

# Australia Stocks

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

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgmt
1. BGRDRNSWWA [Blue grenadier New South Wales to Western Australia]	TB SSB	ER F	TB SSB	ER F
2. BIGHTREDSE [Bight redfish Southeast Australia]	TB SSB	ER F	TB SSB	ER F
3. BTSHRIMPNAUST [Brown tiger shrimp Northern Australia]	TB SSB	ER F	TB SSB	ER F
4. DEEPFLATHEADSE [Deepwater flathead Southeast Australia]	TB SSB	ER F	TB SSB	ER F
5. GEMFISHSE [Common gemfish Southeast Australia]	TB SSB	ER F	TB SSB	ER F
6. GTPRAWNNAUST [Grooved tiger prawn Northern Australia]	TB SSB	ER F	TB SSB	ER F
7. MORWONGESE [Jackass morwong Eastern half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F
8. MORWONGWSE [Jackass morwong Western half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F
9. MULLQNSW [Sea mullet Queensland and New South Wales]	TB SSB	ER F	TB SSB	ER F
10. NZLINGESE [Ling Southeast Australia]	TB SSB	ER F	TB SSB	ER F
11. NZLINGWSE [Ling Western half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F
12. OROUGHYCASCADE [Orange roughy Cascade Plateau]	TB SSB	ER F	TB SSB	ER F
13. OROUGHYSE [Orange roughy Southeast Australia]	TB SSB	ER F	TB SSB	ER F
14. PTOOTHFISHMI [Patagonian toothfish Macquarie Island]	TB SSB	ER F	TB SSB	ER F
15. REDFEAUS [Redfish Eastern Australia]	TB SSB	ER F	TB SSB	ER F
16. RROCKLOBSTERSAUSNZ [Rock lobster South Australia Northern Zone]	TB SSB	ER F	TB SSB	ER F
17. RROCKLOBSTERSAUSSZ [Rock lobster South Australia Southern Zone]	TB SSB	ER F	TB SSB	ER F
18. SARDWSE [Sardine Western half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F
19. SILVERFISHSE [Silverfish Southeast Australia]	TB SSB	ER F	TB SSB	ER F
20. SNAPSausnsg [Snapper Northern Spencer Gulf]	TB SSB	ER F	TB SSB	ER F
21. SNAPSaussgs [Snapper Southern Gulf St. Vincent]	TB SSB	ER F	TB SSB	ER F
22. SNAPSauSSG [Snapper Southern Spencer Gulf]	TB SSB	ER F	TB SSB	ER F
23. SWHITSE [School whiting Southeast Australia]	TB SSB	ER F	TB SSB	ER F
24. TASGIANTCRABTAS [Tasmanian giant crab Tasmania]	TB SSB	ER F	TB SSB	ER F
25. TIGERFLATSE [Tiger flathead Southeast Australia]	TB SSB	ER F	TB SSB	ER F
26. WAREHOUESE [Blue warehou Eastern half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F
27. WAREHOUWSE [Blue warehou Western half of Southeast Australia]	TB SSB	ER F	TB SSB	ER F

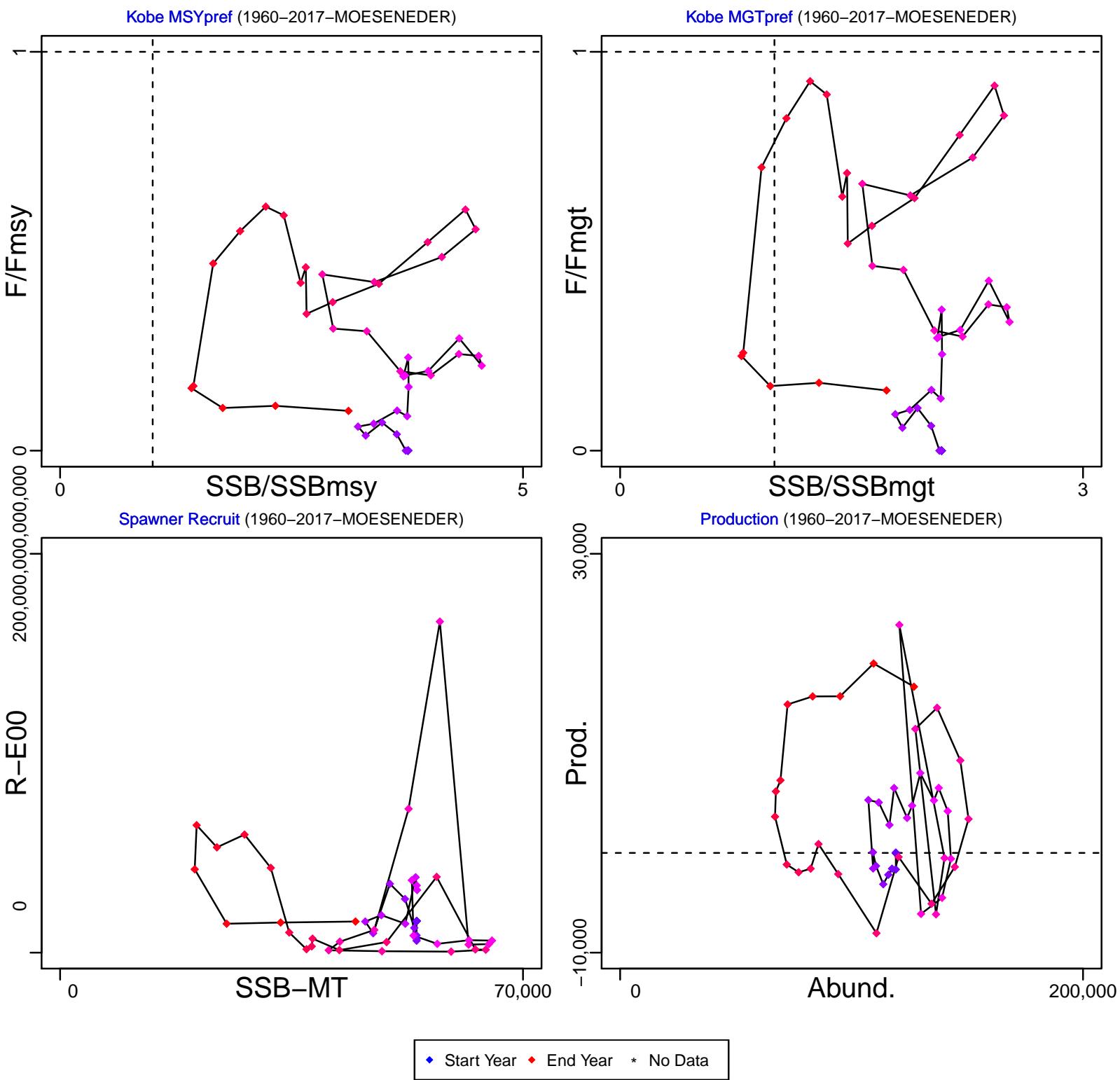
## Blue grenadier New South Wales to Western Australia [BGRDRNSWWA]

<b>Metadata</b>	
<b>Scientific Name</b>	Macruronus novaezelandiae
<b>Current Assess ID</b>	CSIRO-BGRDRNSWWA-1960-2017-MOESENEDER
<b>Area</b>	New South Wales to Western Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2012, 2017

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2017	14,341
<b>Fmsy</b>	Fmsy-1/yr	2017	0.122
<b>ERmsy</b>	ERmsy-conv-ratio	2017	0.159
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2017	25,876
<b>Fmgt</b>	Fmgt-1/yr	2017	0.081
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2017	119,123
<b>SSB0</b>	SSB0-MT	2017	53,909
<b>MSY</b>	MSY-MT	2017	5506
<b>M</b>	M-1/yr	2017	0.174
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2017	10,782
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2017	142,308	-	-	
<b>SSB</b>	SSB-MT	2017	44,673	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2017	$1.56 \times 10^{13}$	-	-	
<b>F</b>	F-1/yr	2017	0.012	-	-	
<b>ER</b>	ER-ratio	2017	0.013	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2017	1692			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2017	3.246			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2017	3.115			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2017	0.1			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2017	0.085			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2017	1.726			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2017	0.151			
<b>ER/ERmgt</b>	-	-	-			

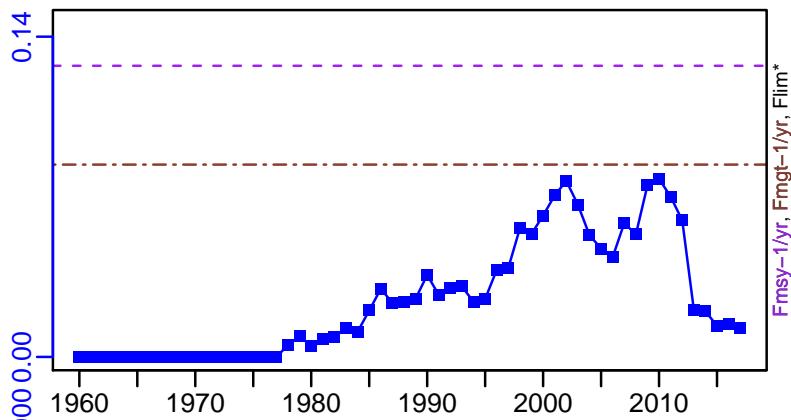
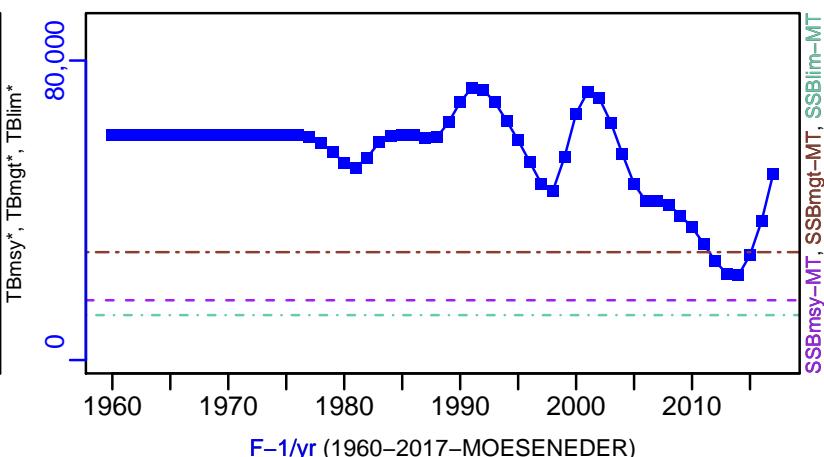
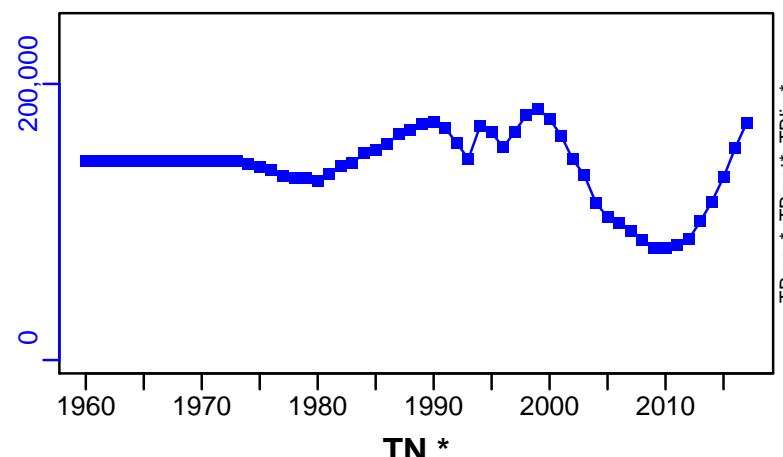
### Blue grenadier New South Wales to Western Australia [BGRDRNSWWA]



### Blue grenadier New South Wales to Western Australia [BGRDRNSWWA]

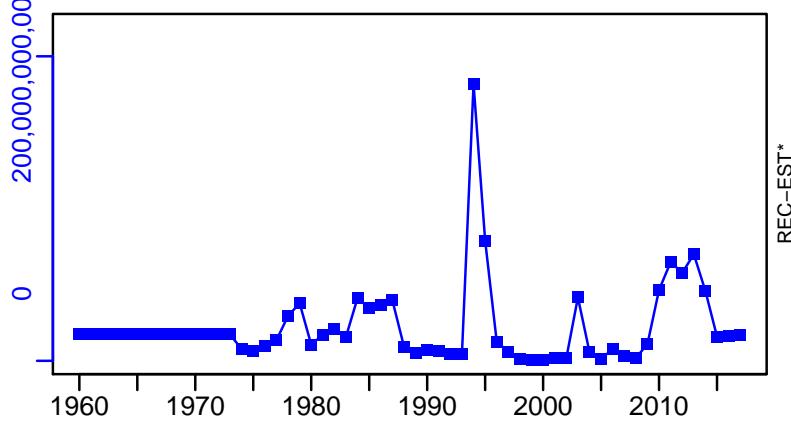
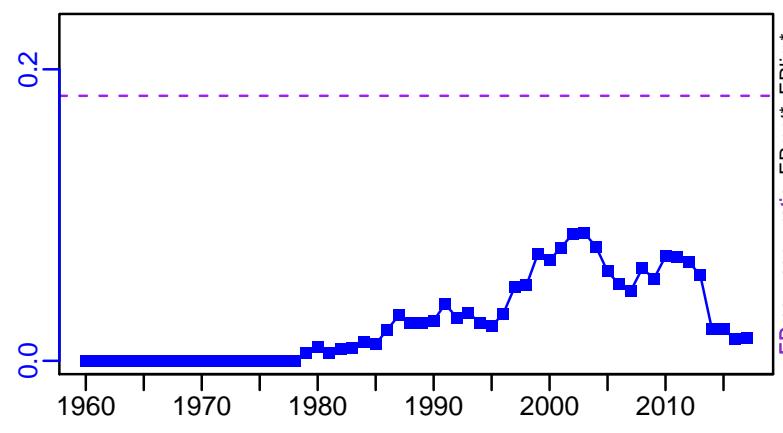
TB-MT (1960–2017–MOESENEDER)

SSB-MT (1960–2017–MOESENEDER)



ER-ratio (1960–2017–MOESENEDER)

R-E00 (1960–2017–MOESENEDER)

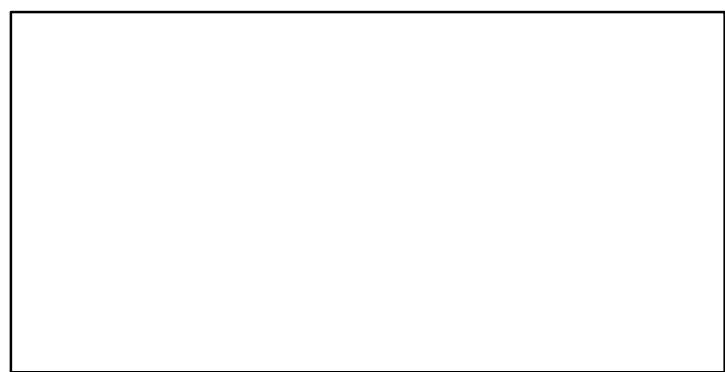
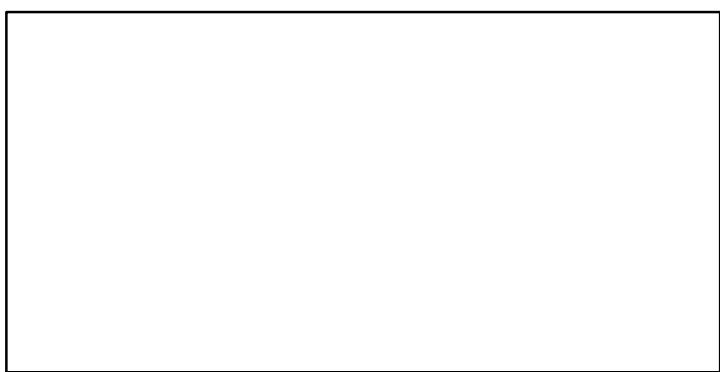
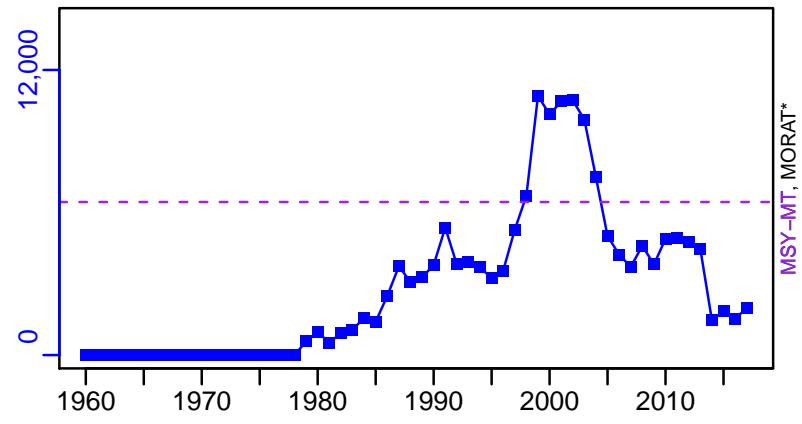


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

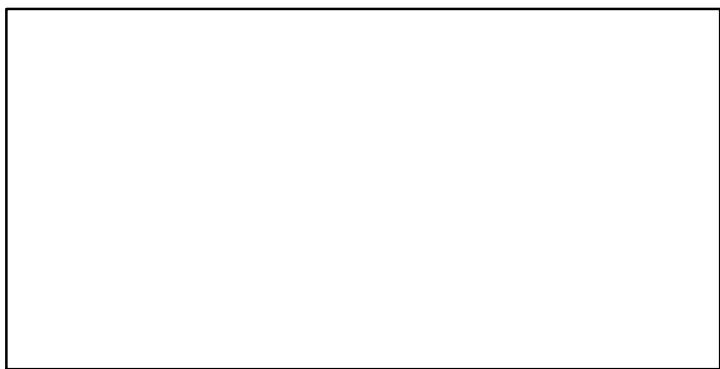
Blue grenadier New South Wales to Western Australia [BGRDRNSWWA]

TL-MT, TC\*, RecC\* (1960–2017–MOESENEDER)

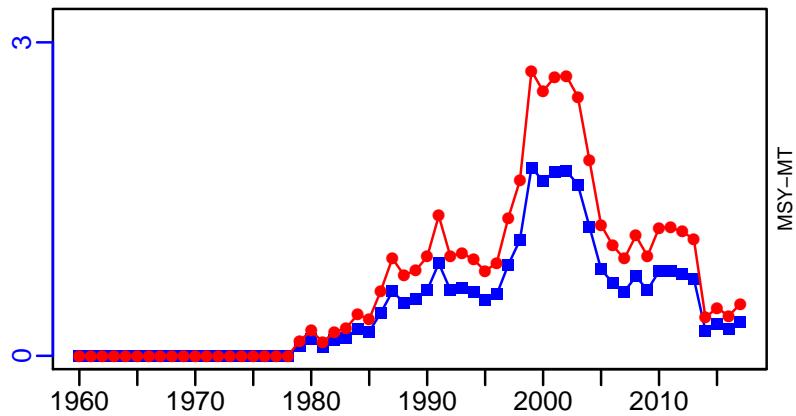
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1960–2017–MOESENEDER)



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

## Bight redfish Southeast Australia [BIGHTREDSE]

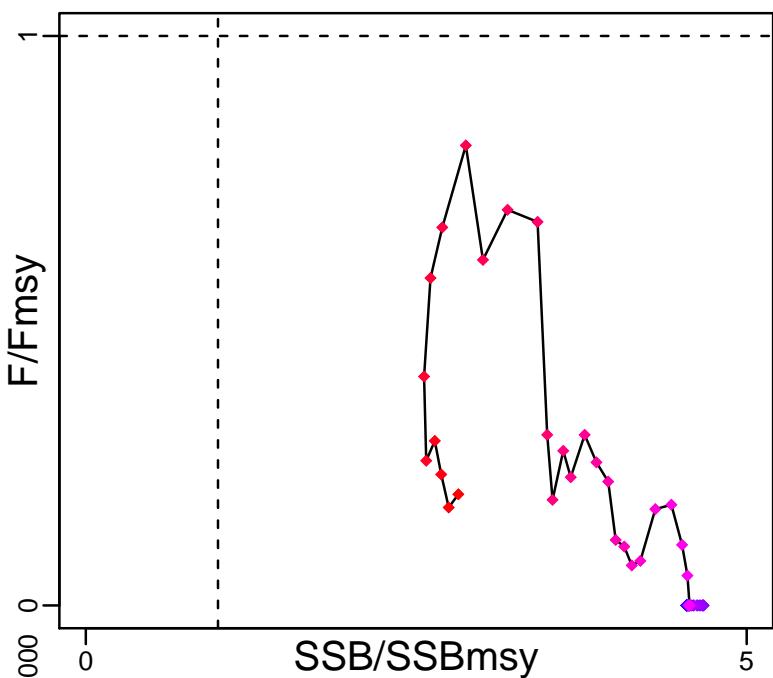
Metadata	
<b>Scientific Name</b>	Centroberyx gerrardi
<b>Current Assess ID</b>	CSIRO-BIGHTREDSE-1960-2014-MOESENEDER
<b>Area</b>	Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2007, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	1235
<b>Fmsy</b>	Fmsy-1/yr	2014	0.103
<b>ERmsy</b>	ERmsy-ratio	2007	0.04
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	2302
<b>Fmgt</b>	Fmgt-1/yr	2014	0.061
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	16,426
<b>SSB0</b>	SSB0-MT	2014	5614
<b>MSY</b>	MSY-MT	2014	625
<b>M</b>	M-1/yr	2014	0.106
<b>TBlim</b>	TBlim-MT	2007	6767
<b>SSBlim</b>	SSBlim-MT	2014	1123
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

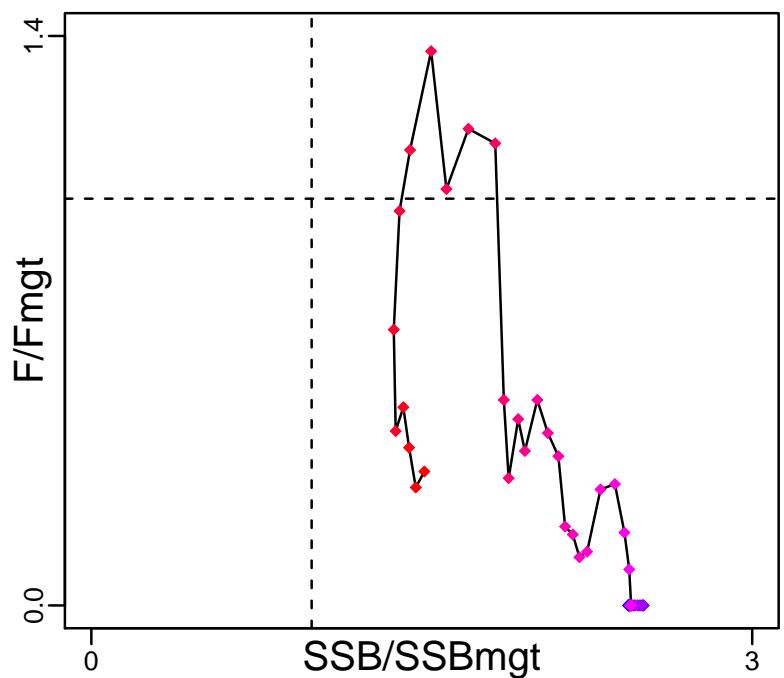
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2014	11,900	-	-	
<b>SSB</b>	SSB-MT	2014	3480	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$4.79 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2014	0.02	-	-	
<b>ER</b>	ER-ratio	2014	0.02	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2014	238			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2014	1.969			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	2.819			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	0.195			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	1.07			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.512			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.329			
<b>ER/ERmgt</b>	-	-	-			

Bight redfish Southeast Australia [BIGHTREDSE]

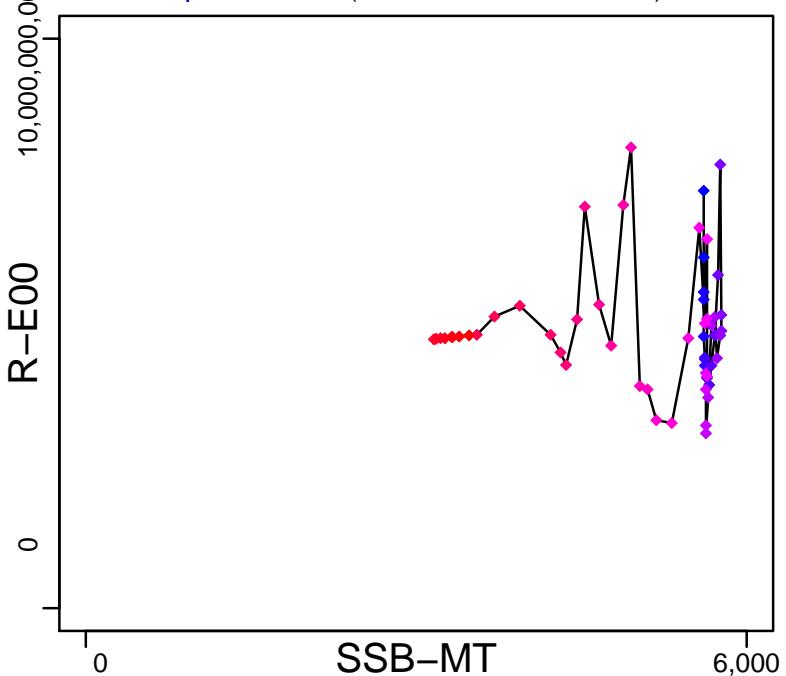
Kobe MSYpref (1960–2014–MOESENEDER)



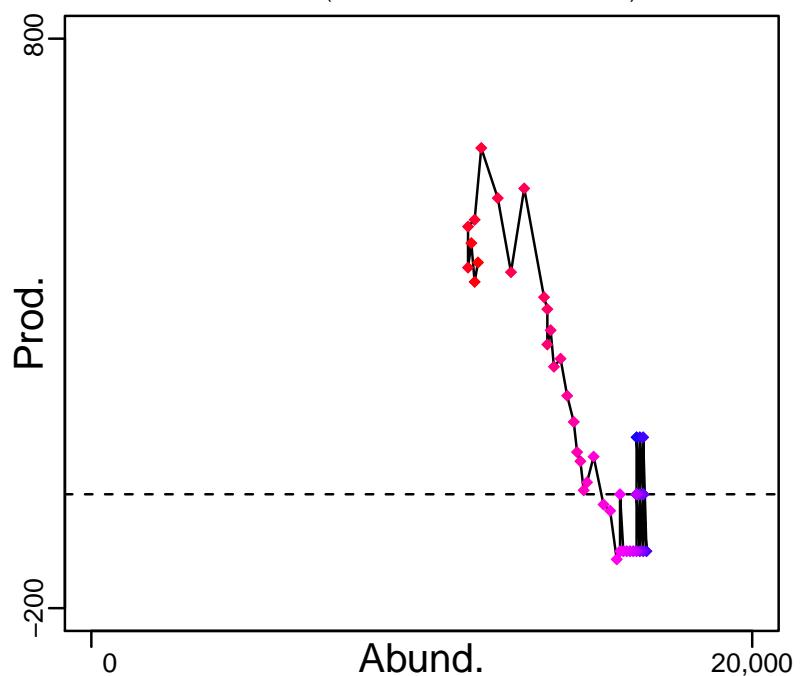
Kobe MGTpref (1960–2014–MOESENEDER)



Spawner Recruit (1960–2014–MOESENEDER)



Production (1960–2014–MOESENEDER)

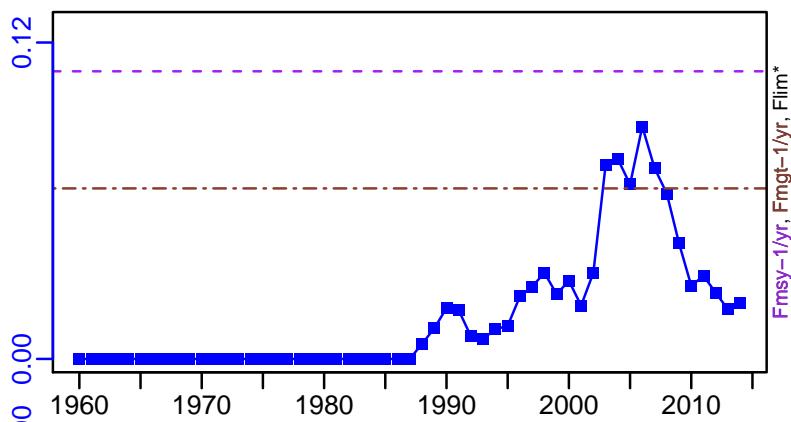
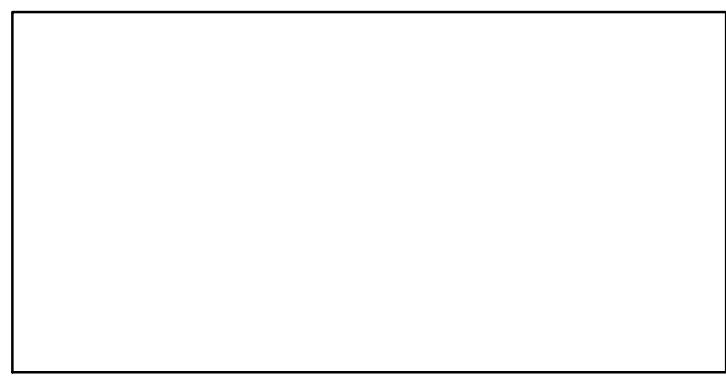
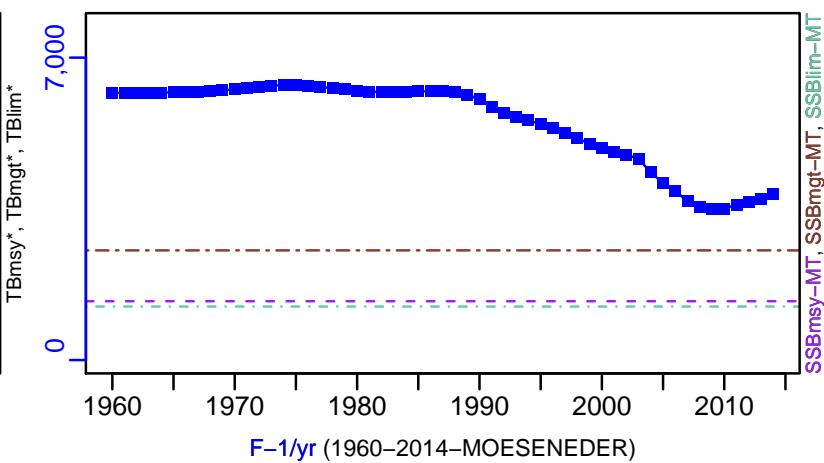
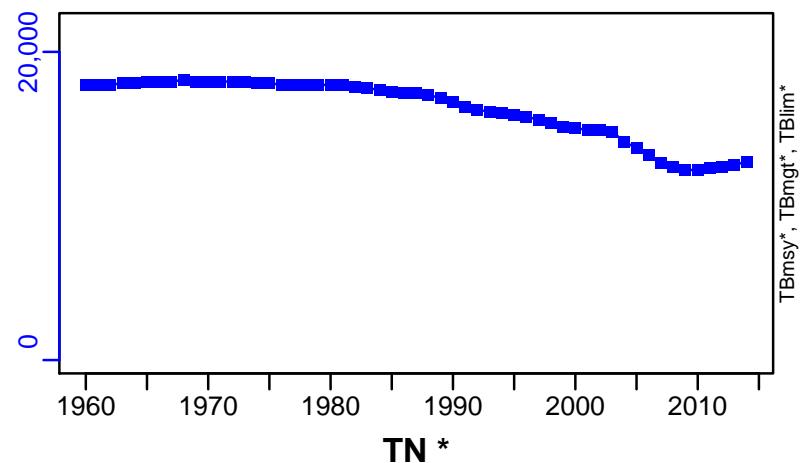


◆ Start Year ◆ End Year \* No Data

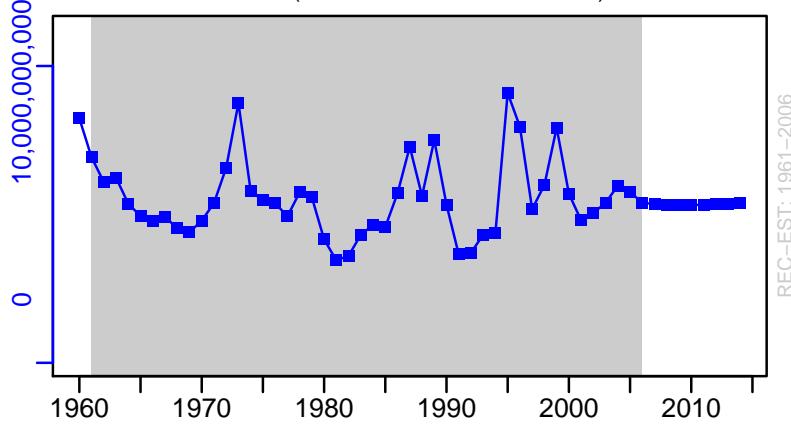
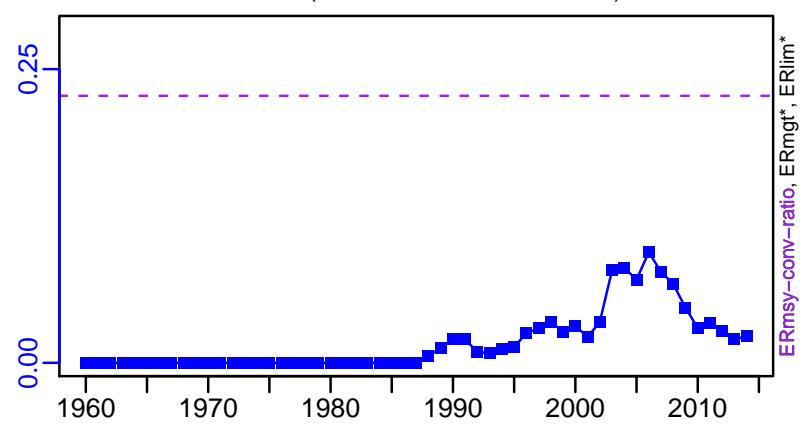
### Bight redfish Southeast Australia [BIGHTREDSE]

TB-MT (1960–2014–MOESENEDER)

SSB-MT (1960–2014–MOESENEDER)



ER-ratio (1960–2014–MOESENEDER)

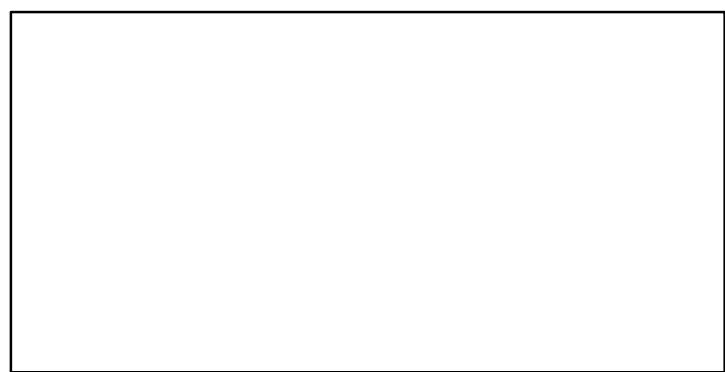
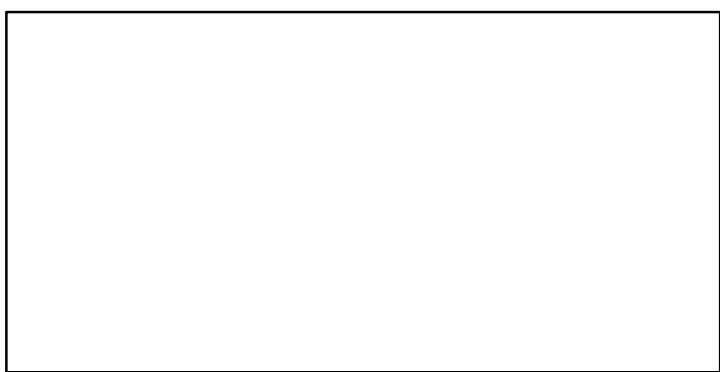
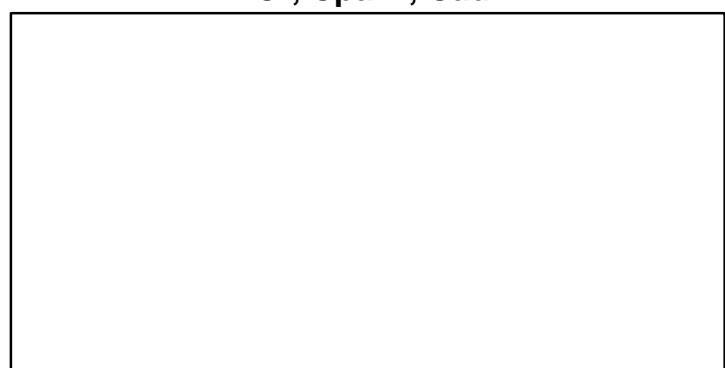
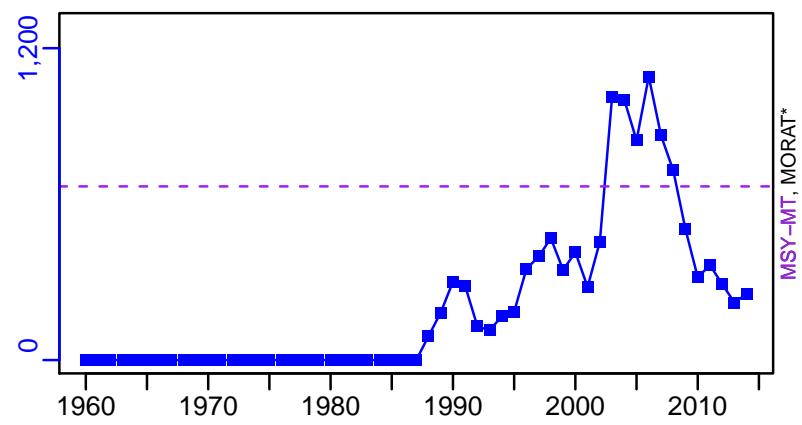


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | --- Lim BRP  | * No Data |

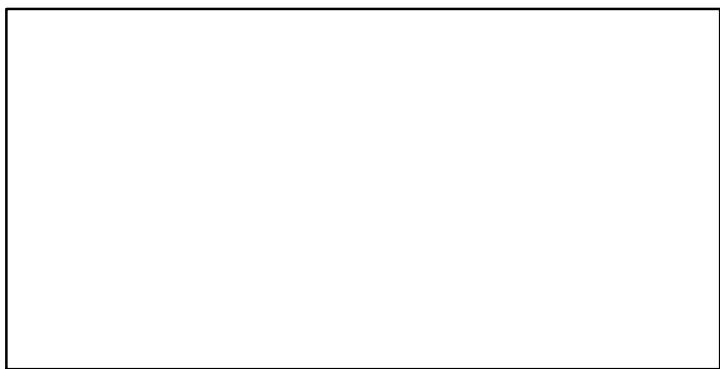
Bight redfish Southeast Australia [BIGHTREDSE]

TL-MT, TC\*, RecC\* (1960–2014–MOESENEDER)

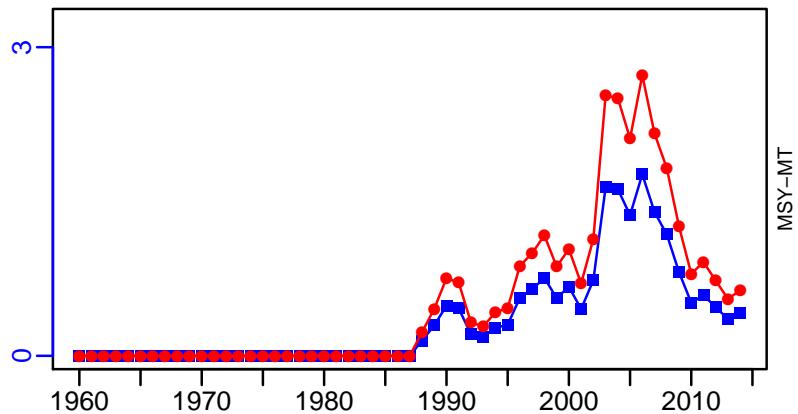
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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



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

## Brown tiger shrimp Northern Australia [BTSHRIMPNAUST]

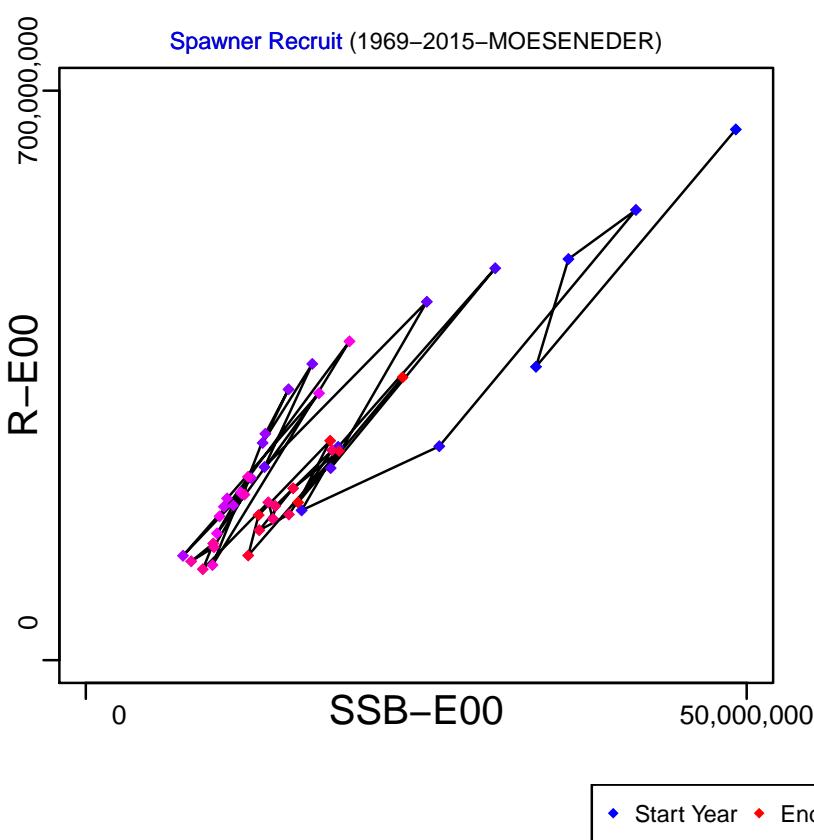
Metadata	
<b>Scientific Name</b>	Penaeus esculentus
<b>Current Assess ID</b>	CSIRO-BTSHRIMPNAUST-1969-2015-MOESENEDER
<b>Area</b>	Northern Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2015, 2006

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-E00	2015	13,728,752
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-E00	2015	14,765,577
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2015	1186
<b>M</b>	M-1/yr	2015	2.34
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-E00	2015	6,864,376
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-E00	2015	23,966,420	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	347,672,000	-	-	
<b>F</b>	F-1/yr	2006	0.135	-	-	
<b>ER</b>	-	-	-	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2015	763			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-E00/SSBmsy-E00	2015	1.746			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-E00/SSBmgt-E00	2015	1.623			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

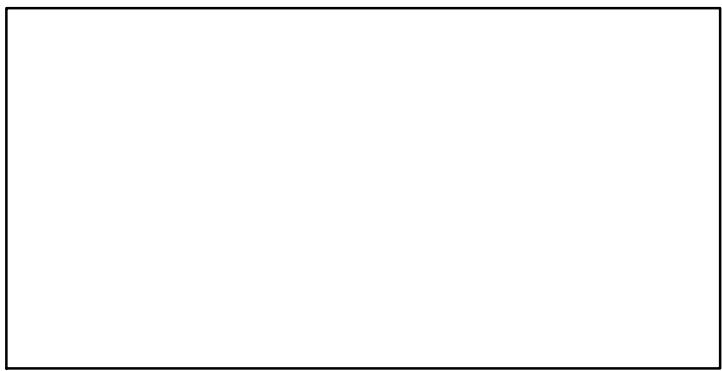
Kobe MSY\*

Kobe MGT\*

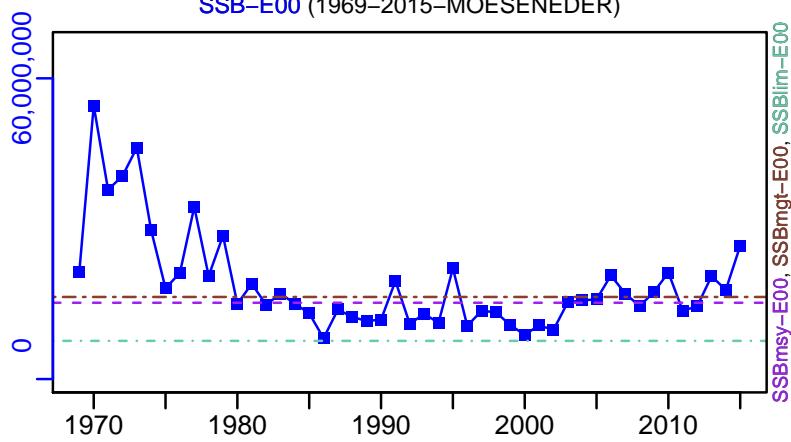


Brown tiger shrimp Northern Australia [BTSHRIMPNAUST]

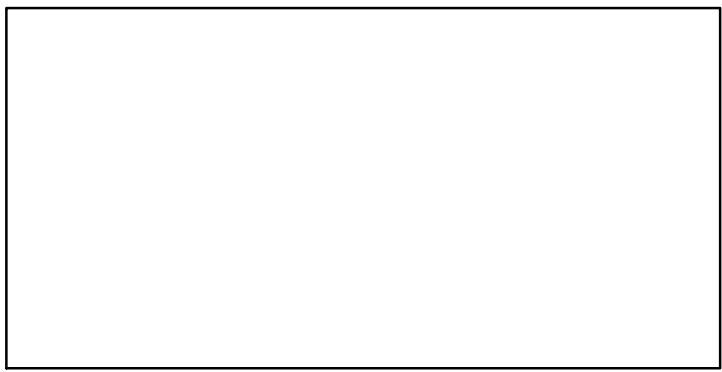
**TB\***



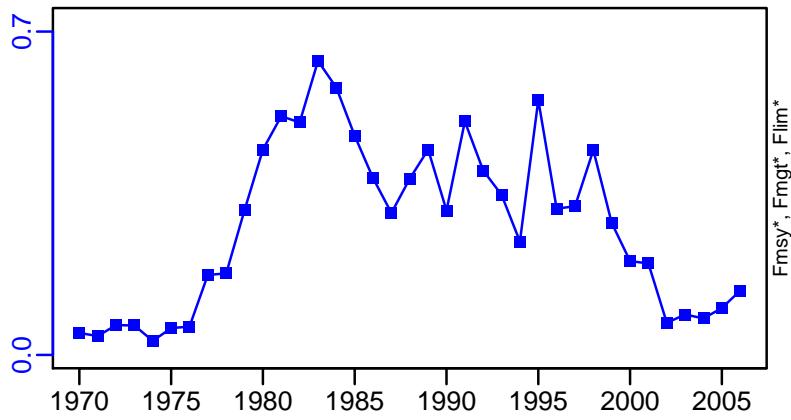
SSB-E00 (1969–2015–MOESENEDER)



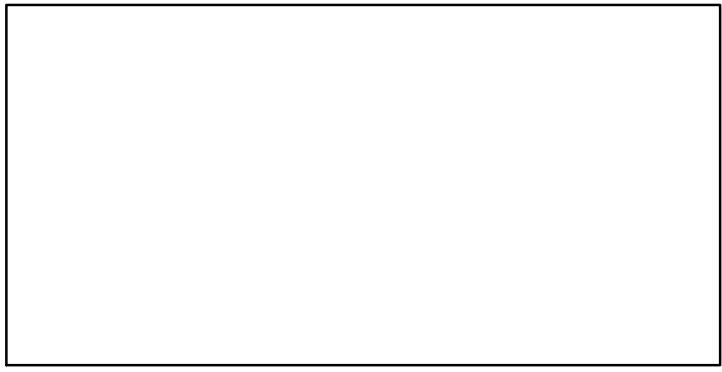
**TN \***



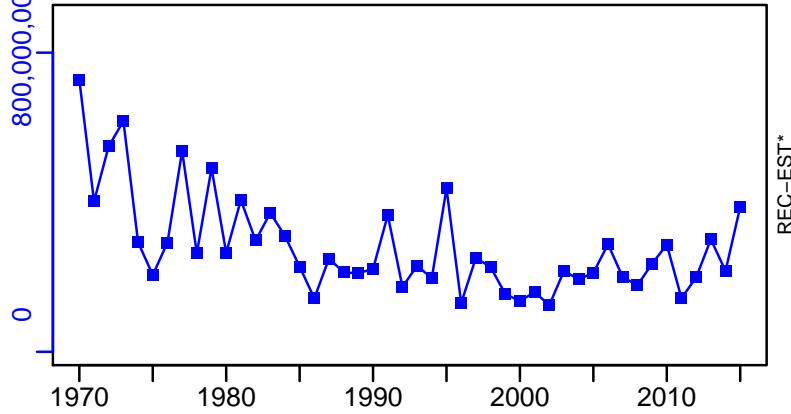
F-1/yr (1970–2006–FULTON)



**ER\***



R-E00 (1969–2015–MOESENEDER)

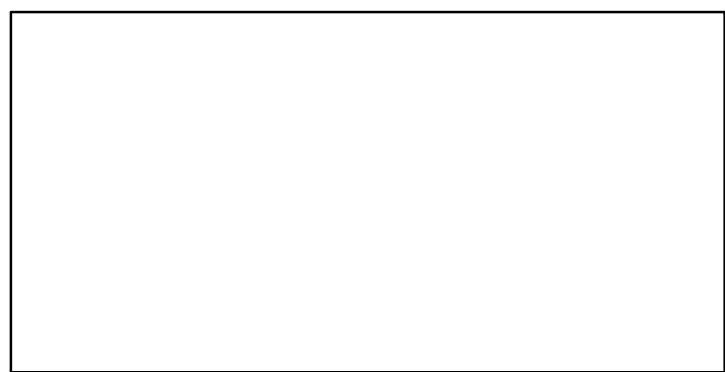
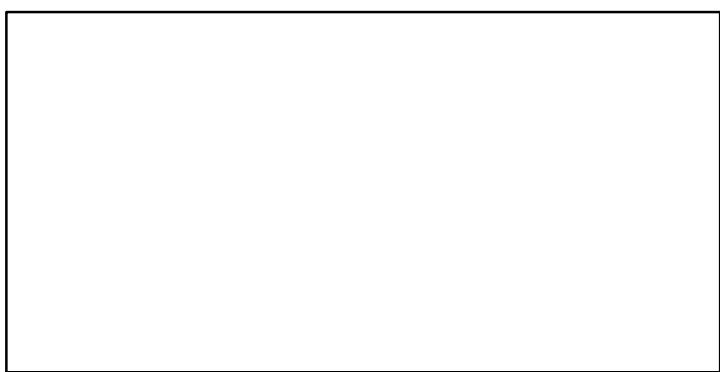
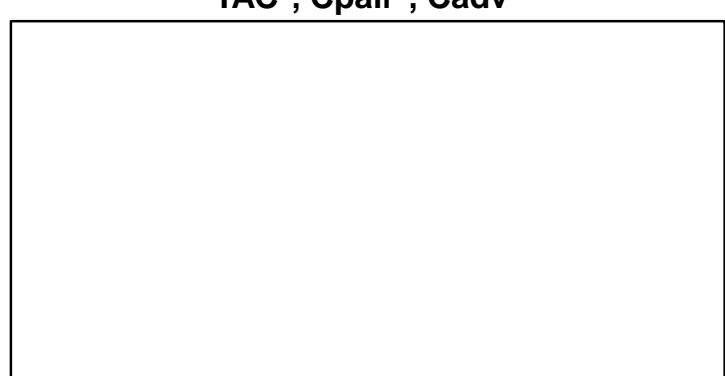
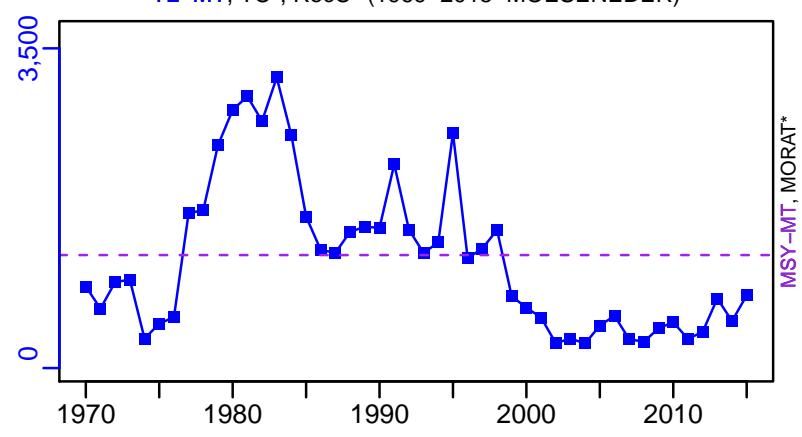


- |                      |               |           |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP  | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP | * No Data |

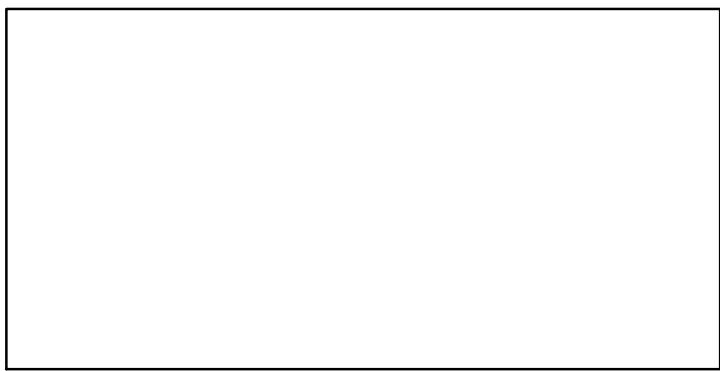
Brown tiger shrimp Northern Australia [BTSHRIMPNAUST]

TL-MT, TC\*, RecC\* (1969–2015–MOESENEDER)

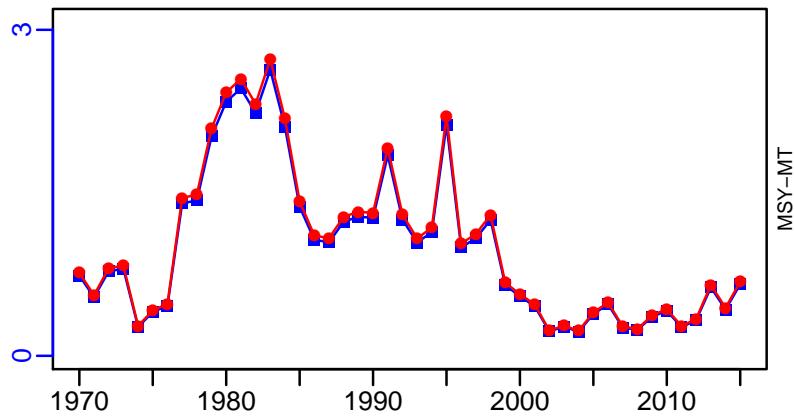
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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



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

## Deepwater flathead Southeast Australia [DEEPFLATHEADSE]

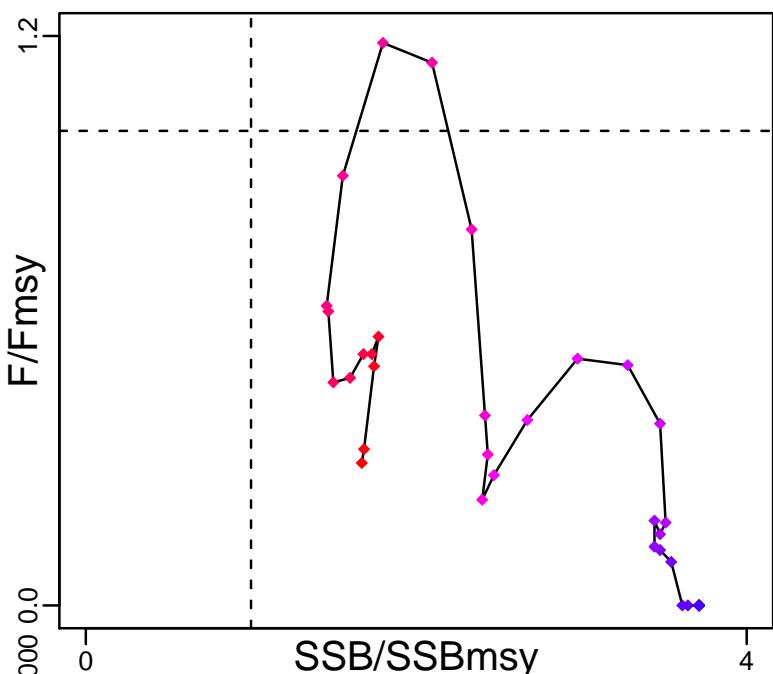
<b>Metadata</b>			
<b>Scientific Name</b>	Platycephalus conatus		
<b>Current Assess ID</b>	CSIRO-DEEPFLATHEADSE-1980-2015-MOESENEDER		
<b>Area</b>	Southeast Australia		
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management		
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization		
<b>Asmts in RAM</b>	2007, 2015		

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	2963
<b>Fmsy</b>	Fmsy-1/yr	2015	0.168
<b>ERmsy</b>	ERmsy-conv-ratio	2015	0.198
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	4750
<b>Fmgt</b>	Fmgt-1/yr	2015	0.105
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2015	21,058
<b>SSB0</b>	SSB0-MT	2015	11,046
<b>MSY</b>	MSY-MT	2015	1200
<b>M</b>	M-1/yr	2015	0.191
<b>TBlim</b>	TBlim-MT	2007	1369
<b>SSBlim</b>	SSBlim-MT	2015	2209
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

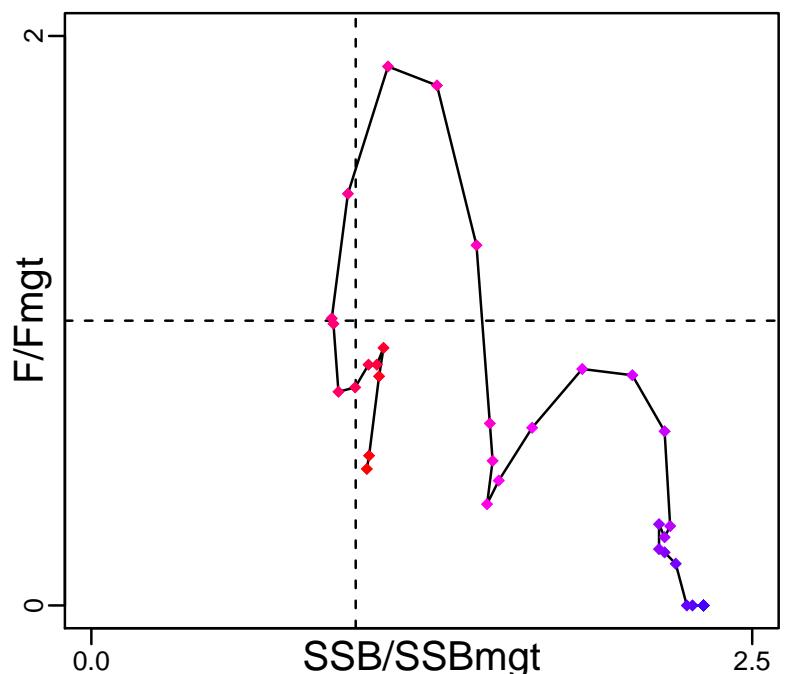
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	10,400	-	-	
<b>SSB</b>	SSB-MT	2015	4950	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$6.75 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2015	0.05	-	-	
<b>ER</b>	ER-ratio	2015	0.05	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2015	523			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2015	1.342			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.67			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.3			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2015	0.254			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.042			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.479			
<b>ER/ERmgt</b>	-	-	-			

