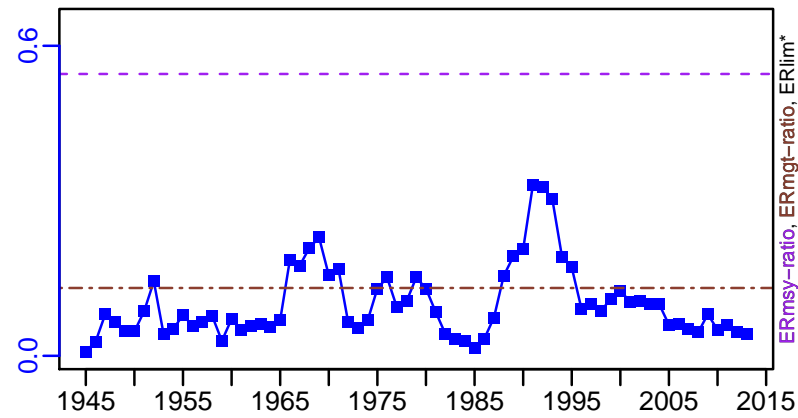
SSB-MT (1945–2014–OSGOOD)



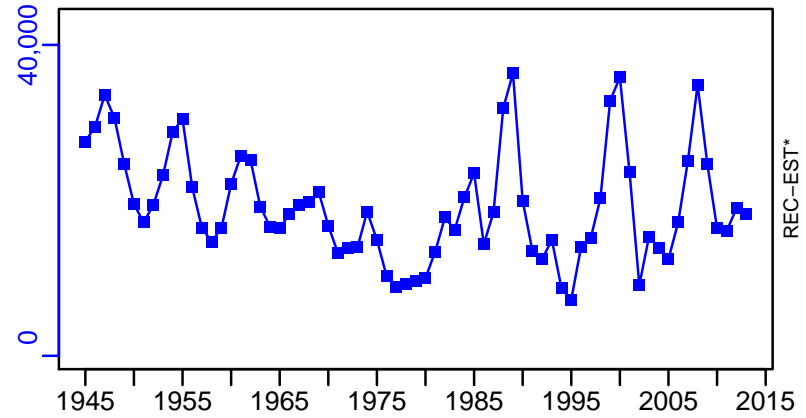
F-1/yr (1945–2001–COLLIE)



ER-ratio (1945–2014–OSGOOD)

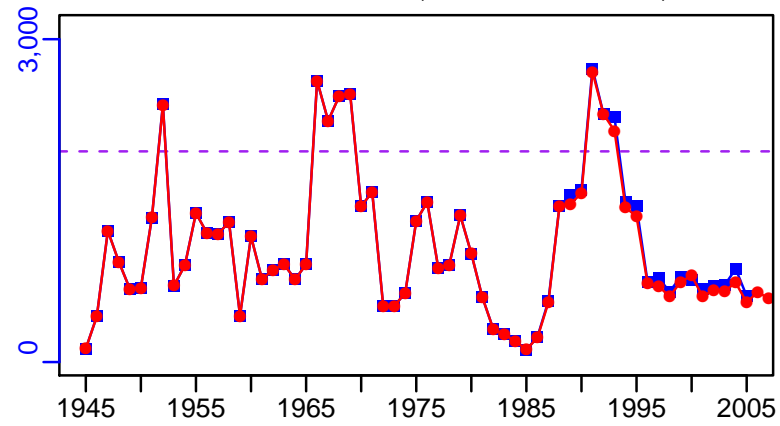


R-E00 (1945–2014–OSGOOD)

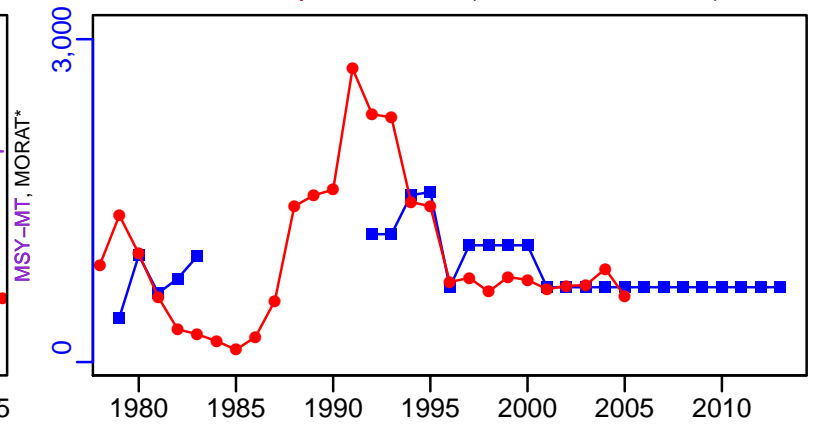


# Rock sole Hecate Strait [RSOLEHSTR]

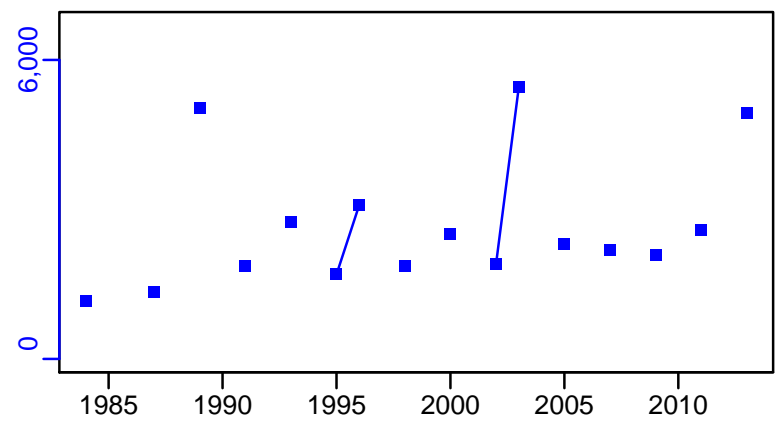
TC-MT, TL-MT, RecC\* (1945-2014-OSGOOD)



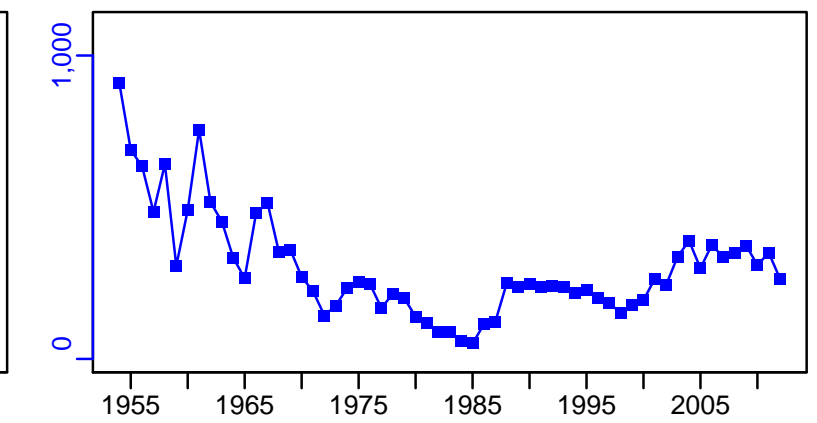
TAC-MT, Cpair-MT, Cadv\* (1945-2014-OSGOOD)



survB-MT (1945-2014-OSGOOD)



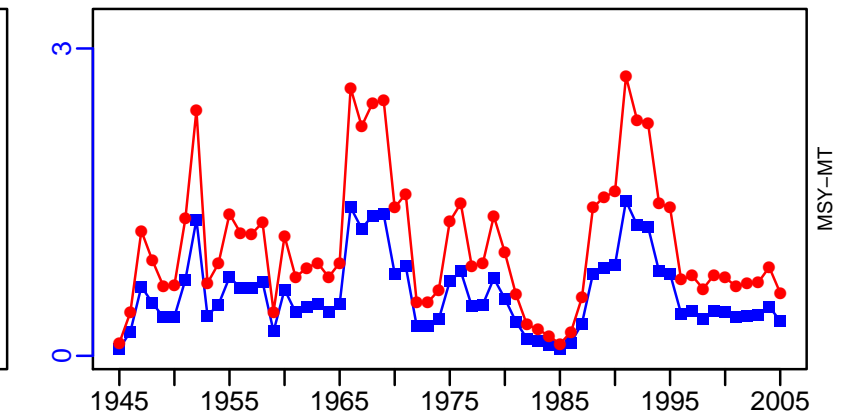
CPUE-kg/hour (1945-2014-OSGOOD)



**EFFORT\***



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



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

## Sablefish Pacific Coast of Canada [SABLEFPCAN]

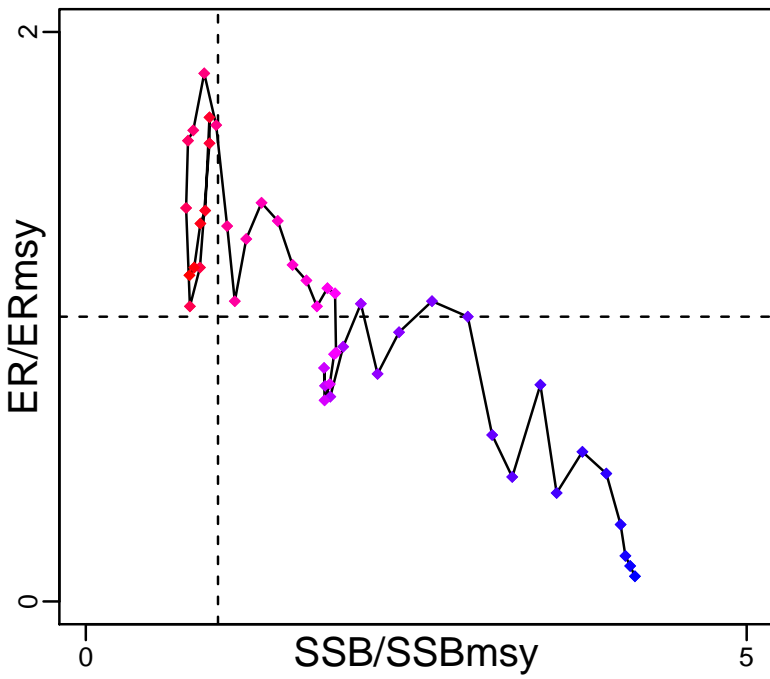
Metadata	
<b>Scientific Name</b>	Anoplopoma fimbria
<b>Current Assess ID</b>	DFO-PAC-SABLEFPCAN-1913-2010-HIVELY
<b>Area</b>	Pacific Coast of Canada
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans - Pacific Region
<b>Asmts in RAM</b>	2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	29,364
<b>SSBmsy</b>	SSBmsy-MT	2010	27,680
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2010	0.11
<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	2010	3230
<b>M</b>	M-1/yr	2010	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

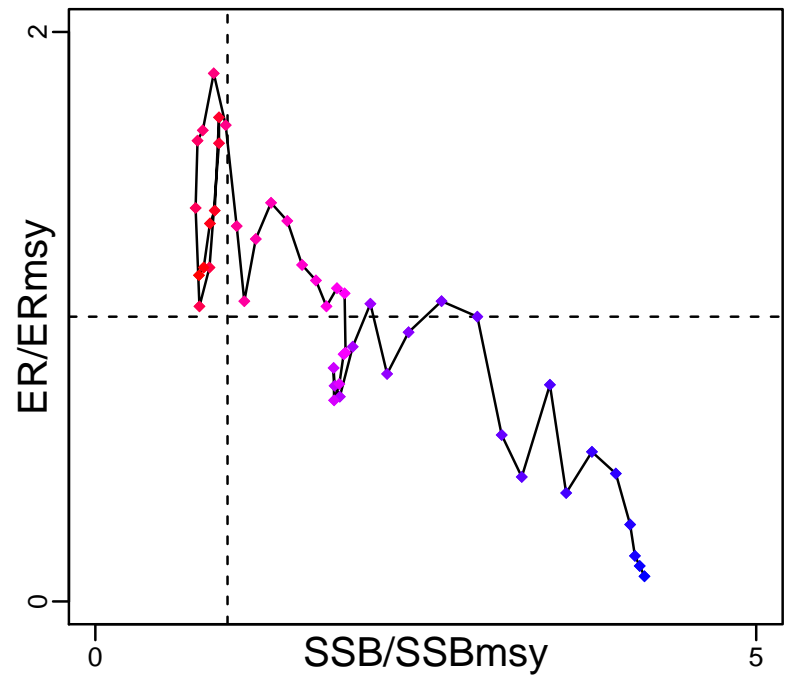
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	28,500	-	-
<b>SSB</b>	SSB-MT	2010	21,700	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2010	1,770,000	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2010	0.126	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2010	2080		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	0.971		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2010	0.784		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	1.145		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Sablefish Pacific Coast of Canada [SABLEFPCAN]

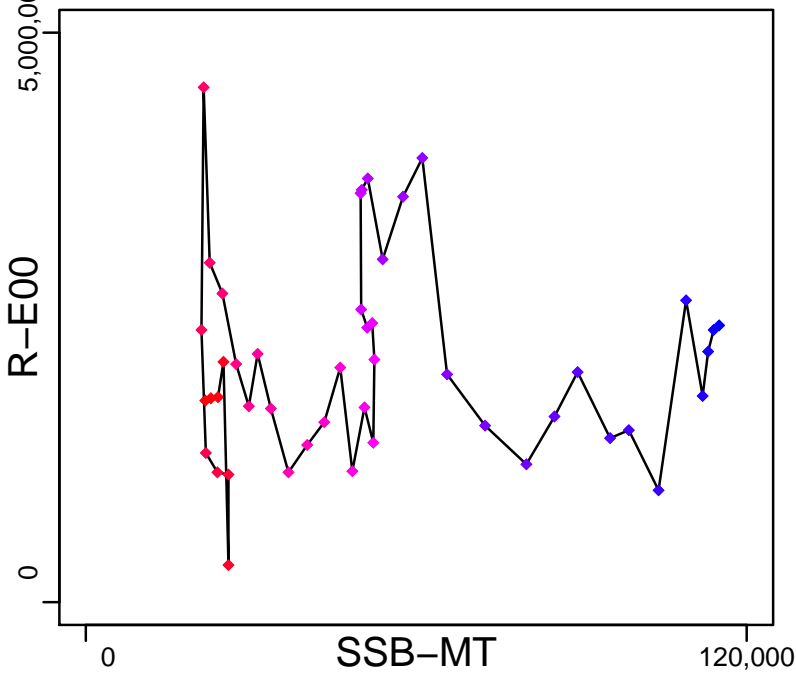
Kobe MSYpref (1913–2010–HIVELY)



Kobe MGTpref (1913–2010–HIVELY)



