

# Mediterranean-Black Sea Stocks

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

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgmt
1. ALBAMED [Albacore tuna Mediterranean Sea]	TB SSB	ER F	TB SSB	ER F
2. ANCHMEDGSA1 [Anchovy Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
3. ANCHMEDGSA16 [Anchovy South of Sicily]	TB SSB	ER F	TB SSB	ER F
4. ANCHMEDGSA17-18 [Anchovy Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F
5. ANCHMEDGSA19 [Anchovy Western Ionian Sea]	TB SSB	ER F	TB SSB	ER F
6. ANCHMEDGSA20 [Anchovy Eastern Ionian Sea]	TB SSB	ER F	TB SSB	ER F
7. ANCHMEDGSA22 [Anchovy Aegean Sea]	TB SSB	ER F	TB SSB	ER F
8. ANCHMEDGSA29 [Anchovy Black Sea]	TB SSB	ER F	TB SSB	ER F
9. ANCHMEDGSA6 [Anchovy Northern Spain]	TB SSB	ER F	TB SSB	ER F
10. ANCHMEDGSA7 [Anchovy Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
11. ANCHMEDGSA9 [Anchovy Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
12. ANGLMEDGSA15-16 [Black bellied angler Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
13. ANGLMEDGSA5 [Black bellied angler Balearic Island]	TB SSB	ER F	TB SSB	ER F
14. ANGLMEDGSA6 [Black bellied angler Northern Spain]	TB SSB	ER F	TB SSB	ER F
15. ANGLMEDGSA7 [Black bellied angler Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
16. BWHITMEDGSA1 [Blue whiting Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
17. BWHITMEDGSA6 [Blue whiting Northern Spain]	TB SSB	ER F	TB SSB	ER F
18. BWHITMEDGSA9 [Blue whiting Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
19. CPANDMEDGSA15-16 [Common pandora Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
20. CPANDMEDGSA9 [Common pandora Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
21. EBASSGSA7 [European seabass Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
22. GFORKBKMEDGSA9 [Greater forkbeard Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
23. GHBRMGSA7 [Gilthead seabream Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
24. GRSHRIMP MEDGSA10 [Giant red shrimp South Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
25. GRSHRIMP MEDGSA11 [Giant red shrimp Sardinia]	TB SSB	ER F	TB SSB	ER F
26. GRSHRIMP MEDGSA12-16 [Giant red shrimp Geographical Sub-Areas 12-16]	TB SSB	ER F	TB SSB	ER F
27. GRSHRIMP MEDGSA18-19 [Giant red shrimp South Adriatic Sea and West Ionian Sea (GSA 18,19)]	TB SSB	ER F	TB SSB	ER F
28. GRSHRIMP MEDGSA9 [Giant red shrimp Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
29. HAKEMEDGSA15-16 [Hake Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
30. HAKEMEDGSA1-7 [Hake Geographical Sub-Areas 1-7]	TB SSB	ER F	TB SSB	ER F
31. HAKEMEDGSA17-18 [Hake Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F
32. HAKEMEDGSA19 [Hake Western Ionian Sea]	TB SSB	ER F	TB SSB	ER F

33. HAKEMEDGSA20 [Hake Eastern Ionian Sea]	TB SSB	ER F	TB SSB	ER F
34. HAKEMEDGSA22-23 [Hake Aegean Sea and Crete Island (GSA 22,23)]	TB SSB	ER F	TB SSB	ER F
35. HAKEMEDGSA7 [Hake Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
36. HAKEMEDGSA9-11 [Hake Geographical Sub-Areas 9-11]	TB SSB	ER F	TB SSB	ER F
37. MHMACKMEDGSA29 [Mediterranean horse mackerel Black Sea]	TB SSB	ER F	TB SSB	ER F
38. NEPHMEDGSA1 [Norway lobster Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
39. NEPHMEDGSA11 [Norway lobster Sardinia]	TB SSB	ER F	TB SSB	ER F
40. NEPHMEDGSA15-16 [Norway lobster Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
41. NEPHMEDGSA17-18 [Norway lobster Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F
42. NEPHMEDGSA5 [Norway lobster Balearic Island]	TB SSB	ER F	TB SSB	ER F
43. NEPHMEDGSA6 [Norway lobster Northern Spain]	TB SSB	ER F	TB SSB	ER F
44. NEPHMEDGSA9 [Norway lobster Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
45. PICAMEDGSA25 [Picarel Cyprus Island]	TB SSB	ER F	TB SSB	ER F
46. PRCODMEDGSA9 [Poor cod Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
47. PSHRMPMEDGSA6 [Deep water rose shrimp Northern Spain]	TB SSB	ER F	TB SSB	ER F
48. RBRMMEDGSA1-3 [Red seabream Alboran Island Sea (GSA 1,3)]	TB SSB	ER F	TB SSB	ER F
49. RDSHRMPMEDGSA1 [Red shrimp Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
50. RDSHRMPMEDGSA10 [Red shrimp South Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
51. RDSHRMPMEDGSA15-16 [Red shrimp Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
52. RDSHRMPMEDGSA6 [Red shrimp Northern Spain]	TB SSB	ER F	TB SSB	ER F
53. RMULLMEDGSA1 [Red mullet Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
54. RMULLMEDGSA10 [Red mullet South Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
55. RMULLMEDGSA11 [Red mullet Sardinia]	TB SSB	ER F	TB SSB	ER F
56. RMULLMEDGSA15-16 [Red mullet Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
57. RMULLMEDGSA17-18 [Red mullet Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F
58. RMULLMEDGSA19 [Red mullet Western Ionian Sea]	TB SSB	ER F	TB SSB	ER F
59. RMULLMEDGSA25 [Red mullet Cyprus Island]	TB SSB	ER F	TB SSB	ER F
60. RMULLMEDGSA29 [Red mullet Black Sea]	TB SSB	ER F	TB SSB	ER F
61. RMULLMEDGSA5 [Red mullet Balearic Island]	TB SSB	ER F	TB SSB	ER F
62. RMULLMEDGSA6 [Red mullet Northern Spain]	TB SSB	ER F	TB SSB	ER F
63. RMULLMEDGSA7 [Red mullet Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
64. RMULLMEDGSA9 [Red mullet Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
65. RSHRMPMEDGSA1 [Deep water rose shrimp Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
66. RSHRMPMEDGSA12-16 [Deep water rose shrimp Geographical Sub-Areas 12-16]	TB SSB	ER F	TB SSB	ER F
67. RSHRMPMEDGSA17-19 [Deep water rose shrimp Geographical Sub-Areas 17-19]	TB SSB	ER F	TB SSB	ER F
68. RSHRMPMEDGSA5 [Deep water rose shrimp Balearic Island]	TB SSB	ER F	TB SSB	ER F
69. RSHRMPMEDGSA9-11 [Deep water rose shrimp Geographical Sub-Areas 9-11]	TB SSB	ER F	TB SSB	ER F
70. SARDMEDGSA1 [European pilchard Northern Alboran Sea]	TB SSB	ER F	TB SSB	ER F
71. SARDMEDGSA16 [Sardine South of Sicily]	TB SSB	ER F	TB SSB	ER F
72. SARDMEDGSA17-18 [Sardine Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F

73. SARDMEDGSA20 [European pilchard Eastern Ionian Sea]	TB SSB	ER F	TB SSB	ER F
74. SARDMEDGSA22 [European pilchard Aegean Sea]	TB SSB	ER F	TB SSB	ER F
75. SARDMEDGSA6 [European pilchard Northern Spain]	TB SSB	ER F	TB SSB	ER F
76. SARDMEDGSA7 [Sardine Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
77. SARDMEDGSA9 [European pilchard Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
78. SDOGBLKGS29 [Spiny dogfish Black Sea]	TB SSB	ER F	TB SSB	ER F
79. SMSHRMPMEDGSA10 [Spottail mantis shrimp South Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
80. SMSHRMPMEDGSA17-18 [Spottail mantis shrimp Adriatic Sea (GSA 17,18)]	TB SSB	ER F	TB SSB	ER F
81. SMSHRMPMEDGSA9 [Spottail mantis shrimp Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
82. SMULLMEDGSA15-16 [Surmullet Malta Island and South of Sicily (GSA 15, 16)]	TB SSB	ER F	TB SSB	ER F
83. SMULLMEDGSA5 [Surmullet Balearic Island]	TB SSB	ER F	TB SSB	ER F
84. SMULLMEDGSA9 [Surmullet Ligurian and North Tyrrhenian Sea]	TB SSB	ER F	TB SSB	ER F
85. SOLMEDGSA17 [Common sole Northern Adriatic Sea]	TB SSB	ER F	TB SSB	ER F
86. SOLMEDGSA7 [Common sole Gulf of Lions]	TB SSB	ER F	TB SSB	ER F
87. SPRBLKGSA29 [Sprat Black Sea]	TB SSB	ER F	TB SSB	ER F
88. SWORDEM [Swordfish Mediterranean Sea]	TB SSB	ER F	TB SSB	ER F
89. TBSKAMEDGSA29 [Thornback skate Black Sea]	TB SSB	ER F	TB SSB	ER F
90. TURBLKGSA29 [Turbot Black Sea]	TB SSB	ER F	TB SSB	ER F
91. WANGLGS1-7 [White anglerfish Geographical Sub-Areas 1-7]	TB SSB	ER F	TB SSB	ER F
92. WHITMEDGSA29 [Whiting Black Sea]	TB SSB	ER F	TB SSB	ER F

## Albacore tuna Mediterranean Sea [ALBAMED]

<b>Metadata</b>	
<b>Scientific Name</b>	Thunnus alalunga
<b>Current Assess ID</b>	ICCAT-ALBAMED-1951-2016-PONS
<b>Area</b>	Mediterranean Sea
<b>Management Authority</b>	International Commission for the Conservation of Atlantic Tunas
<b>Assessor</b>	International Commission for the Conservation of Atlantic Tunas
<b>Asmts in RAM</b>	2016, 2011

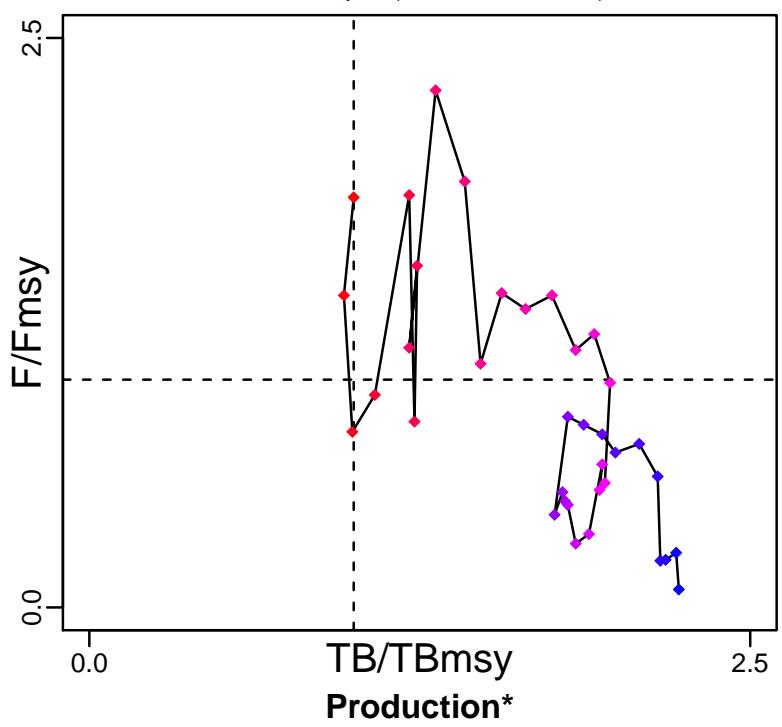
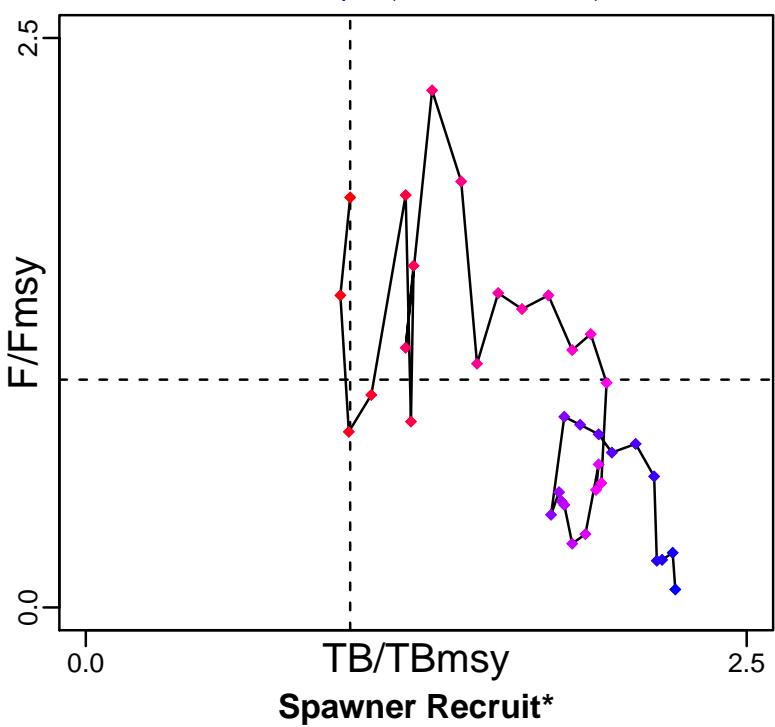
<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-extr-MT	2011	167,158
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2011	0.173
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2011	322,000
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2011	28,900
<b>M</b>	-	-	-
<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	2011	319,000	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2011	0.007	-	-	
<b>TC</b>	TC-MT	2011	2120			
<b>TL</b>	TL-MT	2016	3520			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2016	1			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	1.8			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2011	0.039			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Albacore tuna Mediterranean Sea [ALBAMED]

Kobe MSYpref (1951–2016–PONS)

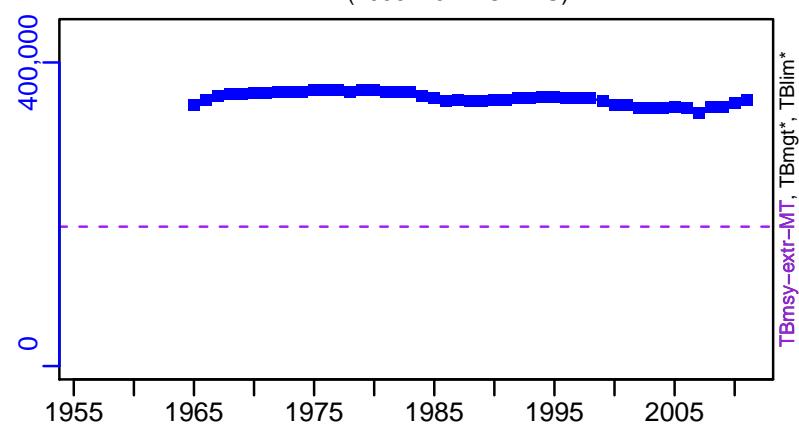
Kobe MGTPref (1951–2016–PONS)



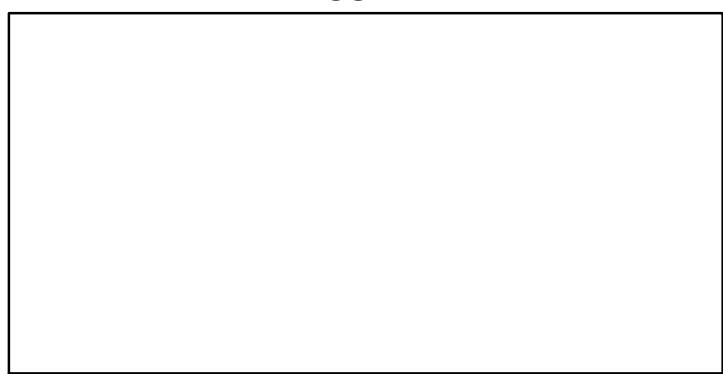
◆ Start Year	◆ End Year	*	No Data
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Albacore tuna Mediterranean Sea [ALBAMED]

TB-MT (1956–2011-CHING)



SSB\*



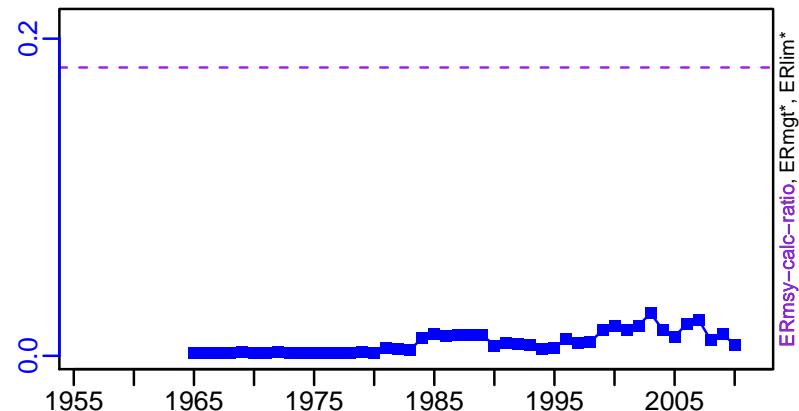
TN \*



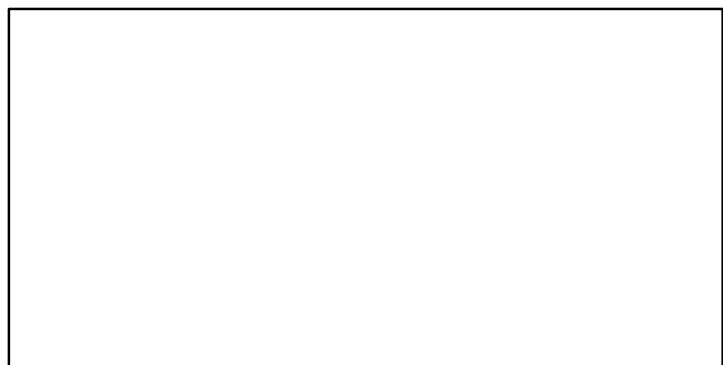
F\*



ER-calc-ratio (1956–2011-CHING)



Recruits\*

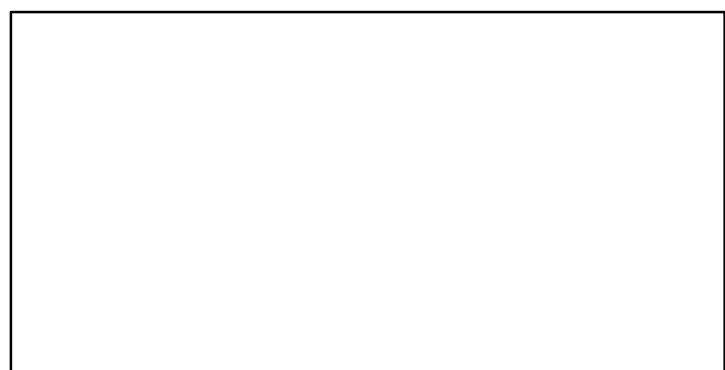
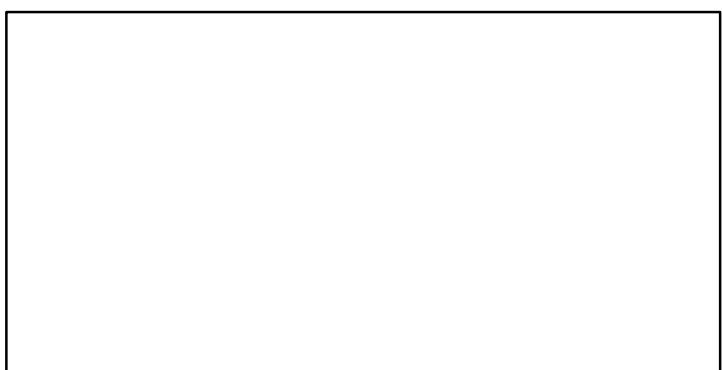
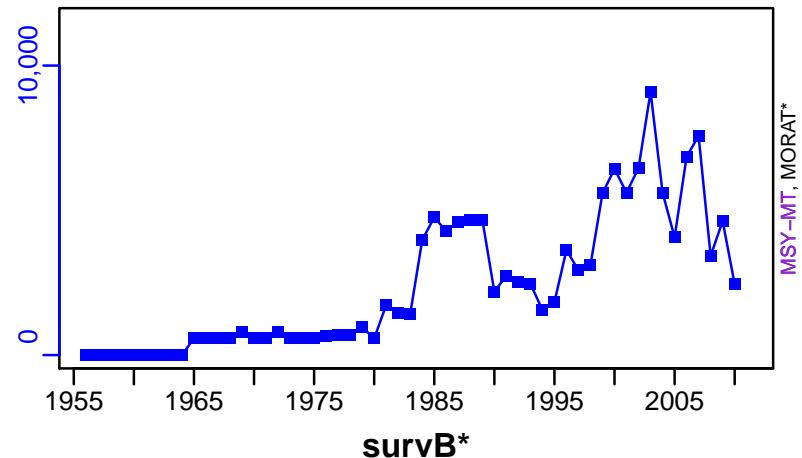


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | ··· Lim BRP  | * No Data |

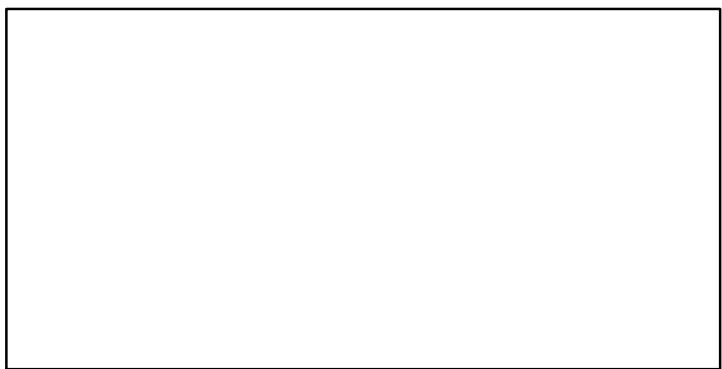
Albacore tuna Mediterranean Sea [ALBAMED]

TC-MT, TL\*, RecC\* (1956–2011-CHING)

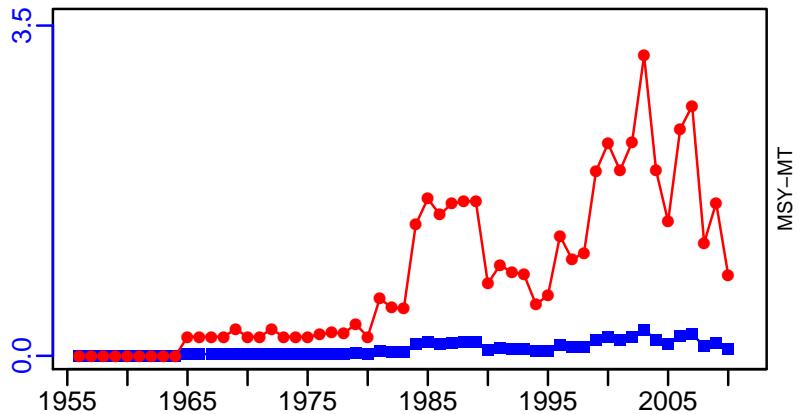
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1956–2011-CHING)



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

## Anchovy Northern Alboran Sea [ANCHMEDGSA1]

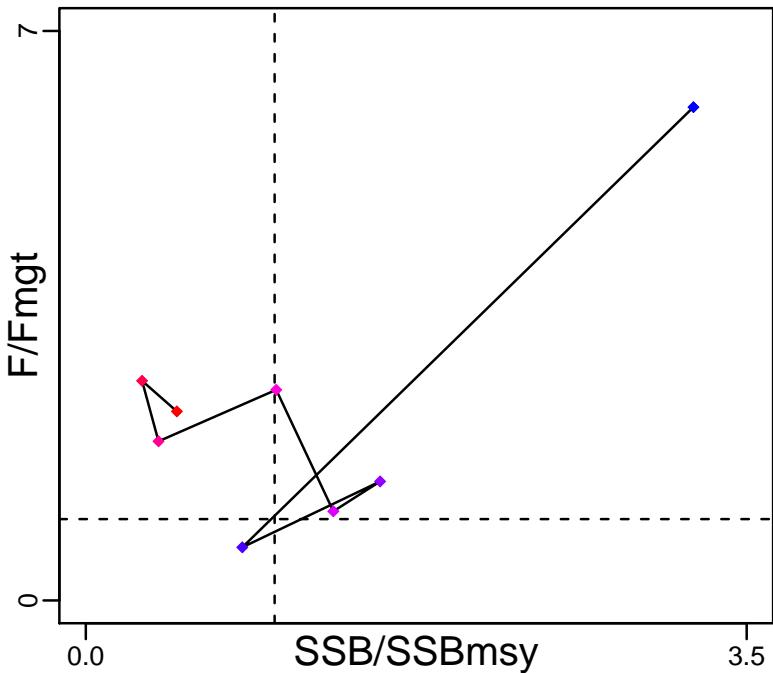
<b>Metadata</b>	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA1-2002-2009-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2009

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2009	1091
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2009	0.202
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2009	0.452
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2009	354
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

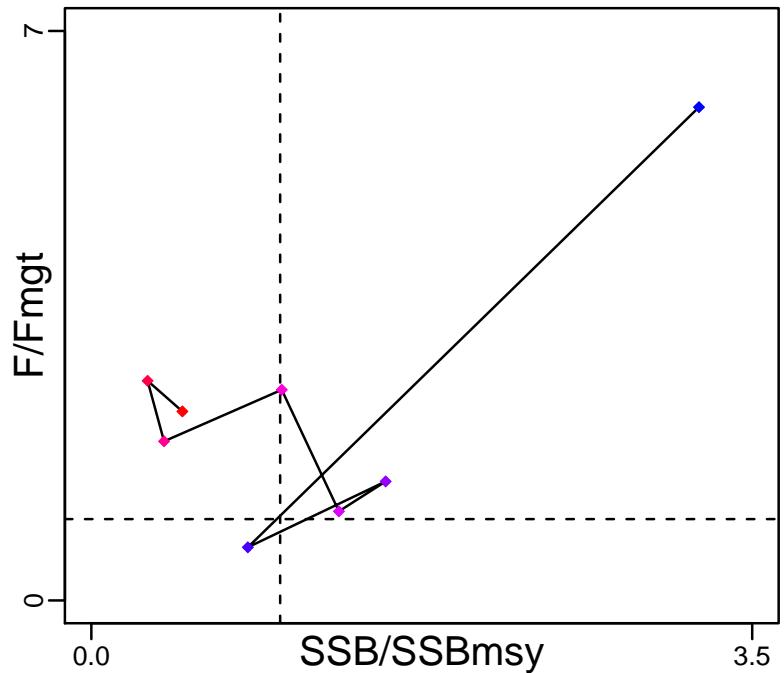
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2009	526	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2009	$1.56 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2009	1.05	-	-	
<b>ER</b>	ER-calc-ratio	2009	0.345	-	-	
<b>TC</b>	TC-MT	2009	292			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2009	0.482			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2009	1.708			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2009	2.324			
<b>ER/ERmgt</b>	-	-	-			

### Anchovy Northern Alboran Sea [ANCHMEDGSA1]

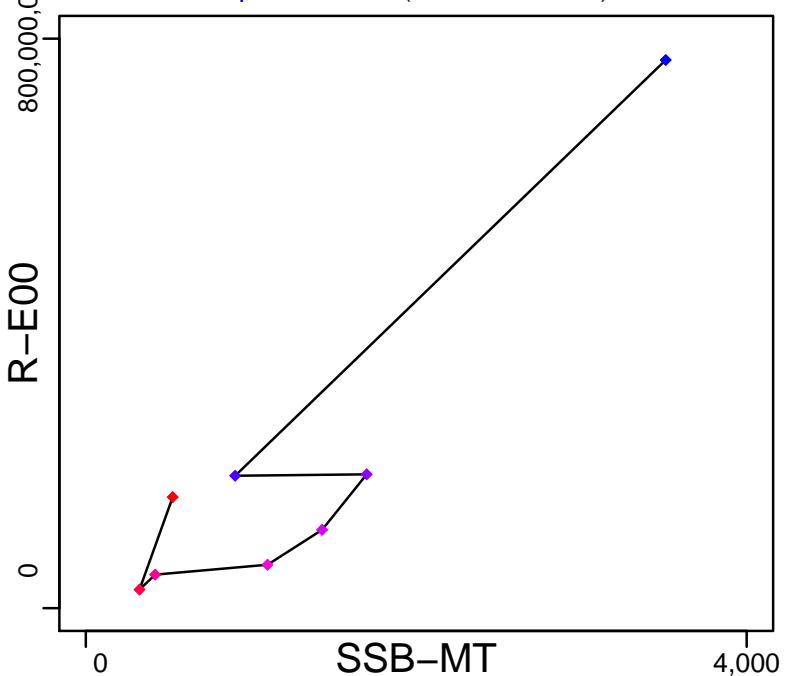
Kobe MSYpref (2002–2009–OSIO)



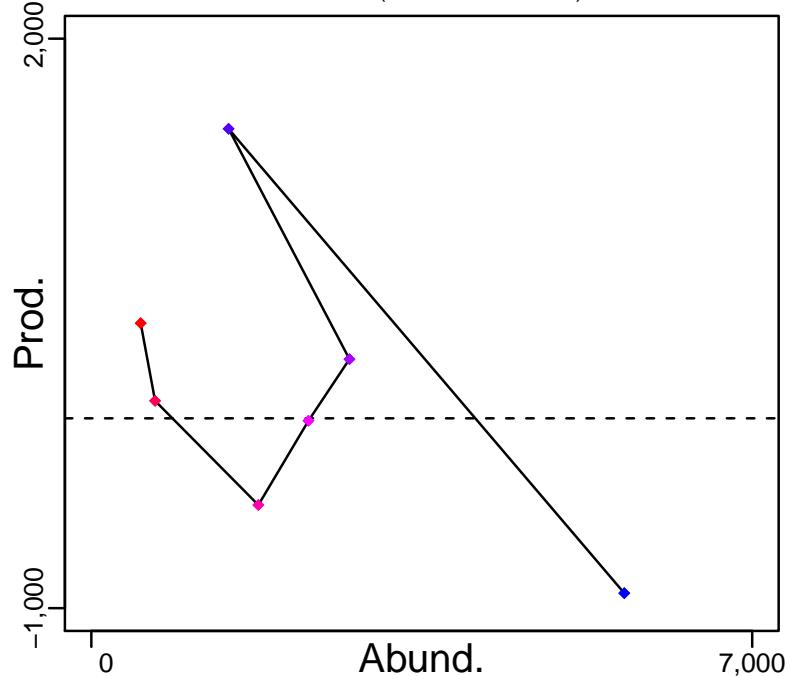
Kobe MGTpref (2002–2009–OSIO)



Spawner Recruit (2002–2009–OSIO)



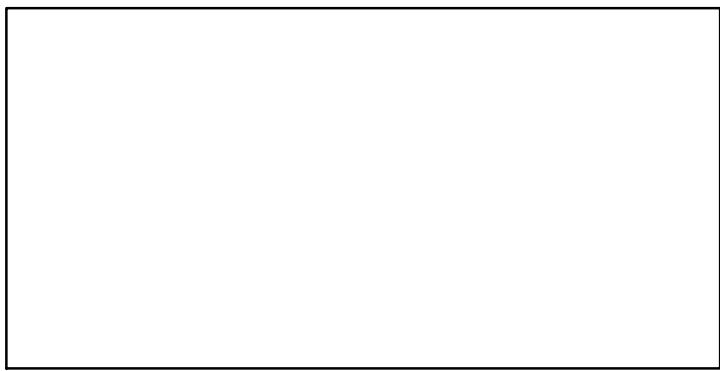
Production (2002–2009–OSIO)



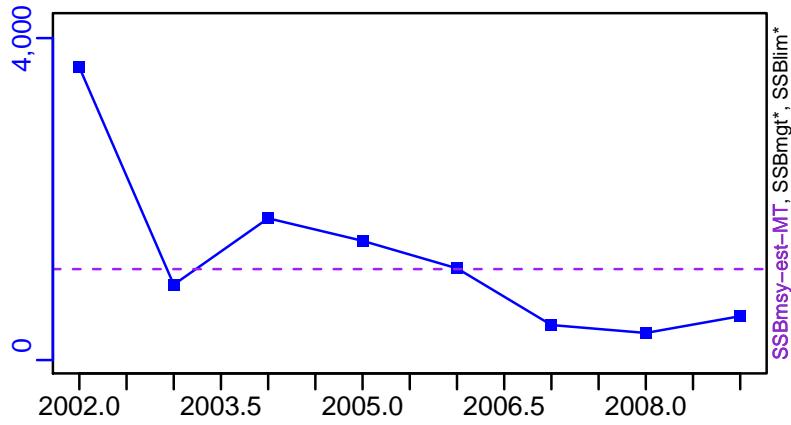
◆ Start Year ◆ End Year \* No Data

Anchovy Northern Alboran Sea [ANCHMEDGSA1]

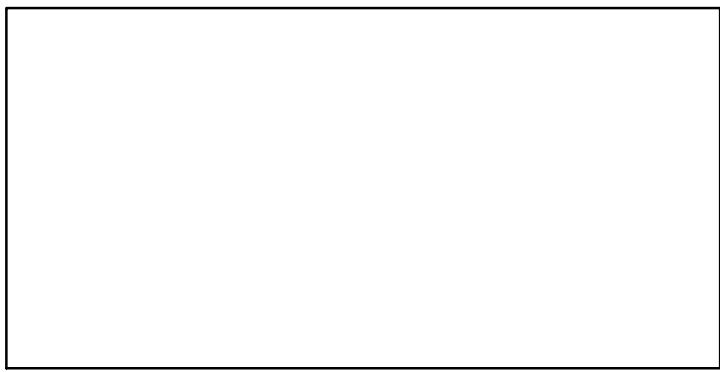
**TB\***



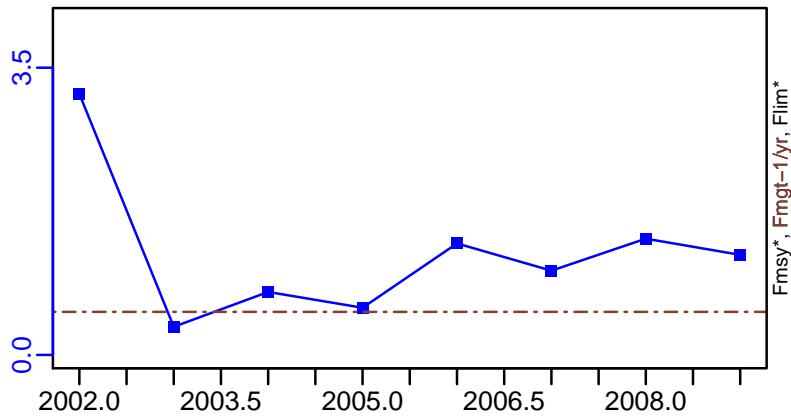
**SSB-MT (2002–2009–OSIO)**



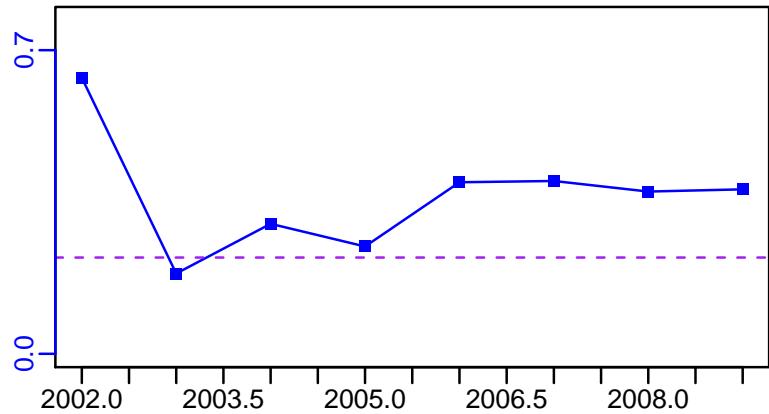
**TN \***



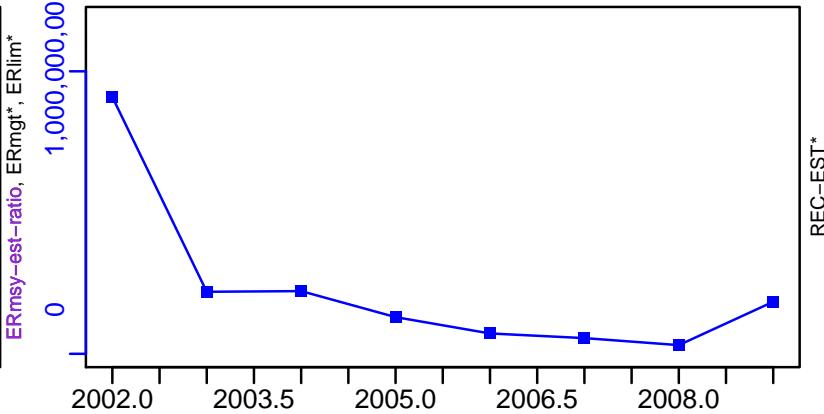
**F-1/yr (2002–2009–OSIO)**



**ER-calc-ratio (2002–2009–OSIO)**



**R-E00 (2002–2009–OSIO)**

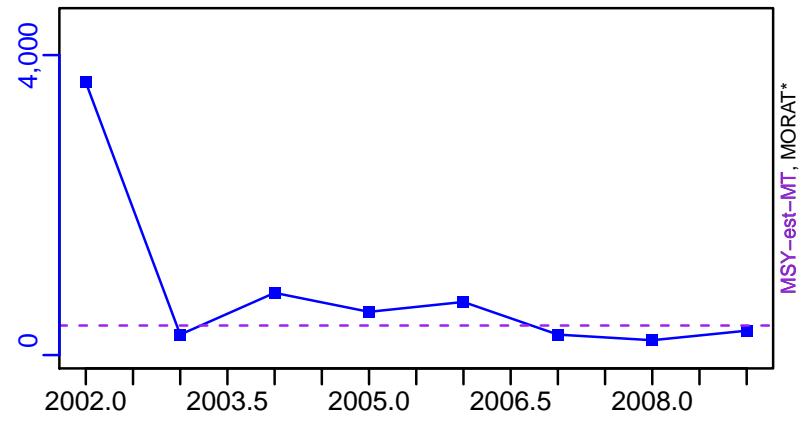


- Listed time series    - - - Target BRP    — Rec-Est
- - - MSY-based BRP    - - - Lim BRP    \* No Data

Anchovy Northern Alboran Sea [ANCHMEDGSA1]

TC-MT, TL\*, RecC\* (2002–2009–OSIO)

TAC\*, Cpair\*, Cadv\*



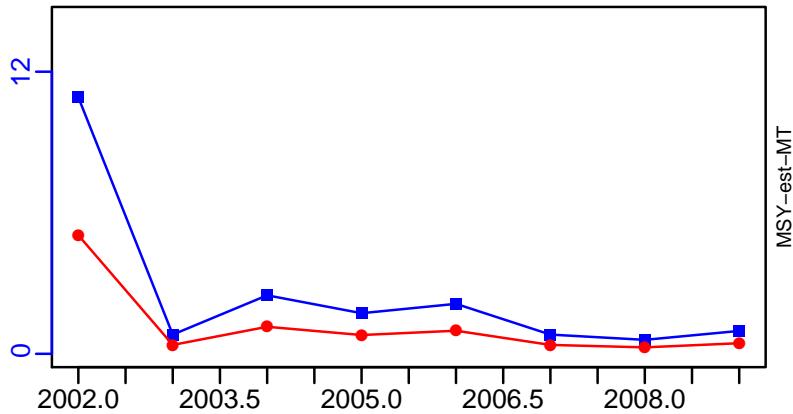
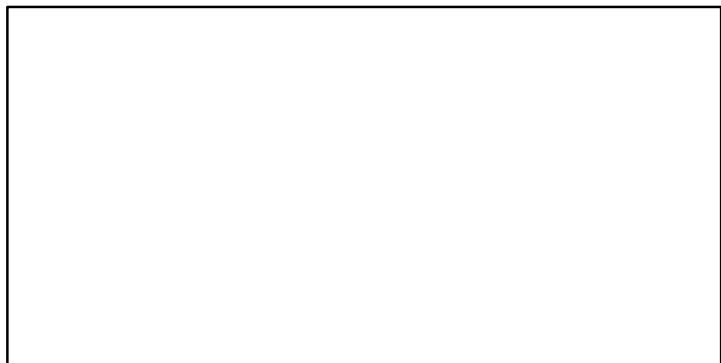
survB\*

MSY-est-MT, MORAT\*

CPUE\*

EFFORT\*

TC-MT/MSY-est-MT, CdivMEANC-ratio, (2002–2009–OSIO)



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

## Anchovy South of Sicily [ANCHMEDGSA16]

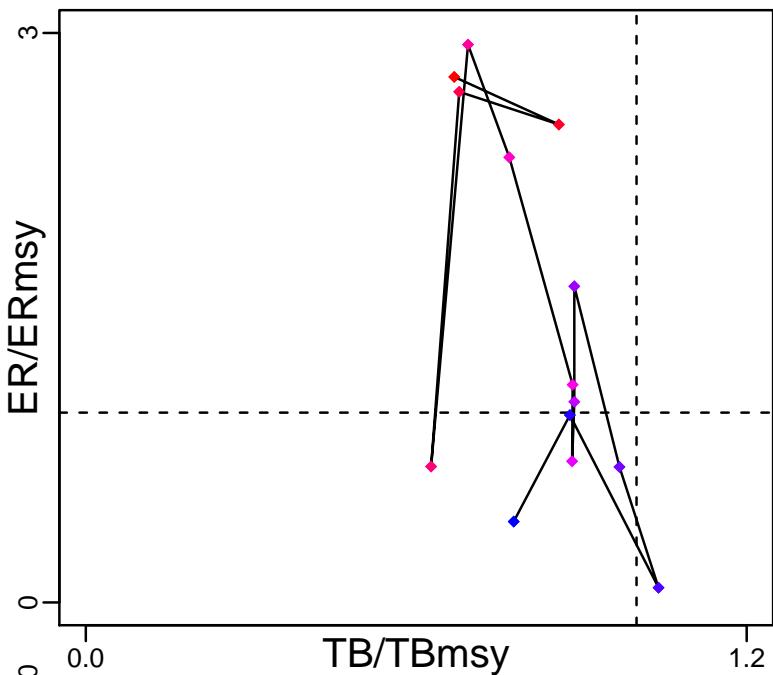
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA16-2004-2011-OSIO
<b>Area</b>	South of Sicily
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2011	14,152
<b>SSBmsy</b>	SSBmsy-est-MT	2011	8349
<b>Fmsy</b>	Fmsy-1/yr	2011	0.17
<b>ERmsy</b>	ERmsy-calc-ratio	2011	0.167
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.08
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2011	2359
<b>M</b>	M-1/yr	2011	0.66
<b>TBlim</b>	TBlim-MT	2011	3130
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

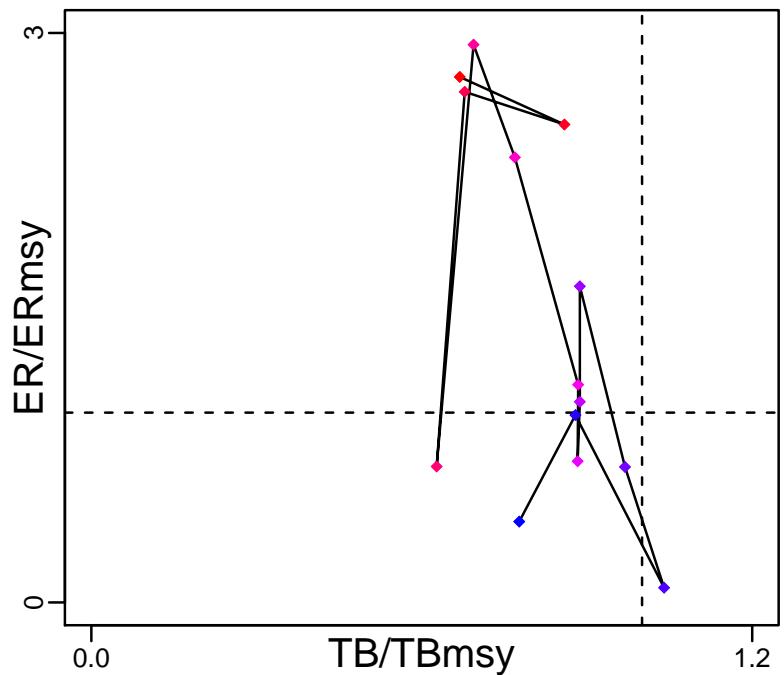
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2011	9470	-	-	
<b>SSB</b>	SSB-MT	2011	10,700	-	0 to 5	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2011	$3.79 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2011	0.275	-	-	
<b>ER</b>	ER-calc-ratio	2011	0.461	-	-	
<b>TC</b>	TC-MT	2011	4370			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2011	0.669			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2011	1.282			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	1.62			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2011	2.768			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	9			
<b>ER/ERmgt</b>	-	-	-			

Anchovy South of Sicily [ANCHMEDGSA16]

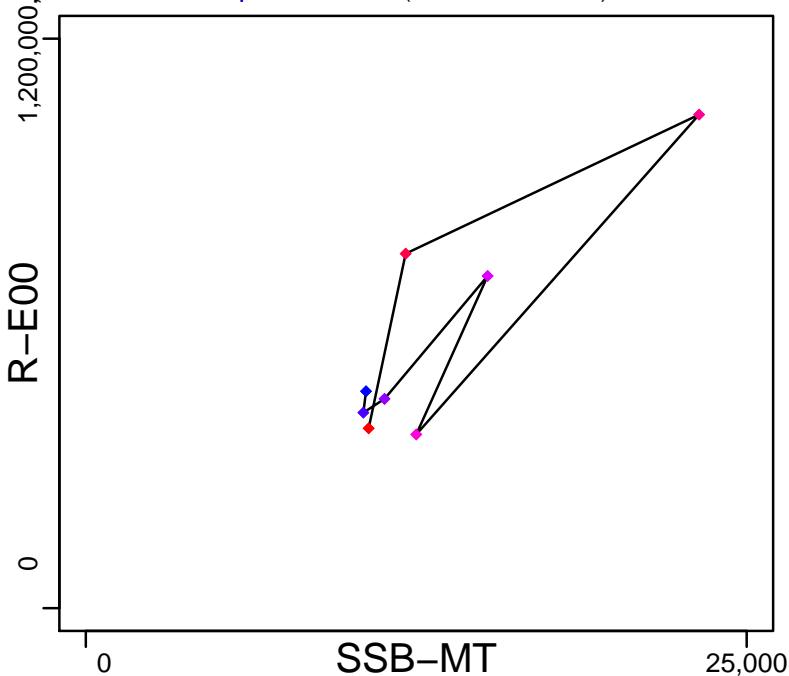
Kobe MSYpref (1998–2011–BANOBI)



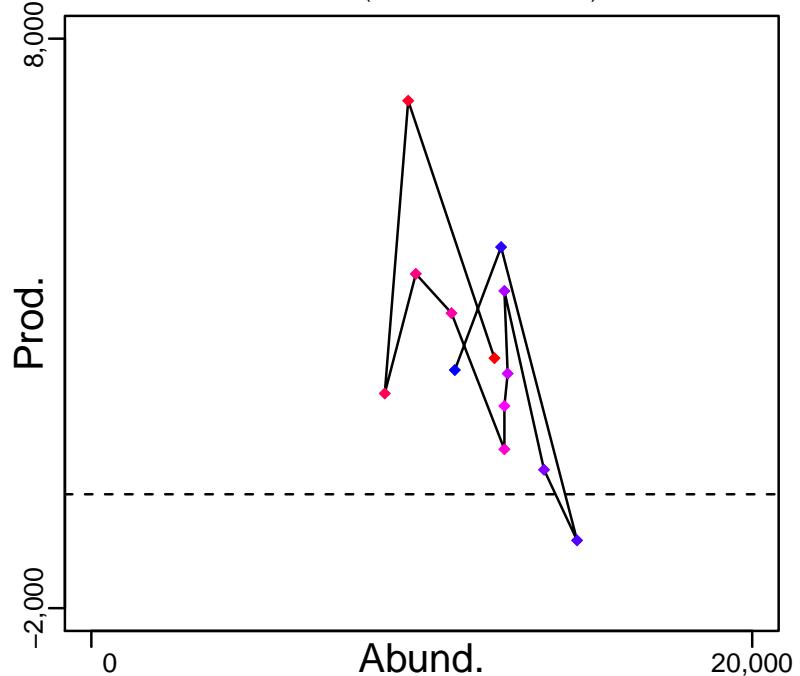
Kobe MGTpref (1998–2011–BANOBI)



Spawner Recruit (2004–2011–OSIO)



Production (1998–2011–BANOBI)

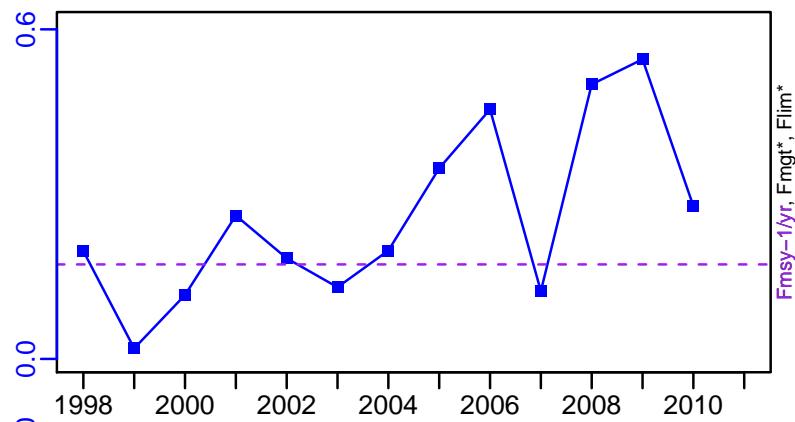
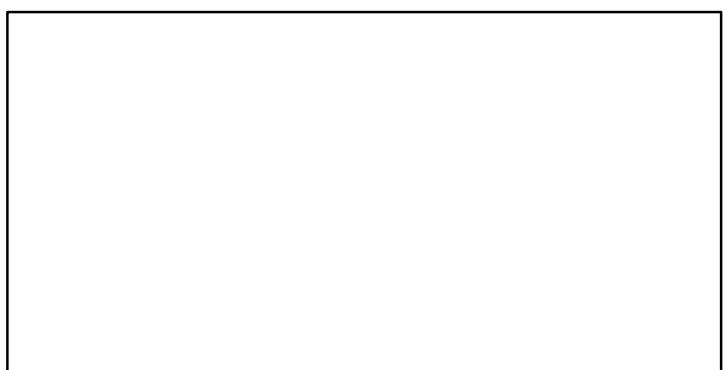
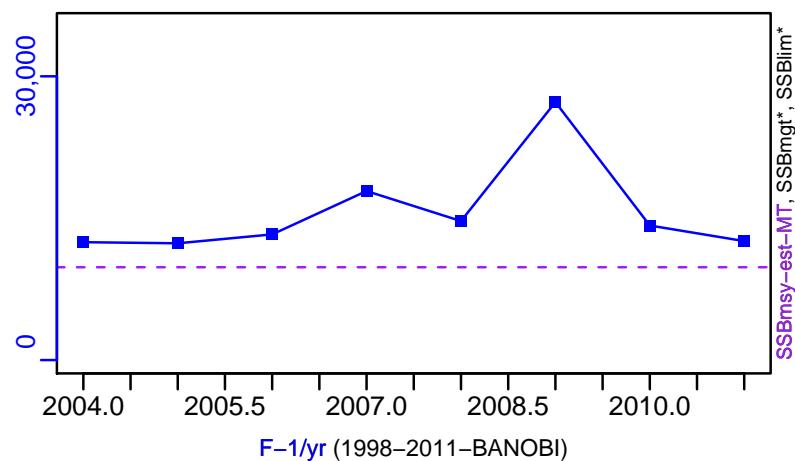
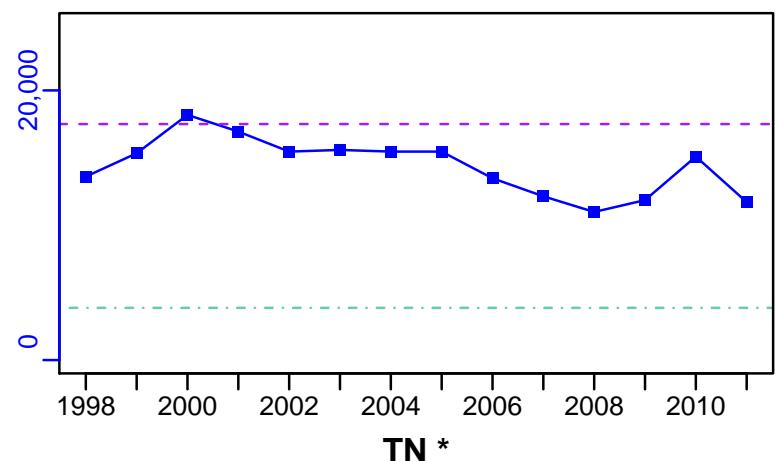


◆ Start Year   ◆ End Year   \* No Data

### Anchovy South of Sicily [ANCHMEDGSA16]

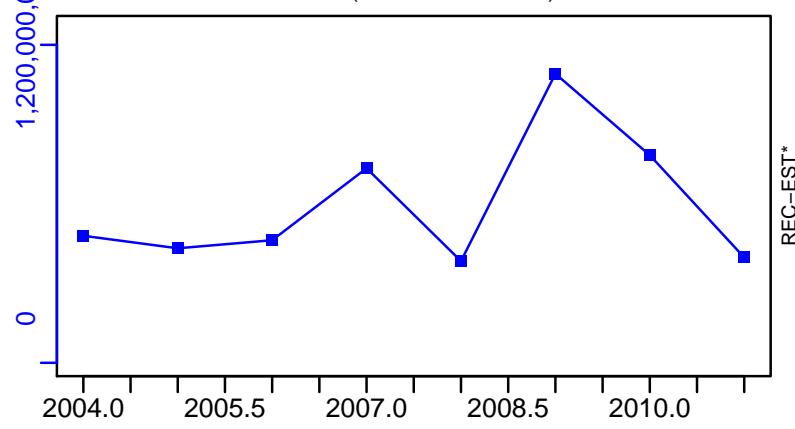
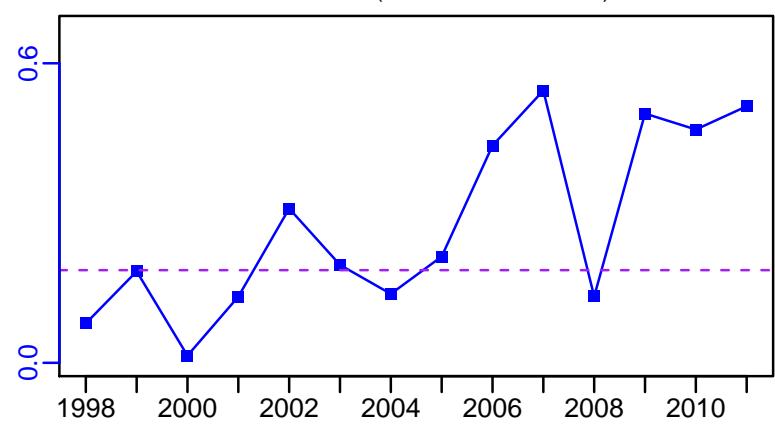
TB-MT (1998–2011–BANOBI)

SSB-MT (2004–2011–OSIO)



ER-calc-ratio (1998–2011–BANOBI)

R-E00 (2004–2011–OSIO)

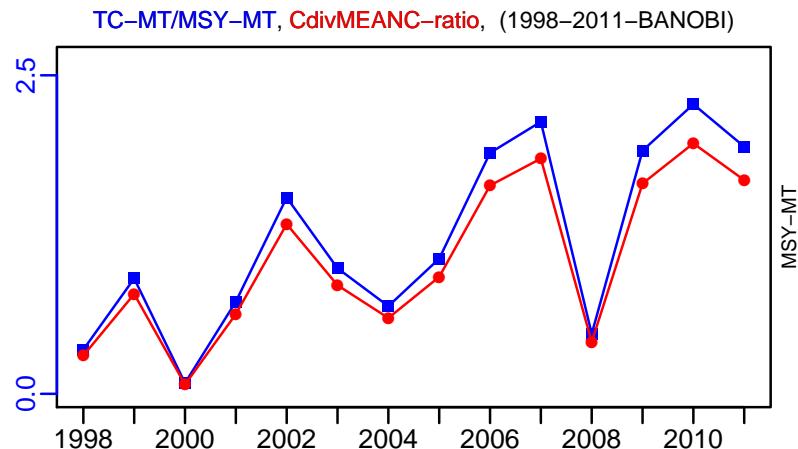
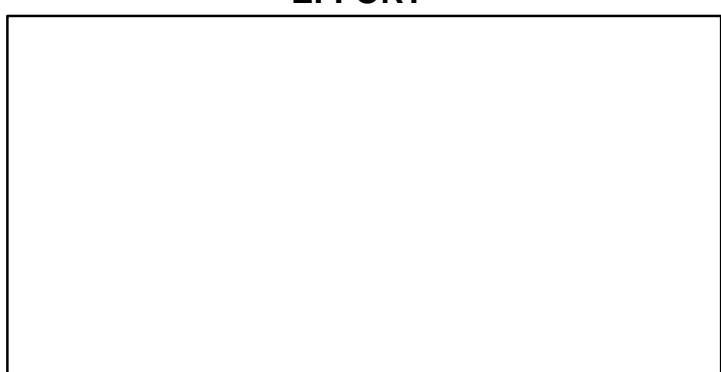
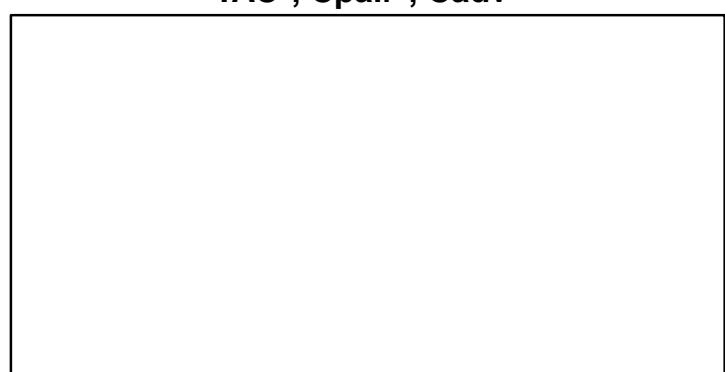
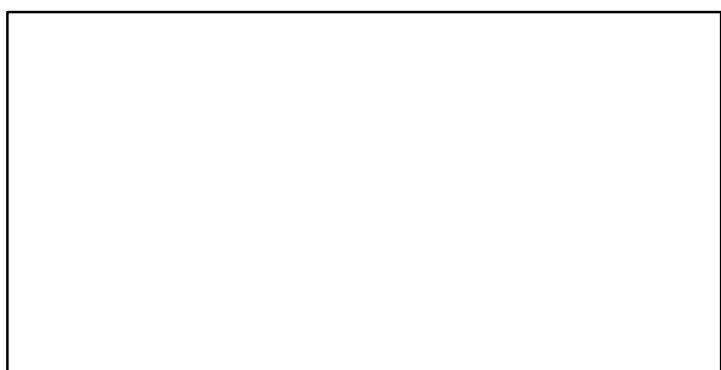
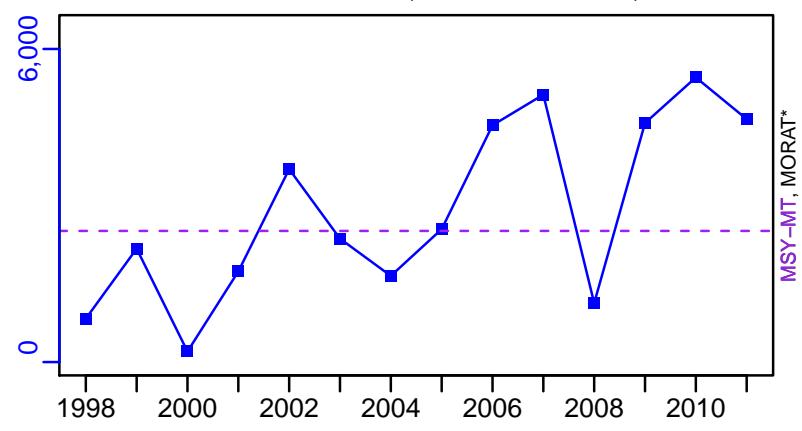


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

### Anchovy South of Sicily [ANCHMEDGSA16]

TC-MT, TL\*, RecC\* (1998–2011–BANOBI)

TAC\*, Cpair\*, Cadv\*



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

## Anchovy Adriatic Sea (GSA 17,18) [ANCHMEDGSA17-18]

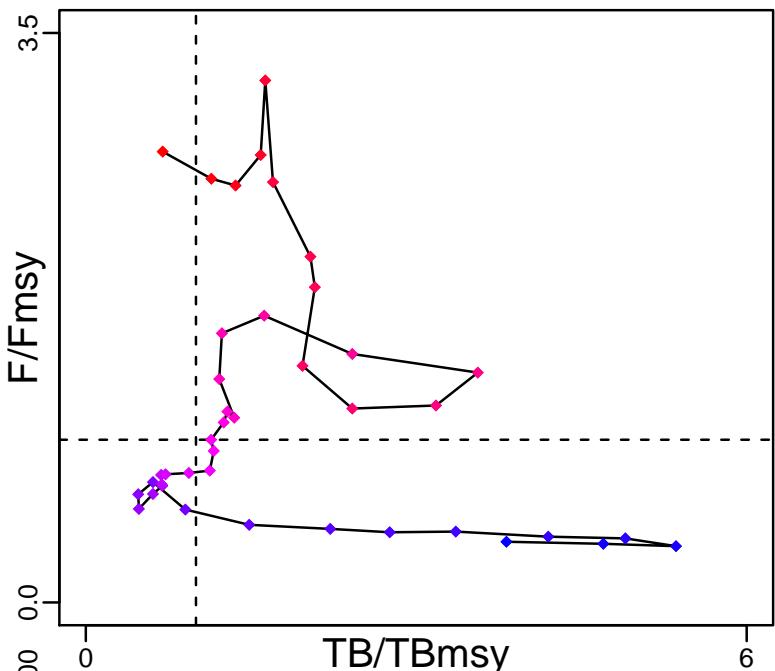
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA17-18-1975-2015-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	500,149
<b>SSBmsy</b>	SSBmsy-est-MT	2013	293,630
<b>Fmsy</b>	Fmsy-1/yr	2015	0.48
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.023
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.48
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	11,507
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

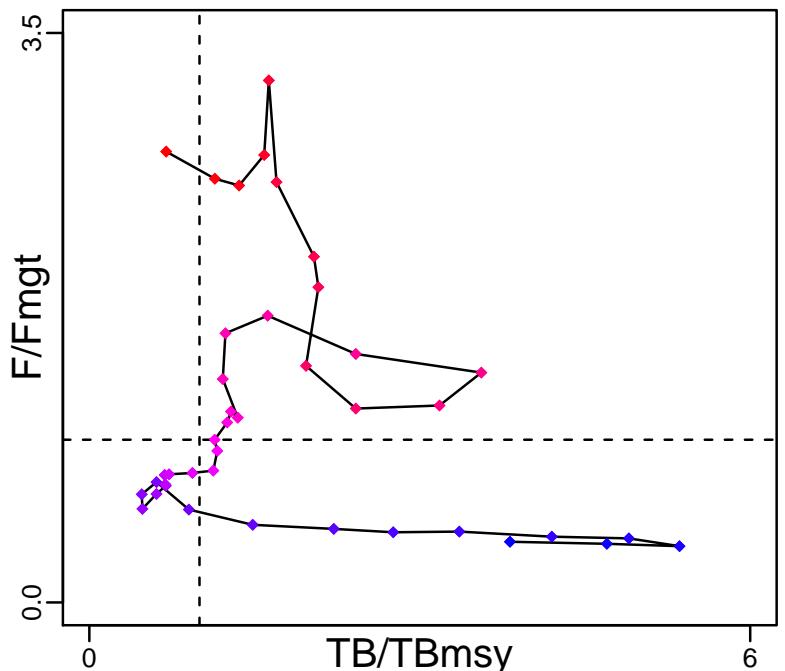
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	349,000	-	-	
<b>SSB</b>	SSB-MT	2015	214,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$2.93 \times 10^{10}$	-	-	
<b>F</b>	F-1/yr	2015	1.33	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.113	-	-	
<b>TC</b>	TC-MT	2015	39,400			
<b>TL</b>	TL-MT	2015	39,400			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.698			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	1.052			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	2.771			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	4.907			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.771			
<b>ER/ERmgt</b>	-	-	-			

Anchovy Adriatic Sea (GSA 17,18) [ANCHMEDGSA17–18]

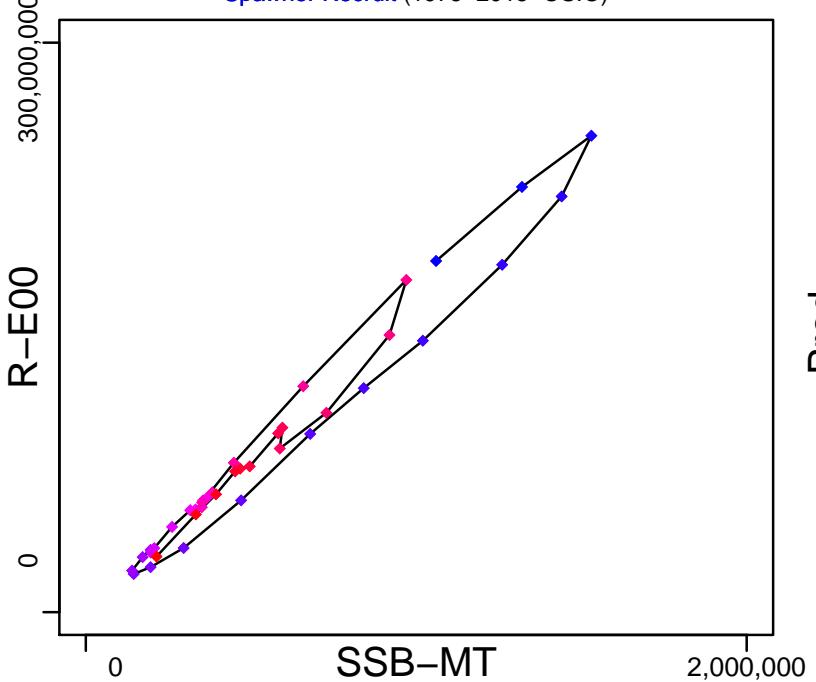
Kobe MSYpref (1975–2015–OSIO)



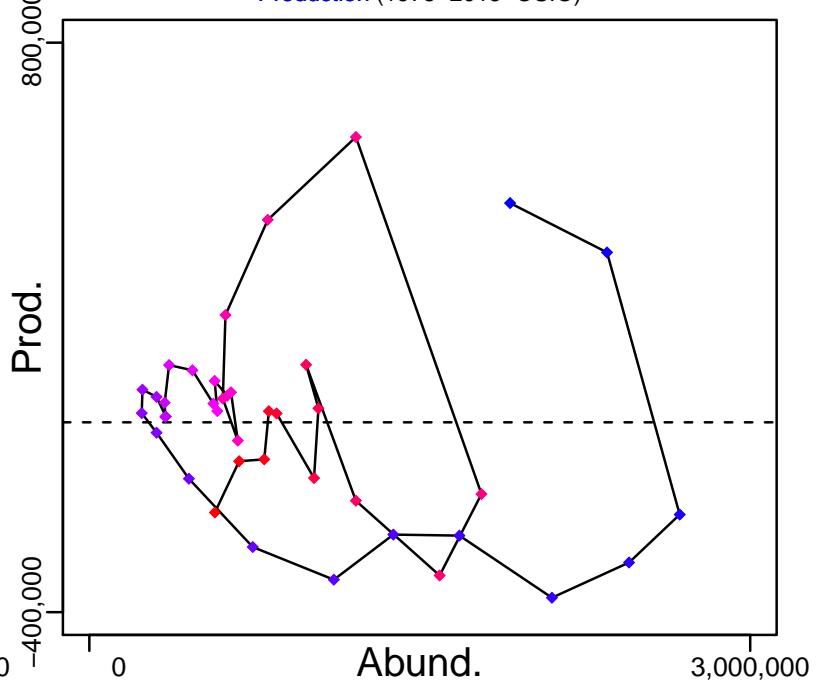
Kobe MGTpref (1975–2015–OSIO)



Spawner Recruit (1975–2015–OSIO)



Production (1975–2015–OSIO)

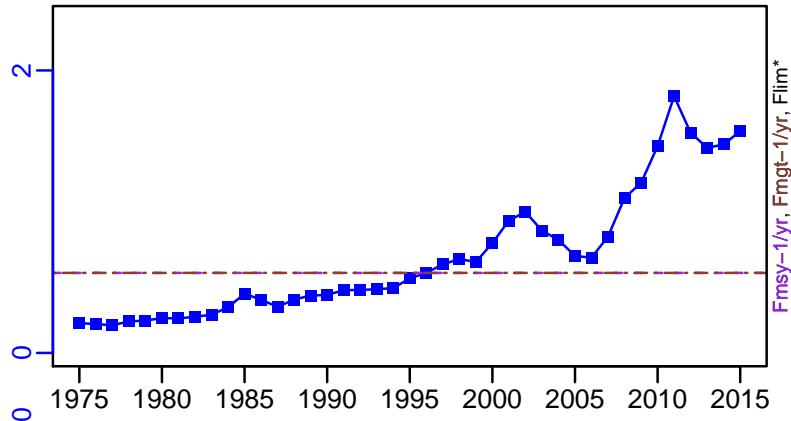
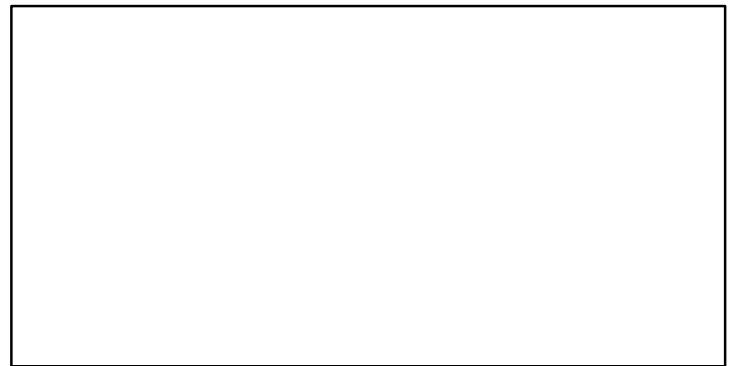
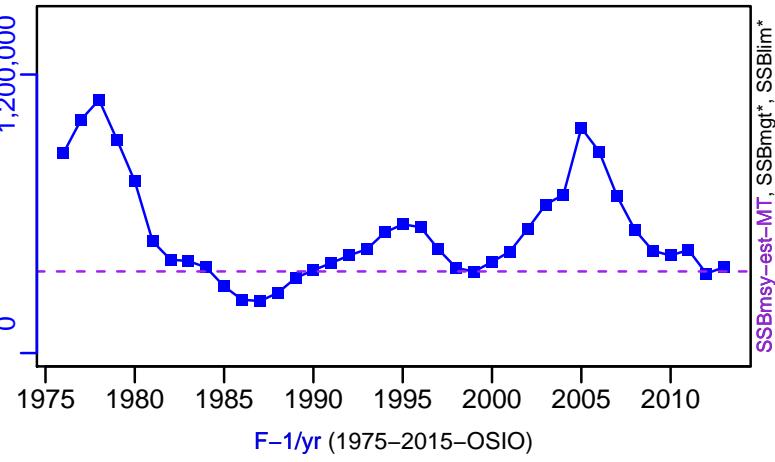
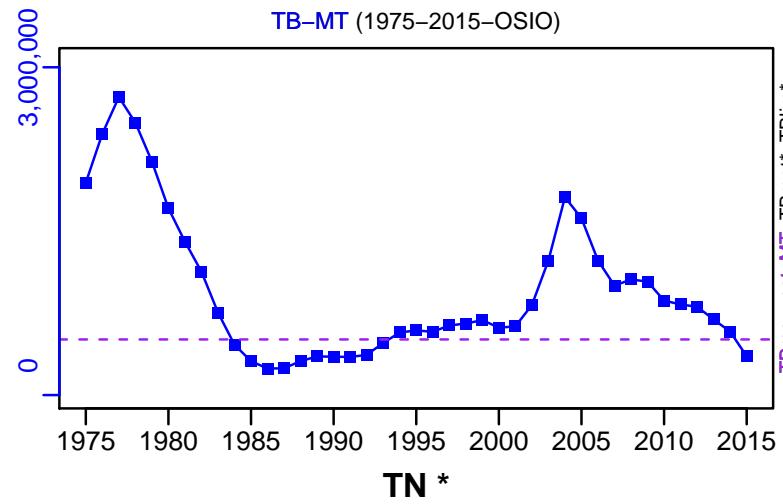


◆ Start Year ◆ End Year \* No Data

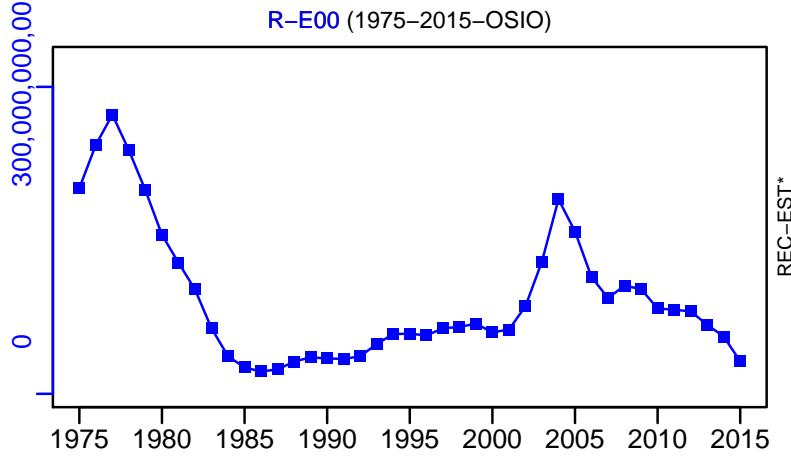
Anchovy Adriatic Sea (GSA 17,18) [ANCHMEDGSA17–18]

TB-MT (1975–2015–OSIO)

SSB-MT (1976–2013–OSIO)



ER-calc-ratio (1975–2015–OSIO)

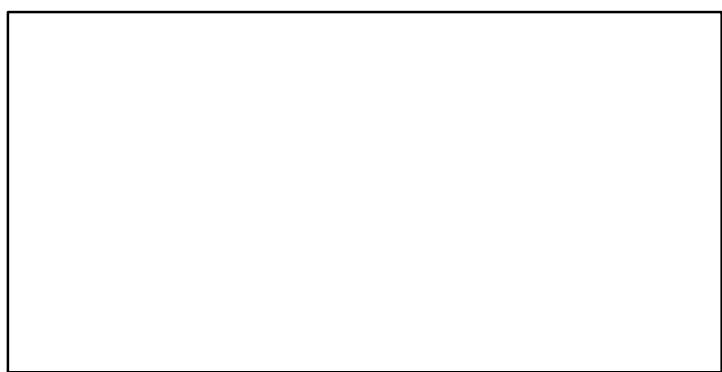
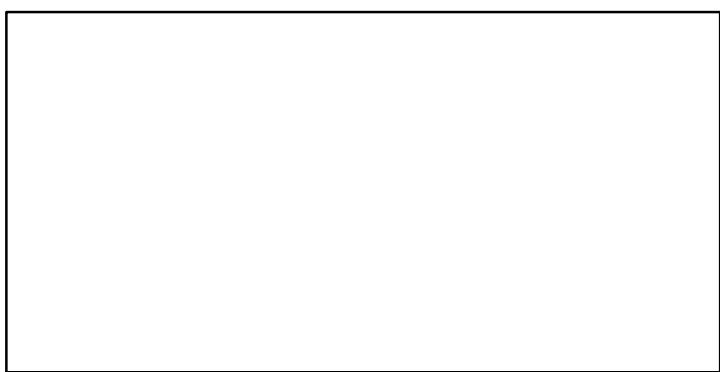
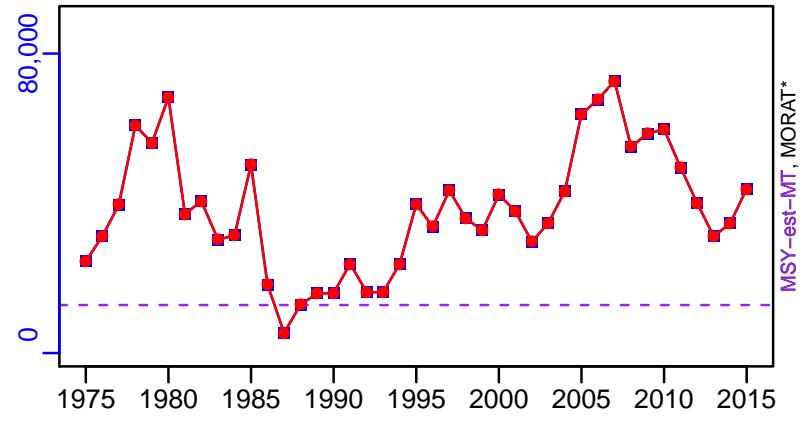


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

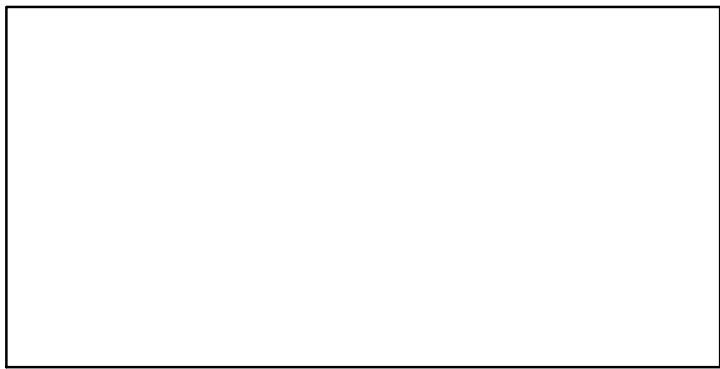
Anchovy Adriatic Sea (GSA 17,18) [ANCHMEDGSA17–18]

TC-MT, TL-MT, RecC\* (1975–2015–OSIO)

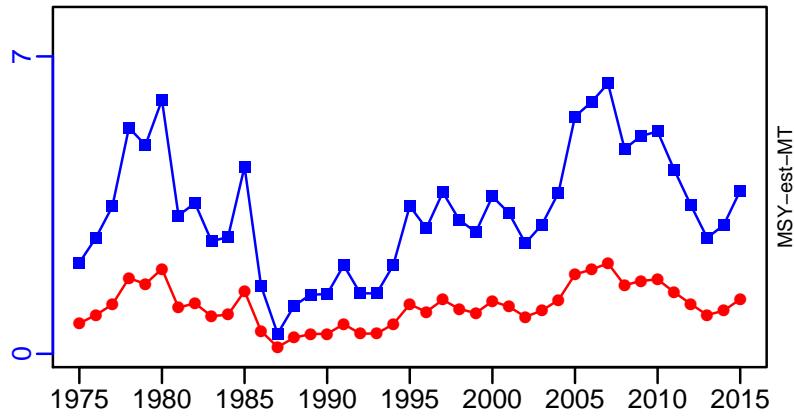
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1975–2015–OSIO)



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

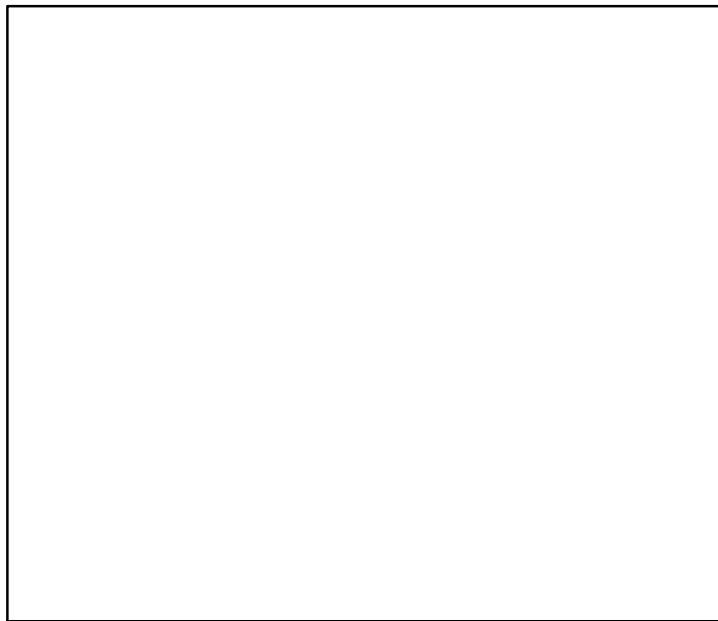
## Anchovy Western Ionian Sea [ANCHMEDGSA19]

Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA19-2006-2012-OSIO
<b>Area</b>	Western Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

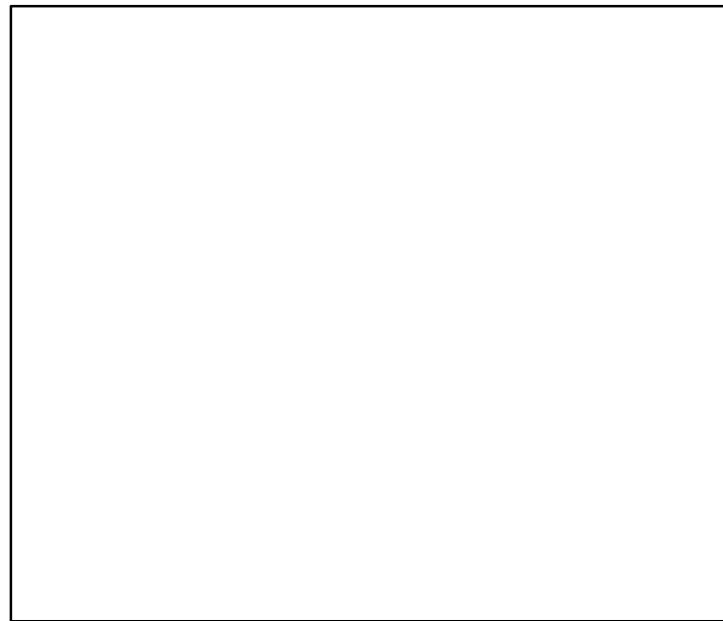
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2012	817		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

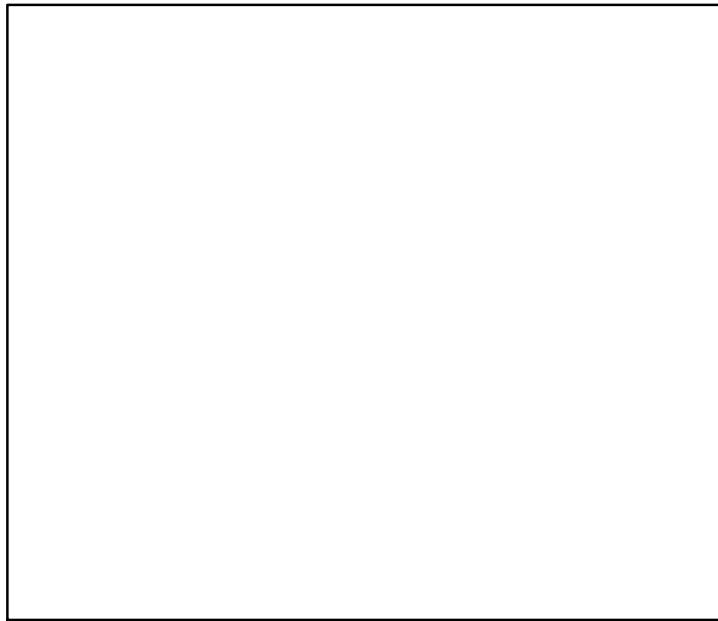
**Kobe MSY\***



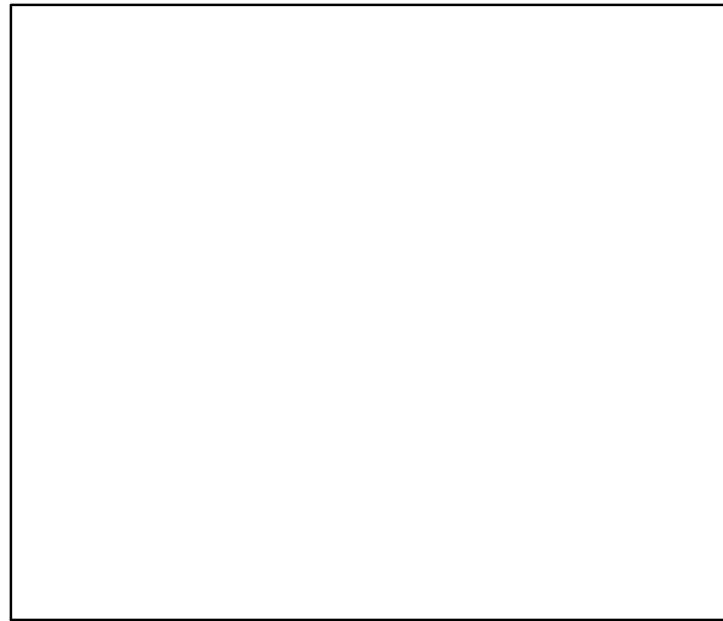
**Kobe MGT\***



**Spawner Recruit\***



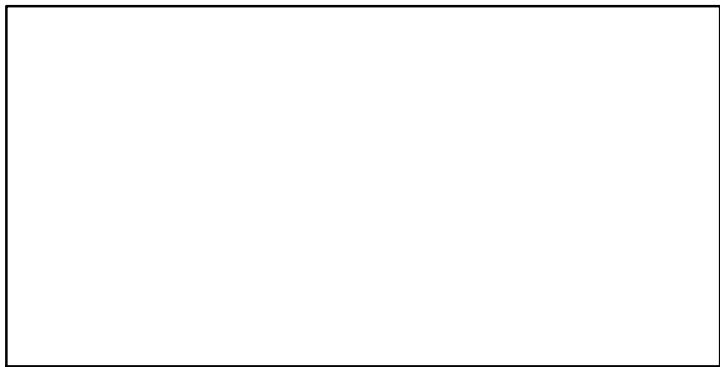
**Production\***



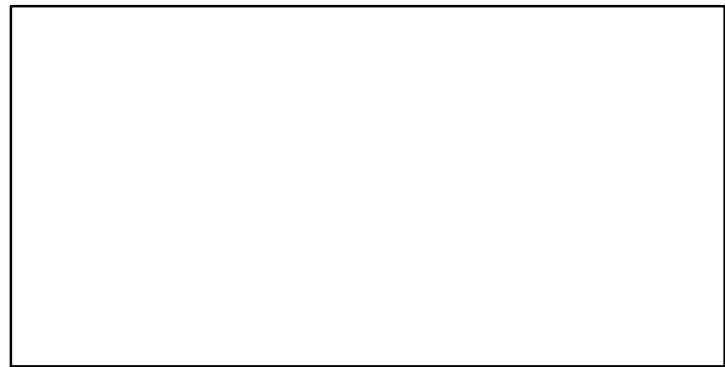
◆ Start Year ◆ End Year \* No Data

Anchovy Western Ionian Sea [ANCHMEDGSA19]

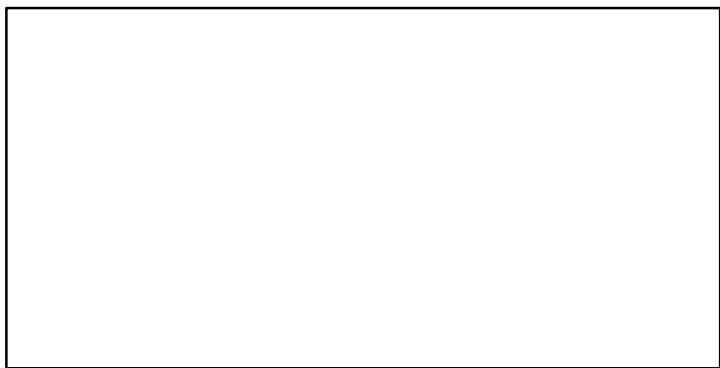
**TB\***



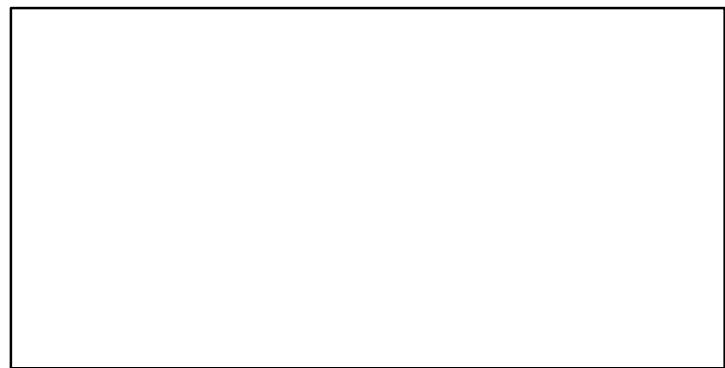
**SSB\***



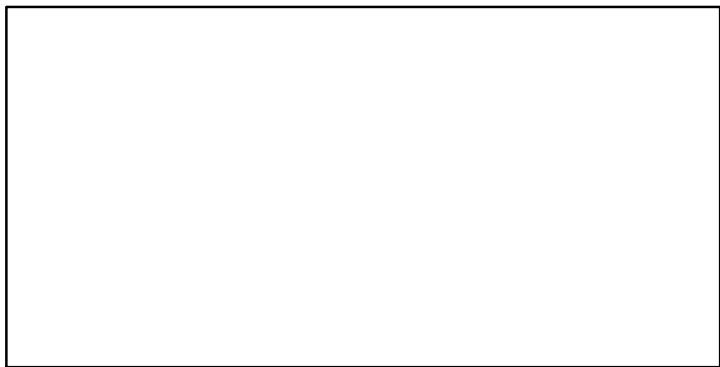
**TN \***



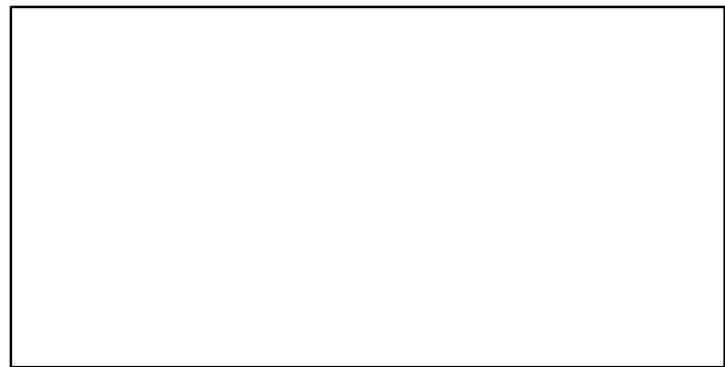
**F\***



**ER\***



**Recruits\***

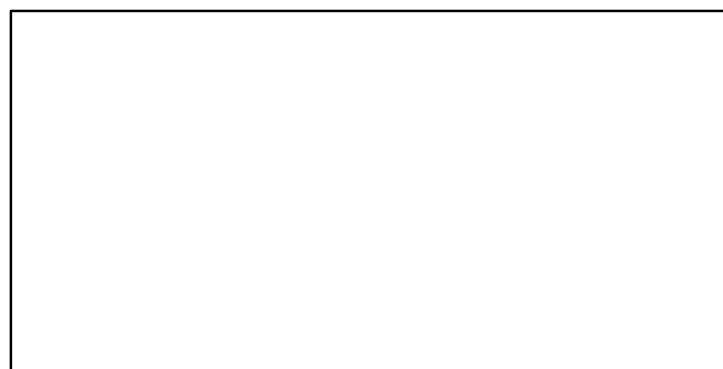
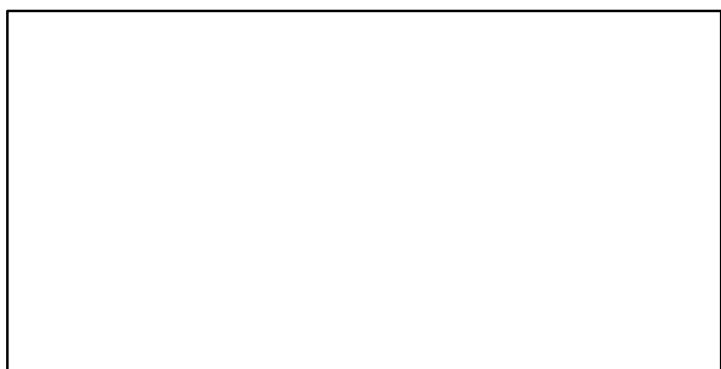
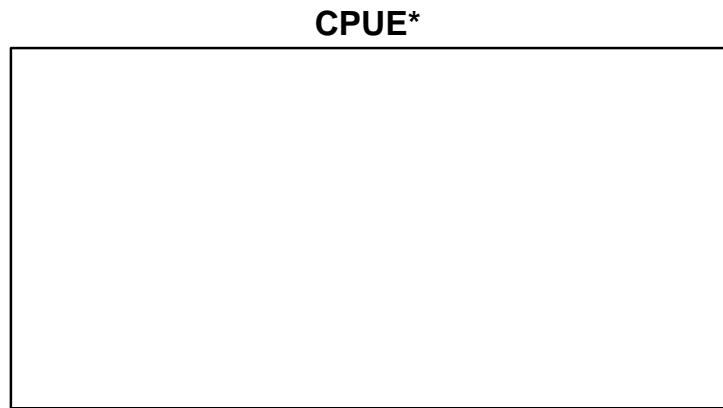
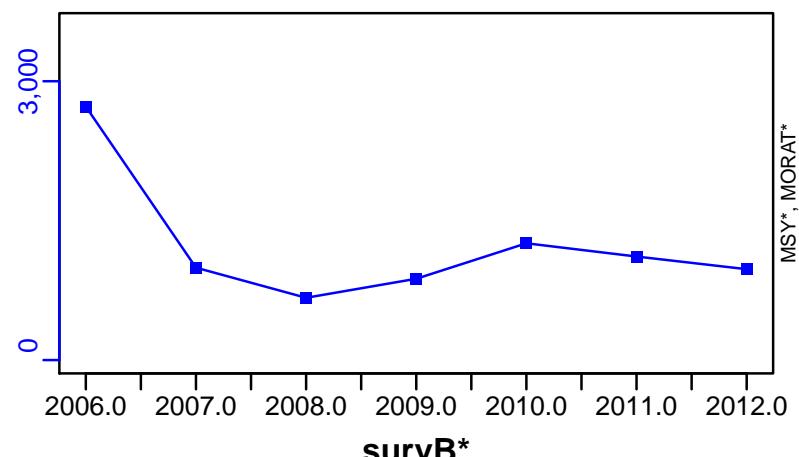


- |       |                    |       |            |   |         |
|-------|--------------------|-------|------------|---|---------|
| ■     | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP      | - - - | Lim BRP    | * | No Data |

Anchovy Western Ionian Sea [ANCHMEDGSA19]

TC-MT, TL\*, RecC\* (2006–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



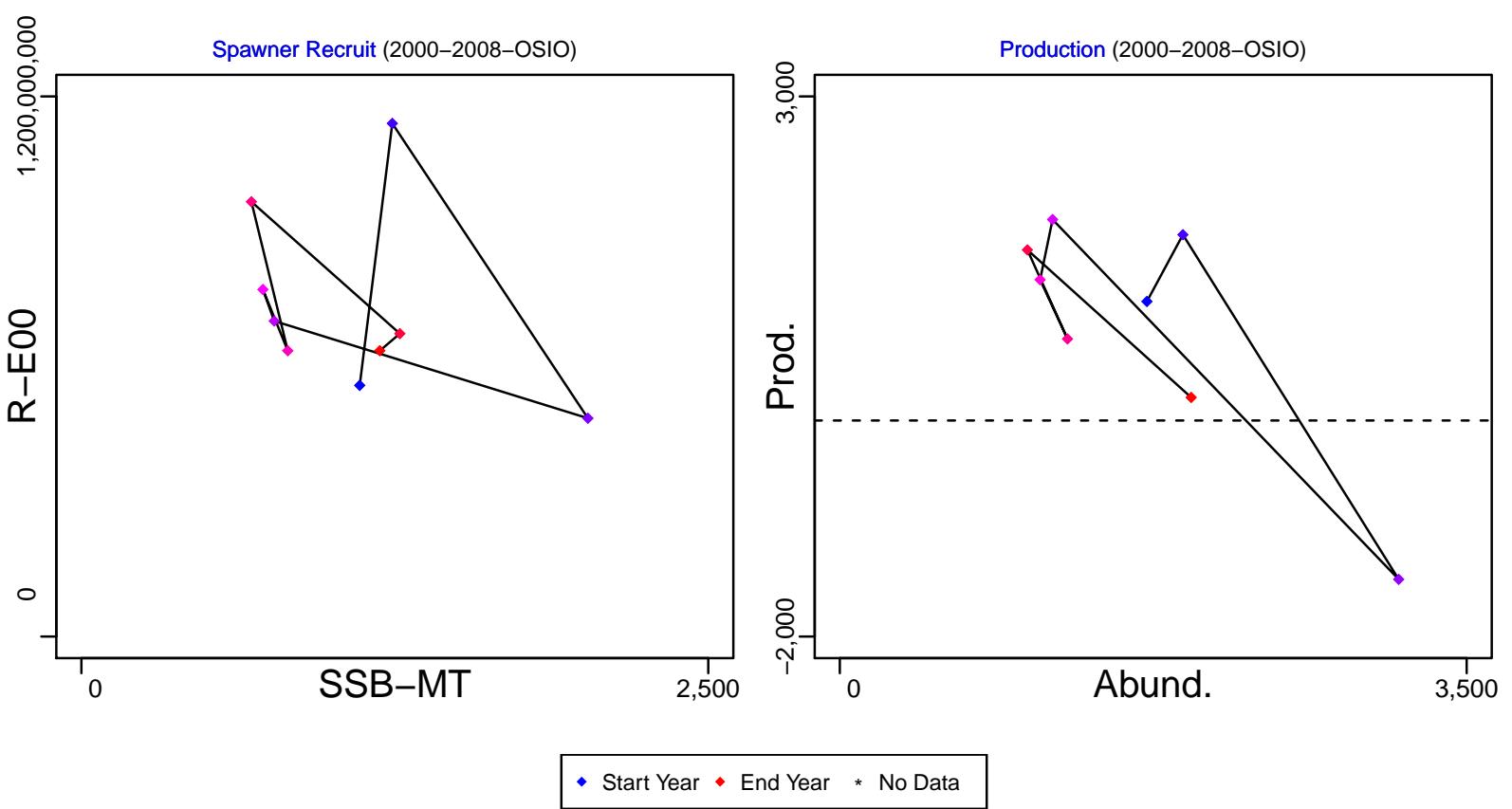
- |                          |                          |           |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT   |
| ● 2nd listed time series | - - MSY                  | * No Data |

## Anchovy Eastern Ionian Sea [ANCHMEDGSA20]

Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA20-2000-2008-OSIO
<b>Area</b>	Eastern Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

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

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	1190	-	-	-
<b>TN</b>	-	-	-	-	-	-
<b>R</b>	R-E00	2008	$6.35 \times 10^8$	-	-	-
<b>F</b>	F-1/yr	2008	0.814	-	-	-
<b>ER</b>	ER-calc-ratio	2008	0.713	-	-	-
<b>TC</b>	TC-MT	2008	1310			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

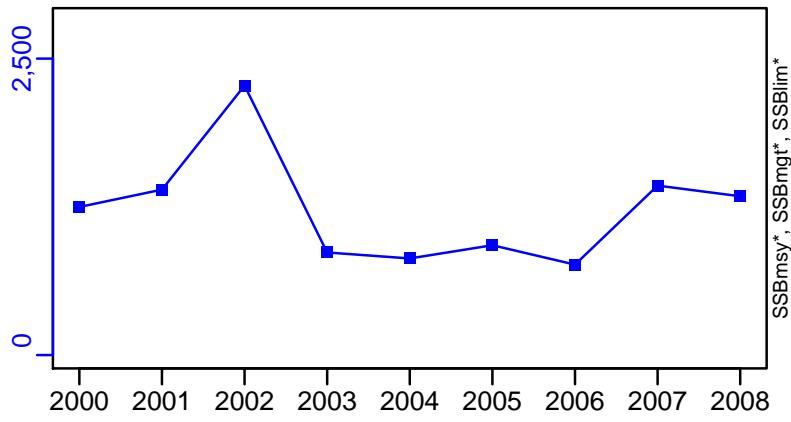
**Kobe MSY\*****Kobe MGT\***

Anchovy Eastern Ionian Sea [ANCHMEDGSA20]

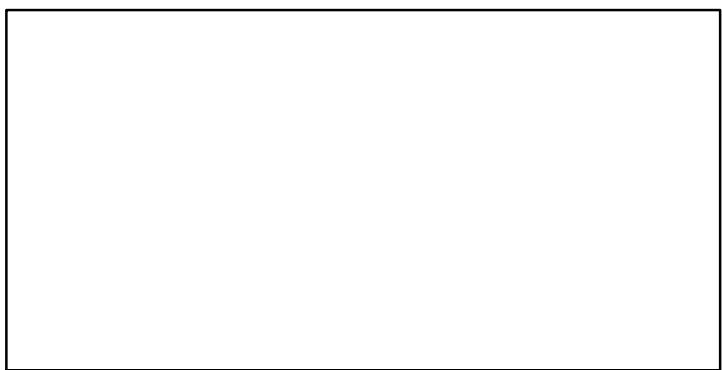
**TB\***



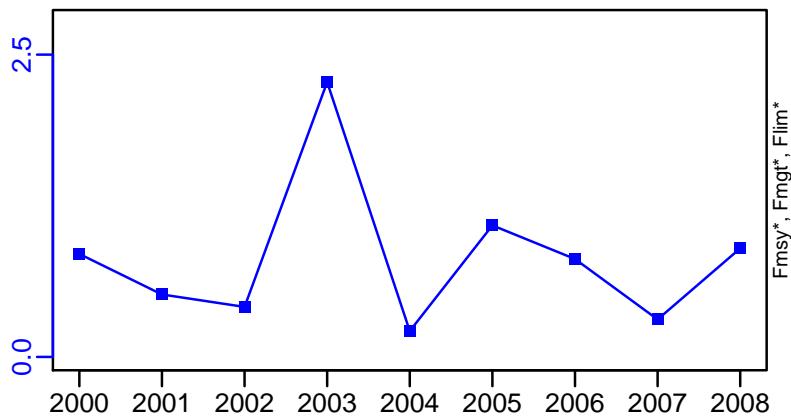
**SSB-MT (2000–2008–OSIO)**



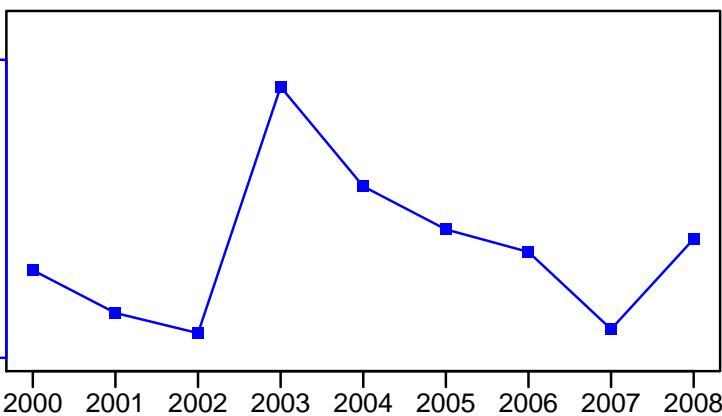
**TN \***



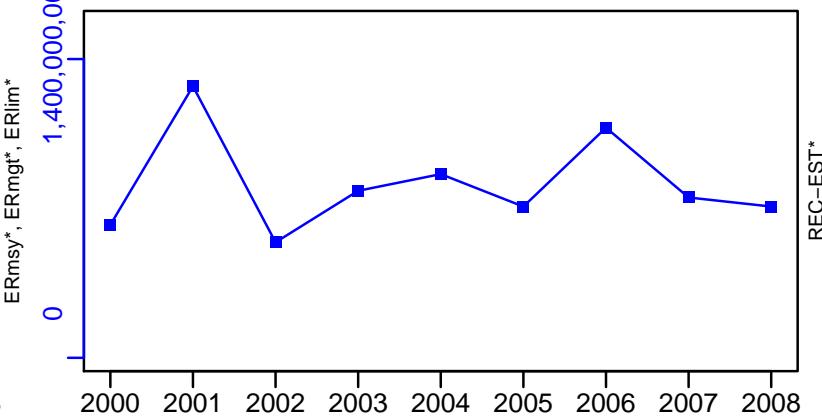
**F-1/yr (2000–2008–OSIO)**



**ER-calc-ratio (2000–2008–OSIO)**



**R-E00 (2000–2008–OSIO)**

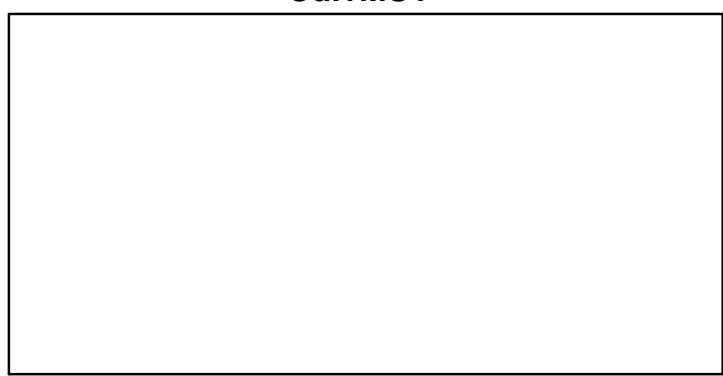
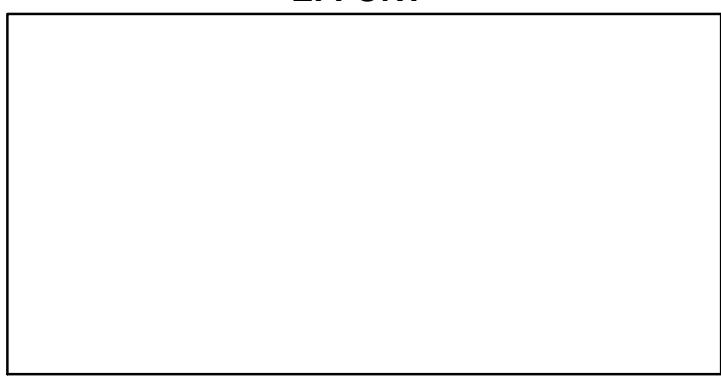
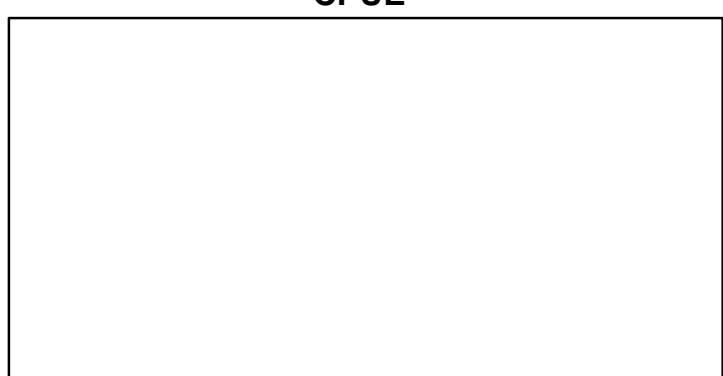
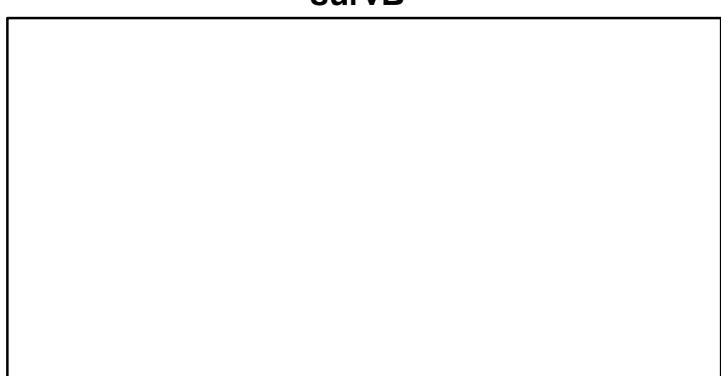
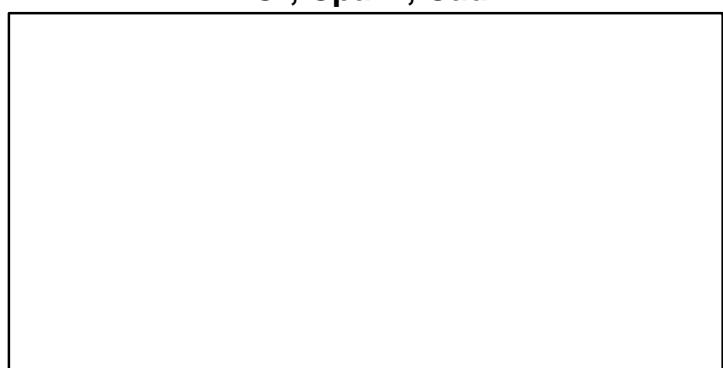
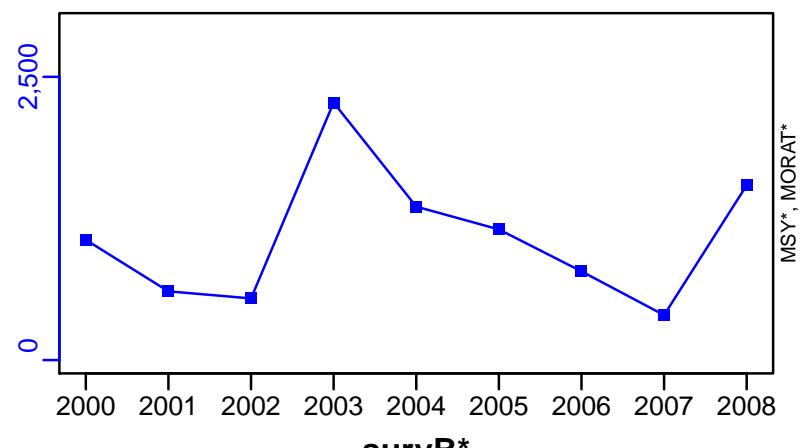


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

Anchovy Eastern Ionian Sea [ANCHMEDGSA20]

TC-MT, TL\*, RecC\* (2000–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



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

## Anchovy Aegean Sea [ANCHMEDGSA22]

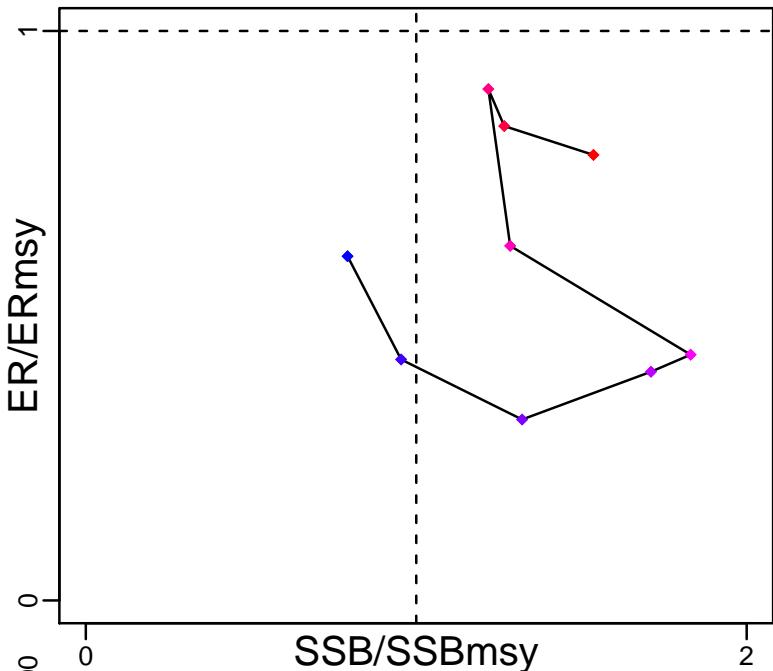
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA22-2000-2008-OSIO
<b>Area</b>	Aegean Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2008	16,663
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2008	0.803
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2008	20,384
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

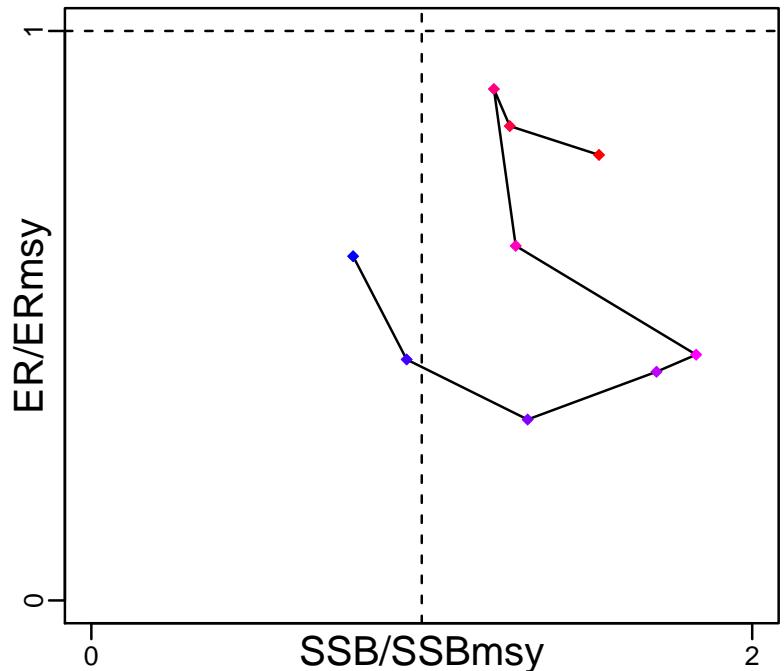
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	25,600	-	-	-
<b>TN</b>	-	-	-	-	-	-
<b>R</b>	R-E00	2008	$3.84 \times 10^{10}$	-	-	-
<b>F</b>	F-1/yr	2008	0.576	-	-	-
<b>ER</b>	ER-calc-ratio	2008	0.628	-	-	-
<b>TC</b>	TC-MT	2008	24,500			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2008	1.536			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2008	0.782			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Anchovy Aegean Sea [ANCHMEDGSA22]

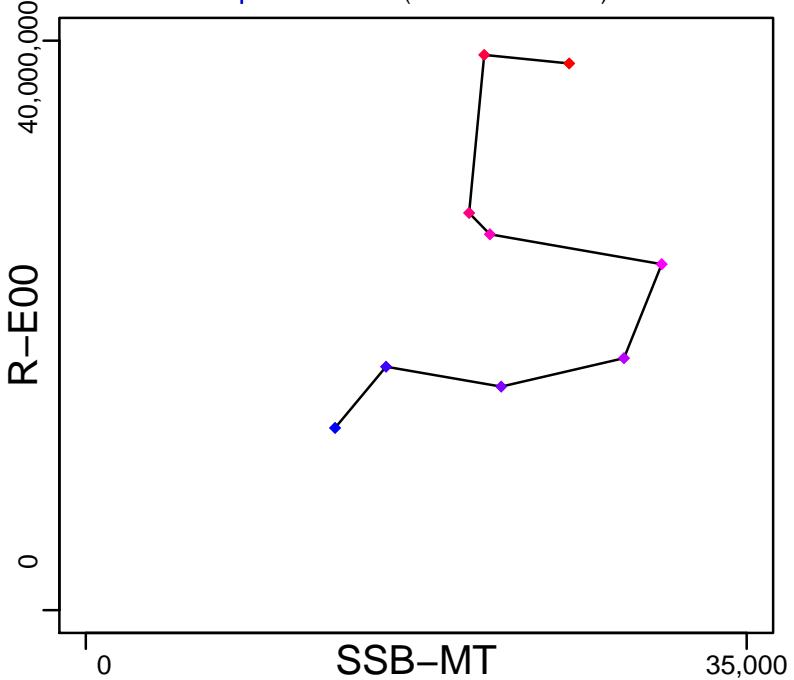
Kobe MSYpref (2000–2008–OSIO)



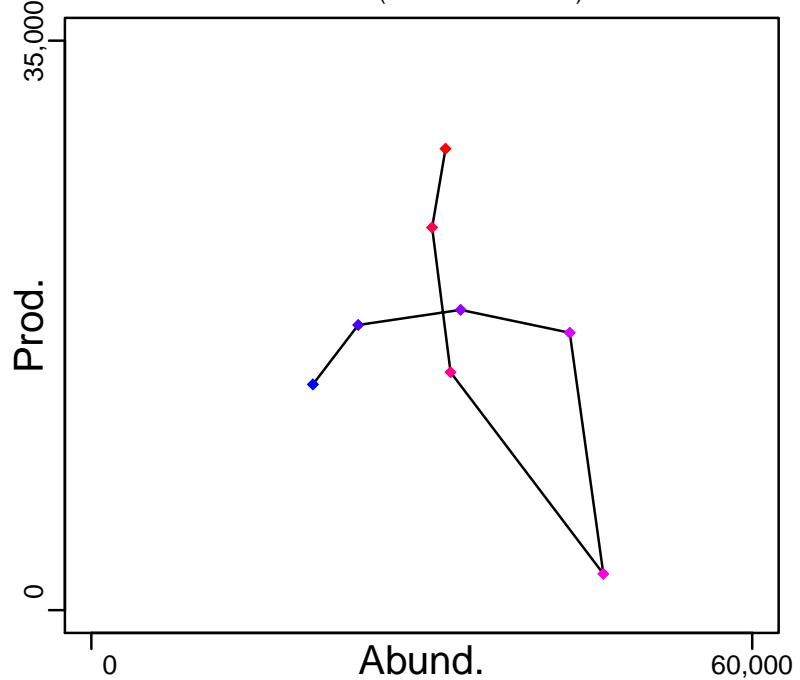
Kobe MGTPref (2000–2008–OSIO)



Spawner Recruit (2000–2008–OSIO)



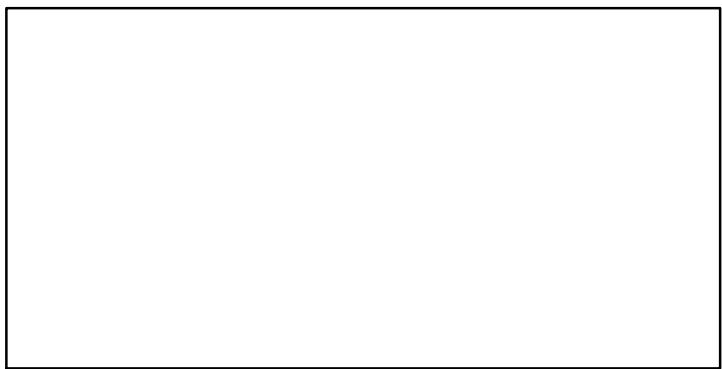
Production (2000–2008–OSIO)



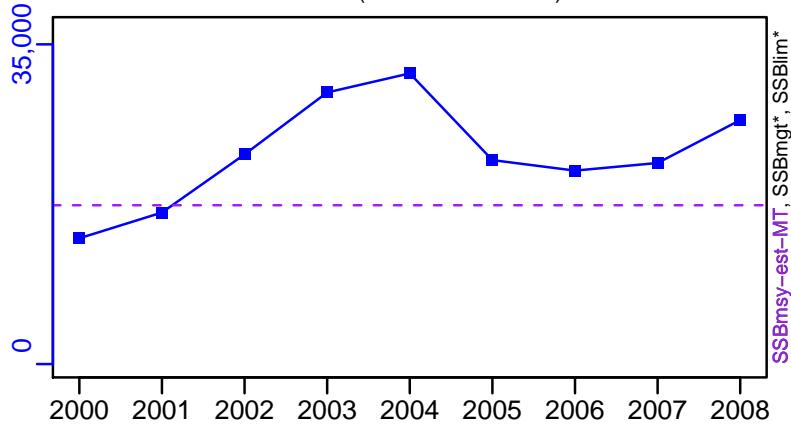
◆ Start Year ◆ End Year \* No Data

Anchovy Aegean Sea [ANCHMEDGSA22]

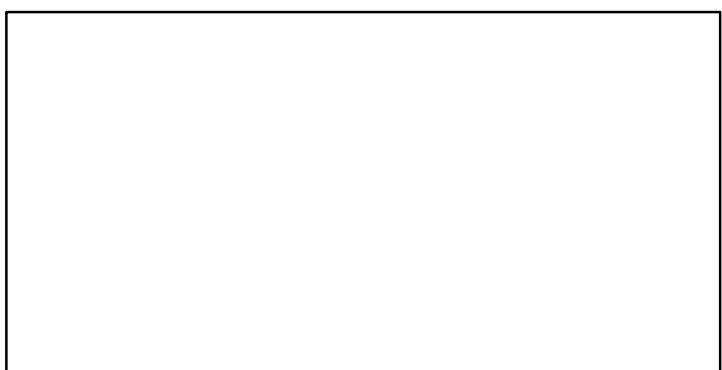
**TB\***



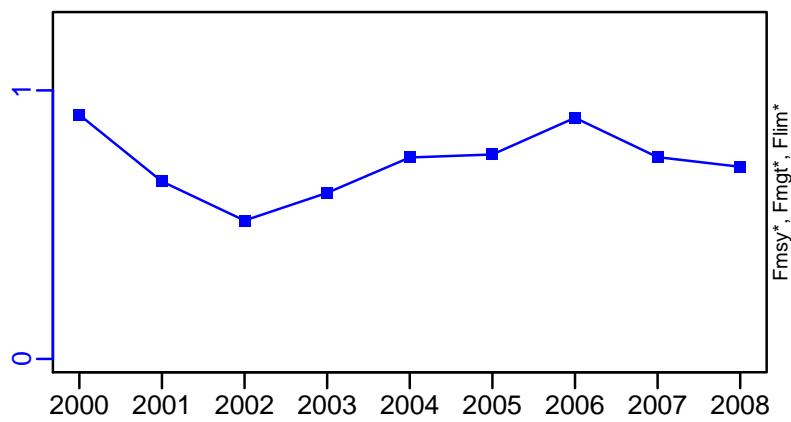
**SSB-MT (2000–2008–OSIO)**



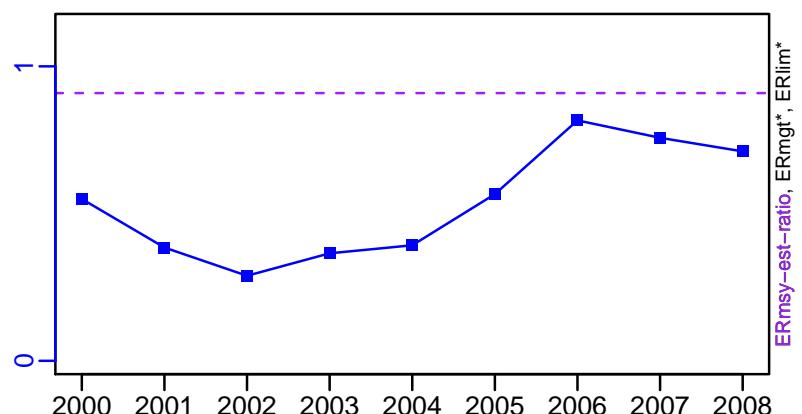
**TN \***



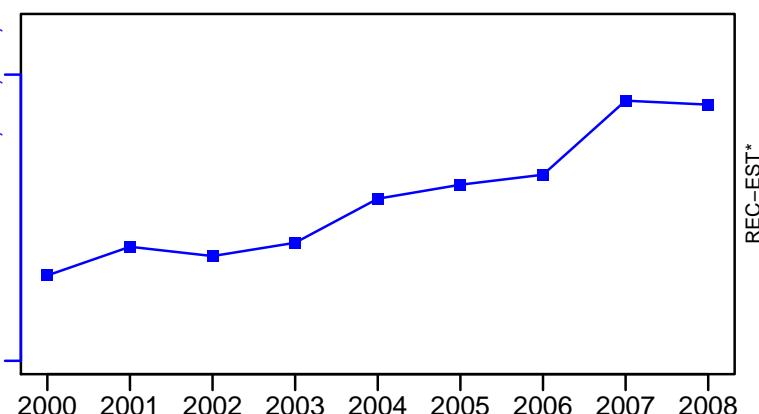
**F-1/yr (2000–2008–OSIO)**



**ER-calc-ratio (2000–2008–OSIO)**



**R-E00 (2000–2008–OSIO)**

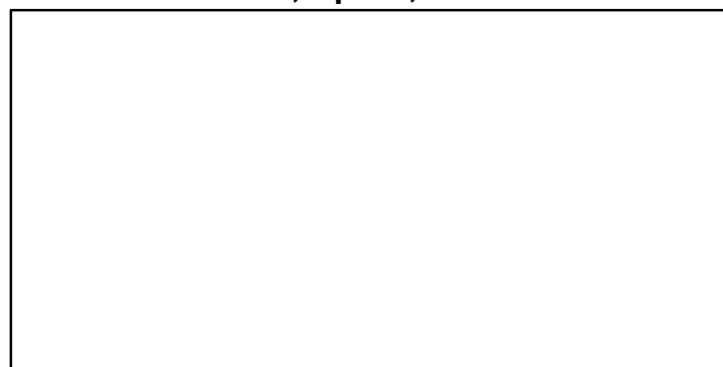
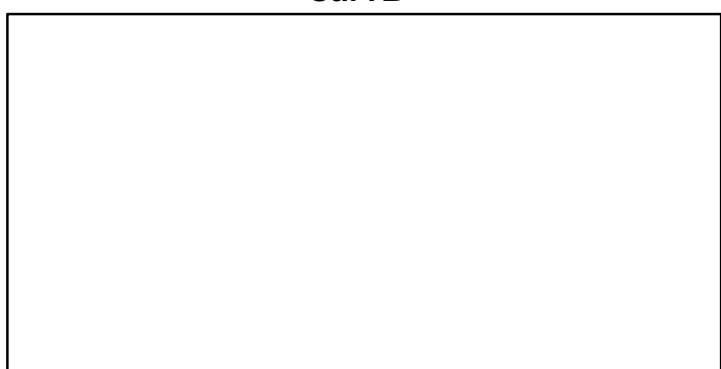
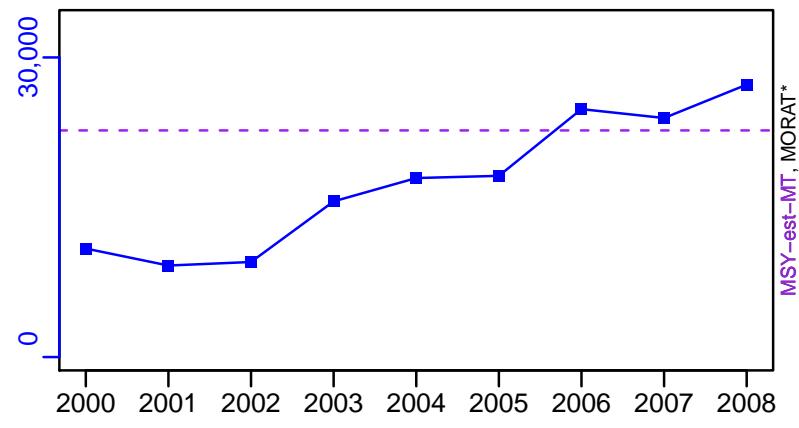


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

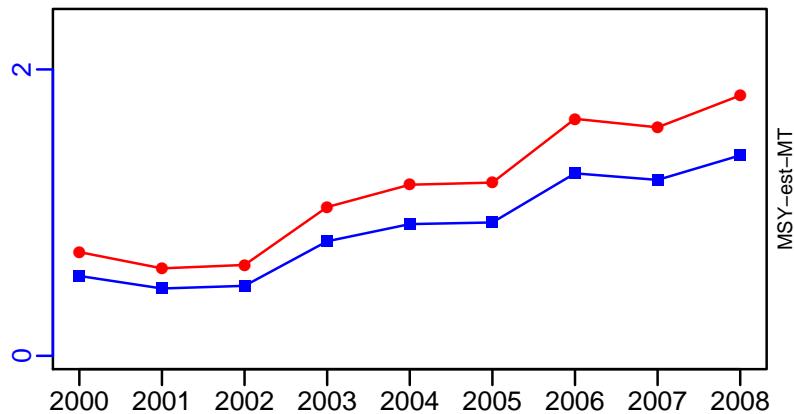
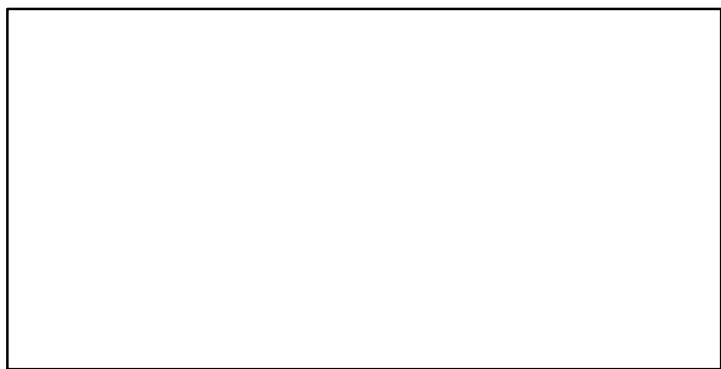
Anchovy Aegean Sea [ANCHMEDGSA22]

TC-MT, TL\*, RecC\* (2000–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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

## Anchovy Black Sea [ANCHMEDGSA29]

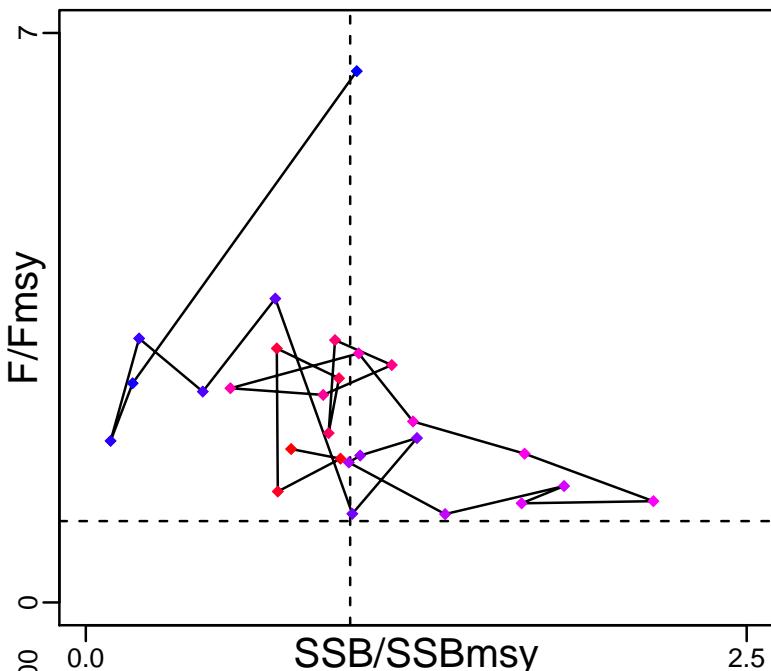
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA29-1988-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	535,627
<b>Fmsy</b>	Fmsy-1/yr	2014	0.49
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.328
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.49
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	278,391
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

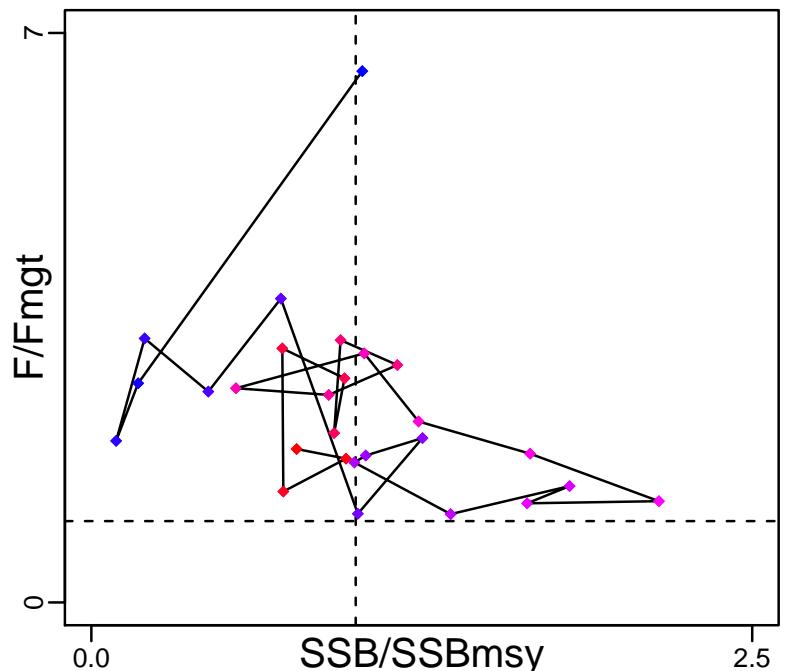
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	416,000	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.68 \times 10^{11}$	-	-	
<b>F</b>	F-1/yr	2014	0.924	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.239	-	-	
<b>TC</b>	TC-MT	2014	157,000			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.777			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	1.886			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.726			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.886			
<b>ER/ERmgt</b>	-	-	-			

Anchovy Black Sea [ANCHMEDGSA29]

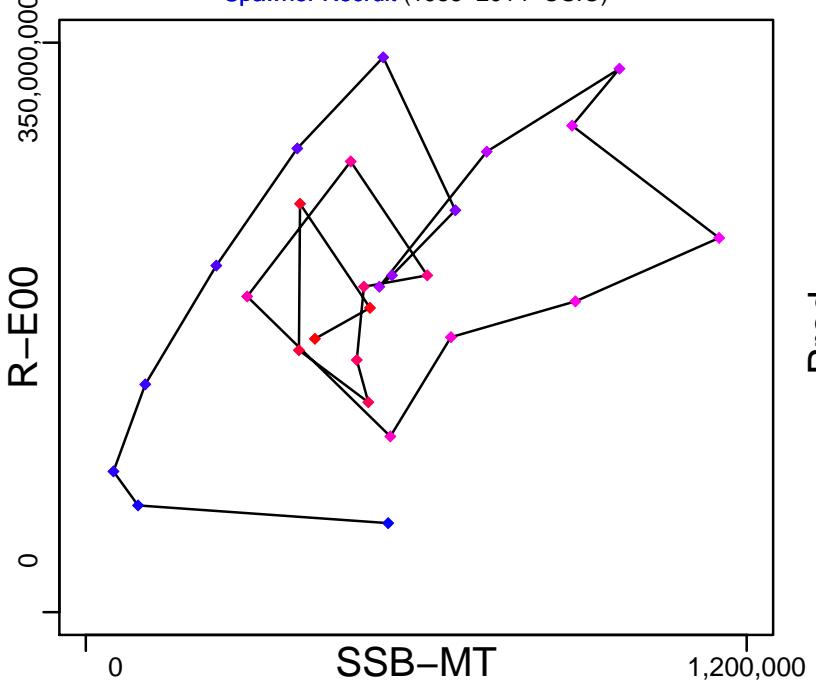
Kobe MSYpref (1988–2014–OSIO)



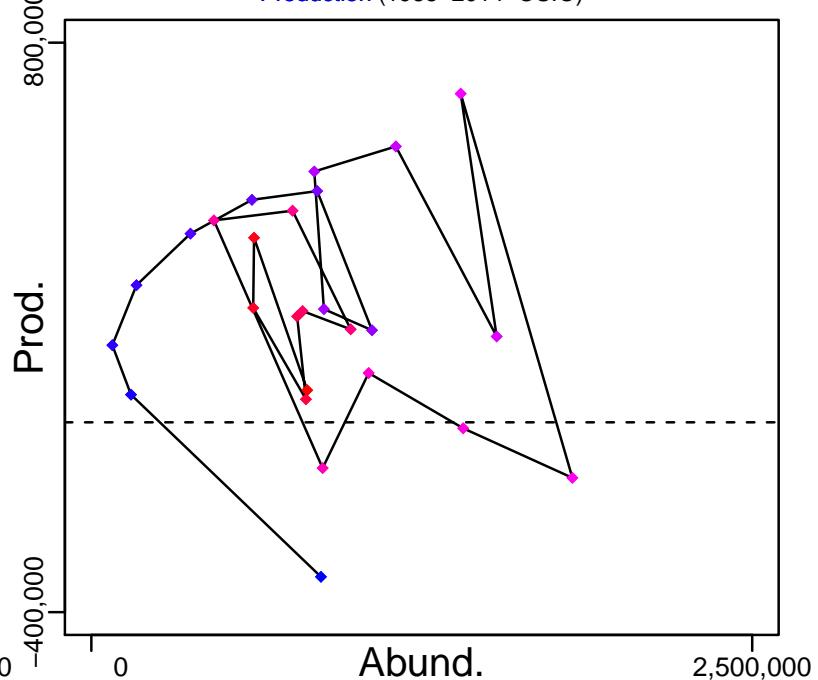
Kobe MGTpref (1988–2014–OSIO)



Spawner Recruit (1988–2014–OSIO)



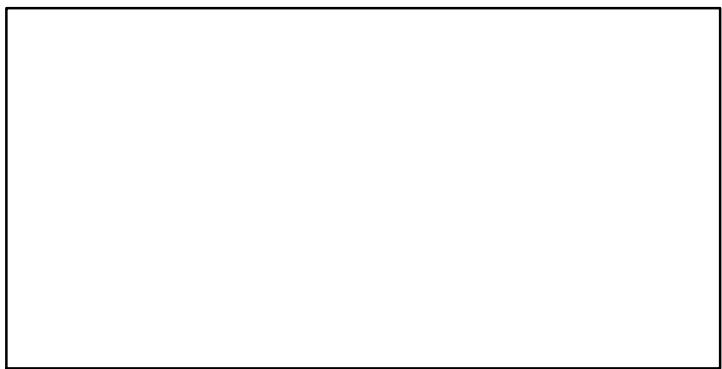
Production (1988–2014–OSIO)



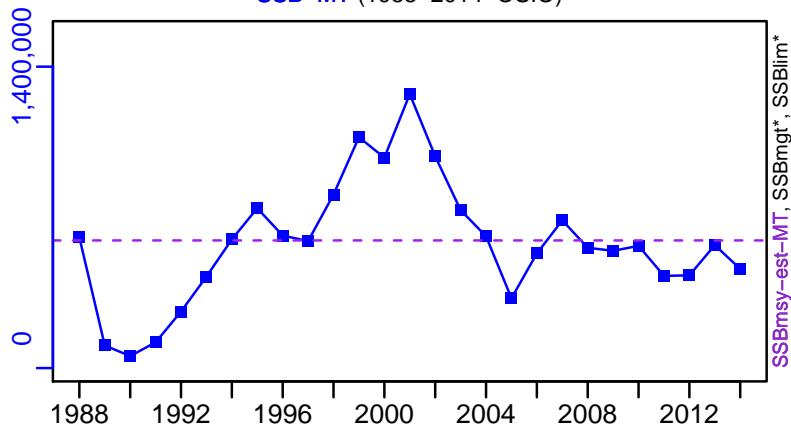
◆ Start Year ◆ End Year \* No Data

Anchovy Black Sea [ANCHMEDGSA29]

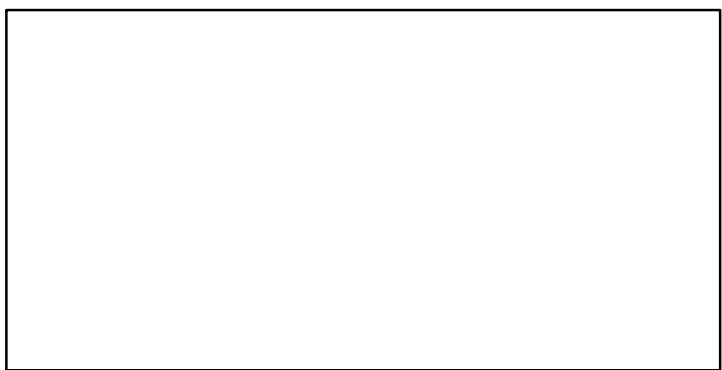
**TB\***



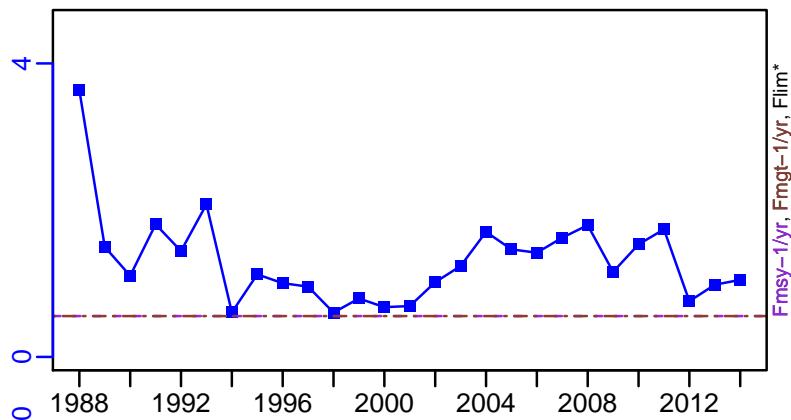
**SSB-MT (1988–2014–OSIO)**



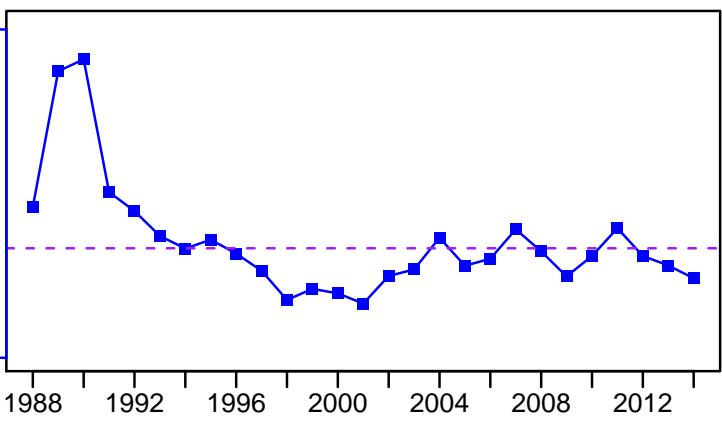
**TN \***



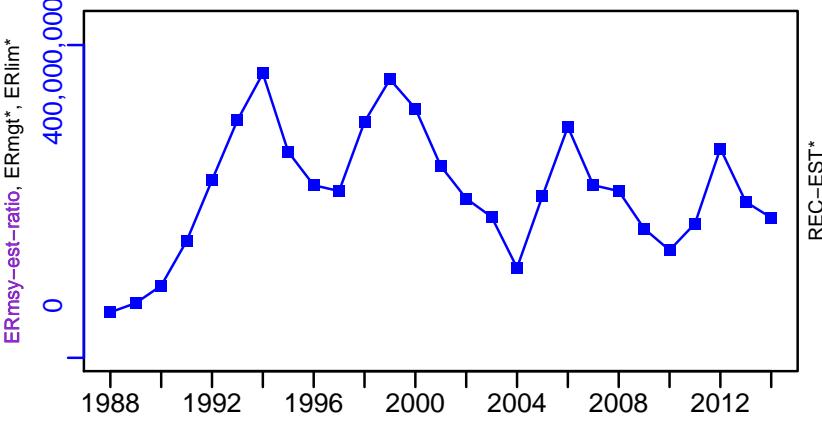
**F-1/yr (1988–2014–OSIO)**



**ER-calc-ratio (1988–2014–OSIO)**



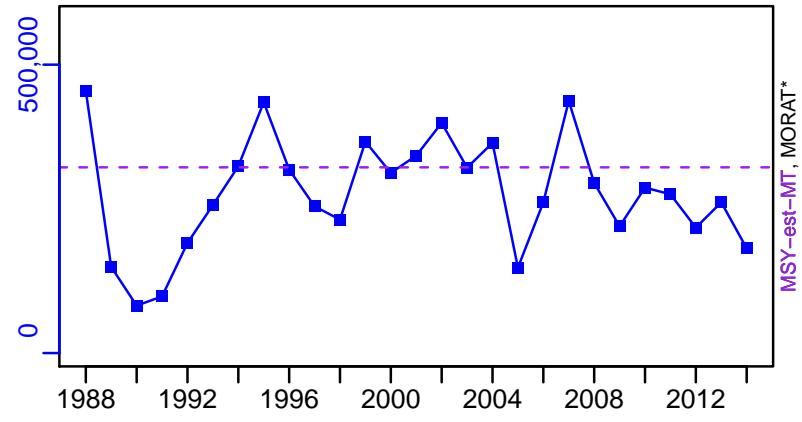
**R-E00 (1988–2014–OSIO)**



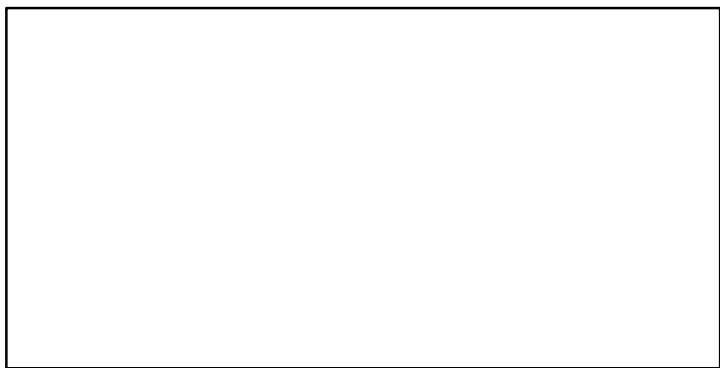
Anchovy Black Sea [ANCHMEDGSA29]

TC-MT, TL\*, RecC\* (1988–2014–OSIO)

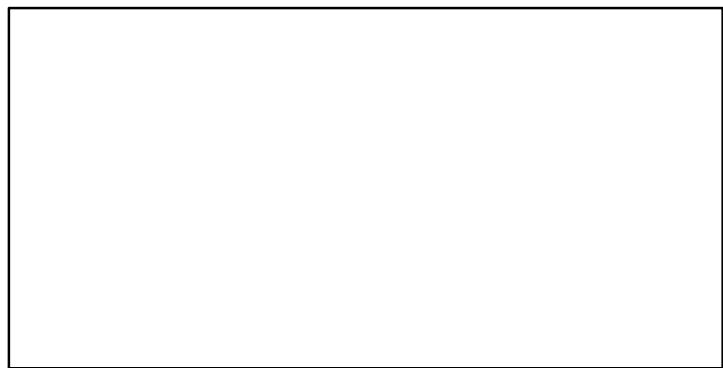
TAC\*, Cpair\*, Cadv\*



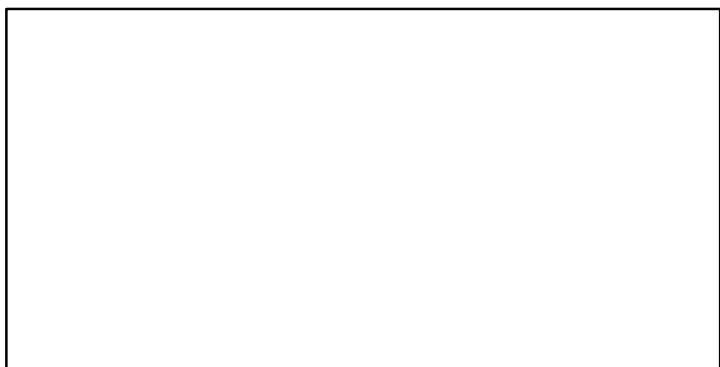
survB\*



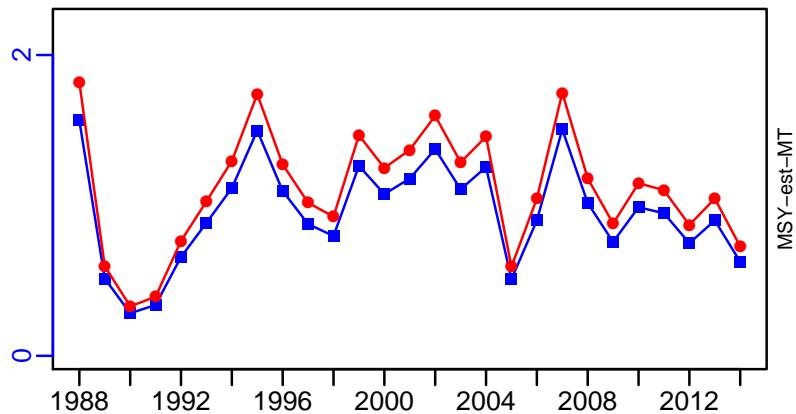
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1988–2014–OSIO)



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

## Anchovy Northern Spain [ANCHMEDGSA6]

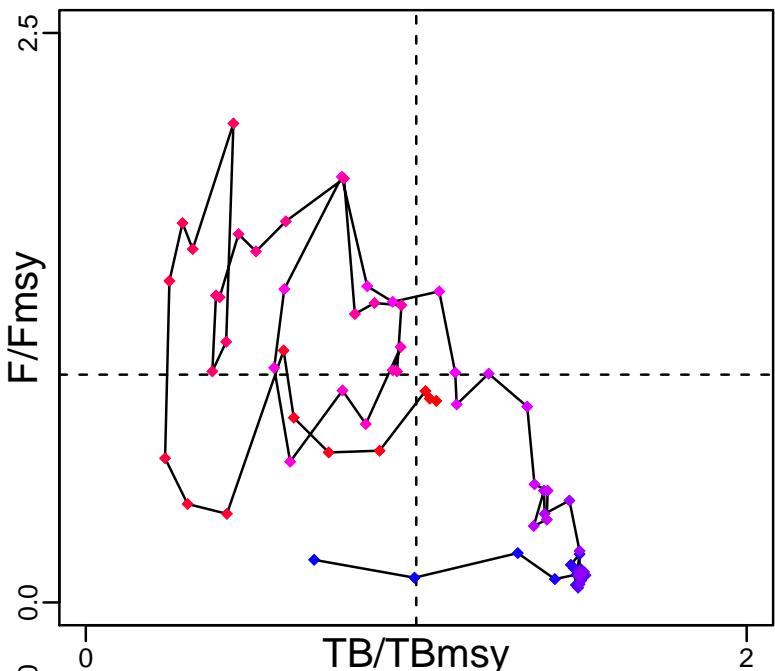
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA6-1945-2015-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015, 2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	45,440
<b>SSBmsy</b>	SSBmsy-est-MT	2009	14,860
<b>Fmsy</b>	Fmsy-1/yr	2015	0.393
<b>ERrmsy</b>	ERrmsy-est-ratio	2015	0.278
<b>TBmgt</b>	TBmgt-MT	2015	45,440
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.393
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	12,650
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

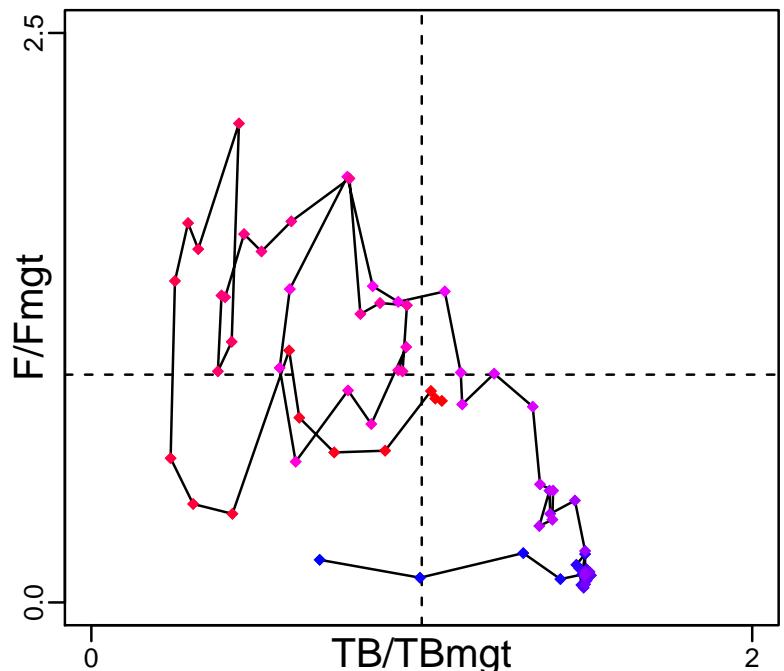
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	48,200	-	-	
<b>SSB</b>	SSB-MT	2009	26,500	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2009	$1.38 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2015	0.348	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.351	-	-	
<b>TC</b>	TC-MT	2009	9810			
<b>TL</b>	TL-MT	2015	16,900			
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	1.061			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2009	1.783			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.885			
<b>ER/ERrmsy</b>	ER-calc-ratio/ERrmsy-est-ratio	2015	1.259			
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2015	1.061			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.885			
<b>ER/ERmgt</b>	-	-	-			

Anchovy Northern Spain [ANCHMEDGSA6]