**Deepwater flathead Southeast Australia [DEEPFLATHEADSE]**

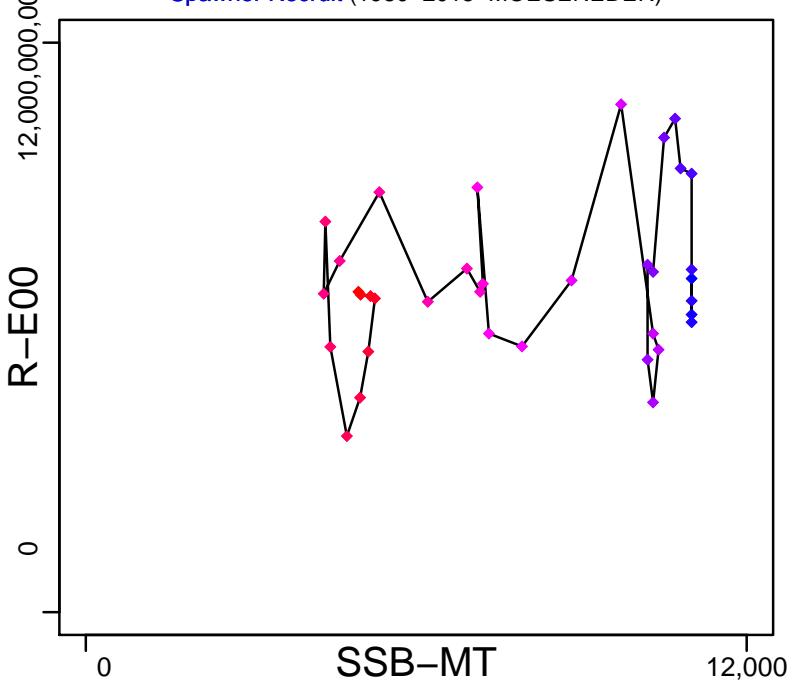
Kobe MSYpref (1980–2015–MOESENEDER)



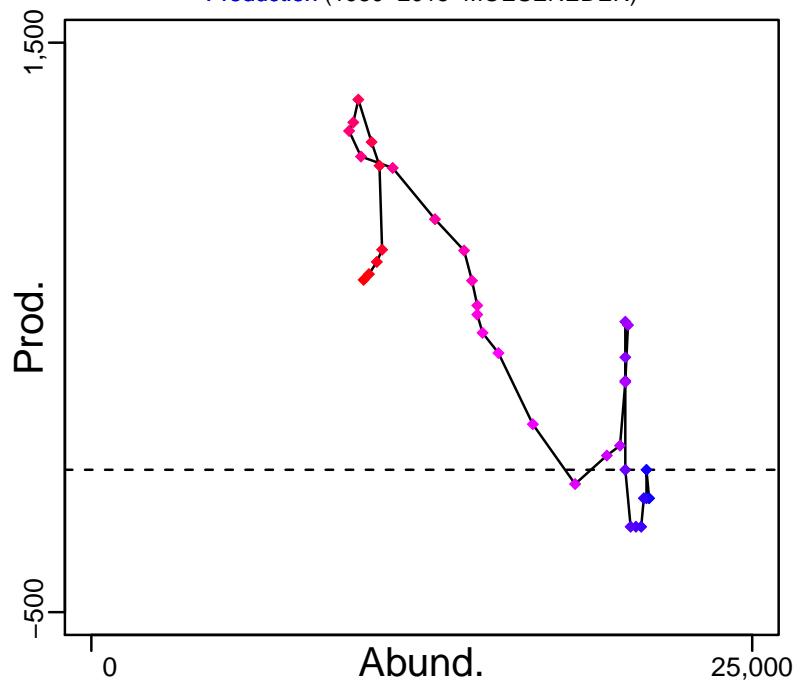
Kobe MGTpref (1980–2015–MOESENEDER)



Spawner Recruit (1980–2015–MOESENEDER)



Production (1980–2015–MOESENEDER)

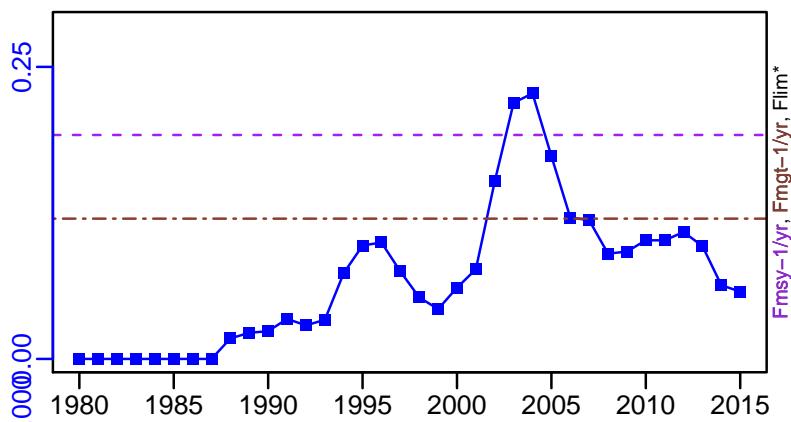
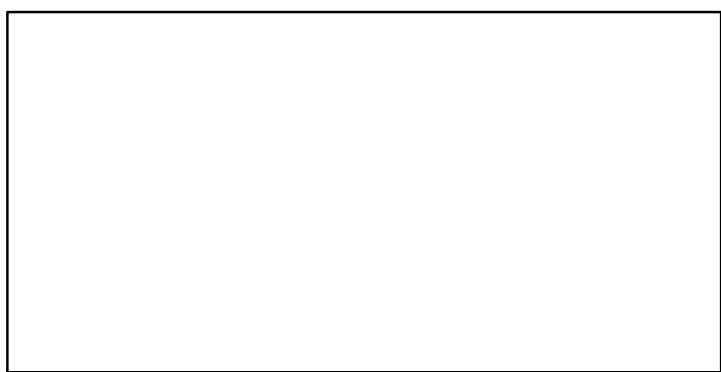
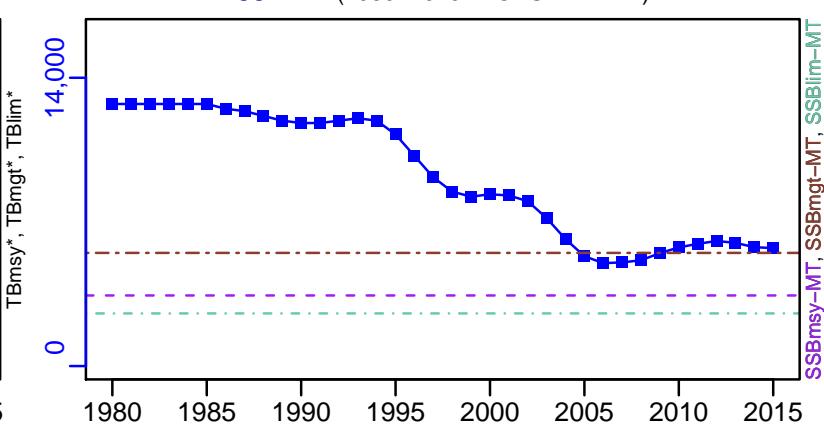
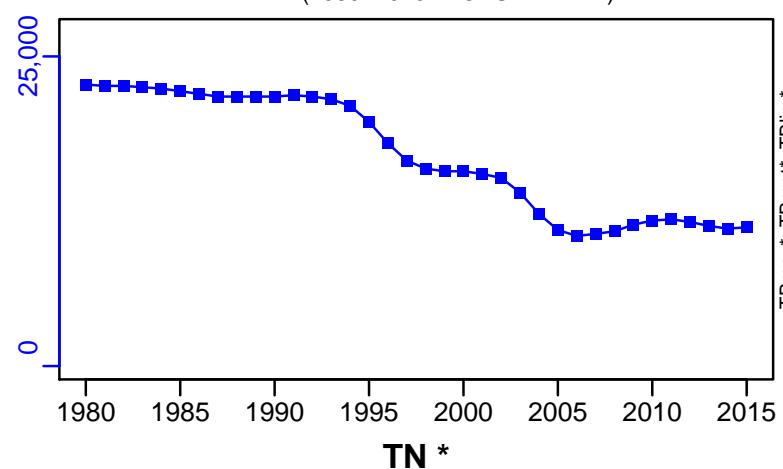


◆ Start Year   ◆ End Year   \* No Data

### Deepwater flathead Southeast Australia [DEEPFLATHEADSE]

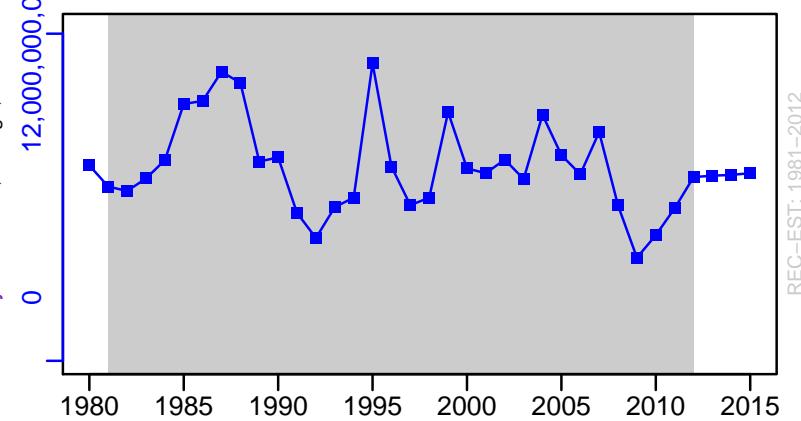
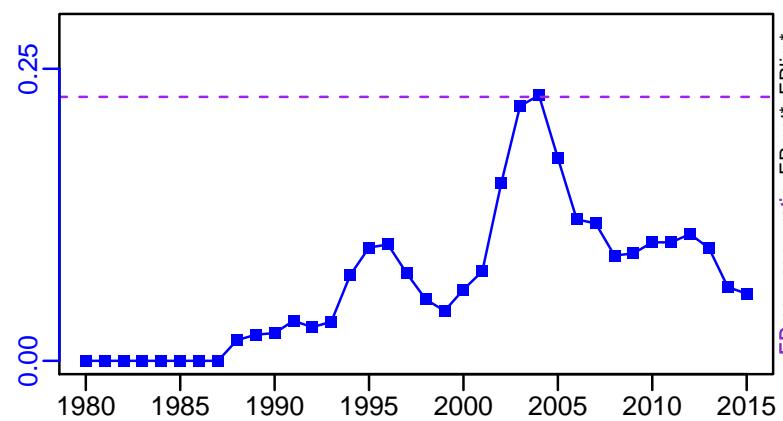
TB-MT (1980–2015–MOESENEDER)

SSB-MT (1980–2015–MOESENEDER)



ER-ratio (1980–2015–MOESENEDER)

R-E00 (1980–2015–MOESENEDER)

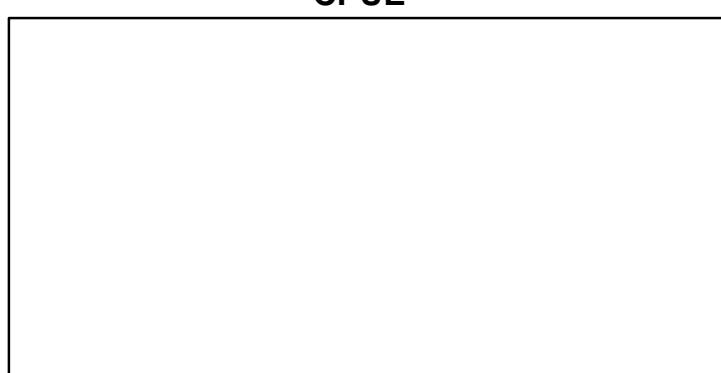
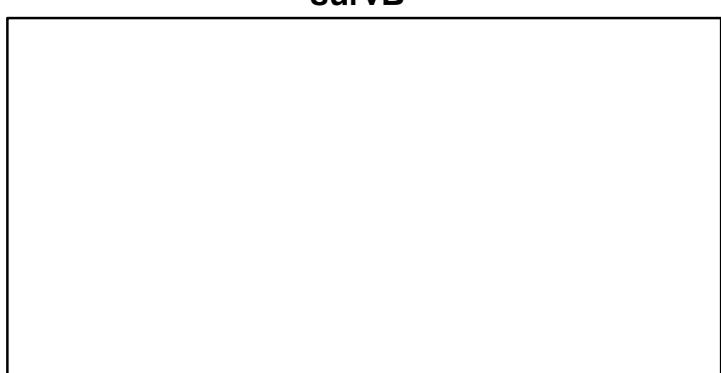
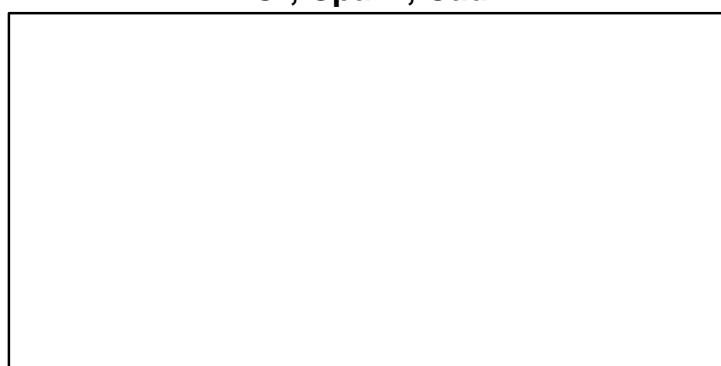
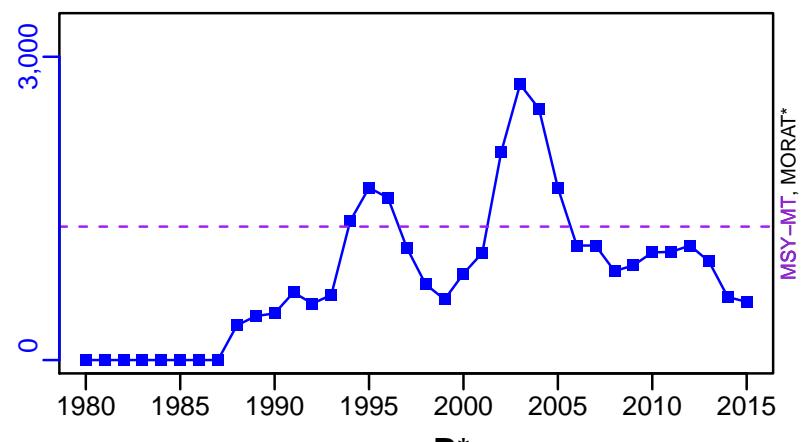


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

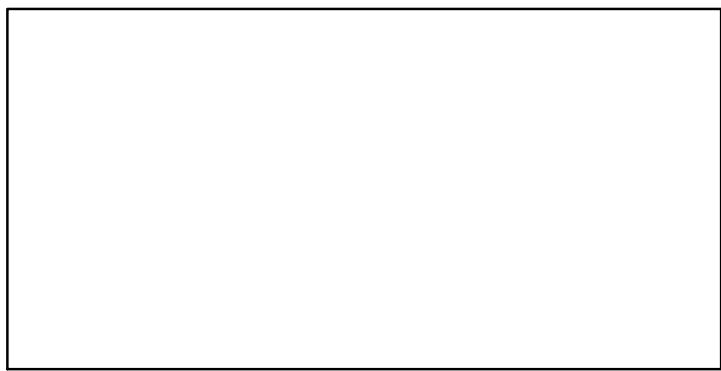
**Deepwater flathead Southeast Australia [DEEPFLATHEADSE]**

TL-MT, TC\*, RecC\* (1980–2015–MOESENEDER)

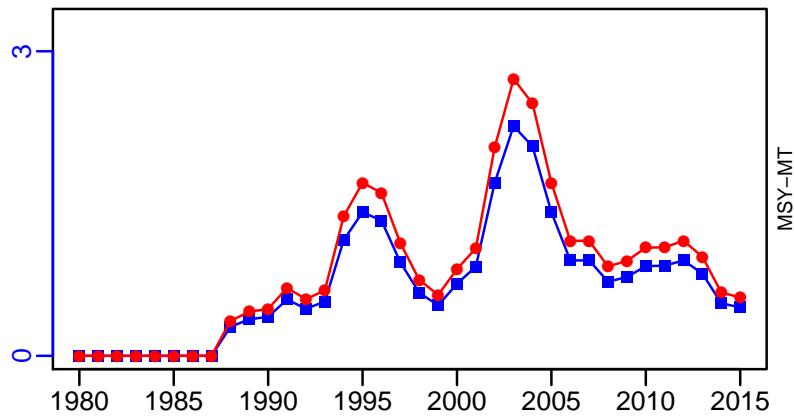
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1980–2015–MOESENEDER)



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

## Common gemfish Southeast Australia [GEMFISHSE]

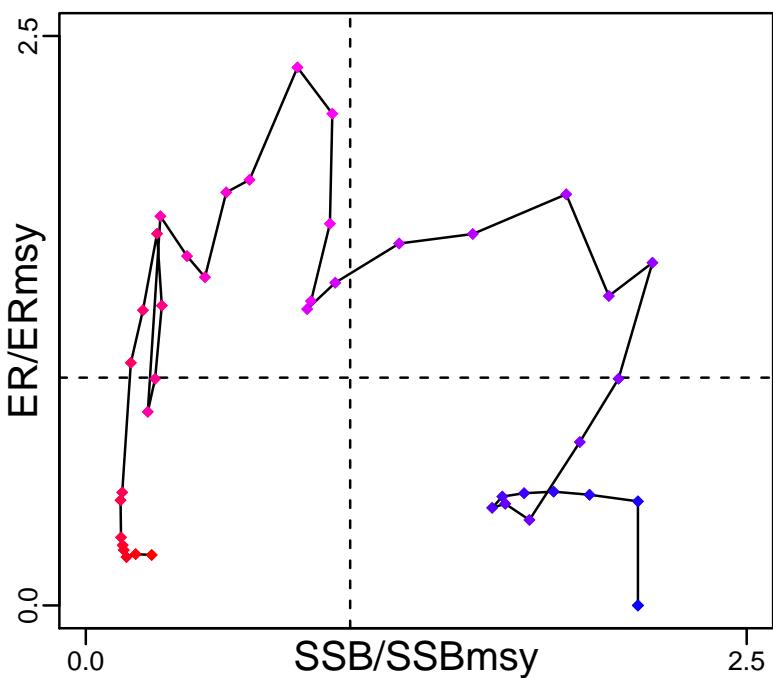
<b>Metadata</b>	
<b>Scientific Name</b>	Rexea solandri
<b>Current Assess ID</b>	CSIRO-GEMFISHSE-1966-2007-FULTON
<b>Area</b>	Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2007

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2007	5458
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2007	0.122
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2007	1996
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2007	2274
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

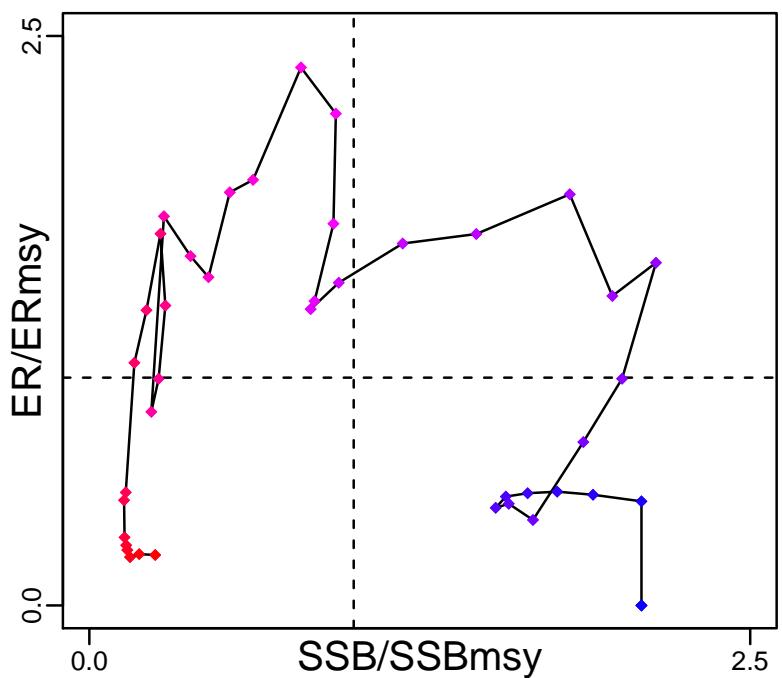
<b>Time Series</b>					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2007	3770	-	0
<b>SSB</b>	SSB-MT	2007	1360	Females	3
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	4,150,000	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2007	0.027	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2007	102		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	0.249		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2007	0.222		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Common gemfish Southeast Australia [GEMFISHSE]**

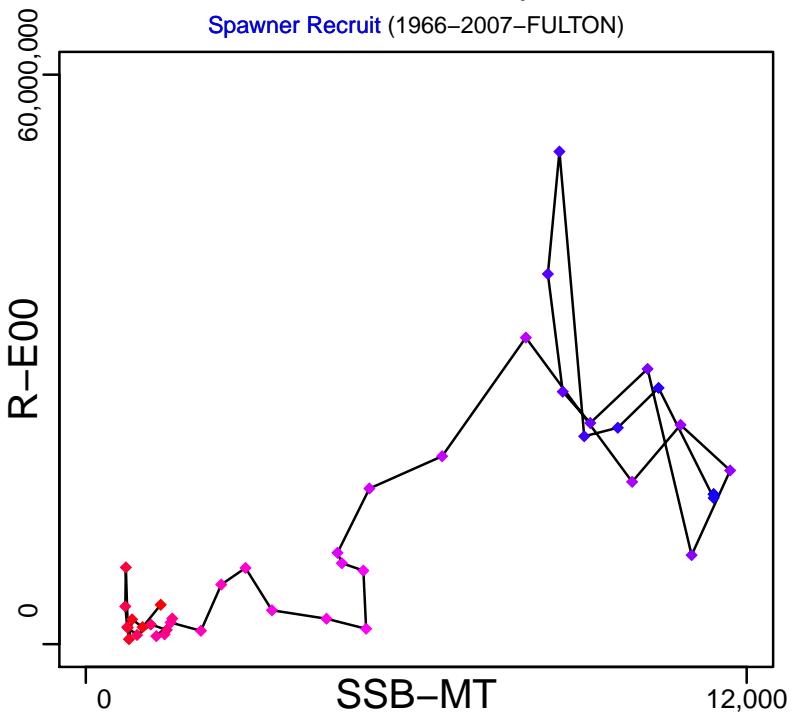
Kobe MSYpref (1966–2007–FULTON)



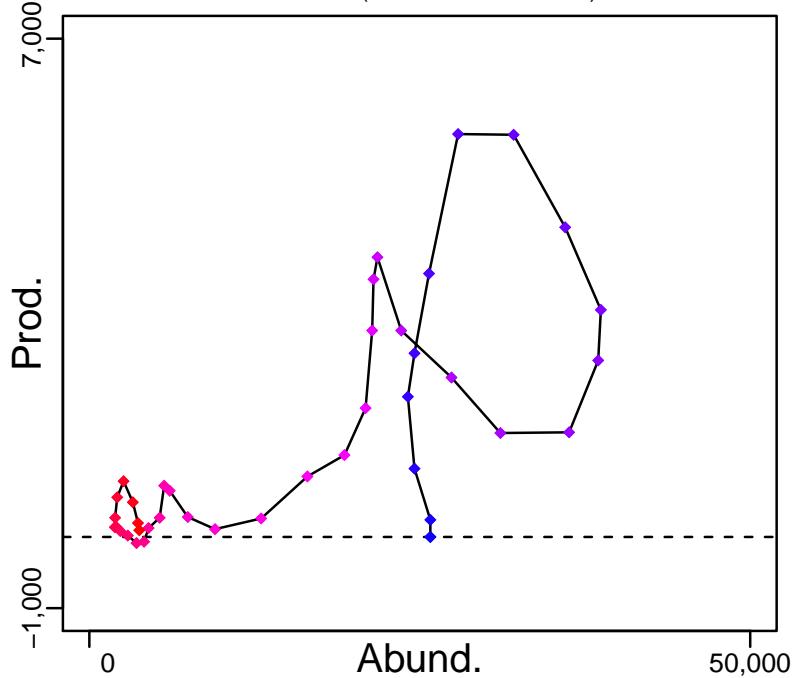
Kobe MGTpref (1966–2007–FULTON)



Spawner Recruit (1966–2007–FULTON)



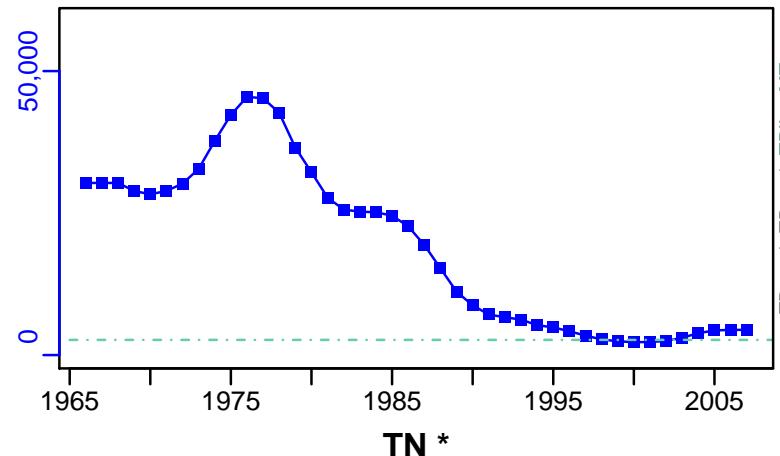
Production (1966–2007–FULTON)



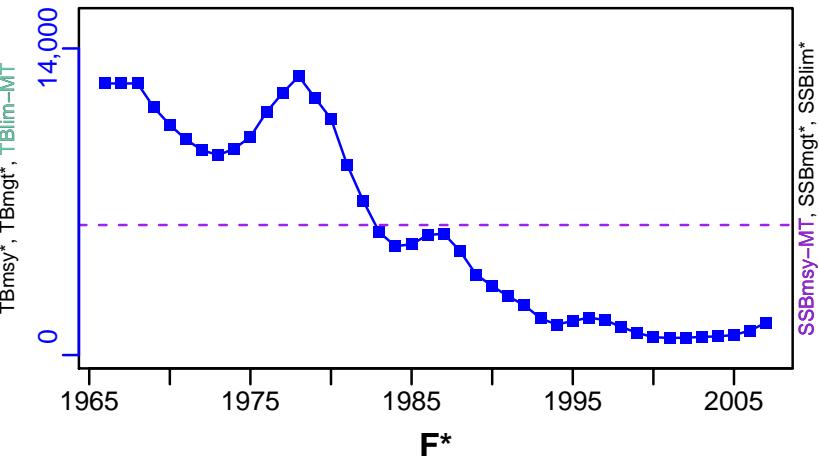
◆ Start Year	◆ End Year	*	No Data
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**Common gemfish Southeast Australia [GEMFISHSE]**

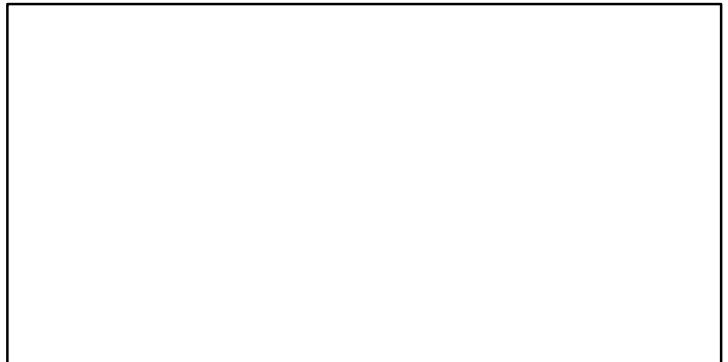
**TB-MT (1966–2007–FULTON)**



**SSB-MT (1966–2007–FULTON)**



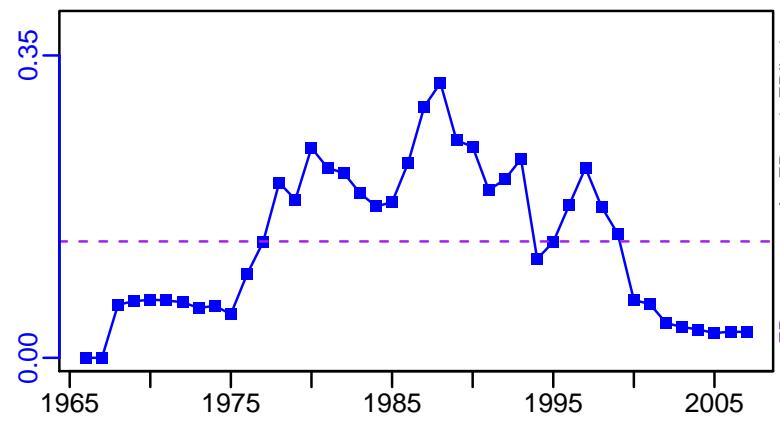
**TN \***



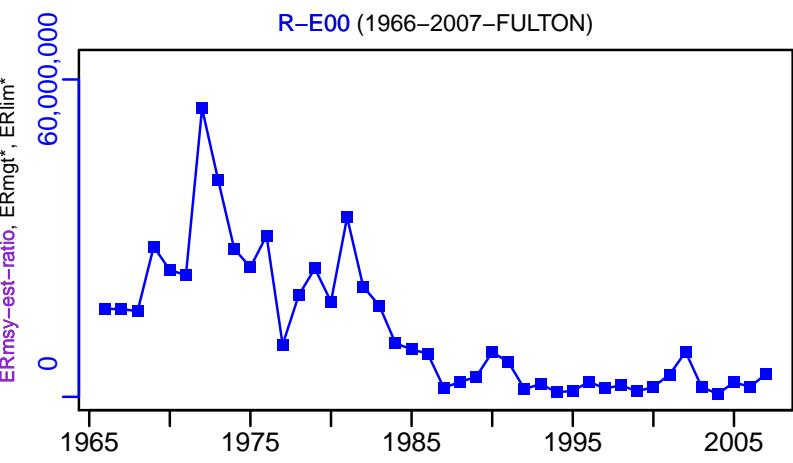
**F\***



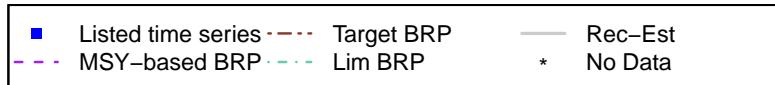
**ER-calc-ratio (1966–2007–FULTON)**



**R-E00 (1966–2007–FULTON)**



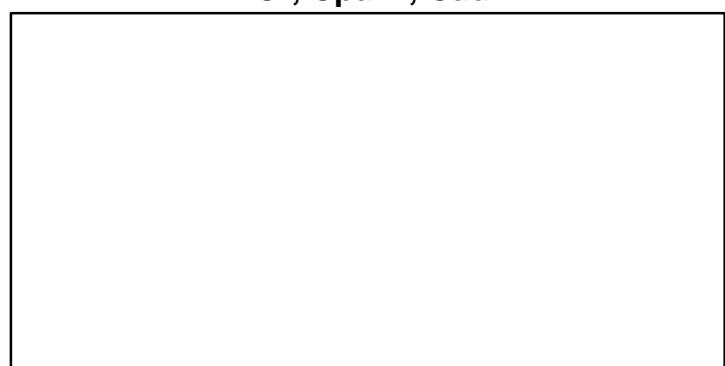
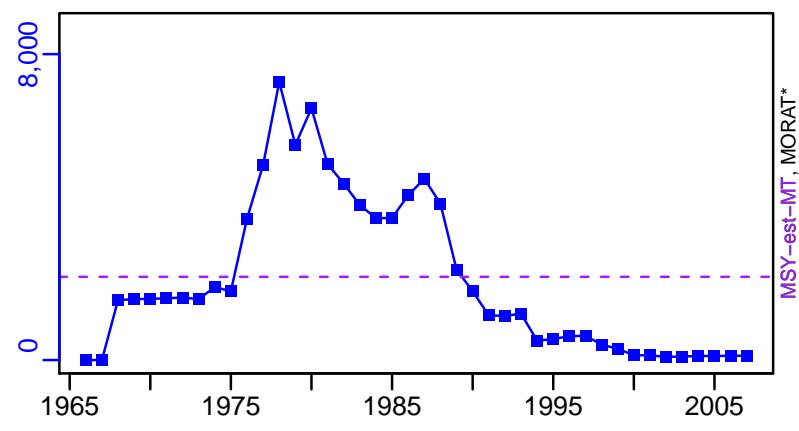
REC-EST: NONE



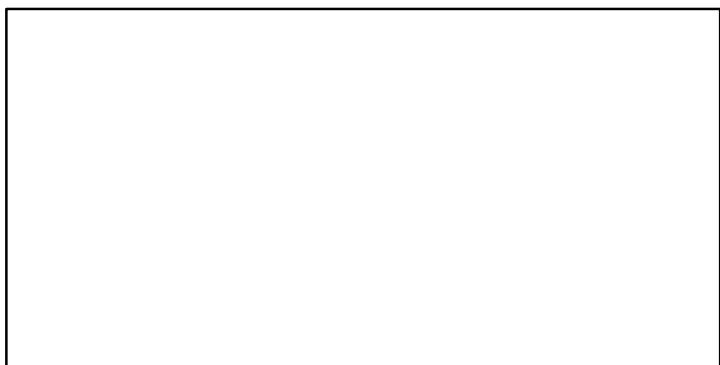
Common gemfish Southeast Australia [GEMFISHSE]

TL-MT, TC\*, RecC\* (1966–2007–FULTON)

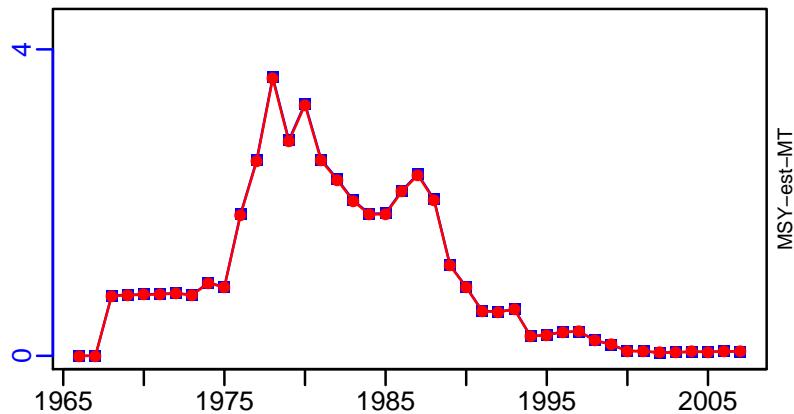
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1966–2007–FULTON)



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

## Grooved tiger prawn Northern Australia [GTPRAWNNAUST]

Metadata	
<b>Scientific Name</b>	Penaeus semisulcatus
<b>Current Assess ID</b>	CSIRO-GTPRAWNNAUST-1969-2015-MOESENEDER
<b>Area</b>	Northern Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2015, 2006

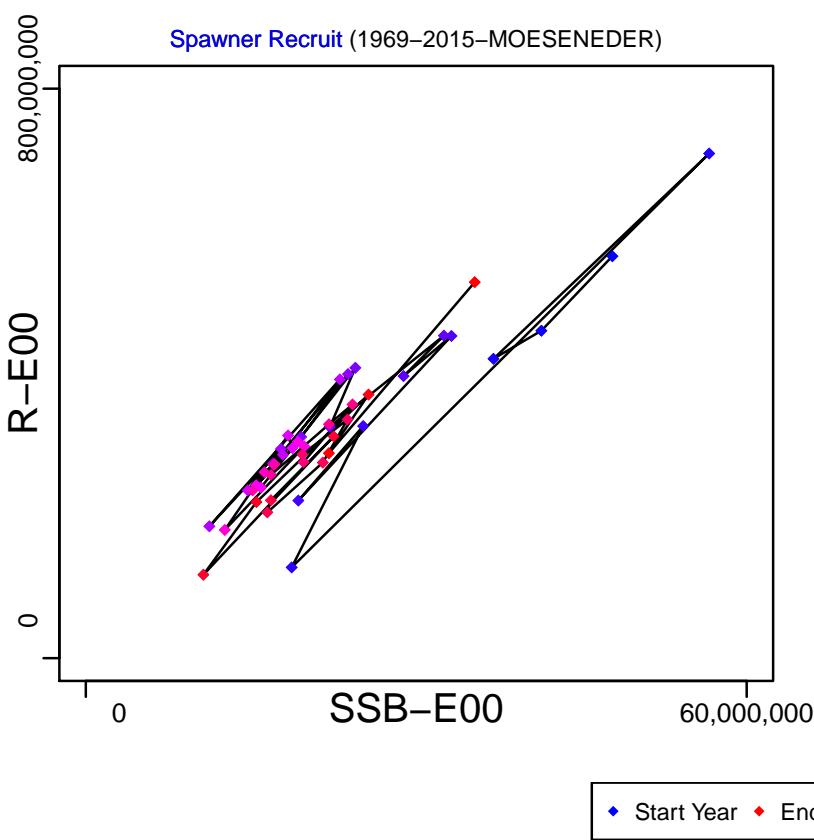
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-E00	2015	19,080,680
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-E00	2015	20,663,682
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2015	1605
<b>M</b>	M-1/yr	2015	2.34
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-E00	2015	9,540,340
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-E00	2015	35,309,530	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	528,150,000	-	-	
<b>F</b>	F-1/yr	2006	0.493	-	-	
<b>ER</b>	-	-	-	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2015	2399			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-E00/SSBmsy-E00	2015	1.851			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-E00/SSBmgt-E00	2015	1.709			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Grooved tiger prawn Northern Australia [GTPRAWNNAUST]

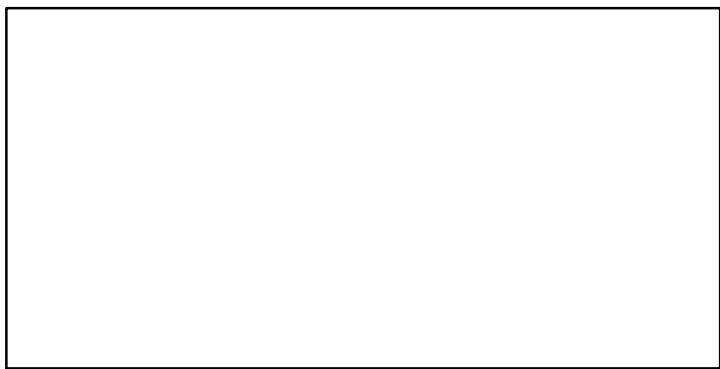
Kobe MSY\*

Kobe MGT\*

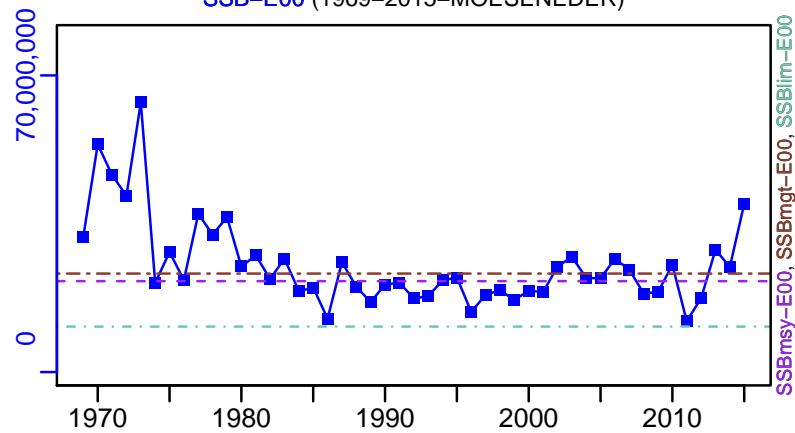


Grooved tiger prawn Northern Australia [GTPRAWNNAUST]

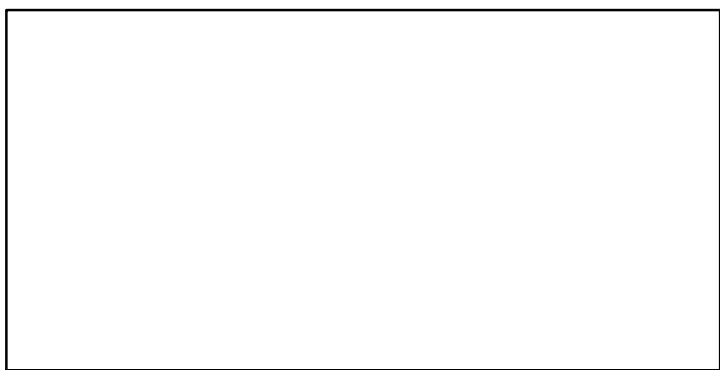
**TB\***



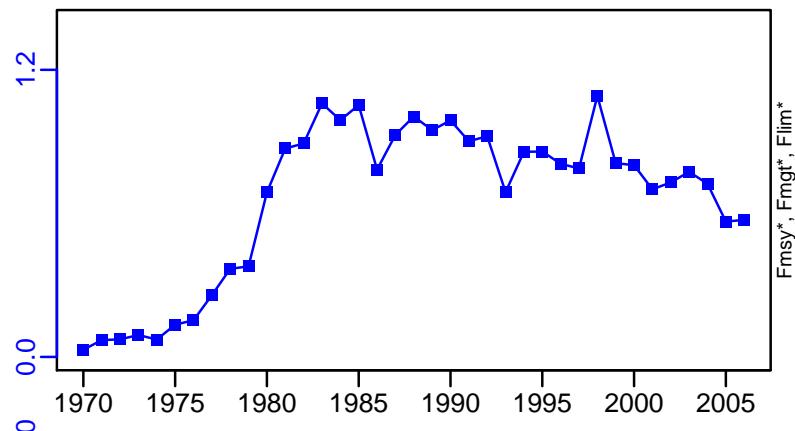
SSB-E00 (1969–2015–MOESENEDER)



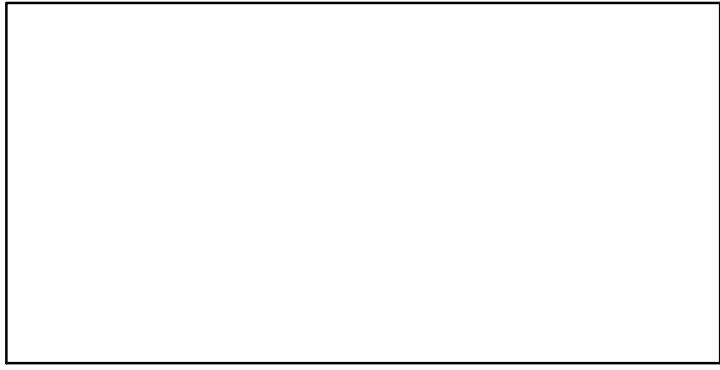
**TN \***



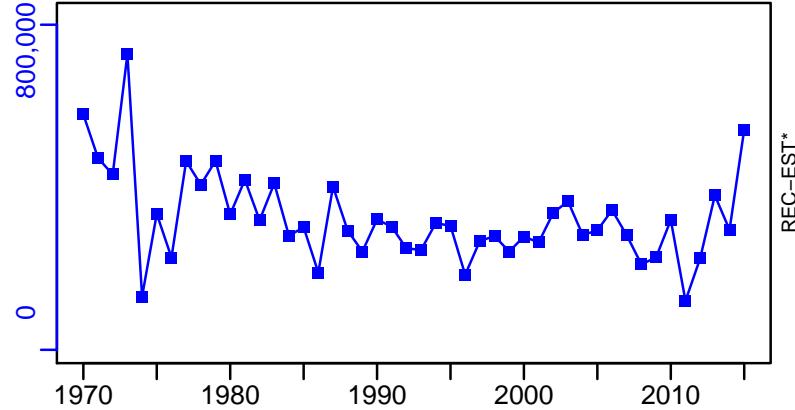
F-1/yr (1970–2006–FULTON)



**ER\***



R-E00 (1969–2015–MOESENEDER)

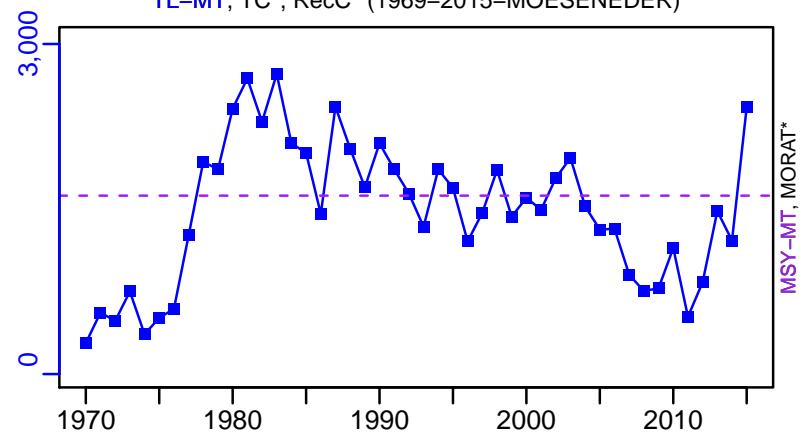


- |                      |               |           |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP  | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP | * No Data |

Grooved tiger prawn Northern Australia [GTPRAWNNAUST]

TL-MT, TC\*, RecC\* (1969–2015–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



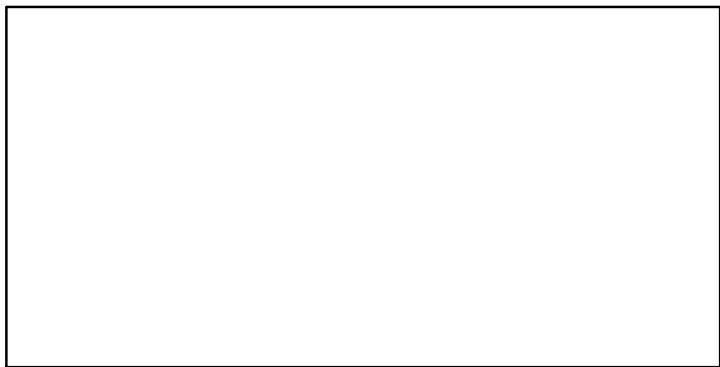
survB\*



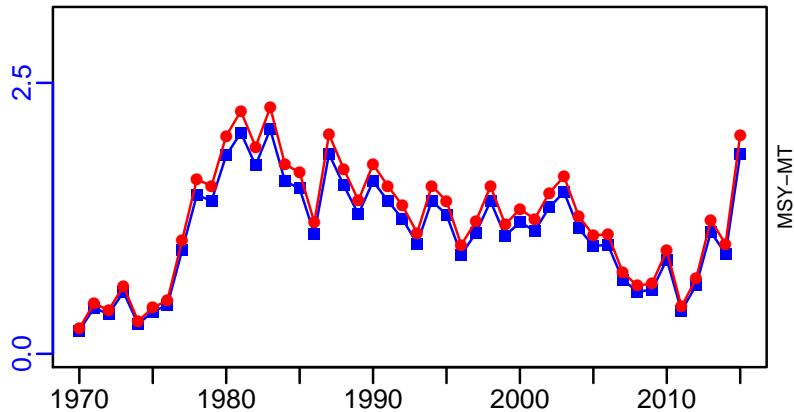
CPUE\*



EFFORT\*



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



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

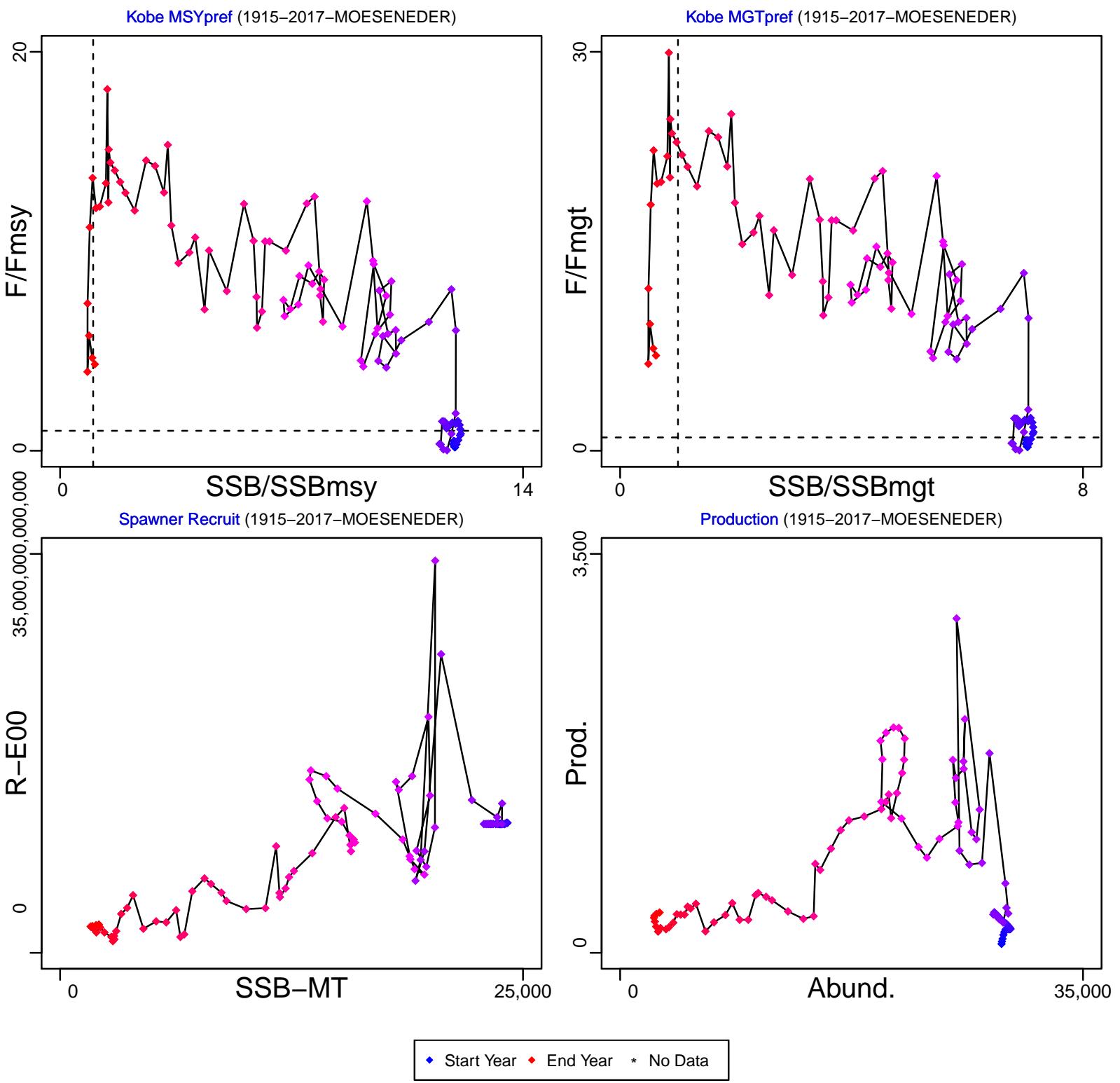
## Jackass morwong Eastern half of Southeast Australia [MORWONGESE]

Metadata	
Scientific Name	Nemadactylus macropterus
Current Assess ID	CSIRO-MORWONGESE-1915-2017-MOESENEDER
Area	Eastern half of Southeast Australia
Management Authority	Australian Fisheries Management Authority, Australia national management
Assessor	Commonwealth Scientific and Industrial Research Organization
Asmts in RAM	2014, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2017	1994
Fmsy	Fmsy-1/yr	2017	0.133
ERmsy	ERmsy-conv-ratio	2017	0.158
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	3382
Fmgt	Fmgt-1/yr	2017	0.08
ERmgt	-	-	-
TB0	TB0-MT	2017	8513
SSB0	SSB0-MT	2017	7047
MSY	MSY-MT	2017	411
M	M-1/yr	2017	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	1409
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	3175	-	-	
SSB	SSB-MT	2017	2097	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	$2.48 \times 10^{12}$	-	-	
F	F-1/yr	2017	0.575	-	-	
ER	ER-ratio	2017	0.047	-	-	
TC	-	-	-			
TL	TL-MT	2017	139			
TB/TBmsy	TB-MT/(TB0-MT*0.368)	2017	1.013			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.051			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	4.336			
ER/ERmsy	ER-ratio/ERmsy-conv-ratio	2017	0.296			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.62			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	7.161			
ER/ERmgt	-	-	-			

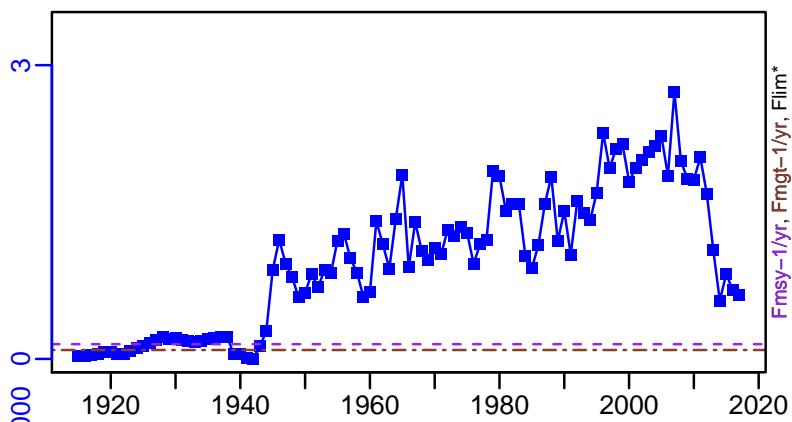
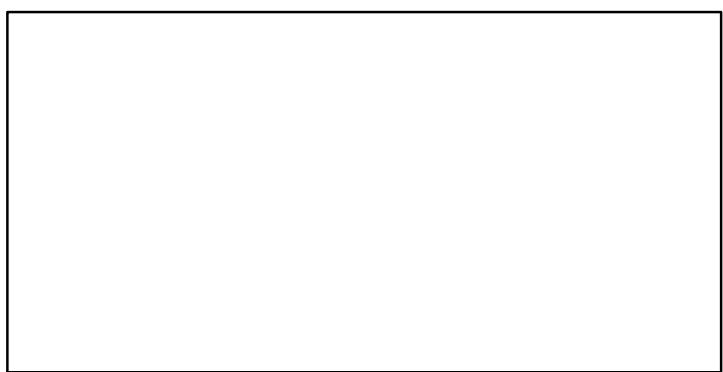
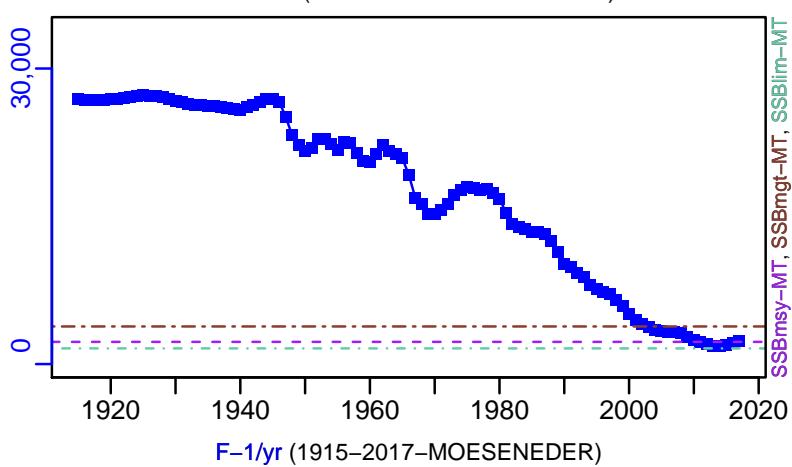
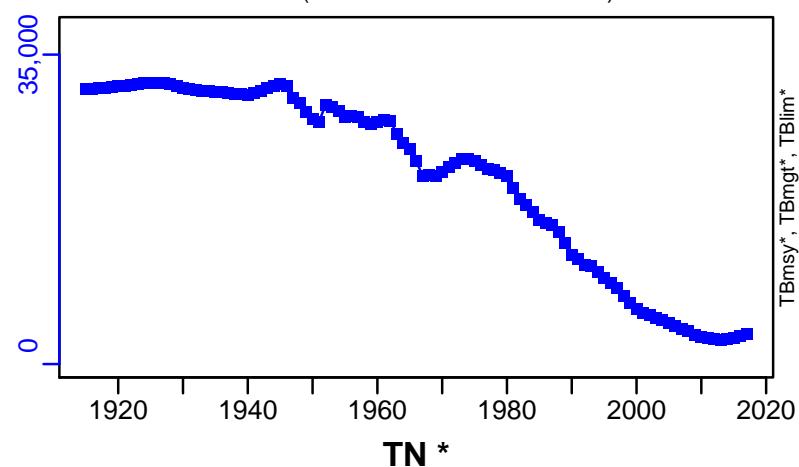
Jackass morwong Eastern half of Southeast Australia [MORWONGESE]



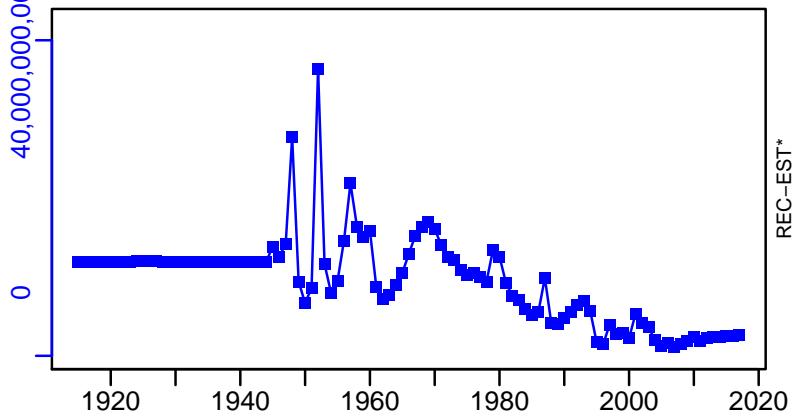
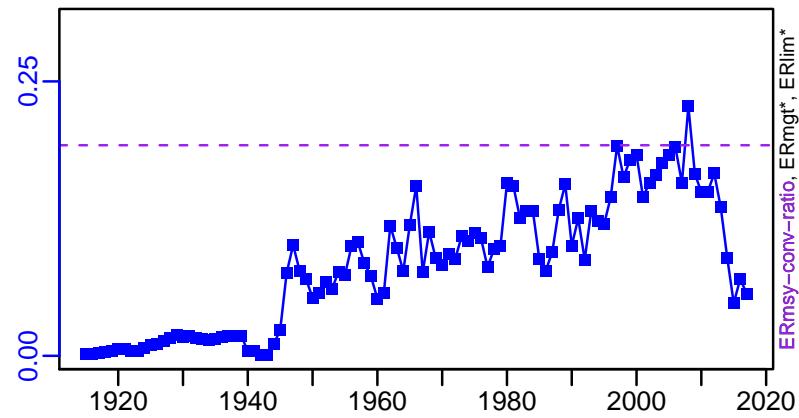
### Jackass morwong Eastern half of Southeast Australia [MORWONGESE]

TB-MT (1915–2017–MOESENEDER)

SSB-MT (1915–2017–MOESENEDER)



ER-ratio (1915–2017–MOESENEDER)

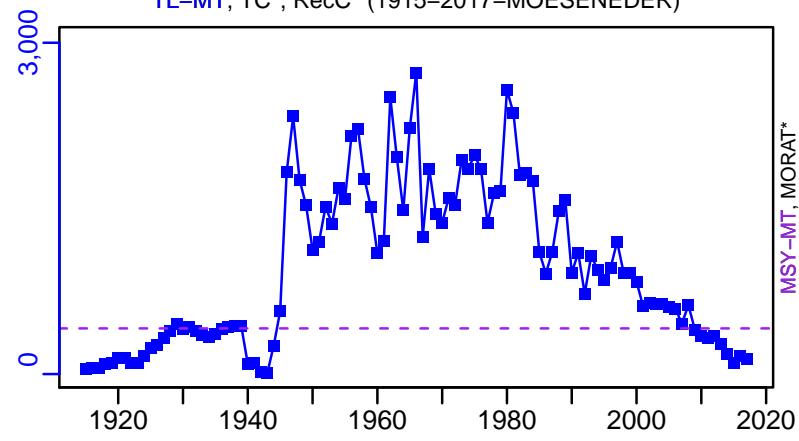


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | --- Lim BRP  | * No Data |