Spawner Recruit (1913–2010–HIVELY)



Production\*

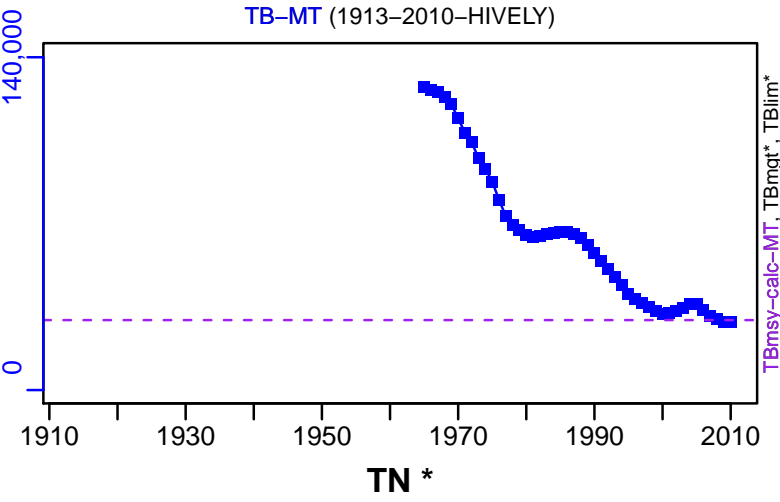


◆ Start Year ◆ End Year \* No Data

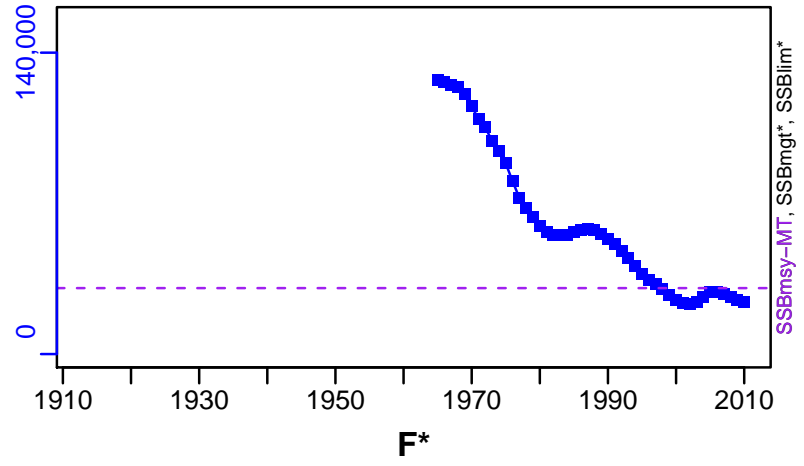


# Sablefish Pacific Coast of Canada [SABLEFPCAN]

TB-MT (1913-2010-HIVELY)

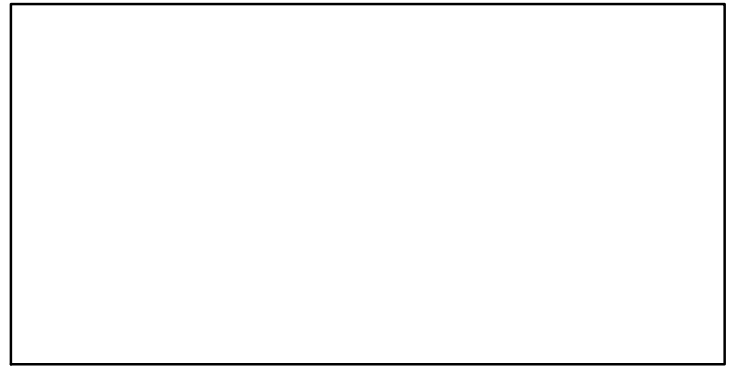
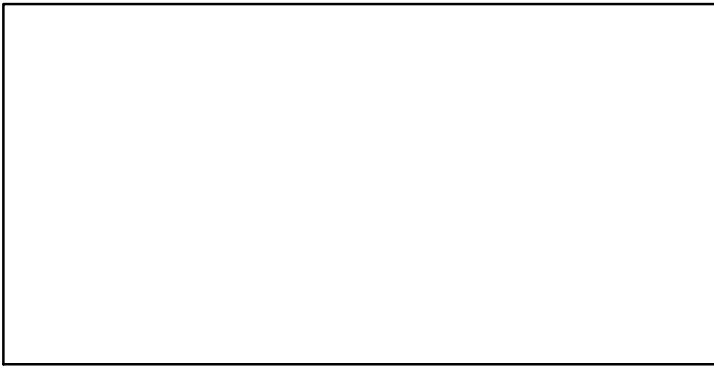


SSB-MT (1913-2010-HIVELY)

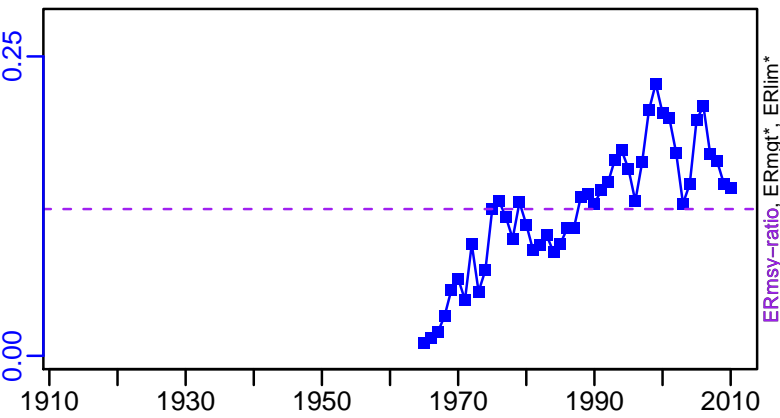


TN \*

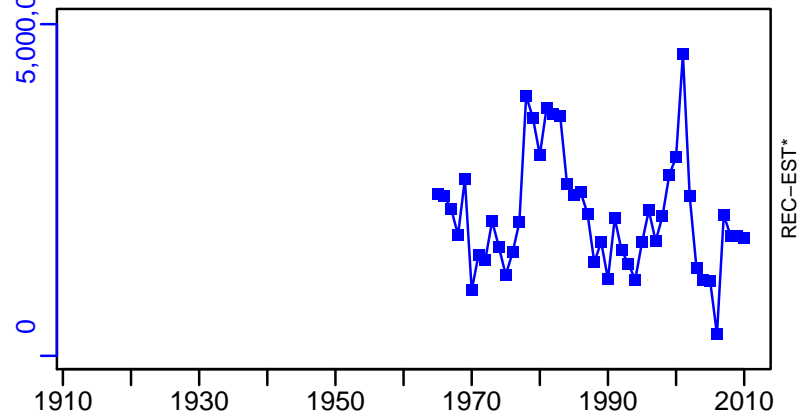
F\*



ER-ratio (1913-2010-HIVELY)

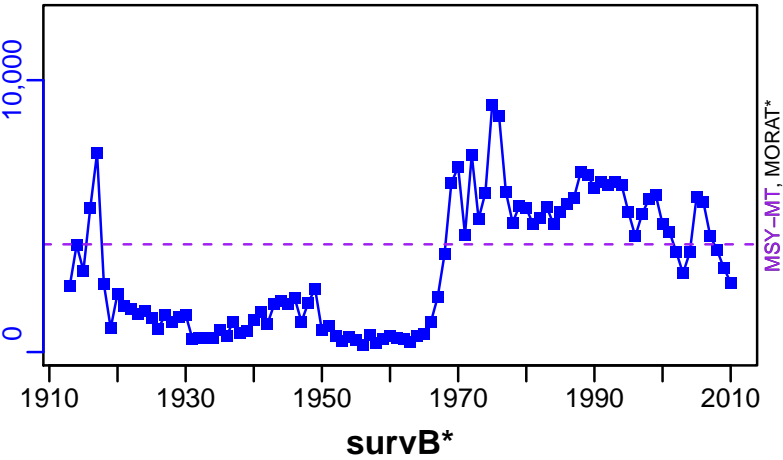


R-E00 (1913-2010-HIVELY)



Sablefish Pacific Coast of Canada [SABLEFPCAN]

TL-MT, TC\*, RecC\* (1913-2010-HIVELY)



TAC\*, Cpair\*, Cadv\*



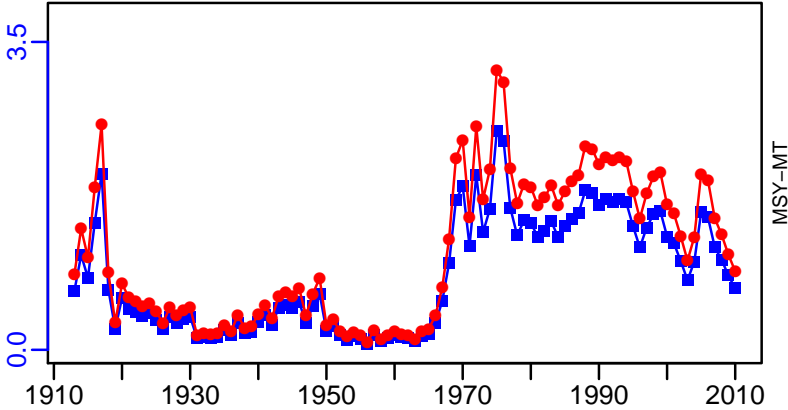
CPUE\*



EFFORT\*



TL-MT/MSY-MT, CdivMEANC-ratio, (1913-2010-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

TB\*



SSB\*



TN \*



F\*



ER\*



Recruits\*



■ Listed time series

- - - MSY-based BRP

- - - Target BRP

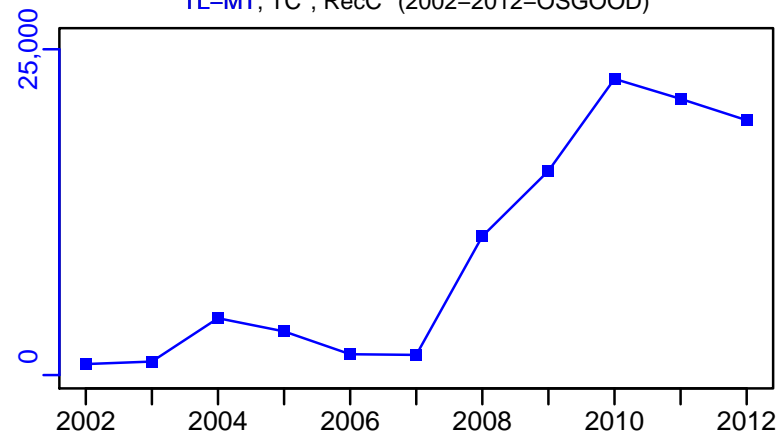
- · - Lim BRP

— Rec-Est

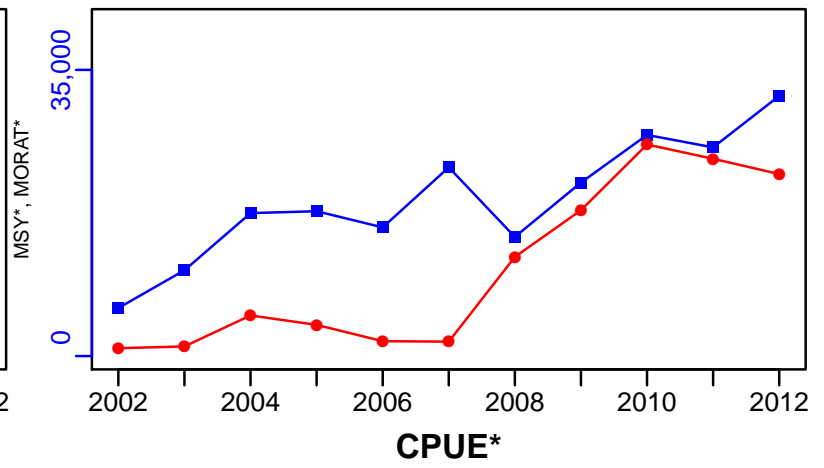
\* No Data

# Pacific sardine Pacific Coast of Canada [SARDBC]

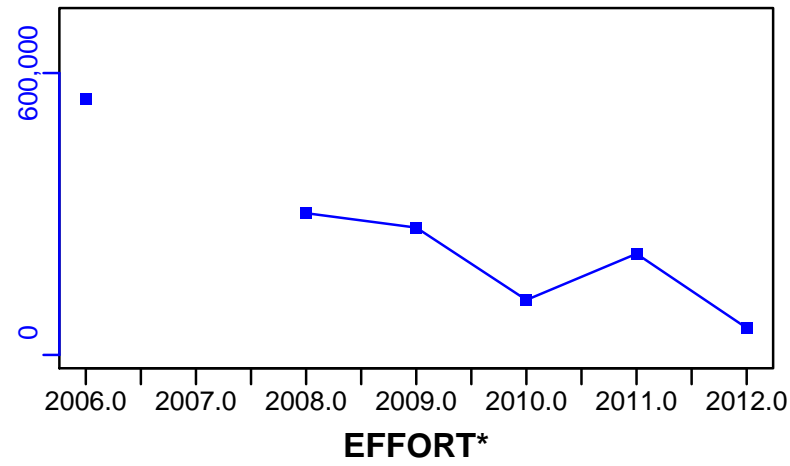
TL-MT, TC\*, RecC\* (2002-2012-OSGOOD)



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



survB-MT (2002-2012-OSGOOD)



CPUE\*



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\***



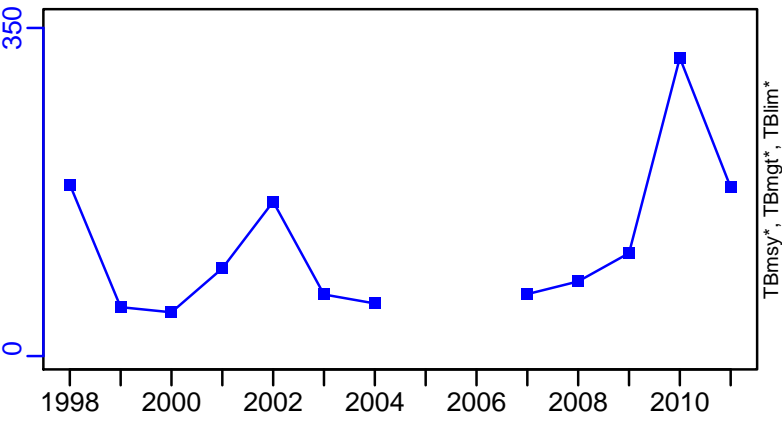
◆ Start Year ◆ End Year \* No Data



# Sidestripe shrimp Shrimp Management Area GTSE [SSHRIMPSMAGTSE]

TB-MT (1992-2011-WATSON)