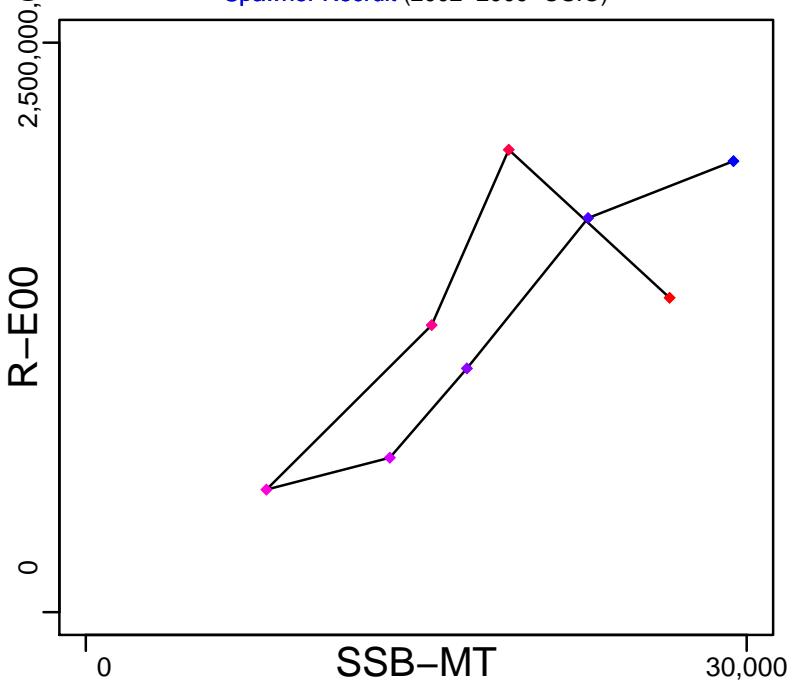
Kobe MSYpref (1945–2015–OSIO)



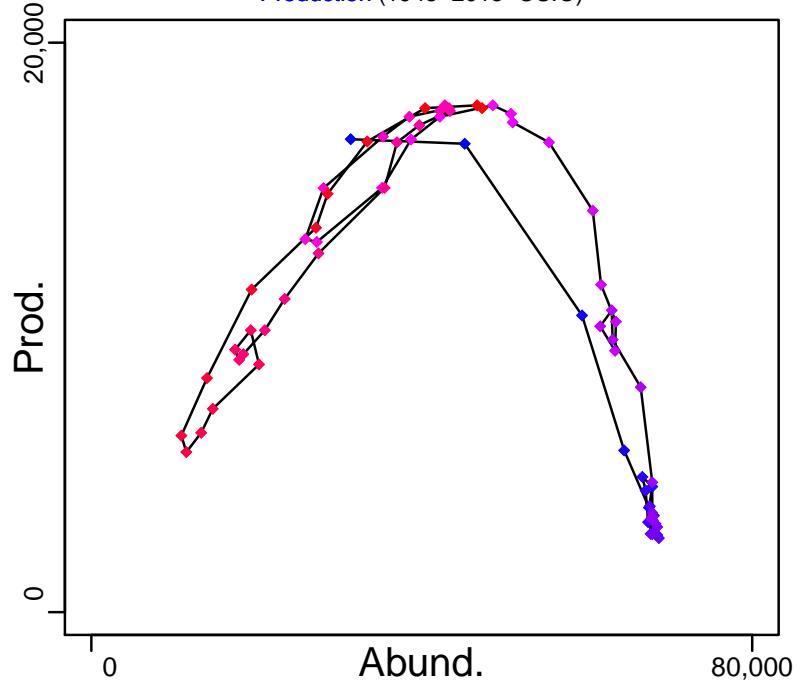
Kobe MGTPref (1945–2015–OSIO)



Spawner Recruit (2002–2009–OSIO)



Production (1945–2015–OSIO)

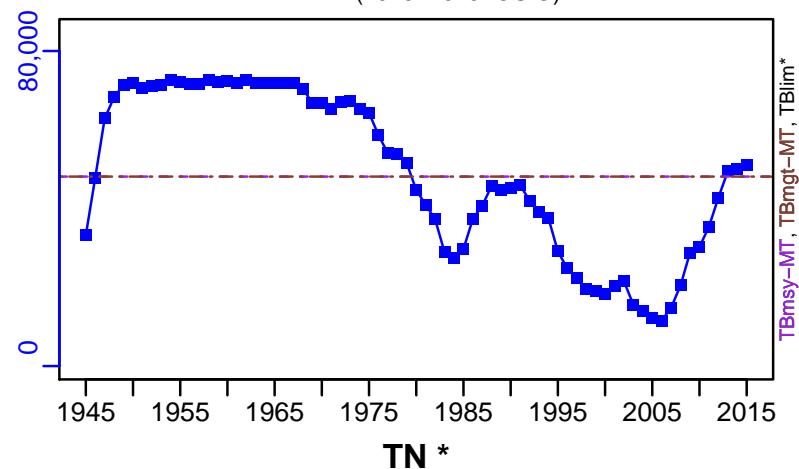


◆ Start Year ◆ End Year \* No Data

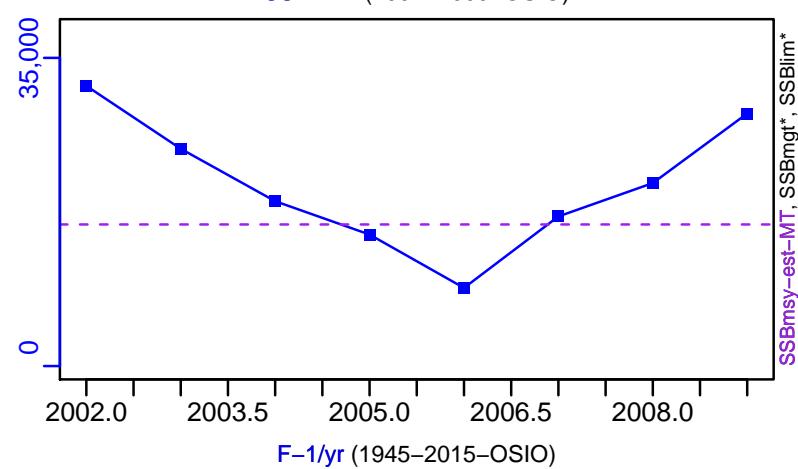
### Anchovy Northern Spain [ANCHMEDGSA6]

TB-MT (1945–2015–OSIO)

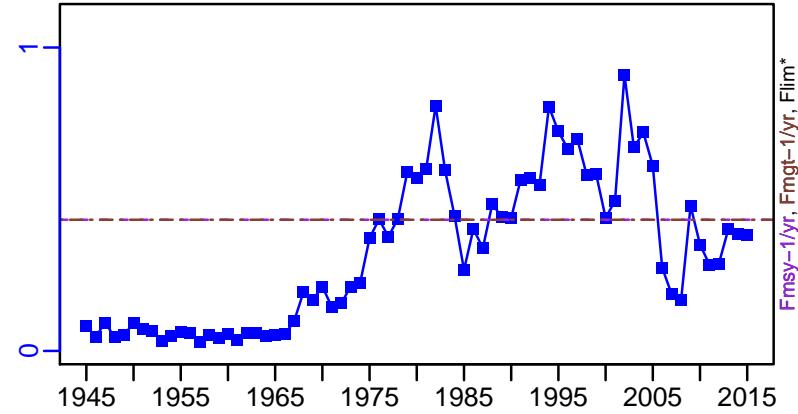
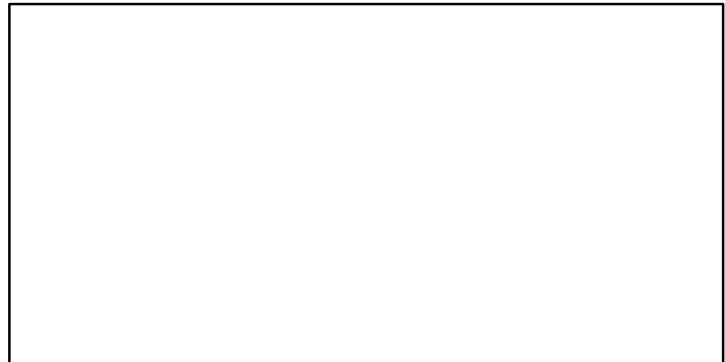
SSB-MT (2002–2009–OSIO)



TN \*

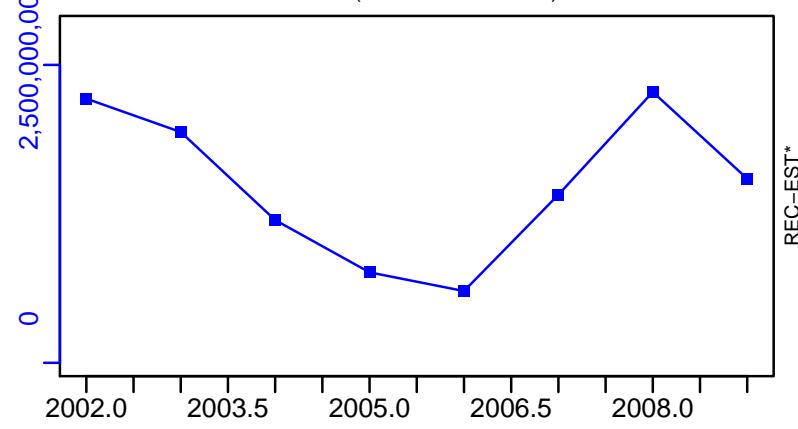
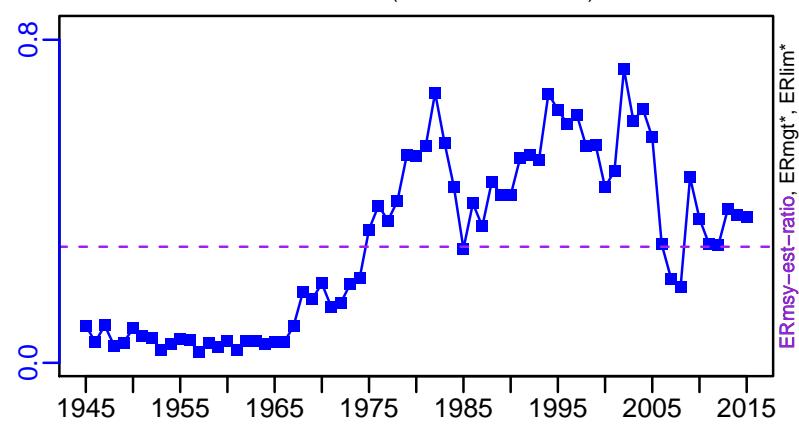


F-1/yr (1945–2015–OSIO)



ER-calc-ratio (1945–2015–OSIO)

R-E00 (2002–2009–OSIO)

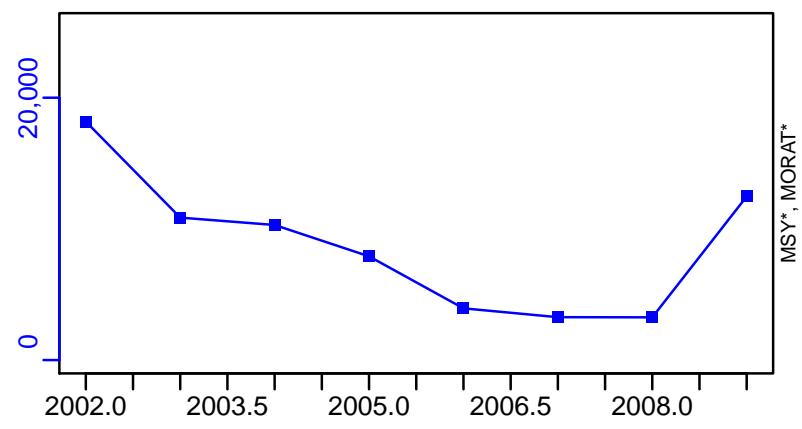


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - Lim BRP  | * No Data |

Anchovy Northern Spain [ANCHMEDGSA6]

TC-MT, TL\*, RecC\* (2002–2009–OSIO)

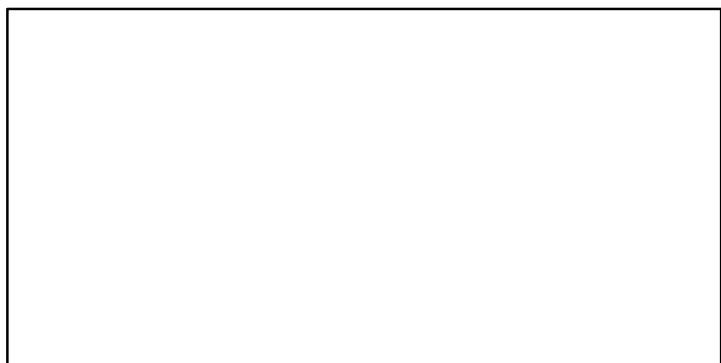
TAC\*, Cpair\*, Cadv\*



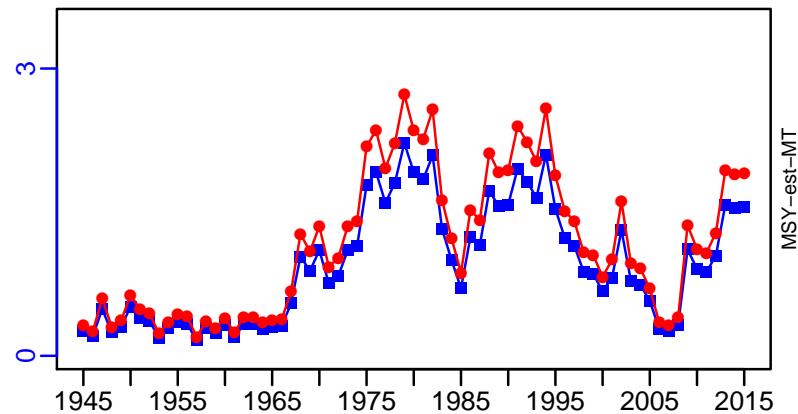
CPUE\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1945–2015–OSIO)



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

## Anchovy Gulf of Lions [ANCHMEDGSA7]

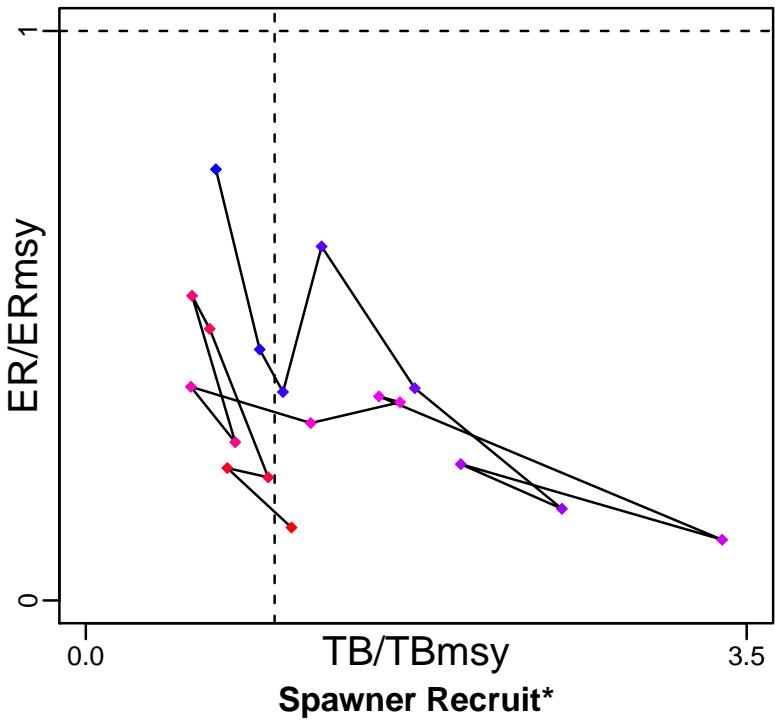
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	IFREMER-ANCHMEDGSA7-1993-2012-BANOBI
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	French Research Institute for Exploitation of the Sea
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	33,232
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.382
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	12,690
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

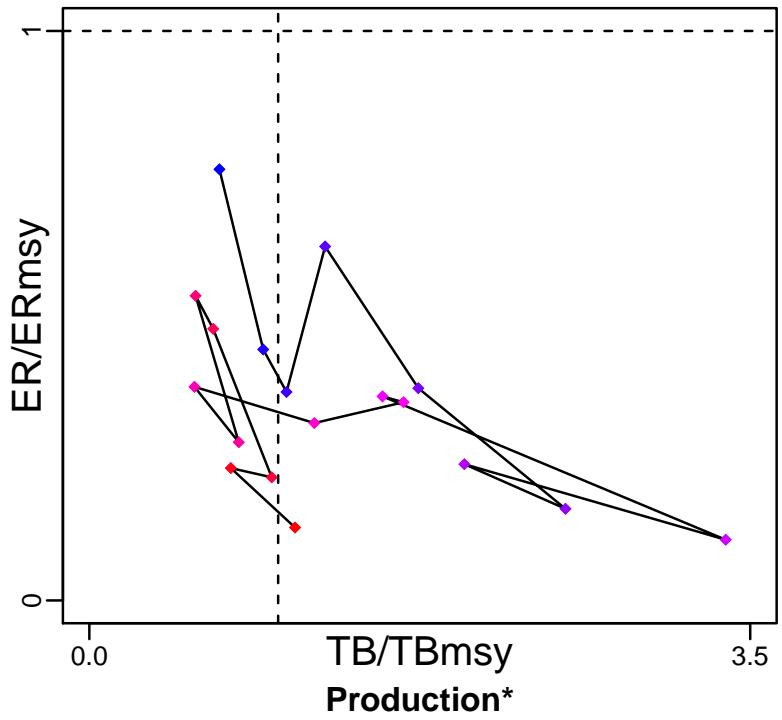
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2012	32,800	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.049	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2012	1770			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2012	0.987			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.128			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Anchovy Gulf of Lions [ANCHMEDGSA7]**

Kobe MSYpref (1993–2012–BANOBI)



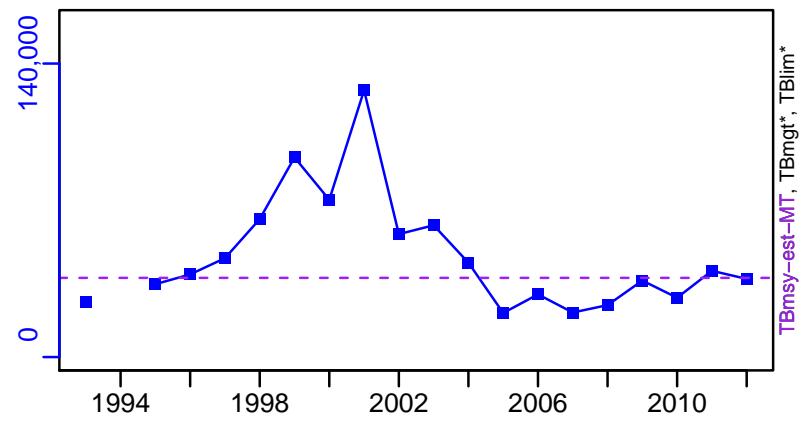
Kobe MGTpref (1993–2012–BANOBI)



◆ Start Year   ◆ End Year   \* No Data

**Anchovy Gulf of Lions [ANCHMEDGSA7]**

TB-MT (1993–2012–BANOBI)



**SSB\***



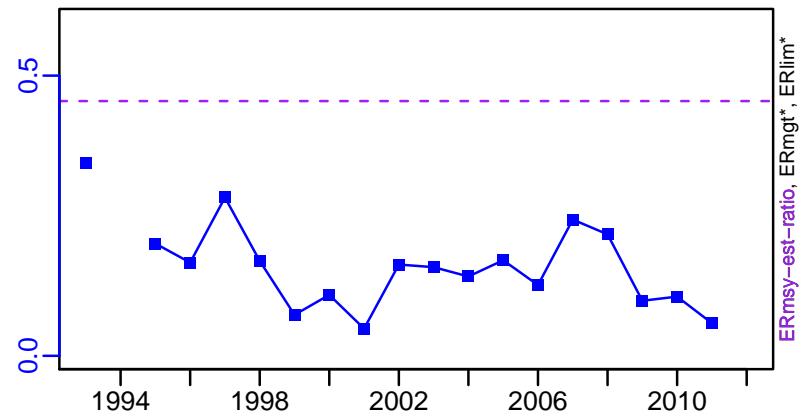
**TN \***



**F\***



ER-calc-ratio (1993–2012–BANOBI)



**Recruits\***

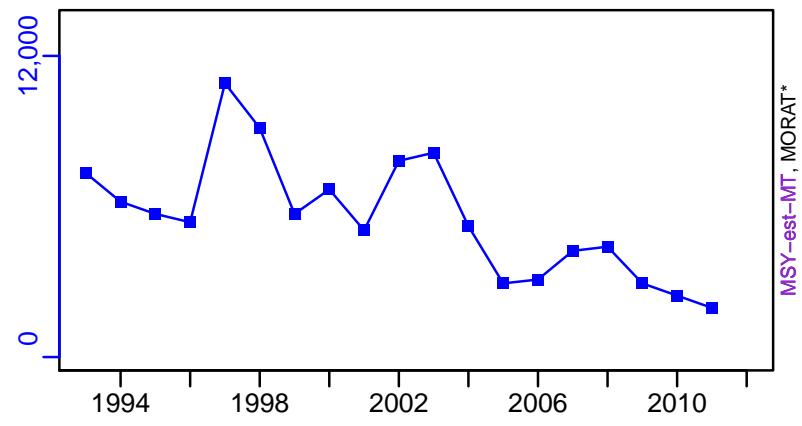


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

**Anchovy Gulf of Lions [ANCHMEDGSA7]**

TL-MT, TC\*, RecC\* (1993–2012–BANOBI)

TAC\*, Cpair\*, Cadv\*



survB\*



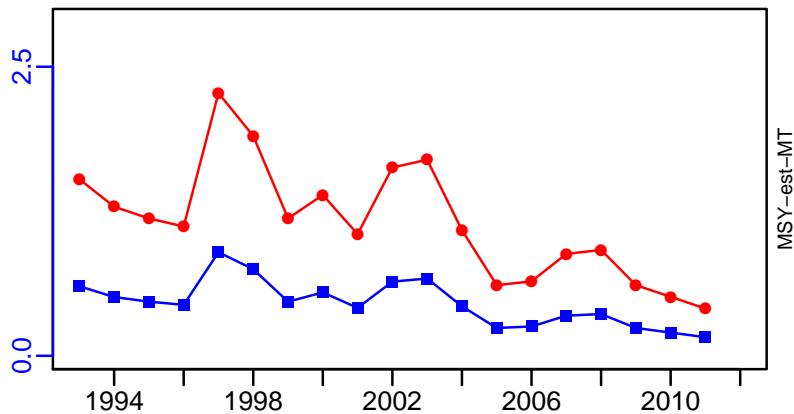
CPUE\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1993–2012–BANOBI)



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

## Anchovy Ligurian and North Tyrrhenian Sea [ANCHMEDGSA9]

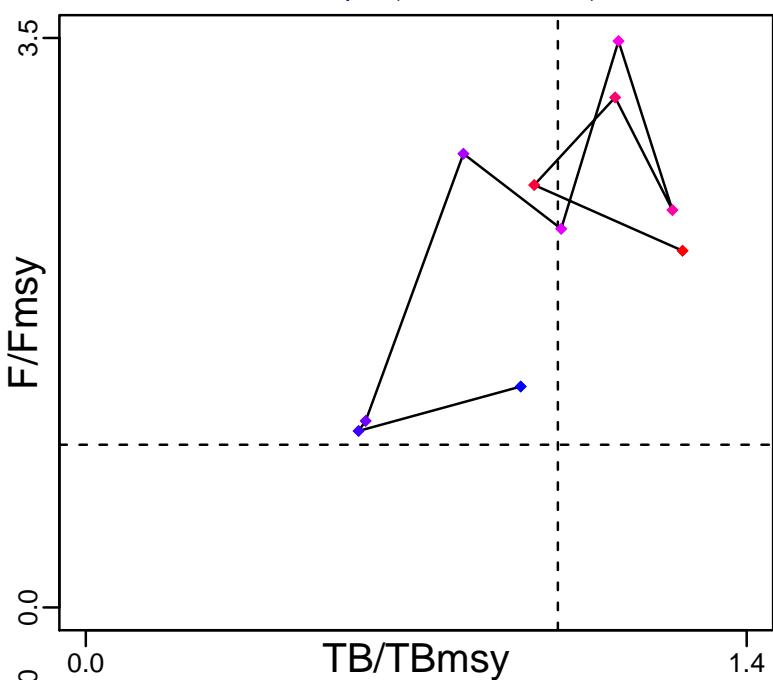
Metadata	
<b>Scientific Name</b>	Engraulis encrasiculus
<b>Current Assess ID</b>	STECF-ANCHMEDGSA9-2006-2015-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	14,002
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.52
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.294
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.52
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	4110
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

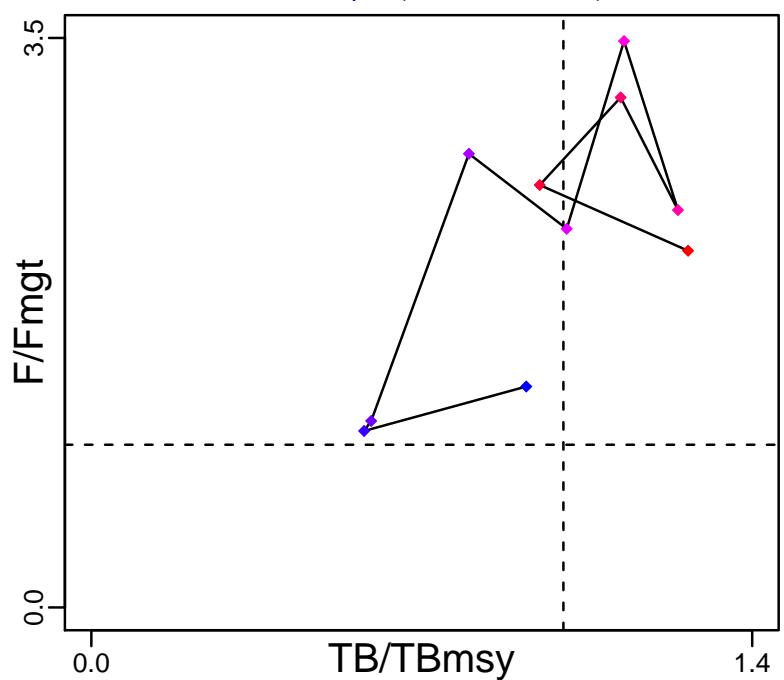
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	17,700	-	-	
<b>SSB</b>	SSB-MT	2015	11,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$1.66 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2015	1.14	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.22	-	-	
<b>TC</b>	TC-MT	2015	3890			
<b>TL</b>	TL-MT	2015	3960			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	1.264			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	2.192			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.749			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.192			
<b>ER/ERmgt</b>	-	-	-			

Anchovy Ligurian and North Tyrrhenian Sea [ANCHMEDGSA9]

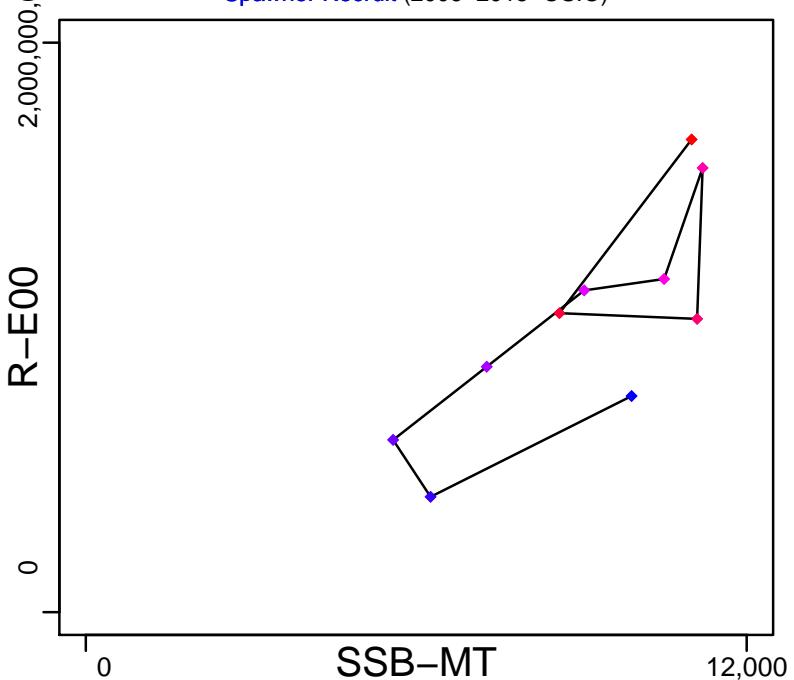
Kobe MSYpref (2006–2015–OSIO)



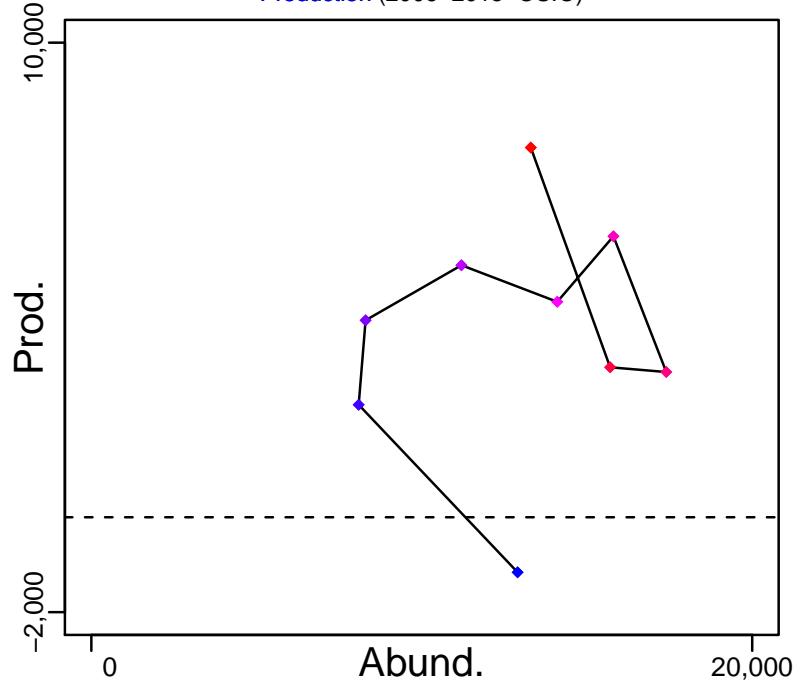
Kobe MGTpref (2006–2015–OSIO)



Spawner Recruit (2006–2015–OSIO)



Production (2006–2015–OSIO)

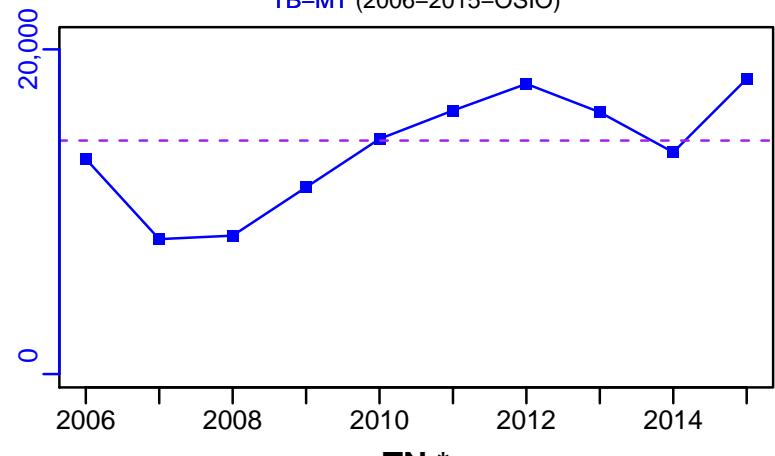


◆ Start Year   ◆ End Year   \* No Data

### Anchovy Ligurian and North Tyrrhenian Sea [ANCHMEDGSA9]

TB-MT (2006–2015–OSIO)

SSB-MT (2006–2015–OSIO)



TN \*

TB<sub>msy</sub>-est-MT, TB<sub>mgt</sub>, TB<sub>lim</sub>\*

2006 2008 2010 2012 2014

F-1/yr (2006–2015–OSIO)

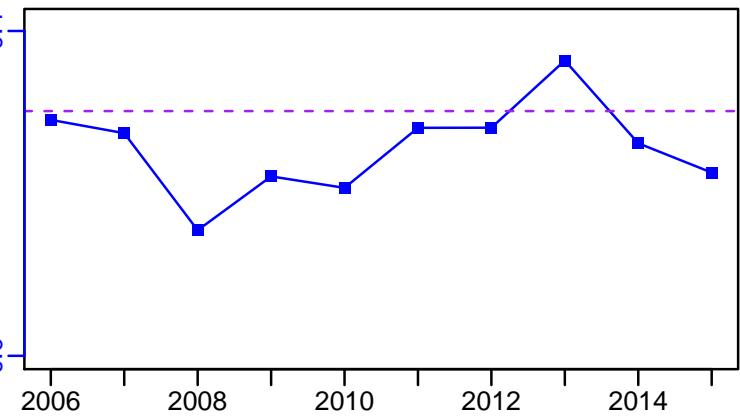
SSB<sub>msy</sub>, SSB<sub>mgt</sub>, SSB<sub>lim</sub>\*

F<sub>msy</sub>-1/yr, F<sub>mgt</sub>-1/yr, F<sub>lim</sub>\*

2006 2008 2010 2012 2014

ER-calc-ratio (2006–2015–OSIO)

ER<sub>msy</sub>-est-ratio, ER<sub>mgt</sub>, ER<sub>lim</sub>\*



R-E00 (2006–2015–OSIO)

REC-EST\*

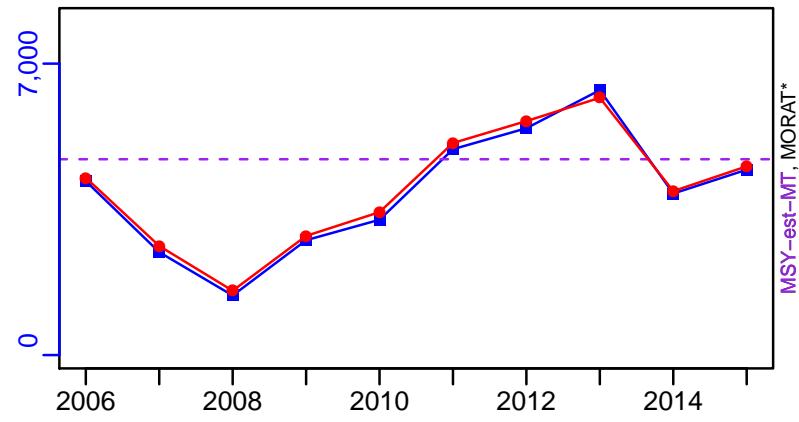
2006 2008 2010 2012 2014

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

Anchovy Ligurian and North Tyrrhenian Sea [ANCHMEDGSA9]

TC-MT, TL-MT, RecC\* (2006–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



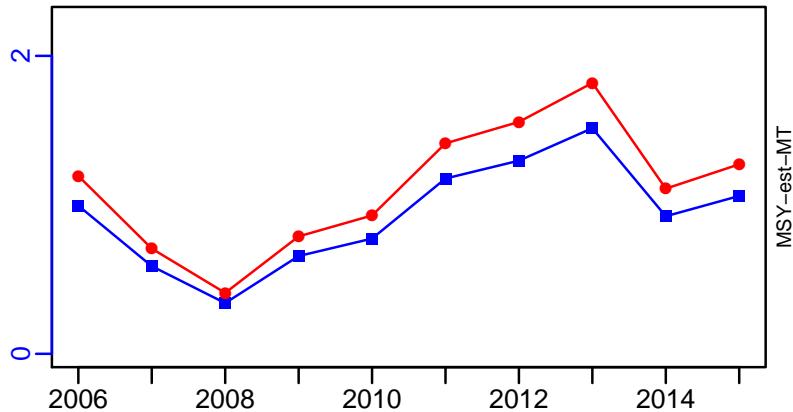
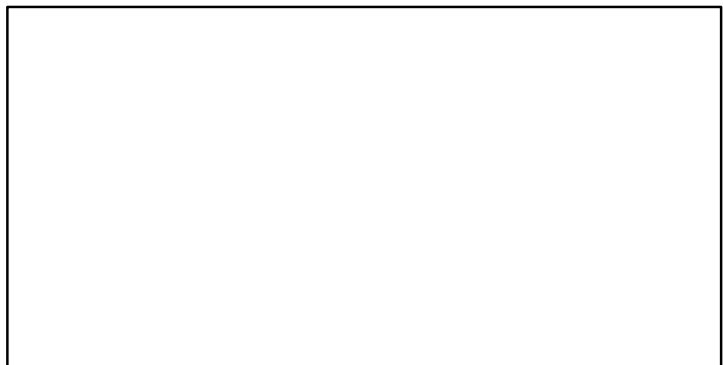
survB\*

MSY-est-MT, MORAT\*

CPUF\*

EFFORT\*

TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2015–OSIO)



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

**Black bellied angler Malta Island and South of Sicily (GSA 15, 16)**  
**[ANGLMEDGSA15-16]**

Metadata	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	STECF-ANGLMEDGSA15-16-2006-2011-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-extr-1/yr	2010	0.165
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.16
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

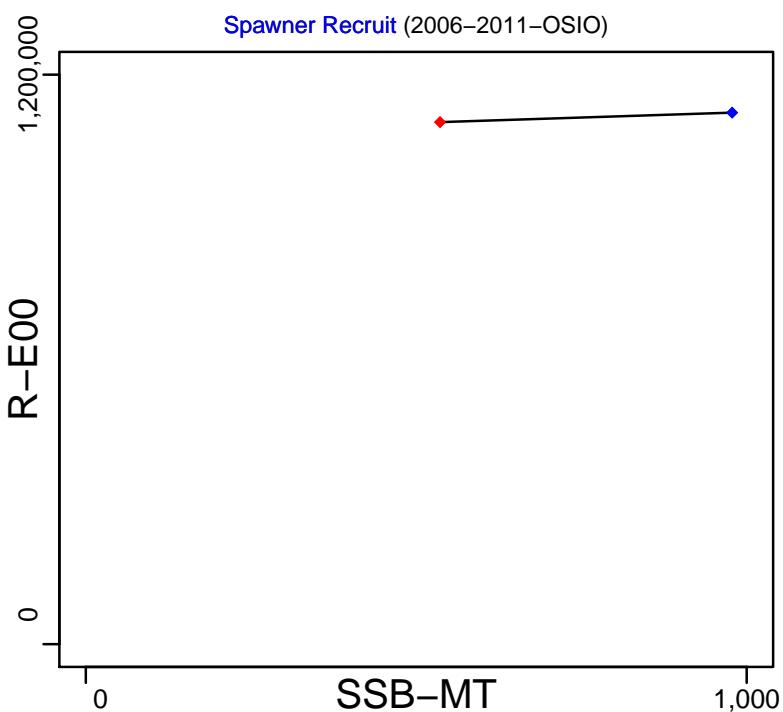
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	536	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	1,100,000	-	-
<b>F</b>	F-1/yr	2011	0.351	-	-
<b>ER</b>	ER-calc-ratio	2011	0.147	-	-
<b>TC</b>	TC-MT	2011	279		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2010	2.07		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	2.194		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2006–2011–OSIO)

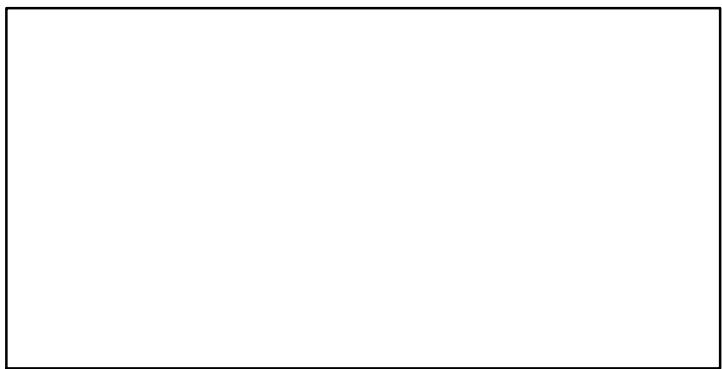
Production\*



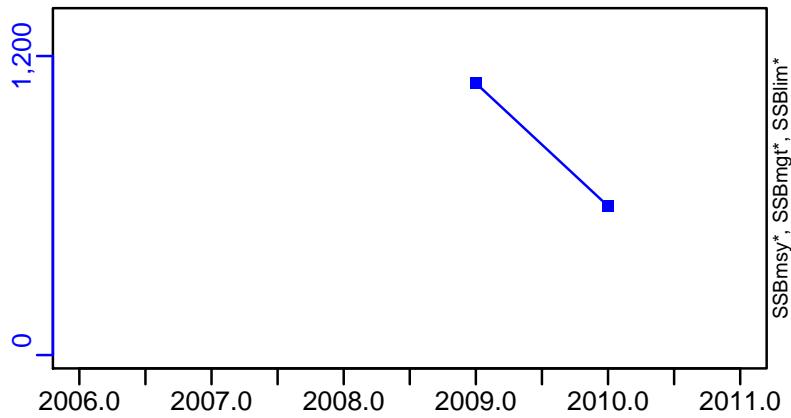
◆ Start Year   ◆ End Year   \* No Data

**Black bellied angler Malta Island and South of Sicily (GSA 15, 16) [ANGLMEDGSA15–16]**

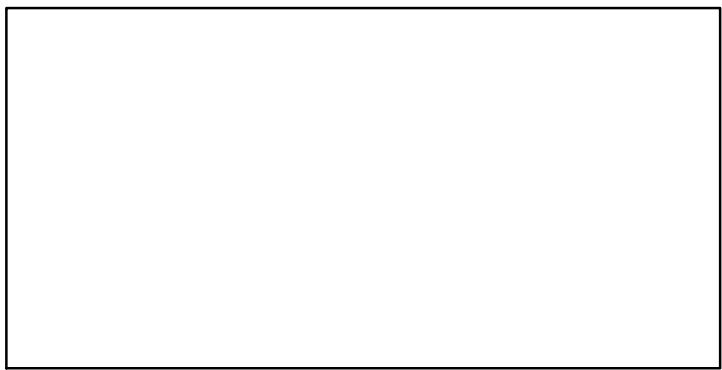
**TB\***



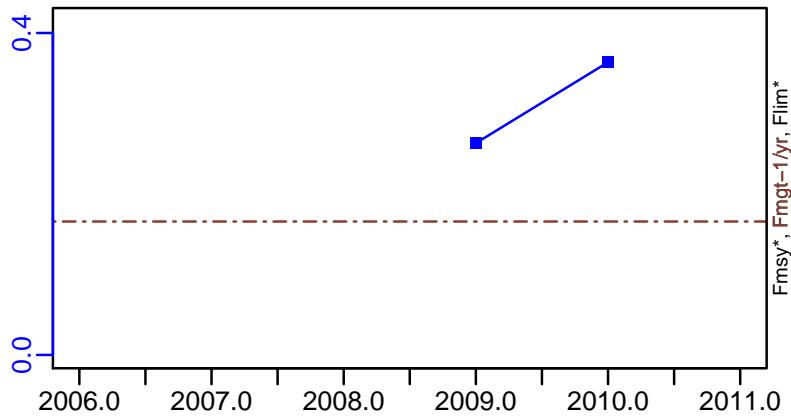
**SSB-MT (2006–2011–OSIO)**



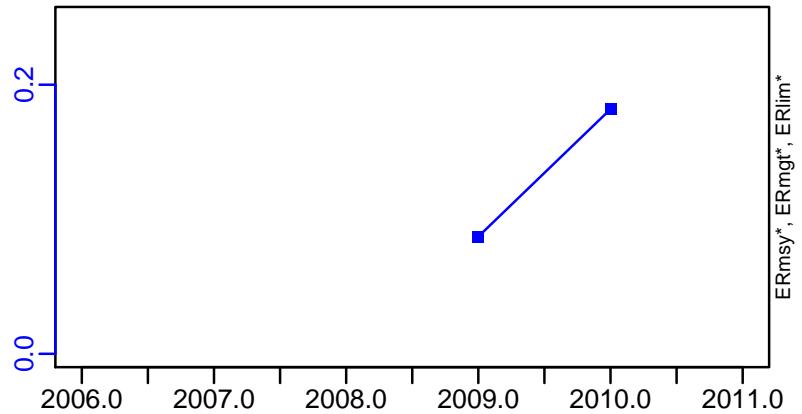
**TN \***



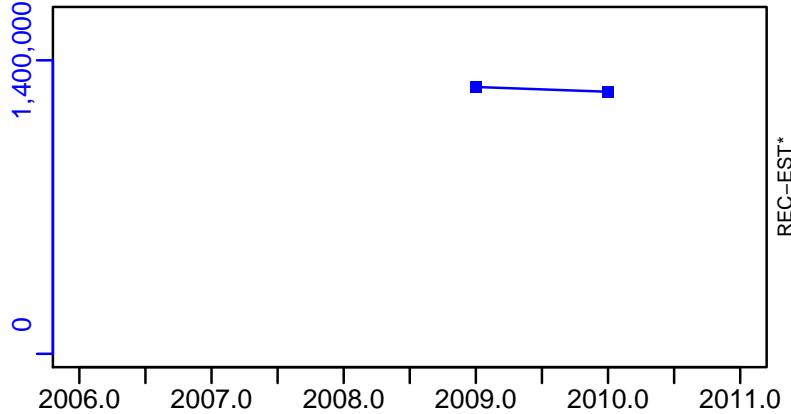
**F-1/yr (2006–2011–OSIO)**



**ER-calc-ratio (2006–2011–OSIO)**



**R-E00 (2006–2011–OSIO)**

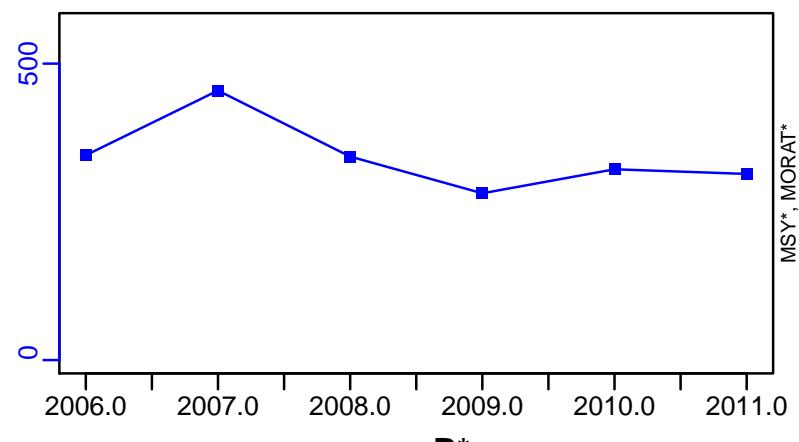


- Listed time series
- - - Target BRP
- - - MSY-based BRP
- - - Lim BRP
- Rec-Est
- \* No Data

**Black bellied angler Malta Island and South of Sicily (GSA 15, 16) [ANGLMEDGSA15–16]**

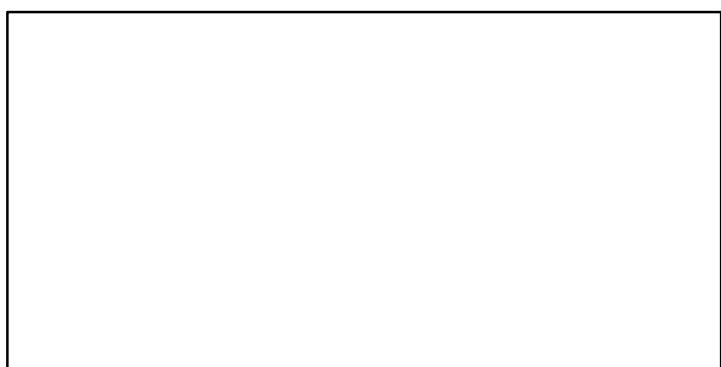
TC-MT, TL\*, RecC\* (2006–2011–OSIO)

TAC\*, Cpair\*, Cadv\*

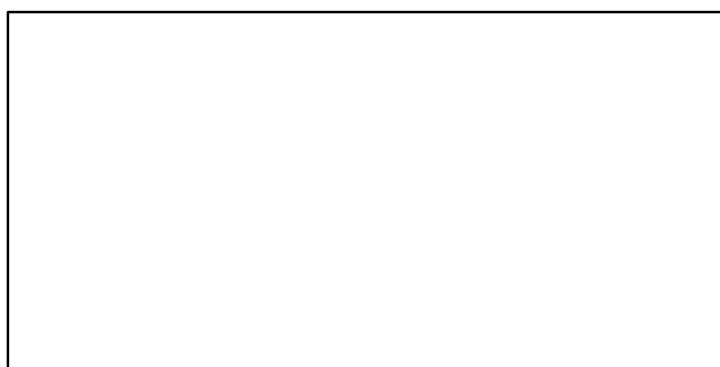


MSY\*, MORAT\*

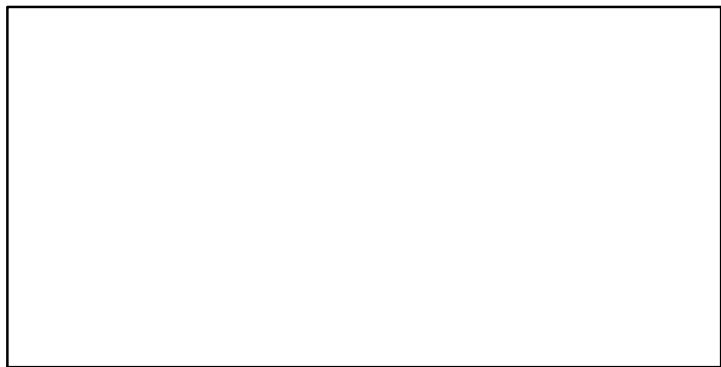
**survB\***



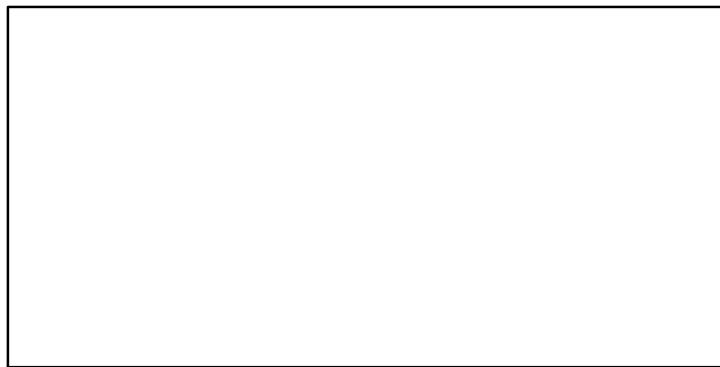
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Black bellied angler Balearic Island [ANGLMEDGSA5]

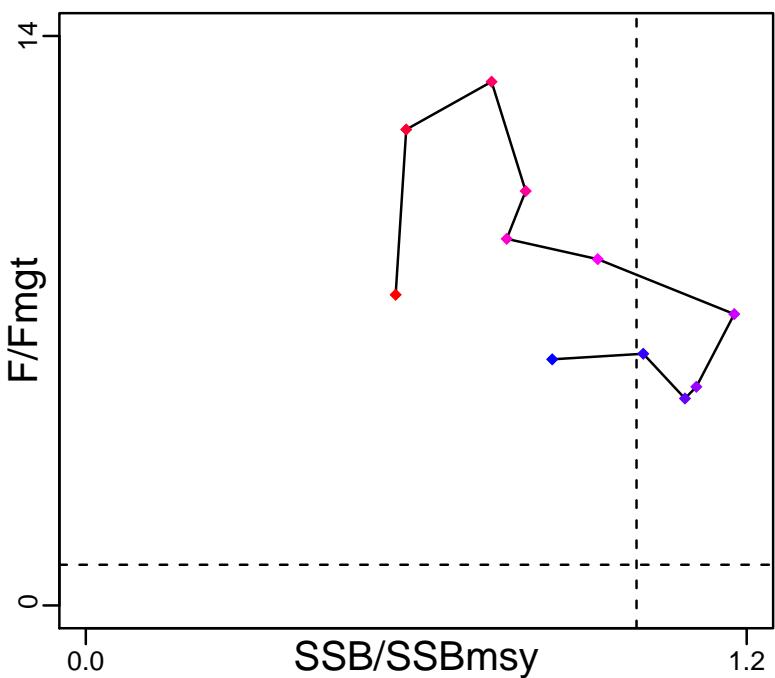
<b>Metadata</b>	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	STECF-ANGLMEDGSA5-2003-2013-OSIO
<b>Area</b>	Balearic Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	15
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.469
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.08
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	19
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

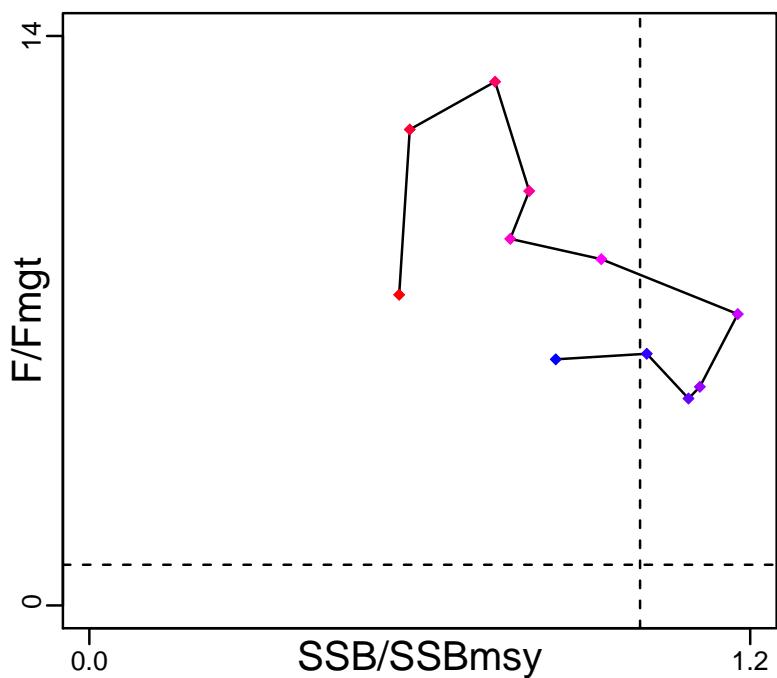
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2013	8	-	5+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	152,000	-	-	
<b>F</b>	F-1/yr	2013	0.611	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.486	-	-	
<b>TC</b>	TC-MT	2013	11			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	0.563			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	1.037			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	7.638			
<b>ER/ERmgt</b>	-	-	-			

**Black bellied angler Balearic Island [ANGLMEDGSA5]**

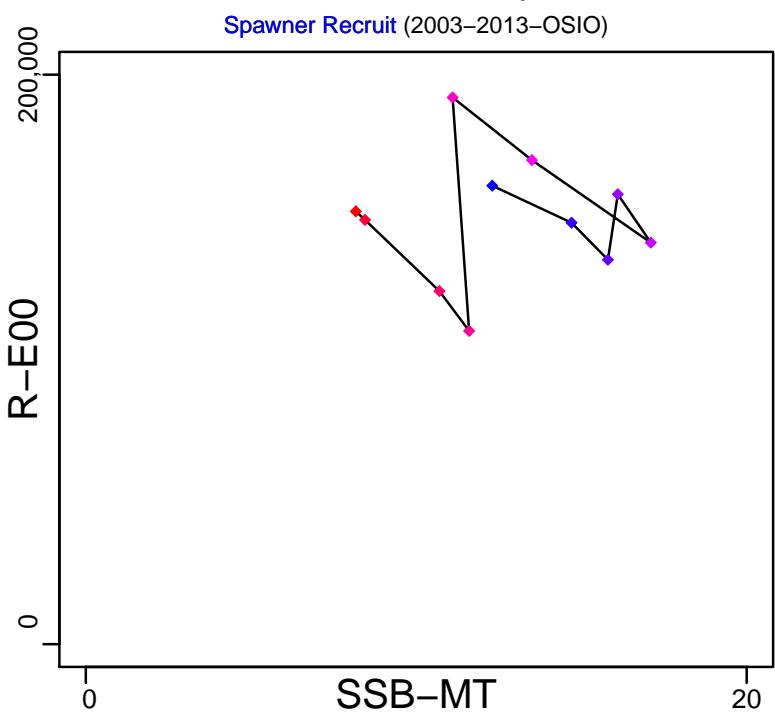
Kobe MSYpref (2003–2013–OSIO)



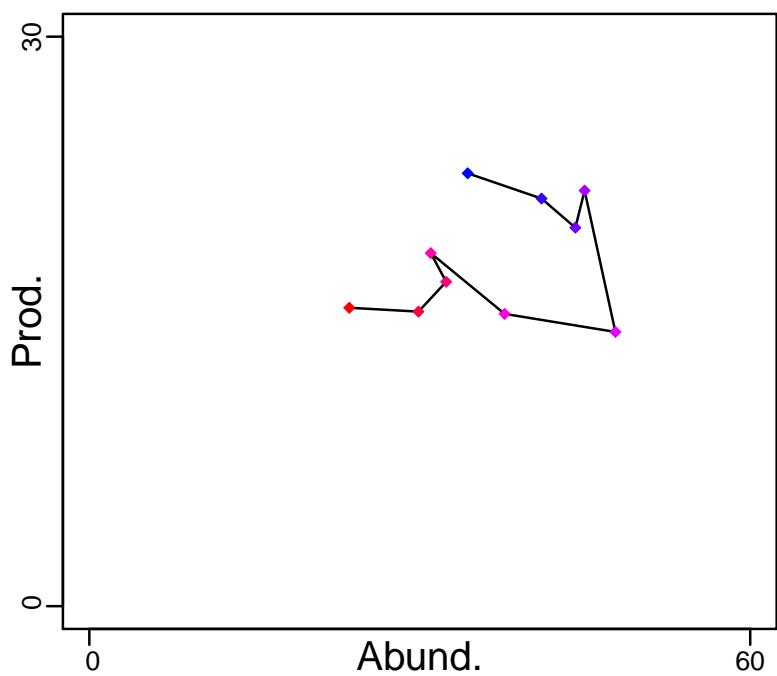
Kobe MGTPref (2003–2013–OSIO)



Spawner Recruit (2003–2013–OSIO)



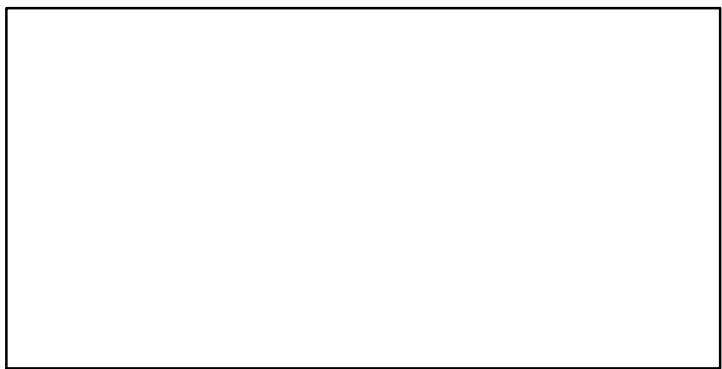
Production (2003–2013–OSIO)



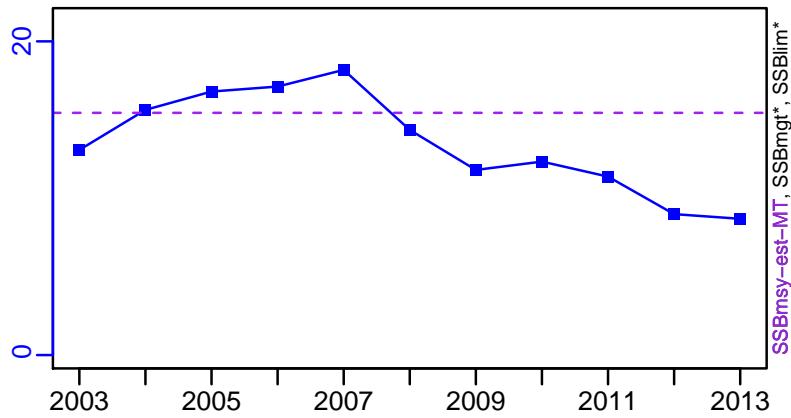
◆ Start Year   ◆ End Year   \* No Data

**Black bellied angler Balearic Island [ANGLMEDGSA5]**

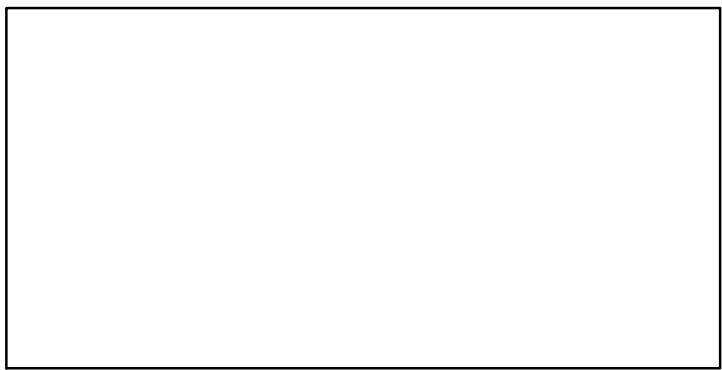
**TB\***



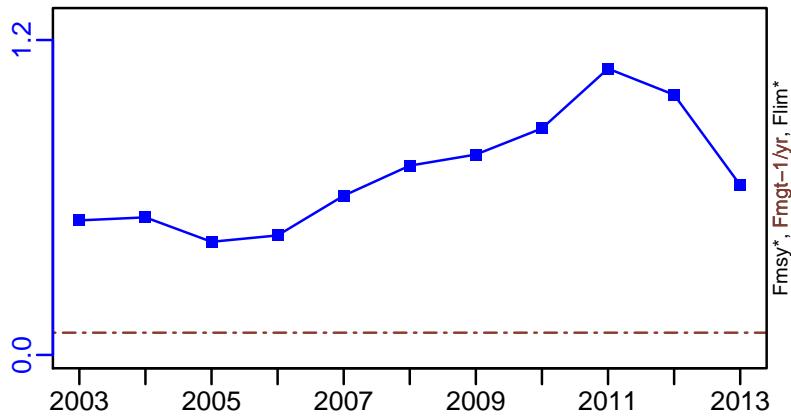
**SSB-MT (2003–2013–OSIO)**



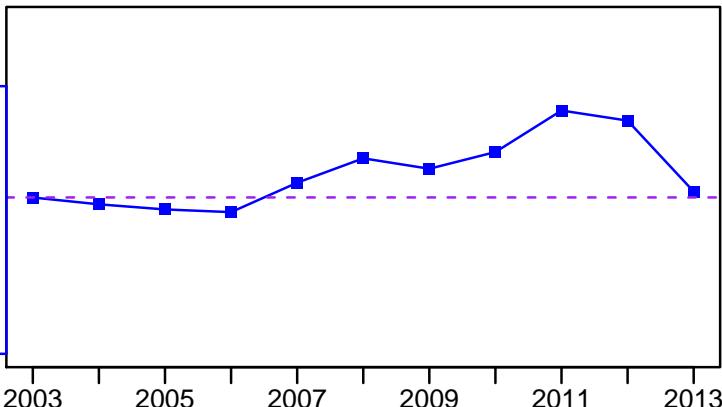
**TN \***



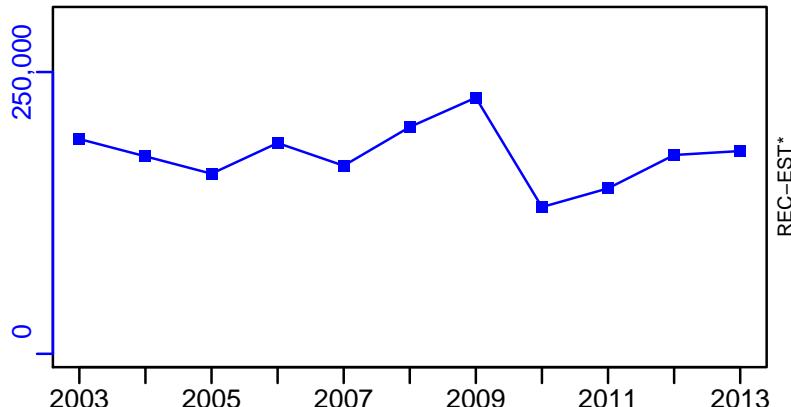
**F-1/yr (2003–2013–OSIO)**



**ER-calc-ratio (2003–2013–OSIO)**



**R-E00 (2003–2013–OSIO)**

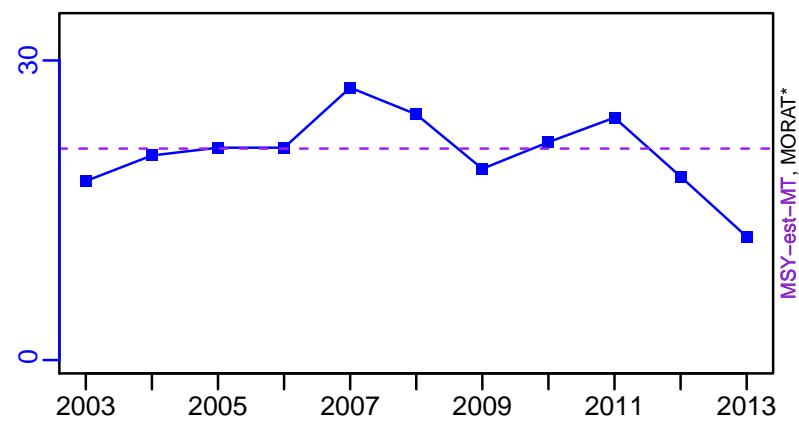


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

**Black bellied angler Balearic Island [ANGLMEDGSA5]**

TC-MT, TL\*, RecC\* (2003–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



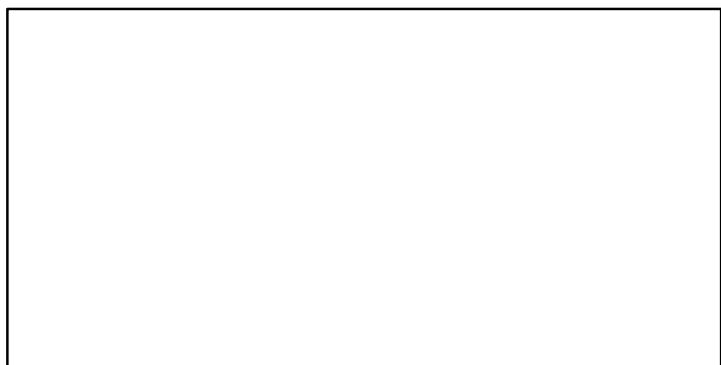
**survB\***



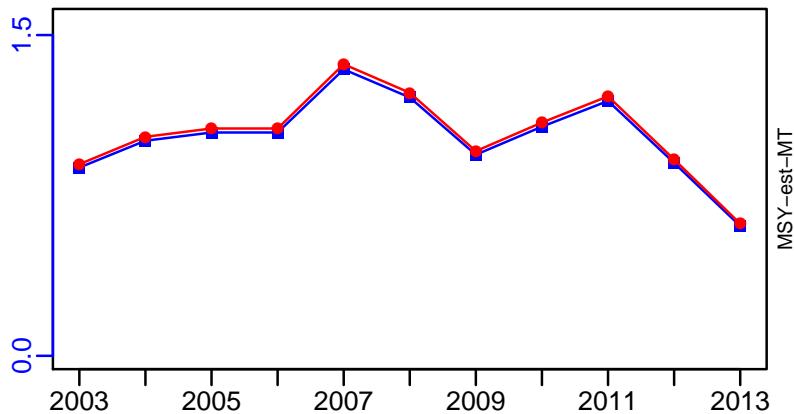
**CPUE\***



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2003–2013–OSIO)



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

## Black bellied angler Northern Spain [ANGLMEDGSA6]

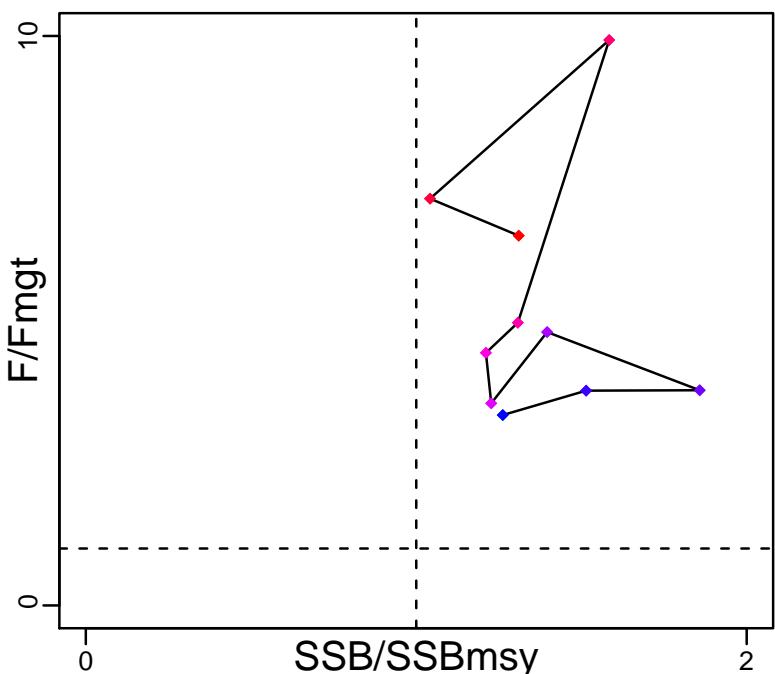
<b>Metadata</b>	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	STECF-ANGLMEDGSA6-2004-2013-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	372
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.794
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.14
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	853
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

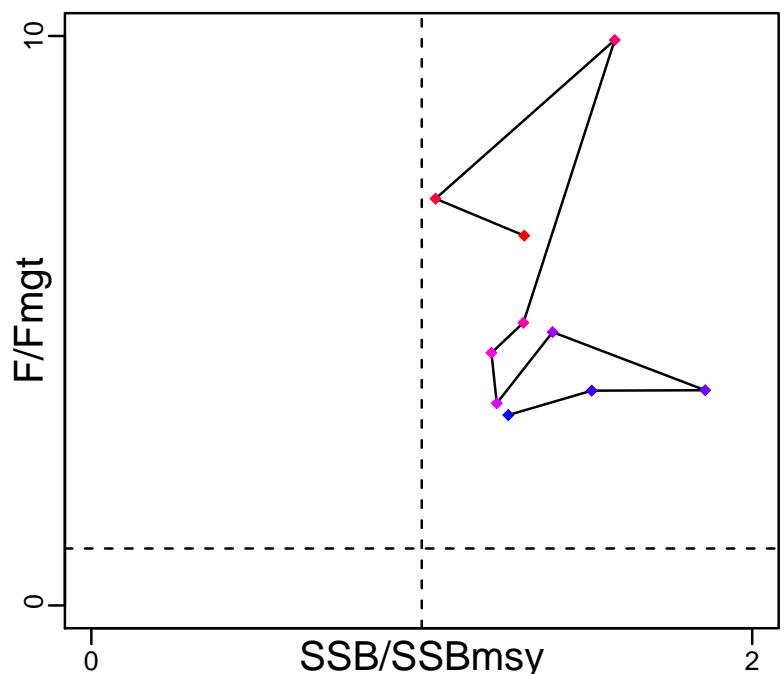
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2013	488	-	5+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	9,510,000	-	-	
<b>F</b>	F-1/yr	2013	0.909	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.747	-	-	
<b>TC</b>	TC-MT	2013	1050			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	1.31			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.94			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	6.493			
<b>ER/ERmgt</b>	-	-	-			

**Black bellied angler Northern Spain [ANGLMEDGSA6]**

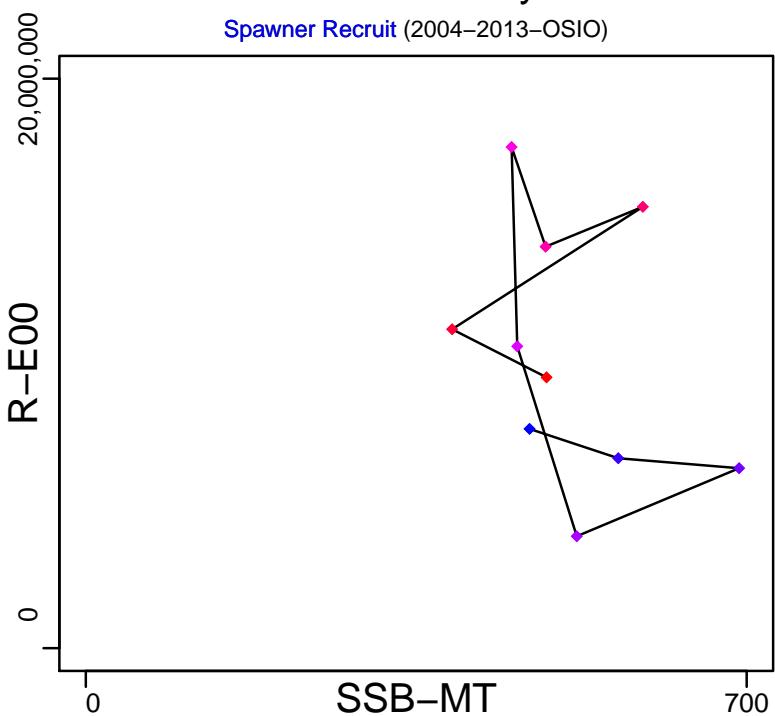
Kobe MSYpref (2004–2013–OSIO)



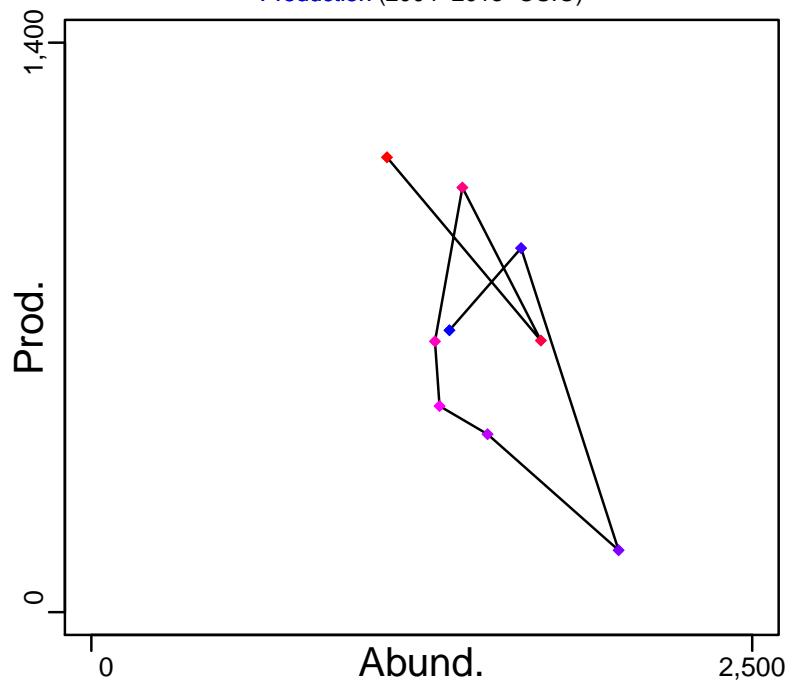
Kobe MGTPref (2004–2013–OSIO)



Spawner Recruit (2004–2013–OSIO)



Production (2004–2013–OSIO)



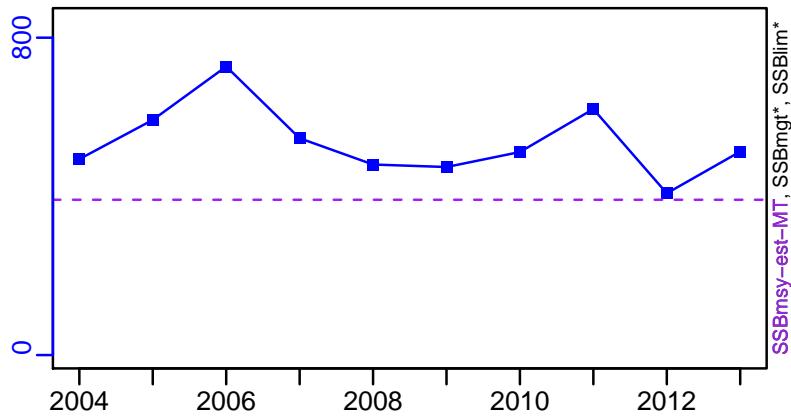
◆ Start Year ◆ End Year \* No Data

Black bellied angler Northern Spain [ANGLMEDGSA6]

**TB\***



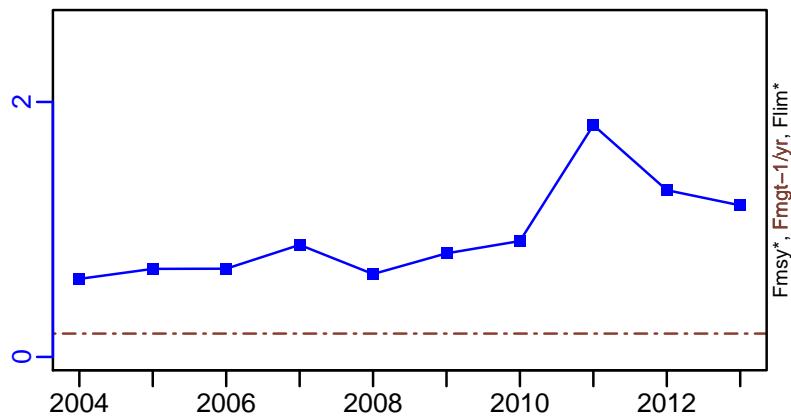
**SSB-MT (2004–2013–OSIO)**



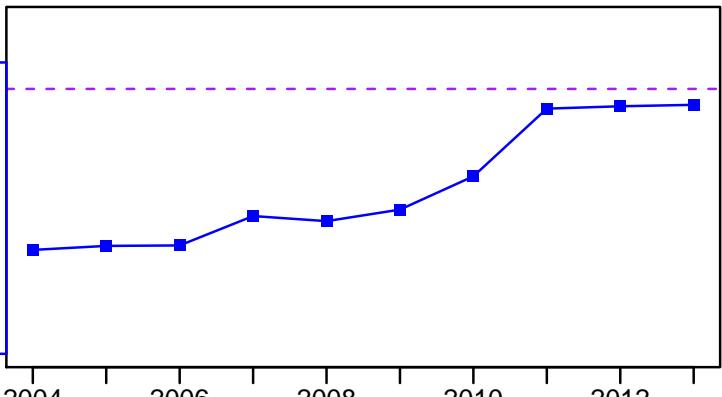
**TN \***



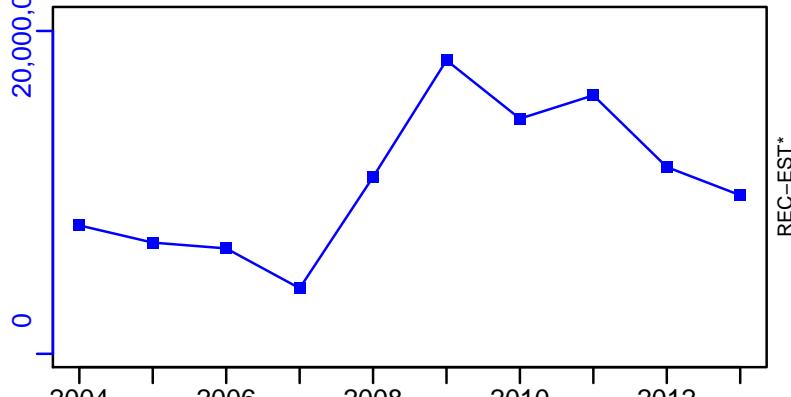
**F-1/yr (2004–2013–OSIO)**



**ER-calc-ratio (2004–2013–OSIO)**



**R-E00 (2004–2013–OSIO)**

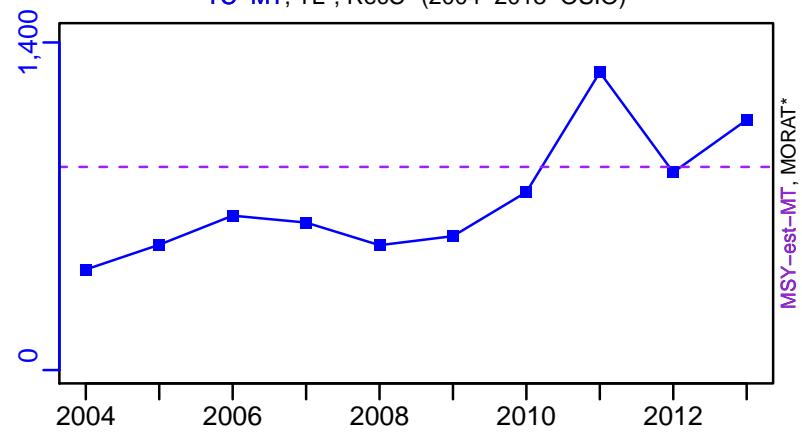


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

**Black bellied angler Northern Spain [ANGLMEDGSA6]**

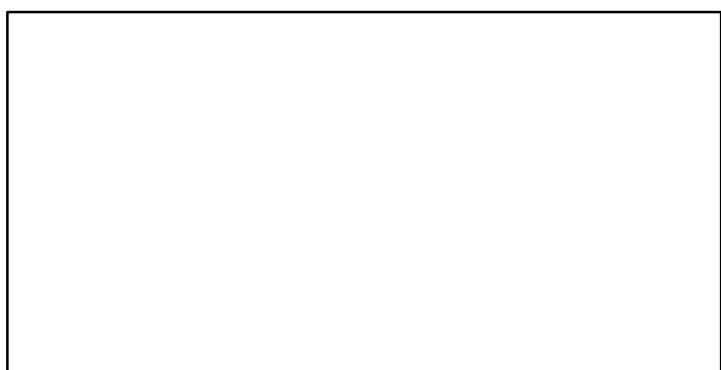
TC-MT, TL\*, RecC\* (2004–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



**survB\***

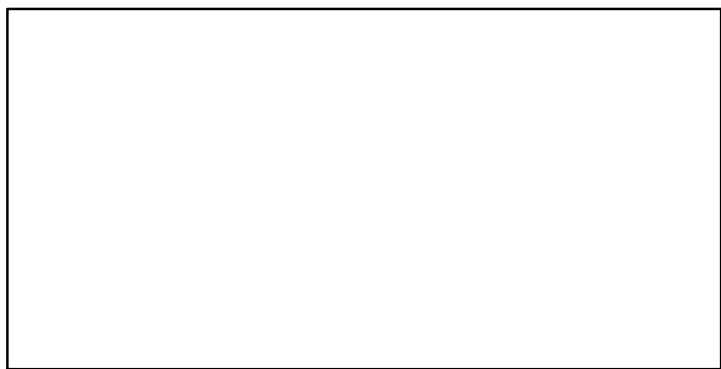
MSY-est-MT, MORAT\*



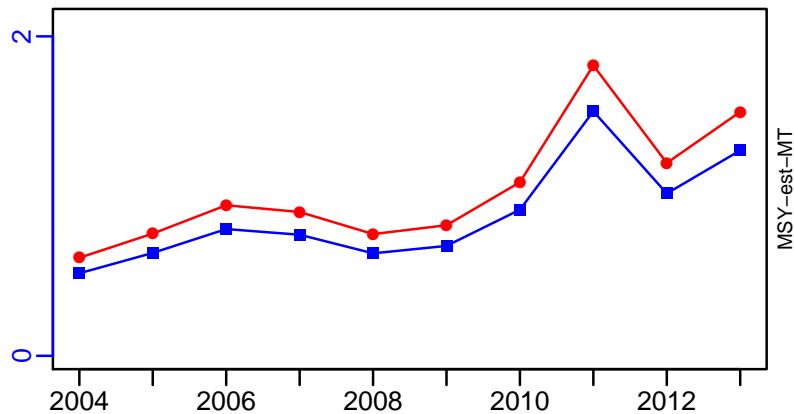
**CPUE\***



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2004–2013–OSIO)



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

## Black bellied angler Gulf of Lions [ANGLMEDGSA7]

<b>Metadata</b>	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	STECF-ANGLMEDGSA7-2005-2011-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

<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>	Fmgt-1/yr	2011	0.29
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2011	355		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

**Spawner Recruit\***

**Production\***

◆ Start Year ♦ End Year \* No Data

**Black bellied angler Gulf of Lions [ANGLMEDGSA7]**

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



**Recruits\***

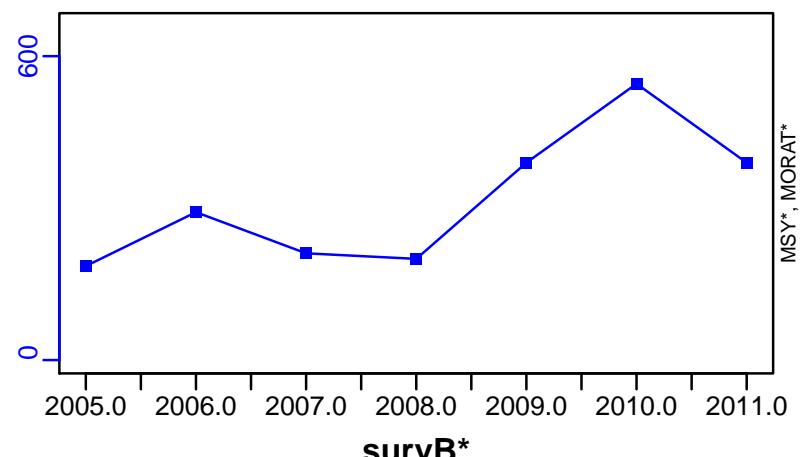


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

**Black bellied angler Gulf of Lions [ANGLMEDGSA7]**

TC-MT, TL\*, RecC\* (2005–2011–OSIO)

TAC\*, Cpair\*, Cadv\*



**survB\***

MSY\*, MORAT\*

**CPUE\***

**EFFORT\***

**CdivMSY\***

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

## Blue whiting Northern Alboran Sea [BWHITMEDGSA1]

<b>Metadata</b>	
<b>Scientific Name</b>	Micromesistius poutassou
<b>Current Assess ID</b>	STECF-BWHITMEDGSA1-2002-2011-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

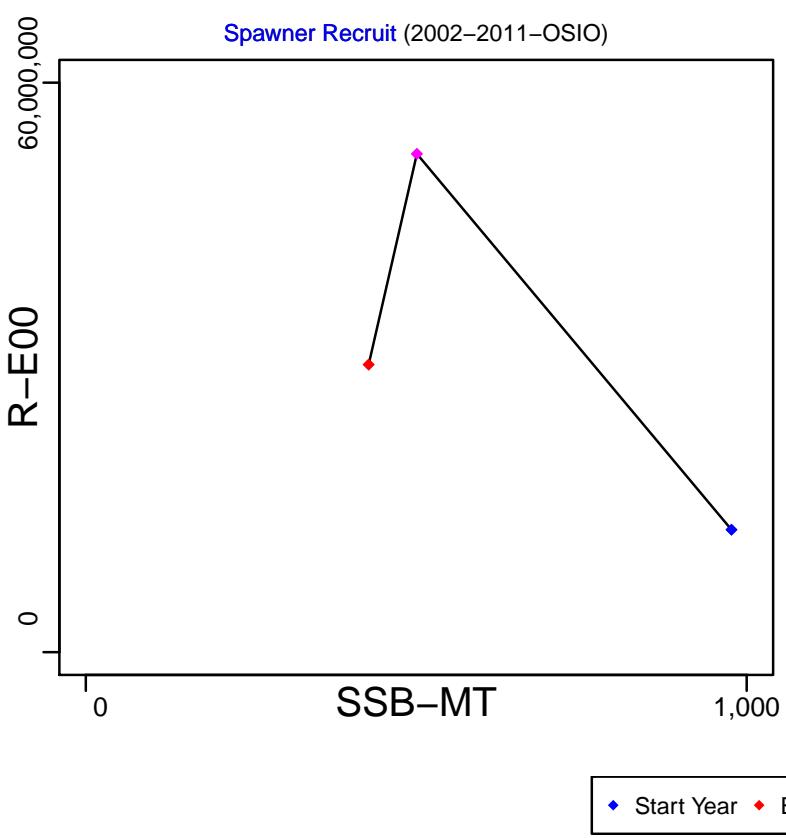
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.4
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	428	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	30,300,000	-	-
<b>F</b>	F-1/yr	2011	1.4	-	-
<b>ER</b>	ER-calc-ratio	2011	0.902	-	-
<b>TC</b>	TC-MT	2011	644		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	3.5		
<b>ER/ERmgt</b>	-	-	-		

Blue whiting Northern Alboran Sea [BWHITMEDGSA1]

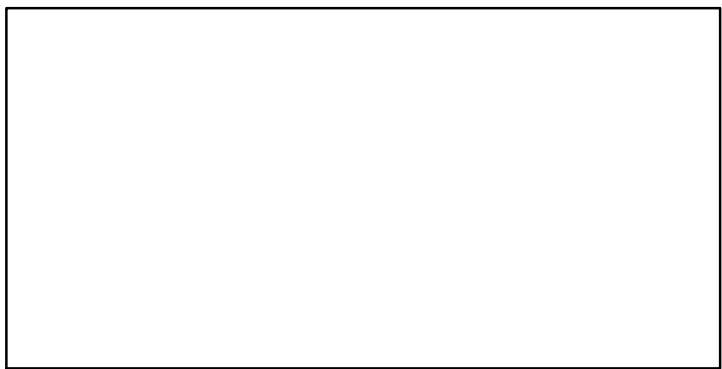
Kobe MSY\*

Kobe MGT\*

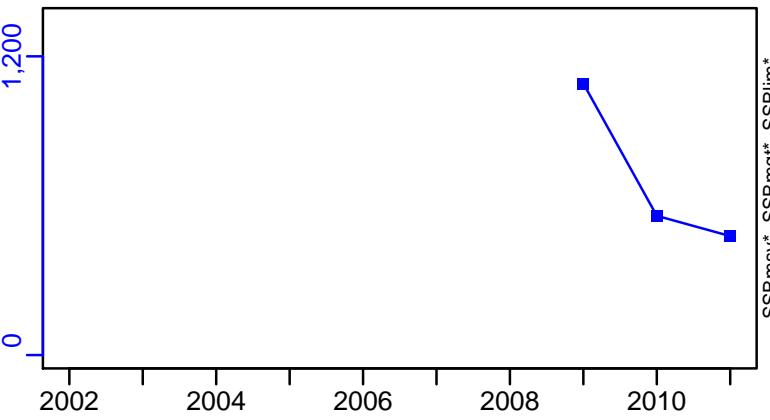


Blue whiting Northern Alboran Sea [BWHITMEDGSA1]

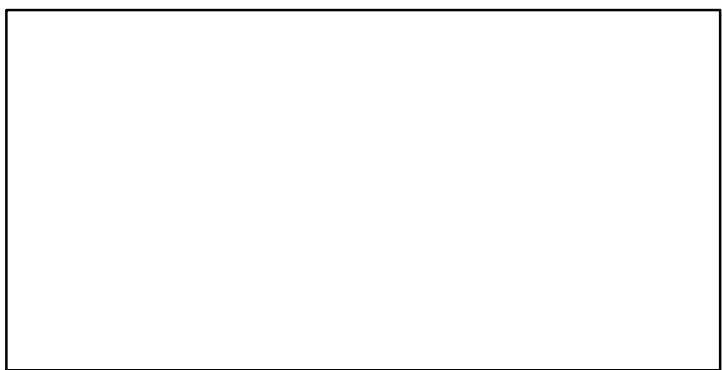
**TB\***



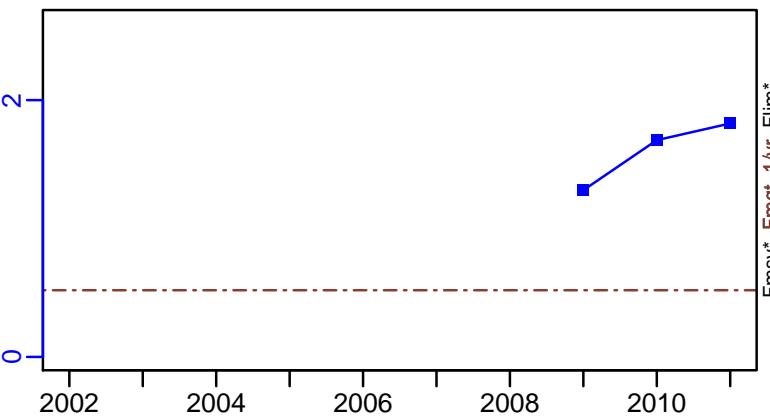
**SSB-MT** (2002–2011–OSIO)



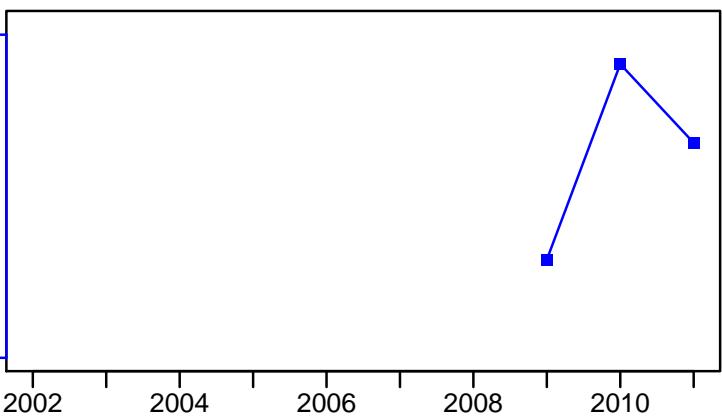
**TN \***



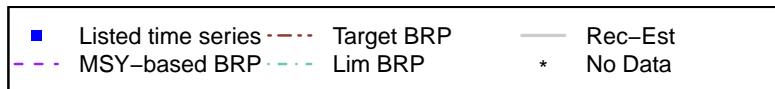
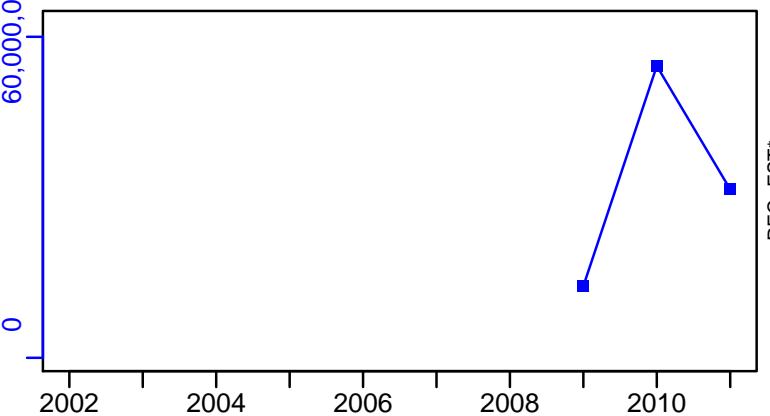
**F-1/yr** (2002–2011–OSIO)



**ER-calc-ratio** (2002–2011–OSIO)



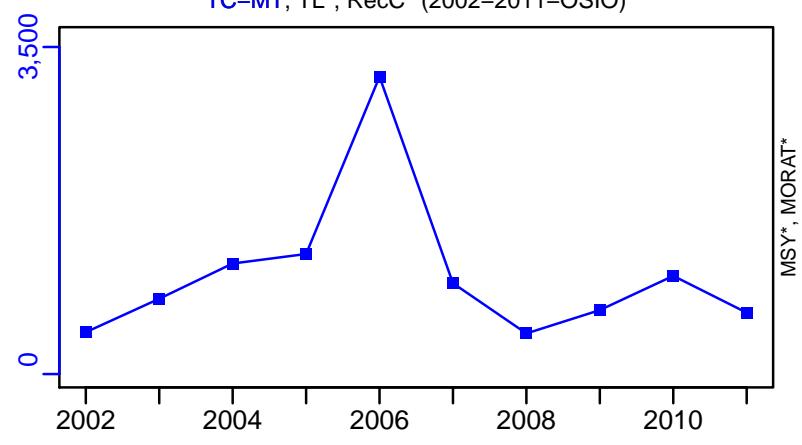
**R-E00** (2002–2011–OSIO)



Blue whiting Northern Alboran Sea [BWHITMEDGSA1]

TC-MT, TL\*, RecC\* (2002–2011–OSIO)

TAC\*, Cpair\*, Cadv\*

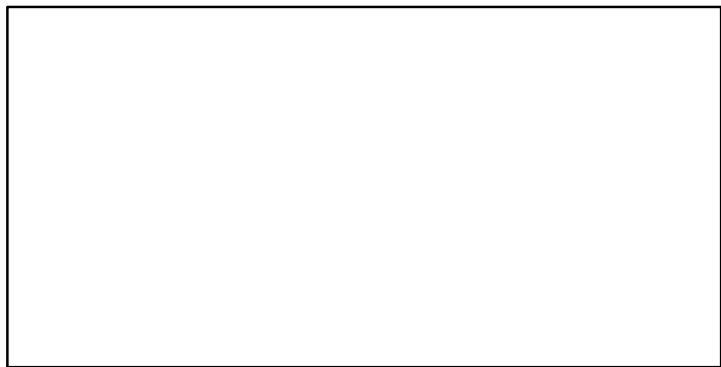


survB\*

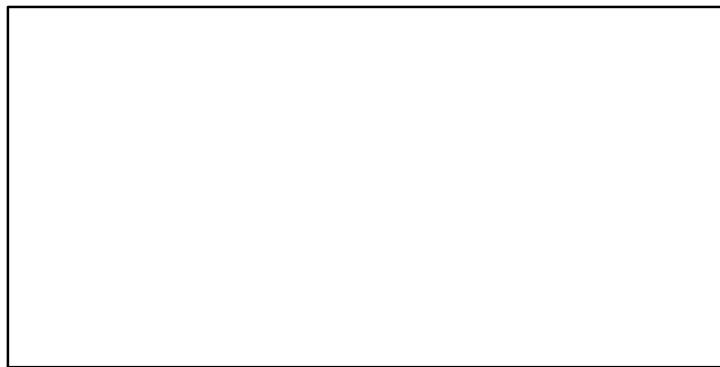


CPUE\*

EFFORT\*



CdivMSY\*



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

## Blue whiting Northern Spain [BWHITMEDGSA6]

<b>Metadata</b>	
<b>Scientific Name</b>	Micromesistius poutassou
<b>Current Assess ID</b>	STECF-BWHITMEDGSA6-2009-2013-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

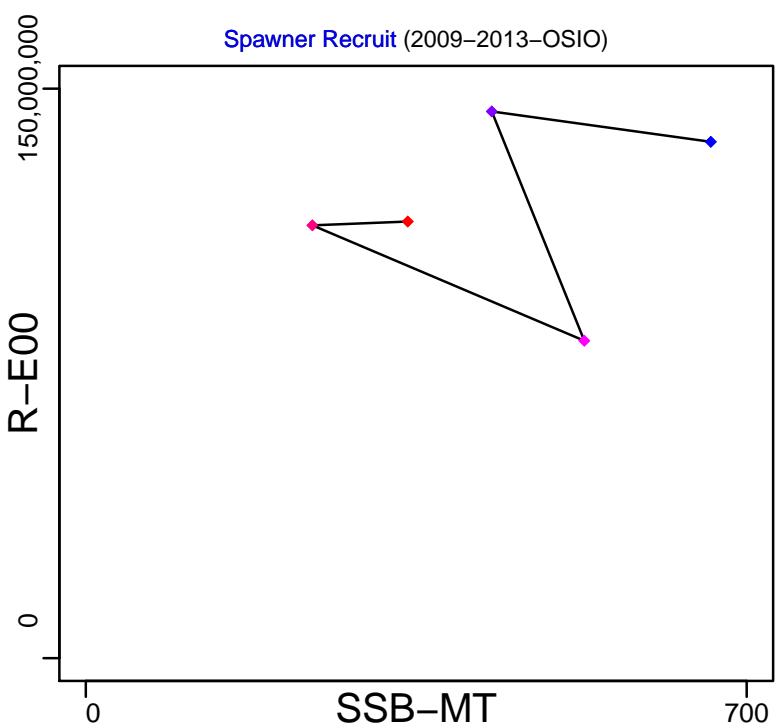
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.159
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	341	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	$1.15 \times 10^8$	-	-
<b>F</b>	F-1/yr	2013	1.26	-	-
<b>ER</b>	ER-calc-ratio	2013	1.794	-	-
<b>TC</b>	TC-MT	2013	1020		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	7.903		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2009–2013–OSIO)

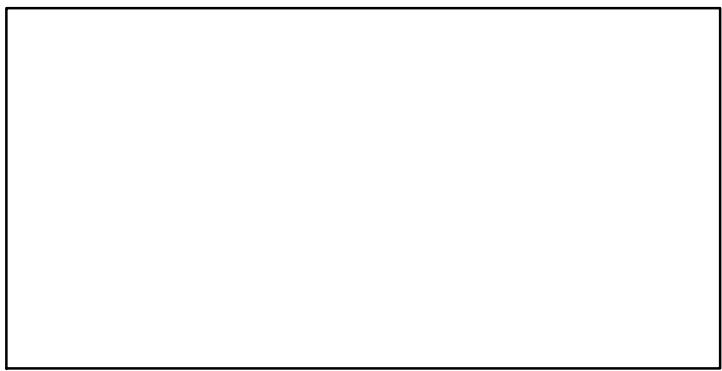


Production\*

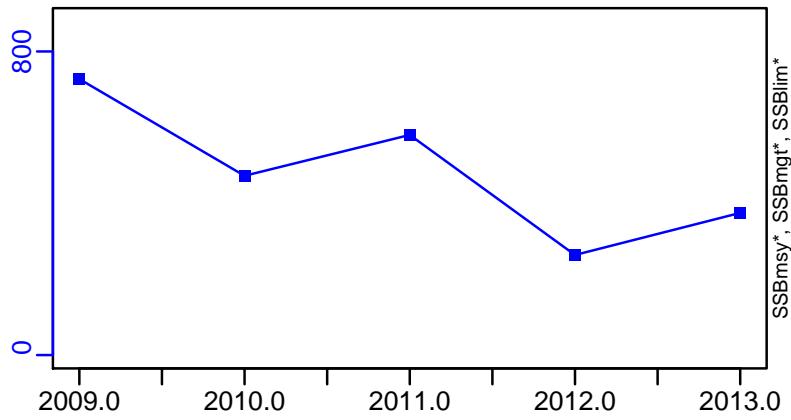
◆ Start Year   ◆ End Year   \* No Data

Blue whiting Northern Spain [BWHITMEDGSA6]

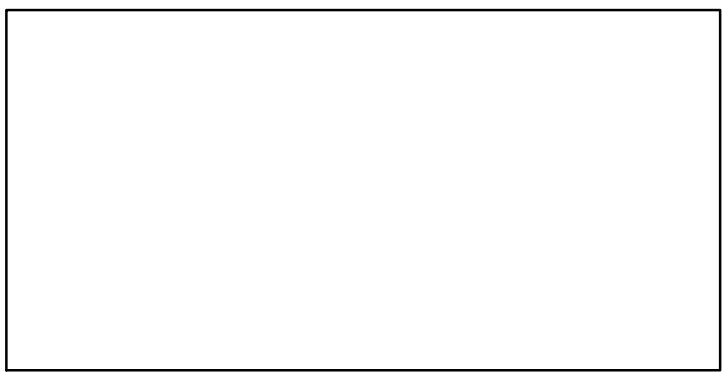
**TB\***



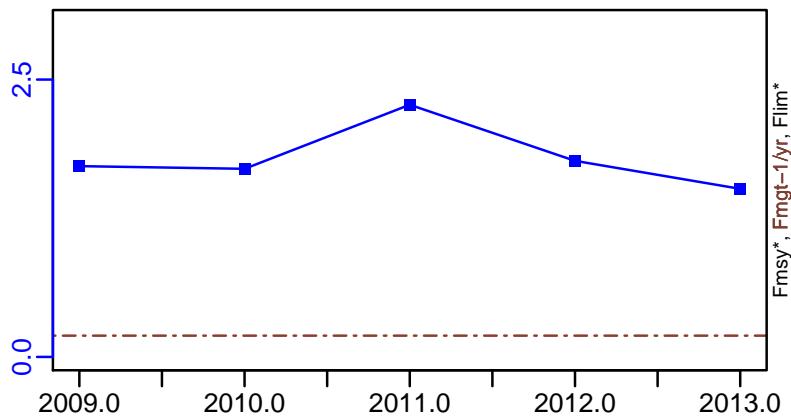
**SSB-MT** (2009–2013–OSIO)



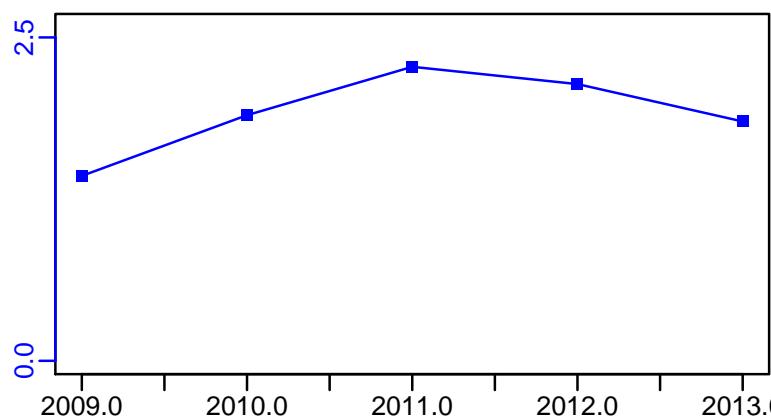
**TN \***



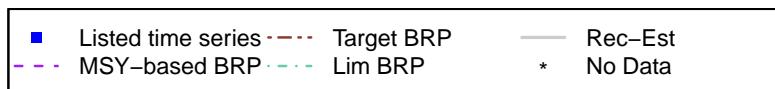
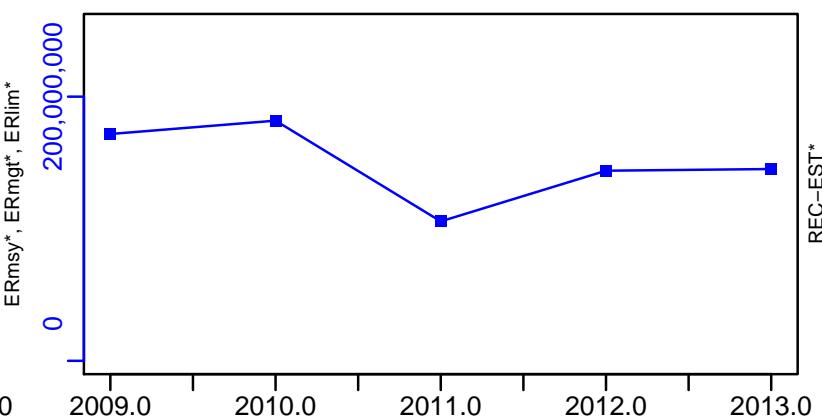
**F-1/yr** (2009–2013–OSIO)



**ER-calc-ratio** (2009–2013–OSIO)



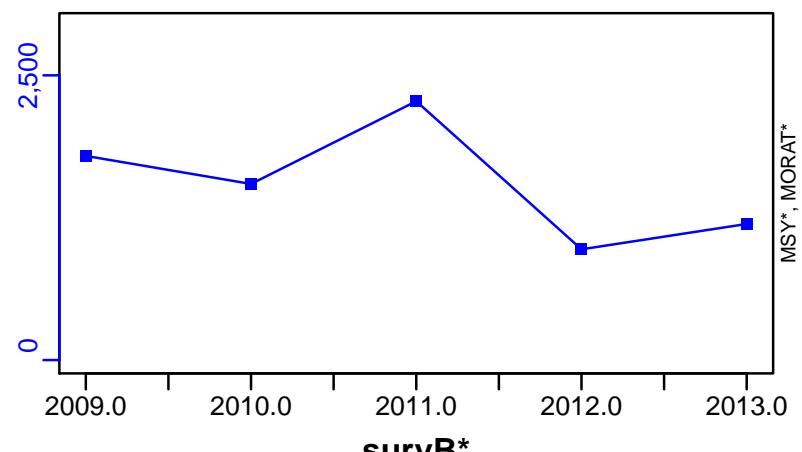
**R-E00** (2009–2013–OSIO)



**Blue whiting Northern Spain [BWHITMEDGSA6]**

TC-MT, TL\*, RecC\* (2009–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



**survB\***

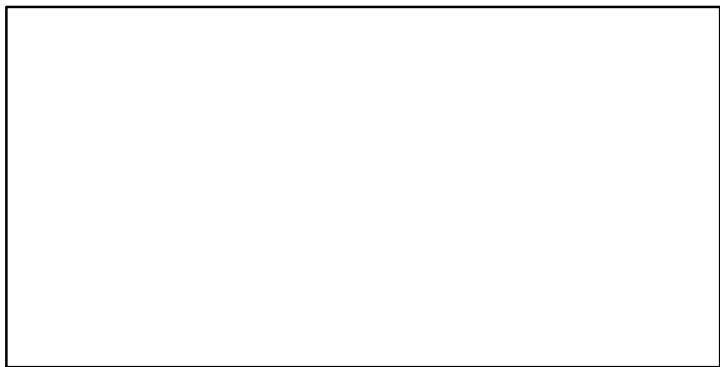
MSY\*, MORAT\*



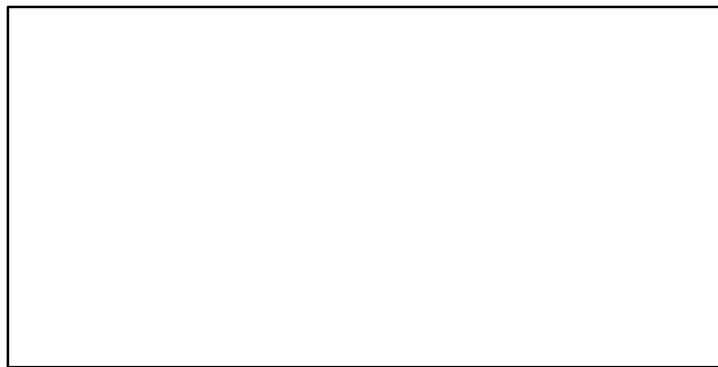
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Blue whiting Ligurian and North Tyrrhenian Sea [BWHITMEDGSA9]

<b>Metadata</b>	
<b>Scientific Name</b>	Micromesistius poutassou
<b>Current Assess ID</b>	STECF-BWHITMEDGSA9-2009-2013-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

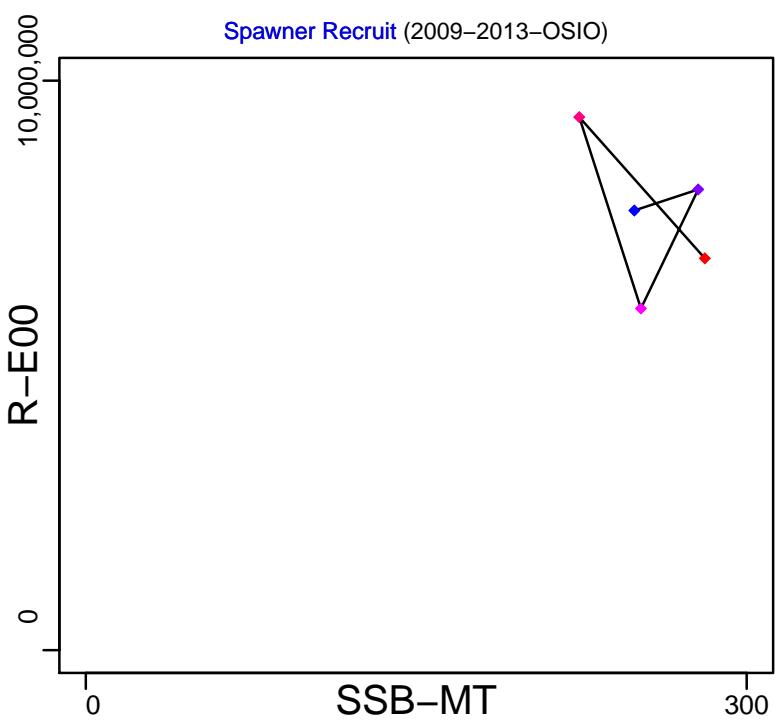
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.328
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	281	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	6,880,000	-	-
<b>F</b>	F-1/yr	2013	0.378	-	-
<b>ER</b>	ER-calc-ratio	2013	0.218	-	-
<b>TC</b>	TC-MT	2013	102		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	1.151		
<b>ER/ERmgt</b>	-	-	-		

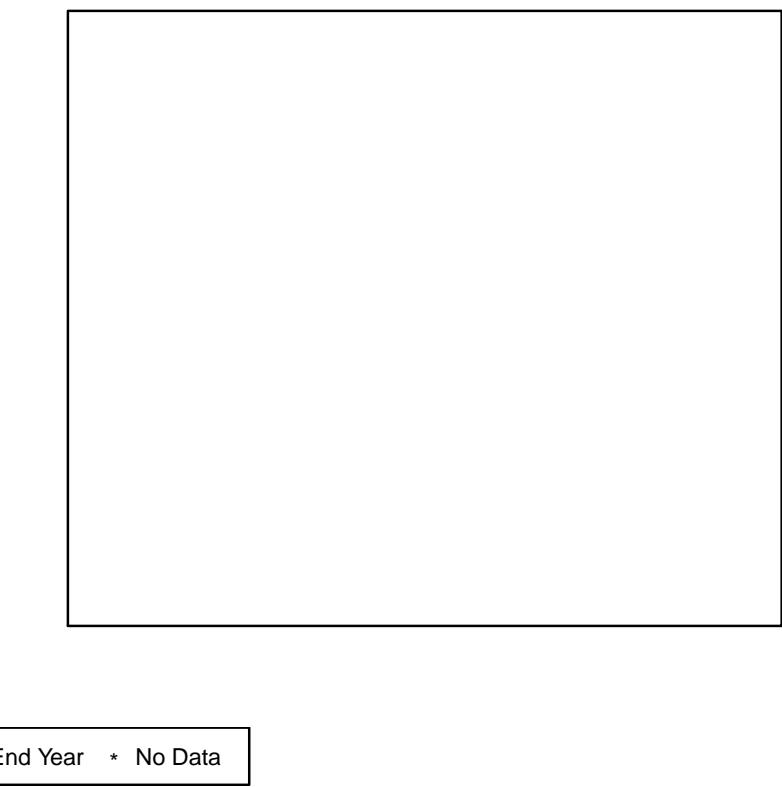
**Kobe MSY\***

**Kobe MGT\***

Spawner Recruit (2009–2013–OSIO)



**Production\***



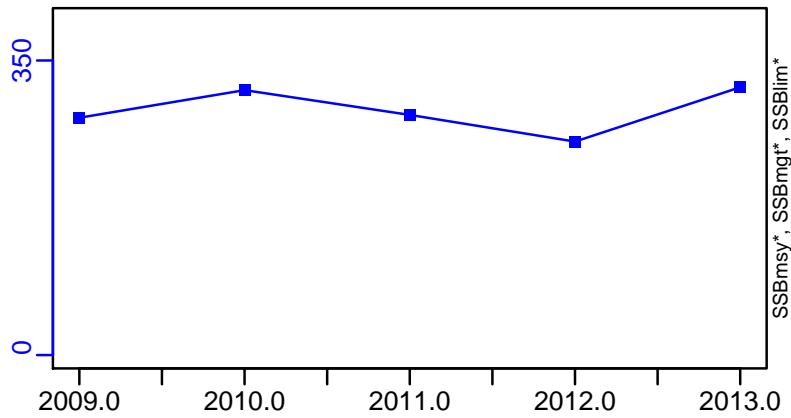
◆ Start Year ♦ End Year \* No Data

Blue whiting Ligurian and North Tyrrhenian Sea [BWHITMEDGSA9]

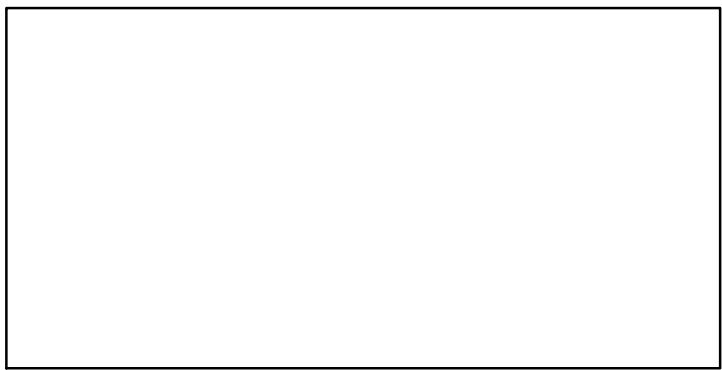
**TB\***



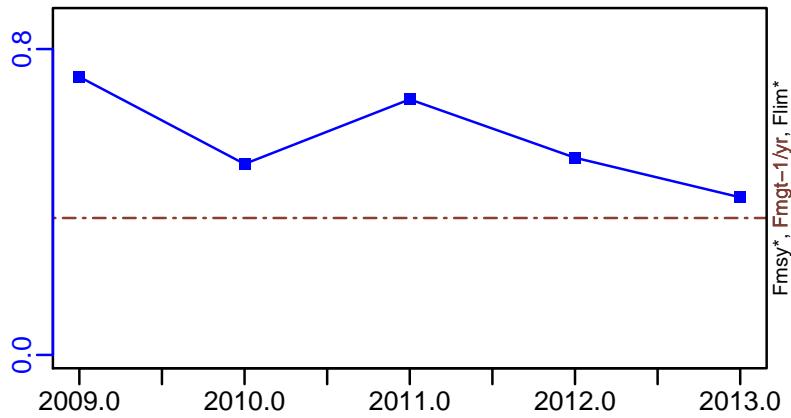
**SSB-MT (2009–2013–OSIO)**



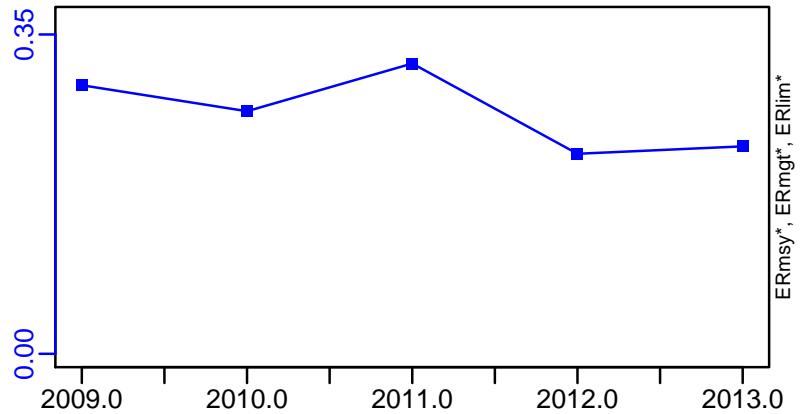
**TN \***



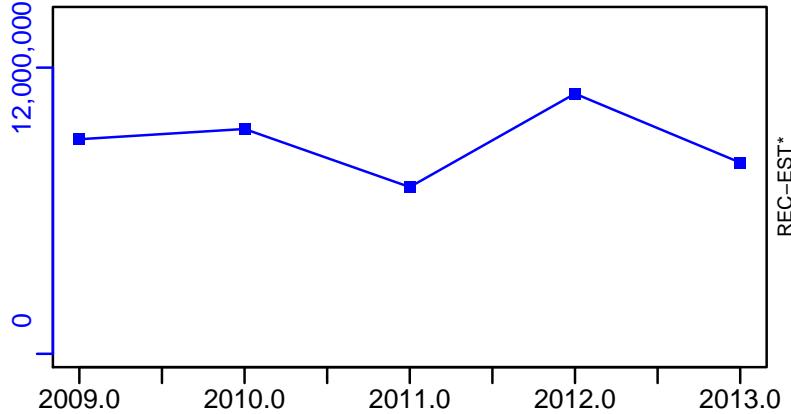
**F-1/yr (2009–2013–OSIO)**



**ER-calc-ratio (2009–2013–OSIO)**



**R-E00 (2009–2013–OSIO)**

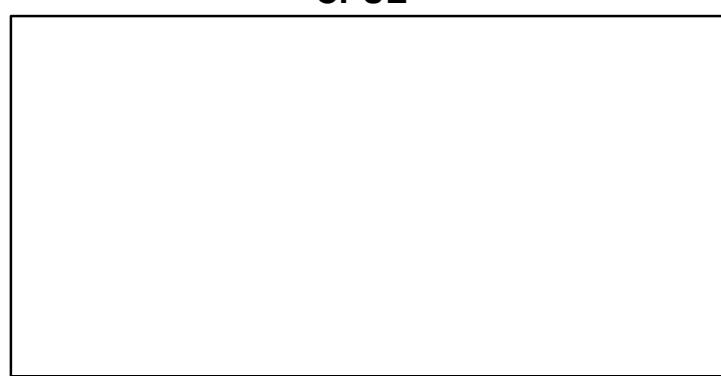
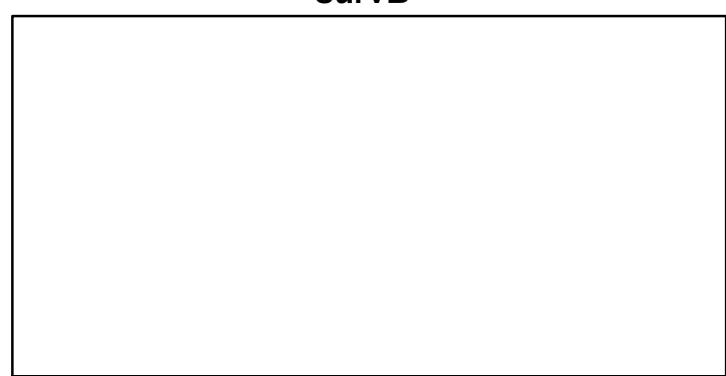
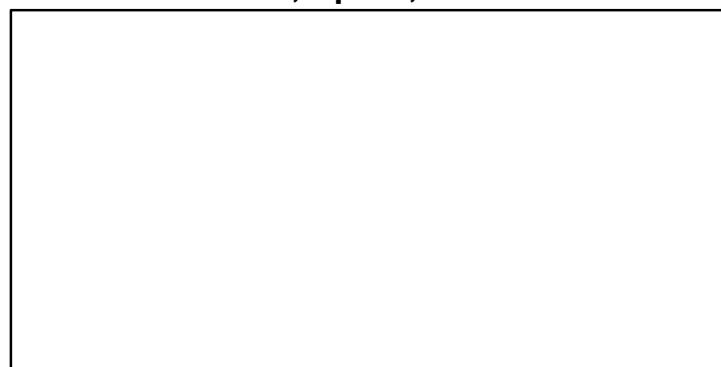
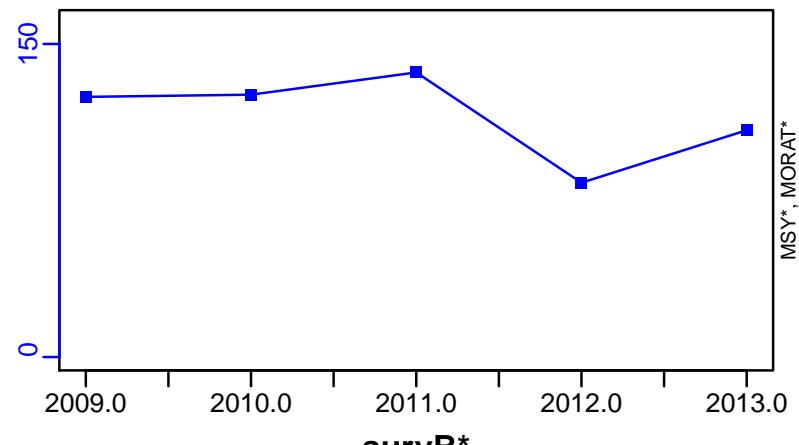


- Listed time series    - - - Target BRP    — Rec-Est
- - - MSY-based BRP    - - - Lim BRP    \* No Data

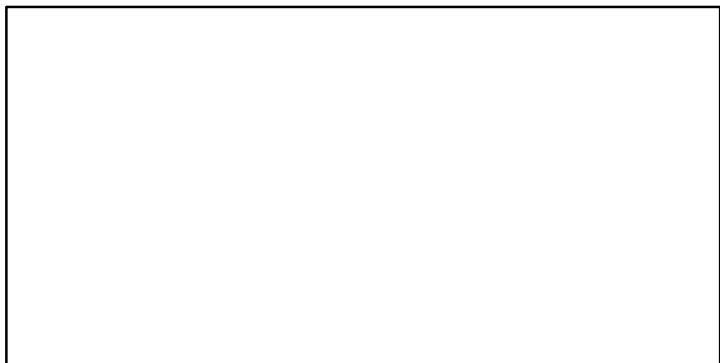
Blue whiting Ligurian and North Tyrrhenian Sea [BWHITMEDGSA9]

TC-MT, TL\*, RecC\* (2009–2013–OSIO)

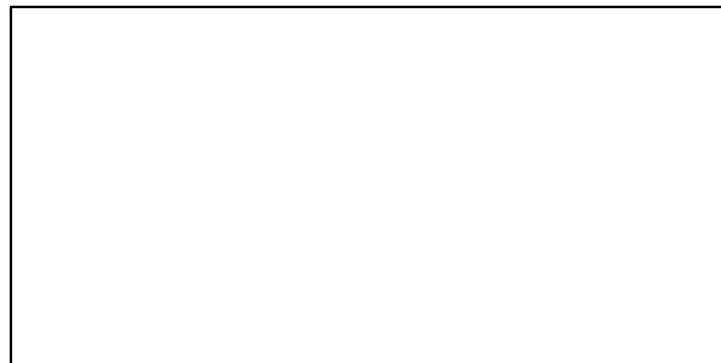
TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY\*



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

**Common pandora Malta Island and South of Sicily (GSA 15, 16)**  
**[CPANDMEDGSA15-16]**

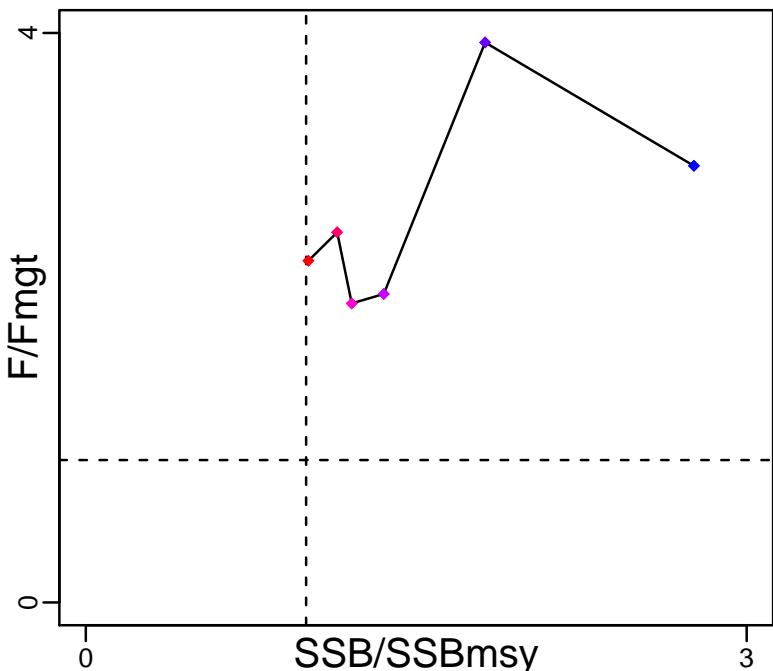
Metadata	
<b>Scientific Name</b>	Pagellus erythrinus
<b>Current Assess ID</b>	STECF-CPANDMEDGSA15-16-2006-2011-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2011	543
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.146
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.3
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	175
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

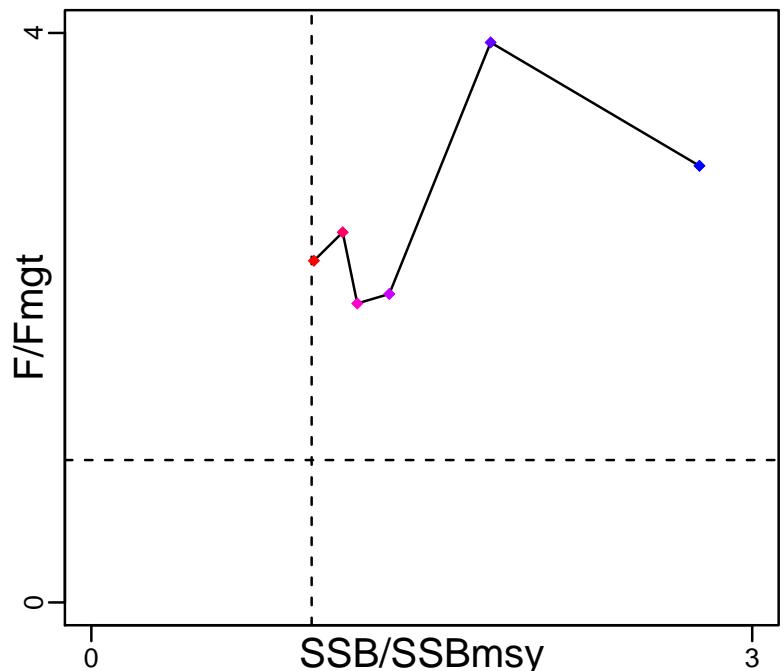
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2011	549	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2011	4,850,000	-	-	
<b>F</b>	F-1/yr	2011	0.72	-	-	
<b>ER</b>	ER-calc-ratio	2011	0.227	-	-	
<b>TC</b>	TC-MT	2011	273			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2011	1.01			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	1.548			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	2.4			
<b>ER/ERmgt</b>	-	-	-			

Common pandora Malta Island and South of Sicily (GSA 15, 16) [CPANDMEDGSA15–16]

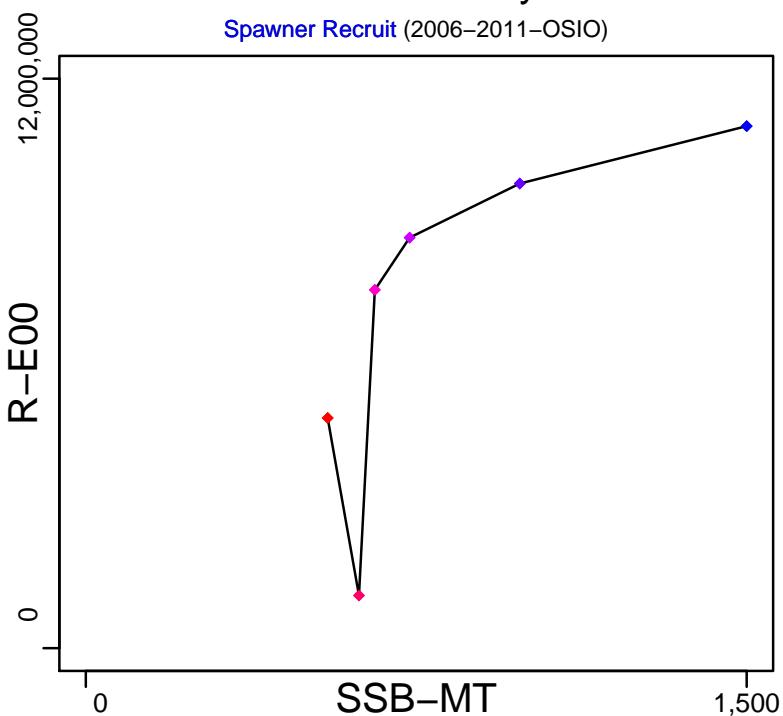
Kobe MSYpref (2006–2011–OSIO)



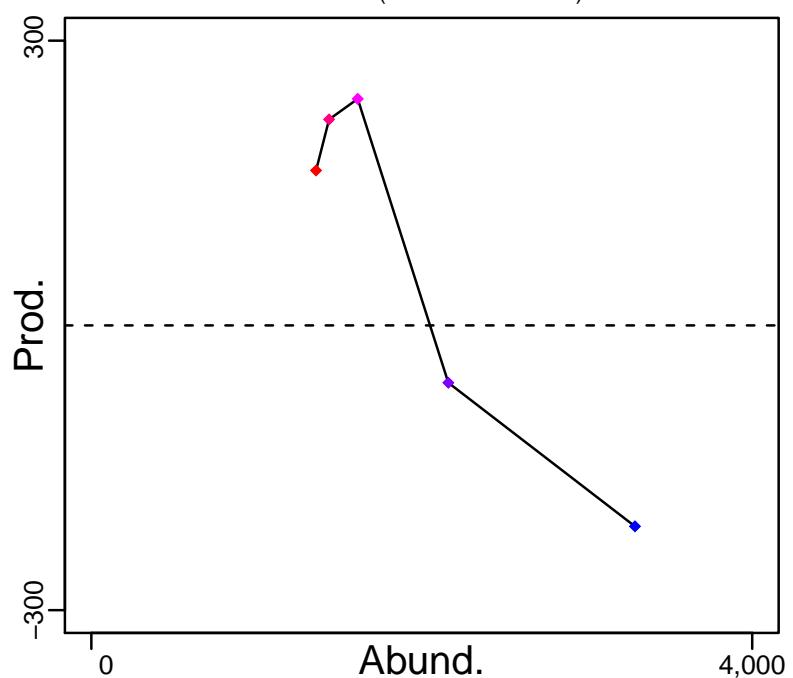
Kobe MGTpref (2006–2011–OSIO)



Spawner Recruit (2006–2011–OSIO)



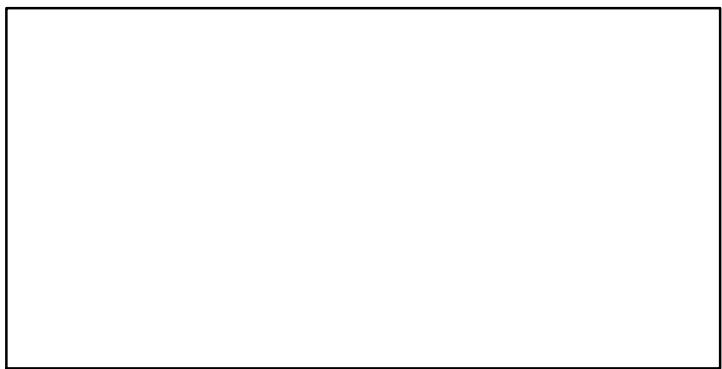
Production (2006–2011–OSIO)



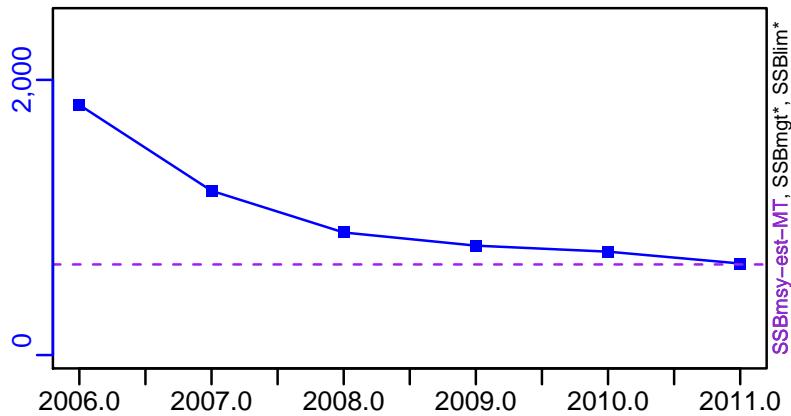
◆ Start Year ◆ End Year \* No Data

Common pandora Malta Island and South of Sicily (GSA 15, 16) [CPANDMEDGSA15–16]

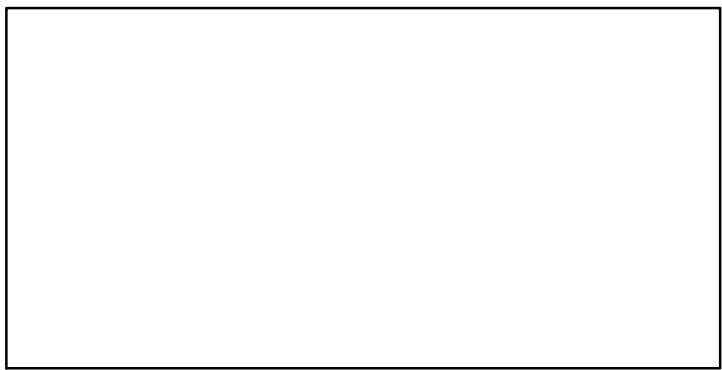
**TB\***



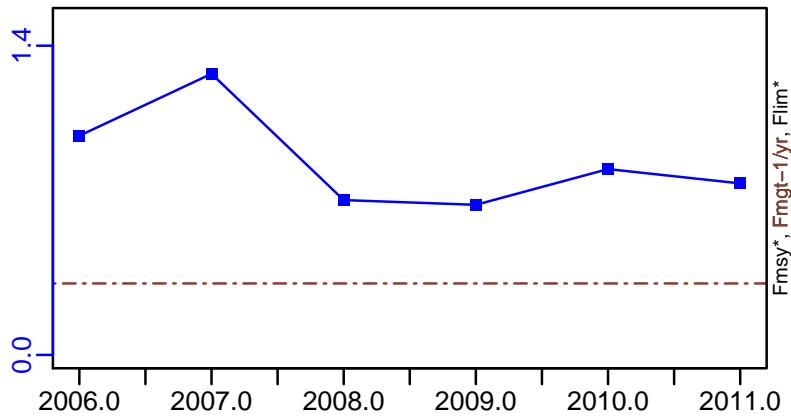
**SSB-MT (2006–2011–OSIO)**



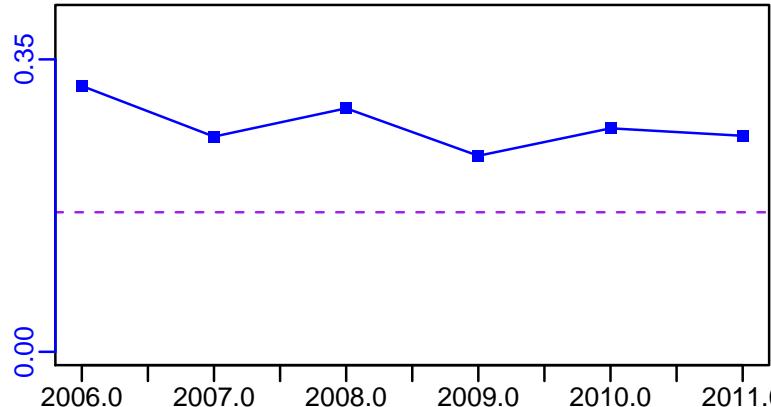
**TN \***



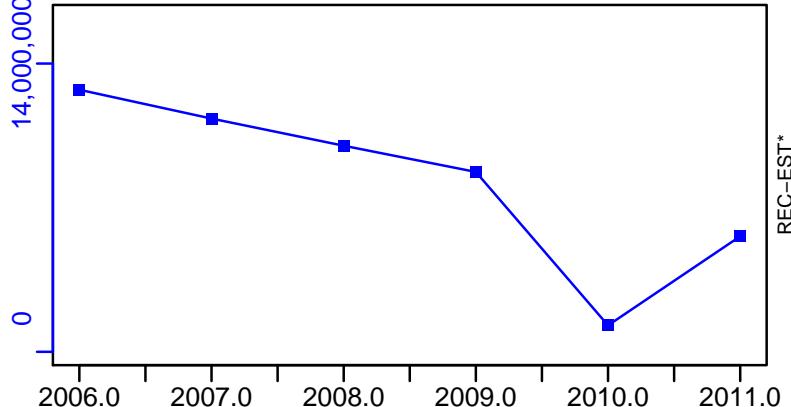
**F-1/yr (2006–2011–OSIO)**



**ER-calc-ratio (2006–2011–OSIO)**



**R-E00 (2006–2011–OSIO)**

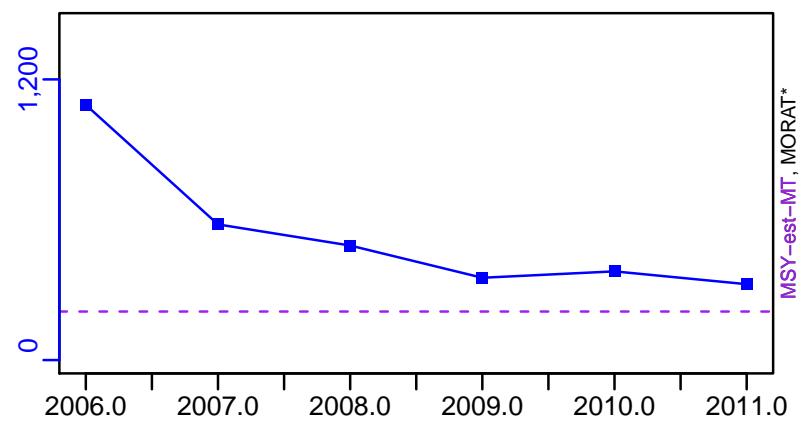


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Common pandora Malta Island and South of Sicily (GSA 15, 16) [CPANDMEDGSA15–16]

TC-MT, TL\*, RecC\* (2006–2011–OSIO)

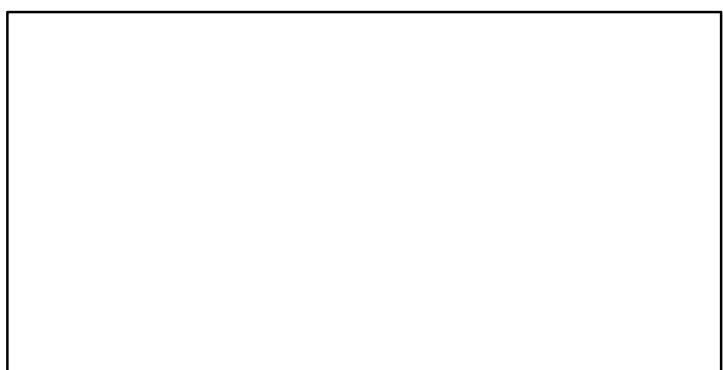
TAC\*, Cpair\*, Cadv\*



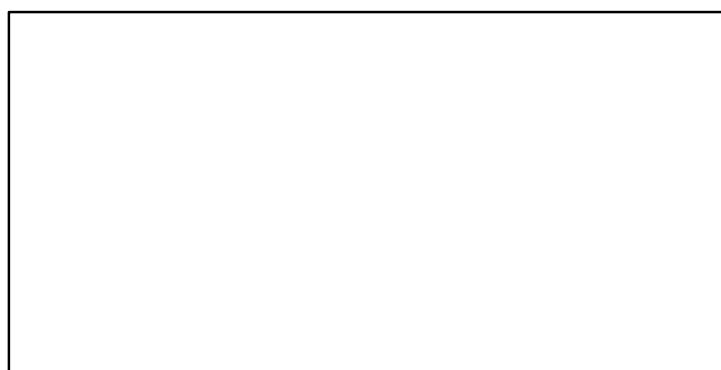
survB\*

MSY-est-MT, MORAT\*

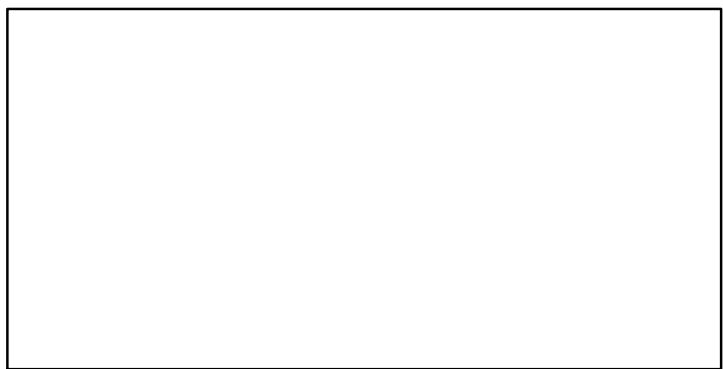
TAC\*, Cpair\*, Cadv\*



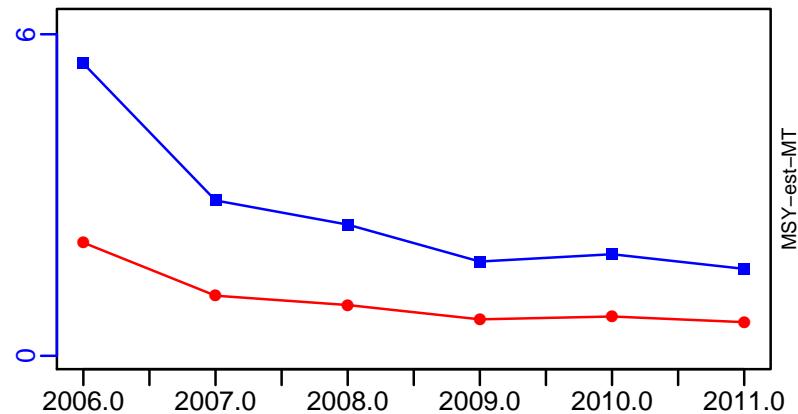
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2011–OSIO)



MSY-est-MT

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

## Common pandora Ligurian and North Tyrrhenian Sea [CPANDMEDGSA9]

Metadata	
<b>Scientific Name</b>	Pagellus erythrinus
<b>Current Assess ID</b>	STECF-CPANDMEDGSA9-2006-2010-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2010	0.48
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2010	171		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

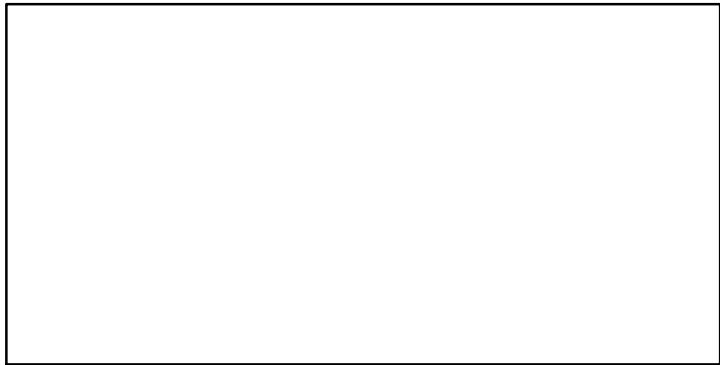
**Spawner Recruit\***

**Production\***

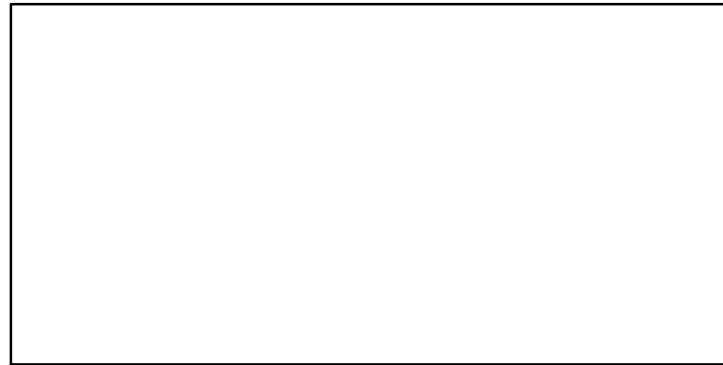
◆ Start Year ♦ End Year \* No Data

**Common pandora Ligurian and North Tyrrhenian Sea [CPANDMEDGSA9]**

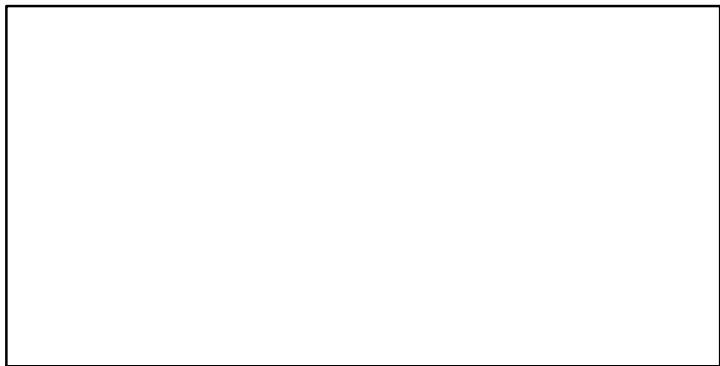
**TB\***



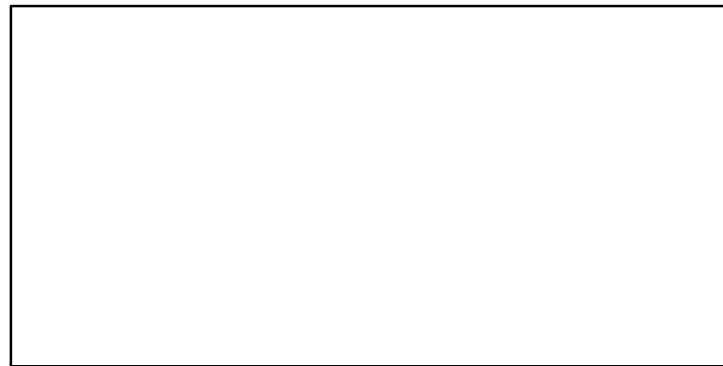
**SSB\***



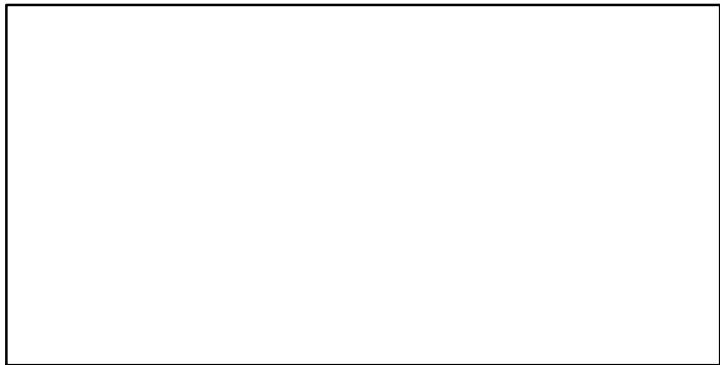
**TN \***



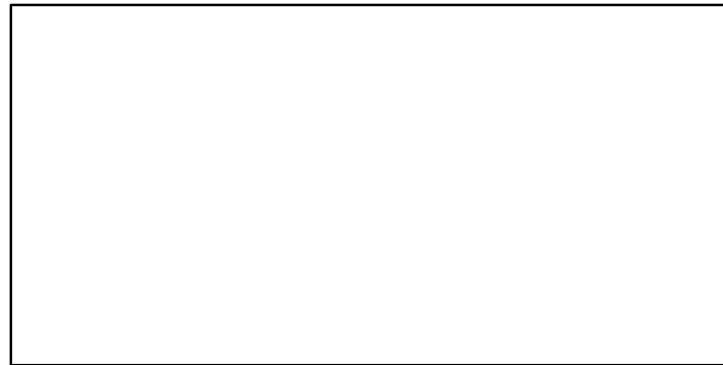
**F\***



**ER\***



**Recruits\***

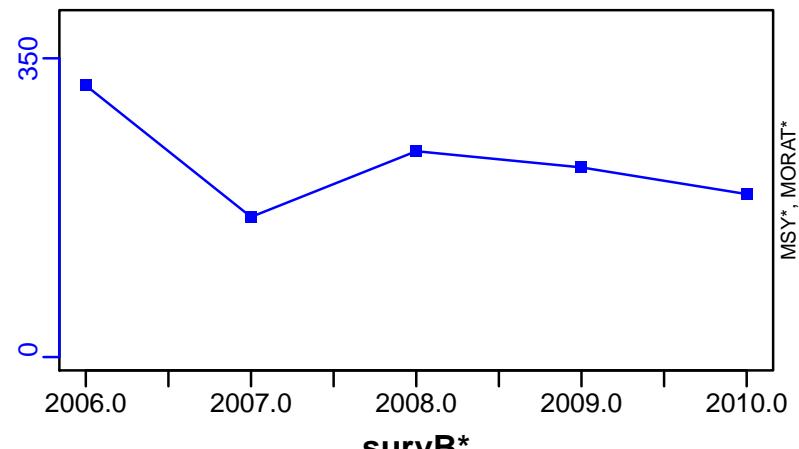


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

Common pandora Ligurian and North Tyrrhenian Sea [CPANDMEDGSA9]

TC-MT, TL\*, RecC\* (2006–2010–OSIO)

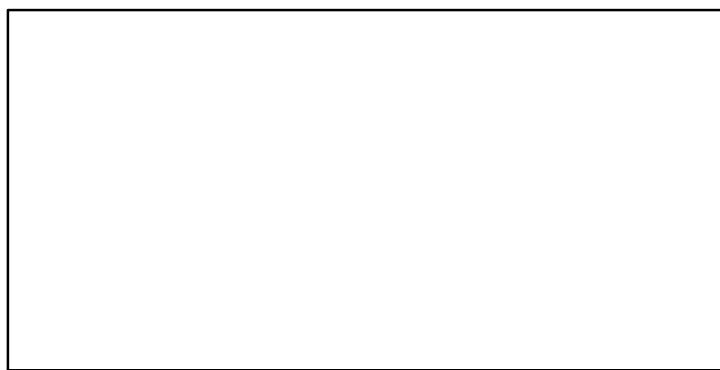
TAC\*, Cpair\*, Cadv\*



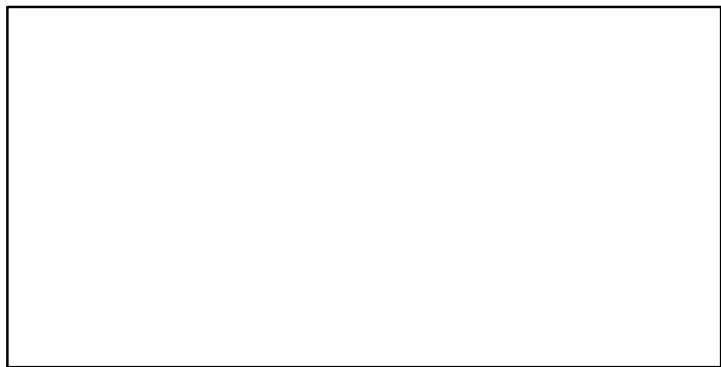
survB\*



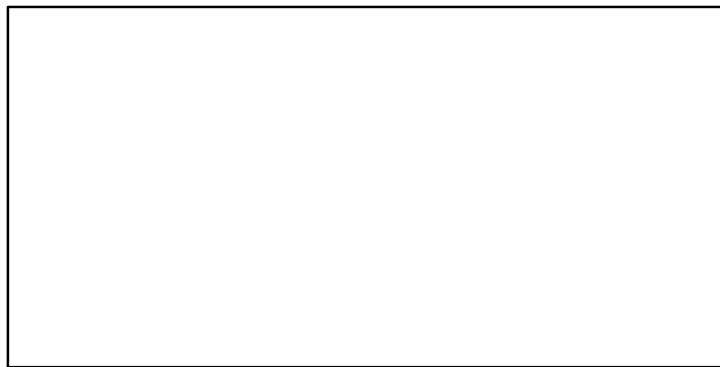
CPUE\*



EFFORT\*



CdivMSY\*



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

## European seabass Gulf of Lions [EBASSGSA7]

<b>Metadata</b>	
<b>Scientific Name</b>	Dicentrarchus labrax
<b>Current Assess ID</b>	STECF-EBASSGSA7-2002-2015-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