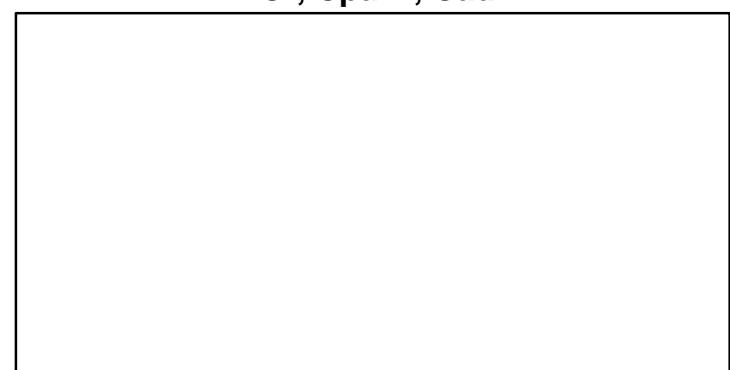
**Jackass morwong Eastern half of Southeast Australia [MORWONGESE]**

TL-MT, TC\*, RecC\* (1915–2017–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



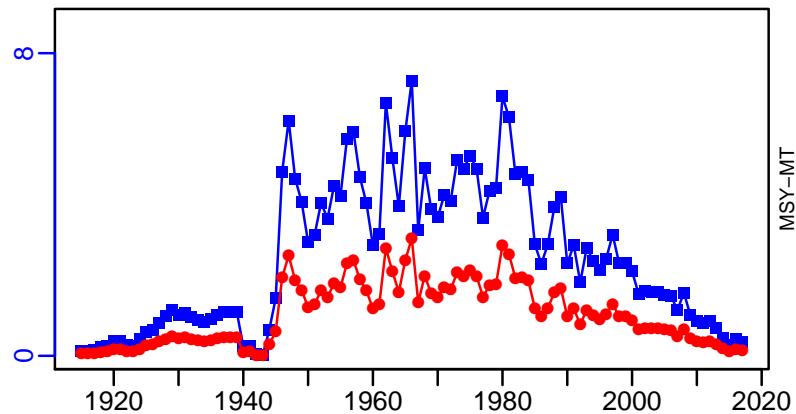
CPUE\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1915–2017–MOESENEDER)



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

## Jackass morwong Western half of Southeast Australia [MORWONGWSE]

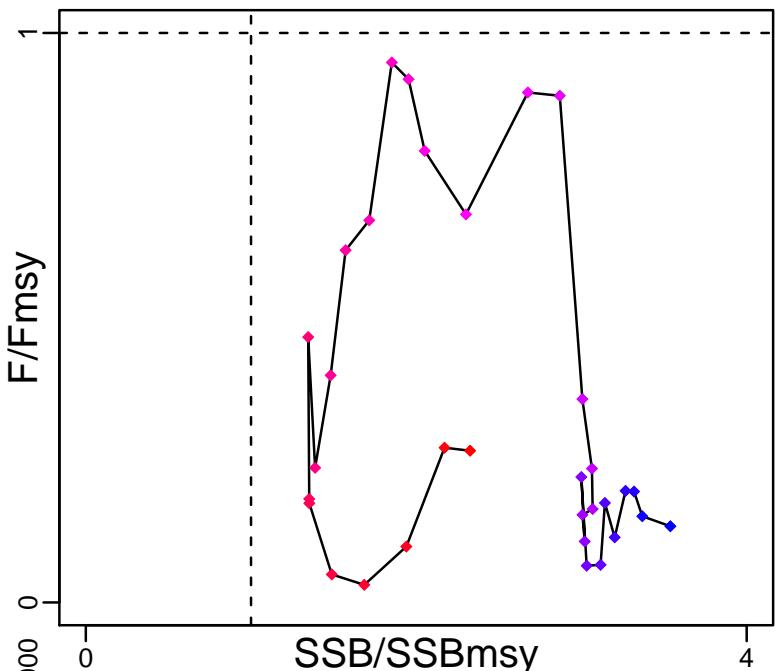
Metadata	
<b>Scientific Name</b>	Nemadactylus macropterus
<b>Current Assess ID</b>	CSIRO-MORWONGWSE-1986-2017-MOESENEDER
<b>Area</b>	Western half of Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2014, 2017

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2017	775
<b>Fmsy</b>	Fmsy-1/yr	2017	0.149
<b>ERmsy</b>	ERmsy-conv-ratio	2017	0.178
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2017	1317
<b>Fmgt</b>	Fmgt-1/yr	2017	0.09
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2017	3314
<b>SSB0</b>	SSB0-MT	2017	2743
<b>MSY</b>	MSY-MT	2017	180
<b>M</b>	M-1/yr	2017	0.15
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2017	549
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

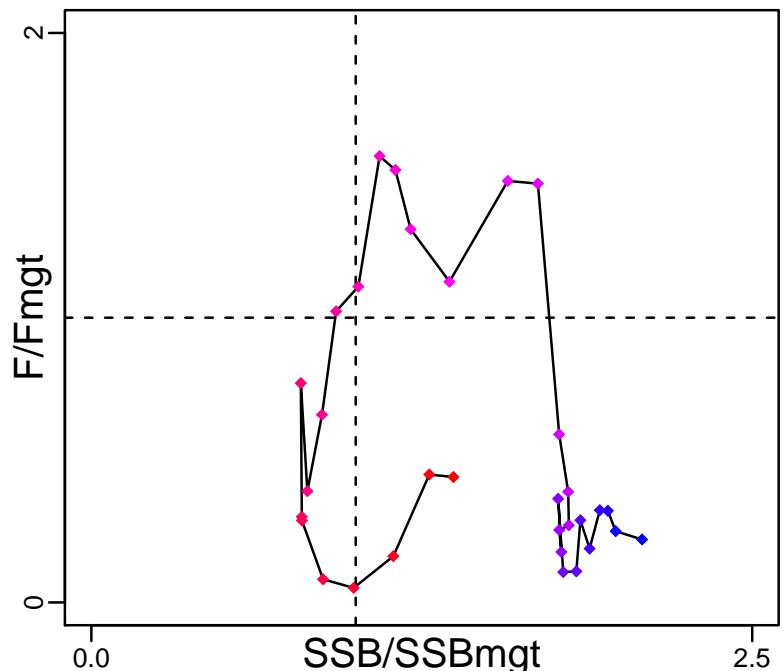
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2017	2338	-	-	
<b>SSB</b>	SSB-MT	2017	1803	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2017	$1.14 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2017	0.04	-	-	
<b>ER</b>	ER-ratio	2017	0.039	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2017	87			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2017	1.917			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2017	2.326			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2017	0.266			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2017	0.22			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2017	1.37			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2017	0.44			
<b>ER/ERmgt</b>	-	-	-			

**Jackass morwong Western half of Southeast Australia [MORWONGWSE]**

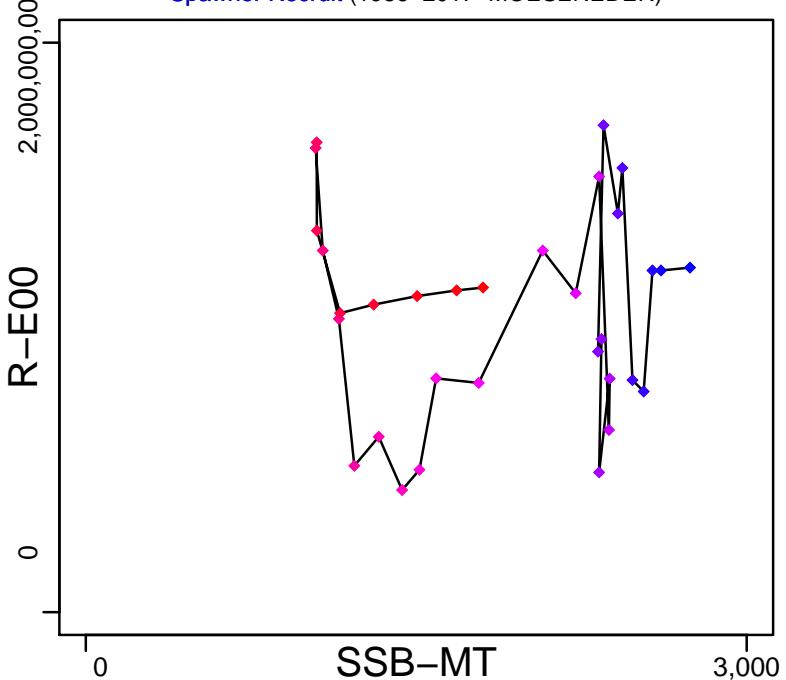
Kobe MSYpref (1986–2017–MOESENEDER)



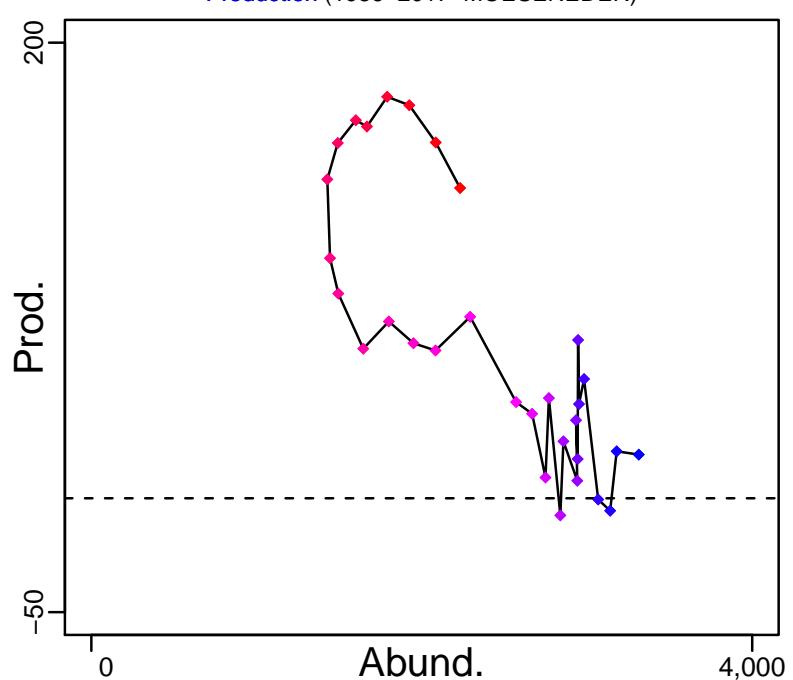
Kobe MGTpref (1986–2017–MOESENEDER)



Spawner Recruit (1986–2017–MOESENEDER)



Production (1986–2017–MOESENEDER)

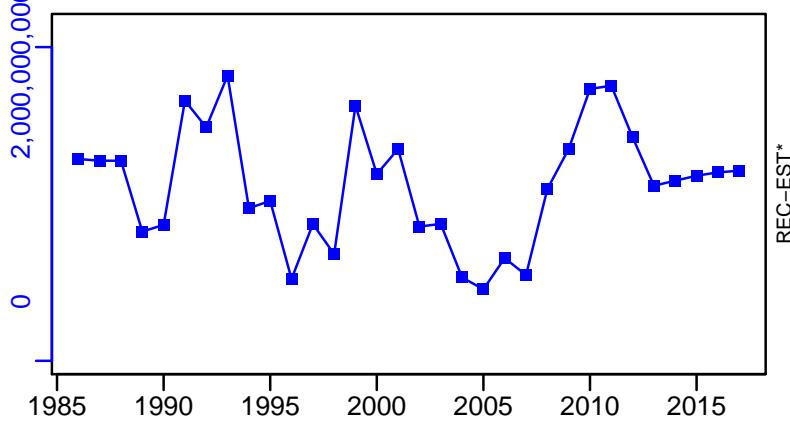
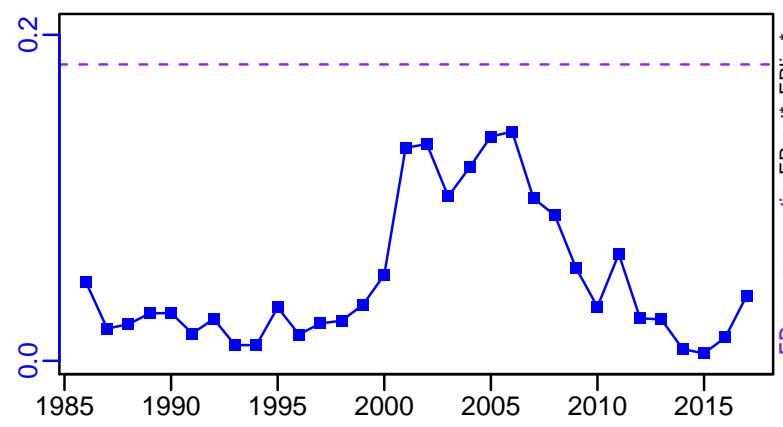
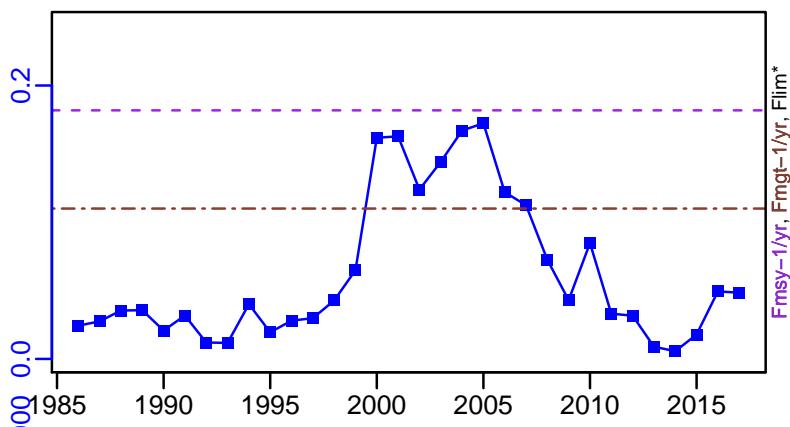
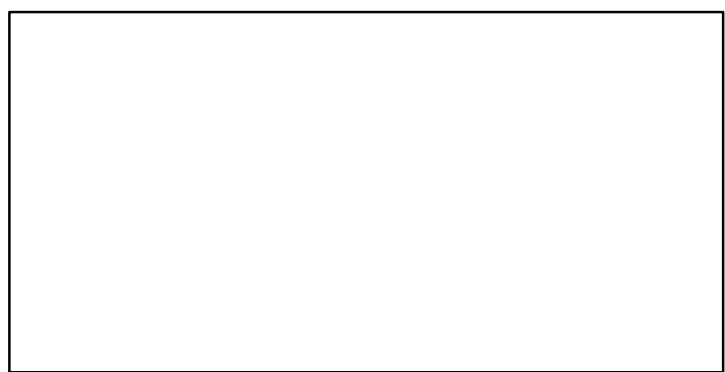
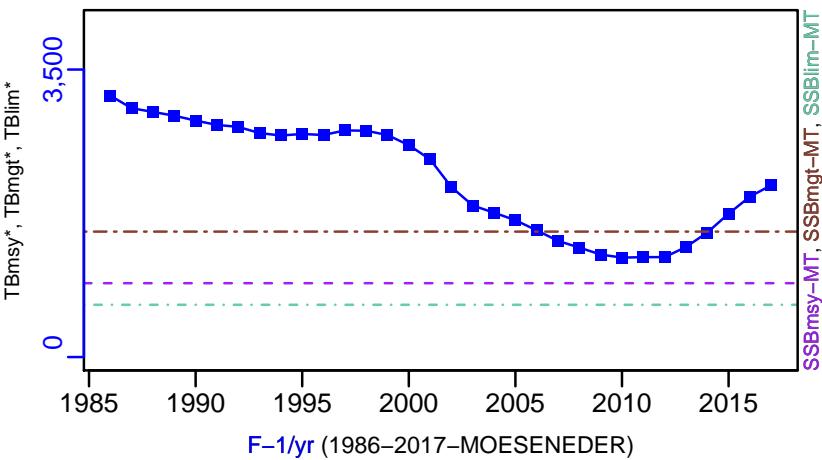
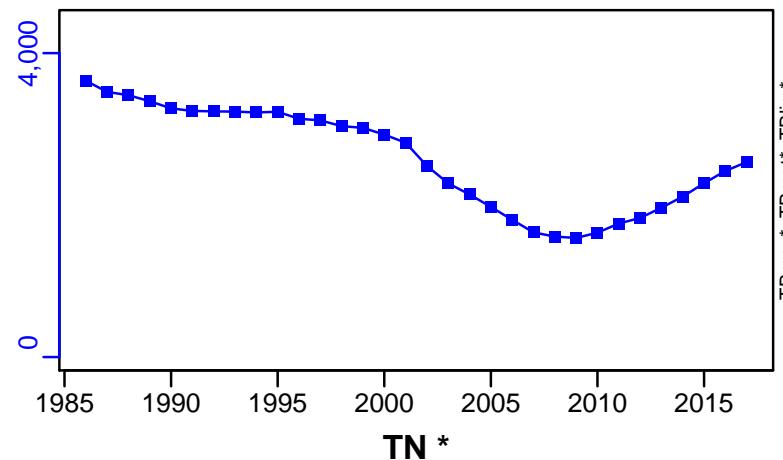


◆ Start Year   ◆ End Year   \* No Data

### Jackass morwong Western half of Southeast Australia [MORWONGWSE]

TB-MT (1986–2017–MOESENEDER)

SSB-MT (1986–2017–MOESENEDER)

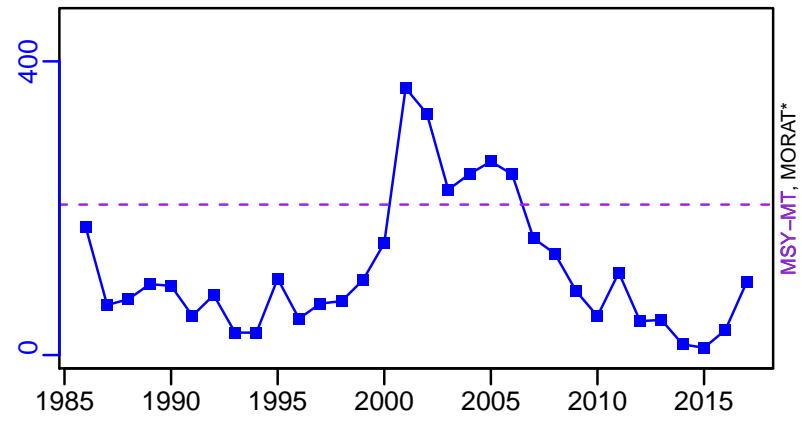


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

**Jackass morwong Western half of Southeast Australia [MORWONGWSE]**

TL-MT, TC\*, RecC\* (1986–2017–MOESENEDER)

TAC\*, Cpair\*, Cadv\*

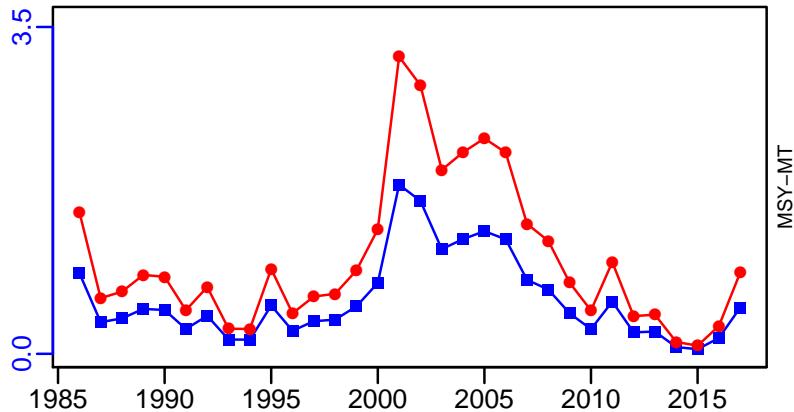
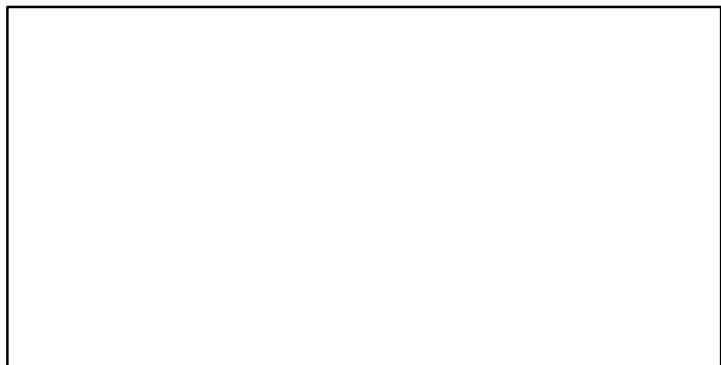


**survB\***

**CPUE\***

**EFFORT\***

TL-MT/MSY-MT, CdivMEANC–ratio, (1986–2017–MOESENEDER)



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

## Sea mullet Queensland and New South Wales [MULLQNSW]

<b>Metadata</b>	
<b>Scientific Name</b>	Mugil cephalus
<b>Current Assess ID</b>	DPIF-MULLQNSW-1945-2003-BANOBI
<b>Area</b>	Queensland and New South Wales
<b>Management Authority</b>	Department of Primary Industries and Fisheries
<b>Assessor</b>	Department of Primary Industries and Fisheries
<b>Asmts in RAM</b>	2003

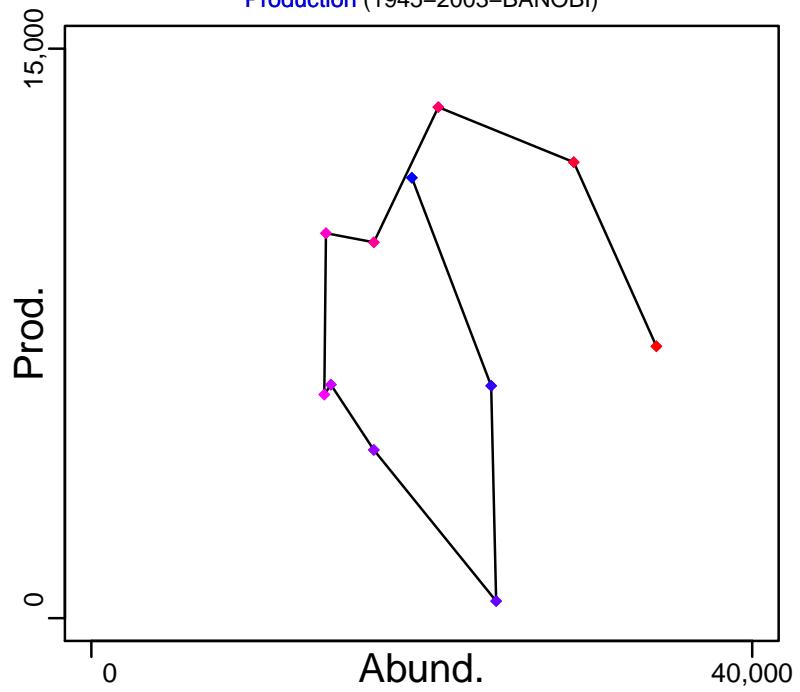
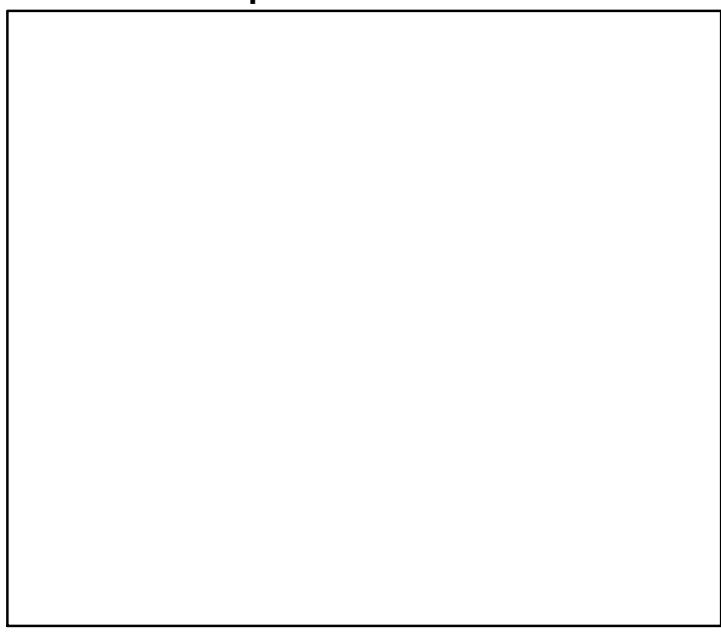
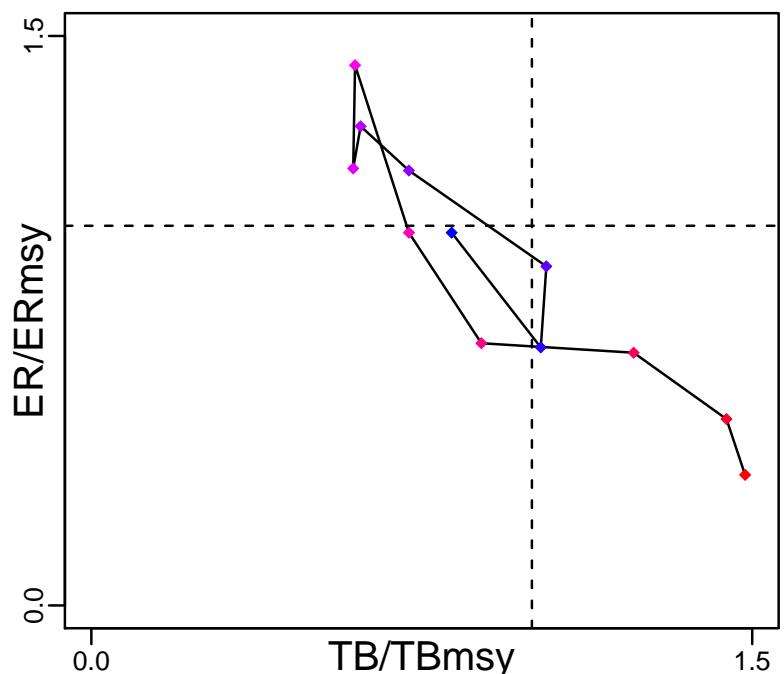
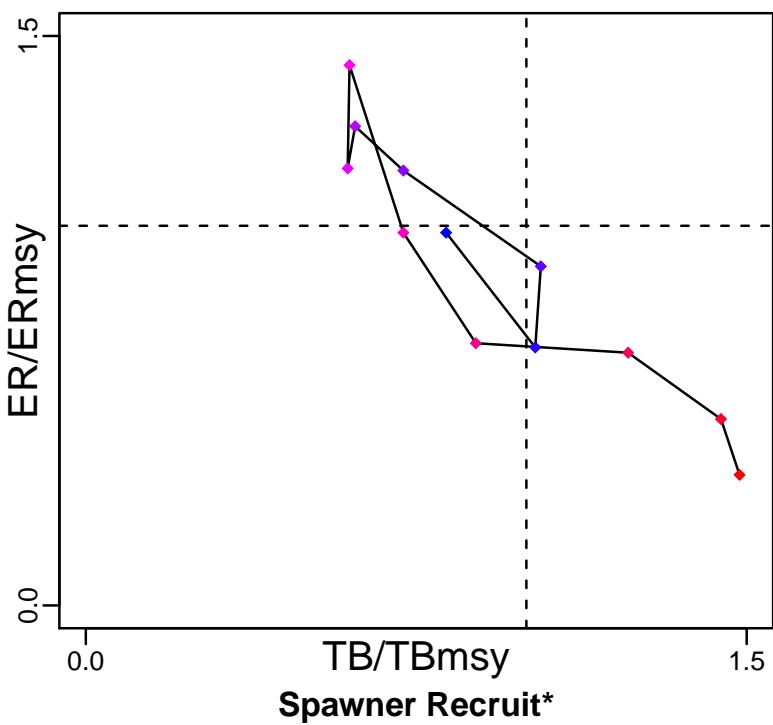
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2003	23,723
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2003	0.361
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2003	8553
<b>M</b>	M-1/yr	2003	0.33
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2003	35,200	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2003	41,800,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2003	0.124	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2003	4220			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2003	1.484			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2003	0.344			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Sea mullet Queensland and New South Wales [MULLQNSW]**

Kobe MSYpref (1945–2003–BANOBI)

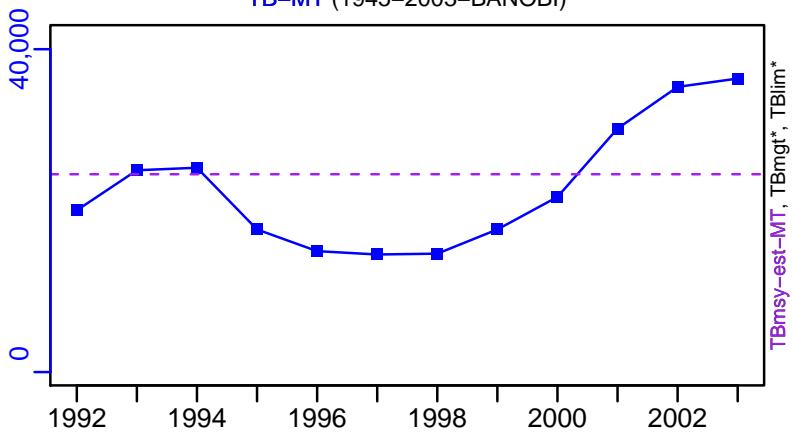
Kobe MGTpref (1945–2003–BANOBI)



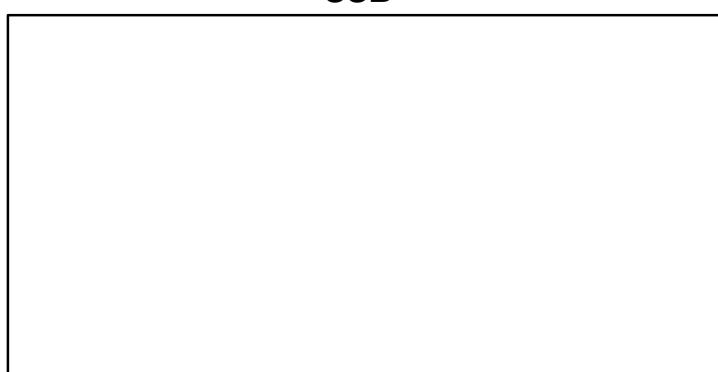
◆ Start Year   ◆ End Year   \* No Data

**Sea mullet Queensland and New South Wales [MULLQNSW]**

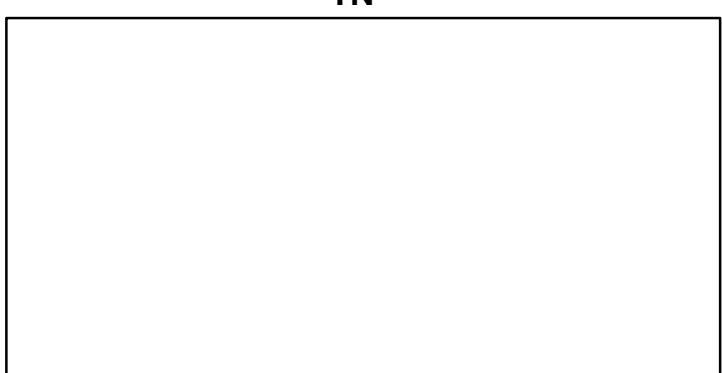
TB-MT (1945–2003–BANOBI)



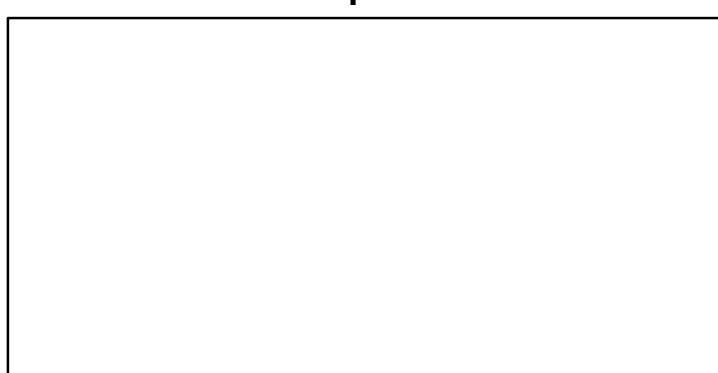
**SSB\***



**TN \***

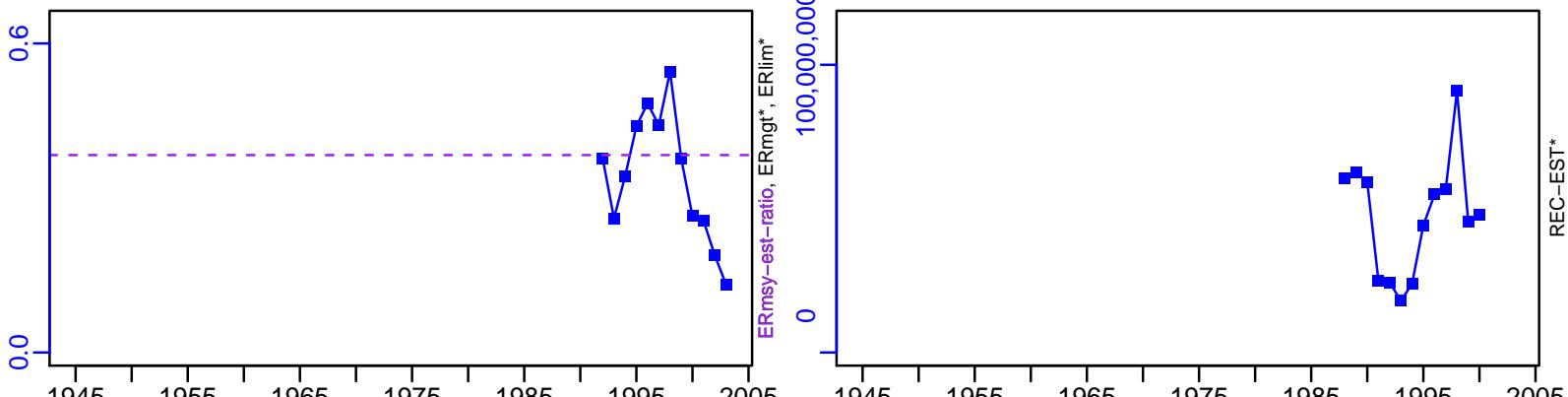


**F\***



**ER-ratio (1945–2003–BANOBI)**

**R-E00 (1945–2003–BANOBI)**

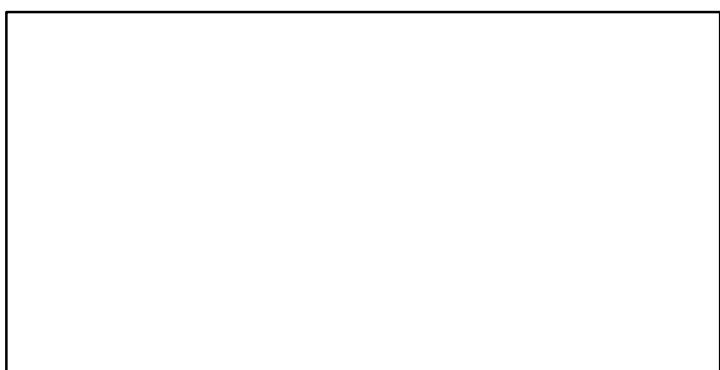
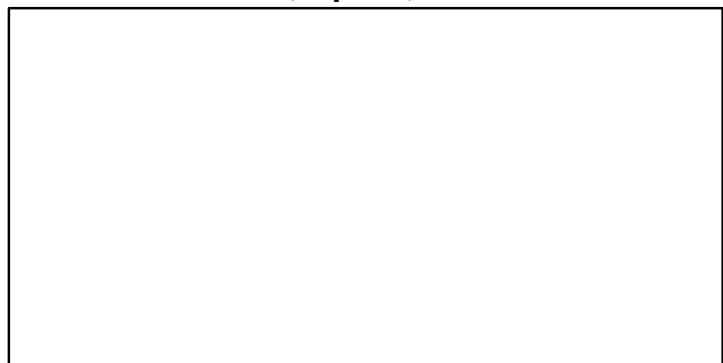
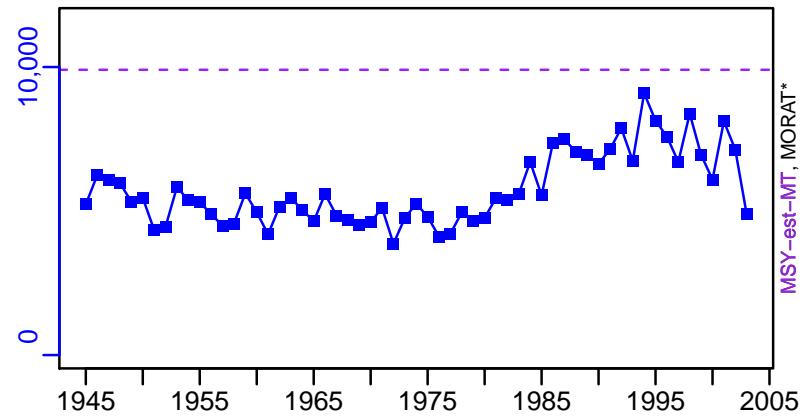


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

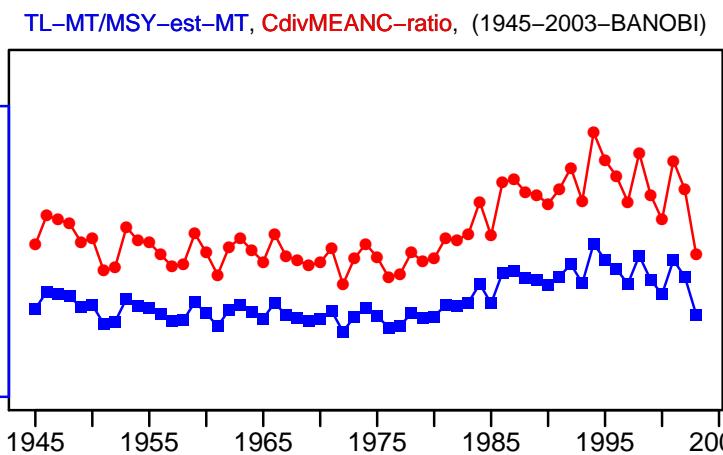
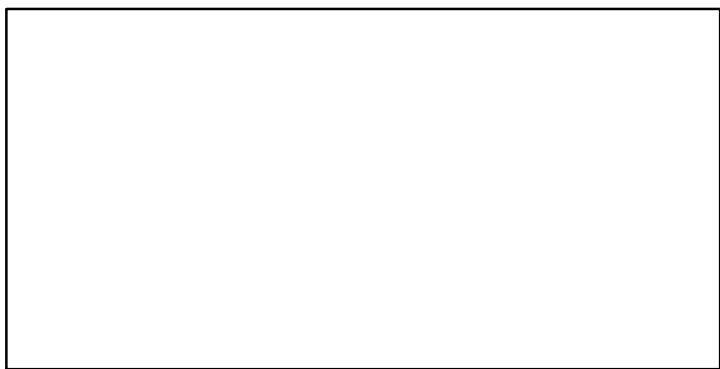
**Sea mullet Queensland and New South Wales [MULLQNSW]**

TL-MT, TC\*, RecC\* (1945–2003–BANOBI)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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

## Ling Southeast Australia [NZLINGESE]

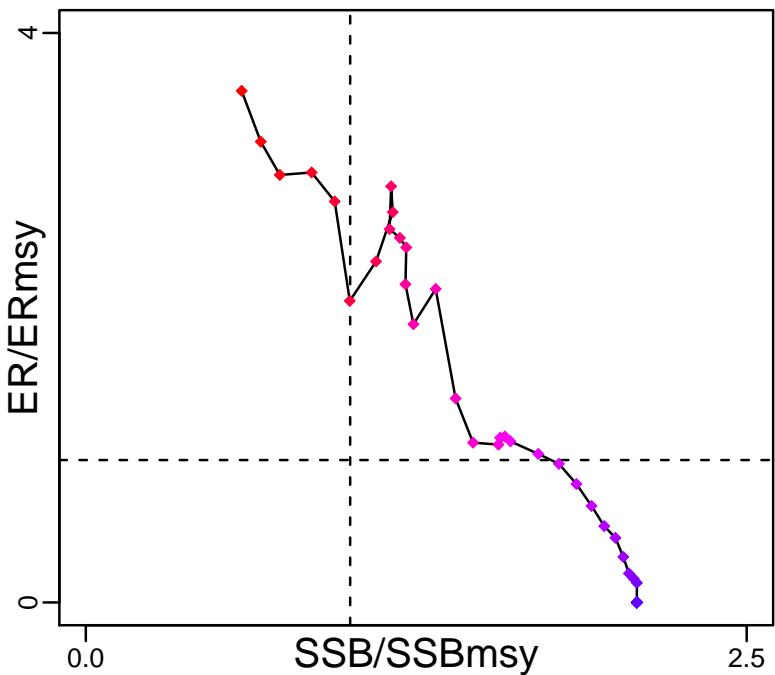
<b>Metadata</b>	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	CSIRO-NZLINGESE-1968-2007-FULTON
<b>Area</b>	Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2007

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2007	3324
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2007	0.048
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2007	365
<b>M</b>	M-1/yr	2007	0.2
<b>TBlim</b>	TBlim-MT	2007	1385
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

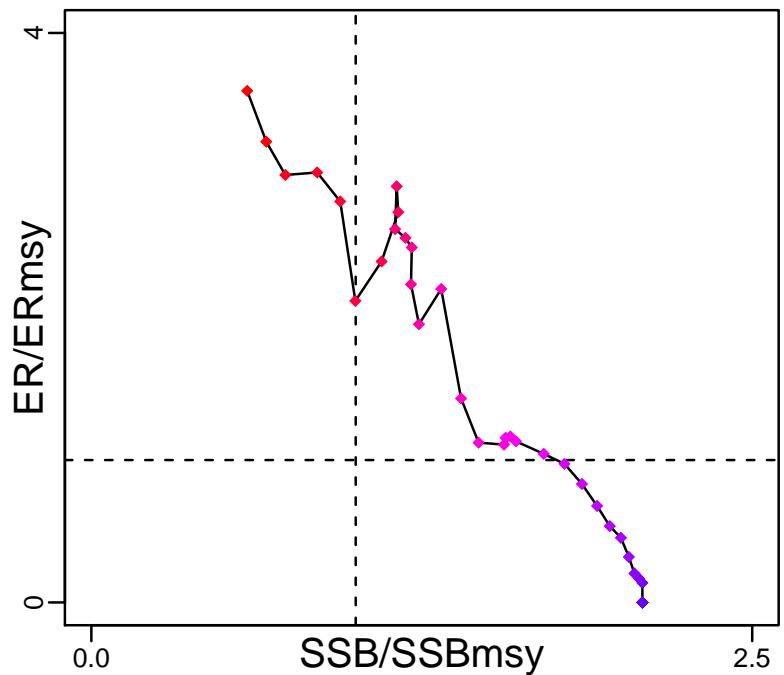
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	TB-MT	2007	4260	-	0
<b>SSB</b>	SSB-MT	2007	1960	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	1,930,000	-	0
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2007	0.173	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2007	736		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	0.59		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2007	3.593		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Ling Southeast Australia [NZLINGESE]

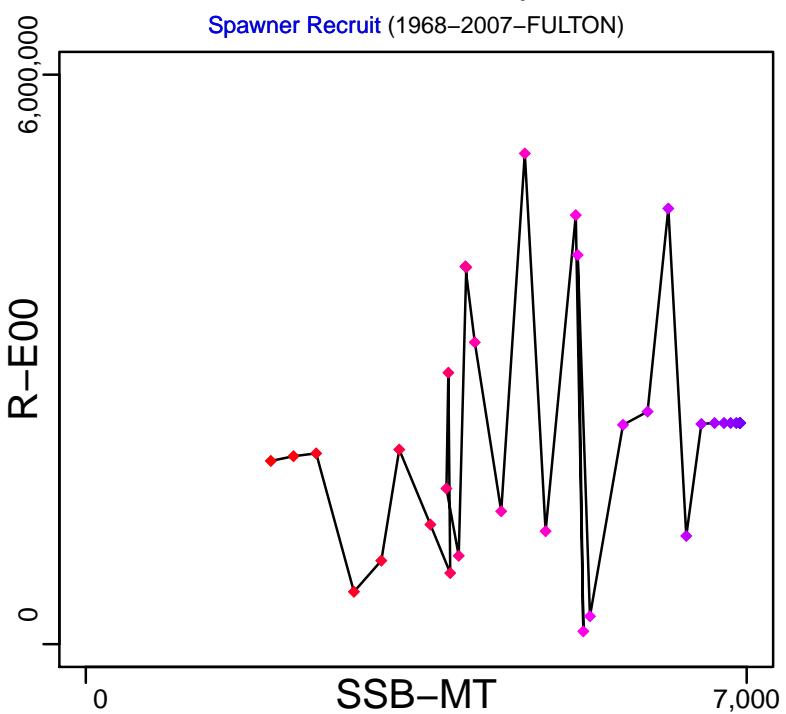
Kobe MSYpref (1968–2007–FULTON)



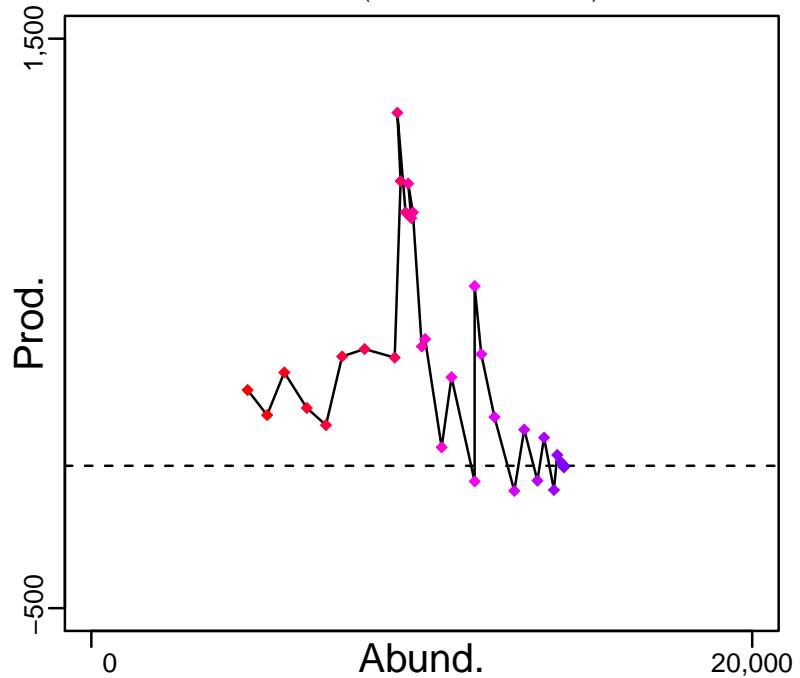
Kobe MGTpref (1968–2007–FULTON)



Spawner Recruit (1968–2007–FULTON)



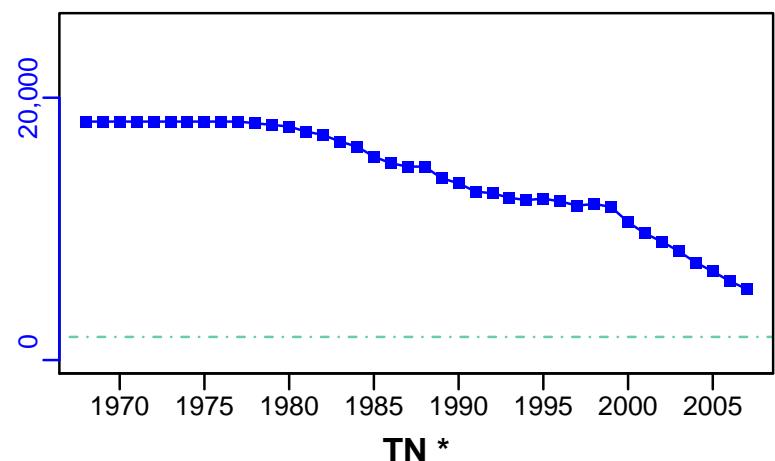
Production (1968–2007–FULTON)



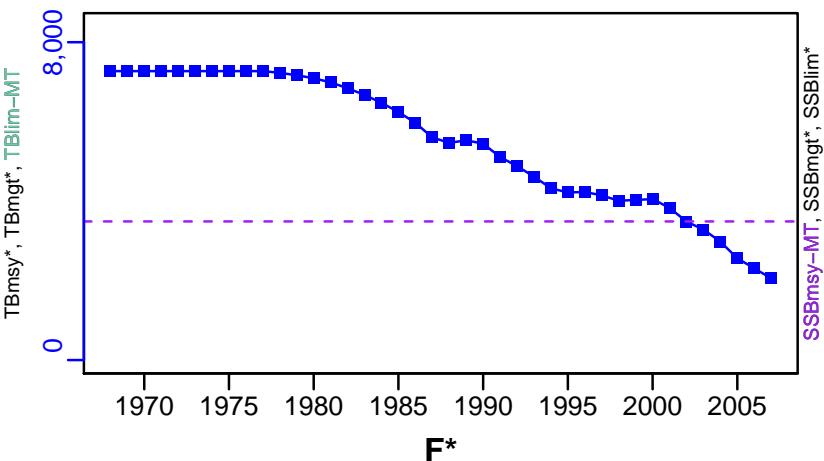
◆ Start Year   ◆ End Year   \* No Data

Ling Southeast Australia [NZLINGESE]

TB-MT (1968–2007–FULTON)



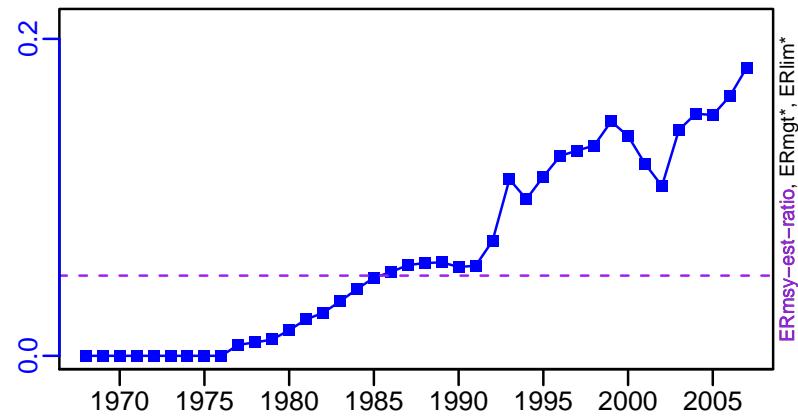
SSB-MT (1968–2007–FULTON)



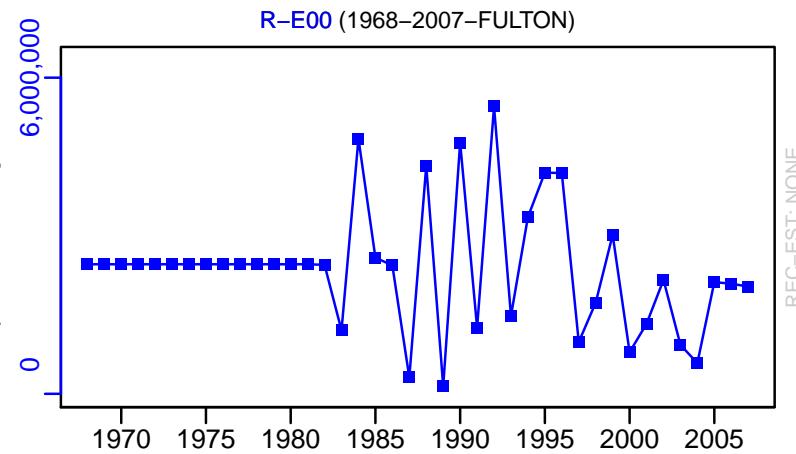
TN \*

F\*

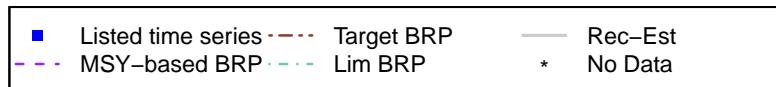
ER-calc-ratio (1968–2007–FULTON)



R-E00 (1968–2007–FULTON)



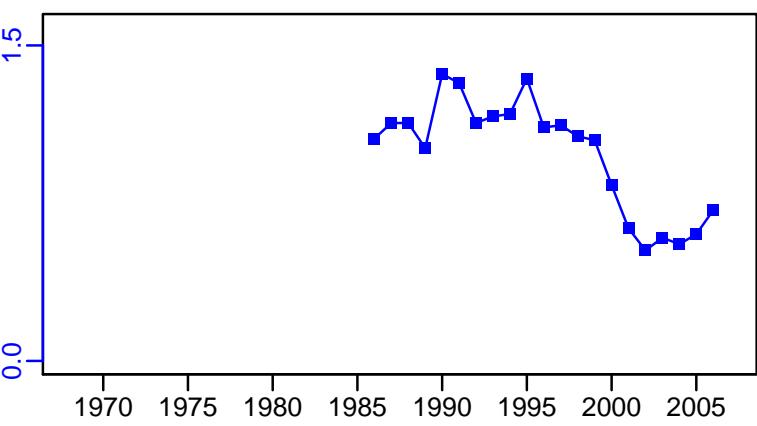
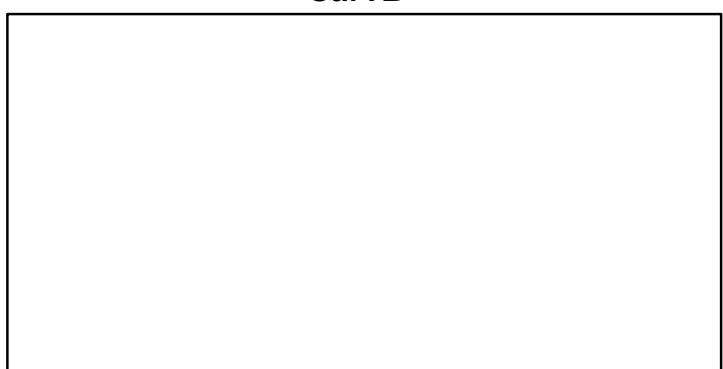
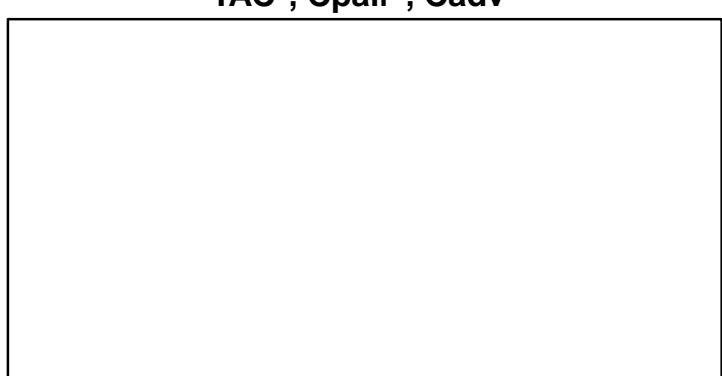
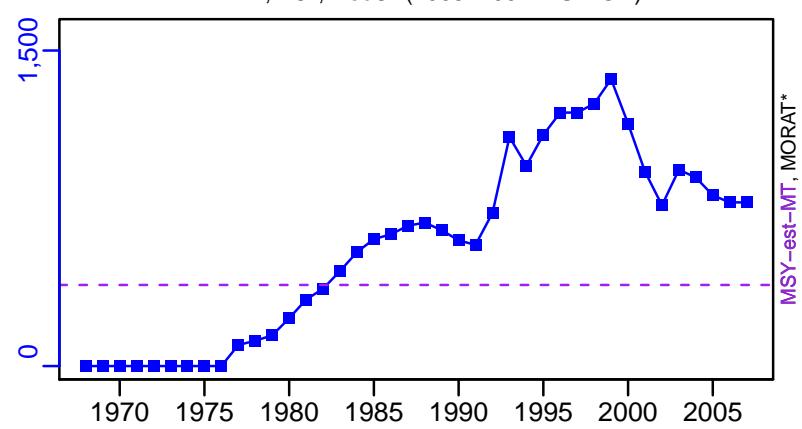
REC-EST: NONE



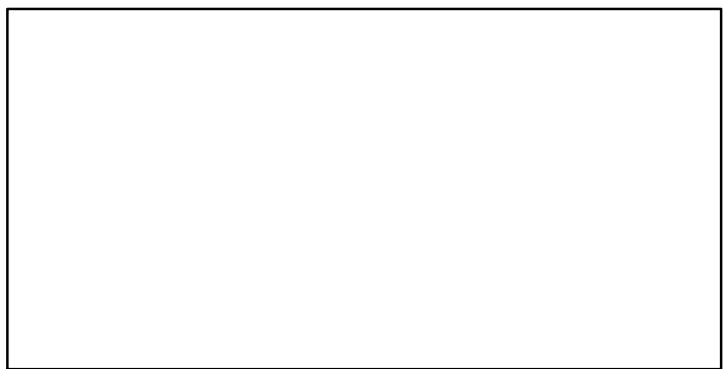
Ling Southeast Australia [NZLINGESE]

TL-MT, TC\*, RecC\* (1968–2007–FULTON)

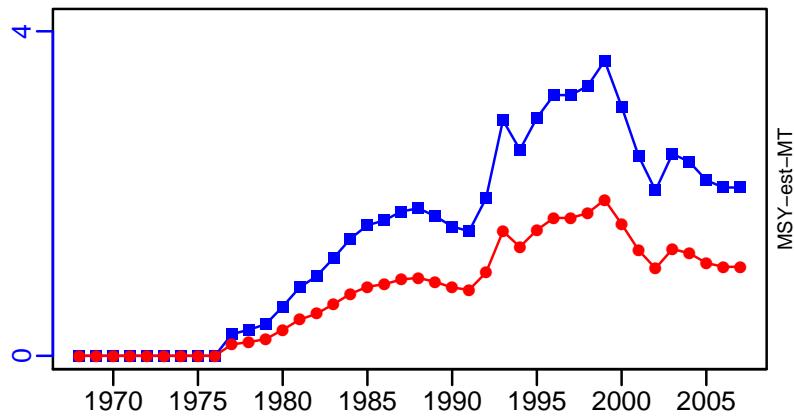
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1968–2007–FULTON)



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

## Ling Western half of Southeast Australia [NZLINGWSE]

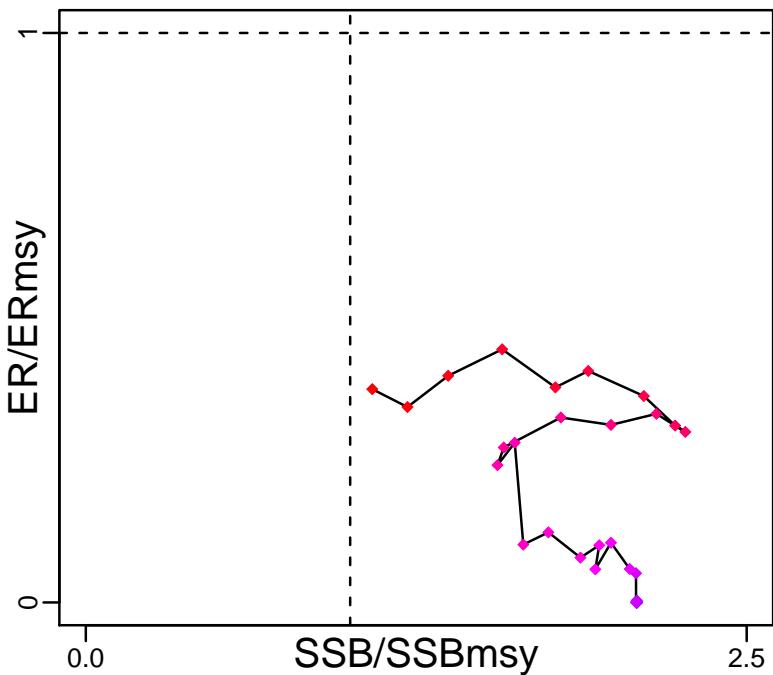
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	CSIRO-NZLINGWSE-1968-2007-FULTON
<b>Area</b>	Western half of Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2007	3378
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2007	0.16
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-conv-MT	2007	1235
<b>M</b>	M-1/yr	2007	0.2
<b>TBlim</b>	TBlim-MT	2007	1407
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