SSB\*



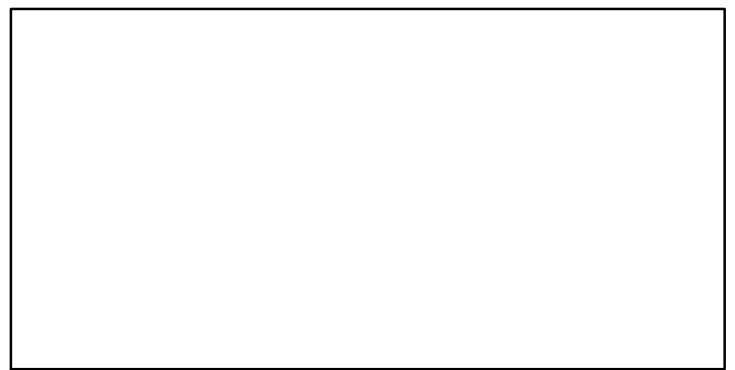
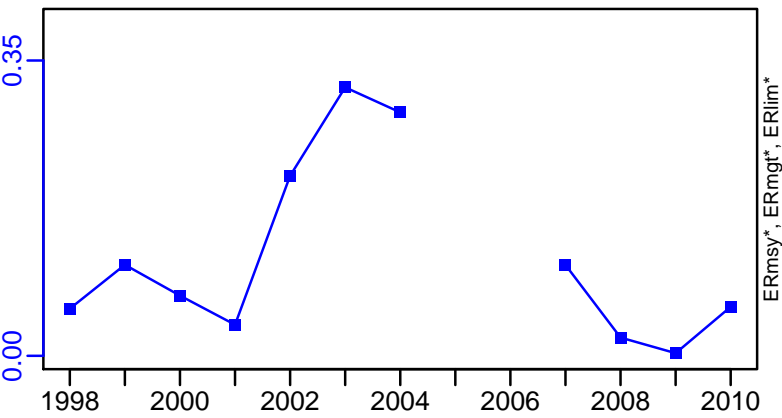
TN \*

F\*



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

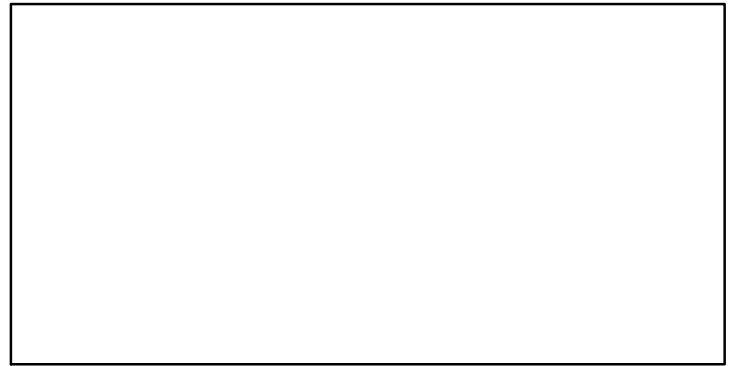
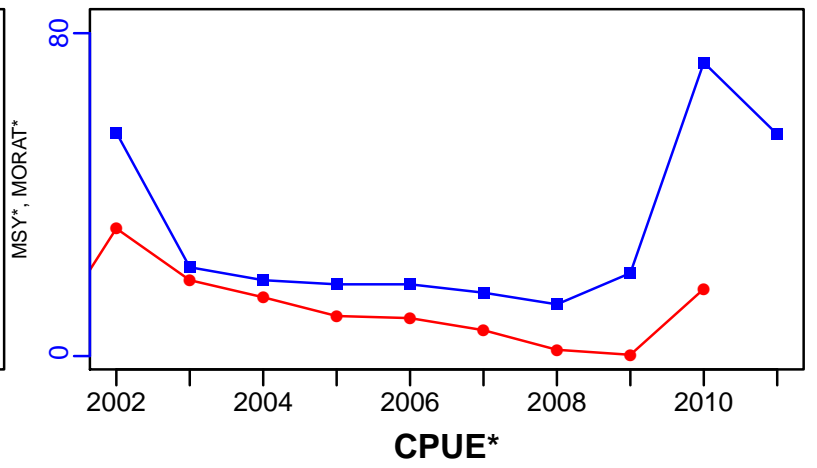
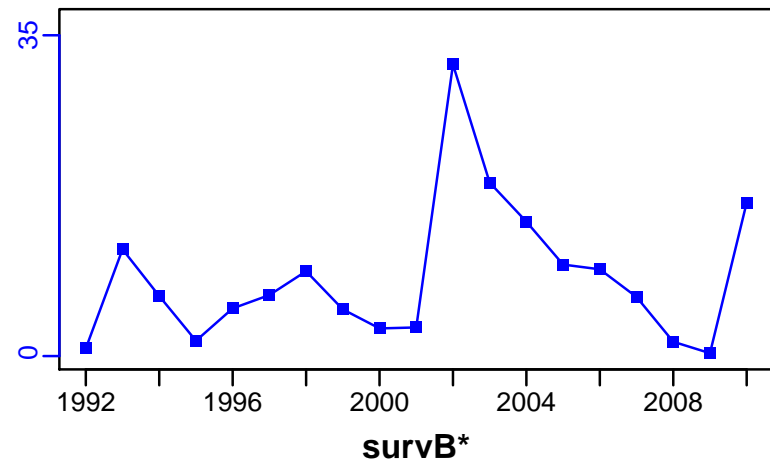
Recruits\*



# Sidestripe shrimp Shrimp Management Area GTSE [SSHRIMPSMAGTSE]

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

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



## Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSPMAPRD]

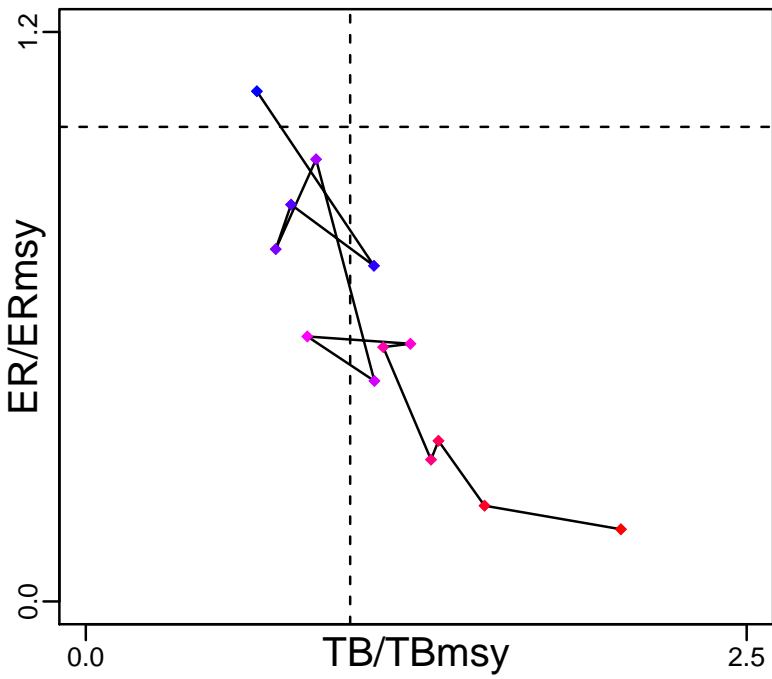
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSHRIMPSPMAPRD-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area PRD
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	603
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.286
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	173
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

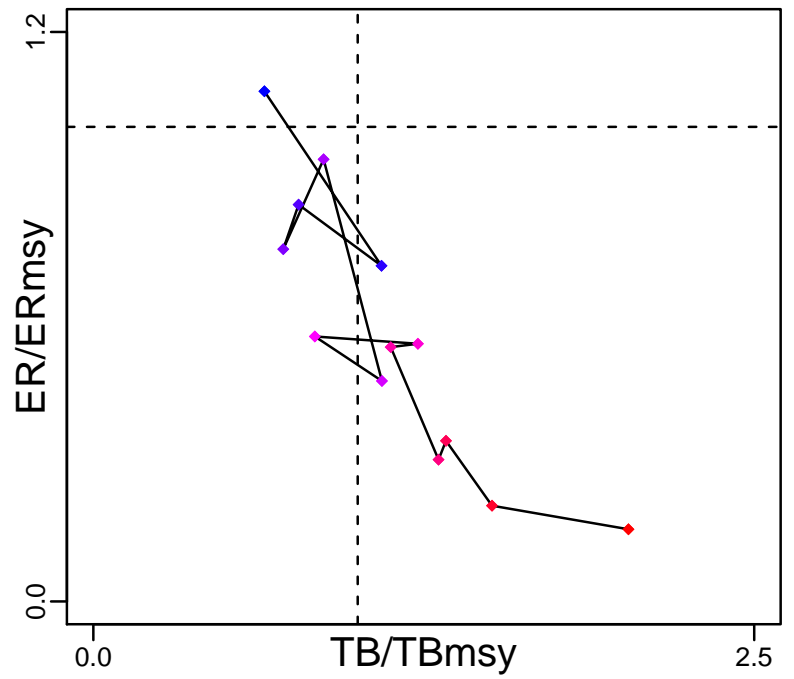
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	970	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.044	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	53		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.609		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.152		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

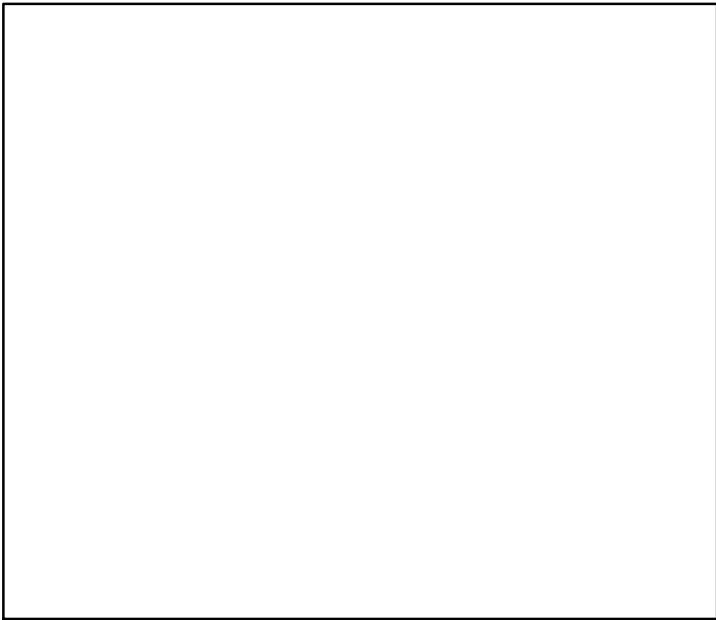
Kobe MSYpref (1987–2011–WATSON)



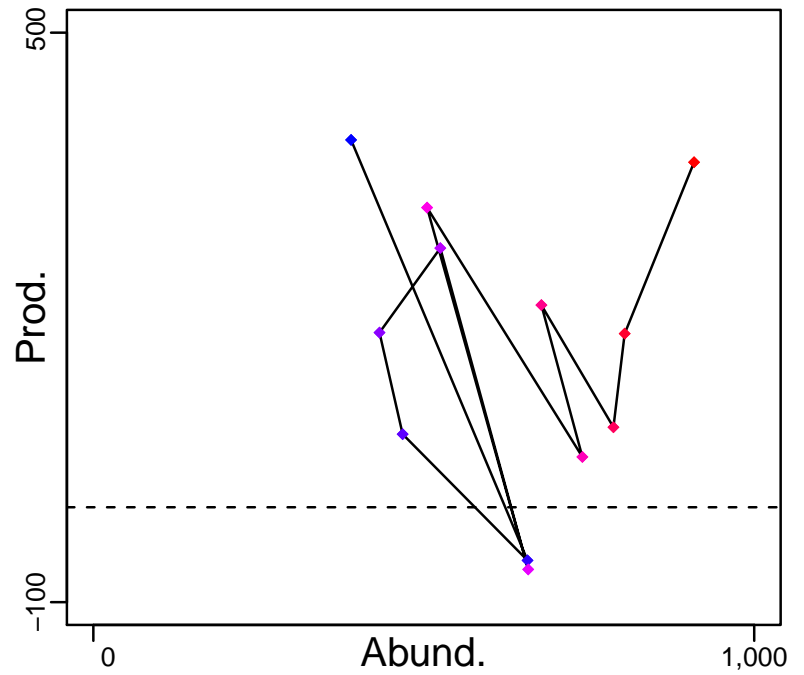
Kobe MGTpref (1987–2011–WATSON)



Spawner Recruit\*



Production (1987–2011–WATSON)

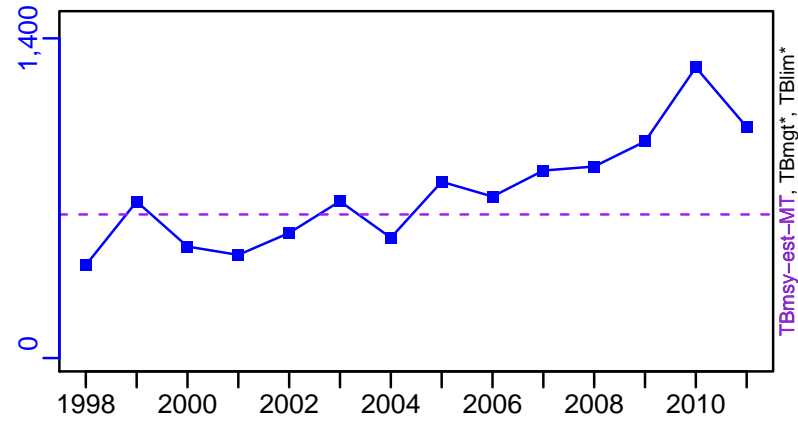


◆ Start Year ◆ End Year \* No Data

# Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

TB-MT (1987-2011-WATSON)