<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>	Fmgt-1/yr	2015	0.136
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

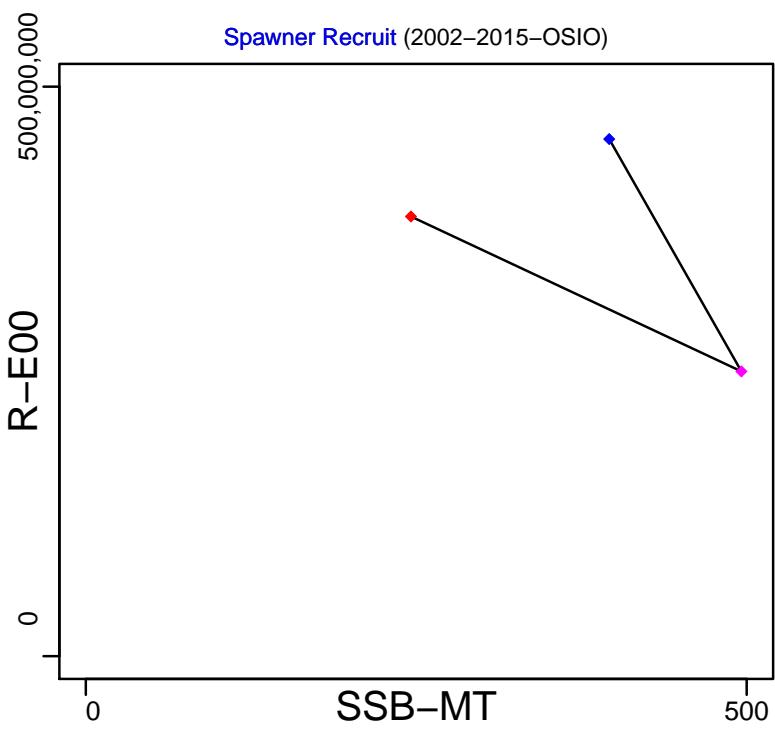
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	246	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$3.86 \times 10^8$	-	-
<b>F</b>	F-1/yr	2015	0.536	-	-
<b>ER</b>	ER-calc-ratio	2015	0.522	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	272		
<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>	F-1/yr/Fmgt-1/yr	2015	3.941		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

Spawner Recruit (2002–2015–OSIO)

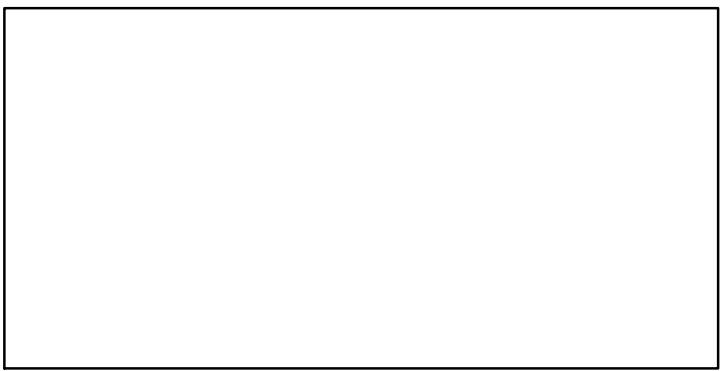
**Production\***



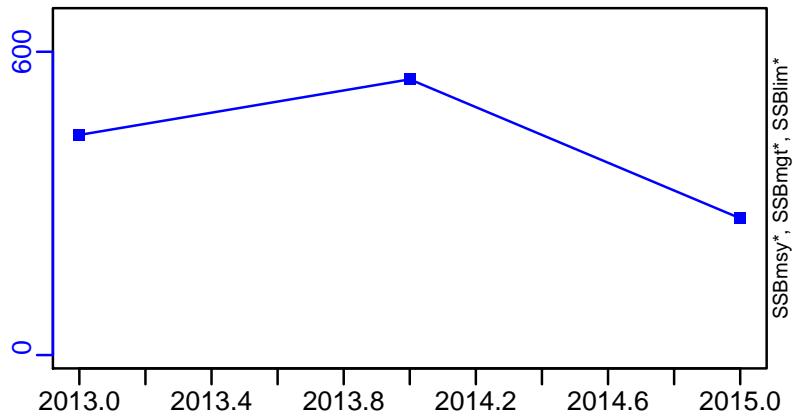
◆ Start Year   ◆ End Year   \* No Data

European seabass Gulf of Lions [EBASSGSA7]

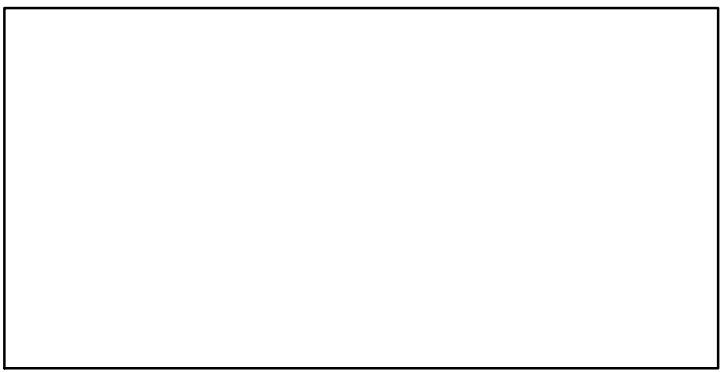
**TB\***



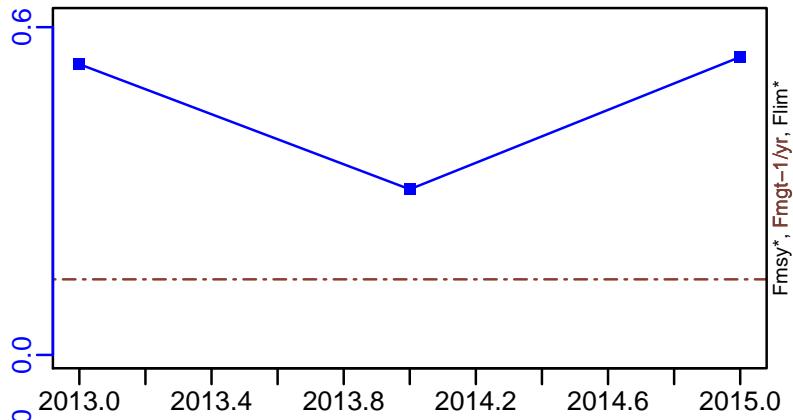
**SSB-MT (2002–2015–OSIO)**



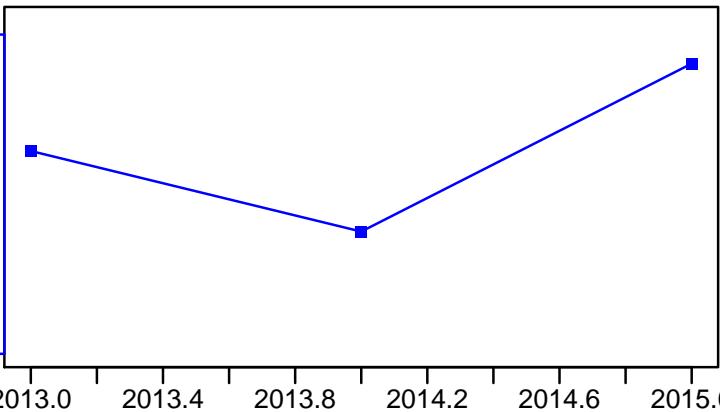
**TN \***



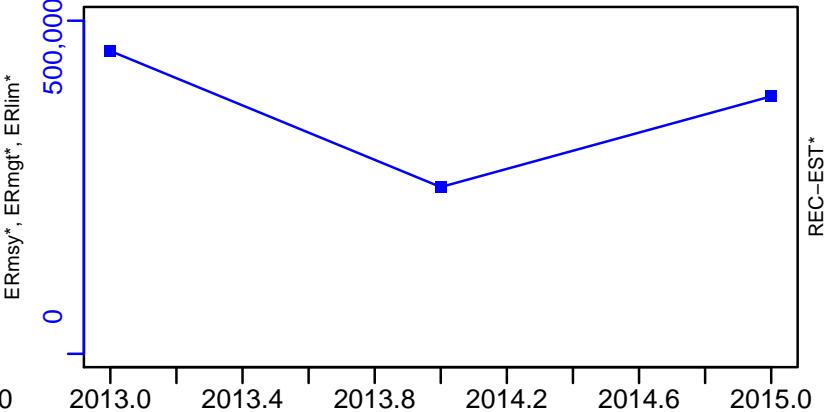
**F-1/yr (2002–2015–OSIO)**



**ER-calc-ratio (2002–2015–OSIO)**



**R-E00 (2002–2015–OSIO)**

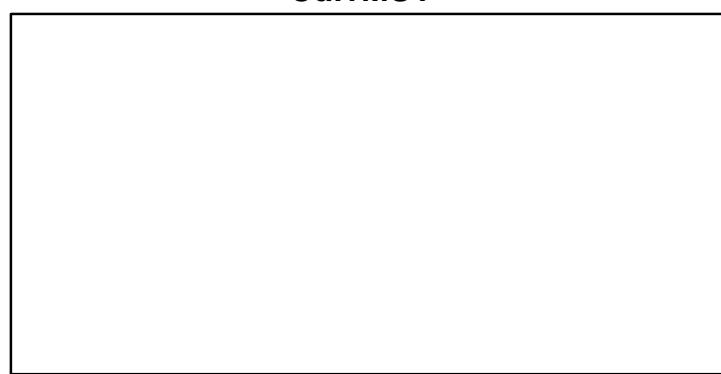
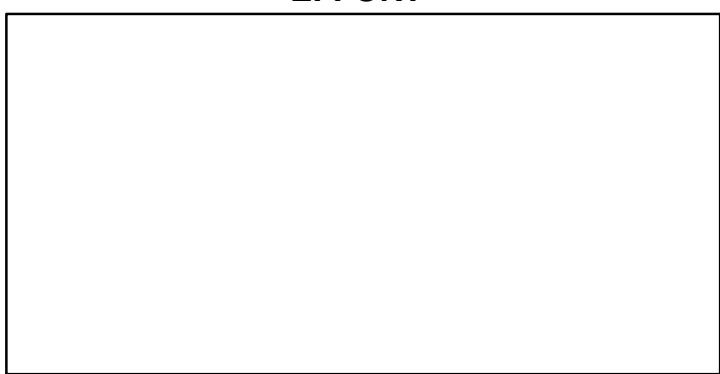
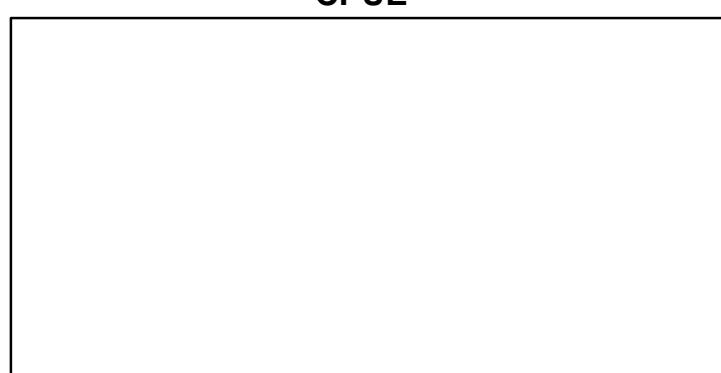
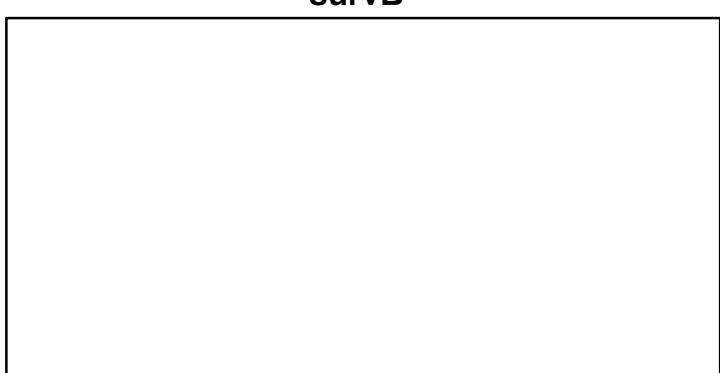
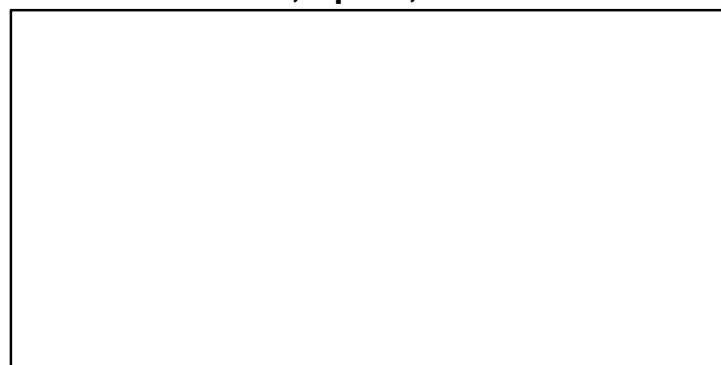
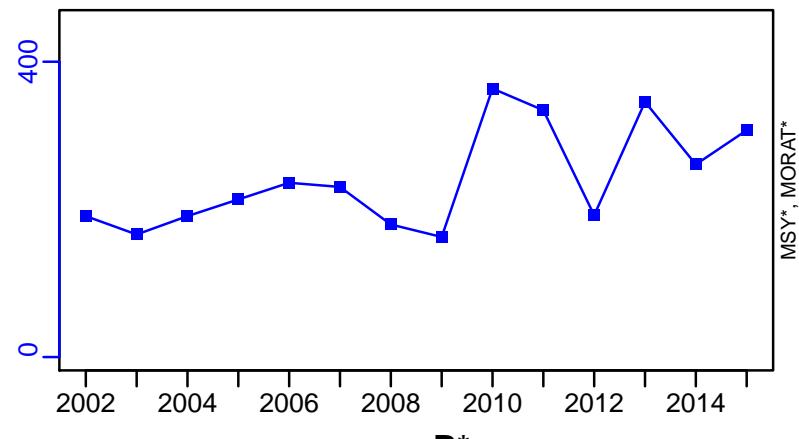


- Listed time series    - - - Target BRP    — Rec-Est
- - MSY-based BRP    - - Lim BRP    \* No Data

European seabass Gulf of Lions [EBASSGSA7]

TL-MT, TC\*, RecC\* (2002–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



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

## Greater forkbeard Ligurian and North Tyrrhenian Sea [GFORKBMEDGSA9]

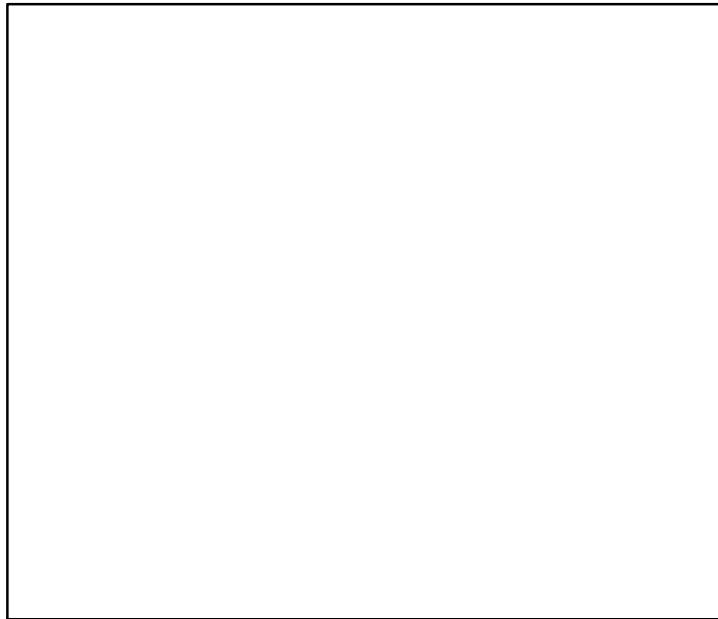
Metadata	
<b>Scientific Name</b>	Phycis blennoides
<b>Current Assess ID</b>	STECF-GFORKBMEDGSA9-2007-2011-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.32
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

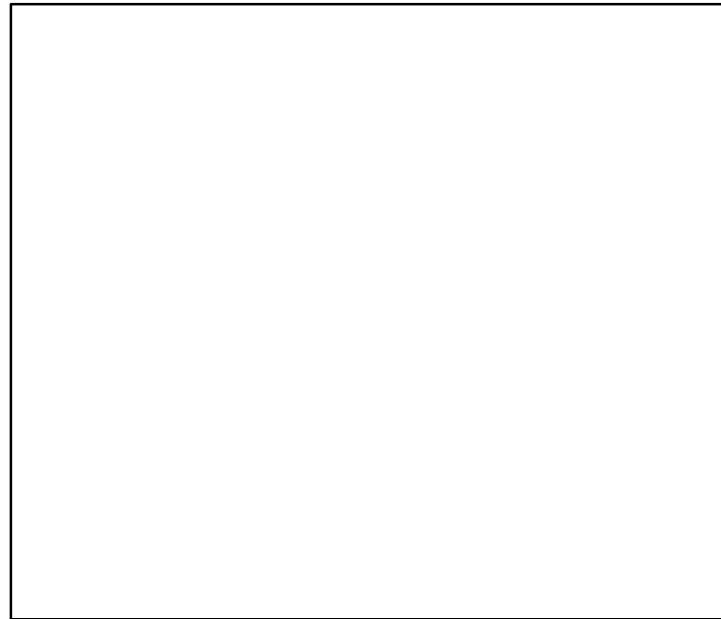
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2011	41		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Greater forkbeard Ligurian and North Tyrrhenian Sea [GFORKBMEDGSA9]**

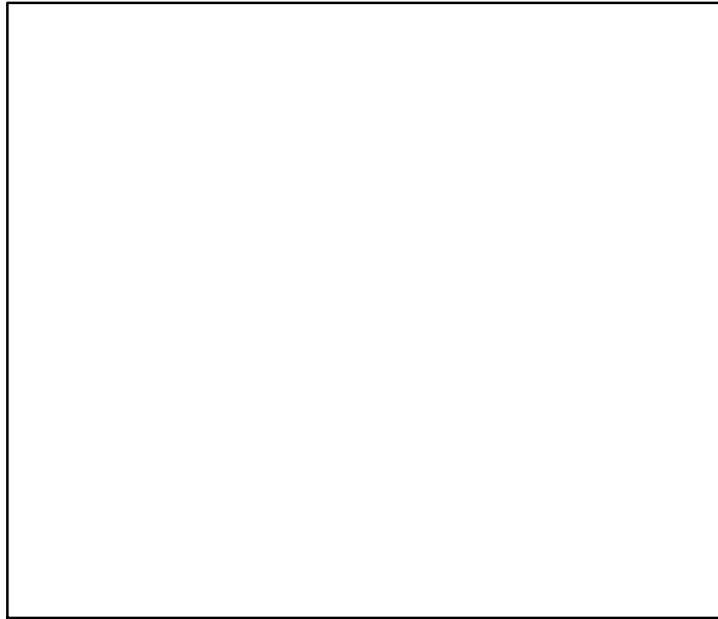
**Kobe MSY\***



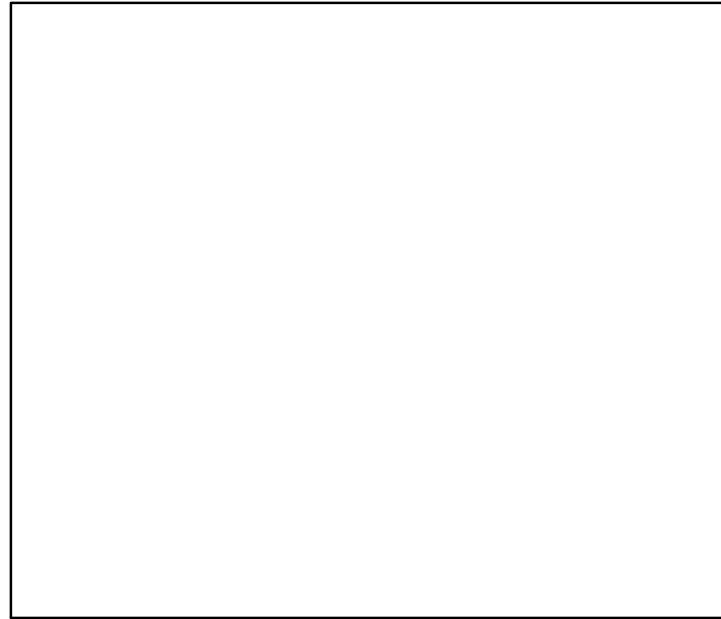
**Kobe MGT\***



**Spawner Recruit\***



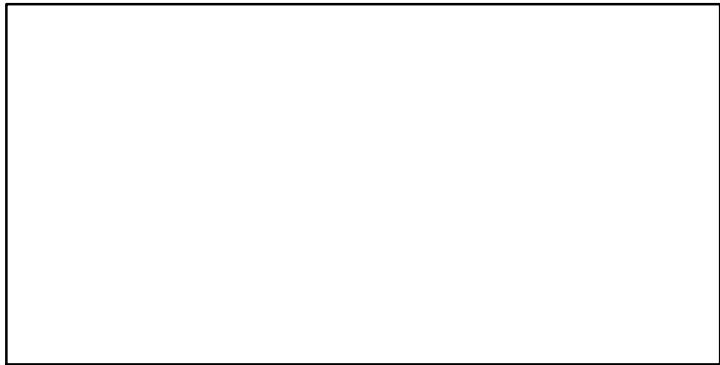
**Production\***



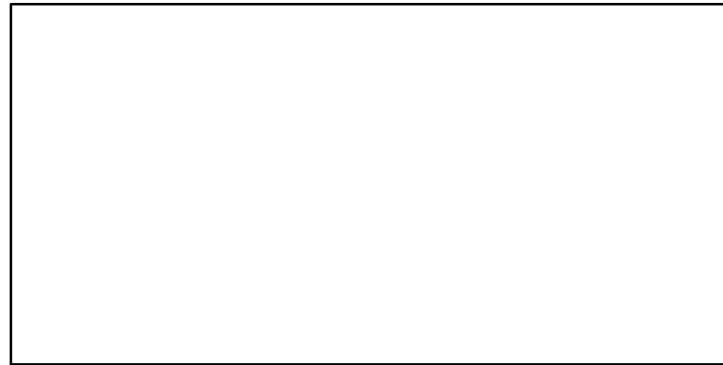
◆ Start Year ♦ End Year \* No Data

**Greater forkbeard Ligurian and North Tyrrhenian Sea [GFORKBMEDGSA9]**

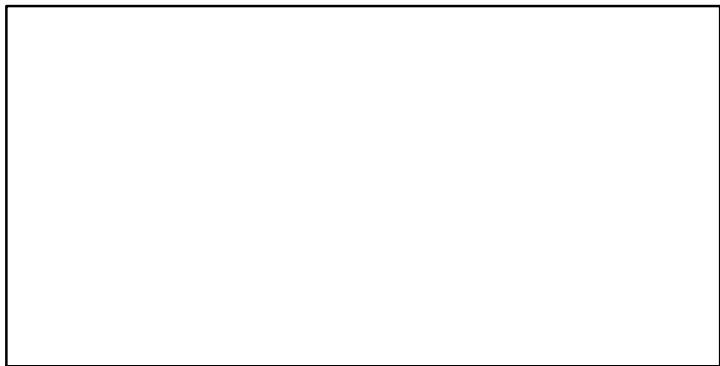
**TB\***



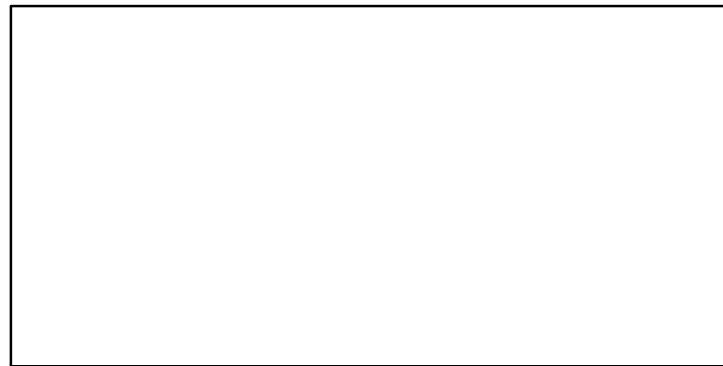
**SSB\***



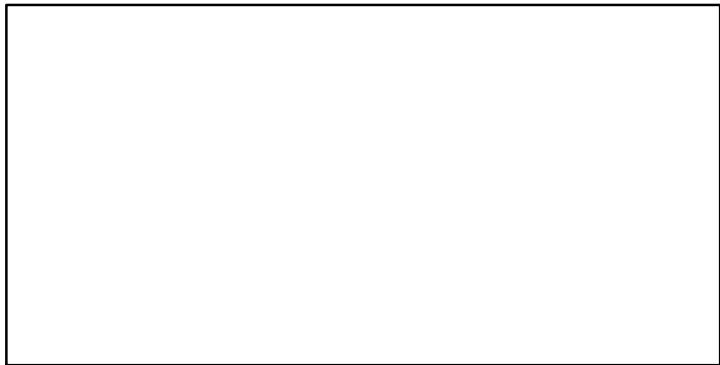
**TN \***



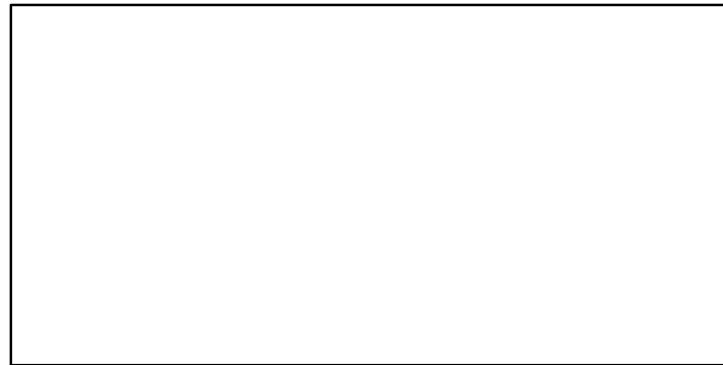
**F\***



**ER\***



**Recruits\***

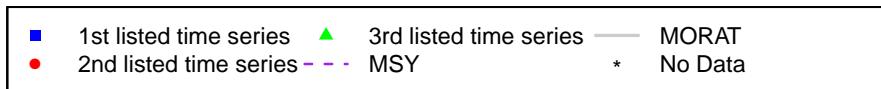
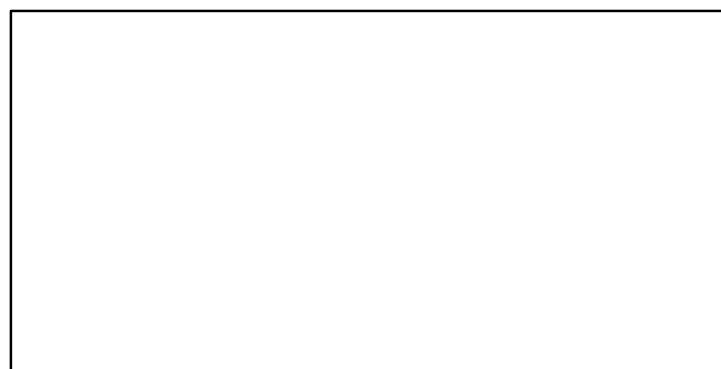
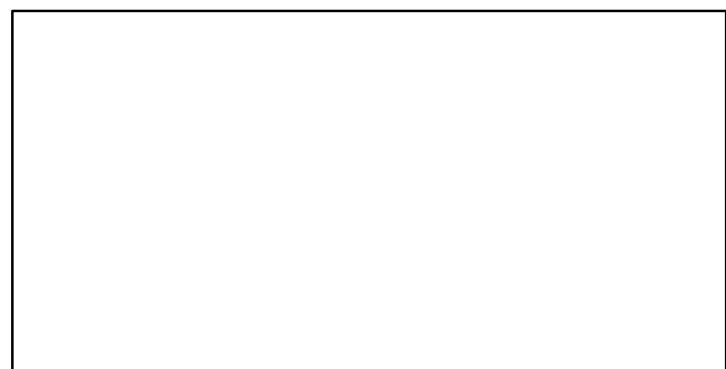
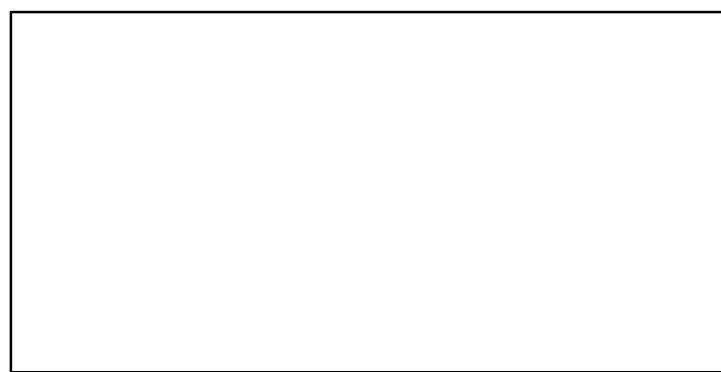
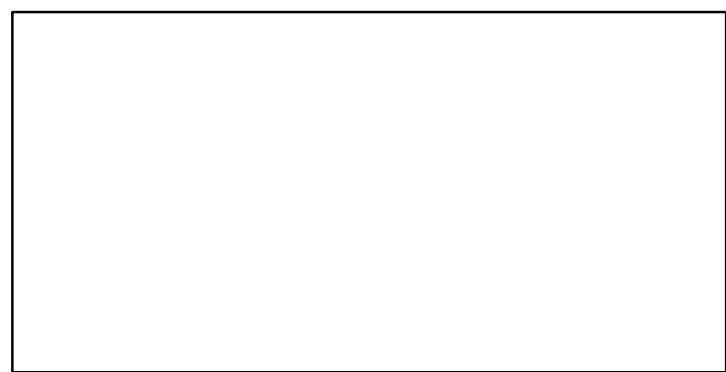
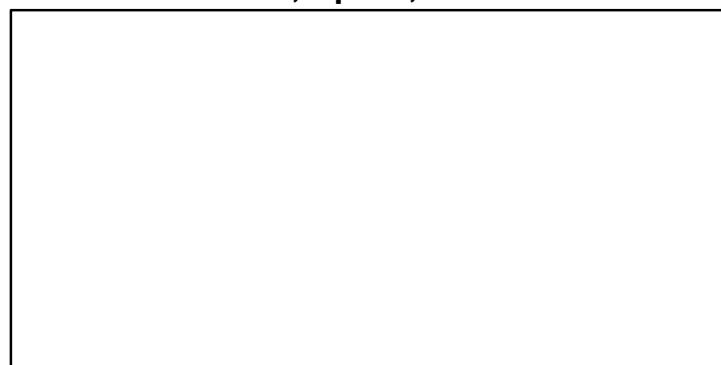
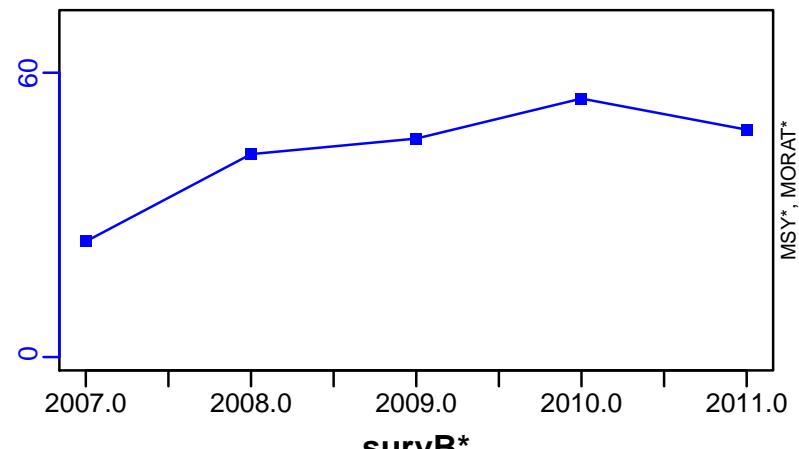


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

**Greater forkbeard Ligurian and North Tyrrhenian Sea [GFORKBMEDGSA9]**

TC-MT, TL\*, RecC\* (2007–2011–OSIO)

TAC\*, Cpair\*, Cadv\*



## Gilthead seabream Gulf of Lions [GHBRMGSA7]

Metadata	
<b>Scientific Name</b>	Sparus aurata
<b>Current Assess ID</b>	STECF-GHBRMGSA7-2013-2015-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

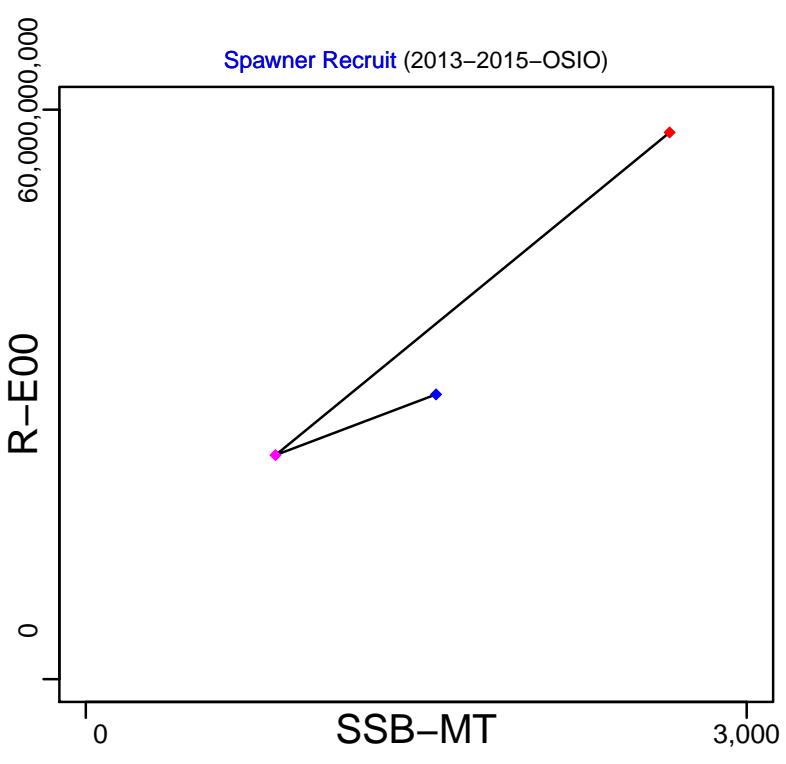
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	2650	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$5.76 \times 10^{10}$	-	-
<b>F</b>	F-1/yr	2015	0.45	-	-
<b>ER</b>	ER-calc-ratio	2015	0.288	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	1700		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.368		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2013–2015–OSIO)

Production\*



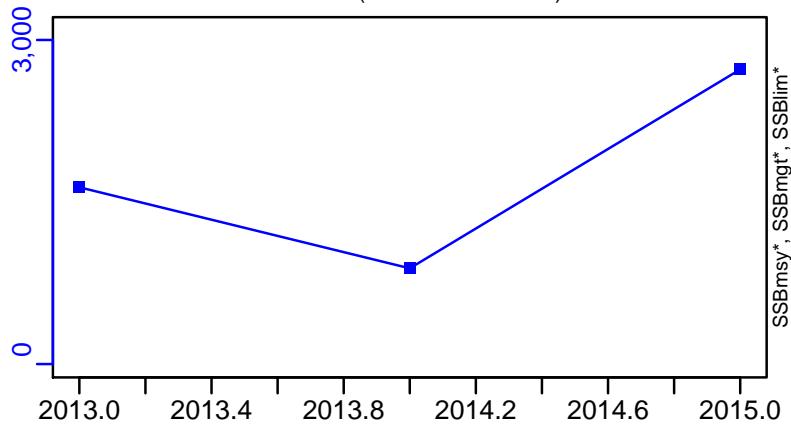
◆ Start Year ◆ End Year \* No Data

Gilthead seabream Gulf of Lions [GHBRMGS7]

**TB\***



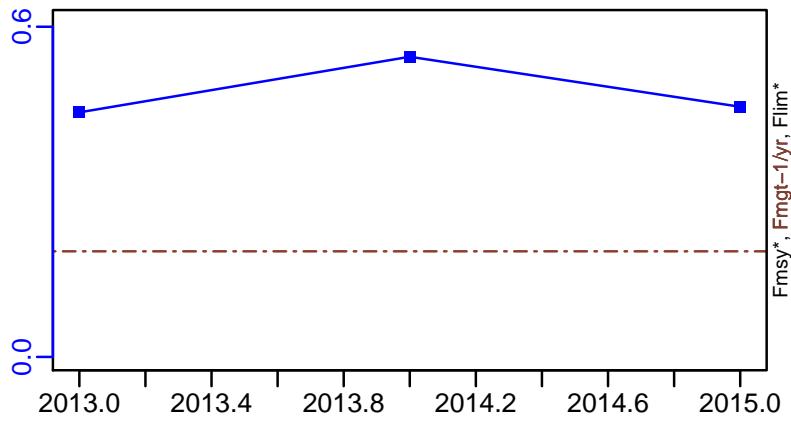
**SSB-MT (2013–2015–OSIO)**



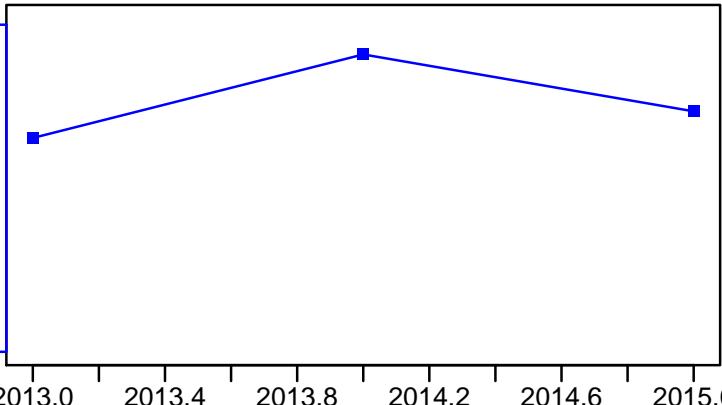
**TN \***



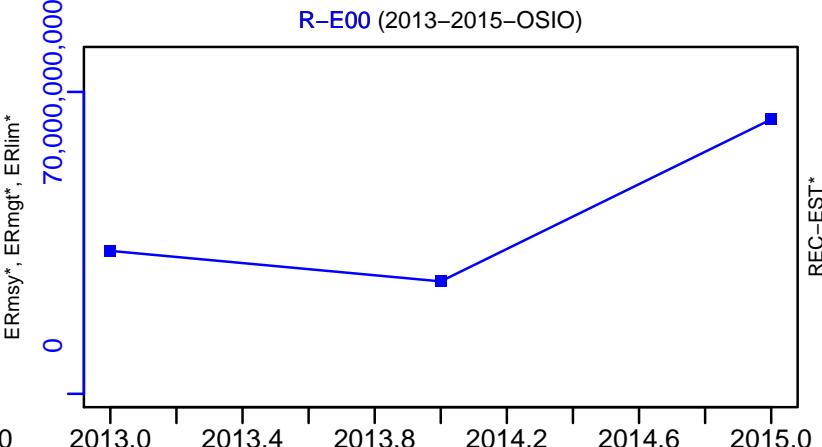
**F-1/yr (2013–2015–OSIO)**



**ER-calc-ratio (2013–2015–OSIO)**



**R-E00 (2013–2015–OSIO)**

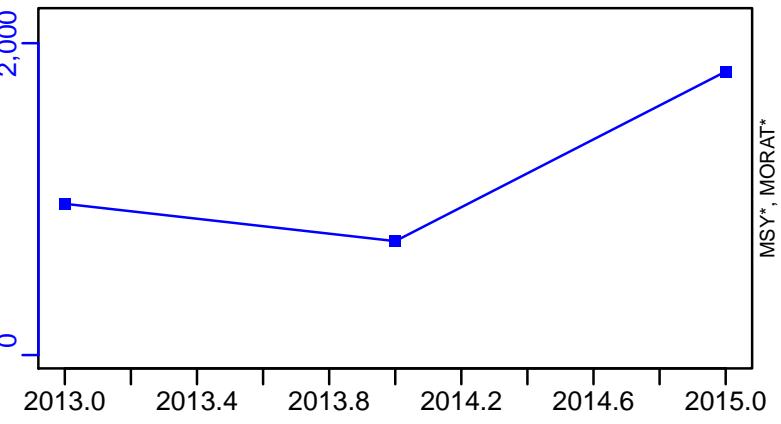


- Listed time series    - - - Target BRP    — Rec-Est
- - MSY-based BRP    - - Lim BRP    \* No Data

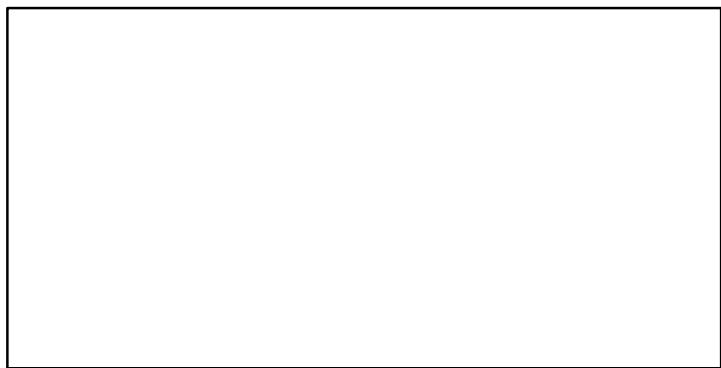
**Gilthead seabream Gulf of Lions [GHBRMGS7]**

TL-MT, TC\*, RecC\* (2013–2015–OSIO)

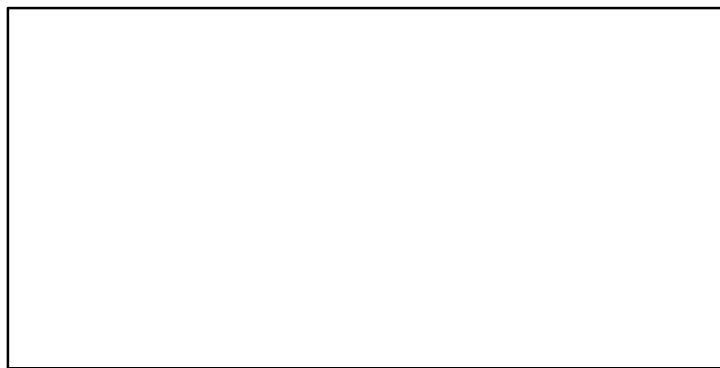
TAC\*, Cpair\*, Cadv\*



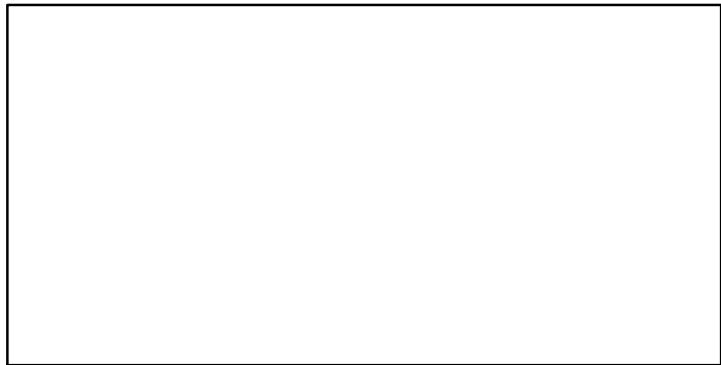
**survB\***



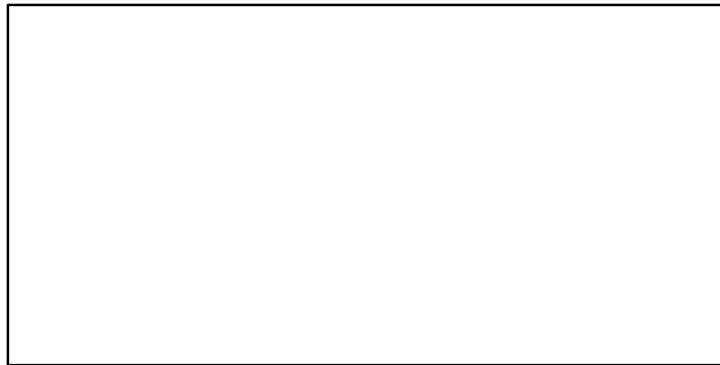
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Giant red shrimp South Tyrrhenian Sea [GRSHRIMP MEDGSA10]

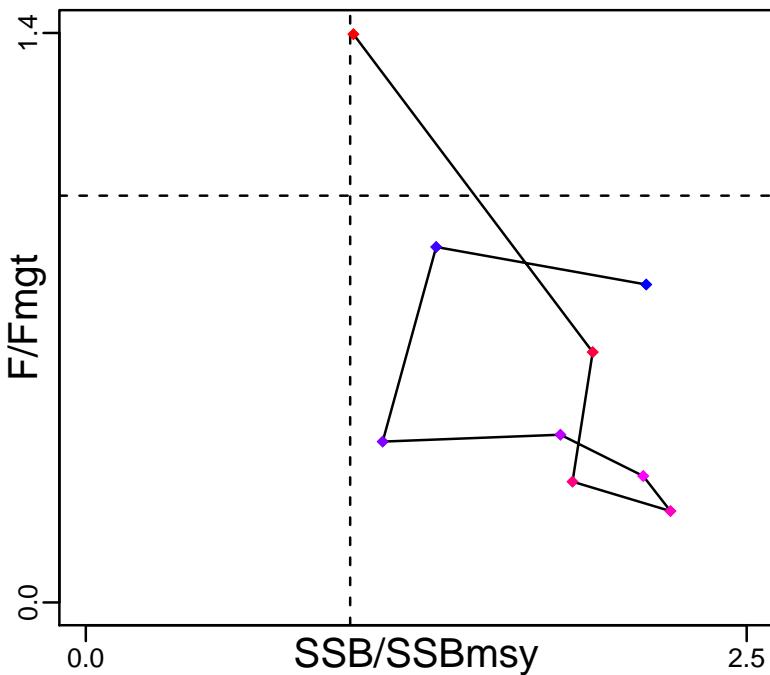
Metadata	
<b>Scientific Name</b>	Aristaeomorpha folacea
<b>Current Assess ID</b>	STECF-GRSHRIMP MEDGSA10-2006-2014-OSIO
<b>Area</b>	South Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	262
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.62
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.65
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	408
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	265
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

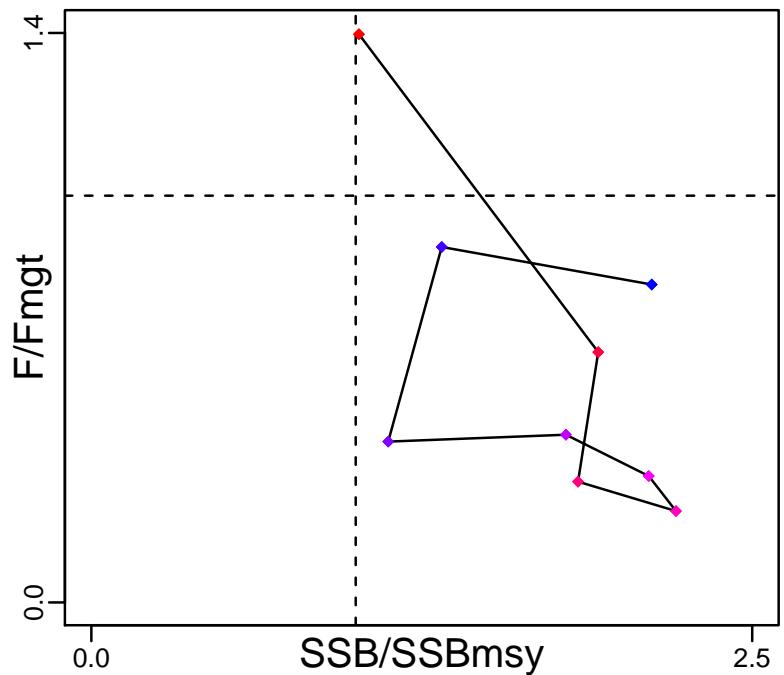
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	265	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.68 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	0.908	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.682	-	-	
<b>TC</b>	TC-MT	2014	454			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.012			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	1.099			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.397			
<b>ER/ERmgt</b>	-	-	-			

Giant red shrimp South Tyrrhenian Sea [GRSHRIMP MEDGSA10]

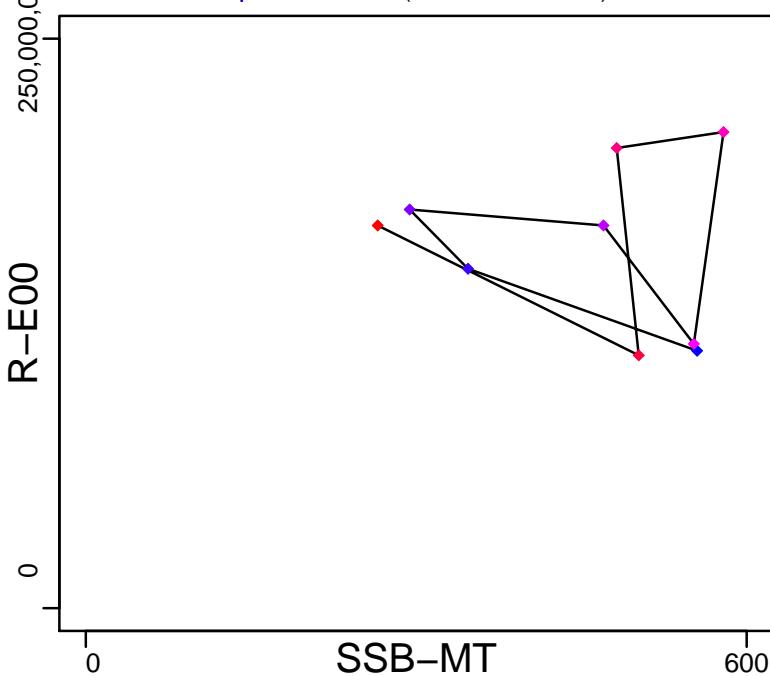
Kobe MSYpref (2006–2014–OSIO)



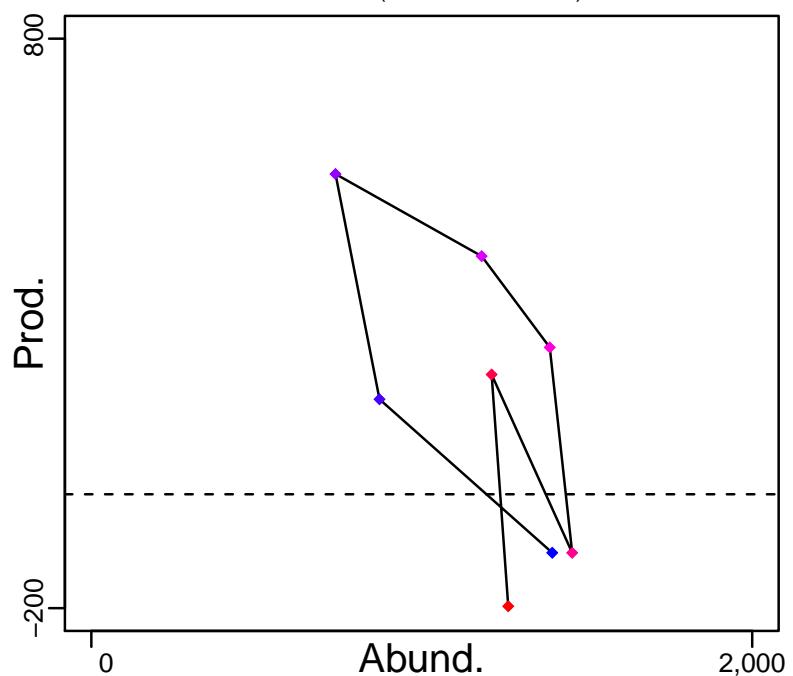
Kobe MGTPref (2006–2014–OSIO)



Spawner Recruit (2006–2014–OSIO)



Production (2006–2014–OSIO)



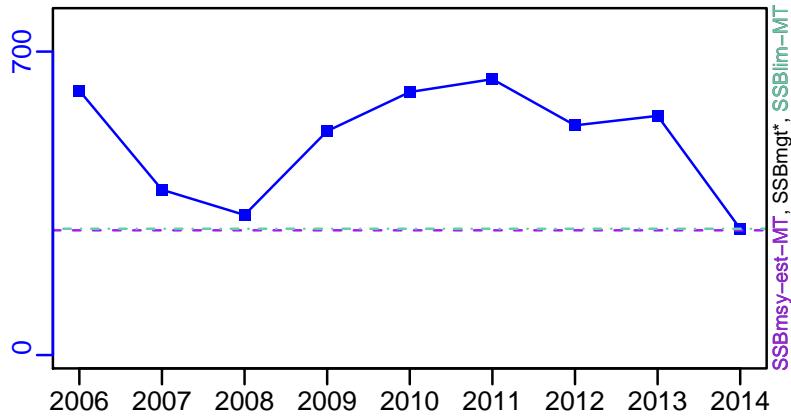
◆ Start Year ◆ End Year \* No Data

Giant red shrimp South Tyrrhenian Sea [GRSHRIMP MEDGSA10]

**TB\***



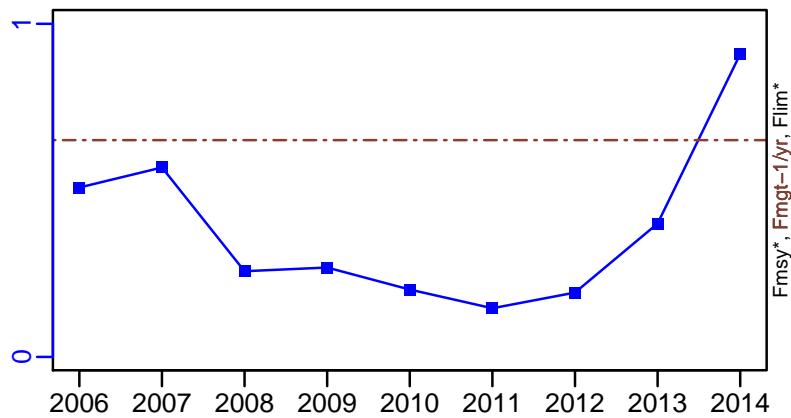
**SSB-MT (2006–2014–OSIO)**



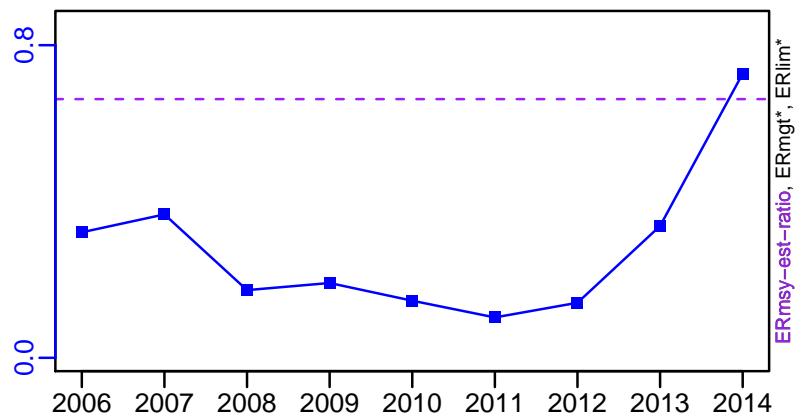
**TN \***



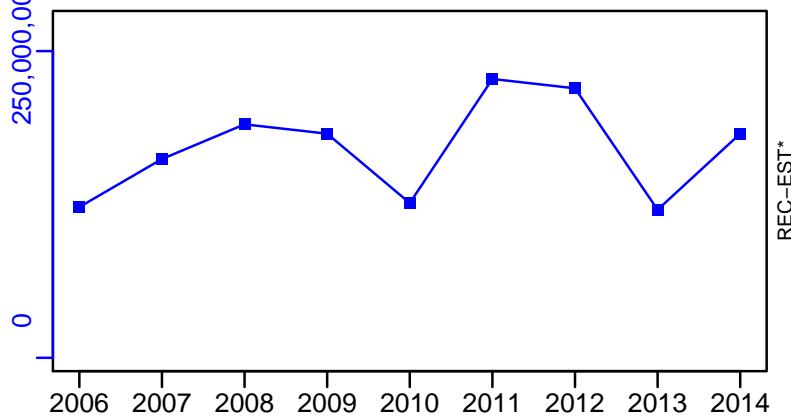
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

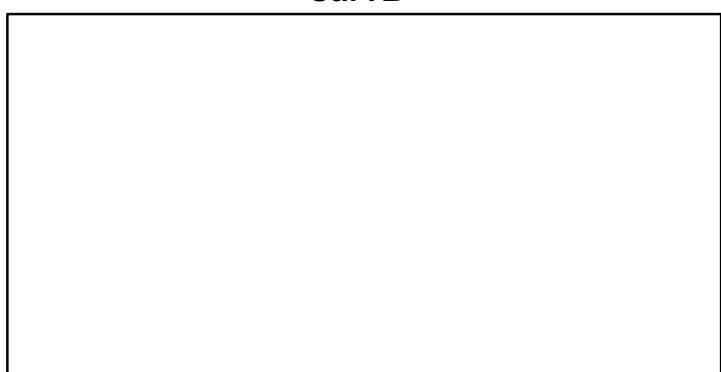
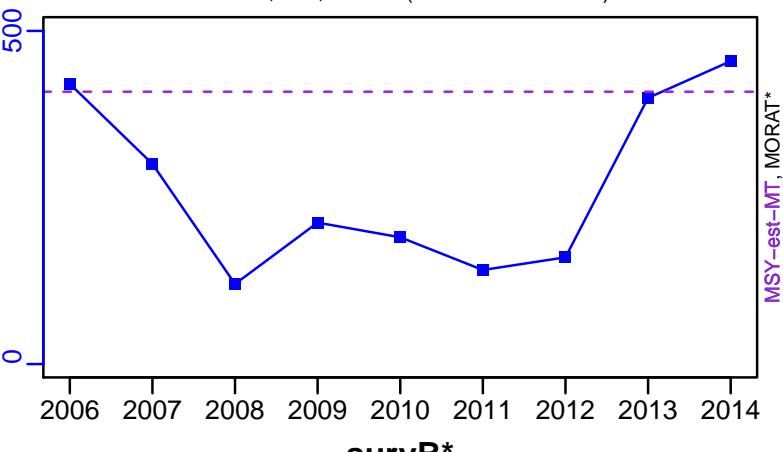


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

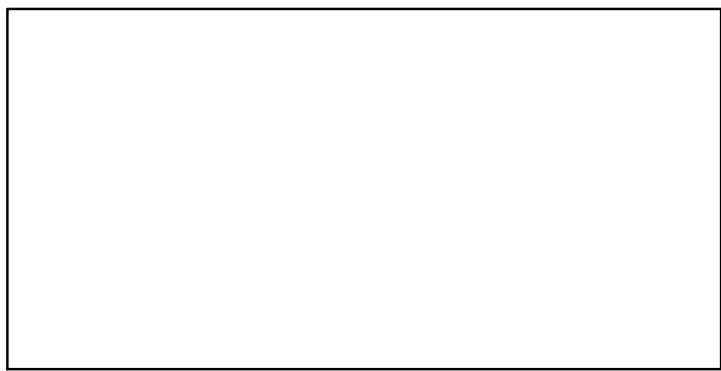
Giant red shrimp South Tyrrhenian Sea [GRSHRIMP MEDGSA10]

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

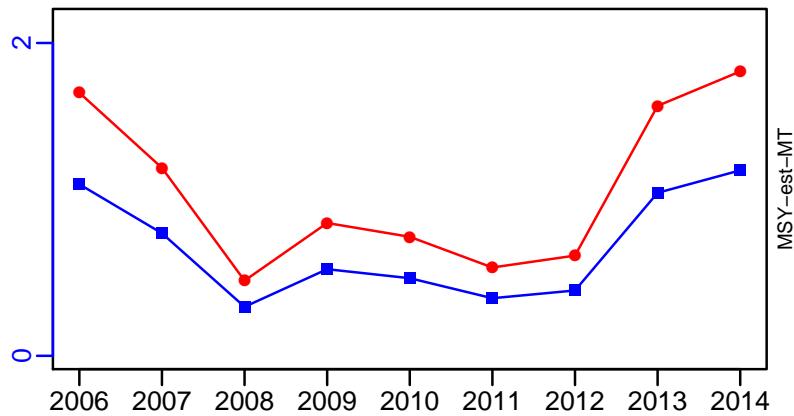
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2014–OSIO)



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

## Giant red shrimp Sardinia [GRSHRIMP MEDGSA11]

<b>Metadata</b>	
<b>Scientific Name</b>	Aristaeomorpha foliacea
<b>Current Assess ID</b>	STECF-GRSHRIMP MEDGSA11-2006-2014-OSIO
<b>Area</b>	Sardinia
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<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>	Fmgt-1/yr	2014	0.31
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	26
<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>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	46	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	18,200,000	-	-
<b>F</b>	F-1/yr	2014	0.496	-	-
<b>ER</b>	ER-calc-ratio	2014	0.418	-	-
<b>TC</b>	TC-MT	2014	49		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.6		
<b>ER/ERmgt</b>	-	-	-		

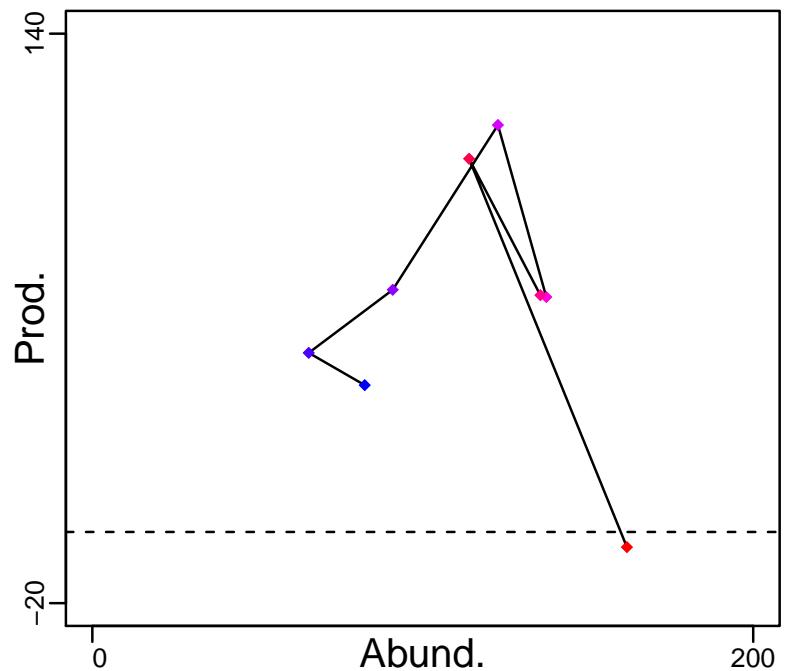
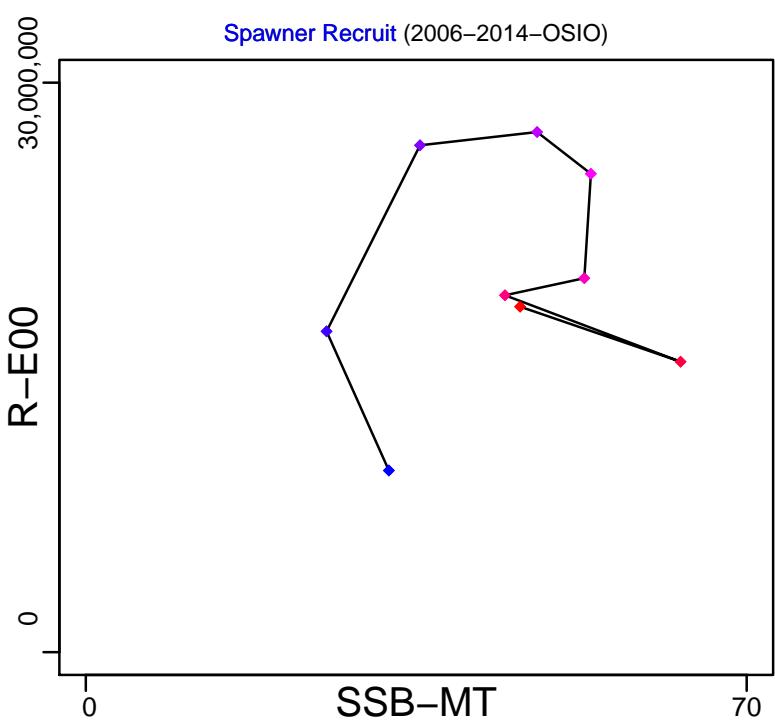
Giant red shrimp Sardinia [GRSHRIMP MEDGSA11]

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2006–2014–OSIO)

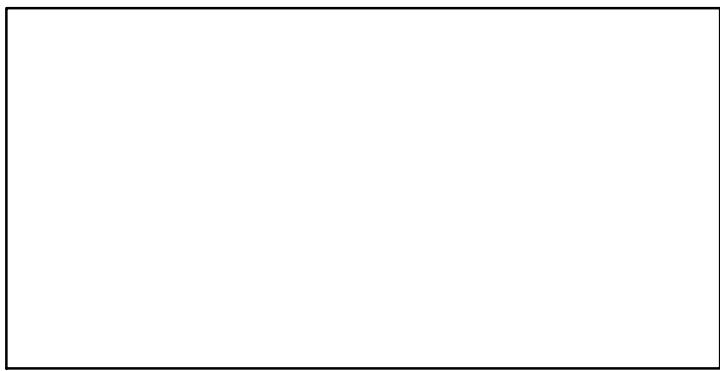
Production (2006–2014–OSIO)



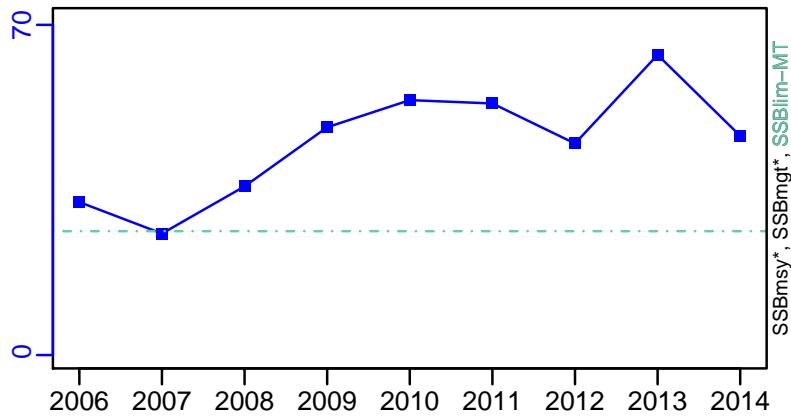
◆ Start Year   ◆ End Year   \* No Data

Giant red shrimp Sardinia [GRSHRIMP MEDGSA11]

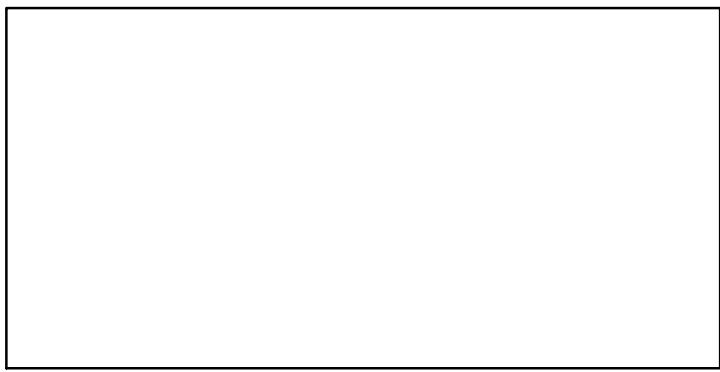
**TB\***



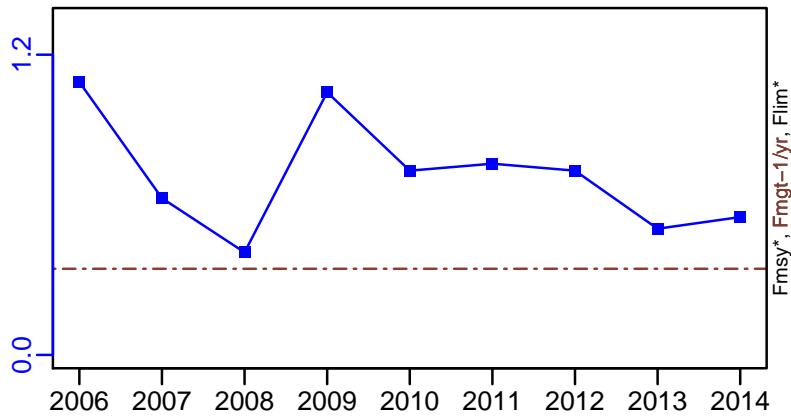
**SSB-MT (2006–2014–OSIO)**



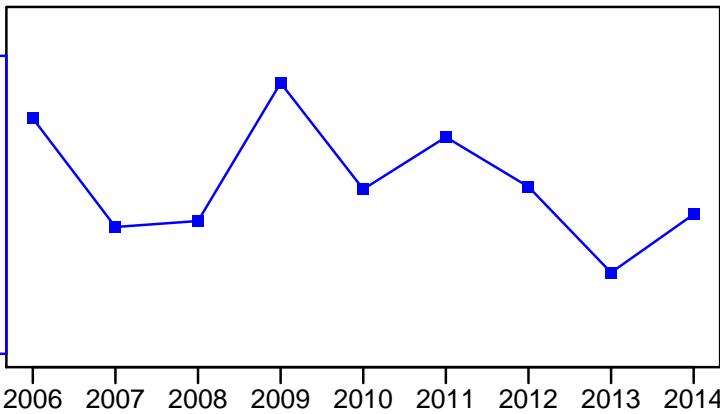
**TN \***



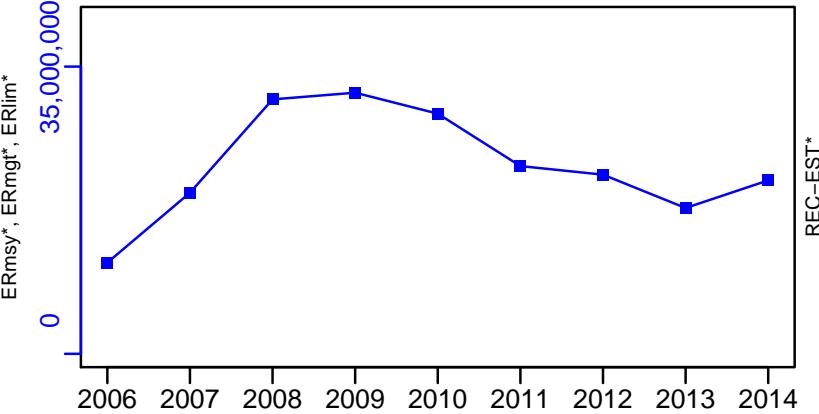
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

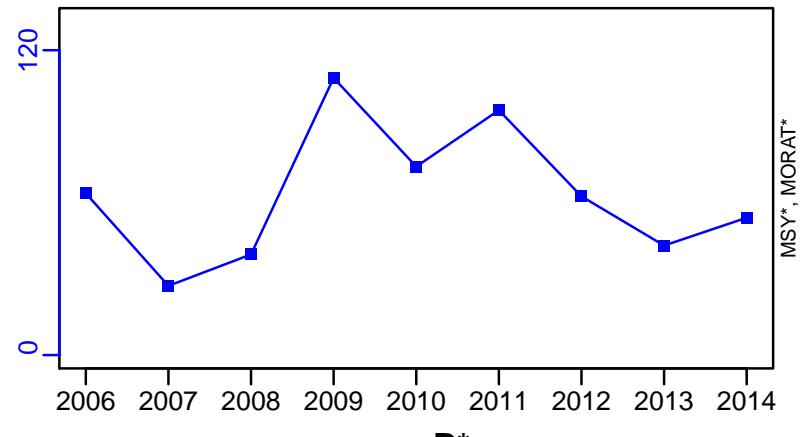


- Listed time series    - - - Target BRP    — Rec-Est
- - MSY-based BRP    - - Lim BRP    \* No Data

Giant red shrimp Sardinia [GRSHRIMP MEDGSA11]

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

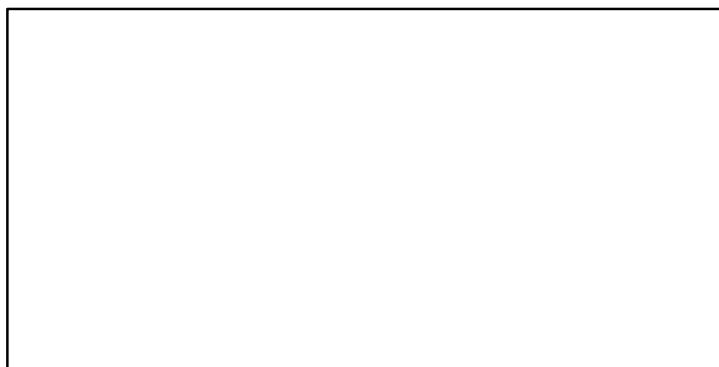
MSY\*, MORAT\*



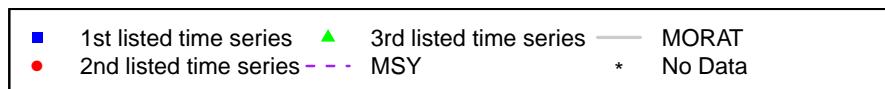
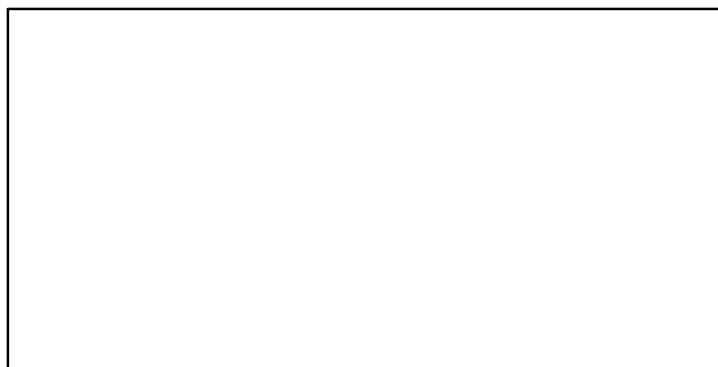
CPUE\*



EFFORT\*



CdivMSY\*



## Giant red shrimp Geographical Sub-Areas 12-16 [GRSHRIMP MEDGSA12-16]

Metadata	
<b>Scientific Name</b>	Aristaeomorpha folacea
<b>Current Assess ID</b>	STECF-GRSHRIMP MEDGSA12-16-2005-2011-OSIO
<b>Area</b>	Geographical Sub-Areas 12-16
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.3
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	1250	-	1+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	84,400,000	-	-
<b>F</b>	F-1/yr	2011	1.67	-	-
<b>ER</b>	ER-calc-ratio	2011	0.357	-	-
<b>TC</b>	TC-MT	2011	1590		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	5.567		
<b>ER/ERmgt</b>	-	-	-		

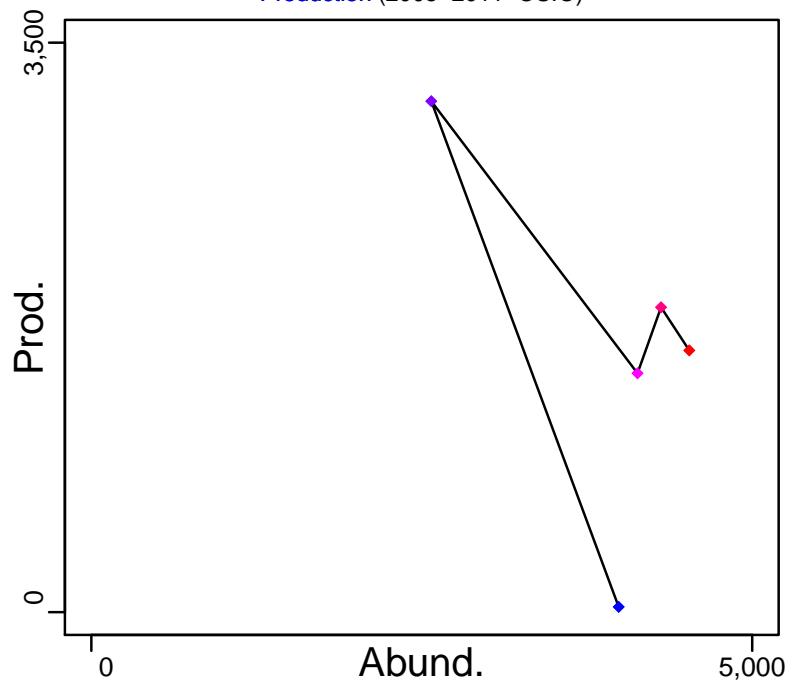
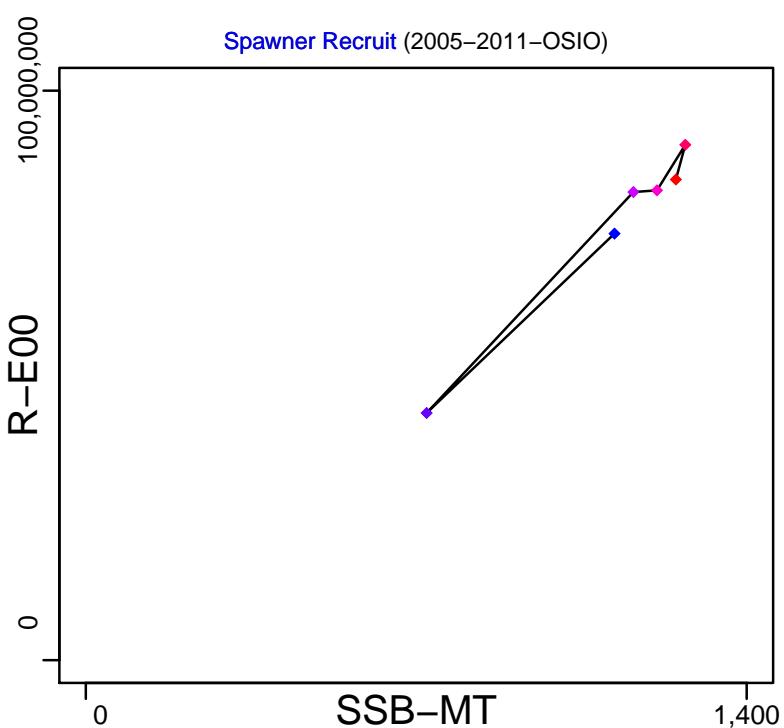
Giant red shrimp Geographical Sub-Areas 12–16 [GRSHRIMP MEDGSA12–16]

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2005–2011–OSIO)

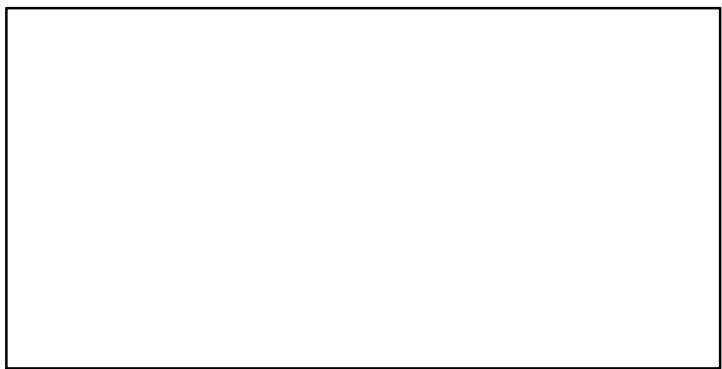
Production (2005–2011–OSIO)



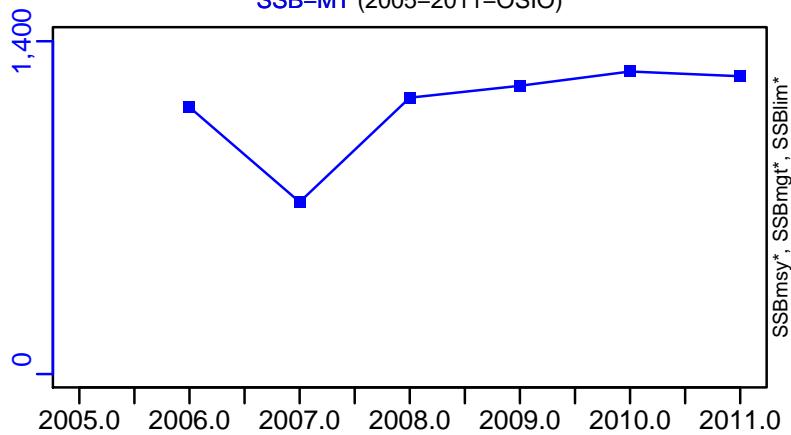
◆ Start Year   ◆ End Year   \* No Data

Giant red shrimp Geographical Sub-Areas 12–16 [GRSHRIMP MEDGSA12–16]

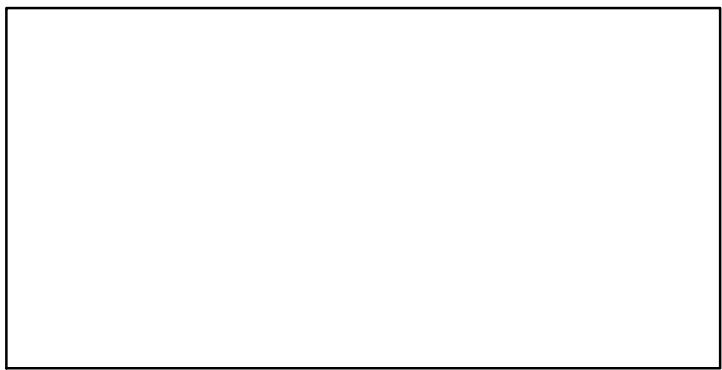
**TB\***



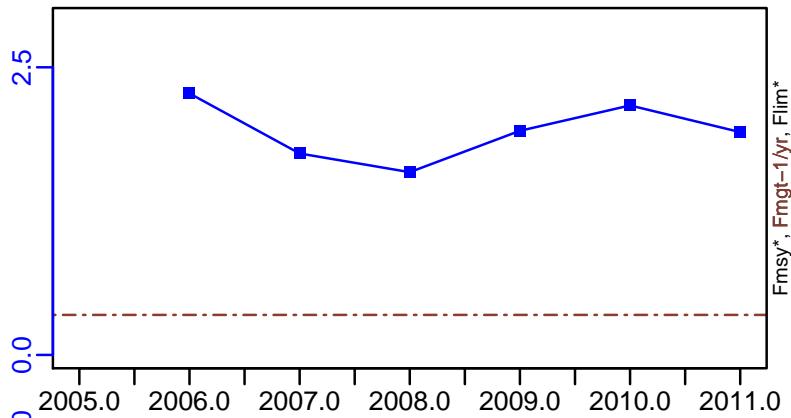
**SSB-MT (2005–2011–OSIO)**



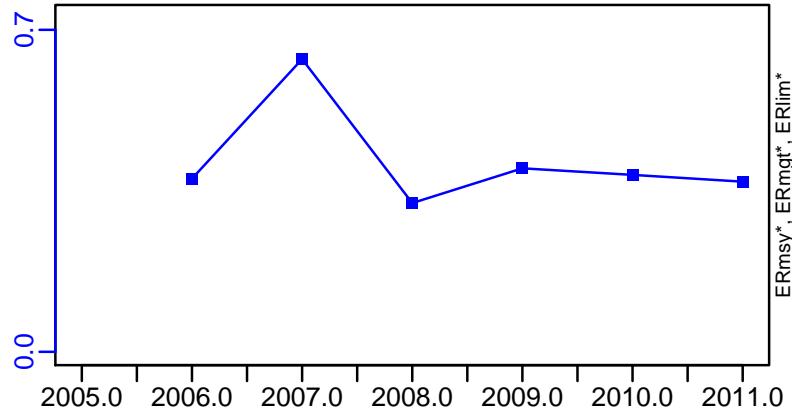
**TN \***



**F-1/yr (2005–2011–OSIO)**

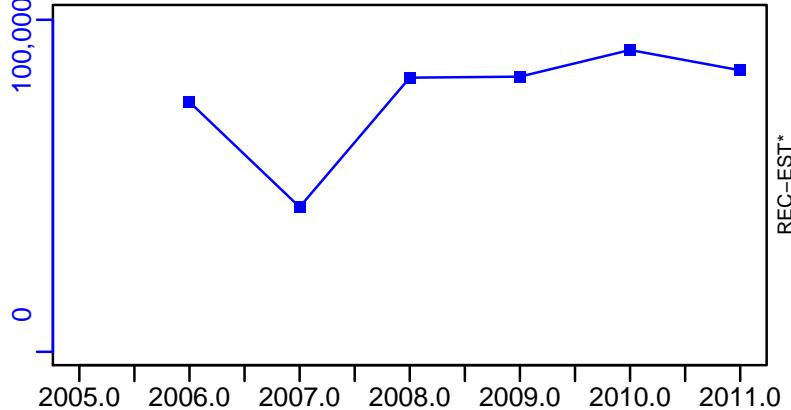


**ER-calc-ratio (2005–2011–OSIO)**



ER<sub>m</sub>s<sup>y</sup>\* , ER<sub>mgt</sub>\* , ER<sub>lim</sub>\*

**R-E00 (2005–2011–OSIO)**



SSB<sub>m</sub>s<sup>y</sup>\* , SSB<sub>mgt</sub>\* , SSB<sub>lim</sub>\*

F<sub>m</sub>s<sup>y</sup>\* , F<sub>mgt</sub>-1/yr , F<sub>lim</sub>\*

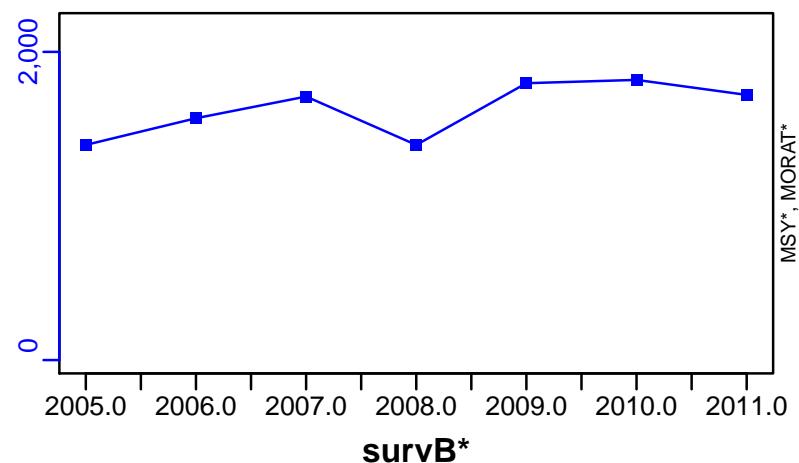
REC-EST\*

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

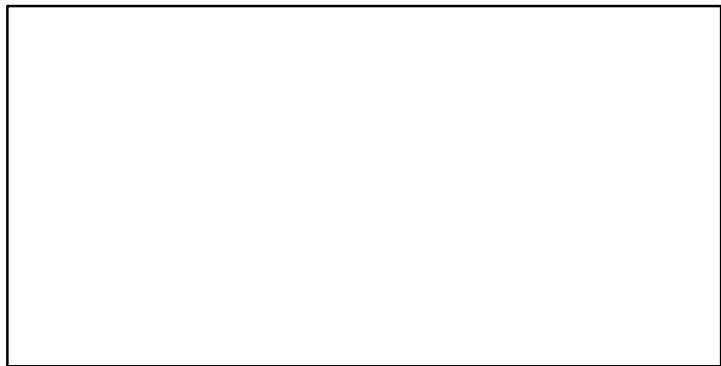
Giant red shrimp Geographical Sub-Areas 12–16 [GRSHRIMP MEDGSA12–16]

TC–MT, TL\*, RecC\* (2005–2011–OSIO)

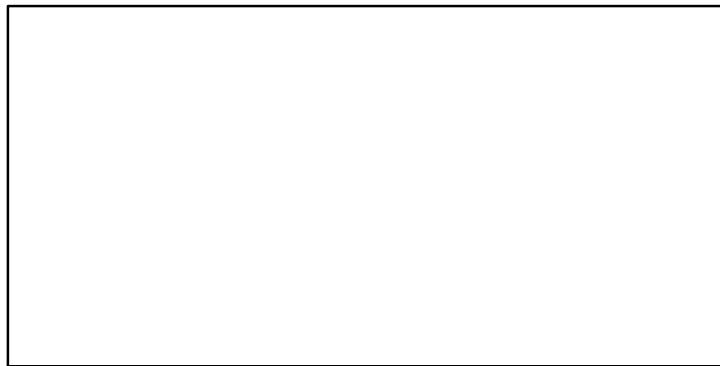
TAC\*, Cpair\*, Cadv\*



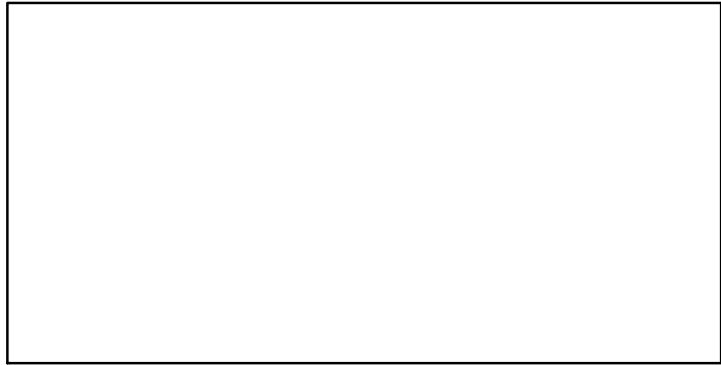
survB\*



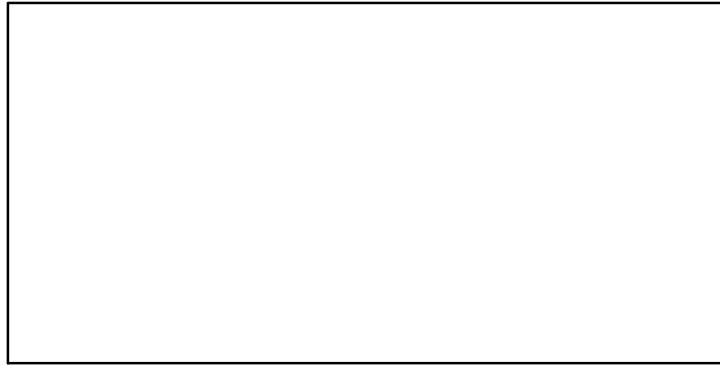
CPUE\*



EFFORT\*



CdivMSY\*



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

**Giant red shrimp South Adriatic Sea and West Ionian Sea (GSA 18,19)**  
**[GRSHRIMP MED GSA 18-19]**

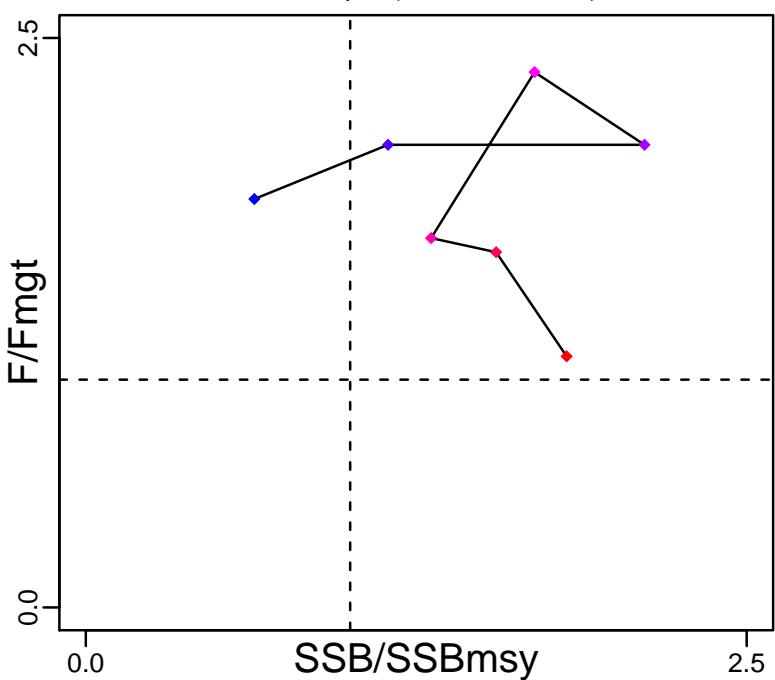
Metadata	
<b>Scientific Name</b>	Aristaeomorpha foliacea
<b>Current Assess ID</b>	STECF-GRSHRIMP MED GSA 18-19-2008-2014-OSIO
<b>Area</b>	South Adriatic Sea and West Ionian Sea (GSA 18,19)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	289
<b>Fmsy</b>	-	-	-
<b>ERrmsy</b>	ERrmsy-est-ratio	2014	0.837
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.42
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	860
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

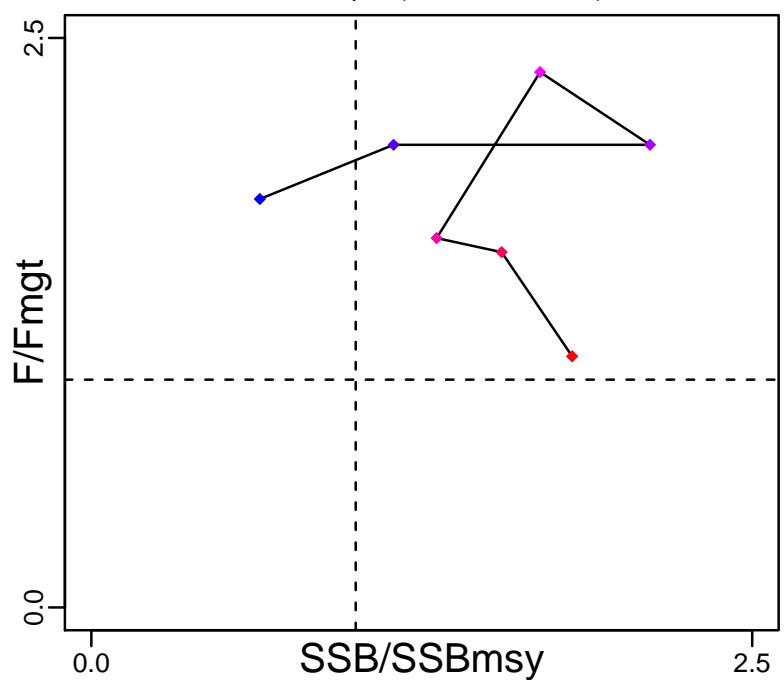
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	525	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	30,200,000	-	-	
<b>F</b>	F-1/yr	2014	0.463	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.175	-	-	
<b>TC</b>	TC-MT	2014	328			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.819			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERrmsy</b>	ER-calc-ratio/ERrmsy-est-ratio	2014	0.21			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.102			
<b>ER/ERmgt</b>	-	-	-			

Giant red shrimp South Adriatic Sea and West Ionian Sea (GSA 18,19) [GRSHRIMP MED GSA 18–19]

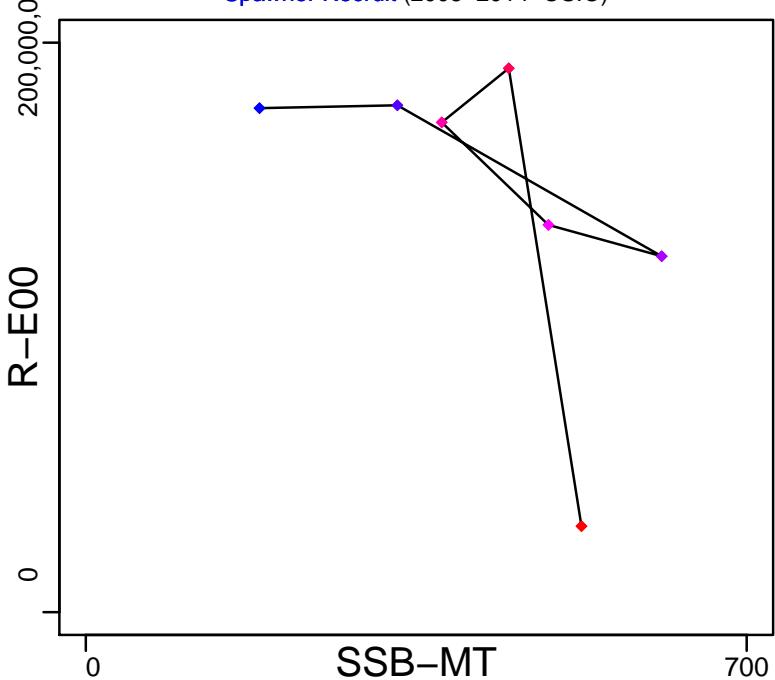
Kobe MSYpref (2008–2014–OSIO)



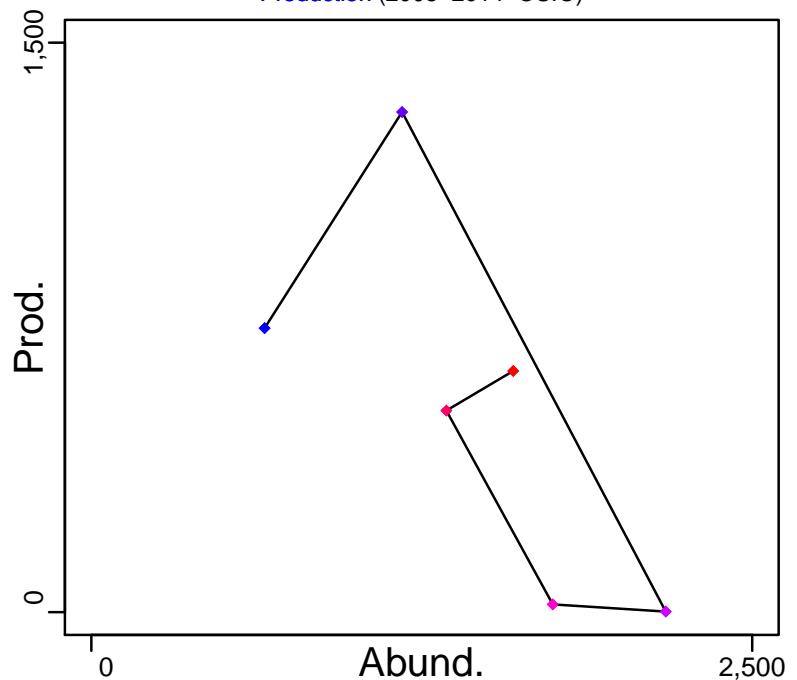
Kobe MGTpref (2008–2014–OSIO)



Spawner Recruit (2008–2014–OSIO)



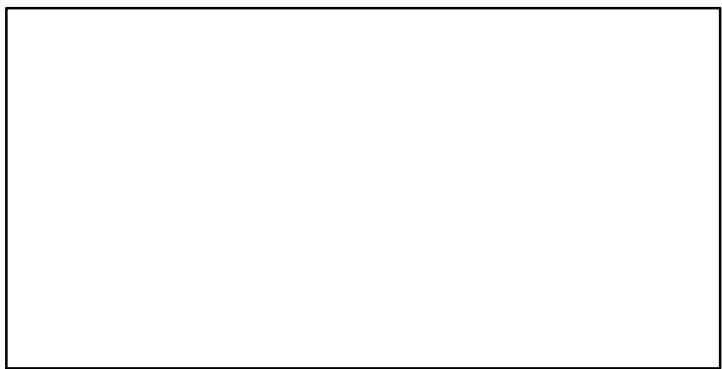
Production (2008–2014–OSIO)



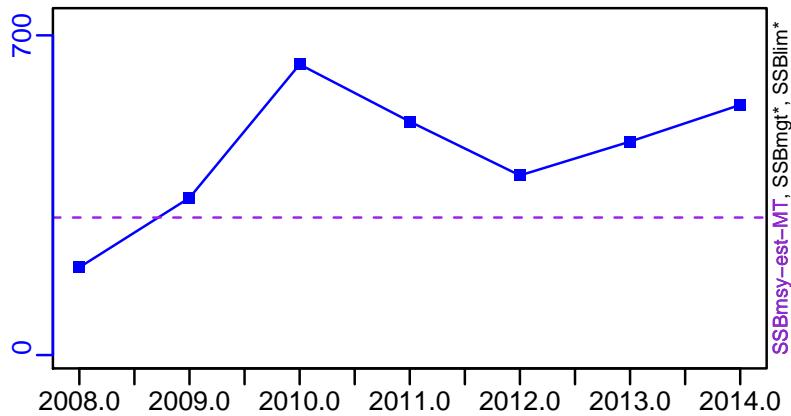
◆ Start Year   ◆ End Year   \* No Data

Giant red shrimp South Adriatic Sea and West Ionian Sea (GSA 18,19) [GRSHRIMP MED GSA 18–19]

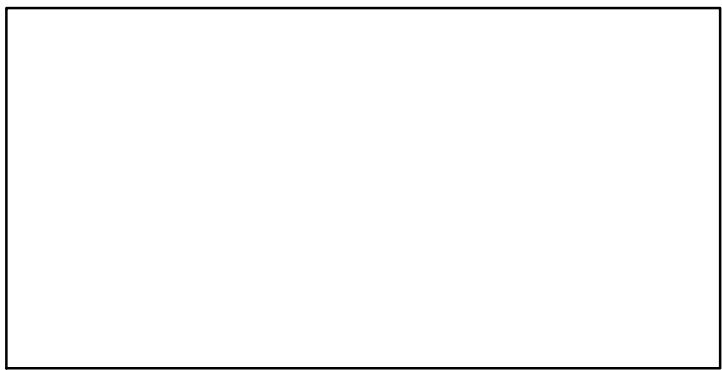
**TB\***



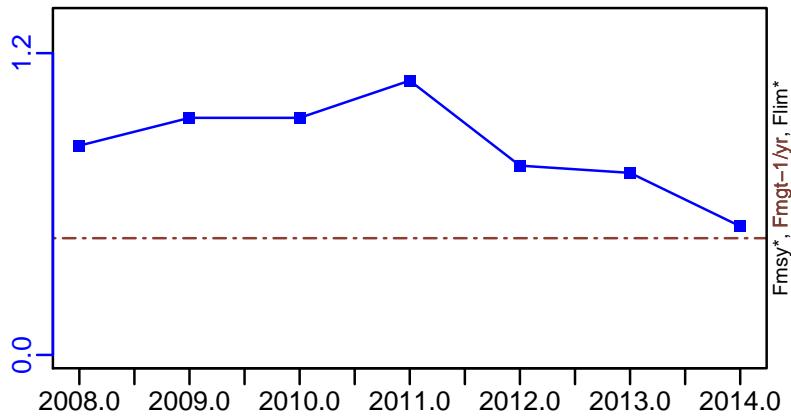
**SSB-MT (2008–2014–OSIO)**



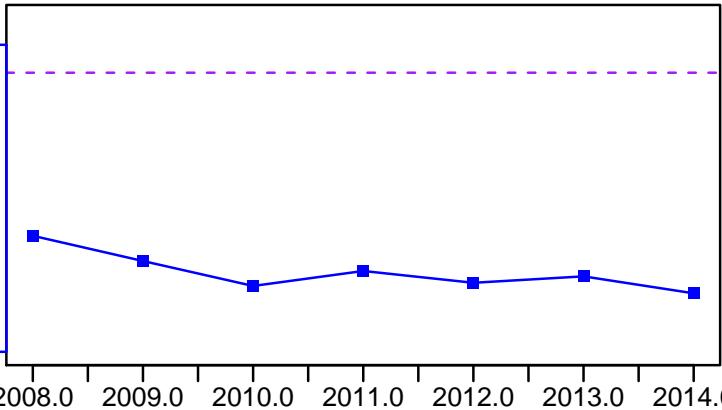
**TN \***



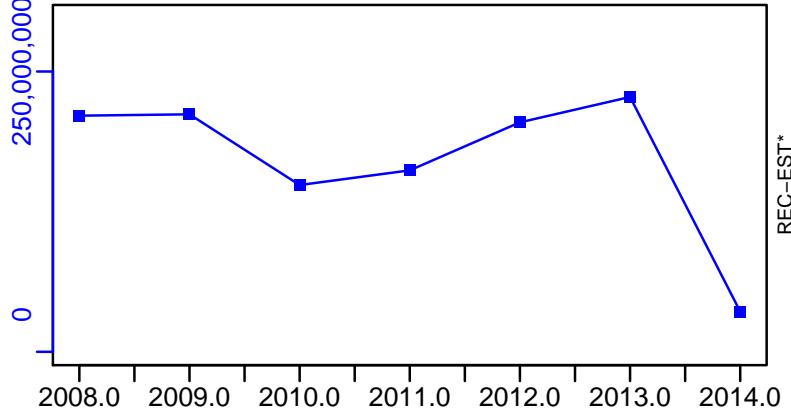
**F-1/yr (2008–2014–OSIO)**



**ER-calc-ratio (2008–2014–OSIO)**



**R-E00 (2008–2014–OSIO)**

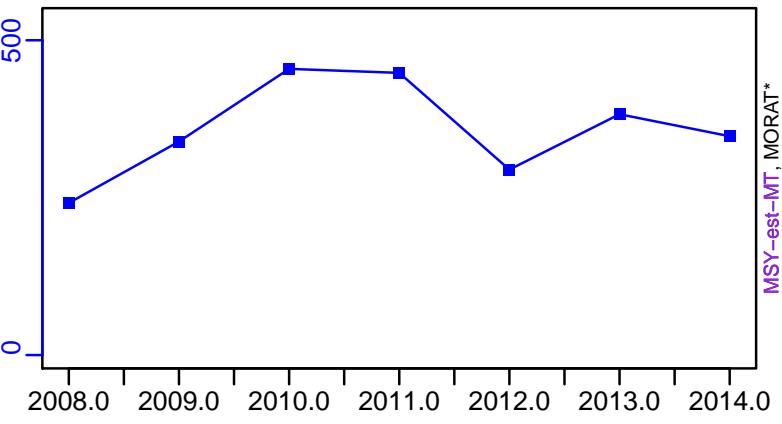


- Listed time series
- - - Target BRP
- - - MSY-based BRP
- - - Lim BRP
- Rec-Est
- \* No Data

Giant red shrimp South Adriatic Sea and West Ionian Sea (GSA 18,19) [GRSHRIMP MED GSA 18–19]

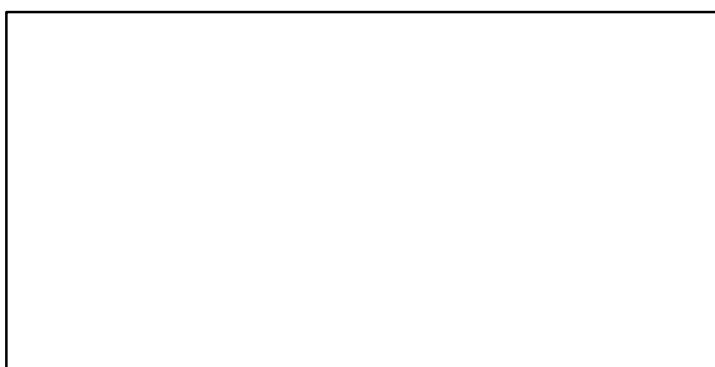
TC-MT, TL\*, RecC\* (2008–2014–OSIO)

TAC\*, Cpair\*, Cadv\*

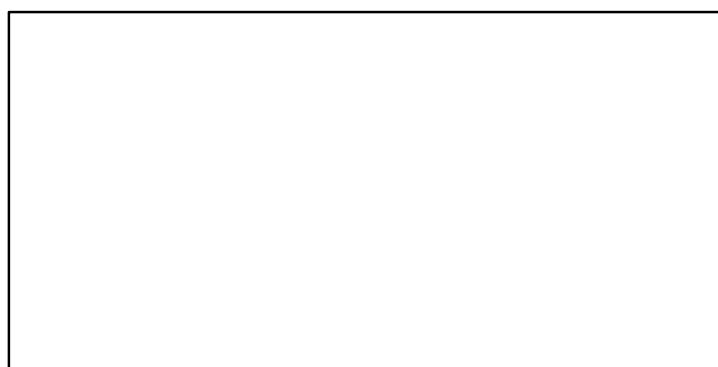


survB\*

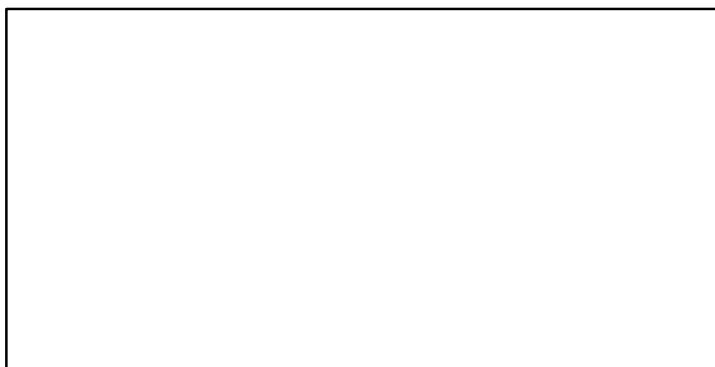
MSY-est-MT, MORAT\*



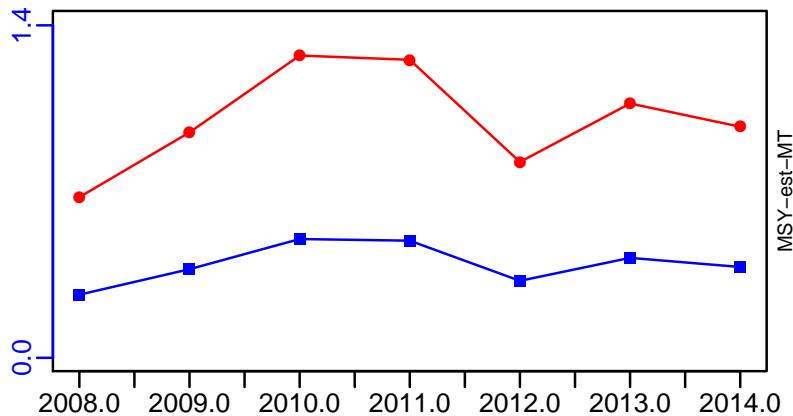
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2008–2014–OSIO)



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

## Giant red shrimp Ligurian and North Tyrrhenian Sea [GRSHRIMP MEDGSA9]

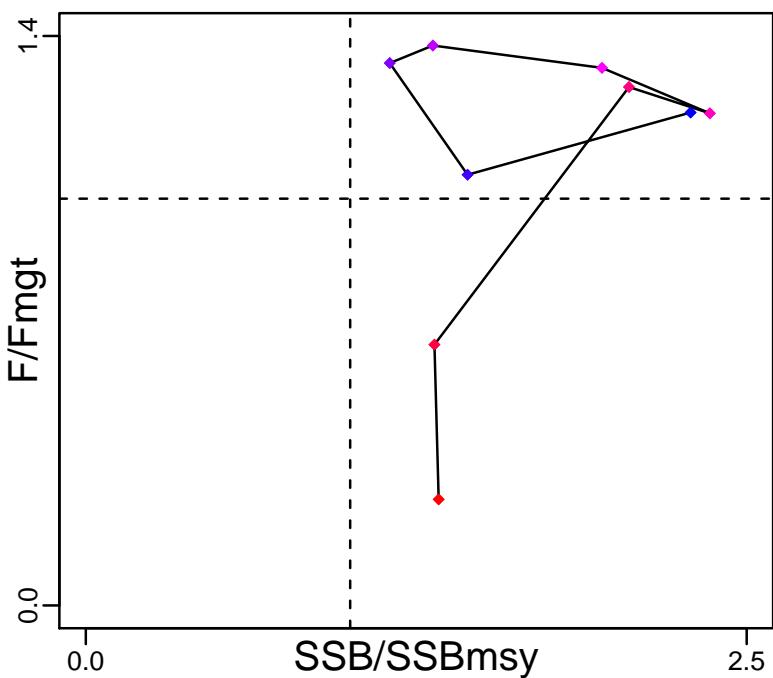
Metadata	
<b>Scientific Name</b>	Aristaeomorpha foliacea
<b>Current Assess ID</b>	STECF-GRSHRIMP MEDGSA9-2006-2014-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	69
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.391
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.51
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	66
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	80
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

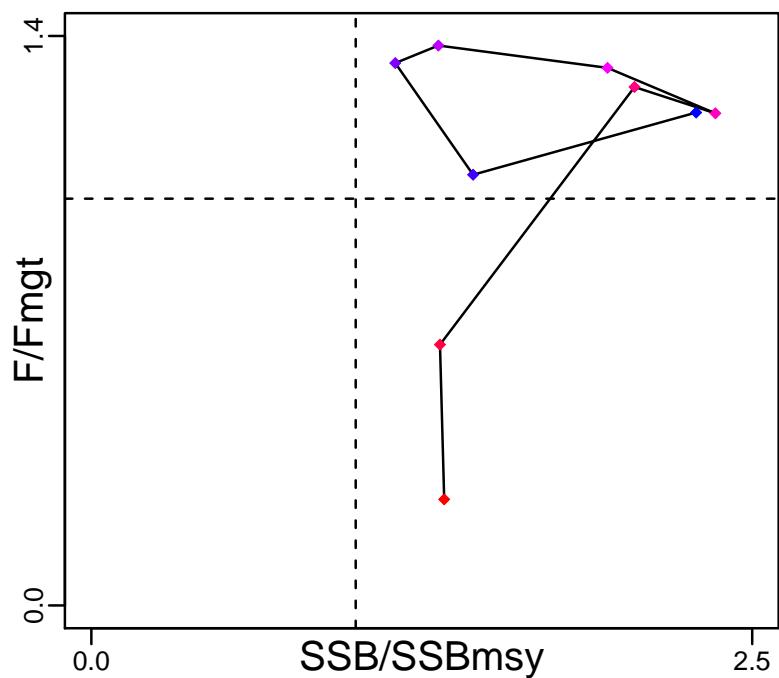
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	92	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	10,600,000	-	-	
<b>F</b>	F-1/yr	2014	0.133	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.074	-	-	
<b>TC</b>	TC-MT	2014	17			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.335			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.19			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.261			
<b>ER/ERmgt</b>	-	-	-			

Giant red shrimp Ligurian and North Tyrrhenian Sea [GRSHRIMP MEDGSA9]

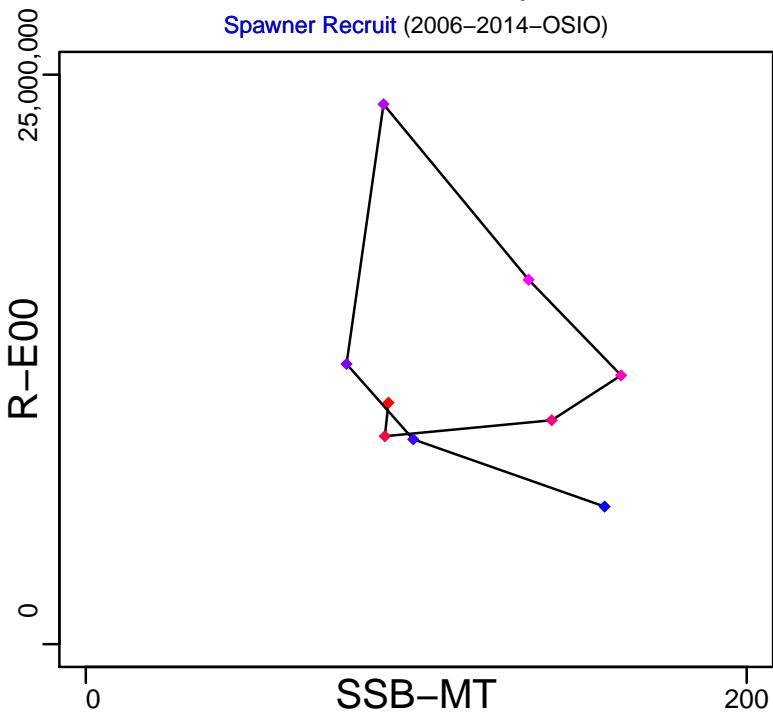
Kobe MSYpref (2006–2014–OSIO)



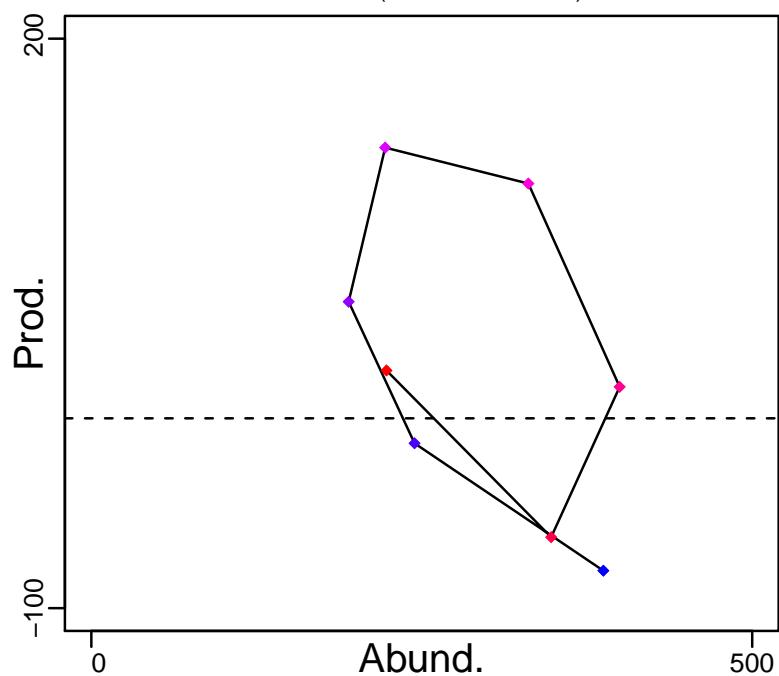
Kobe MGTpref (2006–2014–OSIO)



Spawner Recruit (2006–2014–OSIO)



Production (2006–2014–OSIO)



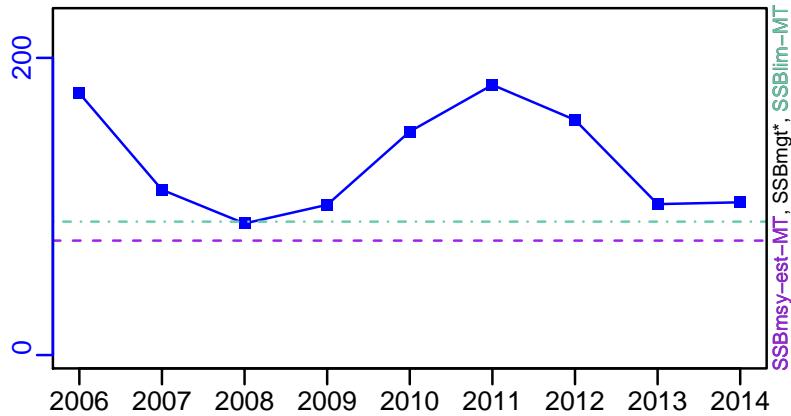
◆ Start Year ◆ End Year \* No Data

Giant red shrimp Ligurian and North Tyrrhenian Sea [GRSHRIMP MEDGSA9]

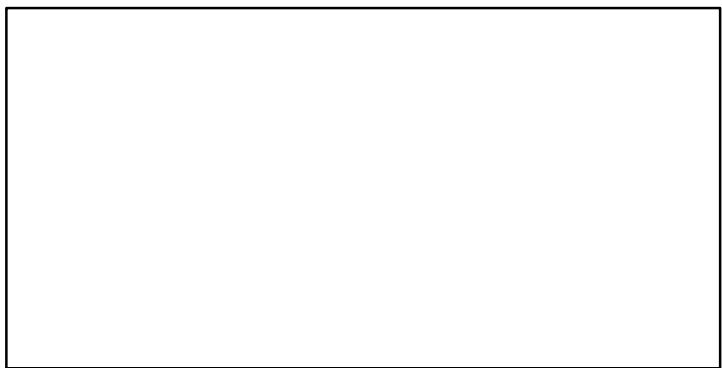
**TB\***



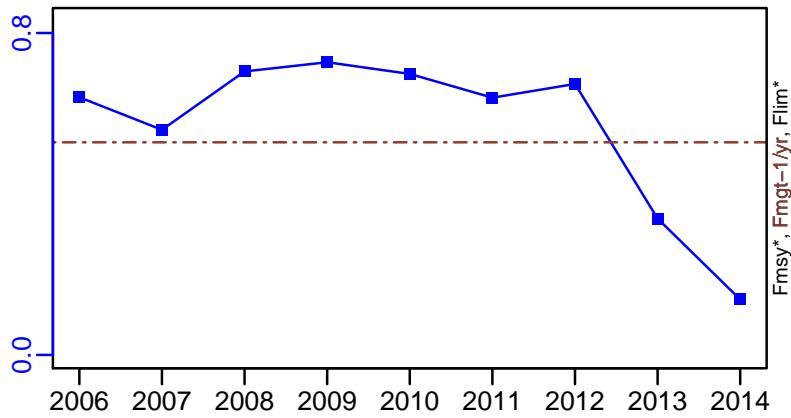
**SSB-MT (2006–2014–OSIO)**



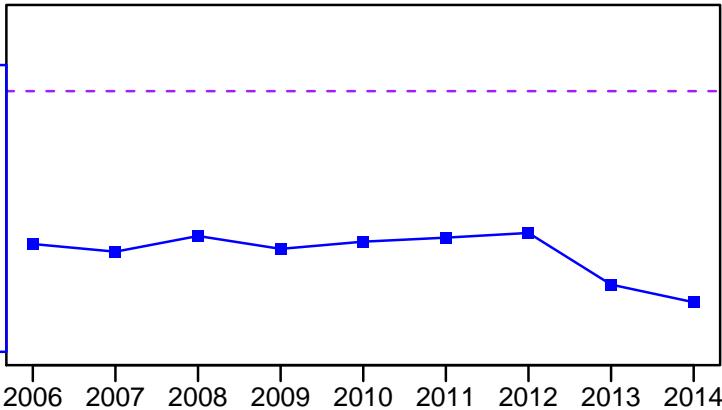
**TN \***



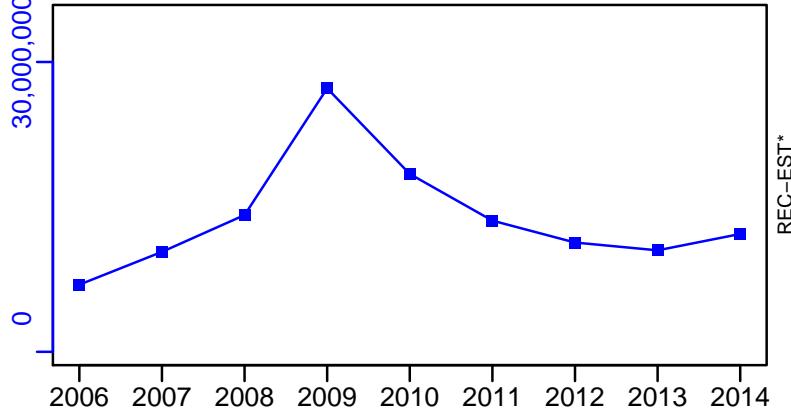
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

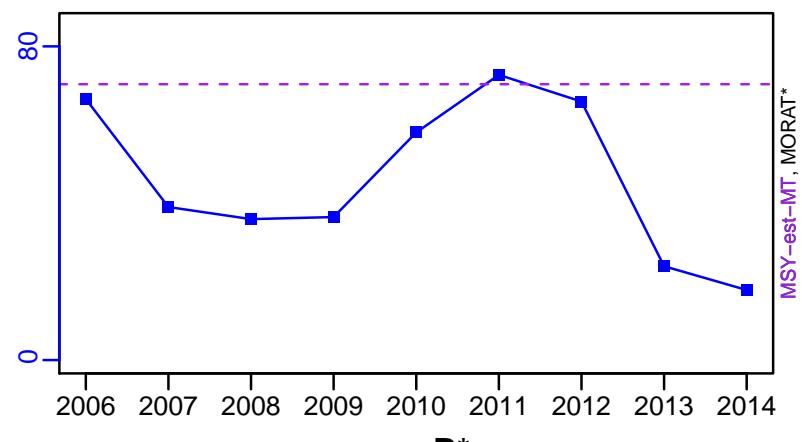


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Giant red shrimp Ligurian and North Tyrrhenian Sea [GRSHRIMP MEDGSA9]

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

TAC\*, Cpair\*, Cadv\*

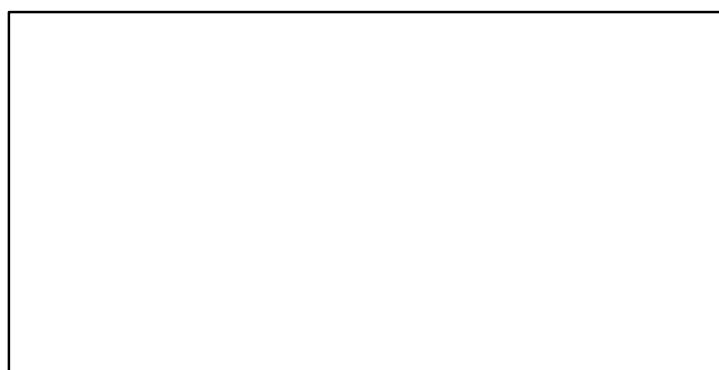


survB\*

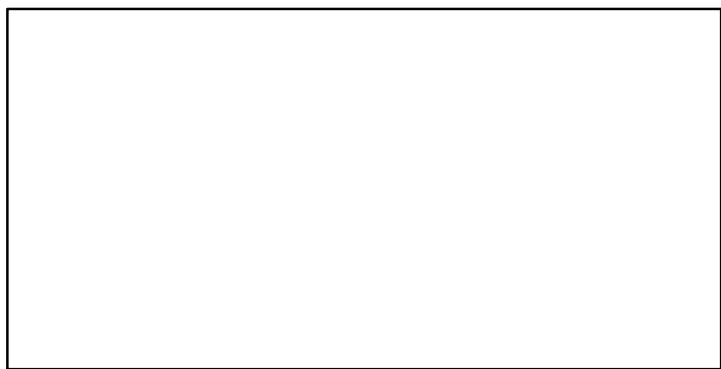
MSY-est-MT, MORAT\*



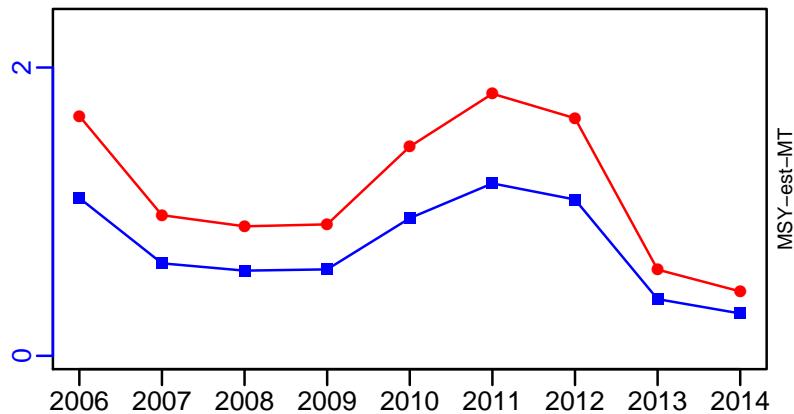
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2014–OSIO)



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

## Hake Malta Island and South of Sicily (GSA 15, 16) [HAKEMEDGSA15-16]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA15-16-2005-2009-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2009	0.15
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2009	1.12	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2009	1590		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2009	7.467		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

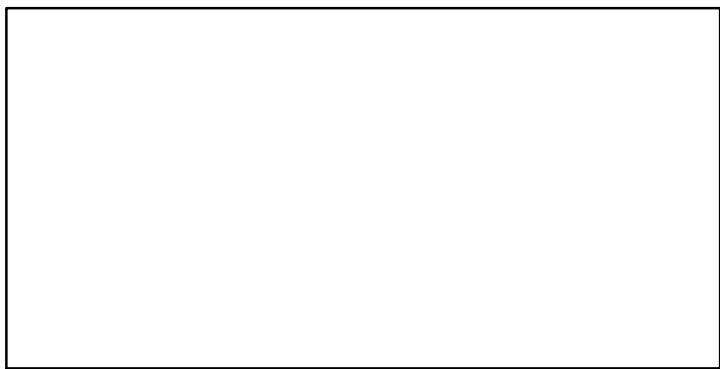
**Spawner Recruit\***

**Production\***

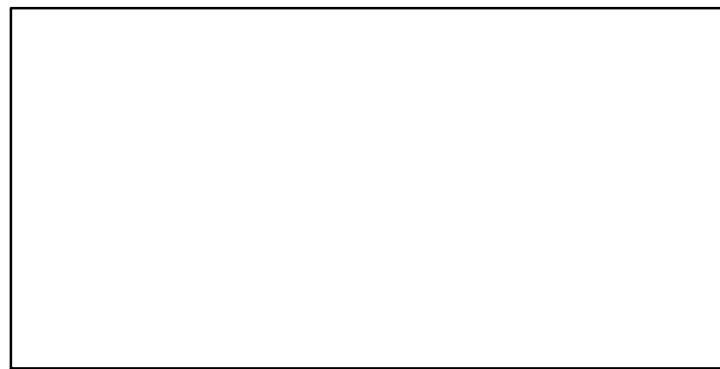
◆ Start Year ◆ End Year \* No Data

Hake Malta Island and South of Sicily (GSA 15, 16) [HAKEMEDGSA15–16]

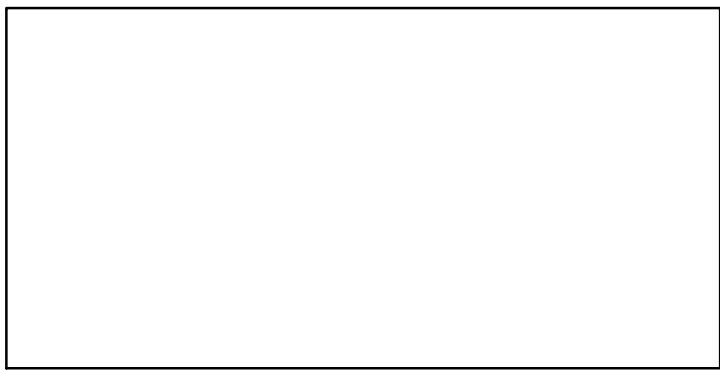
**TB\***



**SSB\***



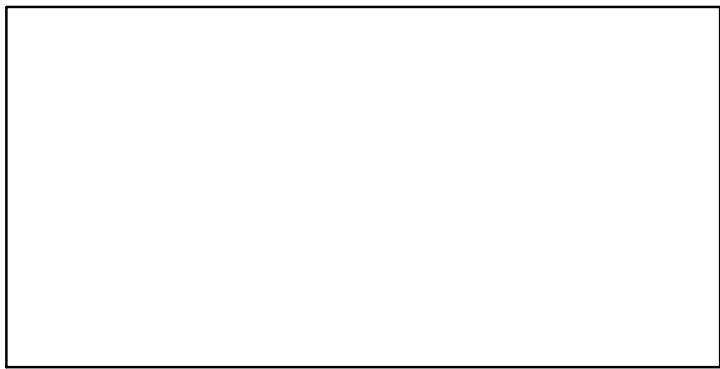
**TN \***



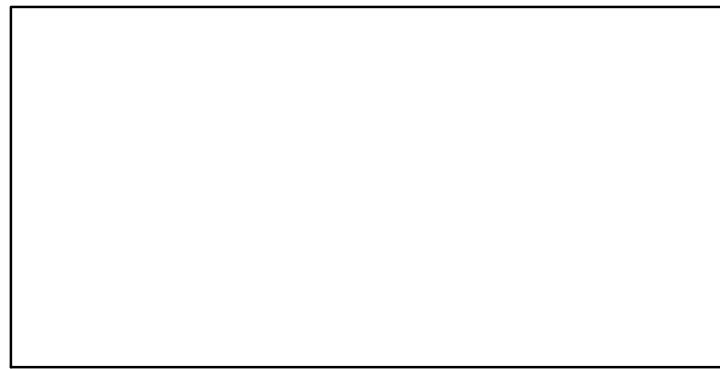
**F-1/yr (2005–2009–OSIO)**



**ER\***



**Recruits\***

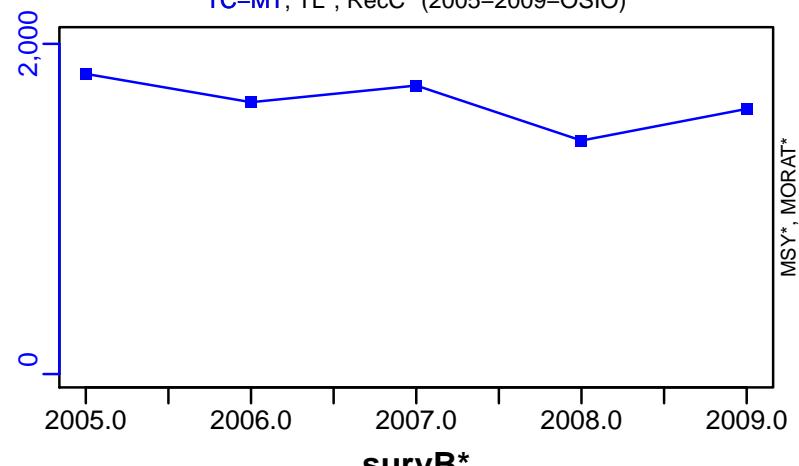


- |   |   |   |
|---|---|---|
| <span style="color: blue;">■</span> Listed time series<br><span style="color: purple;">—</span> MSY-based BRP | <span style="color: brown;">---</span> Target BRP<br><span style="color: cyan;">----</span> Lim BRP | <span style="color: gray;">—</span> Rec-Est<br><span style="color: black;">*</span> No Data |
|---|---|---|

Hake Malta Island and South of Sicily (GSA 15, 16) [HAKEMEDGSA15-16]

TC-MT, TL\*, RecC\* (2005–2009–OSIO)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

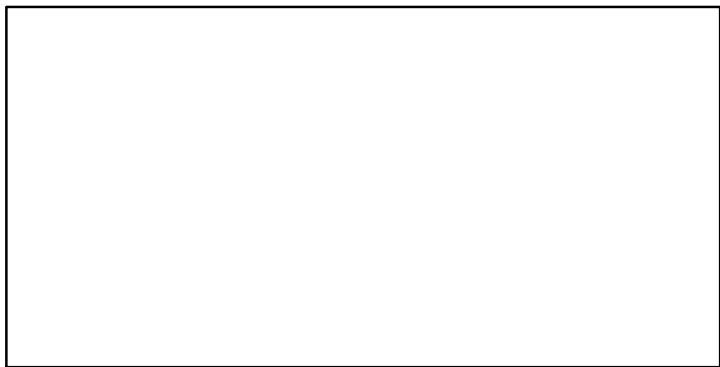
survB\*



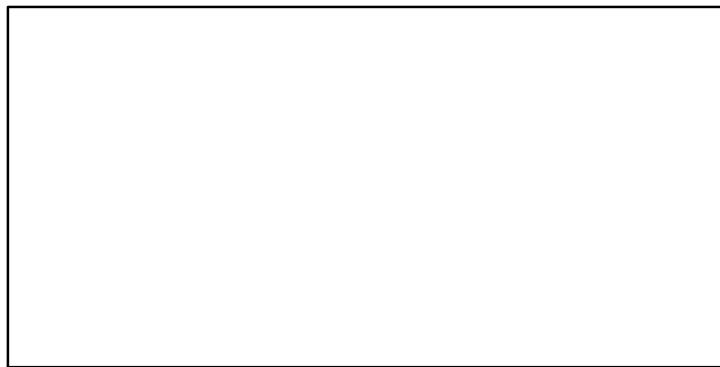
CPUE\*



EFFORT\*



CdivMSY\*



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

## Hake Geographical Sub-Areas 1-7 [HAKEMEDGSA1-7]

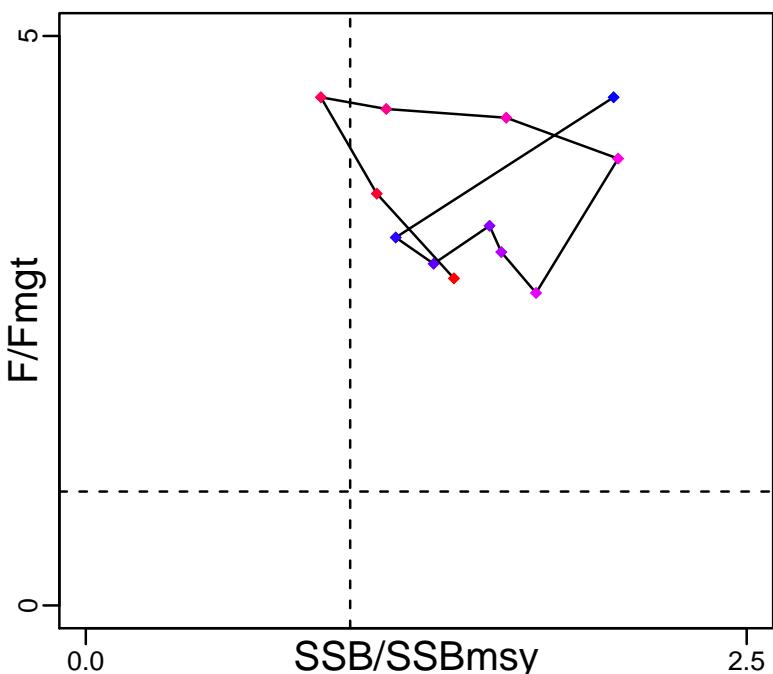
Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA1-7-2003-2014-OSIO
<b>Area</b>	Geographical Sub-Areas 1-7
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	5860
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.606
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.39
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	7563
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	5186
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

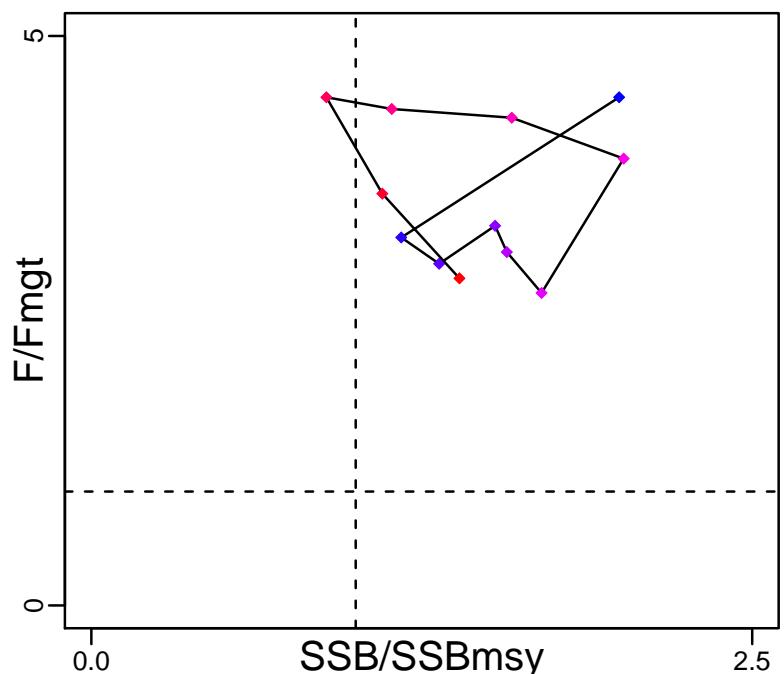
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	8160	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$4.01 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	1.12	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.272	-	-	
<b>TC</b>	TC-MT	2014	4720			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.393			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.448			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	2.872			
<b>ER/ERmgt</b>	-	-	-			

Hake Geographical Sub-Areas 1–7 [HAKEMEDGSA1–7]

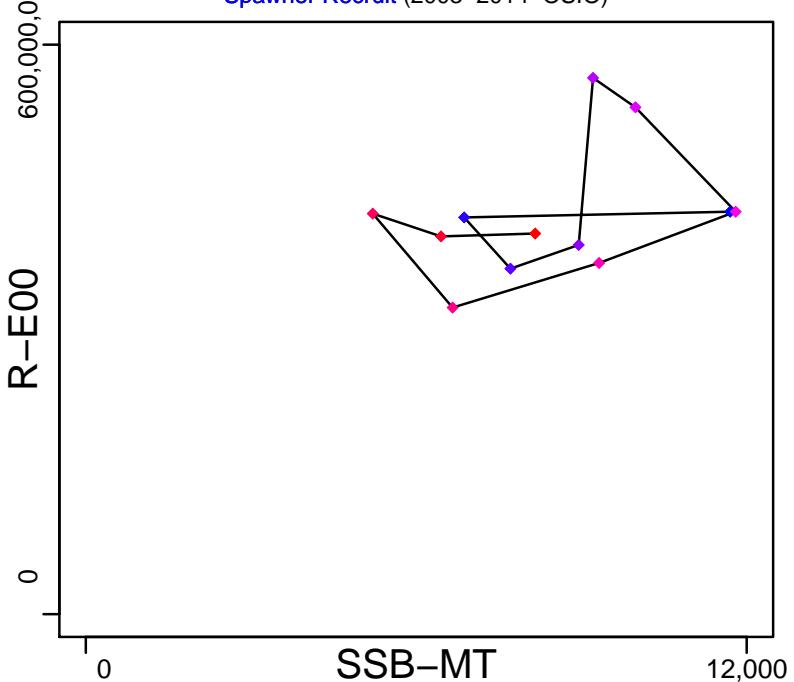
Kobe MSYpref (2003–2014–OSIO)



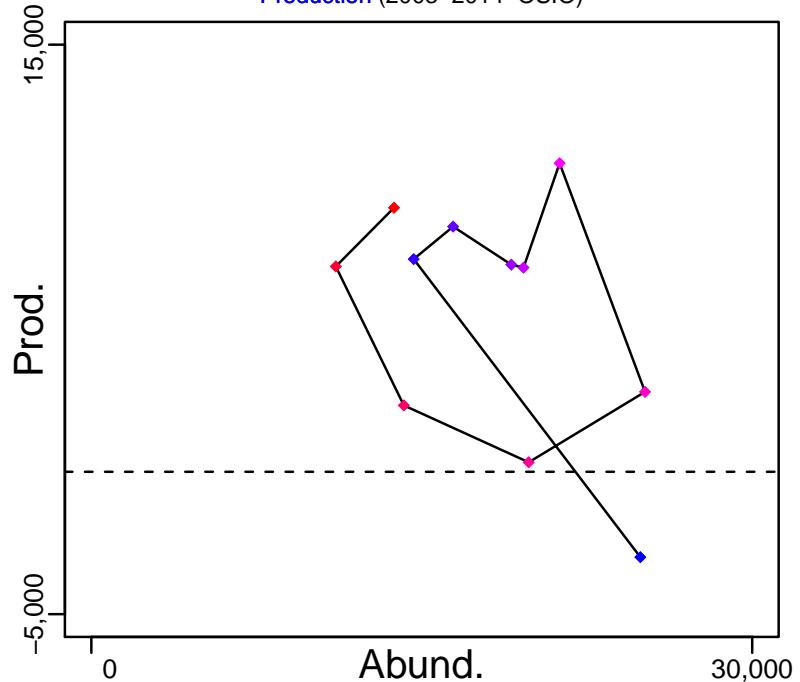
Kobe MGTPref (2003–2014–OSIO)



Spawner Recruit (2003–2014–OSIO)



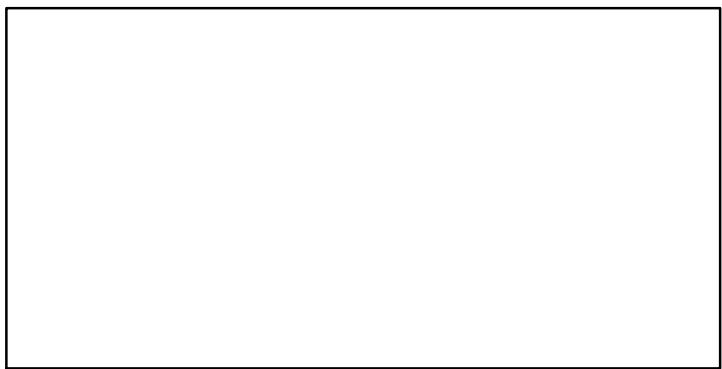
Production (2003–2014–OSIO)



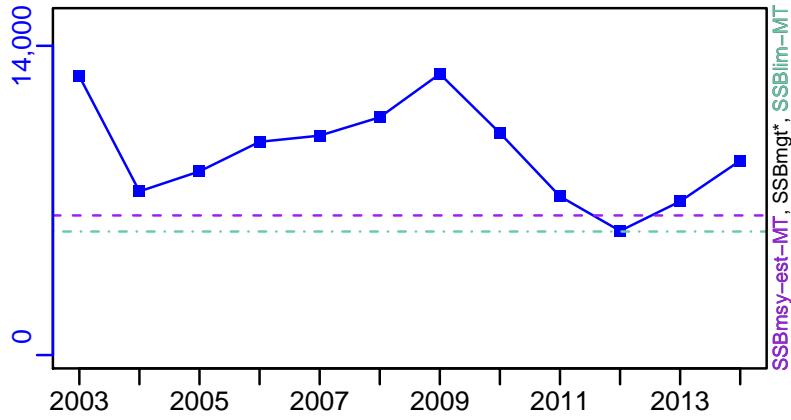
◆ Start Year ◆ End Year \* No Data

Hake Geographical Sub-Areas 1–7 [HAKEMEDGSA1–7]

**TB\***



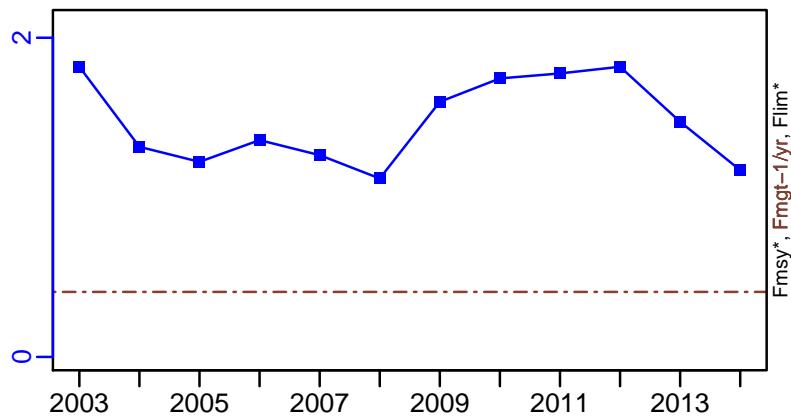
**SSB-MT (2003–2014–OSIO)**



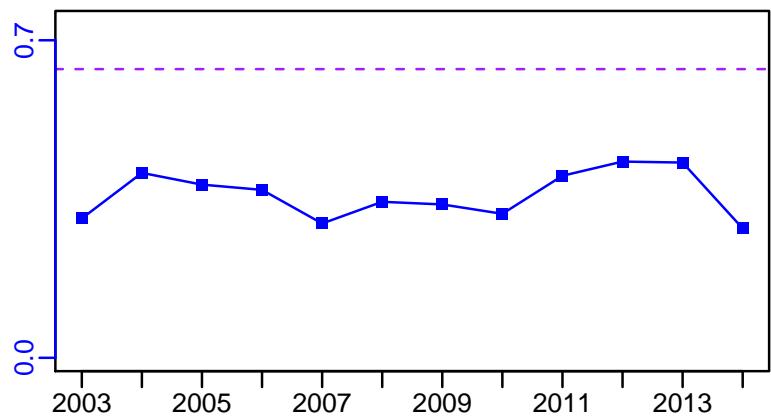
**TN \***



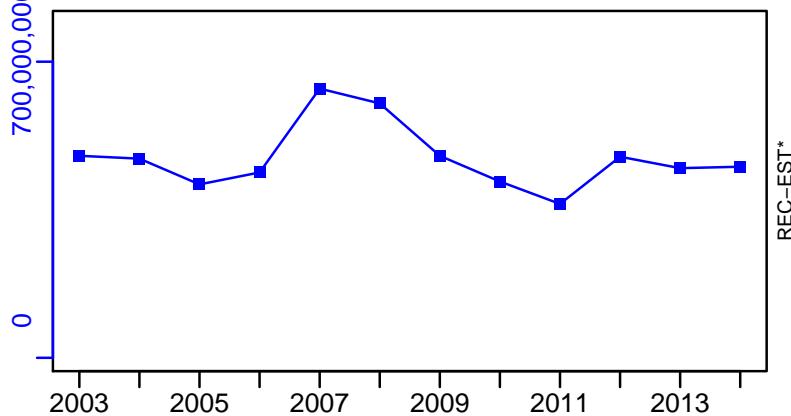
**F-1/yr (2003–2014–OSIO)**



**ER-calc-ratio (2003–2014–OSIO)**



**R-E00 (2003–2014–OSIO)**

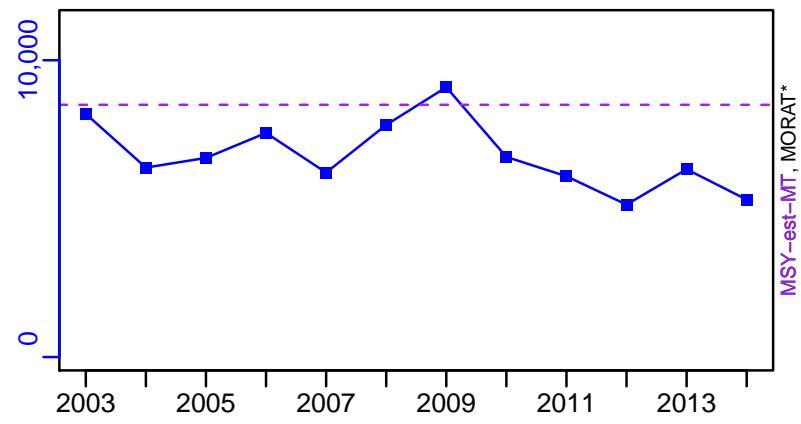


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Hake Geographical Sub-Areas 1–7 [HAKEMEDGSA1–7]

TC–MT, TL\*, RecC\* (2003–2014–OSIO)

TAC\*, Cpair\*, Cadv\*

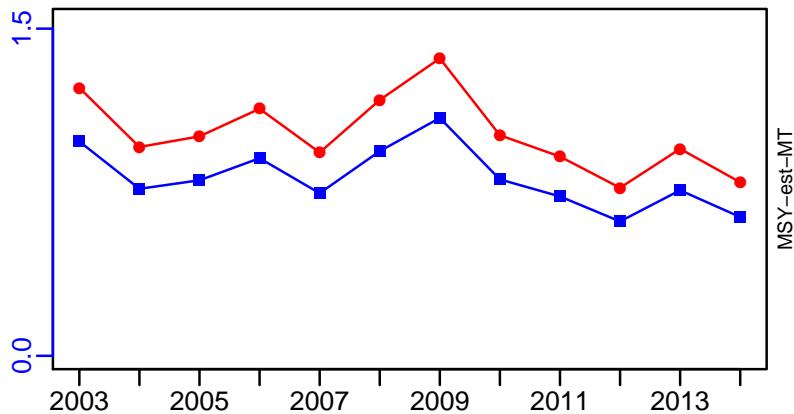
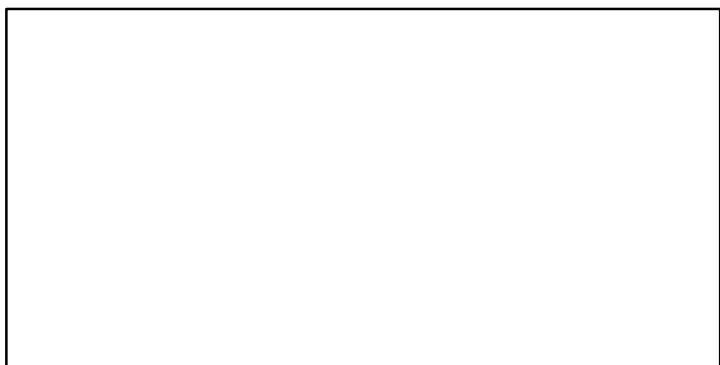


survB\*

CPUE\*

EFFORT\*

TC–MT/MSY–est–MT, CdivMEANC–ratio, (2003–2014–OSIO)



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

## Hake Adriatic Sea (GSA 17,18) [HAKEMEDGSA17-18]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA17-18-2008-2014-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