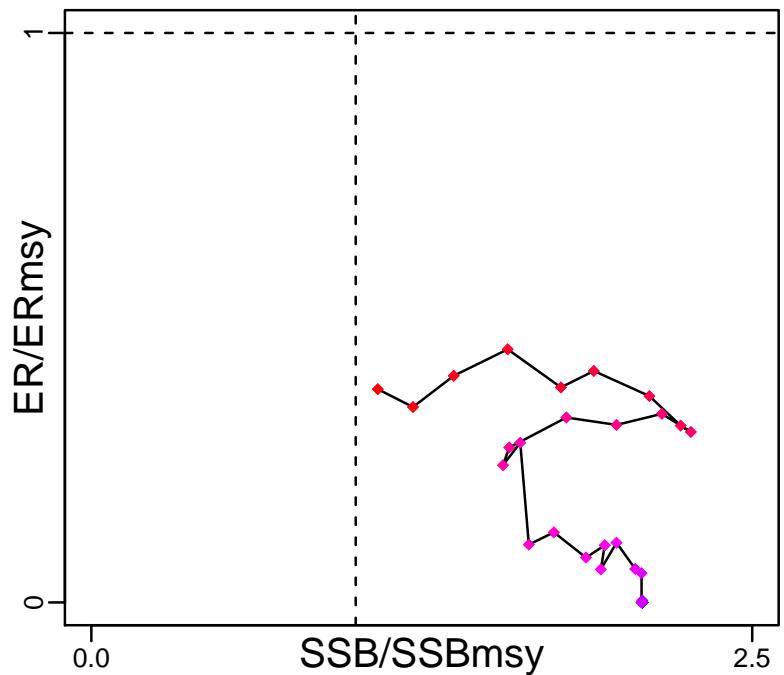
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2007	7760	-	0	
<b>SSB</b>	SSB-MT	2007	3660	Females	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2007	2,290,000	-	0	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2007	0.06	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2007	465			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	1.084			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-ratio	2007	0.375			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Ling Western half of Southeast Australia [NZLINGWSE]

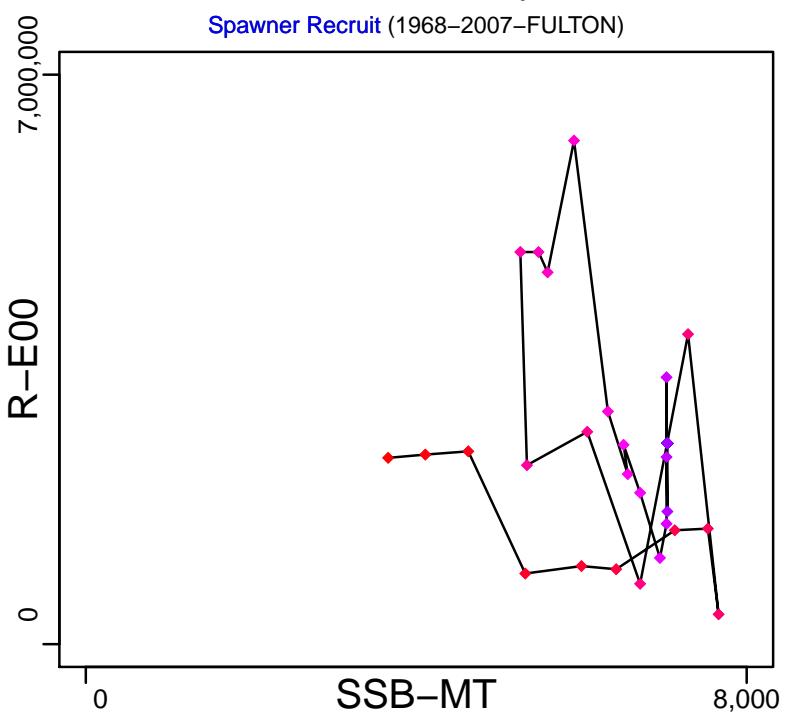
Kobe MSYpref (1968–2007–FULTON)



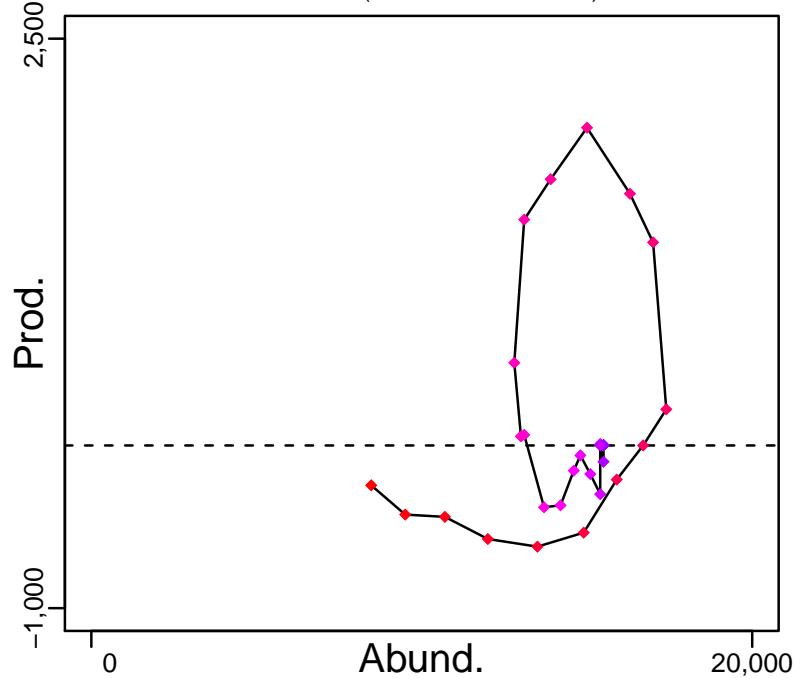
Kobe MGTpref (1968–2007–FULTON)



Spawner Recruit (1968–2007–FULTON)



Production (1968–2007–FULTON)

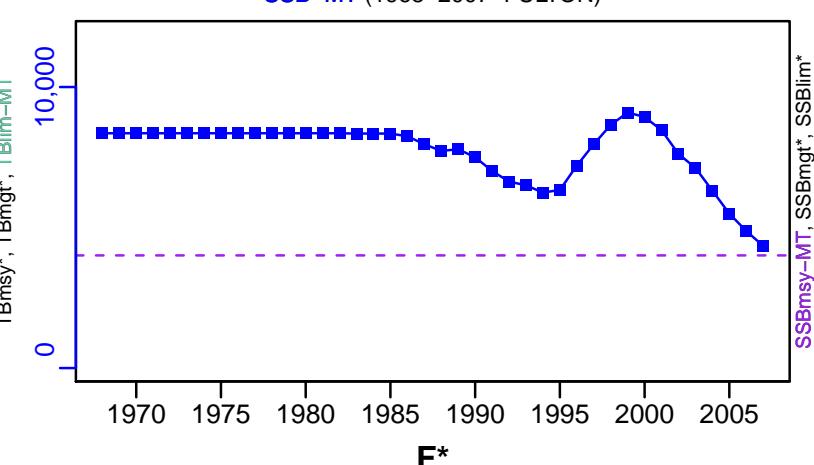
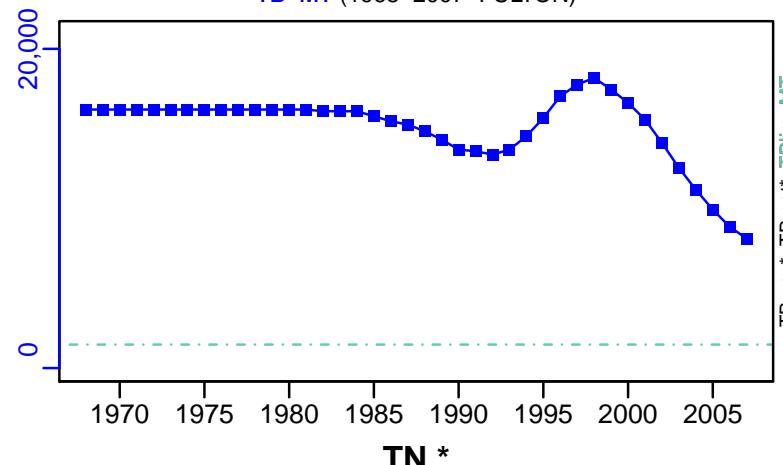


◆ Start Year ◆ End Year \* No Data

Ling Western half of Southeast Australia [NZLINGWSE]

TB-MT (1968–2007–FULTON)

SSB-MT (1968–2007–FULTON)



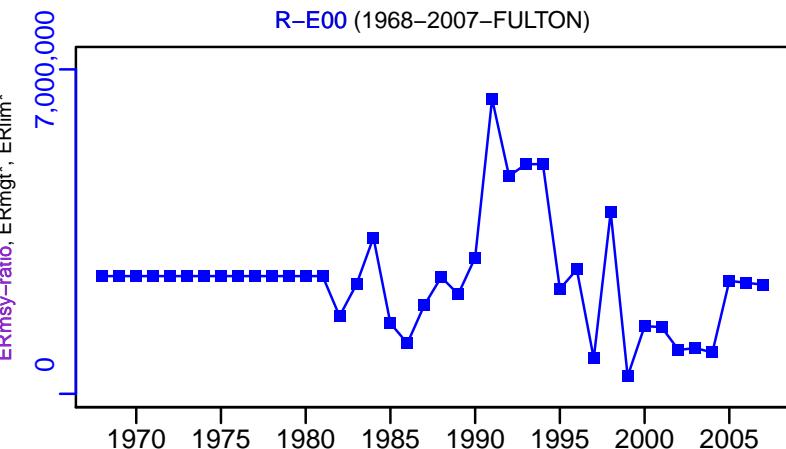
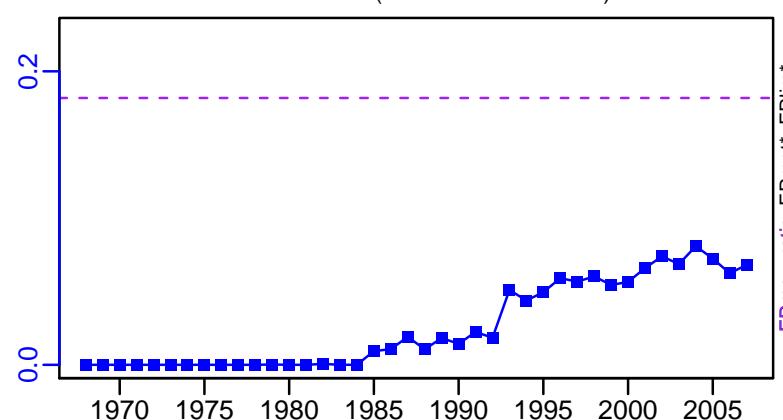
TN \*

F\*



ER-calc-ratio (1968–2007–FULTON)

R-E00 (1968–2007–FULTON)



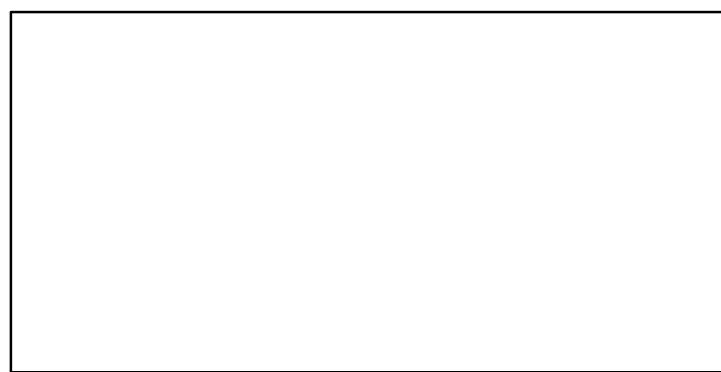
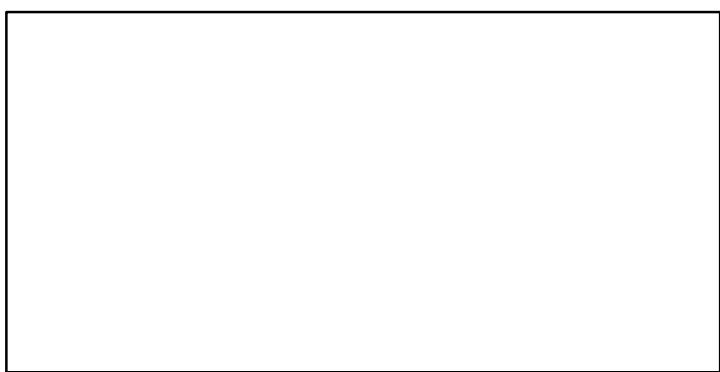
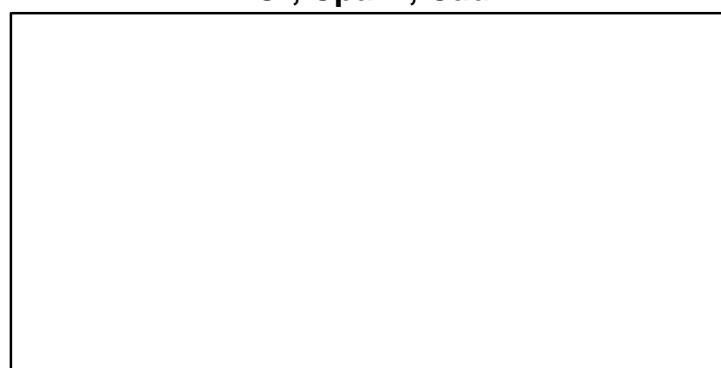
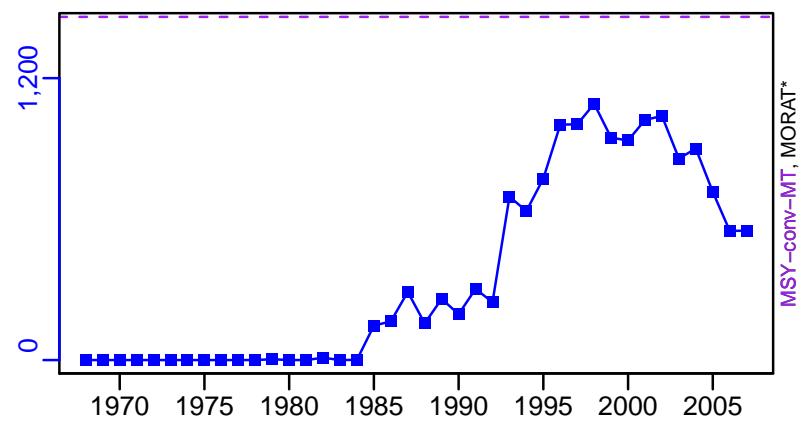
■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

REC-EST: NONE

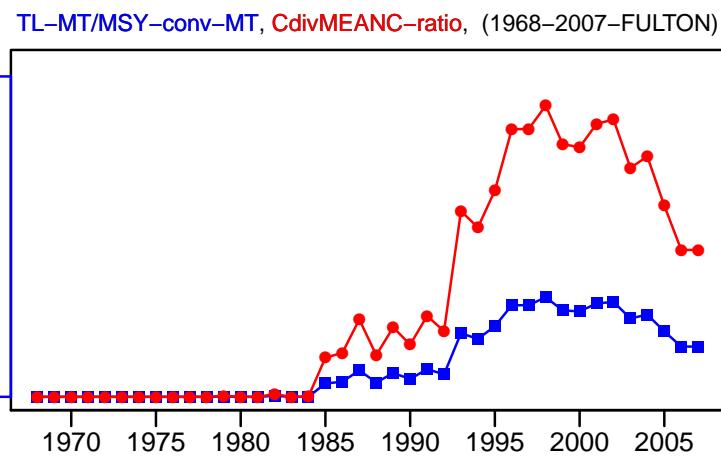
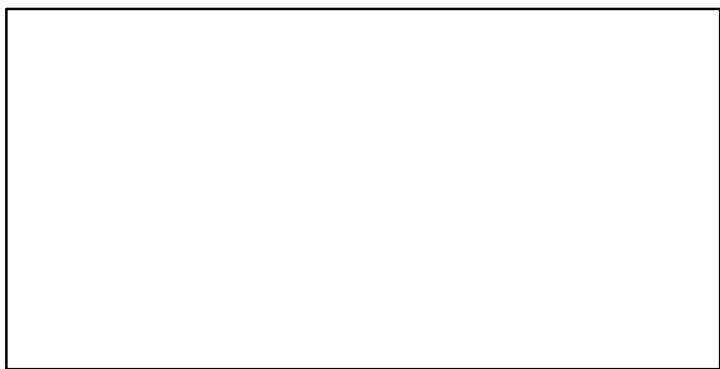
Ling Western half of Southeast Australia [NZLINGWSE]

TL-MT, TC\*, RecC\* (1968–2007–FULTON)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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

## Orange roughy Cascade Plateau [OROUGHYCASCADE]

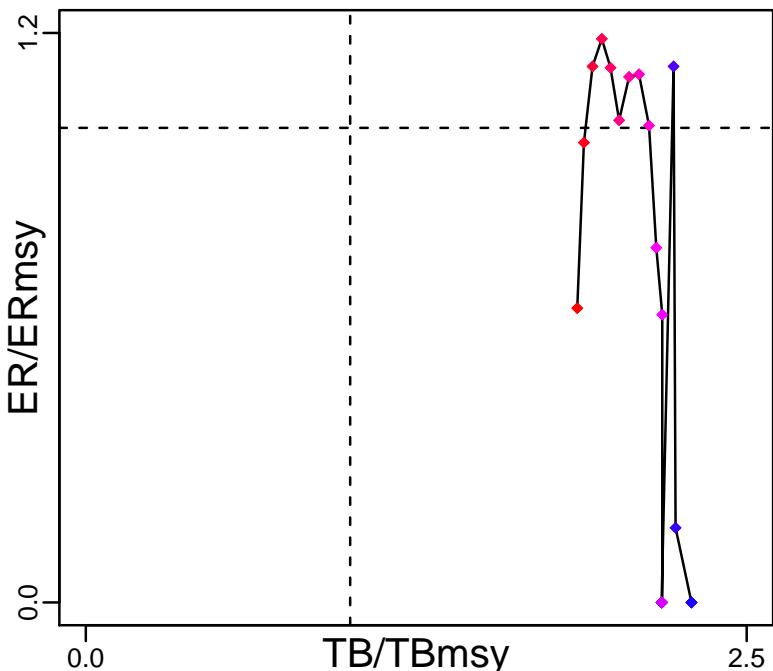
<b>Metadata</b>	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	CSIRO-OROUGHYCASCADE-1987-2006-FULTON
<b>Area</b>	Cascade Plateau
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2006

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2006	39,804
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2006	0.036
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2006	1438
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2006	5716
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

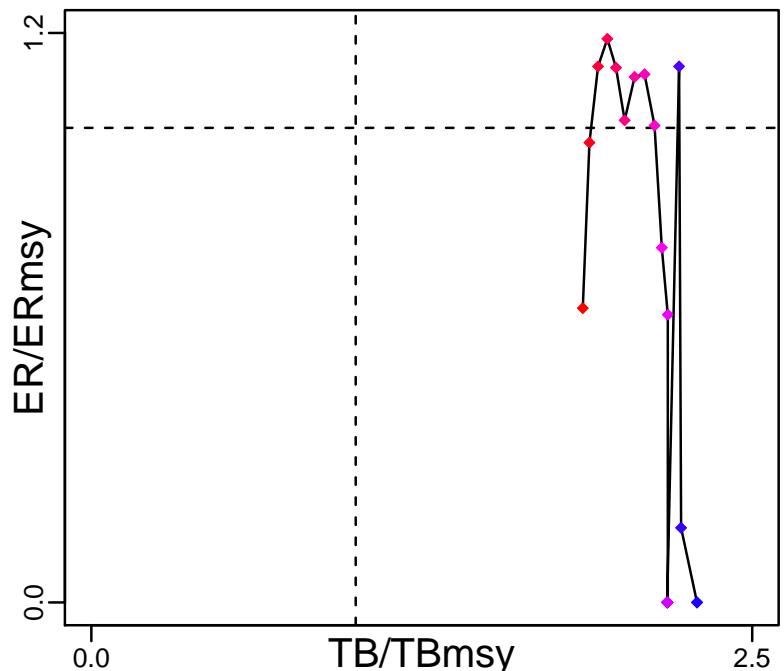
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	TB-MT	2006	74,000	Both	0
<b>SSB</b>	SSB-MT	2006	21,200	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2006	1,030,000	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2006	0.022	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2006	800	-	-
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2006	1.859	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2006	0.62	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	-	-	-	-	-
<b>F/Fmgt</b>	-	-	-	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

**Orange roughy Cascade Plateau [OROUGHYCASCADE]**

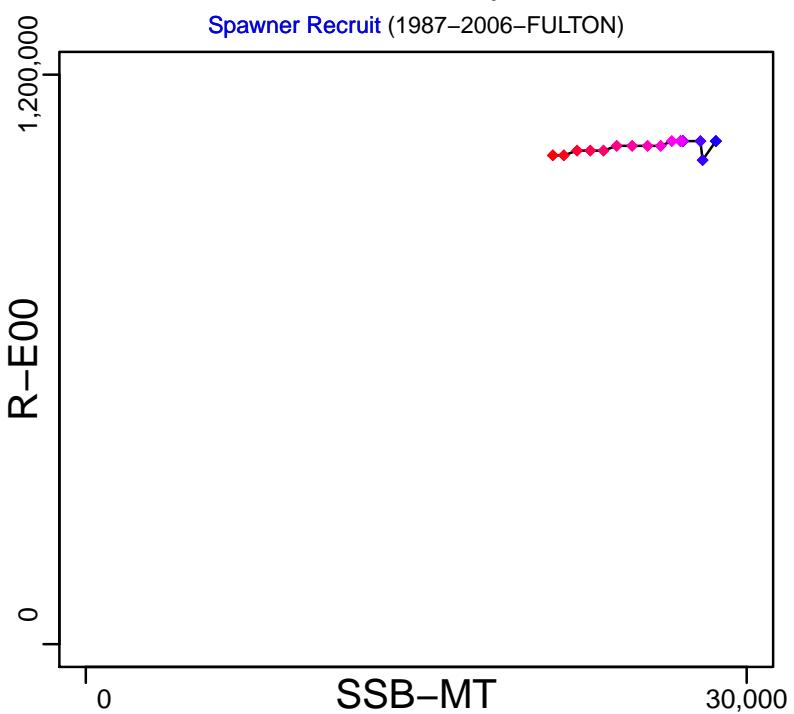
Kobe MSYpref (1987–2006–FULTON)



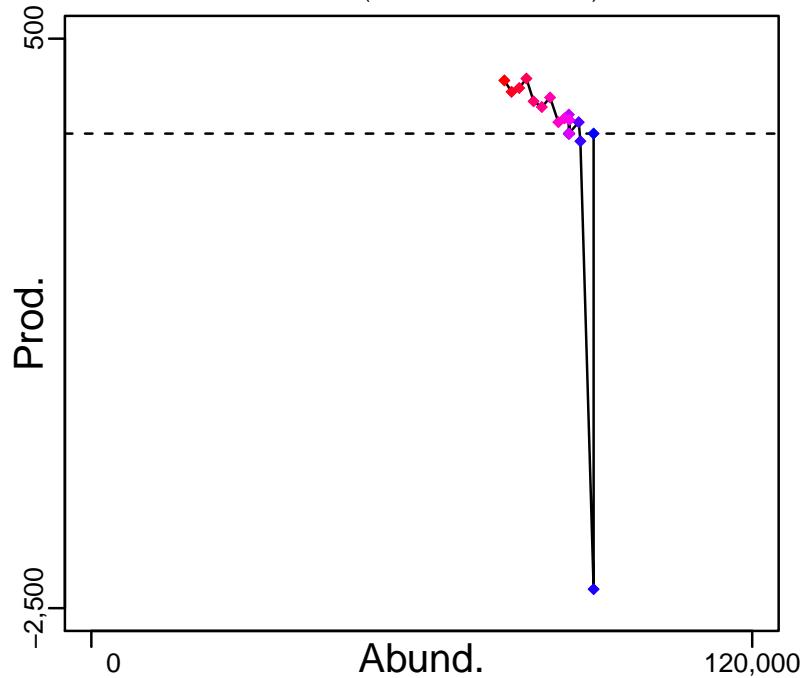
Kobe MGTpref (1987–2006–FULTON)



Spawner Recruit (1987–2006–FULTON)



Production (1987–2006–FULTON)

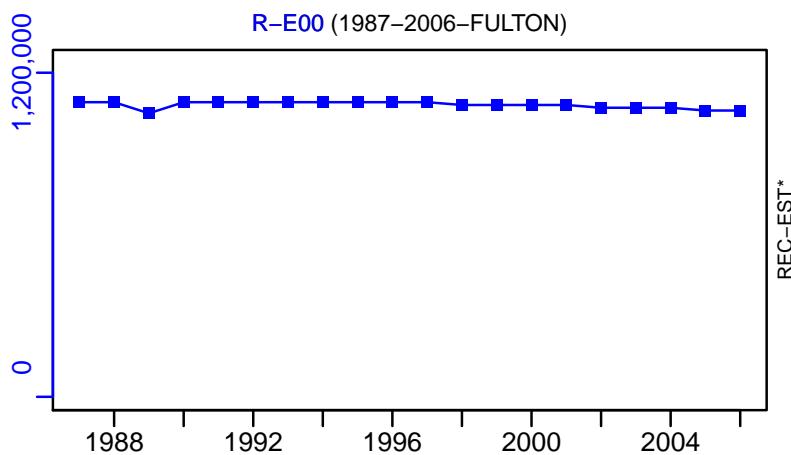
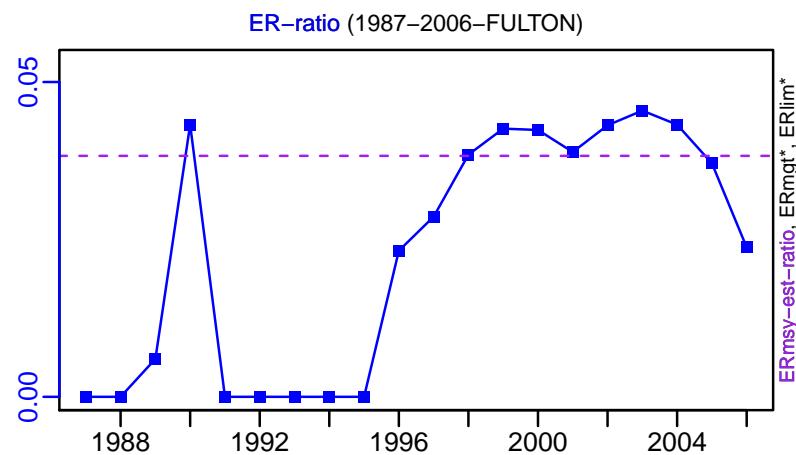
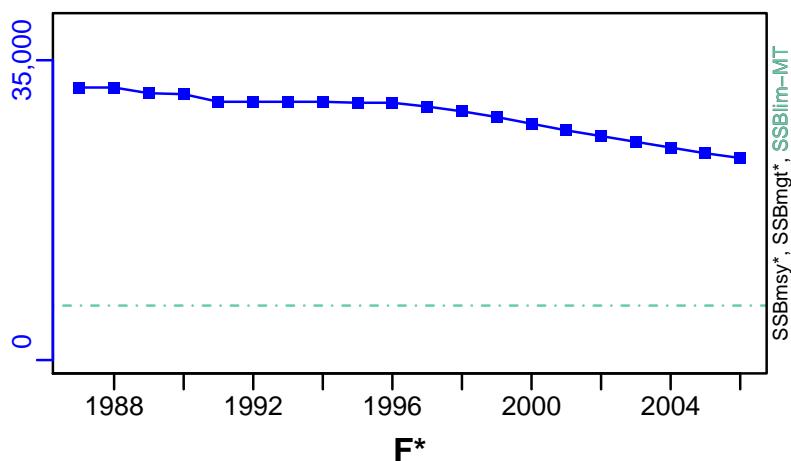
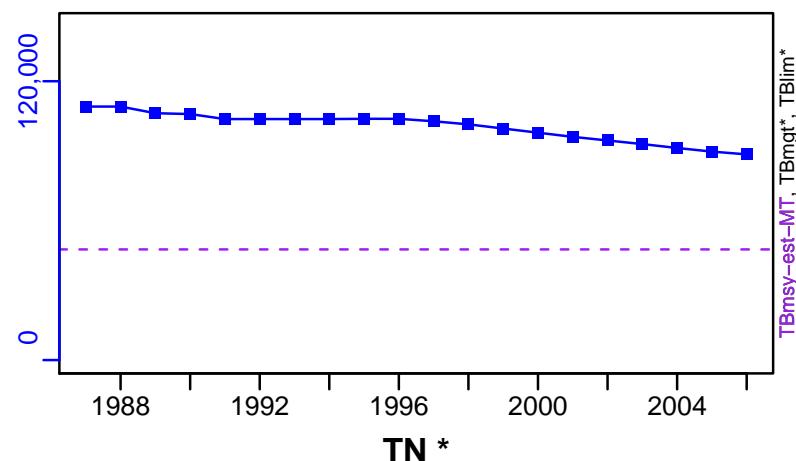


◆ Start Year   ◆ End Year   \* No Data

**Orange roughy Cascade Plateau [OROUGHYCASCADE]**

**TB-MT (1987–2006–FULTON)**

**SSB-MT (1987–2006–FULTON)**

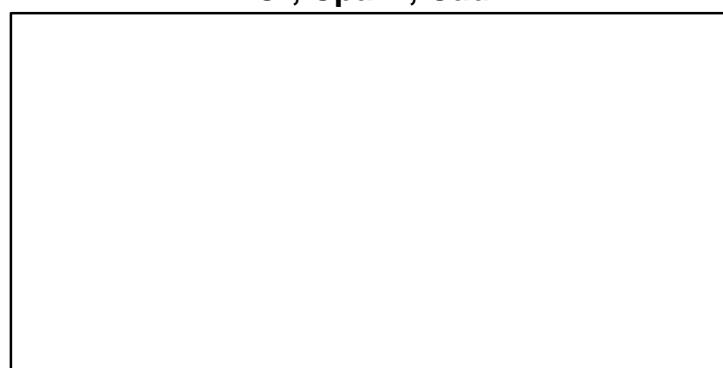
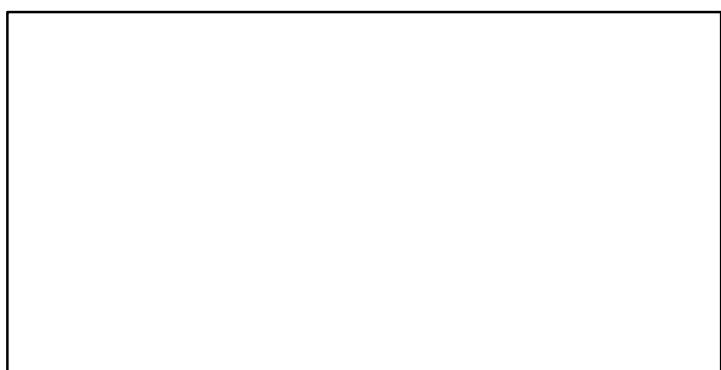
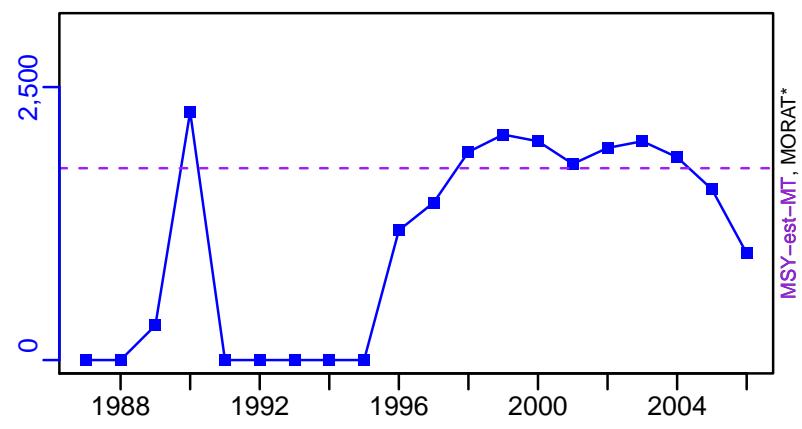


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

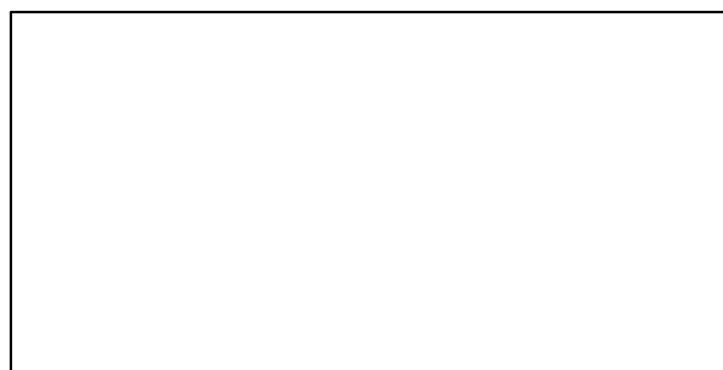
**Orange roughy Cascade Plateau [OROUGHYCASCADE]**

TL-MT, TC\*, RecC\* (1987–2006–FULTON)

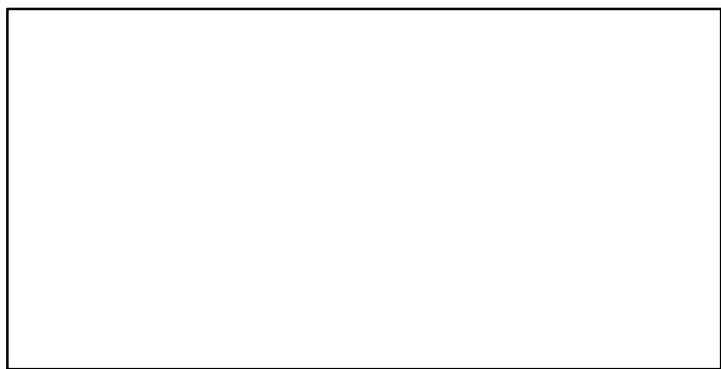
**TAC\*, Cpair\*, Cadv\***



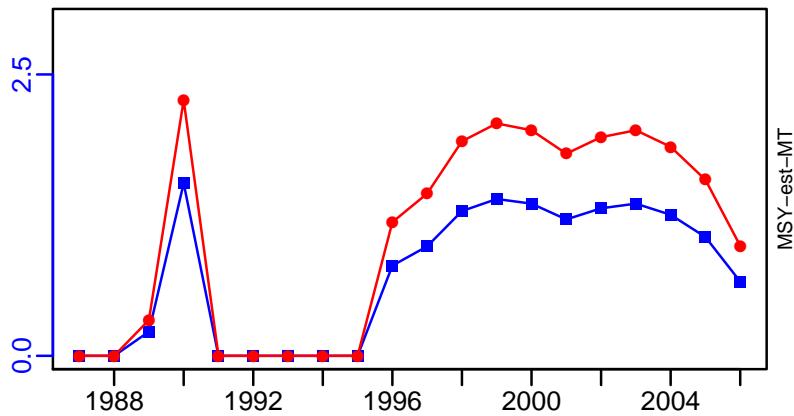
**CPUE\***



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1987–2006–FULTON)



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

## Orange roughy Southeast Australia [OROUGHYSE]

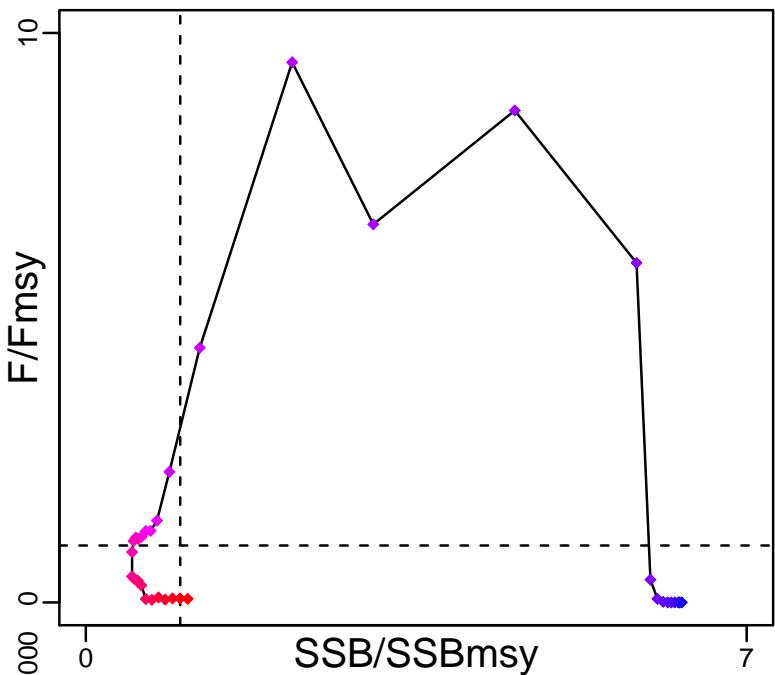
<b>Metadata</b>	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	CSIRO-OROUGHYSE-1980-2013-MOESENEDER
<b>Area</b>	Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2007, 2013

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2013	8143
<b>Fmsy</b>	Fmsy-1/yr	2013	0.03
<b>ERmsy</b>	ERmsy-conv-ratio	2013	0.045
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	18,687
<b>Fmgt</b>	Fmgt-1/yr	2013	0.015
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2013	169,697
<b>SSB0</b>	SSB0-MT	2013	38,931
<b>MSY</b>	MSY-MT	2013	2192
<b>M</b>	M-1/yr	2013	0.04
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2013	7786
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

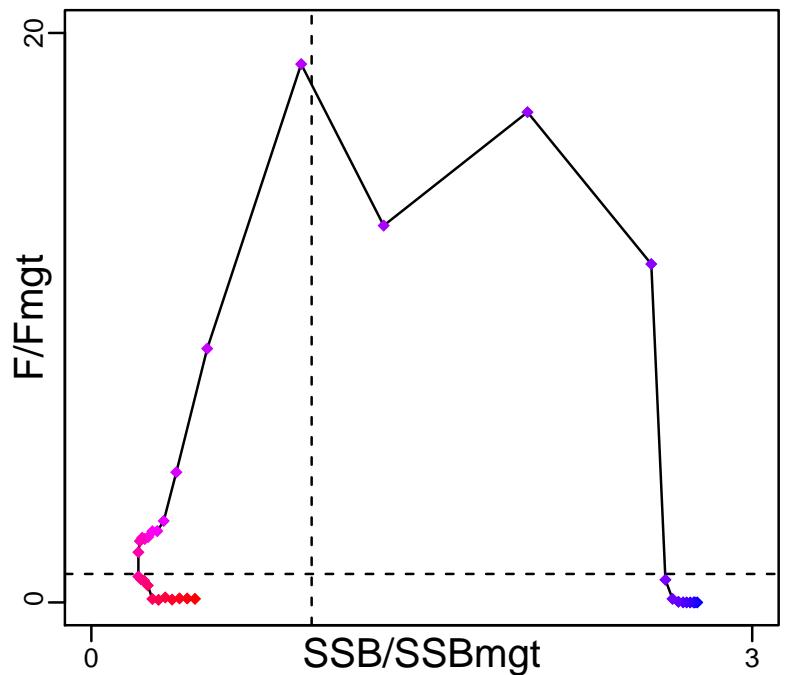
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2013	80,500	-	-	
<b>SSB</b>	SSB-MT	2013	8790	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	$6.63 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2013	0.002	-	-	
<b>ER</b>	ER-ratio	2013	0.002	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2013	150			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2013	1.289			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.079			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2013	0.063			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2013	0.041			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	0.47			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	0.126			
<b>ER/ERmgt</b>	-	-	-			

**Orange roughy Southeast Australia [OROUGHSE]**

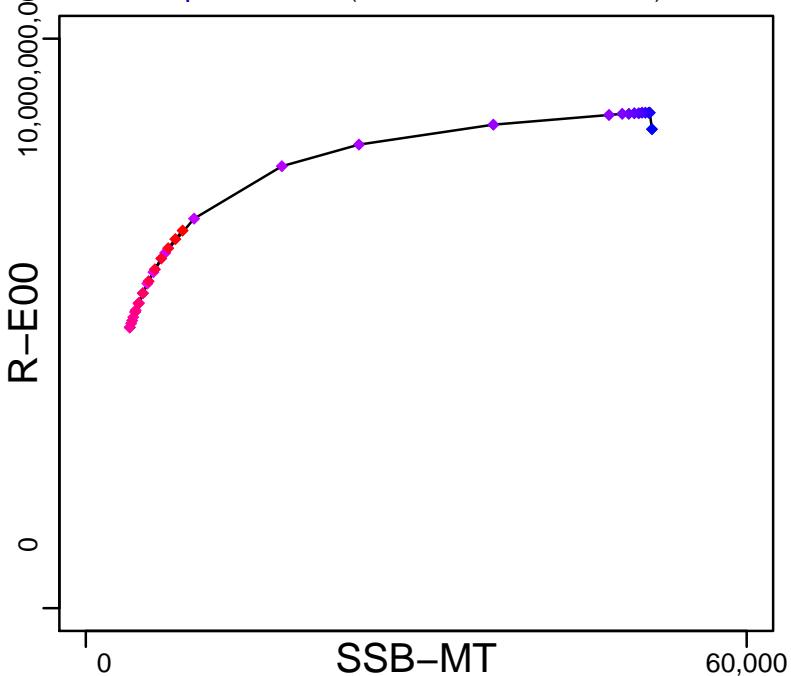
Kobe MSYpref (1980–2013–MOESENEDER)



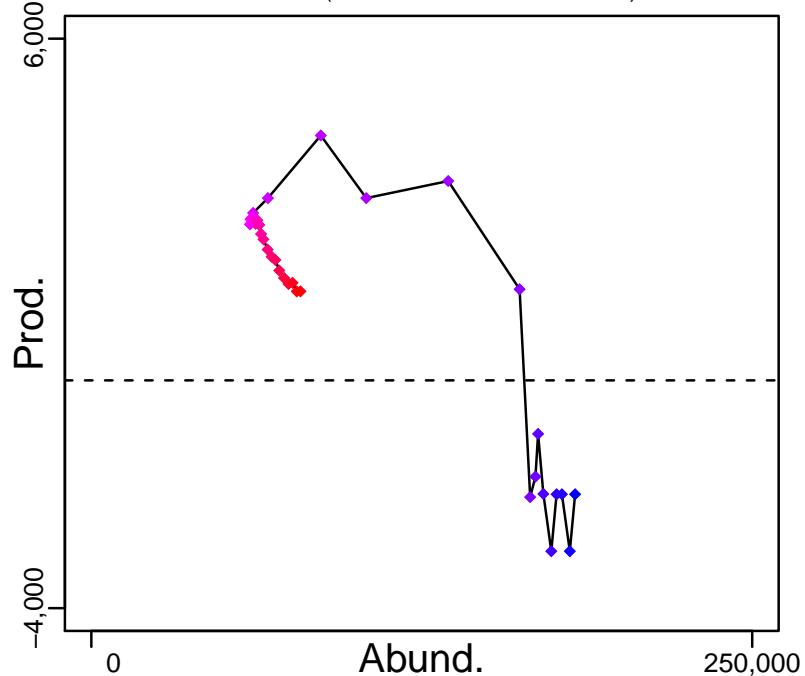
Kobe MGTpref (1980–2013–MOESENEDER)



Spawner Recruit (1980–2013–MOESENEDER)



Production (1980–2013–MOESENEDER)

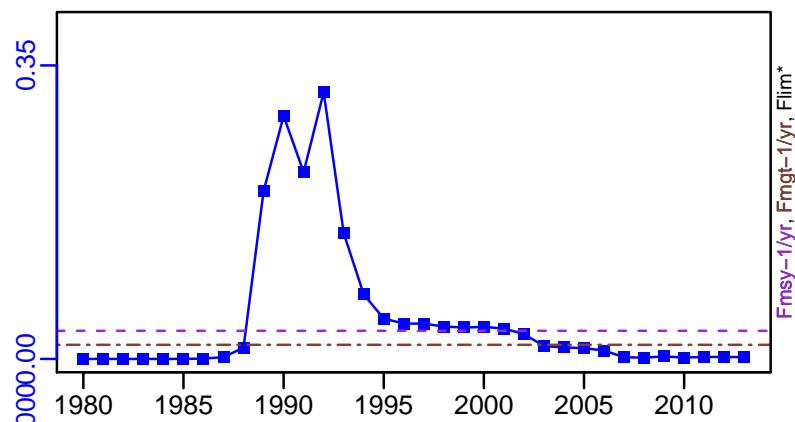
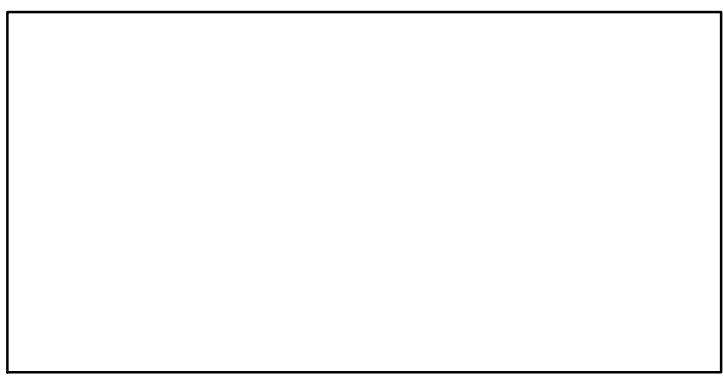
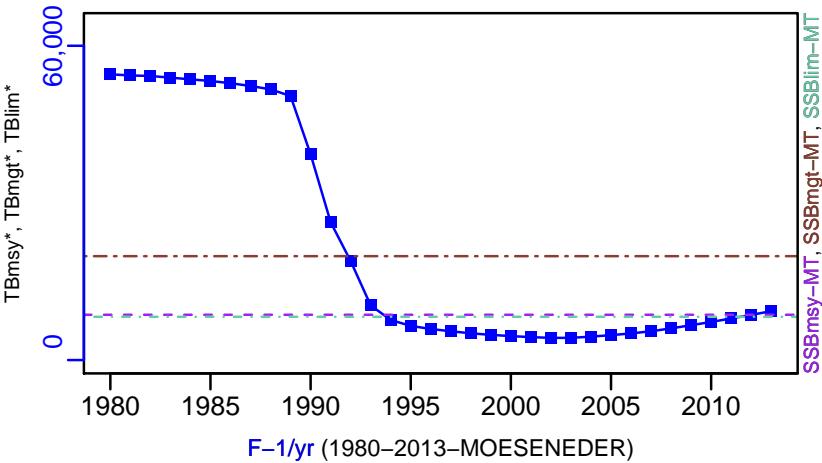
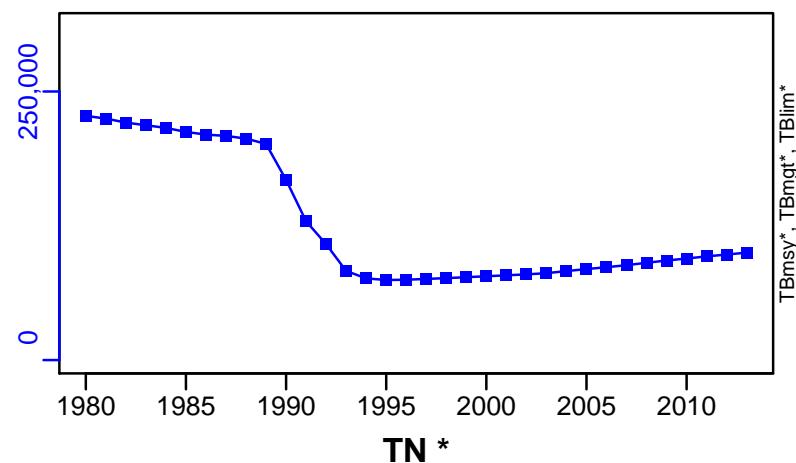


◆ Start Year   ◆ End Year   \* No Data

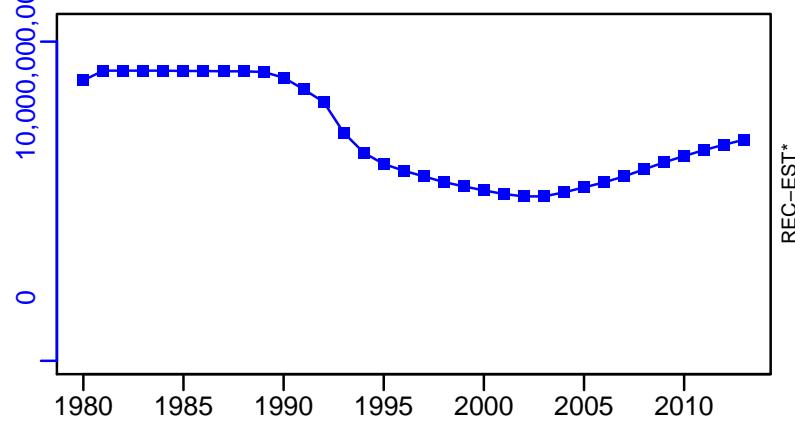
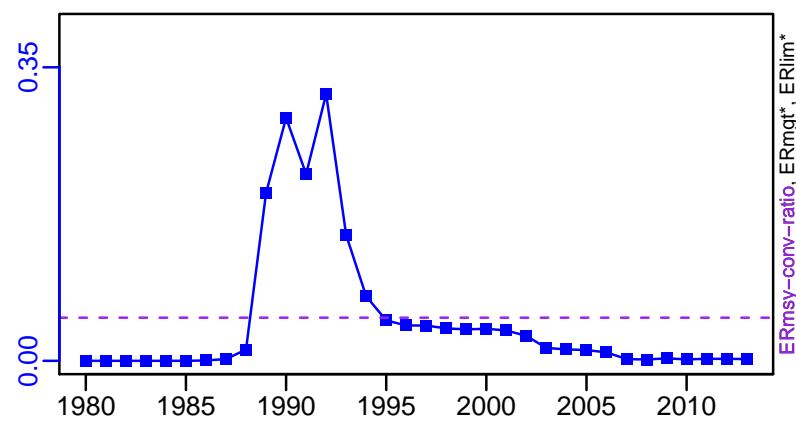
### Orange roughy Southeast Australia [OROUGHYSE]

TB-MT (1980–2013–MOESENEDER)

SSB-MT (1980–2013–MOESENEDER)



ER-ratio (1980–2013–MOESENEDER)

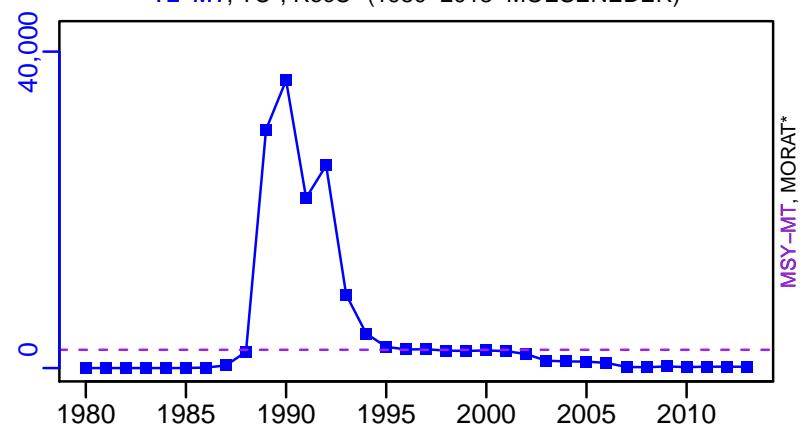


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

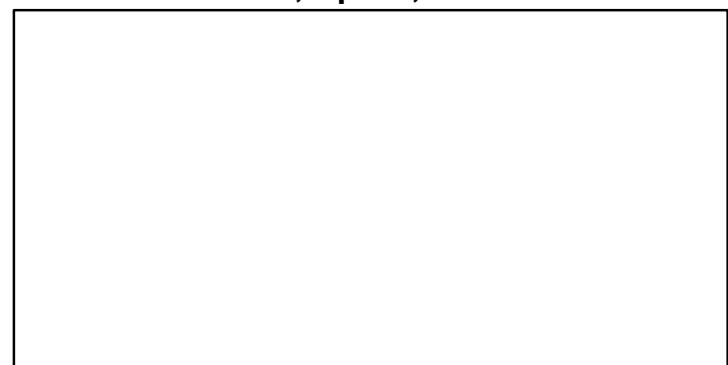
Orange roughy Southeast Australia [OROUGHSE]

TL-MT, TC\*, RecC\* (1980–2013–MOESENEDER)

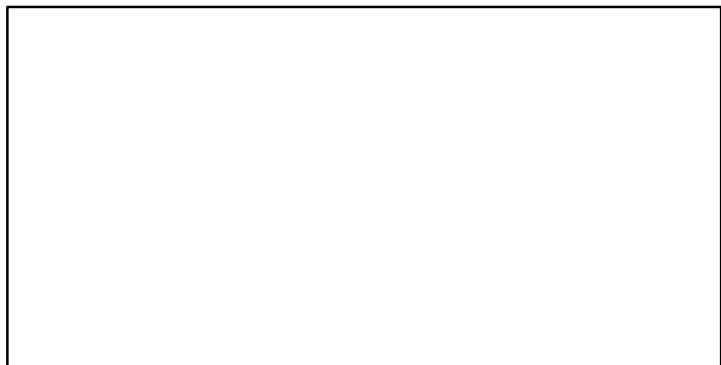
TAC\*, Cpair\*, Cadv\*



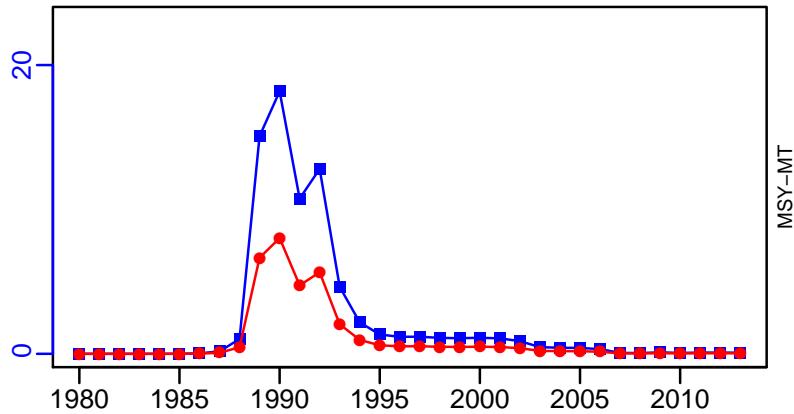
CPUE\*



EFFORT\*



TL-MT/MSY-MT, CdivMEANC–ratio, (1980–2013–MOESENEDER)



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

## Patagonian toothfish Macquarie Island [PTOOTHFISHMI]

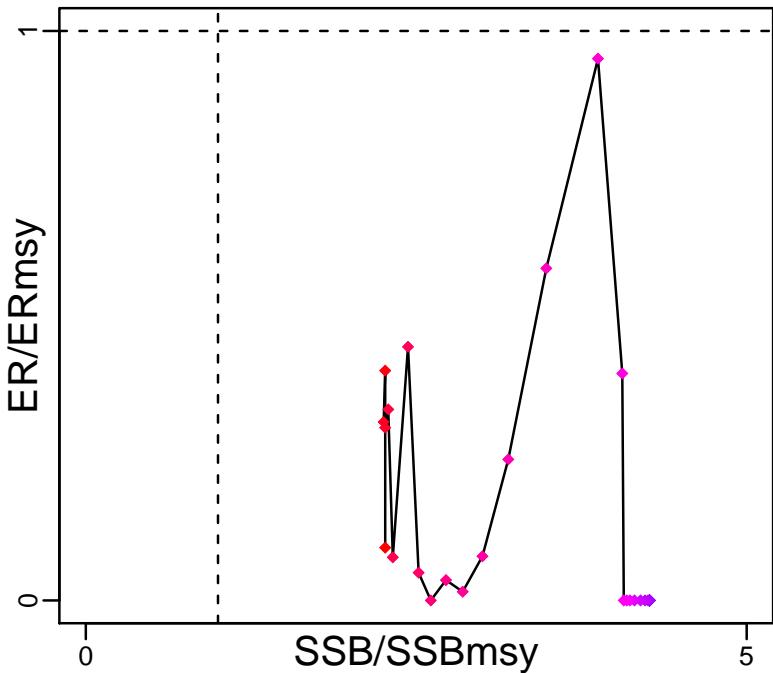
<b>Metadata</b>	
<b>Scientific Name</b>	Dissostichus eleginoides
<b>Current Assess ID</b>	CSIRO-PTOOTHFISHMI-1975-2010-FAY
<b>Area</b>	Macquarie Island
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2010

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	1512
<b>SSBmsy</b>	SSBmsy-MT	2010	870
<b>Fmsy</b>	Fmsy-1/yr	2010	0.058
<b>ERmsy</b>	ERmsy-ratio	2010	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	2010	184
<b>M</b>	M-1/yr	2010	0.13
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

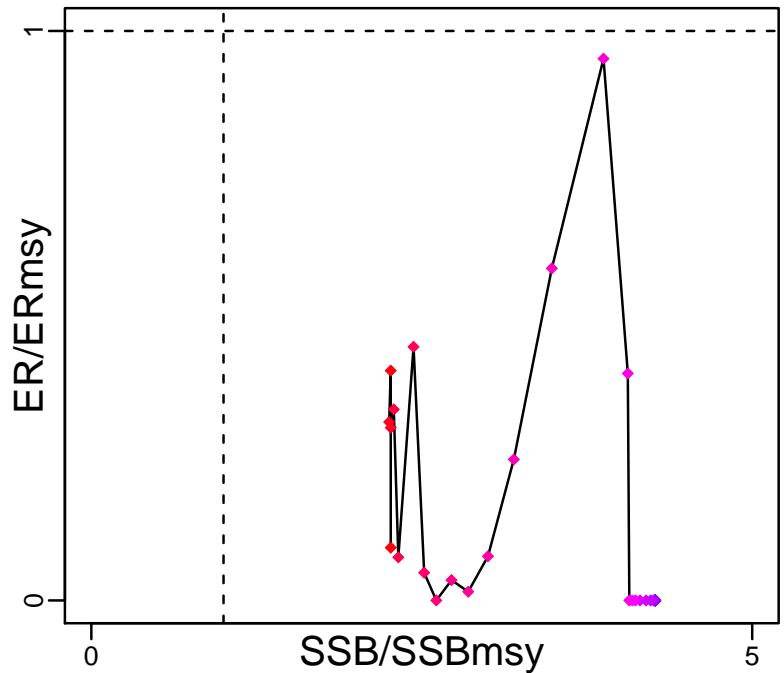
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2010	6170	-	1+	
<b>SSB</b>	SSB-MT	2010	2000	Females	14	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	430,000	-	0	
<b>F</b>	F-1/yr	2010	0.011	Both	-	
<b>ER</b>	ER-ratio	2010	0.011	-	-	
<b>TC</b>	TC-MT	2010	69			
<b>TL</b>	TL-MT	2010	69			
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	4.08			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2010	2.3			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	0.194			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.093			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Patagonian toothfish Macquarie Island [PTOOTHFISHMI]