SSB\*



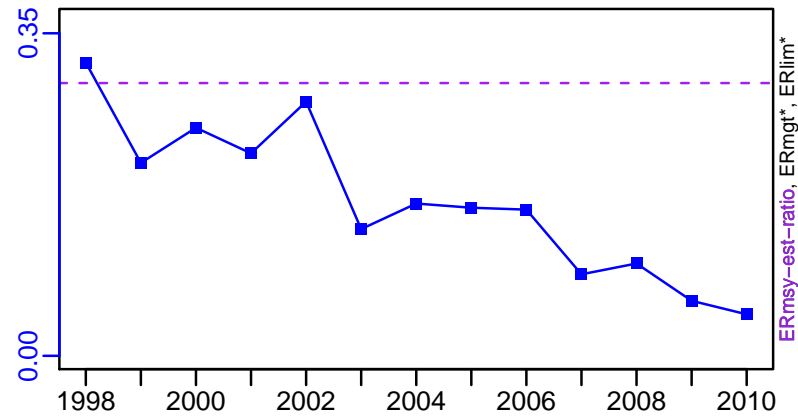
TN \*

F\*



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

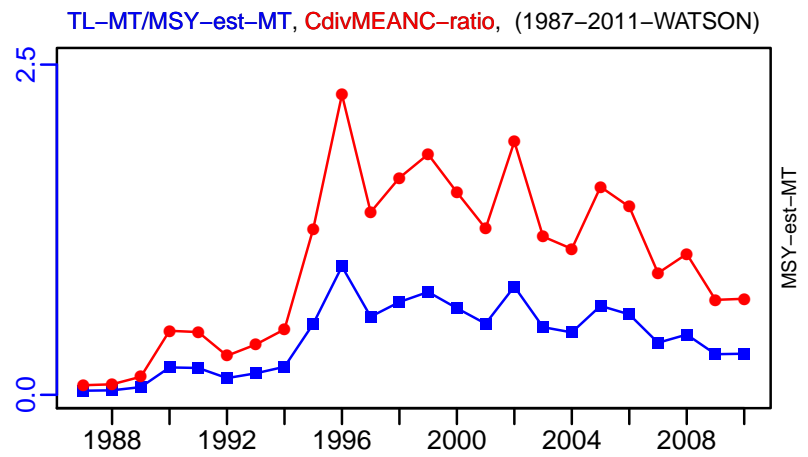
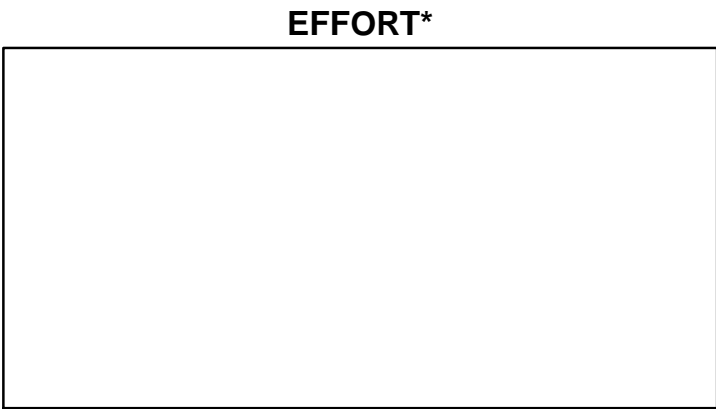
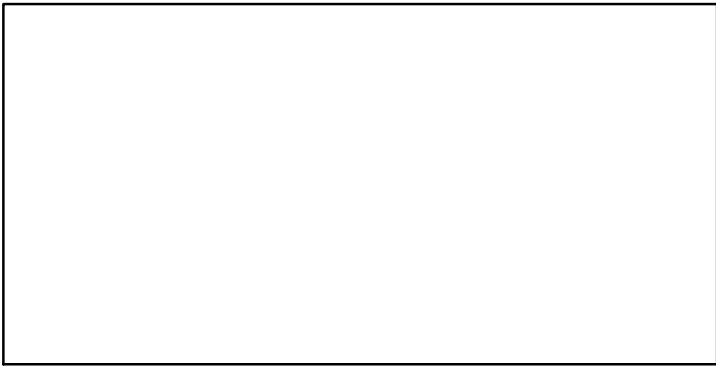
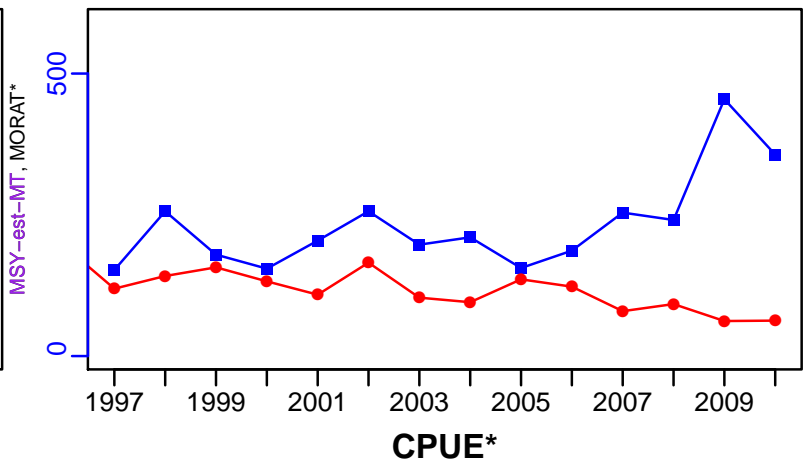
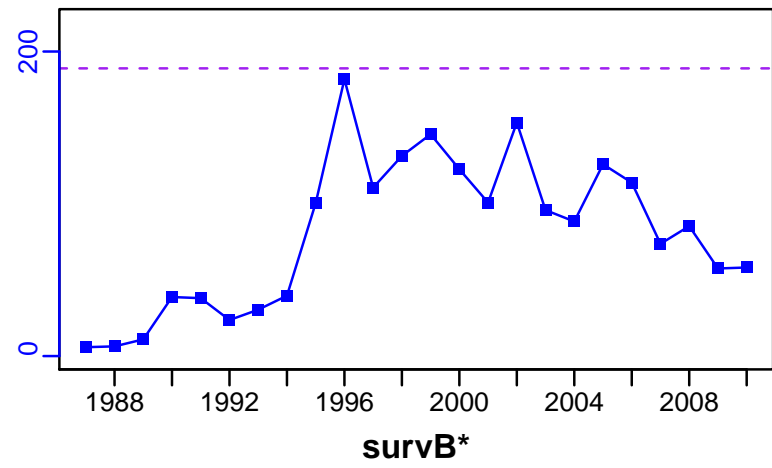
Recruits\*



# Sidestripe shrimp Shrimp Management Area PRD [SSHRIMPSMAPRD]

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

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



## Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

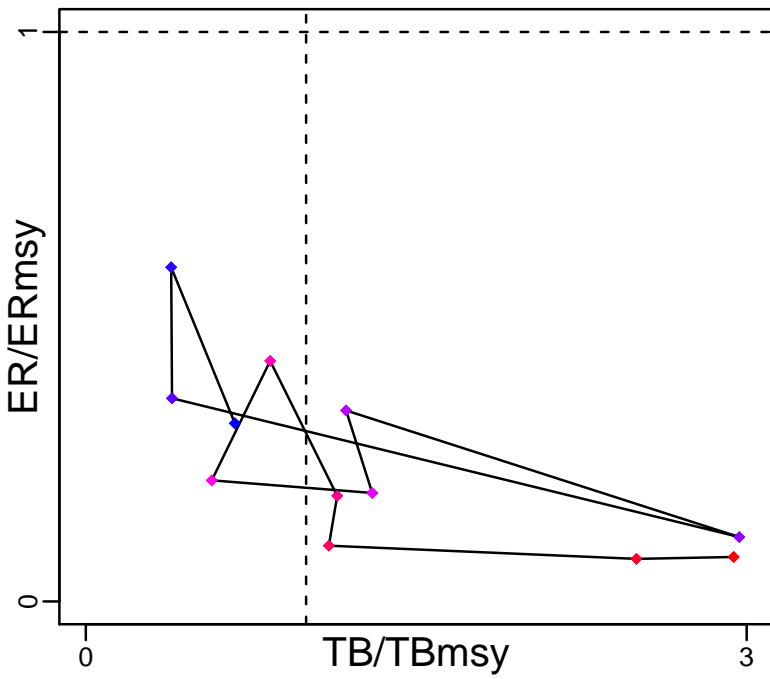
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA14-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 14
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	79
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.561
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	44
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

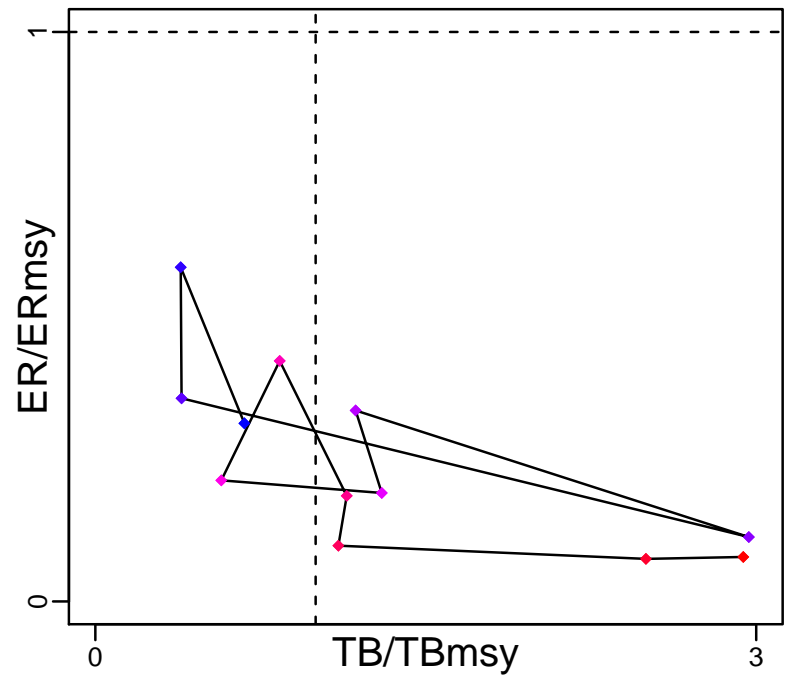
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	125	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.044	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	10		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.578		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.078		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

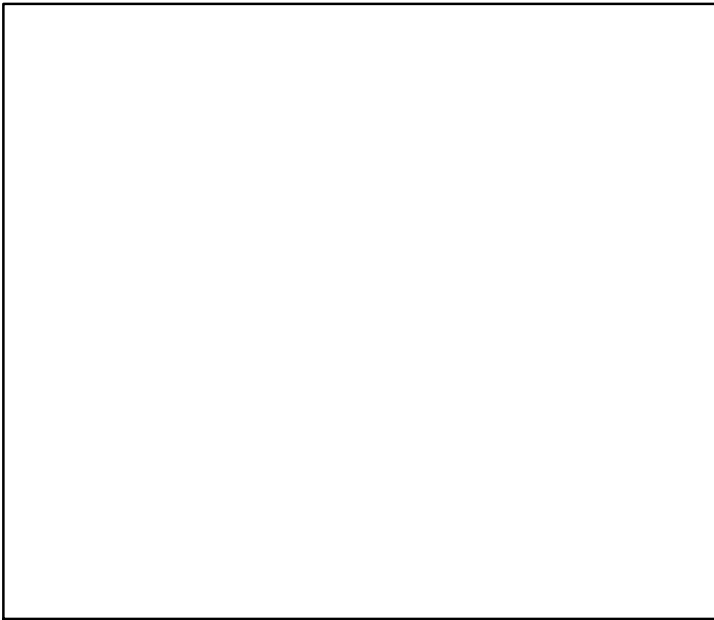
Kobe MSYpref (1987–2011–WATSON)



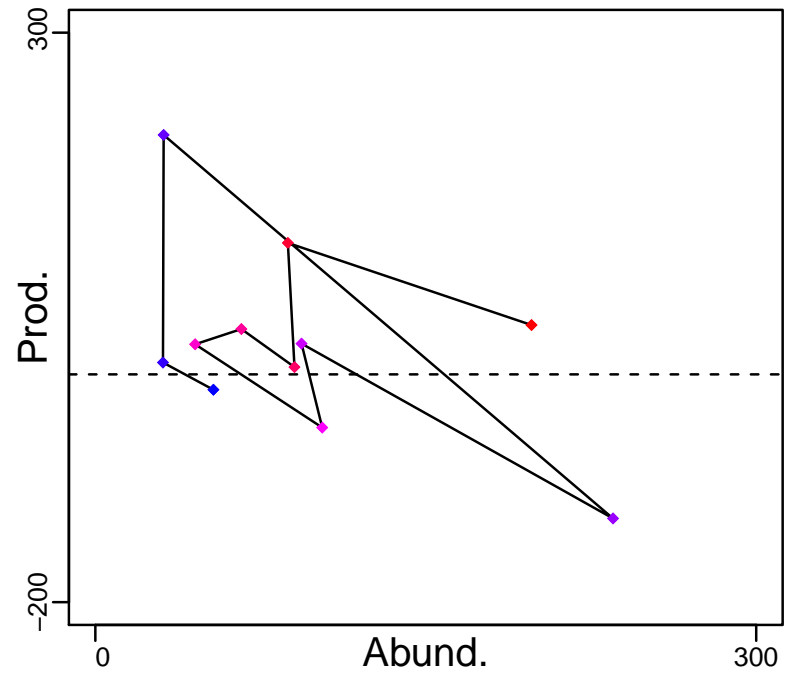
Kobe MGTpref (1987–2011–WATSON)



Spawner Recruit\*



Production (1987–2011–WATSON)



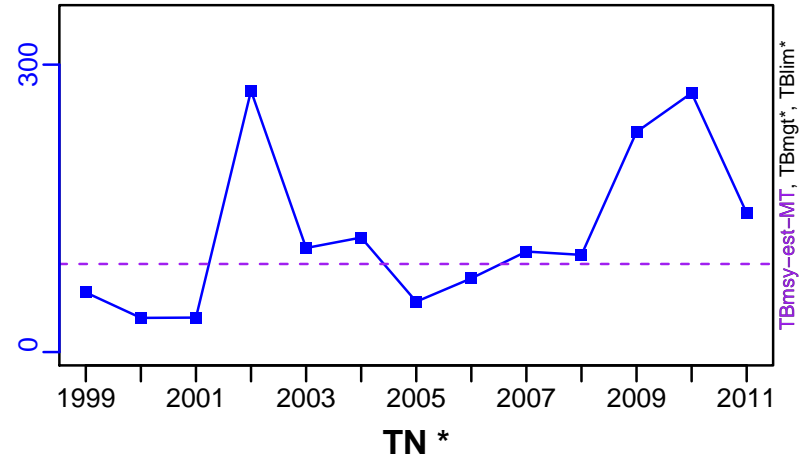
◆ Start Year ◆ End Year \* No Data



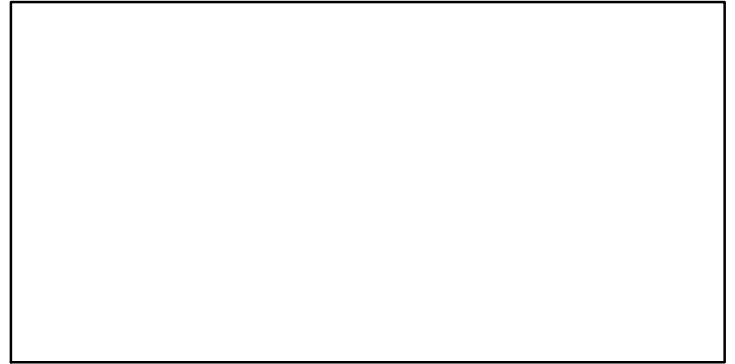
# Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