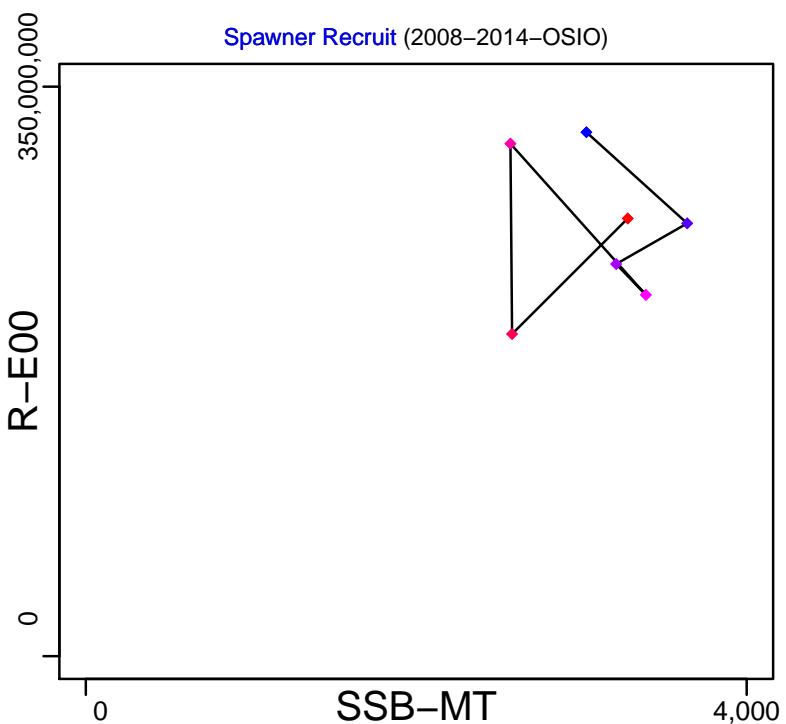
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.16
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	3280	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	$2.69 \times 10^8$	-	-
<b>F</b>	F-1/yr	2014	0.891	-	-
<b>ER</b>	ER-calc-ratio	2014	0.857	-	-
<b>TC</b>	TC-MT	2014	5340		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	5.569		
<b>ER/ERmgt</b>	-	-	-		

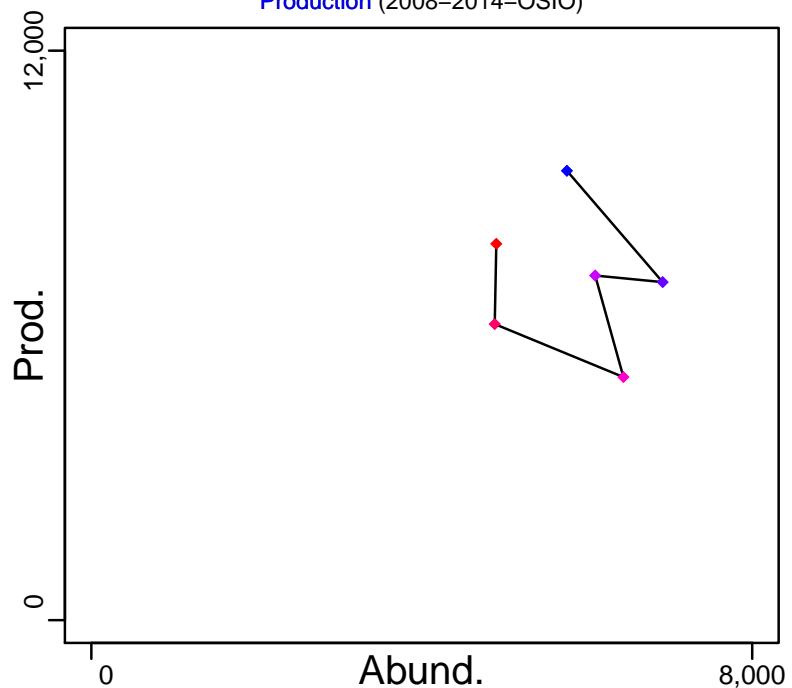
**Kobe MSY\***

**Kobe MGT\***

Spawner Recruit (2008–2014–OSIO)



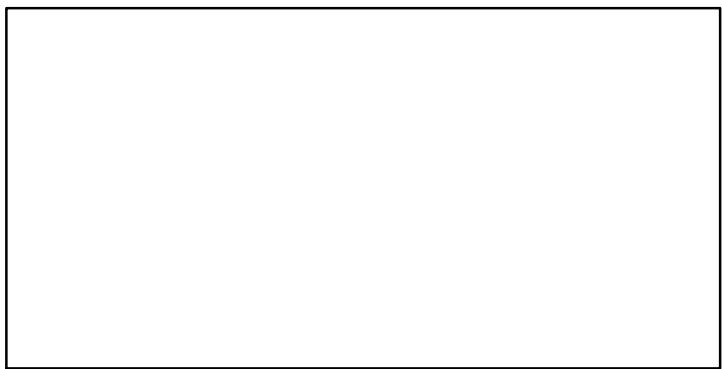
Production (2008–2014–OSIO)



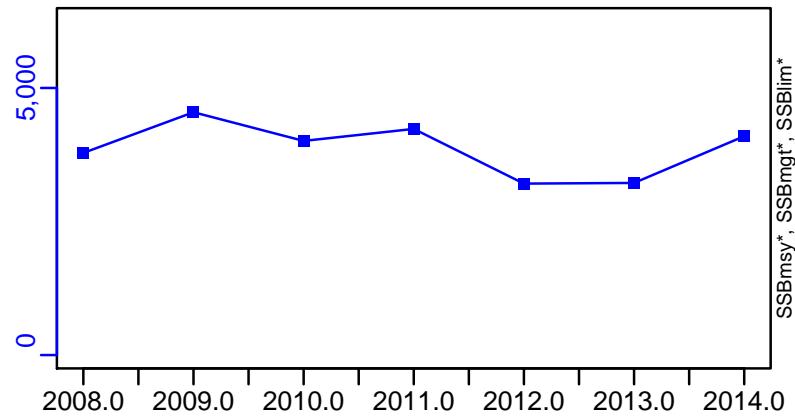
◆ Start Year   ◆ End Year   \* No Data

Hake Adriatic Sea (GSA 17,18) [HAKEMEDGSA17-18]

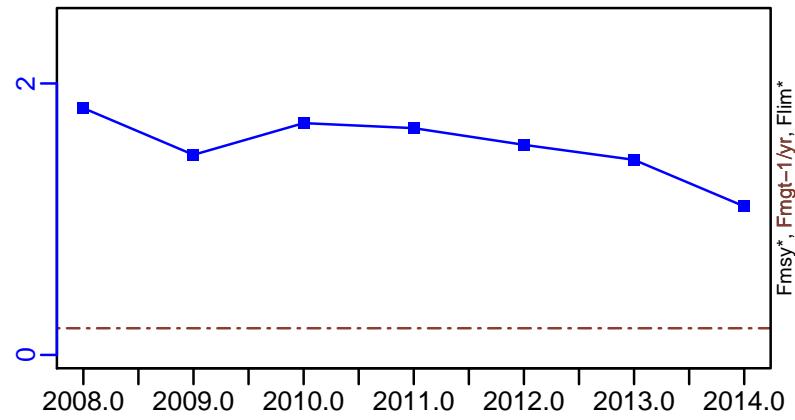
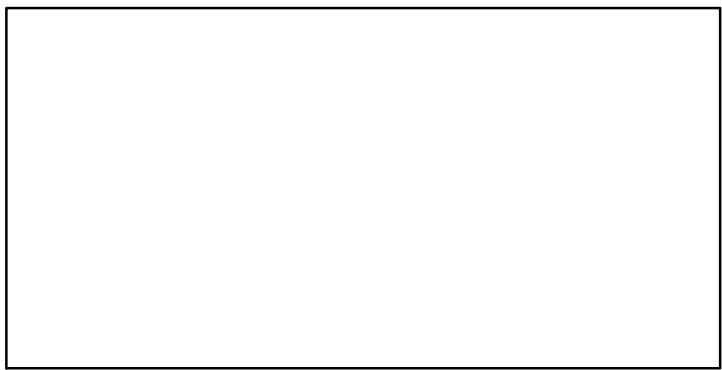
**TB\***



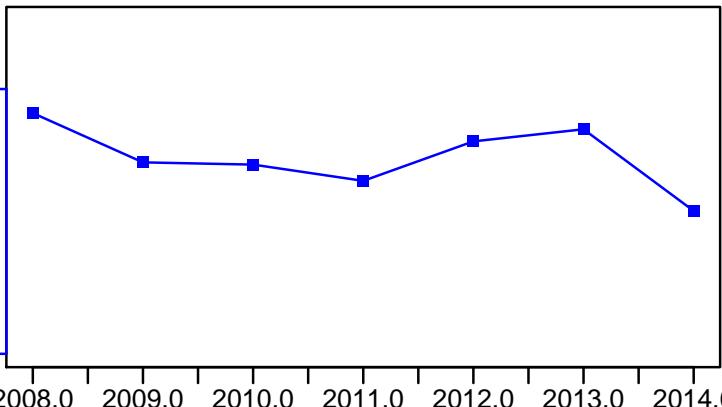
**SSB-MT (2008–2014–OSIO)**



**TN \***

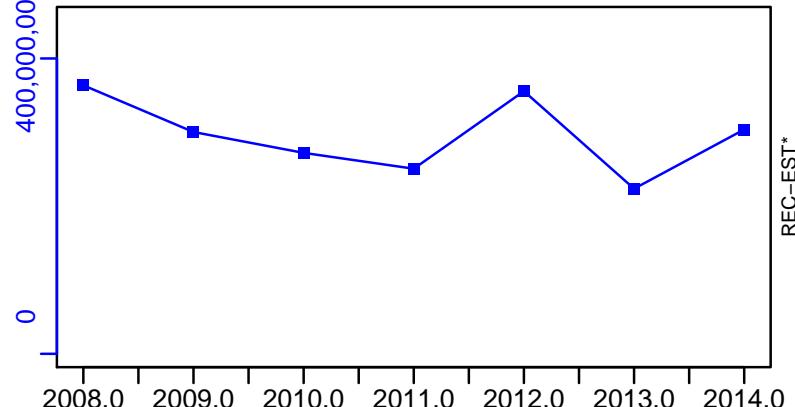


**ER-calc-ratio (2008–2014–OSIO)**



ER<sub>msy</sub>\* , ER<sub>mgt</sub>\* , ER<sub>lim</sub>\*

**R-E00 (2008–2014–OSIO)**



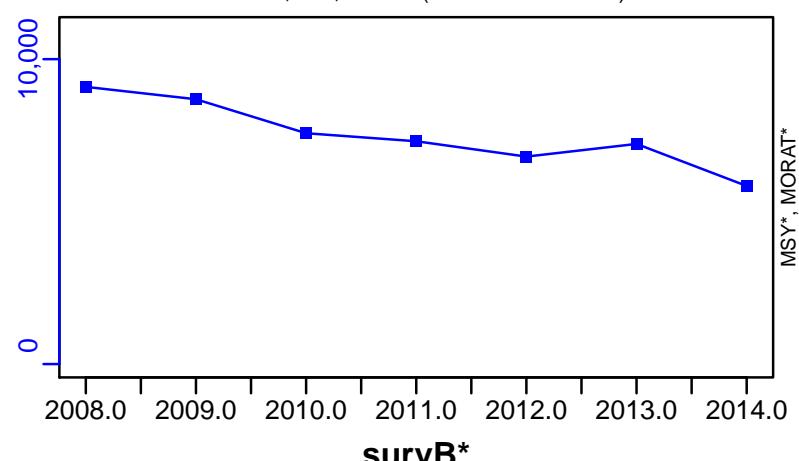
REC-EST\*

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

Hake Adriatic Sea (GSA 17,18) [HAKEMEDGSA17-18]

TC-MT, TL\*, RecC\* (2008–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*



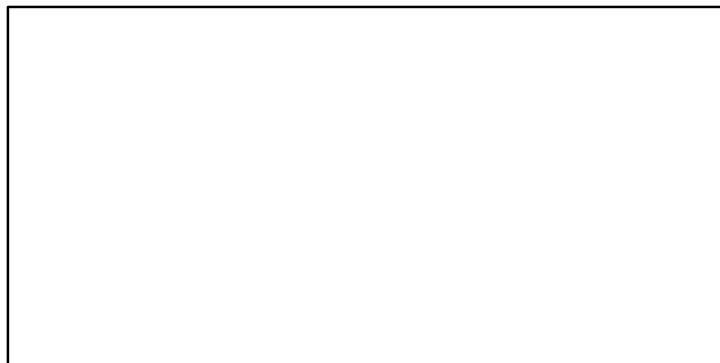
CPUE\*



EFFORT\*



CdivMSY\*



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

## Hake Western Ionian Sea [HAKEMEDGSA19]

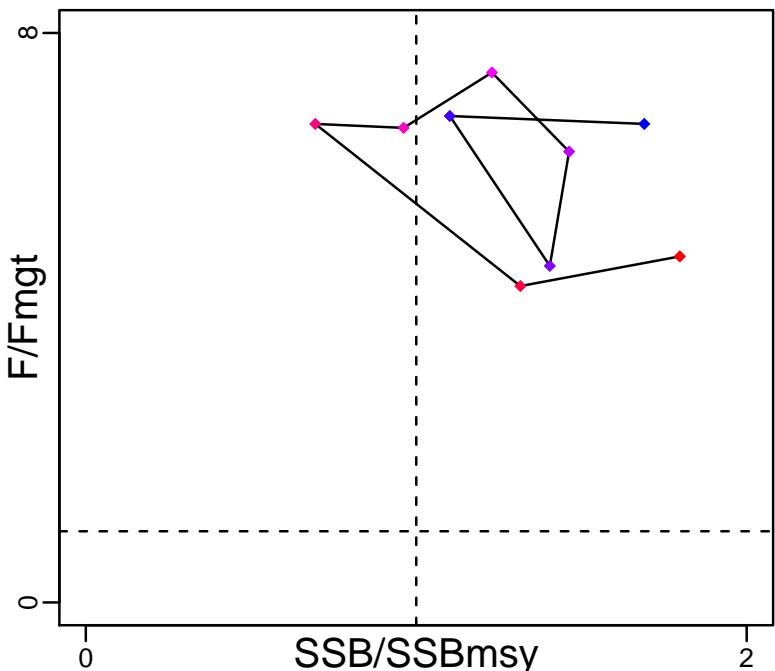
Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA19-2006-2014-OSIO
<b>Area</b>	Western Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	651
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.784
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.18
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	1093
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

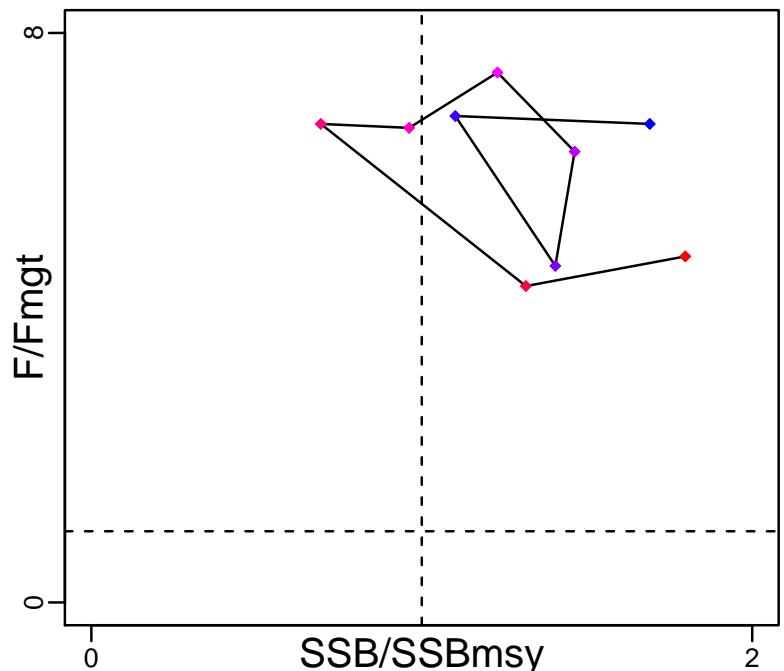
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	1170	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	23,900,000	-	-	
<b>F</b>	F-1/yr	2014	0.875	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.303	-	-	
<b>TC</b>	TC-MT	2014	759			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.798			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.386			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	4.861			
<b>ER/ERmgt</b>	-	-	-			

Hake Western Ionian Sea [HAKEMEDGSA19]

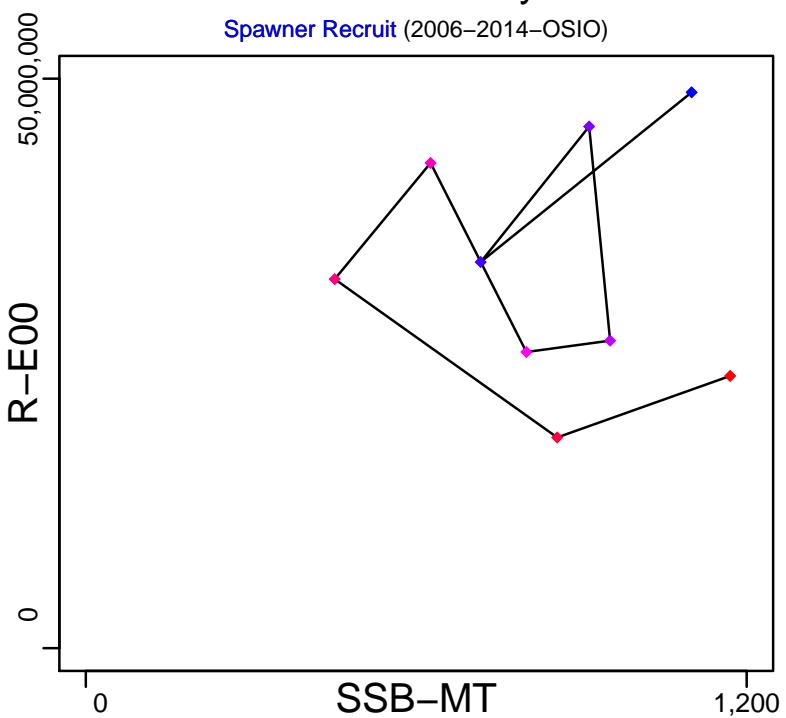
Kobe MSYpref (2006–2014–OSIO)



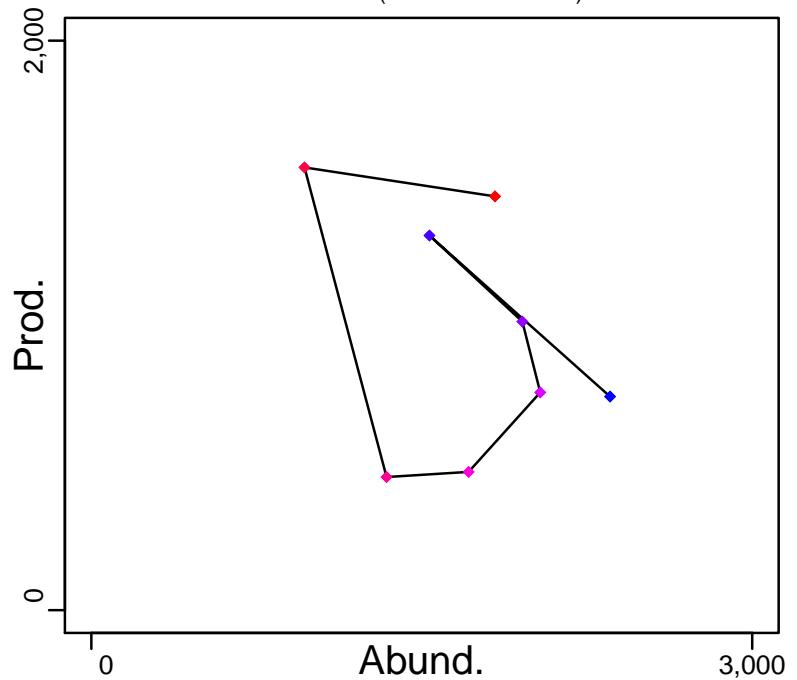
Kobe MGTPref (2006–2014–OSIO)



Spawner Recruit (2006–2014–OSIO)



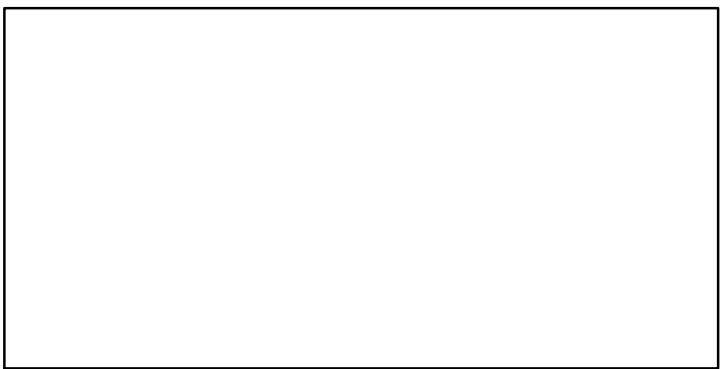
Production (2006–2014–OSIO)



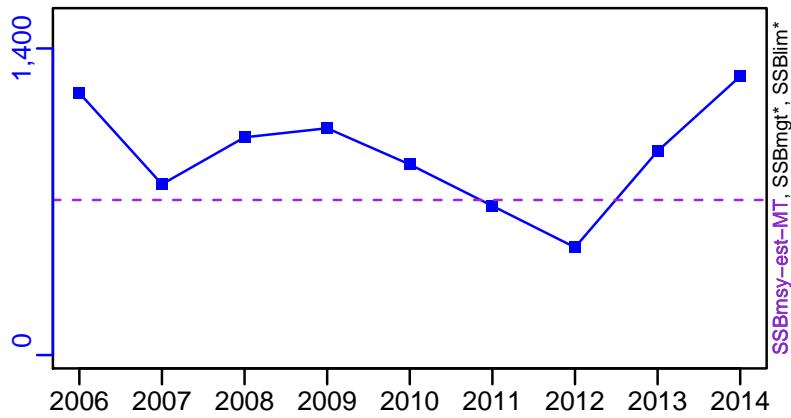
◆ Start Year ◆ End Year \* No Data

Hake Western Ionian Sea [HAKEMEDGSA19]

**TB\***



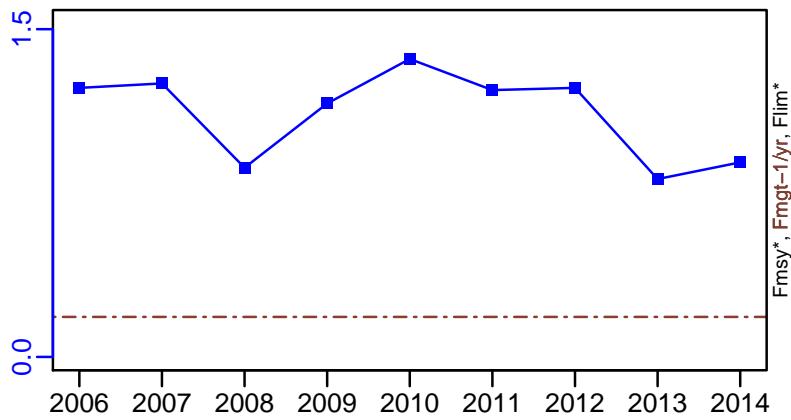
**SSB-MT (2006–2014–OSIO)**



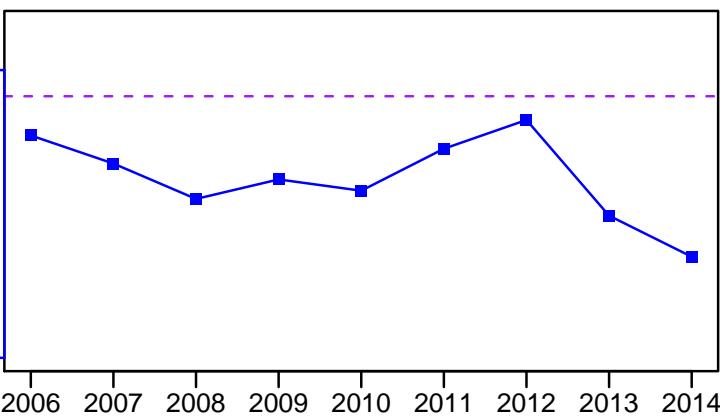
**TN \***



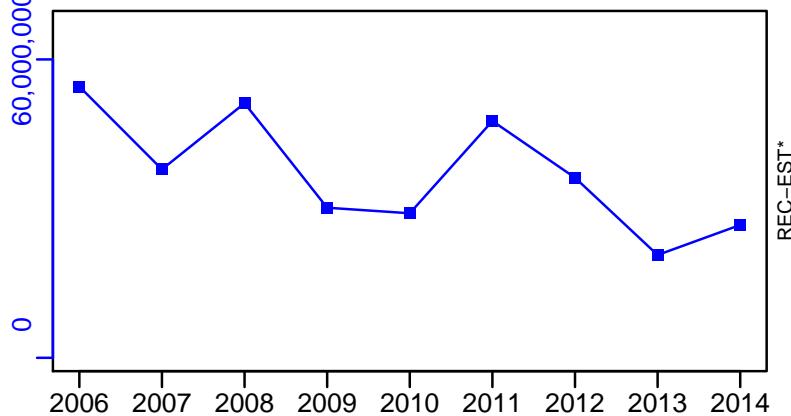
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

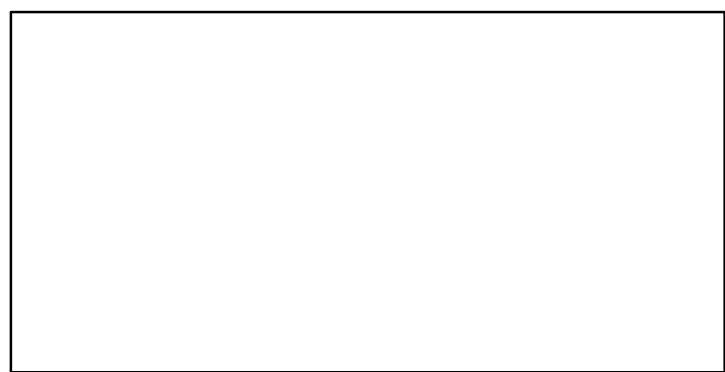
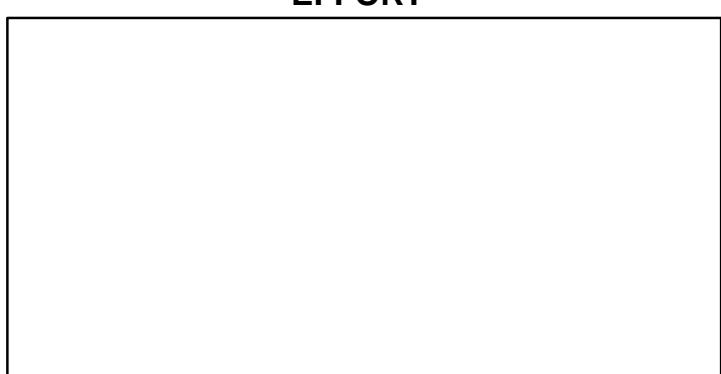
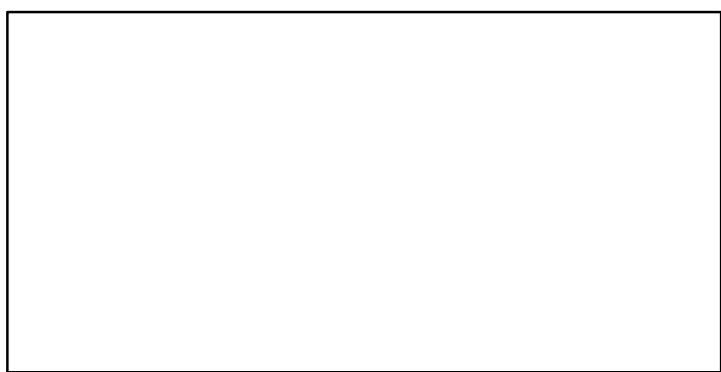
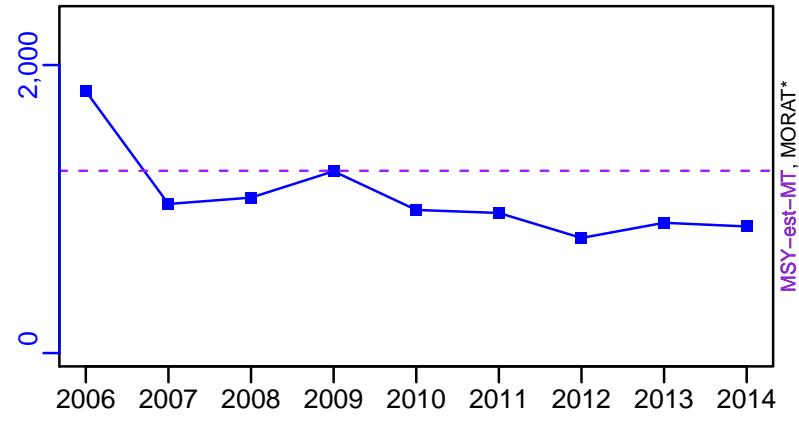


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

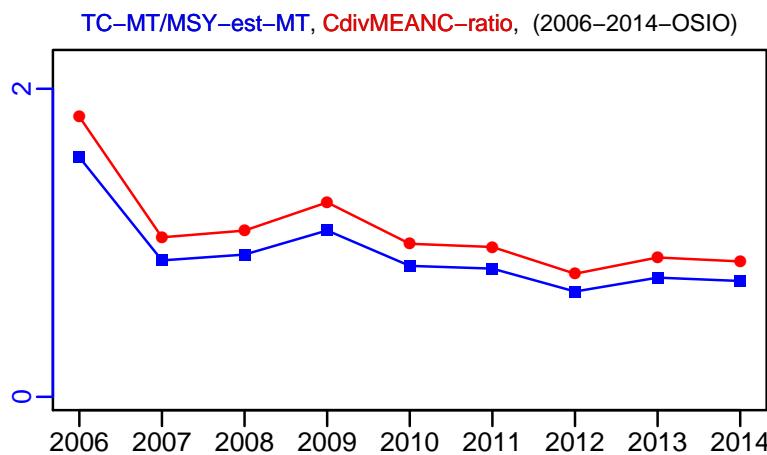
Hake Western Ionian Sea [HAKEMEDGSA19]

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***



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

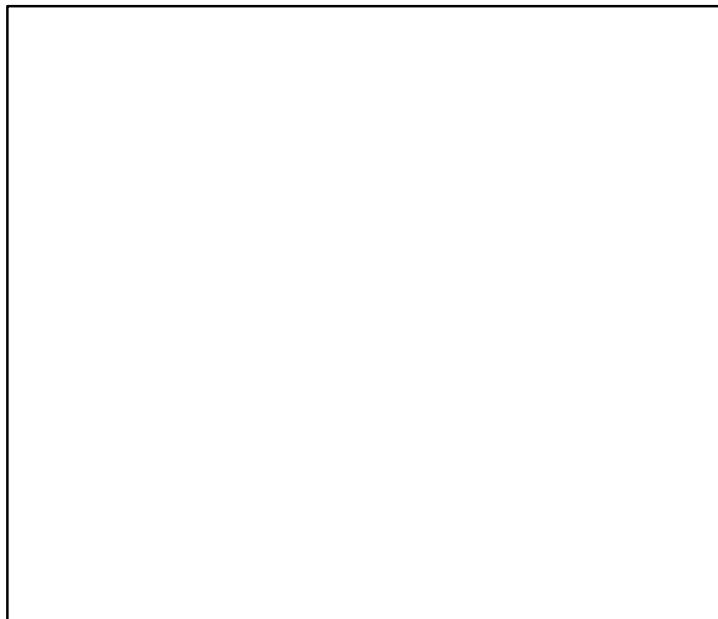
## Hake Eastern Ionian Sea [HAKEMEDGSA20]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA20-2003-2008-OSIO
<b>Area</b>	Eastern Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

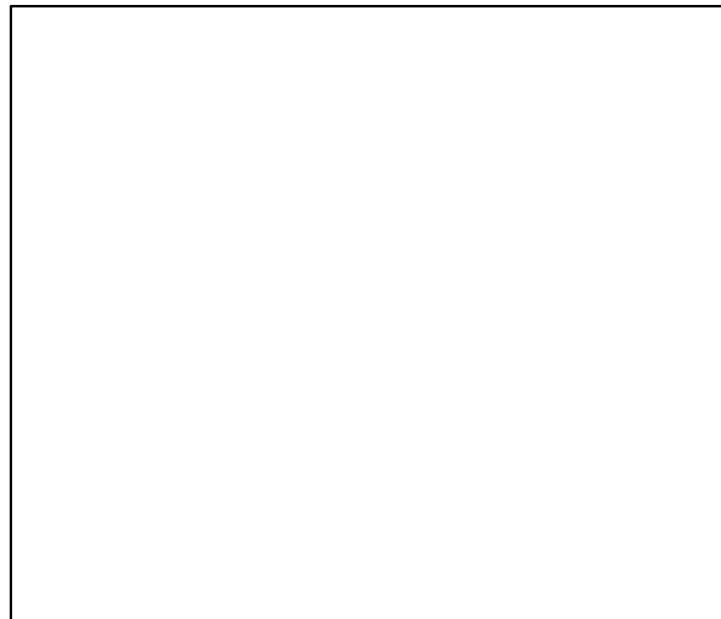
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2008	0.27
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2008	3290		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ♦ End Year \* No Data

Hake Eastern Ionian Sea [HAKEMEDGSA20]

**TB\***



**SSB\***



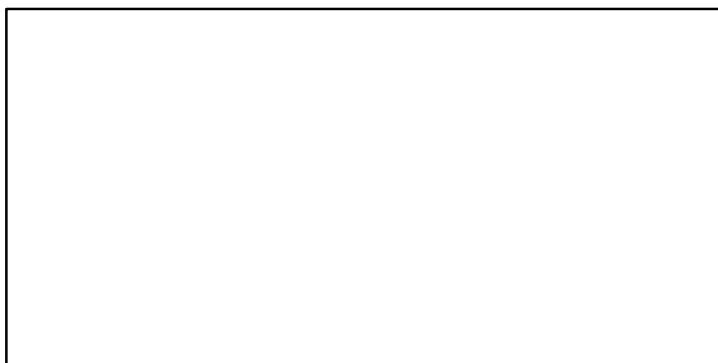
**TN \***



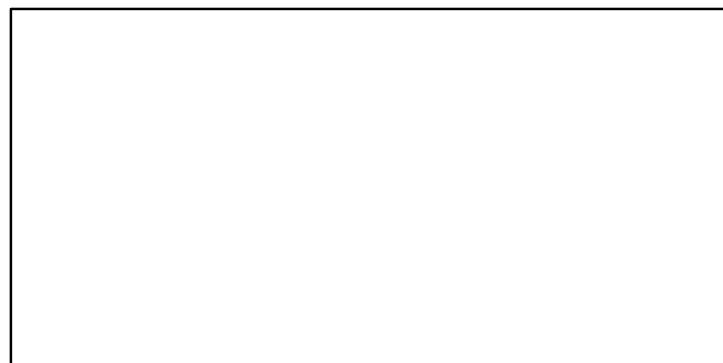
**F\***



**ER\***



**Recruits\***

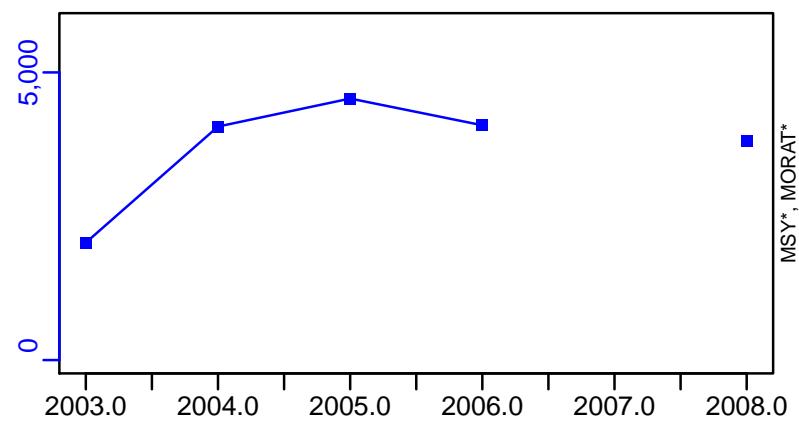


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

Hake Eastern Ionian Sea [HAKEMEDGSA20]

TC-MT, TL\*, RecC\* (2003–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

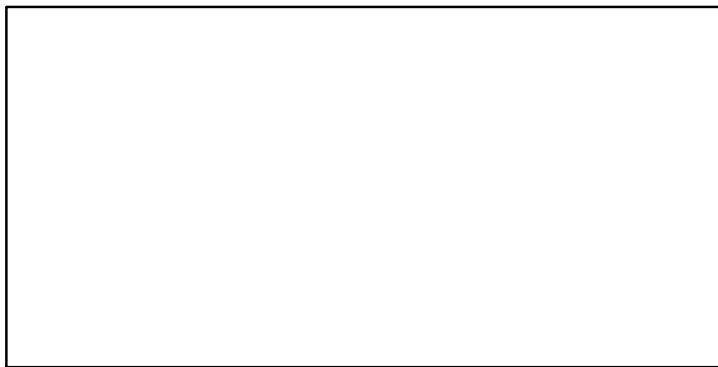
survB\*



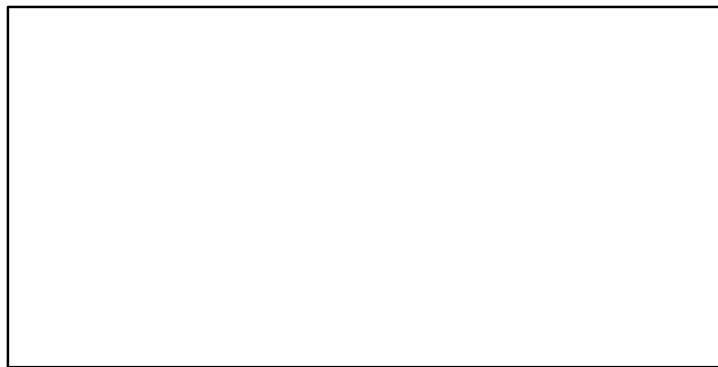
CPUE\*



EFFORT\*



CdivMSY\*



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

## Hake Aegean Sea and Crete Island (GSA 22,23) [HAKEMEDGSA22-23]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA22-23-2003-2008-OSIO
<b>Area</b>	Aegean Sea and Crete Island (GSA 22,23)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

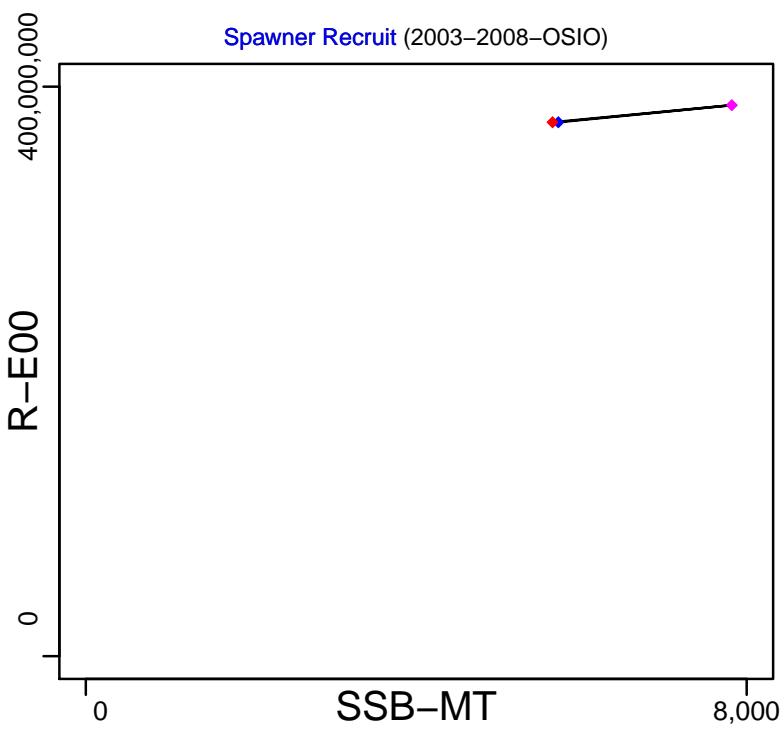
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2008	0.24
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	5650	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2008	$3.75 \times 10^8$	-	-
<b>F</b>	F-1/yr	2008	0.83	-	-
<b>ER</b>	ER-calc-ratio	2008	0.846	-	-
<b>TC</b>	TC-MT	2008	7160		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2008	3.458		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2003–2008–OSIO)



Production\*

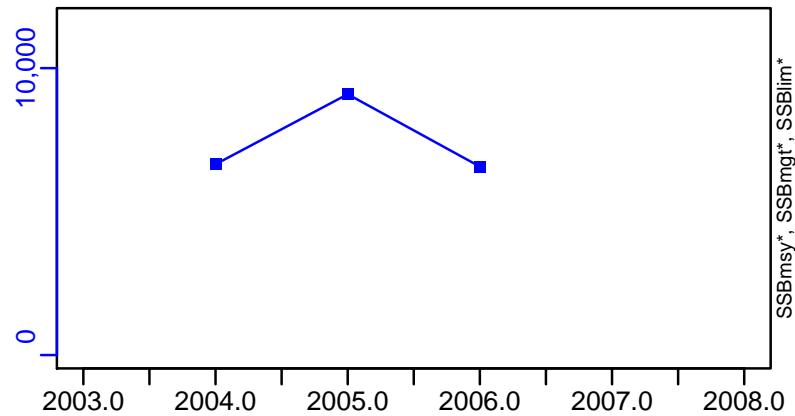
◆ Start Year   ◆ End Year   \* No Data

Hake Aegean Sea and Crete Island (GSA 22,23) [HAKEMEDGSA22–23]

**TB\***



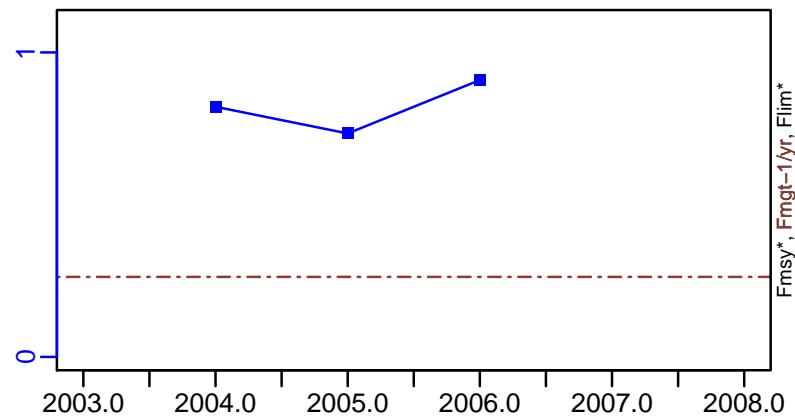
**SSB-MT (2003–2008–OSIO)**



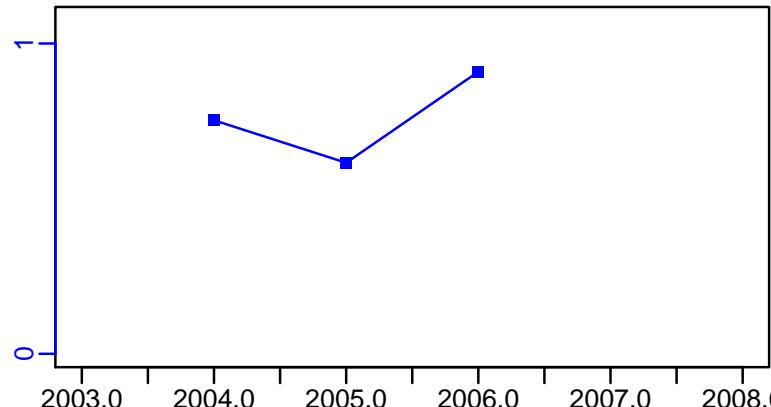
**TN \***



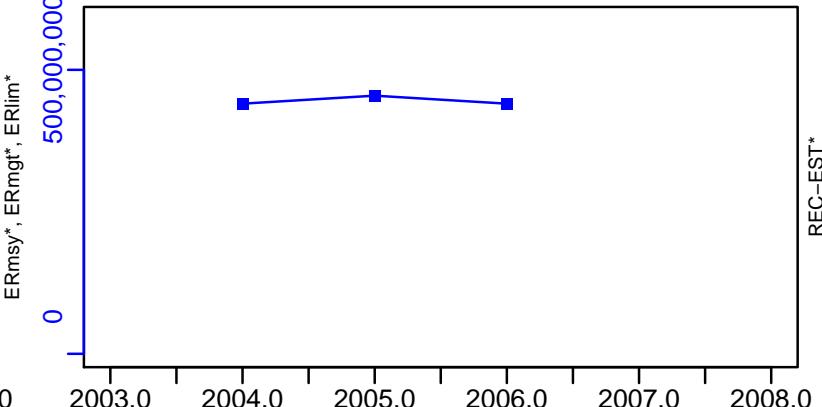
**F-1/yr (2003–2008–OSIO)**



**ER-calc-ratio (2003–2008–OSIO)**



**R-E00 (2003–2008–OSIO)**

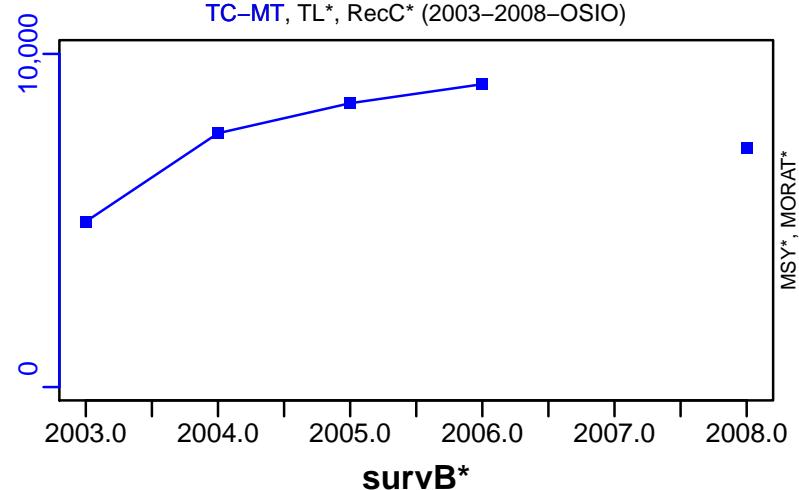


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

Hake Aegean Sea and Crete Island (GSA 22,23) [HAKEMEDGSA22–23]

TC-MT, TL\*, RecC\* (2003–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

MSY\*, MORAT\*

CPUE\*

EFFORT\*

CdivMSY\*

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

## Hake Gulf of Lions [HAKEMEDGSA7]

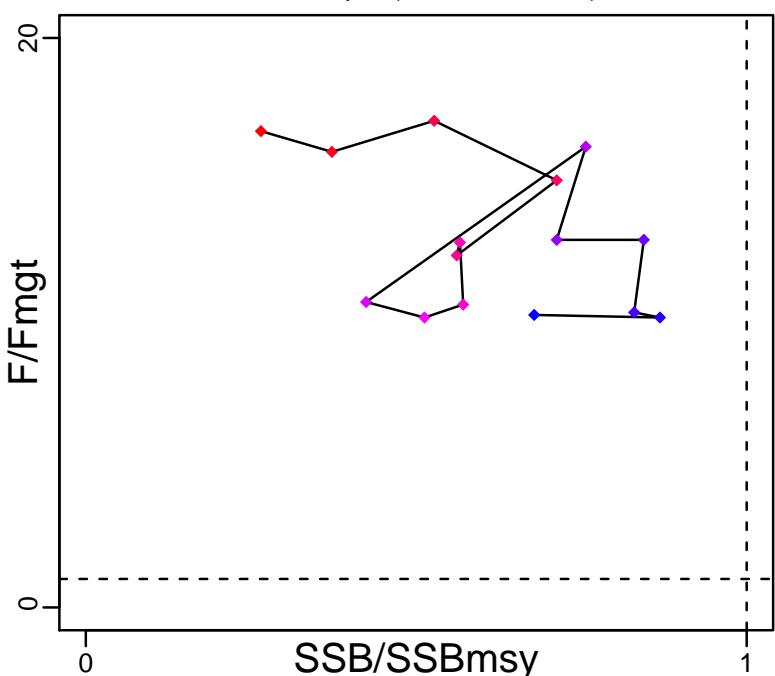
<b>Metadata</b>	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA7-1998-2012-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2012	2049
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.497
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.11
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	2272
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

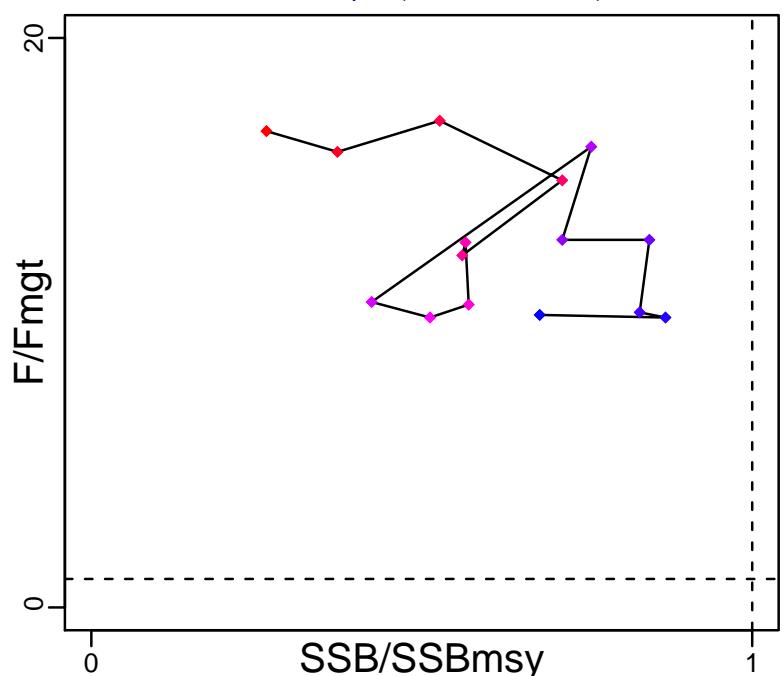
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2012	543	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2012	19,700,000	-	-	
<b>F</b>	F-1/yr	2012	1.84	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.917	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2012	1110			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	0.265			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	1.844			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	16.727			
<b>ER/ERmgt</b>	-	-	-			

Hake Gulf of Lions [HAKEMEDGSA7]

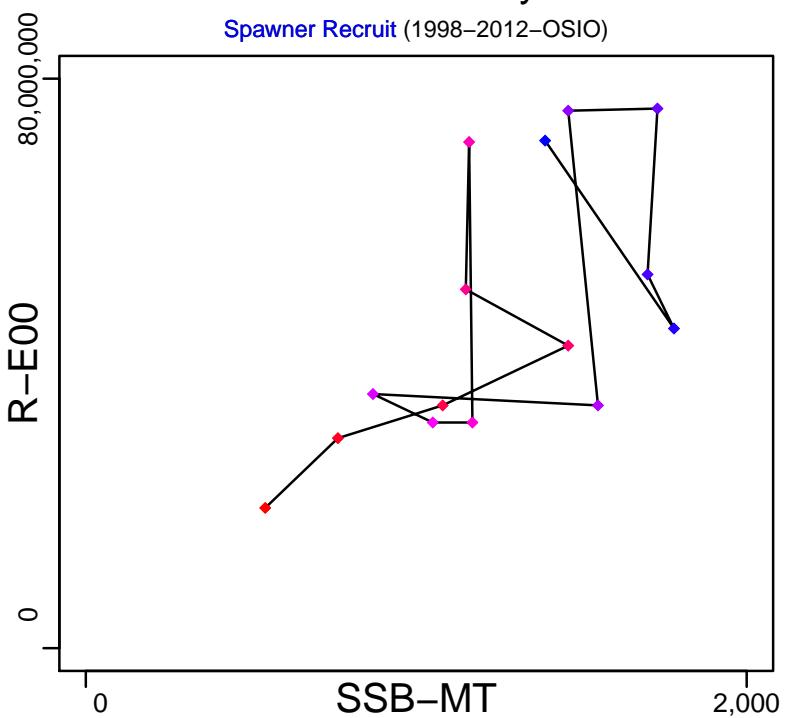
Kobe MSYpref (1998–2012–OSIO)



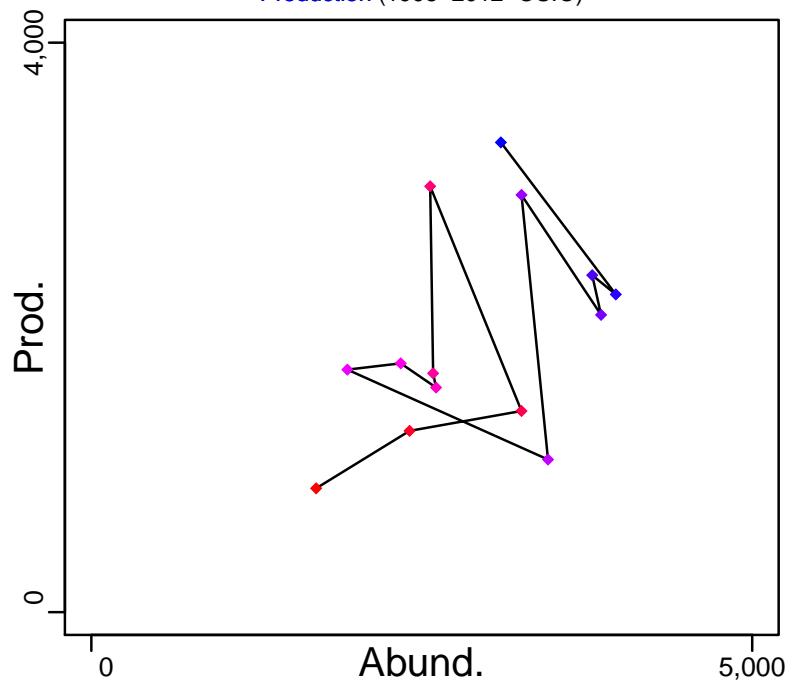
Kobe MGTpref (1998–2012–OSIO)



Spawner Recruit (1998–2012–OSIO)



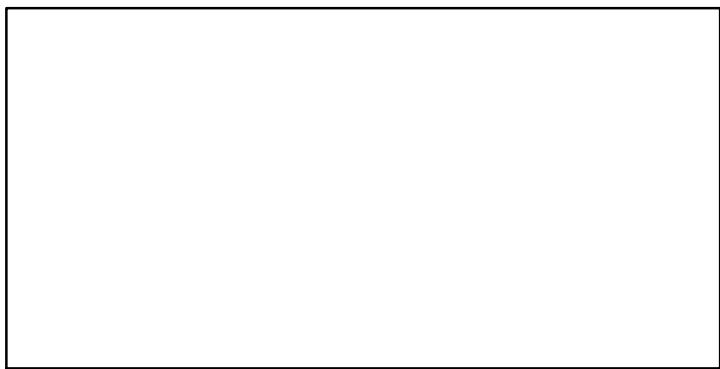
Production (1998–2012–OSIO)



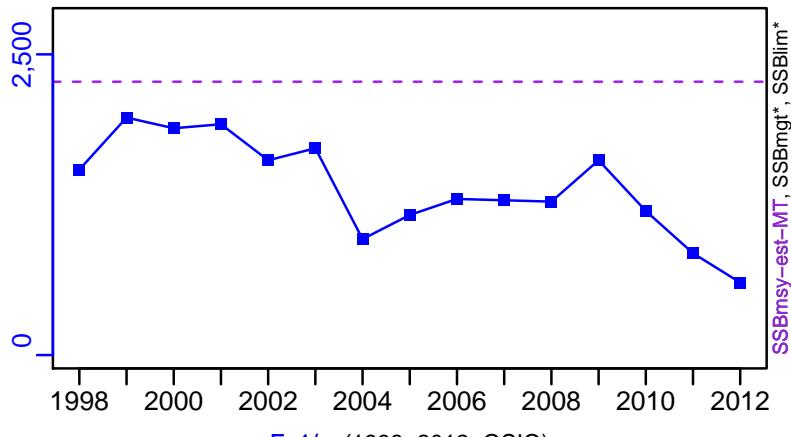
◆ Start Year ◆ End Year \* No Data

Hake Gulf of Lions [HAKEMEDGSA7]

**TB\***



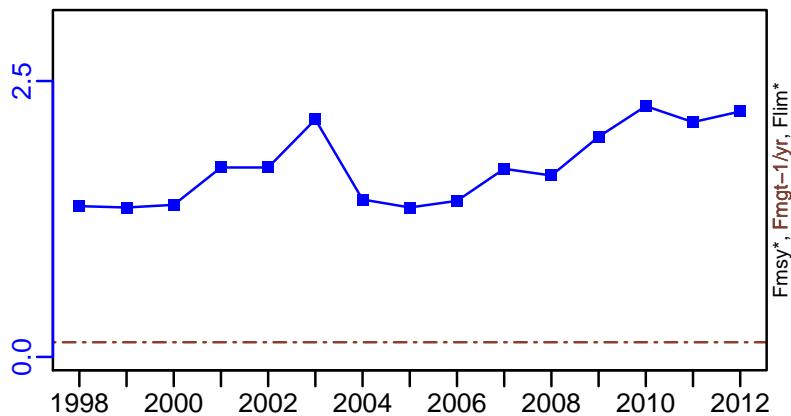
**SSB-MT (1998–2012–OSIO)**



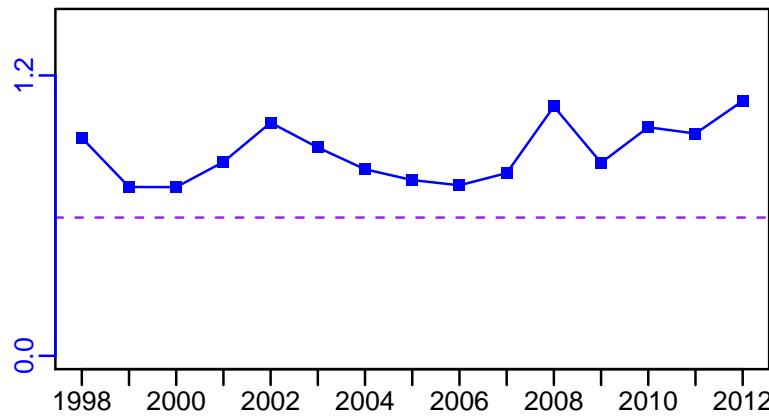
**TN \***



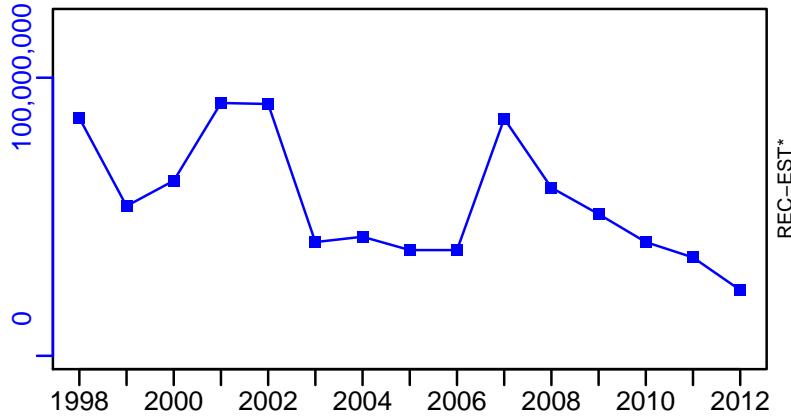
**F-1/yr (1998–2012–OSIO)**



**ER-calc-ratio (1998–2012–OSIO)**



**R-E00 (1998–2012–OSIO)**

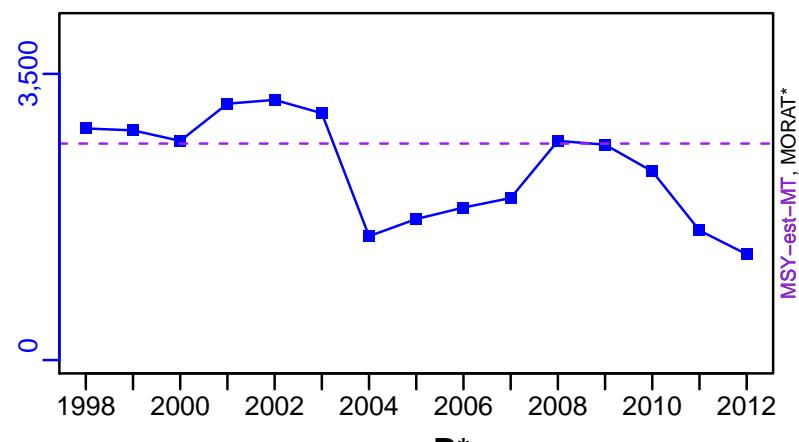


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

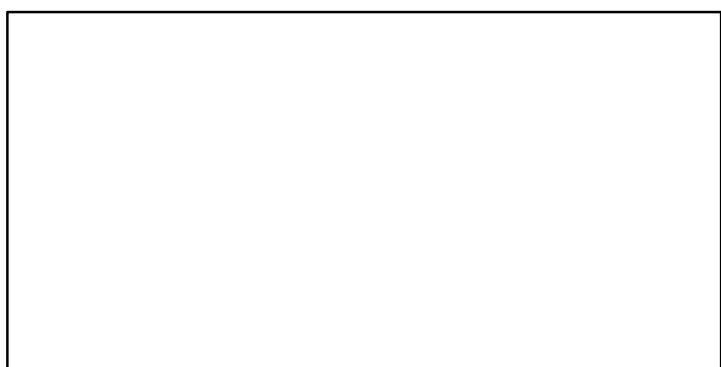
Hake Gulf of Lions [HAKEMEDGSA7]

TL-MT, TC\*, RecC\* (1998–2012–OSIO)

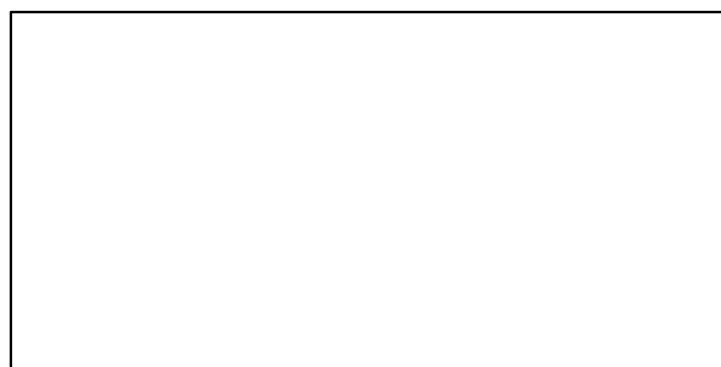
TAC\*, Cpair\*, Cadv\*



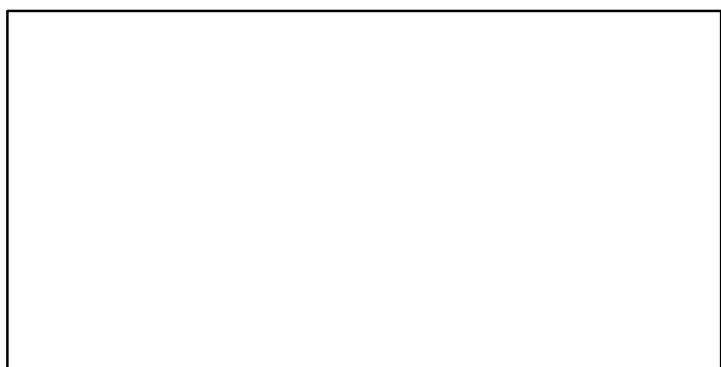
survB\*



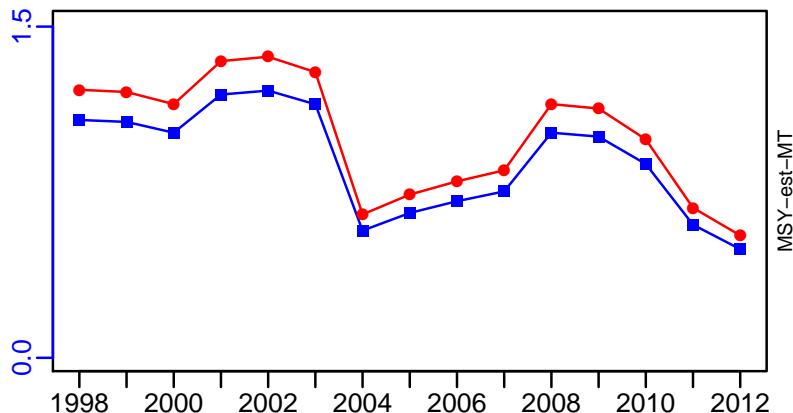
CPUE\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1998–2012–OSIO)



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

## Hake Geographical Sub-Areas 9-11 [HAKEMEDGSA9-11]

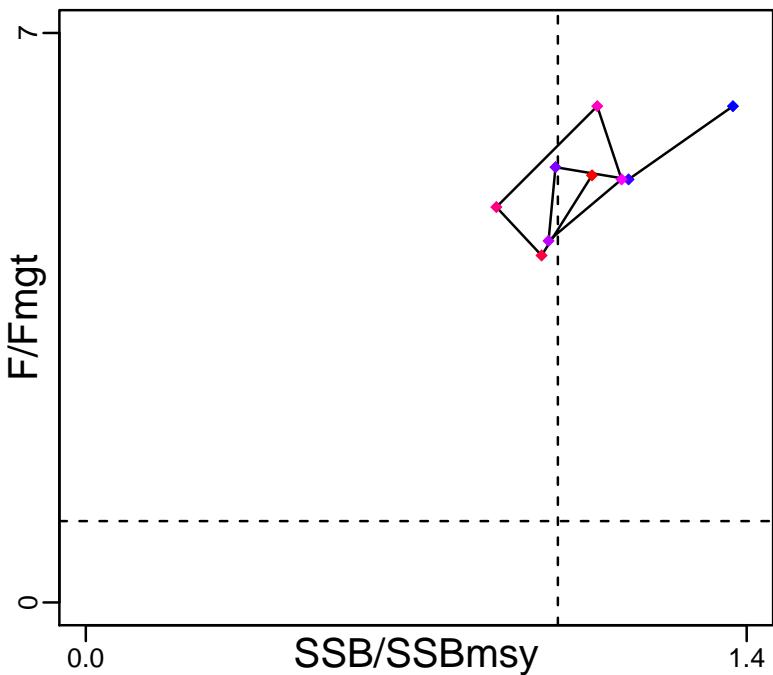
Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	STECF-HAKEMEDGSA9-11-2006-2014-OSIO
<b>Area</b>	Geographical Sub-Areas 9-11
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	2714
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.584
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	3384
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	2355
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

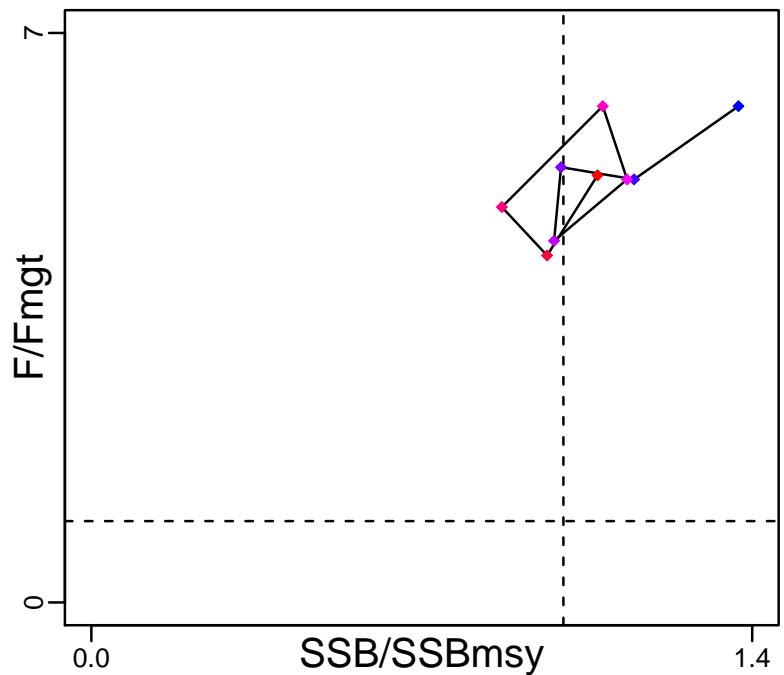
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	2910	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.41 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	1.05	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.494	-	-	
<b>TC</b>	TC-MT	2014	3070			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.072			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.846			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	5.25			
<b>ER/ERmgt</b>	-	-	-			

Hake Geographical Sub-Areas 9–11 [HAKEMEDGSA9–11]

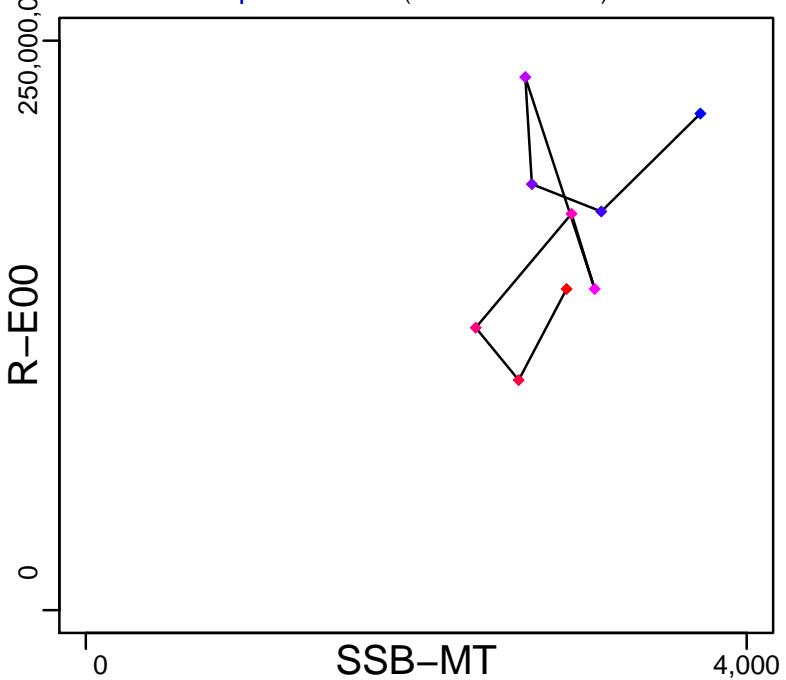
Kobe MSYpref (2006–2014–OSIO)



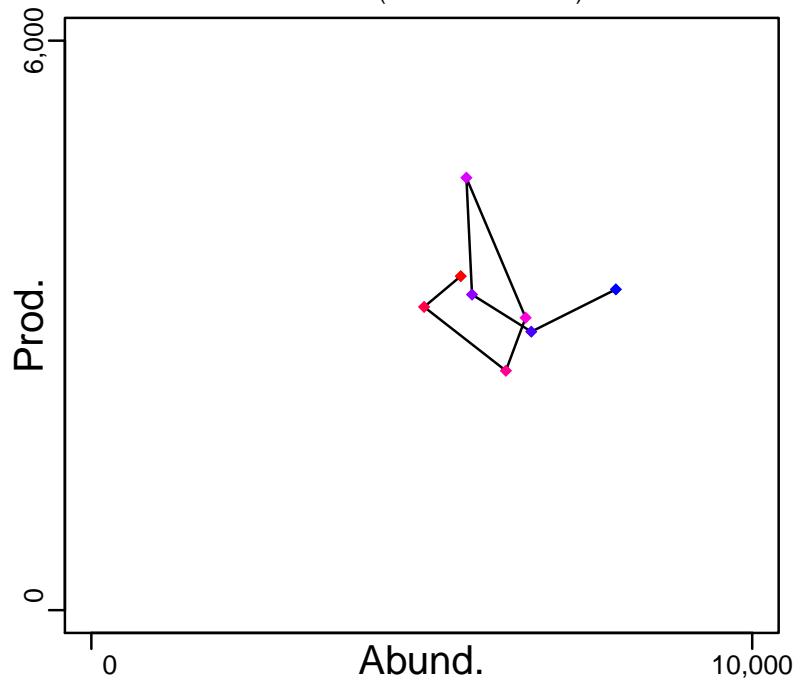
Kobe MGTpref (2006–2014–OSIO)



Spawner Recruit (2006–2014–OSIO)



Production (2006–2014–OSIO)



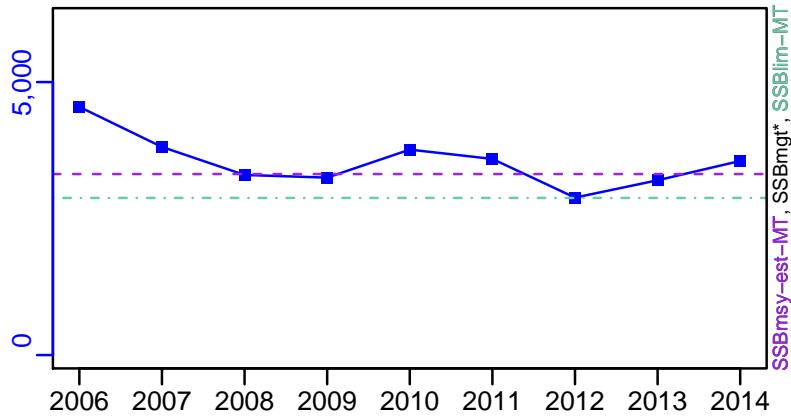
◆ Start Year   ◆ End Year   \* No Data

Hake Geographical Sub-Areas 9–11 [HAKEMEDGSA9–11]

**TB\***



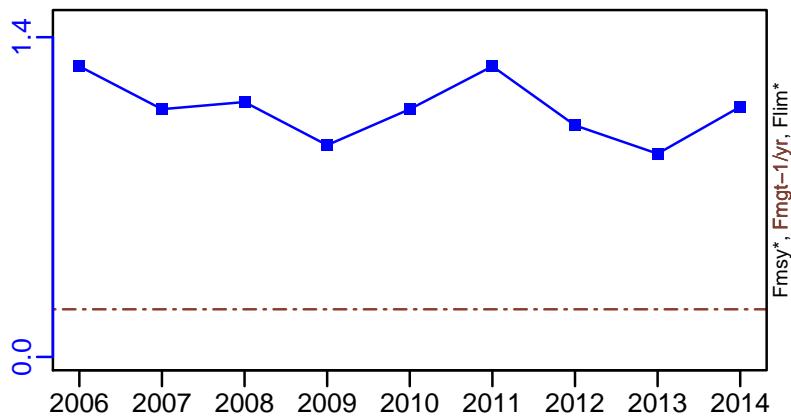
**SSB-MT (2006–2014–OSIO)**



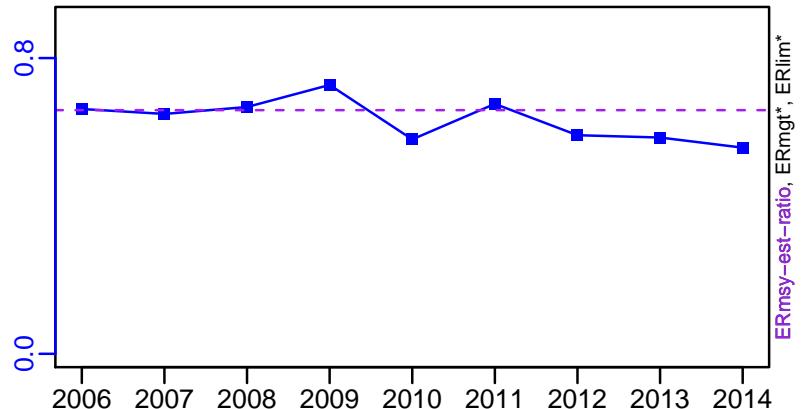
**TN \***



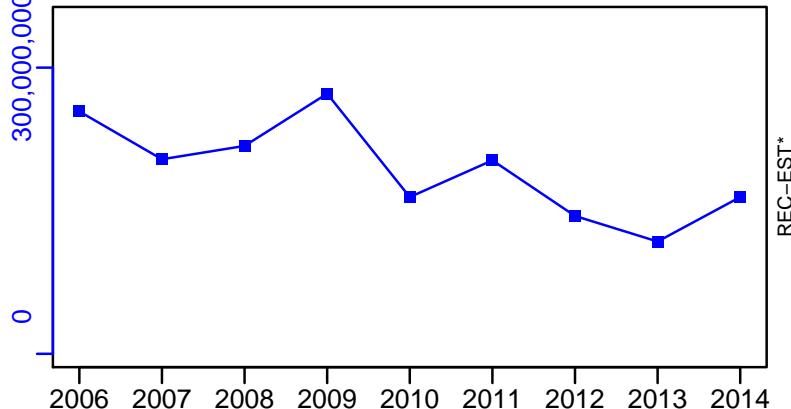
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

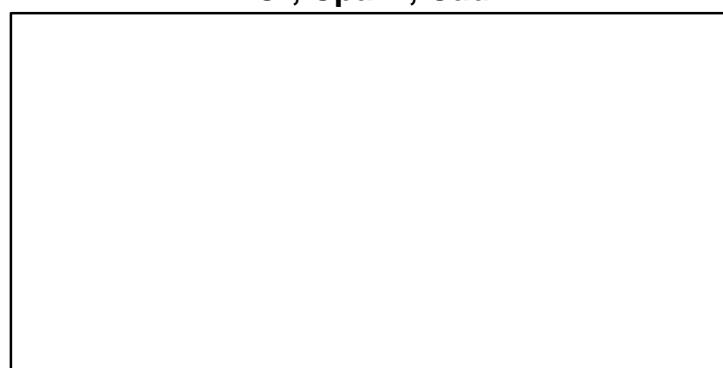
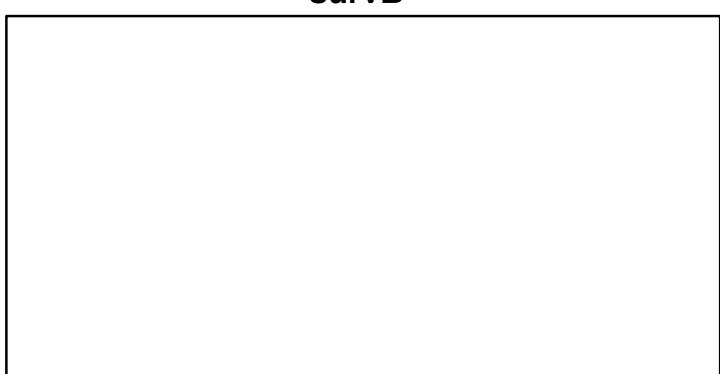
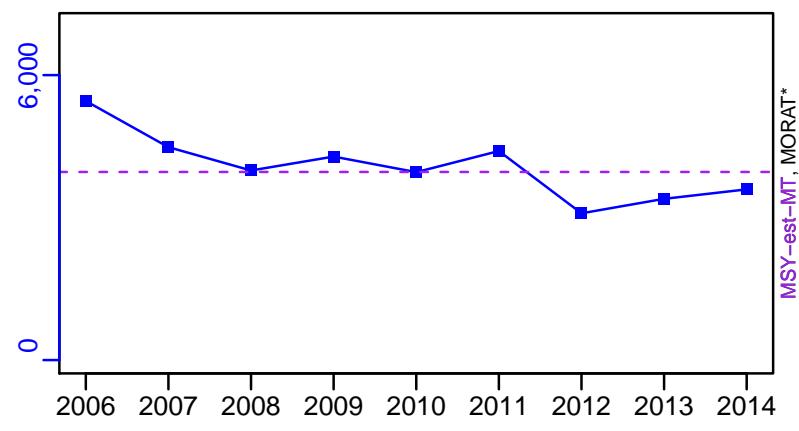


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

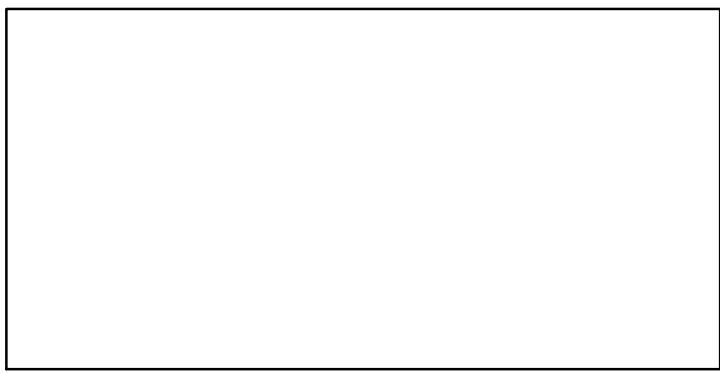
Hake Geographical Sub-Areas 9–11 [HAKEMEDGSA9–11]

TC–MT, TL\*, RecC\* (2006–2014–OSIO)

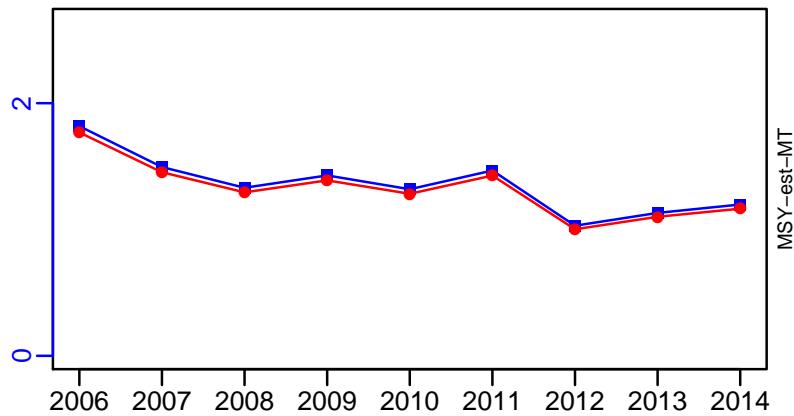
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC–MT/MSY–est–MT, CdivMEANC–ratio, (2006–2014–OSIO)



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

## Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

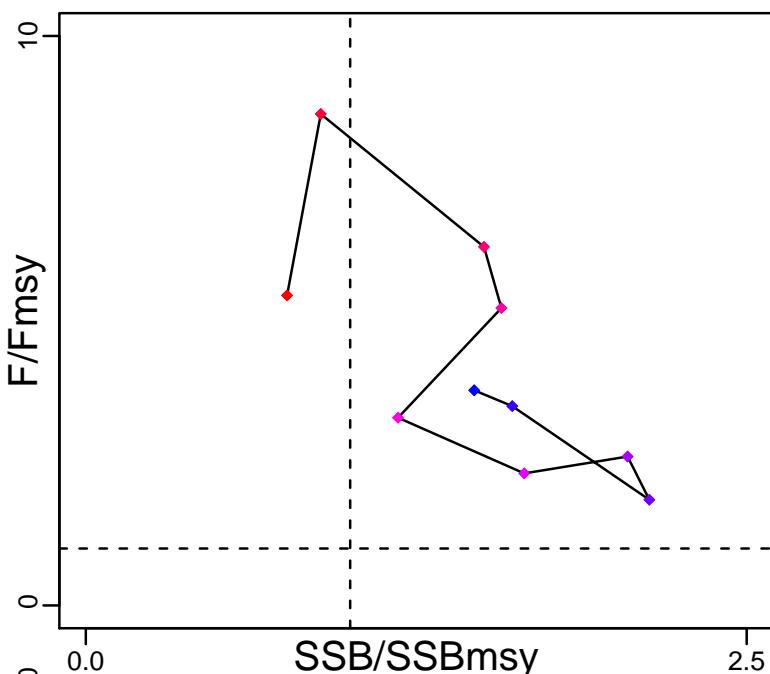
Metadata	
<b>Scientific Name</b>	Trachurus mediterraneus
<b>Current Assess ID</b>	STECF-MHMACKMEDGSA29-2005-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	24,299
<b>Fmsy</b>	Fmsy-1/yr	2014	0.27
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.274
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.27
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	19,690
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

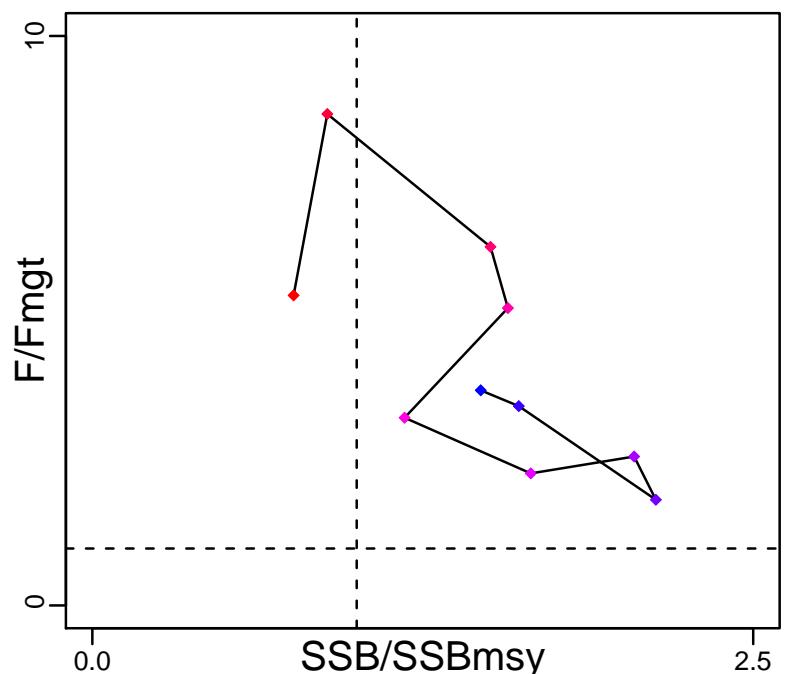
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	18,500	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$3.56 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2014	1.47	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.227	-	-	
<b>TC</b>	TC-MT	2014	12,400			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.761			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	5.444			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.827			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	5.444			
<b>ER/ERmgt</b>	-	-	-			

Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

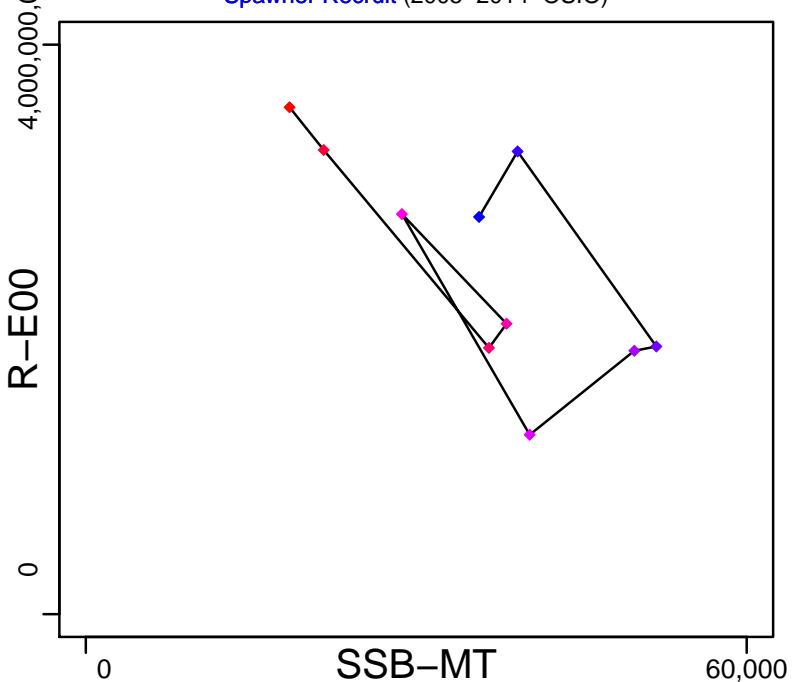
Kobe MSYpref (2005–2014–OSIO)



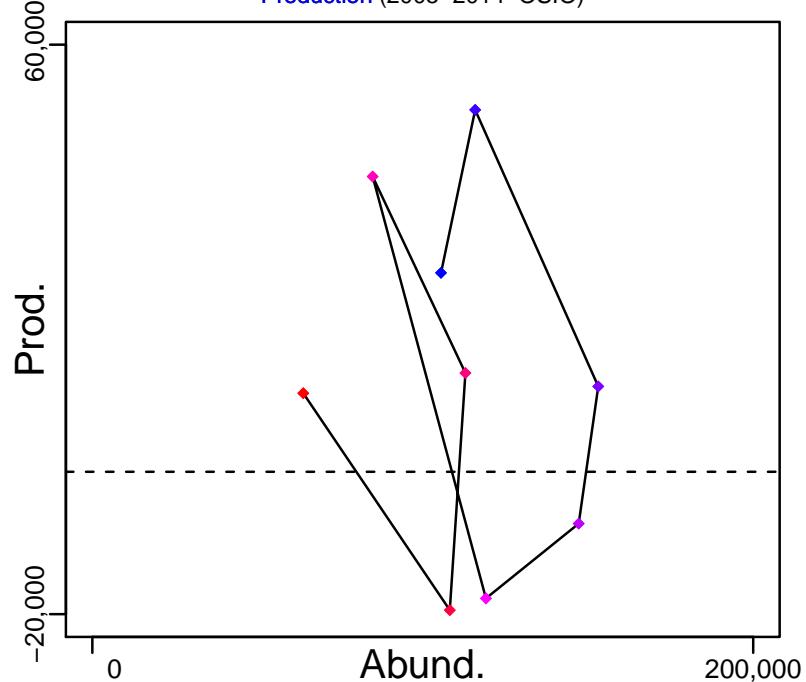
Kobe MGTPref (2005–2014–OSIO)



Spawner Recruit (2005–2014–OSIO)



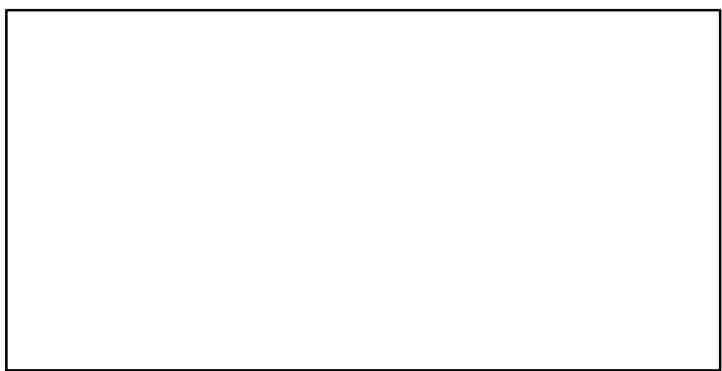
Production (2005–2014–OSIO)



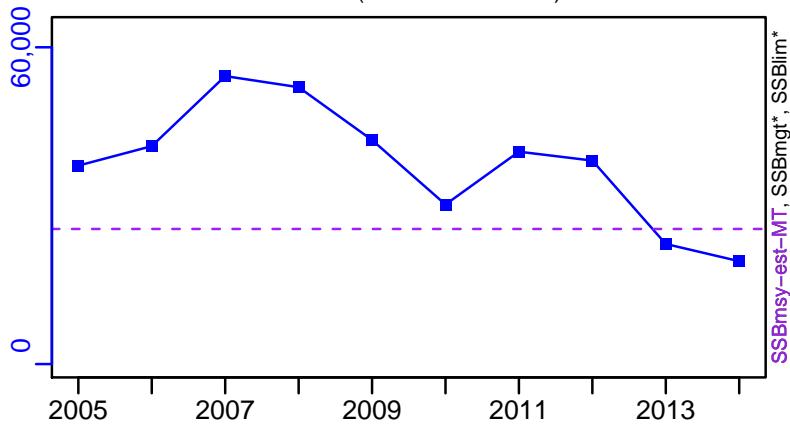
◆ Start Year ◆ End Year \* No Data

Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

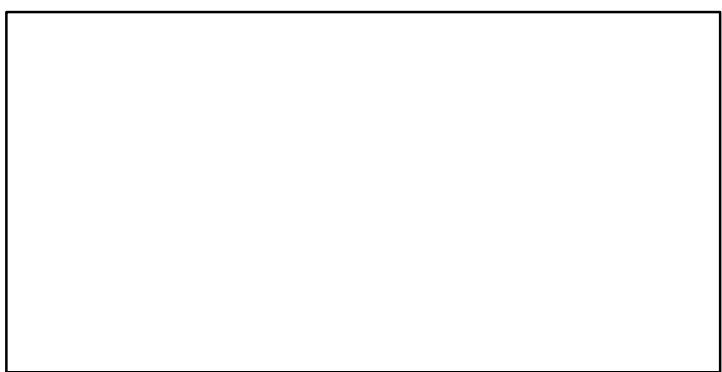
**TB\***



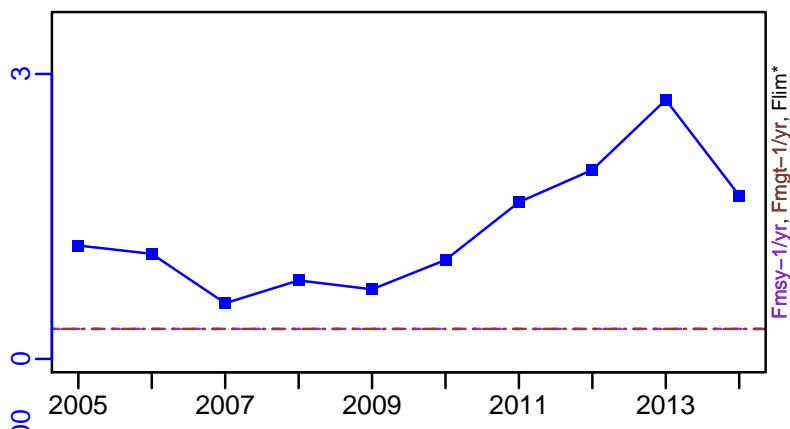
**SSB-MT (2005–2014–OSIO)**



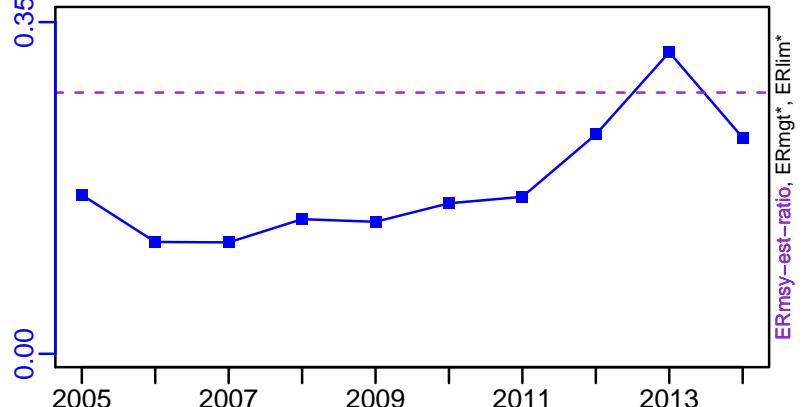
**TN \***



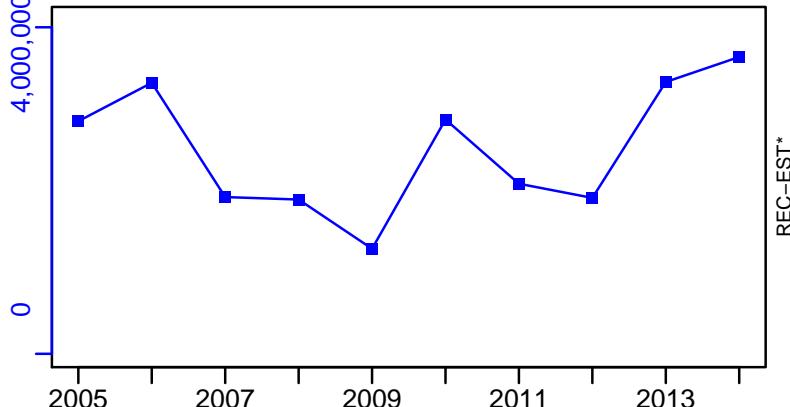
**F-1/yr (2005–2014–OSIO)**



**ER-calc-ratio (2005–2014–OSIO)**



**R-E00 (2005–2014–OSIO)**

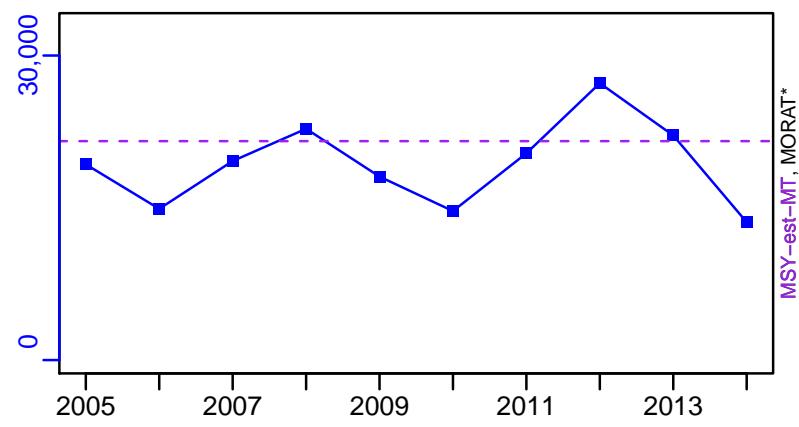


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

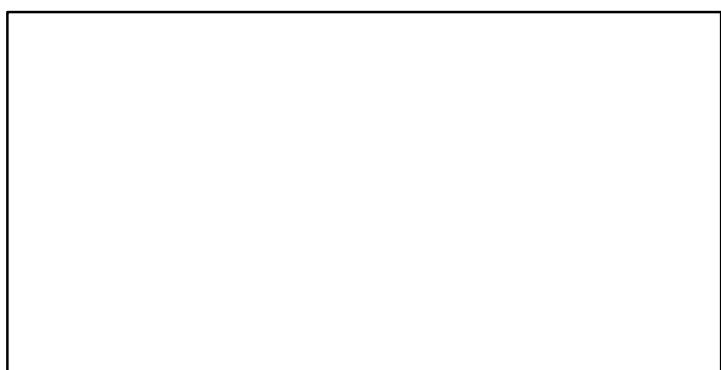
**Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]**

TC-MT, TL\*, RecC\* (2005–2014–OSIO)

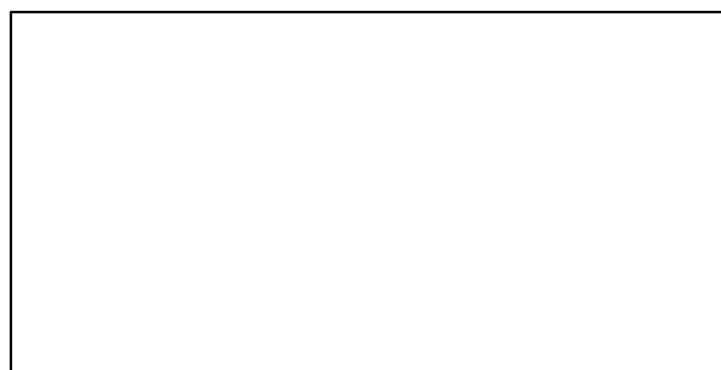
TAC\*, Cpair\*, Cadv\*



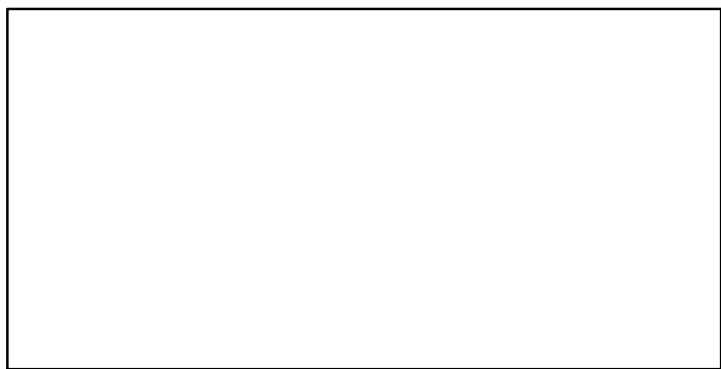
**survB\***



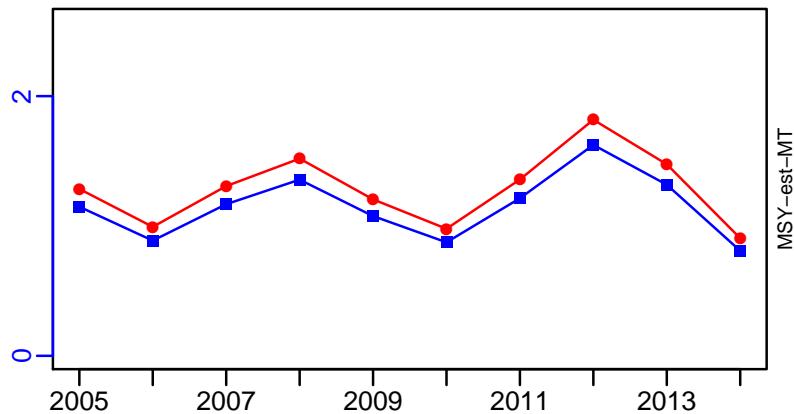
**CPUE\***



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2005–2014–OSIO)



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

## Norway lobster Northern Alboran Sea [NEPHMEDGSA1]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA1-2002-2011-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

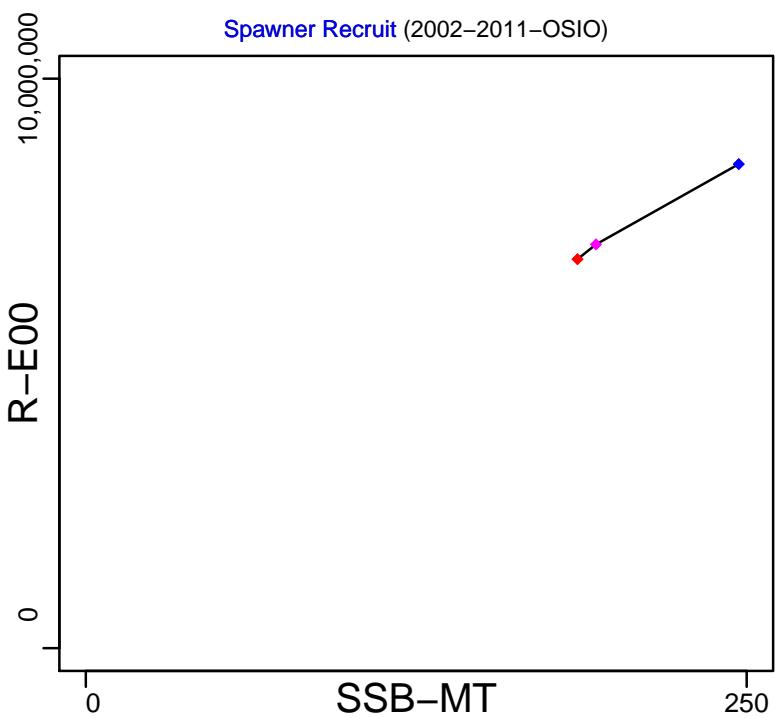
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	186	-	4+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	6,830,000	-	-
<b>F</b>	F-1/yr	2011	0.33	-	-
<b>ER</b>	ER-calc-ratio	2011	0.169	-	-
<b>TC</b>	TC-MT	2011	75		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	1.65		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2002–2011–OSIO)

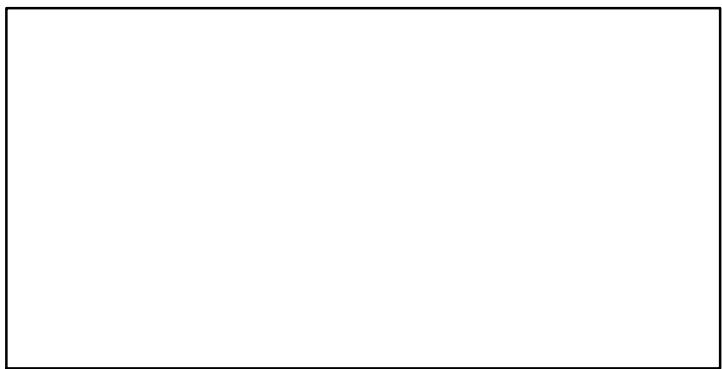


Production\*

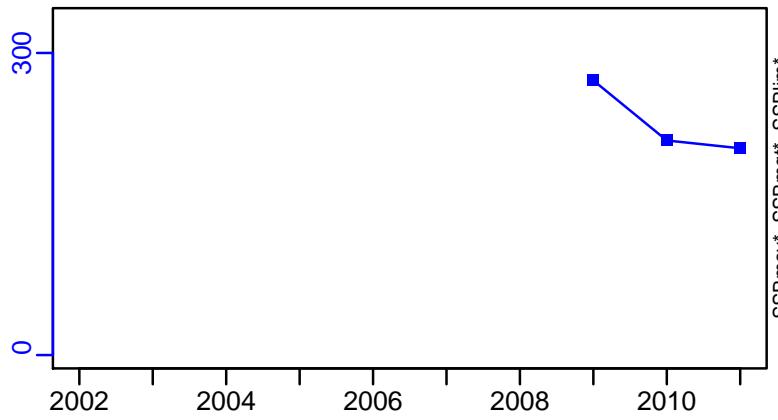
◆ Start Year   ◆ End Year   \* No Data

Norway lobster Northern Alboran Sea [NEPHMEDGSA1]

**TB\***



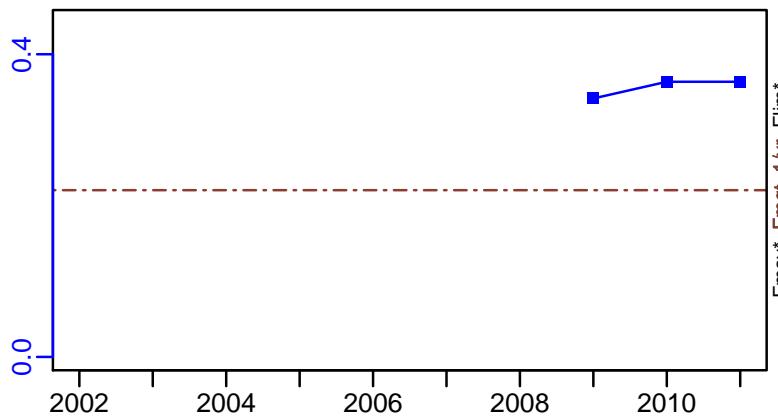
**SSB-MT** (2002–2011–OSIO)



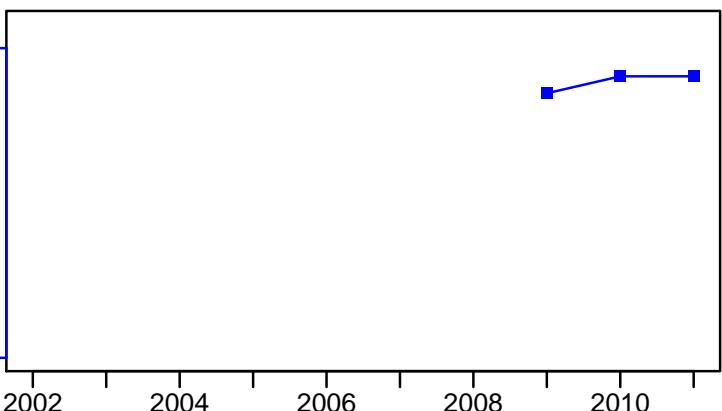
**TN \***



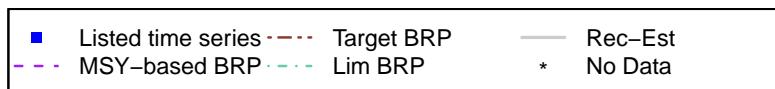
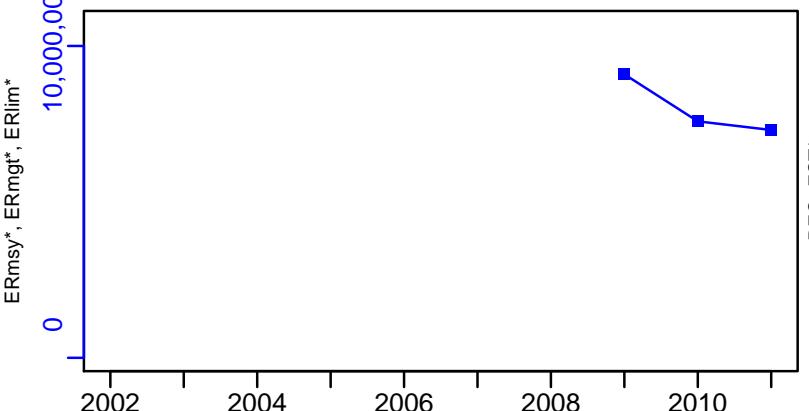
**F-1/yr** (2002–2011–OSIO)



**ER-calc-ratio** (2002–2011–OSIO)



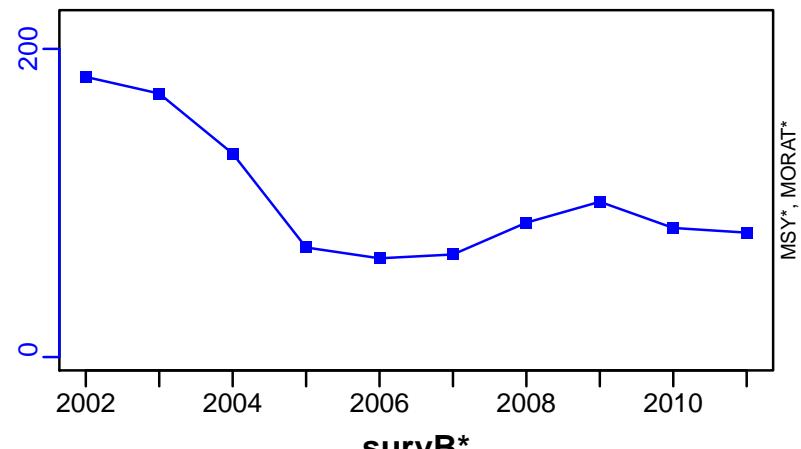
**R-E00** (2002–2011–OSIO)



Norway lobster Northern Alboran Sea [NEPHMEDGSA1]

TC-MT, TL\*, RecC\* (2002–2011–OSIO)

TAC\*, Cpair\*, Cadv\*



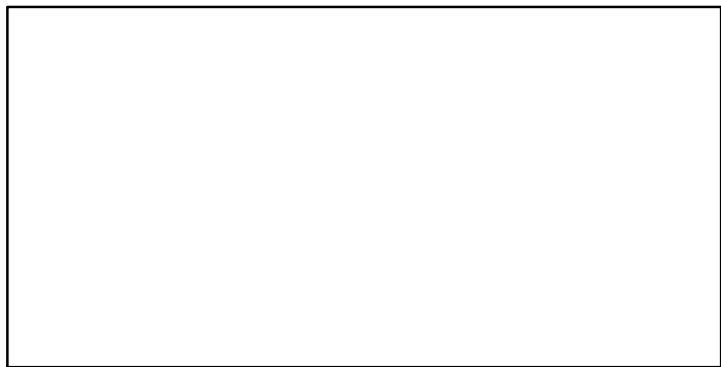
survB\*



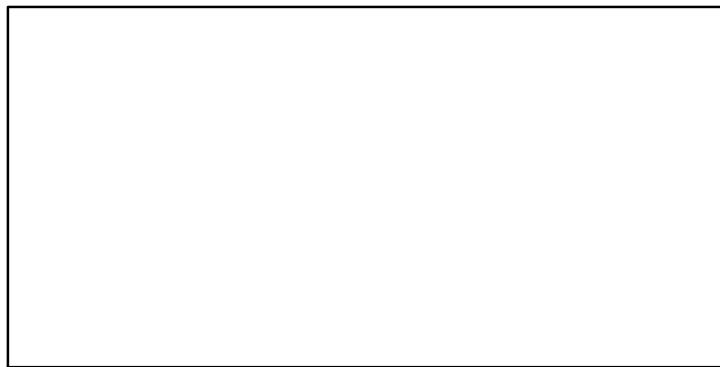
CPUE\*



EFFORT\*



CdivMSY\*



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

## Norway lobster Sardinia [NEPHMEDGSA11]

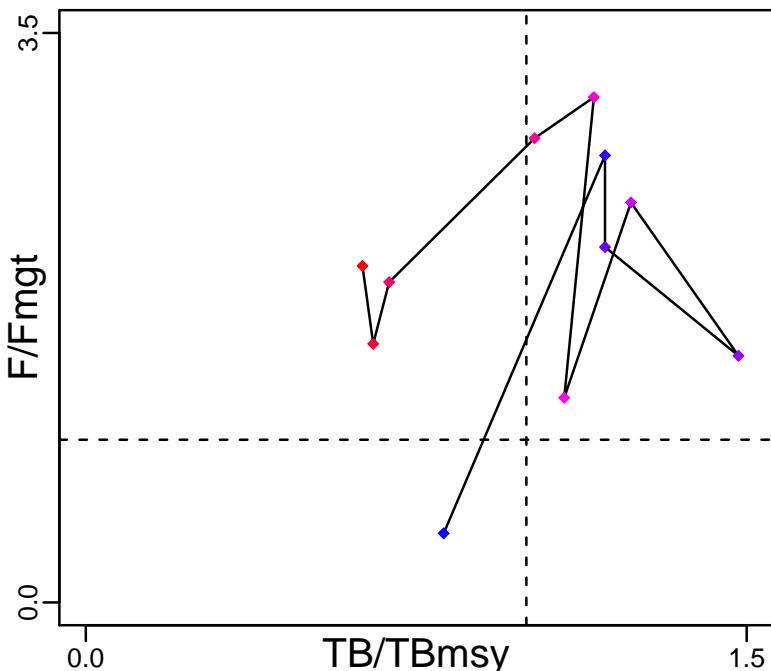
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA11-2005-2015-OSIO
<b>Area</b>	Sardinia
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	119
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.263
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	31
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

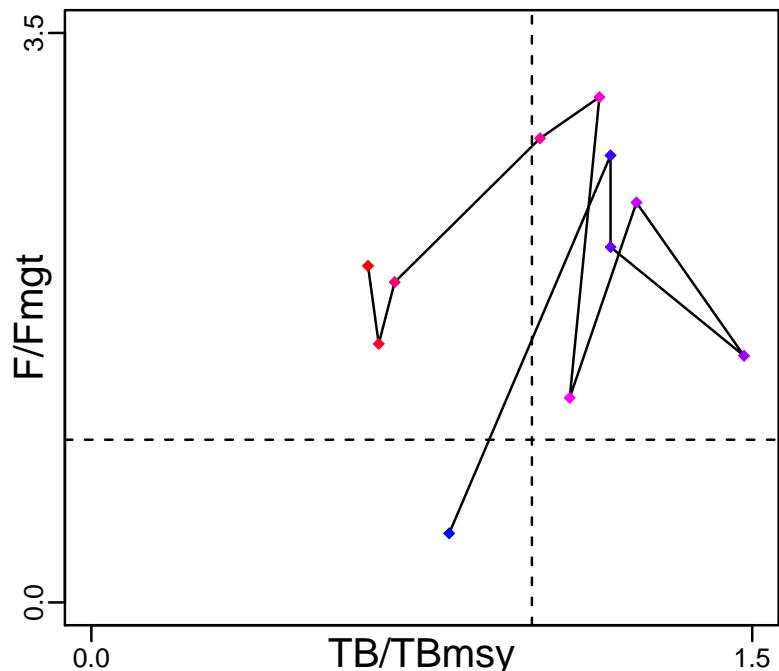
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	75	-	-	
<b>SSB</b>	SSB-MT	2015	39	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	1,370,000	-	-	
<b>F</b>	F-1/yr	2015	0.393	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.244	-	-	
<b>TC</b>	TC-MT	2015	18			
<b>TL</b>	TL-MT	2015	18			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.628			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.929			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.068			
<b>ER/ERmgt</b>	-	-	-			

Norway lobster Sardinia [NEPHMEDGSA11]

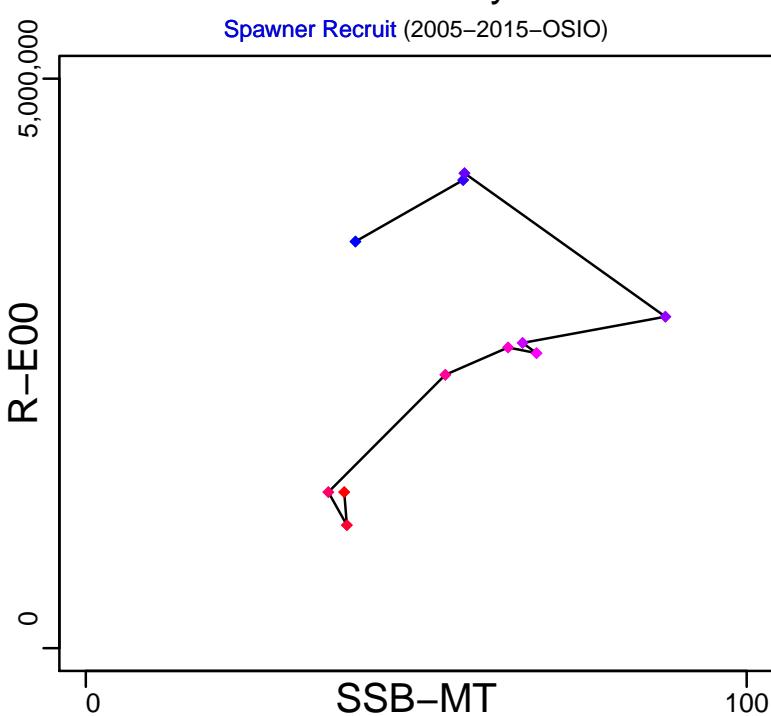
Kobe MSYpref (2005–2015–OSIO)



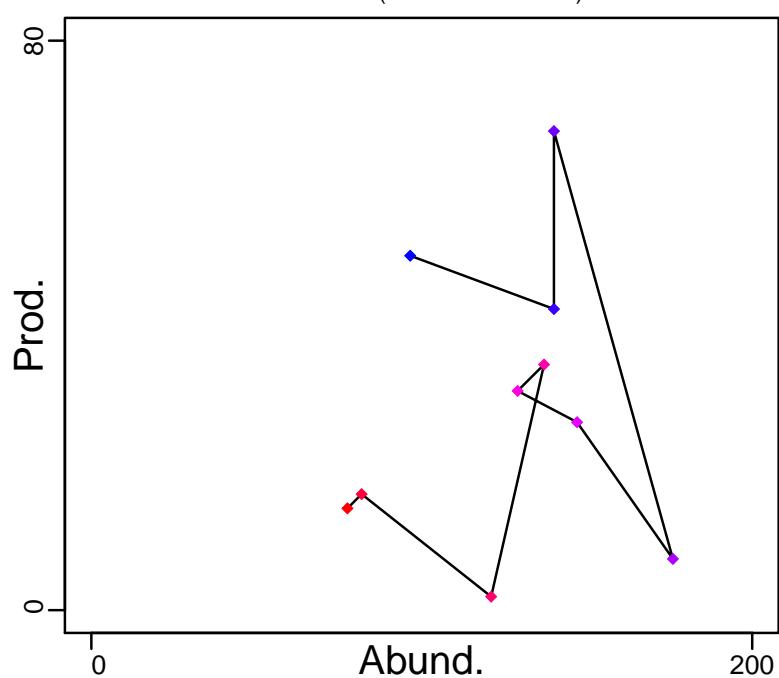
Kobe MGTpref (2005–2015–OSIO)



Spawner Recruit (2005–2015–OSIO)



Production (2005–2015–OSIO)

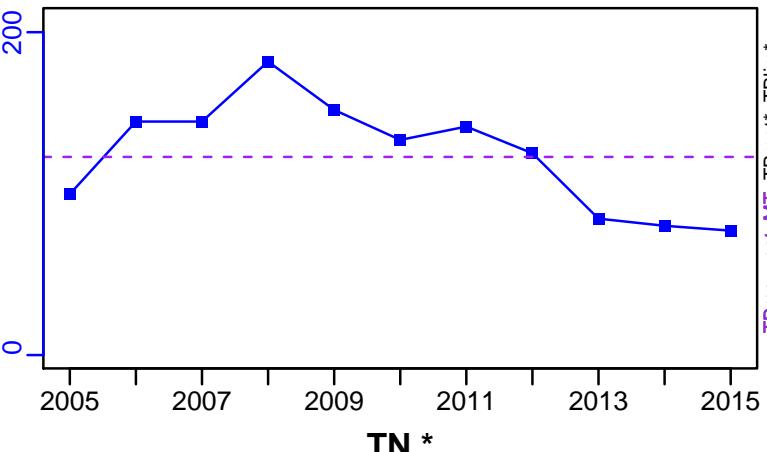


◆ Start Year ◆ End Year \* No Data

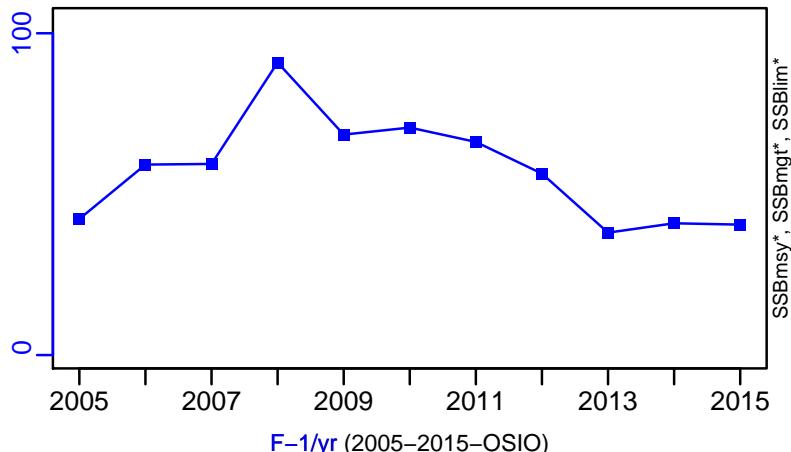
### Norway lobster Sardinia [NEPHMEDGSA11]

TB-MT (2005–2015–OSIO)

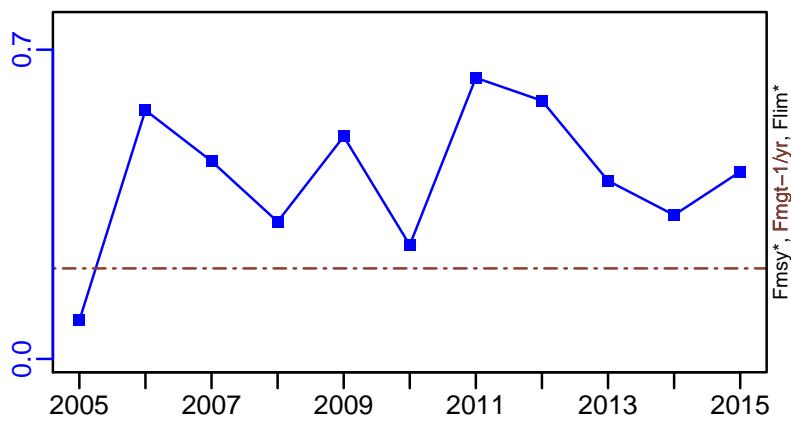
SSB-MT (2005–2015–OSIO)



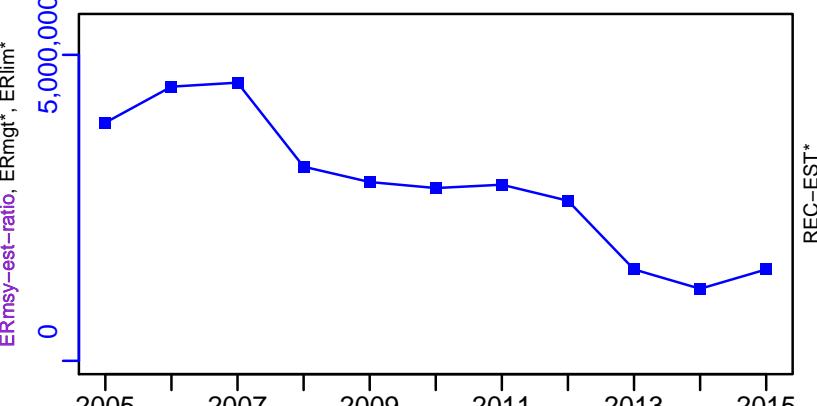
TN \*



F-1/yr (2005–2015–OSIO)



ER-calc-ratio (2005–2015–OSIO)



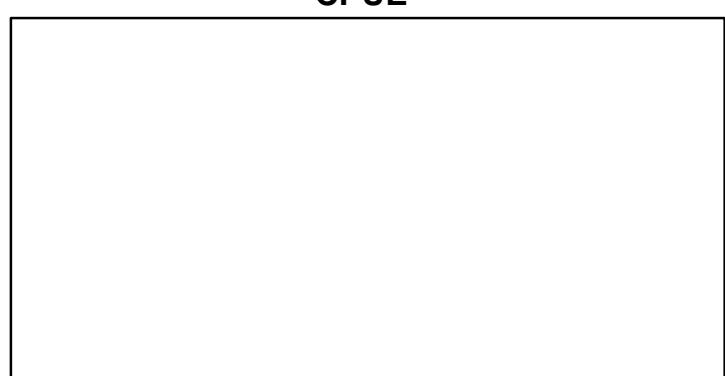
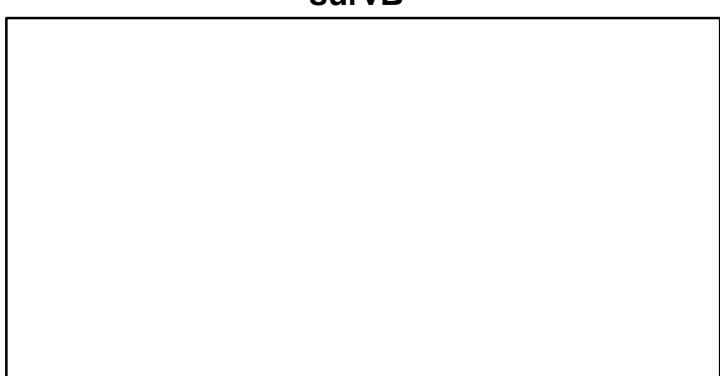
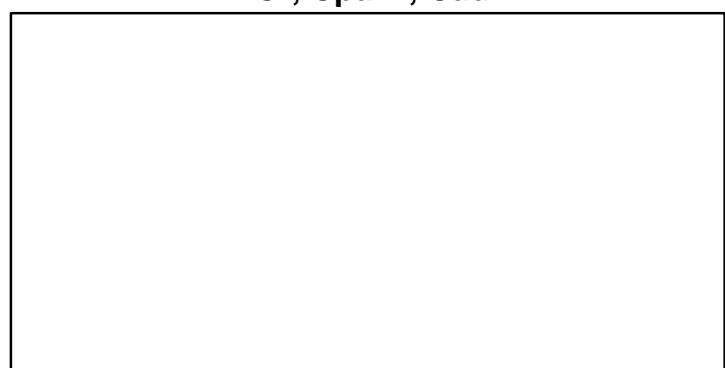
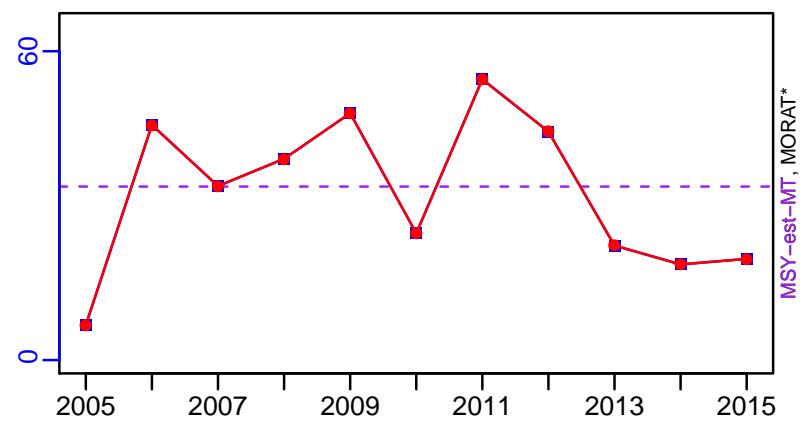
R-E00 (2005–2015–OSIO)

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

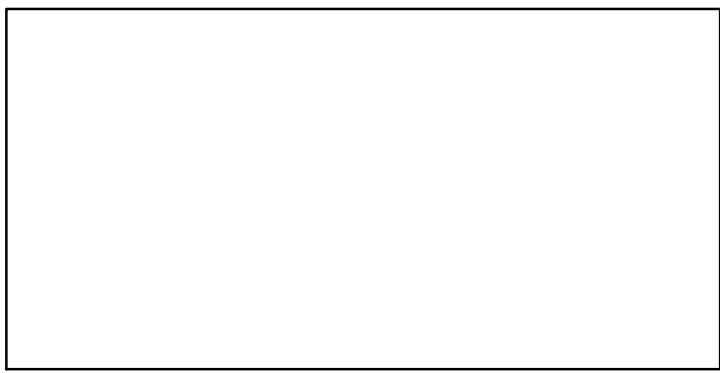
Norway lobster Sardinia [NEPHMEDGSA11]

TC-MT, TL-MT, RecC\* (2005–2015–OSIO)

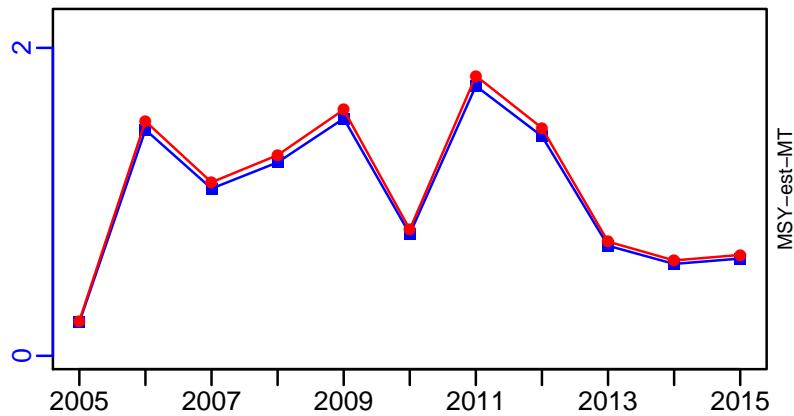
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2005–2015–OSIO)



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

## Norway lobster Malta Island and South of Sicily (GSA 15, 16) [NEPHMEDGSA15-16]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA15-16-2002-2012-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

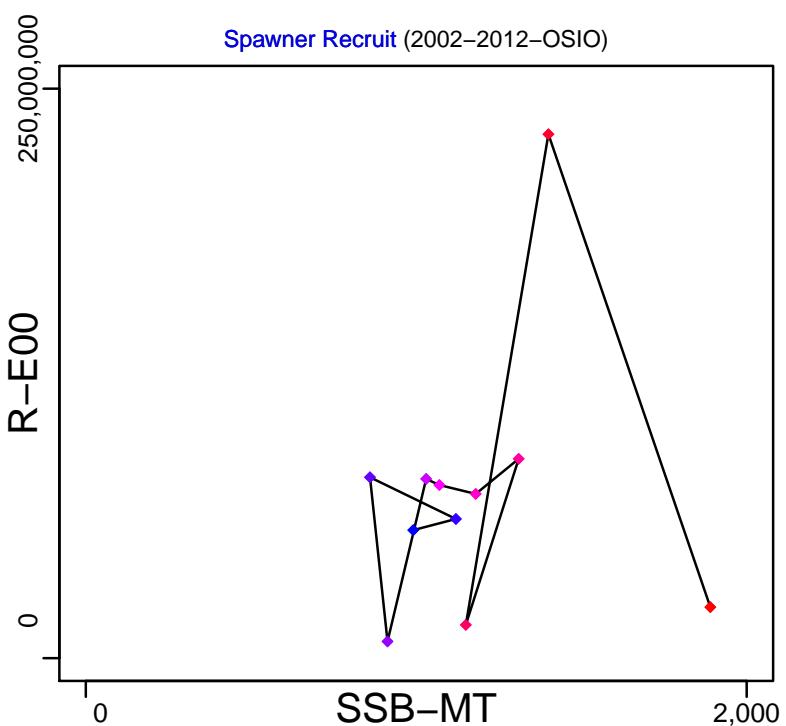
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	1890	-	4+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	22,400,000	-	-
<b>F</b>	F-1/yr	2012	0.15	-	-
<b>ER</b>	ER-calc-ratio	2012	0.099	-	-
<b>TC</b>	TC-MT	2012	444		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	0.75		
<b>ER/ERmgt</b>	-	-	-		

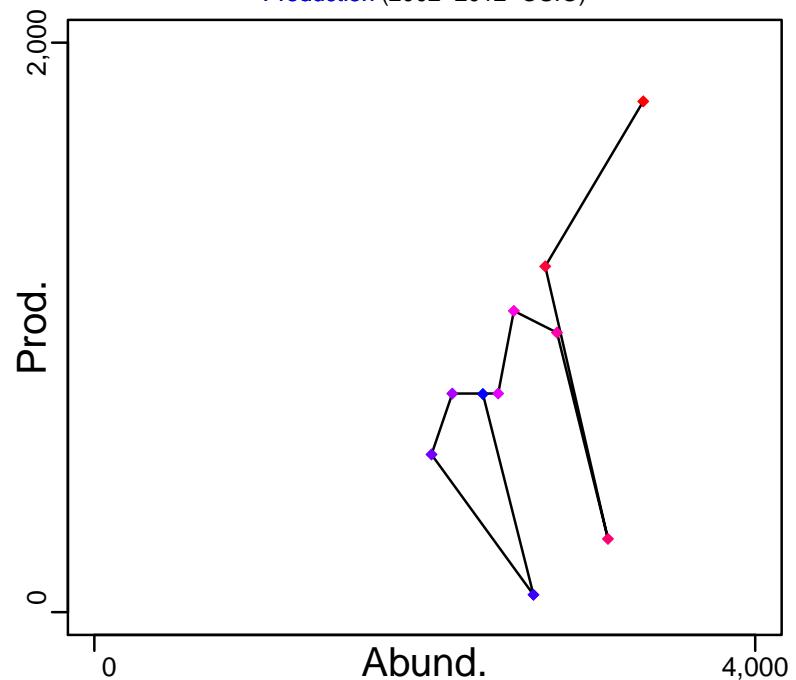
**Kobe MSY\***

**Kobe MGT\***

Spawner Recruit (2002–2012–OSIO)



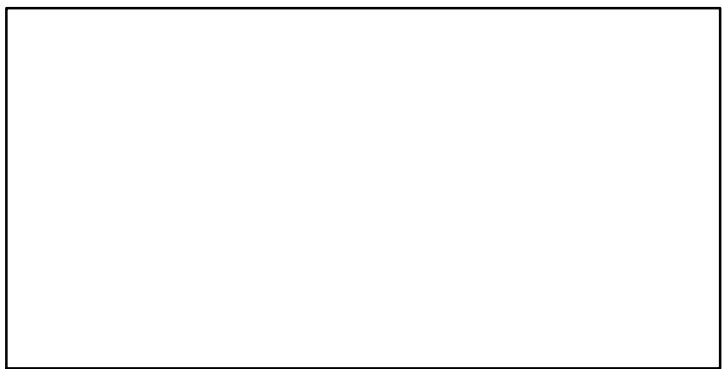
Production (2002–2012–OSIO)



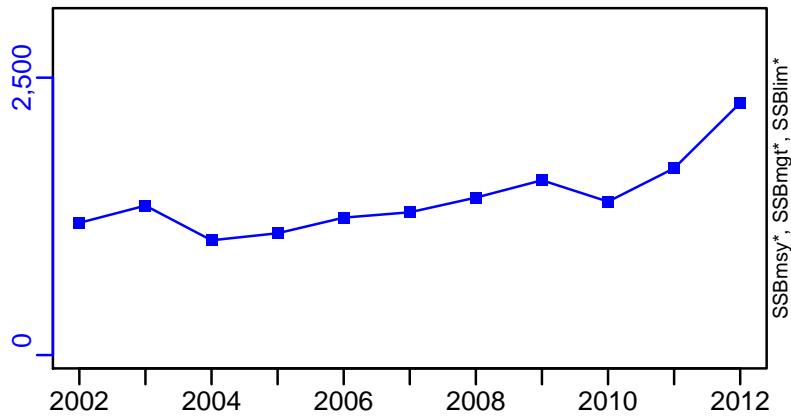
◆ Start Year   ◆ End Year   \* No Data

Norway lobster Malta Island and South of Sicily (GSA 15, 16) [NEPHMEDGSA15–16]

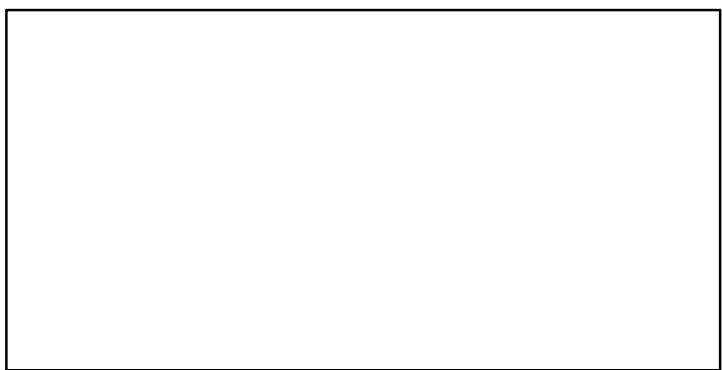
**TB\***



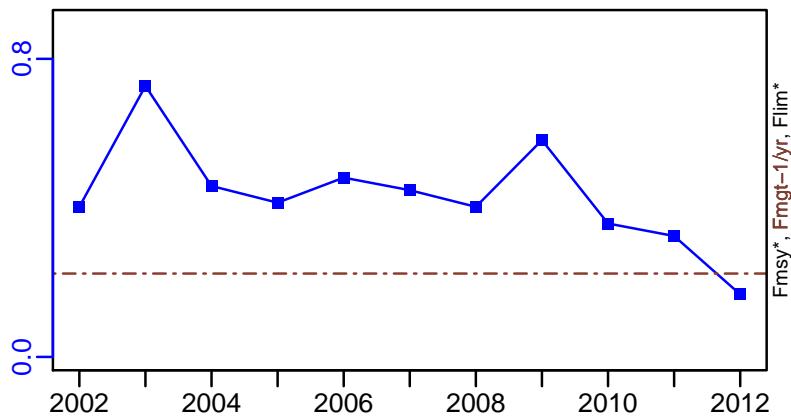
**SSB-MT (2002–2012–OSIO)**



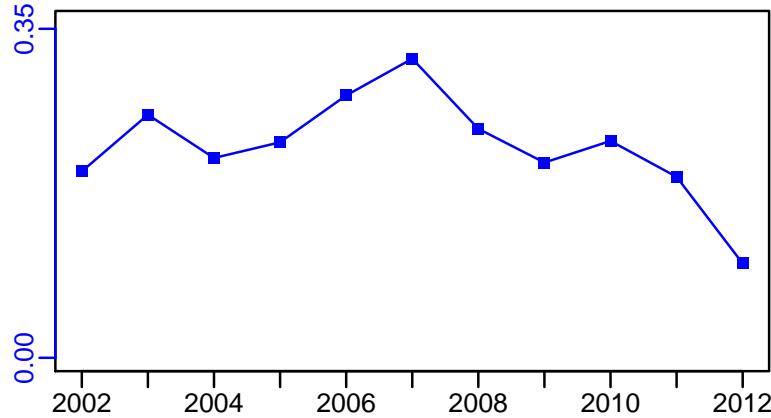
**TN \***



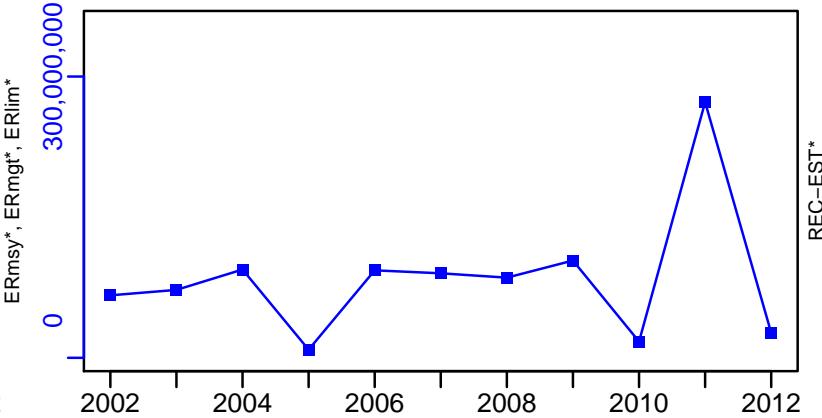
**F-1/yr (2002–2012–OSIO)**



**ER-calc-ratio (2002–2012–OSIO)**



**R-E00 (2002–2012–OSIO)**

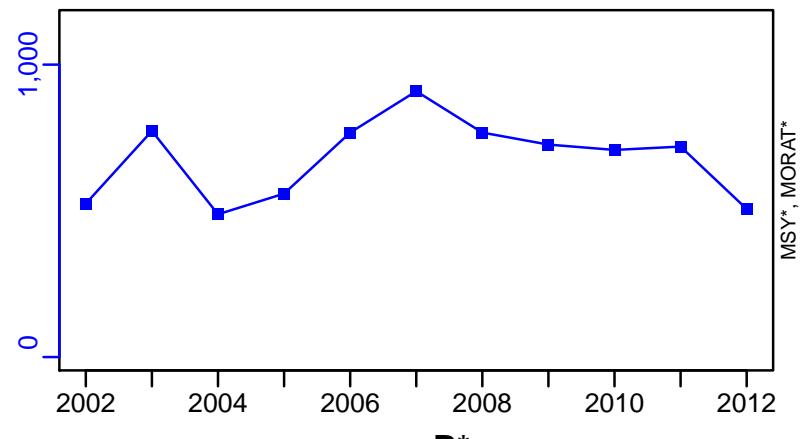


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

Norway lobster Malta Island and South of Sicily (GSA 15, 16) [NEPHMEDGSA15–16]

TC–MT, TL\*, RecC\* (2002–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



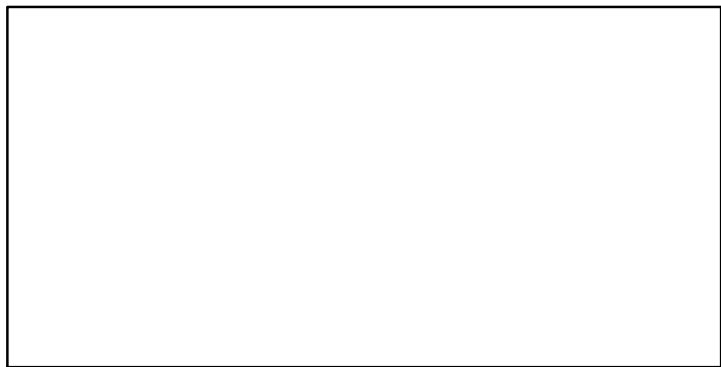
survB\*



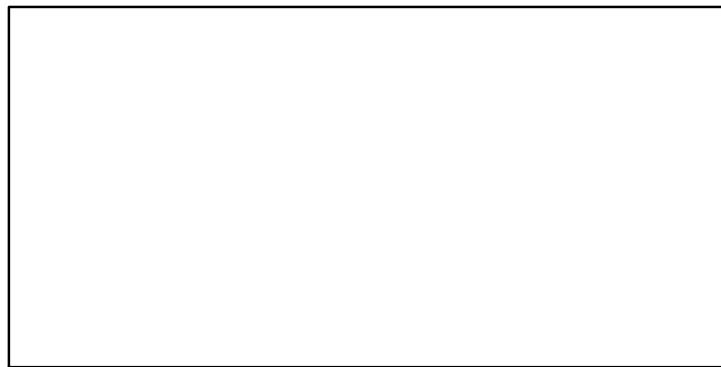
CPUE\*



EFFORT\*



CdivMSY\*



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

## Norway lobster Adriatic Sea (GSA 17,18) [NEPHMEDGSA17-18]

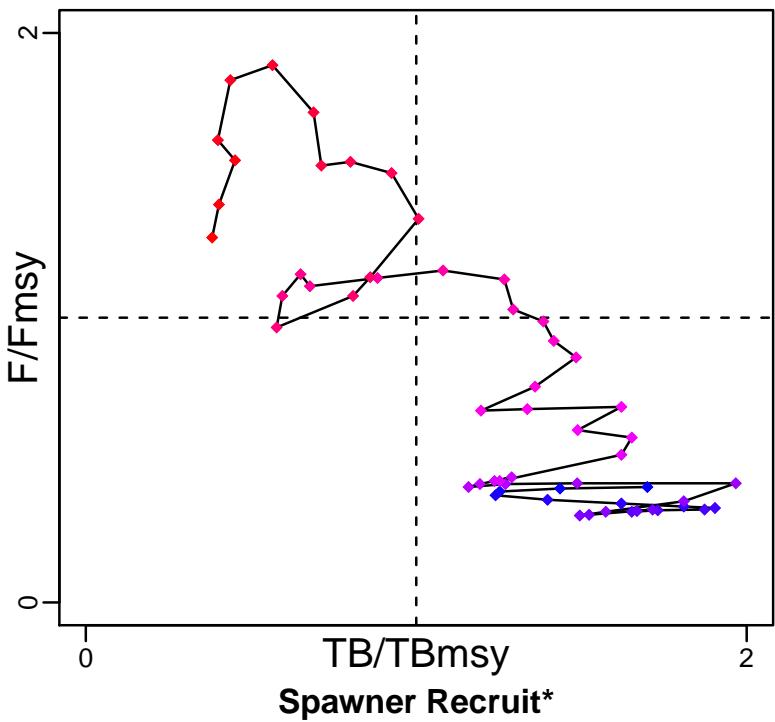
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA17-18-1960-2015-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	6355
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.38
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.34
<b>TBmgt</b>	TBmgt-MT	2015	6355
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.38
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	2163
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

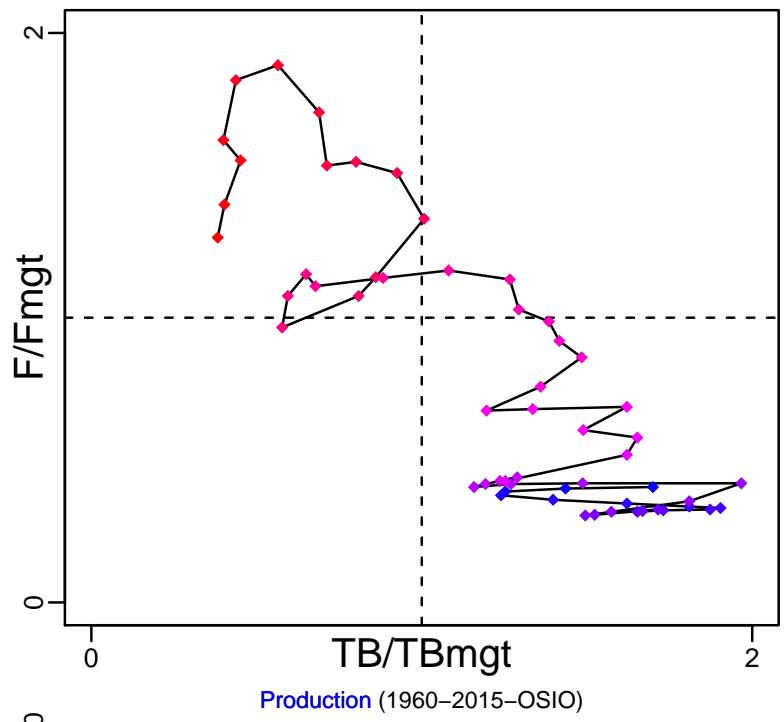
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	2430	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	F-1/yr	2015	0.487	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.49	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2015	1190			
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	0.382			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	1.282			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	1.439			
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2015	0.382			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.282			
<b>ER/ERmgt</b>	-	-	-			

Norway lobster Adriatic Sea (GSA 17,18) [NEPHMEDGSA17-18]

Kobe MSYpref (1960–2015–OSIO)

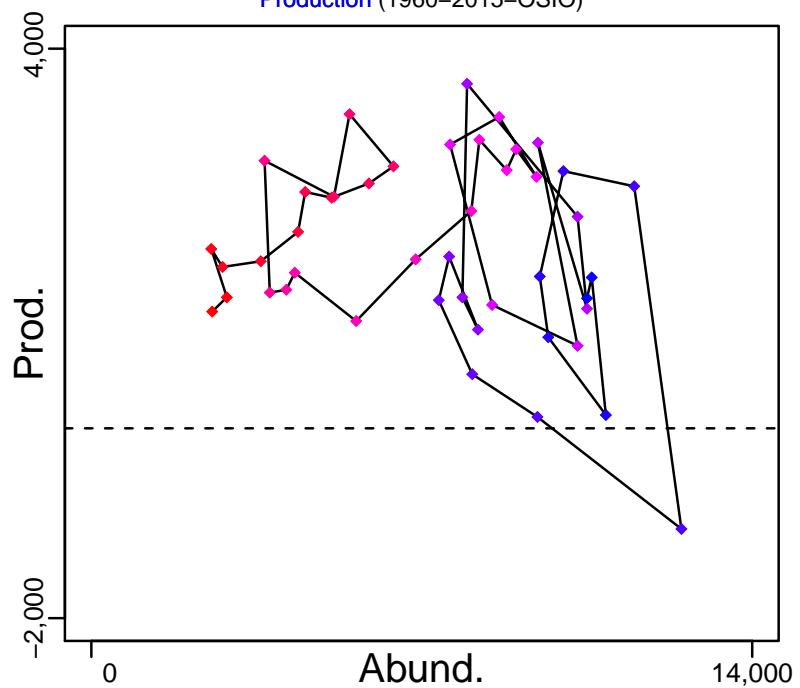
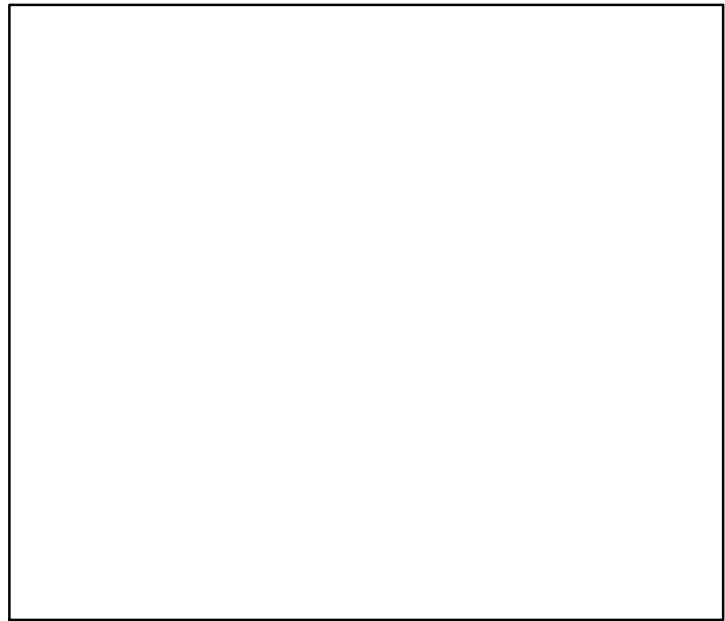


Kobe MGTPref (1960–2015–OSIO)



**Spawner Recruit\***

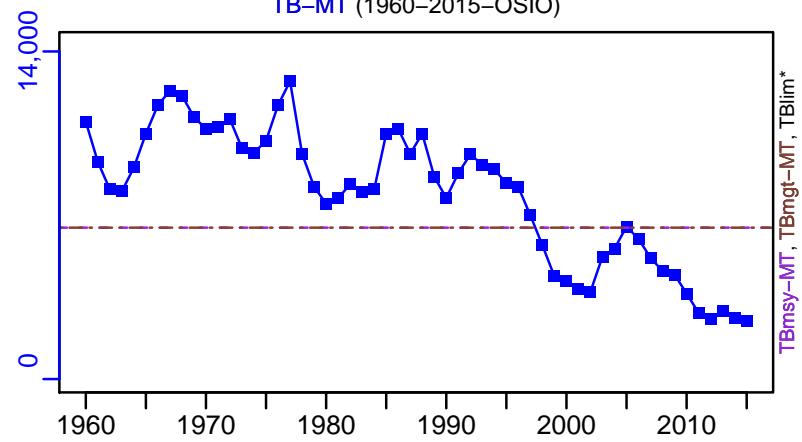
**Production (1960–2015–OSIO)**



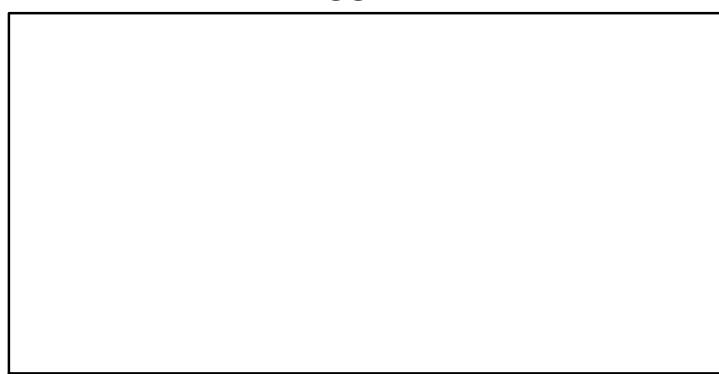
◆ Start Year ◆ End Year \* No Data

Norway lobster Adriatic Sea (GSA 17,18) [NEPHMEDGSA17–18]

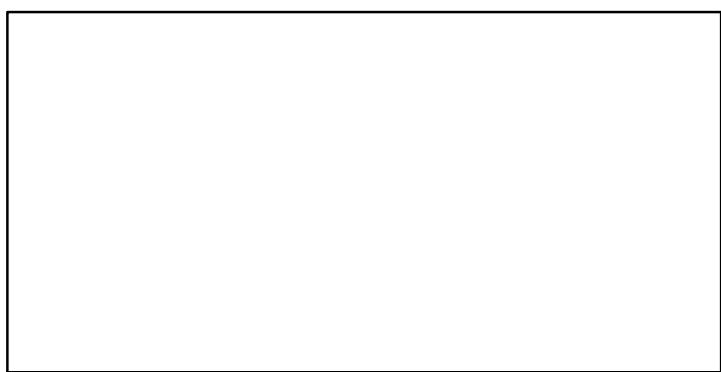
TB-MT (1960–2015–OSIO)