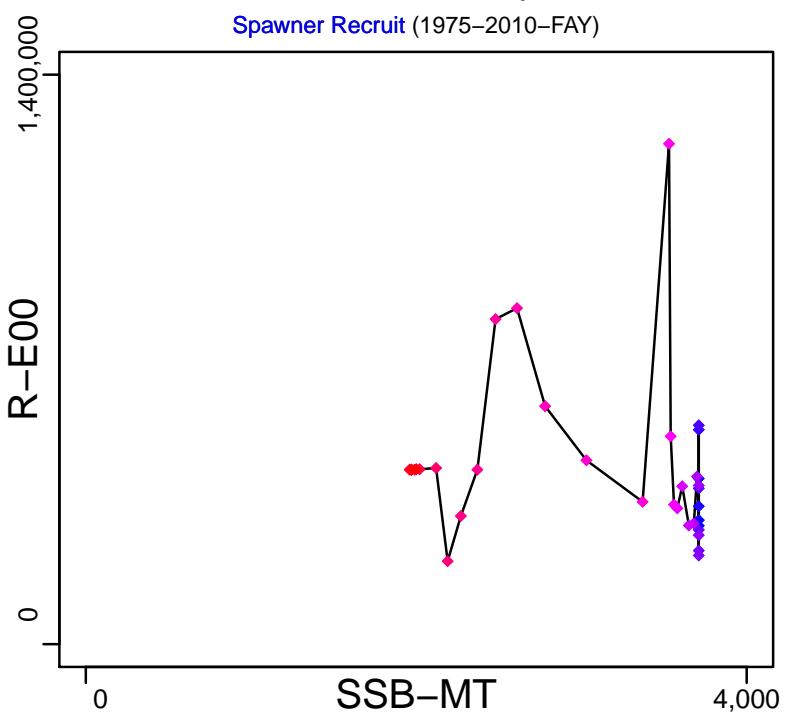
Kobe MSYpref (1975–2010–FAY)



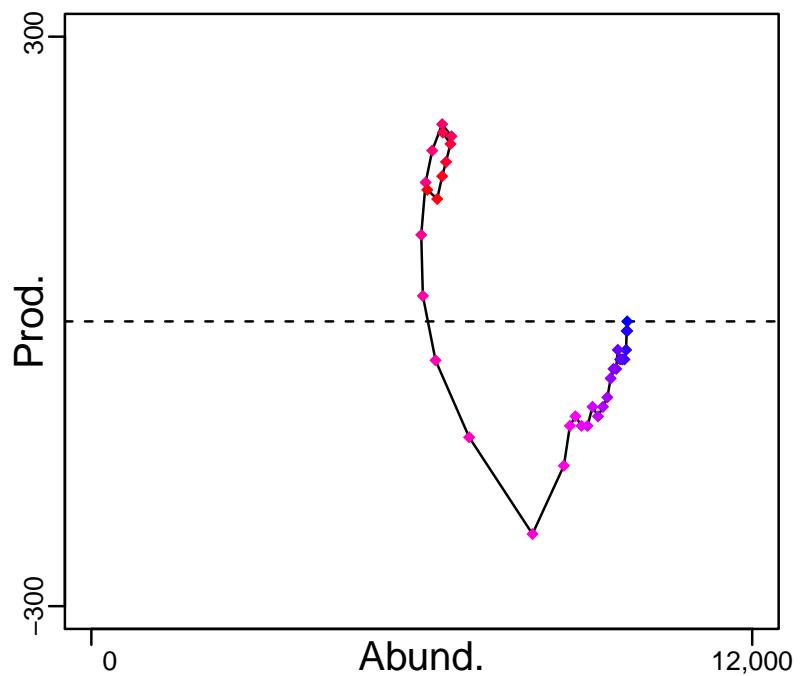
Kobe MGTpref (1975–2010–FAY)



Spawner Recruit (1975–2010–FAY)



Production (1975–2010–FAY)

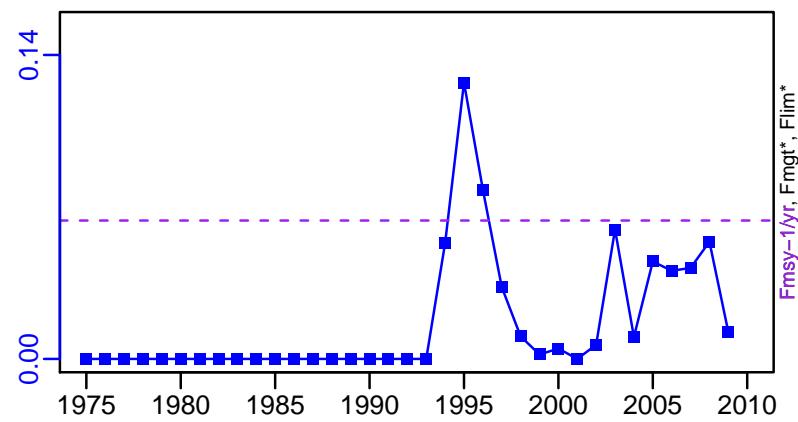
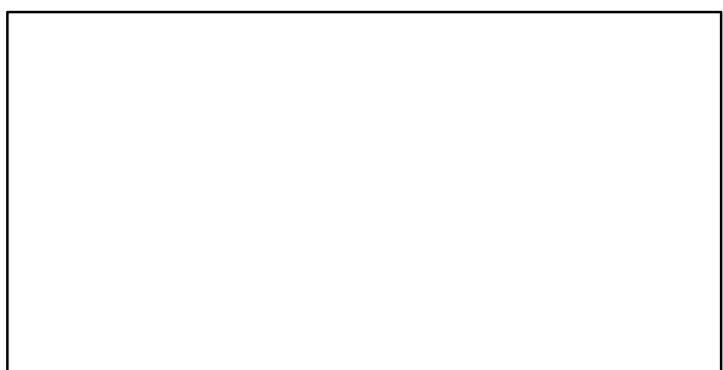
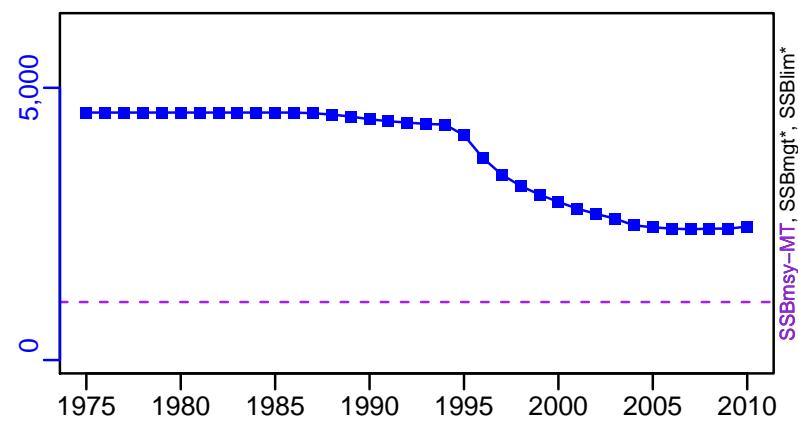
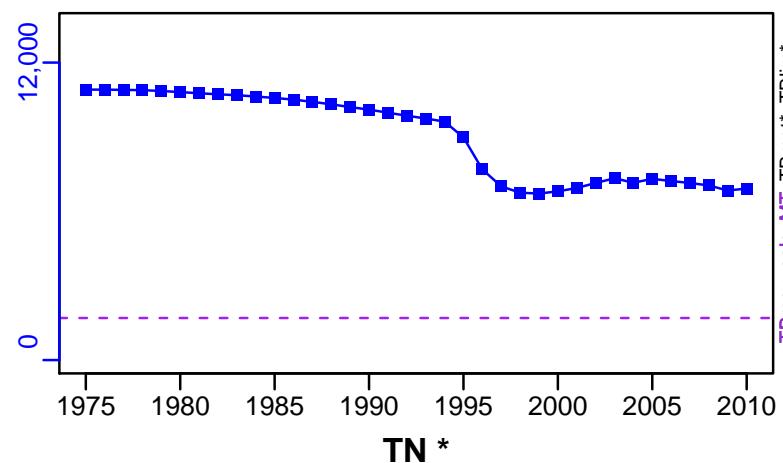


◆ Start Year   ◆ End Year   \* No Data

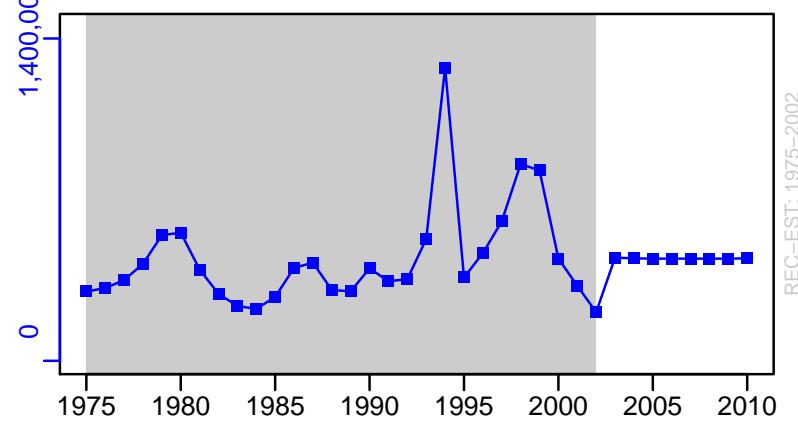
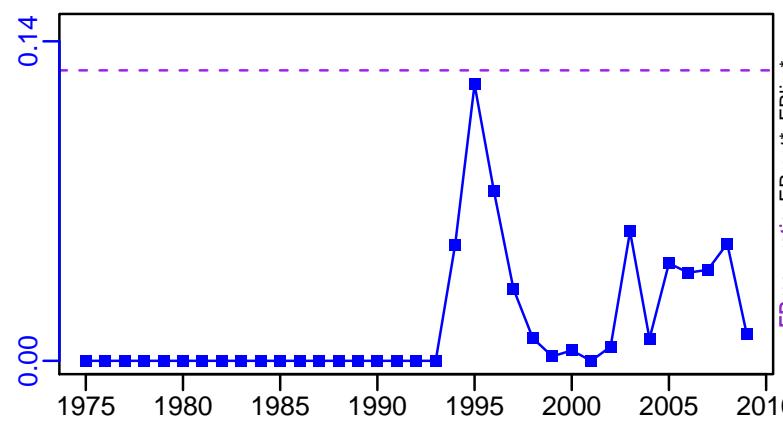
**Patagonian toothfish Macquarie Island [PTOOTHFISHMI]**

**TB-MT** (1975–2010–FAY)

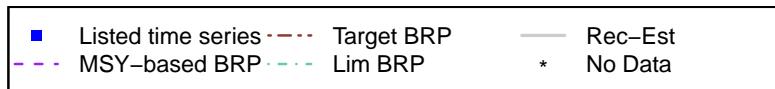
**SSB-MT** (1975–2010–FAY)



**ER-ratio (1975–2010–FAY)**



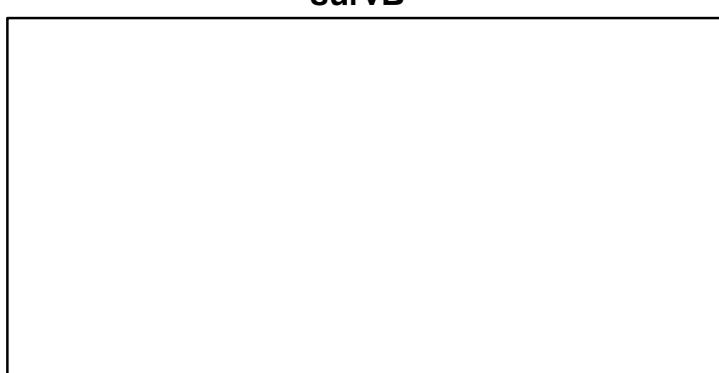
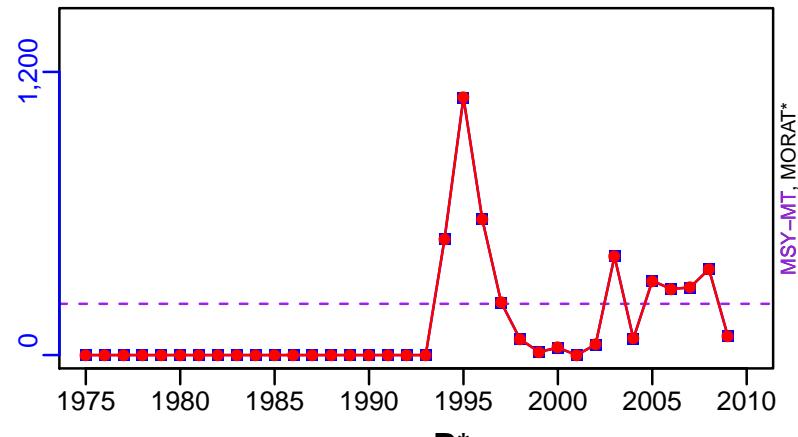
REC-EST: 1975–2002



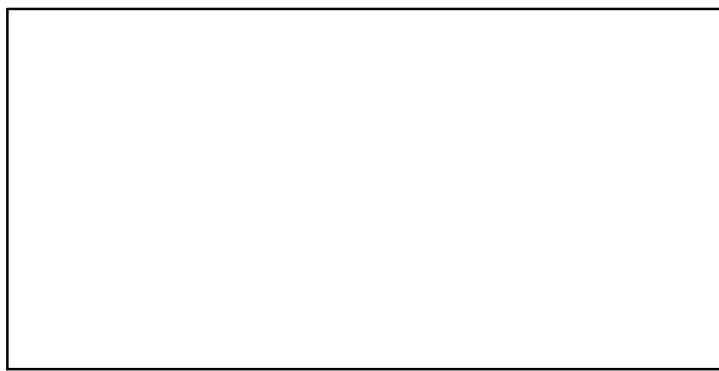
Patagonian toothfish Macquarie Island [PTOOTHFISHMI]

TC-MT, TL-MT, RecC\* (1975–2010–FAY)

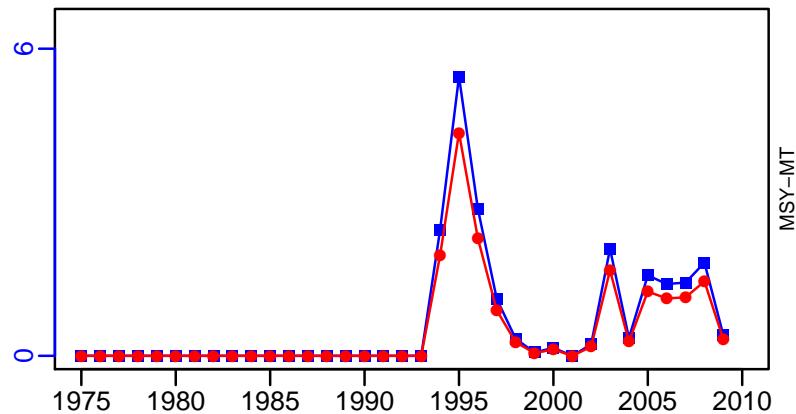
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1975–2010–FAY)



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

## Redfish Eastern Australia [REDFEAUS]

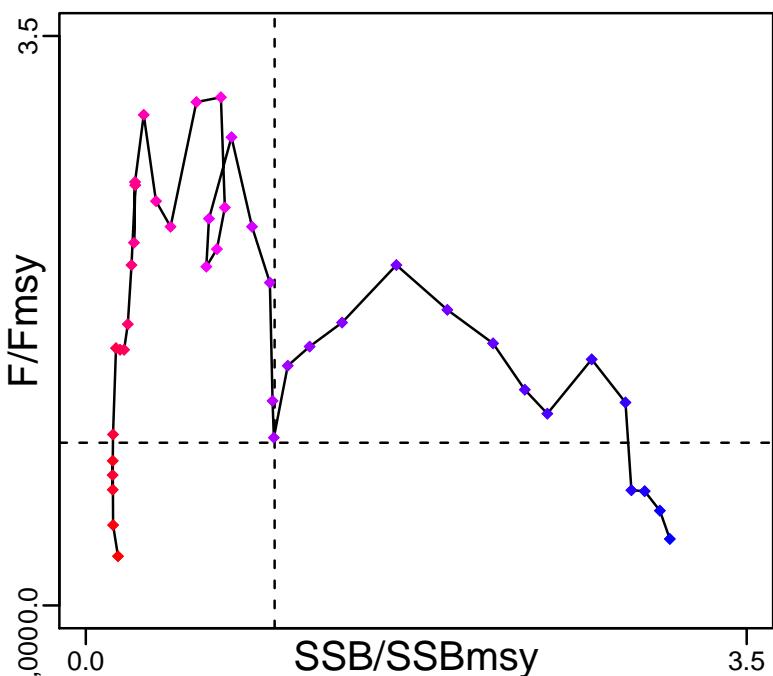
Metadata			
<b>Scientific Name</b>	Centroberyx affinis		
<b>Current Assess ID</b>	CSIRO-REDFEAUS-1975-2016-MOESENEDER		
<b>Area</b>	Eastern Australia		
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management		
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization		
<b>Asmts in RAM</b>	2013, 2016		

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2016	2852
<b>Fmsy</b>	Fmsy-1/yr	2016	0.102
<b>ERmsy</b>	ERmsy-conv-ratio	2016	0.111
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	5336
<b>Fmgt</b>	Fmgt-1/yr	2016	0.053
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2016	26,740
<b>SSB0</b>	SSB0-MT	2016	11,116
<b>MSY</b>	MSY-MT	2016	913
<b>M</b>	M-1/yr	2016	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	2223
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

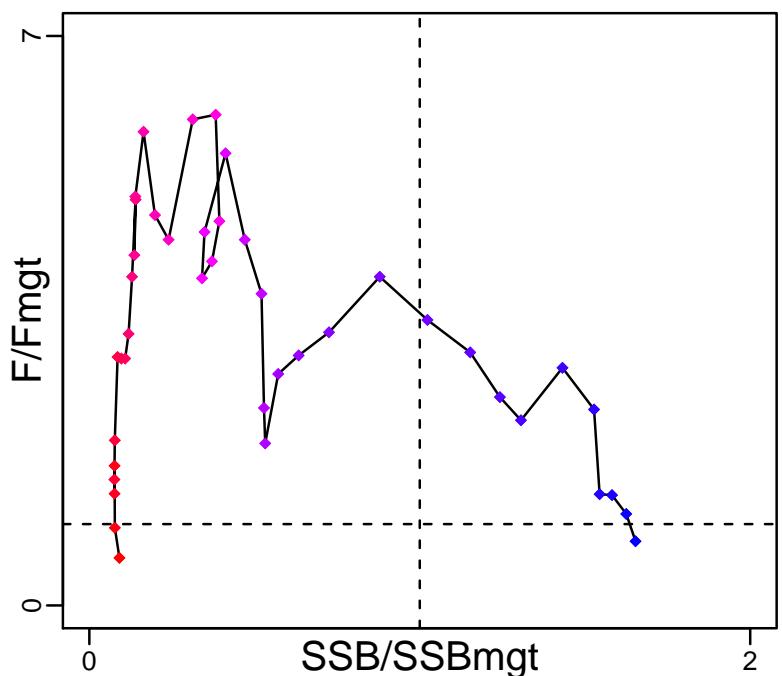
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2016	2250	-	-	
<b>SSB</b>	SSB-MT	2016	486	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2016	$5.18 \times 10^{13}$	-	-	
<b>F</b>	F-1/yr	2016	0.031	-	-	
<b>ER</b>	ER-ratio	2016	0.03	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2016	52			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2016	0.229			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2016	0.17			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.302			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2016	0.273			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.091			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.584			
<b>ER/ERmgt</b>	-	-	-			

**Redfish Eastern Australia [REDFEAUS]**

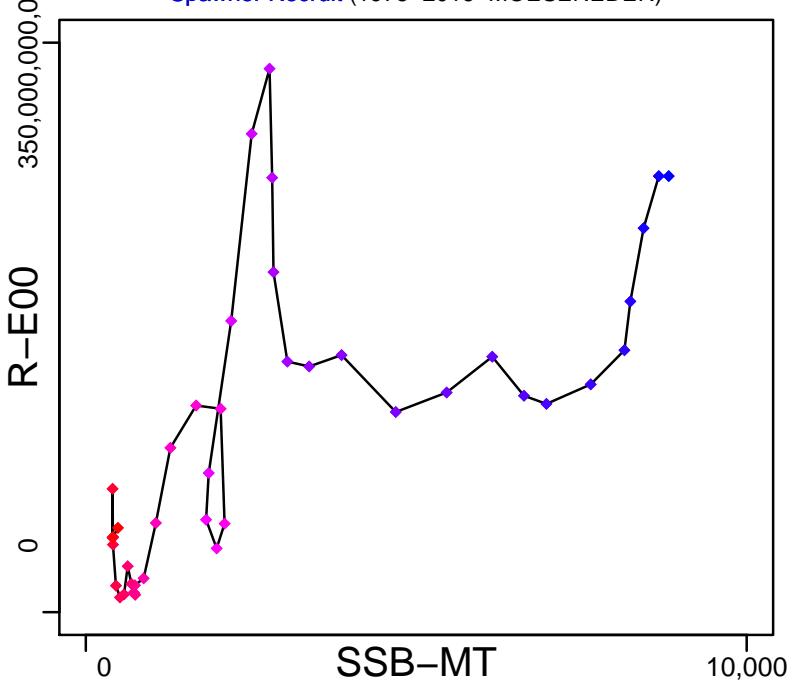
Kobe MSYpref (1975–2016–MOESENER)



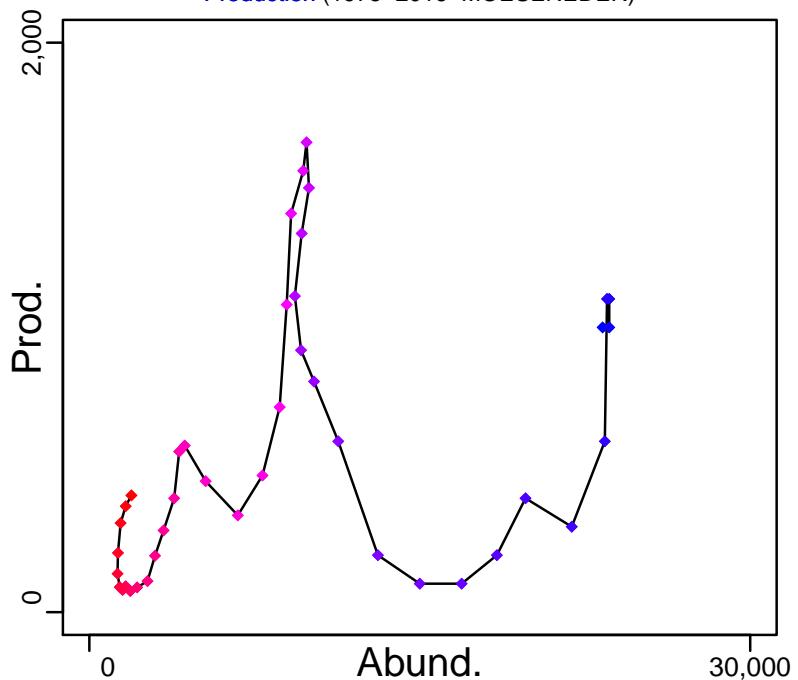
Kobe MGTpref (1975–2016–MOESENER)



Spawner Recruit (1975–2016–MOESENER)



Production (1975–2016–MOESENER)

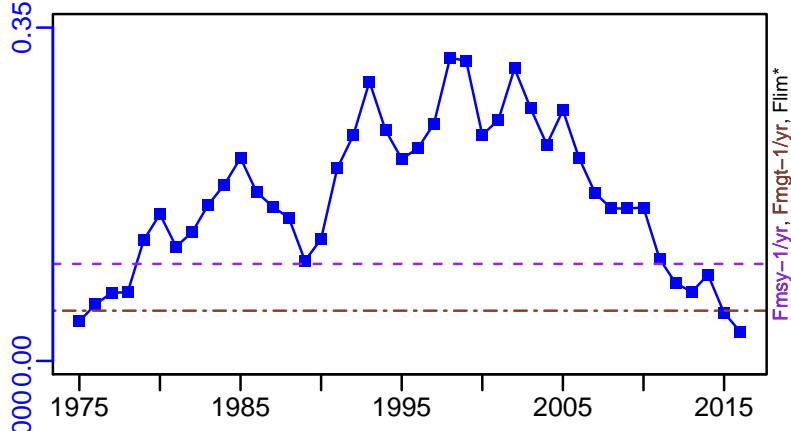
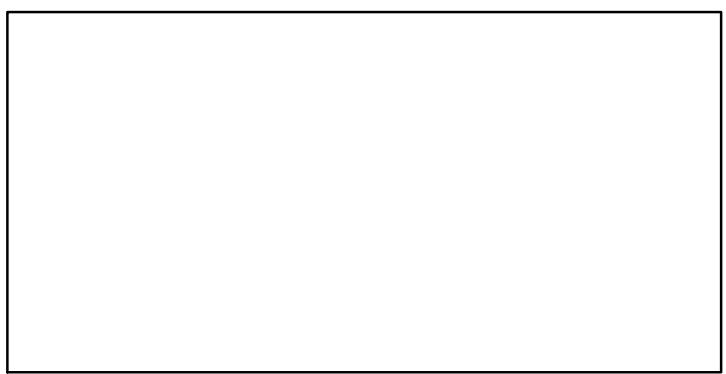
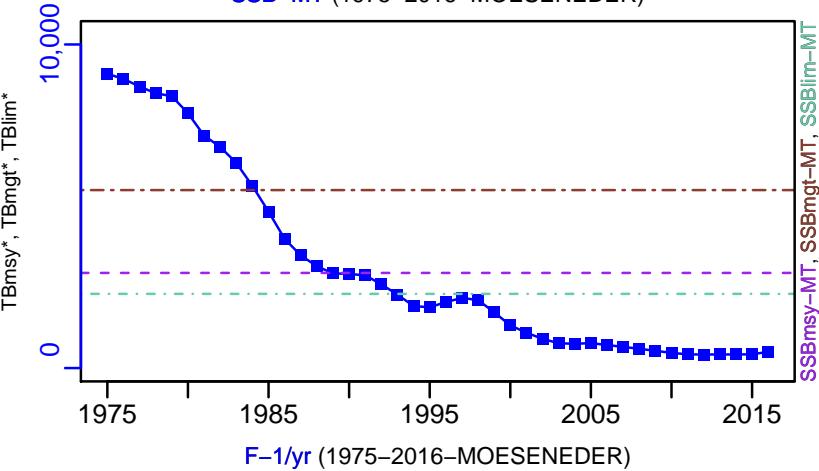
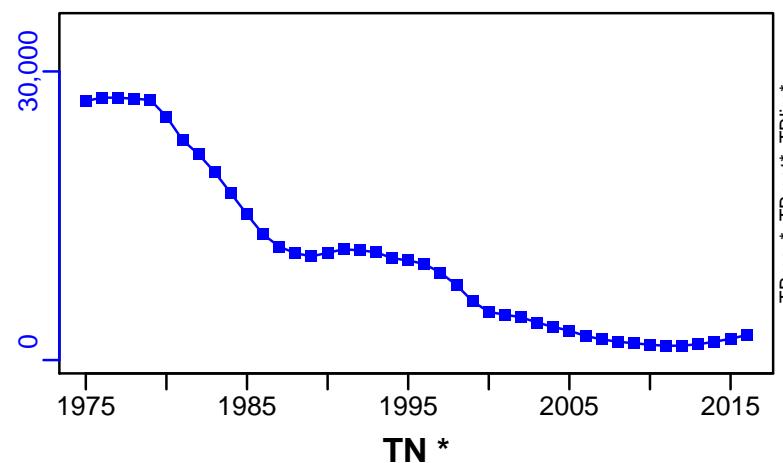


♦ Start Year ♦ End Year \* No Data

### Redfish Eastern Australia [REDFEAUS]

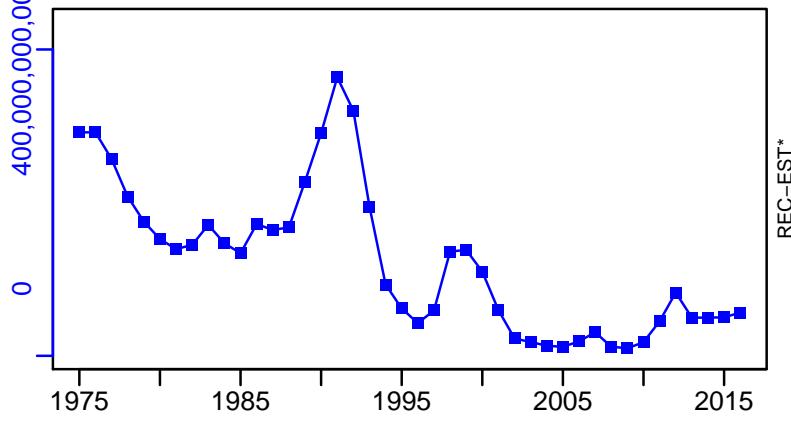
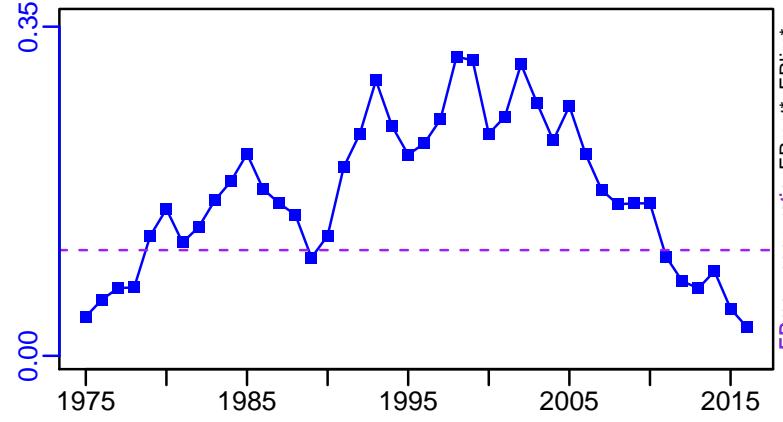
**TB-MT** (1975–2016–MOESENEDER)

**SSB-MT** (1975–2016–MOESENEDER)



**ER-ratio (1975–2016–MOESENEDER)**

**R-E00 (1975–2016–MOESENEDER)**

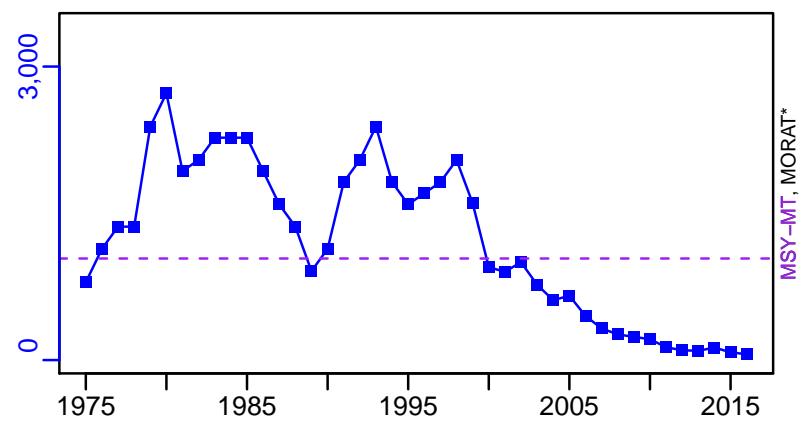


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

**Redfish Eastern Australia [REDFEAUS]**

TL-MT, TC\*, RecC\* (1975–2016–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



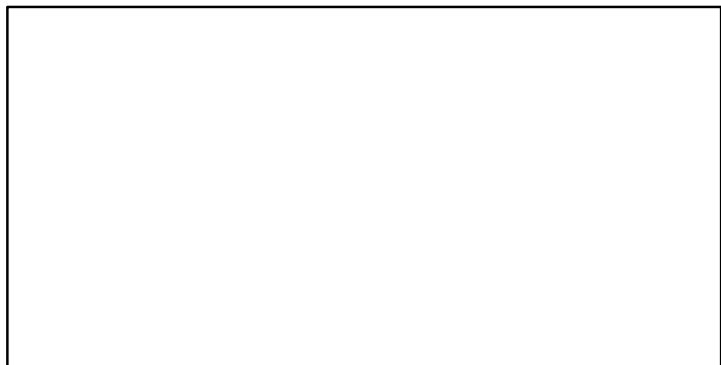
**survB\***



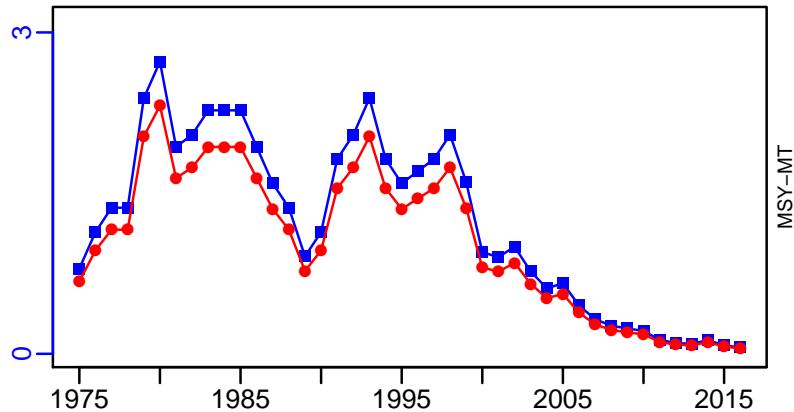
**CPUE\***



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC–ratio, (1975–2016–MOESENEDER)



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

## Rock lobster South Australia Northern Zone [RROCKLOBSTERSAUSNZ]

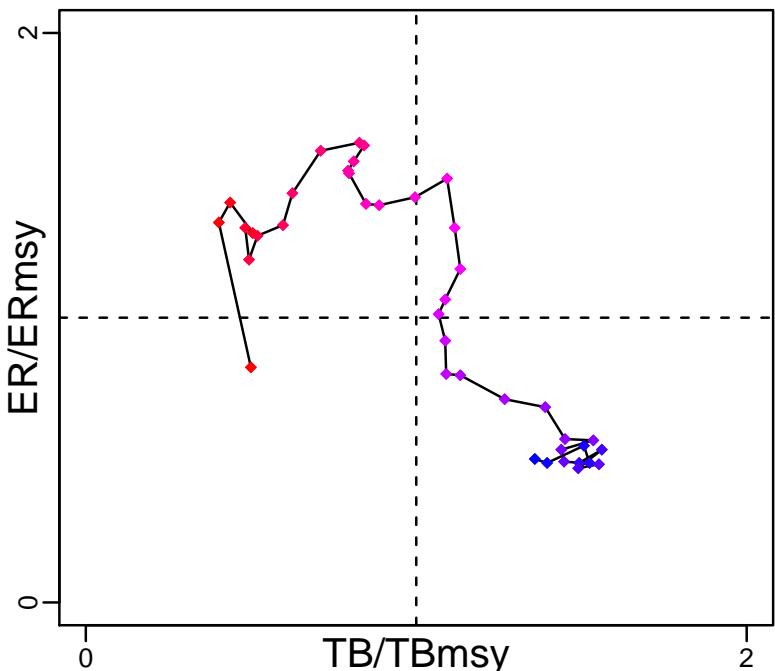
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	SARDI-RROCKLOBSTERSAUSNZ-1966-2010-BANOBI
<b>Area</b>	South Australia Northern Zone
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2010	3503
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2010	0.214
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2010	751
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

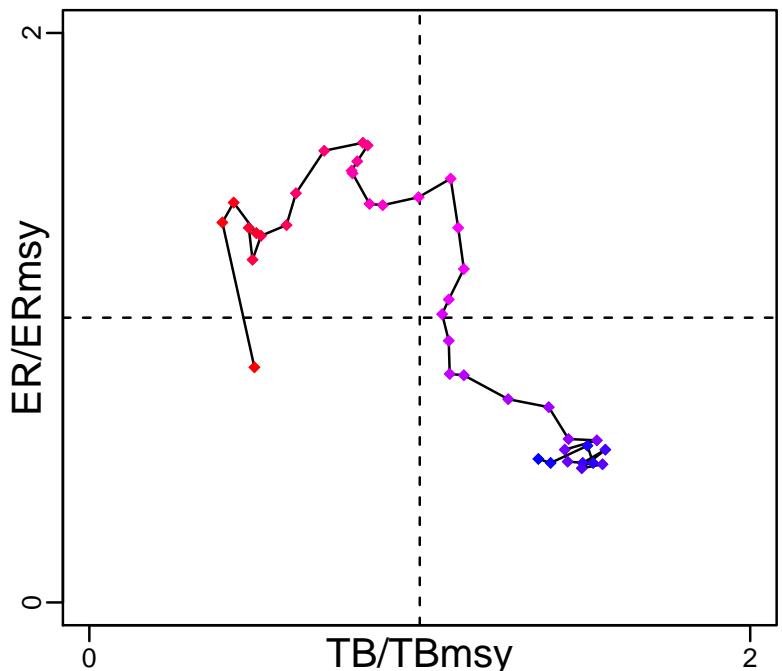
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2010	1750	-	-	
<b>SSB</b>	SSB-E00eggs	2010	$2.02 \times 10^{11}$	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	1,180,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2010	0.177	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2010	312			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2010	0.5			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2010	0.826			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Rock lobster South Australia Northern Zone [RROCKLOBSTERSAUSNZ]

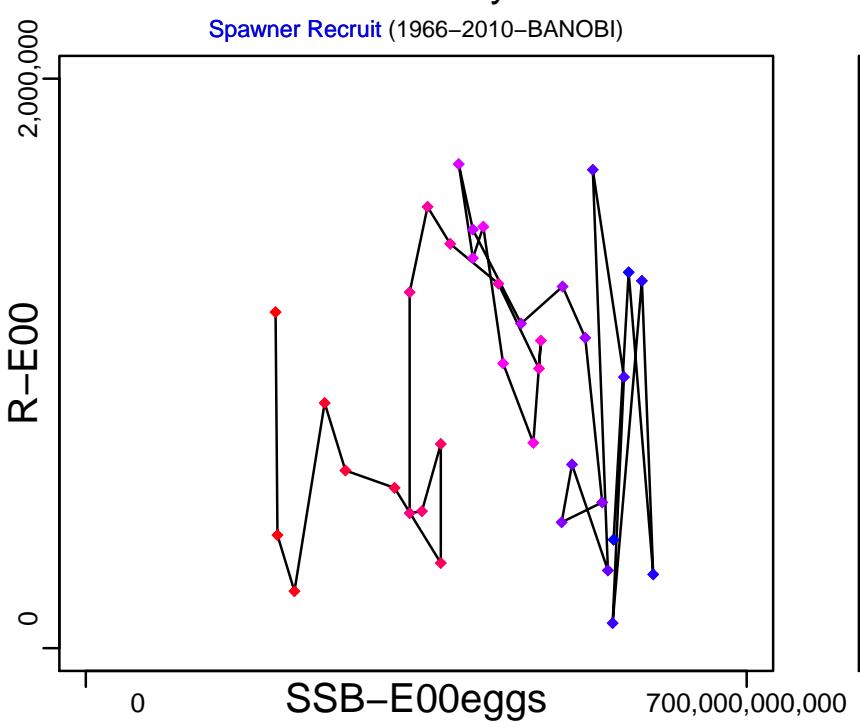
Kobe MSYpref (1966–2010–BANOBI)



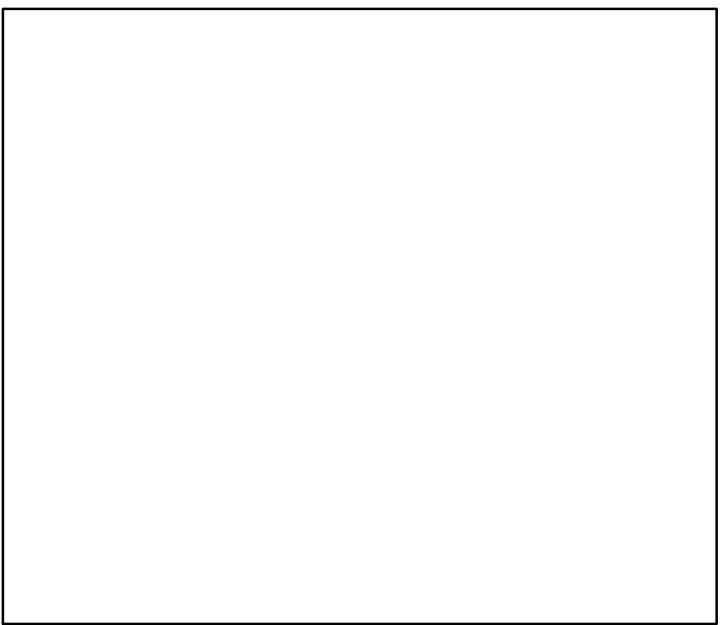
Kobe MGTpref (1966–2010–BANOBI)



Spawner Recruit (1966–2010–BANOBI)



TB/TBmsy  
Production\*

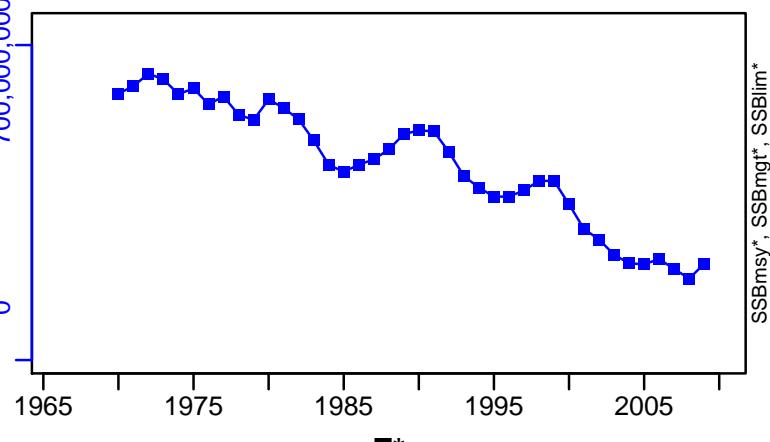
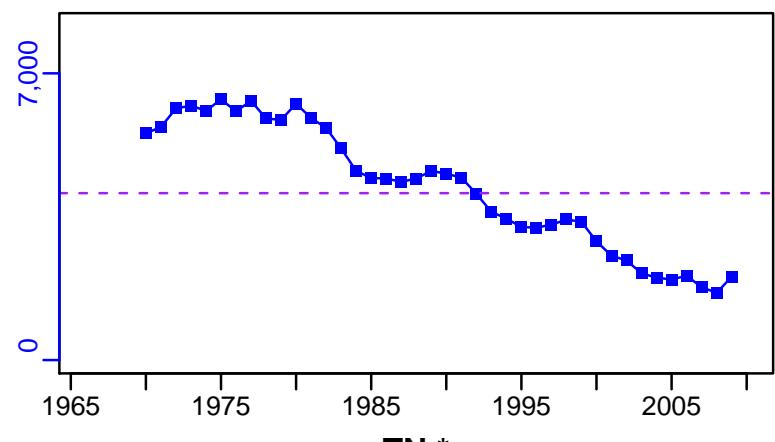


◆ Start Year   ◆ End Year   \* No Data

### Rock lobster South Australia Northern Zone [RROCKLOBSTERSAUSNZ]

TB-MT (1966–2010–BANOBI)

SSB-E00eggs (1966–2010–BANOBI)



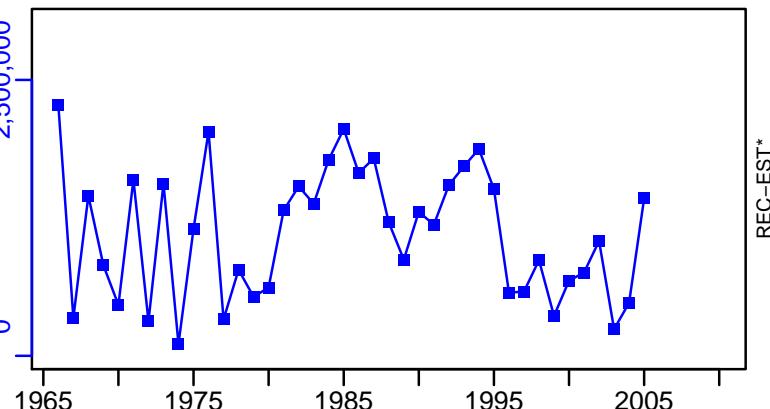
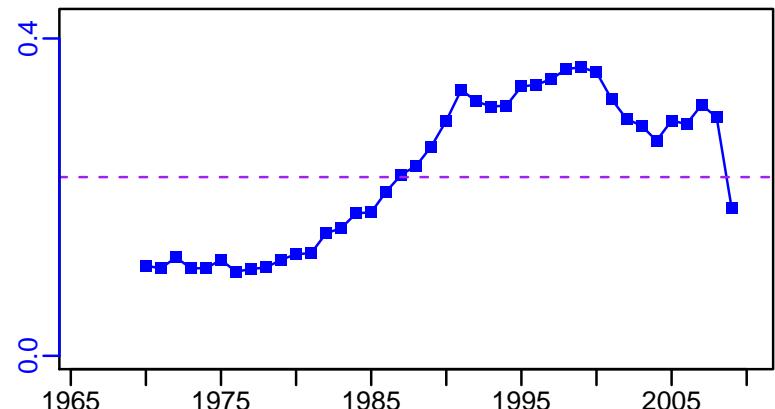
TN \*

F\*



ER-ratio (1966–2010–BANOBI)

R-E00 (1966–2010–BANOBI)

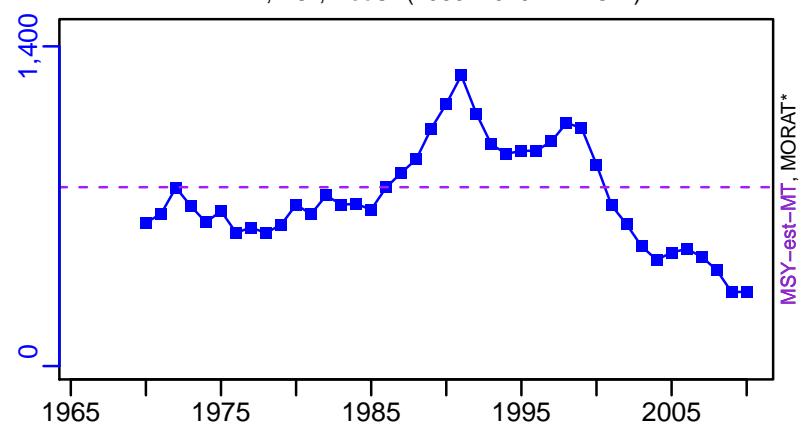


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

**Rock lobster South Australia Northern Zone [RROCKLOBSTERSAUSNZ]**

TL-MT, TC\*, RecC\* (1966–2010–BANOBI)

TAC\*, Cpair\*, Cadv\*



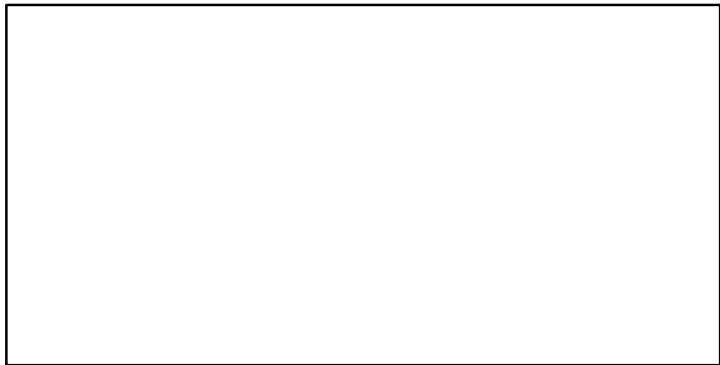
**survB\***



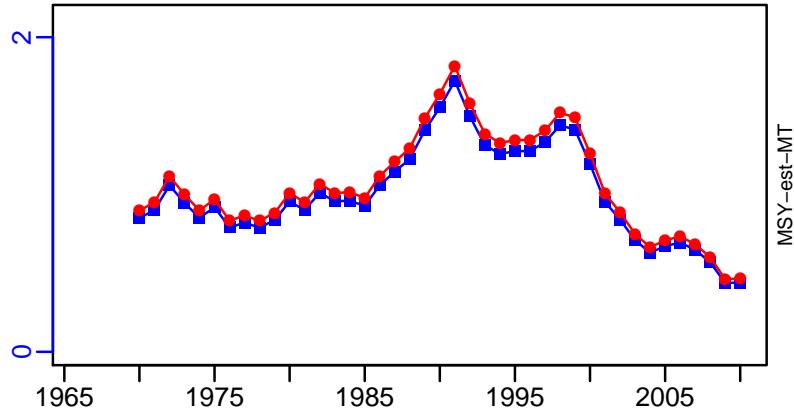
**CPUE\***



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1966–2010–BANOBI)



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

## Rock lobster South Australia Southern Zone [RROCKLOBSTERSAUSSZ]

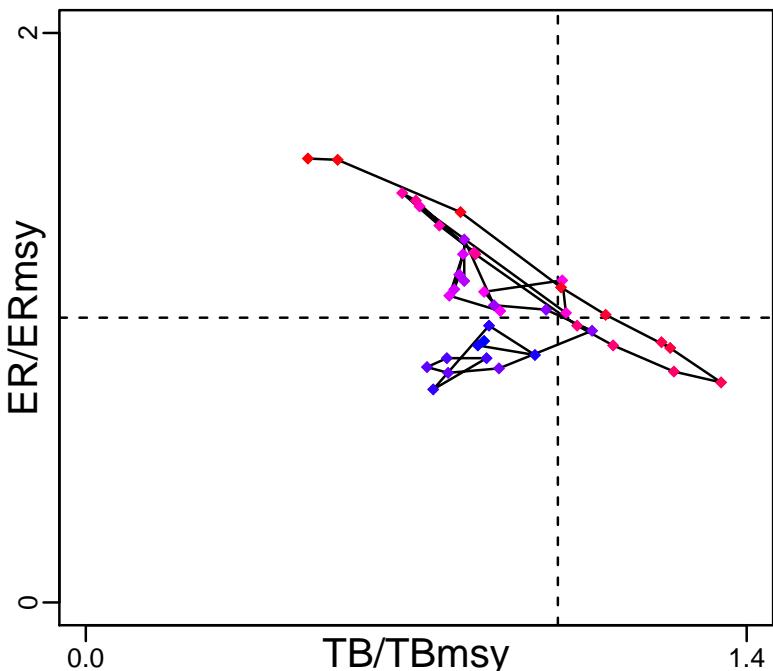
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	SARDI-RROCKLOBSTERSAUSSZ-1965-2010-BANOBI
<b>Area</b>	South Australia Southern Zone
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2010	3805
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2010	0.446
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2010	1699
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

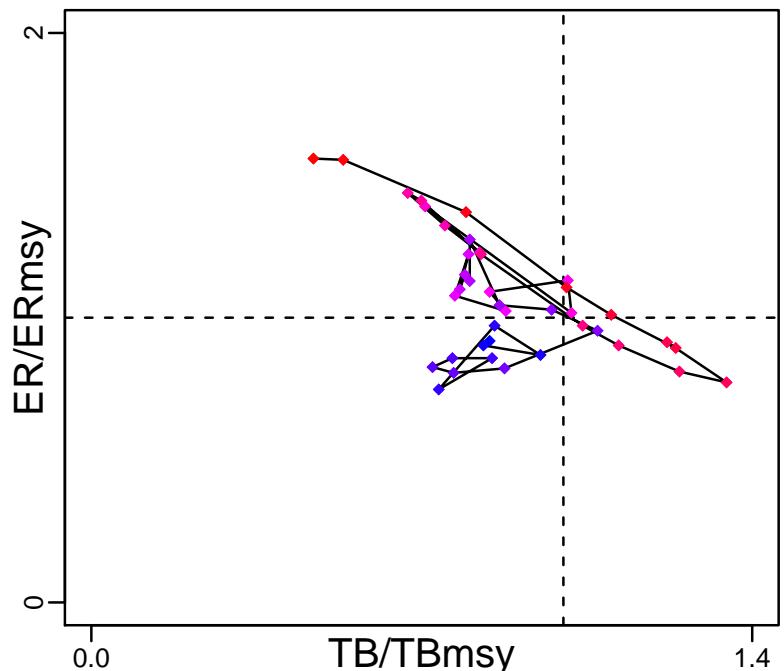
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2010	1790	-	-	
<b>SSB</b>	SSB-E00eggs	2010	$2.73 \times 10^{11}$	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	1,600,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2010	0.696	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2010	1240			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2010	0.47			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2010	1.559			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

### Rock lobster South Australia Southern Zone [RROCKLOBSTERSAUSSZ]

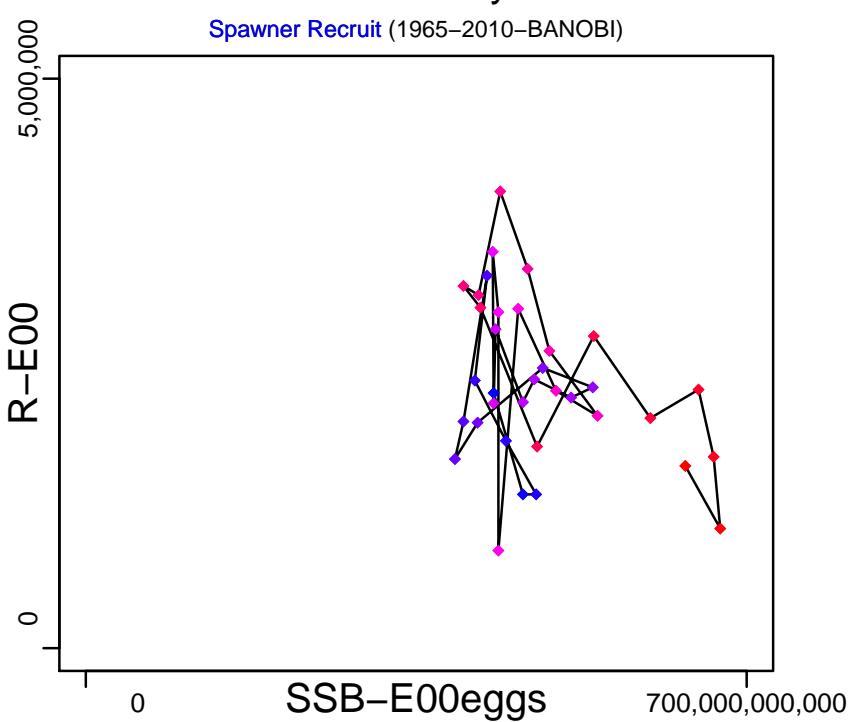
Kobe MSYpref (1965–2010–BANOBI)



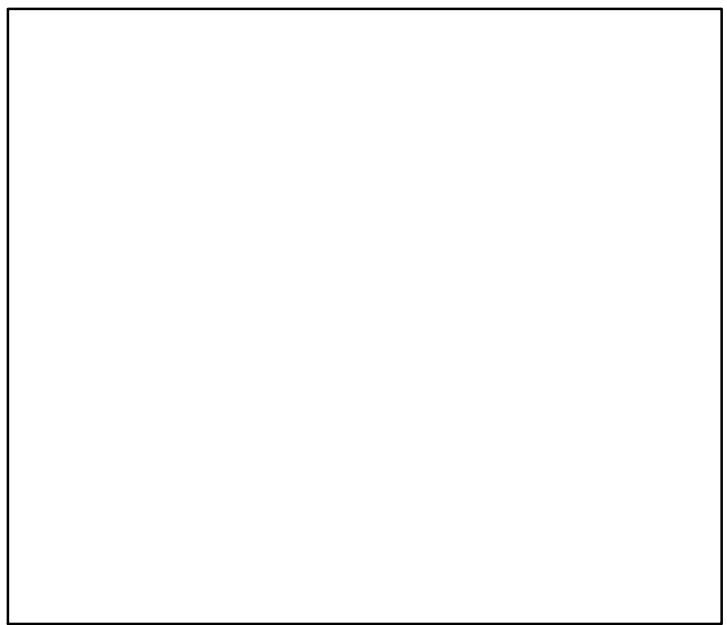
Kobe MGTpref (1965–2010–BANOBI)



Spawner Recruit (1965–2010–BANOBI)



TB/TBmsy  
Production\*

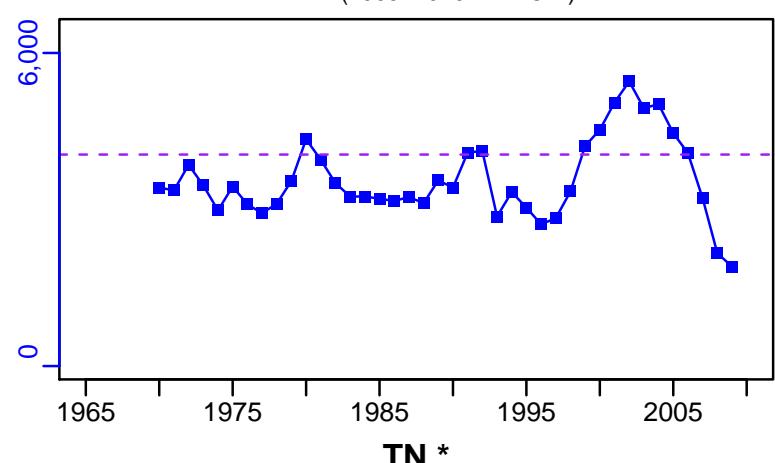


◆ Start Year   ◆ End Year   \* No Data

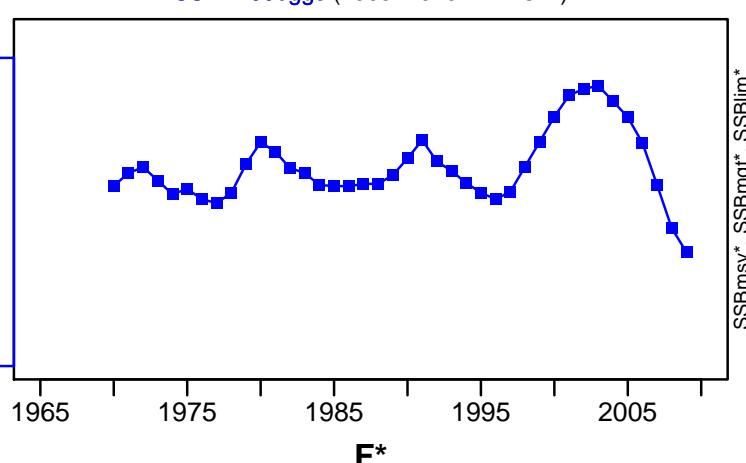
### Rock lobster South Australia Southern Zone [RROCKLOBSTERSAUSSZ]

TB-MT (1965–2010–BANOBI)

SSB-E00eggs (1965–2010–BANOBI)

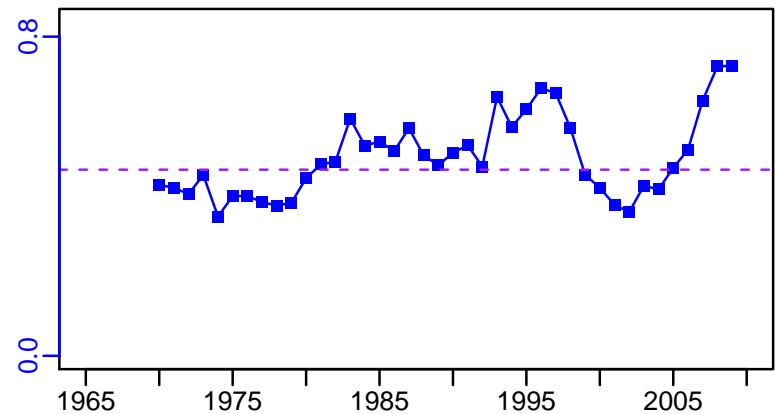


$TB_{mgt}^*, TB_{lim}^*$

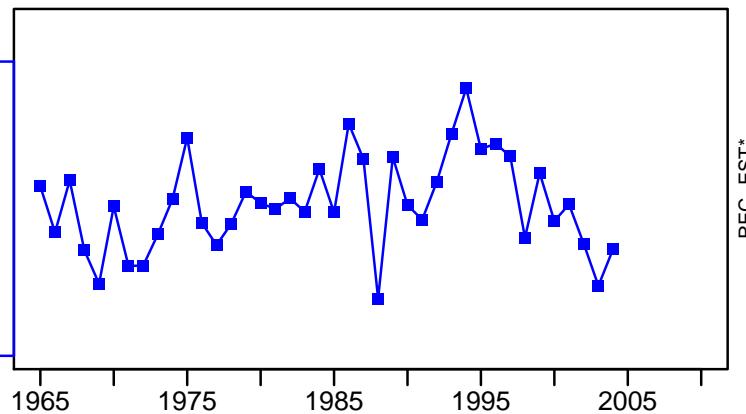


ER-ratio (1965–2010–BANOBI)

R-E00 (1965–2010–BANOBI)