TB-MT (1987-2011-WATSON)

SSB\*

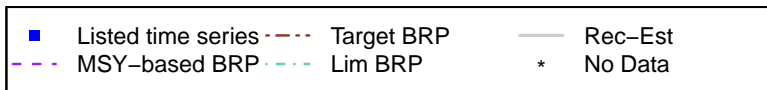
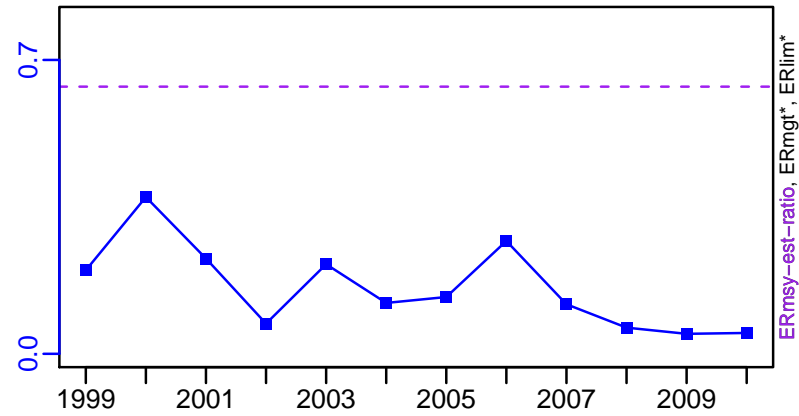


F\*



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

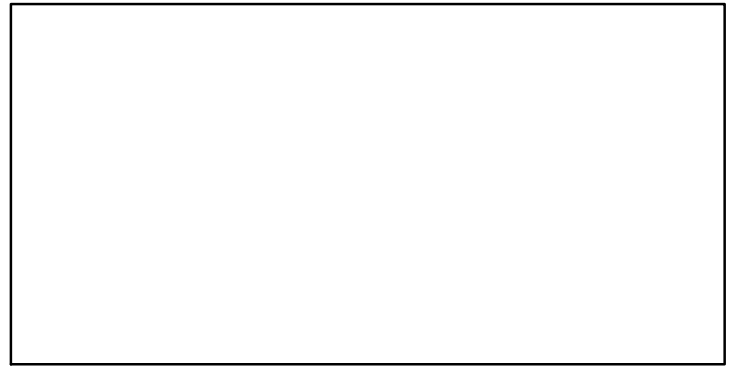
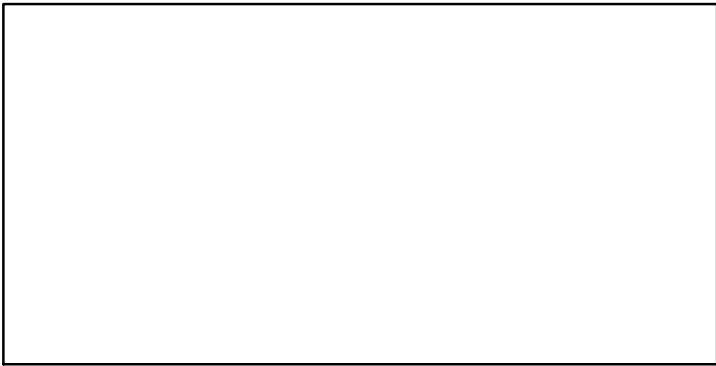
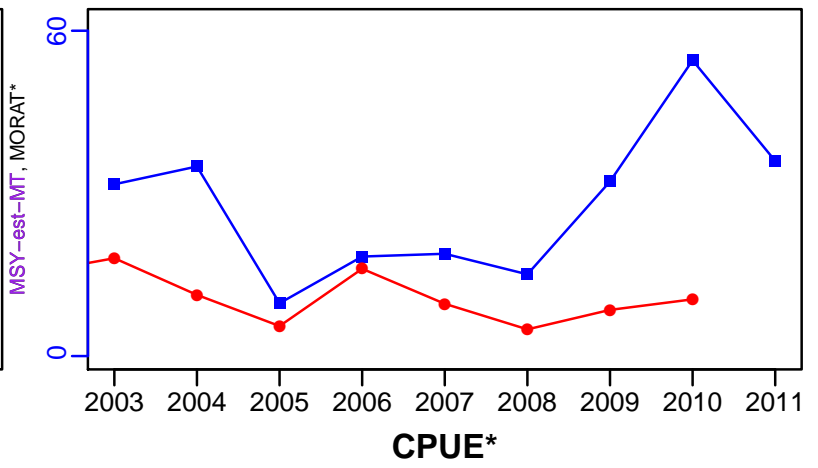
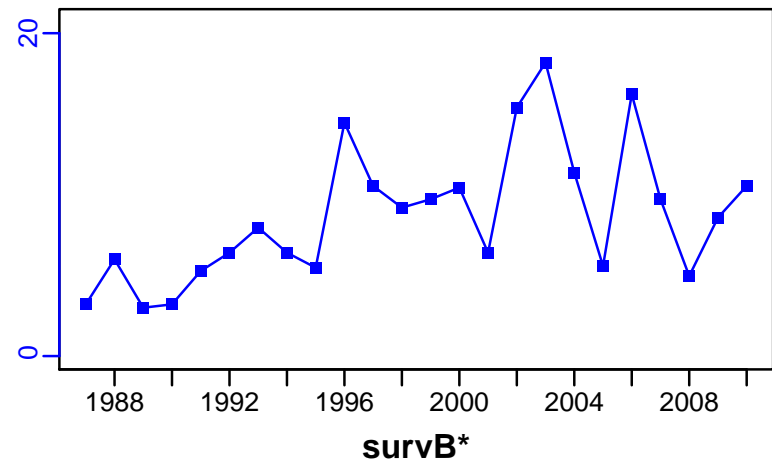
Recruits\*



# Sidestripe shrimp Shrimp Management Area 14 [SSSHRIMPSMA14]

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

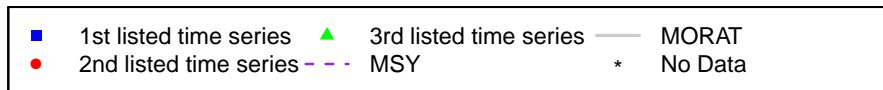
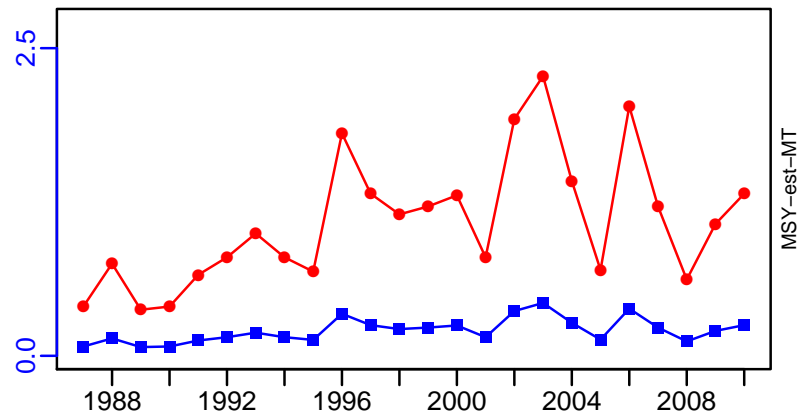
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



## Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

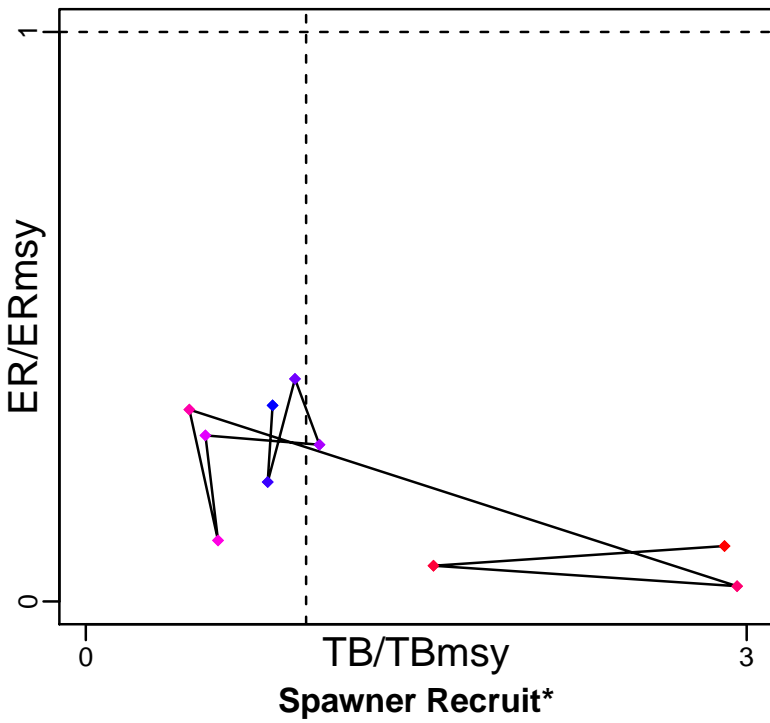
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA16-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area 16
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	31
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.642
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	20
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

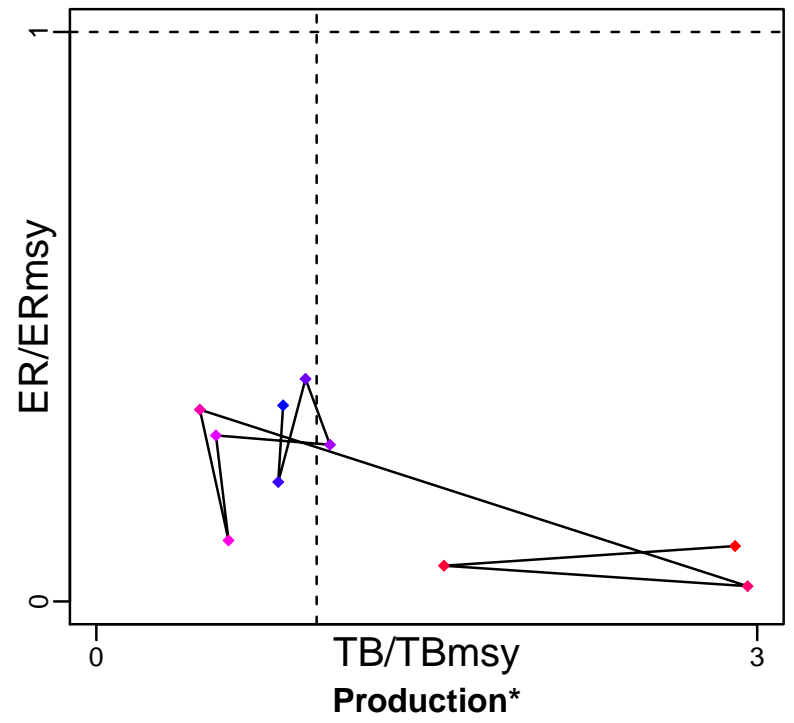
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	34	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.062	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	6		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.064		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.097		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

Kobe MSYpref (1987–2011–WATSON)



Kobe MGTpref (1987–2011–WATSON)

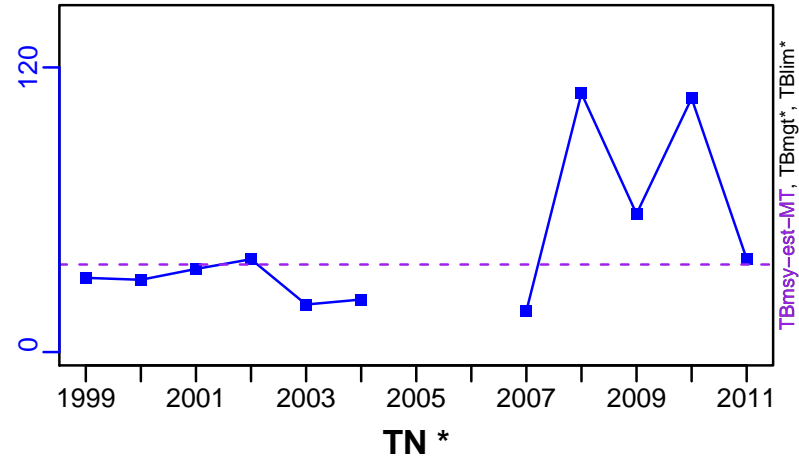


◆ Start Year ◆ End Year \* No Data

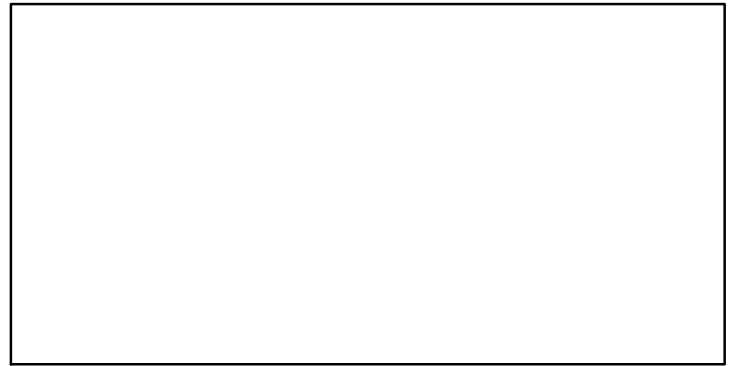
# Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

TB-MT (1987-2011-WATSON)

SSB\*

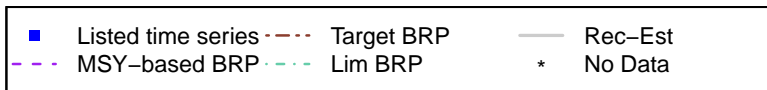
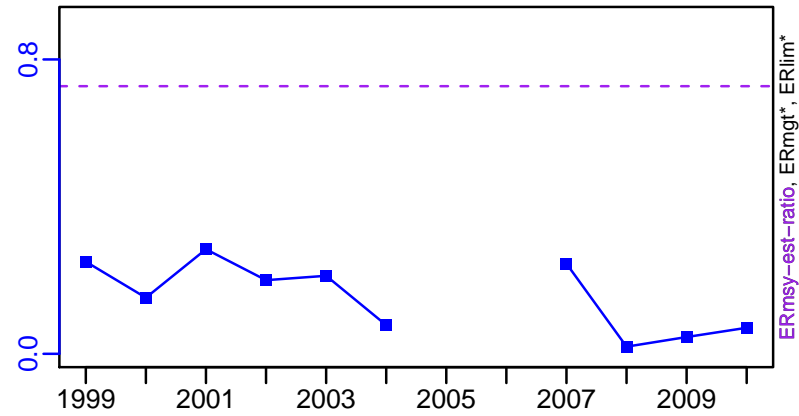