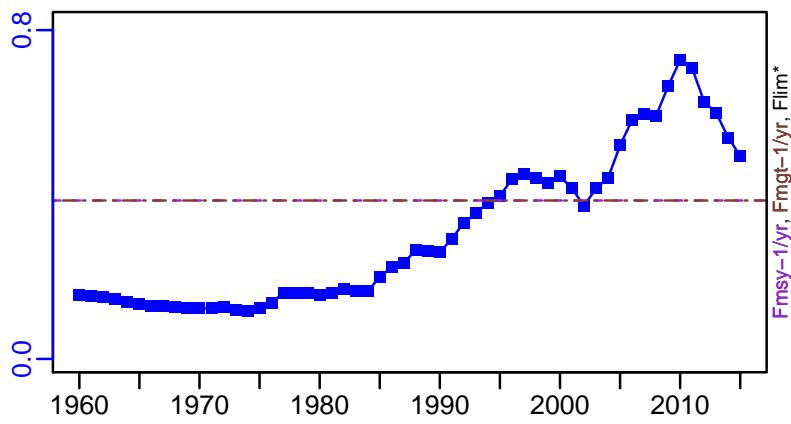
SSB\*



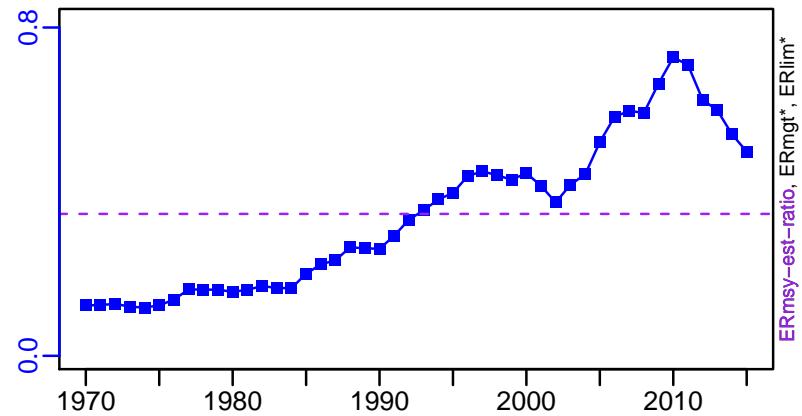
TN \*



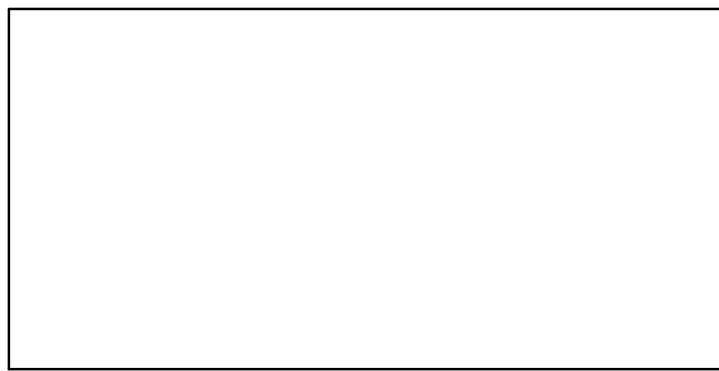
F-1/yr (1960–2015–OSIO)



ER-calc-ratio (1960–2015–OSIO)



Recruits\*

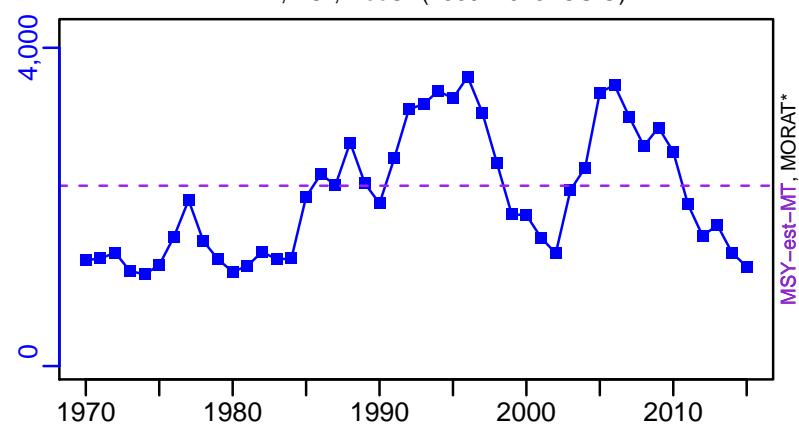


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | — Lim BRP    | * No Data |

Norway lobster Adriatic Sea (GSA 17,18) [NEPHMEDGSA17–18]

TL-MT, TC\*, RecC\* (1960–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



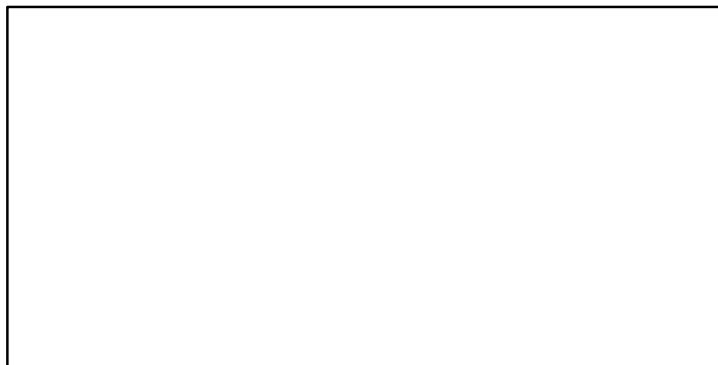
survB\*



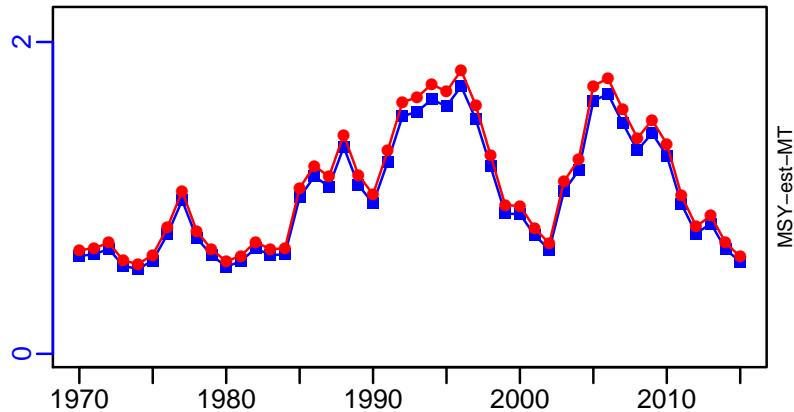
CPUE\*



EFFORT\*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1960–2015–OSIO)



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

## Norway lobster Balearic Island [NEPHMEDGSA5]

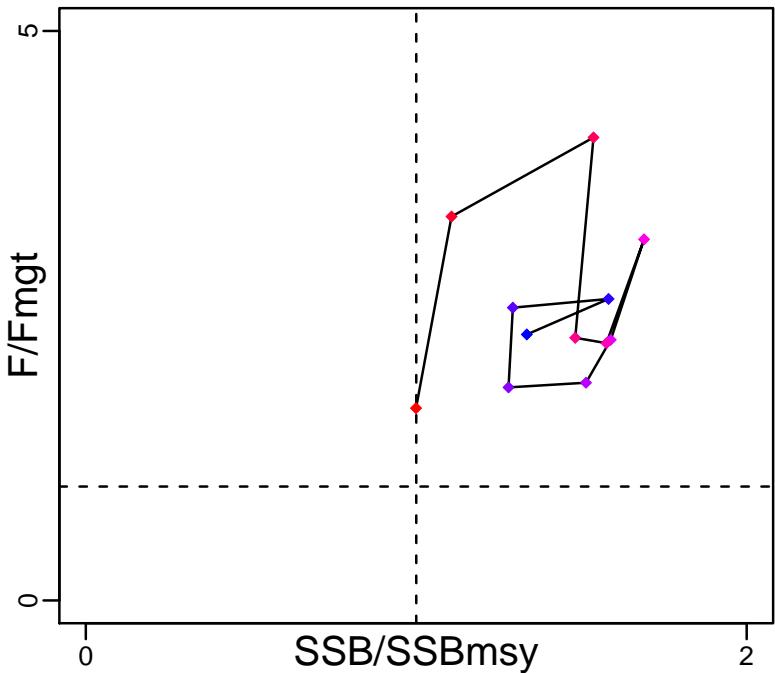
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA5-2002-2013-OSIO
<b>Area</b>	Balearic Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2011	157
<b>SSBmsy</b>	SSBmsy-est-MT	2013	31
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.326
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.17
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	23
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

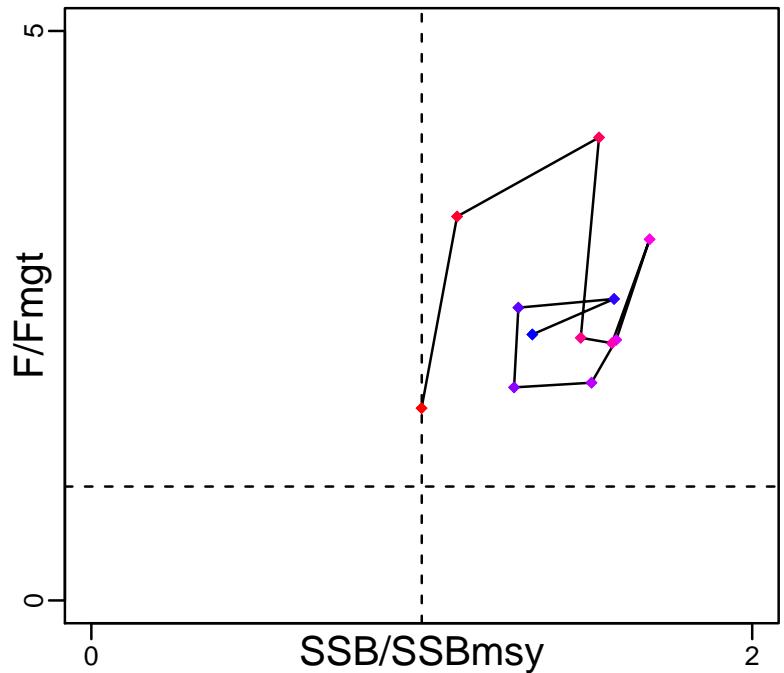
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2011	100	-	-	
<b>SSB</b>	SSB-MT	2013	31	-	4+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	1,620,000	-	-	
<b>F</b>	F-1/yr	2013	0.287	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.135	-	-	
<b>TC</b>	TC-MT	2013	10			
<b>TL</b>	TL-MT	2011	32			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	0.639			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	0.999			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.413			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	1.688			
<b>ER/ERmgt</b>	-	-	-			

Norway lobster Balearic Island [NEPHMEDGSA5]

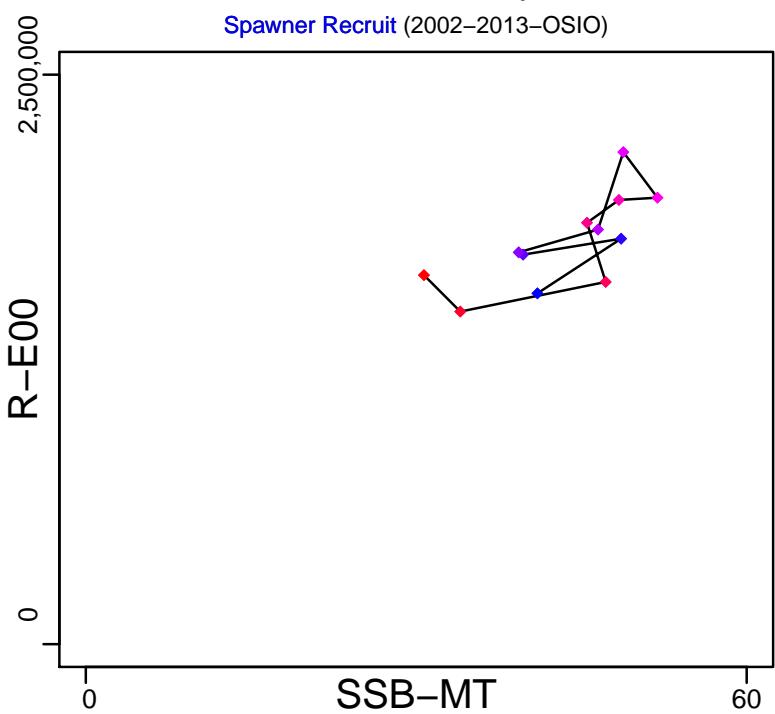
Kobe MSYpref (2002–2013–OSIO)



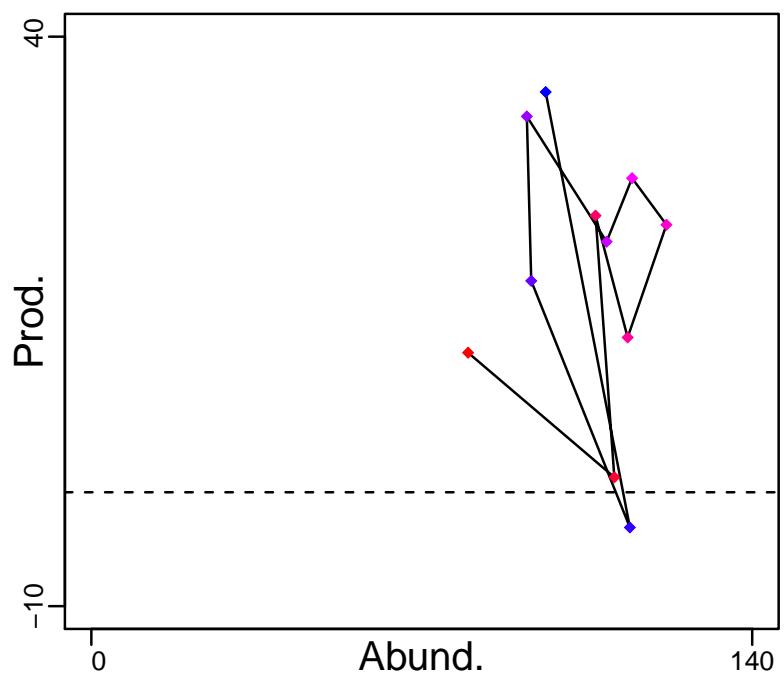
Kobe MGTPref (2002–2013–OSIO)



Spawner Recruit (2002–2013–OSIO)



Production (2002–2013–OSIO)

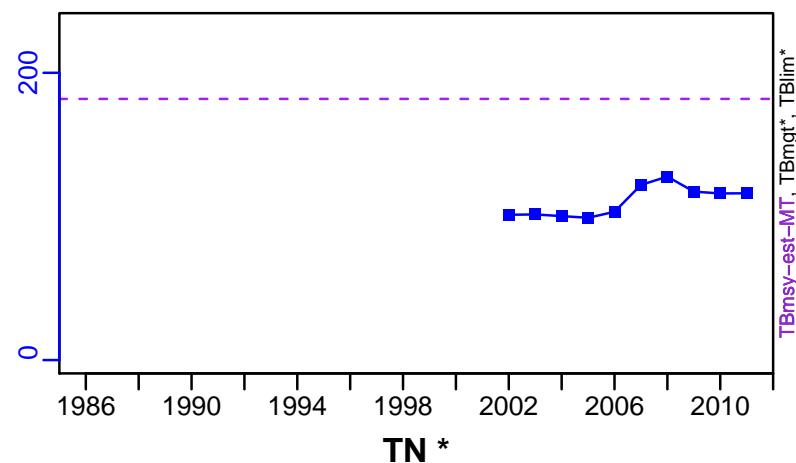


◆ Start Year ◆ End Year \* No Data

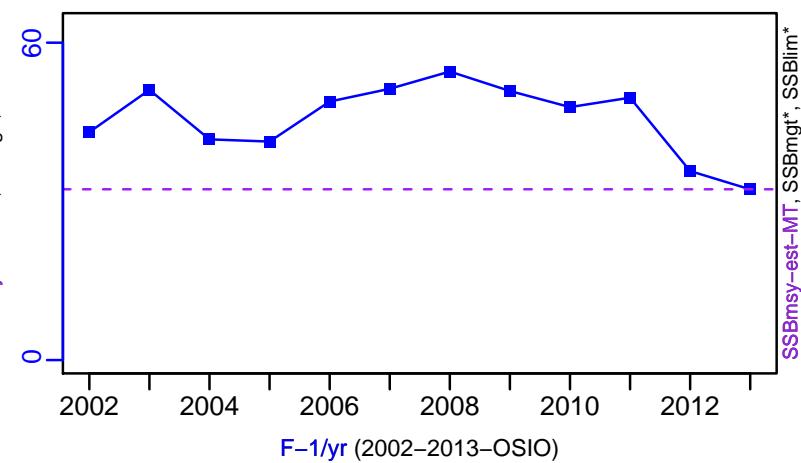
### Norway lobster Balearic Island [NEPHMEDGSA5]

TB-MT (1986–2011–BANOBI)

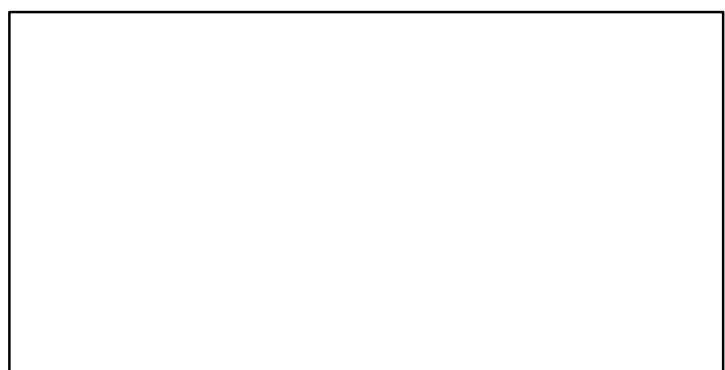
SSB-MT (2002–2013–OSIO)



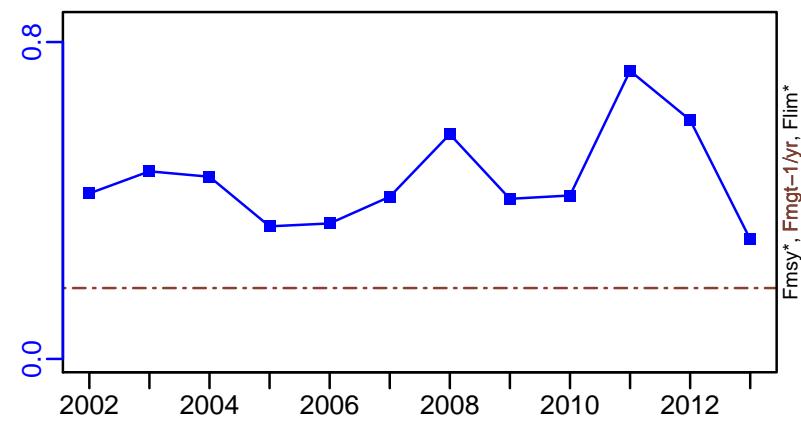
TN \*



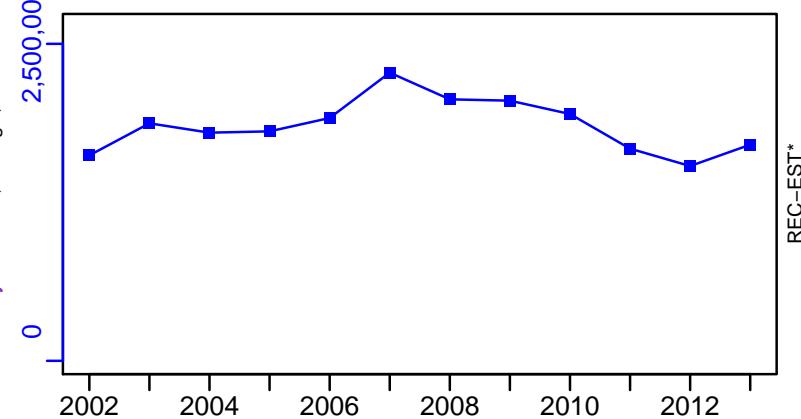
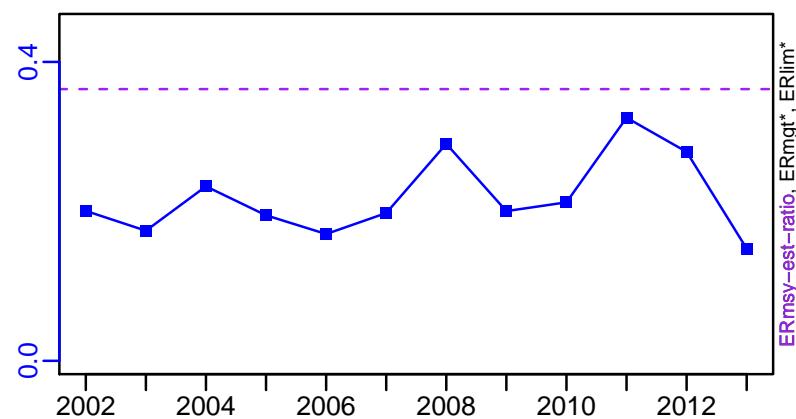
F-1/yr (2002–2013–OSIO)



ER-calc-ratio (2002–2013–OSIO)



R-E00 (2002–2013–OSIO)

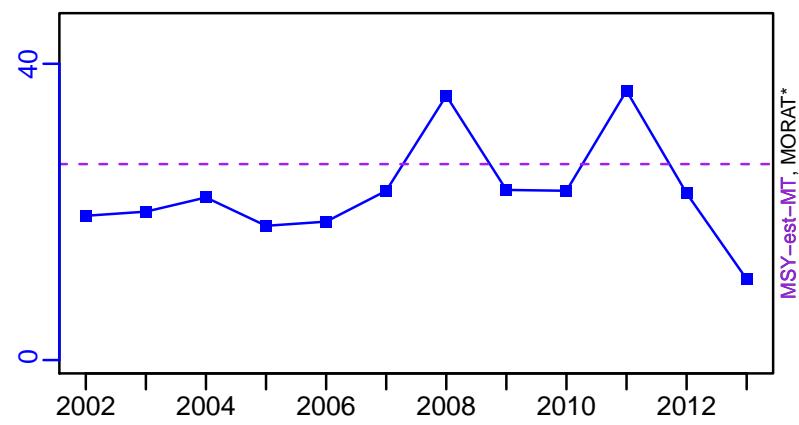


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Norway lobster Balearic Island [NEPHMEDGSA5]

TC-MT, TL\*, RecC\* (2002–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*



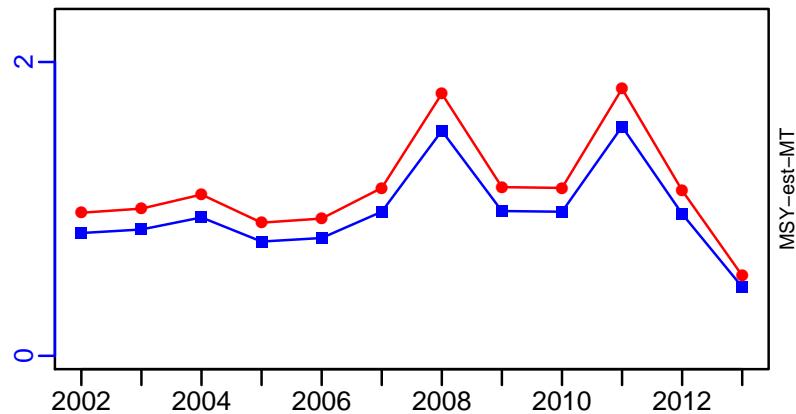
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2002–2013–OSIO)



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

## Norway lobster Northern Spain [NEPHMEDGSA6]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA6-2002-2015-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2015

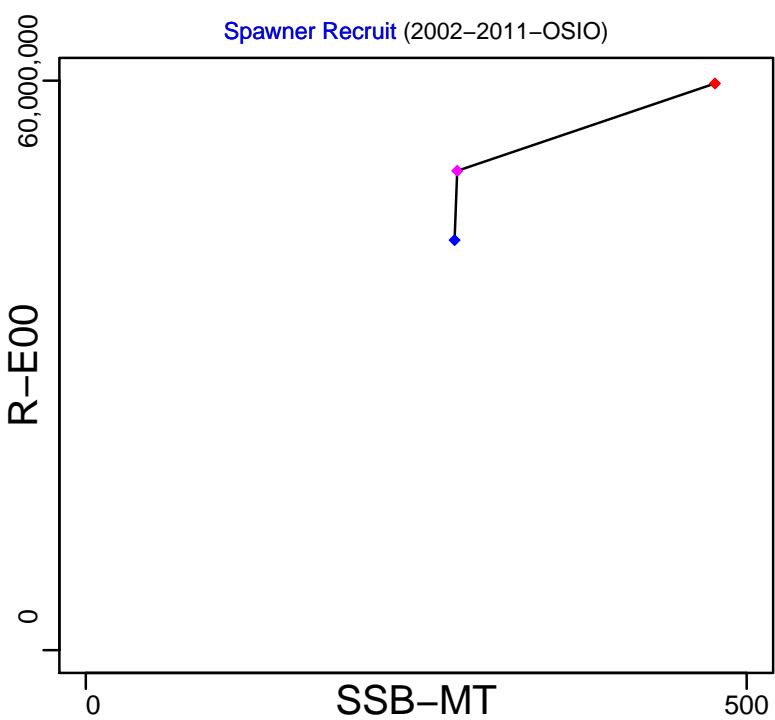
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.175
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	476	-	4+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	59,700,000	-	-
<b>F</b>	F-1/yr	2015	1.66	-	-
<b>ER</b>	ER-calc-ratio	2011	0.439	-	-
<b>TC</b>	TC-MT	2011	497		
<b>TL</b>	TL-MT	2015	355		
<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>	F-1/yr/Fmgt-1/yr	2015	9.486		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

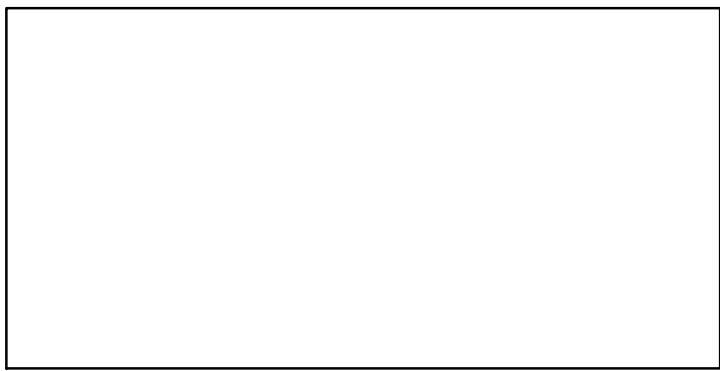
Spawner Recruit (2002–2011–OSIO)



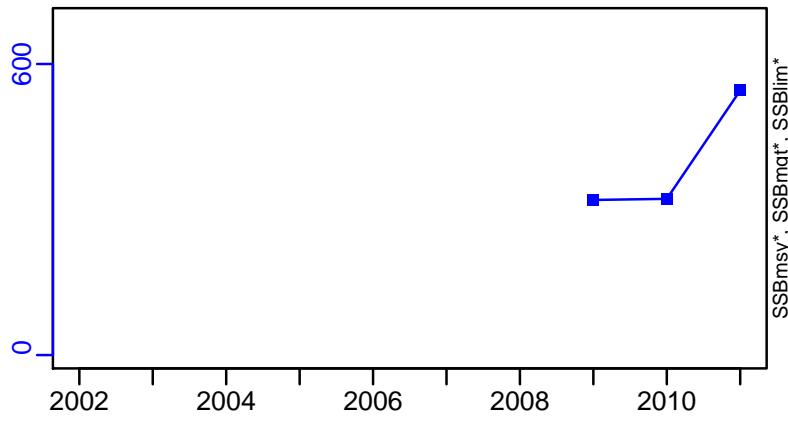
Production\*

Norway lobster Northern Spain [NEPHMEDGSA6]

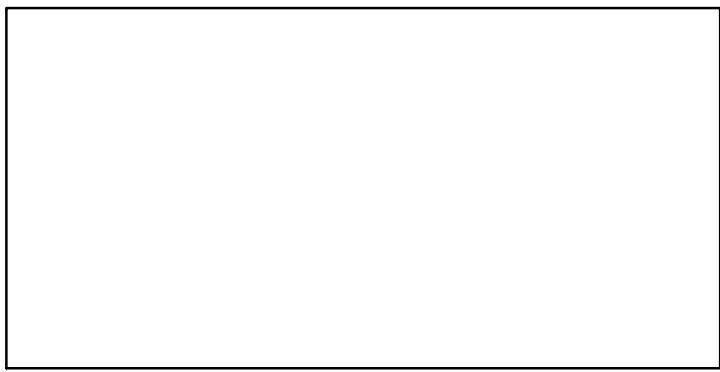
**TB\***



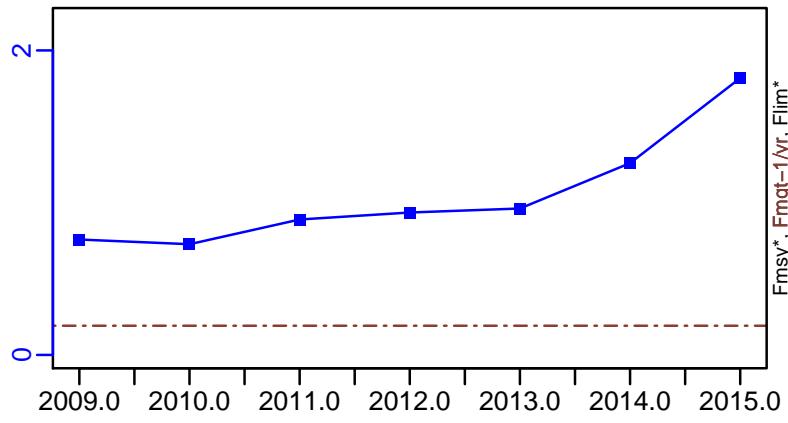
**SSB-MT** (2002–2011–OSIO)



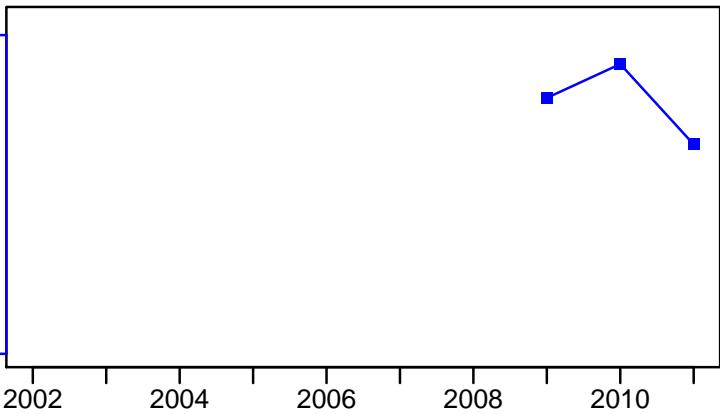
**TN \***



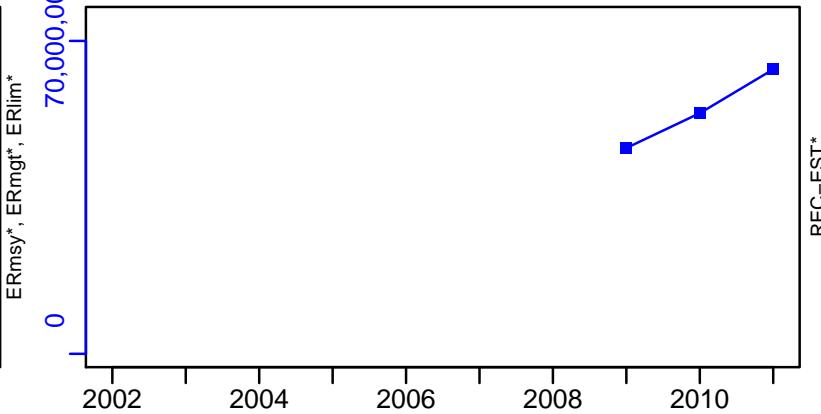
**F-1/yr** (2002–2015–OSIO)



**ER-calc-ratio** (2002–2011–OSIO)



**R-E00** (2002–2011–OSIO)

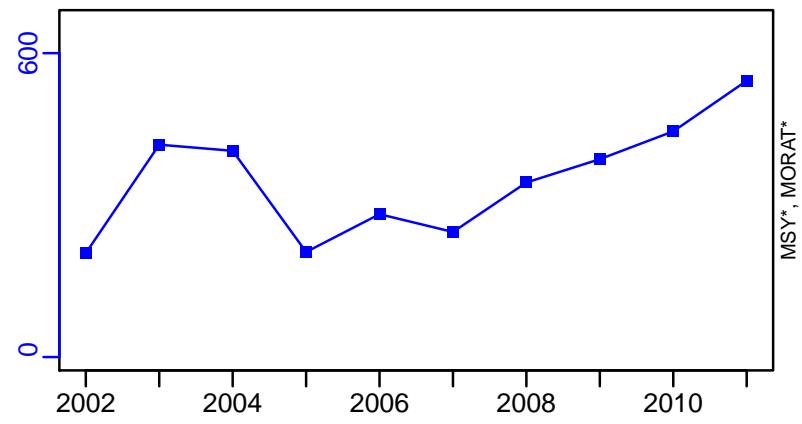


- Listed time series
- - - Target BRP
- - - MSY-based BRP
- - Lim BRP
- Rec-Est
- \* No Data

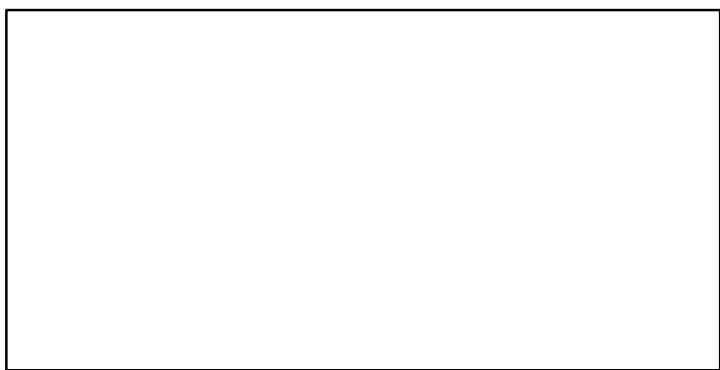
Norway lobster Northern Spain [NEPHMEDGSA6]

TC-MT, TL\*, RecC\* (2002–2011–OSIO)

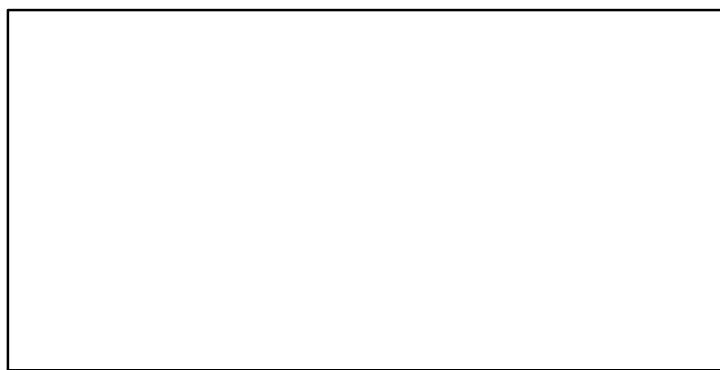
TAC\*, Cpair\*, Cadv\*



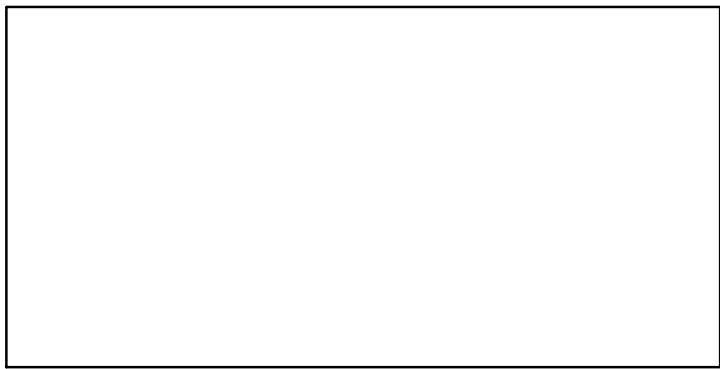
survB\*



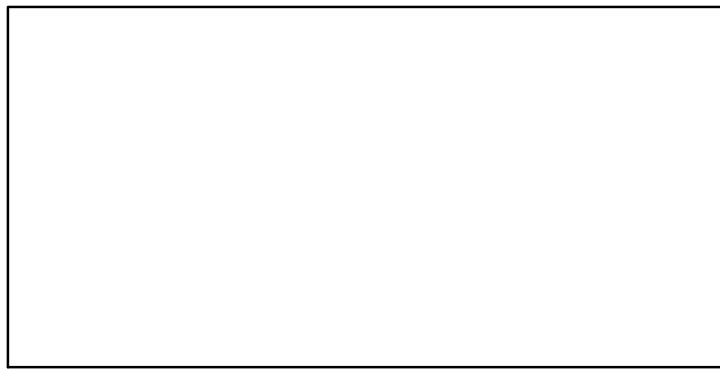
CPUE\*



EFFORT\*



CdivMSY\*



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

## Norway lobster Ligurian and North Tyrrhenian Sea [NEPHMEDGSA9]

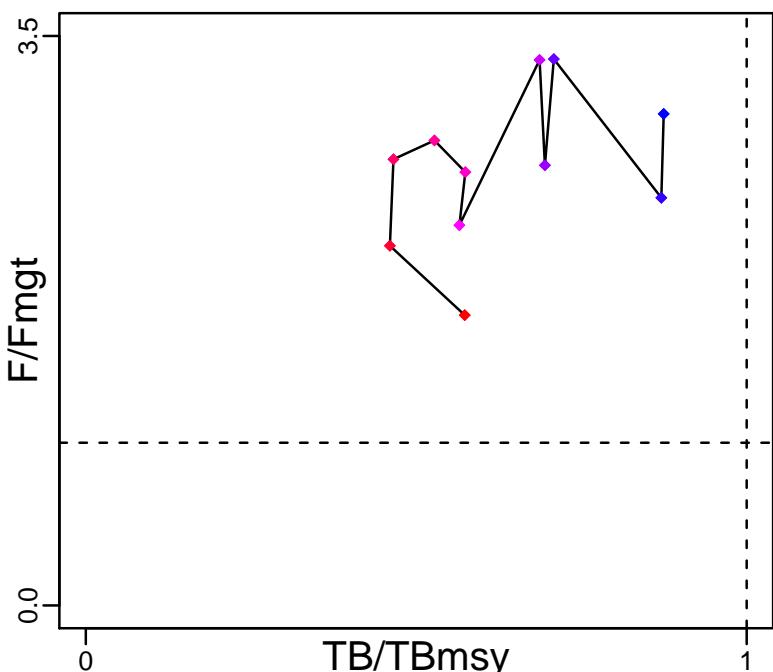
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	STECF-NEPHMEDGSA9-2005-2015-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	1113
<b>SSBmsy</b>	SSBmsy-est-MT	2013	811
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.149
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	165
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

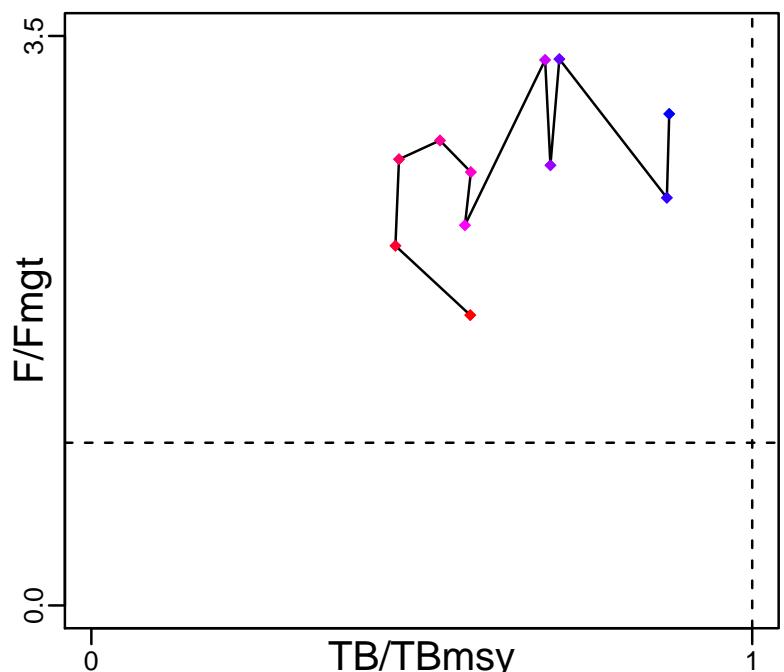
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	638	-	-	
<b>SSB</b>	SSB-MT	2015	235	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$1.9 \times 10^7$	-	-	
<b>F</b>	F-1/yr	2015	0.339	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.145	-	-	
<b>TC</b>	TC-MT	2015	92			
<b>TL</b>	TL-MT	2015	114			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.573			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	0.437			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.975			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.784			
<b>ER/ERmgt</b>	-	-	-			

Norway lobster Ligurian and North Tyrrhenian Sea [NEPHMEDGSA9]

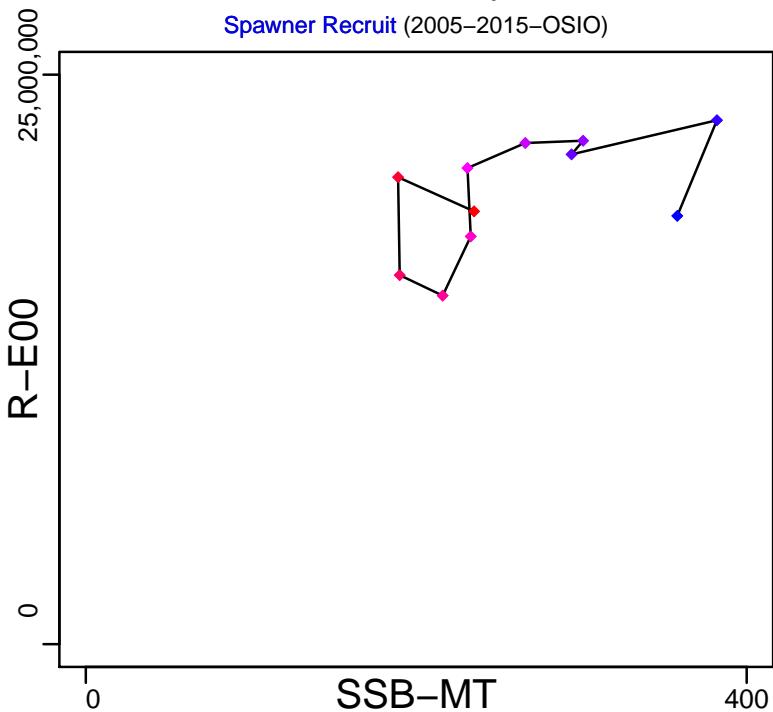
Kobe MSYpref (2005–2015–OSIO)



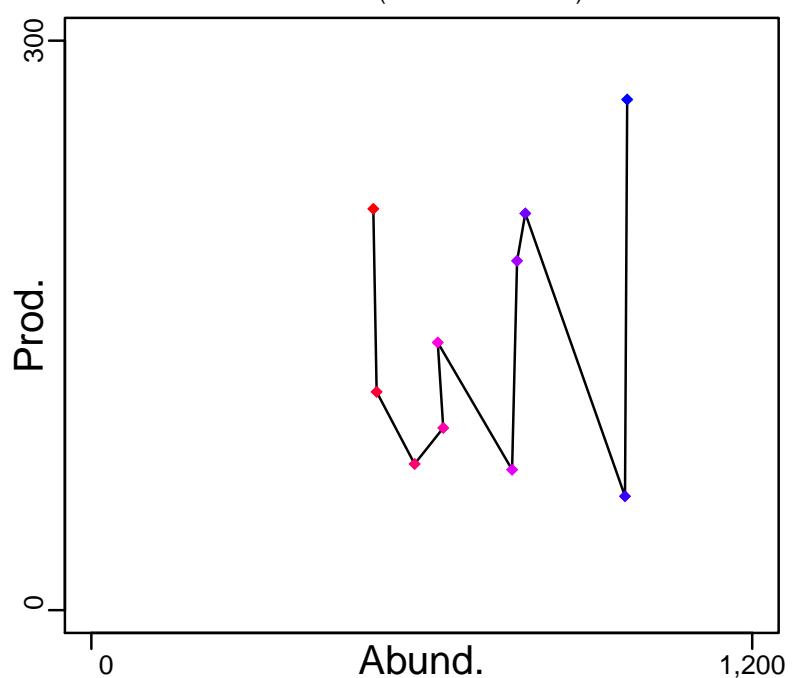
Kobe MGTpref (2005–2015–OSIO)



Spawner Recruit (2005–2015–OSIO)



Production (2005–2015–OSIO)

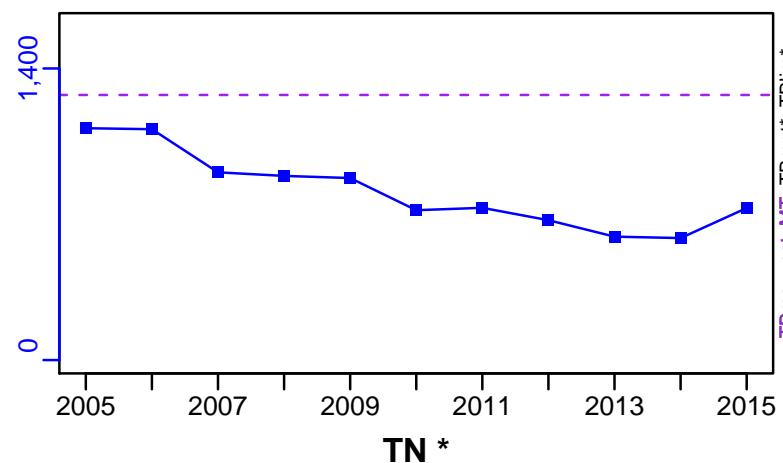


◆ Start Year   ◆ End Year   \* No Data

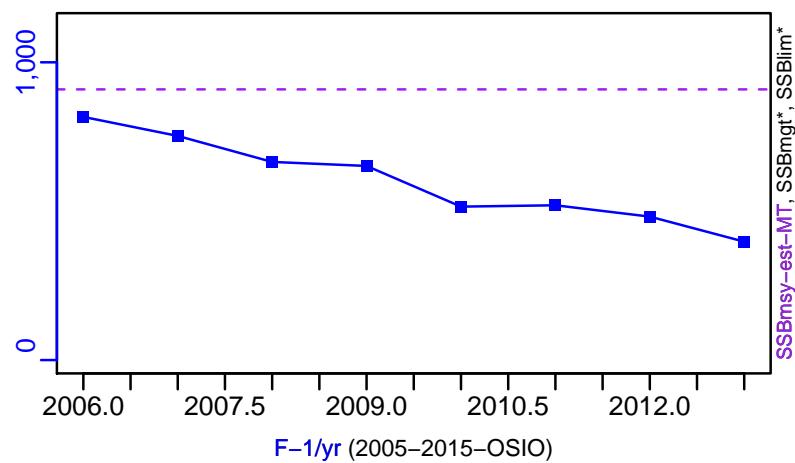
### Norway lobster Ligurian and North Tyrrhenian Sea [NEPHMEDGSA9]

TB-MT (2005–2015–OSIO)

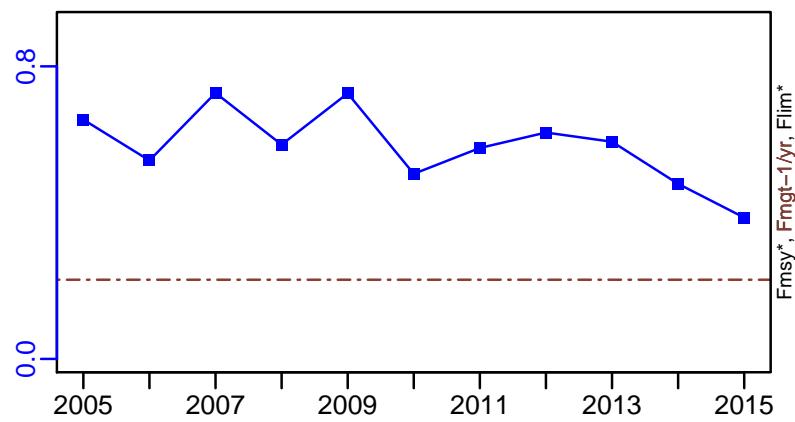
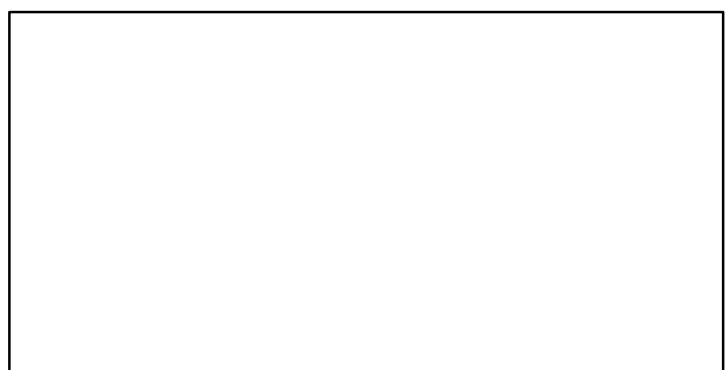
SSB-MT (2006–2013–OSIO)



TN \*

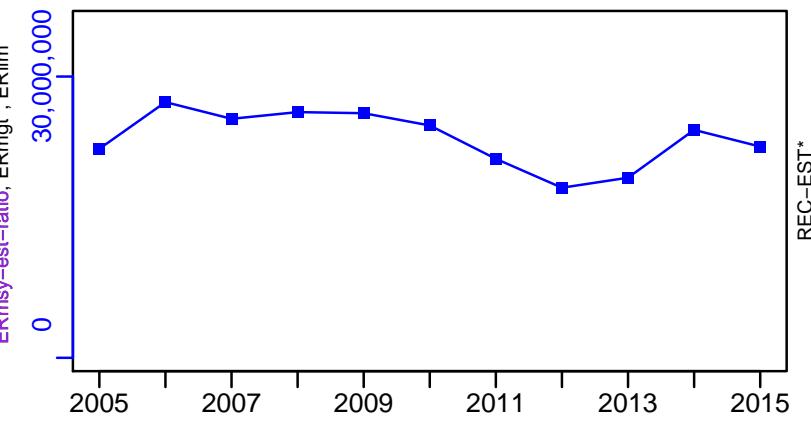
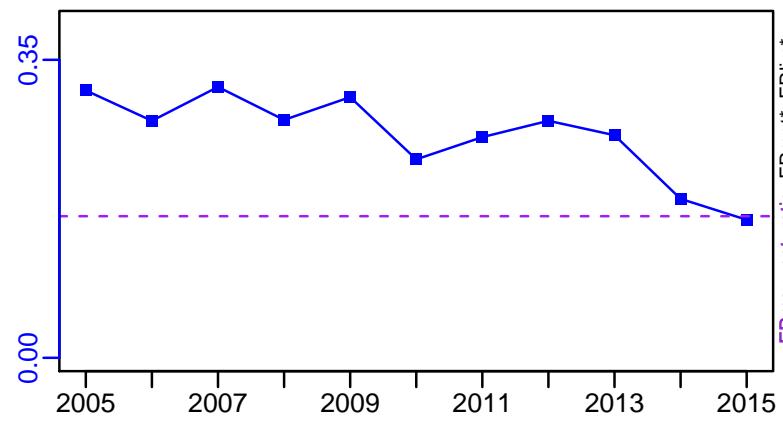


F-1/yr (2005–2015–OSIO)



ER-calc-ratio (2005–2015–OSIO)

R-E00 (2005–2015–OSIO)

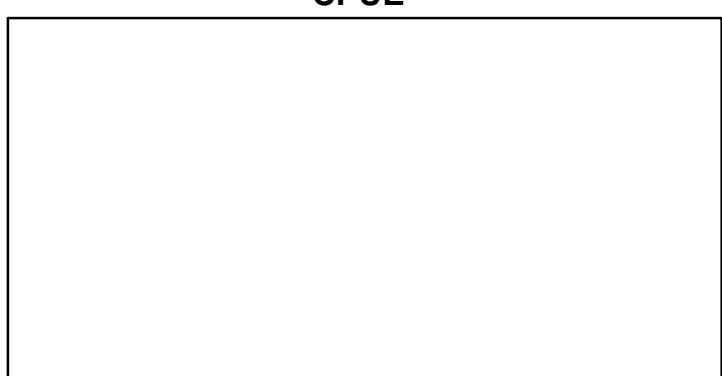
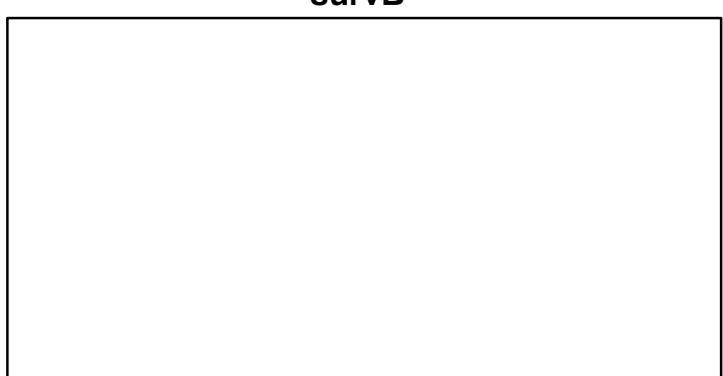
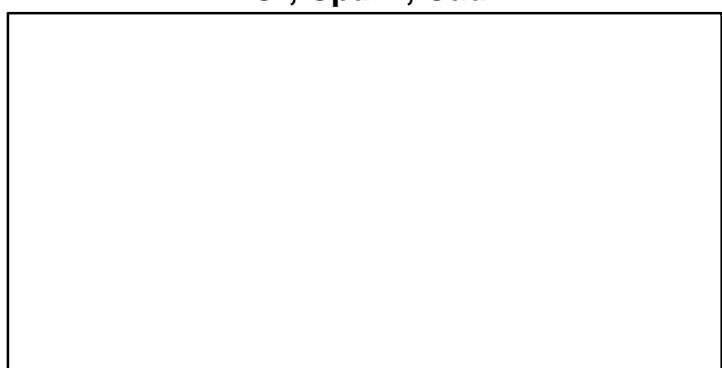
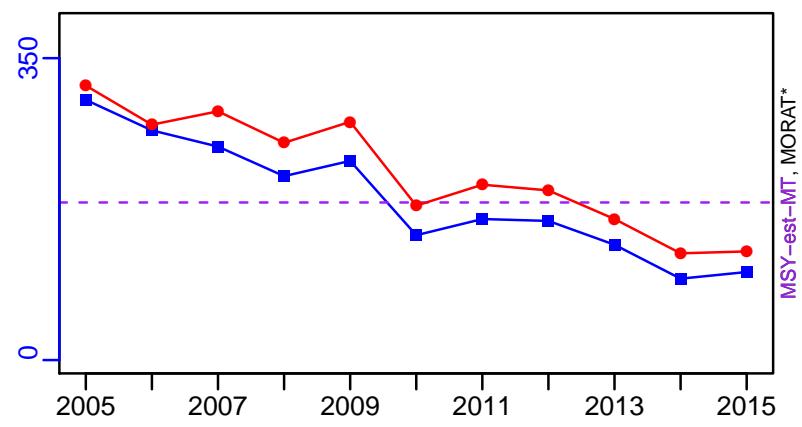


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

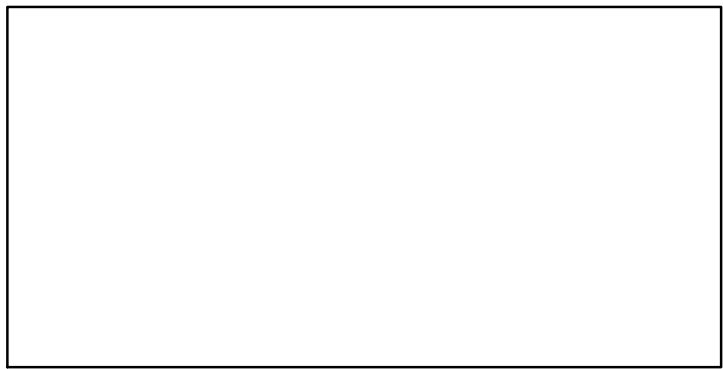
Norway lobster Ligurian and North Tyrrhenian Sea [NEPHMEDGSA9]

TC-MT, TL-MT, RecC\* (2005–2015–OSIO)

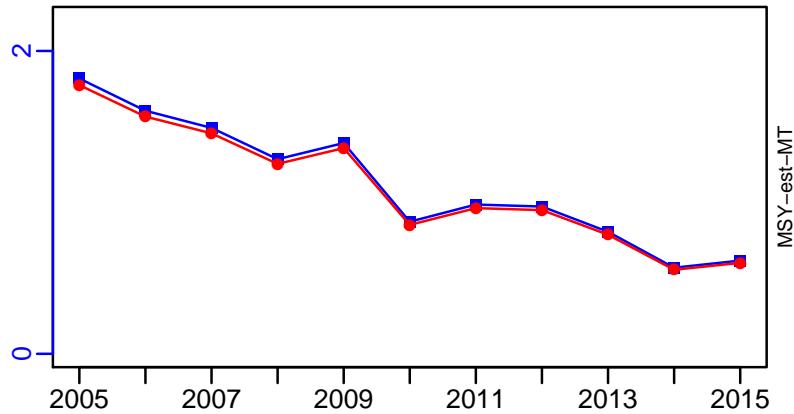
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2005–2015–OSIO)



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

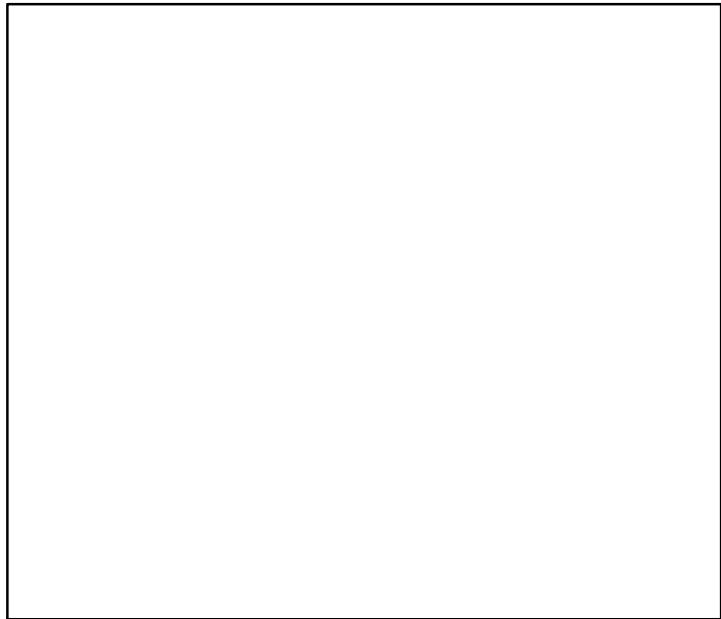
## Picarel Cyprus Island [PICAMEDGSA25]

Metadata	
<b>Scientific Name</b>	Spicara smaris
<b>Current Assess ID</b>	STECF-PICAMEDGSA25-2005-2010-OSIO
<b>Area</b>	Cyprus Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010

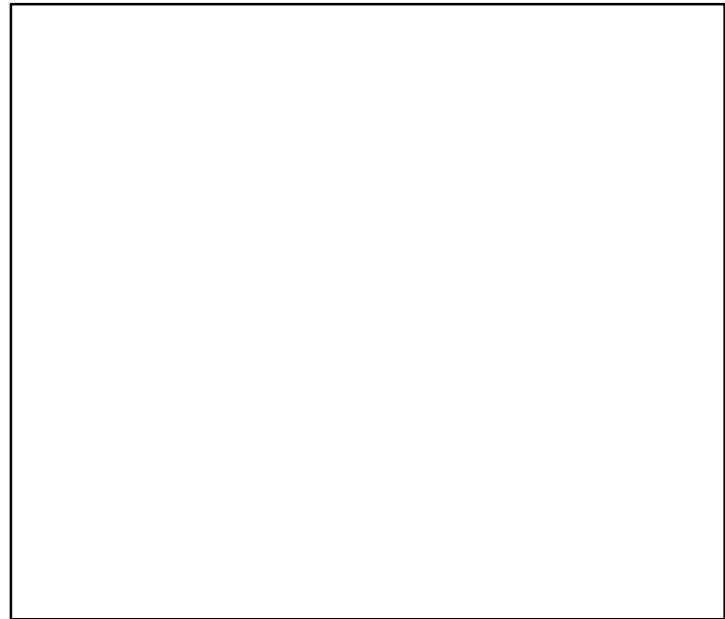
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2010	0.31
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2010	1350	-	0+
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	0.08	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2010	245		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2010	0.258		
<b>ER/ERmgt</b>	-	-	-		

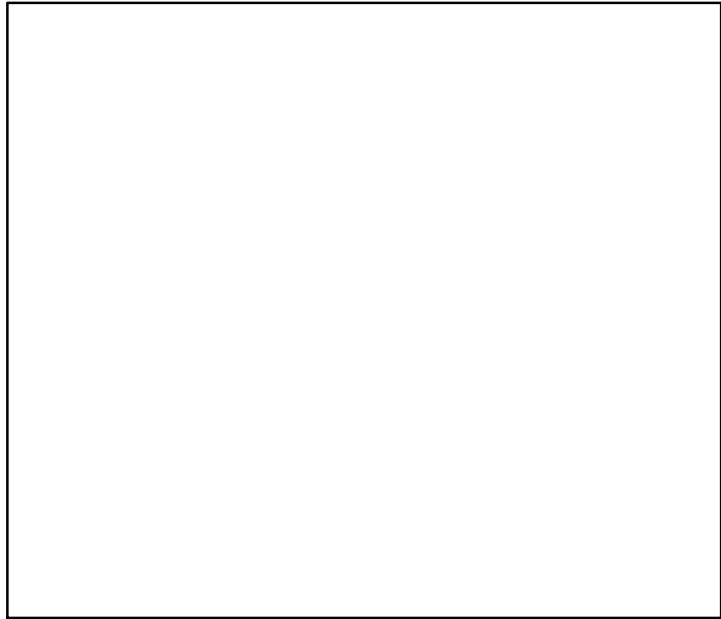
**Kobe MSY\***



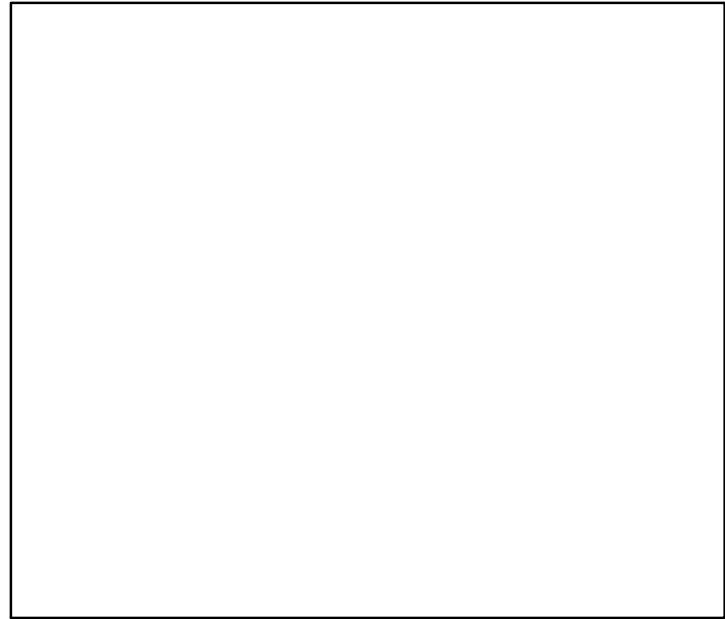
**Kobe MGT\***



**Spawner Recruit\***



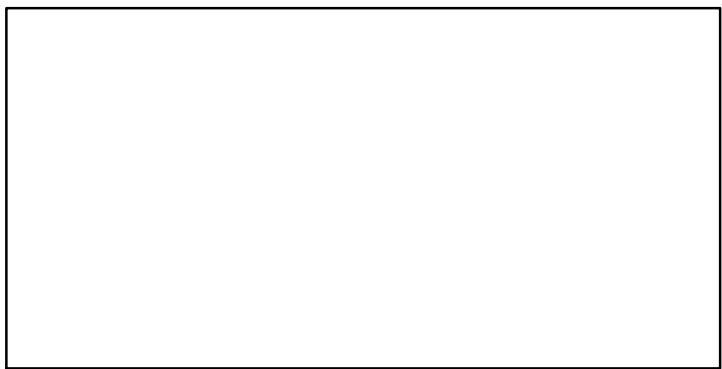
**Production\***



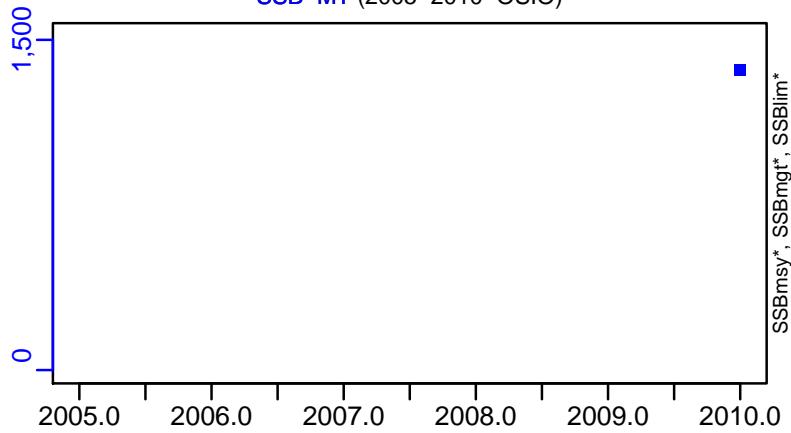
◆ Start Year ♦ End Year \* No Data

Picarel Cyprus Island [PICAMEDGSA25]

**TB\***



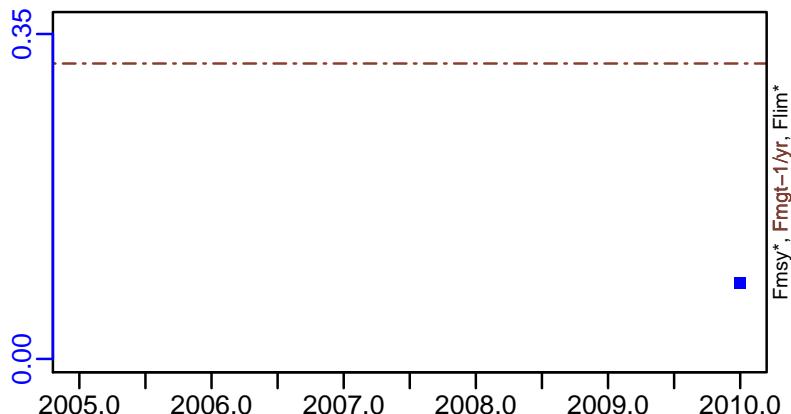
**SSB-MT** (2005–2010–OSIO)



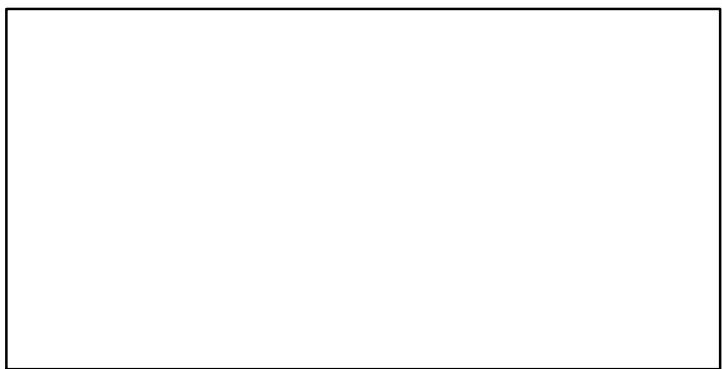
**TN \***



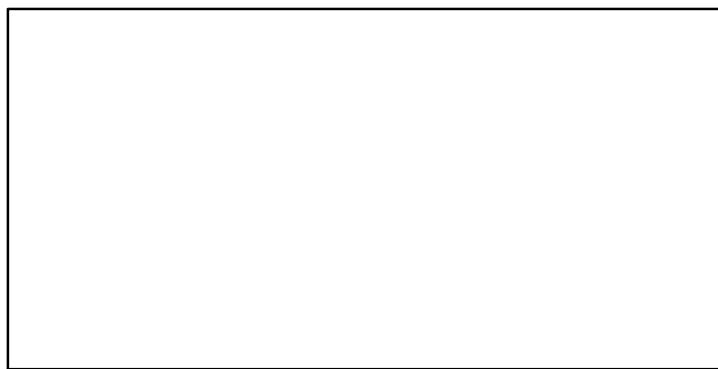
**F-1/yr** (2005–2010–OSIO)



**ER\***



**Recruits\***

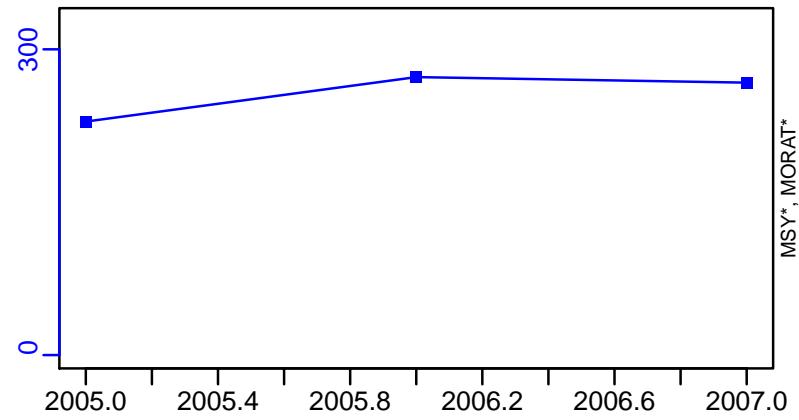


- |   |  |   |
|---|--|---|
| <span style="color: blue;">■</span> Listed time series<br><span style="color: purple;">—</span> MSY-based BRP | <span style="color: brown;">—</span> Target BRP<br><span style="color: cyan;">—</span> Lim BRP | <span style="color: gray;">—</span> Rec-Est<br><span style="color: black;">*</span> No Data |
|---|--|---|

Picarel Cyprus Island [PICAMEDGSA25]

TC-MT, TL\*, RecC\* (2005–2010–OSIO)

TAC\*, Cpair\*, Cadv\*



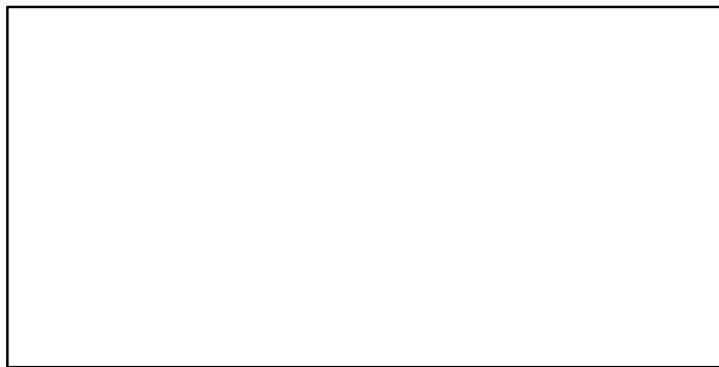
survB\*



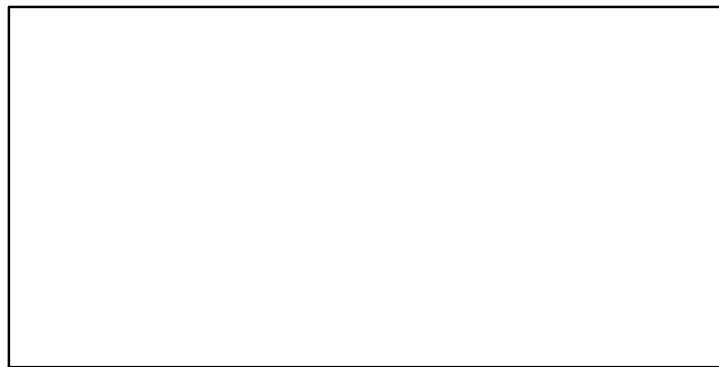
CPUE\*



EFFORT\*



CdivMSY\*



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

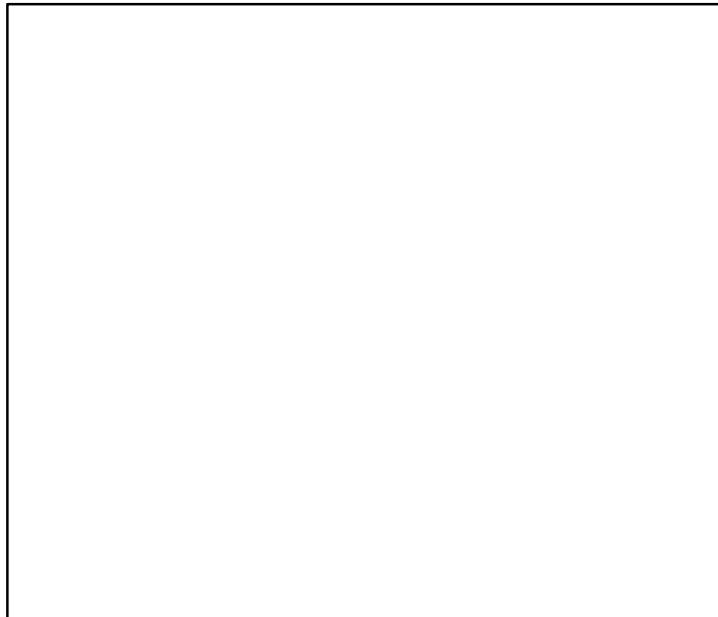
## Poor cod Ligurian and North Tyrrhenian Sea [PRCODMEDGSA9]

Metadata	
<b>Scientific Name</b>	Trisopterus minutus
<b>Current Assess ID</b>	STECF-PRCODMEDGSA9-2004-2011-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

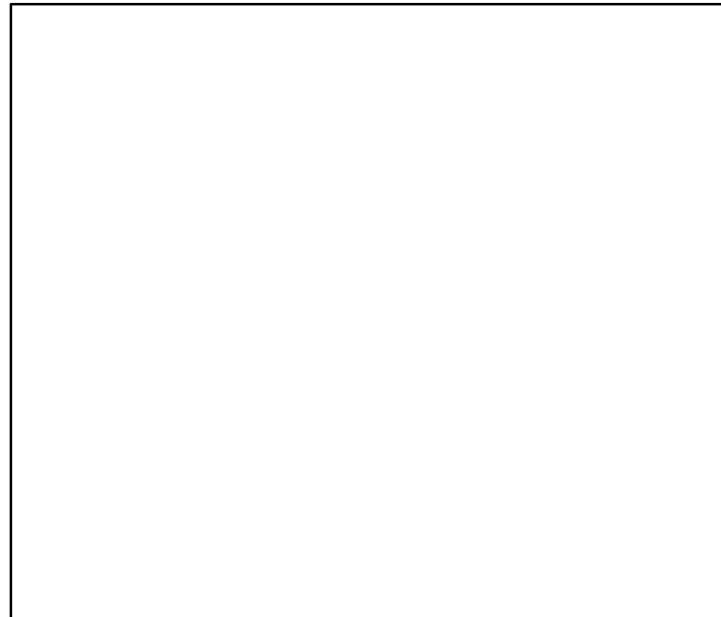
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.74
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	163	-	0+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	$3 \times 10^6$	-	-
<b>F</b>	F-1/yr	2011	0.9	-	-
<b>ER</b>	ER-calc-ratio	2011	0.251	-	-
<b>TC</b>	TC-MT	2011	105		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	1.216		
<b>ER/ERmgt</b>	-	-	-		

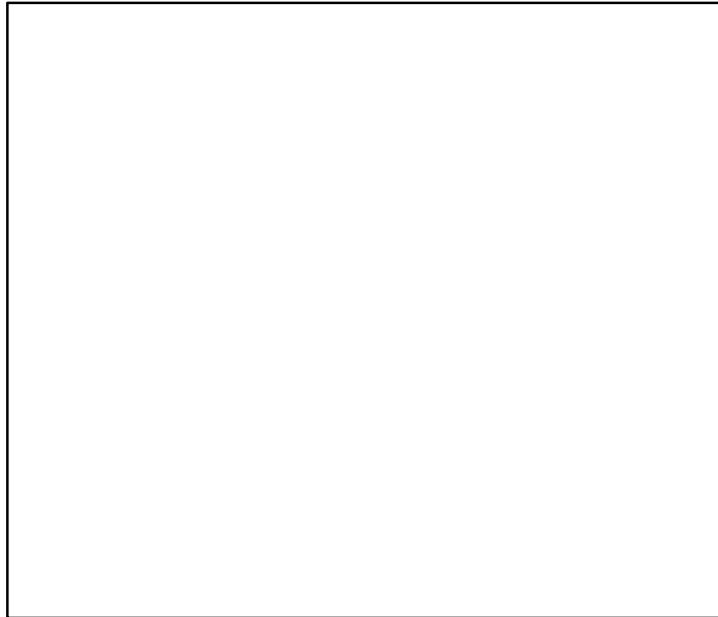
**Kobe MSY\***



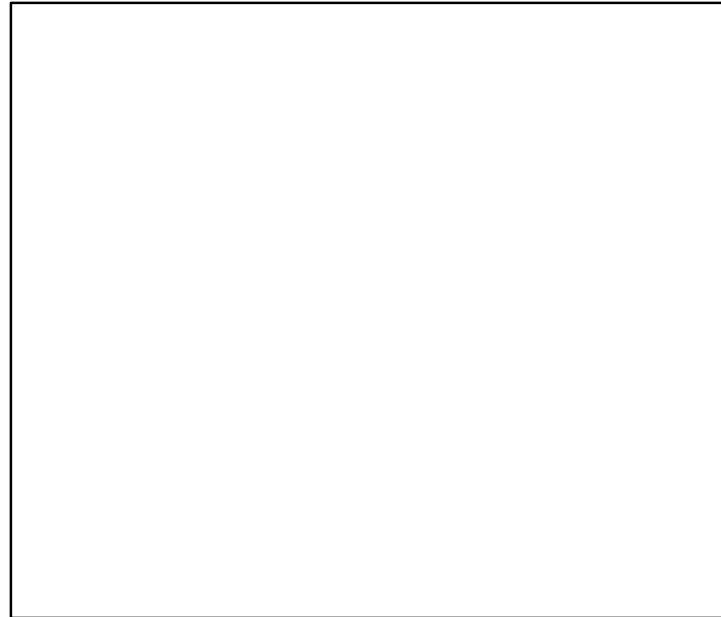
**Kobe MGT\***



**Spawner Recruit\***



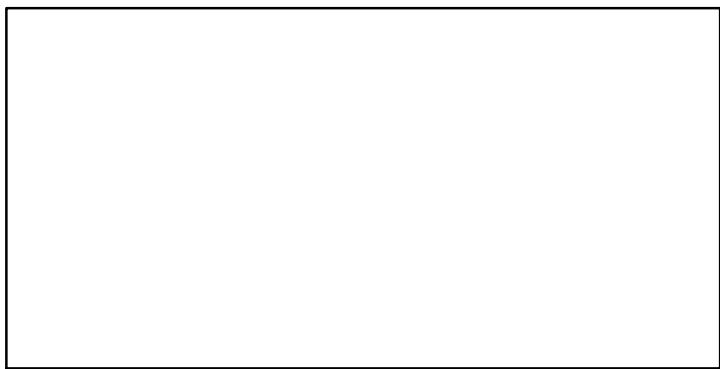
**Production\***



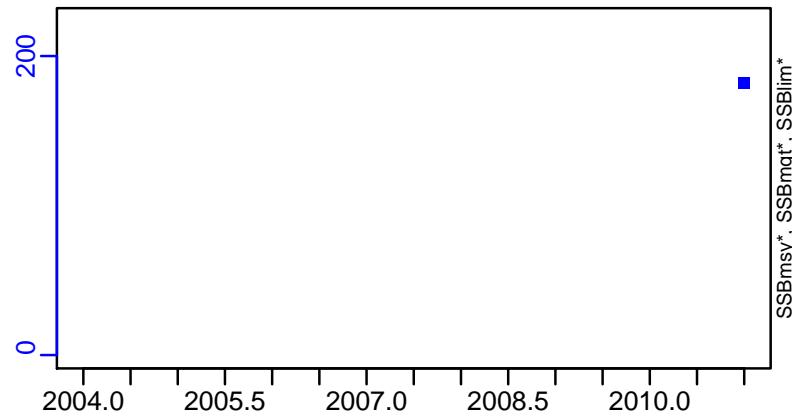
◆ Start Year ♦ End Year \* No Data

Poor cod Ligurian and North Tyrrhenian Sea [PRCODMEDGSA9]

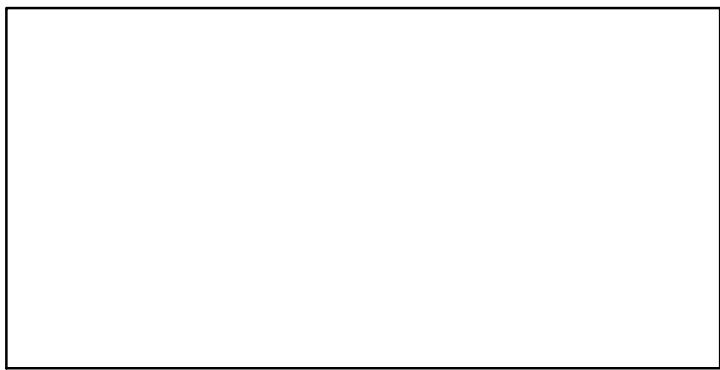
**TB\***



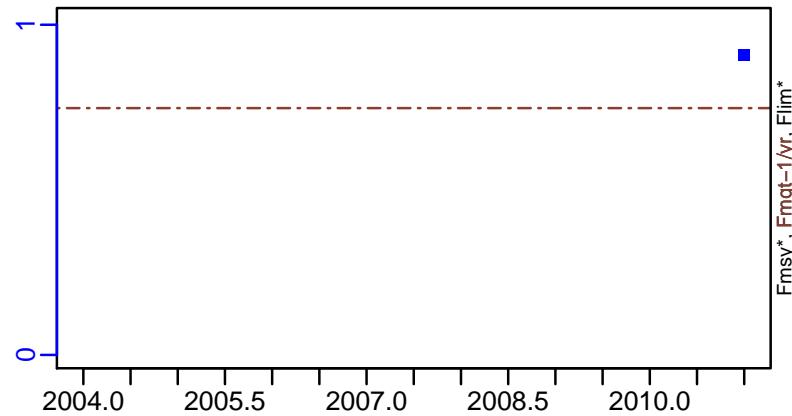
**SSB-MT** (2004–2011–OSIO)



**TN \***



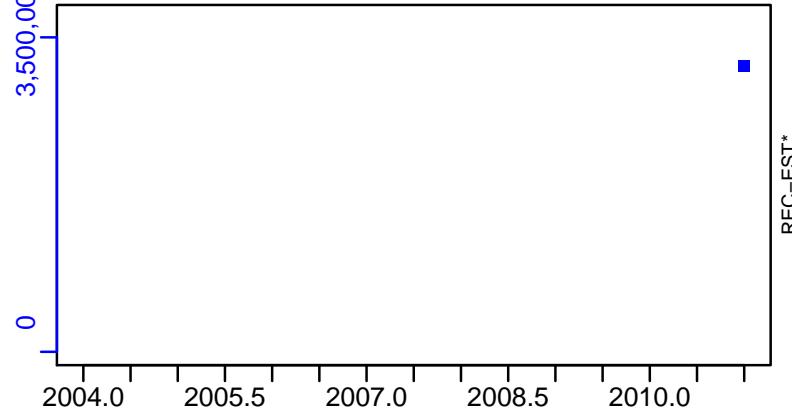
**F-1/yr** (2004–2011–OSIO)



**ER-calc-ratio** (2004–2011–OSIO)



**R-E00** (2004–2011–OSIO)

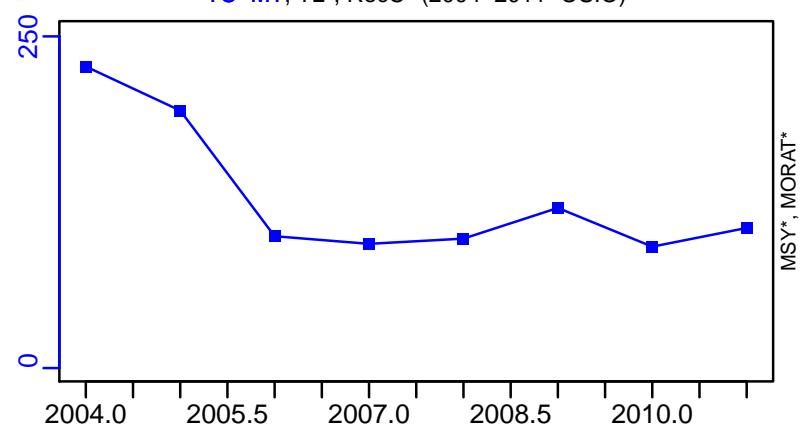


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - MSY-based BRP    | ·· Lim BRP   | * No Data |

Poor cod Ligurian and North Tyrrhenian Sea [PRCODMEDGSA9]

TC-MT, TL\*, RecC\* (2004–2011–OSIO)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

survB\*

CPUE\*

EFFORT\*

CdivMSY\*

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

## Deep water rose shrimp Northern Spain [PSHRMPMEDGSA6]

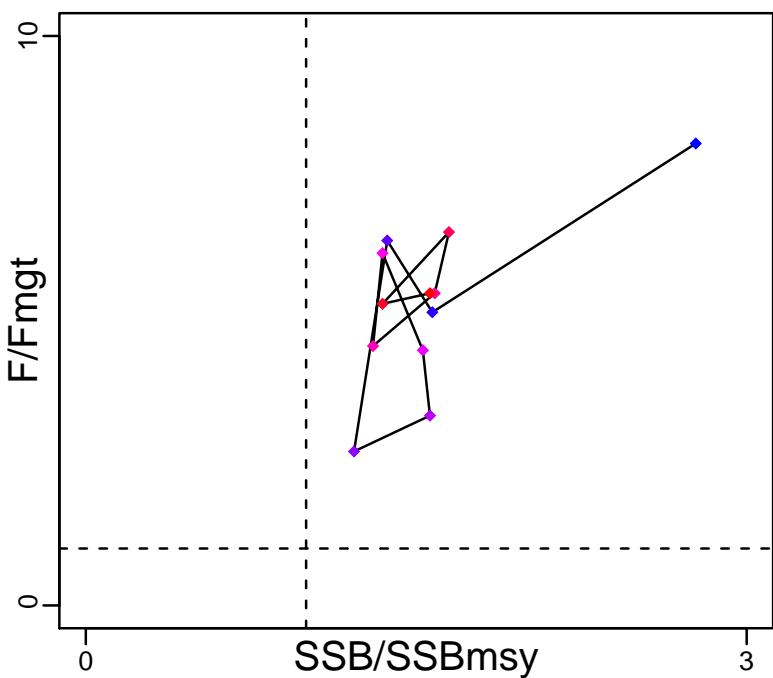
<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-PSHRMPMEDGSA6-2001-2012-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2012

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2012	93
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.328
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.27
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	140
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

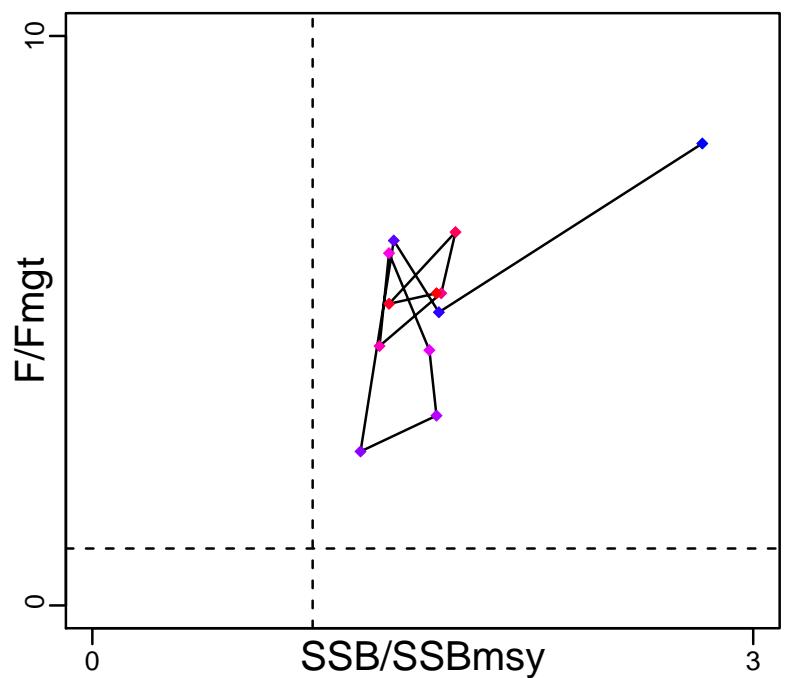
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	145	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2012	$1.26 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2012	1.48	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.18	-	-	
<b>TC</b>	TC-MT	2012	120			
<b>TL</b>	TL-MT	2011	92			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	1.562			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.549			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	5.481			
<b>ER/ERmgt</b>	-	-	-			

Deep water rose shrimp Northern Spain [PSHRMPMEDGSA6]

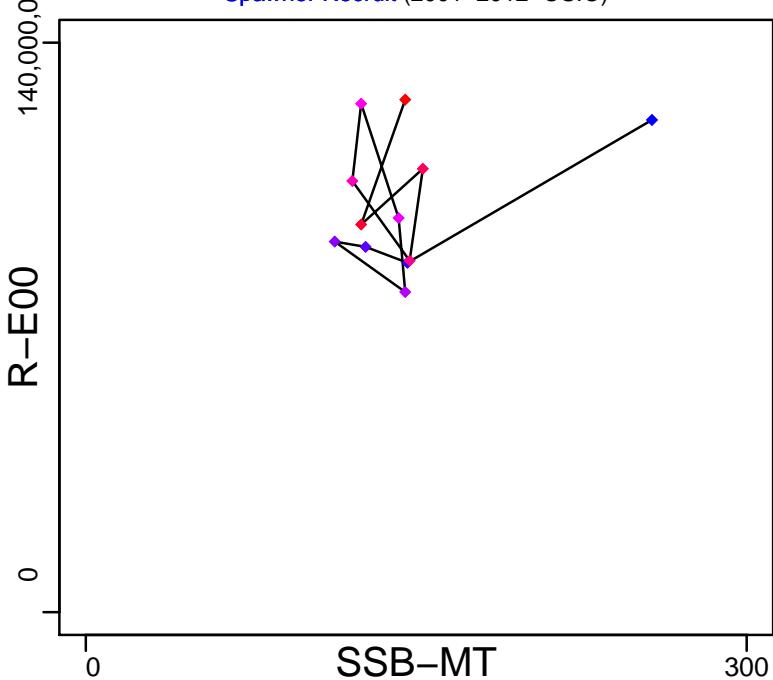
Kobe MSYpref (2001–2012–OSIO)



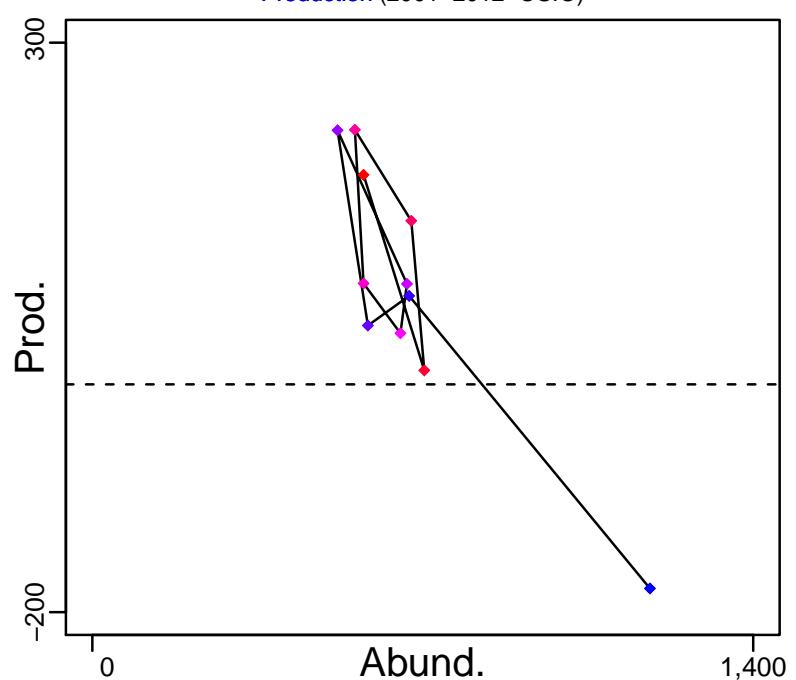
Kobe MGTpref (2001–2012–OSIO)



Spawner Recruit (2001–2012–OSIO)



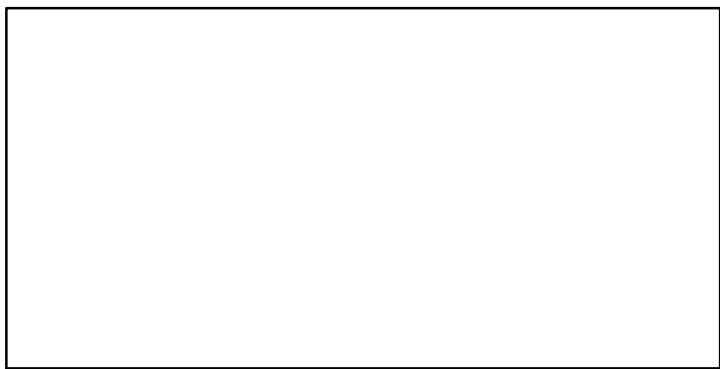
Production (2001–2012–OSIO)



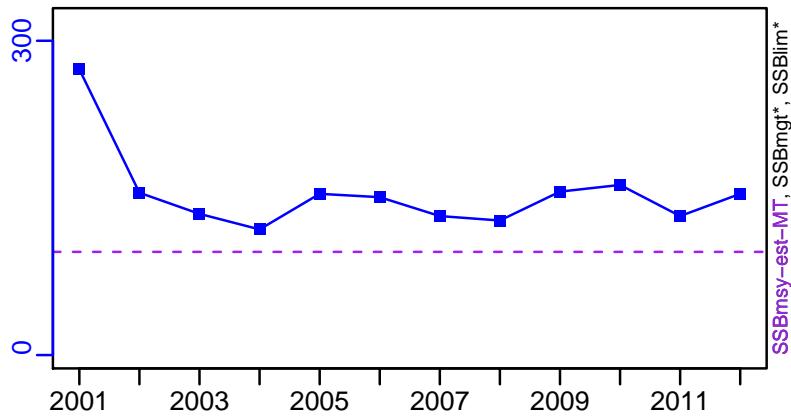
◆ Start Year   ◆ End Year   \* No Data

Deep water rose shrimp Northern Spain [PSHRMPMEDGSA6]

**TB\***



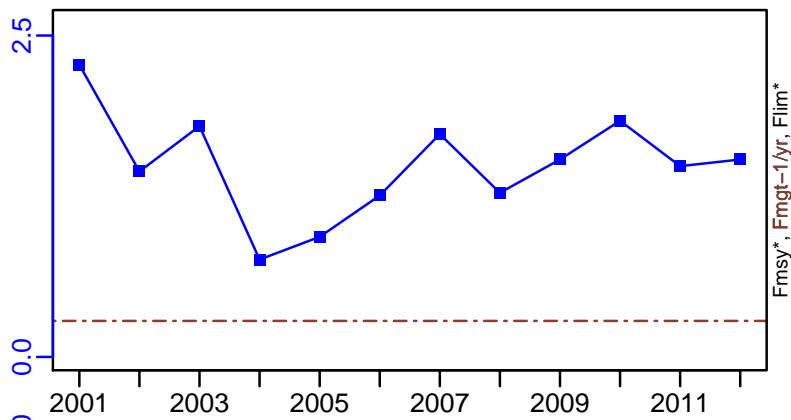
**SSB-MT (2001–2012–OSIO)**



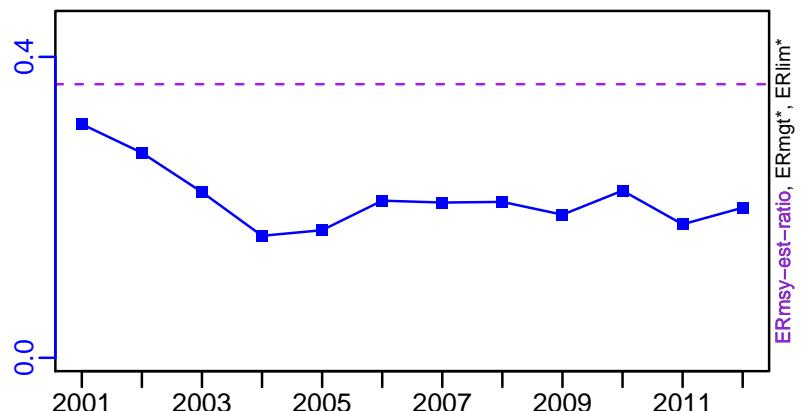
**TN \***



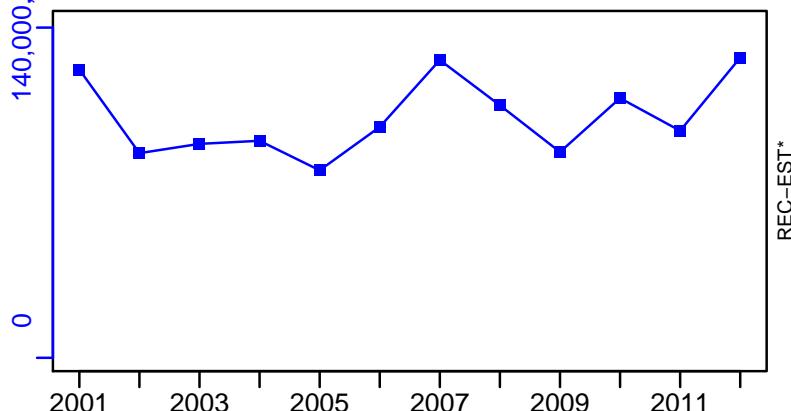
**F-1/yr (2001–2012–OSIO)**



**ER-calc-ratio (2001–2012–OSIO)**



**R-E00 (2001–2012–OSIO)**

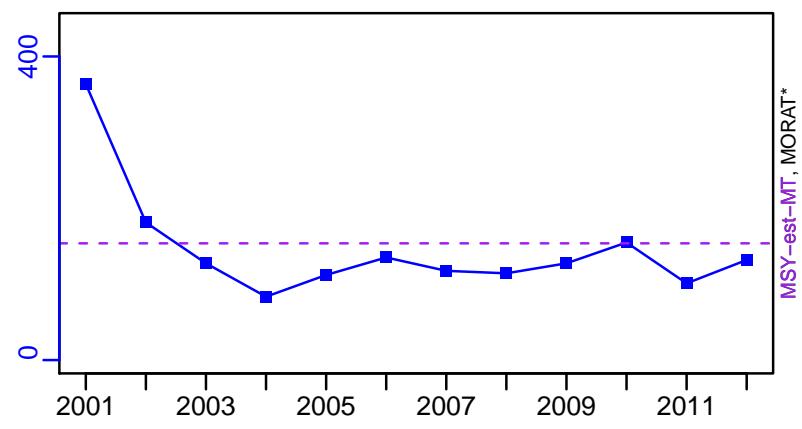


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

Deep water rose shrimp Northern Spain [PSHRMPMEDGSA6]

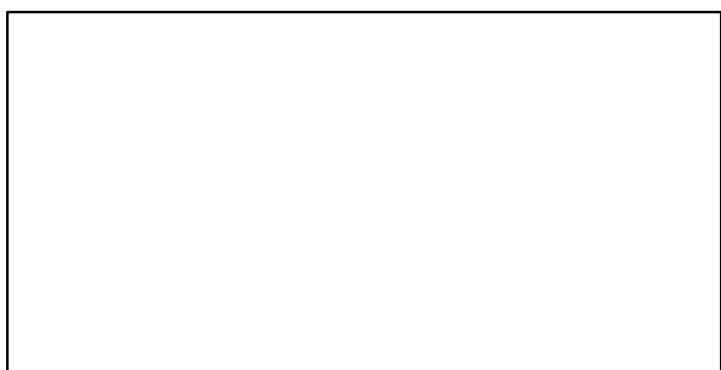
TC-MT, TL\*, RecC\* (2001–2012–OSIO)

TAC\*, Cpair\*, Cadv\*

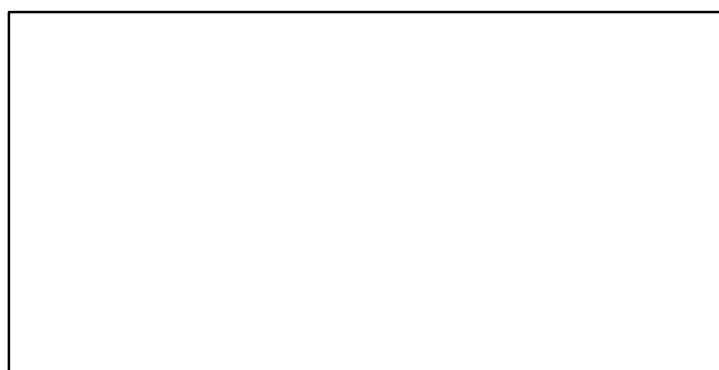


survB\*

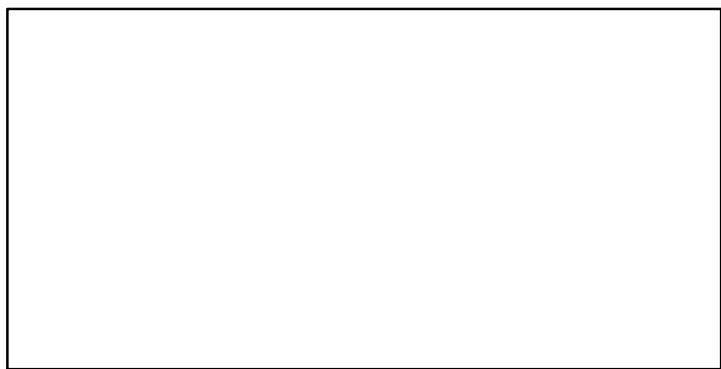
MSY-est-MT, MORAT\*



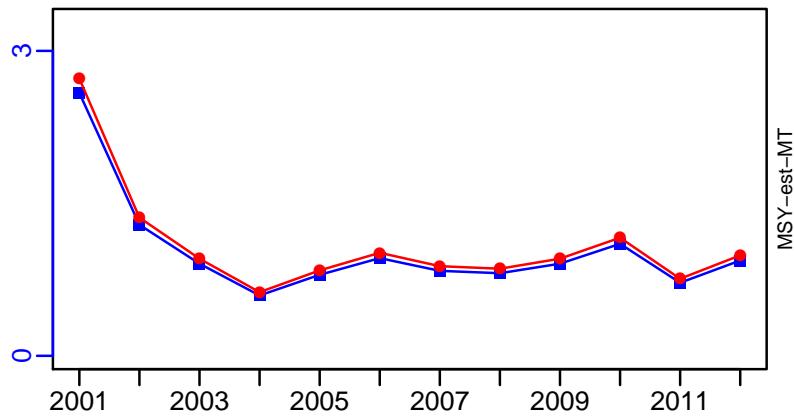
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2001–2012–OSIO)



MSY-est-MT

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

## Red seabream Alboran Island Sea (GSA 1,3) [RBRMMEDGSA1-3]

<b>Metadata</b>	
<b>Scientific Name</b>	Pagellus bogaraveo
<b>Current Assess ID</b>	GRP7-RBRMMEDGSA1-3-2009-2011-BANOBI
<b>Area</b>	Alboran Island Sea (GSA 1,3)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	INRH-NADOR, IEO-MALAGA
<b>Asmts in RAM</b>	2011

<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	2011	0.2
<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>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2011	0.194	-	2 to 6
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2011	258		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

**Spawner Recruit\***

**Production\***

◆ Start Year ♦ End Year \* No Data

Red seabream Alboran Island Sea (GSA 1,3) [RBRMMEDGSA1–3]

**TB\***



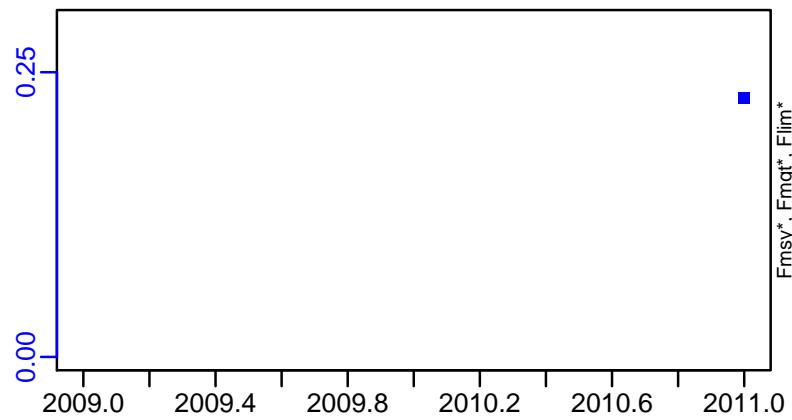
**SSB\***



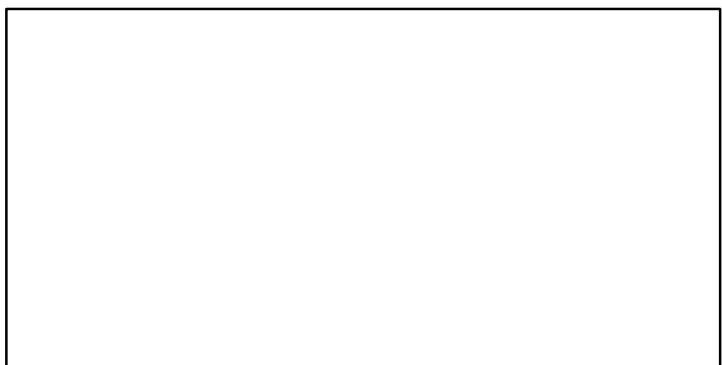
**TN \***



**F-1/yr (2009–2011–BANOBI)**



**ER\***



**Recruits\***

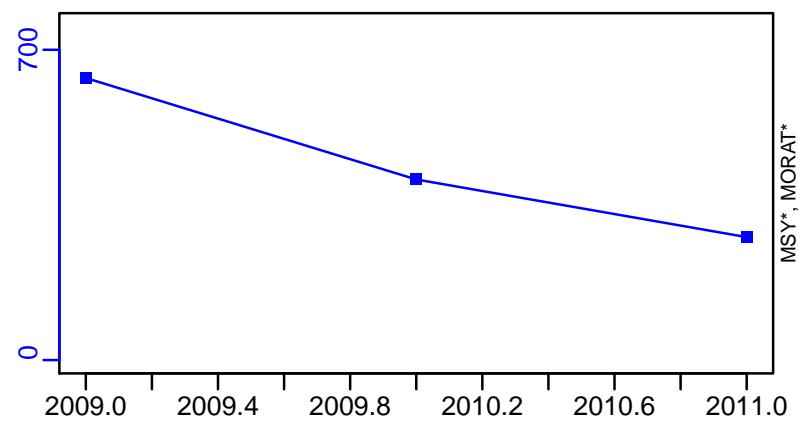


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - MSY-based BRP    | --- Lim BRP  | * No Data |

Red seabream Alboran Island Sea (GSA 1,3) [RBRMMEDGSA1–3]

TC-MT, TL\*, RecC\* (2009–2011–BANOBI)

TAC\*, Cpair\*, Cadv\*



**survB\***

**CPUE\***

**EFFORT\***

**CdivMSY\***

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

## Red shrimp Northern Alboran Sea [RDSHRMPMEDGSA1]

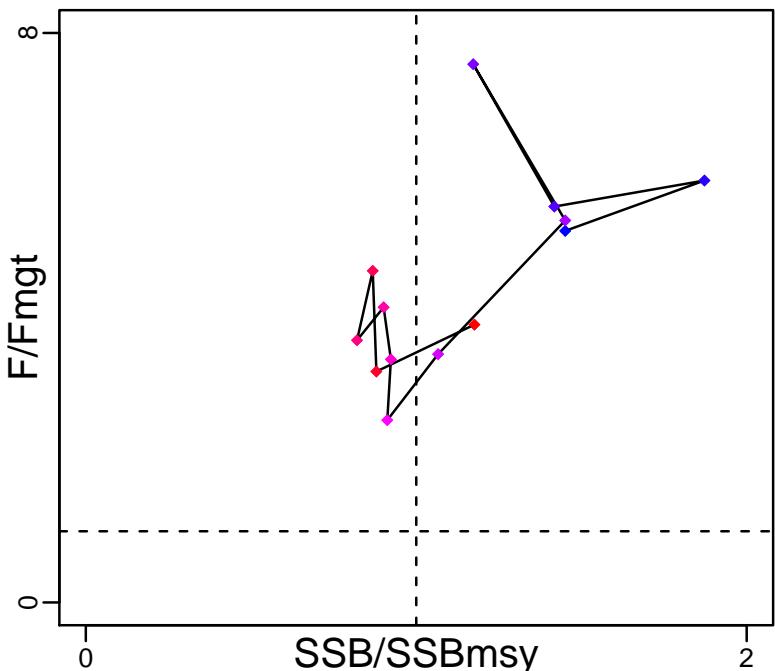
<b>Metadata</b>	
<b>Scientific Name</b>	Aristeus antennatus
<b>Current Assess ID</b>	STECF-RDSHRMPMEDGSA1-2002-2014-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	273
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.25
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.41
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	202
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	1287
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

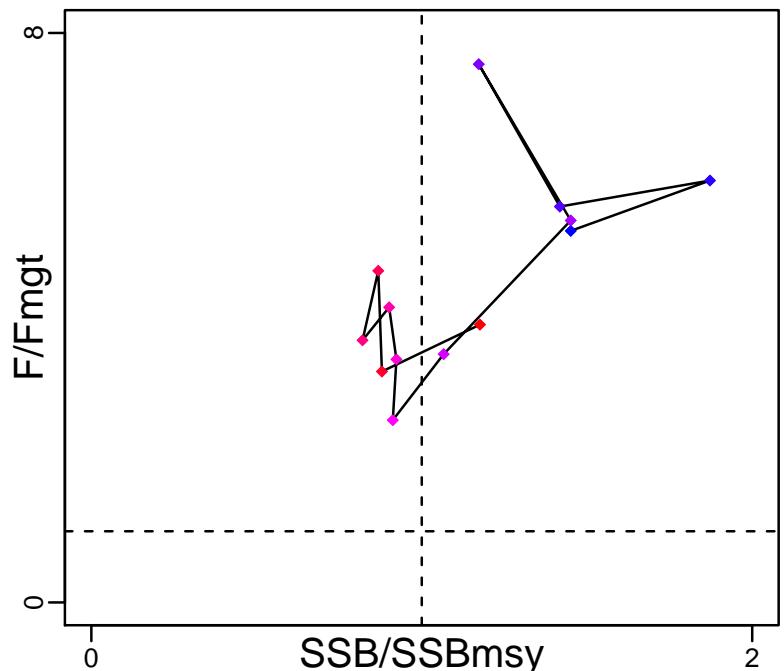
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	321	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	34,700,000	-	-	
<b>F</b>	F-1/yr	2014	1.6	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.193	-	-	
<b>TC</b>	TC-MT	2014	184			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.176			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.775			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	3.902			
<b>ER/ERmgt</b>	-	-	-			

**Red shrimp Northern Alboran Sea [RDSHRMPMEDGSA1]**

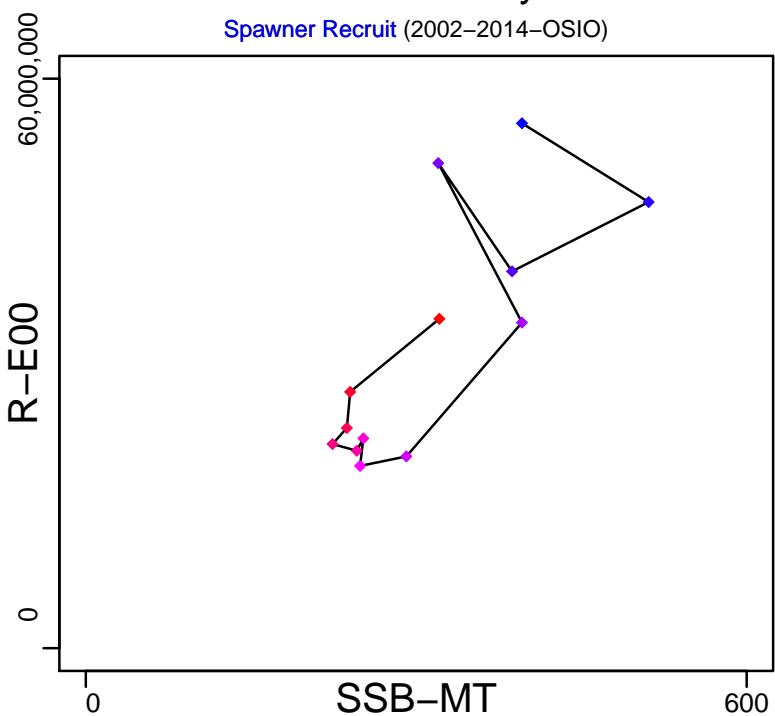
Kobe MSYpref (2002–2014–OSIO)



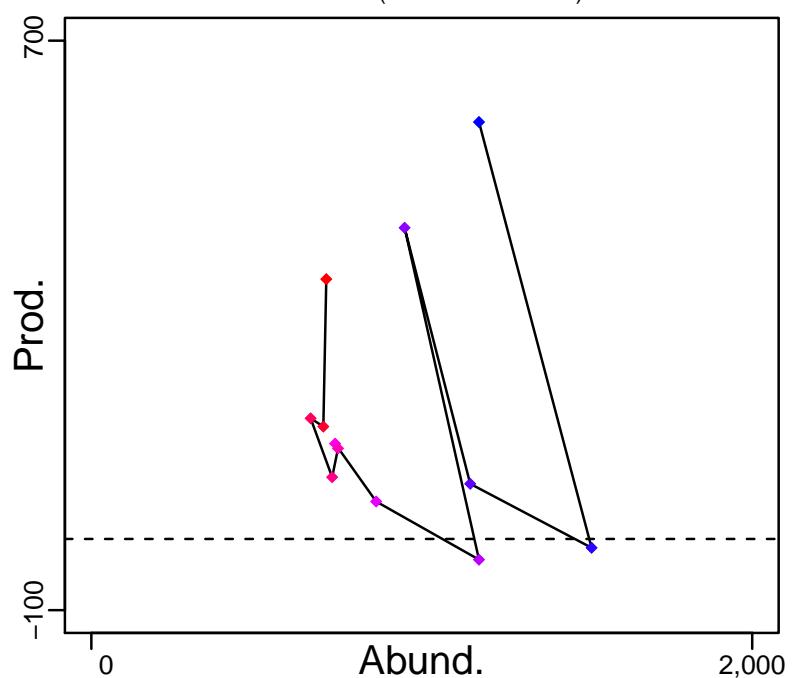
Kobe MGTpref (2002–2014–OSIO)



Spawner Recruit (2002–2014–OSIO)



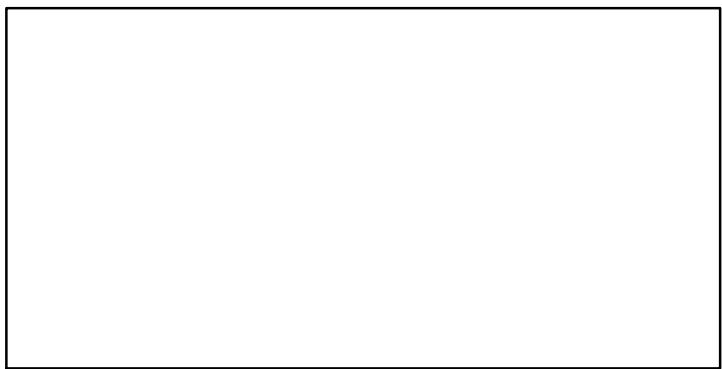
Production (2002–2014–OSIO)



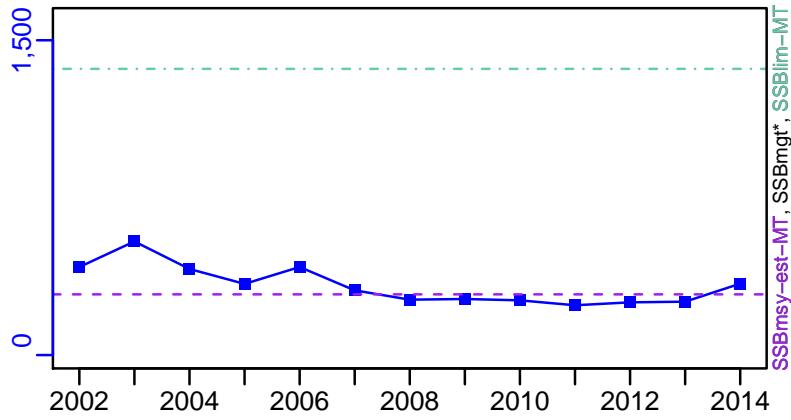
◆ Start Year   ◆ End Year   \* No Data

Red shrimp Northern Alboran Sea [RDSHRMPMEDGSA1]

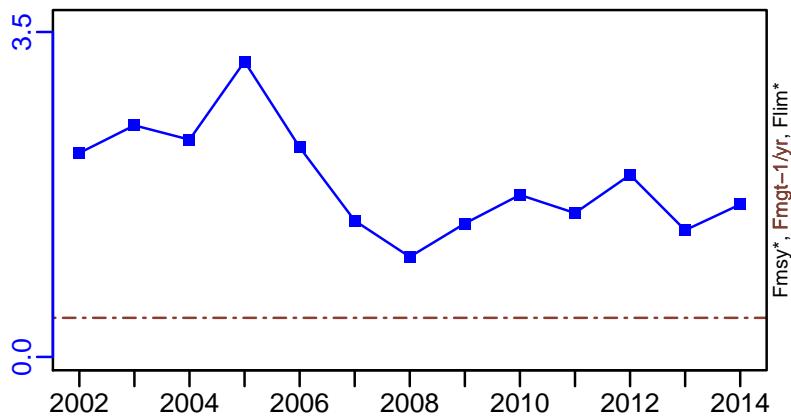
**TB\***



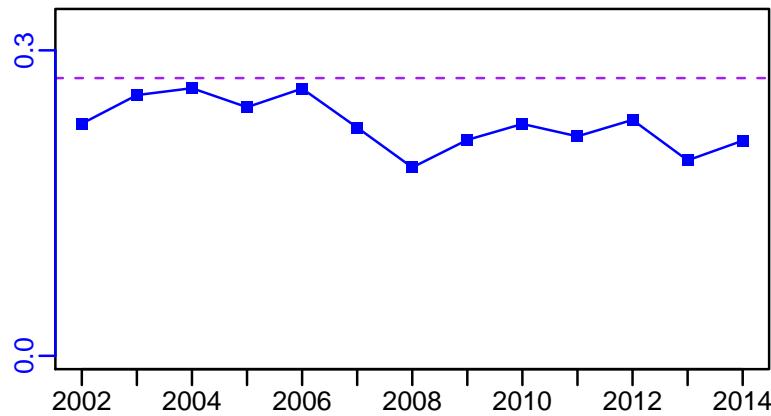
**SSB-MT (2002–2014–OSIO)**



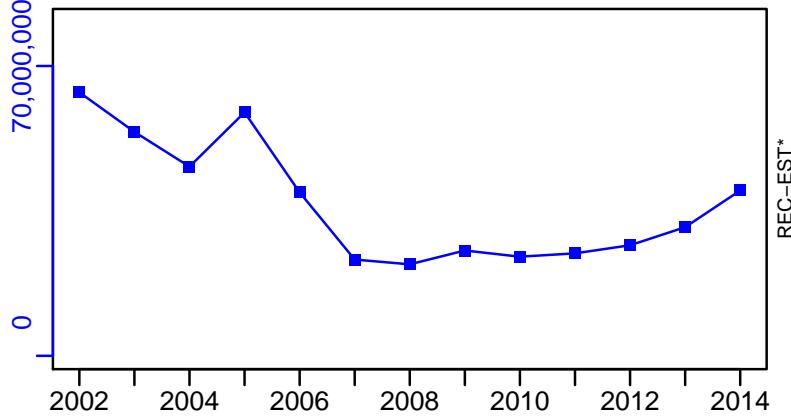
**TN \***



**ER-calc-ratio (2002–2014–OSIO)**



**R-E00 (2002–2014–OSIO)**

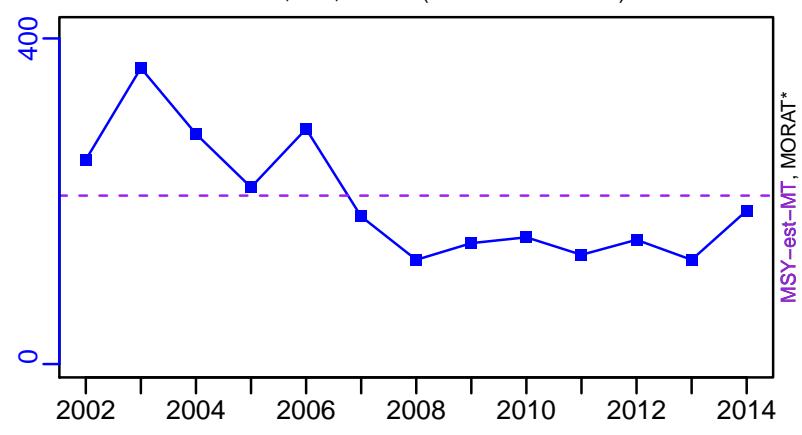


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Red shrimp Northern Alboran Sea [RDSHRMPMEDGSA1]

TC-MT, TL\*, RecC\* (2002–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

MSY-est-MT, MORAT\*

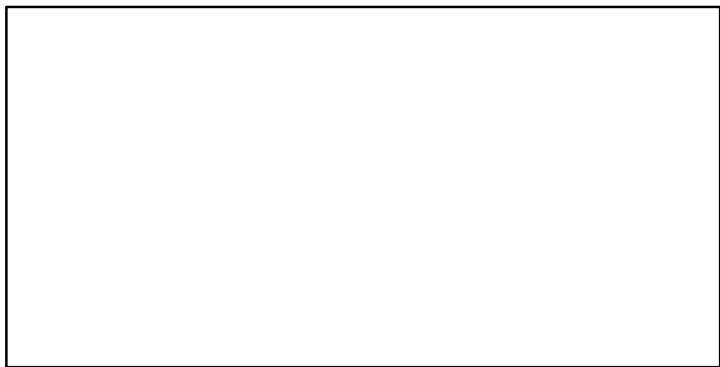
TAC\*, Cpair\*, Cadv\*



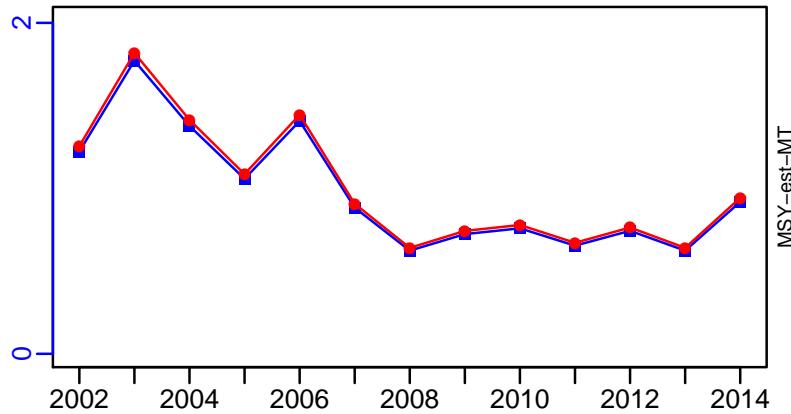
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2002–2014–OSIO)



MSY-est-MT

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

## Red shrimp South Tyrrhenian Sea [RDSHRMPMEDGSA10]

<b>Metadata</b>	
<b>Scientific Name</b>	Aristeus antennatus
<b>Current Assess ID</b>	STECF-RDSHRMPMEDGSA10-2006-2011-OSIO
<b>Area</b>	South Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

<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>	Fmgt-1/yr	2011	0.31
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2011	48		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

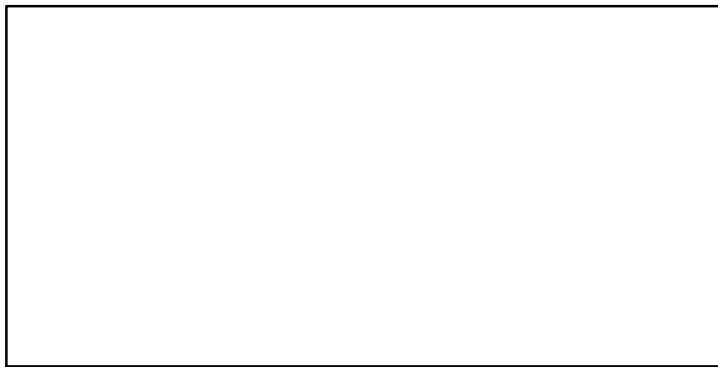
**Spawner Recruit\***

**Production\***

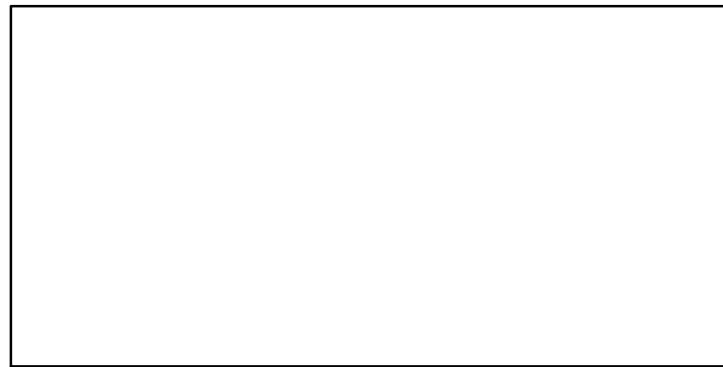
◆ Start Year ♦ End Year \* No Data

**Red shrimp South Tyrrhenian Sea [RDSHRMPMEDGSA10]**

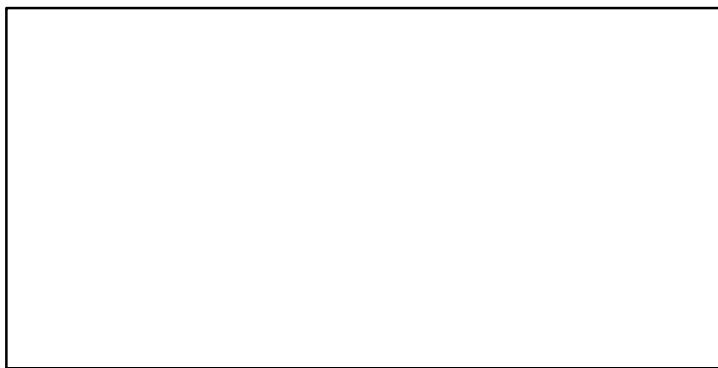
**TB\***



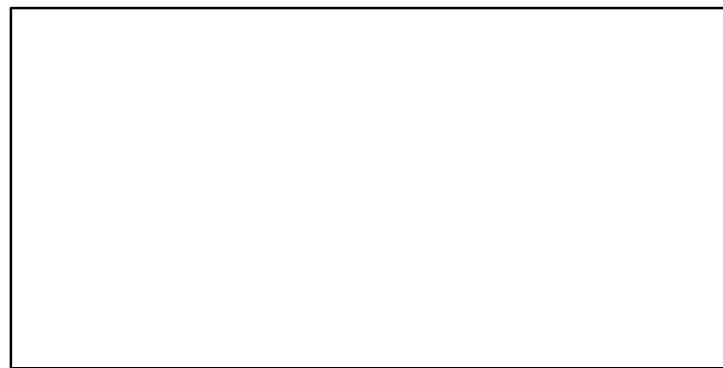
**SSB\***



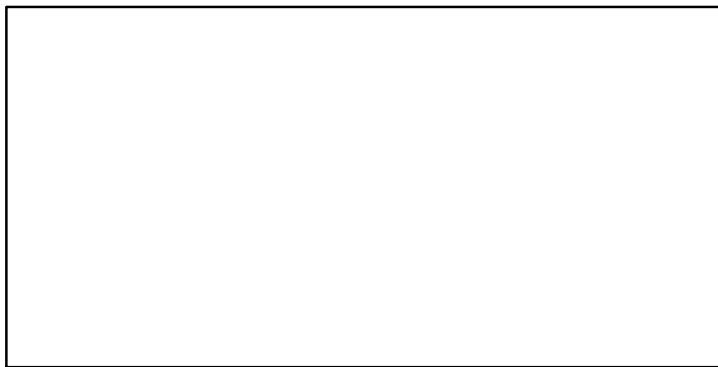
**TN \***



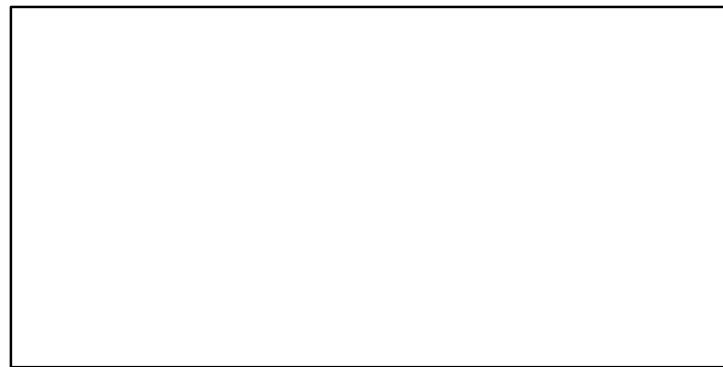
**F\***



**ER\***



**Recruits\***

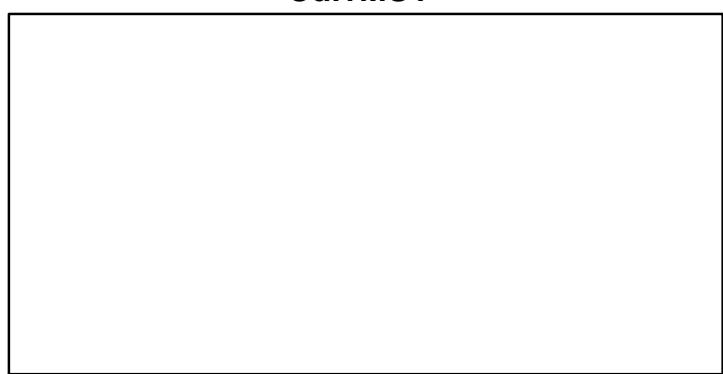
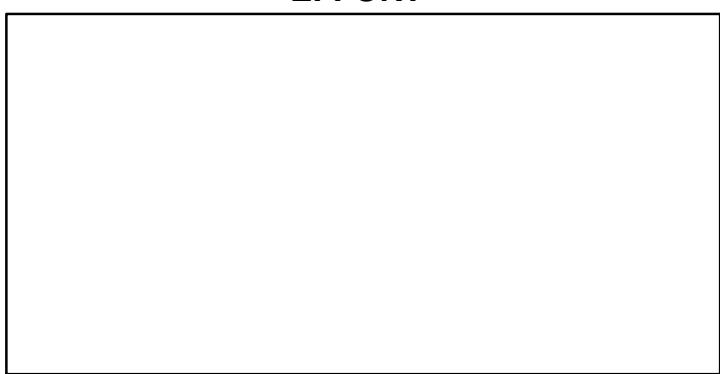
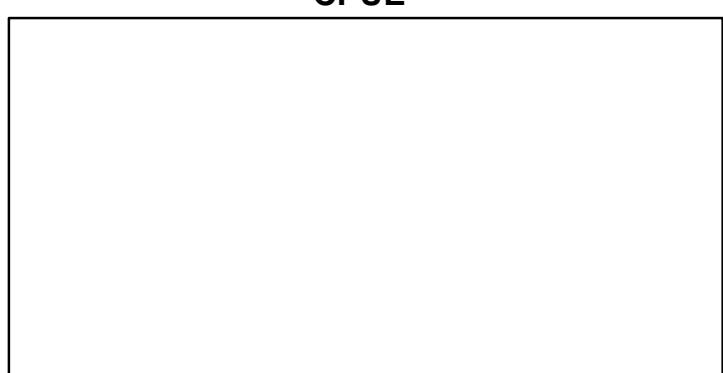
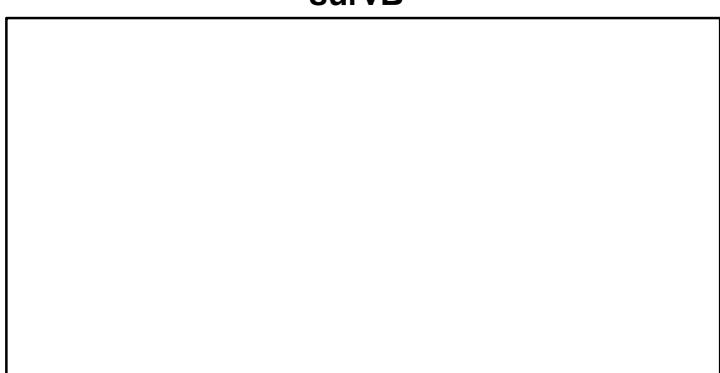
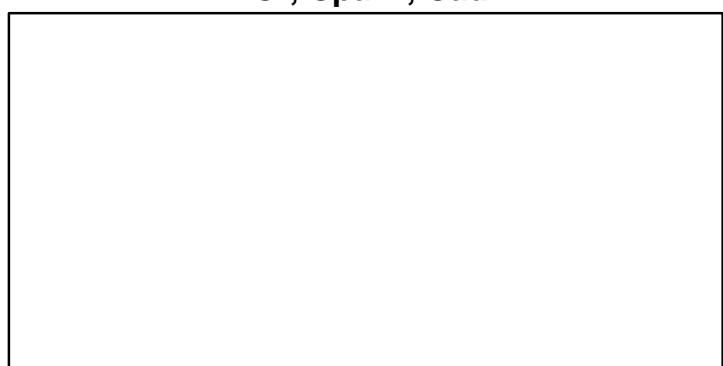
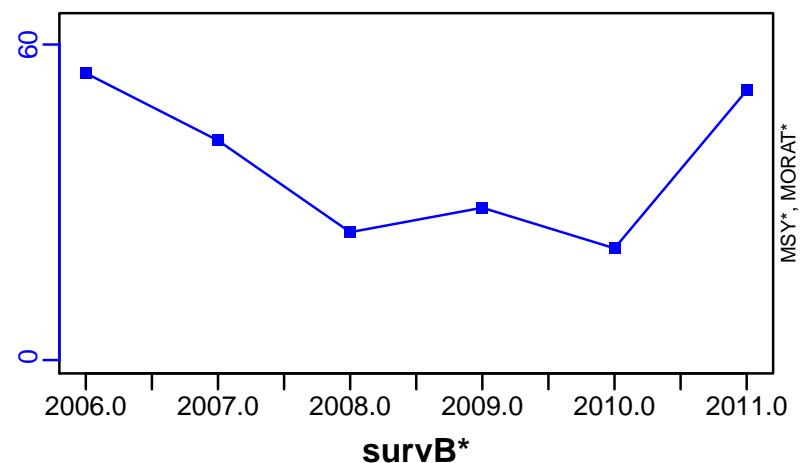


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

Red shrimp South Tyrrhenian Sea [RDSHRMPMEDGSA10]

TC-MT, TL\*, RecC\* (2006–2011–OSIO)

TAC\*, Cpair\*, Cadv\*



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

**Red shrimp Malta Island and South of Sicily (GSA 15, 16)**  
**[RDSHRMPMEDGSA15-16]**

Metadata	
<b>Scientific Name</b>	Aristeus antennatus
<b>Current Assess ID</b>	STECF-RDSHRMPMEDGSA15-16-2009-2012-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2012	94		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

**Spawner Recruit\***

**Production\***

◆ Start Year ♦ End Year \* No Data

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



**Recruits\***

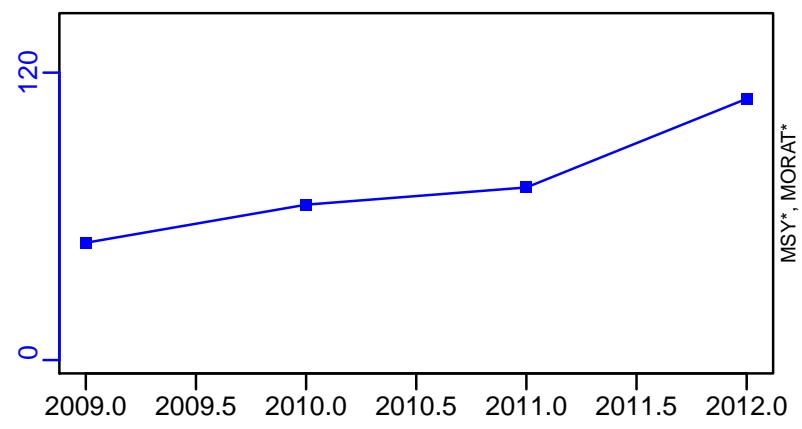


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

**Red shrimp Malta Island and South of Sicily (GSA 15, 16) [RDSHRMPMEDGSA15–16]**

**TC–MT**, TL\*, RecC\* (2009–2012–OSIO)

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



**survB\***

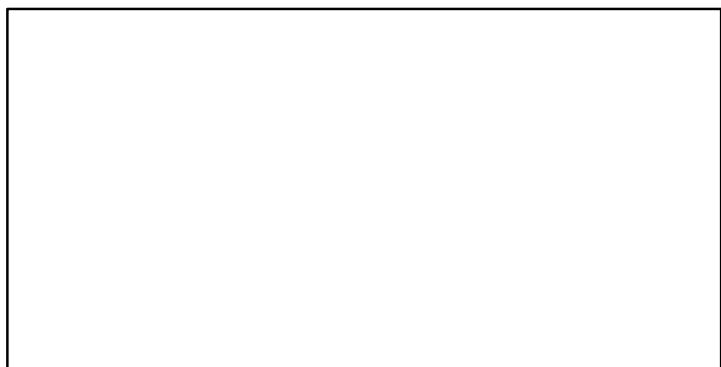
MSY\*, MORAT\*



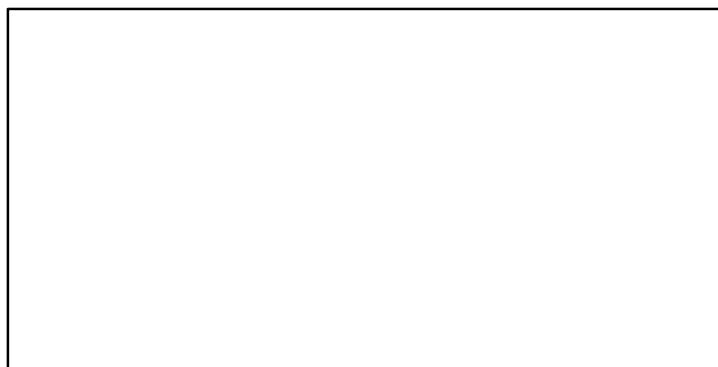
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Red shrimp Northern Spain [RDSHRMPMEDGSA6]

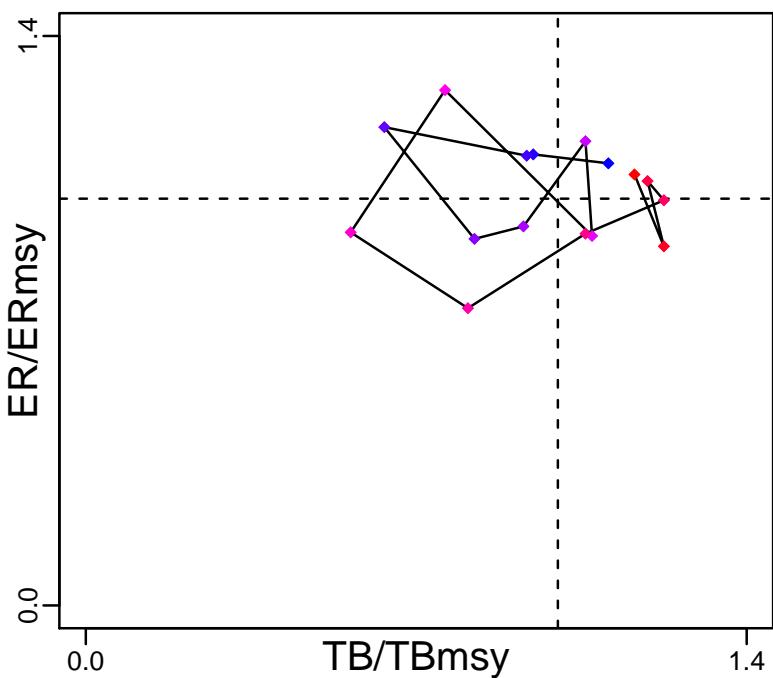
<b>Metadata</b>	
<b>Scientific Name</b>	Aristeus antennatus
<b>Current Assess ID</b>	STECF-RDSHRMPMEDGSA6-2002-2014-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2011	1445
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2011	0.414
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.36
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2011	598
<b>M</b>	M-1/yr	2011	0.46
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	224
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

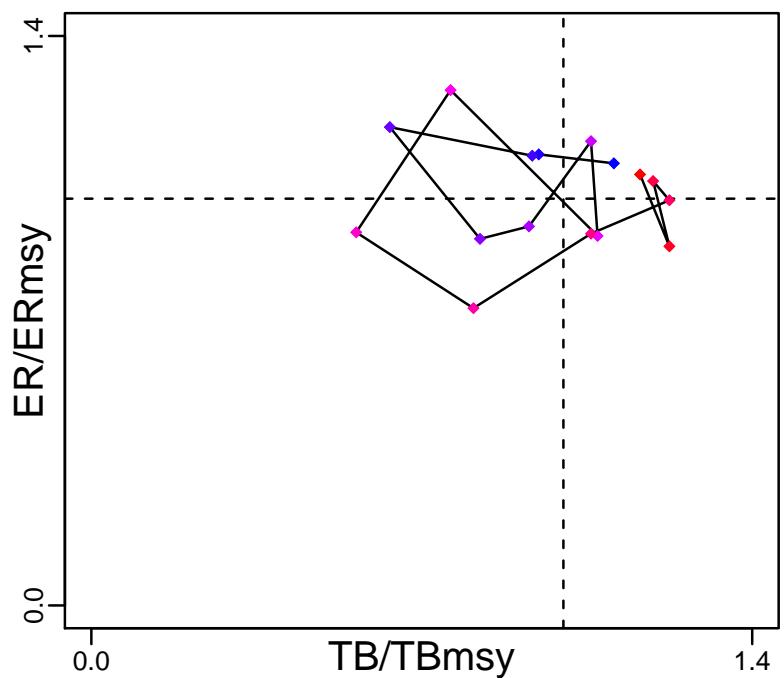
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2011	1680	-	-	
<b>SSB</b>	SSB-MT	2014	4050	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$5.98 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	0.441	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.045	-	-	
<b>TC</b>	TC-MT	2014	546			
<b>TL</b>	TL-MT	2011	737			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2011	1.162			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2011	1.06			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.225			
<b>ER/ERmgt</b>	-	-	-			

**Red shrimp Northern Spain [RDSHRMPMEDGSA6]**

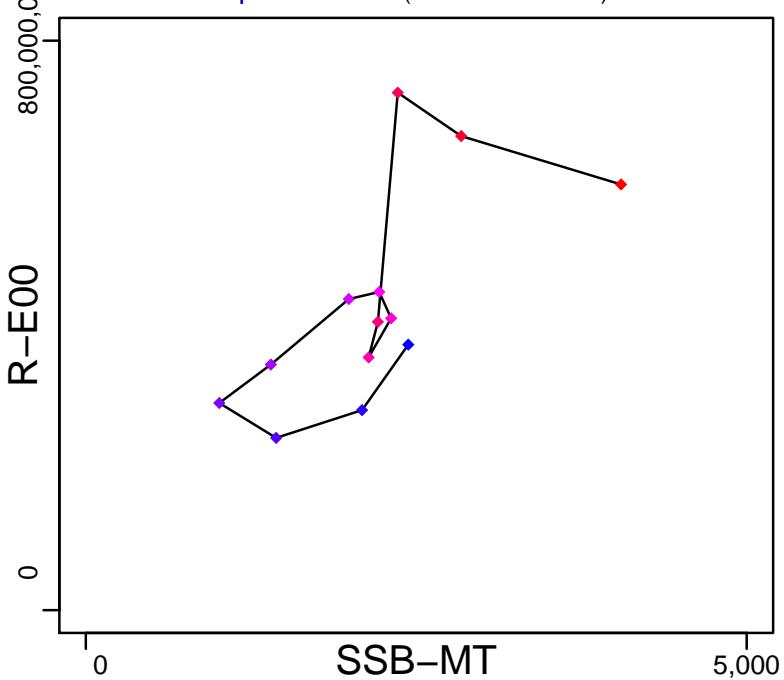
Kobe MSYpref (1996–2011–BANOBI)



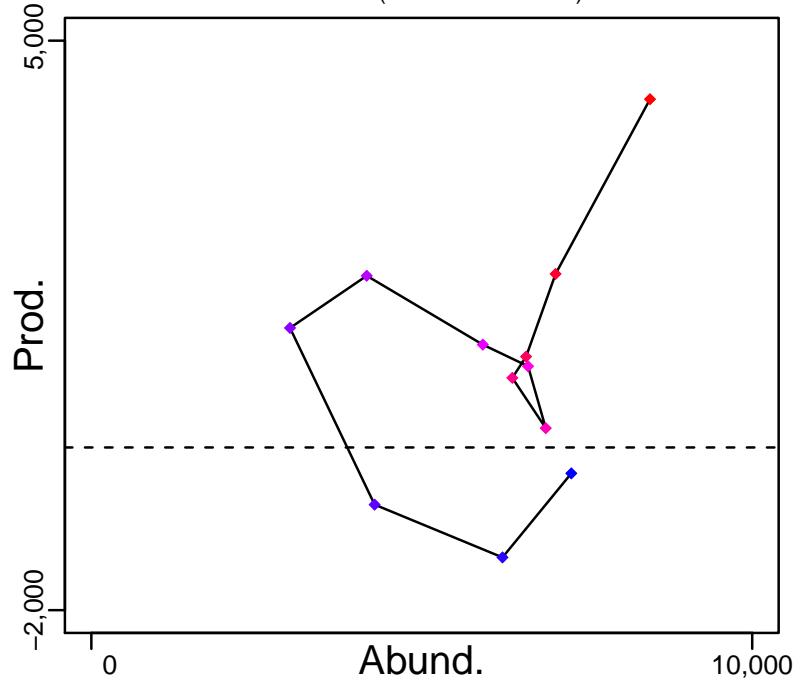
Kobe MGTpref (1996–2011–BANOBI)



Spawner Recruit (2002–2014–OSIO)



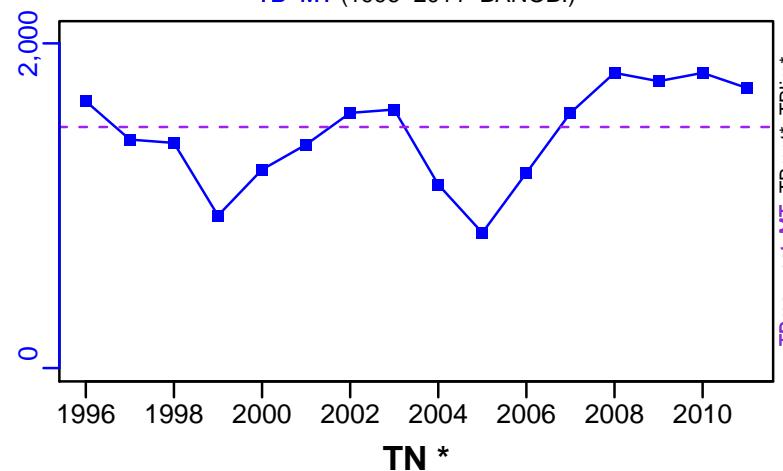
Production (2002–2014–OSIO)



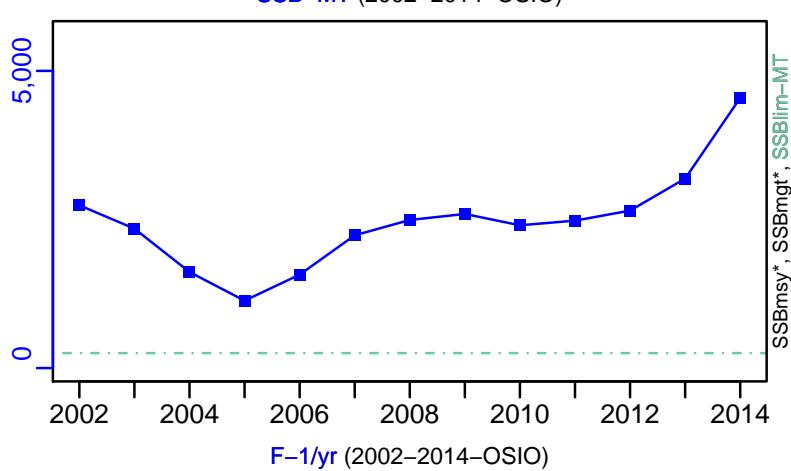
◆ Start Year   ◆ End Year   \* No Data

**Red shrimp Northern Spain [RDSHRMPMEDGSA6]**

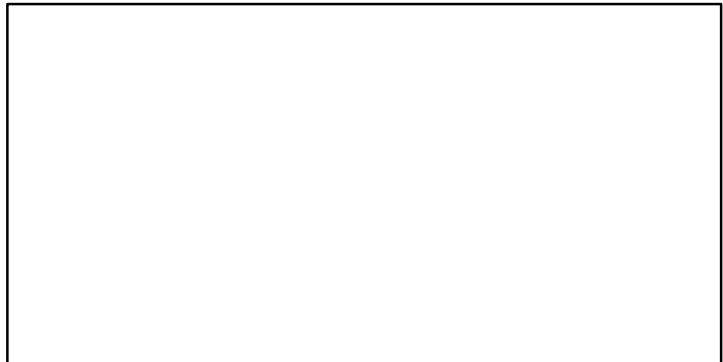
**TB-MT (1996–2011–BANOBI)**



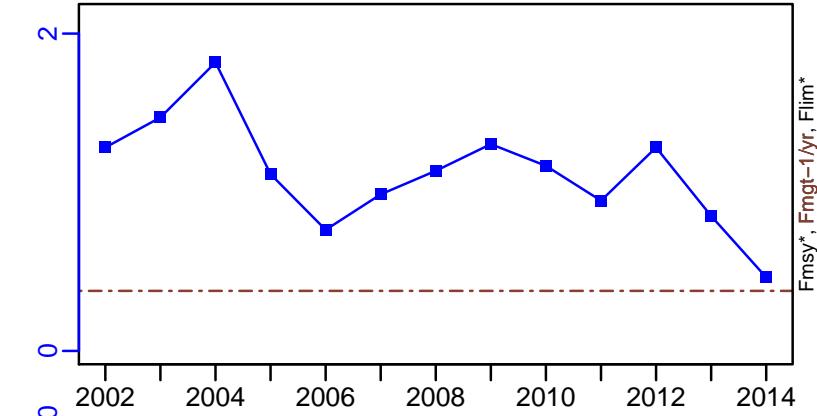
**SSB-MT (2002–2014–OSIO)**



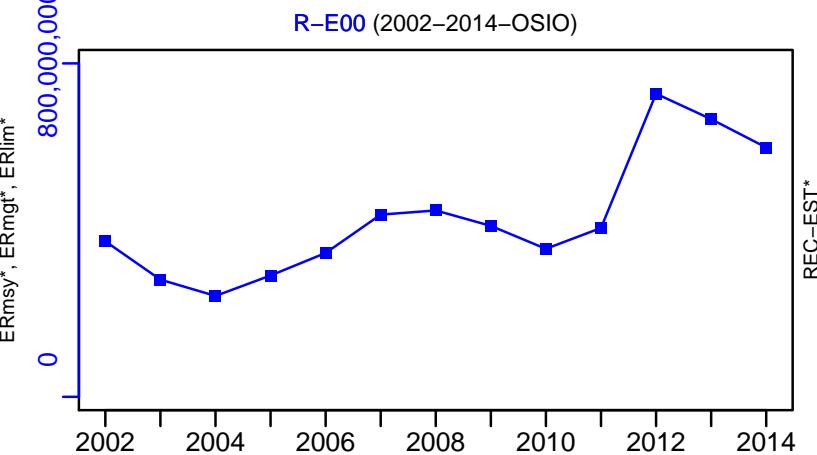
**TN \***



**ER-calc-ratio (2002–2014–OSIO)**



**F-1/yr (2002–2014–OSIO)**



**R-E00 (2002–2014–OSIO)**

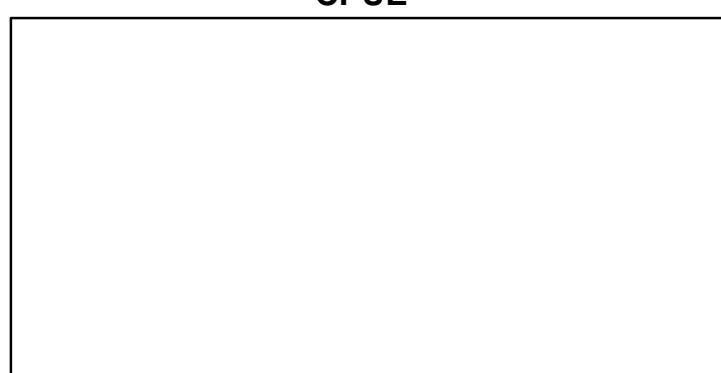
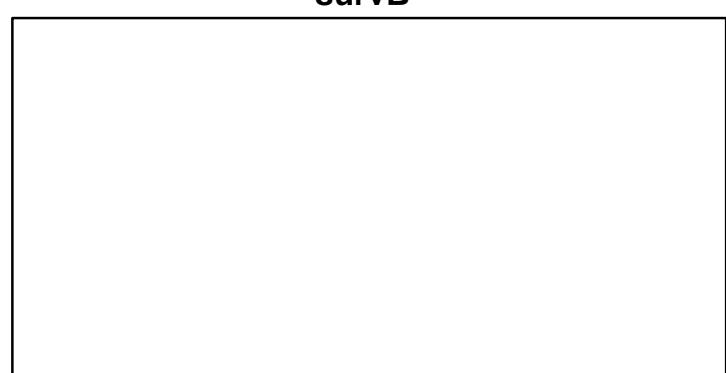
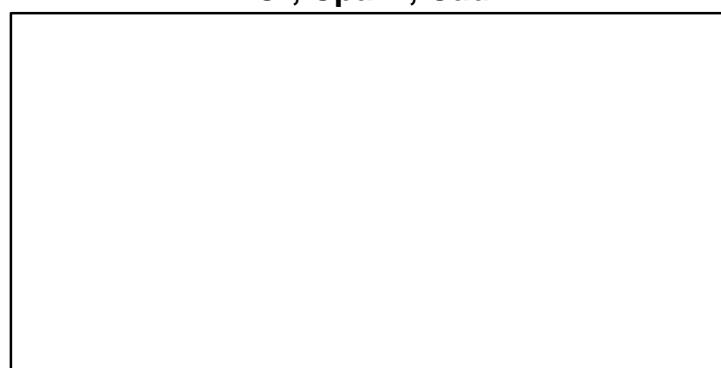
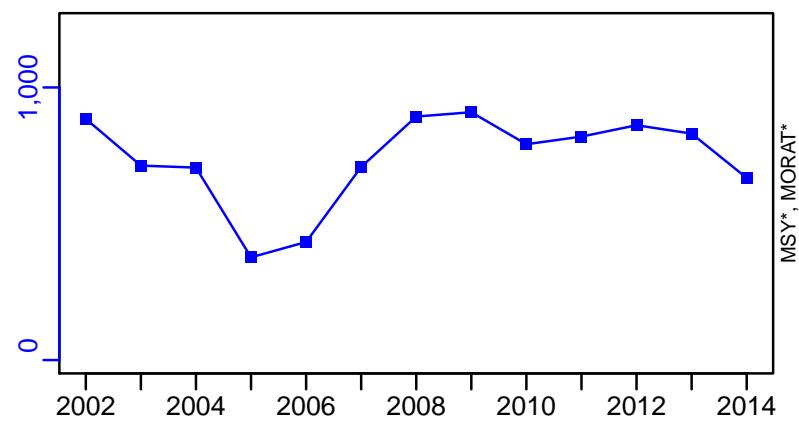