$ER_{mgt}^*, ER_{lim}^*$

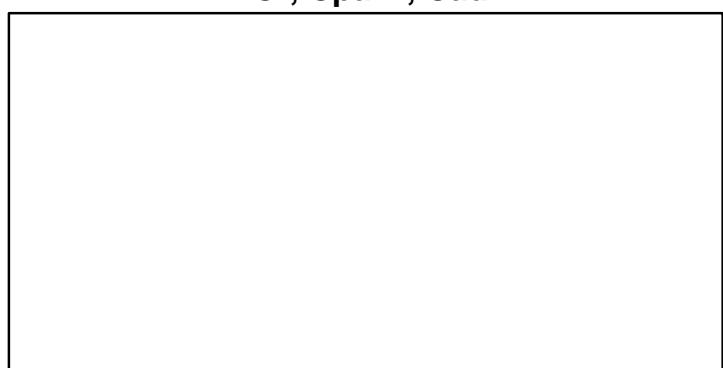
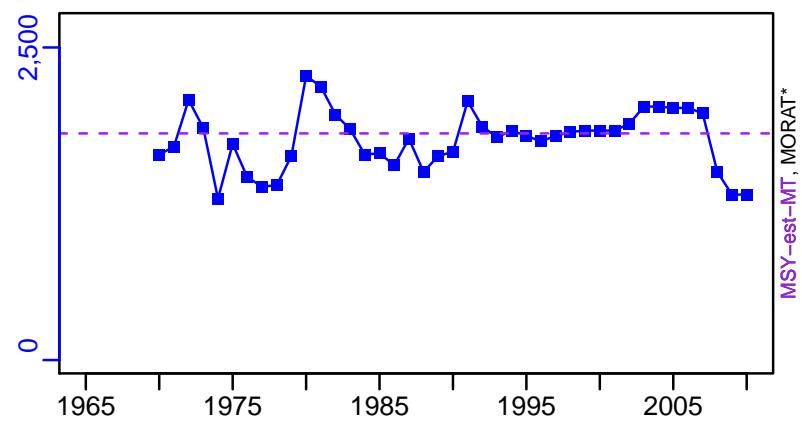


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - Lim BRP  | * No Data |

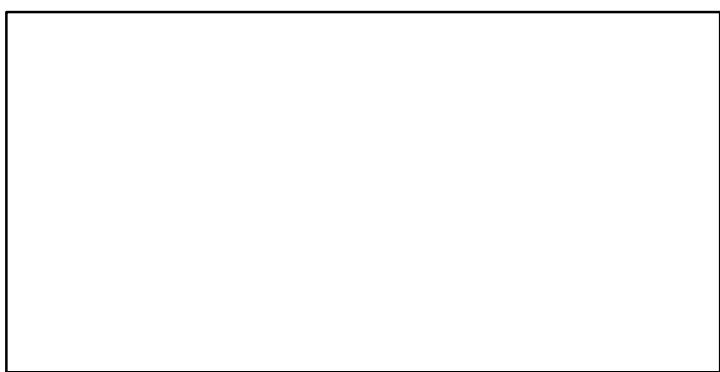
**Rock lobster South Australia Southern Zone [RROCKLOBSTERSAUSSZ]**

TL-MT, TC\*, RecC\* (1965–2010–BANOBI)

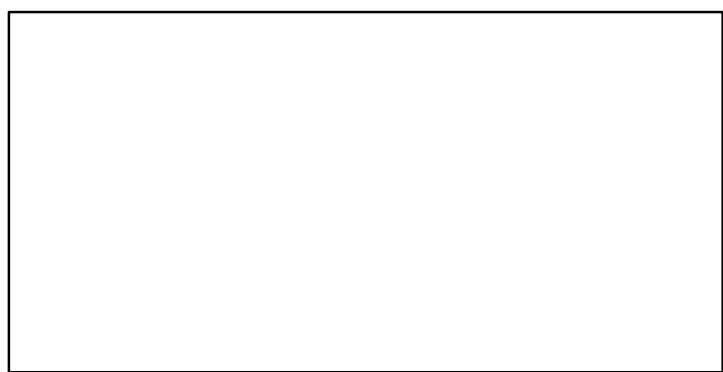
TAC\*, Cpair\*, Cadv\*



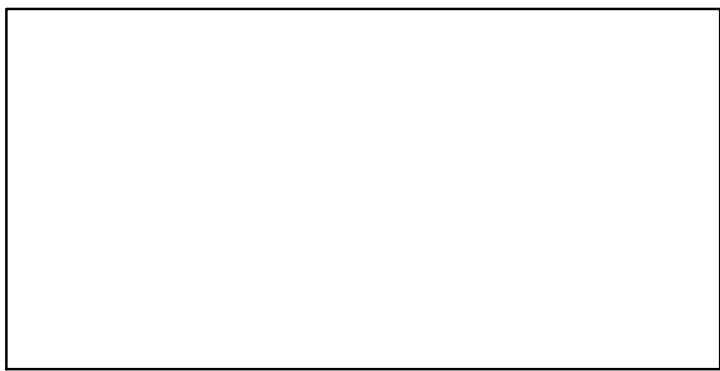
**survB\***



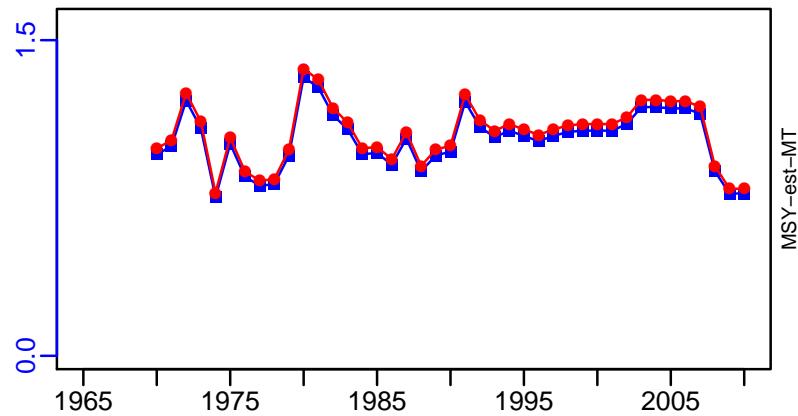
**CPUE\***



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1965–2010–BANOBI)



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

## Sardine Western half of Southeast Australia [SARDWSE]

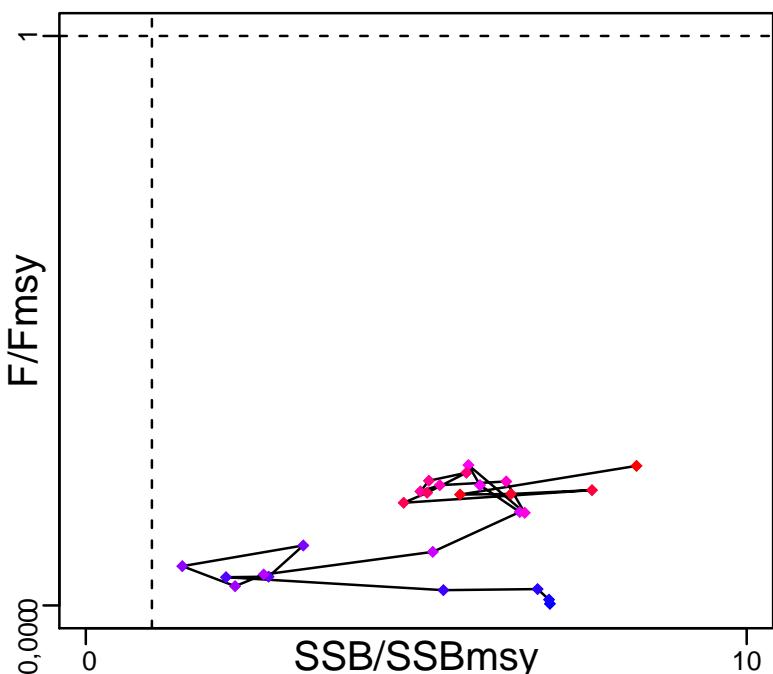
Metadata	
<b>Scientific Name</b>	Sardinops sagax
<b>Current Assess ID</b>	SARDI-SARDWSE-1992-2017-MOESENEDER
<b>Area</b>	Western half of Southeast Australia
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2017

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2017	15,293
<b>Fmsy</b>	Fmsy-1/yr	2017	0.405
<b>ERmsy</b>	ERmsy-conv-ratio	2017	1.248
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2017	42,960
<b>Fmgt</b>	Fmgt-1/yr	2017	0.23
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2017	400,434
<b>SSB0</b>	SSB0-MT	2017	107,400
<b>MSY</b>	MSY-MT	2017	85,726
<b>M</b>	M-1/yr	2017	0.6
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2017	21,480
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

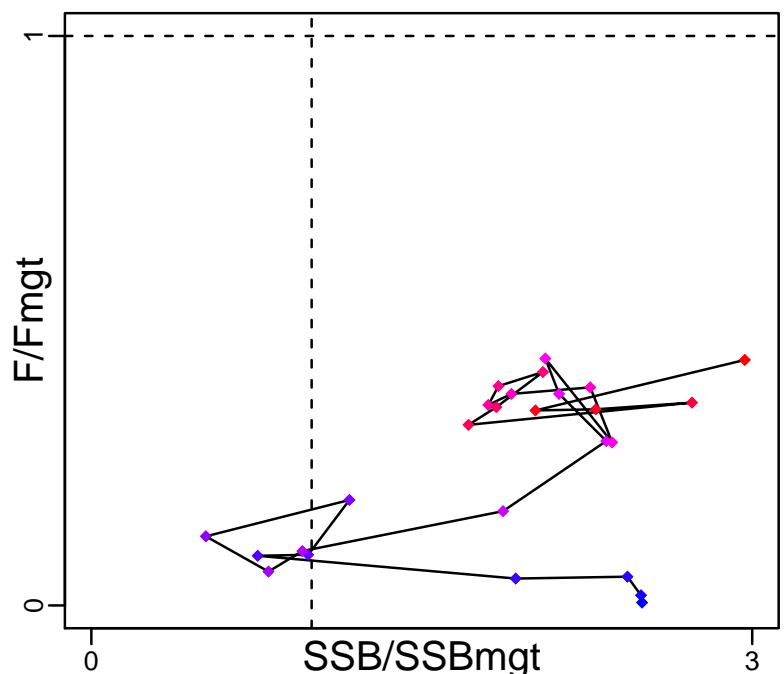
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2017	430,348	-	-	
<b>SSB</b>	SSB-MT	2017	127,437	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2017	$1.13 \times 10^{16}$	-	-	
<b>F</b>	F-1/yr	2017	0.099	-	-	
<b>ER</b>	ER-ratio	2017	0.099	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2017	42,750			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2017	2.92			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2017	8.333			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2017	0.245			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2017	0.08			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2017	2.966			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2017	0.431			
<b>ER/ERmgt</b>	-	-	-			

Sardine Western half of Southeast Australia [SARDWSE]

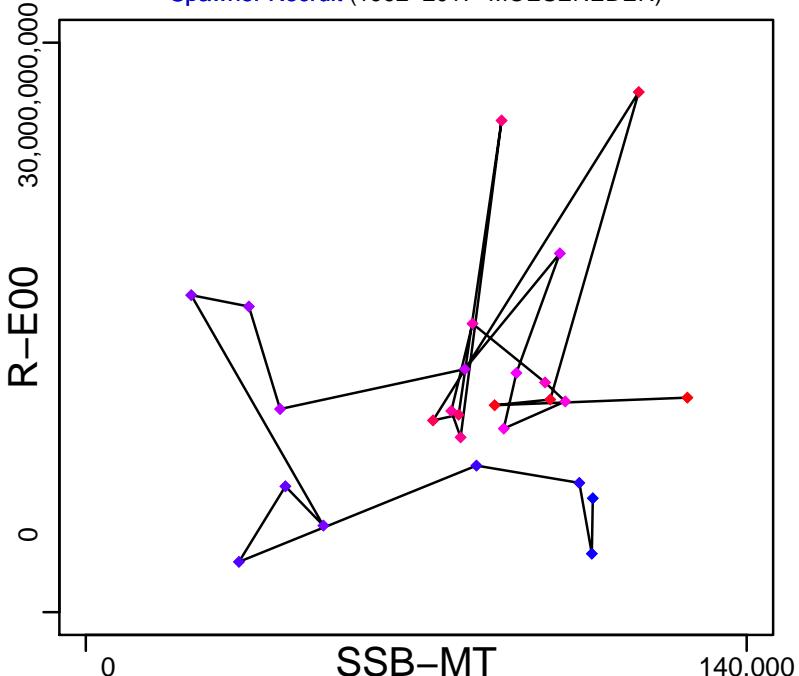
Kobe MSYpref (1992–2017–MOESENEDER)



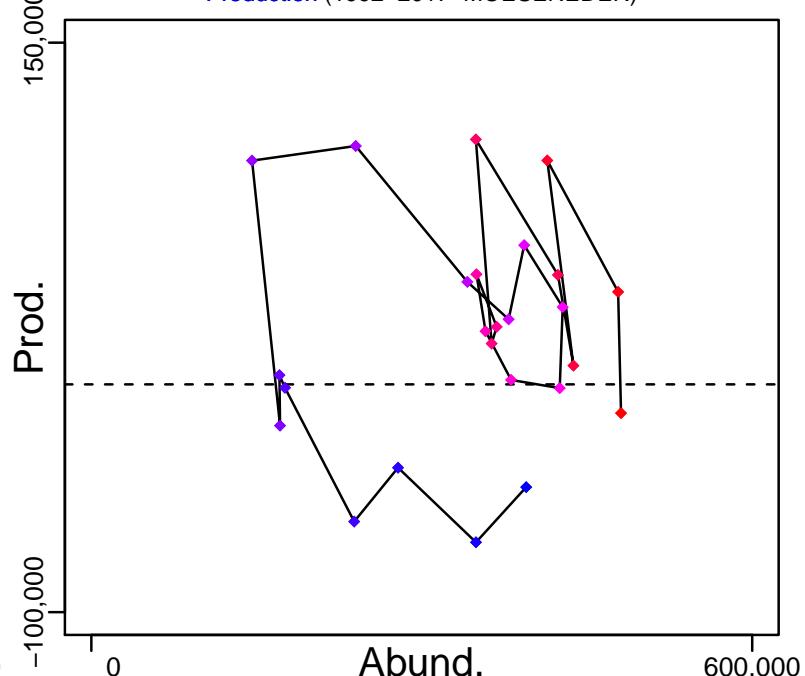
Kobe MGTpref (1992–2017–MOESENEDER)



Spawner Recruit (1992–2017–MOESENEDER)



Production (1992–2017–MOESENEDER)

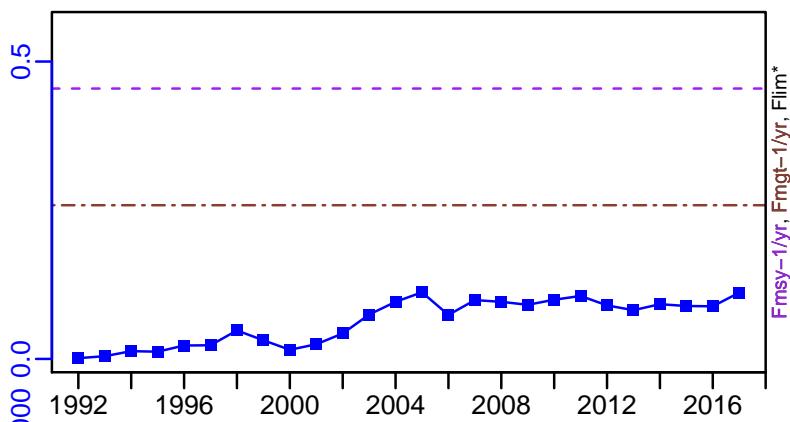
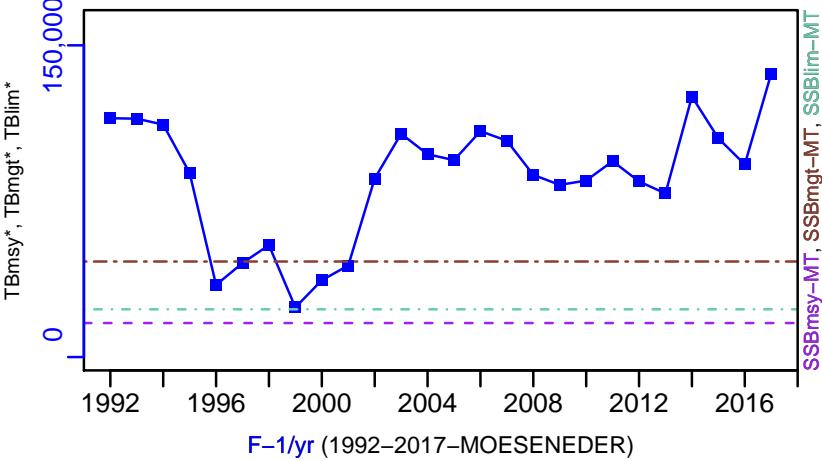
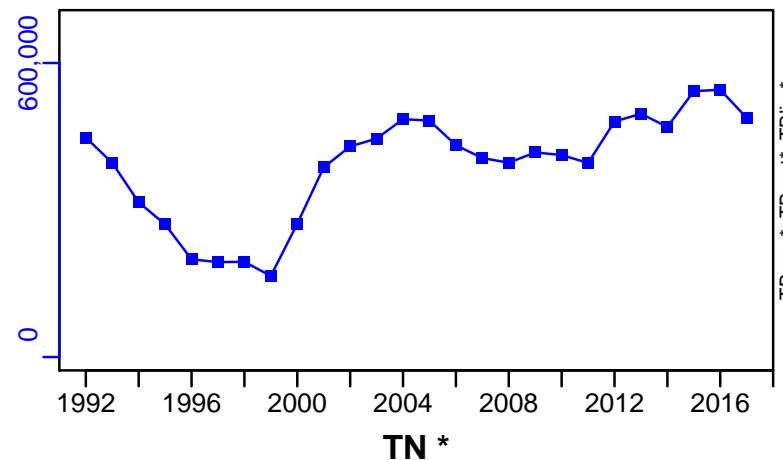


◆ Start Year   ◆ End Year   \* No Data

Sardine Western half of Southeast Australia [SARDWSE]

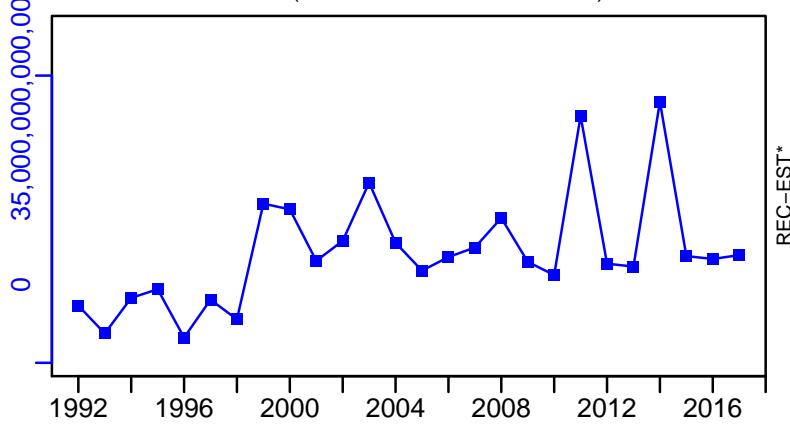
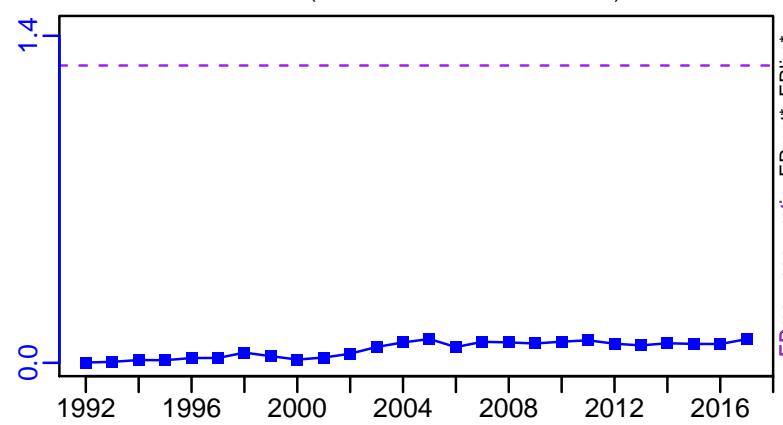
TB-MT (1992–2017–MOESENEDER)

SSB-MT (1992–2017–MOESENEDER)



ER-ratio (1992–2017–MOESENEDER)

R-E00 (1992–2017–MOESENEDER)

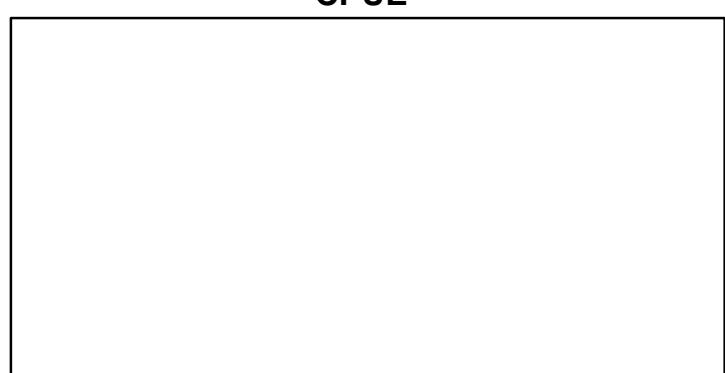
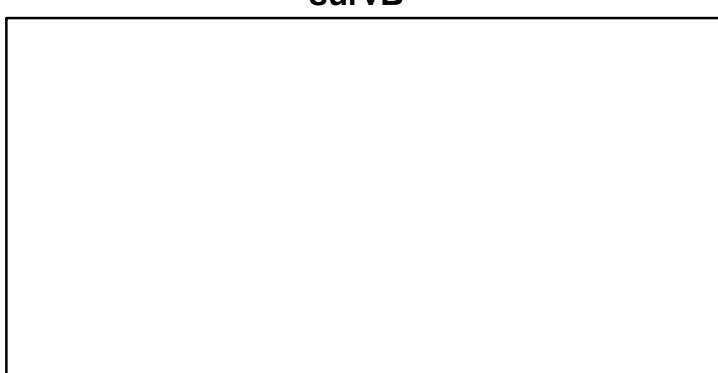
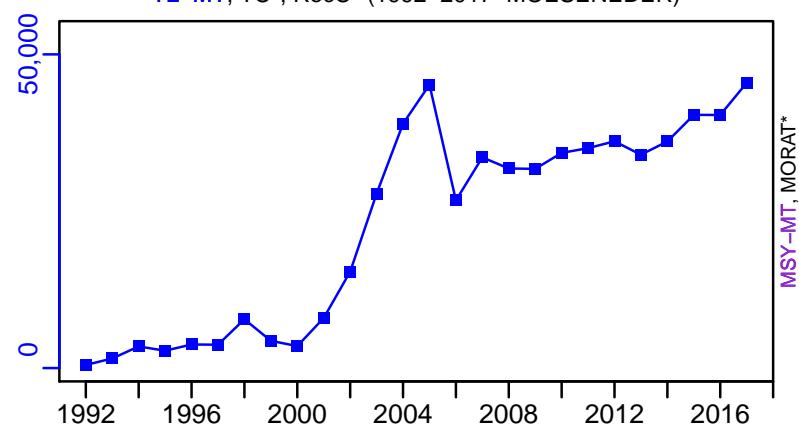


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

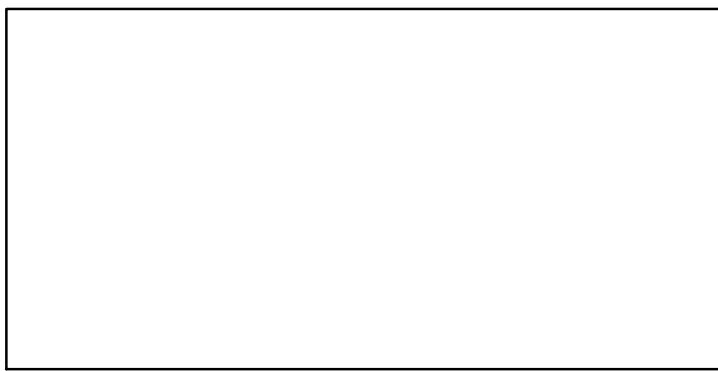
Sardine Western half of Southeast Australia [SARDWSE]

TL-MT, TC\*, RecC\* (1992–2017–MOESENEDER)

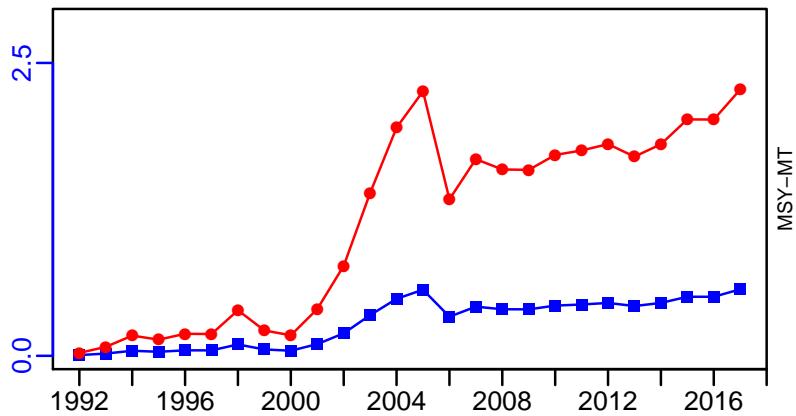
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TL-MT/MSY-MT, CdivMEANC–ratio, (1992–2017–MOESENEDER)



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

## Silverfish Southeast Australia [SILVERFISHSE]

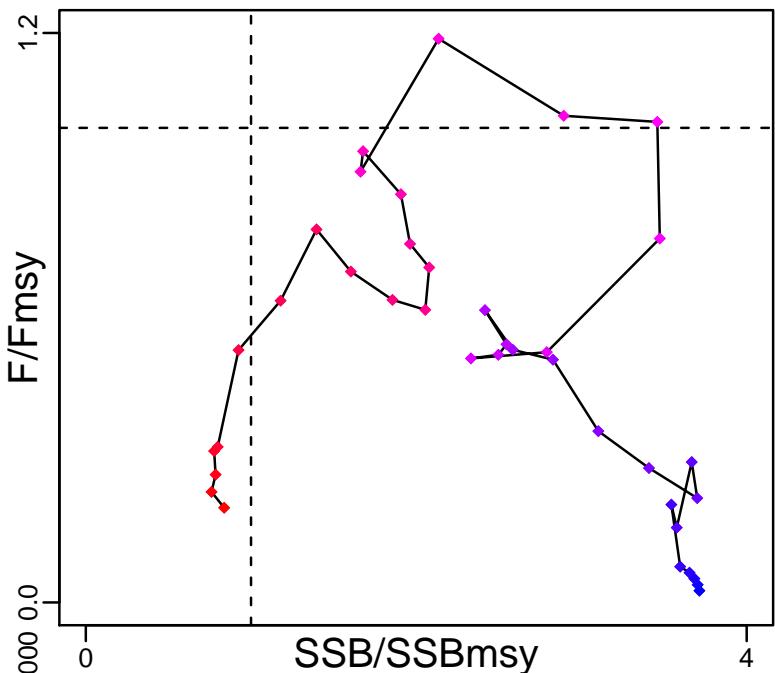
Metadata			
<b>Scientific Name</b>	Seriolella punctata		
<b>Current Assess ID</b>	CSIRO-SILVERFISHSE-1980-2017-MOESENEDER		
<b>Area</b>	Southeast Australia		
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management		
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization		
<b>Asmts in RAM</b>	2006, 2014, 2017		

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2017	5102
<b>Fmsy</b>	Fmsy-1/yr	2017	0.215
<b>ERmsy</b>	ERmsy-conv-ratio	2017	0.266
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2017	9096
<b>Fmgt</b>	Fmgt-1/yr	2017	0.124
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2017	25,224
<b>SSB0</b>	SSB0-MT	2017	18,949
<b>MSY</b>	MSY-MT	2017	2064
<b>M</b>	M-1/yr	2017	0.3
<b>TBlim</b>	TBlim-MT	2006	4136
<b>SSBlim</b>	SSBlim-MT	2017	3790
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

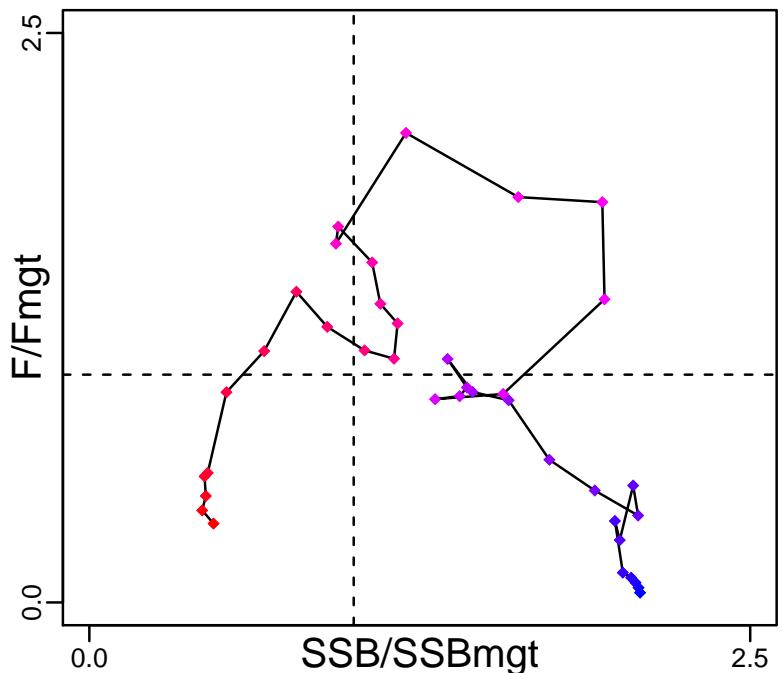
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2017	7866	-	-	
<b>SSB</b>	SSB-MT	2017	4273	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2017	$9.2 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2017	0.043	-	-	
<b>ER</b>	ER-ratio	2017	0.049	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2017	348			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2017	0.847			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2017	0.837			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2017	0.2			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2017	0.185			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2017	0.47			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2017	0.346			
<b>ER/ERmgt</b>	-	-	-			

### Silverfish Southeast Australia [SILVERFISHSE]

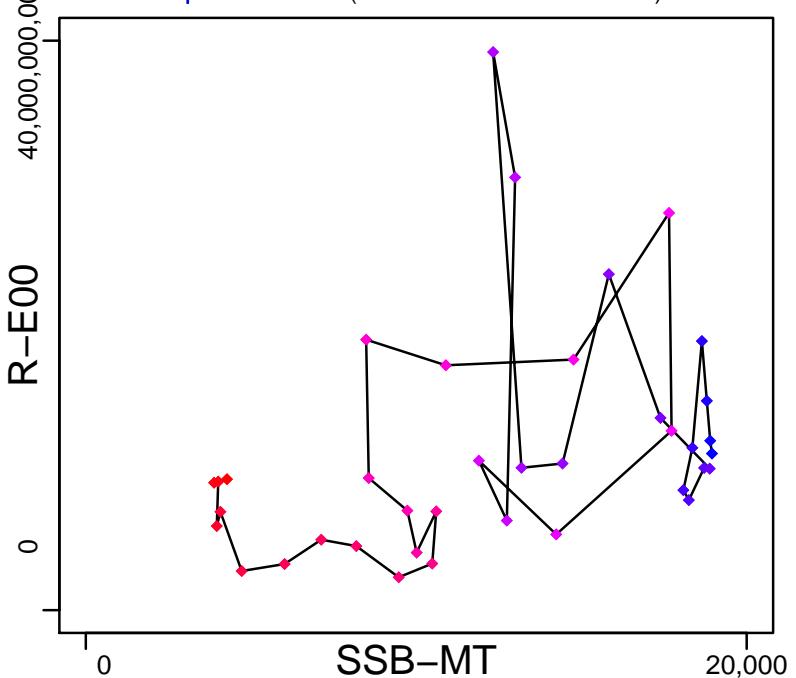
Kobe MSYpref (1980–2017–MOESENEDER)



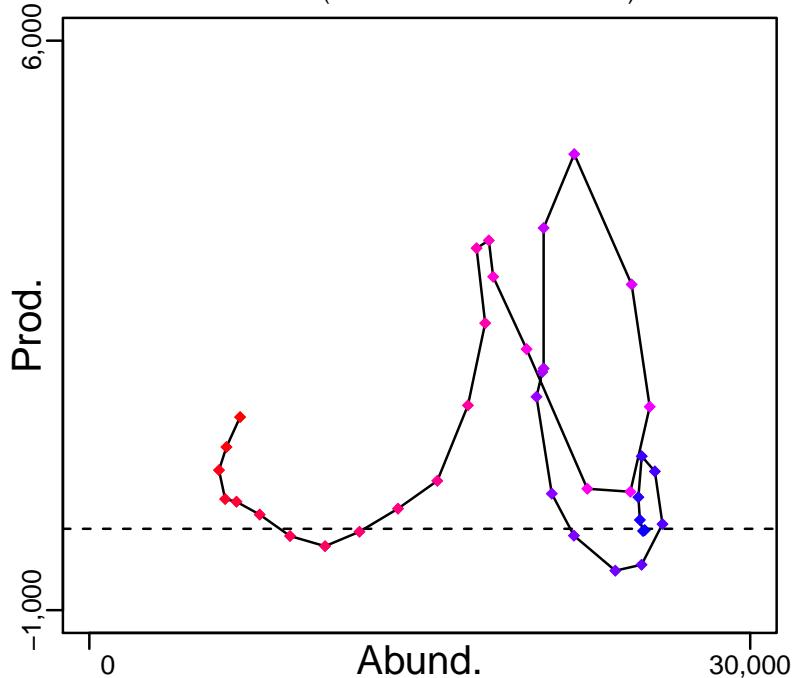
Kobe MGTpref (1980–2017–MOESENEDER)



Spawner Recruit (1980–2017–MOESENEDER)



Production (1980–2017–MOESENEDER)

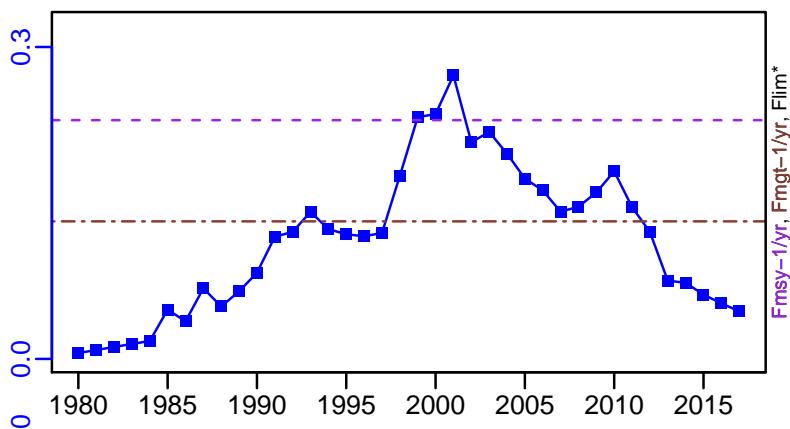
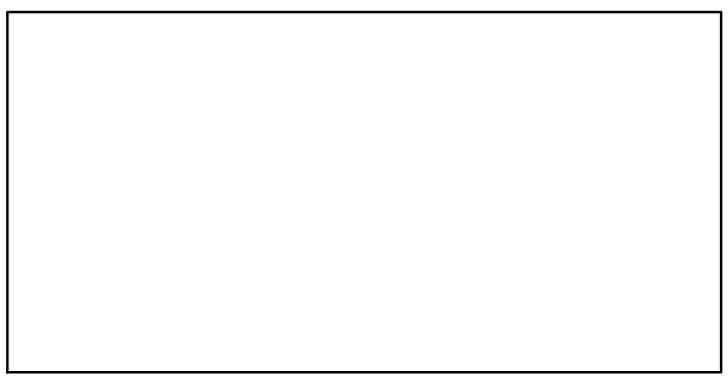
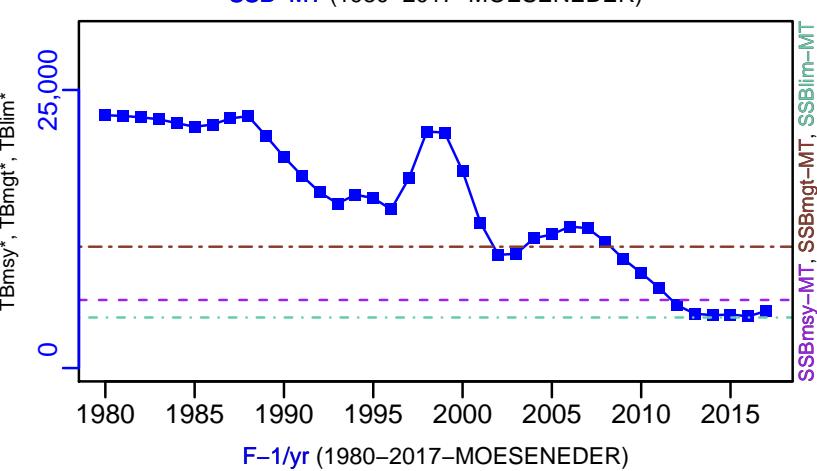
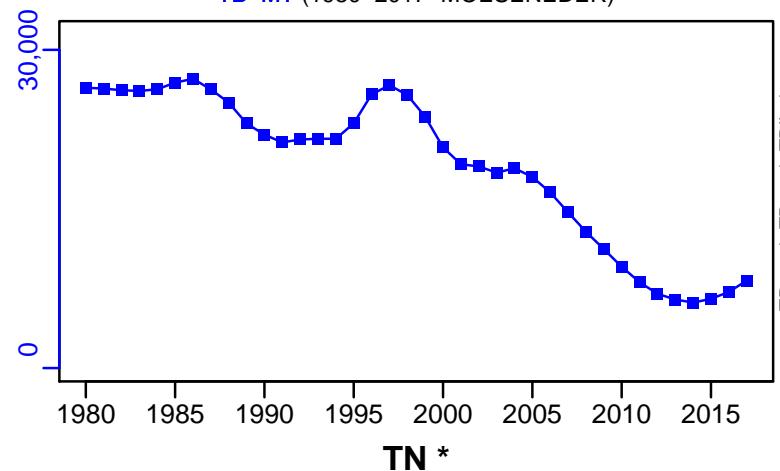


◆ Start Year ◆ End Year \* No Data

### Silverfish Southeast Australia [SILVERFISHSE]

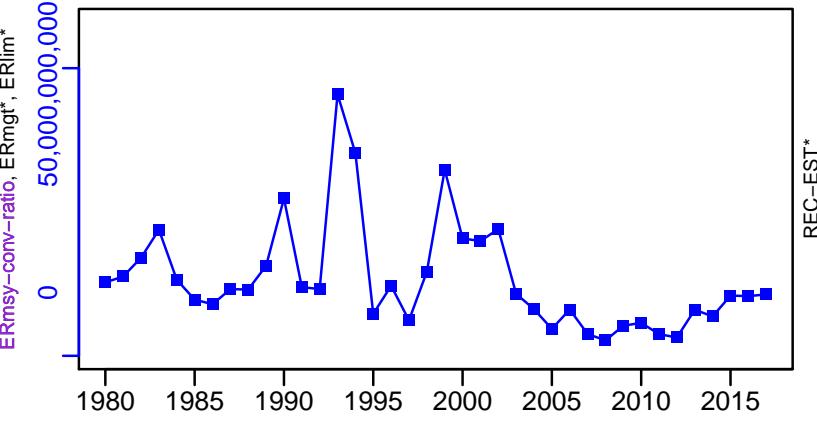
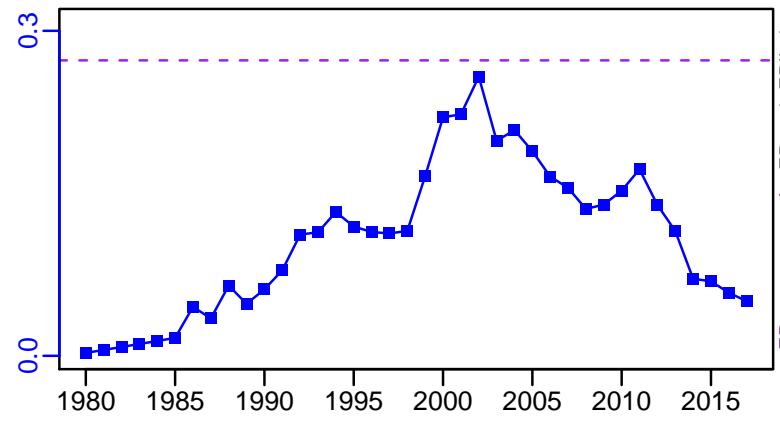
TB-MT (1980–2017–MOESENEDER)

SSB-MT (1980–2017–MOESENEDER)



ER-ratio (1980–2017–MOESENEDER)

R-E00 (1980–2017–MOESENEDER)

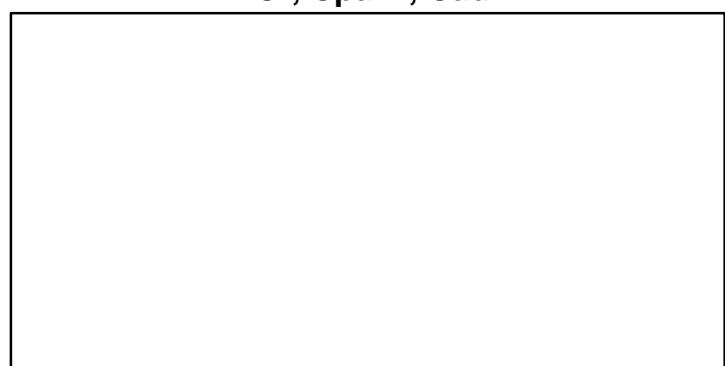
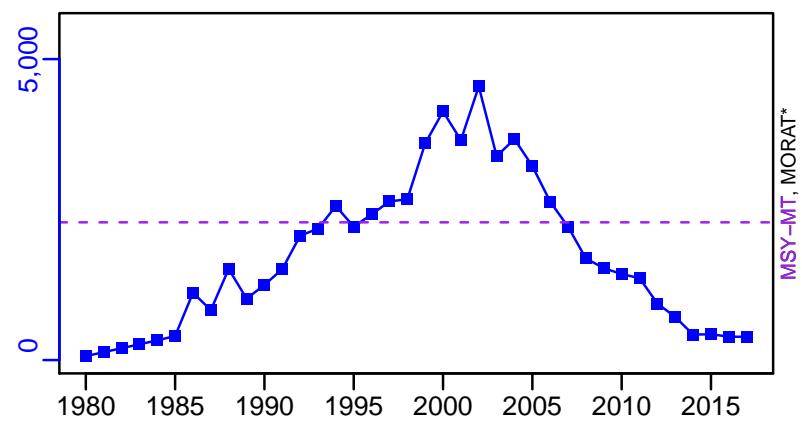


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

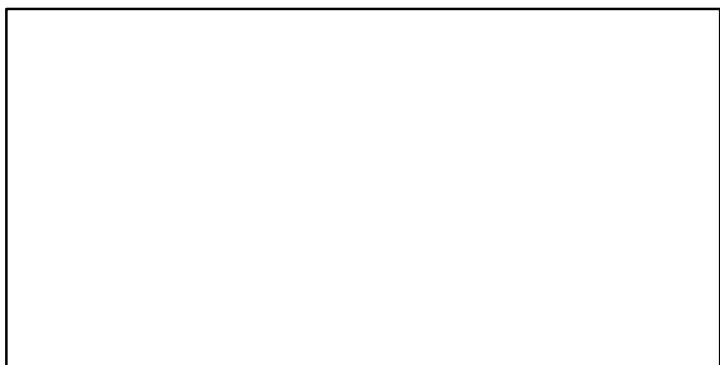
### Silverfish Southeast Australia [SILVERFISHSE]

TL-MT, TC\*, RecC\* (1980–2017–MOESENEDER)

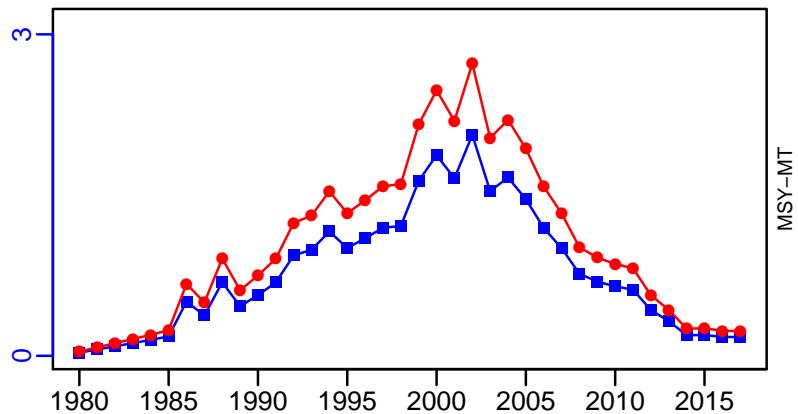
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1980–2017–MOESENEDER)



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

## Snapper Northern Spencer Gulf [SNAPSAUSNSG]

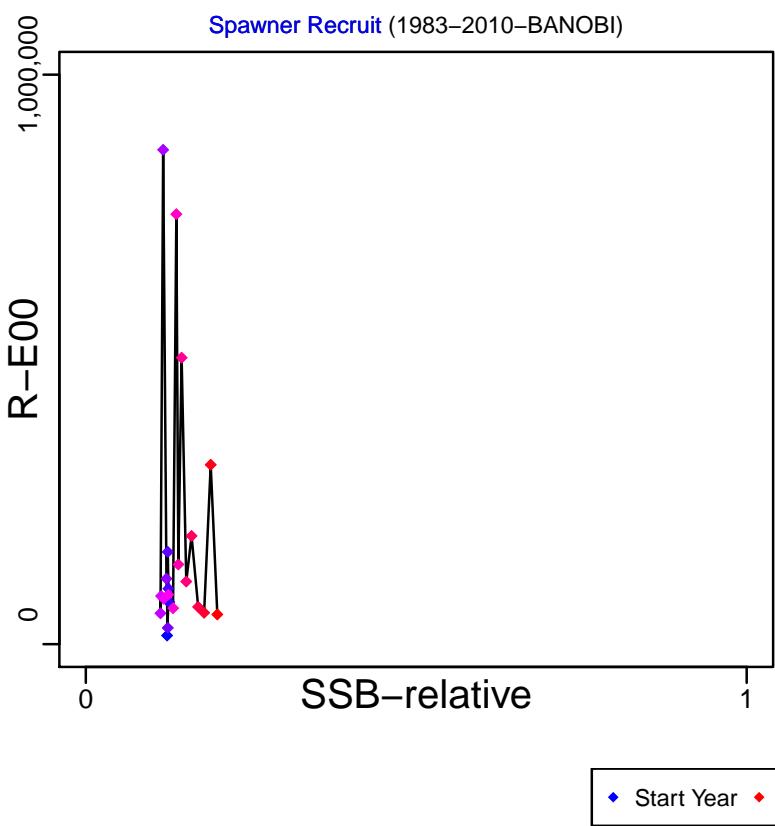
<b>Metadata</b>	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	SARDI-SNAPSAUSNSG-1983-2010-BANOBI
<b>Area</b>	Northern Spencer Gulf
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2010

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.05
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2010	6920	-	-	
<b>SSB</b>	SSB-relative	2010	0.246	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	52,200	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2010	0.047	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2010	183			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Kobe MSY\*

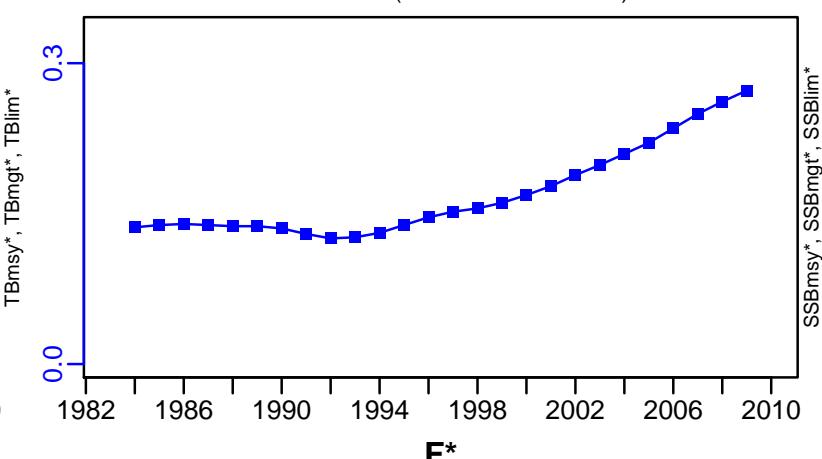
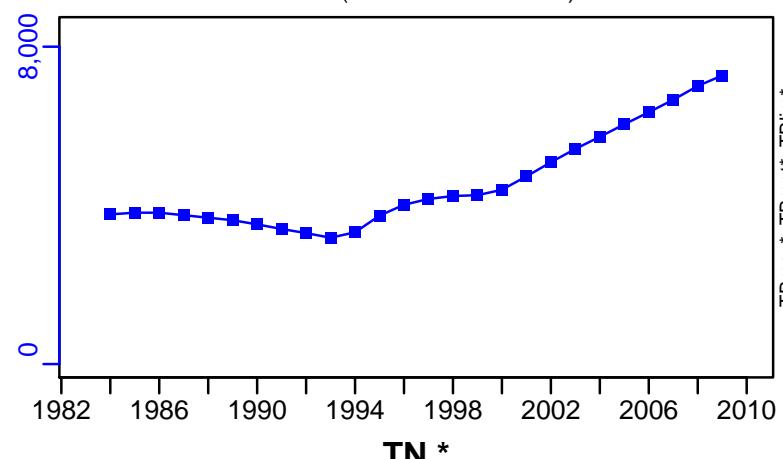
Kobe MGT\*



**Snapper Northern Spencer Gulf [SNAPSAUSNSG]**

TB-MT (1983–2010–BANOBI)

SSB-relative (1983–2010–BANOBI)

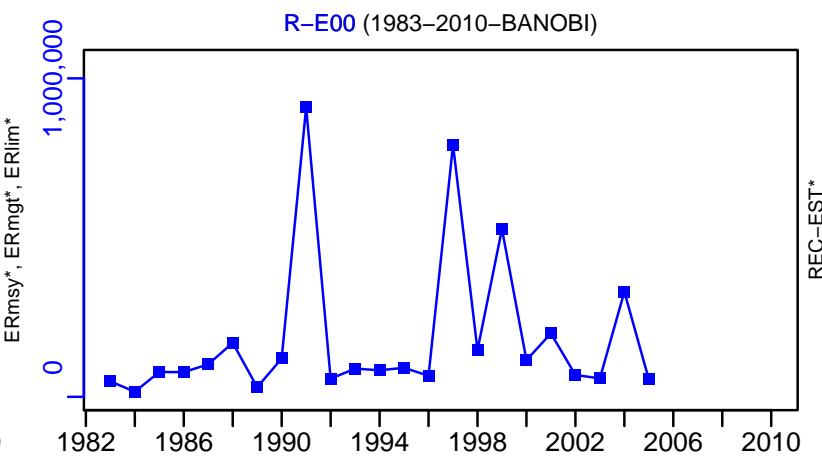
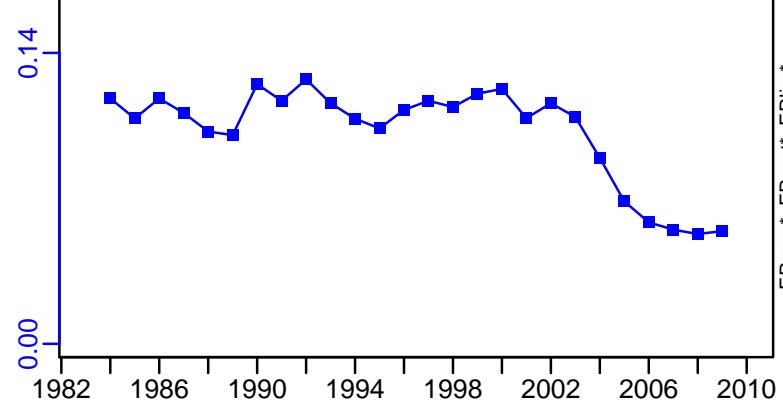


TN \*

F\*

ER-ratio (1983–2010–BANOBI)

R-E00 (1983–2010–BANOBI)

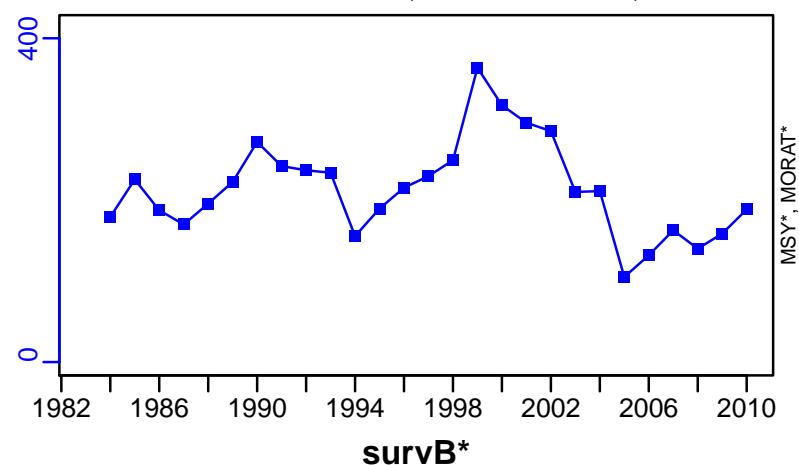


■ Listed time series	— Target BRP	— Rec-Est
- MSY-based BRP	··· Lim BRP	* No Data

**Snapper Northern Spencer Gulf [SNAPSAUSNSG]**

TL-MT, TC\*, RecC\* (1983–2010–BANOBI)

TAC\*, Cpair\*, Cadv\*



**survB\***



**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Snapper Southern Gulf St. Vincent [SNAPSAUSSGSV]

<b>Metadata</b>	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	SARDI-SNAPSAUSSGSV-1983-2010-BANOBI
<b>Area</b>	Southern Gulf St. Vincent
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2010

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.05
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2010	2920	-	-	
<b>SSB</b>	SSB-relative	2010	0.287	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	39,700	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2010	0.098	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2010	419			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Snapper Southern Gulf St. Vincent [SNAPSAUSSGSV]

Kobe MSY\*

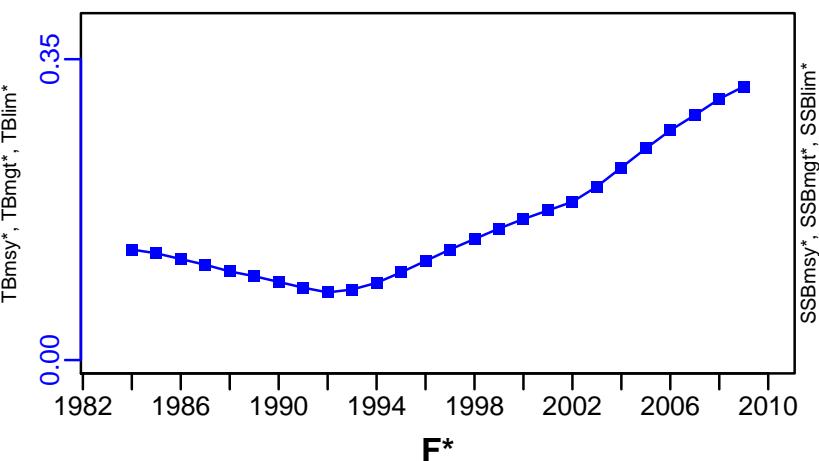
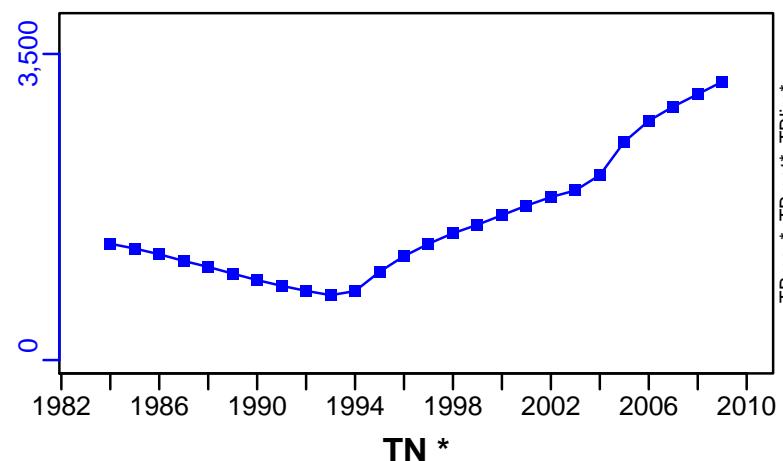
Kobe MGT\*



**Snapper Southern Gulf St. Vincent [SNAPSAUSSGSV]**

TB-MT (1983–2010–BANOBI)

SSB-relative (1983–2010–BANOBI)

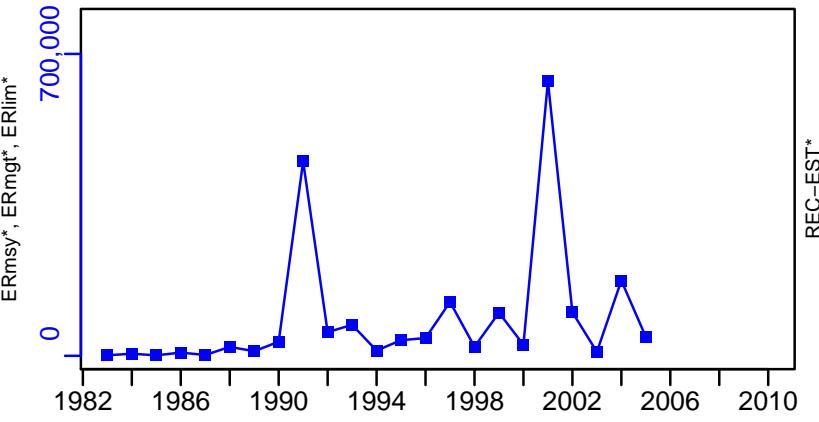
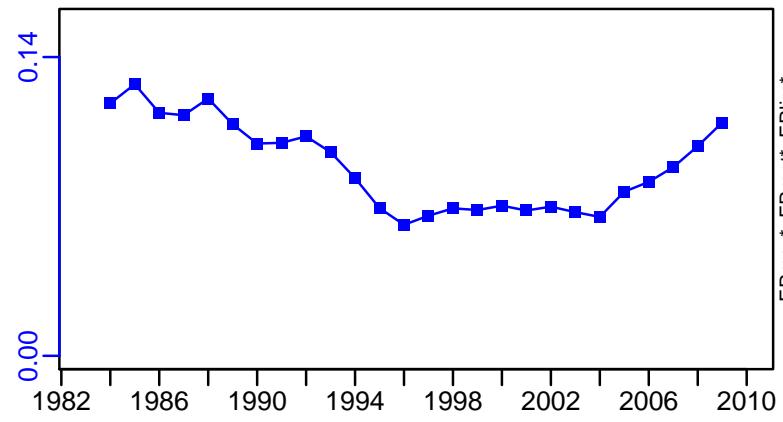


TN \*

F\*

ER-ratio (1983–2010–BANOBI)

R-E00 (1983–2010–BANOBI)