F\*



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

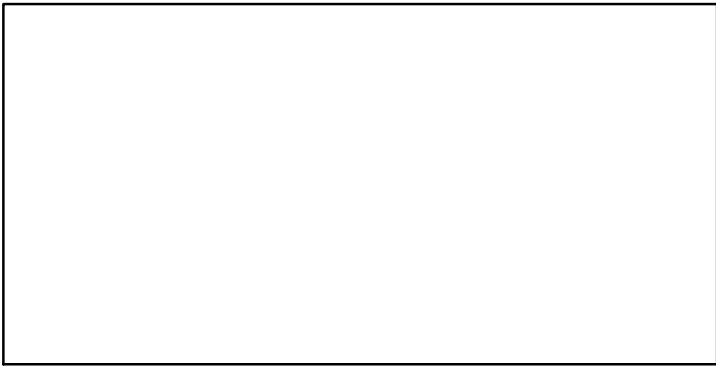
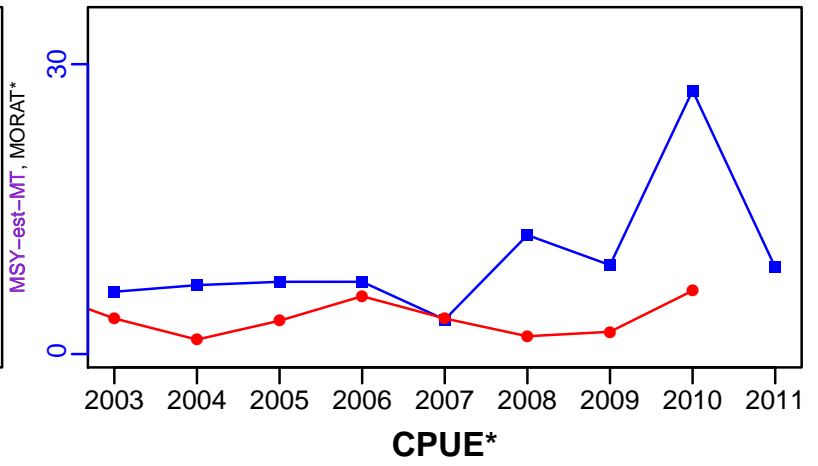
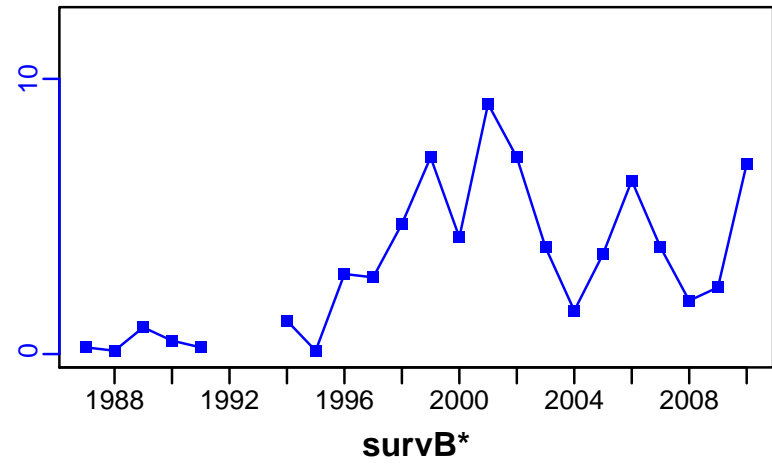
Recruits\*



# Sidestripe shrimp Shrimp Management Area 16 [SSSHRIMPSMA16]

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

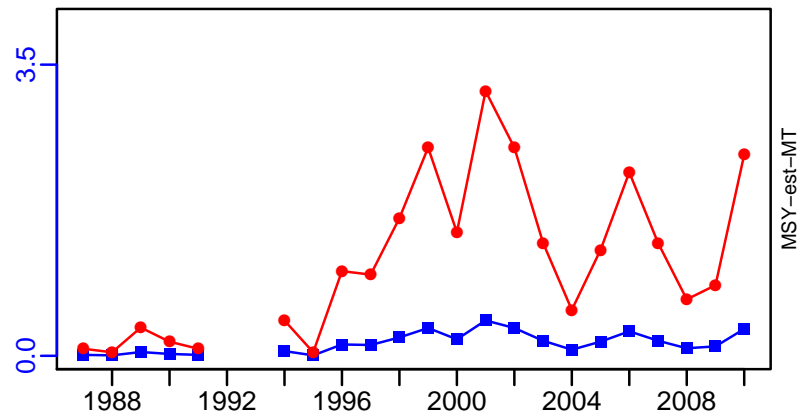
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



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

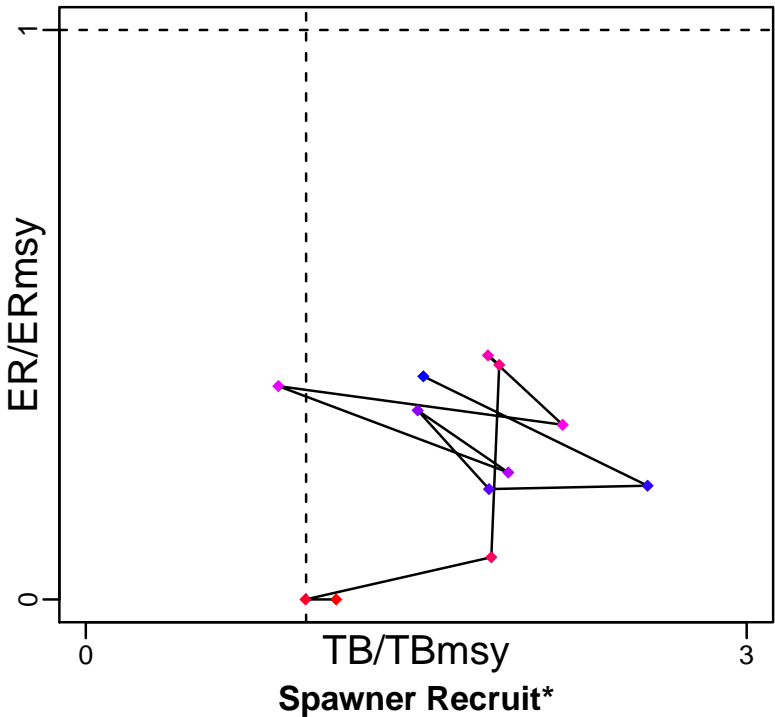
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMA18-19-1987-2011-WATSON
<b>Area</b>	Shrimp Management Areas 18 and 19
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	19
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.565
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	11
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

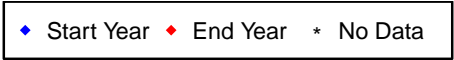
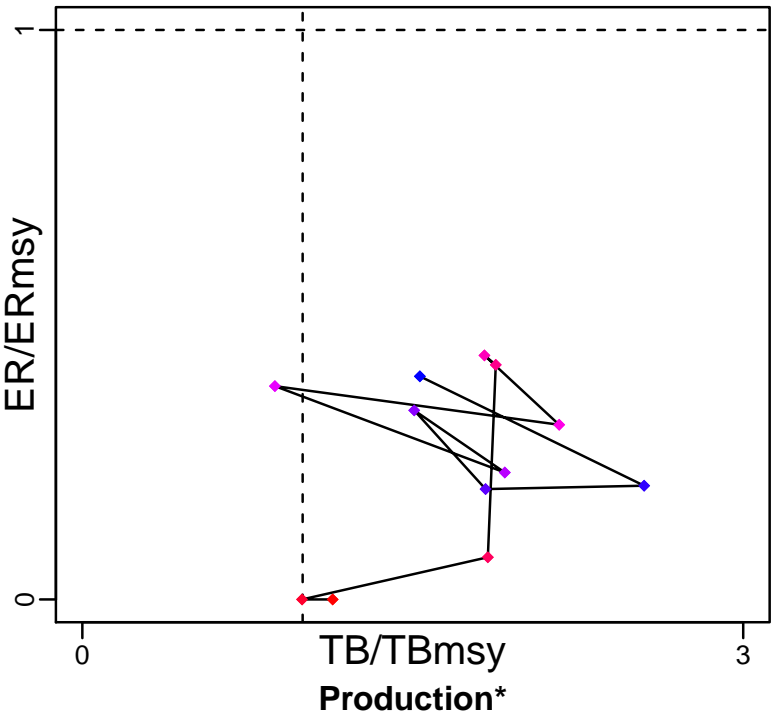
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	22	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	0		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.136		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

Kobe MSYpref (1987-2011-WATSON)



Kobe MGTpref (1987-2011-WATSON)





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

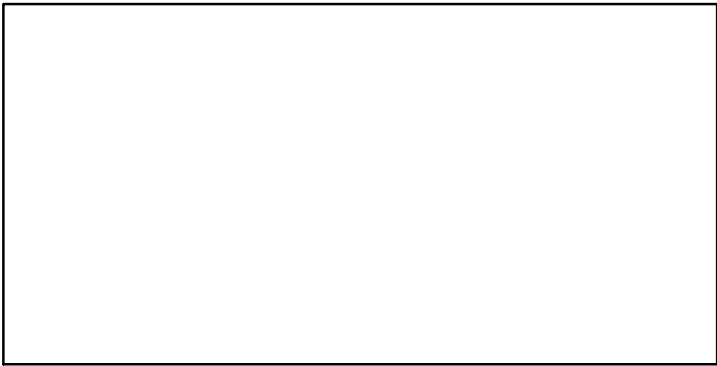
TB-MT (1987-2011-WATSON)



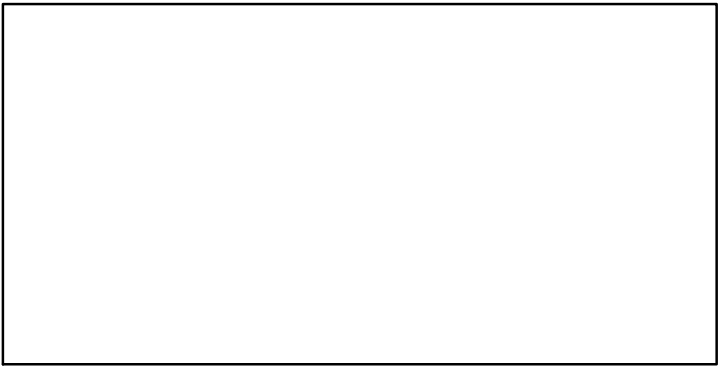
SSB\*



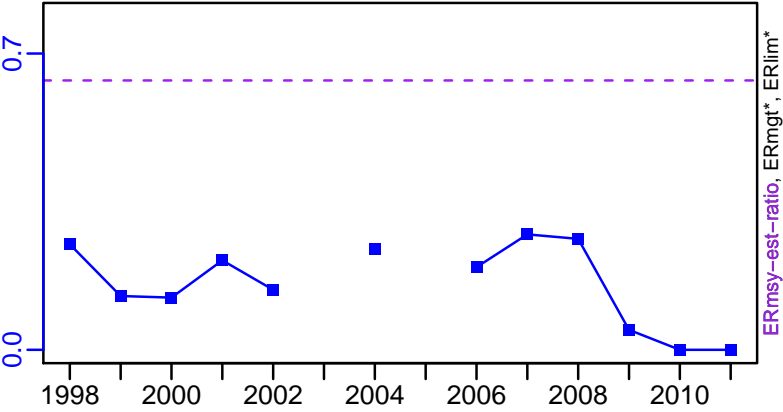
TN \*



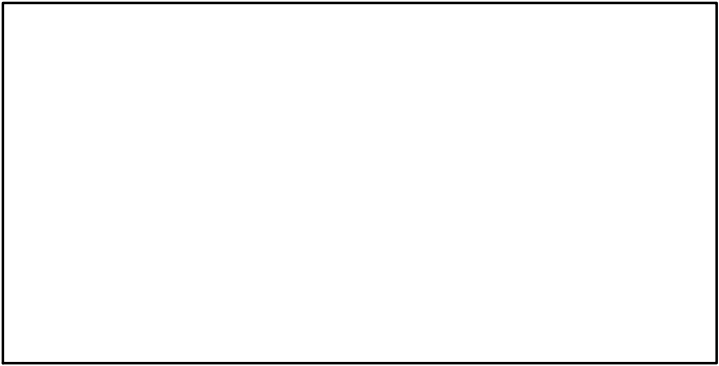
F\*



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

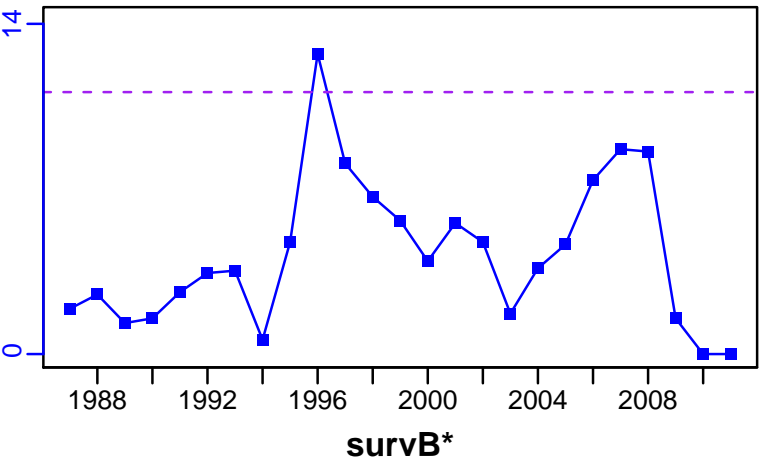


Recruits\*

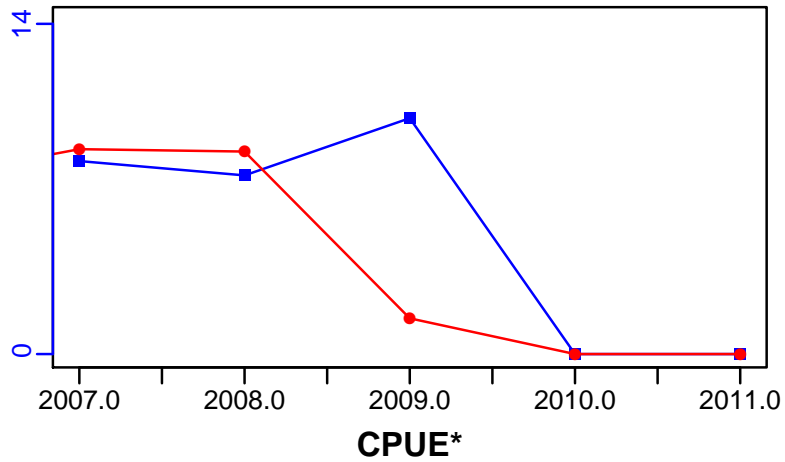


Sidestripe shrimp Shrimp Management Areas 18 and 19 [SSSHRIMPSMA18-19]