█ Listed time series   — Target BRP   — Rec-Est  
— MSY-based BRP   — Lim BRP   \* No Data

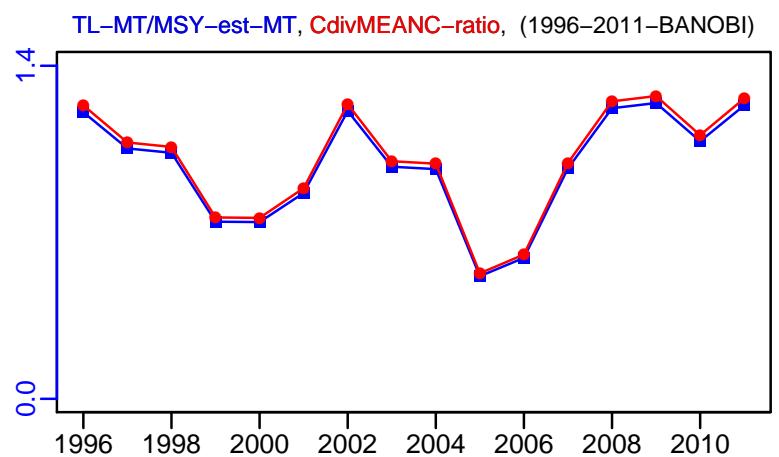
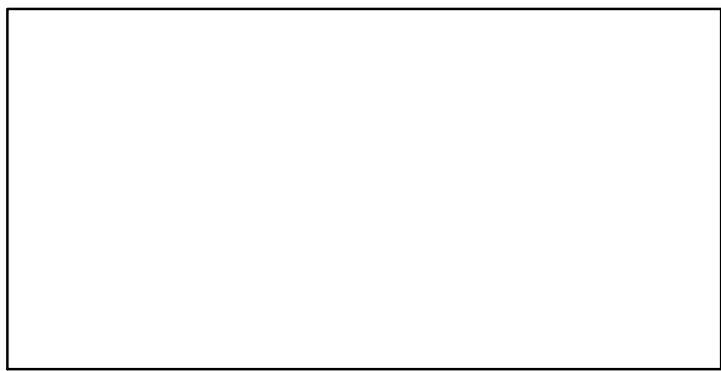
Red shrimp Northern Spain [RDSHRMPMEDGSA6]

TC-MT, TL\*, RecC\* (2002–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



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

## Red mullet Northern Alboran Sea [RMULLMEDGSA1]

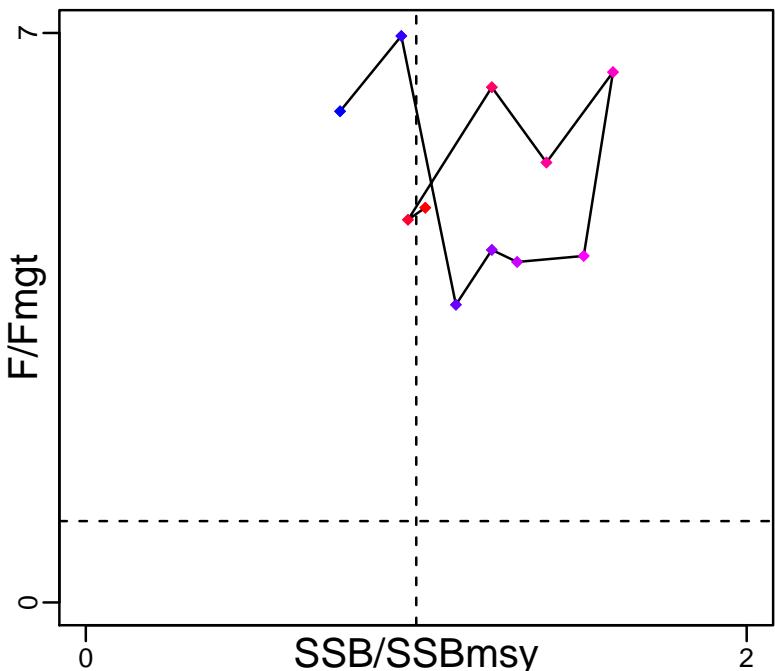
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA1-2003-2013-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	248
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.353
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.27
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	182
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

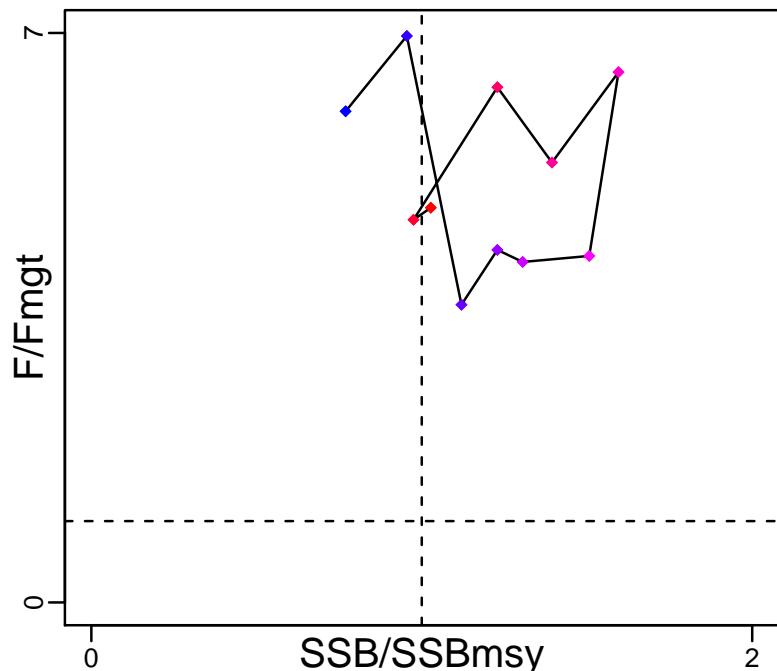
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2013	255	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	13,400,000	-	-	
<b>F</b>	F-1/yr	2013	1.31	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.246	-	-	
<b>TC</b>	TC-MT	2013	130			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	1.027			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.696			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	4.852			
<b>ER/ERmgt</b>	-	-	-			

**Red mullet Northern Alboran Sea [RMULLMEDGSA1]**

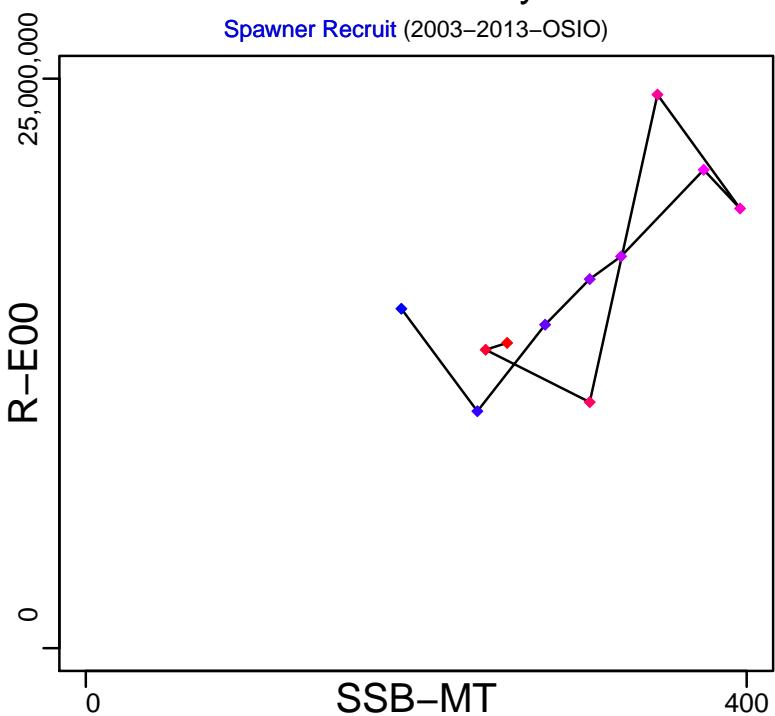
Kobe MSYpref (2003–2013–OSIO)



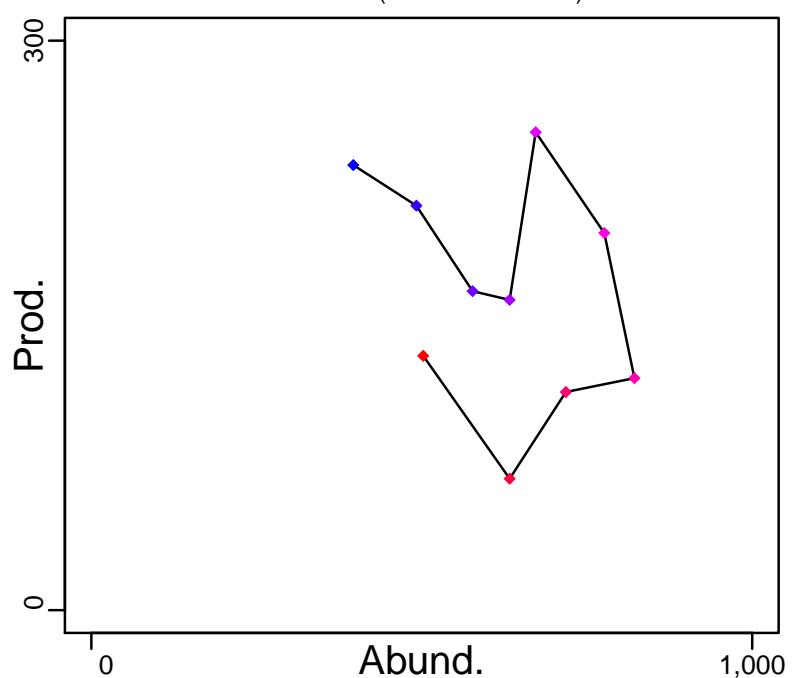
Kobe MGTpref (2003–2013–OSIO)



Spawner Recruit (2003–2013–OSIO)



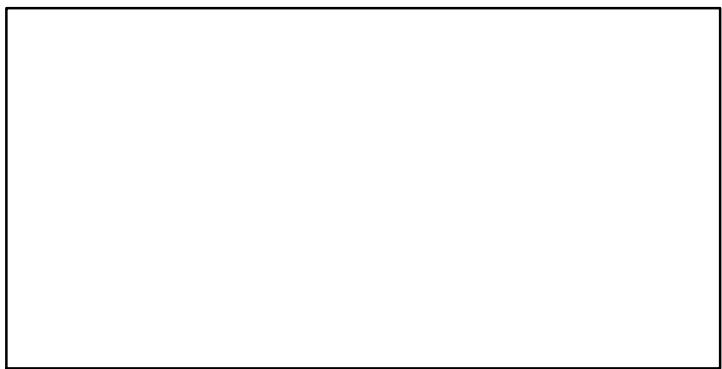
Production (2003–2013–OSIO)



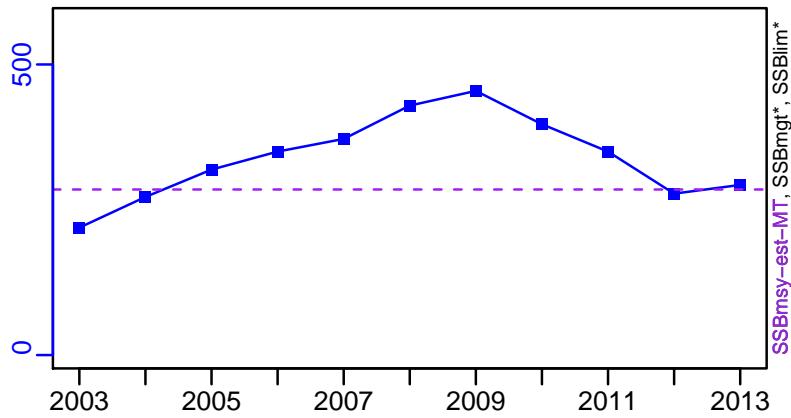
◆ Start Year   ◆ End Year   \* No Data

Red mullet Northern Alboran Sea [RMULLMEDGSA1]

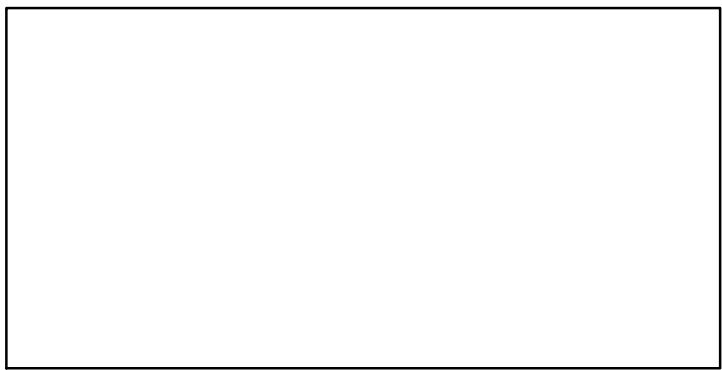
**TB\***



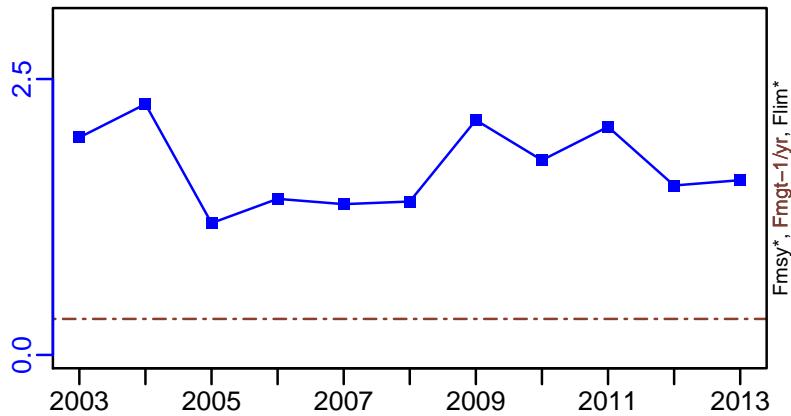
**SSB-MT (2003–2013–OSIO)**



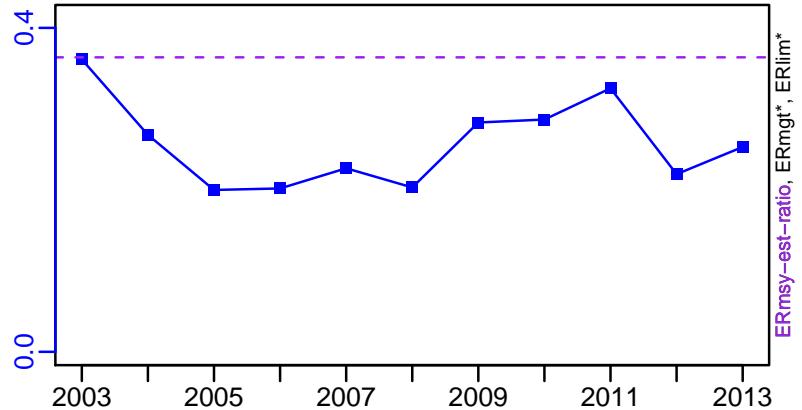
**TN \***



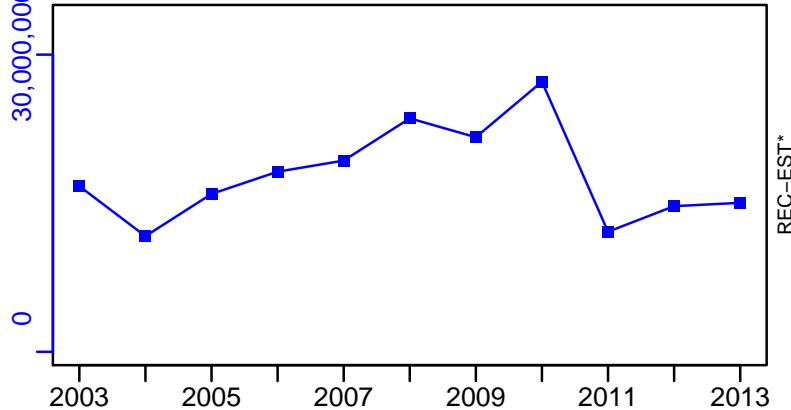
**F-1/yr (2003–2013–OSIO)**



**ER-calc-ratio (2003–2013–OSIO)**



**R-E00 (2003–2013–OSIO)**

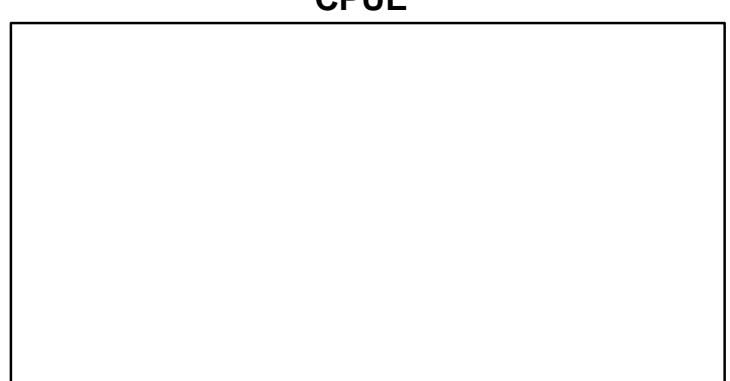
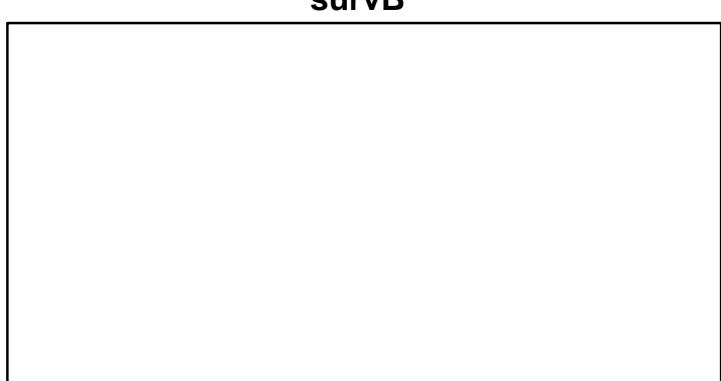
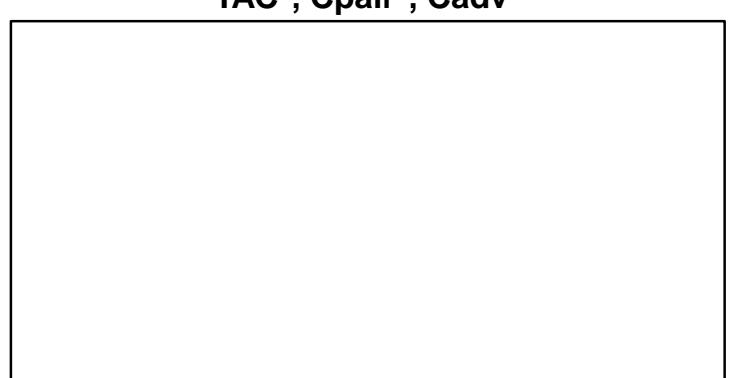
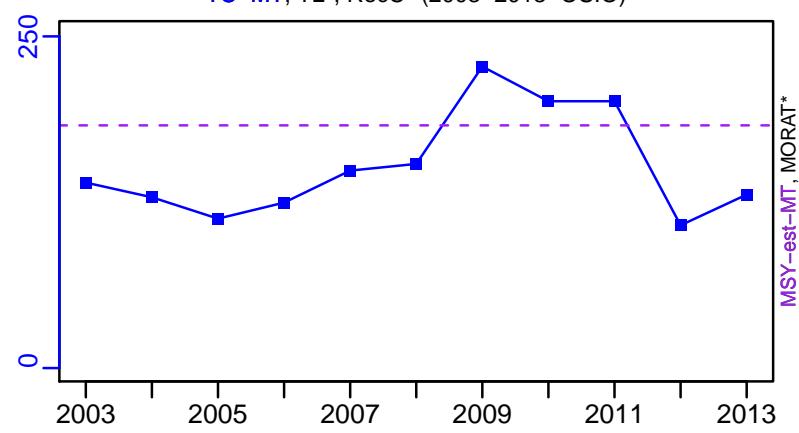


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

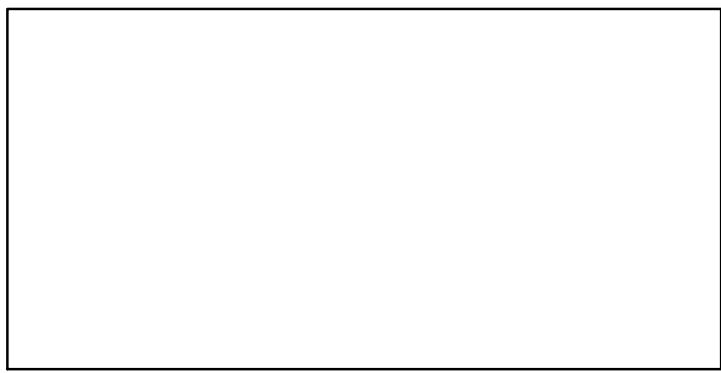
Red mullet Northern Alboran Sea [RMULLMEDGSA1]

TC-MT, TL\*, RecC\* (2003–2013–OSIO)

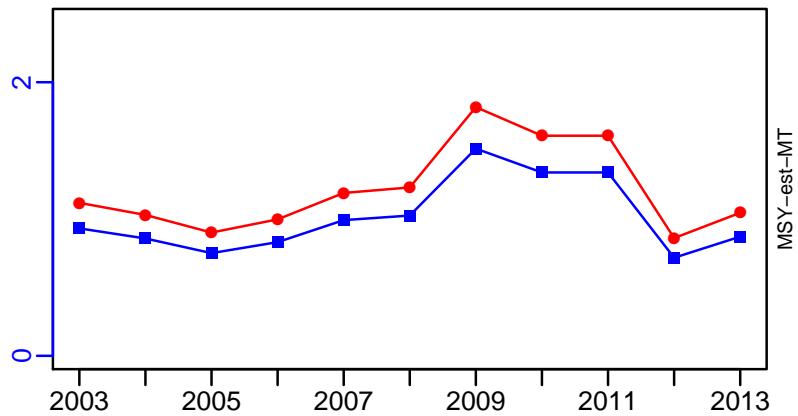
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2003–2013–OSIO)



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

## Red mullet South Tyrrhenian Sea [RMULLMEDGSA10]

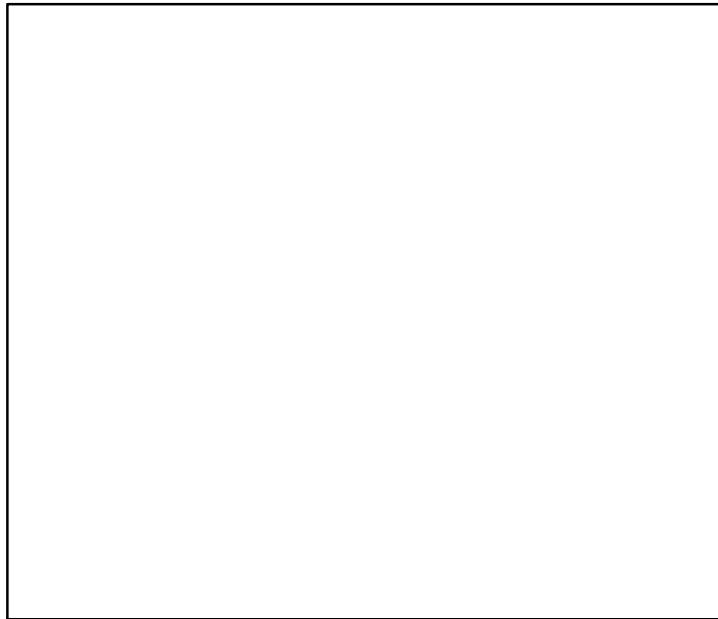
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA10-2004-2010-OSIO
<b>Area</b>	South Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<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>	Fmgt-1/yr	2010	0.41
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

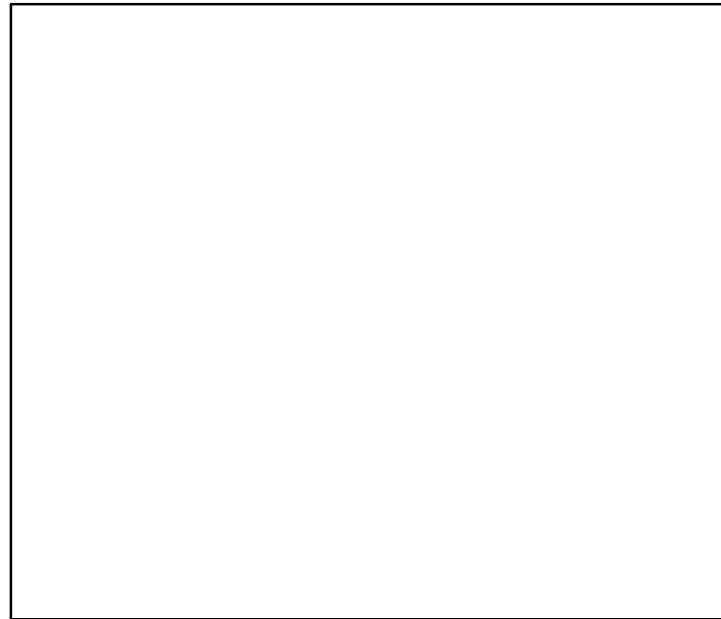
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2010	1.01	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2010	84		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2010	2.463		
<b>ER/ERmgt</b>	-	-	-		

**Red mullet South Tyrrhenian Sea [RMULLMEDGSA10]**

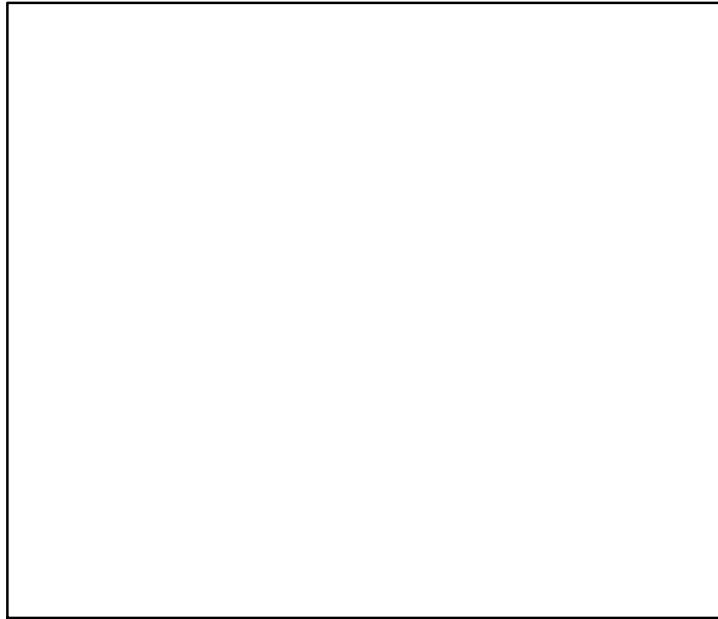
**Kobe MSY\***



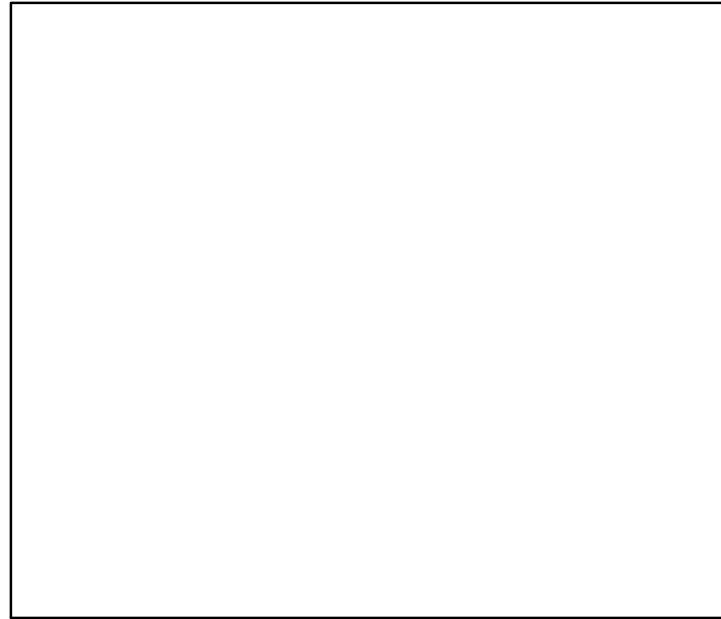
**Kobe MGT\***



**Spawner Recruit\***



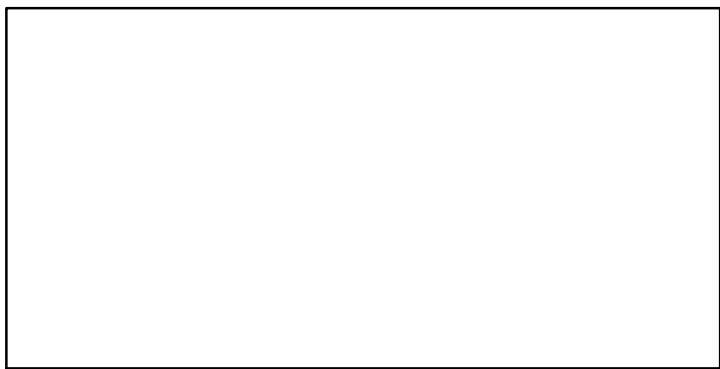
**Production\***



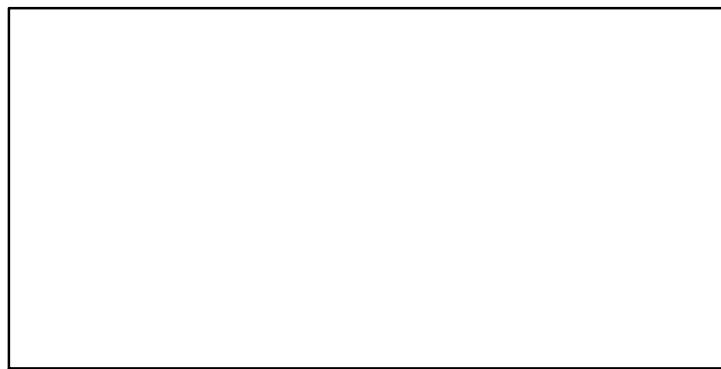
◆ Start Year ♦ End Year \* No Data

**Red mullet South Tyrrhenian Sea [RMULLMEDGSA10]**

**TB\***



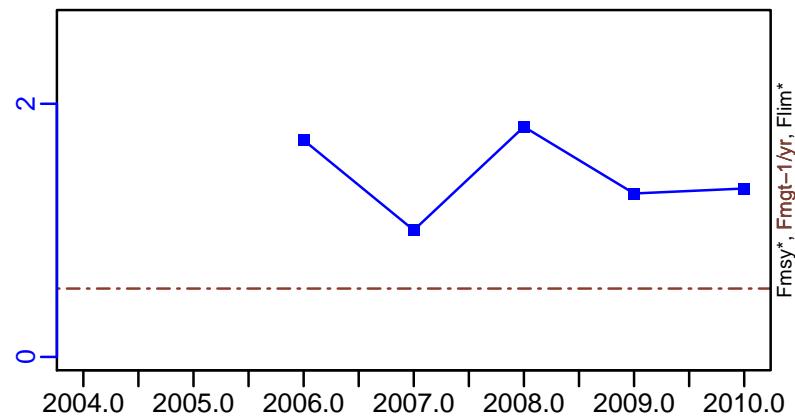
**SSB\***



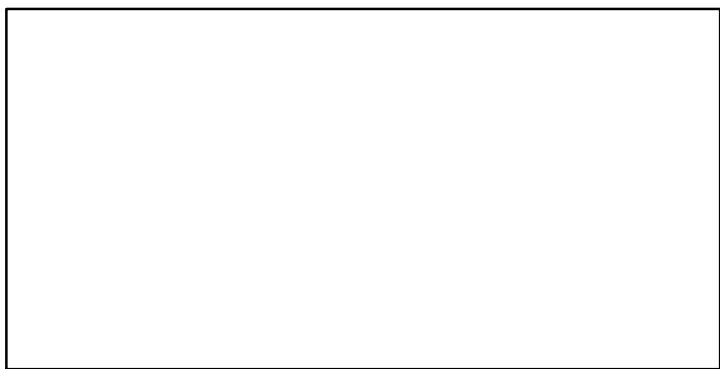
**TN \***



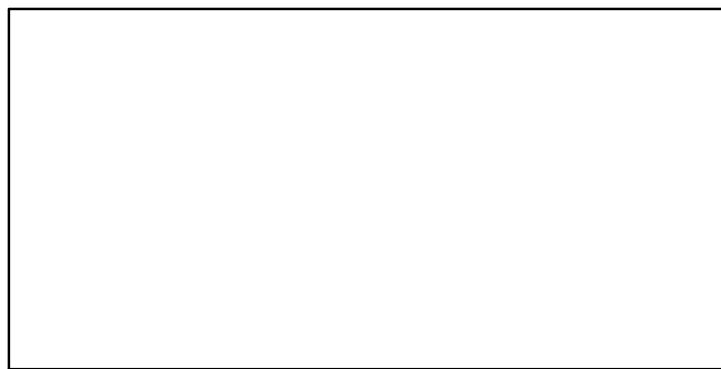
**F-1/yr (2004–2010–OSIO)**



**ER\***



**Recruits\***

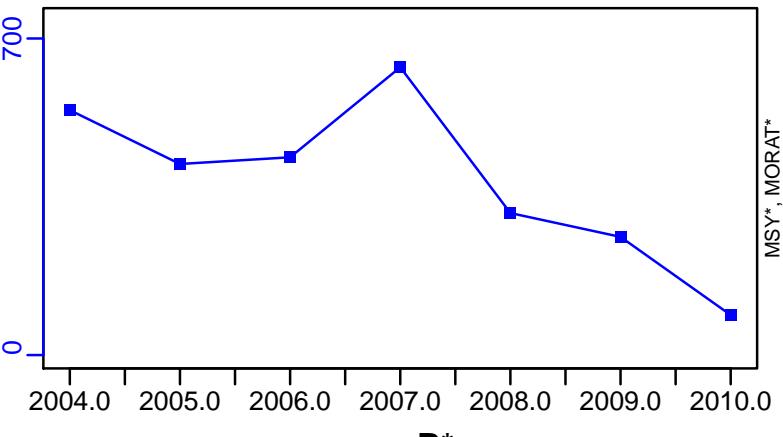


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | — Lim BRP    | * No Data |

**Red mullet South Tyrrhenian Sea [RMULLMEDGSA10]**

TC-MT, TL\*, RecC\* (2004–2010–OSIO)

TAC\*, Cpair\*, Cadv\*



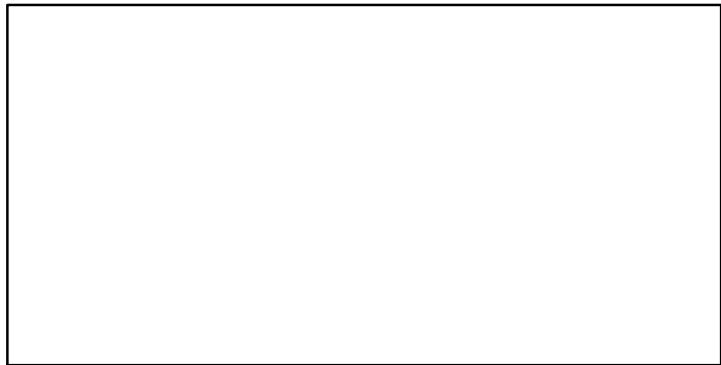
**survB\***



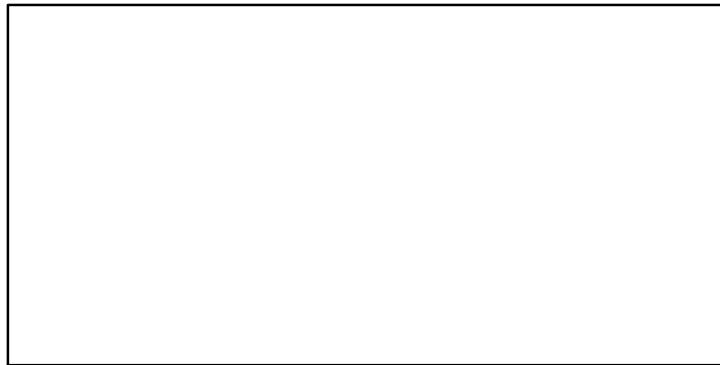
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Red mullet Sardinia [RMULLMEDGSA11]

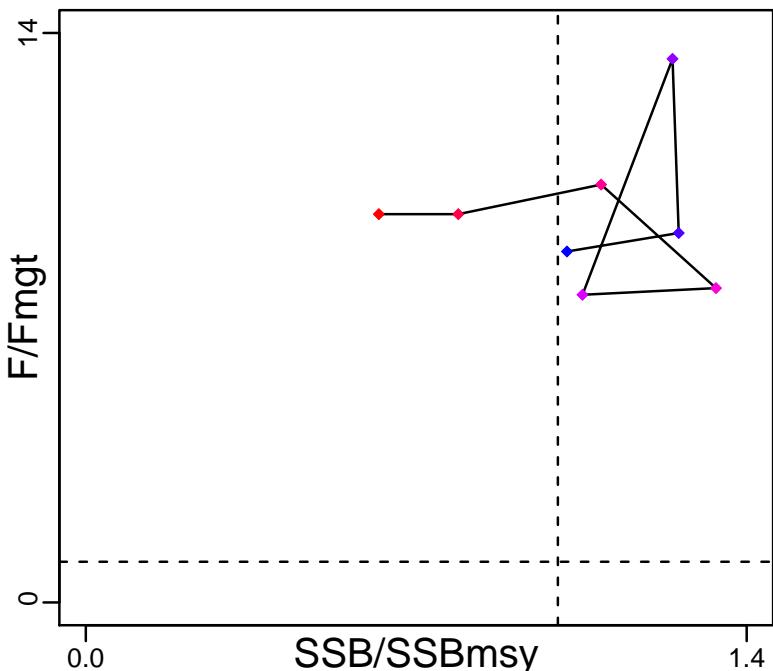
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA11-2005-2012-OSIO
<b>Area</b>	Sardinia
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2012	152
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.841
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.11
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	272
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

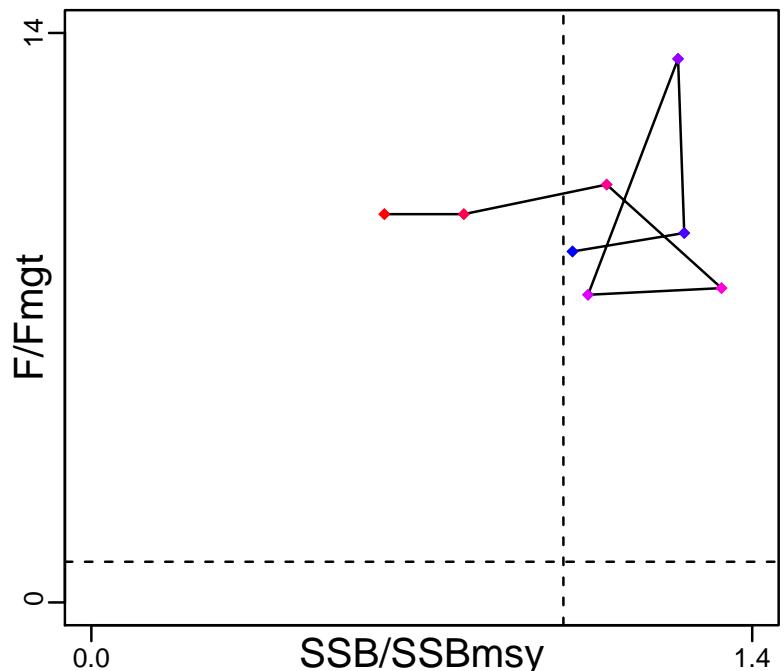
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2012	94	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2012	26,600,000	-	-	
<b>F</b>	F-1/yr	2012	1.05	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.677	-	-	
<b>TC</b>	TC-MT	2012	136			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	0.621			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.805			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	9.545			
<b>ER/ERmgt</b>	-	-	-			

**Red mullet Sardinia [RMULLMEDGSA11]**

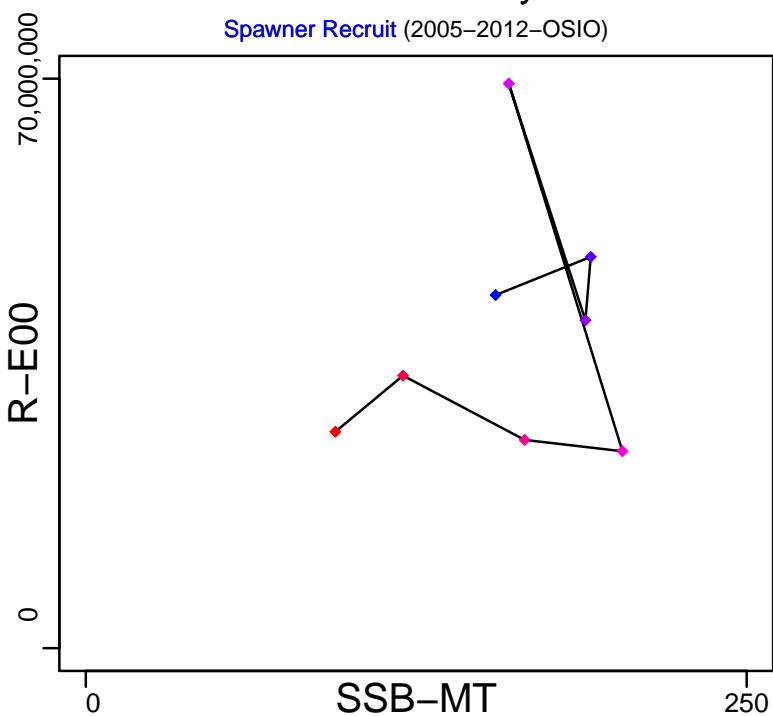
Kobe MSYpref (2005–2012–OSIO)



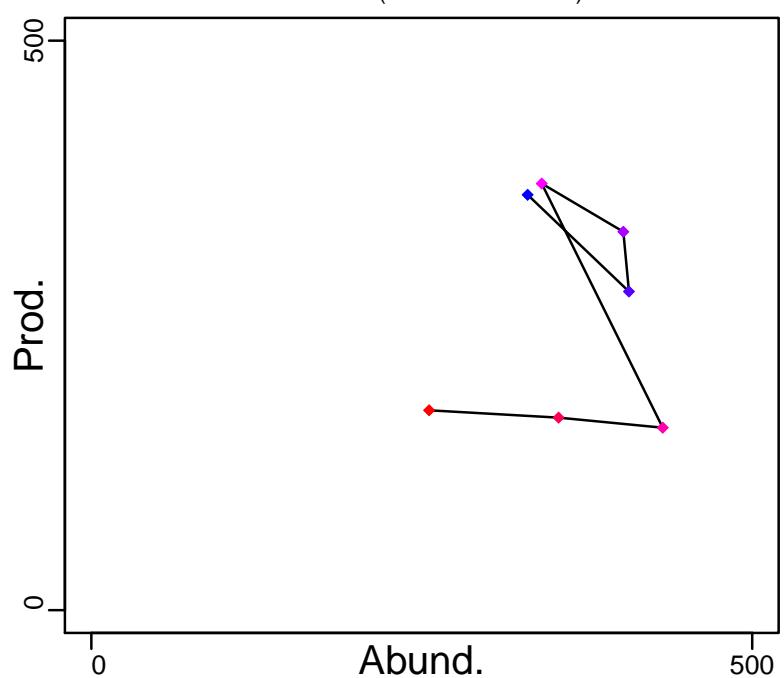
Kobe MGTpref (2005–2012–OSIO)



Spawner Recruit (2005–2012–OSIO)



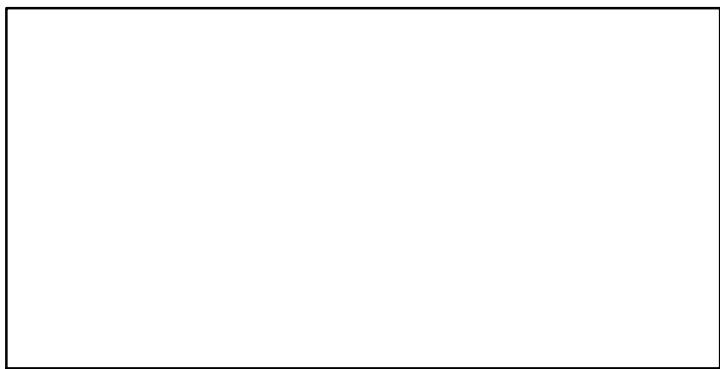
Production (2005–2012–OSIO)



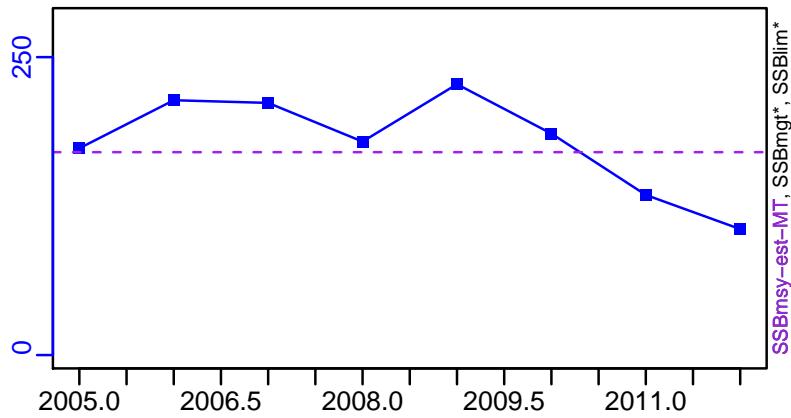
◆ Start Year ◆ End Year \* No Data

Red mullet Sardinia [RMULLMEDGSA11]

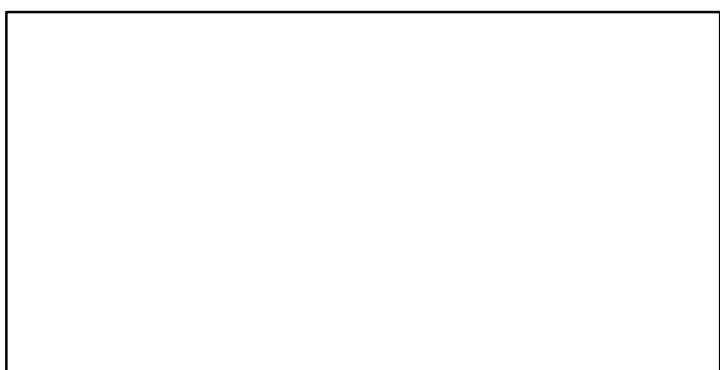
**TB\***



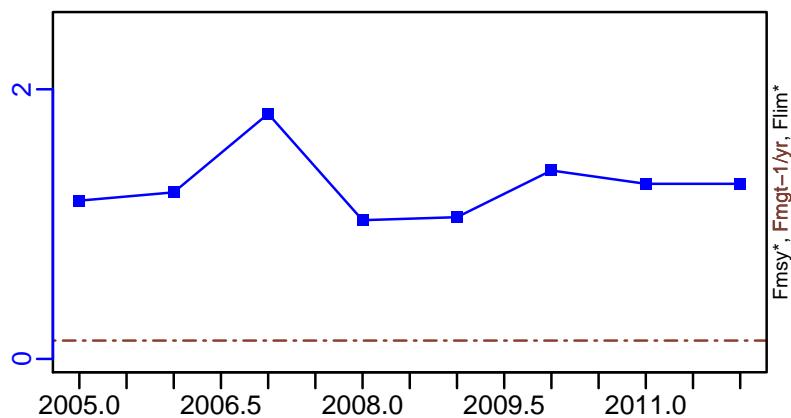
**SSB-MT (2005–2012–OSIO)**



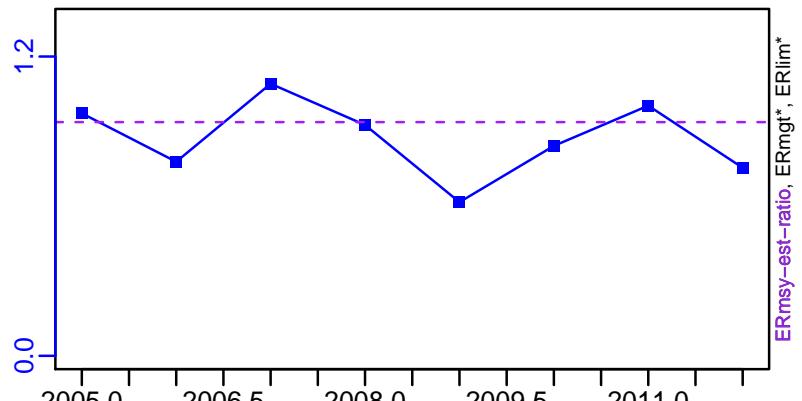
**TN \***



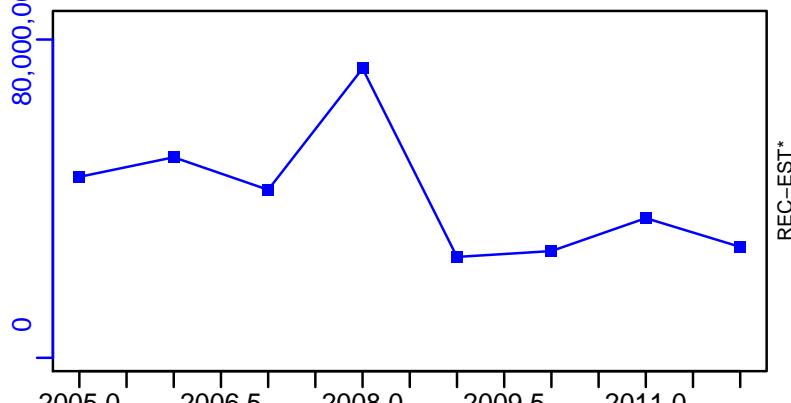
**F-1/yr (2005–2012–OSIO)**



**ER-calc-ratio (2005–2012–OSIO)**



**R-E00 (2005–2012–OSIO)**

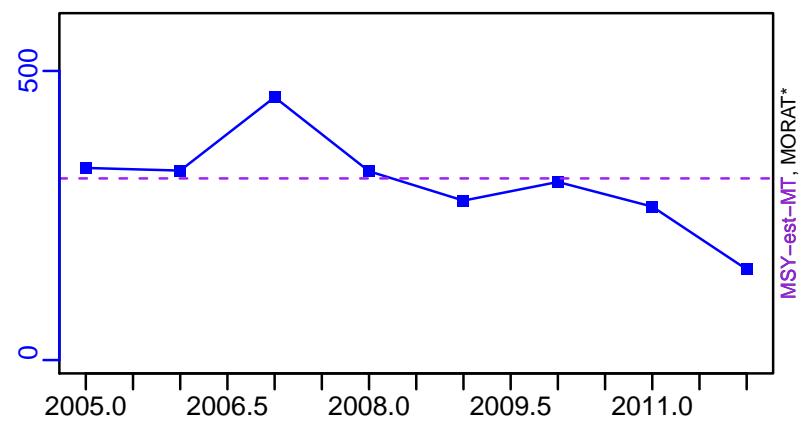


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

**Red mullet Sardinia [RMULLMEDGSA11]**

TC-MT, TL\*, RecC\* (2005–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



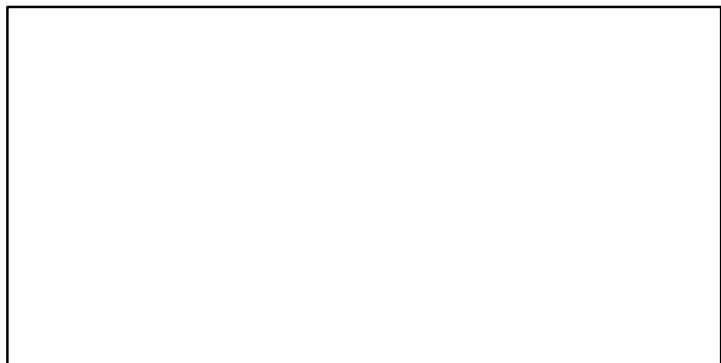
**survB\***



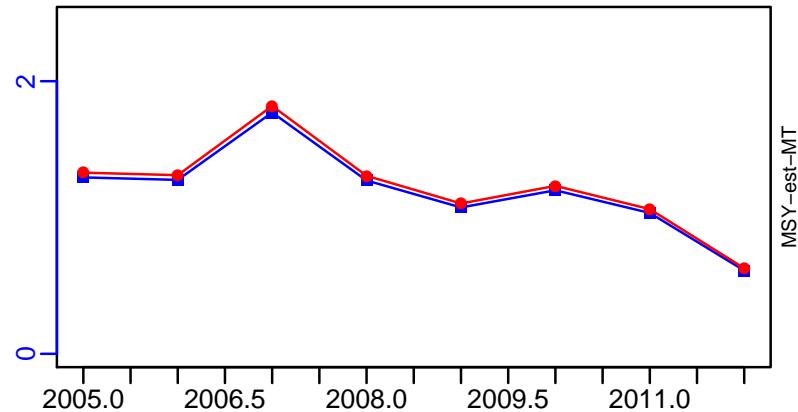
**CPUE\***



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2005–2012–OSIO)



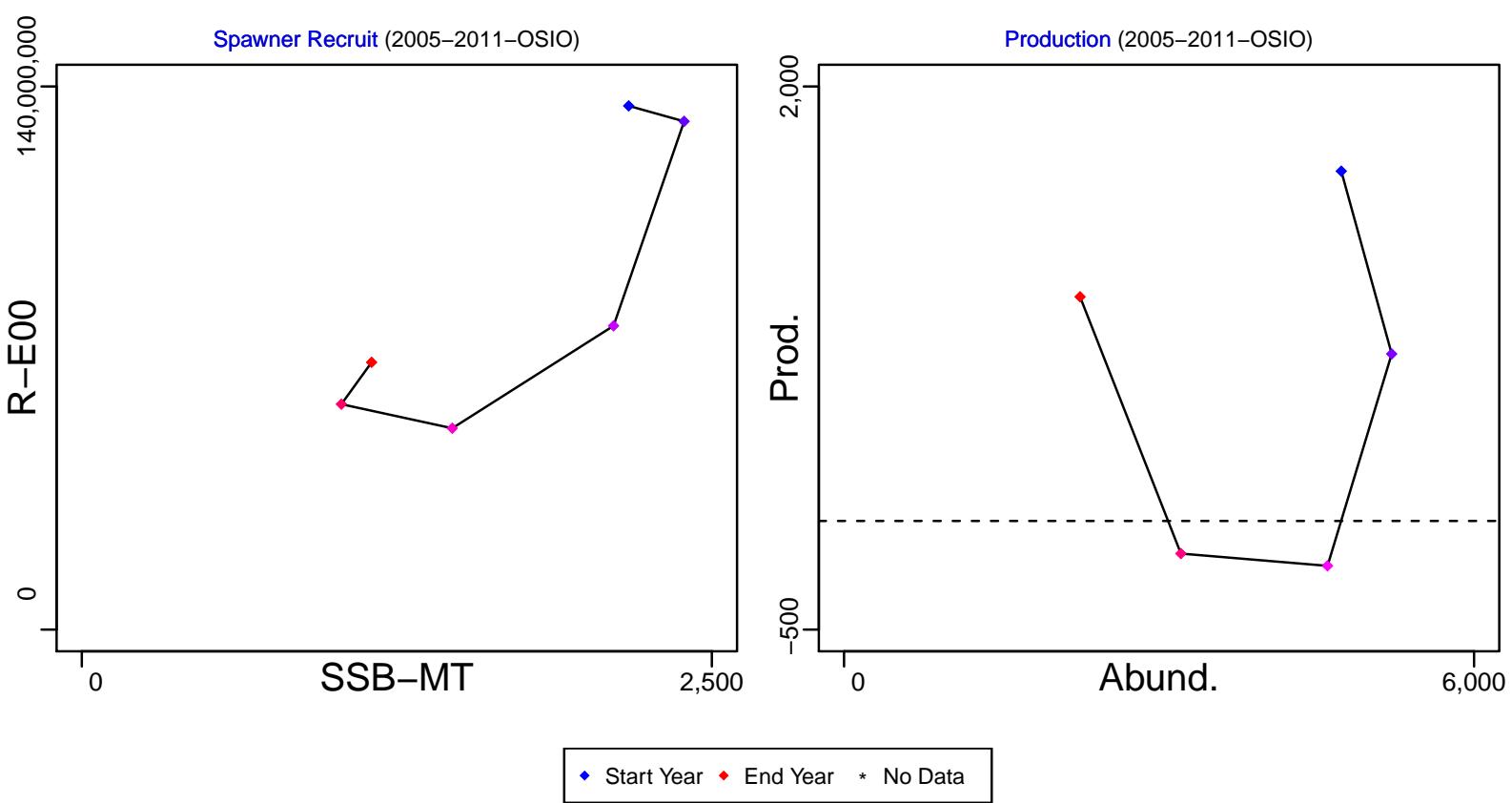
■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

## Red mullet Malta Island and South of Sicily (GSA 15, 16) [RMULLMEDGSA15-16]

<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA15-16-2005-2011-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

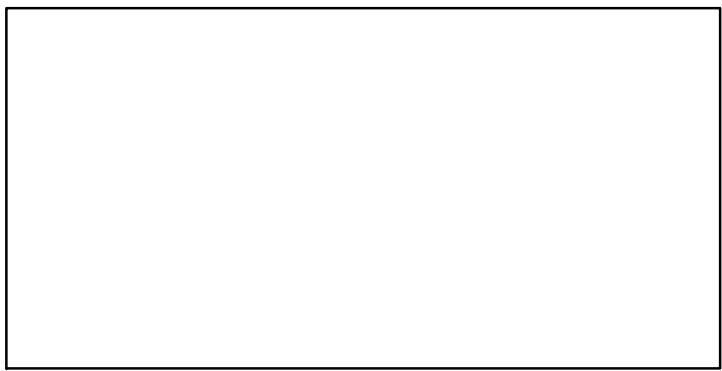
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2011	0.45
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	1150	-	1.5+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	68,900,000	-	-
<b>F</b>	F-1/yr	2011	1.3	-	-
<b>ER</b>	ER-calc-ratio	2011	0.243	-	-
<b>TC</b>	TC-MT	2011	609		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	2.889		
<b>ER/ERmgt</b>	-	-	-		

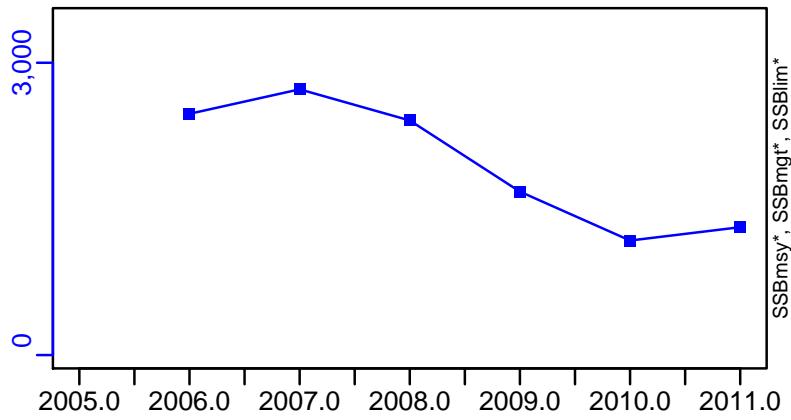
**Kobe MSY\*****Kobe MGT\***

Red mullet Malta Island and South of Sicily (GSA 15, 16) [RMULLMEDGSA15–16]

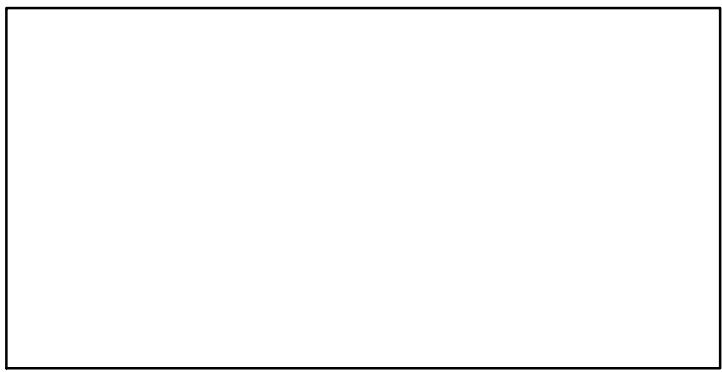
**TB\***



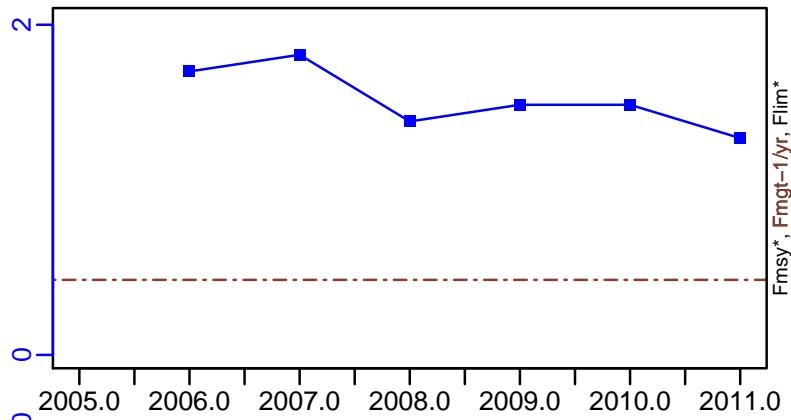
**SSB-MT (2005–2011–OSIO)**



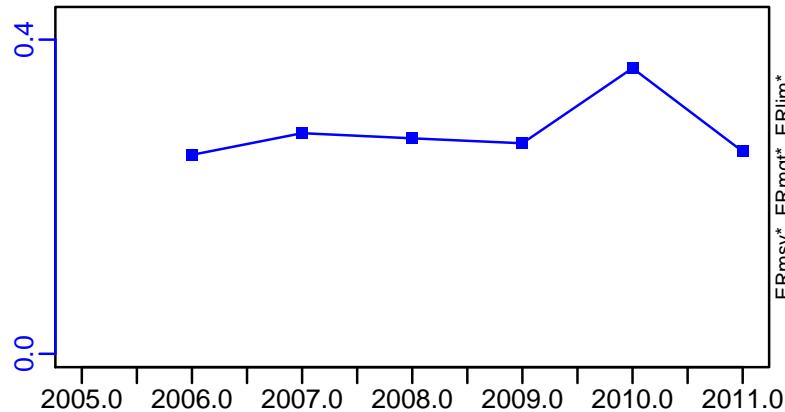
**TN \***



**F-1/yr (2005–2011–OSIO)**

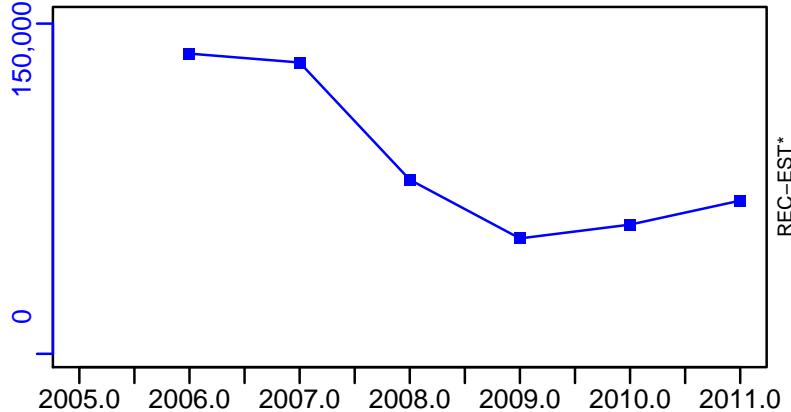


**ER-calc-ratio (2005–2011–OSIO)**



ER<sub>MSY</sub>\* , ER<sub>Mgt</sub>\* , ER<sub>Lim</sub>\*

**R-E00 (2005–2011–OSIO)**



F<sub>MSY</sub>\* , F<sub>Mgt</sub>-1/yr , F<sub>Lim</sub>\*

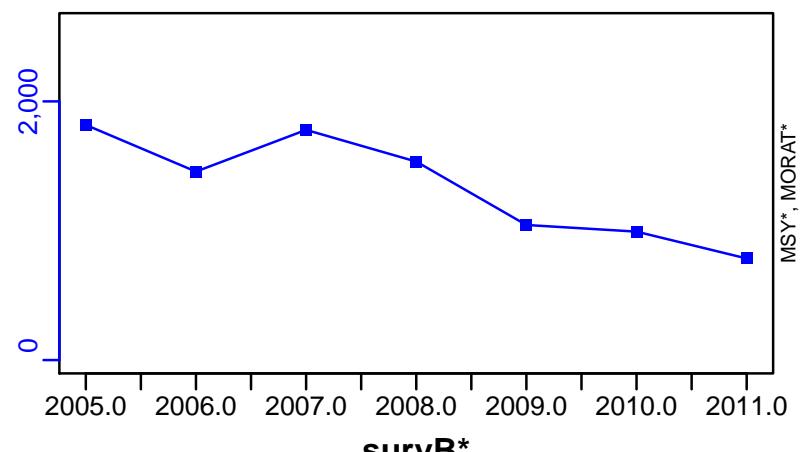
REC-EST\*

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

**Red mullet Malta Island and South of Sicily (GSA 15, 16) [RMULLMEDGSA15–16]**

**TC–MT, TL\*, RecC\* (2005–2011–OSIO)**

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



MSY\*, MORAT\*

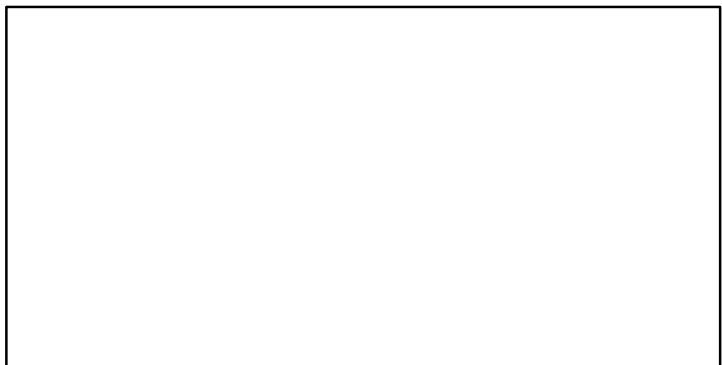
**survB\***



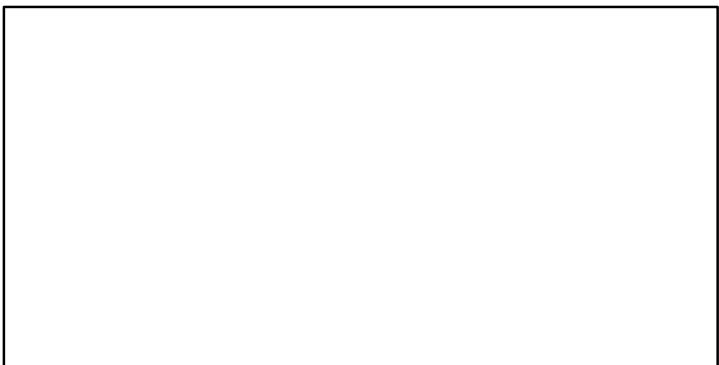
**CPUE\***



**EFFORT\***



**CdivMSY\***



- |   |  |   |
|---|--|---|
| <span style="color: blue;">■</span> 1st listed time series<br><span style="color: red;">●</span> 2nd listed time series | <span style="color: green;">▲</span> 3rd listed time series<br><span style="color: purple;">—</span> MSY | <span style="color: grey;">—</span> MORAT<br><span style="color: black;">*</span> No Data |
|---|--|---|

## Red mullet Adriatic Sea (GSA 17,18) [RMULLMEDGSA17-18]

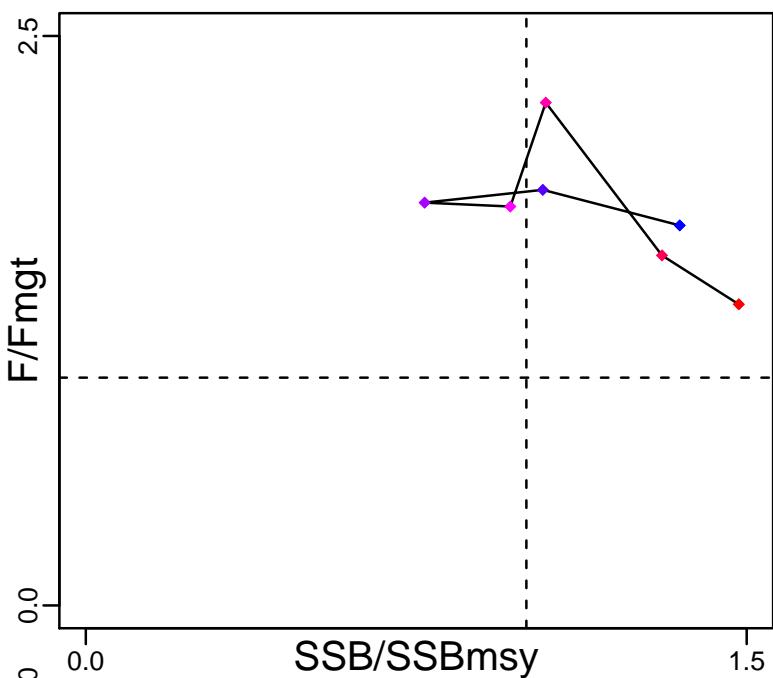
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA17-18-2008-2014-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	4473
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.633
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.41
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	6027
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

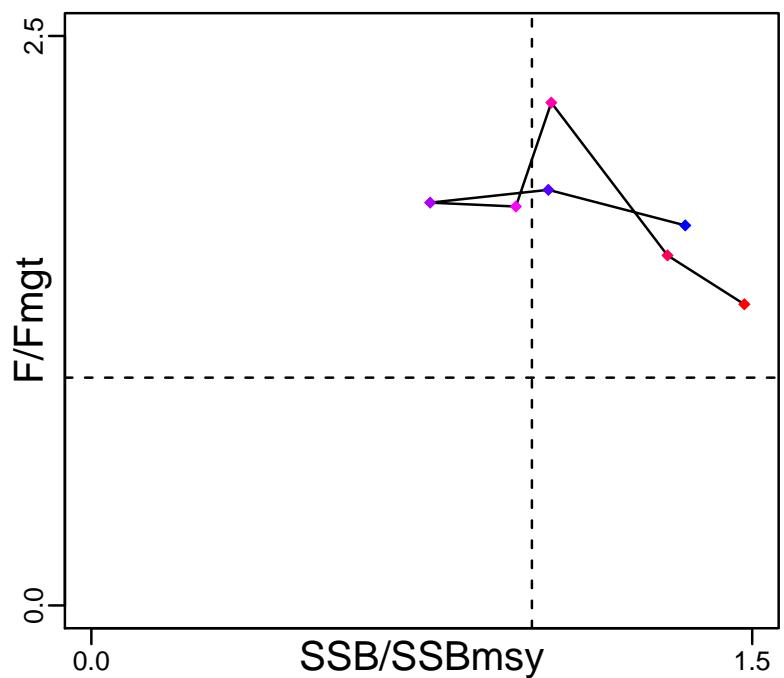
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	6630	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.17 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2014	0.542	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.467	-	-	
<b>TC</b>	TC-MT	2014	6600			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.482			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.739			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.322			
<b>ER/ERmgt</b>	-	-	-			

Red mullet Adriatic Sea (GSA 17,18) [RMULLMEDGSA17–18]

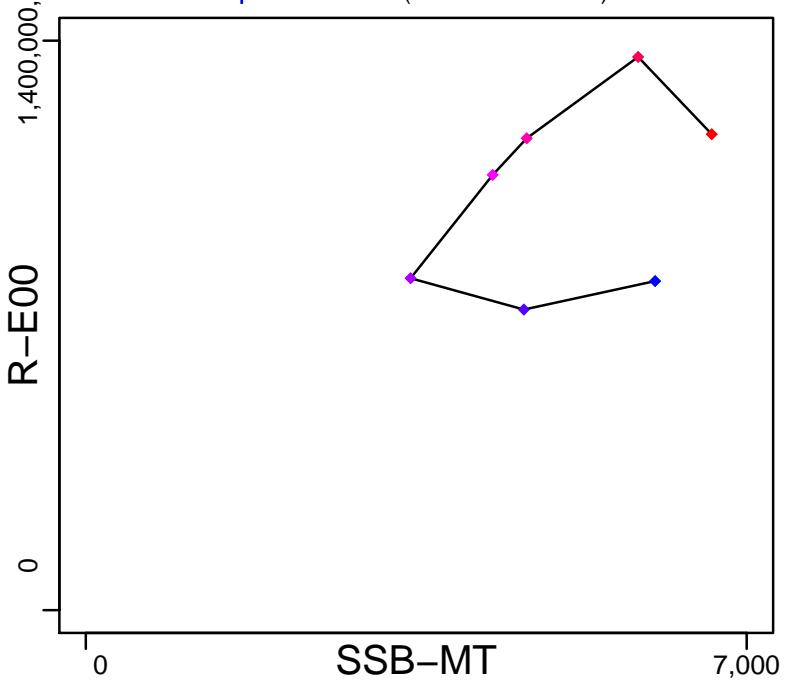
Kobe MSYpref (2008–2014–OSIO)



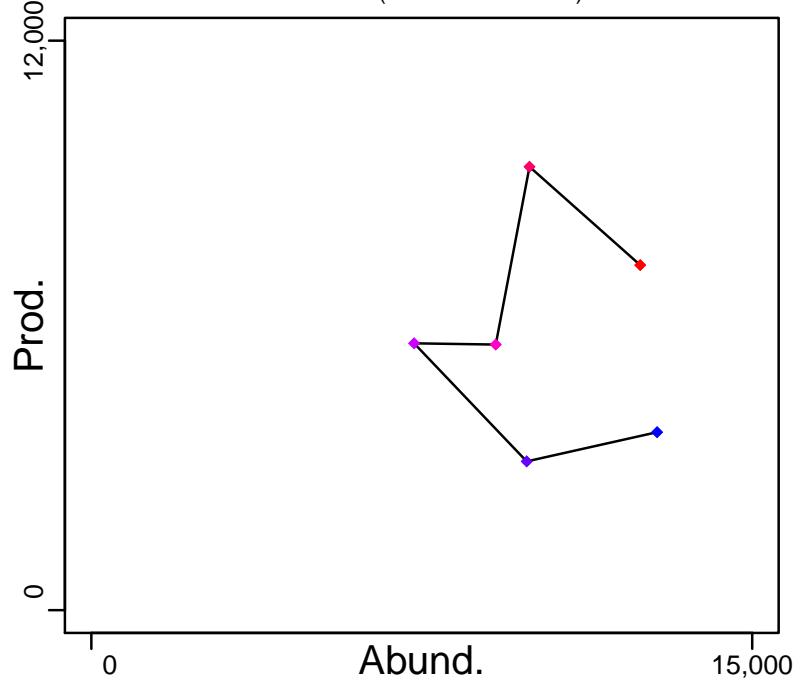
Kobe MGTpref (2008–2014–OSIO)



Spawner Recruit (2008–2014–OSIO)



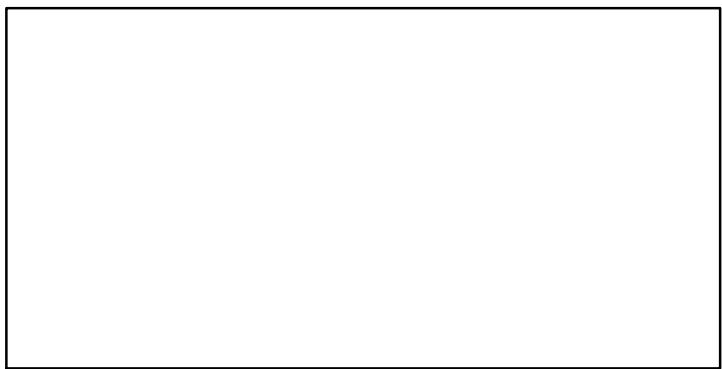
Production (2008–2014–OSIO)



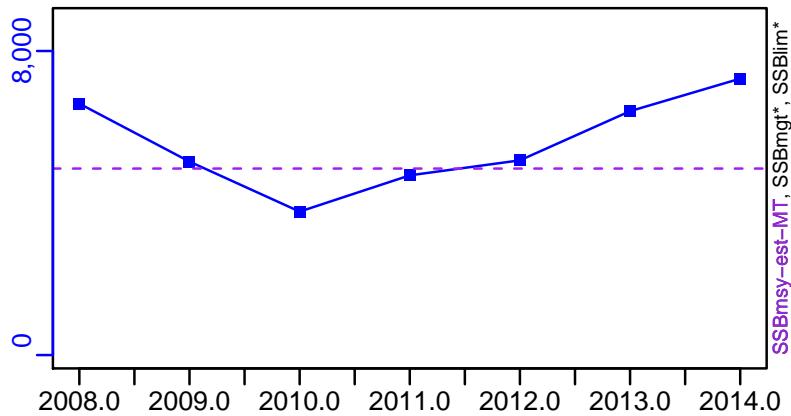
◆ Start Year   ◆ End Year   \* No Data

Red mullet Adriatic Sea (GSA 17,18) [RMULLMEDGSA17–18]

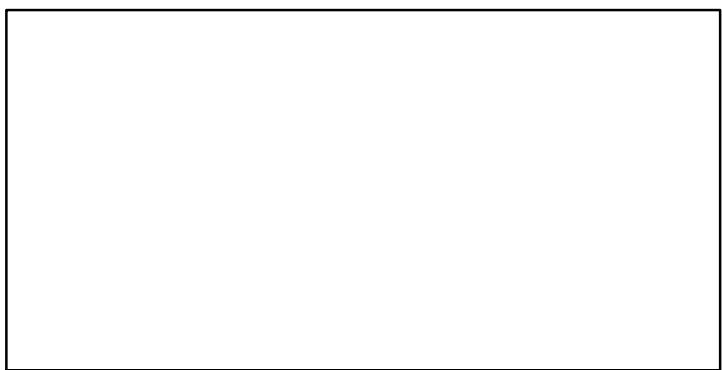
**TB\***



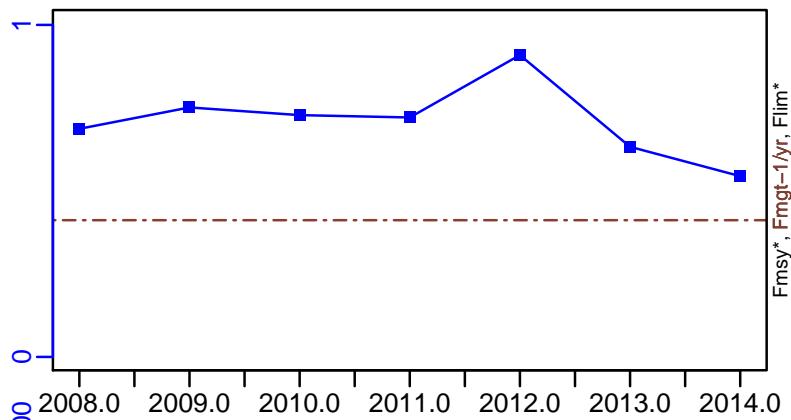
**SSB-MT** (2008–2014–OSIO)



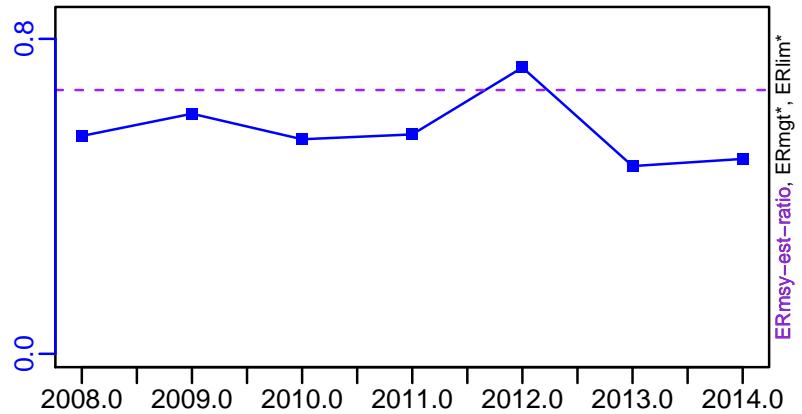
**TN \***



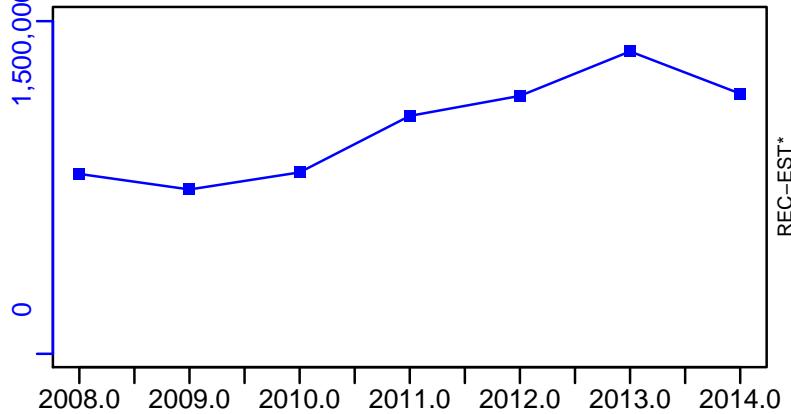
**F-1/yr** (2008–2014–OSIO)



**ER-calc-ratio** (2008–2014–OSIO)



**R-E00** (2008–2014–OSIO)

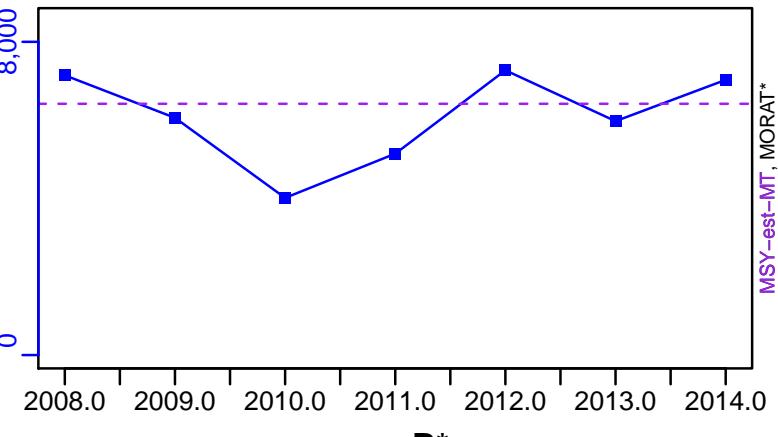


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

Red mullet Adriatic Sea (GSA 17,18) [RMULLMEDGSA17–18]

TC-MT, TL\*, RecC\* (2008–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

MSY-est-MT, MORAT\*



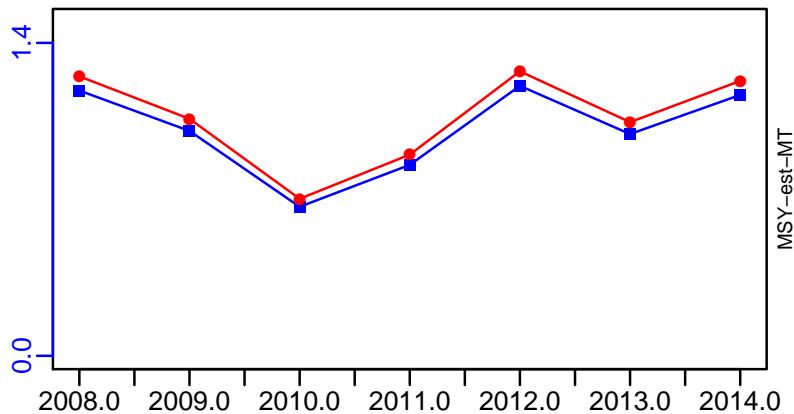
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2008–2014–OSIO)



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

## Red mullet Western Ionian Sea [RMULLMEDGSA19]

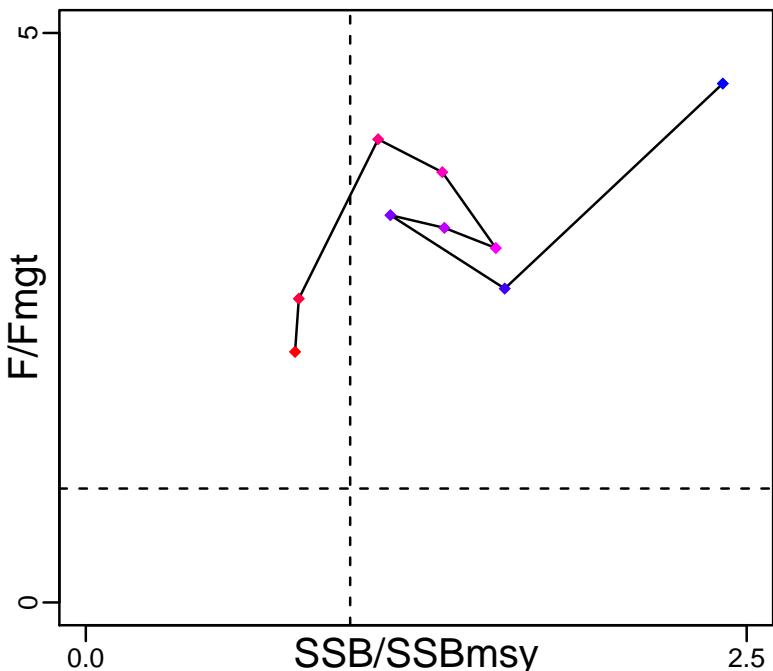
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA19-2006-2014-OSIO
<b>Area</b>	Western Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	627
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.298
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.45
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	390
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

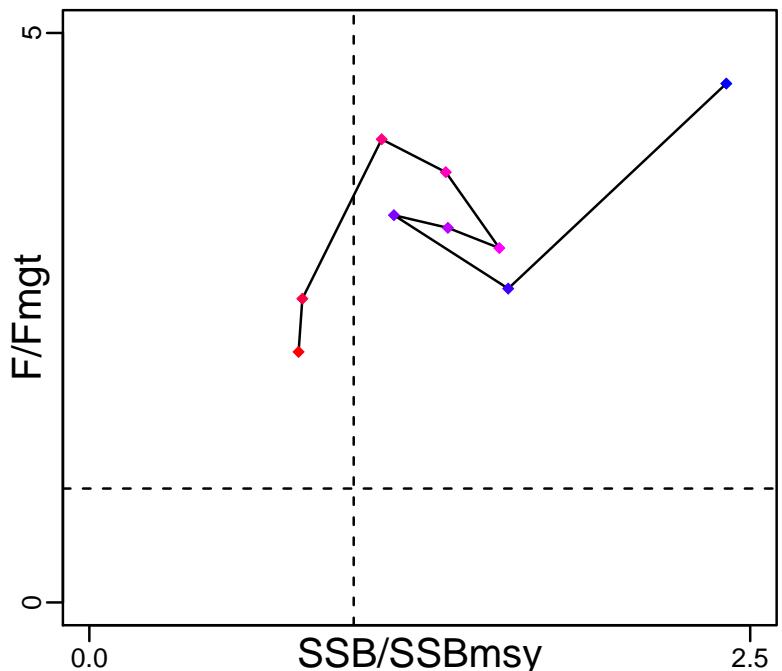
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	496	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	40,100,000	-	-	
<b>F</b>	F-1/yr	2014	0.99	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.26	-	-	
<b>TC</b>	TC-MT	2014	269			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.792			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.872			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	2.2			
<b>ER/ERmgt</b>	-	-	-			

**Red mullet Western Ionian Sea [RMULLMEDGSA19]**

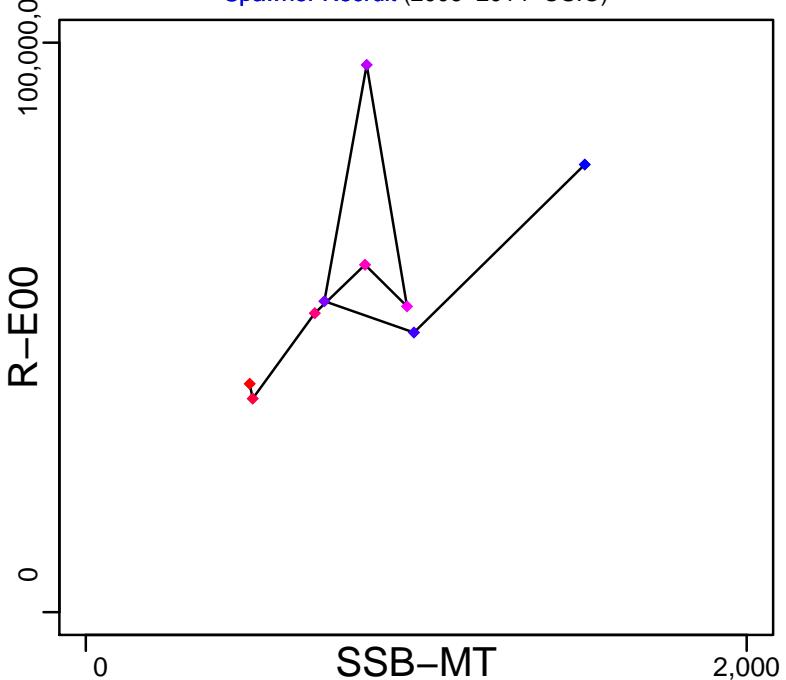
Kobe MSYpref (2006–2014–OSIO)



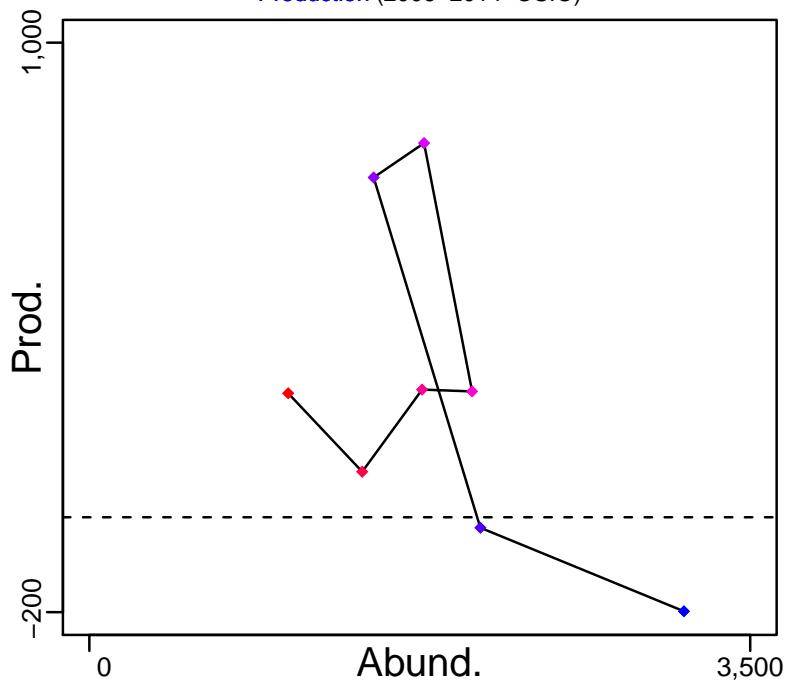
Kobe MGTPref (2006–2014–OSIO)



Spawner Recruit (2006–2014–OSIO)



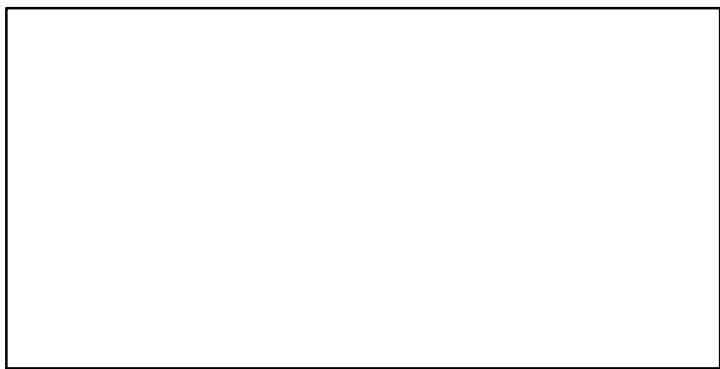
Production (2006–2014–OSIO)



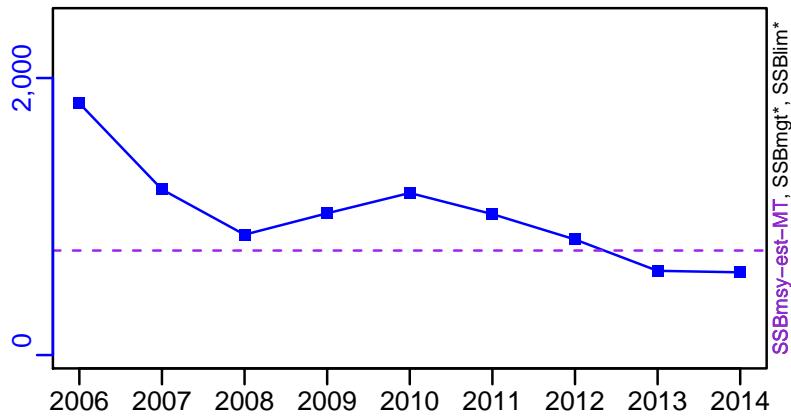
◆ Start Year   ◆ End Year   \* No Data

Red mullet Western Ionian Sea [RMULLMEDGSA19]

**TB\***



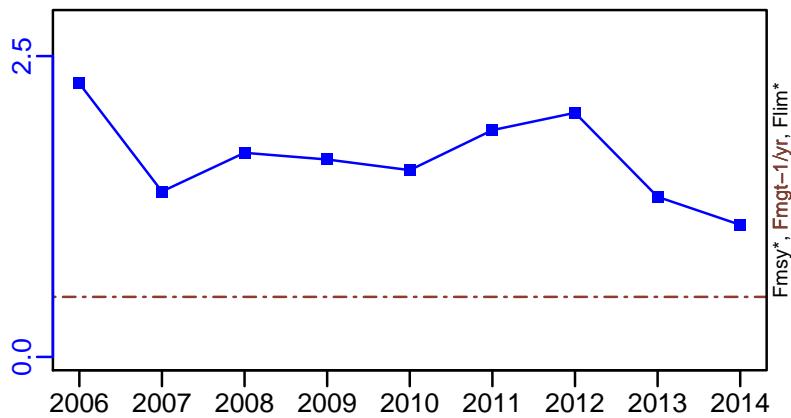
**SSB-MT (2006–2014–OSIO)**



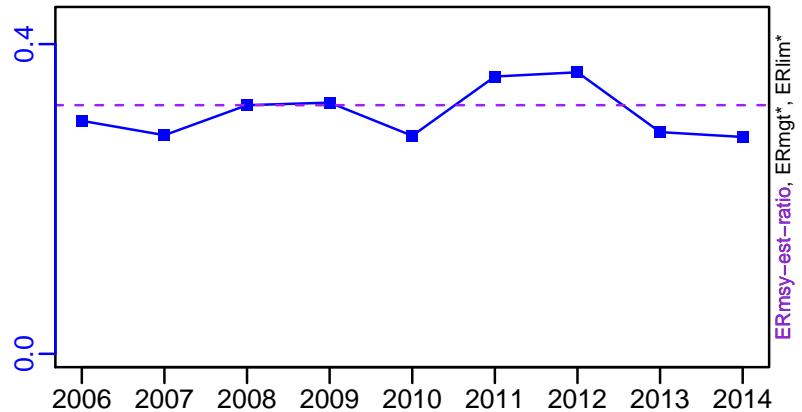
**TN \***



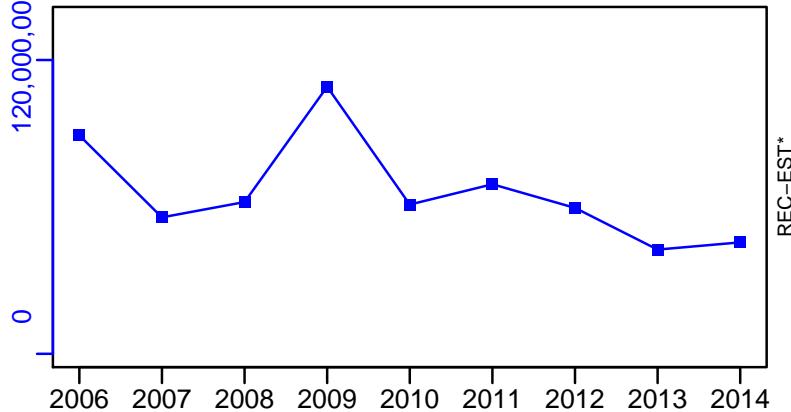
**F-1/yr (2006–2014–OSIO)**



**ER-calc-ratio (2006–2014–OSIO)**



**R-E00 (2006–2014–OSIO)**

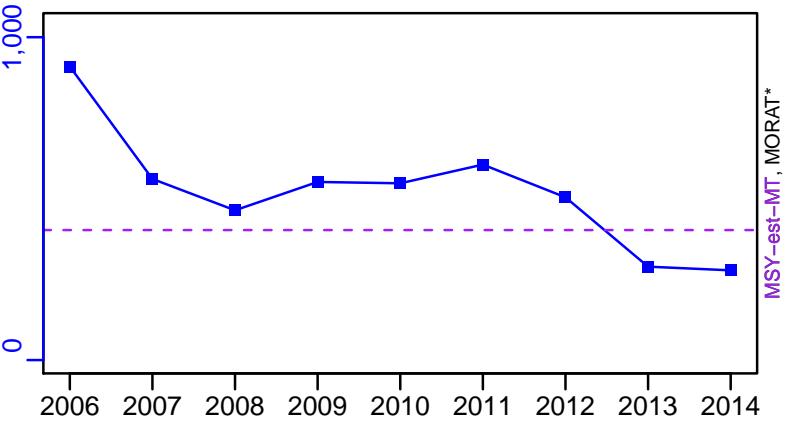


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Red mullet Western Ionian Sea [RMULLMEDGSA19]

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

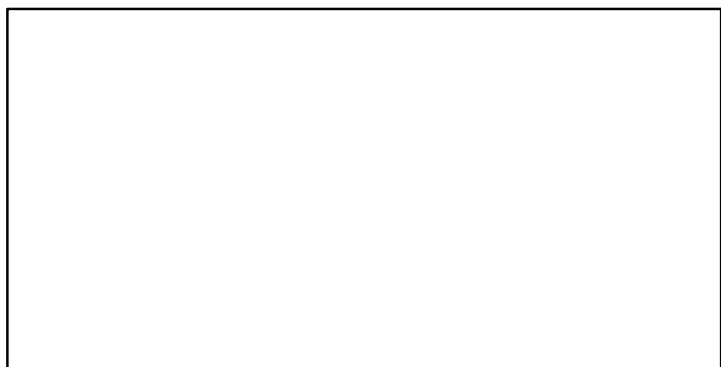
MSY-est-MT, MORAT\*



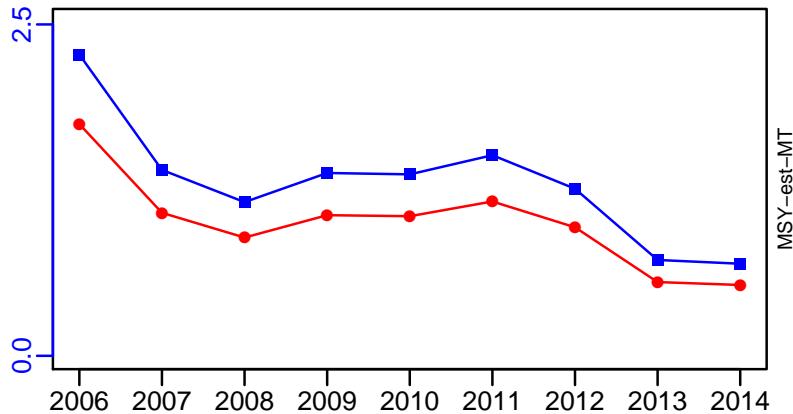
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2014–OSIO)



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

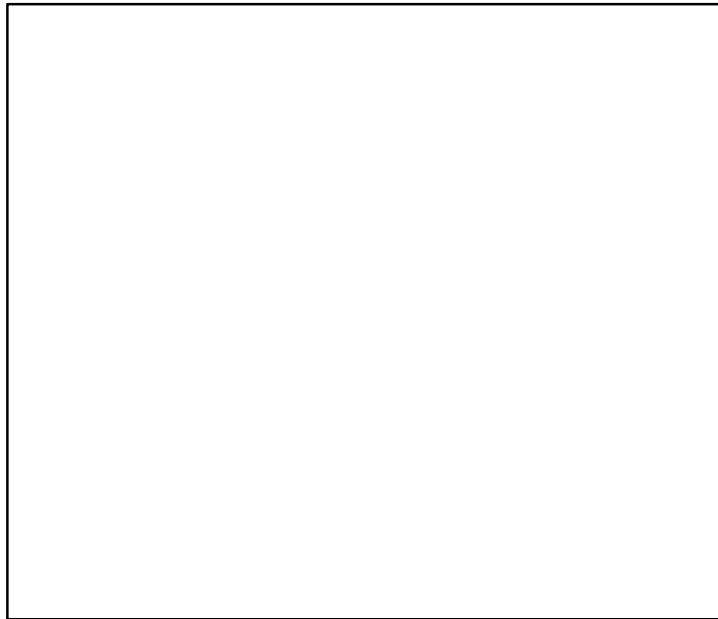
## Red mullet Cyprus Island [RMULLMEDGSA25]

<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA25-2005-2008-OSIO
<b>Area</b>	Cyprus Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

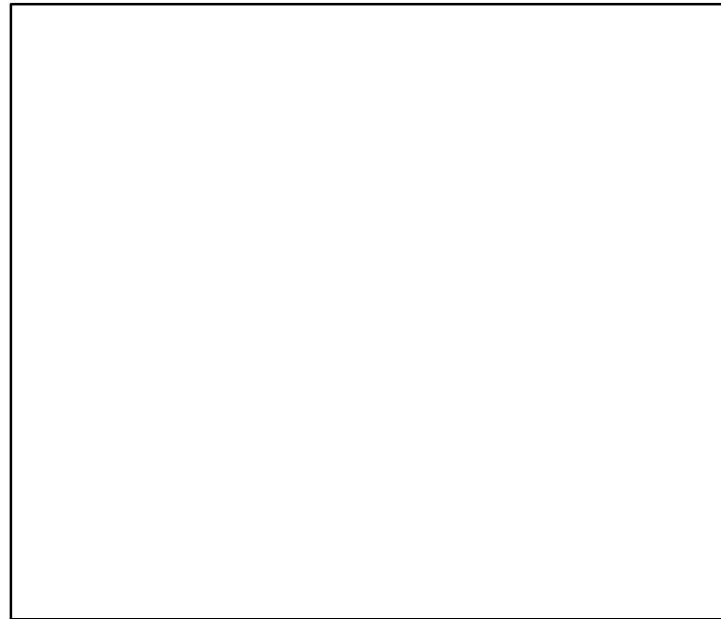
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2008	0.22
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	58	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2008	1,480,000	-	-
<b>F</b>	F-1/yr	2008	0.84	-	-
<b>ER</b>	ER-calc-ratio	2008	0.266	-	-
<b>TC</b>	TC-MT	2008	33		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2008	3.818		
<b>ER/ERmgt</b>	-	-	-		

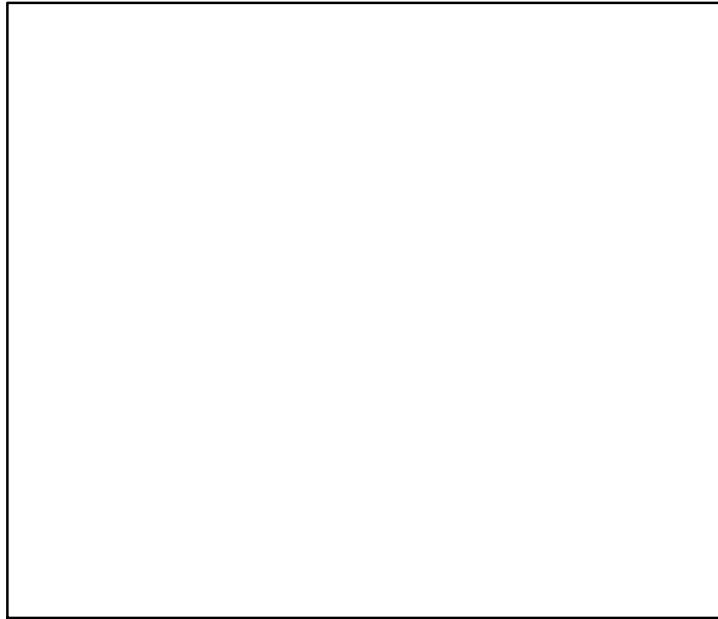
**Kobe MSY\***



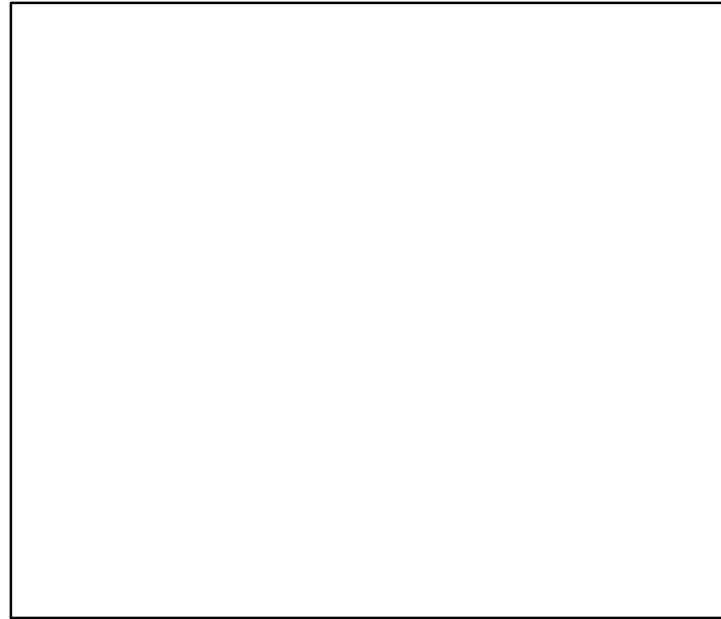
**Kobe MGT\***



**Spawner Recruit\***



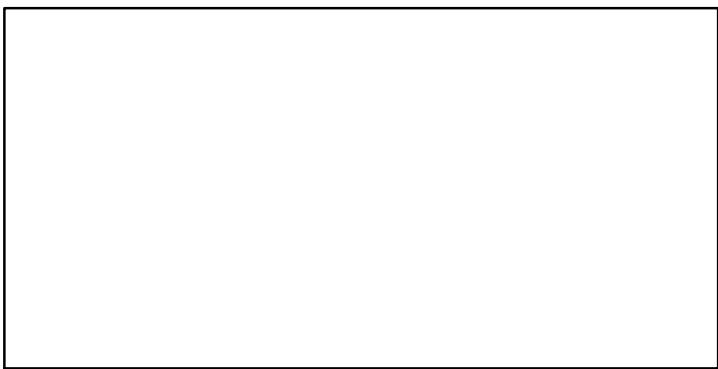
**Production\***



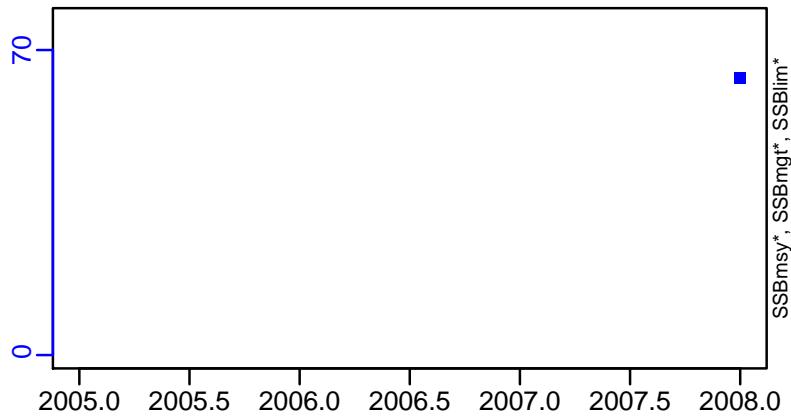
◆ Start Year ♦ End Year \* No Data

Red mullet Cyprus Island [RMULLMEDGSA25]

**TB\***



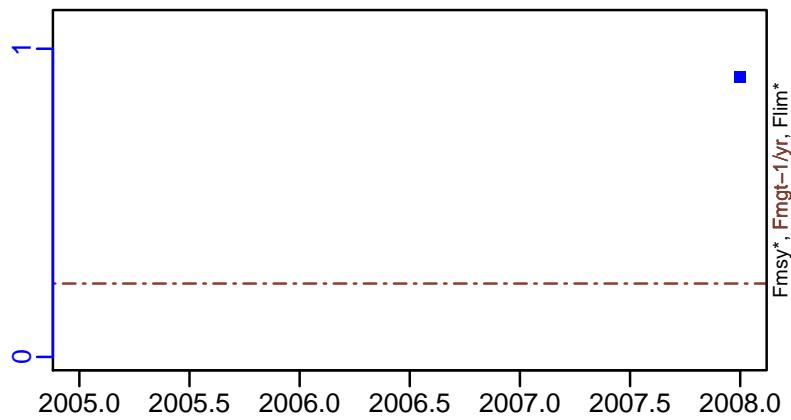
**SSB-MT** (2005–2008–OSIO)



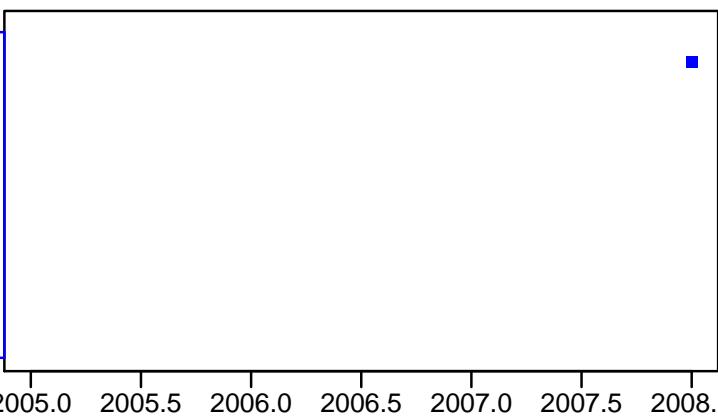
**TN \***



**F-1/yr** (2005–2008–OSIO)



**ER-calc-ratio** (2005–2008–OSIO)



**R-E00** (2005–2008–OSIO)

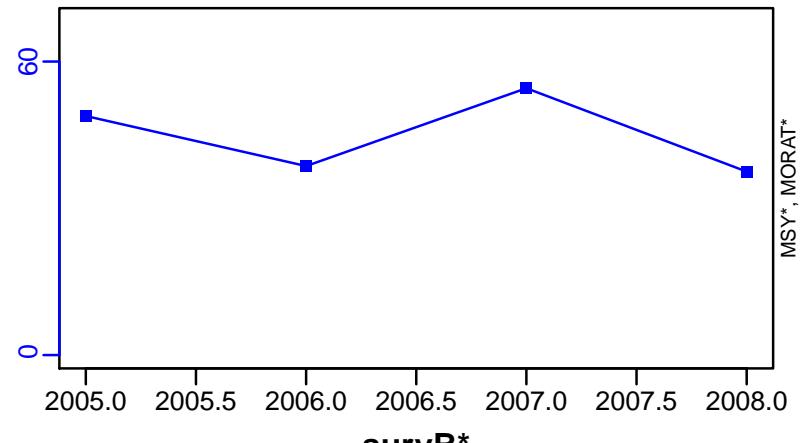


- Listed time series
- - - Target BRP
- - MSY-based BRP
- - Lim BRP
- Rec-Est
- \* No Data

**Red mullet Cyprus Island [RMULLMEDGSA25]**

TC-MT, TL\*, RecC\* (2005–2008–OSIO)

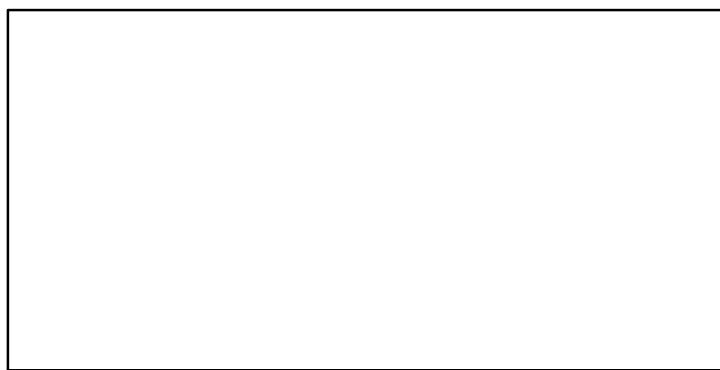
TAC\*, Cpair\*, Cadv\*



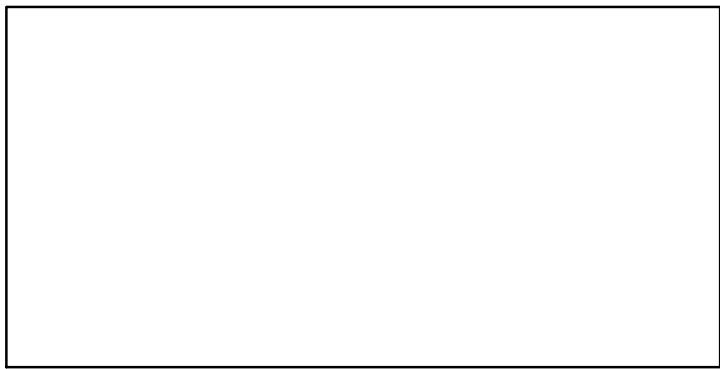
**survB\***



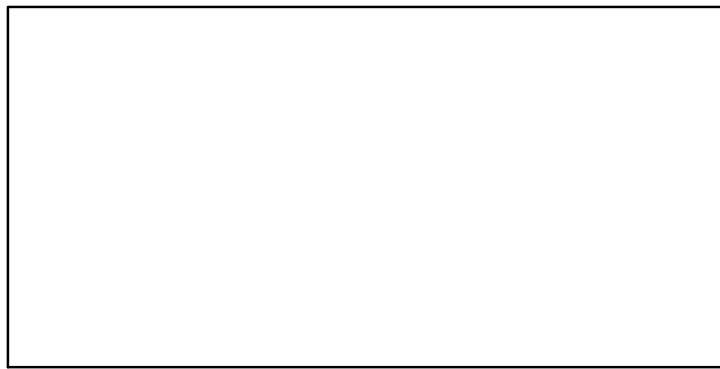
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Red mullet Black Sea [RMULLMEDGSA29]

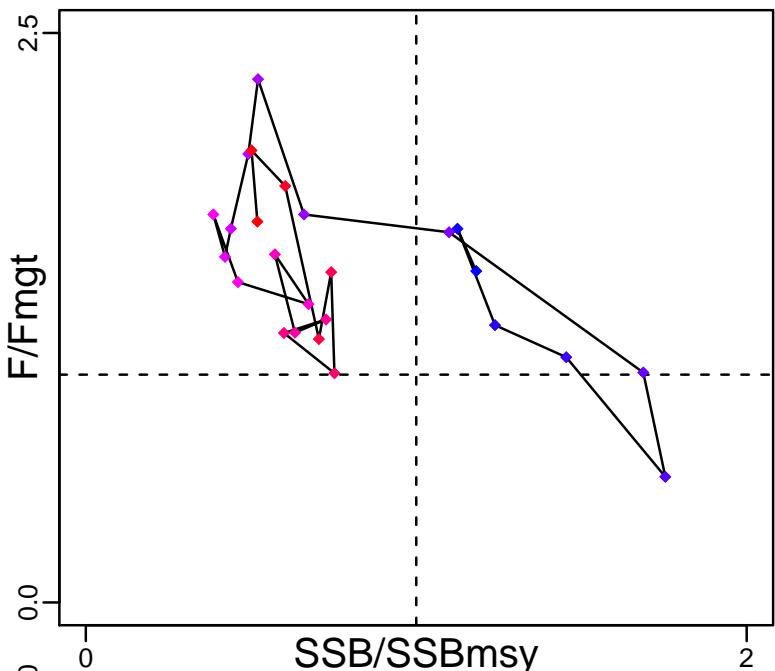
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA29-1990-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	5104
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.281
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.64
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	3000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

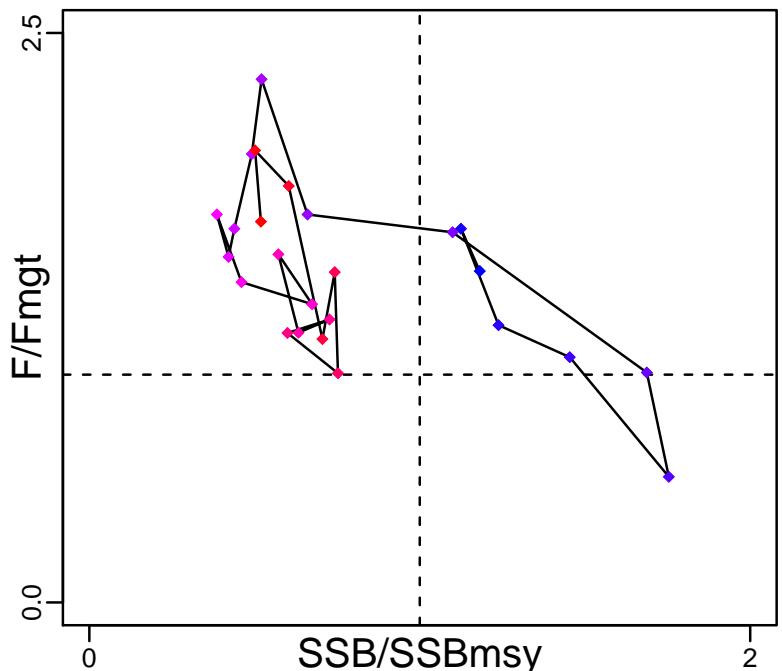
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	2650	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$7.69 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	1.07	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.705	-	-	
<b>TC</b>	TC-MT	2014	3900			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.519			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	2.503			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.672			
<b>ER/ERmgt</b>	-	-	-			

**Red mullet Black Sea [RMULLMEDGSA29]**

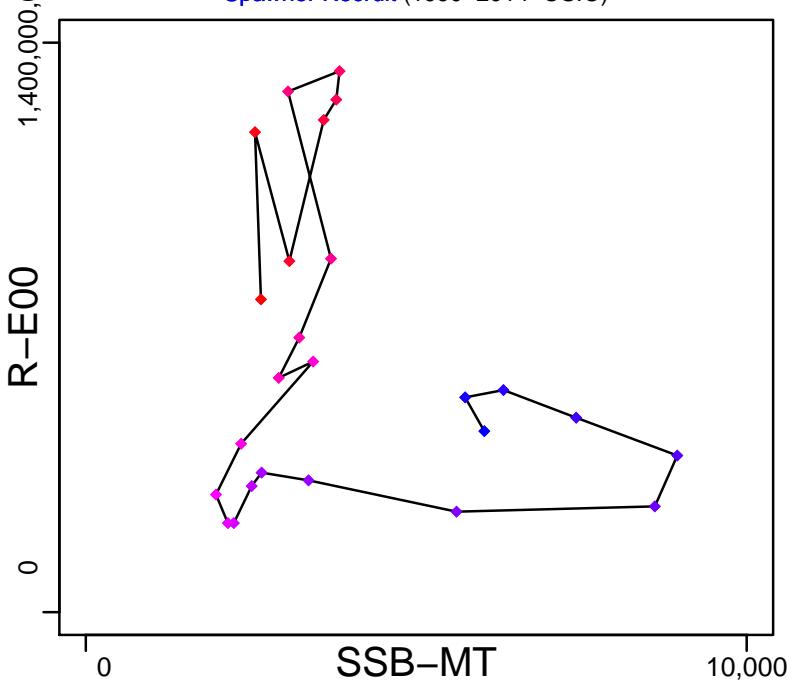
Kobe MSYpref (1990–2014–OSIO)



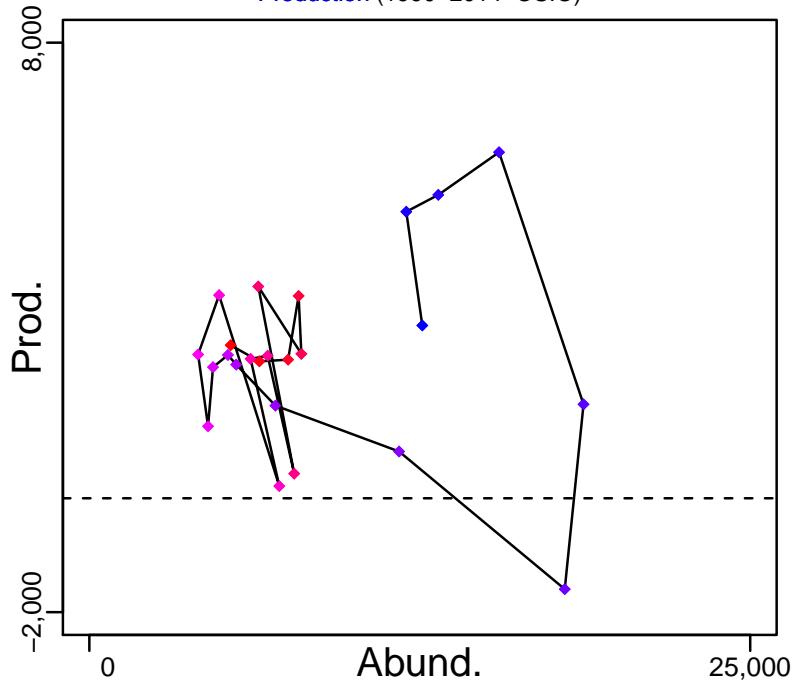
Kobe MGTpref (1990–2014–OSIO)



Spawner Recruit (1990–2014–OSIO)



Production (1990–2014–OSIO)



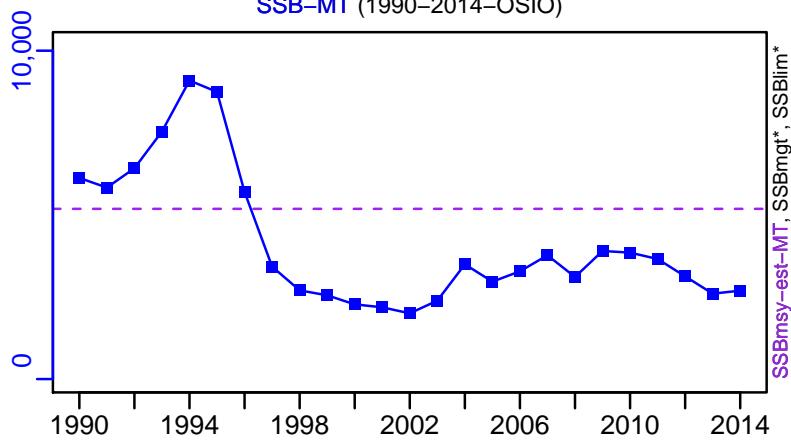
◆ Start Year   ◆ End Year   \* No Data

Red mullet Black Sea [RMULLMEDGSA29]

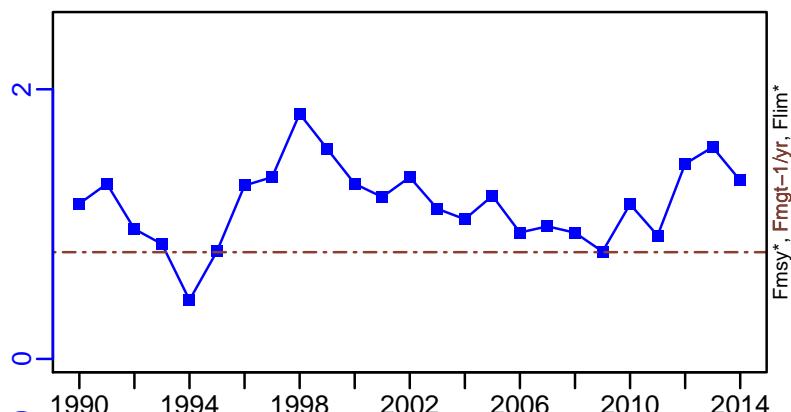
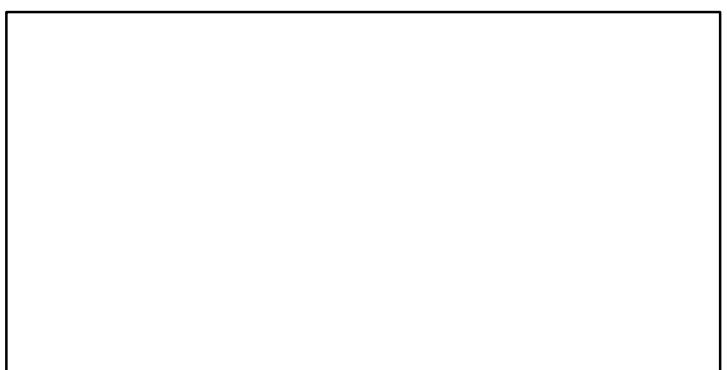
**TB\***



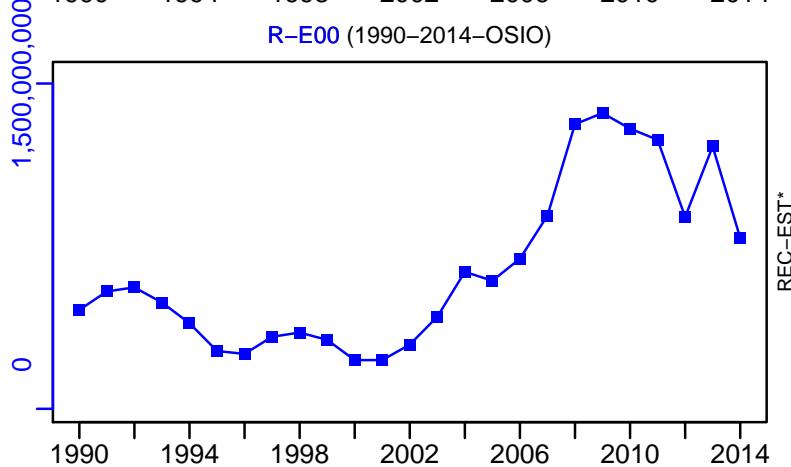
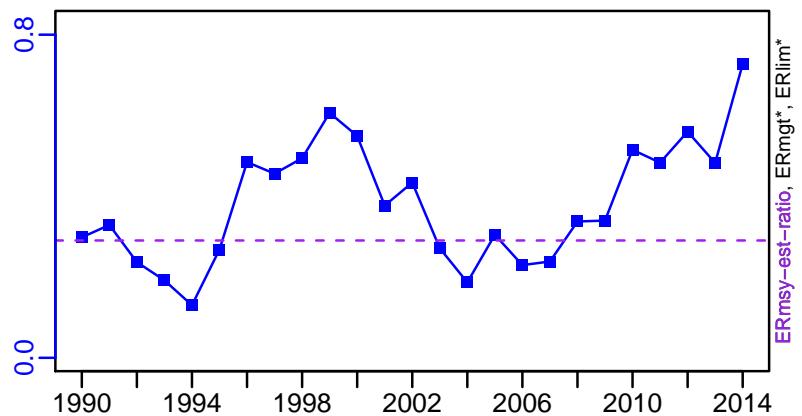
**SSB-MT (1990–2014–OSIO)**



**TN \***



**ER-calc-ratio (1990–2014–OSIO)**

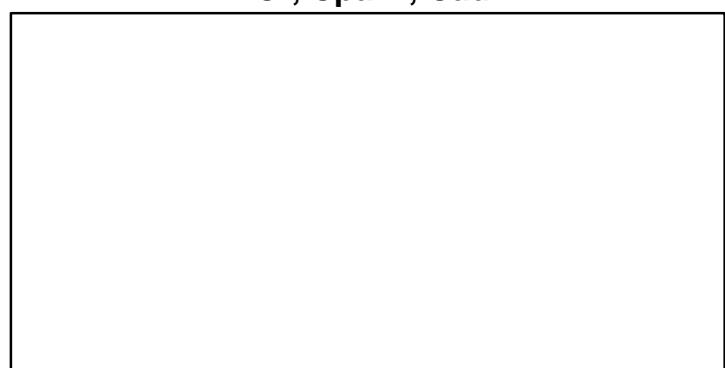
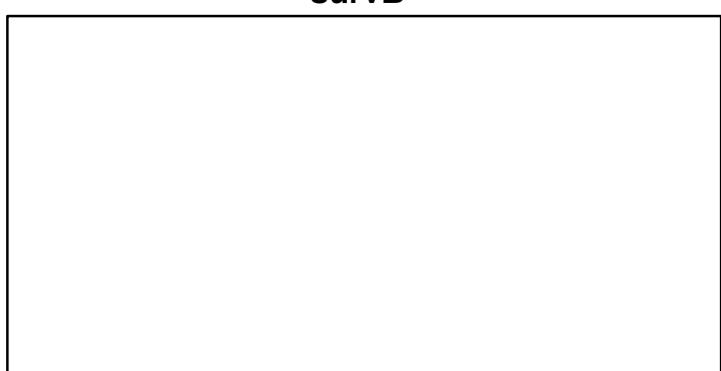
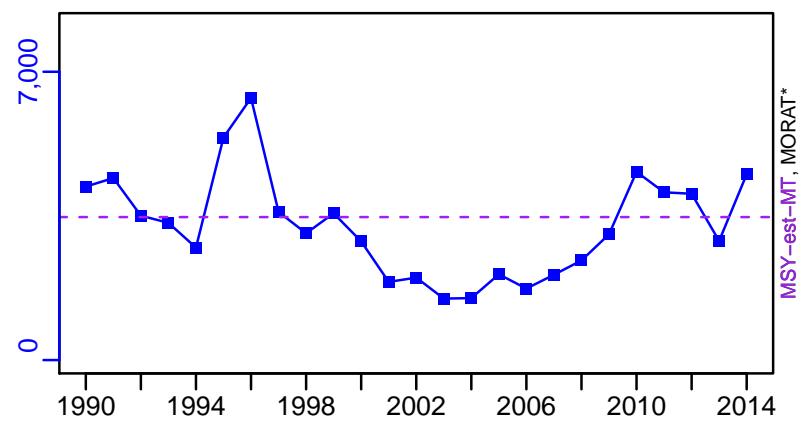


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

**Red mullet Black Sea [RMULLMEDGSA29]**

TC-MT, TL\*, RecC\* (1990–2014–OSIO)

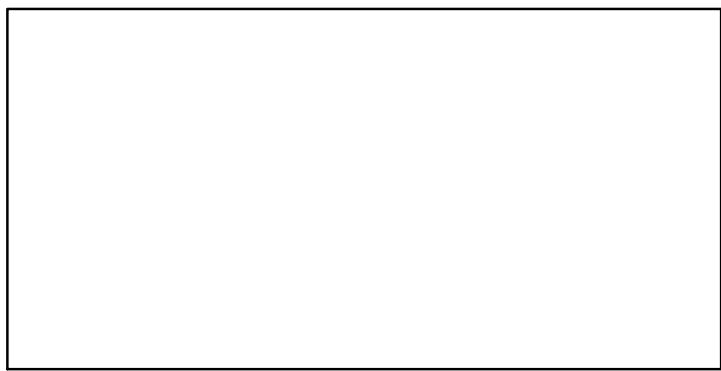
TAC\*, Cpair\*, Cadv\*



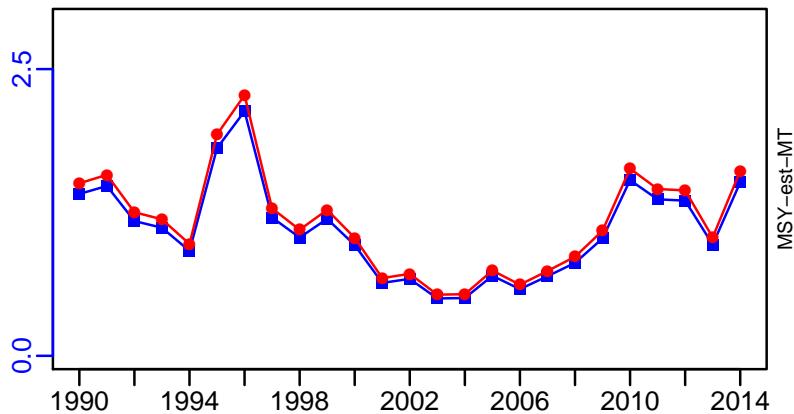
CPUE\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990–2014–OSIO)



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

## Red mullet Balearic Island [RMULLMEDGSA5]

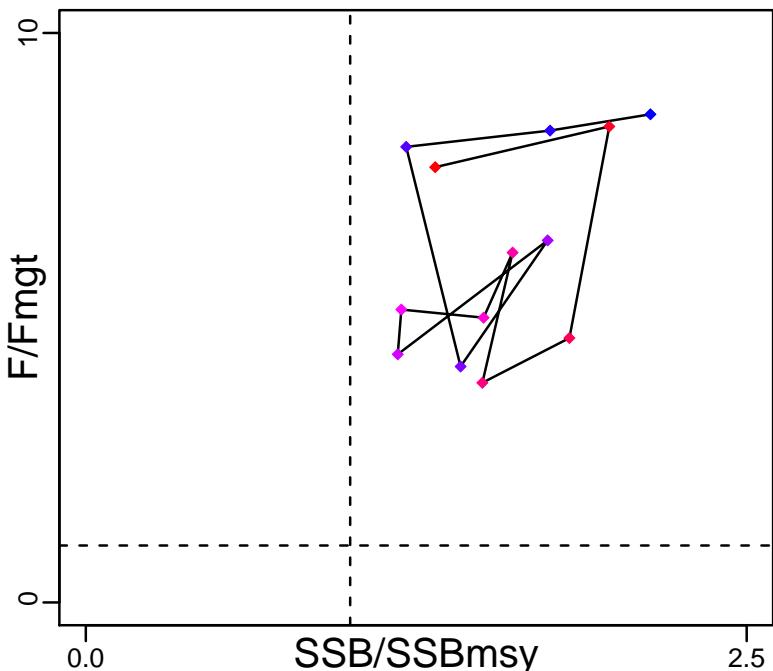
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA5-2000-2012-OSIO
<b>Area</b>	Balearic Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2012	22
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.478
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.14
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	22
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

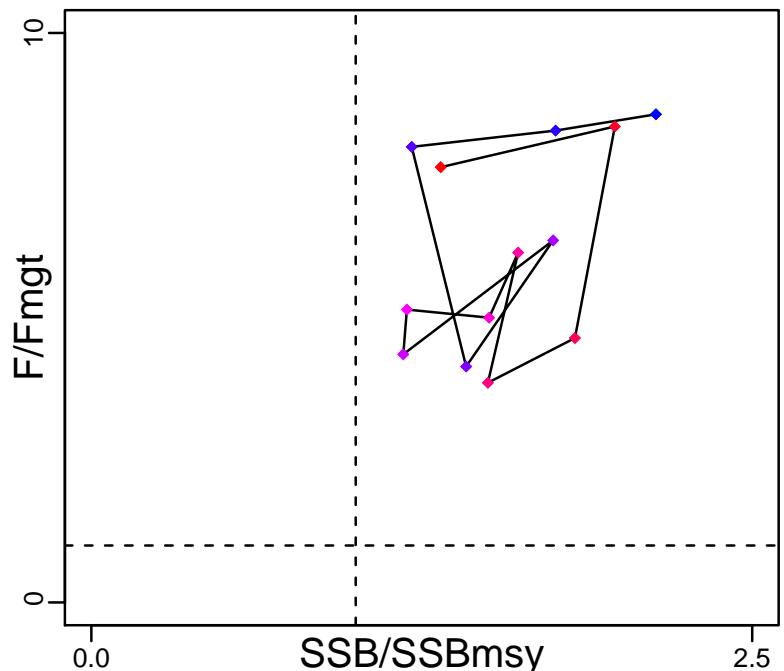
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2012	29	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2012	1,050,000	-	-	
<b>F</b>	F-1/yr	2012	1.07	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.266	-	-	
<b>TC</b>	TC-MT	2012	16			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	1.322			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.557			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	7.643			
<b>ER/ERmgt</b>	-	-	-			

**Red mullet Balearic Island [RMULLMEDGSA5]**

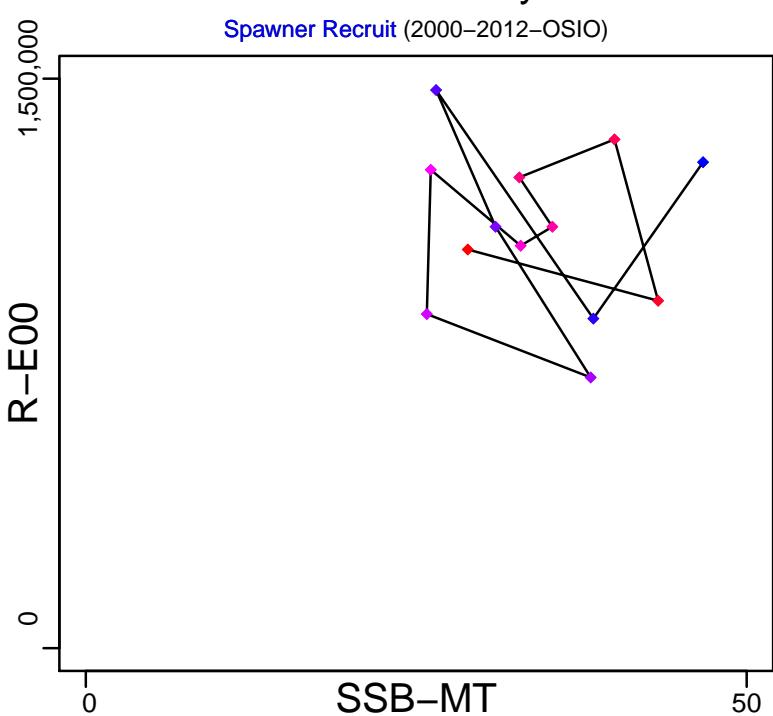
Kobe MSYpref (2000–2012–OSIO)



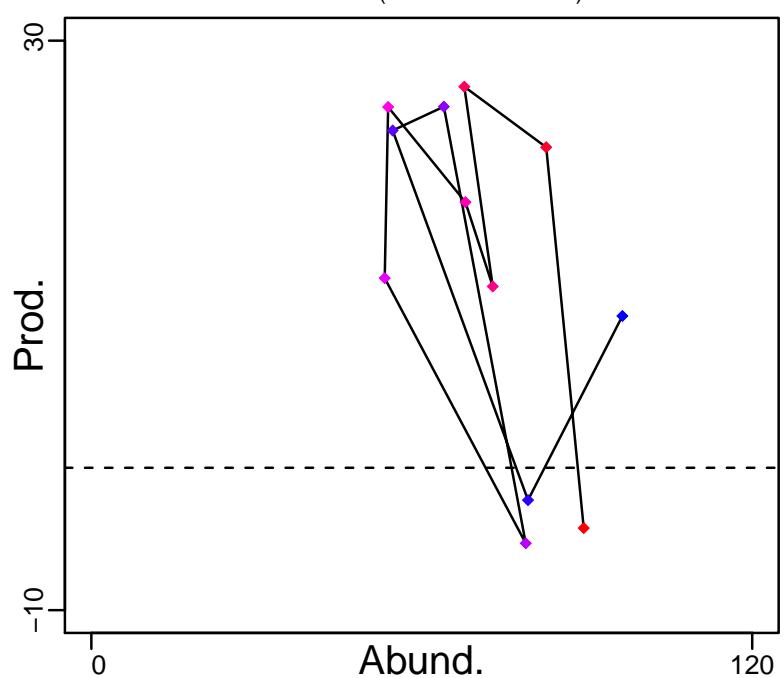
Kobe MGTpref (2000–2012–OSIO)



Spawner Recruit (2000–2012–OSIO)



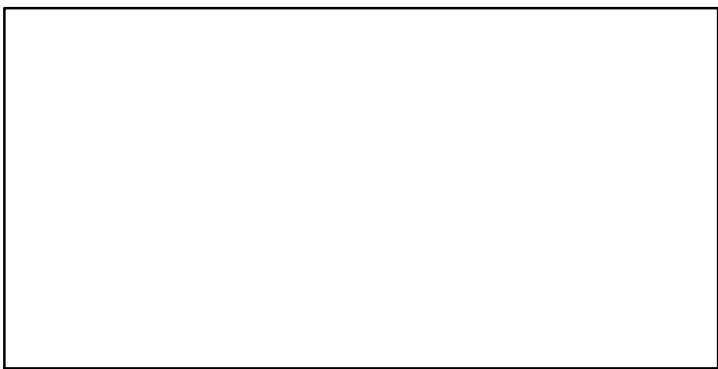
Production (2000–2012–OSIO)



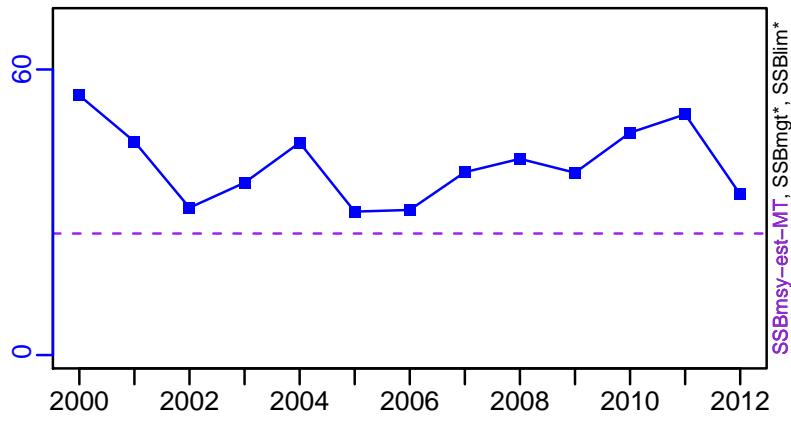
◆ Start Year ◆ End Year \* No Data

Red mullet Balearic Island [RMULLMEDGSA5]

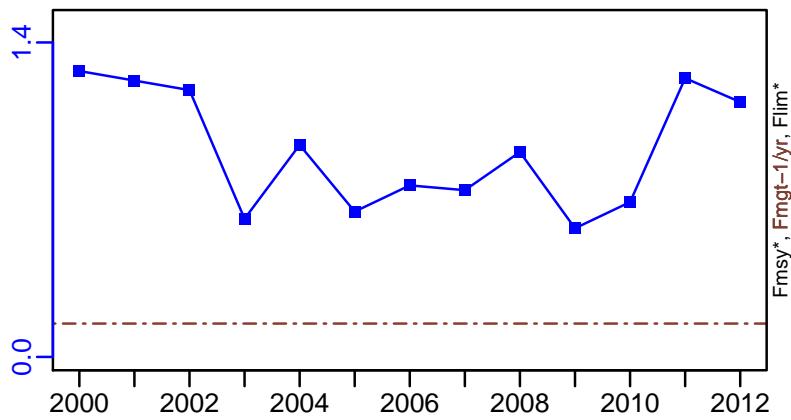
**TB\***



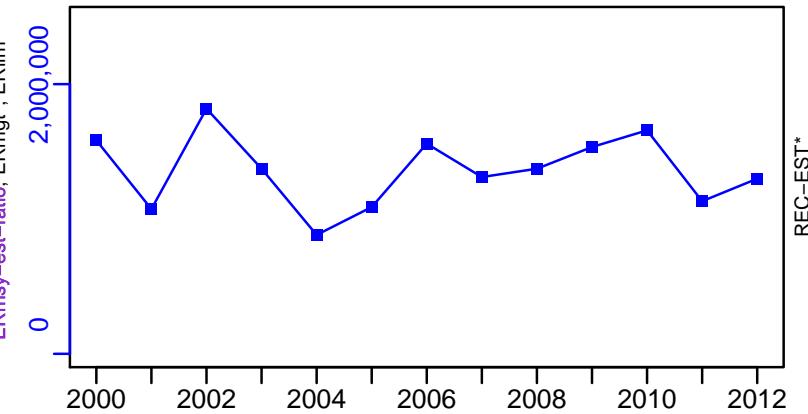
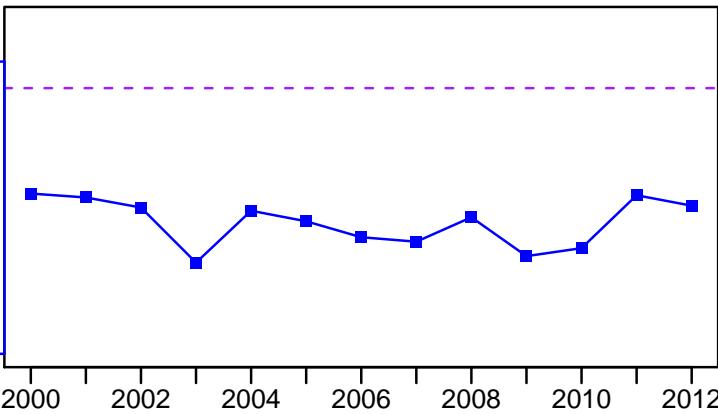
**SSB-MT** (2000–2012–OSIO)



**TN \***



**ER-calc-ratio** (2000–2012–OSIO)

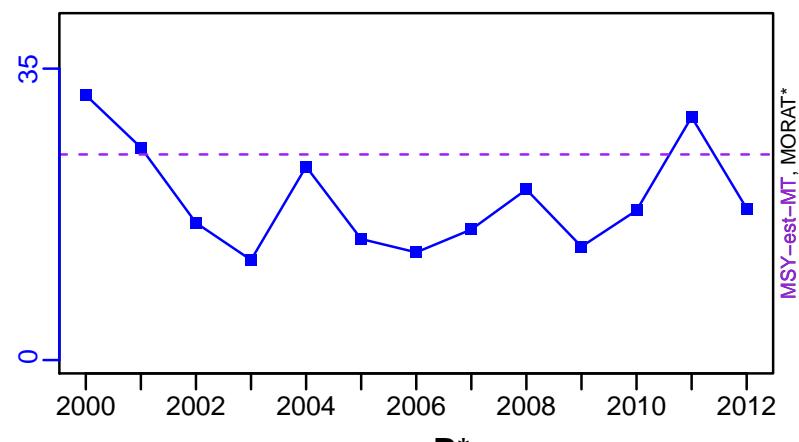


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

**Red mullet Balearic Island [RMULLMEDGSA5]**

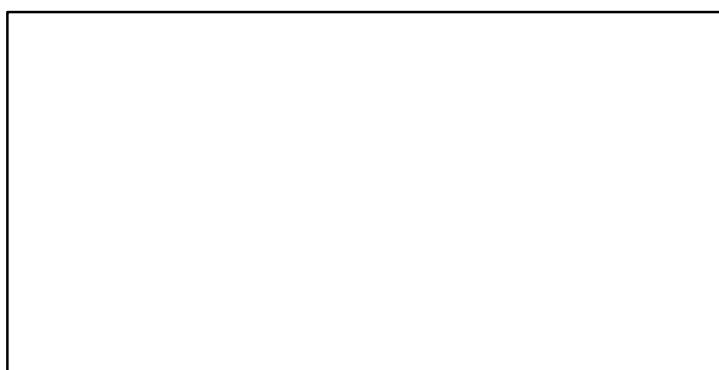
TC-MT, TL\*, RecC\* (2000–2012–OSIO)

TAC\*, Cpair\*, Cadv\*

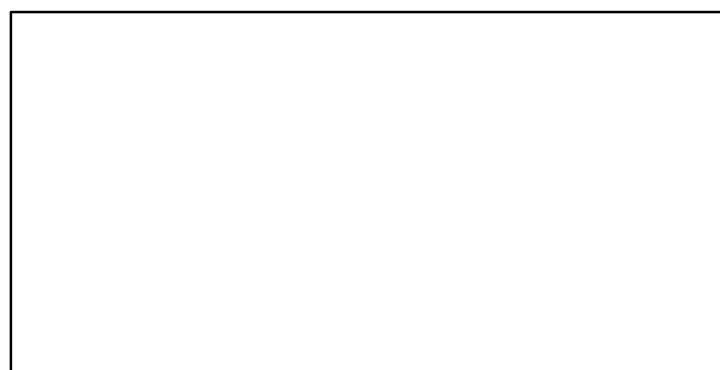


survB\*

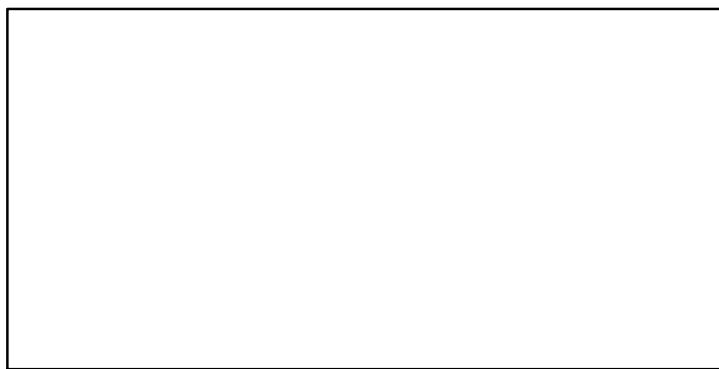
MSY-est-MT, MORAT\*



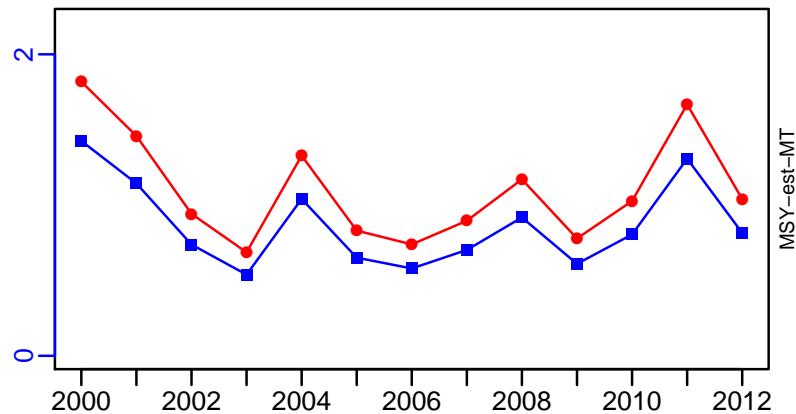
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2000–2012–OSIO)