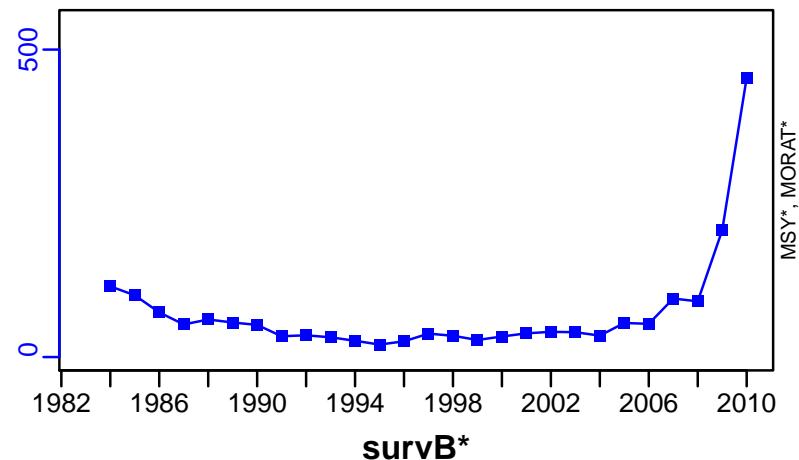


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	··· Lim BRP	* No Data

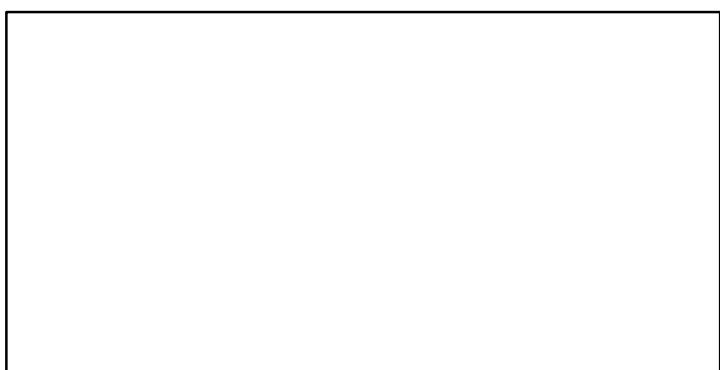
**Snapper Southern Gulf St. Vincent [SNAPSAUSSGSV]**

TL-MT, TC\*, RecC\* (1983–2010–BANOBI)

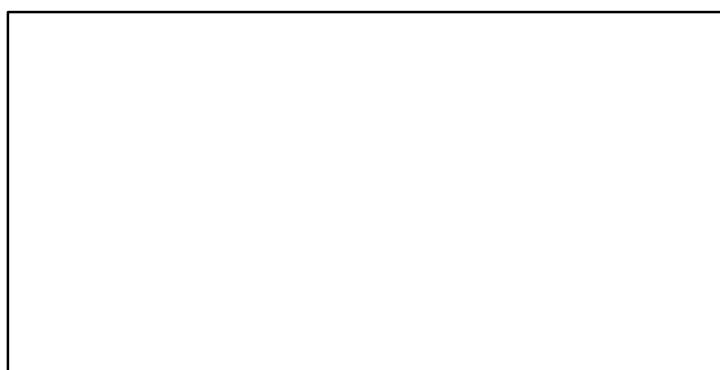
TAC\*, Cpair\*, Cadv\*



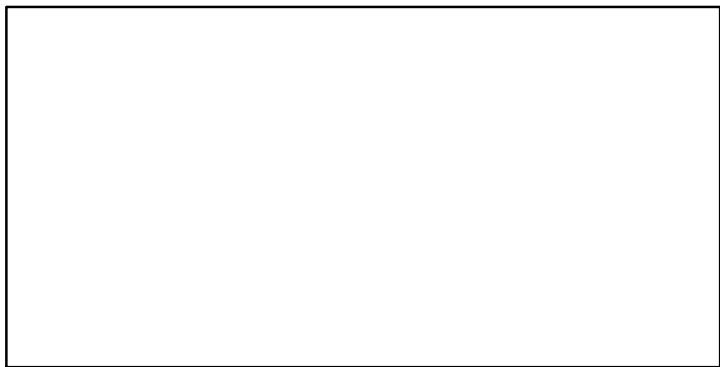
**survB\***



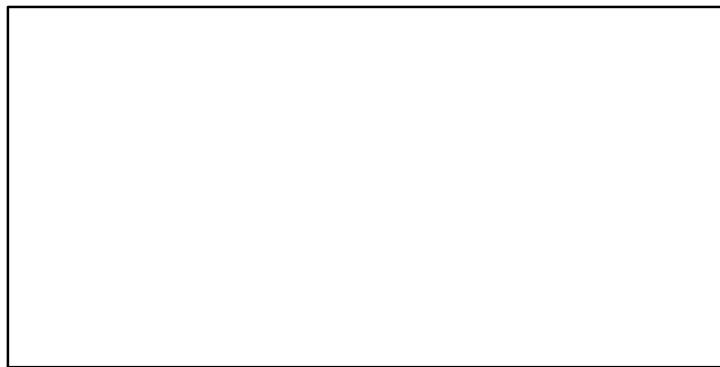
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Snapper Southern Spencer Gulf [SNAPSAUSSSG]

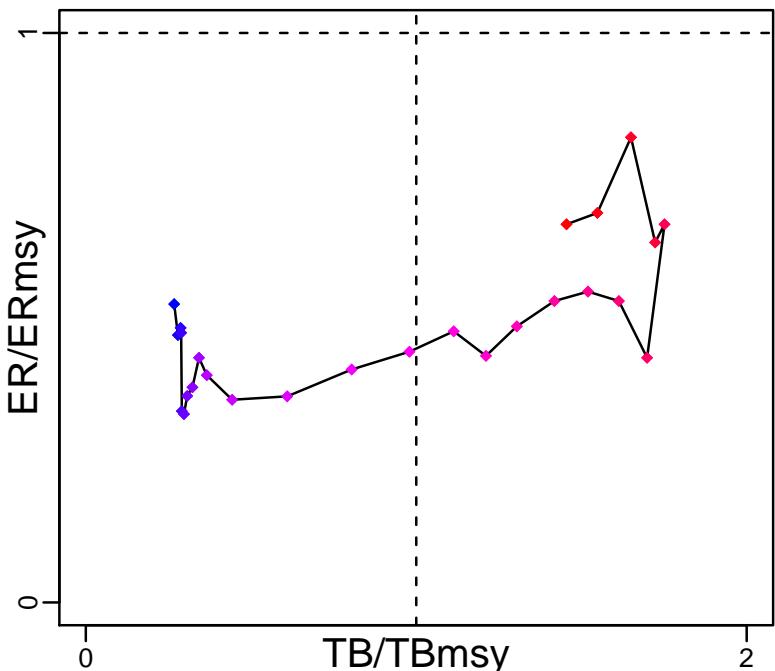
<b>Metadata</b>	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	SARDI-SNAPSAUSSSG-1984-2010-BANOBI
<b>Area</b>	Southern Spencer Gulf
<b>Management Authority</b>	South Australian Research and Development Institute
<b>Assessor</b>	South Australian Research and Development Institute
<b>Asmts in RAM</b>	2010

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2010	2461
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2010	0.151
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2010	371
<b>M</b>	M-1/yr	2010	0.05
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

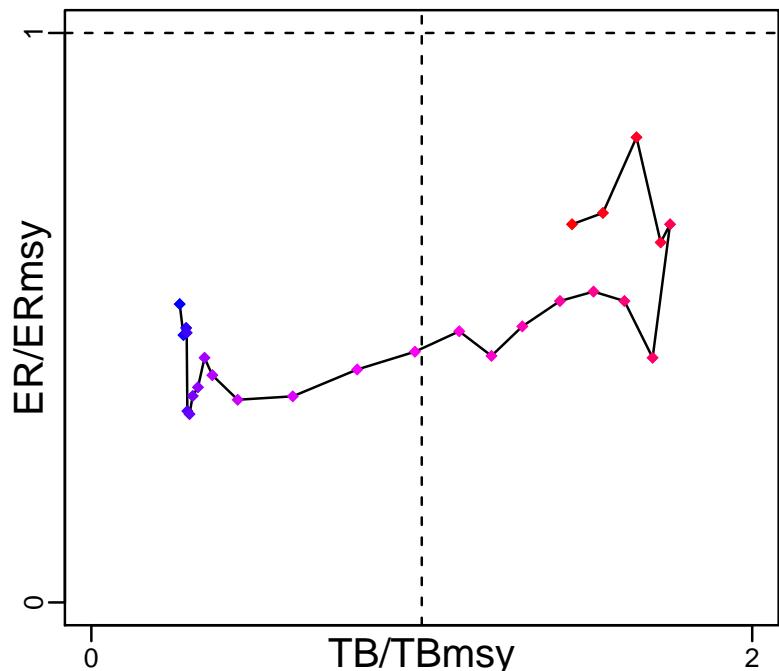
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2010	3580	-	-	
<b>SSB</b>	SSB-relative	2010	0.205	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2010	5070	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2010	0.1	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2010	61			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2010	1.455			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2010	0.664			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Snapper Southern Spencer Gulf [SNAPSAUSSG]**

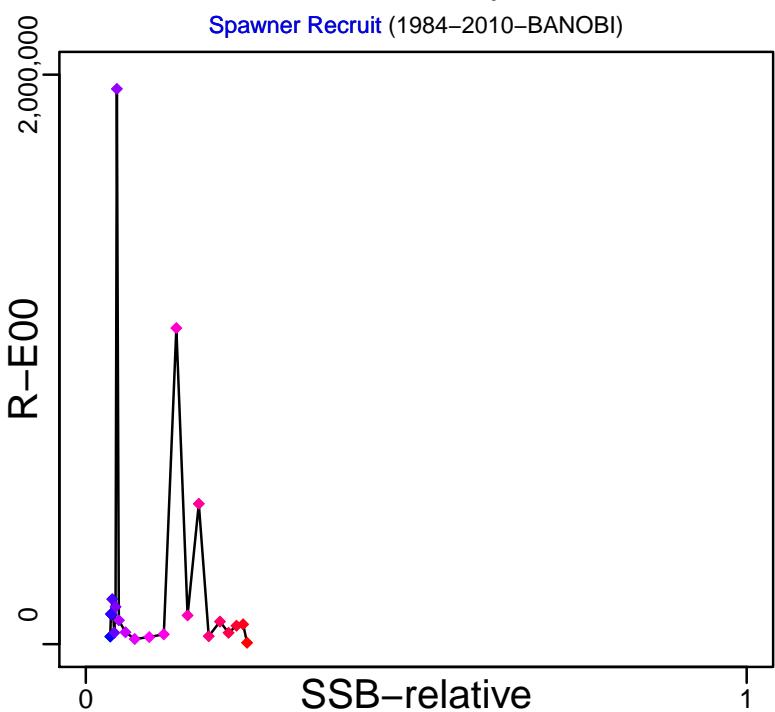
Kobe MSYpref (1984–2010–BANOBI)



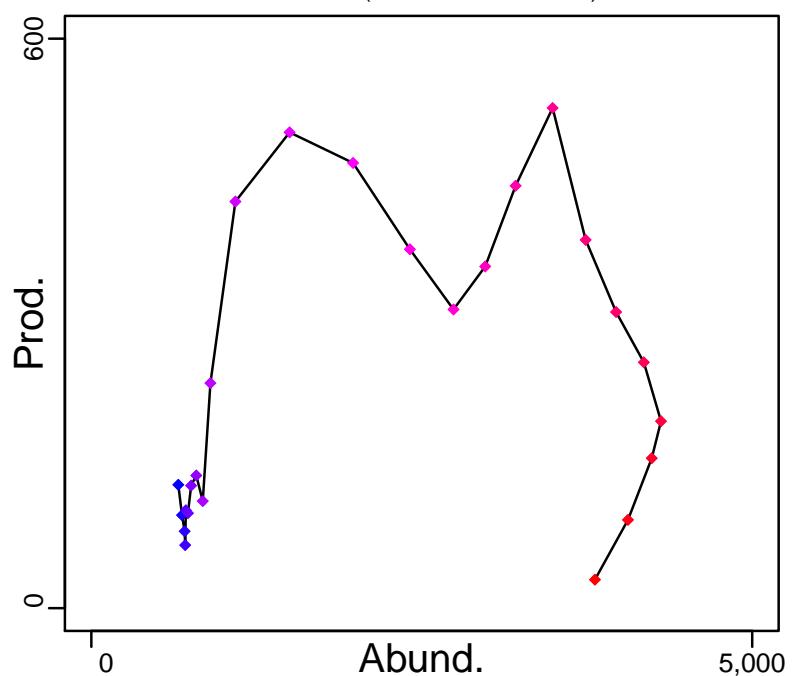
Kobe MGTpref (1984–2010–BANOBI)



Spawner Recruit (1984–2010–BANOBI)



Production (1984–2010–BANOBI)

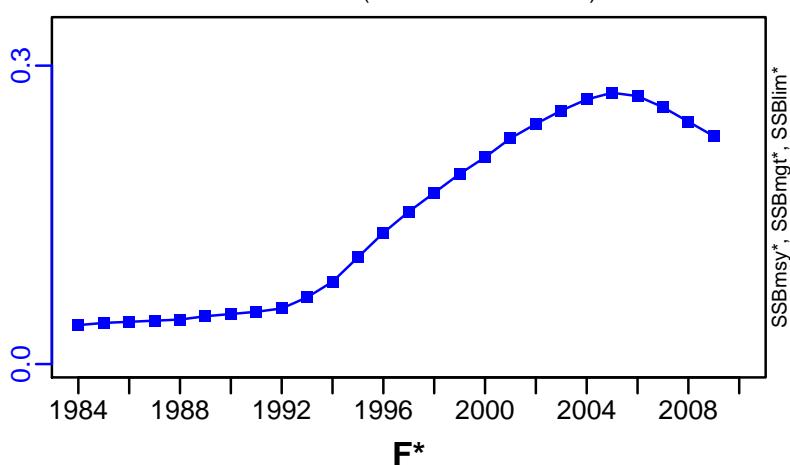
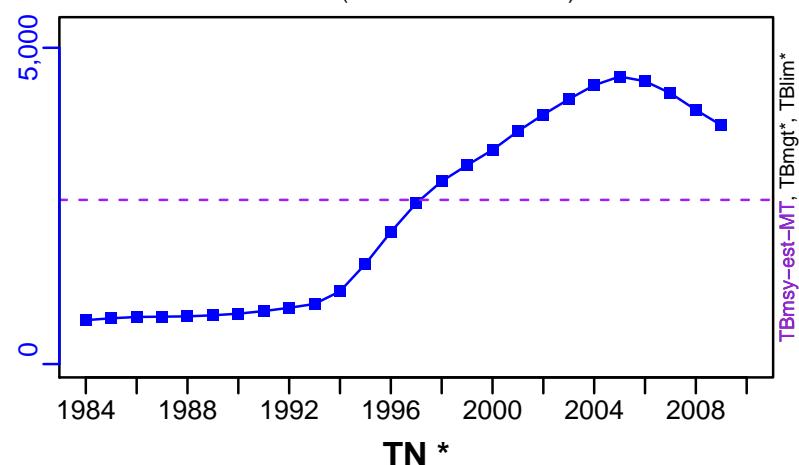


◆ Start Year   ◆ End Year   \* No Data

### Snapper Southern Spencer Gulf [SNAPSAUSSG]

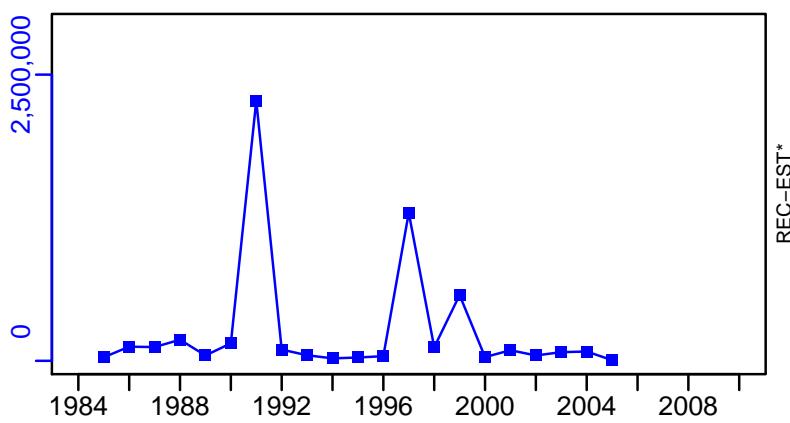
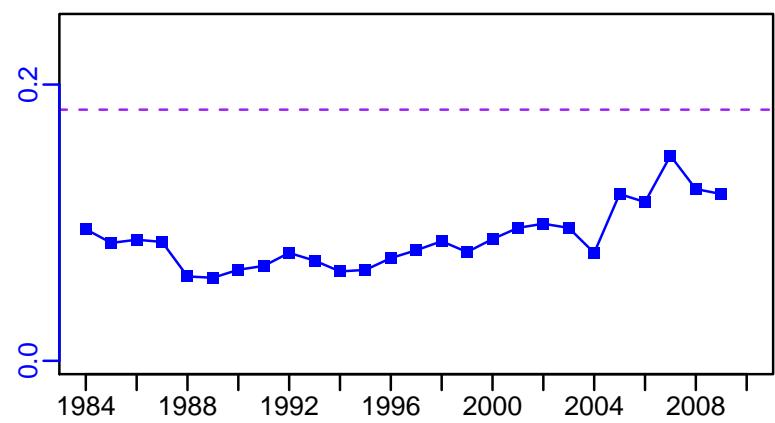
TB-MT (1984–2010–BANOBI)

SSB-relative (1984–2010–BANOBI)



ER-ratio (1984–2010–BANOBI)

R-E00 (1984–2010–BANOBI)

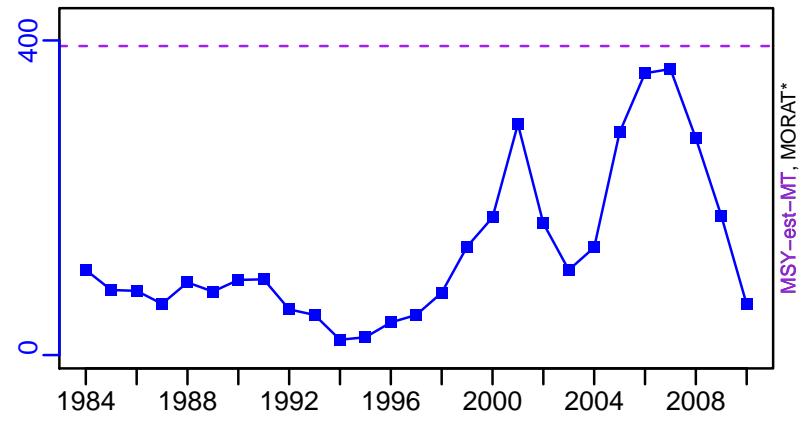


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	··· Lim BRP	* No Data

**Snapper Southern Spencer Gulf [SNAPSAUSSG]**

TL-MT, TC\*, RecC\* (1984–2010–BANOBI)

TAC\*, Cpair\*, Cadv\*



**survB\***

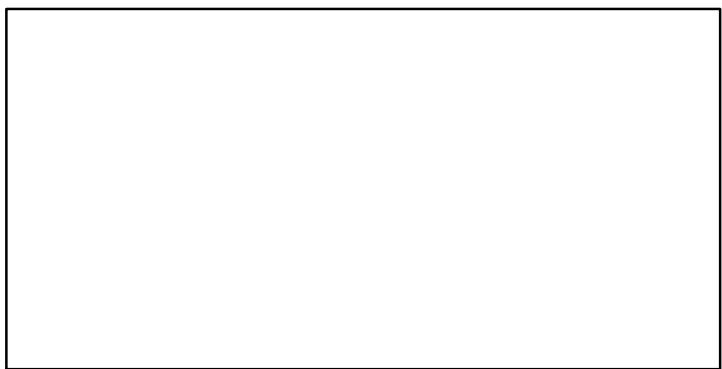
MSY-est-MT, MORAT\*



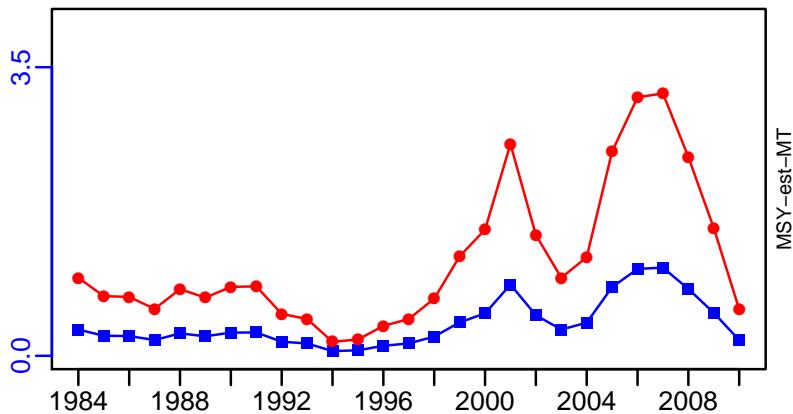
**CPUE\***



**EFFORT\***



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1984–2010–BANOBI)



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

## School whiting Southeast Australia [SWHITSE]

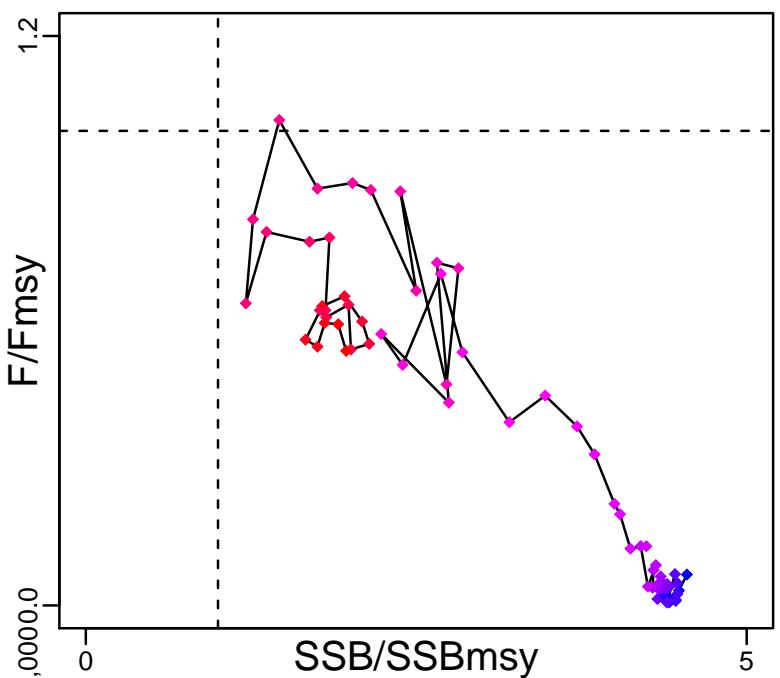
Metadata	
Scientific Name	Sillago flindersi
Current Assess ID	CSIRO-SWHITSE-1947-2016-MOESENEDER
Area	Southeast Australia
Management Authority	Australian Fisheries Management Authority, Australia national management
Assessor	Commonwealth Scientific and Industrial Research Organization
Asmts in RAM	2007, 2008, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2016	1660
<b>Fmsy</b>	Fmsy-1/yr	2016	0.339
<b>ERmsy</b>	ERmsy-conv-ratio	2016	0.563
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	3622
<b>Fmgt</b>	Fmgt-1/yr	2016	0.199
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2016	13,702
<b>SSB0</b>	SSB0-MT	2016	7547
<b>MSY</b>	MSY-MT	2016	2070
<b>M</b>	M-1/yr	2016	0.593
<b>TBlim</b>	TBlim-MT	2007	1556
<b>SSBlim</b>	SSBlim-MT	2016	1509
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

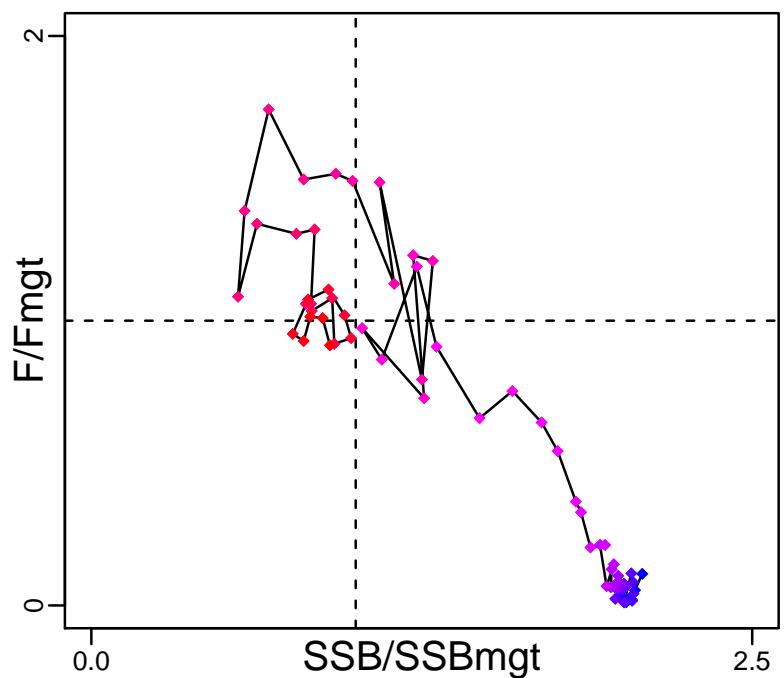
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2016	8610	-	-	
<b>SSB</b>	SSB-MT	2016	3270	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2016	$2.46 \times 10^{14}$	-	-	
<b>F</b>	F-1/yr	2016	0.182	-	-	
<b>ER</b>	ER-ratio	2016	0.181	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2016	1440			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2016	1.708			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2016	1.97			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.536			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2016	0.321			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.903			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.914			
<b>ER/ERmgt</b>	-	-	-			

School whiting Southeast Australia [SWHITSE]

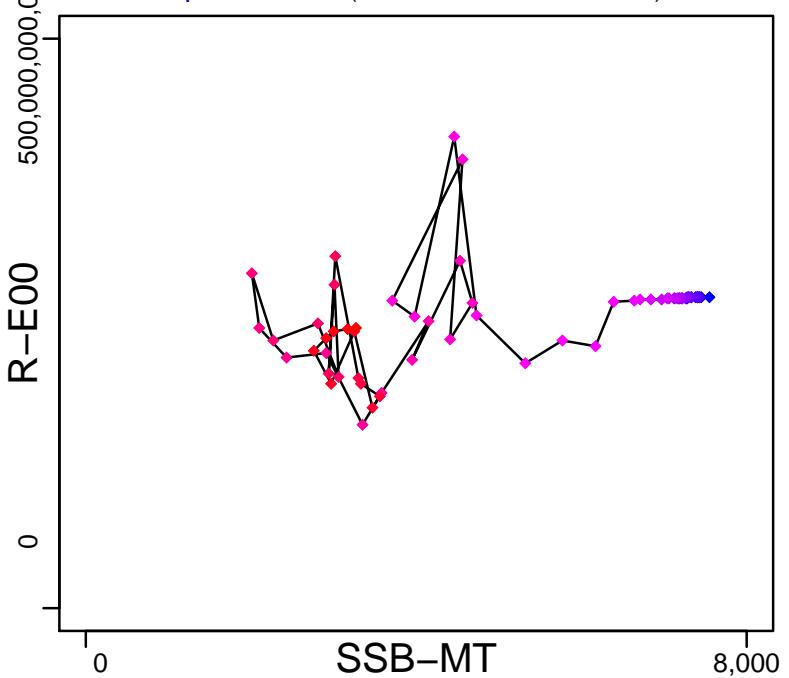
Kobe MSYpref (1947–2016–MOESENEDER)



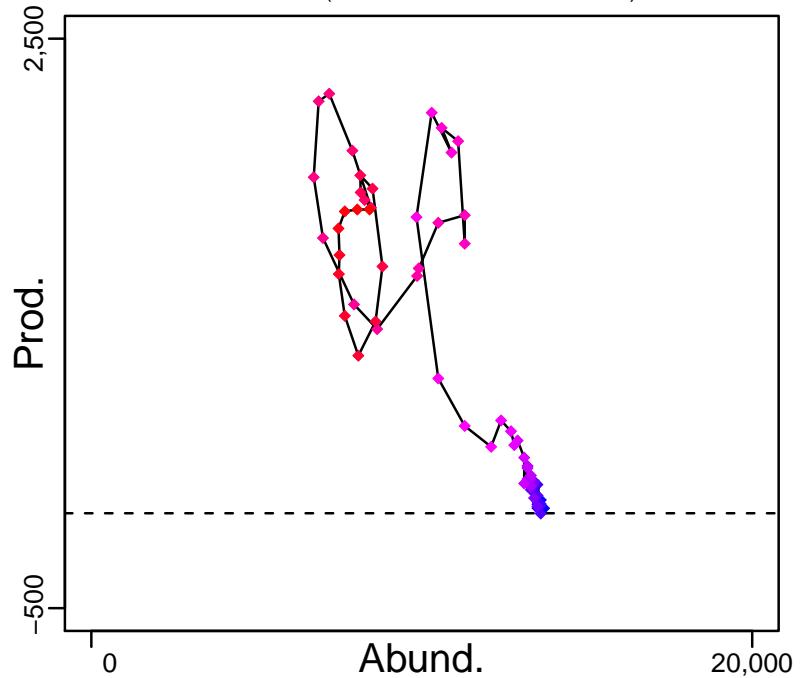
Kobe MGTpref (1947–2016–MOESENEDER)



Spawner Recruit (1947–2016–MOESENEDER)



Production (1947–2016–MOESENEDER)

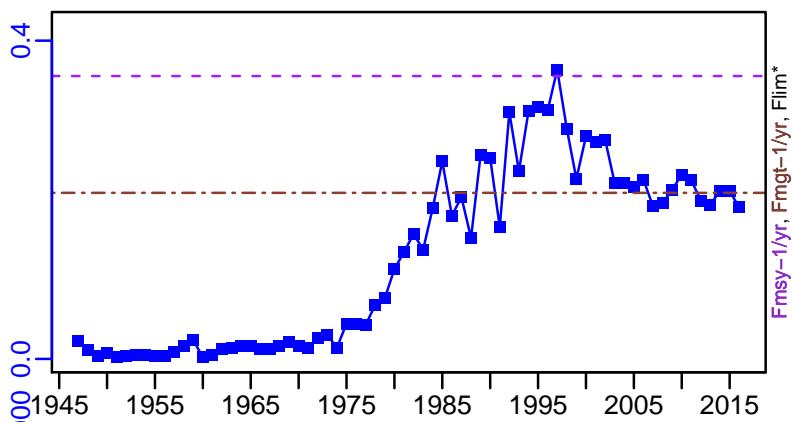
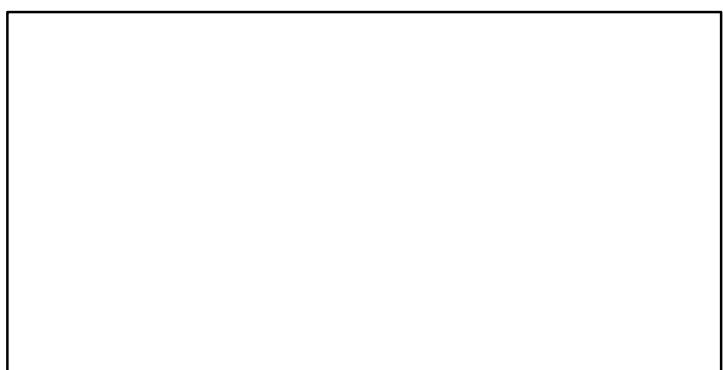
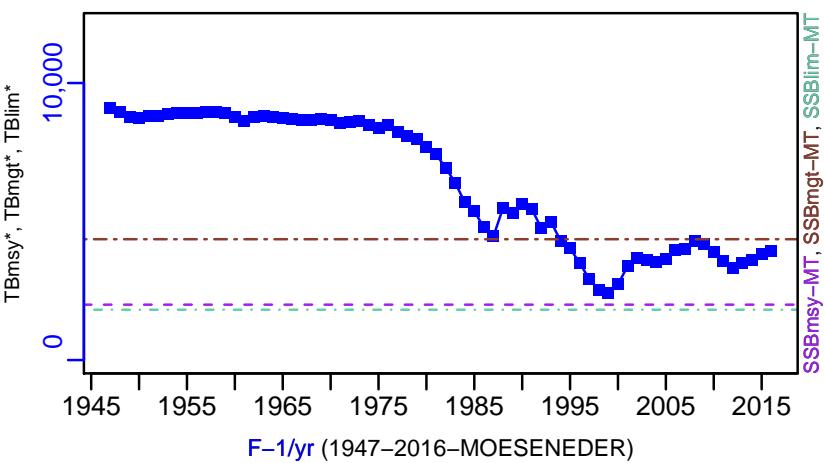
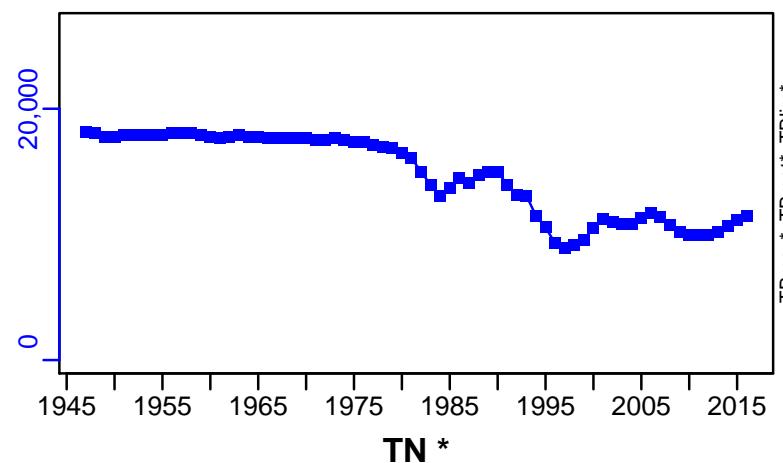


◆ Start Year   ◆ End Year   \* No Data

### School whiting Southeast Australia [SWHITSE]

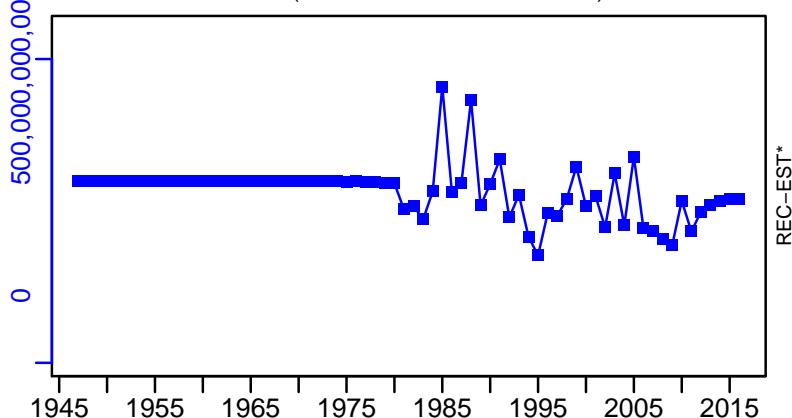
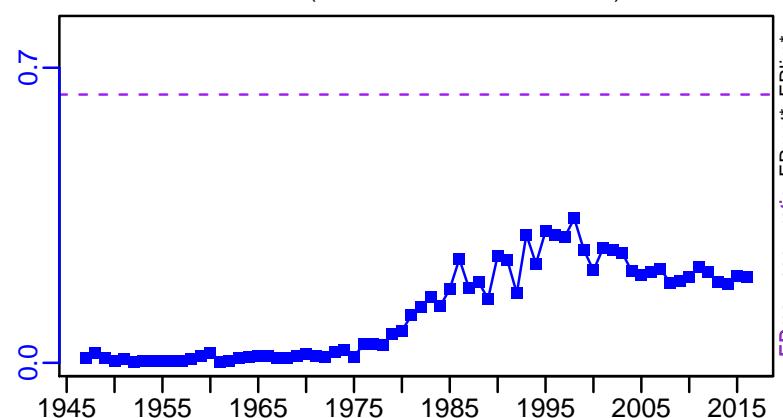
TB-MT (1947–2016–MOESENEDER)

SSB-MT (1947–2016–MOESENEDER)



ER-ratio (1947–2016–MOESENEDER)

R-E00 (1947–2016–MOESENEDER)

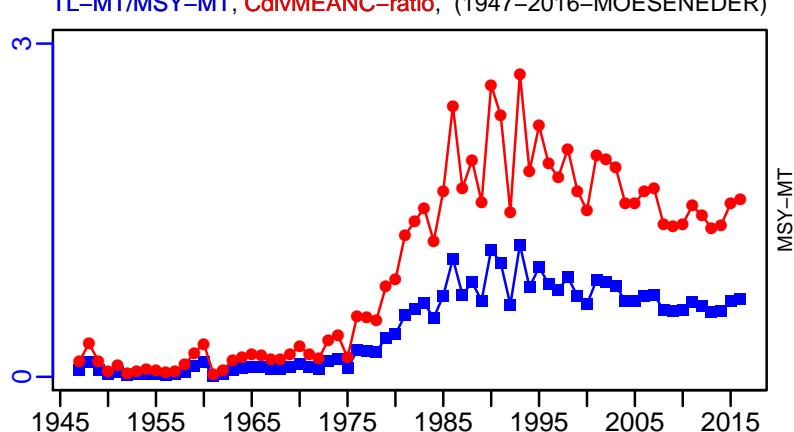
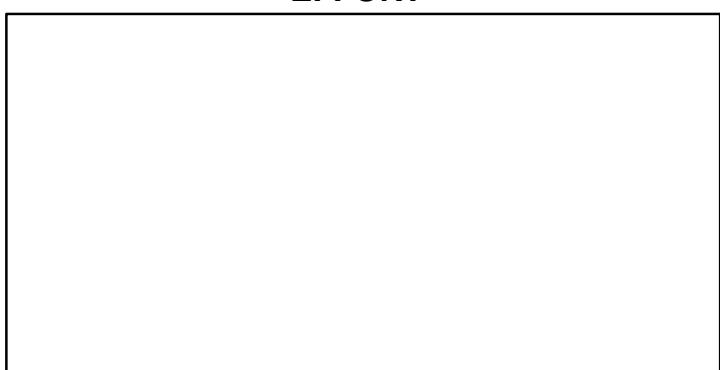
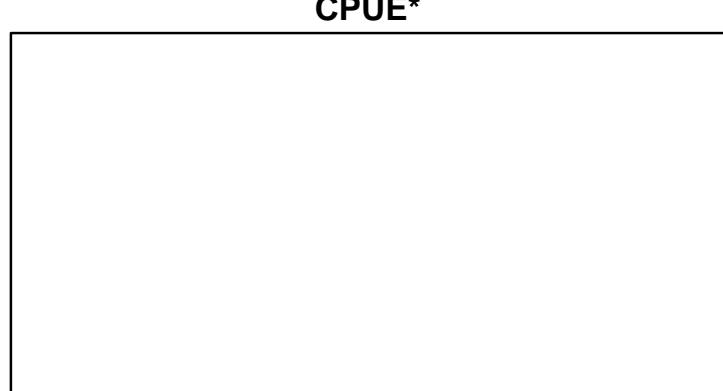
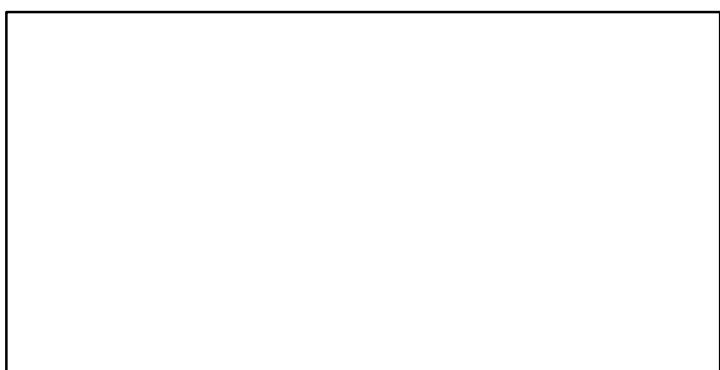
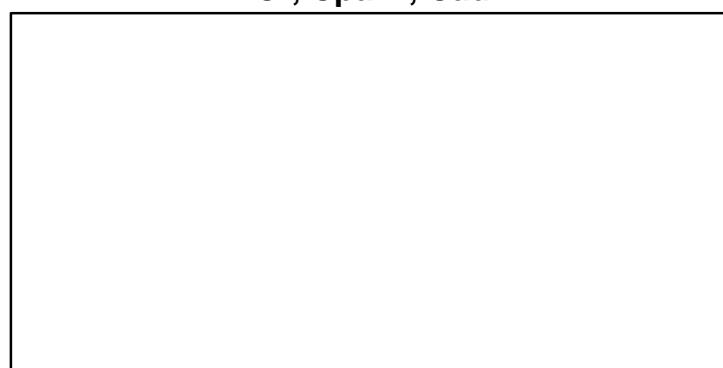
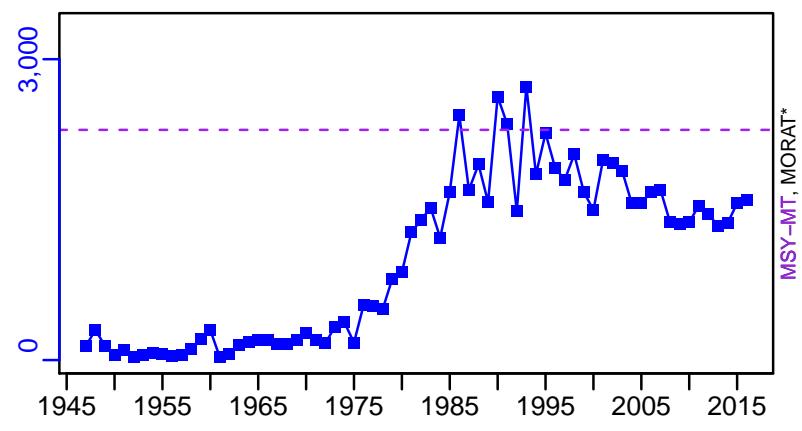


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | --- Lim BRP  | * No Data |

School whiting Southeast Australia [SWHITSE]

TL-MT, TC\*, RecC\* (1947–2016–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



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

## Tasmanian giant crab Tasmania [TASGIANTCRABTAS]

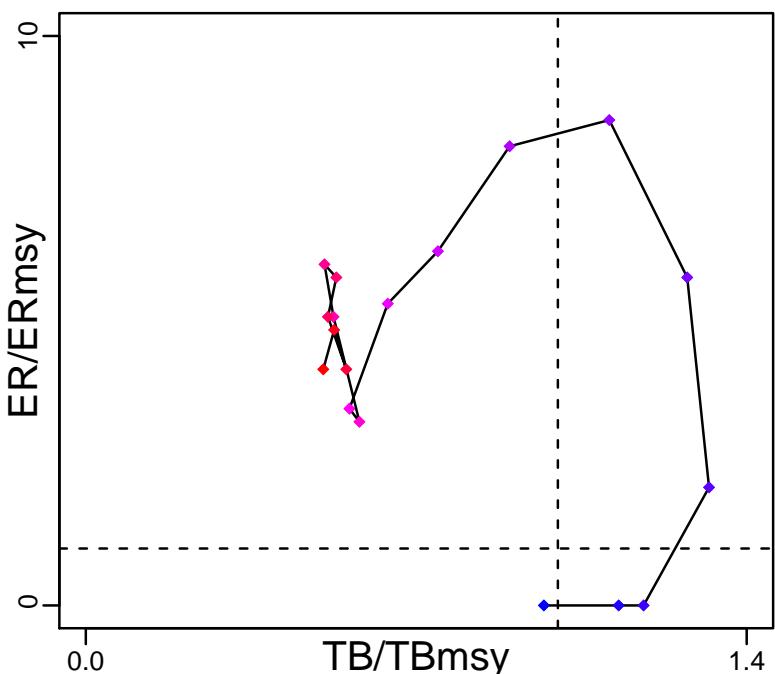
<b>Metadata</b>	
<b>Scientific Name</b>	Pseudocarcinus gigas
<b>Current Assess ID</b>	TAFI-TASGIANTCRABTAS-1990-2007-JENSEN
<b>Area</b>	Tasmania
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Tasmanian Aquaculture and Fisheries Institute
<b>Asmts in RAM</b>	2007

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2007	1515
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2007	0.043
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2007	66
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

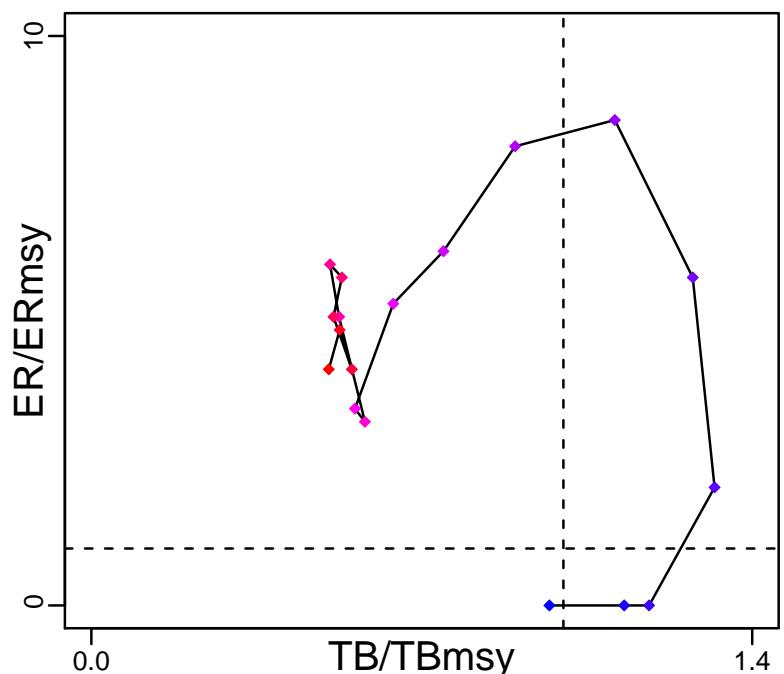
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2007	762	-	-	
<b>SSB</b>	SSB-E00eggs	2007	143,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2007	180,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2007	0.18	-	-	
<b>TC</b>	TC-MT	2007	57			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2007	0.503			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-est-ratio	2007	4.147			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Tasmanian giant crab Tasmania [TASGIANTCRABTAS]

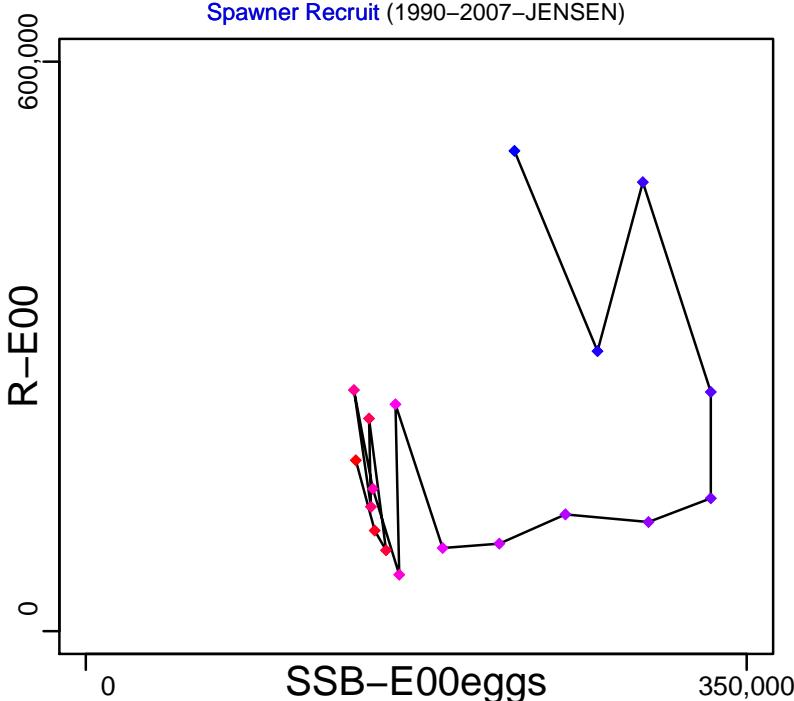
Kobe MSYpref (1990–2007–JENSEN)



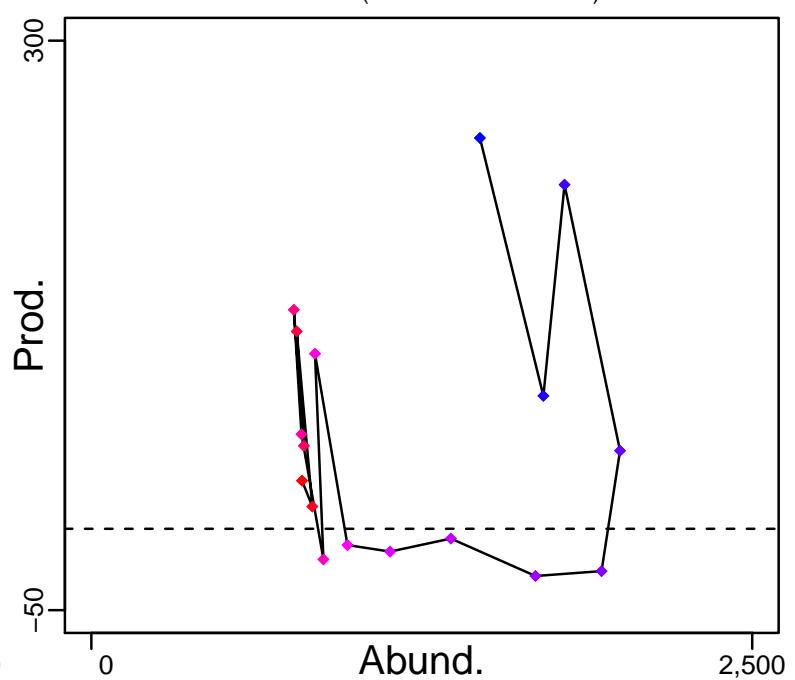
Kobe MGTpref (1990–2007–JENSEN)



Spawner Recruit (1990–2007–JENSEN)



Production (1990–2007–JENSEN)

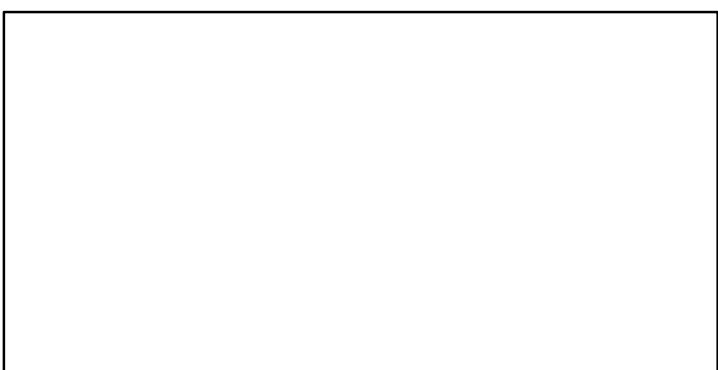
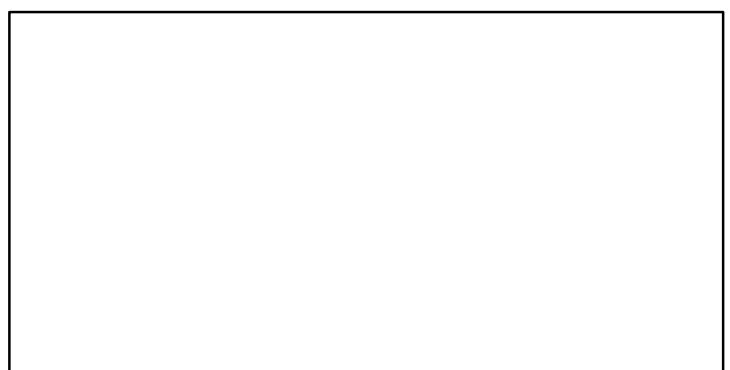
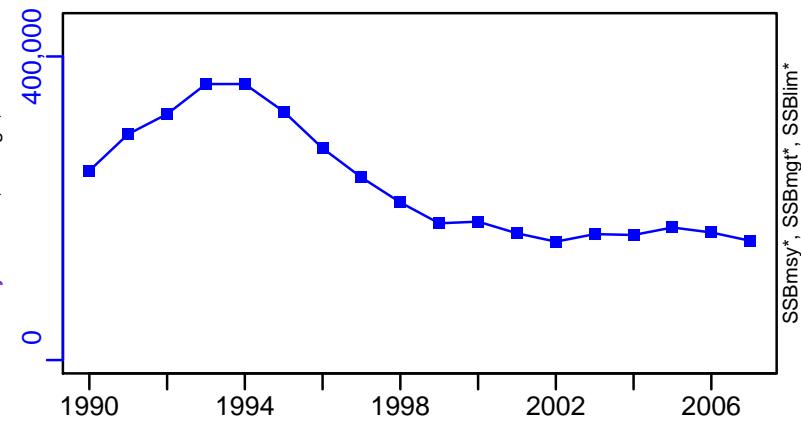
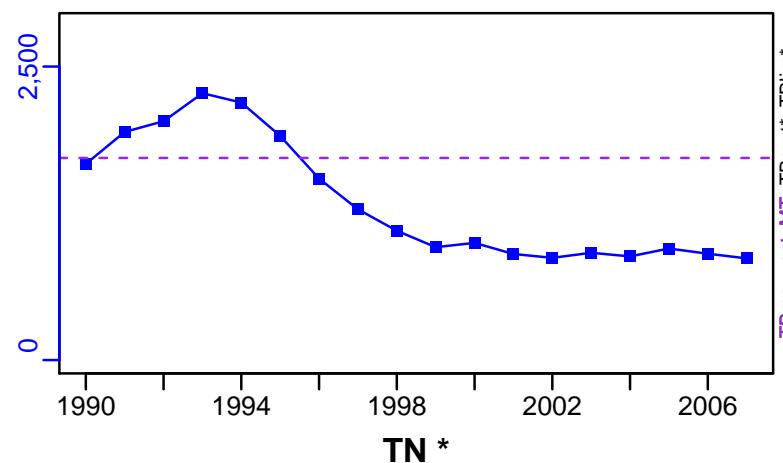


◆ Start Year ◆ End Year \* No Data

Tasmanian giant crab Tasmania [TASGIANTCRABTAS]

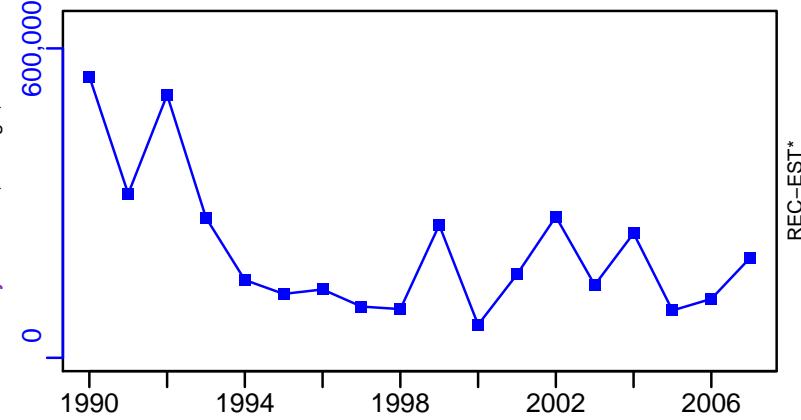
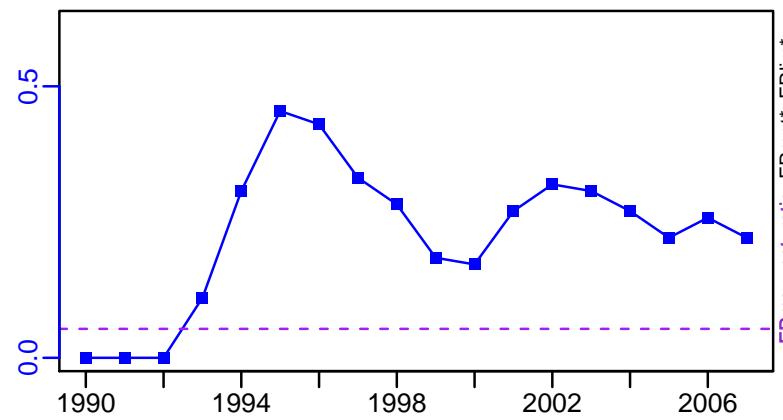
TB-MT (1990–2007–JENSEN)

SSB-E00eggs (1990–2007–JENSEN)



ER-ratio (1990–2007–JENSEN)

R-E00 (1990–2007–JENSEN)

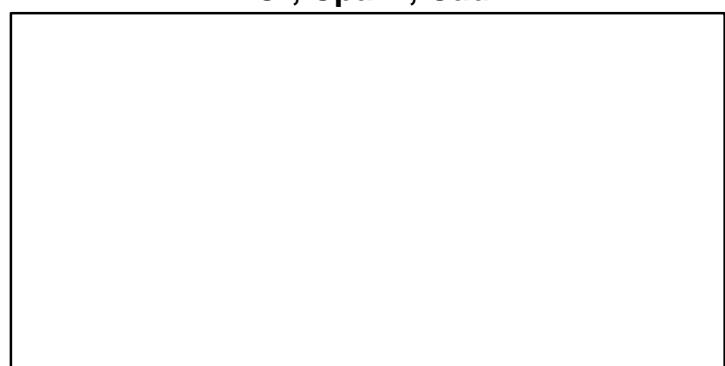
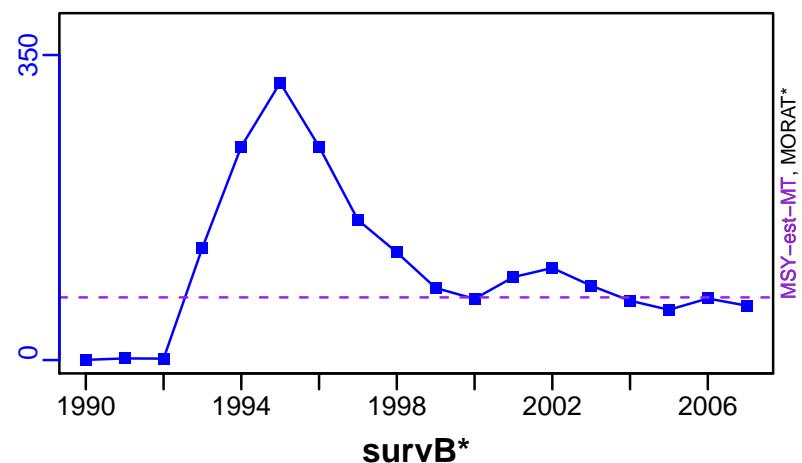


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

Tasmanian giant crab Tasmania [TASGIANTCRABTAS]

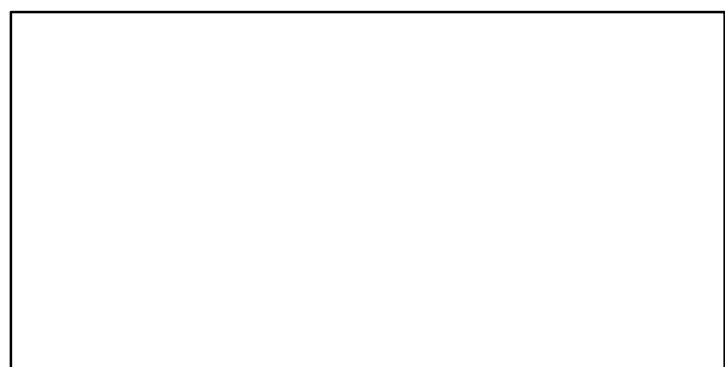
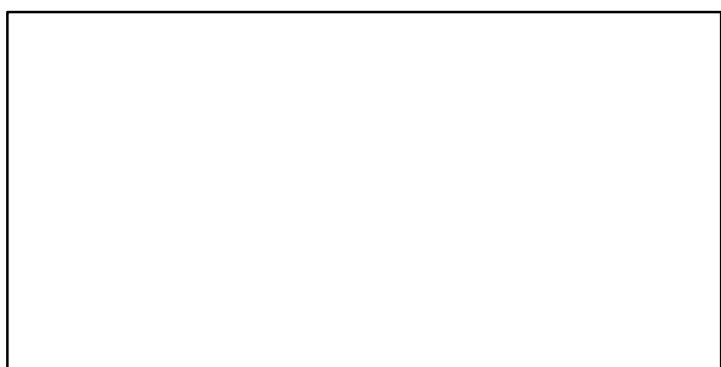
TC-MT, TL\*, RecC\* (1990–2007–JENSEN)