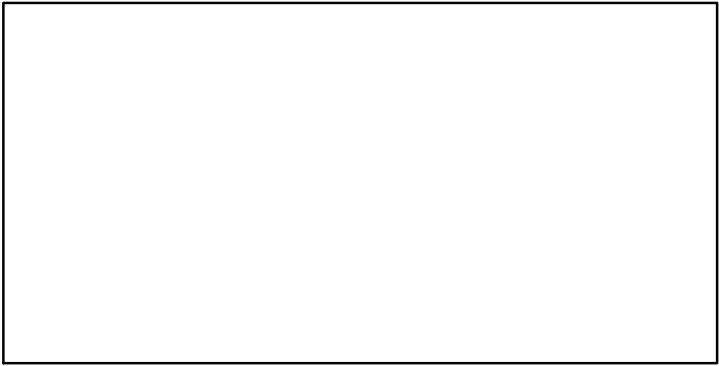
TL-MT, TC\*, RecC\* (1987-2011-WATSON)



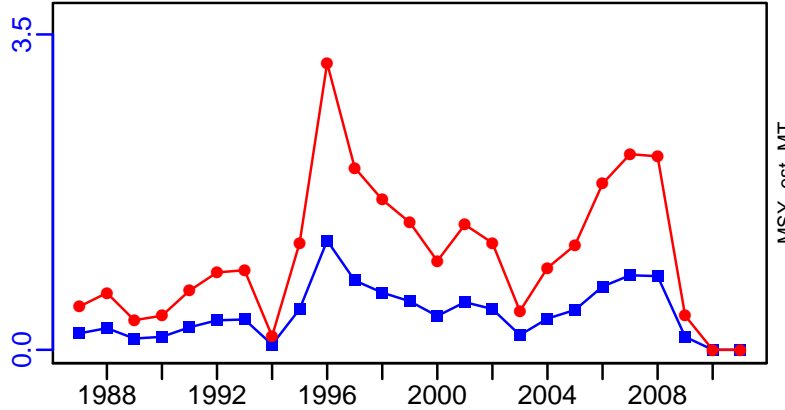
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



## Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

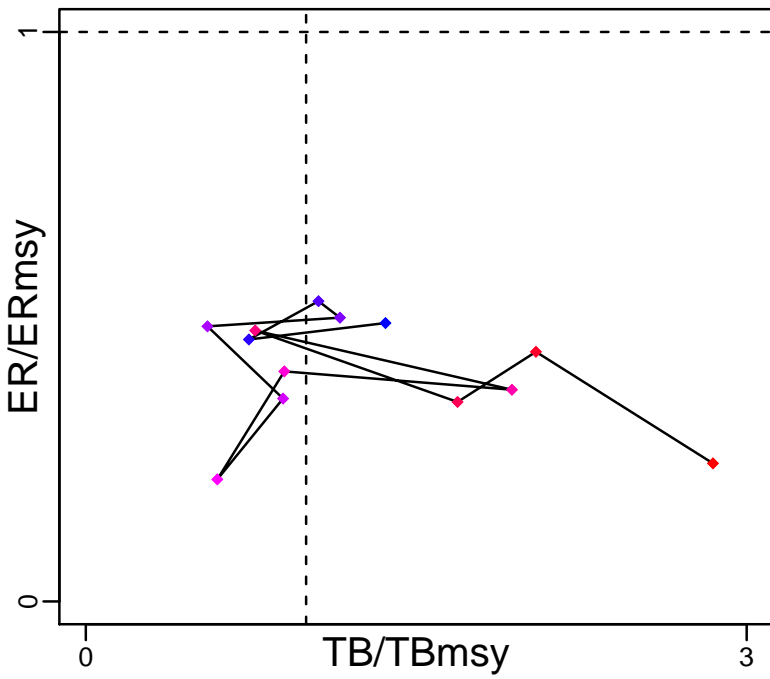
Metadata	
<b>Scientific Name</b>	Pandalopsis dispar
<b>Current Assess ID</b>	DFO-SSSHRIMPSMAFR-1987-2011-WATSON
<b>Area</b>	Shrimp Management Area FR
<b>Management Authority</b>	Department of Fisheries and Oceans, Canada national management
<b>Assessor</b>	Department of Fisheries and Oceans
<b>Asmts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

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	174
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.318
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	55
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

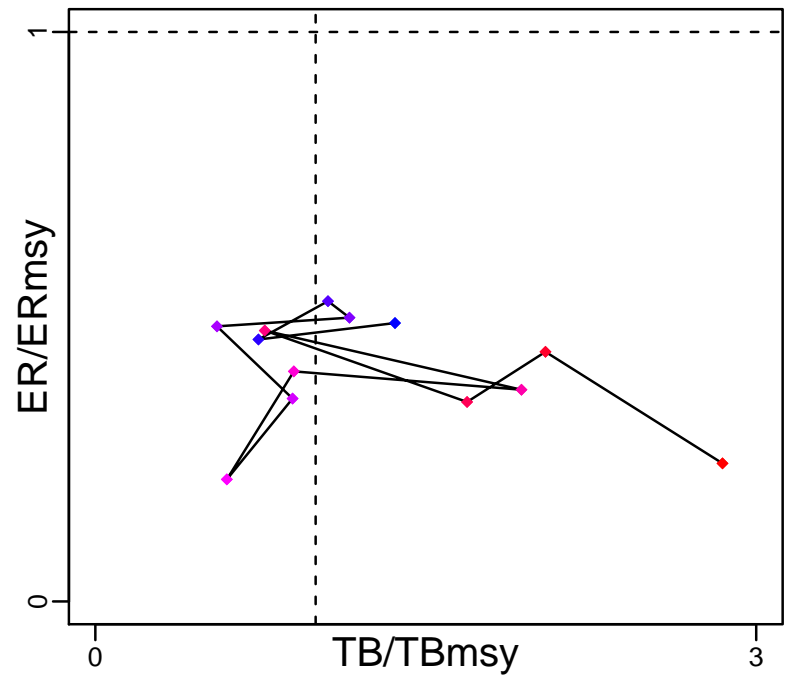
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	520	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2011	0.077	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2011	38		
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	2.985		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	0.242		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

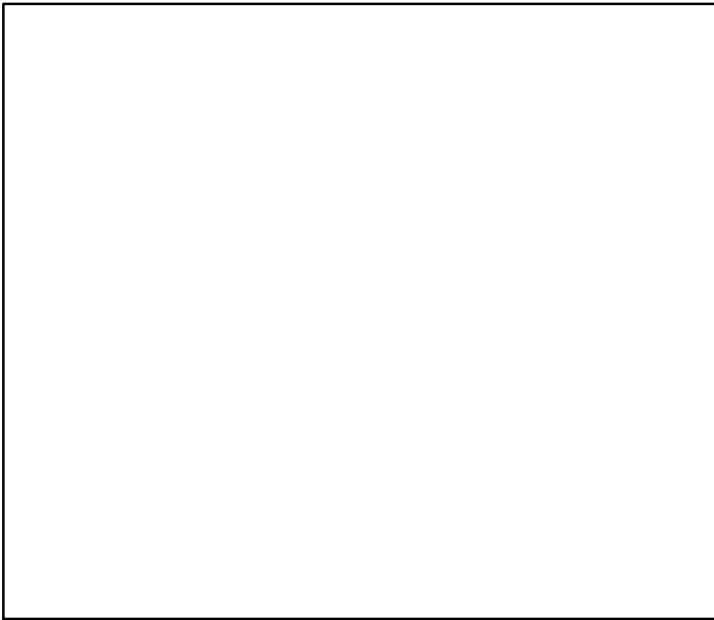
Kobe MSYpref (1987–2011–WATSON)



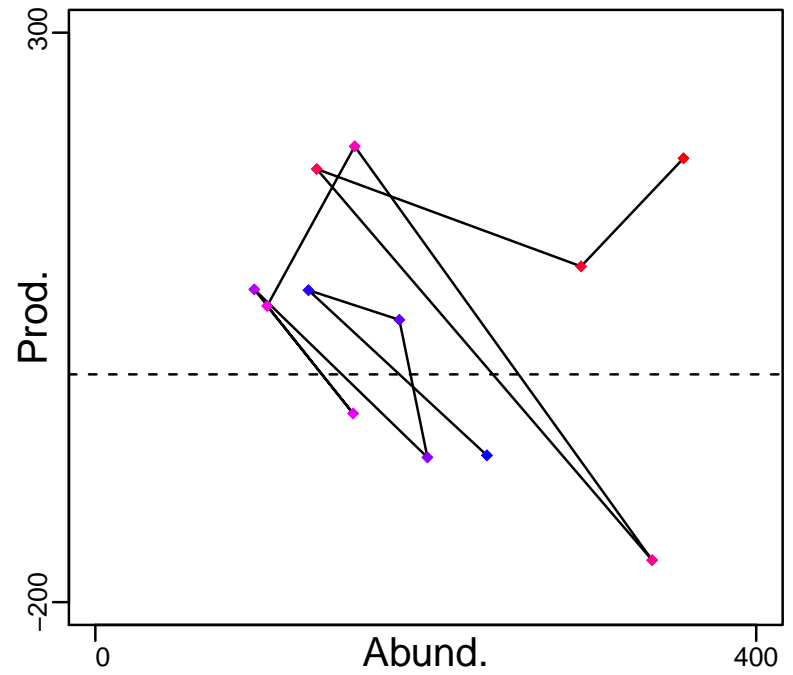
Kobe MGTpref (1987–2011–WATSON)



Spawner Recruit\*



Production (1987–2011–WATSON)

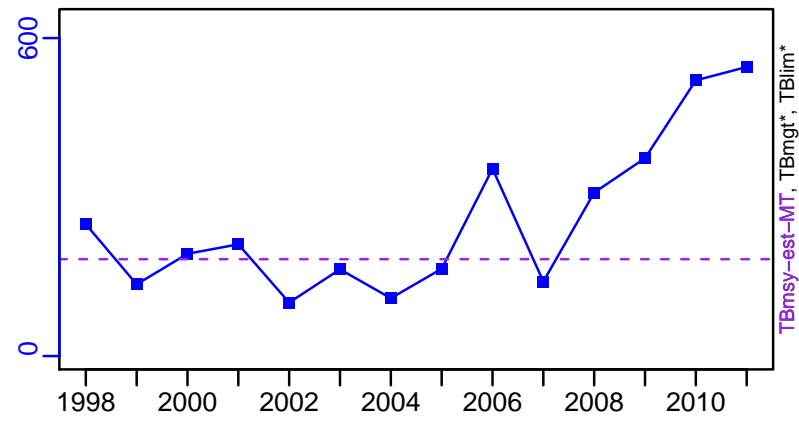


◆ Start Year ◆ End Year \* No Data

# Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

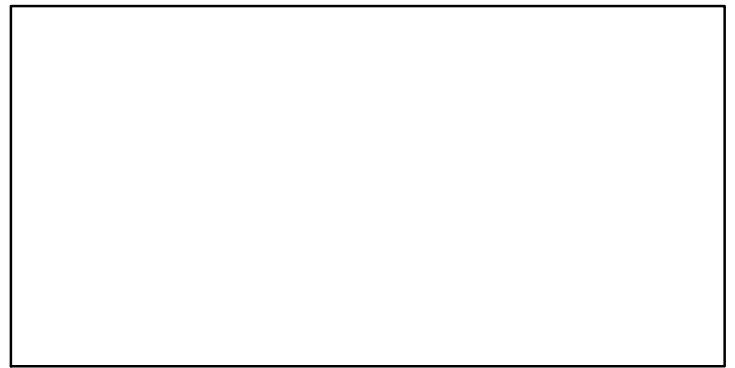
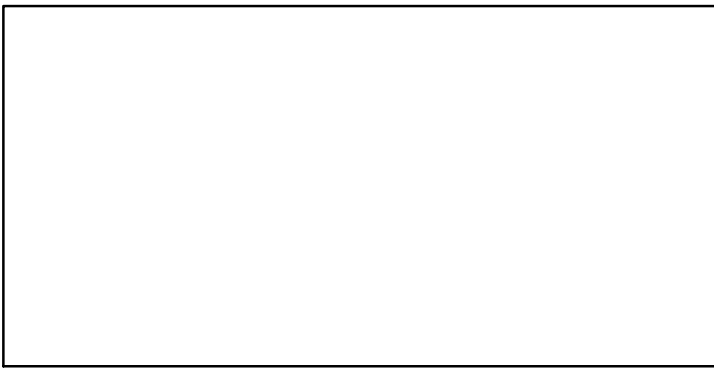
TB-MT (1987-2011-WATSON)

SSB\*



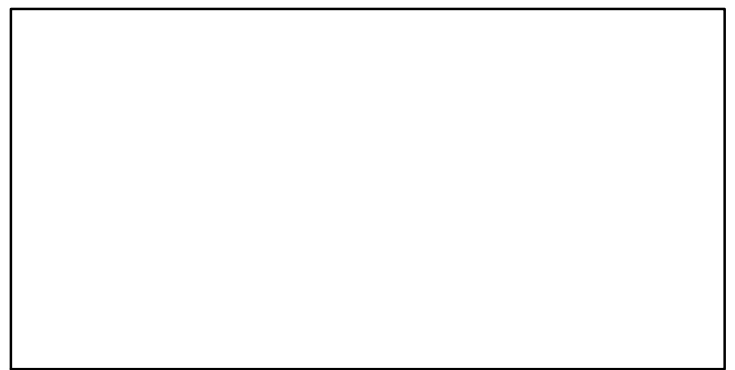
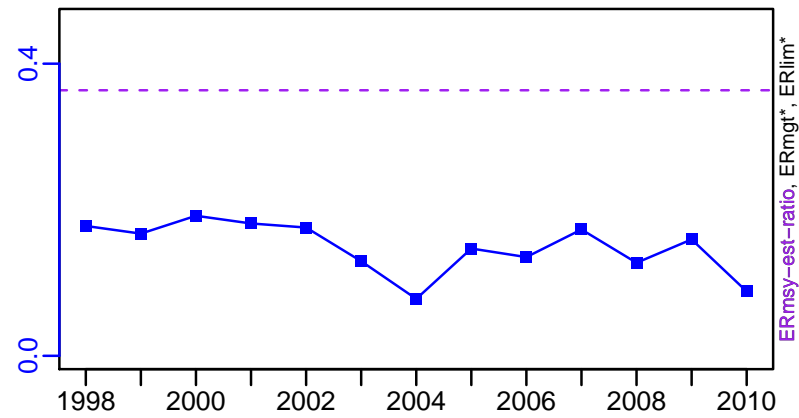
TN \*