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

## Red mullet Northern Spain [RMULLMEDGSA6]

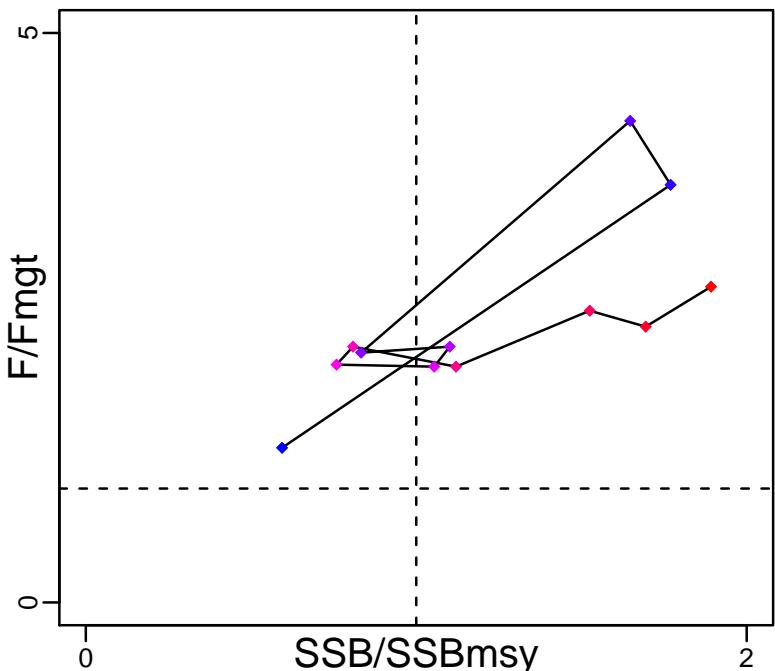
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA6-2002-2013-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	1062
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.516
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.57
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	1297
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

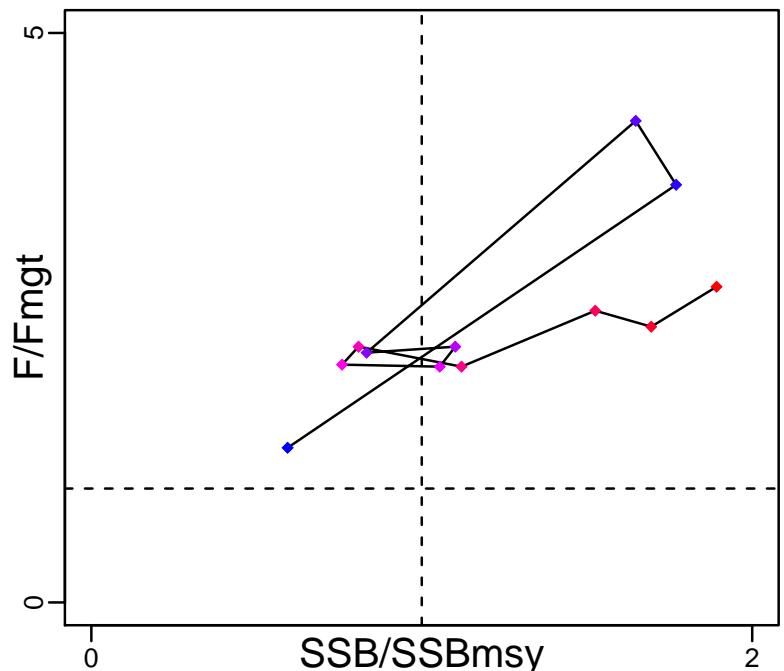
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2013	2010	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	86,300,000	-	-	
<b>F</b>	F-1/yr	2013	1.58	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.263	-	-	
<b>TC</b>	TC-MT	2013	1250			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	1.892			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.51			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	2.772			
<b>ER/ERmgt</b>	-	-	-			

Red mullet Northern Spain [RMULLMEDGSA6]

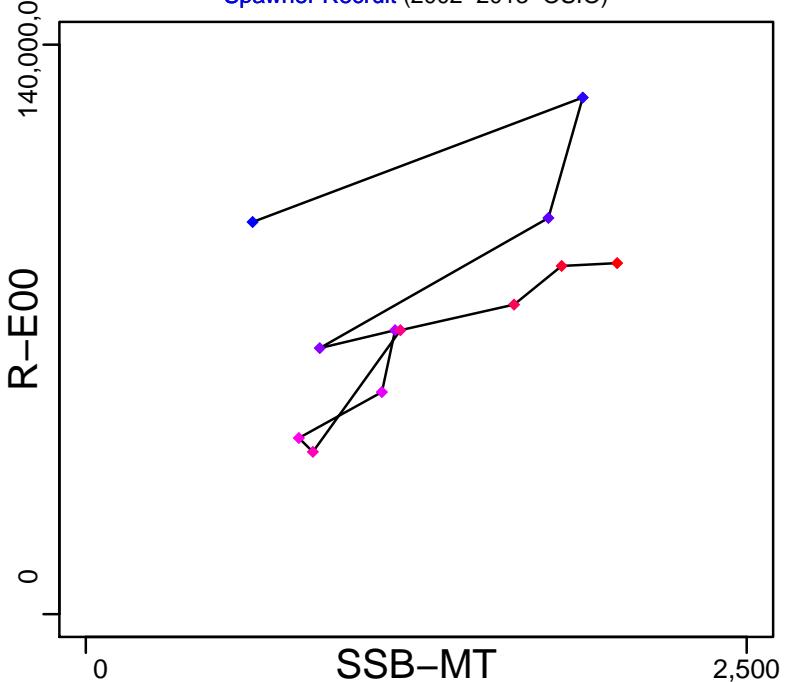
Kobe MSYpref (2002–2013–OSIO)



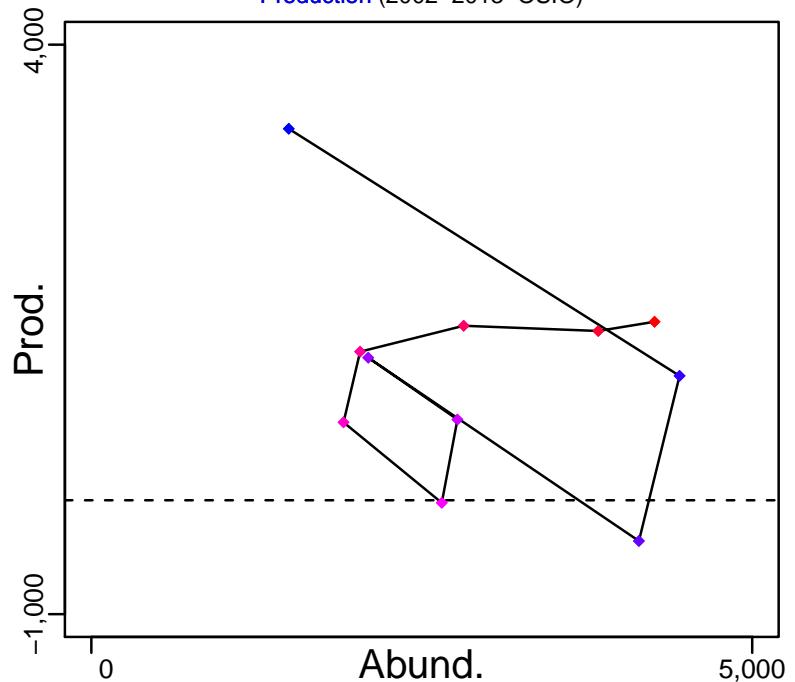
Kobe MGTPref (2002–2013–OSIO)



Spawner Recruit (2002–2013–OSIO)



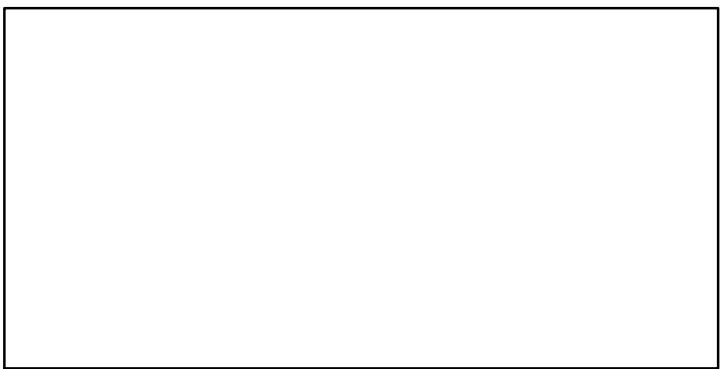
Production (2002–2013–OSIO)



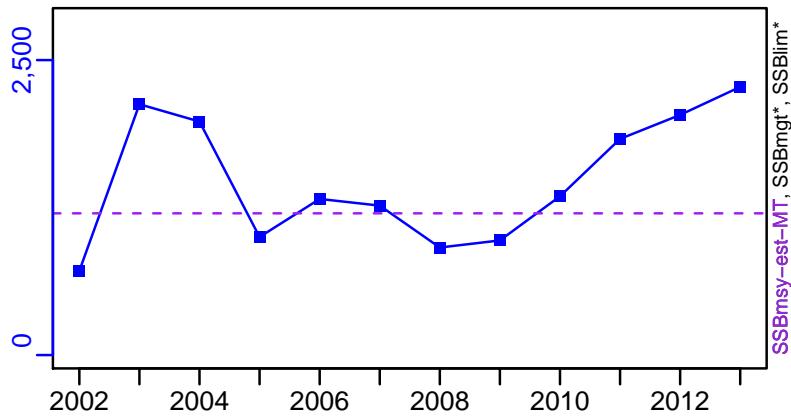
◆ Start Year   ◆ End Year   \* No Data

Red mullet Northern Spain [RMULLMEDGSA6]

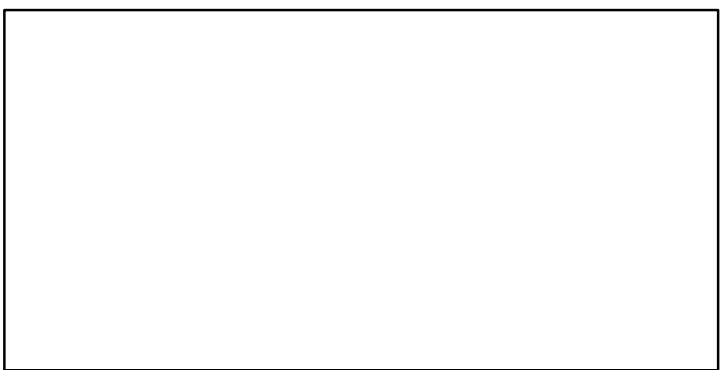
**TB\***



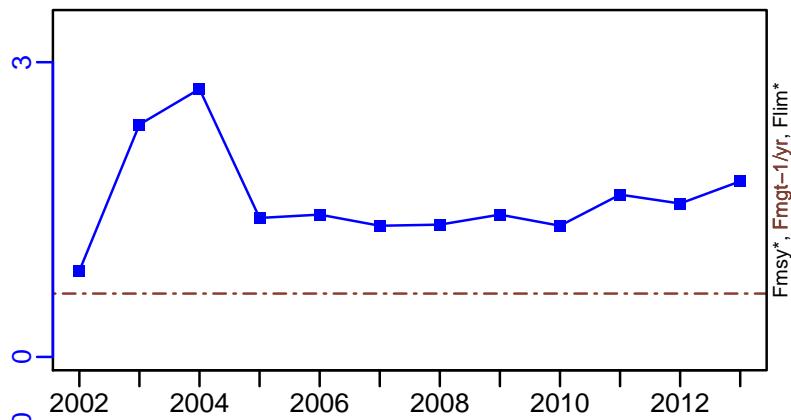
**SSB-MT** (2002–2013–OSIO)



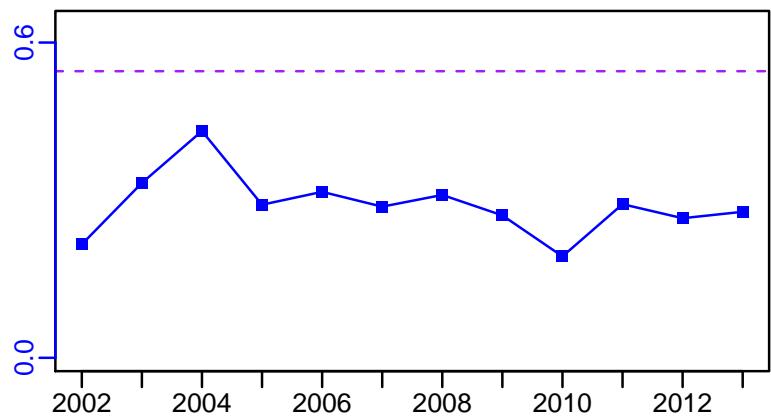
**TN \***



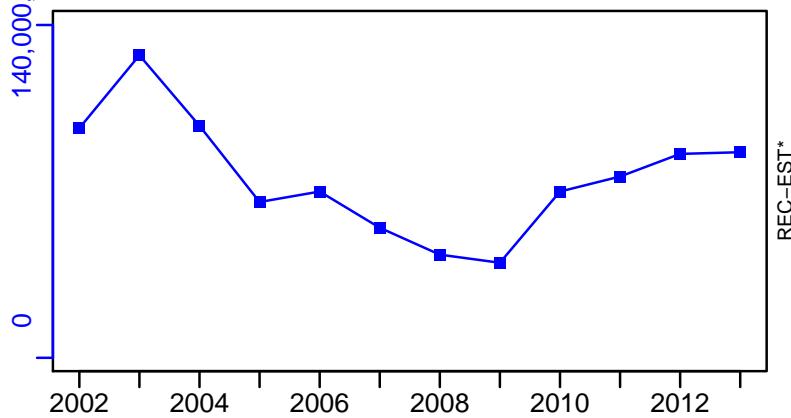
**F-1/yr** (2002–2013–OSIO)



**ER-calc-ratio** (2002–2013–OSIO)



**R-E00** (2002–2013–OSIO)

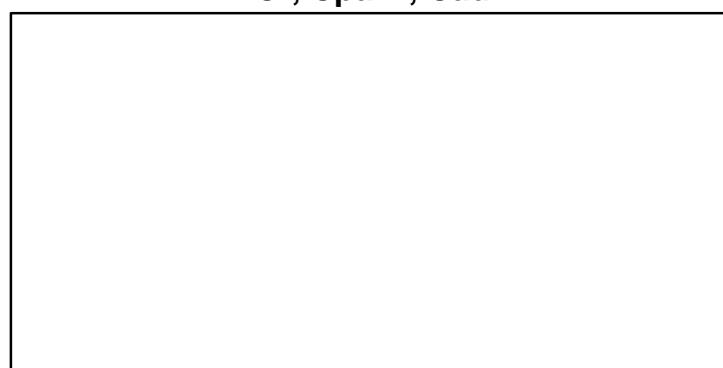
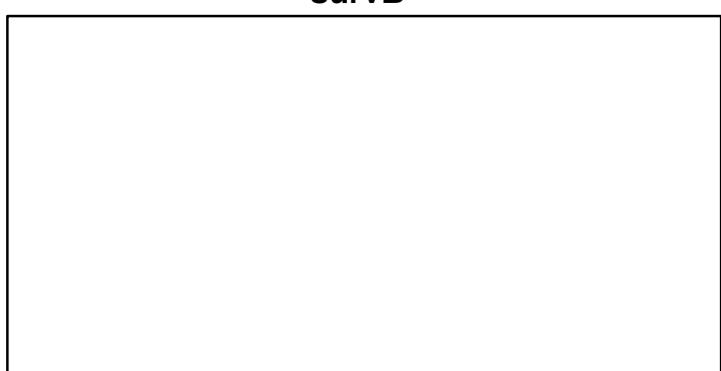
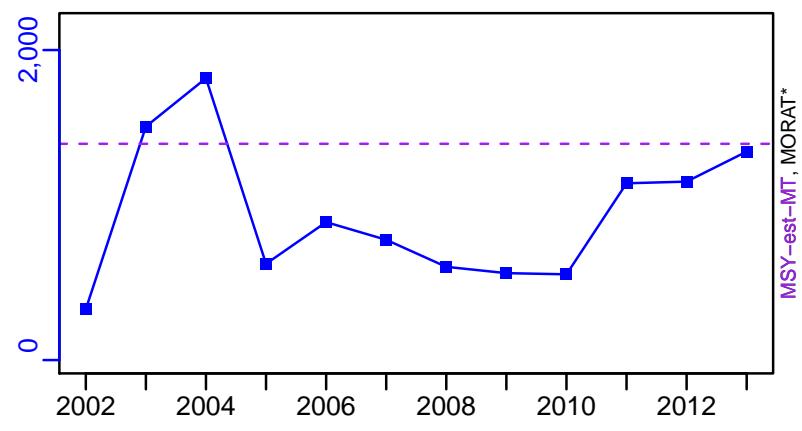


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

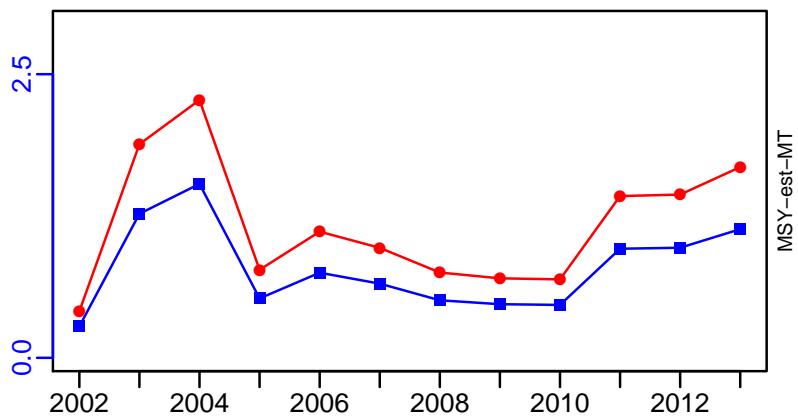
Red mullet Northern Spain [RMULLMEDGSA6]

TC-MT, TL\*, RecC\* (2002–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2002–2013–OSIO)



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

## Red mullet Gulf of Lions [RMULLMEDGSA7]

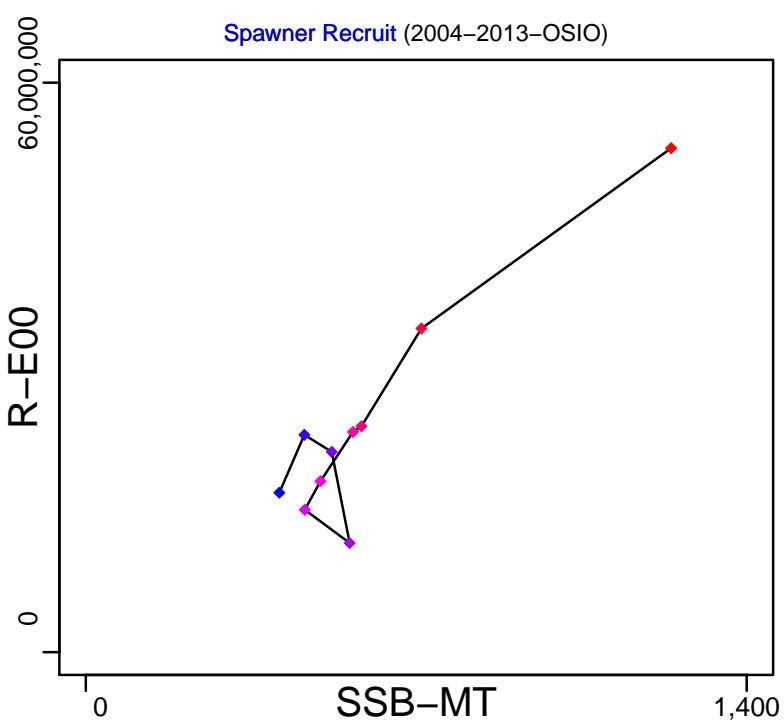
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA7-2004-2013-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<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>	Fmgt-1/yr	2013	0.14
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

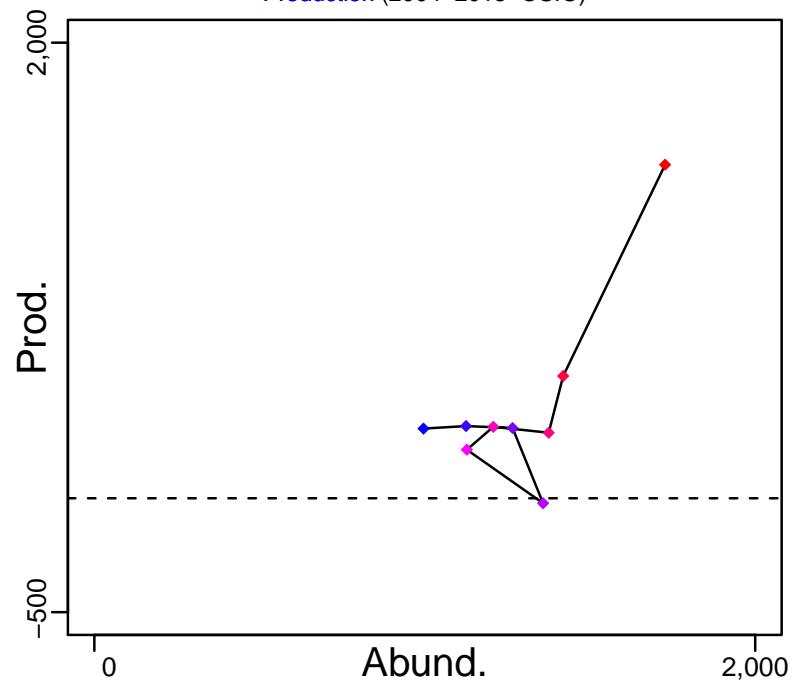
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	1240	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	53,100,000	-	-
<b>F</b>	F-1/yr	2013	0.435	-	-
<b>ER</b>	ER-calc-ratio	2013	0.099	-	-
<b>TC</b>	TC-MT	2013	297		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	3.107		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\*****Kobe MGT\***

Spawner Recruit (2004–2013–OSIO)



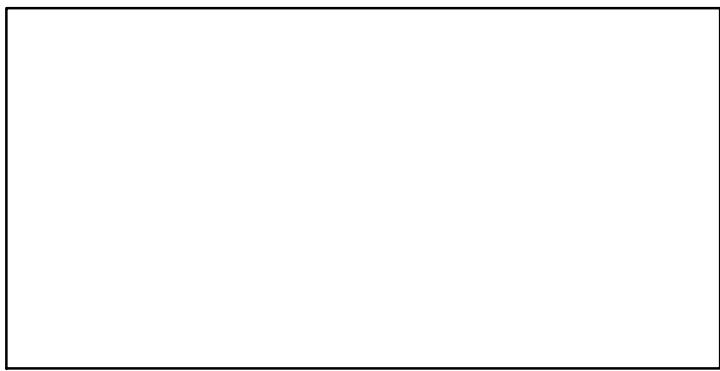
Production (2004–2013–OSIO)



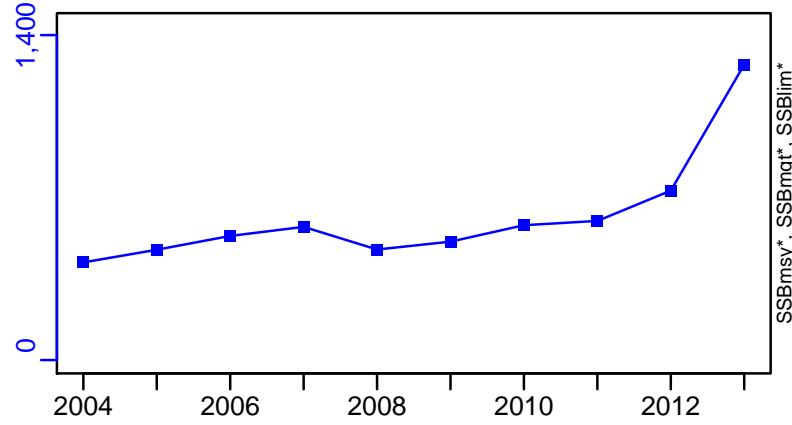
◆ Start Year   ◆ End Year   \* No Data

Red mullet Gulf of Lions [RMULLMEDGSA7]

**TB\***



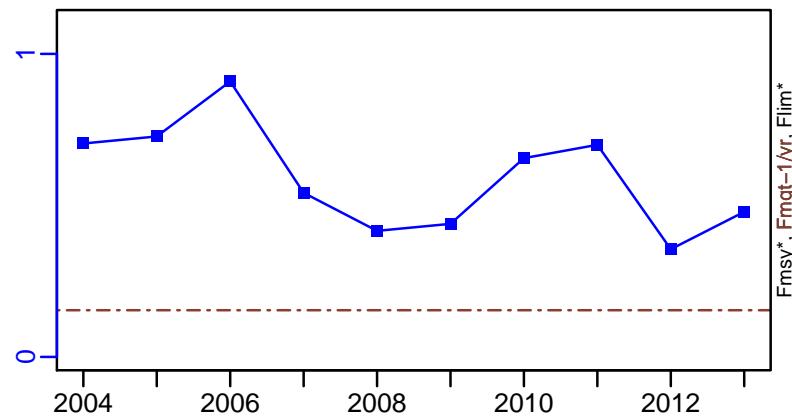
**SSB-MT (2004–2013–OSIO)**



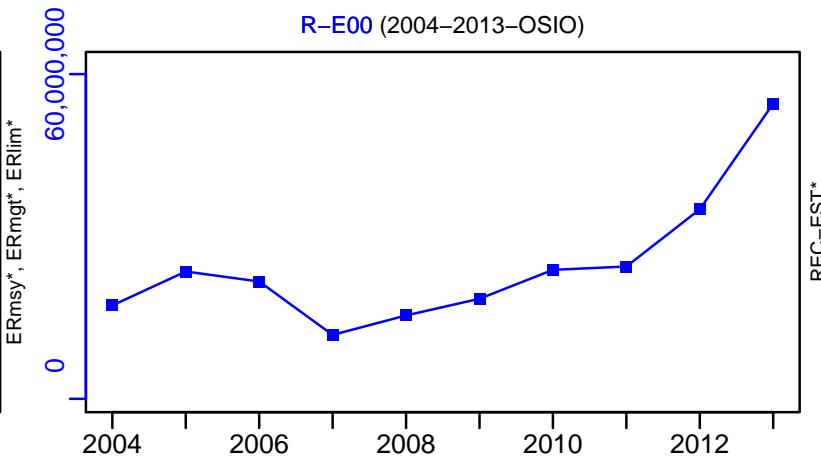
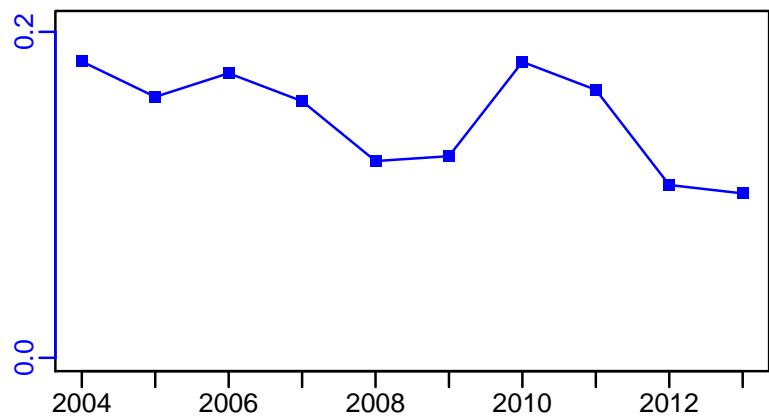
**TN \***



**F-1/yr (2004–2013–OSIO)**



**ER-calc-ratio (2004–2013–OSIO)**

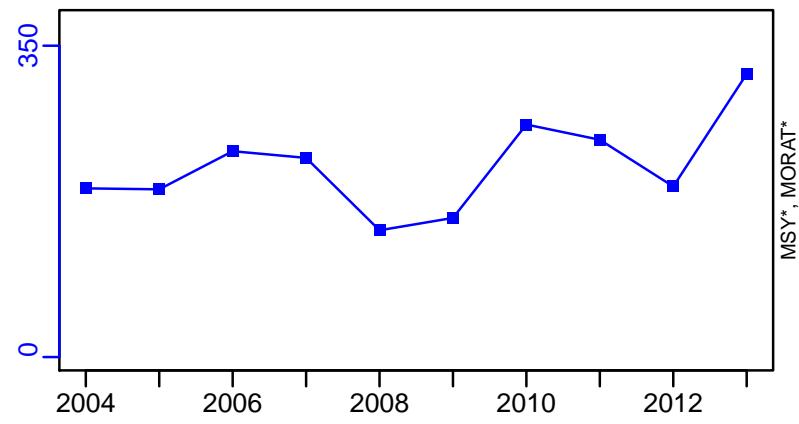


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

**Red mullet Gulf of Lions [RMULLMEDGSA7]**

TC-MT, TL\*, RecC\* (2004–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



**survB\***

MSY\*, MORAT\*

**CPUE\***

**EFFORT\***

**CdivMSY\***

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

## Red mullet Ligurian and North Tyrrhenian Sea [RMULLMEDGSA9]

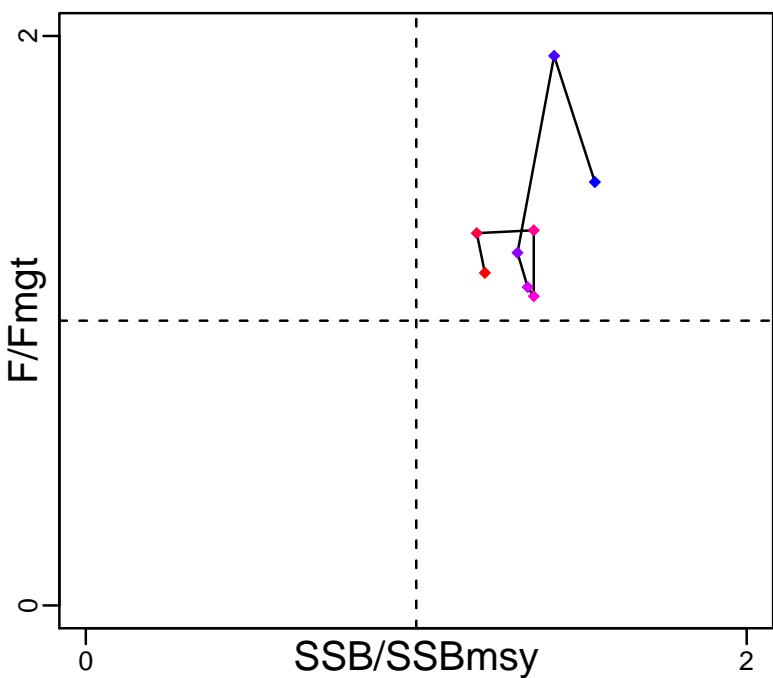
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus barbatus
<b>Current Assess ID</b>	STECF-RMULLMEDGSA9-2006-2013-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	1623
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.225
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2013	0.596
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	778
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

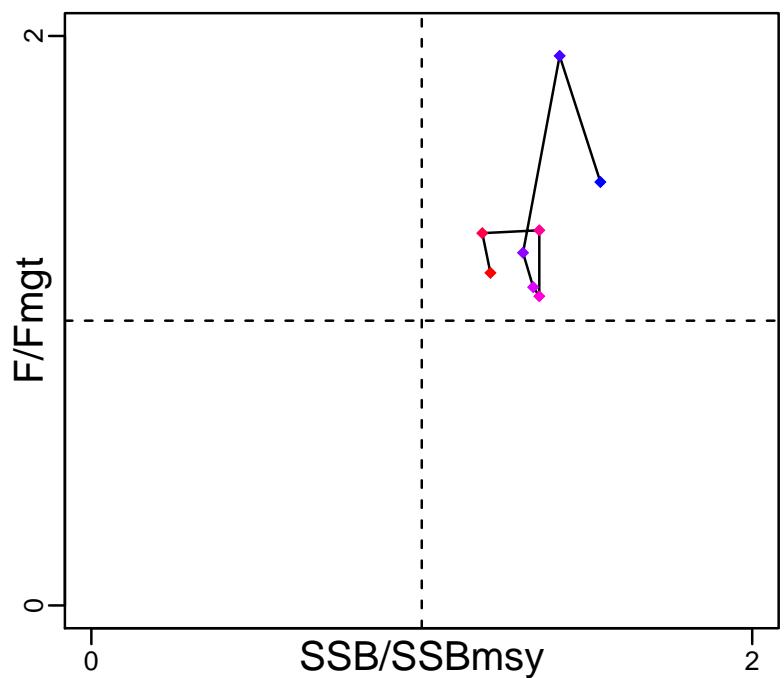
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2013	1960	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2013	$1.63 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2013	0.696	-	-	
<b>ER</b>	ER-calc-ratio	2013	0.176	-	-	
<b>TC</b>	TC-MT	2013	736			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	1.208			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.783			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	1.168			
<b>ER/ERmgt</b>	-	-	-			

Red mullet Ligurian and North Tyrrhenian Sea [RMULLMEDGSA9]

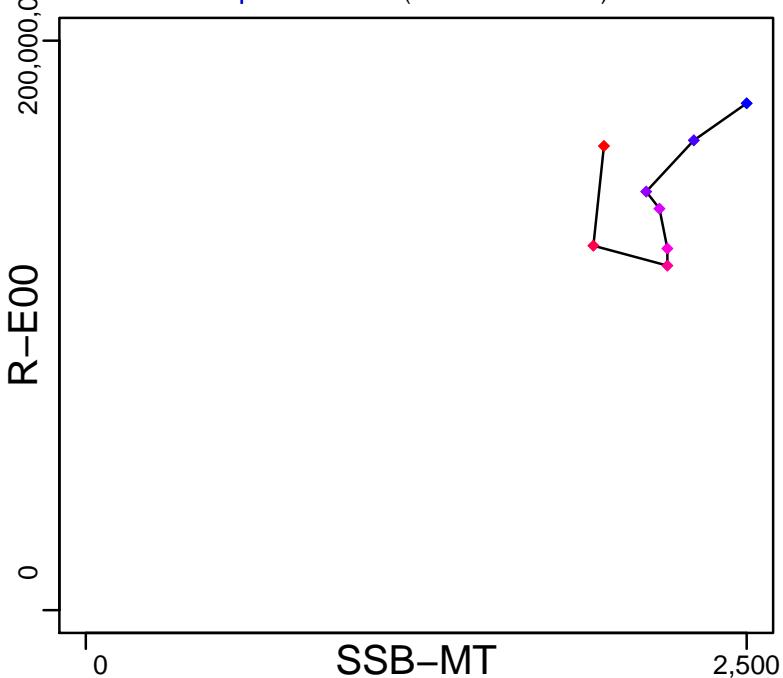
Kobe MSYpref (2006–2013–OSIO)



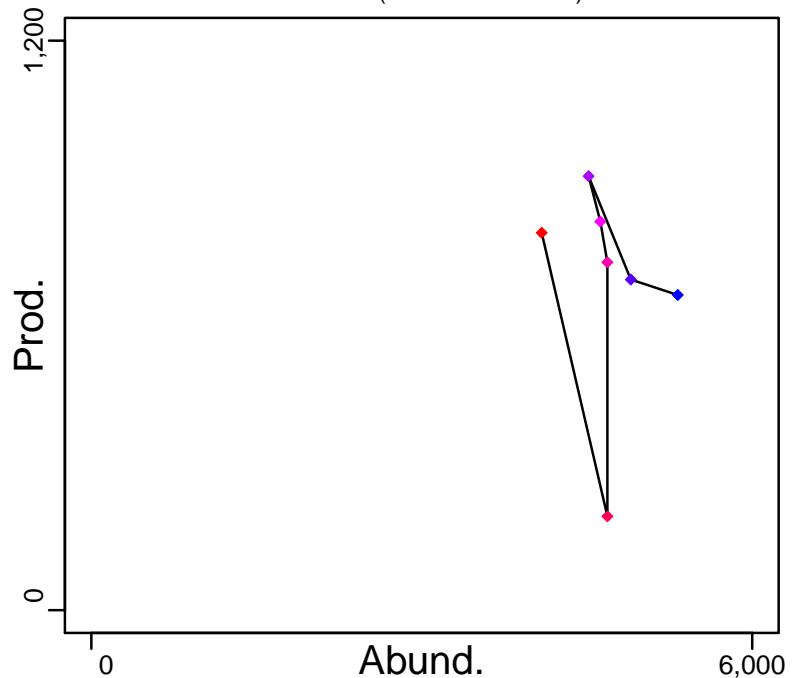
Kobe MGTpref (2006–2013–OSIO)



Spawner Recruit (2006–2013–OSIO)



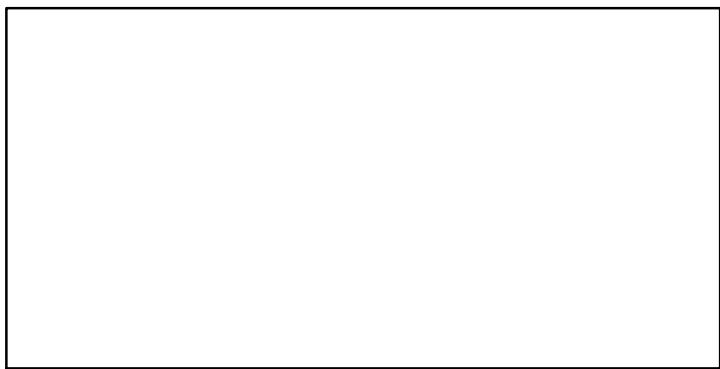
Production (2006–2013–OSIO)



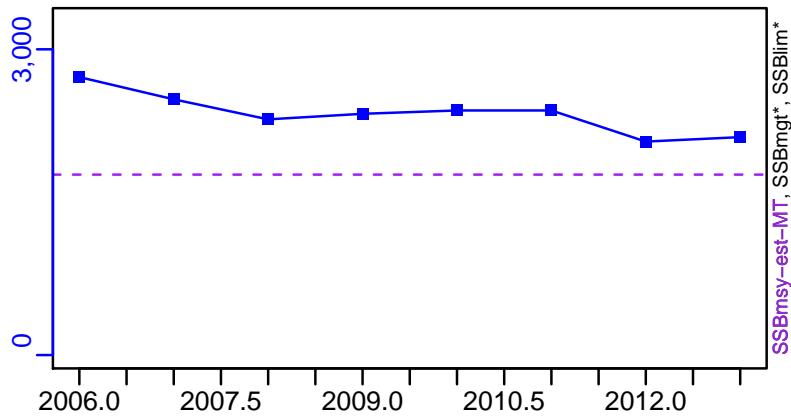
◆ Start Year   ◆ End Year   \* No Data

Red mullet Ligurian and North Tyrrhenian Sea [RMULLMEDGSA9]

**TB\***



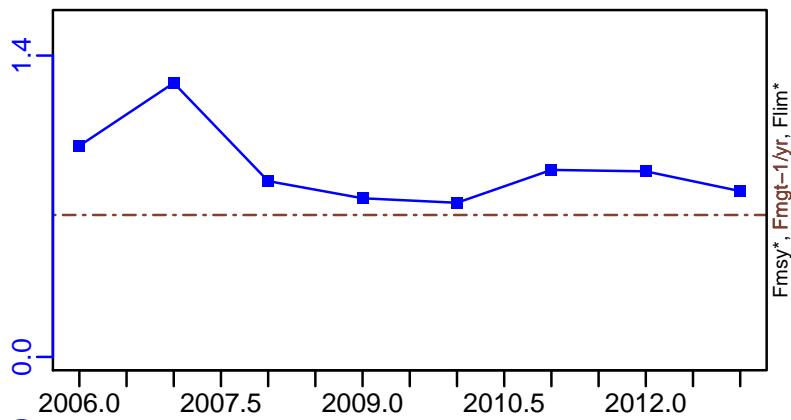
**SSB-MT** (2006–2013–OSIO)



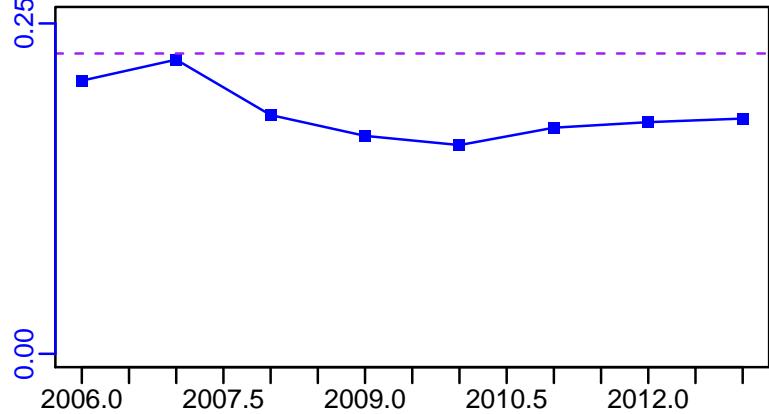
**TN \***



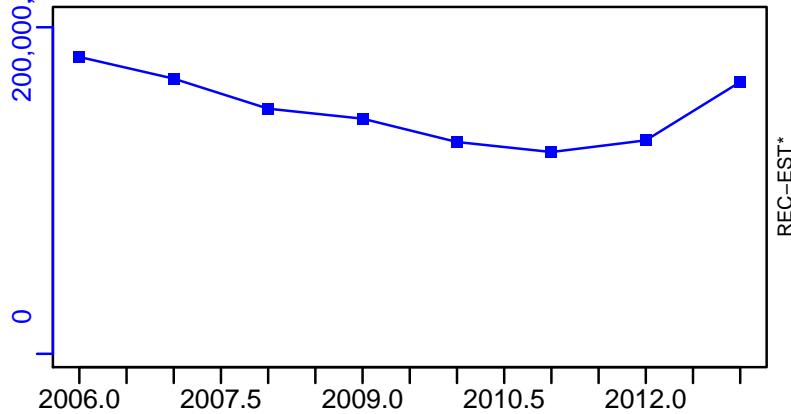
**F-1/yr** (2006–2013–OSIO)



**ER-calc-ratio** (2006–2013–OSIO)



**R-E00** (2006–2013–OSIO)

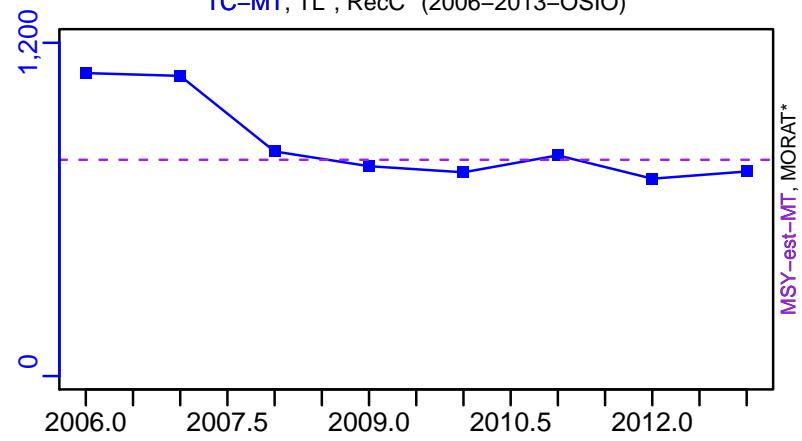


- Listed time series    - - - Target BRP    — Rec-Est
- - - MSY-based BRP    - - - Lim BRP    \* No Data

Red mullet Ligurian and North Tyrrhenian Sea [RMULLMEDGSA9]

TC-MT, TL\*, RecC\* (2006–2013–OSIO)

TAC\*, Cpair\*, Cadv\*



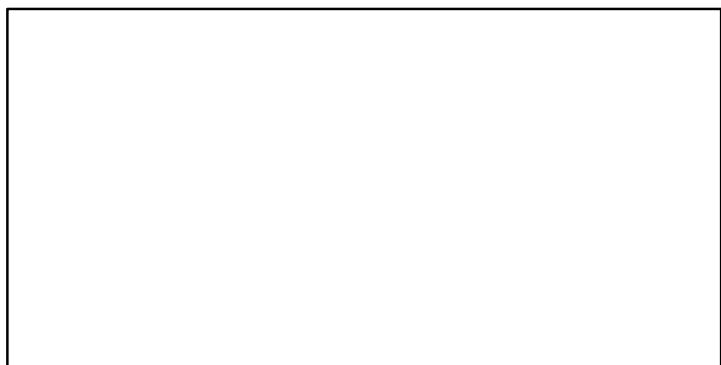
survB\*



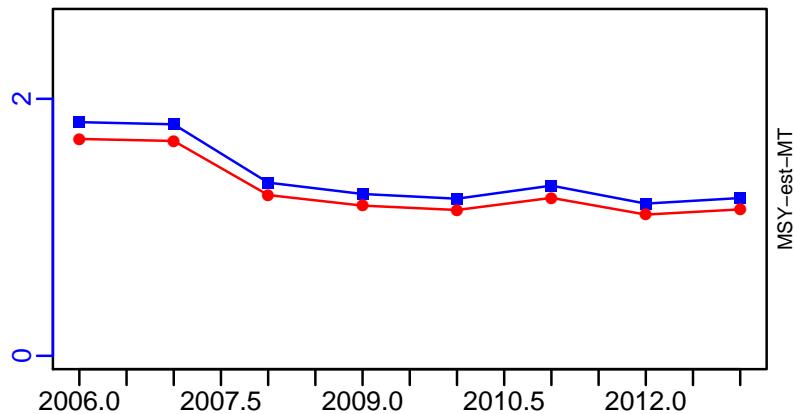
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2013–OSIO)



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

## Deep water rose shrimp Northern Alboran Sea [RSHRMPMEDGSA1]

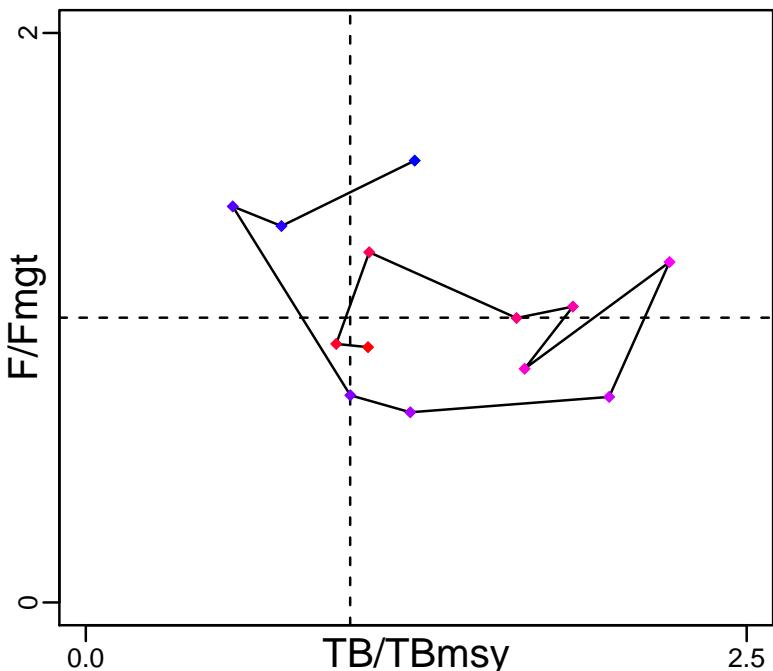
<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-RSHRMPMEDGSA1-2003-2015-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012, 2015

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2015	657
<b>SSBmsy</b>	SSBmsy-est-MT	2012	233
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.267
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.87
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	175
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

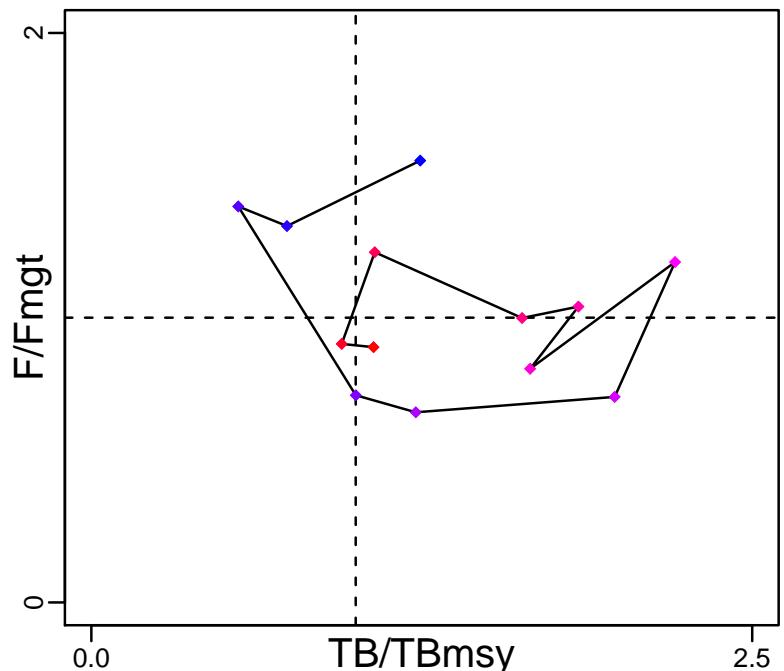
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2015	701	-	-	
<b>SSB</b>	SSB-MT	2015	127	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$2.9 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2015	0.78	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.163	-	-	
<b>TC</b>	TC-MT	2015	114			
<b>TL</b>	TL-MT	2015	114			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	1.068			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	1.782			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.609			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.897			
<b>ER/ERmgt</b>	-	-	-			

Deep water rose shrimp Northern Alboran Sea [RSHRMPMEDGSA1]

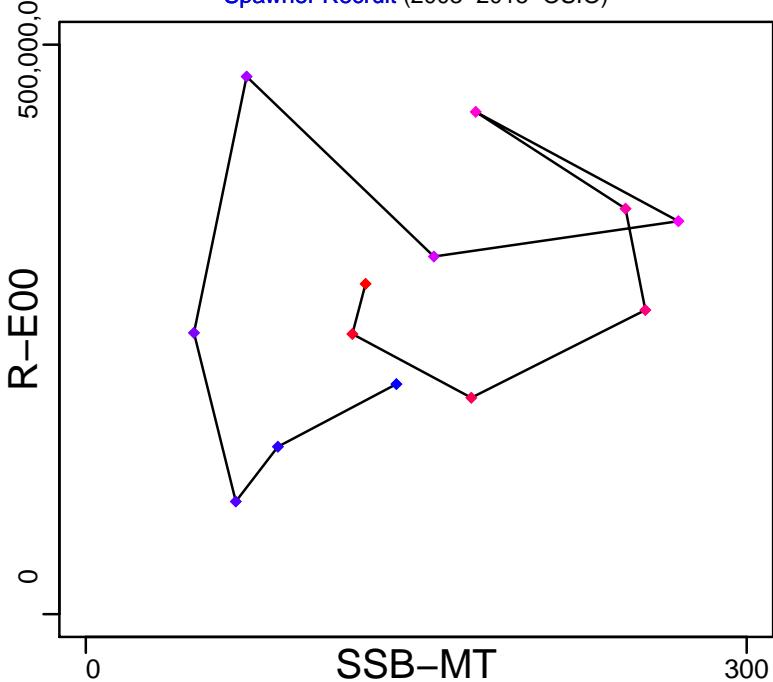
Kobe MSYpref (2003–2015–OSIO)



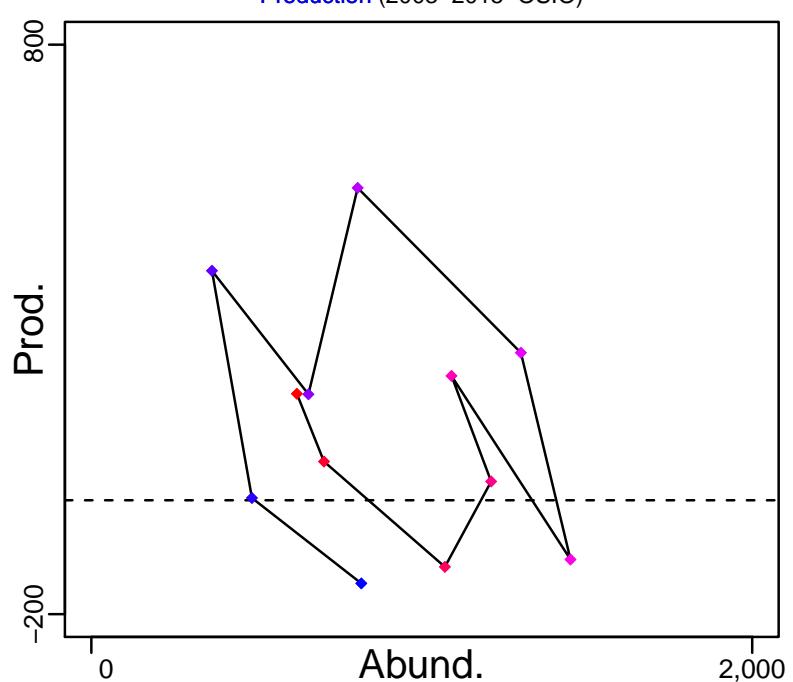
Kobe MGTpref (2003–2015–OSIO)



Spawner Recruit (2003–2015–OSIO)



Production (2003–2015–OSIO)

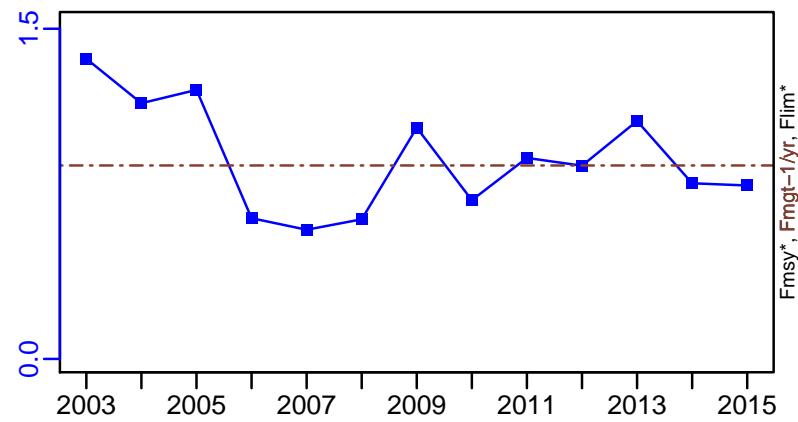
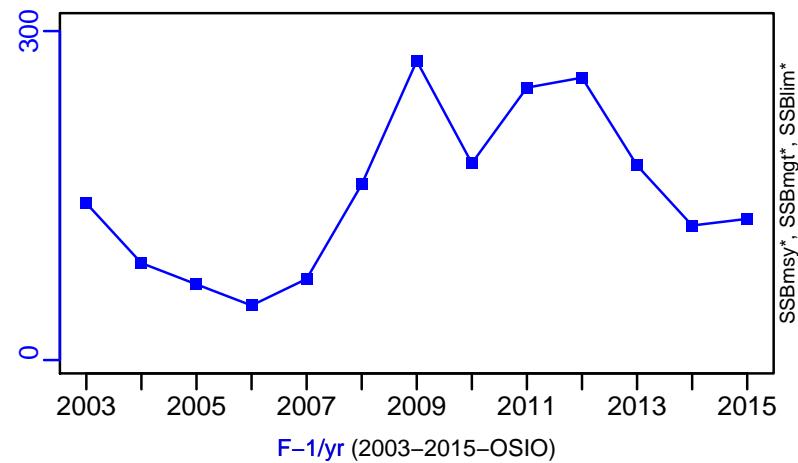
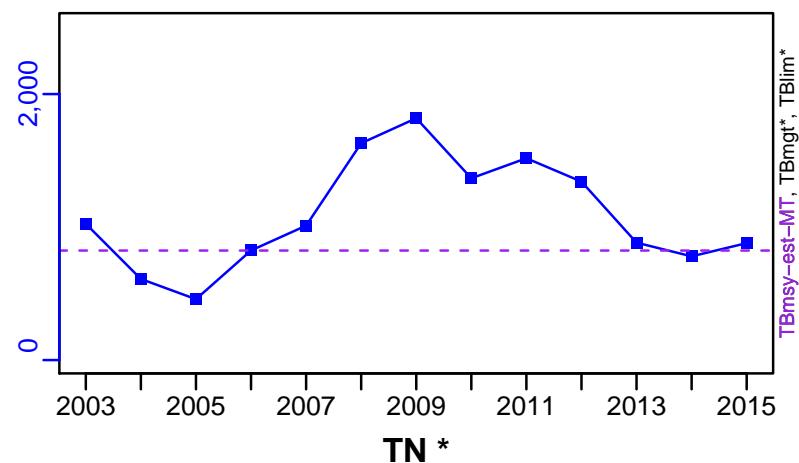


◆ Start Year ◆ End Year \* No Data

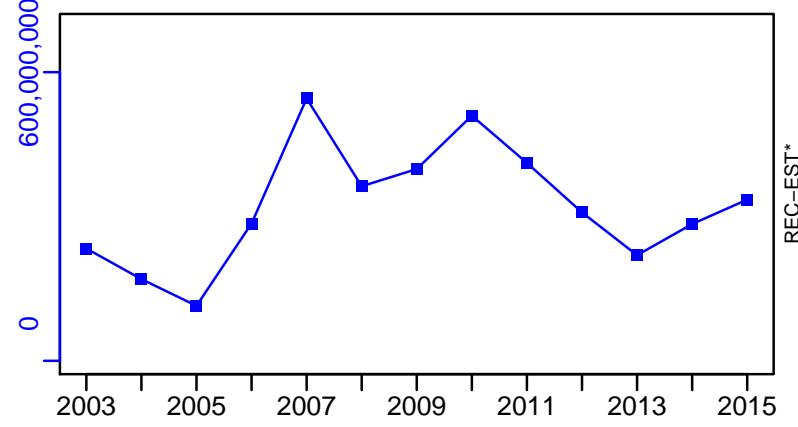
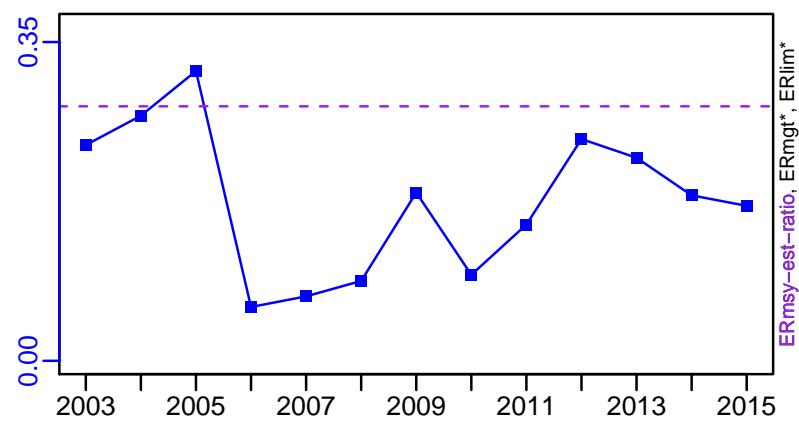
### Deep water rose shrimp Northern Alboran Sea [RSHRMPMEDGSA1]

TB-MT (2003–2015–OSIO)

SSB-MT (2003–2015–OSIO)



ER-calc-ratio (2003–2015–OSIO)

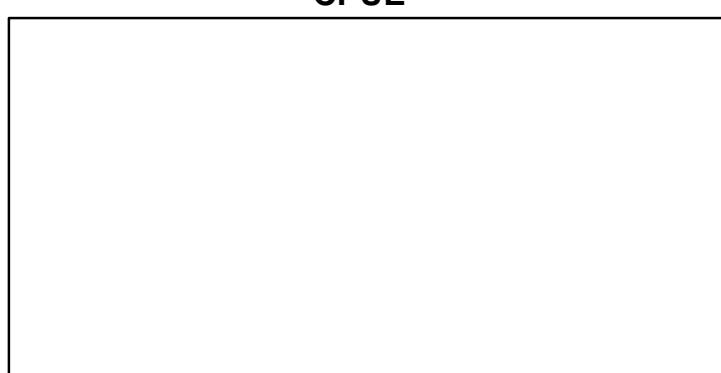
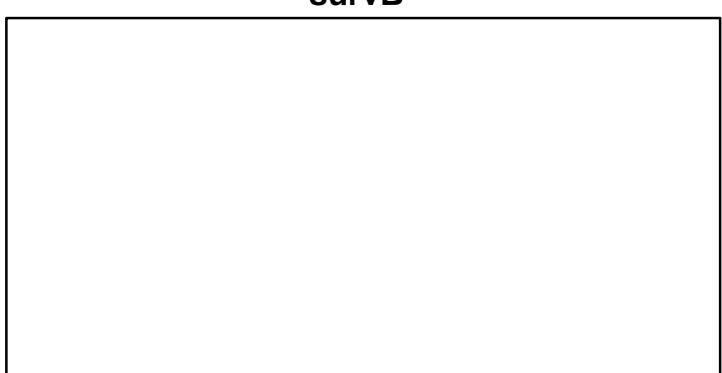
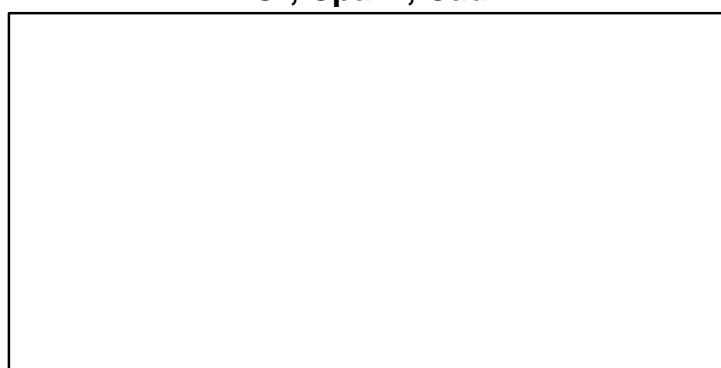
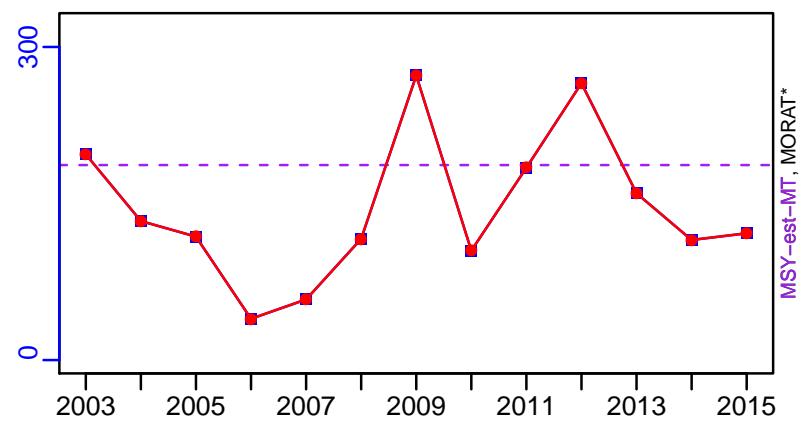


<span style="color: blue;">■</span> Listed time series <span style="color: purple;">—</span> MSY-based BRP	<span style="color: brown;">—</span> Target BRP <span style="color: green;">—</span> Rec-Est
<span style="color: purple;">—</span> Lim BRP <span style="color: cyan;">—</span> No Data	<span style="color: black;">*</span>

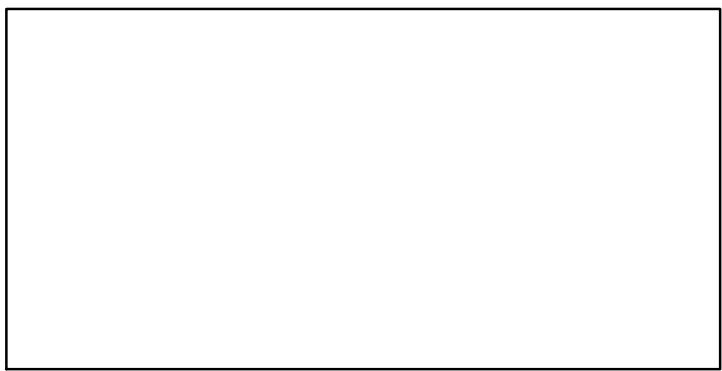
Deep water rose shrimp Northern Alboran Sea [RSHRMPMEDGSA1]

TC-MT, TL-MT, RecC\* (2003–2015–OSIO)

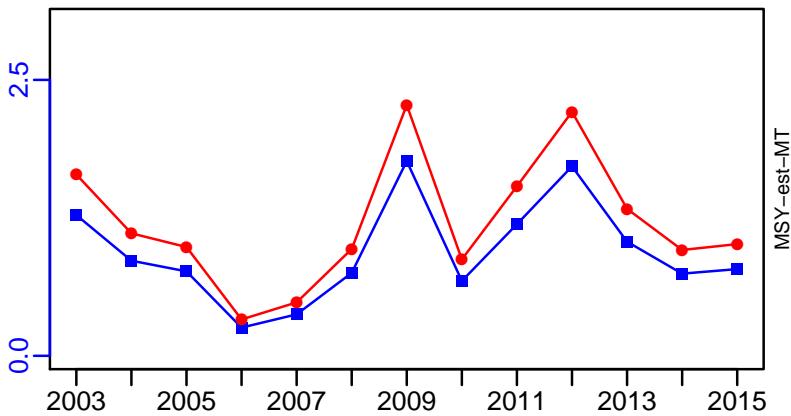
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2003–2015–OSIO)



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

## Deep water rose shrimp Geographical Sub-Areas 12-16 [RSHRMPMEDGSA12-16]

<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-RSHRMPMEDGSA12-16-2007-2009-OSIO
<b>Area</b>	Geographical Sub-Areas 12-16
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2009

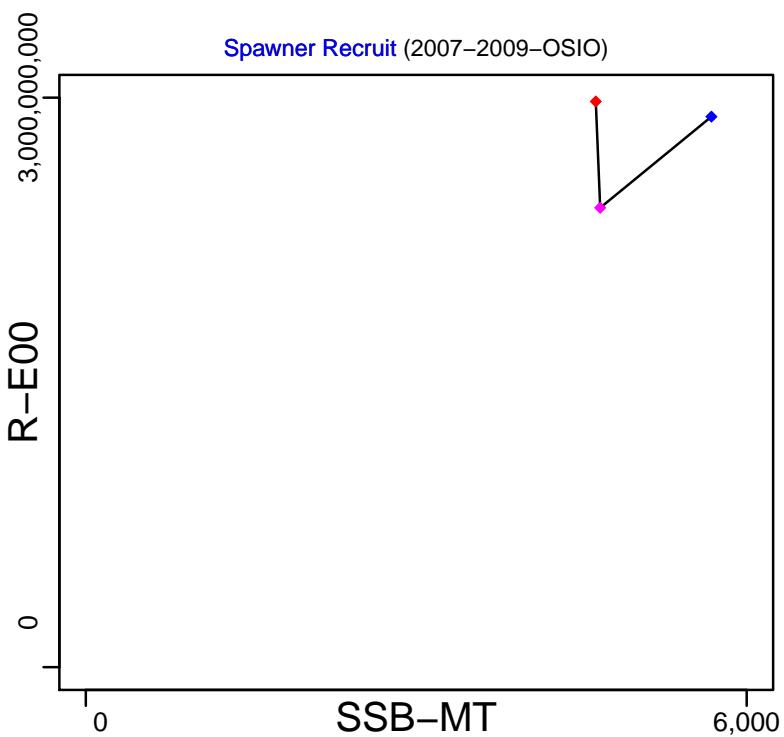
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-extr-1/yr	2011	1.21
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2009	0.9
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	1.05
<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>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2009	4630	Both	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2009	$2.98 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2011	1.65	-	-	
<b>ER</b>	ER-calc-ratio	2009	0.408	-	-	
<b>TC</b>	TC-MT	2009	8810			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	1.4			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2009	1.533			
<b>ER/ERmgt</b>	-	-	-			

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2007–2009–OSIO)

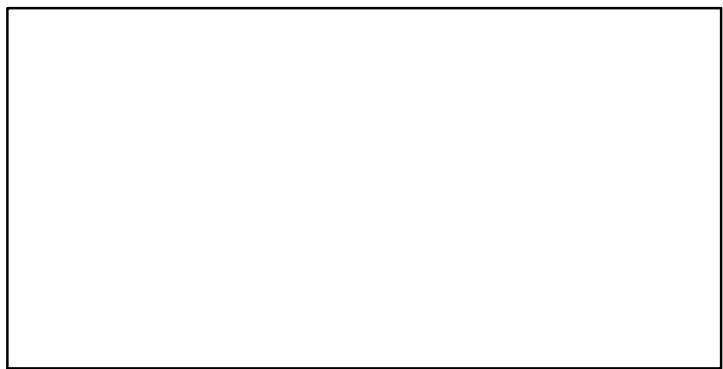


Production\*

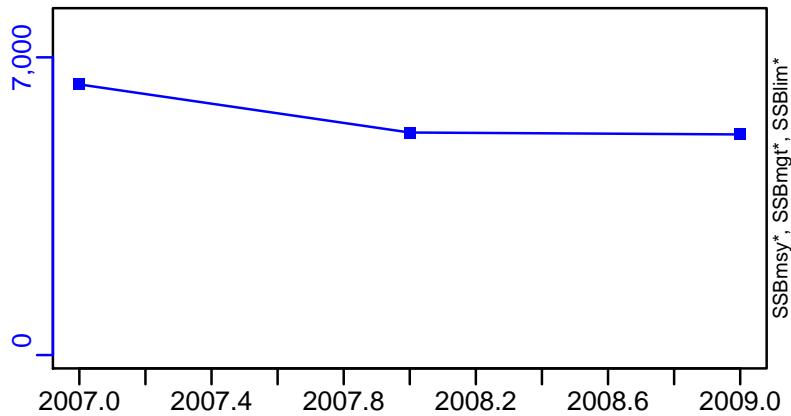
◆ Start Year    ♦ End Year    \* No Data

Deep water rose shrimp Geographical Sub-Areas 12–16 [RSHRMPMEDGSA12–16]

**TB\***



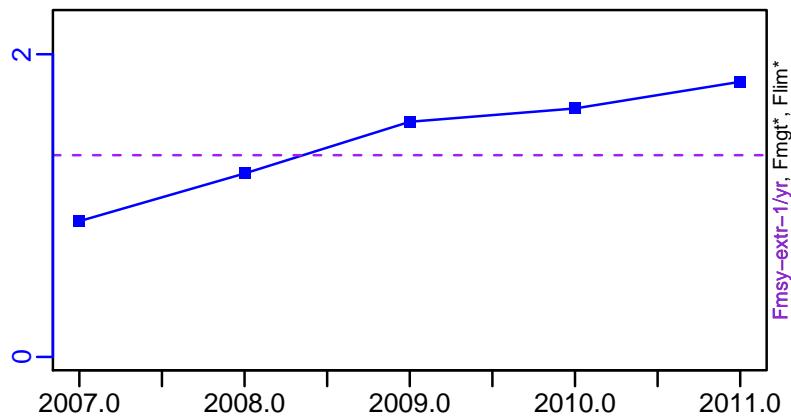
**SSB-MT (2007–2009–OSIO)**



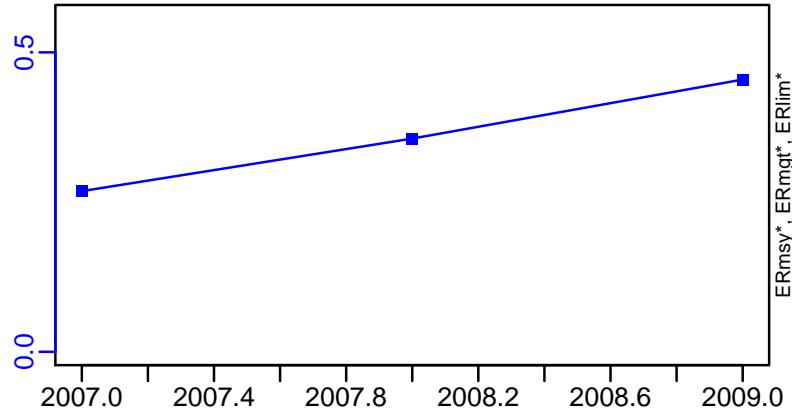
**TN \***



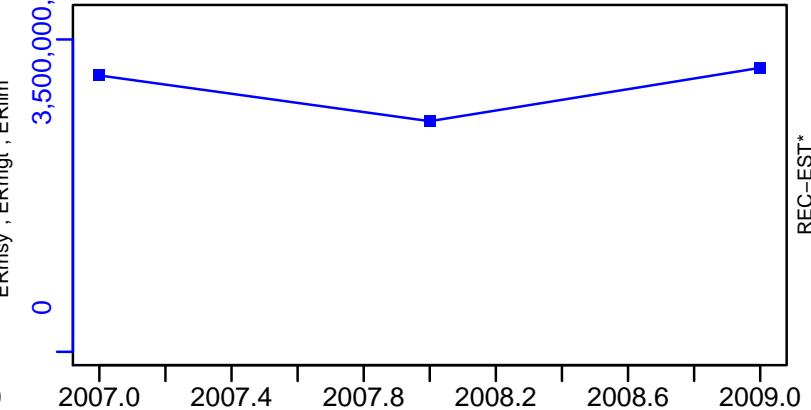
**F-1/yr (2007–2011–BANOBI)**



**ER-calc-ratio (2007–2009–OSIO)**



**R-E00 (2007–2009–OSIO)**

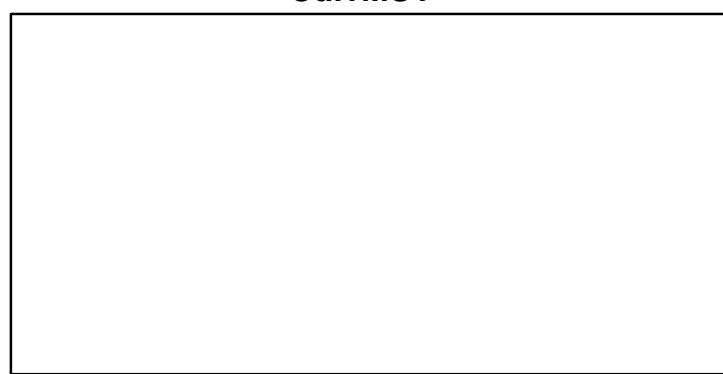
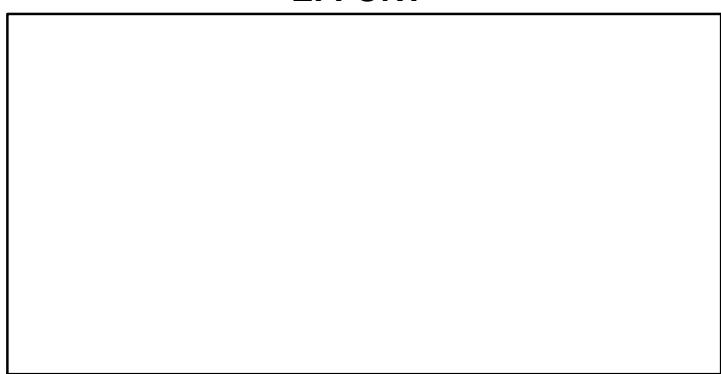
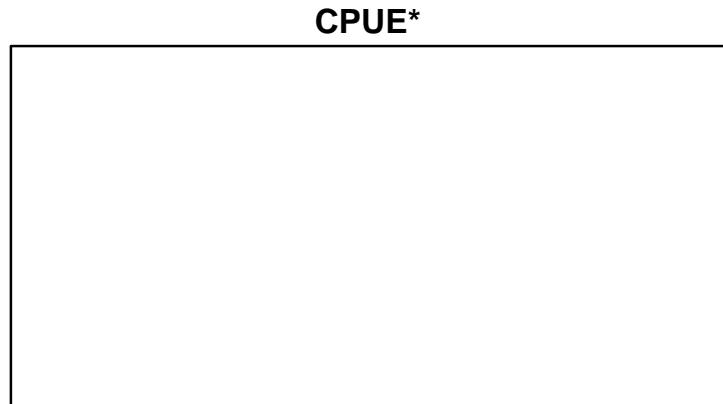
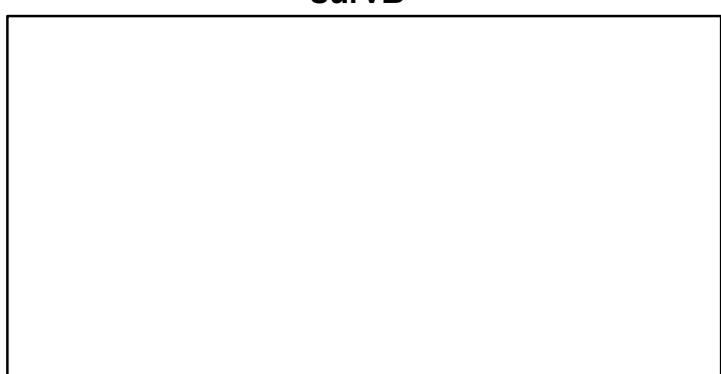
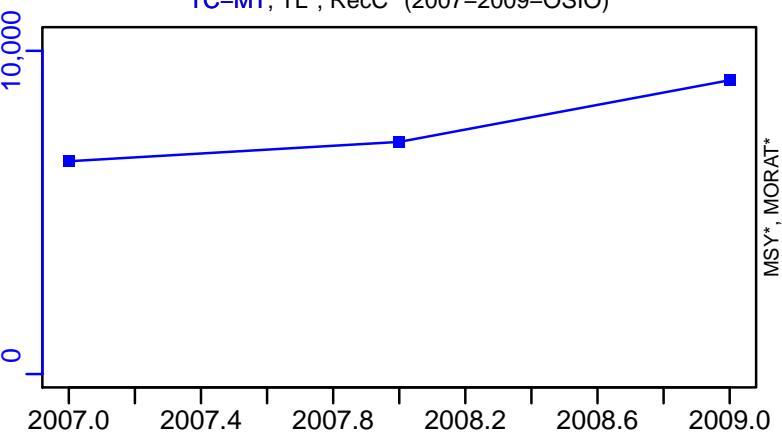


- Listed time series    - - - Target BRP    — Rec-Est
- - - MSY-based BRP    - - - Lim BRP    \* No Data

Deep water rose shrimp Geographical Sub-Areas 12–16 [RSHRMPMEDGSA12–16]

TC–MT, TL\*, RecC\* (2007–2009–OSIO)

TAC\*, Cpair\*, Cadv\*



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

## Deep water rose shrimp Geographical Sub-Areas 17-19 [RSHRMPMEDGSA17-19]

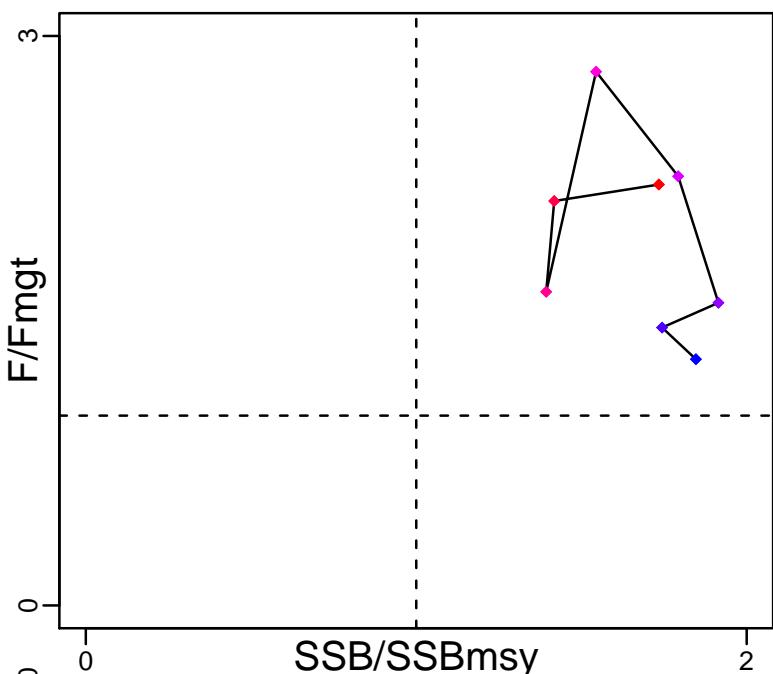
<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-RSHRMPMEDGSA17-19-2007-2014-OSIO
<b>Area</b>	Geographical Sub-Areas 17-19
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	2053
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.365
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.69
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	3165
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

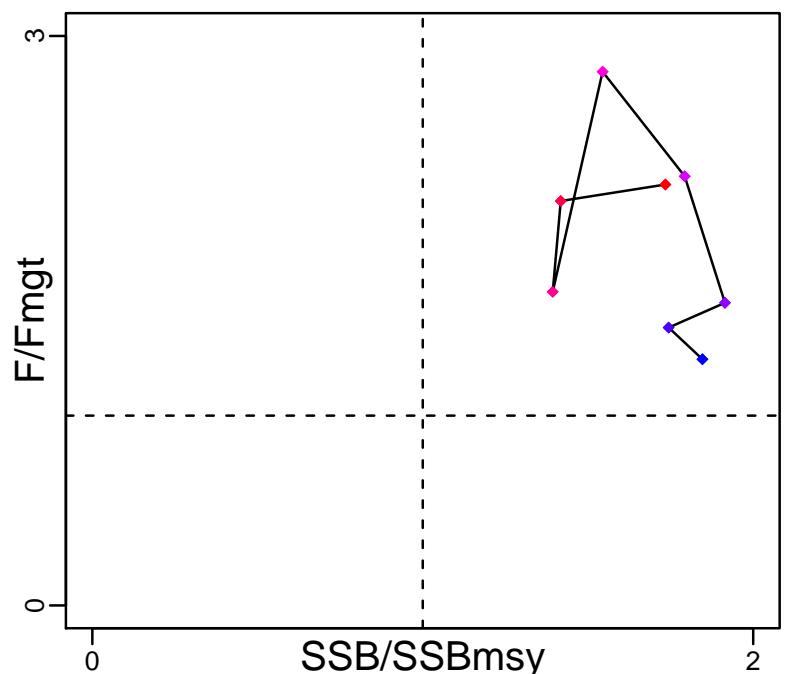
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	3560	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.32 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2014	1.53	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.13	-	-	
<b>TC</b>	TC-MT	2014	1960			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.734			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.357			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	2.217			
<b>ER/ERmgt</b>	-	-	-			

Deep water rose shrimp Geographical Sub-Areas 17–19 [RSHRMPMEDGSA17–19]

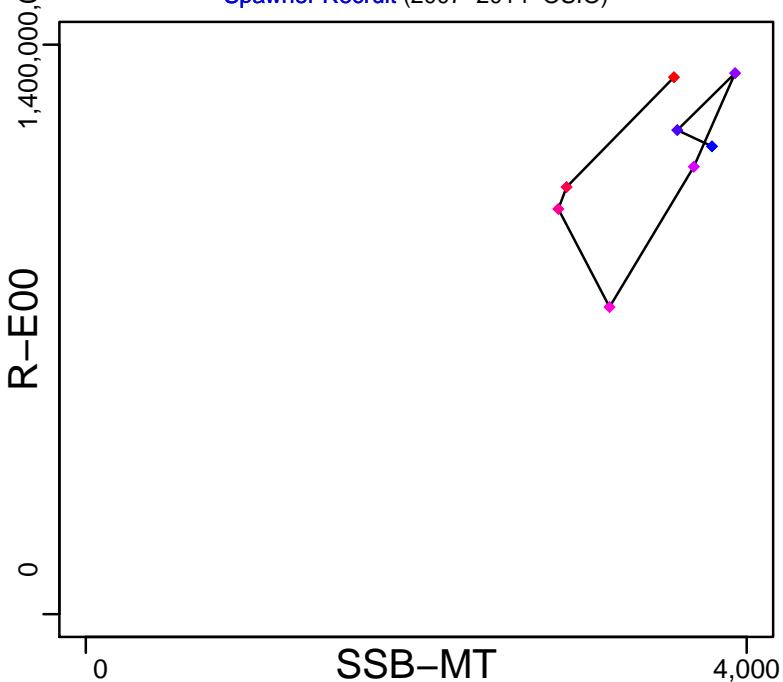
Kobe MSYpref (2007–2014–OSIO)



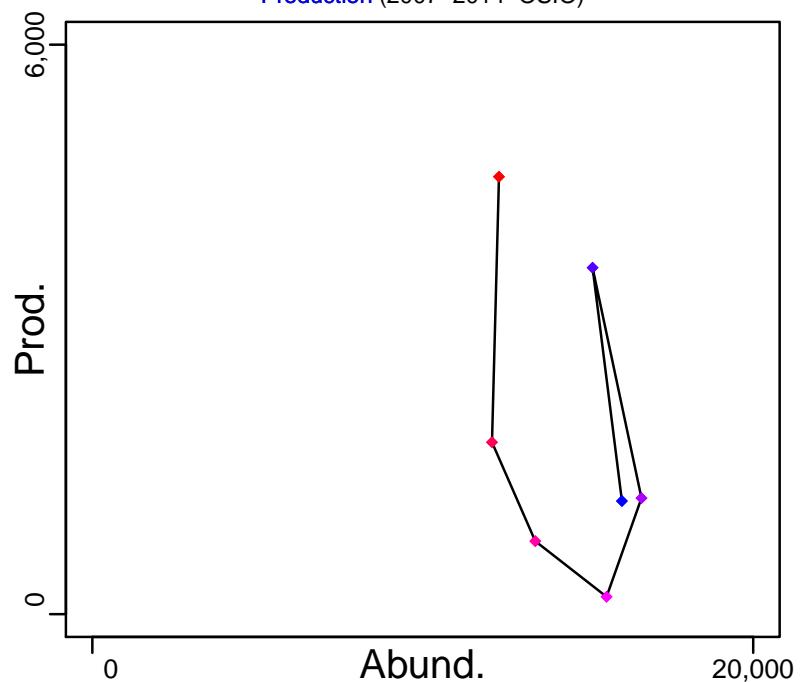
Kobe MGTpref (2007–2014–OSIO)



Spawner Recruit (2007–2014–OSIO)



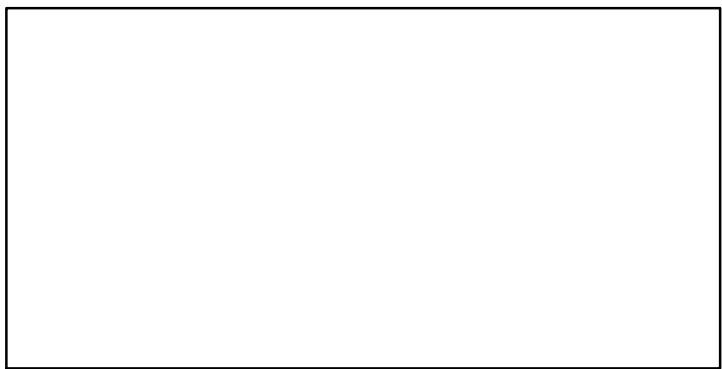
Production (2007–2014–OSIO)



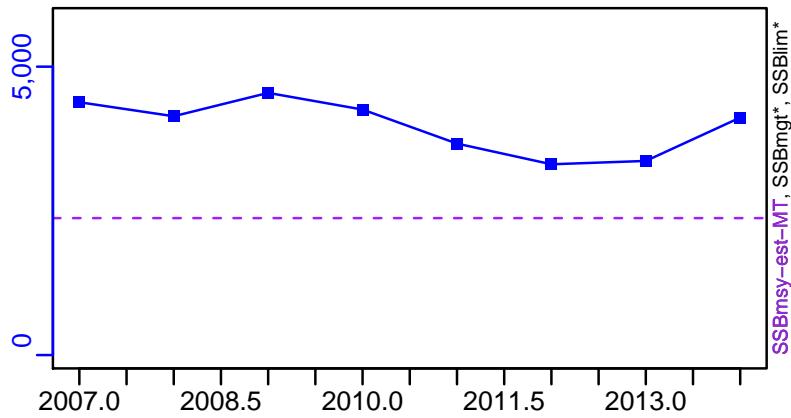
◆ Start Year   ◆ End Year   \* No Data

Deep water rose shrimp Geographical Sub-Areas 17–19 [RSHRMPMEDGSA17–19]

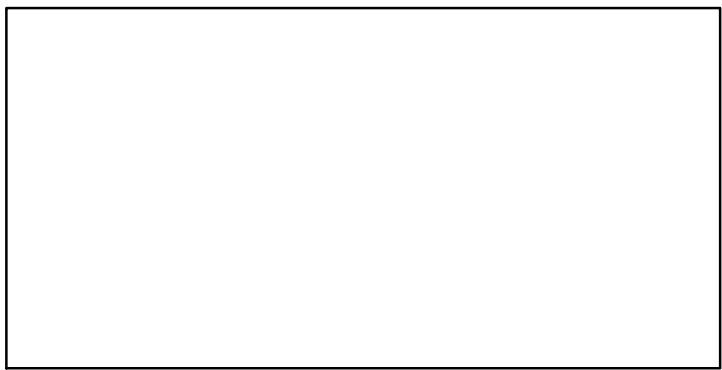
**TB\***



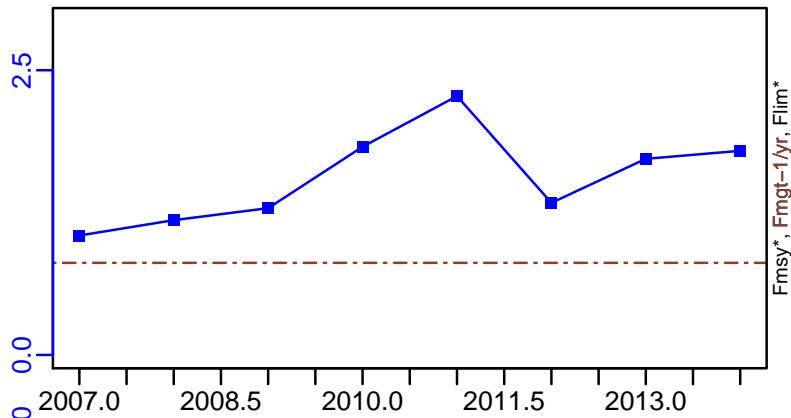
**SSB-MT (2007–2014–OSIO)**



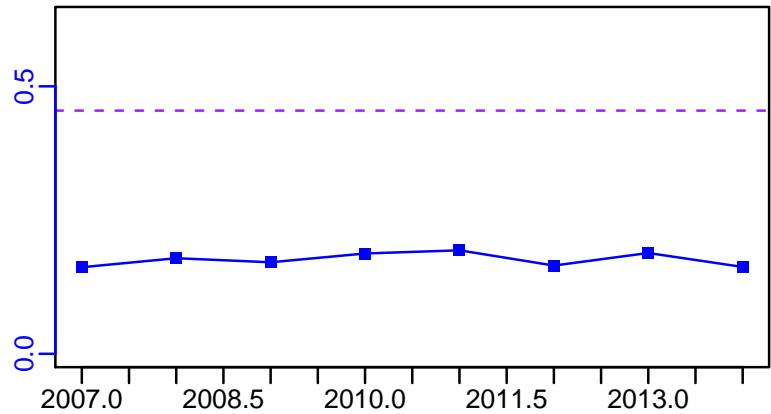
**TN \***



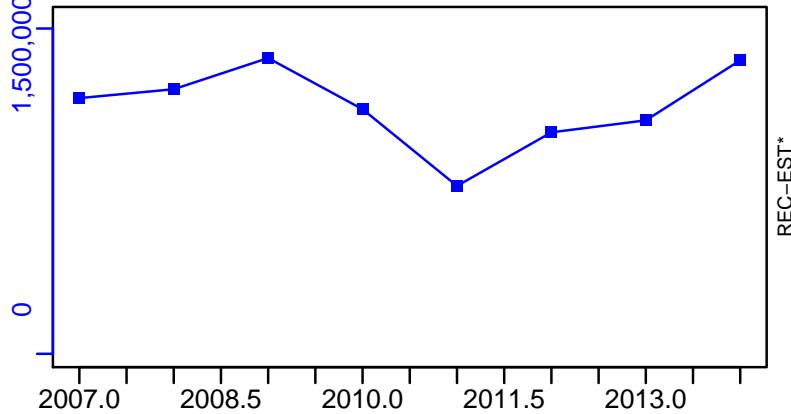
**F-1/yr (2007–2014–OSIO)**



**ER-calc-ratio (2007–2014–OSIO)**



**R-E00 (2007–2014–OSIO)**

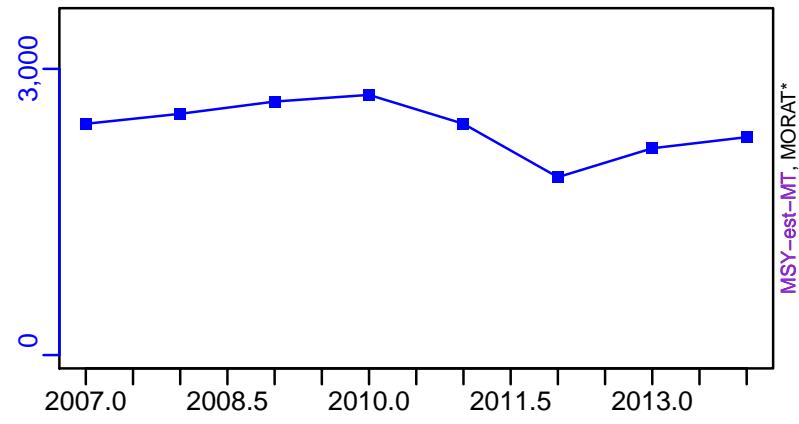


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Deep water rose shrimp Geographical Sub-Areas 17–19 [RSHRMPMEDGSA17–19]

TC-MT, TL\*, RecC\* (2007–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



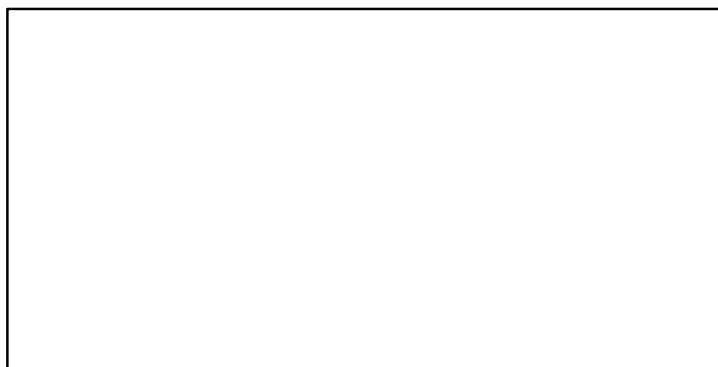
survB\*



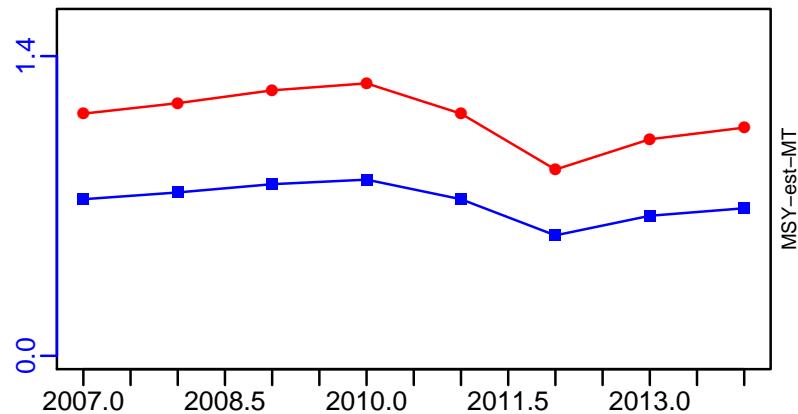
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2007–2014–OSIO)



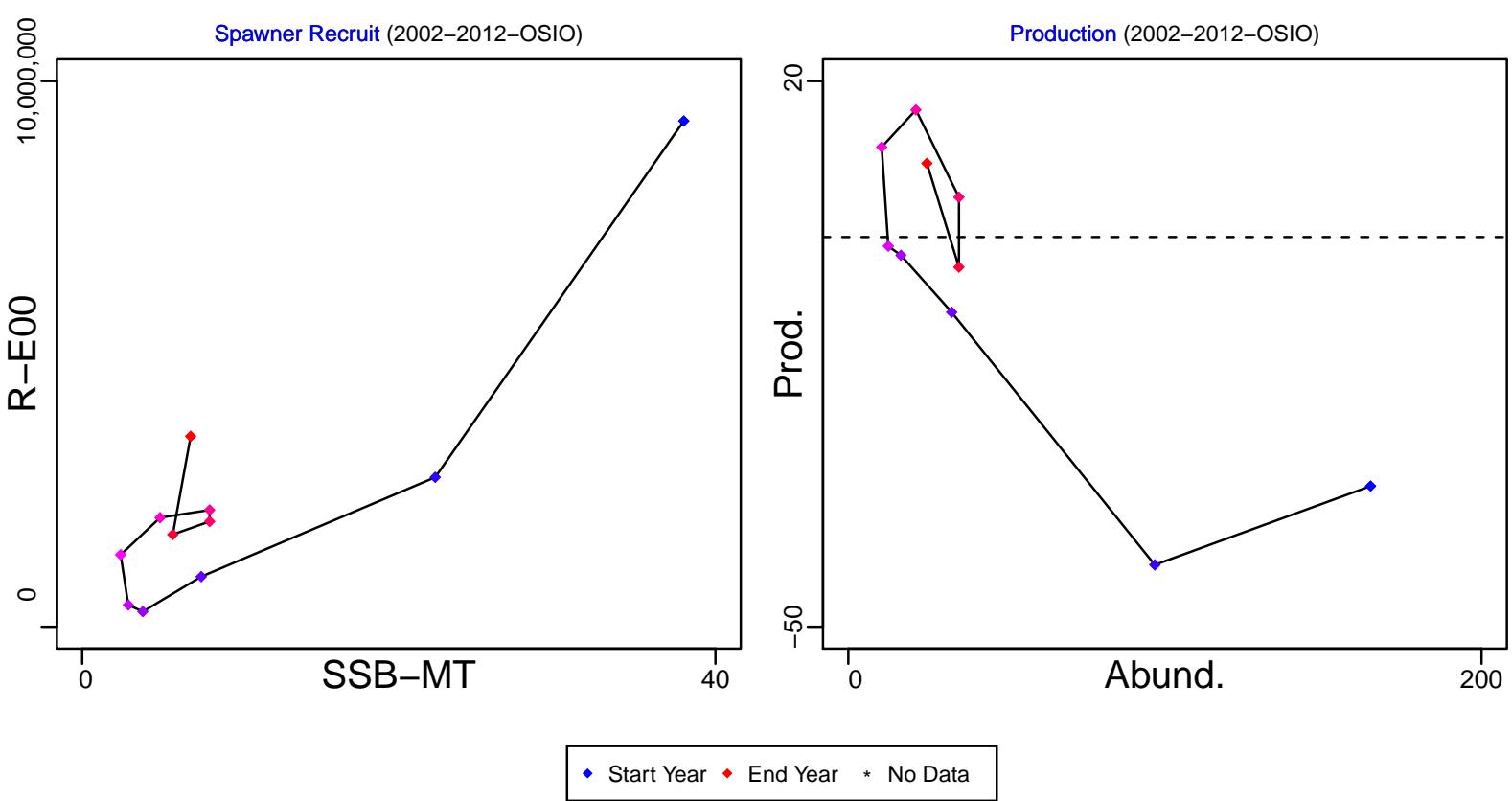
■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

## Deep water rose shrimp Balearic Island [RSHRMPMEDGSA5]

<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-RSHRMPMEDGSA5-2002-2012-OSIO
<b>Area</b>	Balearic Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.62
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	7	-	1+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	3,490,000	-	-
<b>F</b>	F-1/yr	2012	0.68	-	-
<b>ER</b>	ER-calc-ratio	2012	0.14	-	-
<b>TC</b>	TC-MT	2012	4.17		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	1.097		
<b>ER/ERmgt</b>	-	-	-		

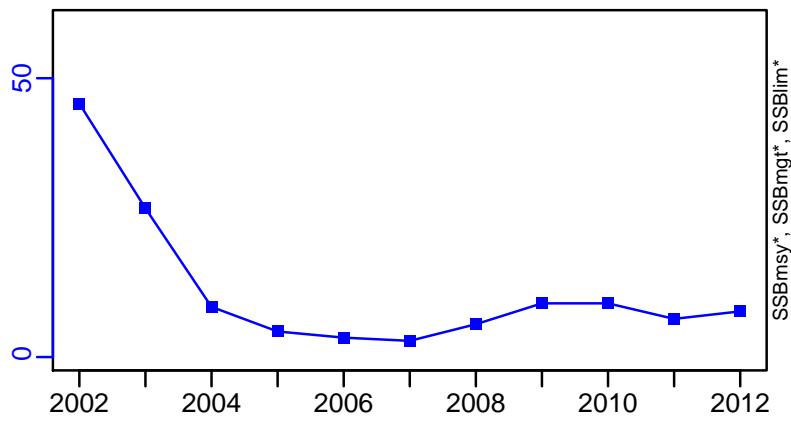
**Kobe MSY\*****Kobe MGT\***

Deep water rose shrimp Balearic Island [RSHRMPMEDGSA5]

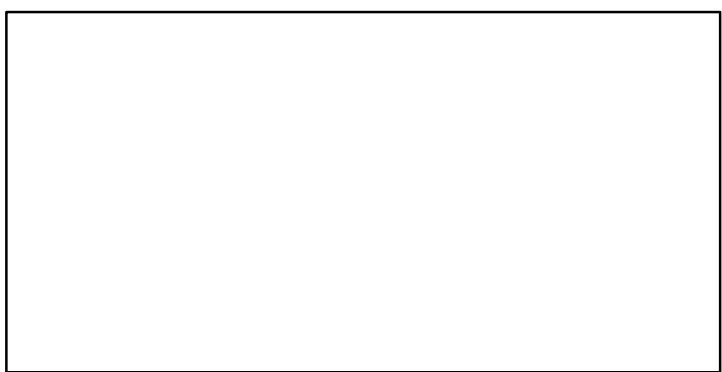
**TB\***



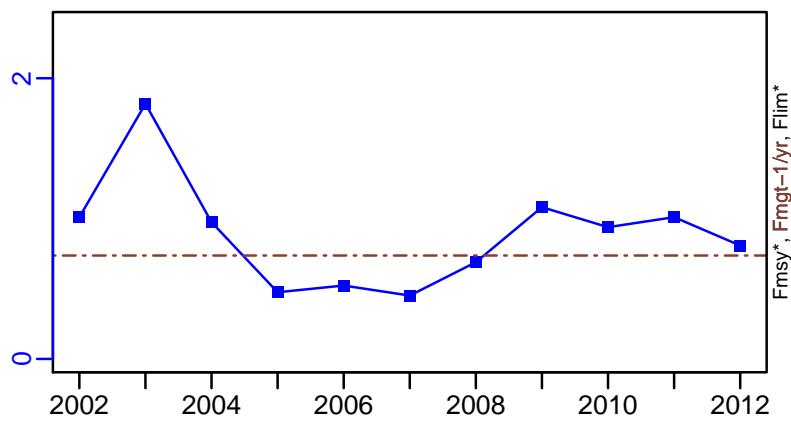
**SSB-MT** (2002–2012–OSIO)



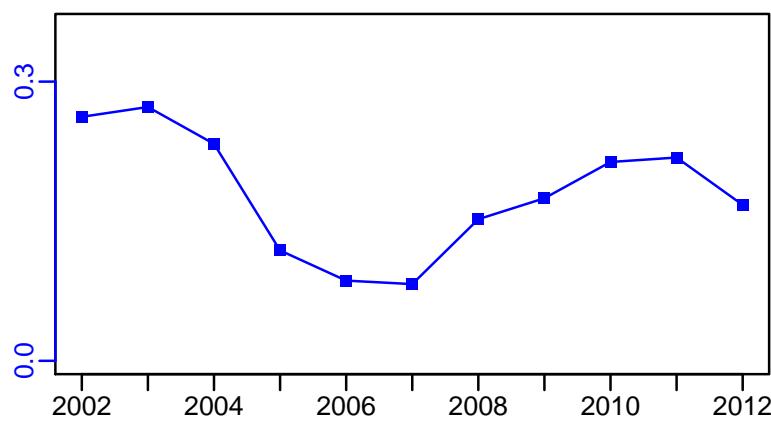
**TN \***



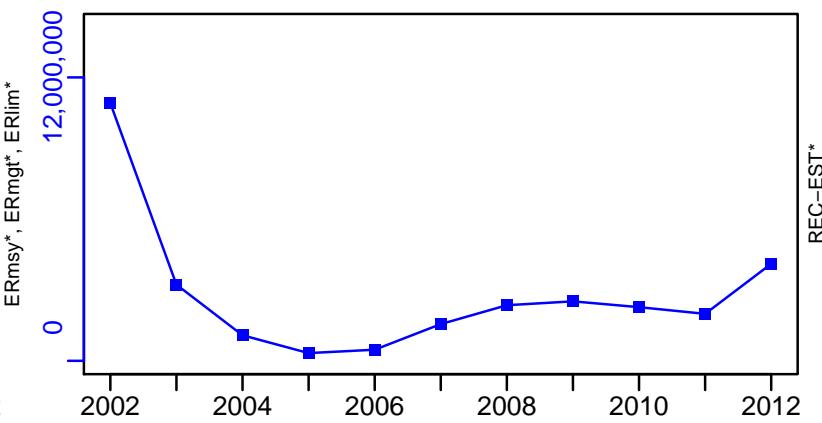
**F-1/yr** (2002–2012–OSIO)



**ER-calc-ratio** (2002–2012–OSIO)



**R-E00** (2002–2012–OSIO)

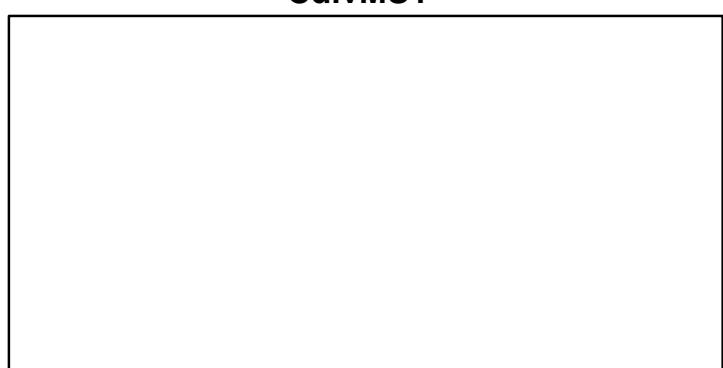
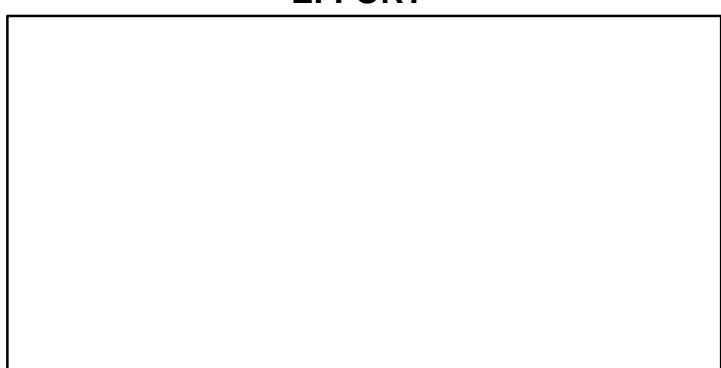
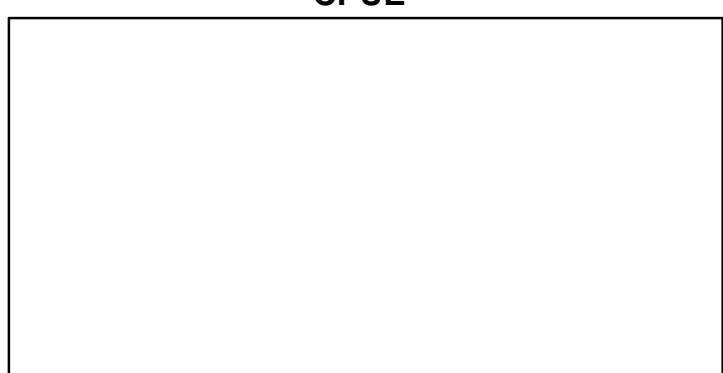
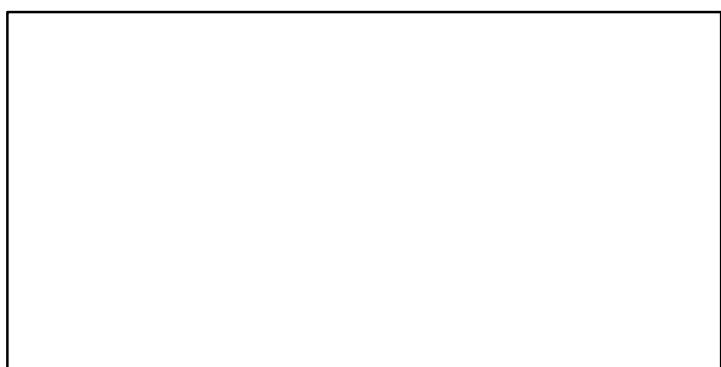
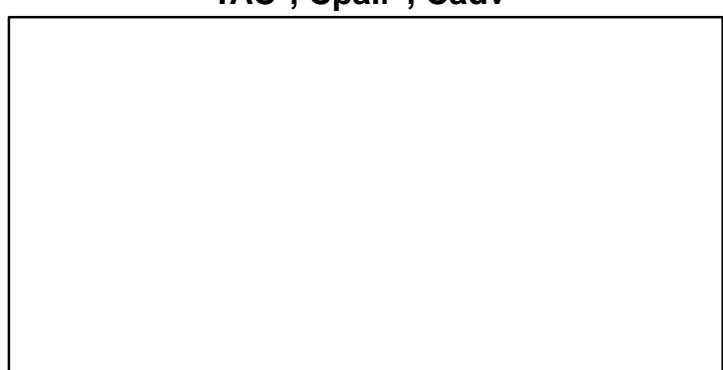
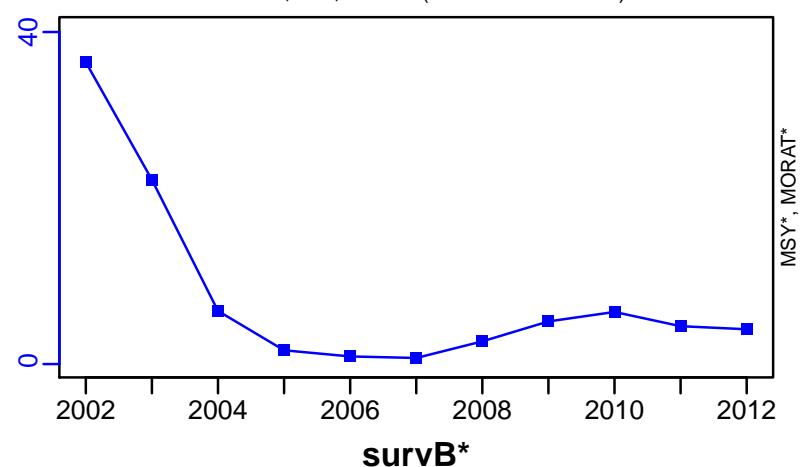


■ Listed time series	— Target BRP	— Rec-Est
- MSY-based BRP	--- Lim BRP	* No Data

Deep water rose shrimp Balearic Island [RSHRMPMEDGSA5]

TC-MT, TL\*, RecC\* (2002–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



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

## Deep water rose shrimp Geographical Sub-Areas 9-11 [RSHRMPMEDGSA9-11]

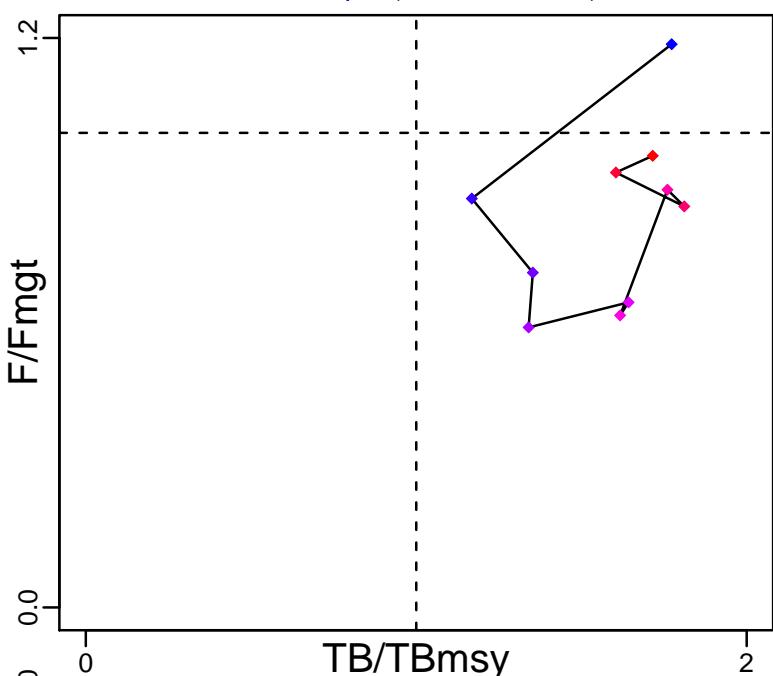
<b>Metadata</b>	
<b>Scientific Name</b>	Parapenaeus longirostris
<b>Current Assess ID</b>	STECF-RSHRMPMEDGSA9-11-2006-2015-OSIO
<b>Area</b>	Geographical Sub-Areas 9-11
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2015	3142
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.493
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.91
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	1549
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

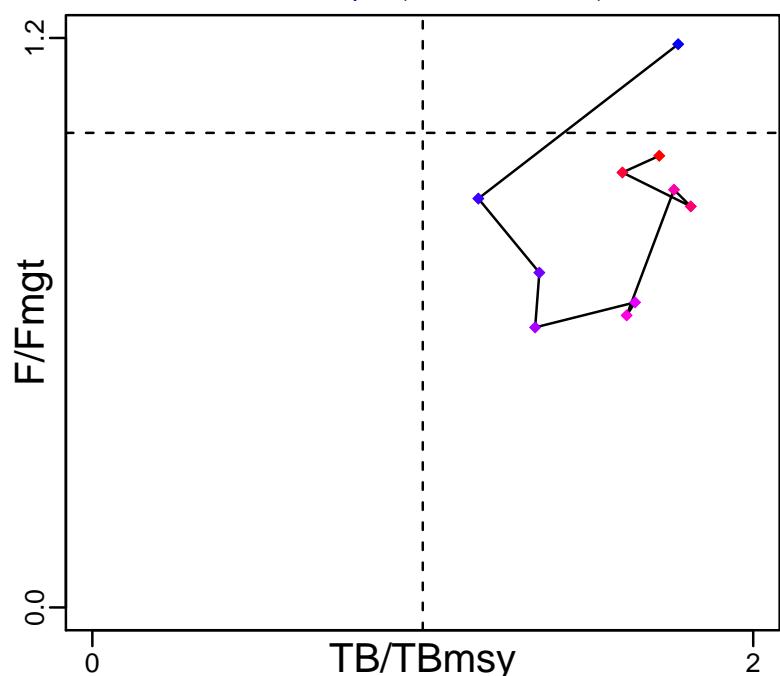
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2015	5390	-	-	
<b>SSB</b>	SSB-MT	2015	1750	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$8.58 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2015	0.866	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.286	-	-	
<b>TC</b>	TC-MT	2015	1540			
<b>TL</b>	TL-MT	2015	1540			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	1.716			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.579			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.952			
<b>ER/ERmgt</b>	-	-	-			

Deep water rose shrimp Geographical Sub-Areas 9–11 [RSHRMPMEDGSA9–11]

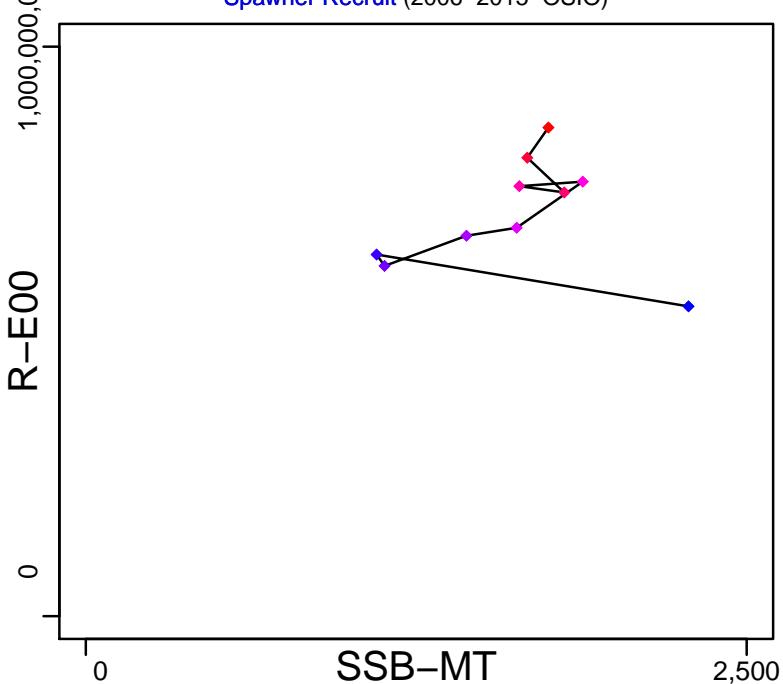
Kobe MSYpref (2006–2015–OSIO)



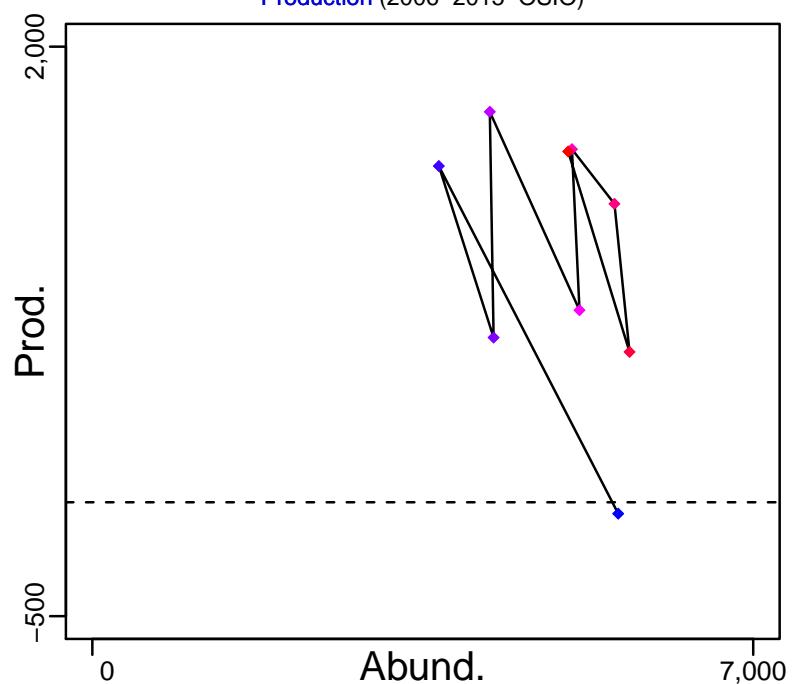
Kobe MGTpref (2006–2015–OSIO)



Spawner Recruit (2006–2015–OSIO)



Production (2006–2015–OSIO)

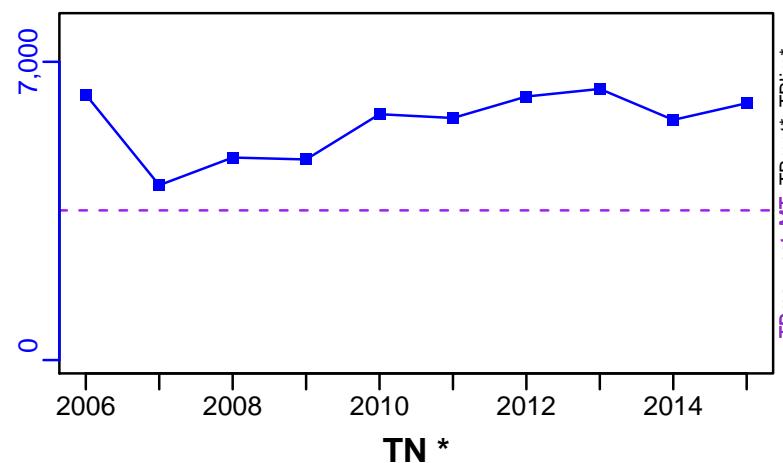


◆ Start Year ◆ End Year \* No Data

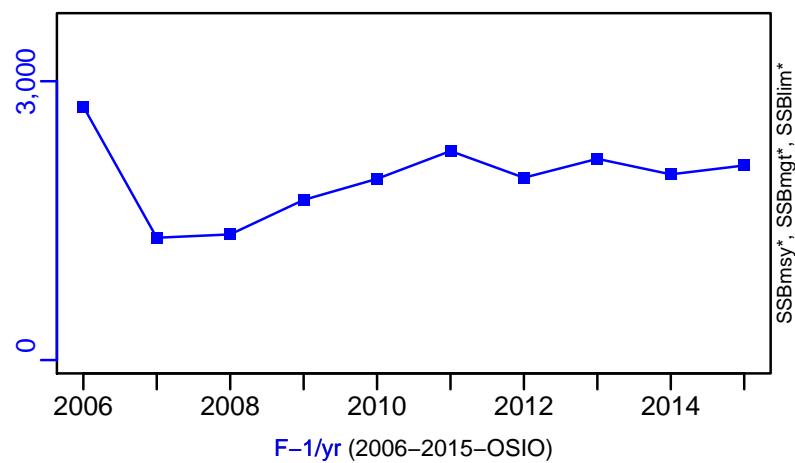
**Deep water rose shrimp Geographical Sub-Areas 9–11 [RSHRMPMEDGSA9–11]**

**TB-MT (2006–2015–OSIO)**

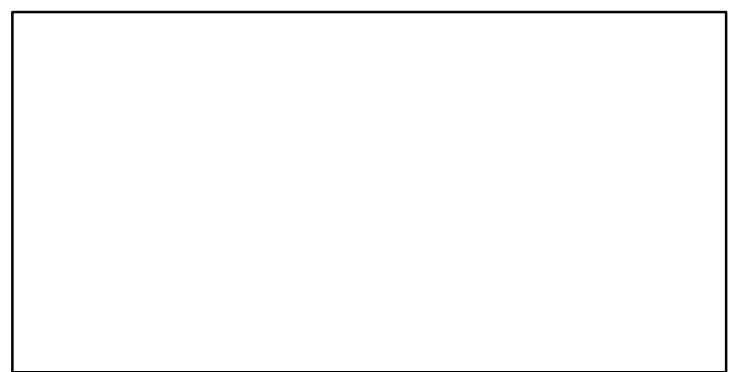
**SSB-MT (2006–2015–OSIO)**



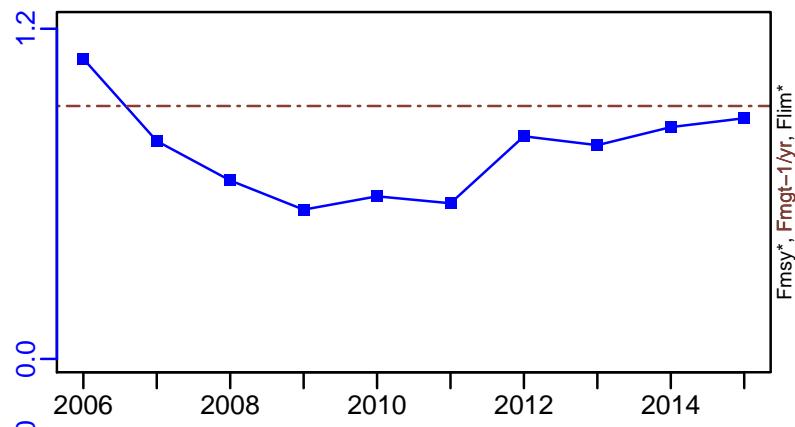
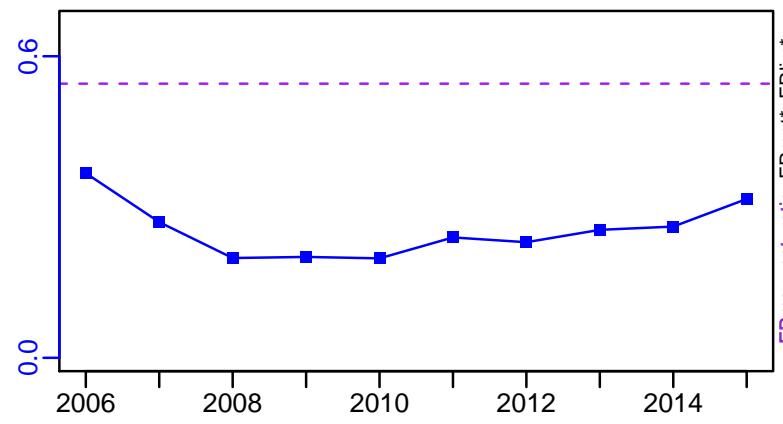
**TN \***



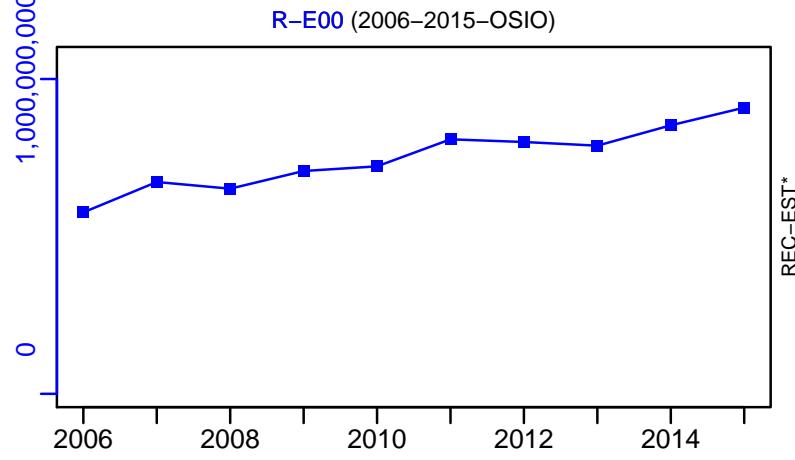
**F-1/yr (2006–2015–OSIO)**



**ER-calc-ratio (2006–2015–OSIO)**



**R-E00 (2006–2015–OSIO)**

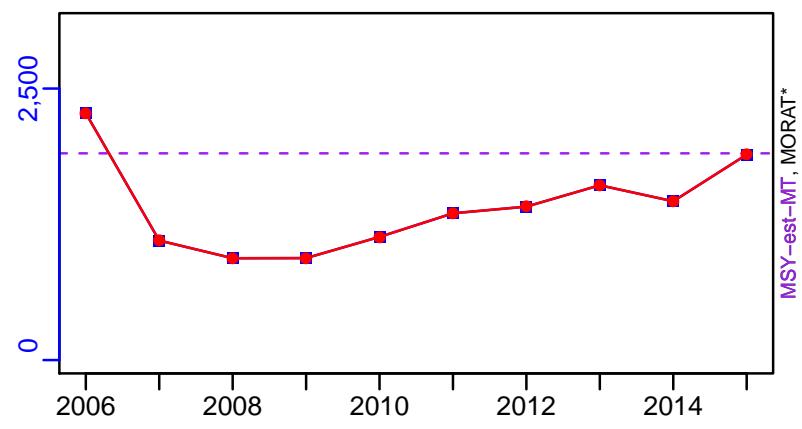


<span style="color: blue;">■</span> Listed time series	<span style="color: brown;">—</span> Target BRP	<span style="color: grey;">—</span> Rec-Est
<span style="color: purple;">—</span> MSY-based BRP	<span style="color: green;">—</span> Lim BRP	* No Data

Deep water rose shrimp Geographical Sub-Areas 9–11 [RSHRMPMEDGSA9–11]

TC-MT, TL-MT, RecC\* (2006–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

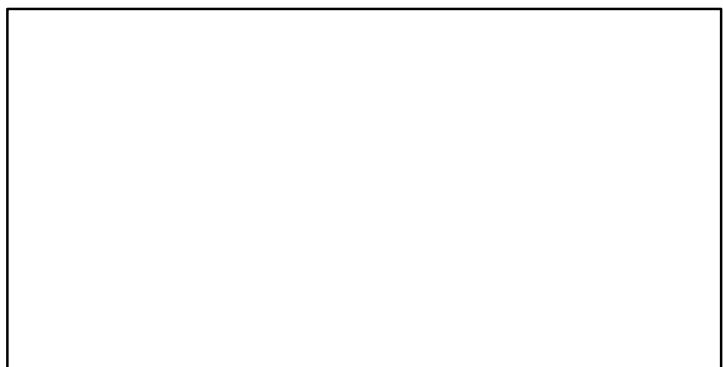
MSY-est-MT, MORAT\*



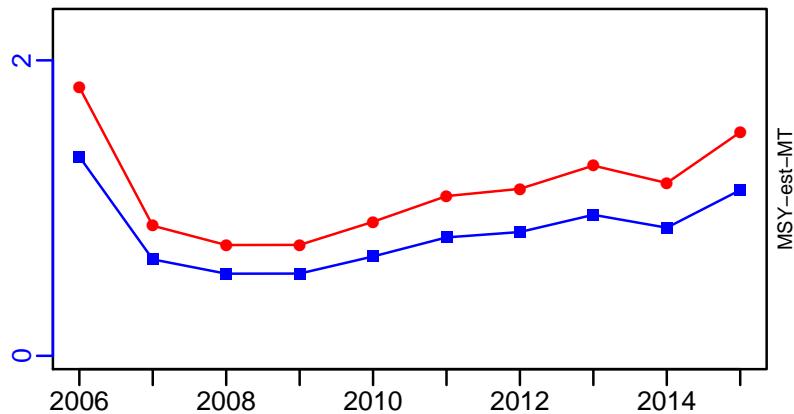
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2015–OSIO)



MSY-est-MT

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

## European pilchard Northern Alboran Sea [SARDMEDGSA1]

Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA1-2002-2012-OSIO
<b>Area</b>	Northern Alboran Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2012	6220		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

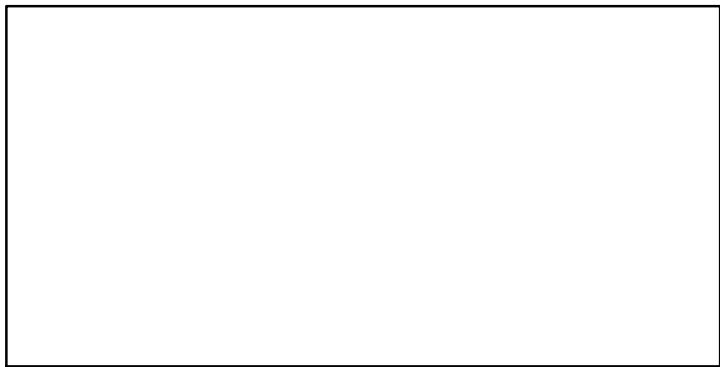
**Spawner Recruit\***

**Production\***

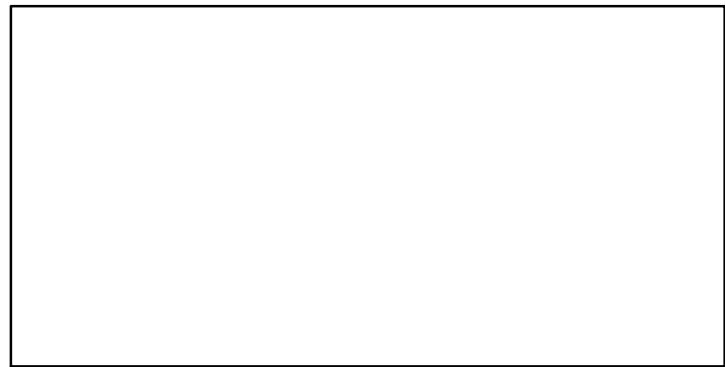
◆ Start Year ♦ End Year \* No Data

European pilchard Northern Alboran Sea [SARDMEDGSA1]

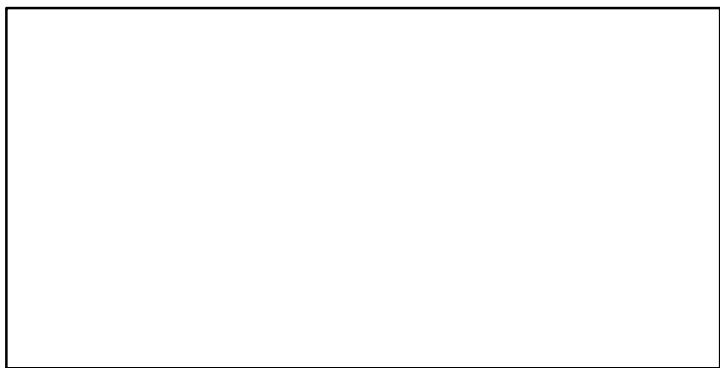
**TB\***



**SSB\***



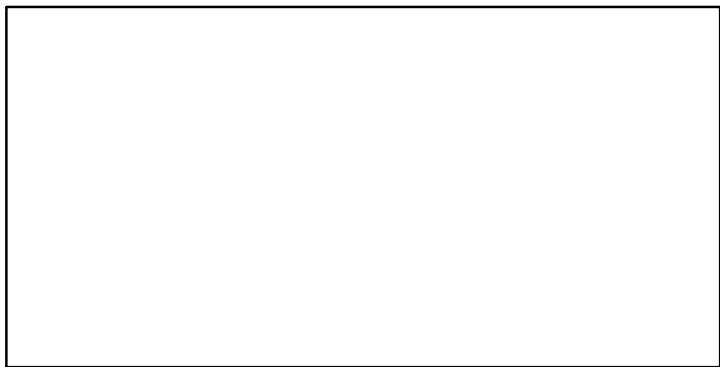
**TN \***



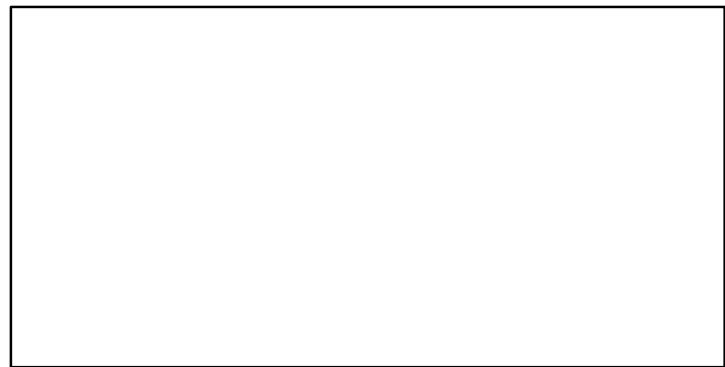
**F\***



**ER\***



**Recruits\***

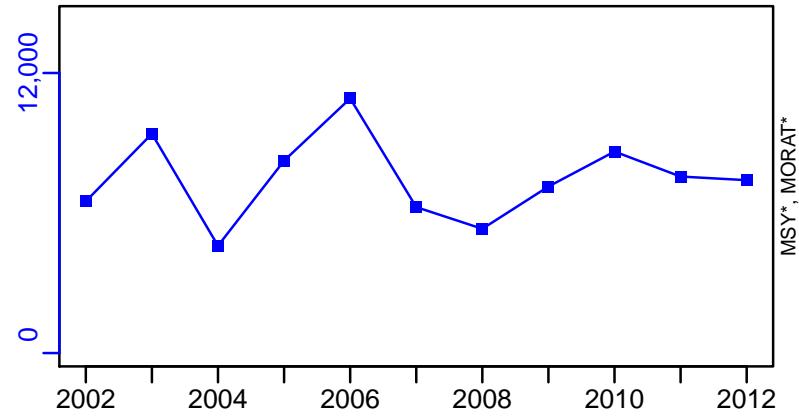


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

European pilchard Northern Alboran Sea [SARDMEDGSA1]

TC-MT, TL\*, RecC\* (2002–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

survB\*



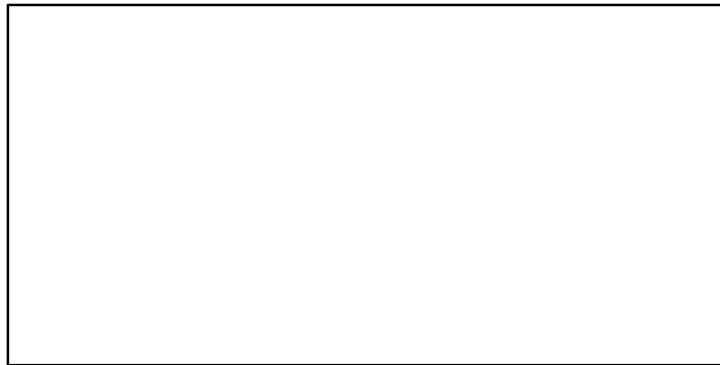
CPUE\*



EFFORT\*



CdivMSY\*



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

## Sardine South of Sicily [SARDMEDGSA16]

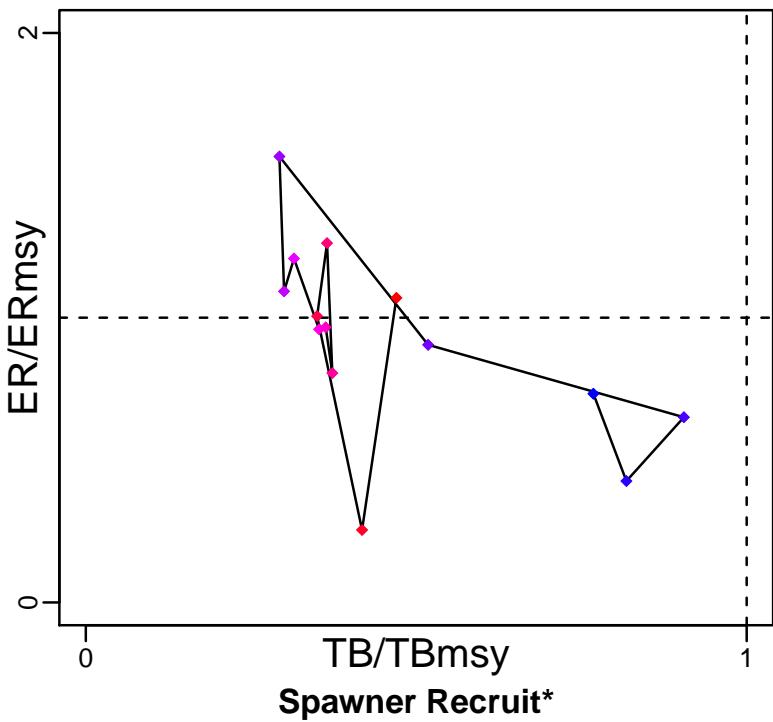
Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	CNR-IAMC-SARDMEDGSA16-1998-2011-BANOBI
<b>Area</b>	South of Sicily
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Institute for Coastal Marine Environment of the National Research Council
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2011	32,527
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2011	0.16
<b>ERmsy</b>	ERmsy-calc-ratio	2011	0.163
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2011	5307
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

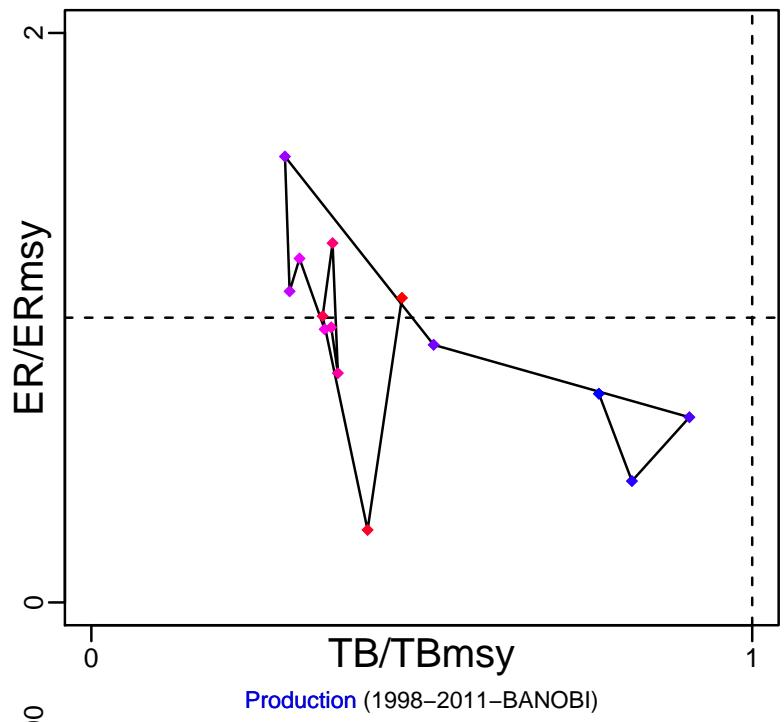
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2011	15,300	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	F-1/yr	2011	0.171	-	-	
<b>ER</b>	ER-calc-ratio	2011	0.175	-	-	
<b>TC</b>	TC-MT	2011	2670			
<b>TL</b>	TL-MT	2011	1780			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2011	0.47			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	1.07			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2011	1.07			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Sardine South of Sicily [SARDMEDGSA16]**

Kobe MSYpref (1998–2011–BANOBI)

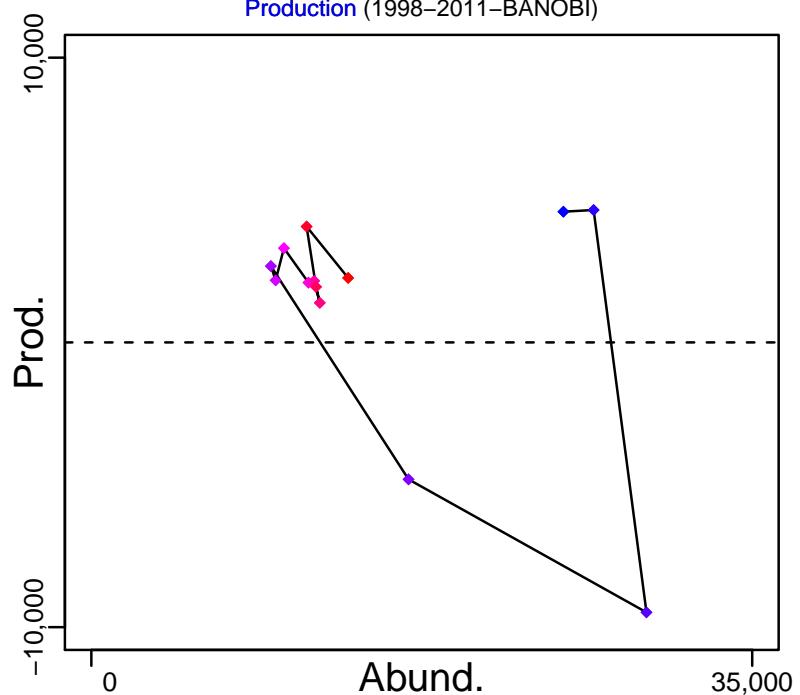
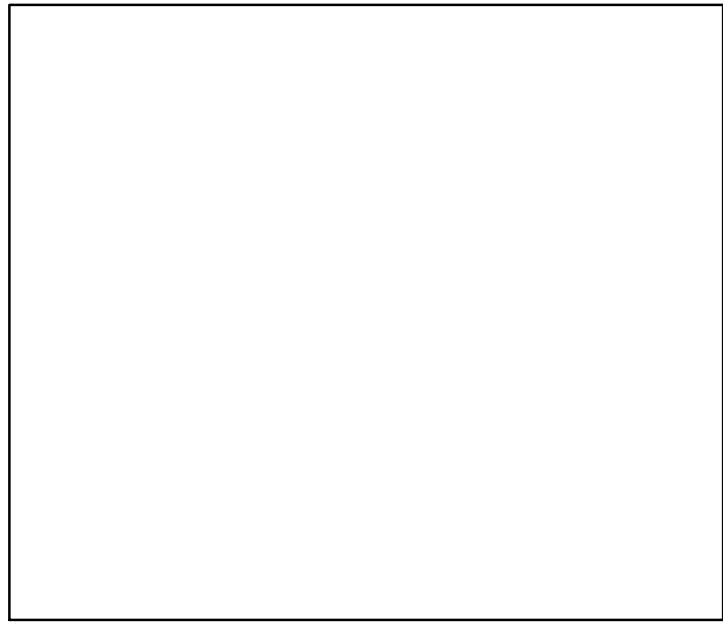


Kobe MGTpref (1998–2011–BANOBI)



**Spawner Recruit\***

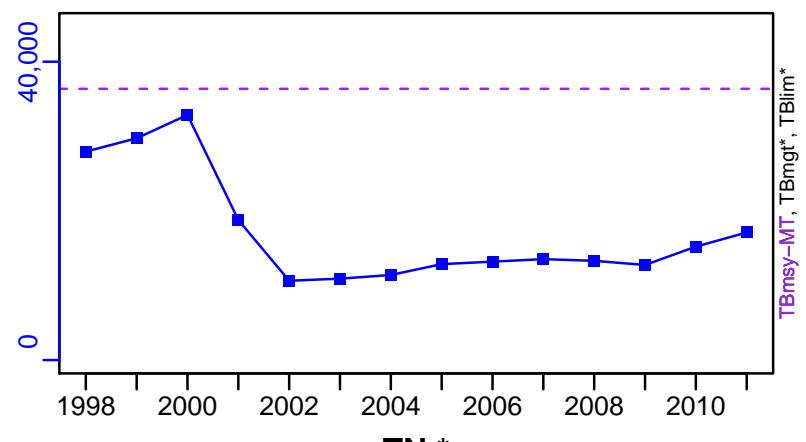
Production (1998–2011–BANOBI)



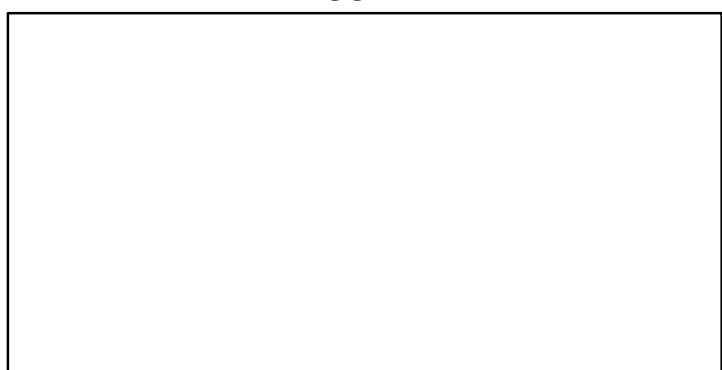
◆ Start Year   ◆ End Year   \* No Data

Sardine South of Sicily [SARDMEDGSA16]

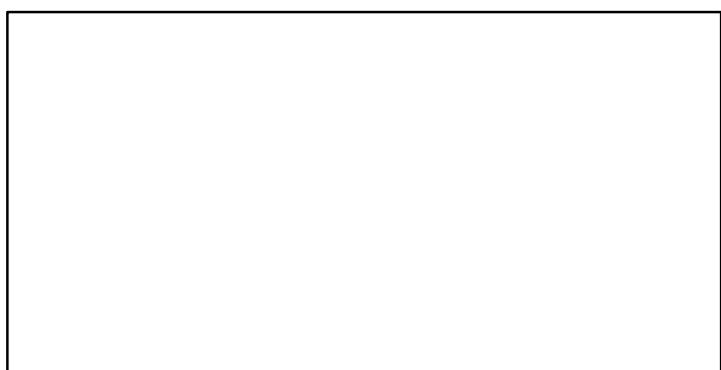
TB-MT (1998–2011–BANOBI)



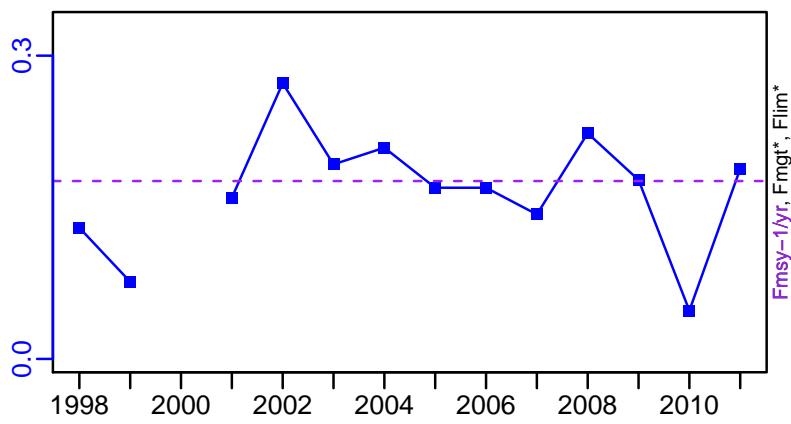
SSB\*



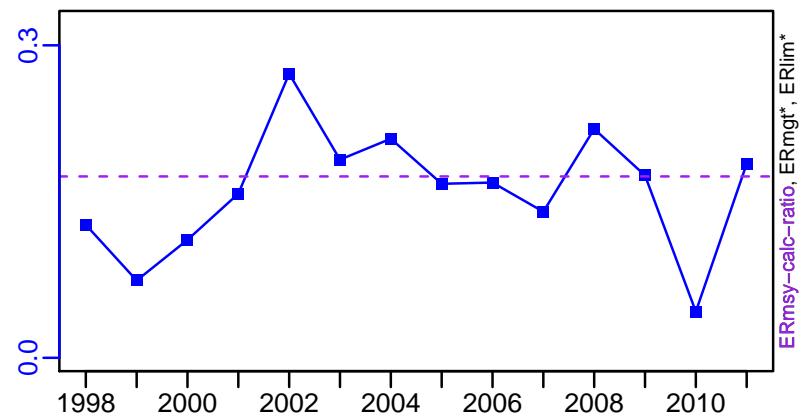
TN \*



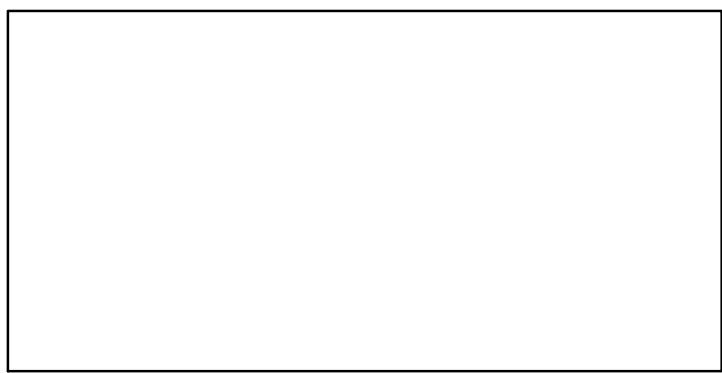
F-1/yr (1998–2011–BANOBI)



ER-calc-ratio (1998–2011–BANOBI)



Recruits\*

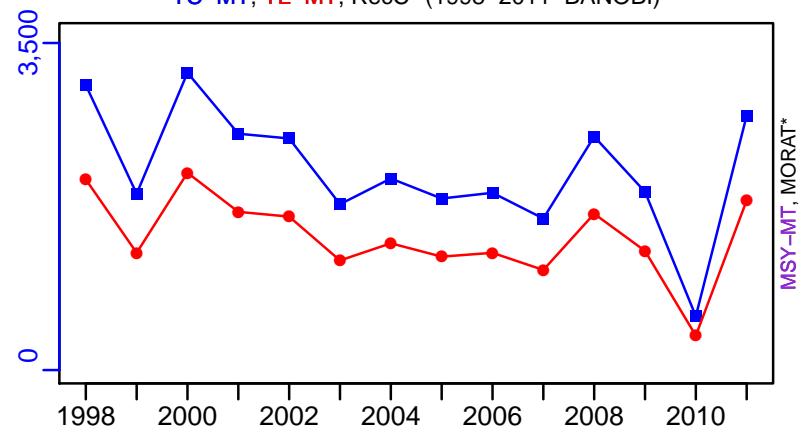


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

Sardine South of Sicily [SARDMEDGSA16]

TC-MT, TL-MT, RecC\* (1998–2011–BANOBI)

TAC\*, Cpair\*, Cadv\*



survB\*

MSY-MT, MORAT\*



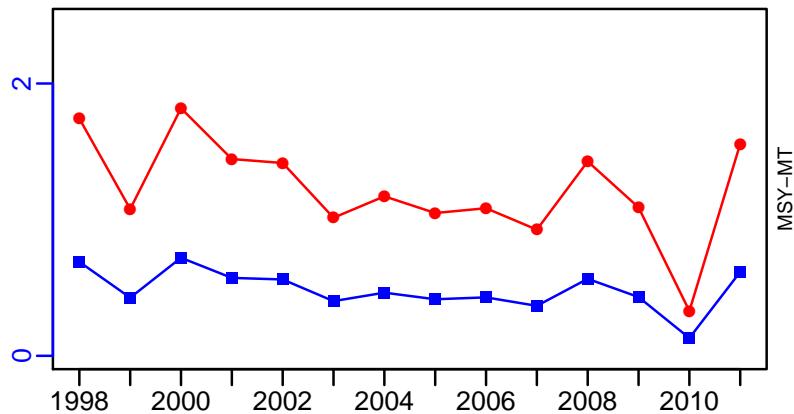
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1998–2011–BANOBI)