TAC\*, Cpair\*, Cadv\*

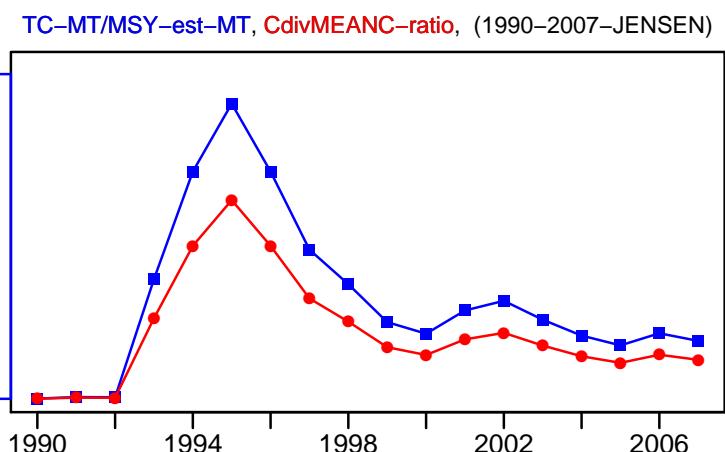
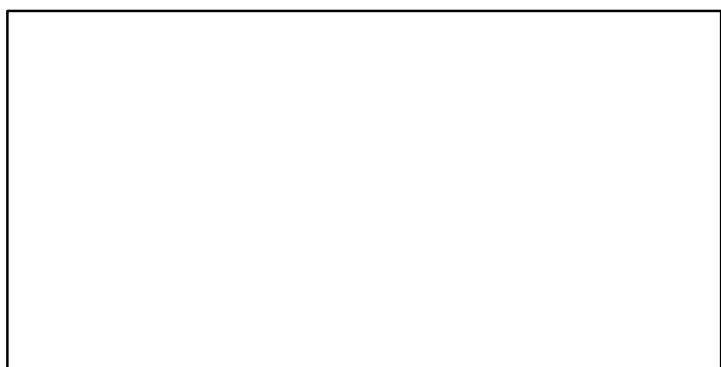


survB\*

CPUE\*



EFFORT\*



MSY-est-MT

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

## Tiger flathead Southeast Australia [TIGERFLATSE]

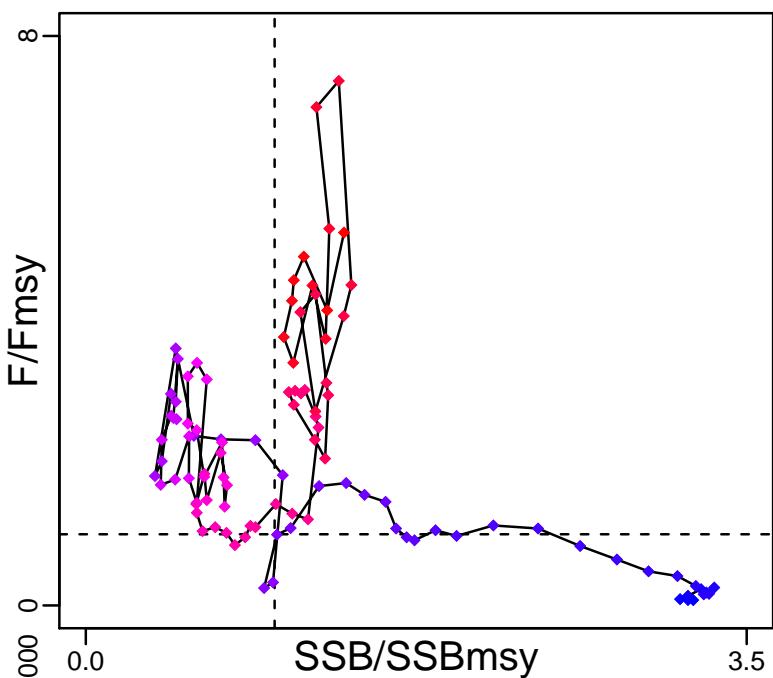
<b>Metadata</b>	
<b>Scientific Name</b>	Neoplatycephalus richardsoni
<b>Current Assess ID</b>	CSIRO-TIGERFLATSE-1915-2015-MOESENEDER
<b>Area</b>	Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2006, 2015

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	7181
<b>Fmsy</b>	Fmsy-1/yr	2015	0.163
<b>ERmsy</b>	ERmsy-conv-ratio	2015	0.164
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	9240
<b>Fmgt</b>	Fmgt-1/yr	2015	0.754
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2015	45,431
<b>SSB0</b>	SSB0-MT	2015	23,100
<b>MSY</b>	MSY-MT	2015	2854
<b>M</b>	M-1/yr	2015	0.27
<b>TBlim</b>	TBlim-MT	2006	2546
<b>SSBlim</b>	SSBlim-MT	2015	4620
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

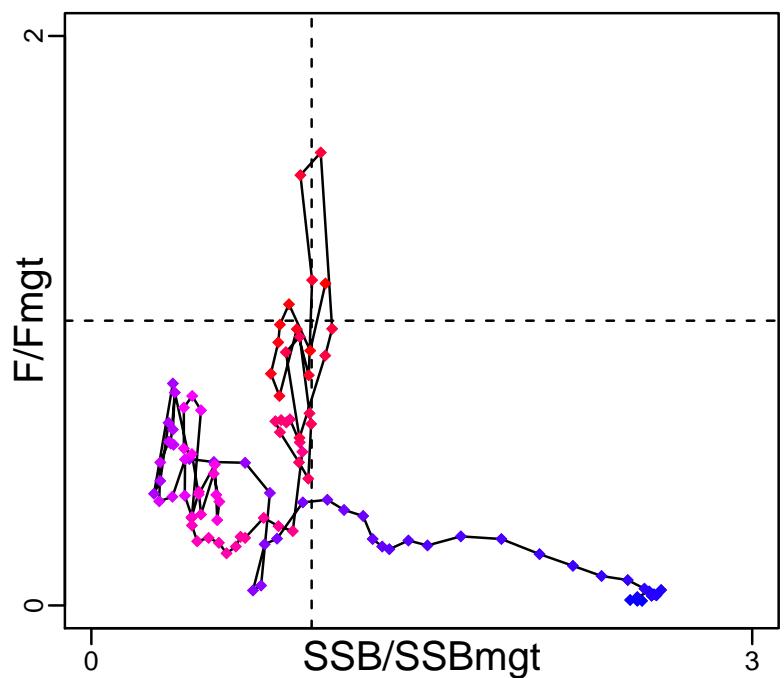
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	23,400	-	-	
<b>SSB</b>	SSB-MT	2015	9820	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$1.72 \times 10^{13}$	-	-	
<b>F</b>	F-1/yr	2015	0.853	-	-	
<b>ER</b>	ER-ratio	2015	0.14	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2015	3070			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2015	1.4			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.368			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	5.238			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2015	0.851			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.063			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.131			
<b>ER/ERmgt</b>	-	-	-			

Tiger flathead Southeast Australia [TIGERFLATSE]

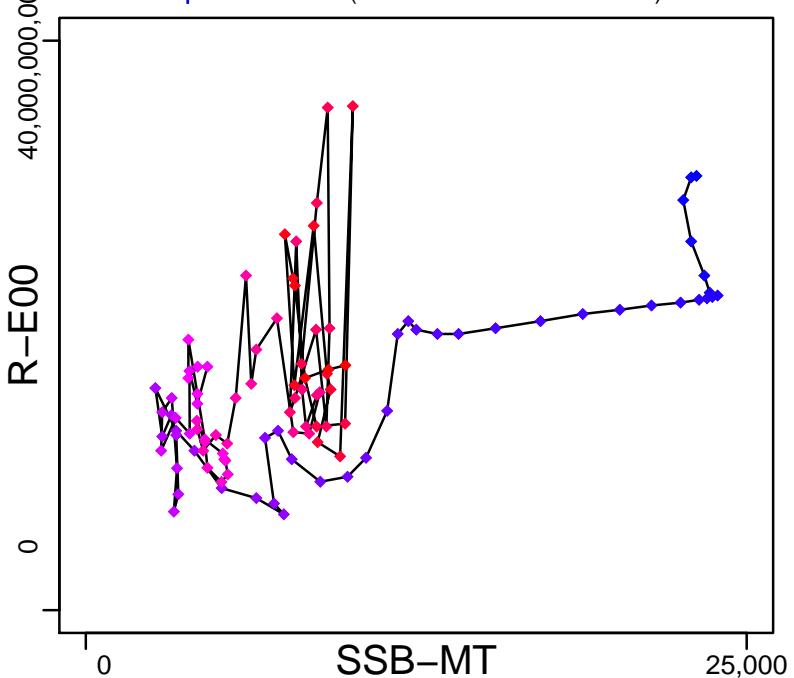
Kobe MSYpref (1915–2015–MOESENEDER)



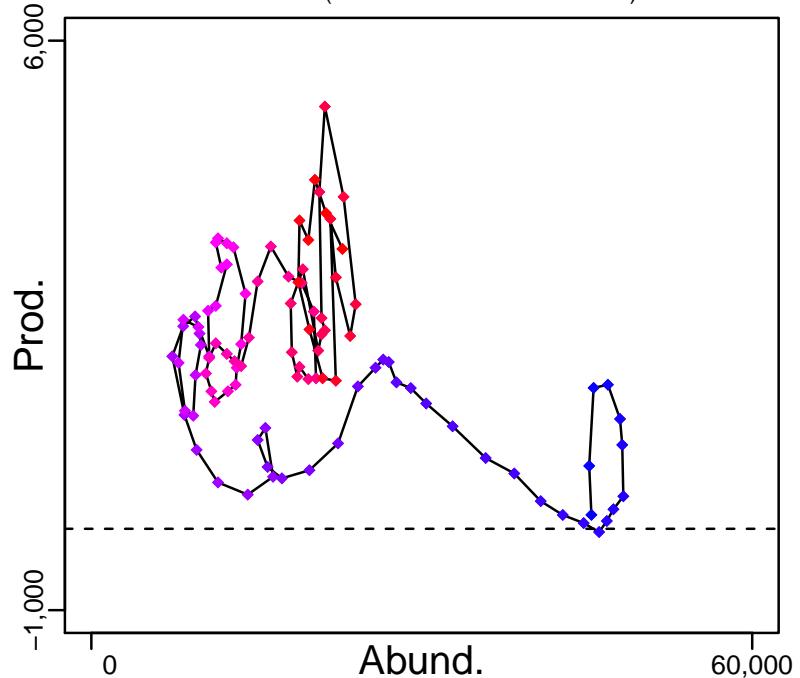
Kobe MGTpref (1915–2015–MOESENEDER)



Spawner Recruit (1915–2015–MOESENEDER)



Production (1915–2015–MOESENEDER)

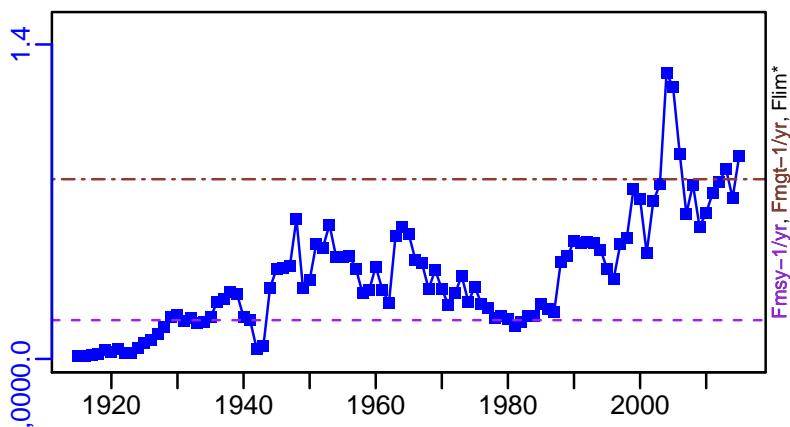
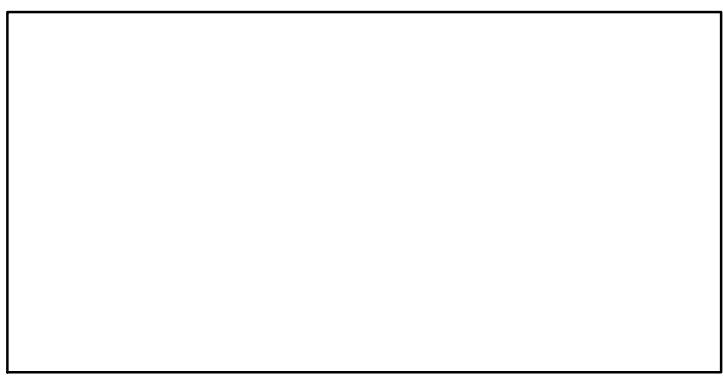
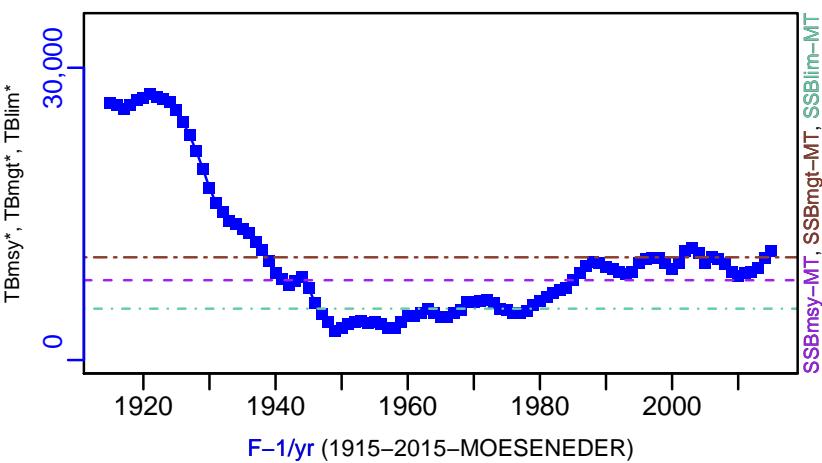
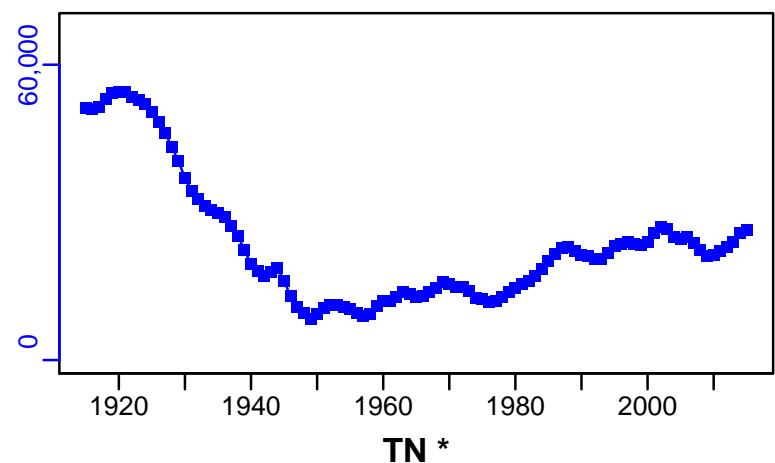


◆ Start Year ◆ End Year \* No Data

Tiger flathead Southeast Australia [TIGERFLATSE]

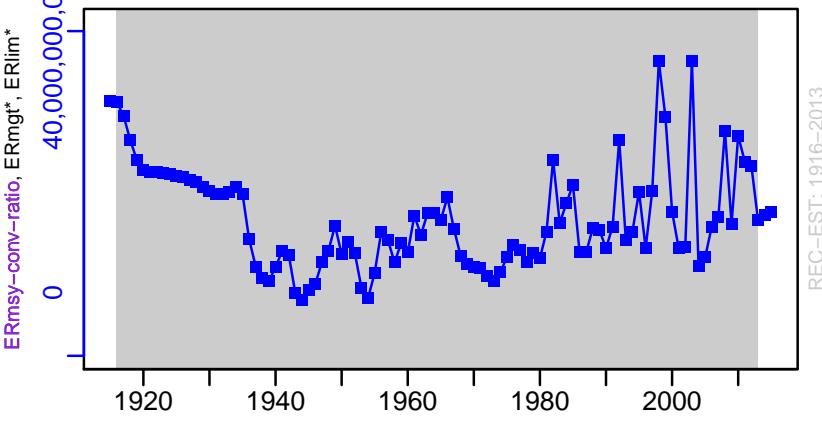
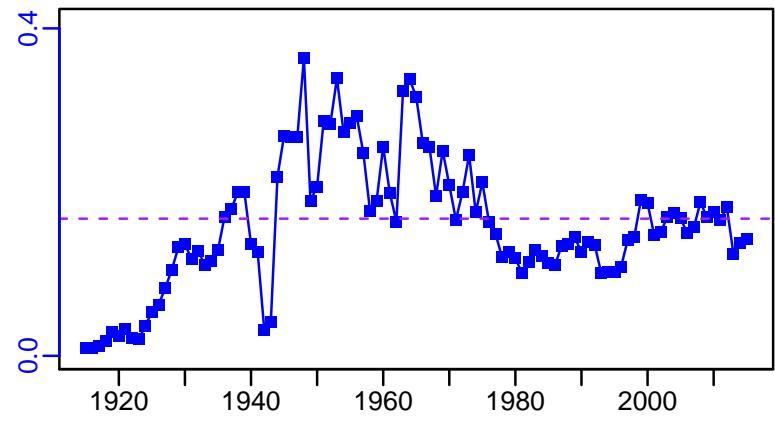
TB-MT (1915–2015–MOESENEDER)

SSB-MT (1915–2015–MOESENEDER)



ER-ratio (1915–2015–MOESENEDER)

R-E00 (1915–2015–MOESENEDER)

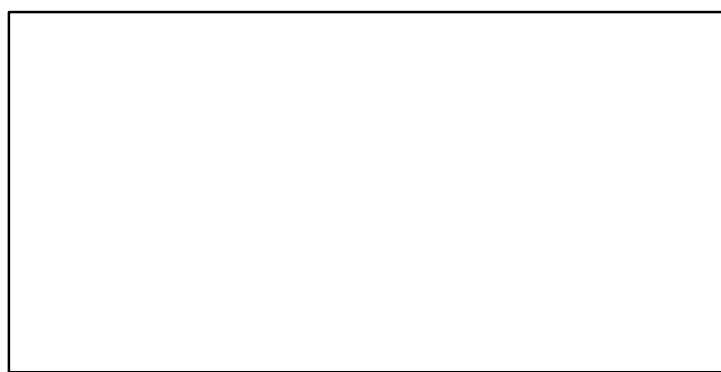
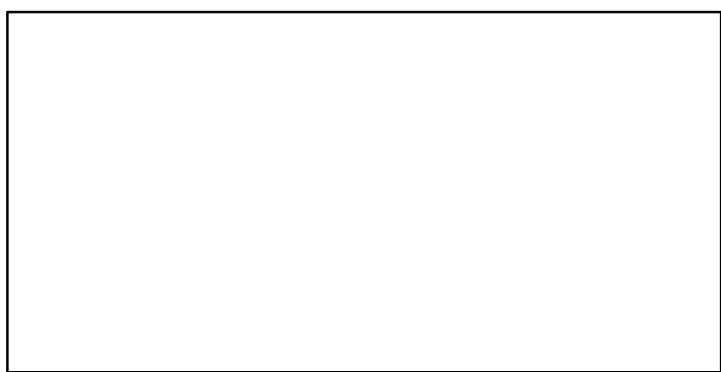
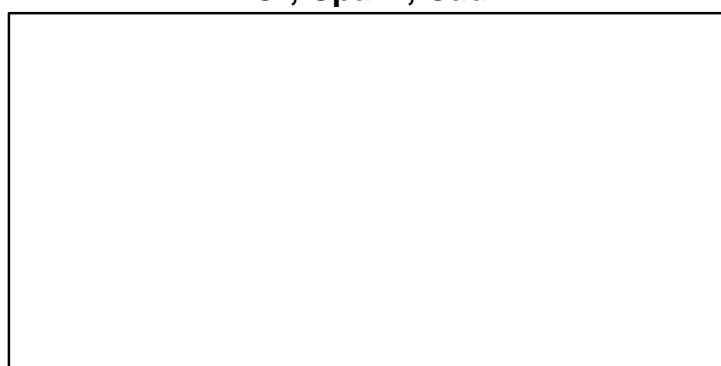
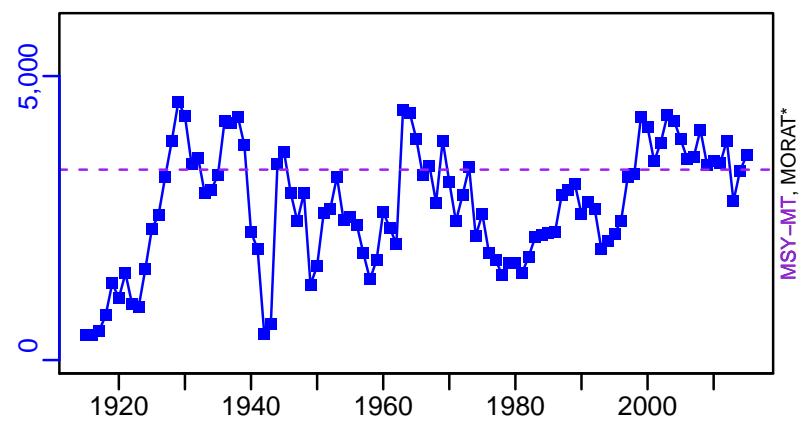


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | --- Lim BRP  | * No Data |

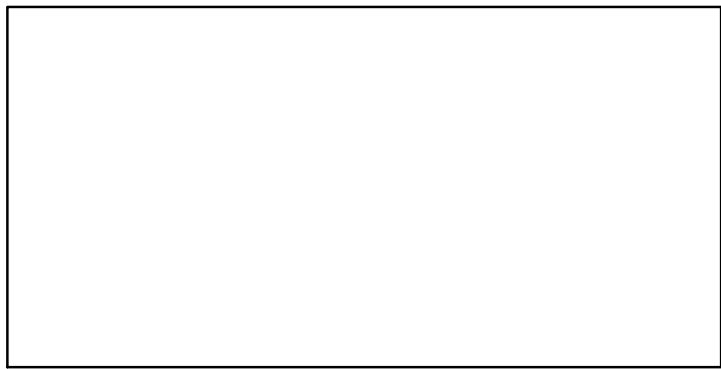
Tiger flathead Southeast Australia [TIGERFLATSE]

TL-MT, TC\*, RecC\* (1915–2015–MOESENEDER)

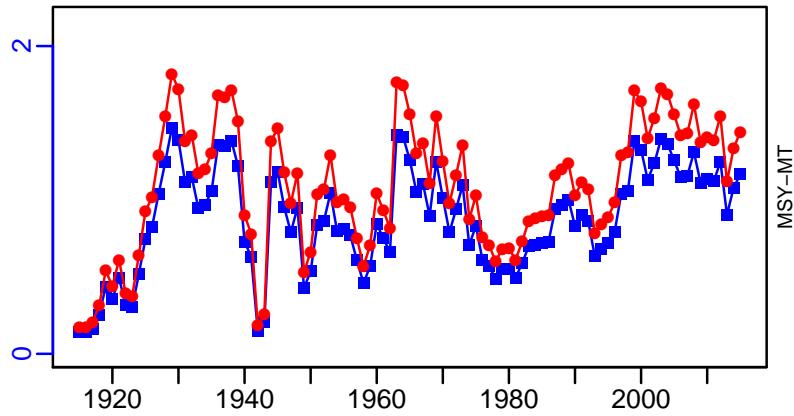
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1915–2015–MOESENEDER)



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

## Blue warehou Eastern half of Southeast Australia [WAREHOUSE]

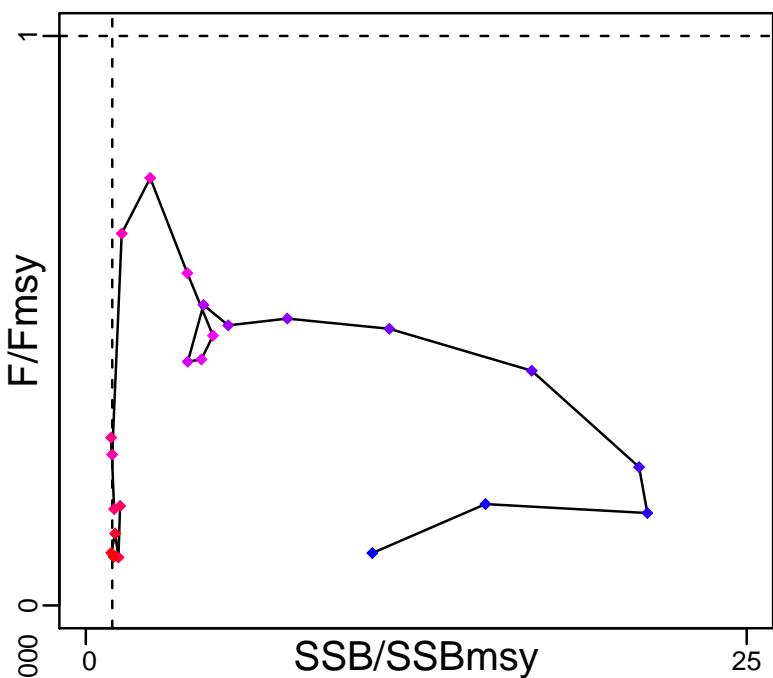
<b>Metadata</b>	
<b>Scientific Name</b>	Seriolaella brama
<b>Current Assess ID</b>	CSIRO-WAREHOUSE-1986-2008-MOESENEDER
<b>Area</b>	Eastern half of Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2006, 2008

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2008	640
<b>Fmsy</b>	Fmsy-1/yr	2008	0.502
<b>ERmsy</b>	ERmsy-ratio	2006	0.17
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2008	2135
<b>Fmgt</b>	Fmgt-1/yr	2008	0.206
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2008	6058
<b>SSB0</b>	SSB0-MT	2008	4447
<b>MSY</b>	MSY-MT	2008	967
<b>M</b>	M-1/yr	2008	0.45
<b>TBlim</b>	TBlim-MT	2006	653
<b>SSBlim</b>	SSBlim-MT	2008	889
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

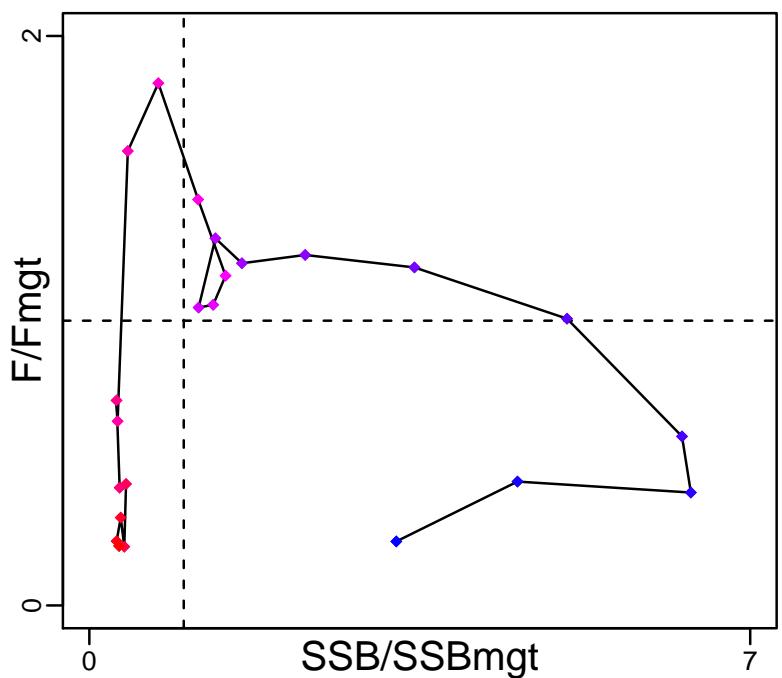
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2008	1680	-	-	
<b>SSB</b>	SSB-MT	2008	673	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2008	$5.11 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2008	0.043	-	-	
<b>ER</b>	ER-ratio	2008	0.036	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2008	59			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2008	0.754			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	1.051			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2008	0.085			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-ratio	2006	0.653			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2008	0.315			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2008	0.209			
<b>ER/ERmgt</b>	-	-	-			

**Blue warehou Eastern half of Southeast Australia [WAREHOUSE]**

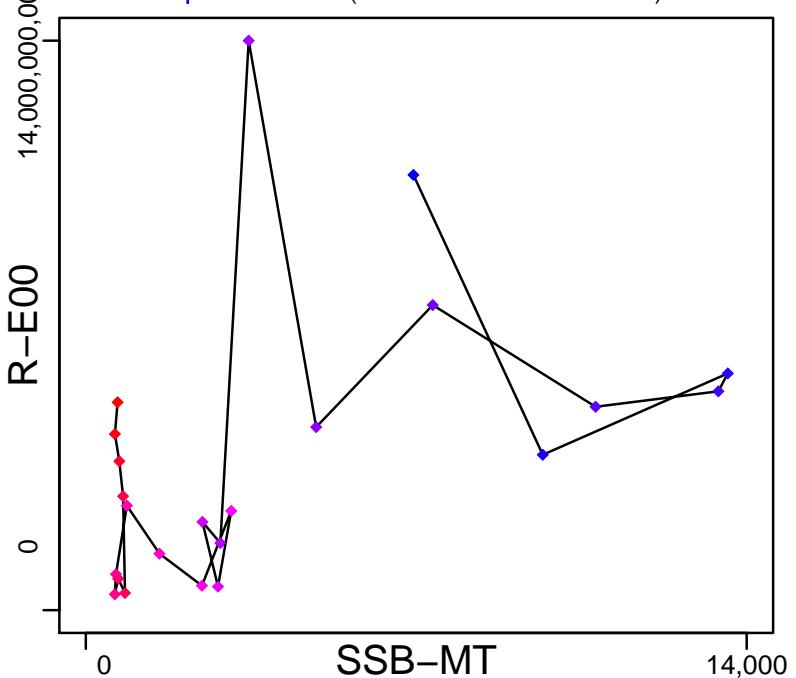
Kobe MSYpref (1986–2008–MOESENER)



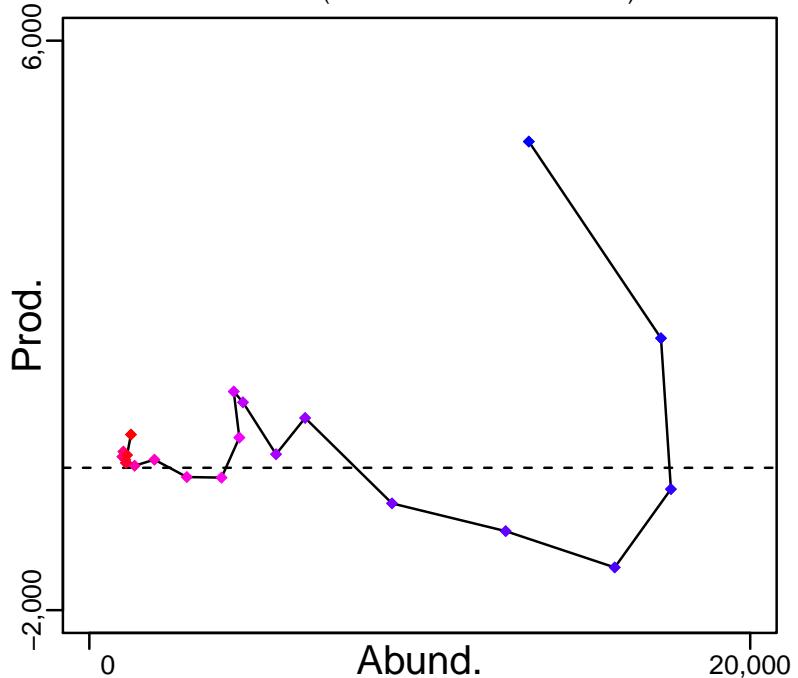
Kobe MGTpref (1986–2008–MOESENER)



Spawner Recruit (1986–2008–MOESENER)



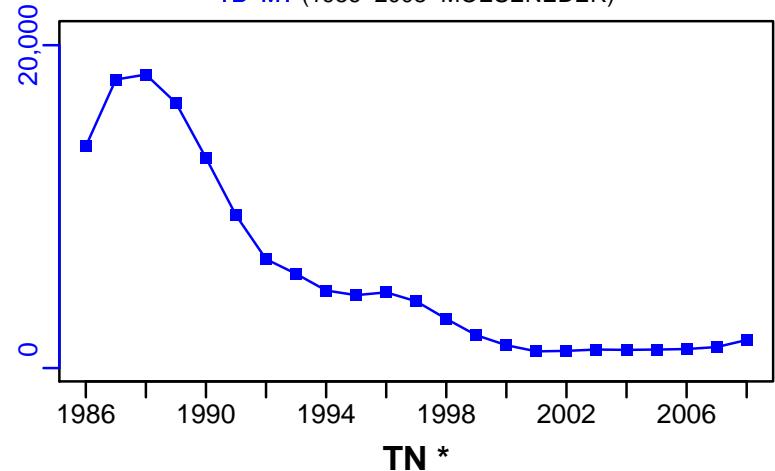
Production (1986–2008–MOESENER)



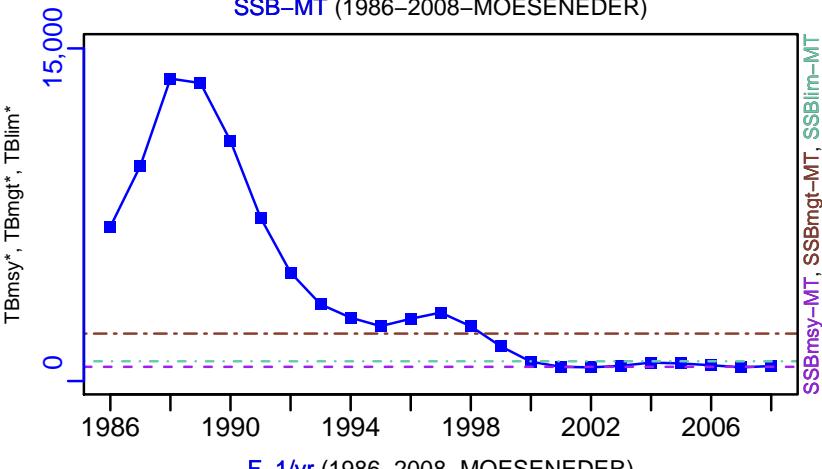
◆ Start Year ◆ End Year \* No Data

### Blue warehou Eastern half of Southeast Australia [WAREHOUSE]

**TB-MT (1986–2008–MOESENEDER)**



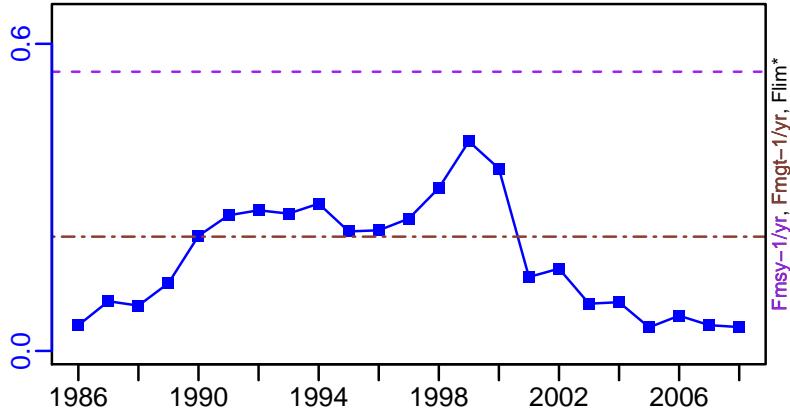
**SSB-MT (1986–2008–MOESENEDER)**



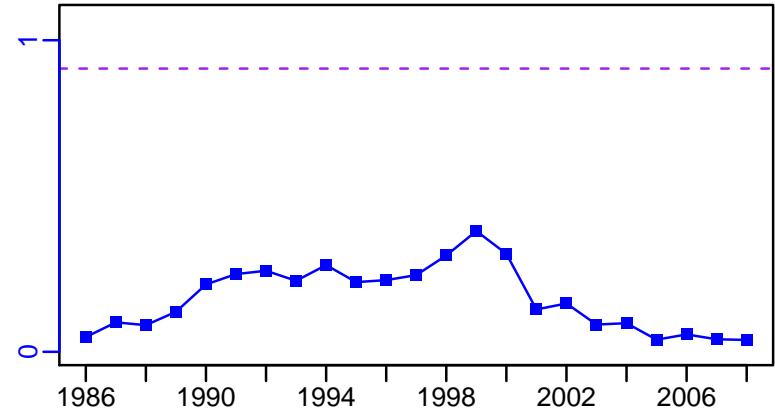
**TN \***



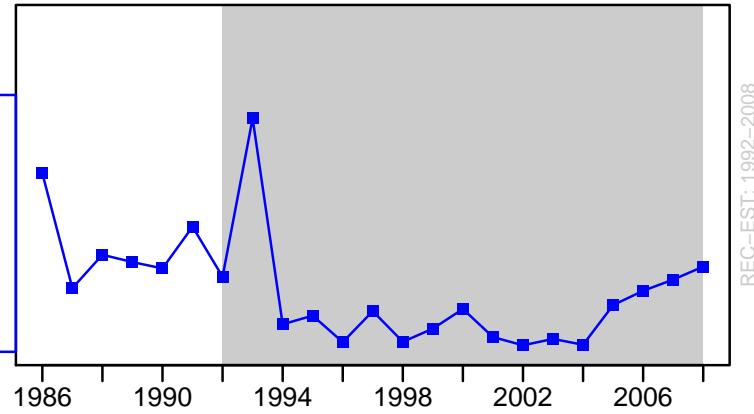
**F-1/yr (1986–2008–MOESENEDER)**



**ER-ratio (1986–2008–MOESENEDER)**



**EPmsy-conv-ratio, EPmgt\*, ERlim\***



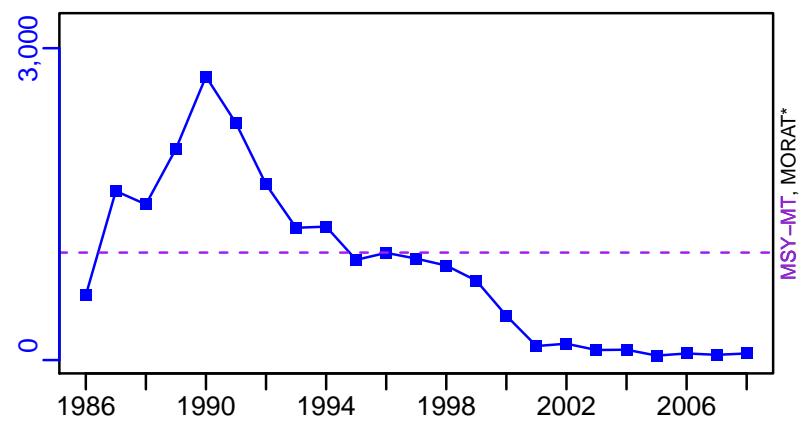
REC-EST: 1992–2008

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

Blue warehou Eastern half of Southeast Australia [WAREHOUSE]

TL-MT, TC\*, RecC\* (1986–2008–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



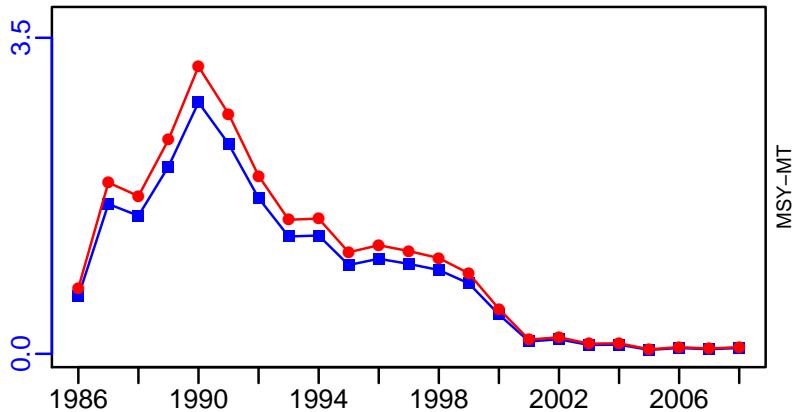
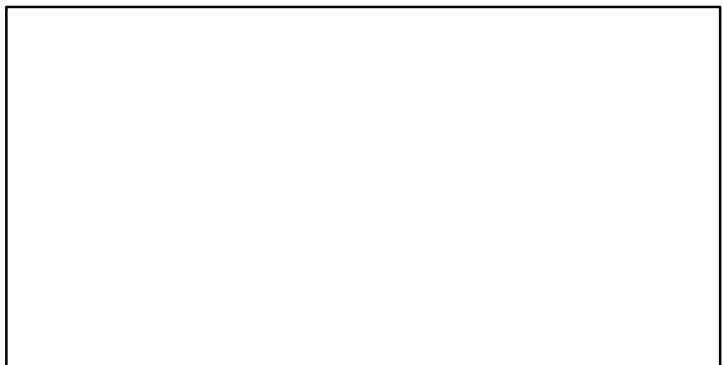
survB\*

MSY-MT, MORAT\*

CPUE\*

EFFORT\*

TL-MT/MSY-MT, CdivMEANC-ratio, (1986–2008–MOESENEDER)



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

## Blue warehou Western half of Southeast Australia [WAREHOUWSE]

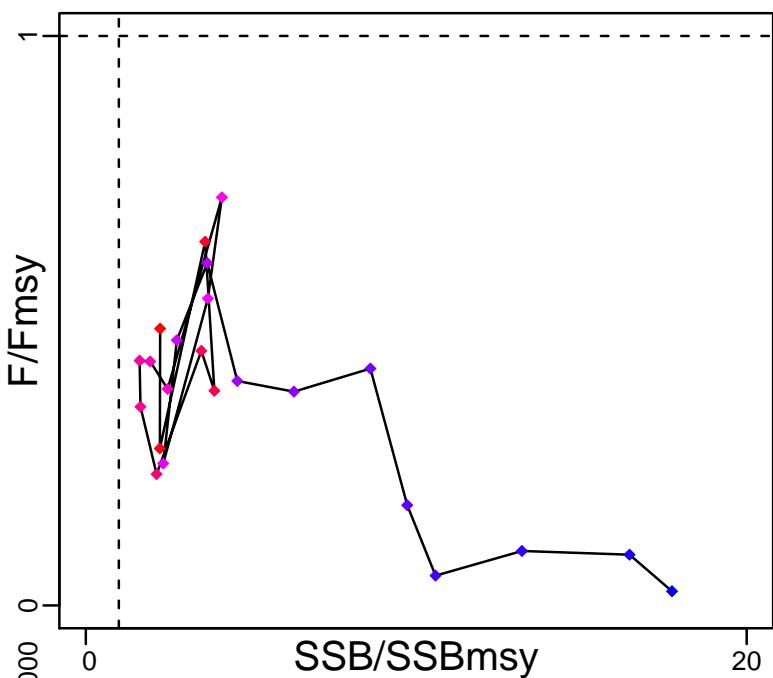
<b>Metadata</b>	
<b>Scientific Name</b>	Seriolaella brama
<b>Current Assess ID</b>	CSIRO-WAREHOUWSE-1986-2008-MOESENEDER
<b>Area</b>	Western half of Southeast Australia
<b>Management Authority</b>	Australian Fisheries Management Authority, Australia national management
<b>Assessor</b>	Commonwealth Scientific and Industrial Research Organization
<b>Asmts in RAM</b>	2006, 2008

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2008	233
<b>Fmsy</b>	Fmsy-1/yr	2008	0.642
<b>ERmsy</b>	ERmsy-conv-ratio	2008	2.11
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2008	1423
<b>Fmgt</b>	Fmgt-1/yr	2008	0.197
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2008	4423
<b>SSB0</b>	SSB0-MT	2008	2964
<b>MSY</b>	MSY-MT	2008	867
<b>M</b>	M-1/yr	2008	0.45
<b>TBlim</b>	TBlim-MT	2006	653
<b>SSBlim</b>	SSBlim-MT	2008	593
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

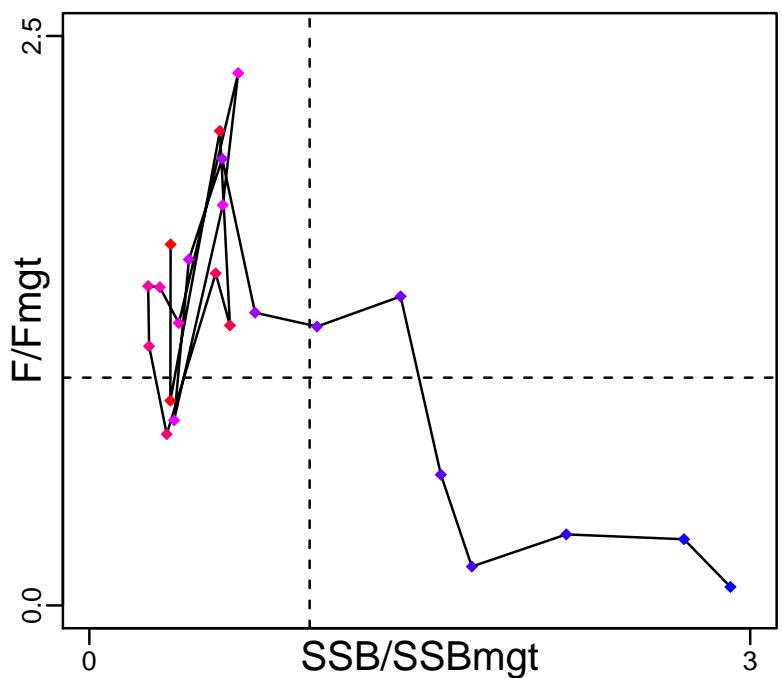
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2008	1430	-	-	
<b>SSB</b>	SSB-MT	2008	525	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2008	$4.15 \times 10^{12}$	-	-	
<b>F</b>	F-1/yr	2008	0.312	-	-	
<b>ER</b>	ER-ratio	2008	0.265	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2008	379			
<b>TB/TBmsy</b>	TB-MT/(TB0-MT*0.368)	2008	0.879			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	2.25			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2008	0.486			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-conv-ratio	2008	0.126			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2008	0.369			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2008	1.585			
<b>ER/ERmgt</b>	-	-	-			

**Blue warehou Western half of Southeast Australia [WAREHOUWSE]**

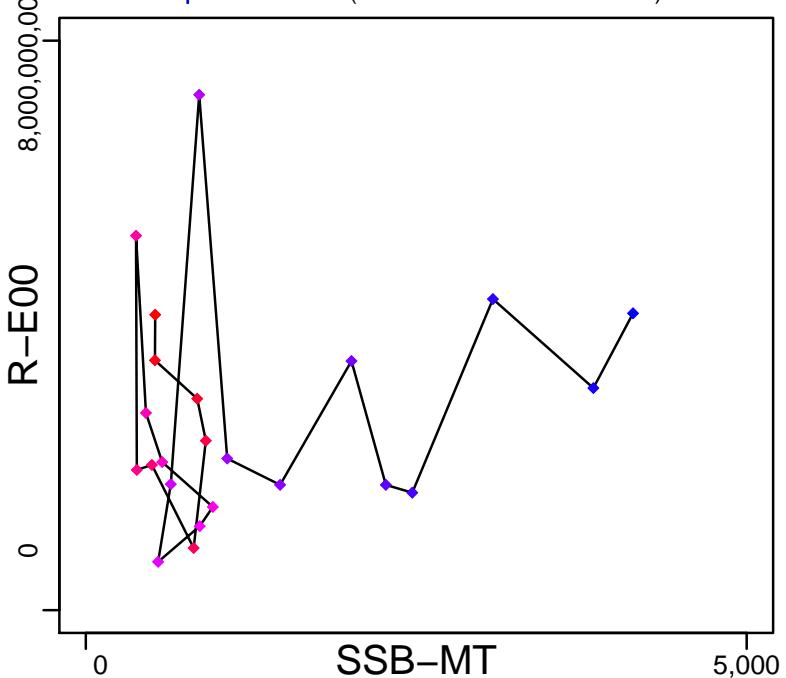
Kobe MSYpref (1986–2008–MOESENEDER)



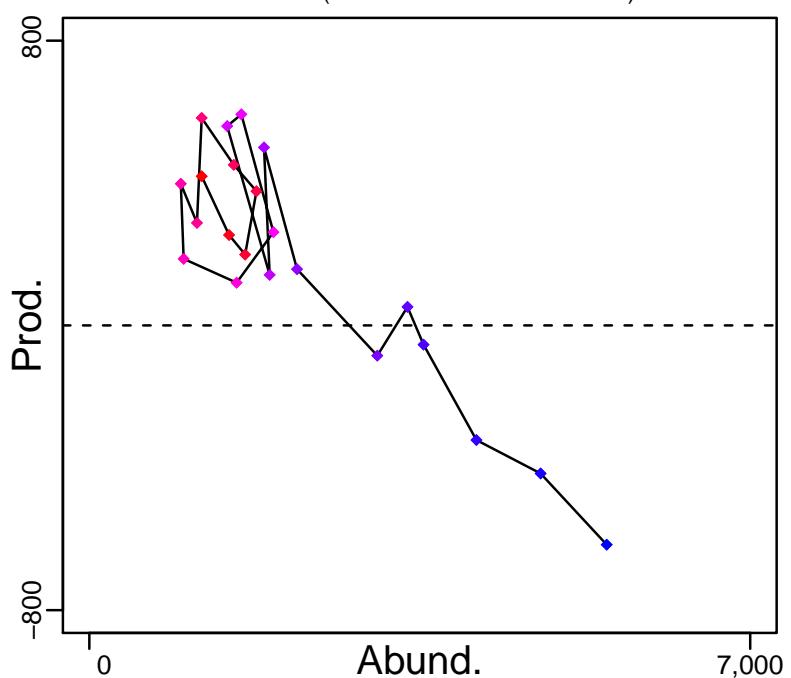
Kobe MGTpref (1986–2008–MOESENEDER)



Spawner Recruit (1986–2008–MOESENEDER)



Production (1986–2008–MOESENEDER)

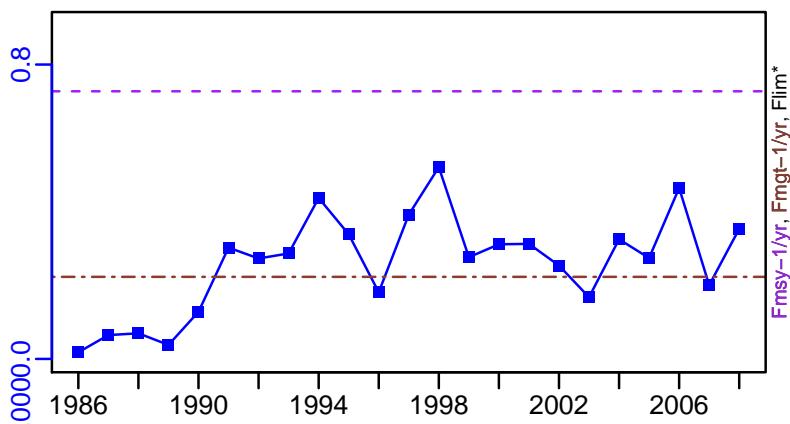
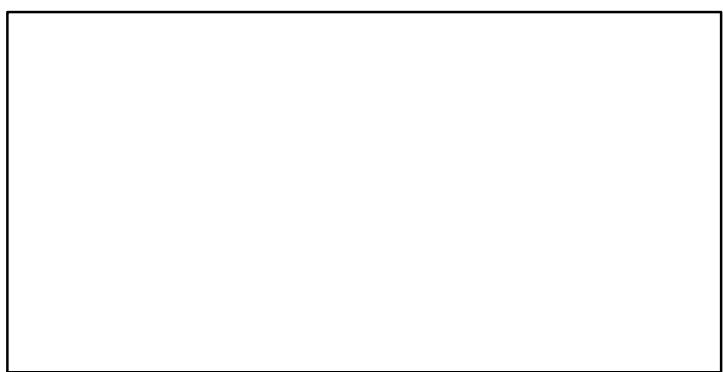
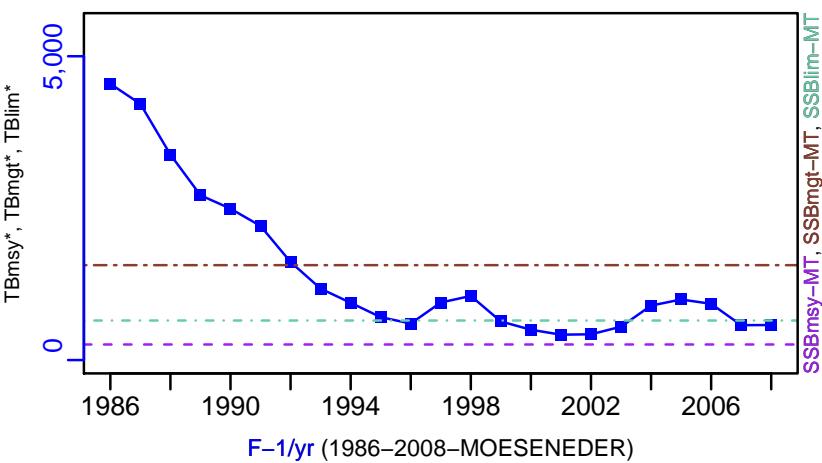
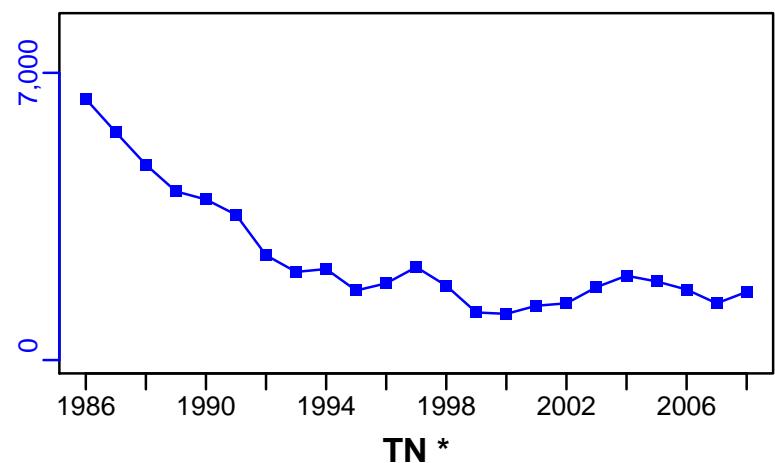


◆ Start Year   ◆ End Year   \* No Data

### Blue warehou Western half of Southeast Australia [WAREHOUWSE]

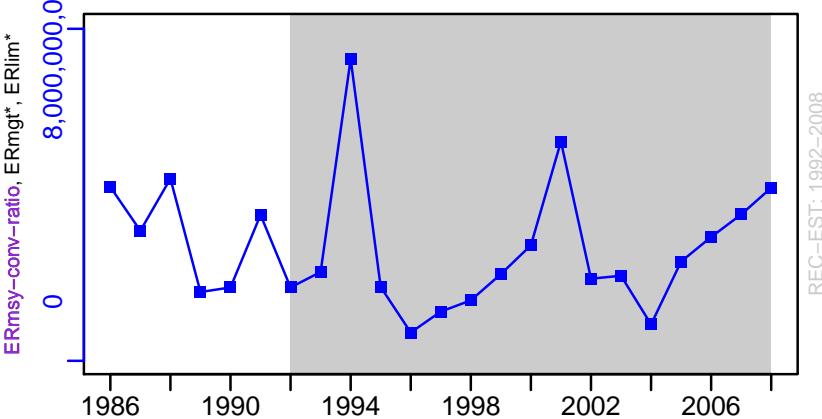
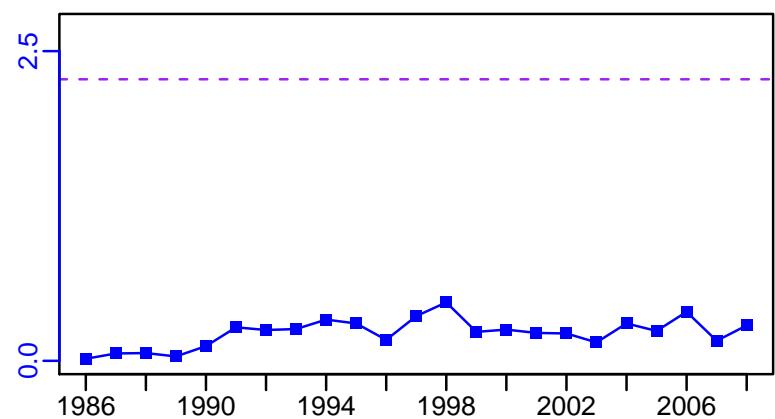
TB-MT (1986–2008–MOESENEDER)

SSB-MT (1986–2008–MOESENEDER)



ER-ratio (1986–2008–MOESENEDER)

R-E00 (1986–2008–MOESENEDER)

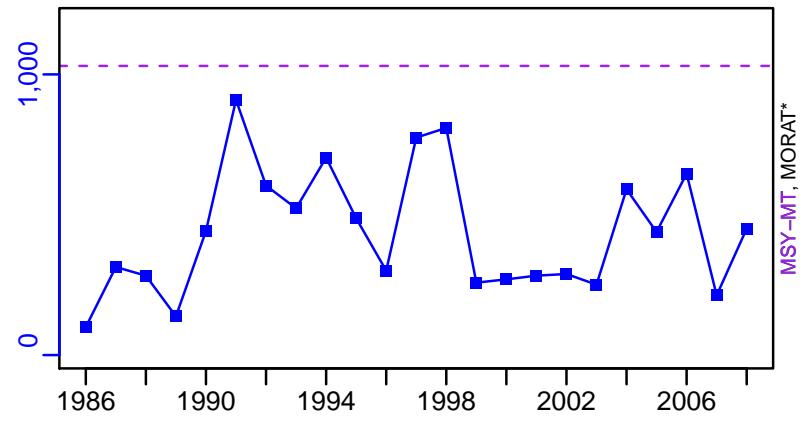


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

**Blue warehou Western half of Southeast Australia [WAREHOUWSE]**

TL-MT, TC\*, RecC\* (1986–2008–MOESENEDER)

TAC\*, Cpair\*, Cadv\*



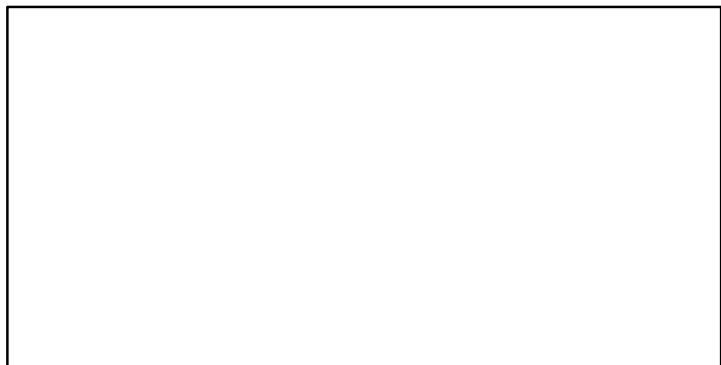
**survB\***



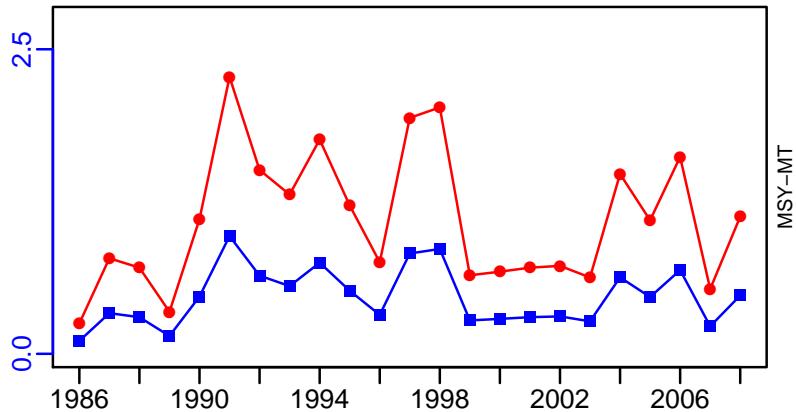
**CPUE\***



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC–ratio, (1986–2008–MOESENEDER)



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