F\*



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

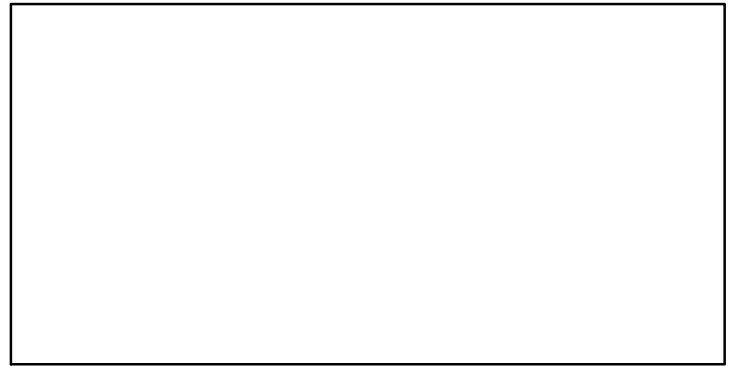
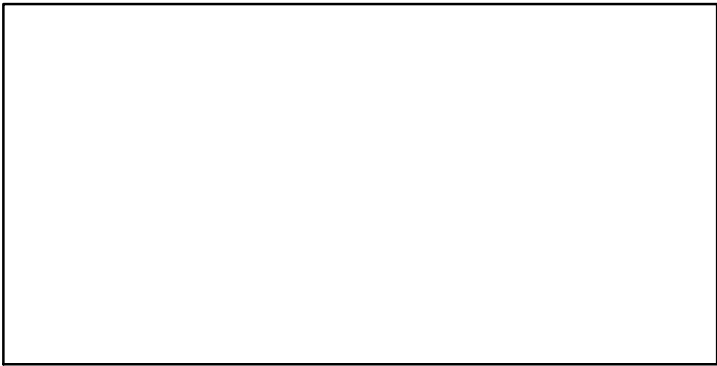
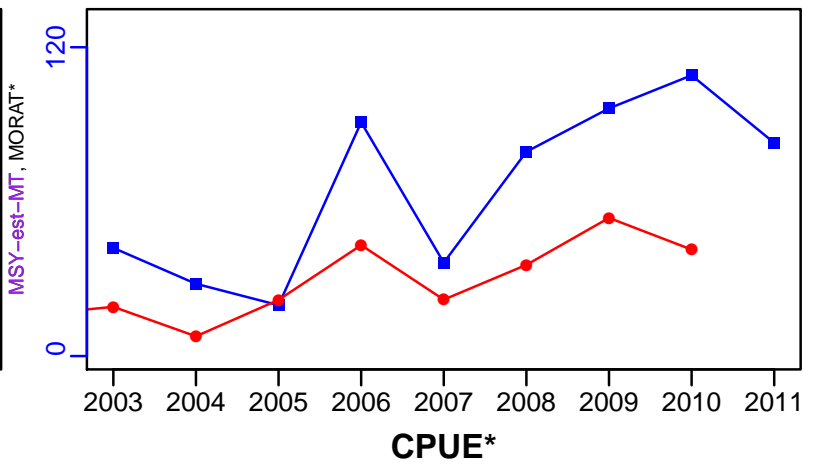
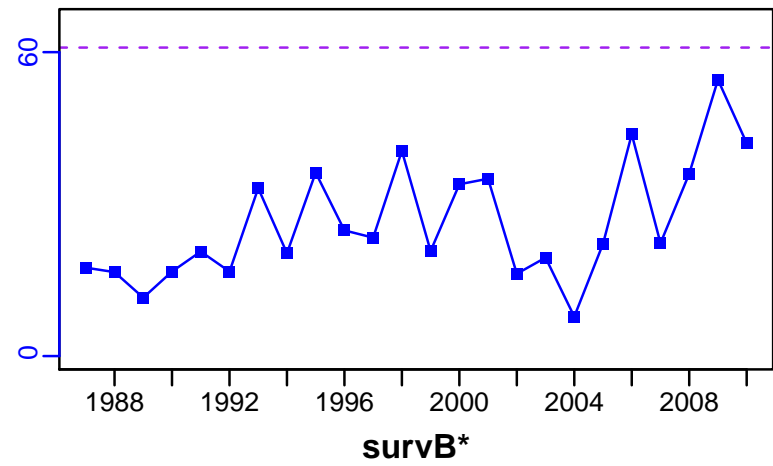
Recruits\*



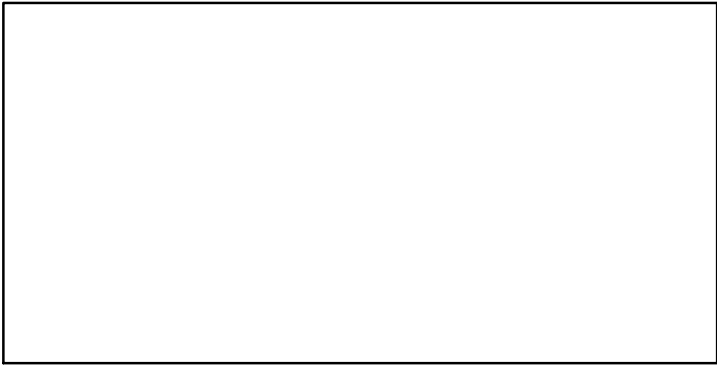
# Sidestripe shrimp Shrimp Management Area FR [SSSHRIMPSMAFR]

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

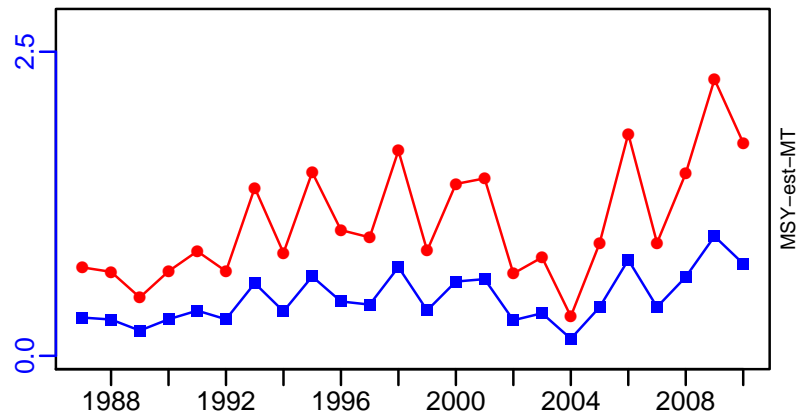
TAC-MT, Cpair-MT, Cadv\* (1987-2011-WATSON)



EFFORT\*



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



## 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

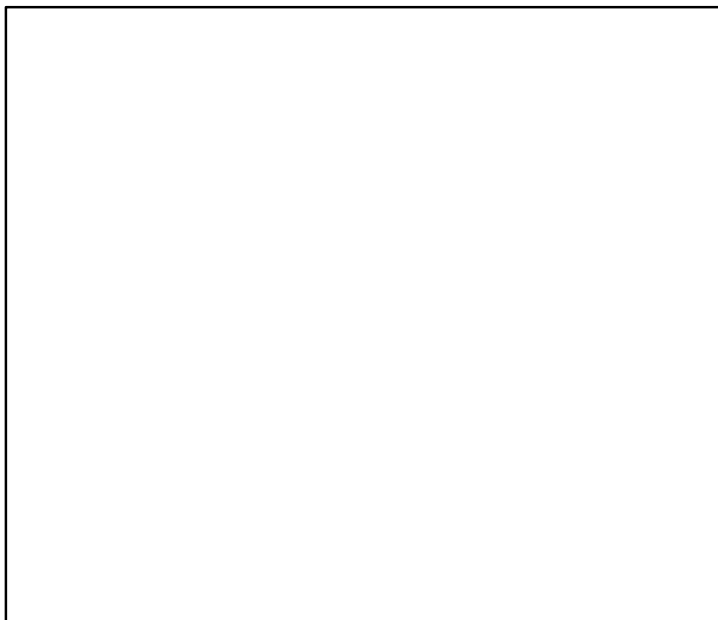
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-		

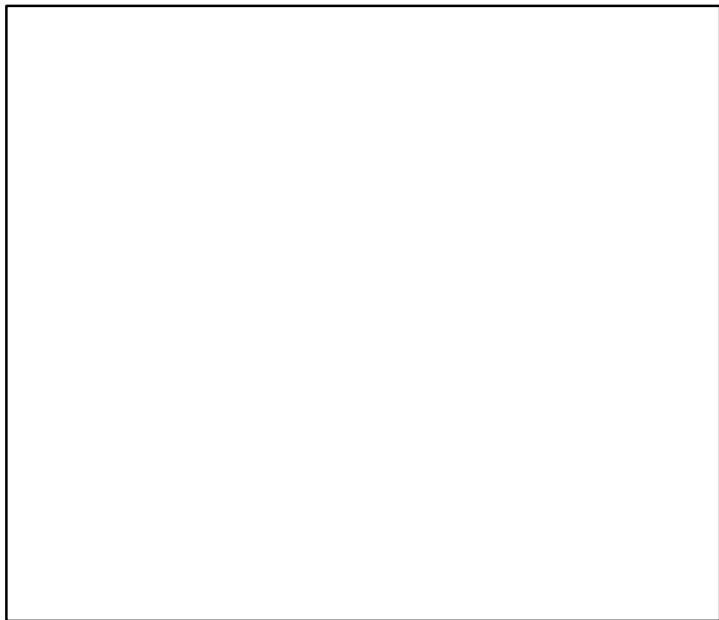
**Kobe MSY\***



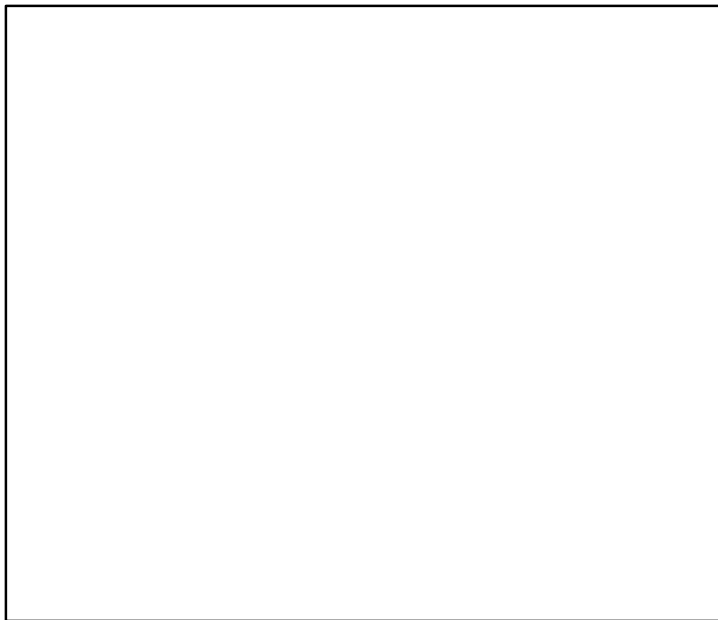
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

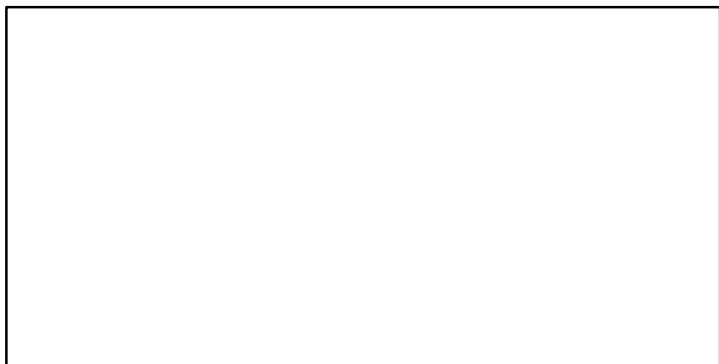


◆ Start Year ◆ End Year \* No Data

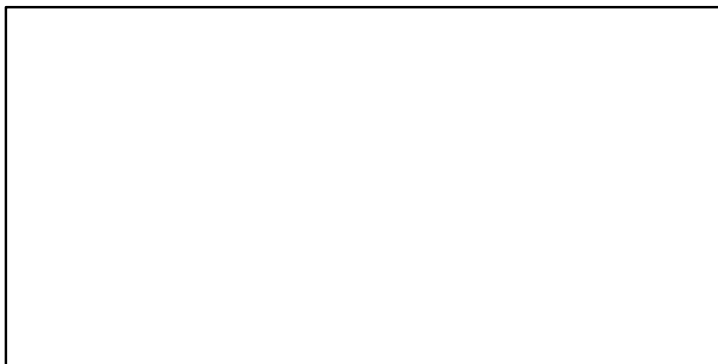


Yelloweye rockfish Pacific Coast of Canada (Inside) [YEYEROCKPCOASTIN]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



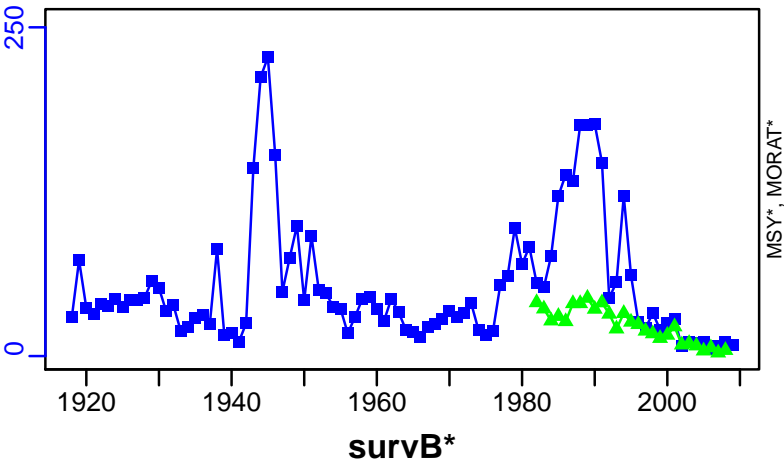
**Recruits\***



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

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

TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY\*