MSY-MT

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

## Sardine Adriatic Sea (GSA 17,18) [SARDMEDGSA17-18]

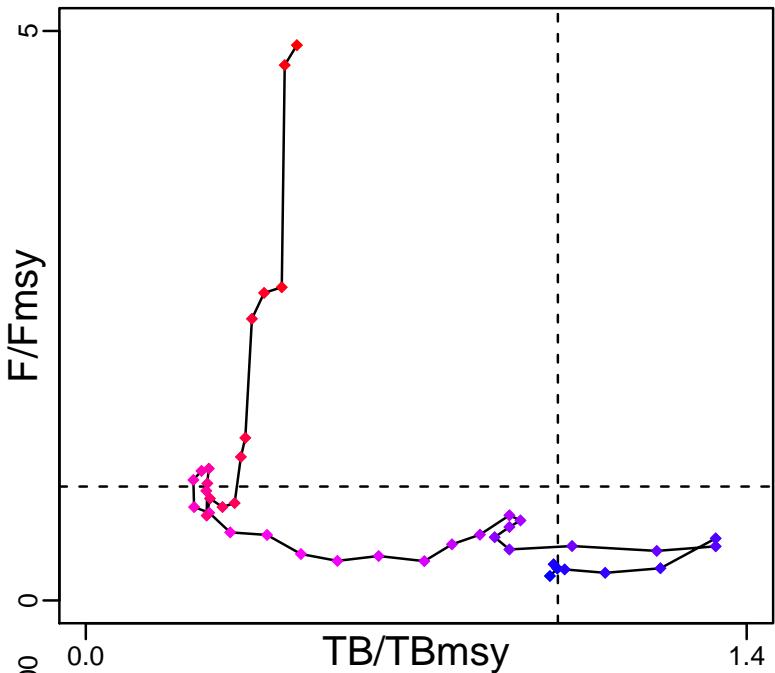
Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA17-18-1975-2015-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2015	1,281,535
<b>SSBmsy</b>	SSBmsy-est-MT	2013	481,542
<b>Fmsy</b>	Fmsy-1/yr	2015	0.4
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.031
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.4
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	39,779
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

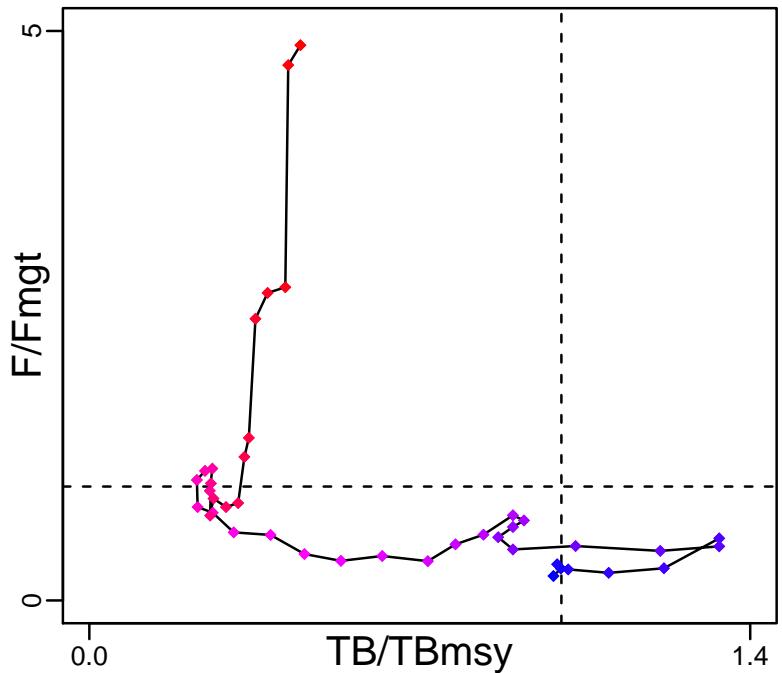
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2015	573,000	-	-	
<b>SSB</b>	SSB-MT	2015	383,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$2.37 \times 10^{10}$	-	-	
<b>F</b>	F-1/yr	2015	1.95	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.135	-	-	
<b>TC</b>	TC-MT	2015	77,200			
<b>TL</b>	TL-MT	2015	77,200			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	0.447			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	0.363			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	4.875			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	4.34			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	4.875			
<b>ER/ERmgt</b>	-	-	-			

Sardine Adriatic Sea (GSA 17,18) [SARDMEDGSA17-18]

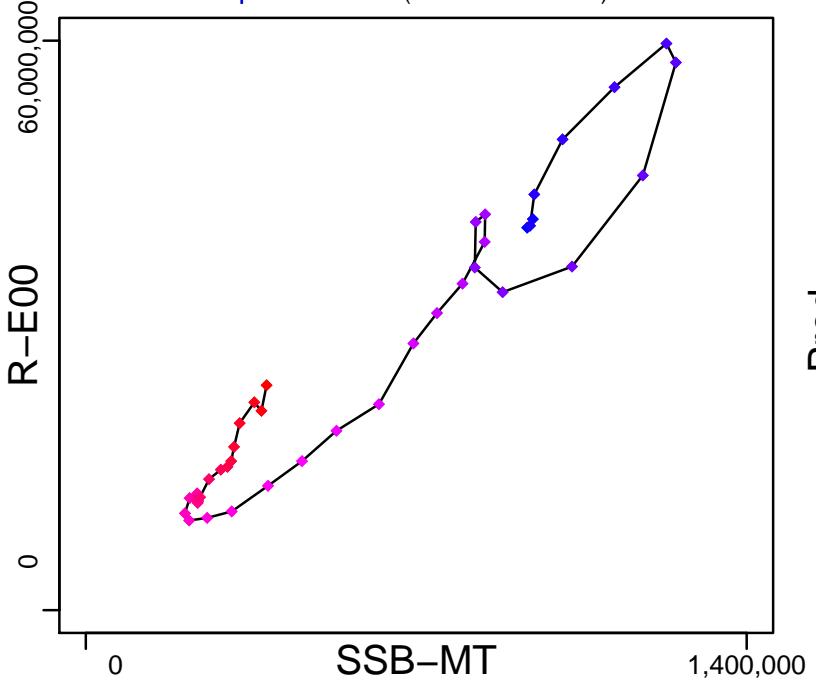
Kobe MSYpref (1975–2015–OSIO)



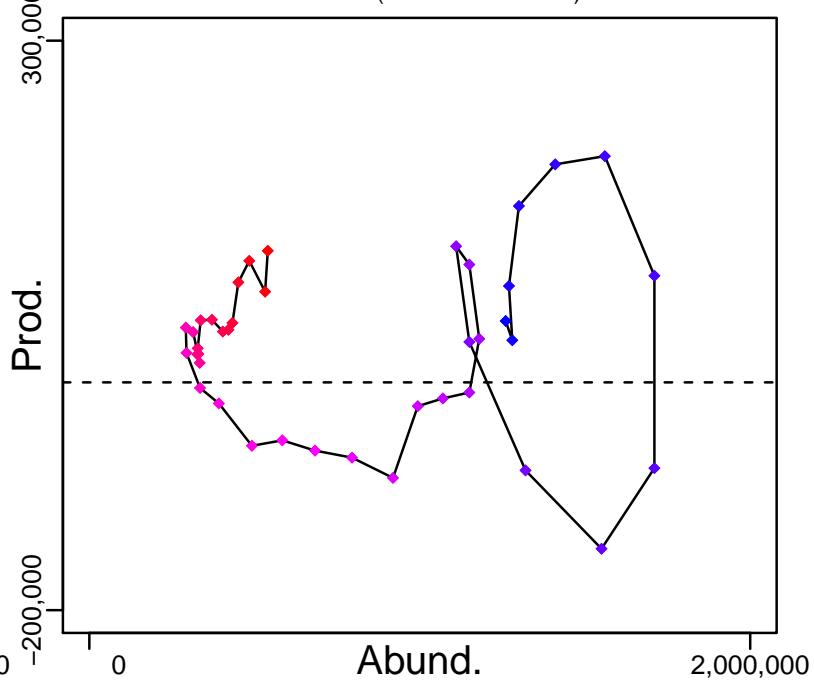
Kobe MGTPref (1975–2015–OSIO)



Spawner Recruit (1975–2015–OSIO)



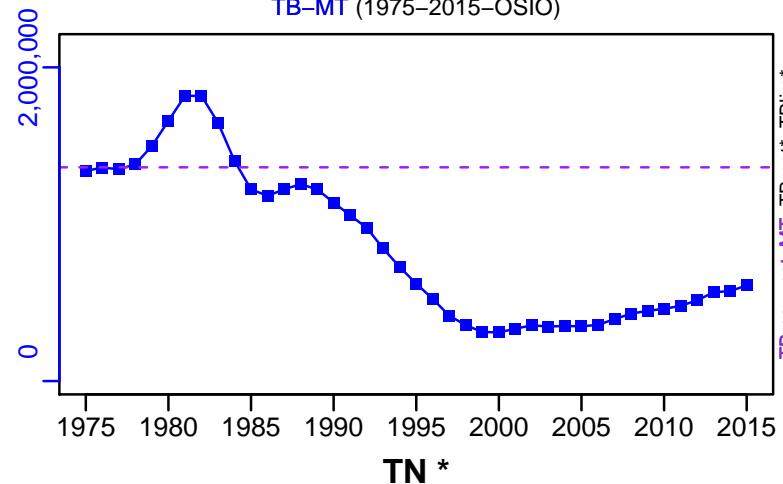
Production (1975–2015–OSIO)



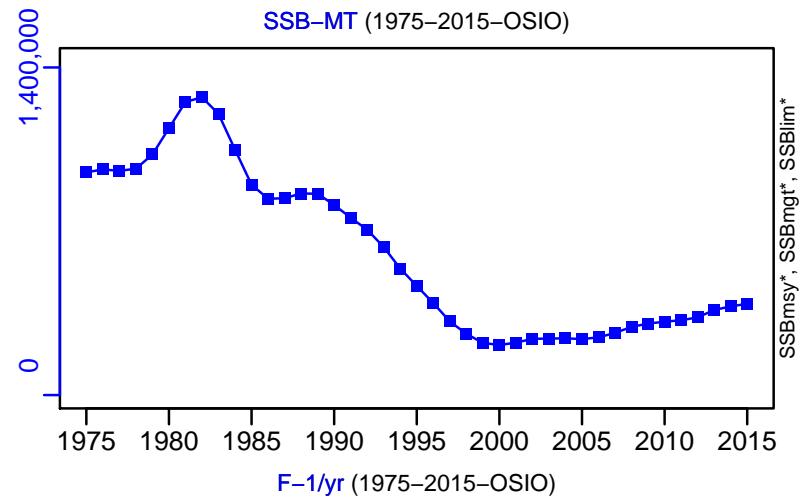
◆ Start Year    ♦ End Year    \* No Data

Sardine Adriatic Sea (GSA 17,18) [SARDMEDGSA17-18]

TB-MT (1975–2015–OSIO)



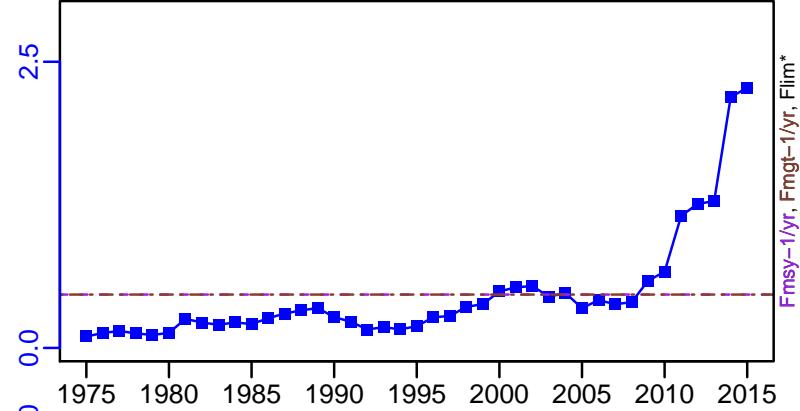
SSB-MT (1975–2015–OSIO)



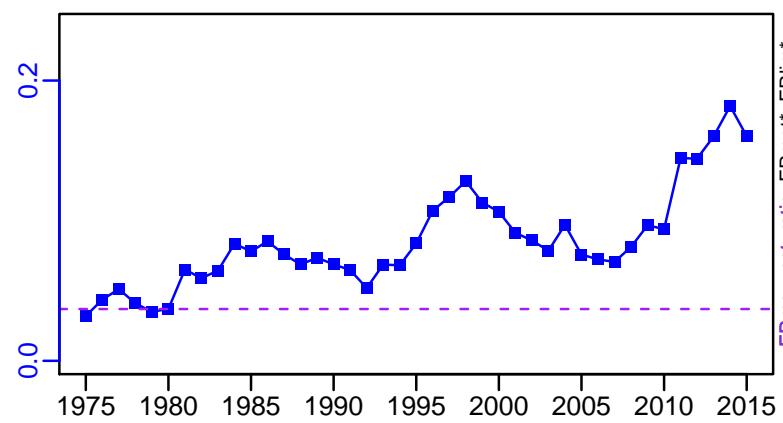
TN \*



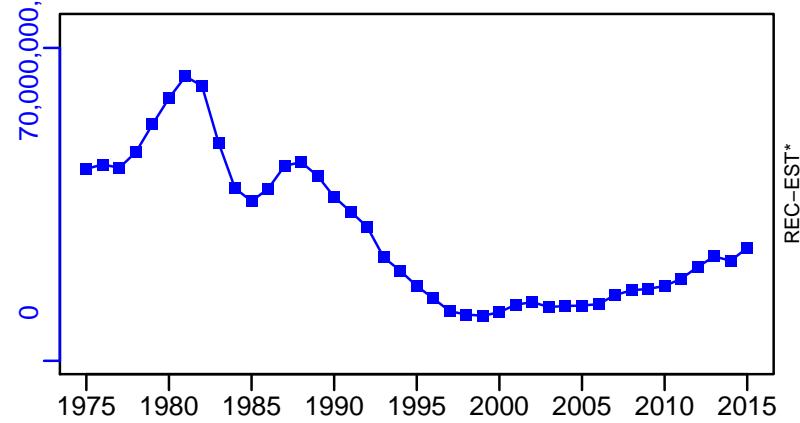
F-1/yr (1975–2015–OSIO)



ER-calc-ratio (1975–2015–OSIO)



R-E00 (1975–2015–OSIO)

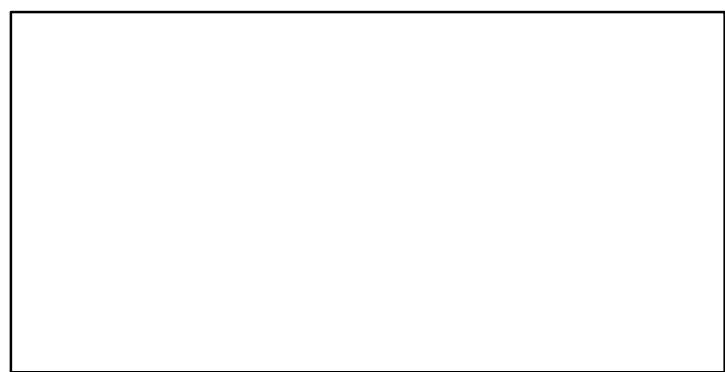
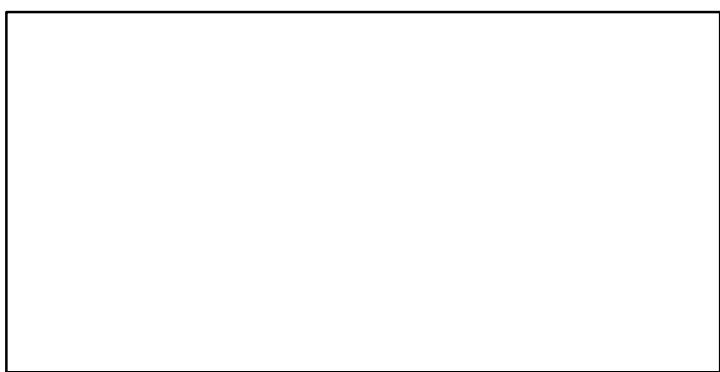
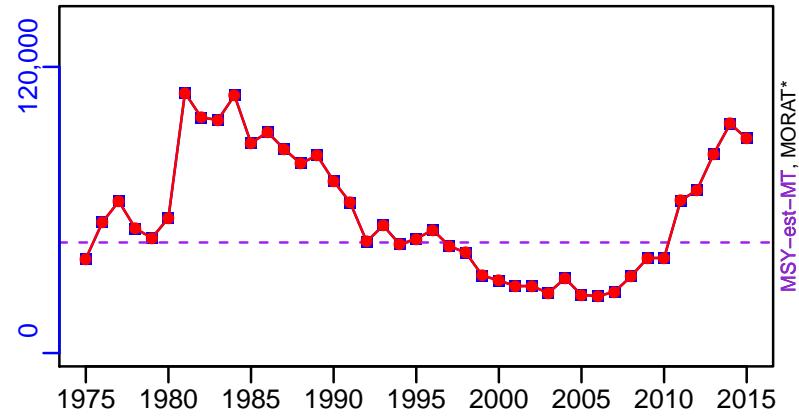


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

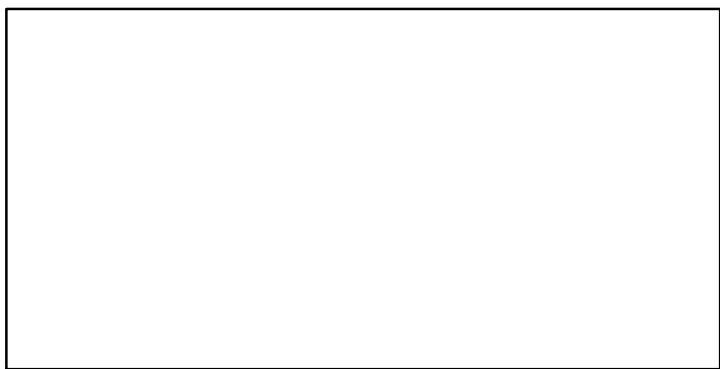
Sardine Adriatic Sea (GSA 17,18) [SARDMEDGSA17–18]

TC-MT, TL-MT, RecC\* (1975–2015–OSIO)

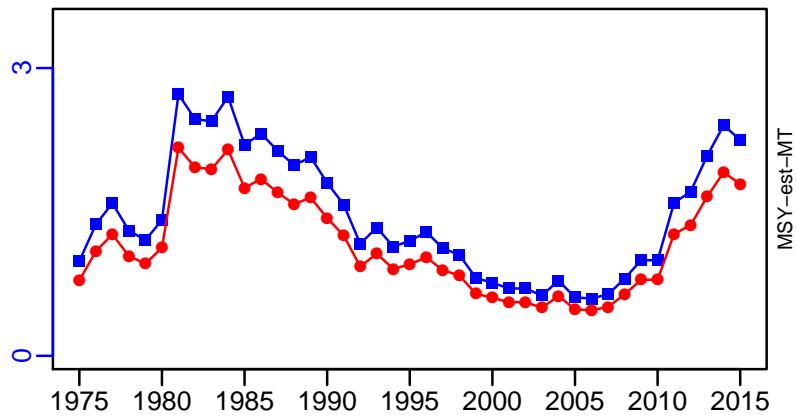
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1975–2015–OSIO)



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

## European pilchard Eastern Ionian Sea [SARDMEDGSA20]

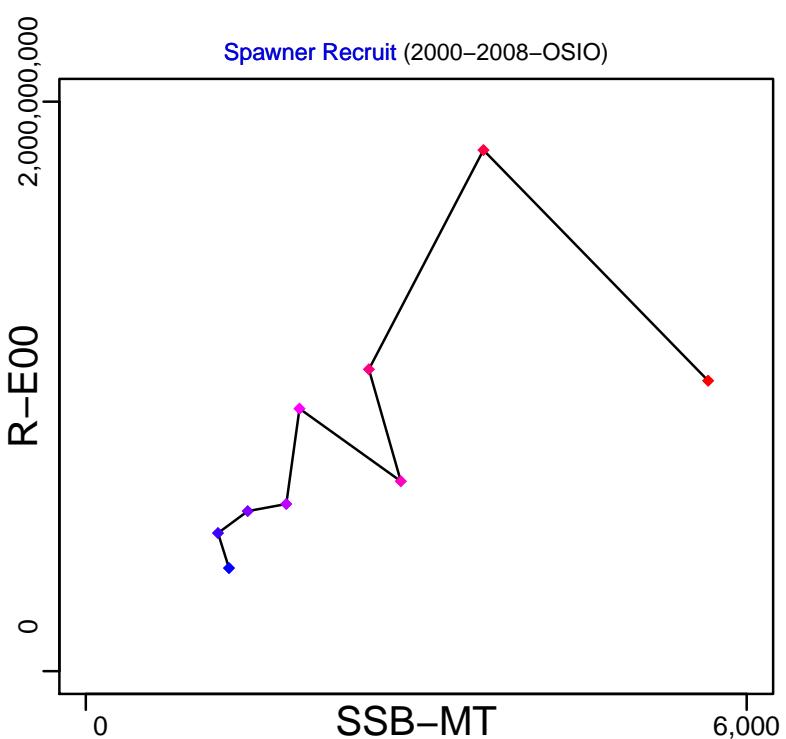
<b>Metadata</b>	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA20-2000-2008-OSIO
<b>Area</b>	Eastern Ionian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

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

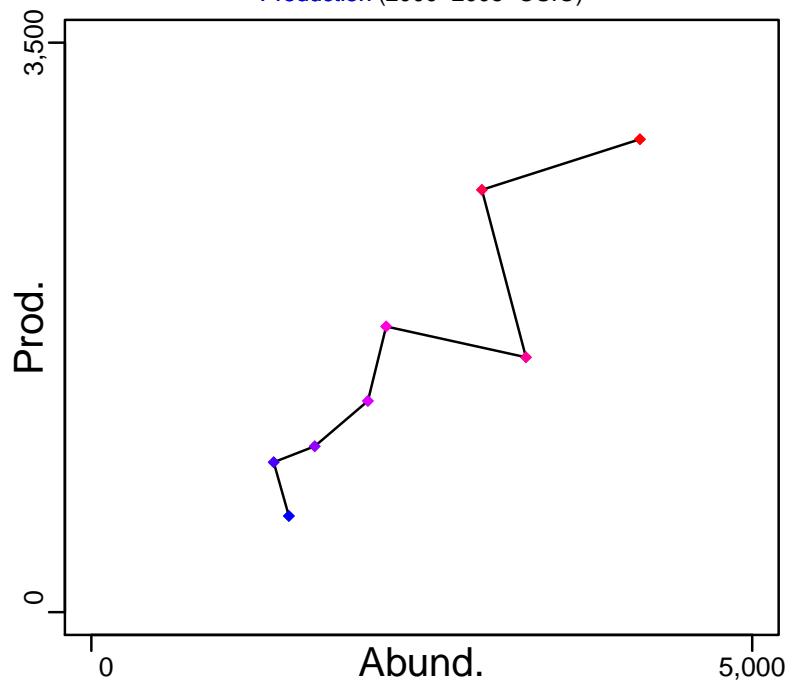
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2008	5650	-	1 to 3	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2008	$1.02 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2008	0.68	-	-	
<b>ER</b>	ER-calc-ratio	2008	0.453	-	-	
<b>TC</b>	TC-MT	2008	2940			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERrmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Kobe MSY\*****Kobe MGT\***

Spawner Recruit (2000–2008–OSIO)



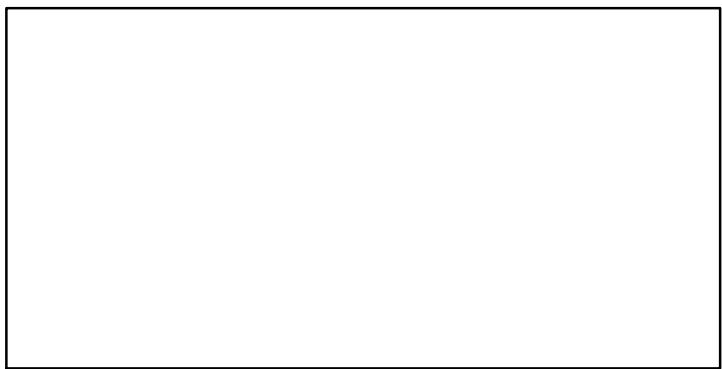
Production (2000–2008–OSIO)



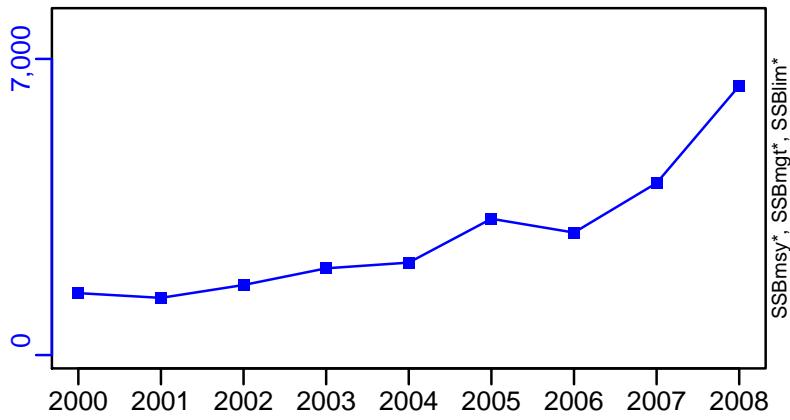
◆ Start Year   ◆ End Year   \* No Data

European pilchard Eastern Ionian Sea [SARDMEDGSA20]

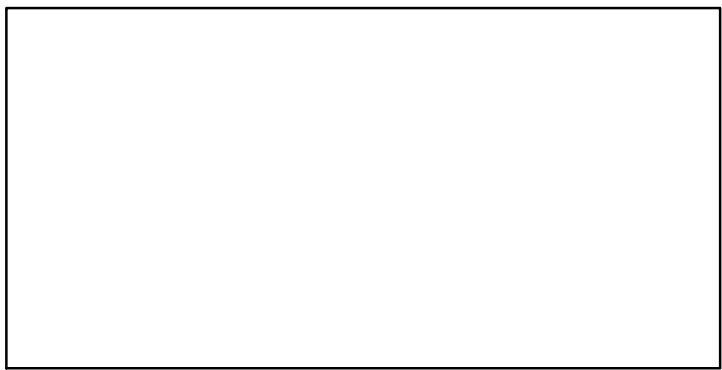
**TB\***



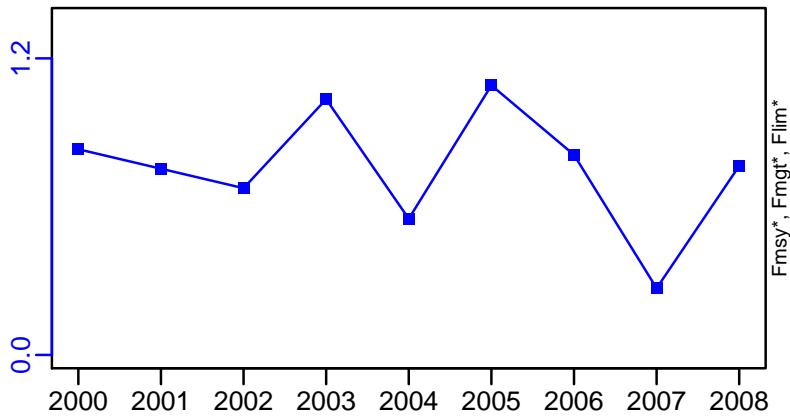
**SSB-MT** (2000–2008–OSIO)



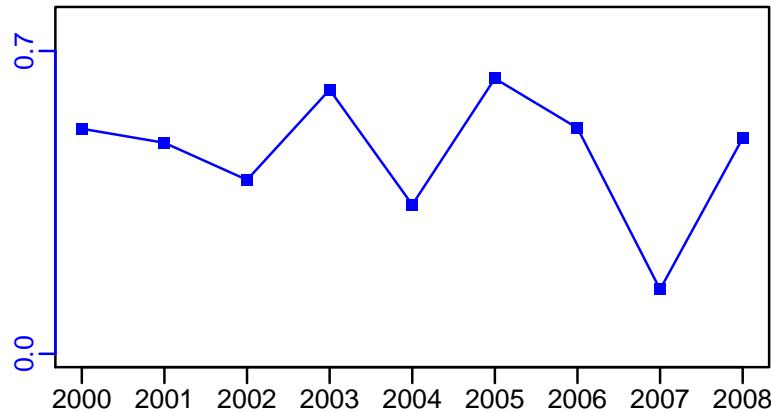
**TN \***



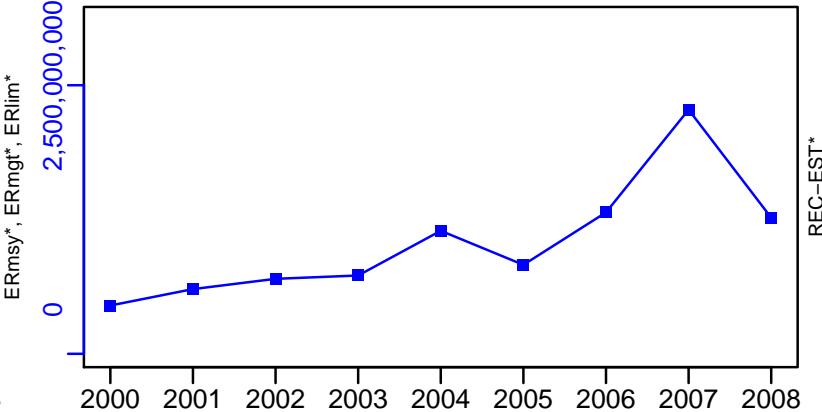
**F-1/yr** (2000–2008–OSIO)



**ER-calc-ratio** (2000–2008–OSIO)



**R-E00** (2000–2008–OSIO)

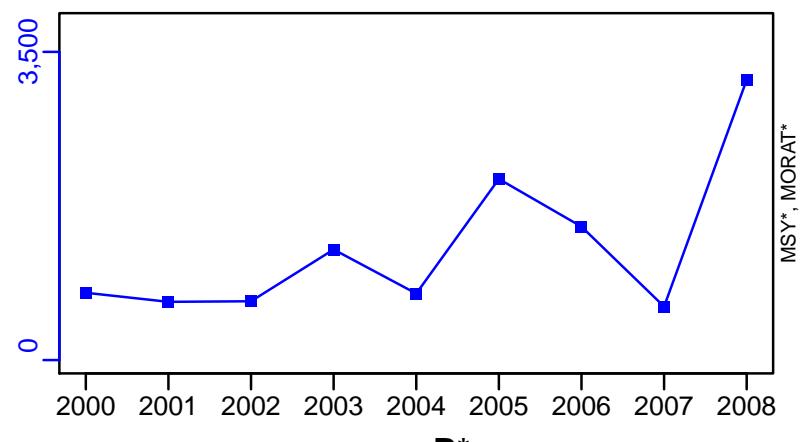


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

European pilchard Eastern Ionian Sea [SARDMEDGSA20]

TC-MT, TL\*, RecC\* (2000–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*



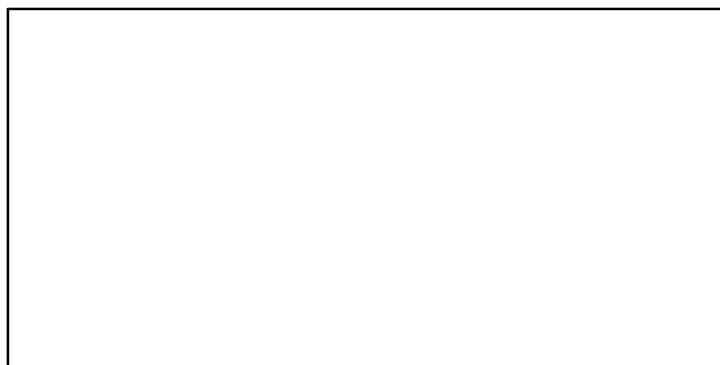
CPUE\*



EFFORT\*



CdivMSY\*



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

## European pilchard Aegean Sea [SARDMEDGSA22]

<b>Metadata</b>	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA22-2000-2008-OSIO
<b>Area</b>	Aegean Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2008

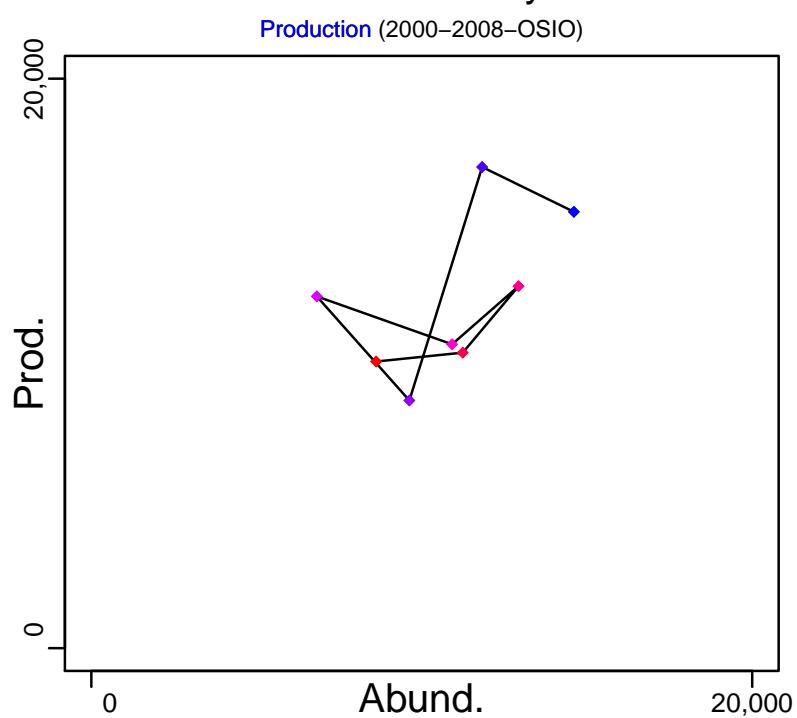
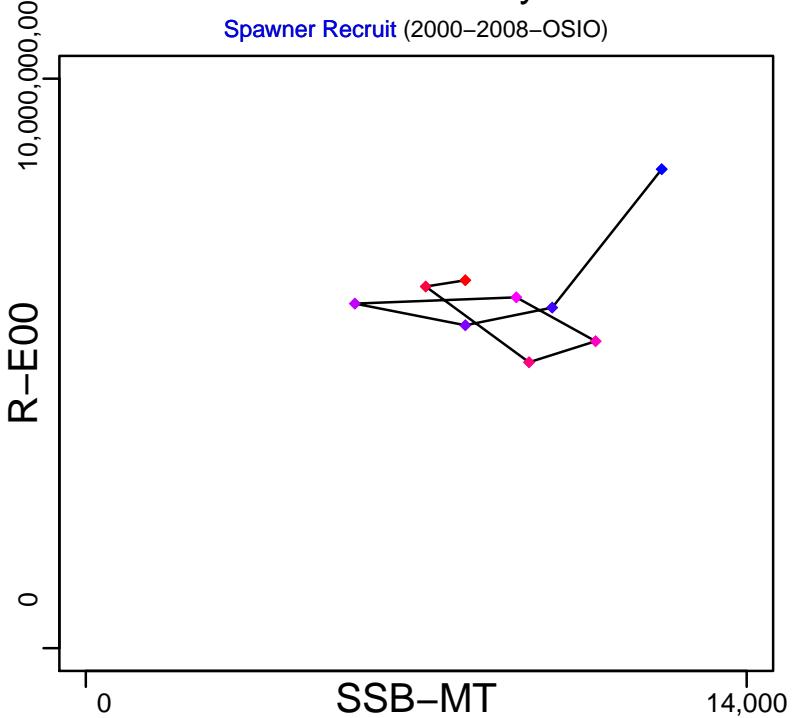
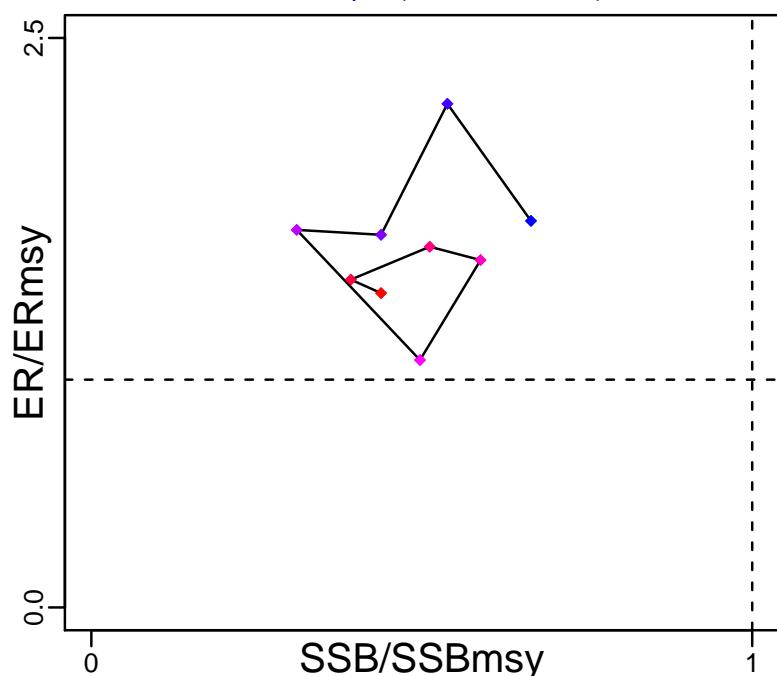
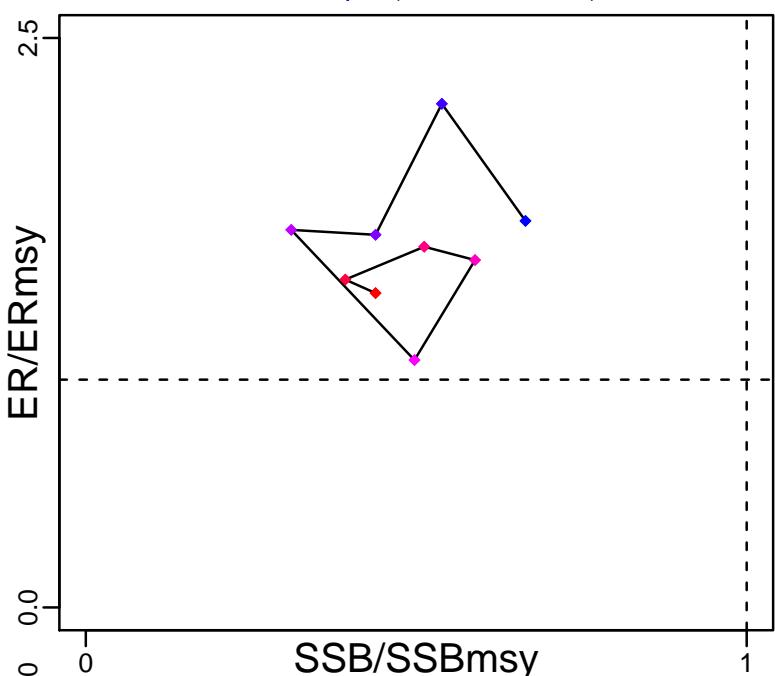
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2008	18,338
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2008	0.73
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2008	16,034
<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>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2008	8040	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2008	$6.46 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2008	0.752	-	-	
<b>ER</b>	ER-calc-ratio	2008	1.008	-	-	
<b>TC</b>	TC-MT	2008	9700			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2008	0.438			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2008	1.38			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

European pilchard Aegean Sea [SARDMEDGSA22]

Kobe MSYpref (2000–2008–OSIO)

Kobe MGTpref (2000–2008–OSIO)



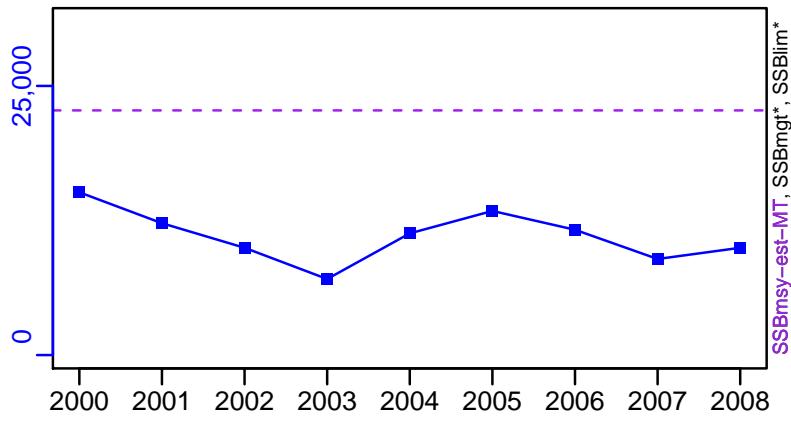
◆ Start Year   ◆ End Year   \* No Data

European pilchard Aegean Sea [SARDMEDGSA22]

**TB\***



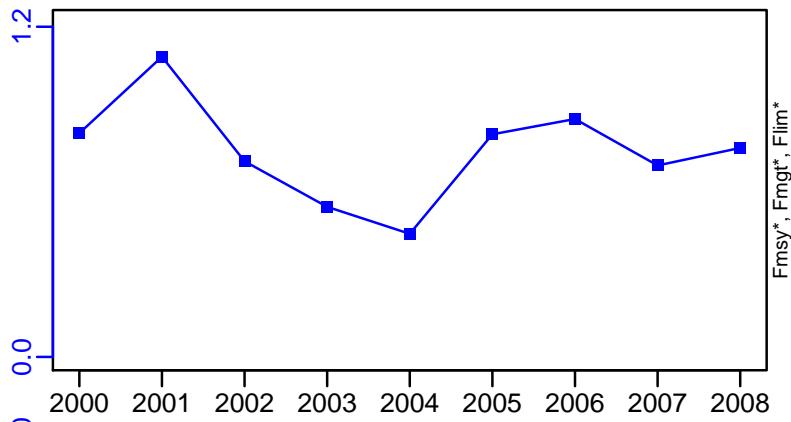
**SSB-MT (2000–2008–OSIO)**



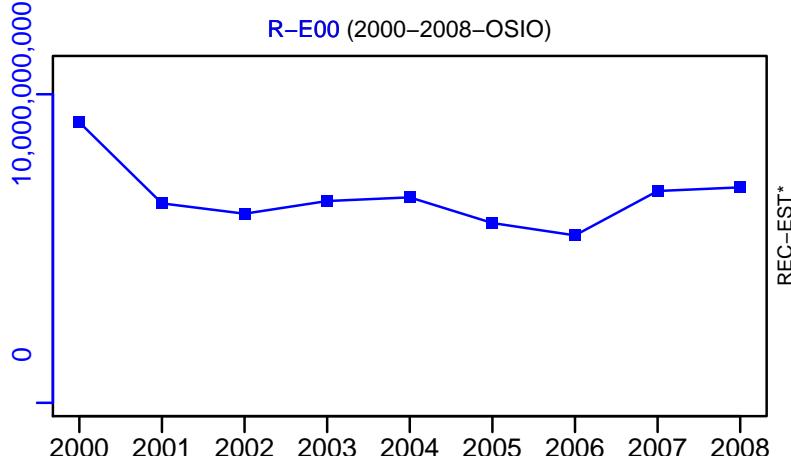
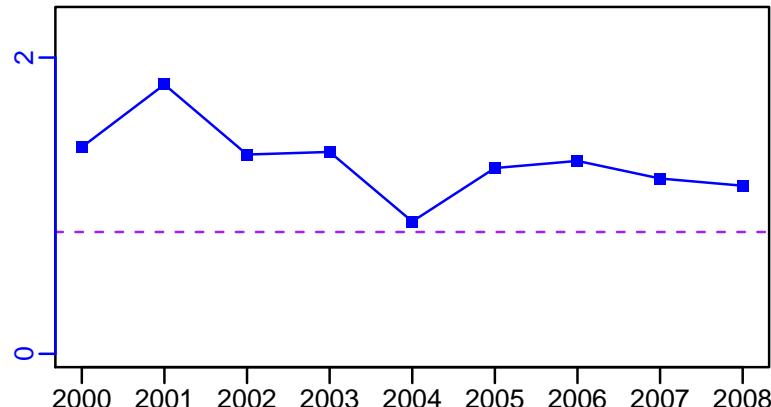
**TN \***



**F-1/yr (2000–2008–OSIO)**



**ER-calc-ratio (2000–2008–OSIO)**



SSB<sub>msy</sub>-est-MT, SSB<sub>mgt</sub>\* , SSB<sub>lim</sub>\*

F<sub>msy</sub>\*, F<sub>mgt</sub>\*, F<sub>lim</sub>\*

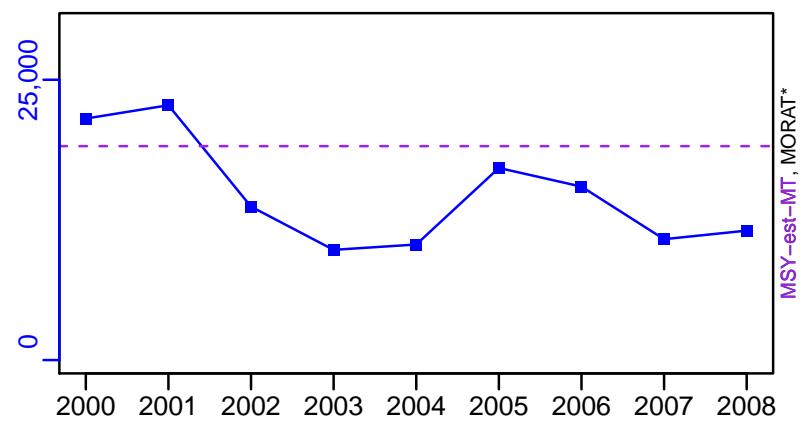
REC-EST\*

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

European pilchard Aegean Sea [SARDMEDGSA22]

TC-MT, TL\*, RecC\* (2000–2008–OSIO)

TAC\*, Cpair\*, Cadv\*



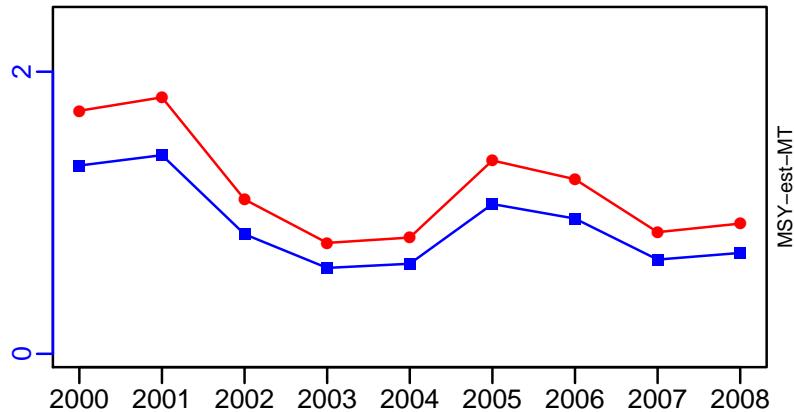
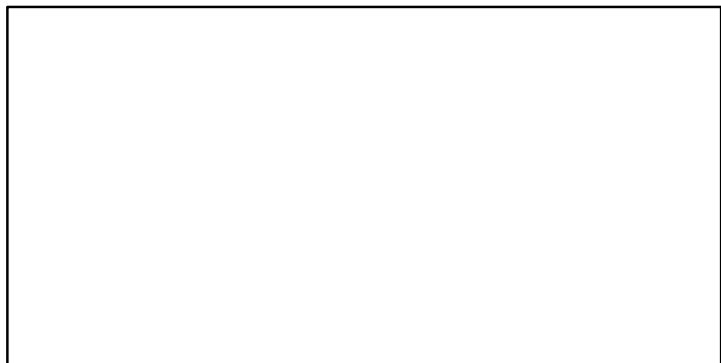
survB\*

MSY-est-MT, MORAT\*

CPUE\*

EFFORT\*

TC-MT/MSY-est-MT, CdivMEANC-ratio, (2000–2008–OSIO)



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

## European pilchard Northern Spain [SARDMEDGSA6]

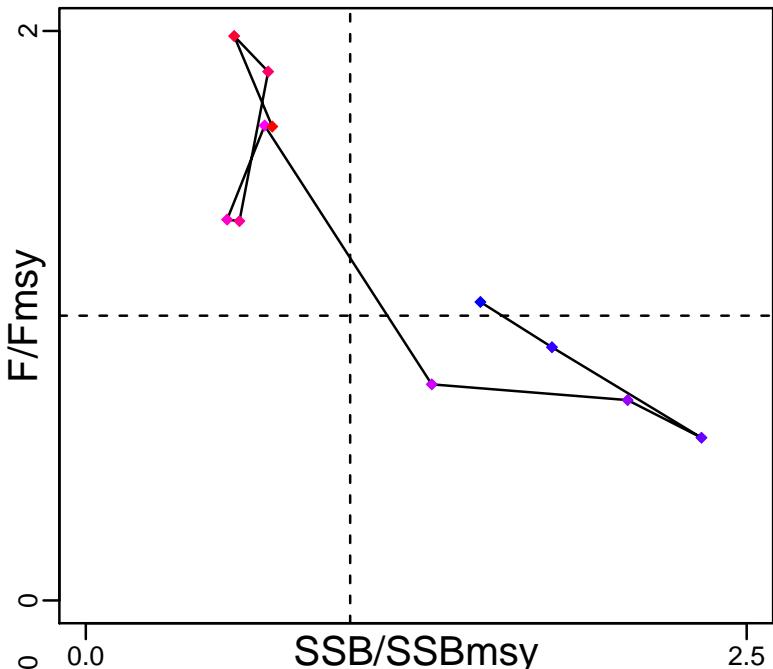
<b>Metadata</b>	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA6-2003-2015-OSIO
<b>Area</b>	Northern Spain
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2013, 2015

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2013	45,085
<b>Fmsy</b>	Fmsy-1/yr	2015	0.7
<b>ERmsy</b>	ERmsy-est-ratio	2013	0.164
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.7
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2013	14,007
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

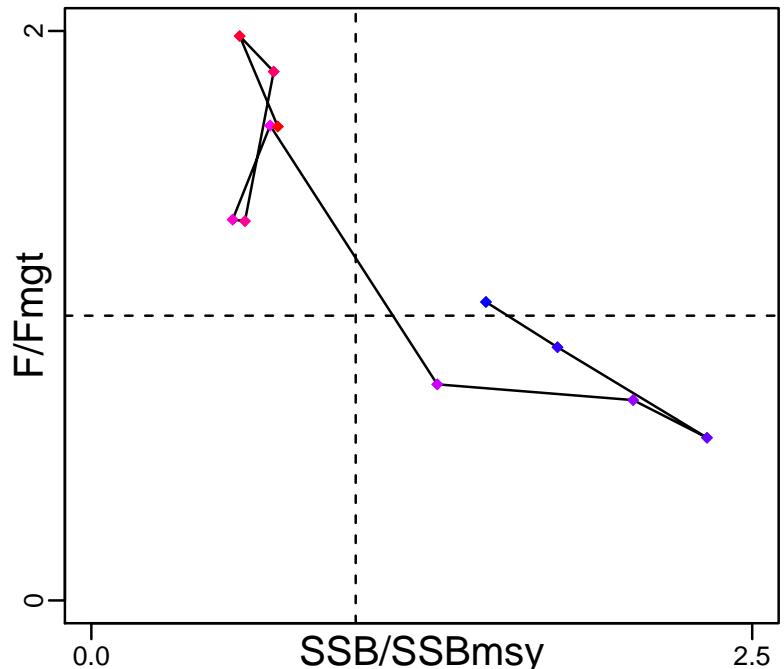
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2015	168,000	-	-	
<b>SSB</b>	SSB-MT	2015	120,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	$1.44 \times 10^{10}$	-	-	
<b>F</b>	F-1/yr	2015	1.77	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-	
<b>TC</b>	TC-MT	2015	6310			
<b>TL</b>	TL-MT	2015	6310			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2013	0.705			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	2.529			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2013	0.985			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.529			
<b>ER/ERmgt</b>	-	-	-			

European pilchard Northern Spain [SARDMEDGSA6]

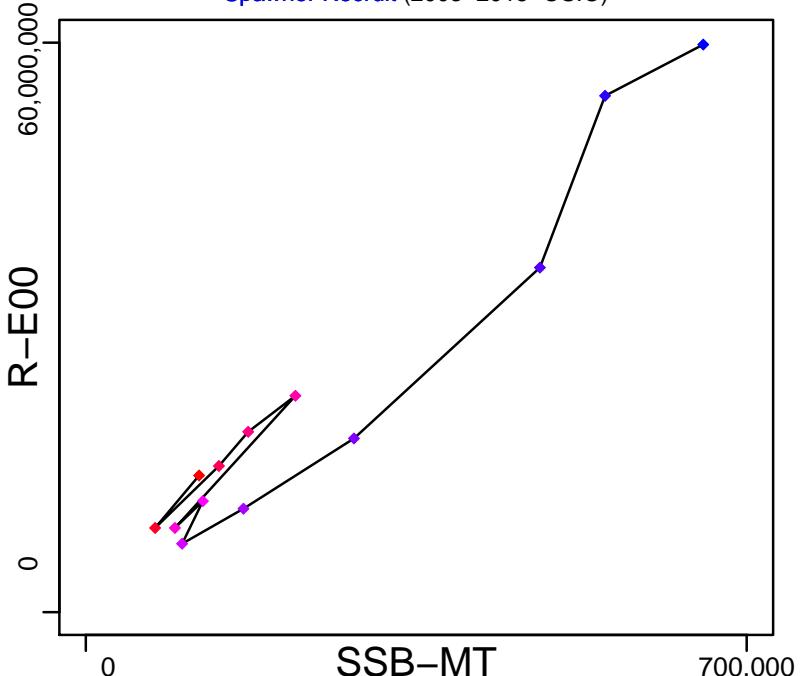
Kobe MSYpref (2003–2013–OSIO)



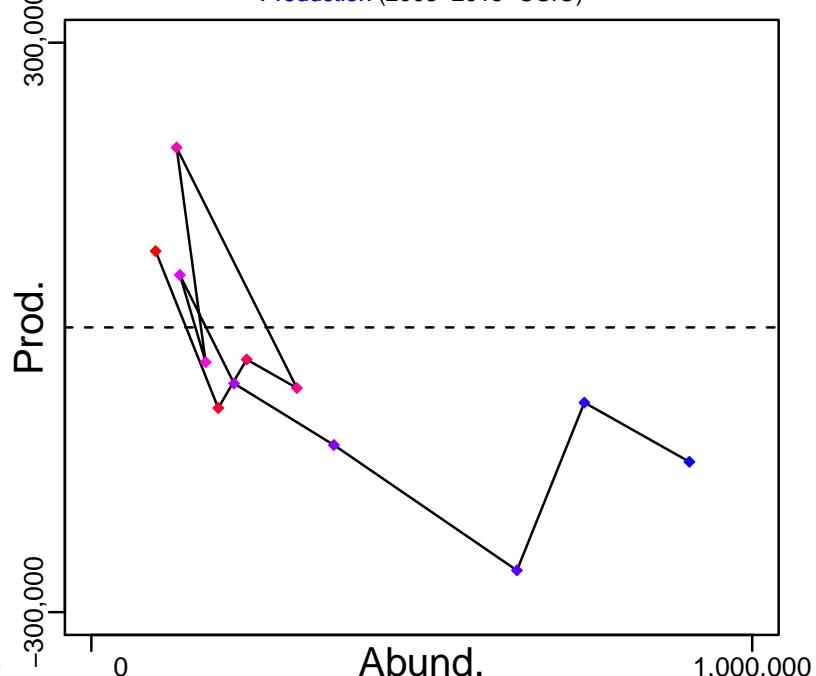
Kobe MGTPref (2003–2013–OSIO)



Spawner Recruit (2003–2015–OSIO)



Production (2003–2015–OSIO)

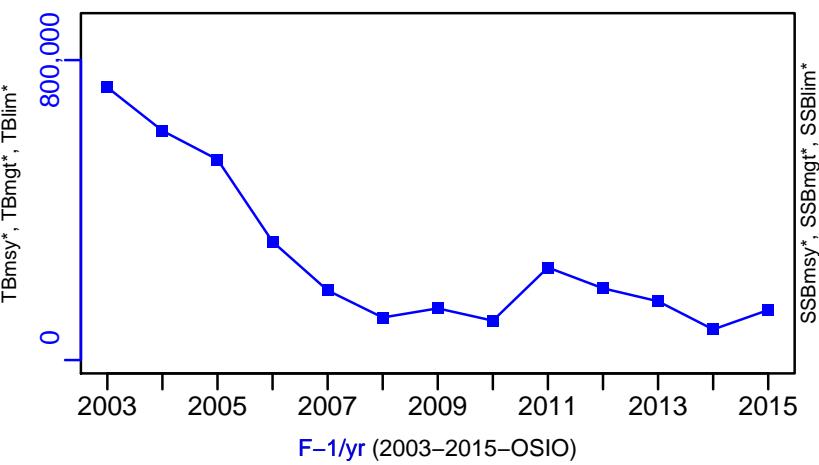
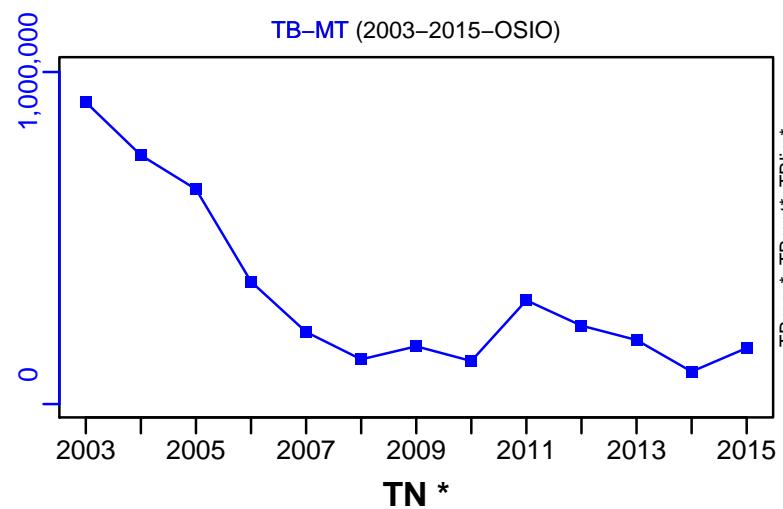


◆ Start Year ◆ End Year \* No Data

### European pilchard Northern Spain [SARDMEDGSA6]

TB-MT (2003–2015–OSIO)

SSB-MT (2003–2015–OSIO)



TN \*

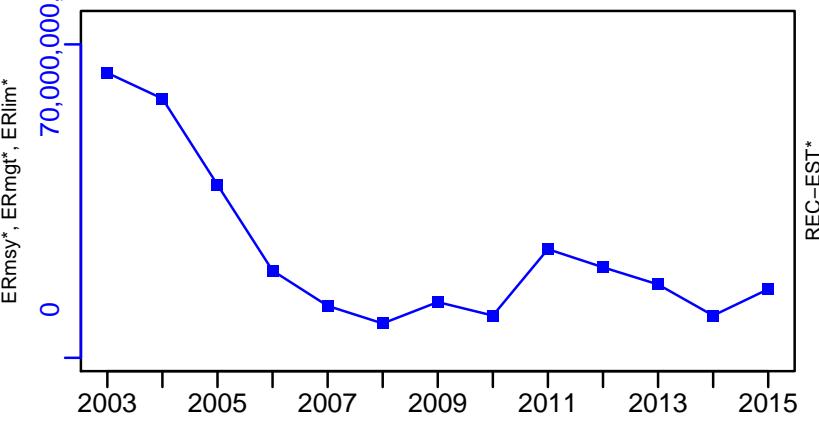
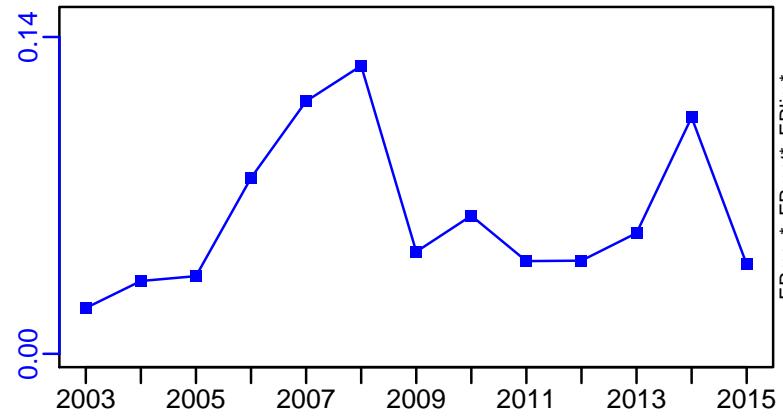
F-1/yr (2003–2015–OSIO)

SSBmsy\*, SSBmg\*, SSBlim\*

Fmsy-1/yr, Fmgmt-1/yr, Flim\*

ER-calc-ratio (2003–2015–OSIO)

R-E00 (2003–2015–OSIO)



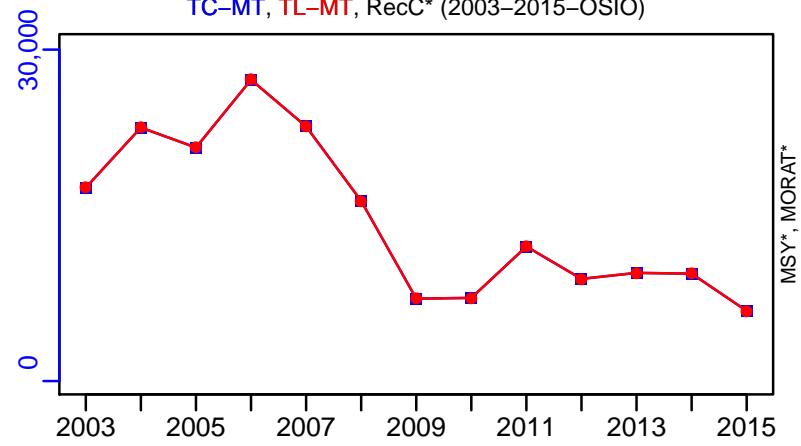
REC-EST\*

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

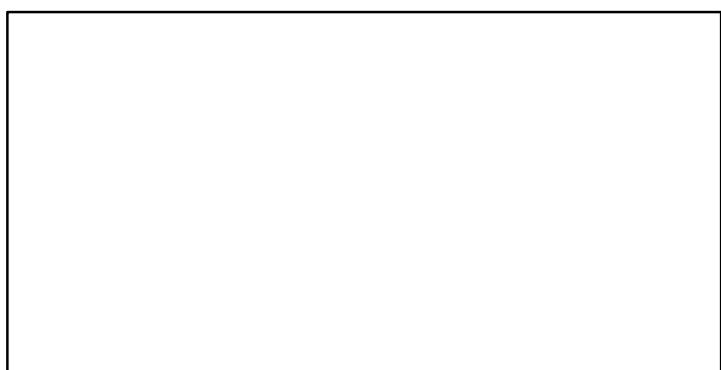
European pilchard Northern Spain [SARDMEDGSA6]

TC-MT, TL-MT, RecC\* (2003–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



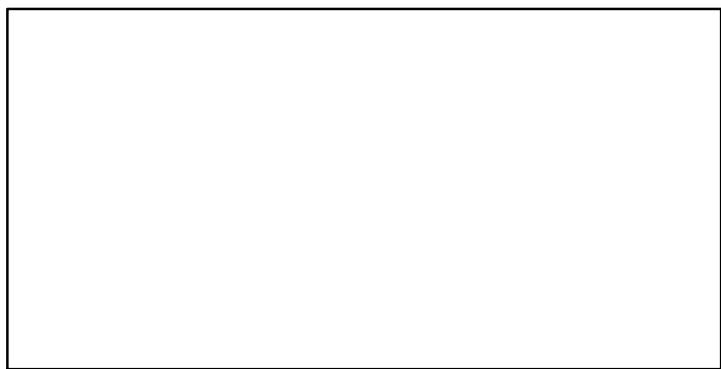
survB\*



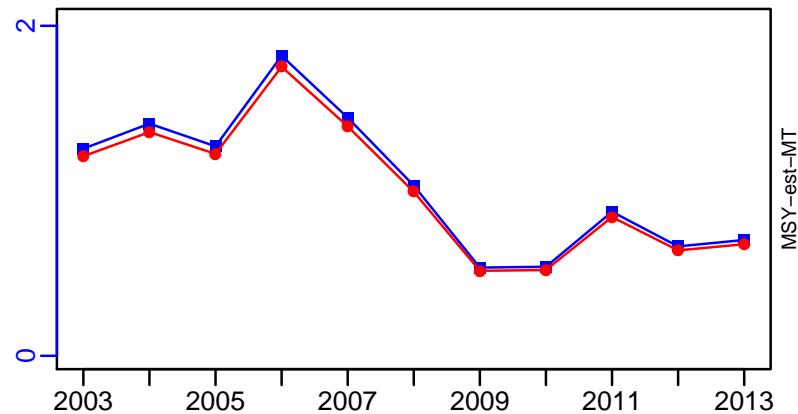
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2003–2013–OSIO)



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

## Sardine Gulf of Lions [SARDMEDGSA7]

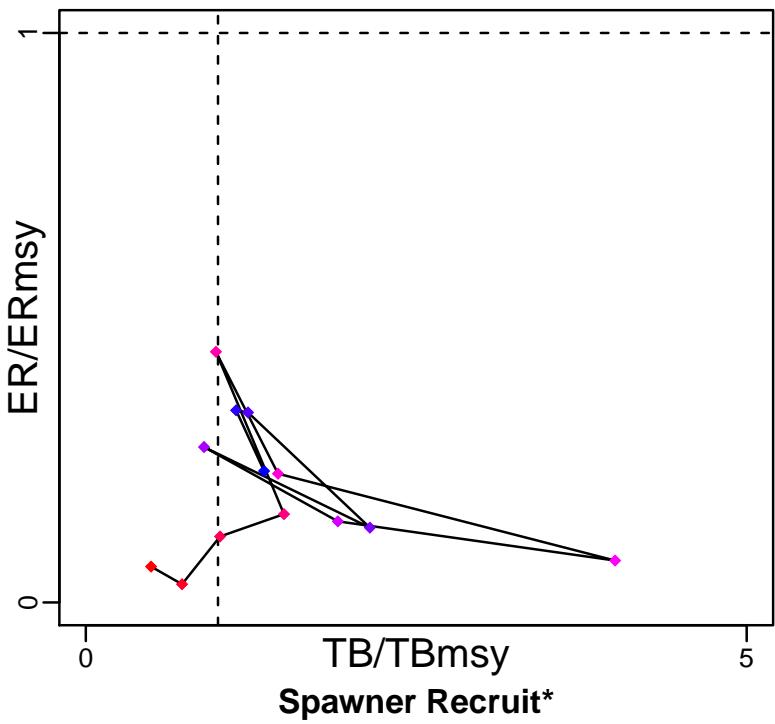
Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	IFREMER-SARDMEDGSA7-1993-2012-BANOBI
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	French Research Institute for Exploitation of the Sea
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-est-MT	2012	57,689
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERrmsy</b>	ERrmsy-est-ratio	2012	0.436
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	25,156
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

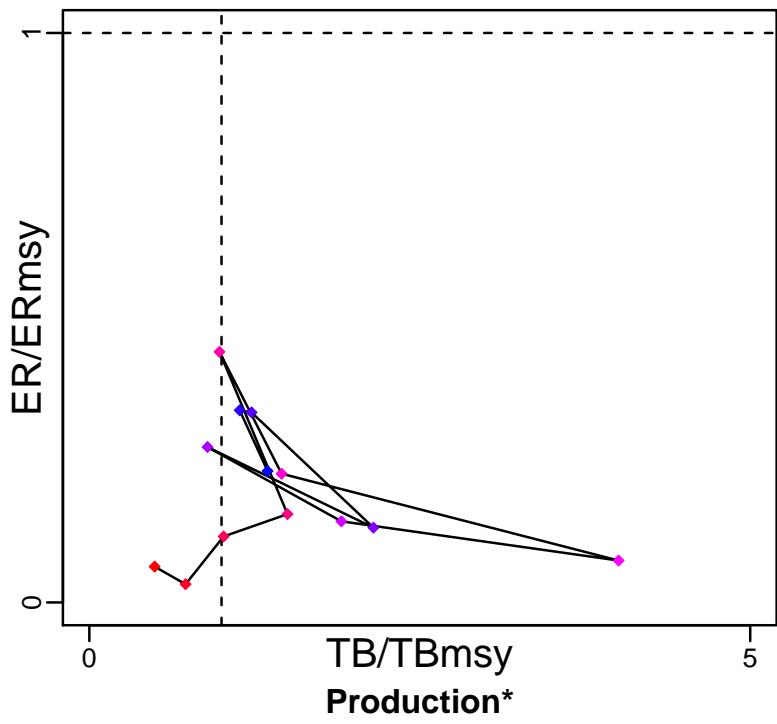
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2012	115,000	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-MT	2012	57,500	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.027	-	-	
<b>TC</b>	TC-MT	2012	782			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2012	1.993			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERrmsy</b>	ER-calc-ratio/ERrmsy-est-ratio	2012	0.063			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Sardine Gulf of Lions [SARDMEDGSA7]

Kobe MSYpref (1993–2012–BANOBI)



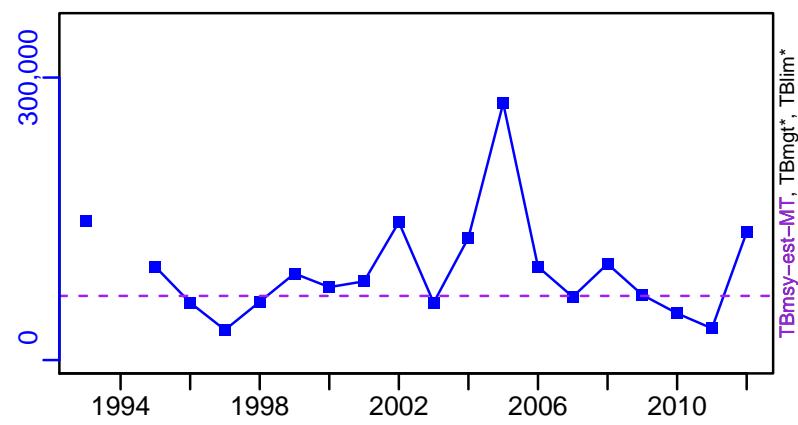
Kobe MGTpref (1993–2012–BANOBI)



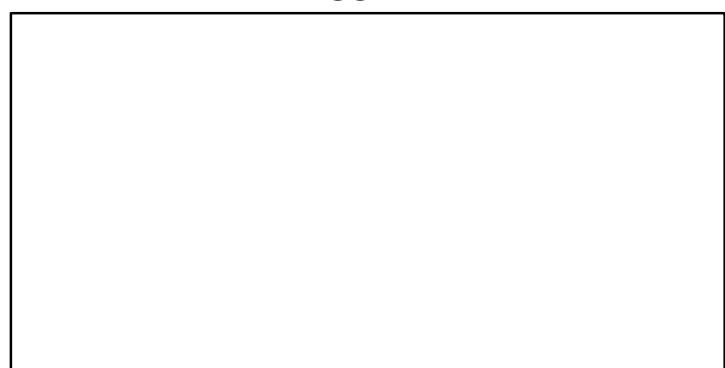
◆ Start Year   ◆ End Year   \* No Data

Sardine Gulf of Lions [SARDMEDGSA7]

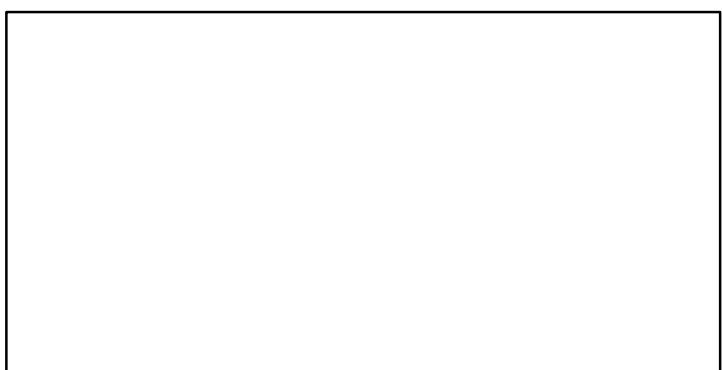
TB-MT (1993–2012–BANOBI)



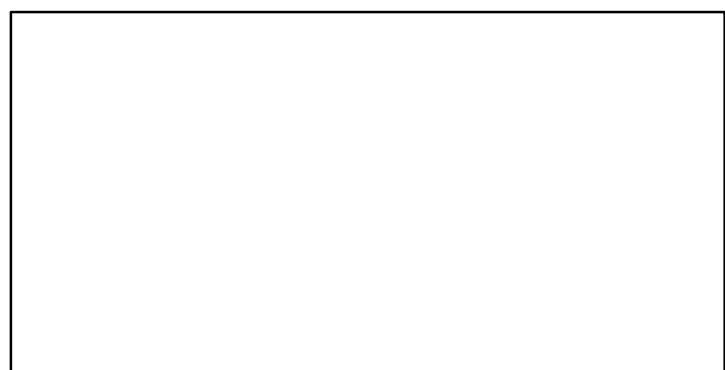
SSB\*



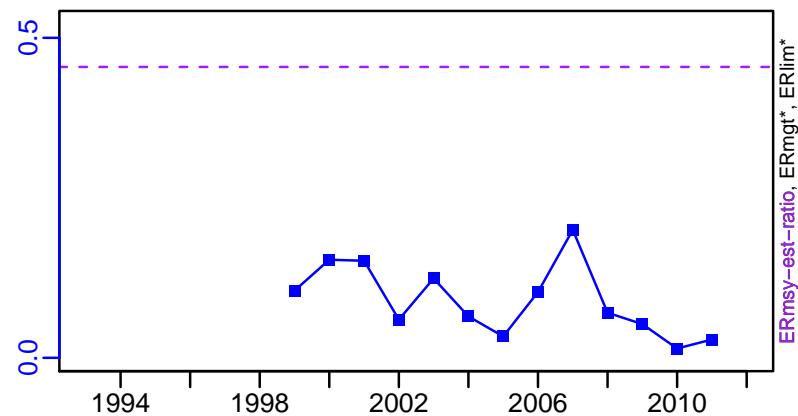
TN \*



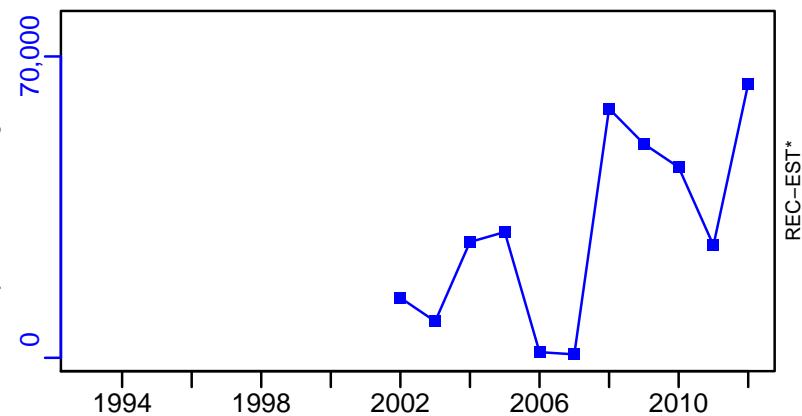
F\*



ER-calc-ratio (1993–2012–BANOBI)



R-MT (1993–2012–BANOBI)

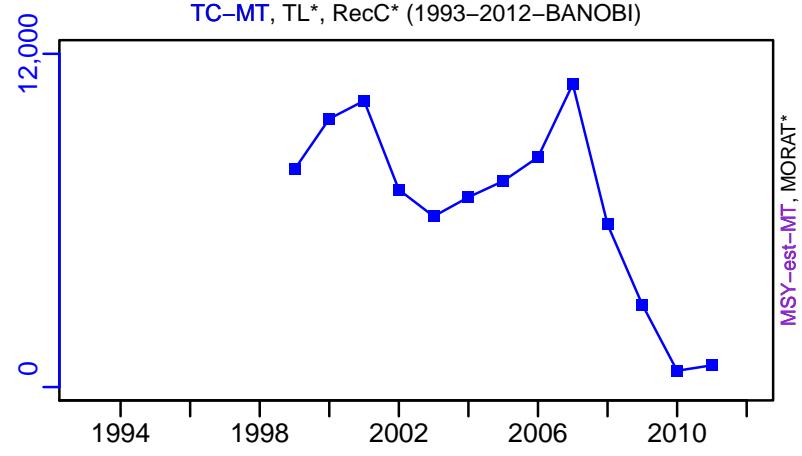


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

Sardine Gulf of Lions [SARDMEDGSA7]

TC-MT, TL\*, RecC\* (1993–2012–BANOBI)

TAC\*, Cpair\*, Cadv\*



survB\*



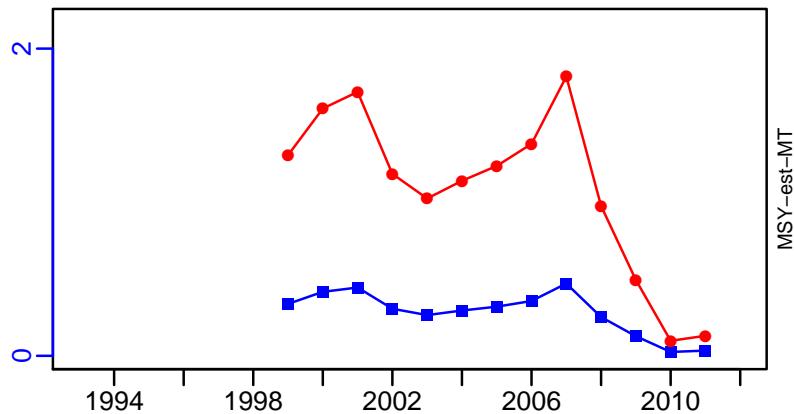
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1993–2012–BANOBI)



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

## European pilchard Ligurian and North Tyrrhenian Sea [SARDMEDGSA9]

Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	STECF-SARDMEDGSA9-2006-2012-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2012	1730		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

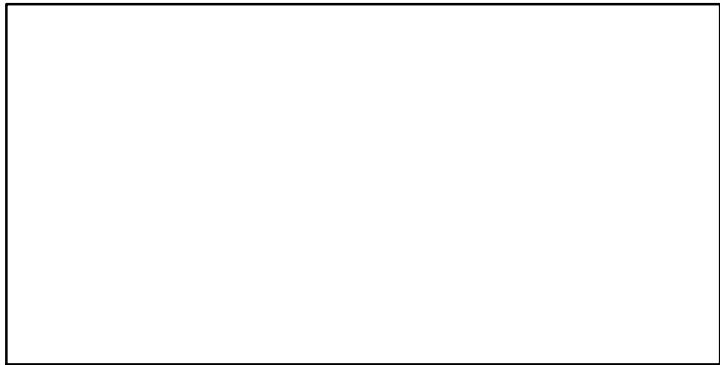
**Spawner Recruit\***

**Production\***

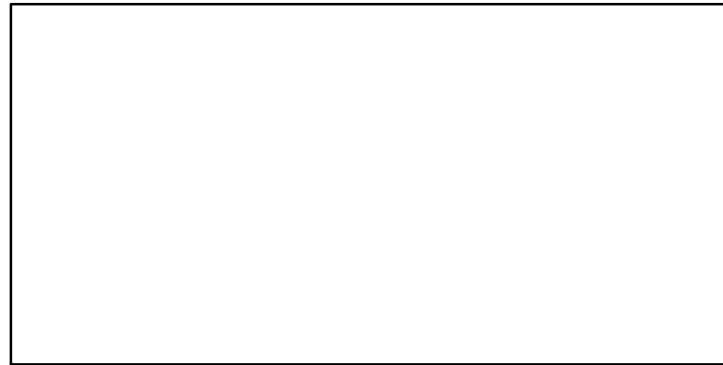
◆ Start Year ♦ End Year \* No Data

European pilchard Ligurian and North Tyrrhenian Sea [SARDMEDGSA9]

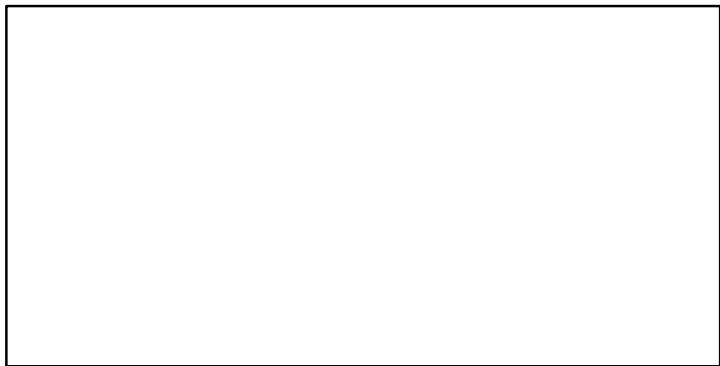
**TB\***



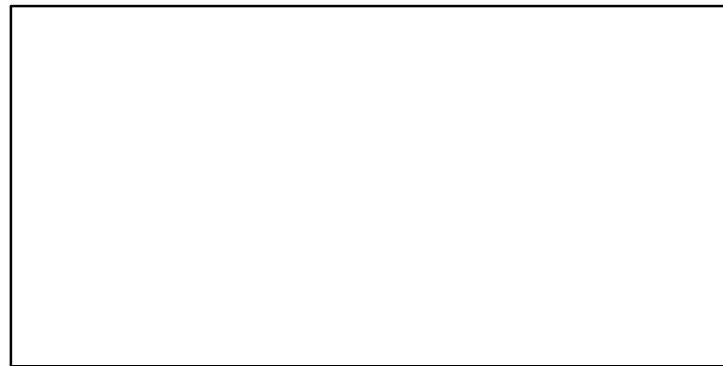
**SSB\***



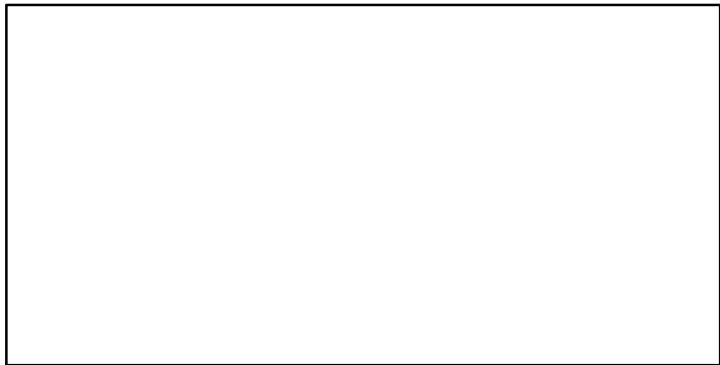
**TN \***



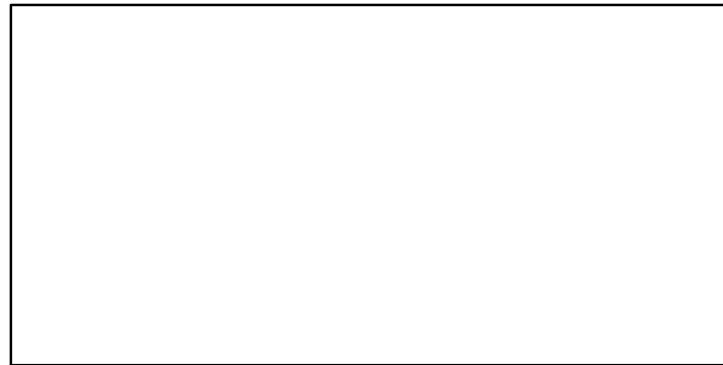
**F\***



**ER\***



**Recruits\***

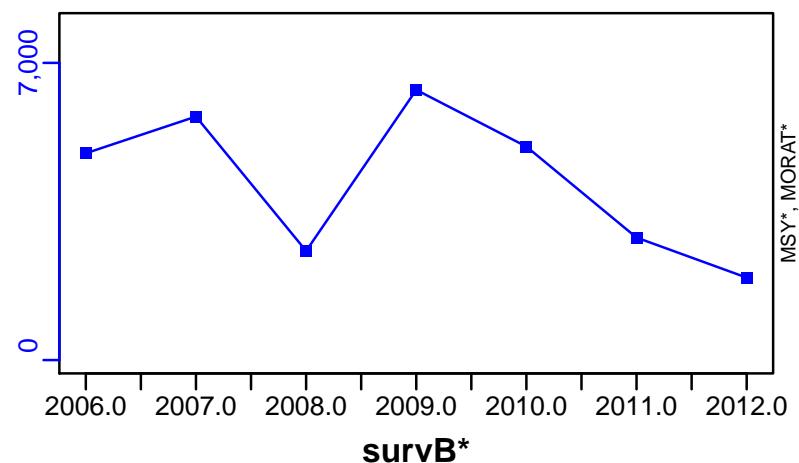


- |                      |                  |           |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - - Lim BRP    | * No Data |

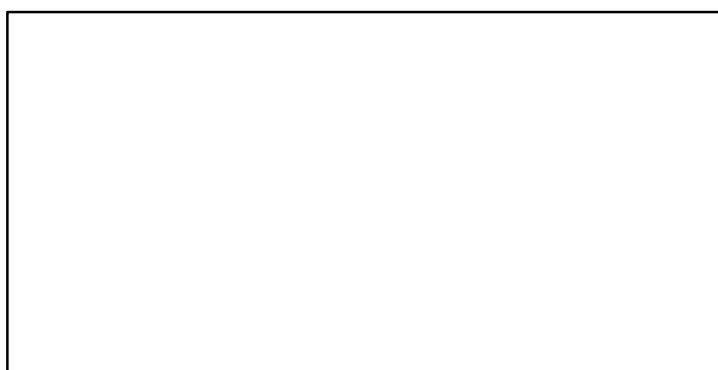
European pilchard Ligurian and North Tyrrhenian Sea [SARDMEDGSA9]

TC-MT, TL\*, RecC\* (2006–2012–OSIO)

TAC\*, Cpair\*, Cadv\*



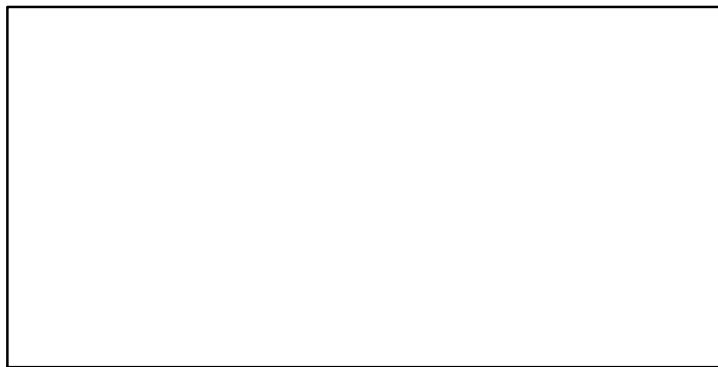
survB\*



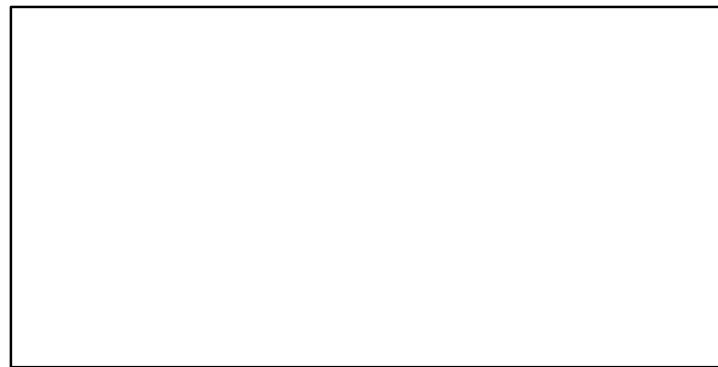
CPUE\*



EFFORT\*



CdivMSY\*



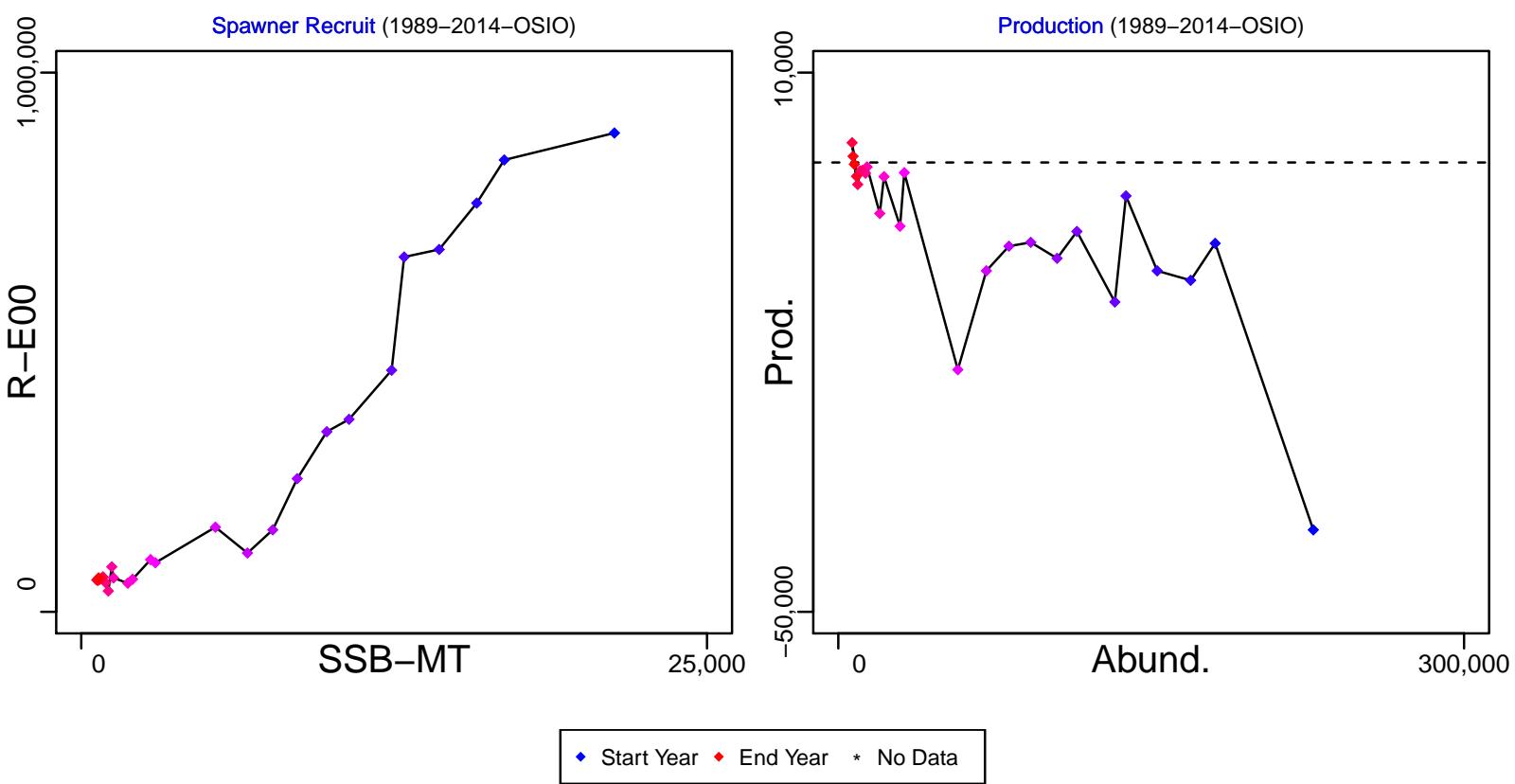
- |                          |                          |           |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT   |
| ● 2nd listed time series | - - - MSY                | * No Data |

## Spiny dogfish Black Sea [SDOGLKGSA29]

<b>Metadata</b>	
<b>Scientific Name</b>	Squalus acanthias
<b>Current Assess ID</b>	STECF-SDOGLKGSA29-1989-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2014

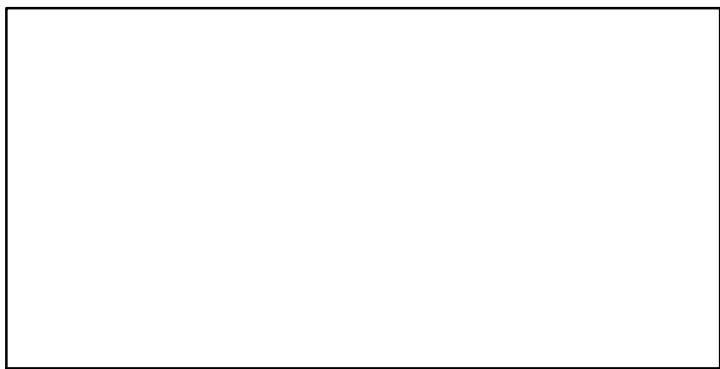
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.08
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.15
<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>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	693	-	12+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	62,900	-	-	
<b>F</b>	F-1/yr	2014	0.24	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.01	-	-	
<b>TC</b>	TC-MT	2014	75			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	-	-	-			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	3			
<b>ER/ERmgt</b>	-	-	-			

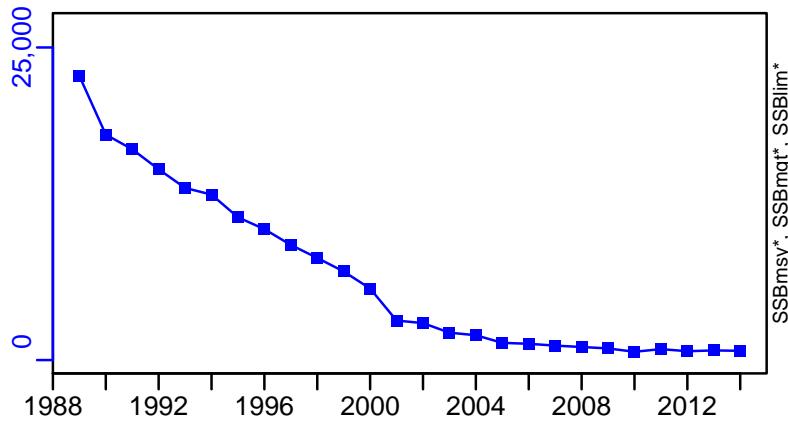
**Kobe MSY\*****Kobe MGT\***

Spiny dogfish Black Sea [SDOGLKGS29]

**TB\***



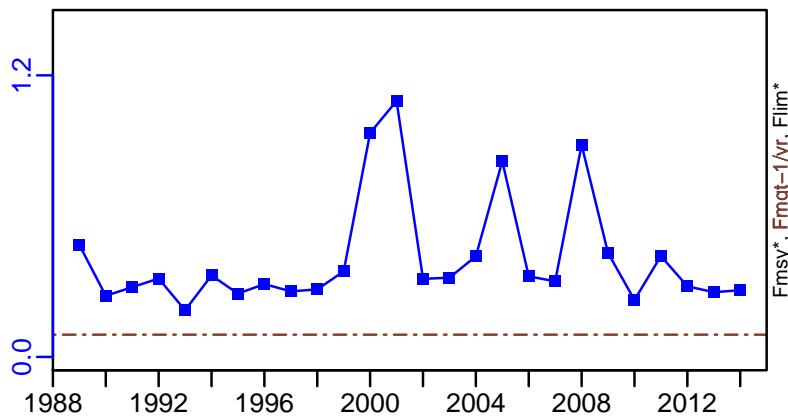
**SSB-MT (1989–2014–OSIO)**



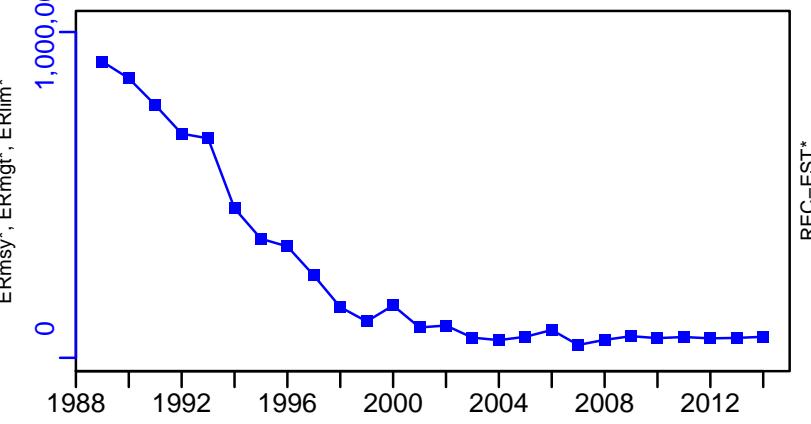
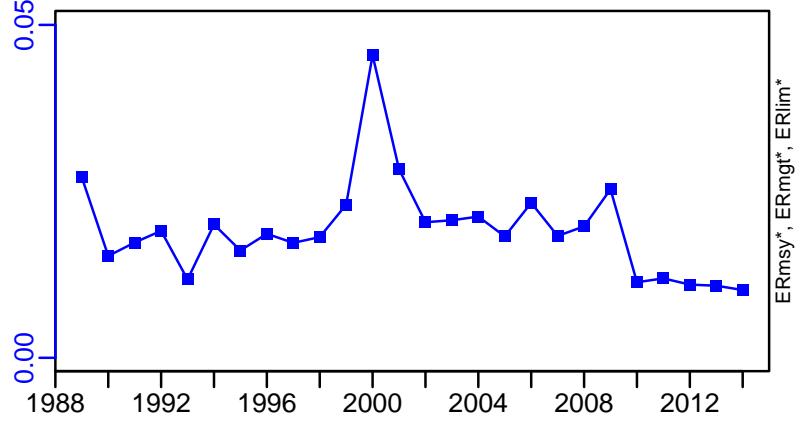
**TN \***



**F-1/yr (1989–2014–OSIO)**



**ER-calc-ratio (1989–2014–OSIO)**

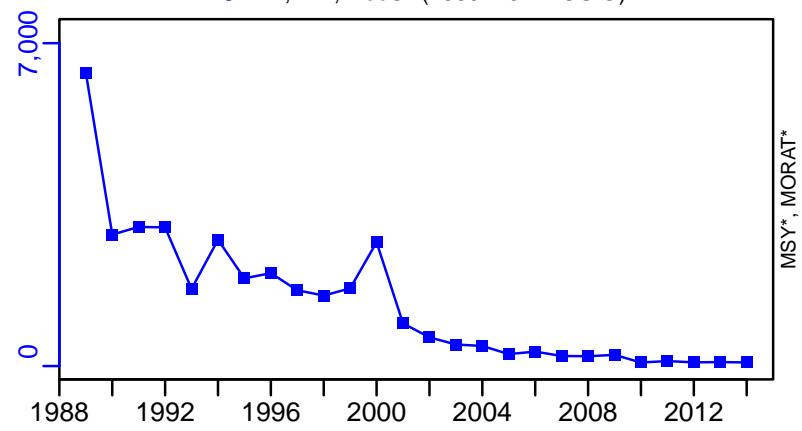


■ Listed time series	— Target BRP	— Rec-Est
- MSY-based BRP	- Lim BRP	* No Data

Spiny dogfish Black Sea [SDOGLKGSA29]

TC-MT, TL\*, RecC\* (1989–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



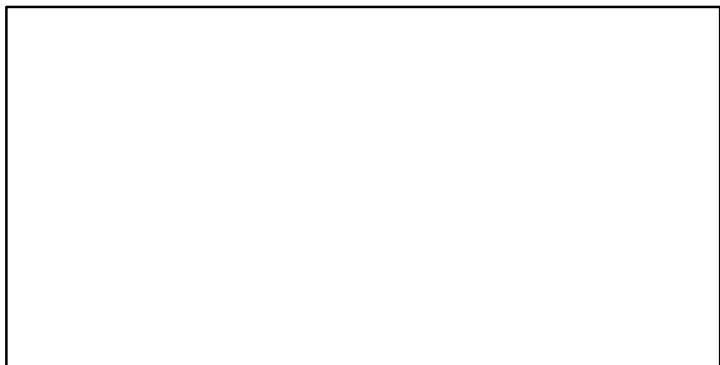
survB\*



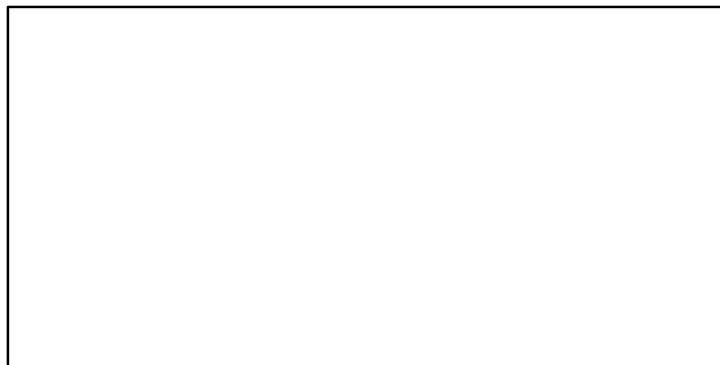
CPUE\*



EFFORT\*



CdivMSY\*



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

## Spottail mantis shrimp South Tyrrhenian Sea [SMSHRMPMEDGSA10]

<b>Metadata</b>	
<b>Scientific Name</b>	Squilla mantis
<b>Current Assess ID</b>	STECF-SMSHRMPMEDGSA10-2011-2011-OSIO
<b>Area</b>	South Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011

<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>	Fmgt-1/yr	2011	0.41
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2011	1.08	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2011	387		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2011	2.634		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***

**Kobe MGT\***

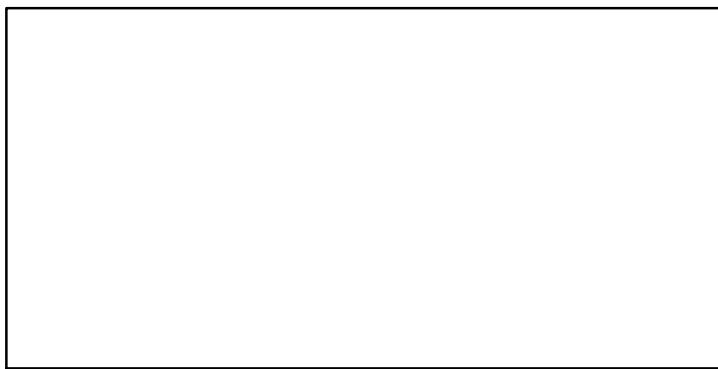
**Spawner Recruit\***

**Production\***

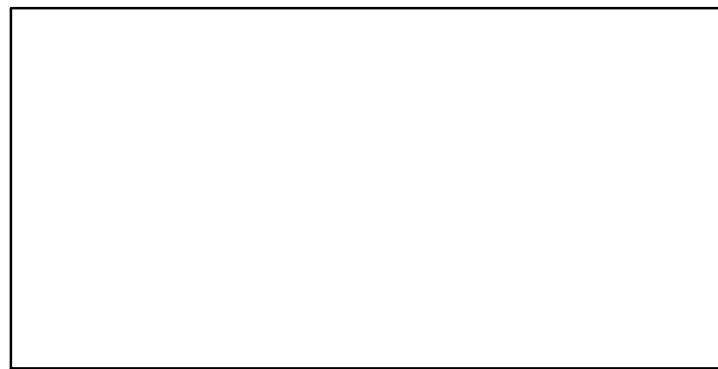
◆ Start Year ♦ End Year \* No Data

Spottail mantis shrimp South Tyrrhenian Sea [SMSHRMPMEDGSA10]

**TB\***



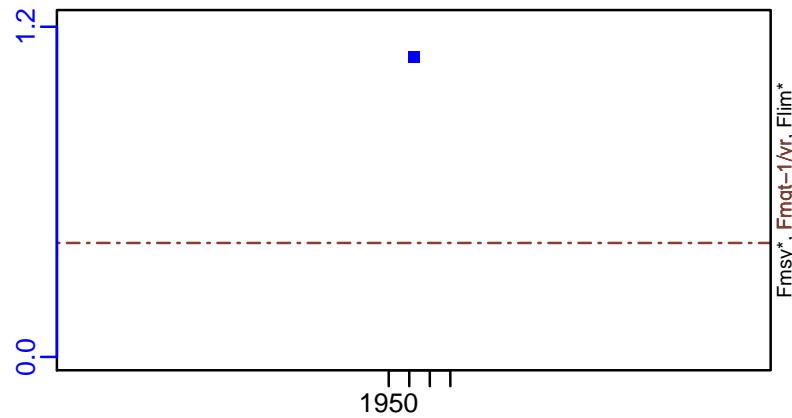
**SSB\***



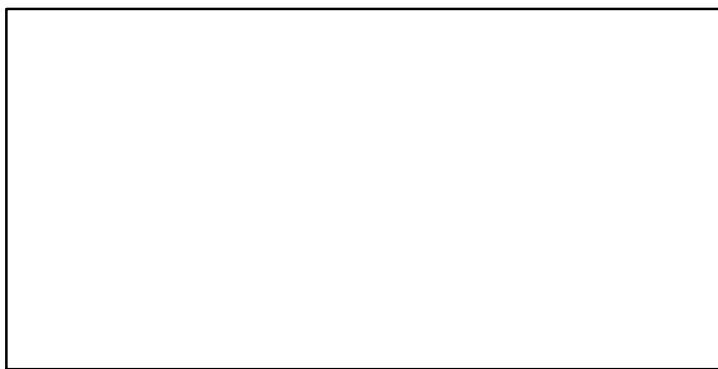
**TN \***



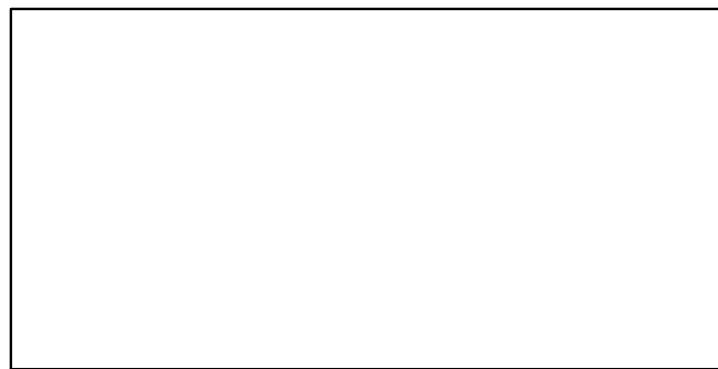
**F-1/yr (2011–2011–OSIO)**



**ER\***



**Recruits\***

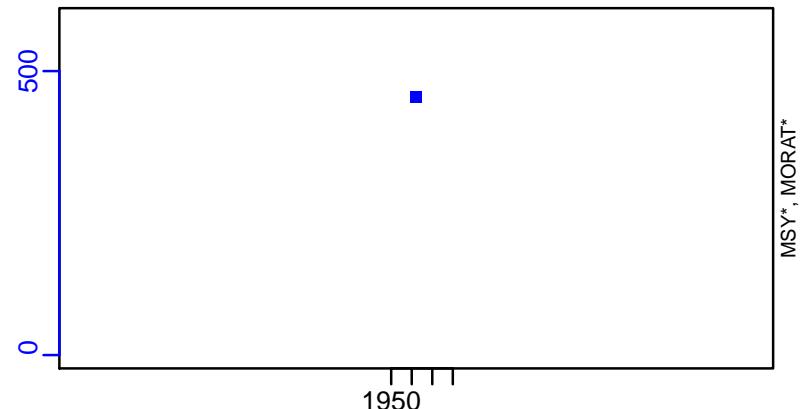


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | — Lim BRP    | * No Data |

**Spottail mantis shrimp South Tyrrhenian Sea [SMSHRMPMEDGSA10]**

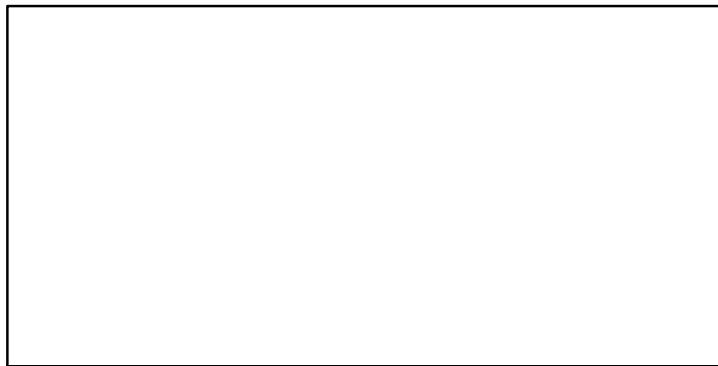
TC-MT, TL\*, RecC\* (2011–2011–OSIO)

TAC\*, Cpair\*, Cadv\*

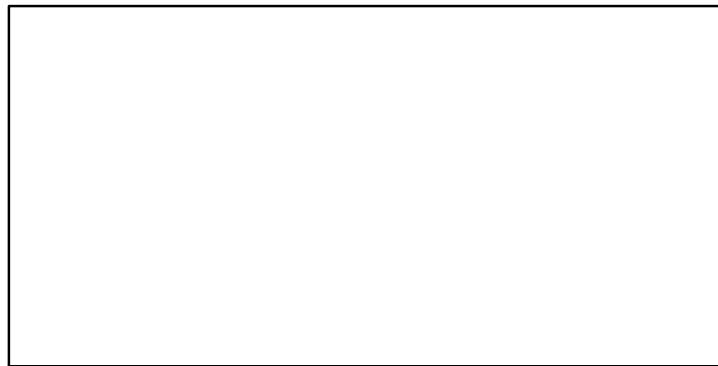


MSY\*, MORAT\*

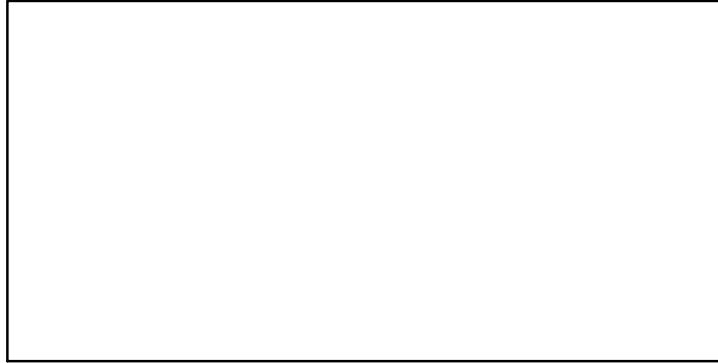
**survB\***



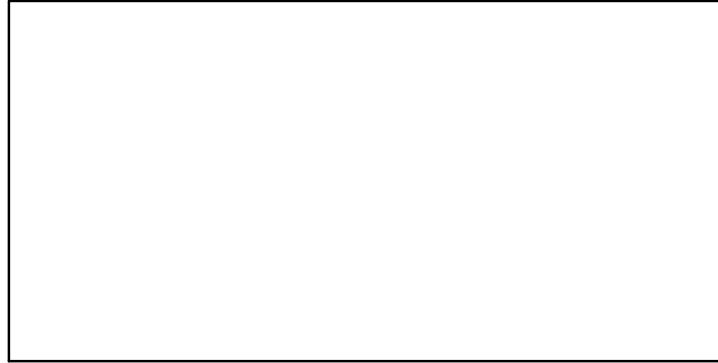
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Spottail mantis shrimp Adriatic Sea (GSA 17,18) [SMSHRMPMEDGSA17-18]

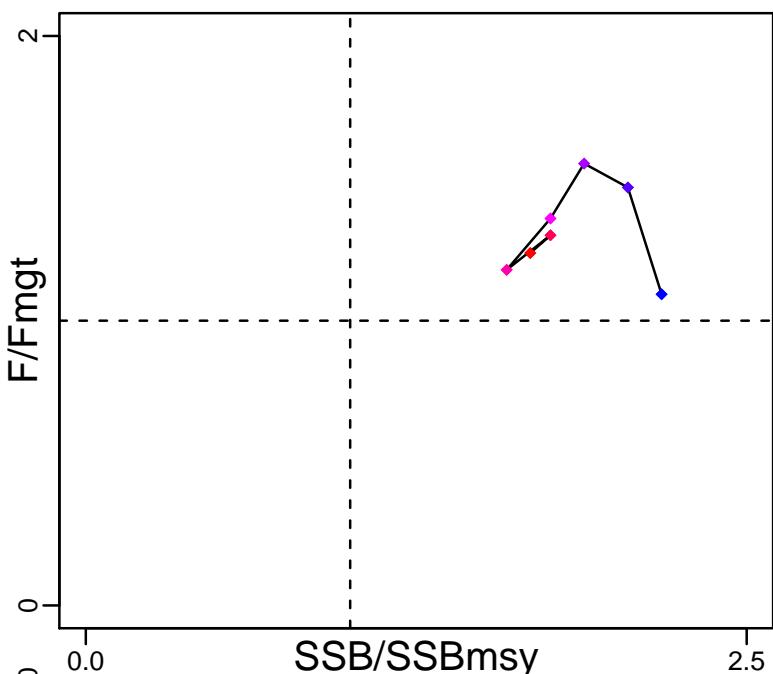
Metadata	
<b>Scientific Name</b>	Squilla mantis
<b>Current Assess ID</b>	STECF-SMSHRMPMEDGSA17-18-2008-2014-OSIO
<b>Area</b>	Adriatic Sea (GSA 17,18)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	7851
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.201
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.56
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	6716
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

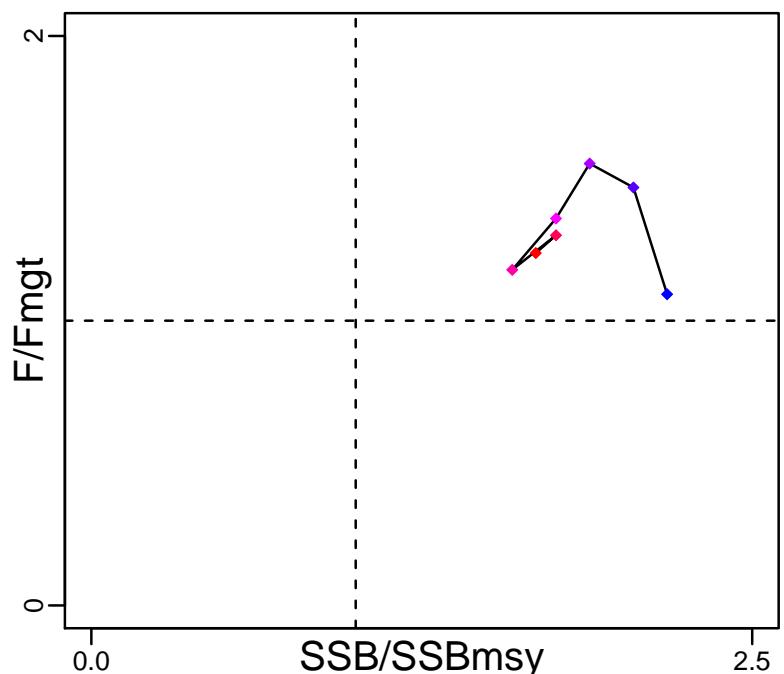
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	13,200	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$1.12 \times 10^9$	-	-	
<b>F</b>	F-1/yr	2014	0.693	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.077	-	-	
<b>TC</b>	TC-MT	2014	4290			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.681			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.38			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.238			
<b>ER/ERmgt</b>	-	-	-			

Spottail mantis shrimp Adriatic Sea (GSA 17,18) [SMSHRMPMEDGSA17–18]

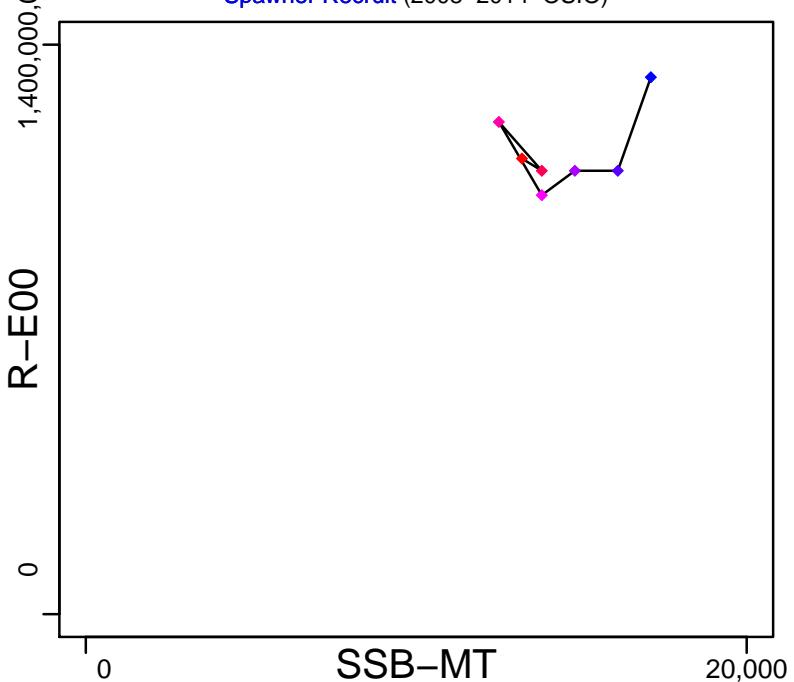
Kobe MSYpref (2008–2014–OSIO)



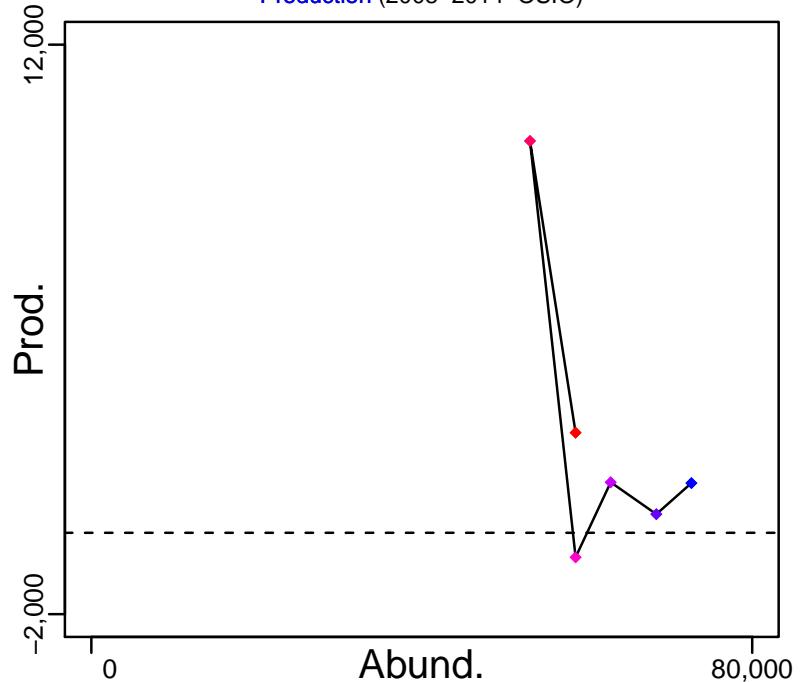
Kobe MGTpref (2008–2014–OSIO)



Spawner Recruit (2008–2014–OSIO)



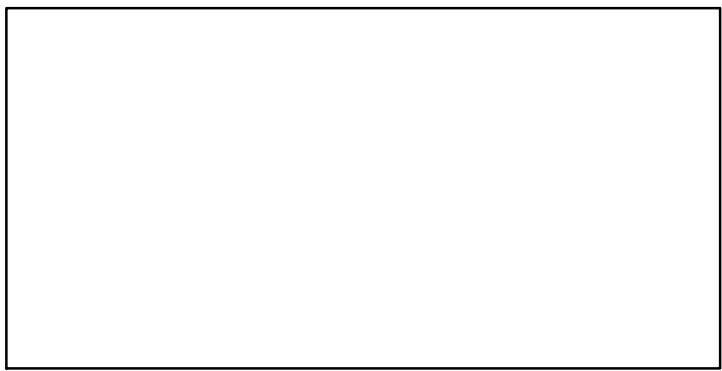
Production (2008–2014–OSIO)



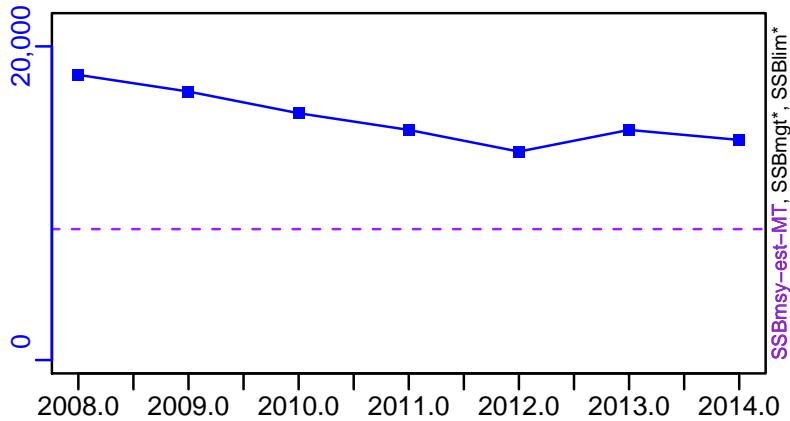
◆ Start Year   ◆ End Year   \* No Data

Spottail mantis shrimp Adriatic Sea (GSA 17,18) [SMSHRMPMEDGSA17–18]

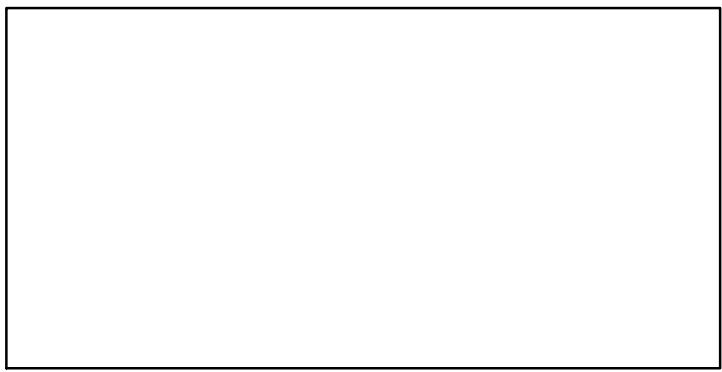
**TB\***



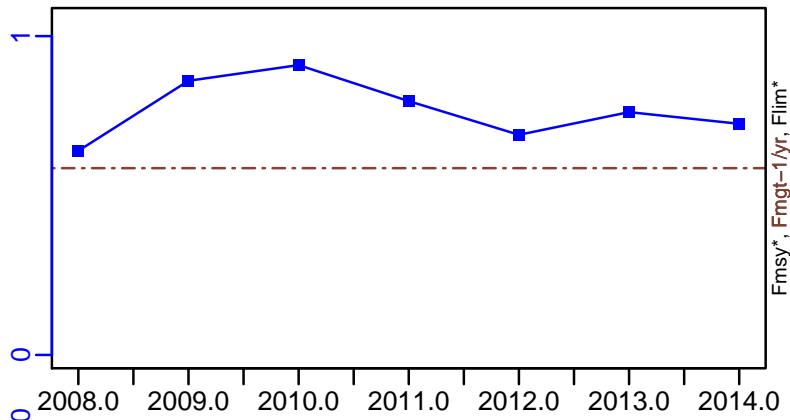
**SSB-MT (2008–2014–OSIO)**



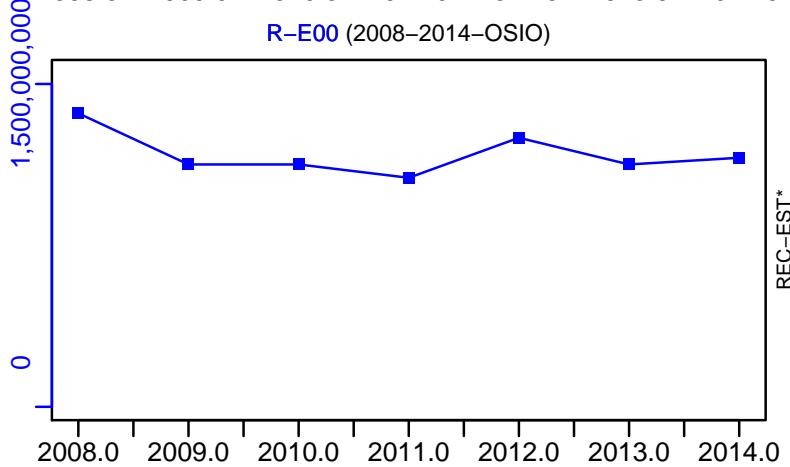
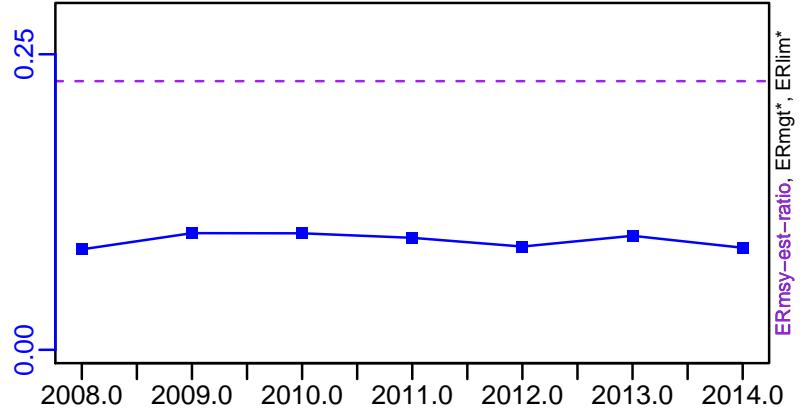
**TN \***



**F-1/yr (2008–2014–OSIO)**



**ER-calc-ratio (2008–2014–OSIO)**

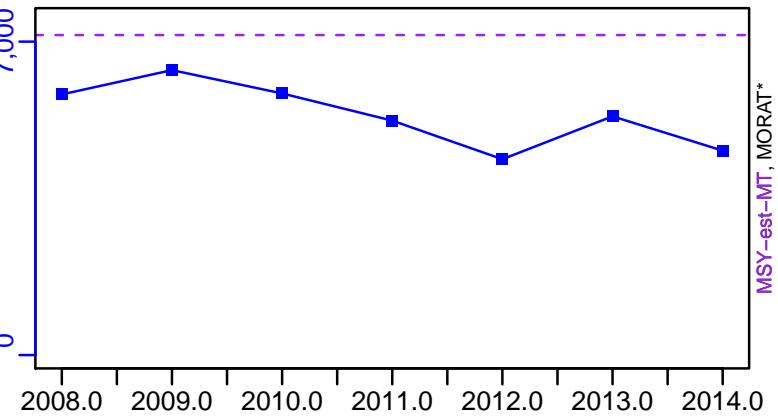


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

Spottail mantis shrimp Adriatic Sea (GSA 17,18) [SMSHRMPMEDGSA17–18]

TC-MT, TL\*, RecC\* (2008–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

MSY-est-MT, MORAT\*



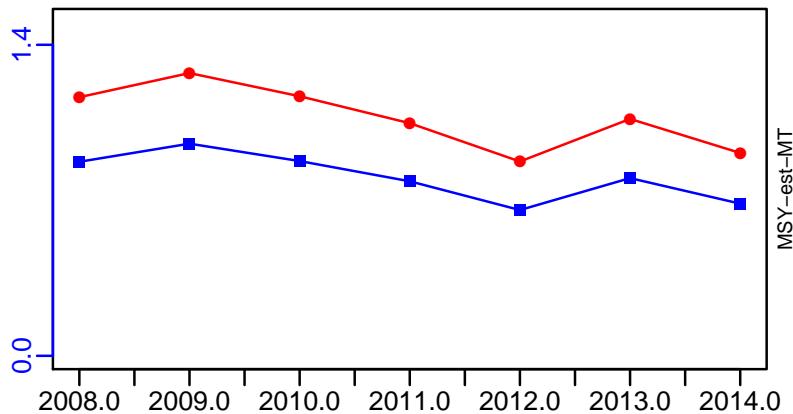
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2008–2014–OSIO)



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

## Spottail mantis shrimp Ligurian and North Tyrrhenian Sea [SMSHRMPMEDGSA9]

Metadata	
<b>Scientific Name</b>	Squilla mantis
<b>Current Assess ID</b>	STECF-SMSHRMPMEDGSA9-2004-2010-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010

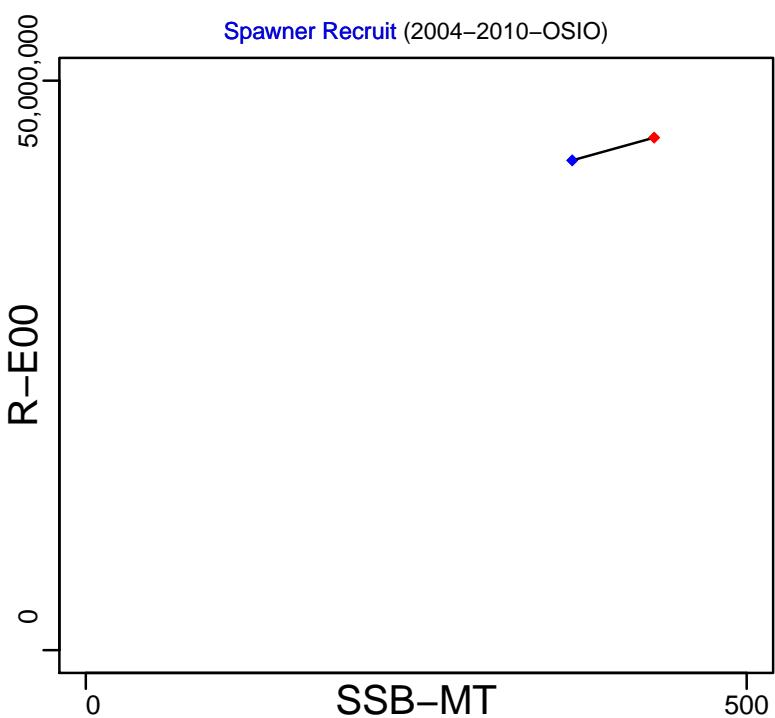
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2010	0.54
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2010	430	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2010	$4.5 \times 10^7$	-	-
<b>F</b>	F-1/yr	2010	1.2	-	-
<b>ER</b>	ER-calc-ratio	2010	0.202	-	-
<b>TC</b>	TC-MT	2010	386		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2010	2.222		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2004–2010–OSIO)

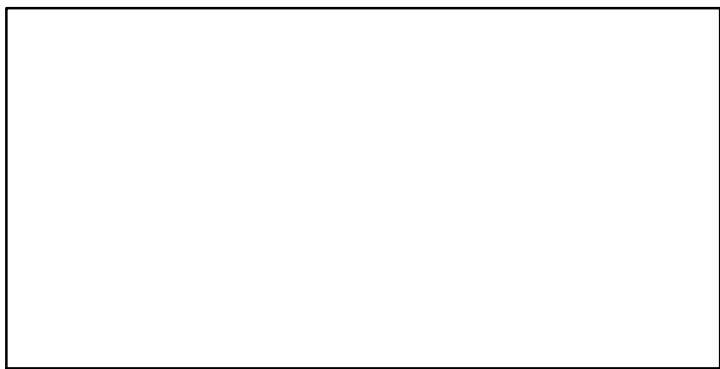


Production\*

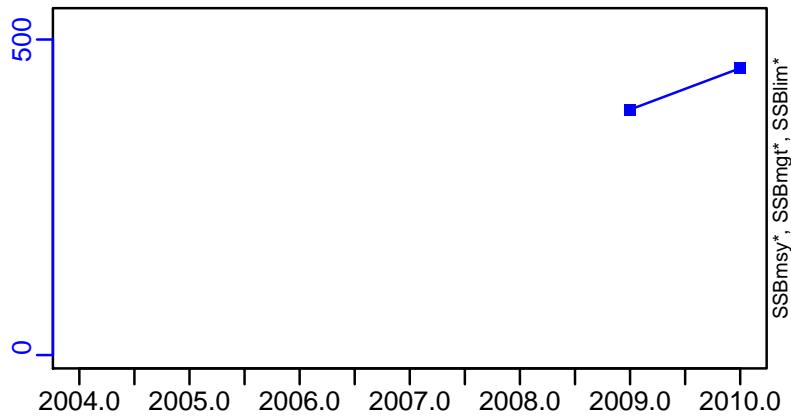
◆ Start Year   ◆ End Year   \* No Data

**Spottail mantis shrimp Ligurian and North Tyrrhenian Sea [SMSHRMPMEDGSA9]**

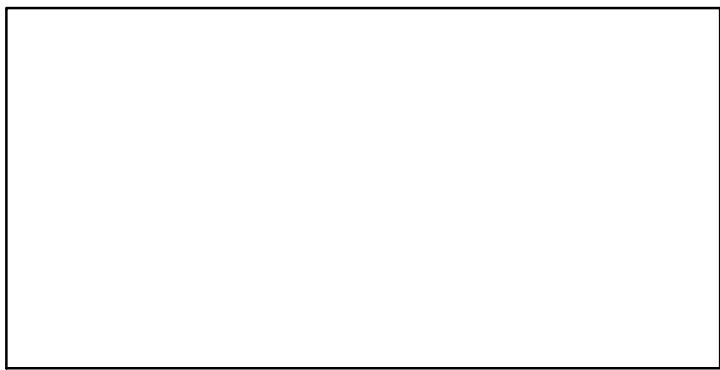
**TB\***



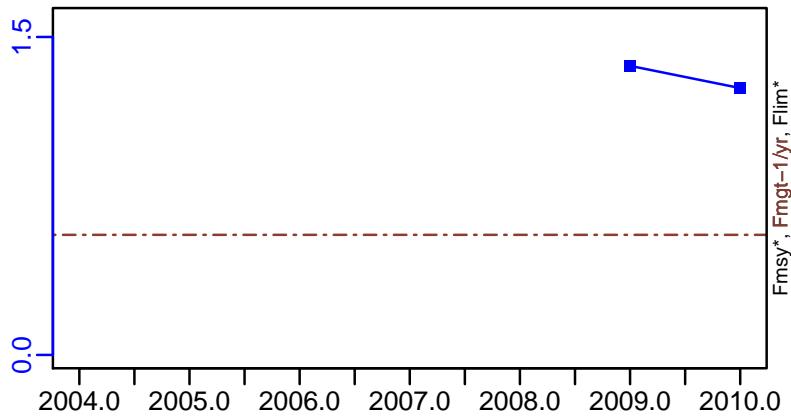
**SSB-MT (2004–2010–OSIO)**



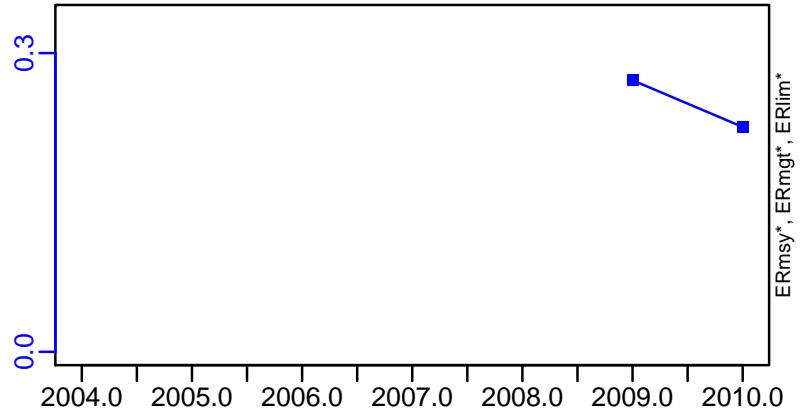
**TN \***



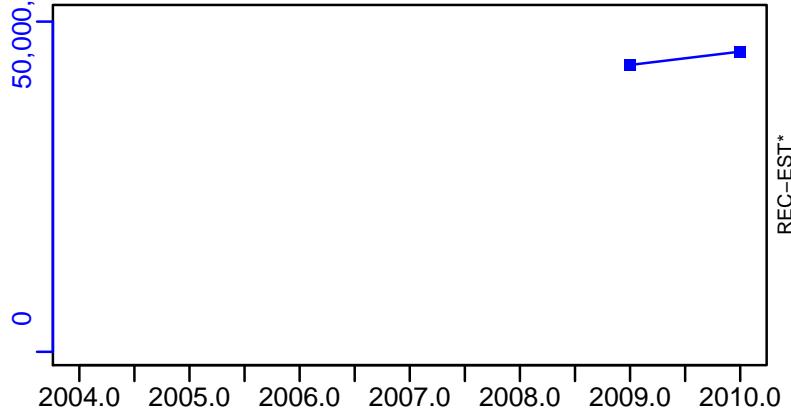
**F-1/yr (2004–2010–OSIO)**



**ER-calc-ratio (2004–2010–OSIO)**



**R-E00 (2004–2010–OSIO)**

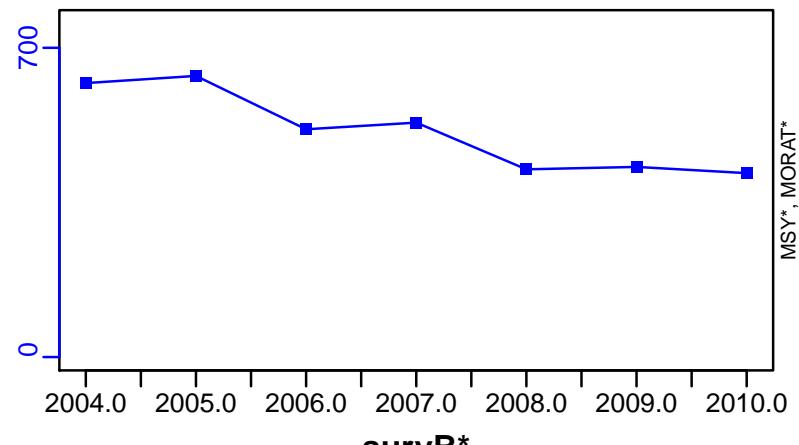


- Listed time series
- - - Target BRP
- - - MSY-based BRP
- - - Lim BRP
- Rec-Est
- \* No Data

**Spottail mantis shrimp Ligurian and North Tyrrhenian Sea [SMSHRMPMEDGSA9]**

TC-MT, TL\*, RecC\* (2004–2010–OSIO)

TAC\*, Cpair\*, Cadv\*



**survB\***

MSY\*, MORAT\*

**CPUE\***

**EFFORT\***

**CdivMSY\***

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

## Surmullet Malta Island and South of Sicily (GSA 15, 16) [SMULLMEDGSA15-16]

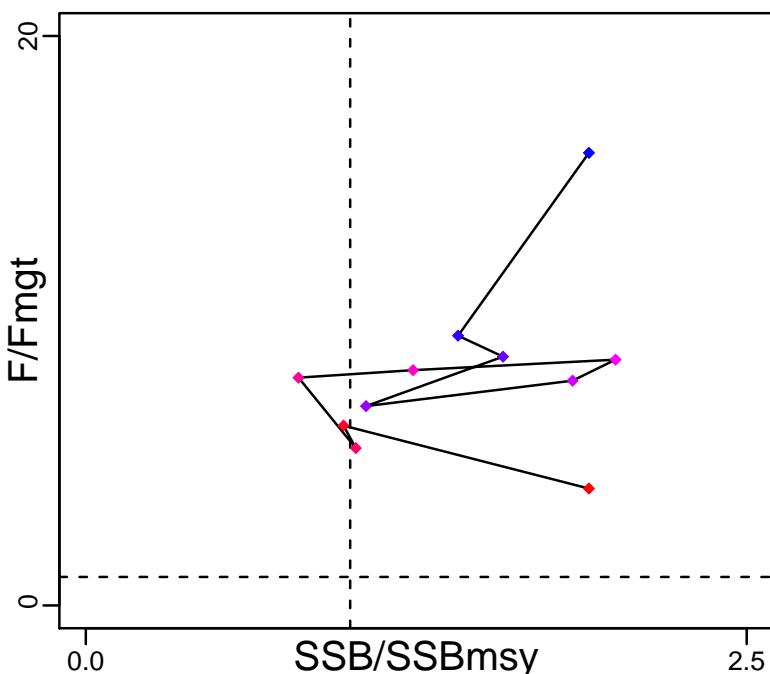
Metadata	
<b>Scientific Name</b>	Mullus surmuletus
<b>Current Assess ID</b>	STECF-SMULLMEDGSA15-16-2002-2012-OSIO
<b>Area</b>	Malta Island and South of Sicily (GSA 15, 16)
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2012	1293
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2012	0.645
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2012	2165
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

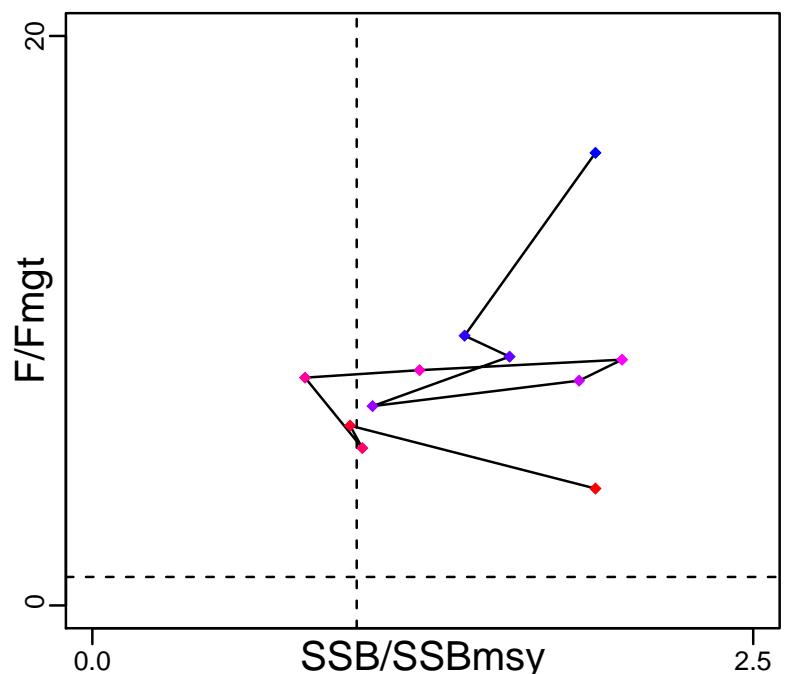
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	2460	-	2+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2012	$4.2 \times 10^7$	-	-	
<b>F</b>	F-1/yr	2012	0.78	-	-	
<b>ER</b>	ER-calc-ratio	2012	0.118	-	-	
<b>TC</b>	TC-MT	2012	753			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2012	1.903			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2012	0.183			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	4.105			
<b>ER/ERmgt</b>	-	-	-			

**Surmullet Malta Island and South of Sicily (GSA 15, 16) [SMULLMEDGSA15–16]**

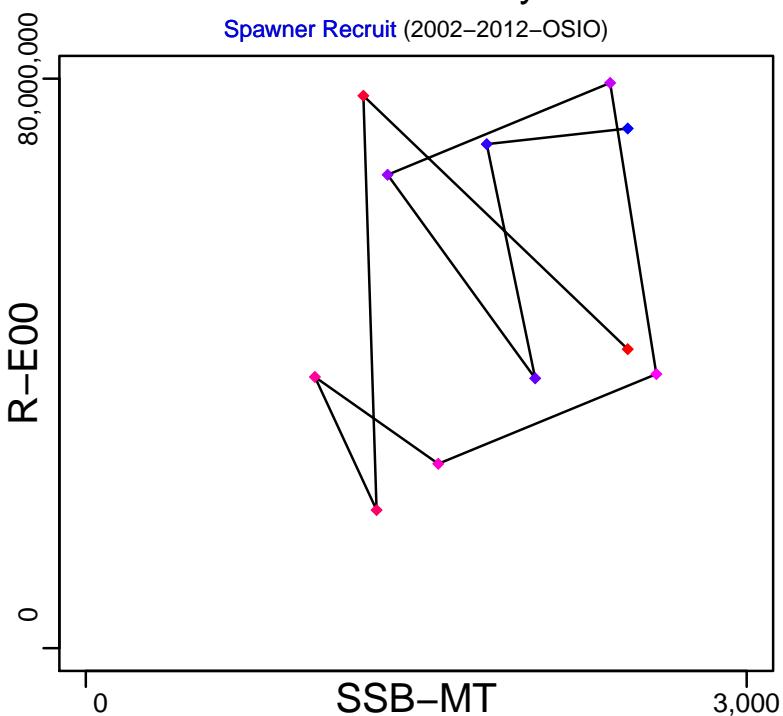
Kobe MSYpref (2002–2012–OSIO)



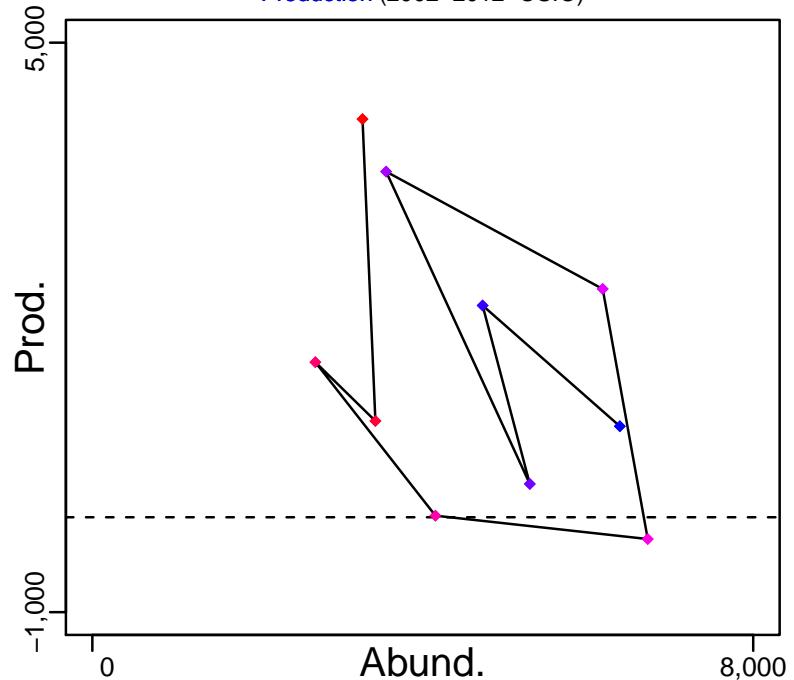
Kobe MGTPref (2002–2012–OSIO)



Spawner Recruit (2002–2012–OSIO)



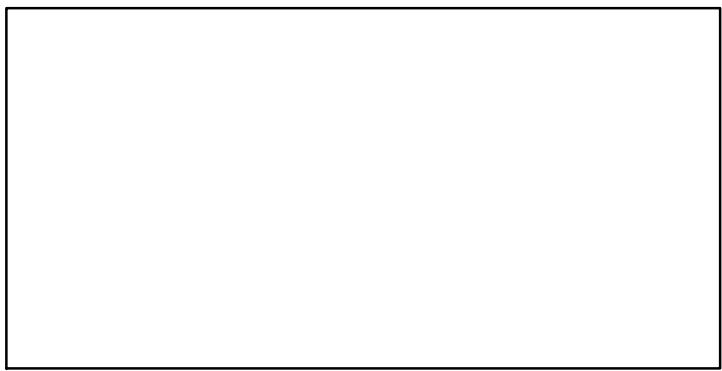
Production (2002–2012–OSIO)



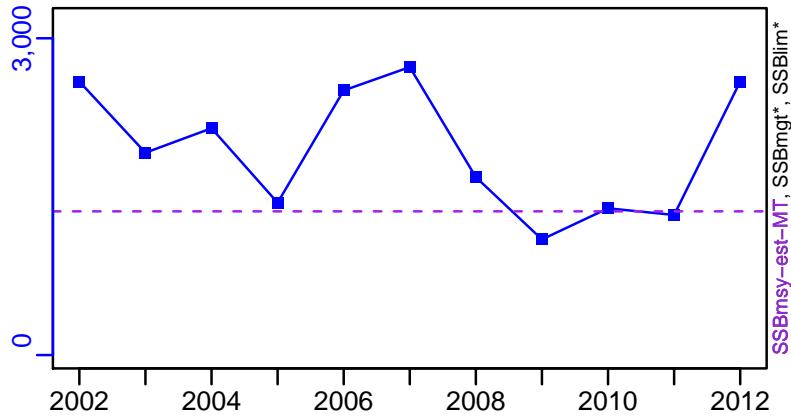
◆ Start Year   ◆ End Year   \* No Data

**Surmullet Malta Island and South of Sicily (GSA 15, 16) [SMULLMEDGSA15–16]**

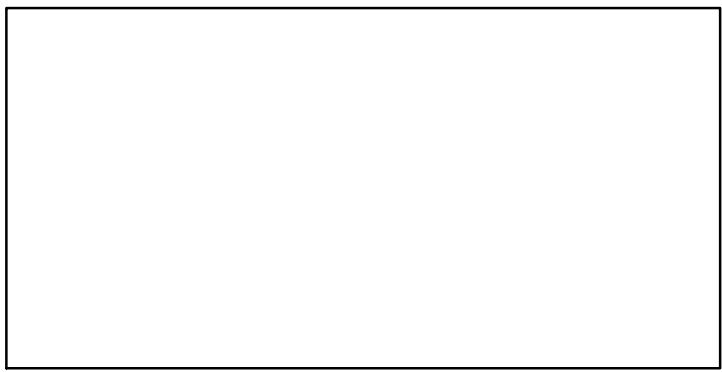
**TB\***



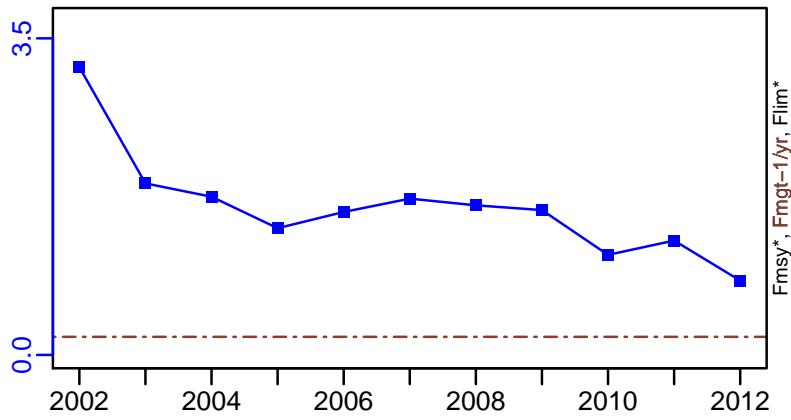
**SSB-MT (2002–2012–OSIO)**



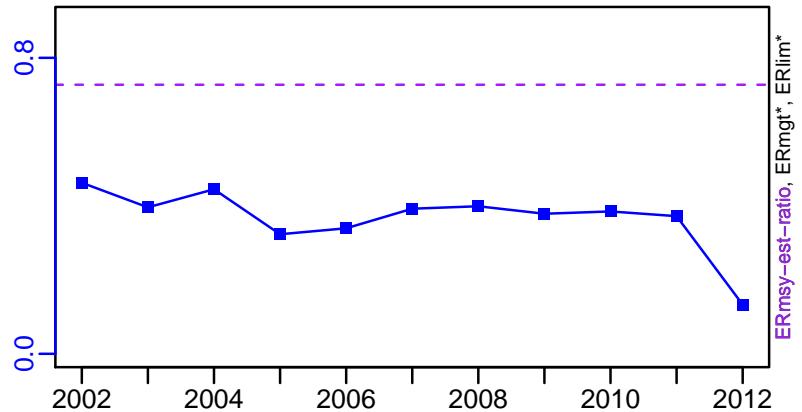
**TN \***



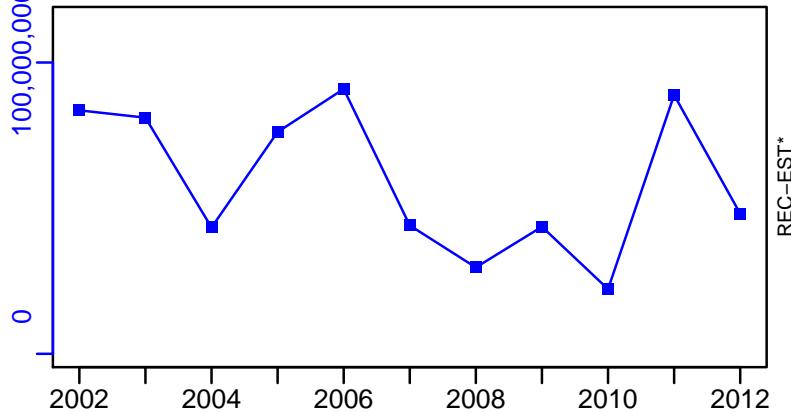
**F-1/yr (2002–2012–OSIO)**



**ER-calc-ratio (2002–2012–OSIO)**



**R-E00 (2002–2012–OSIO)**

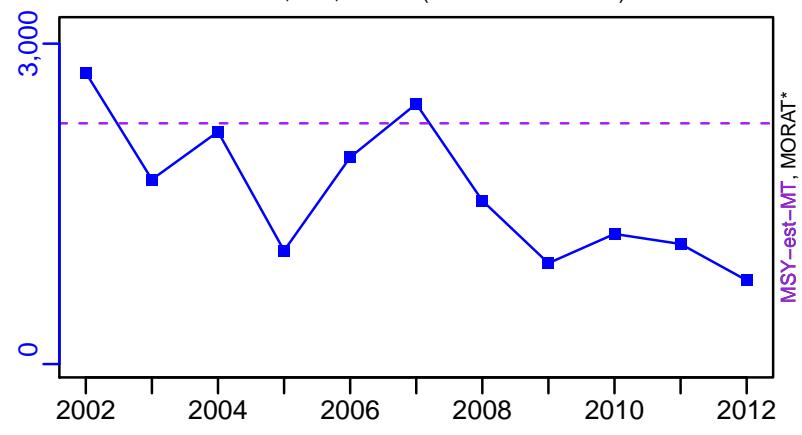


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

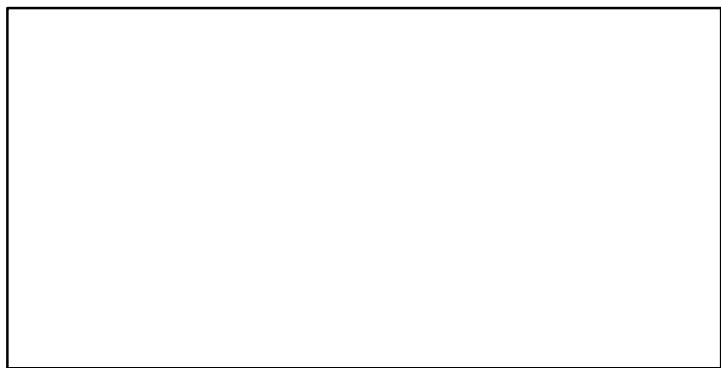
**Surmullet Malta Island and South of Sicily (GSA 15, 16) [SMULLMEDGSA15–16]**

TC-MT, TL\*, RecC\* (2002–2012–OSIO)

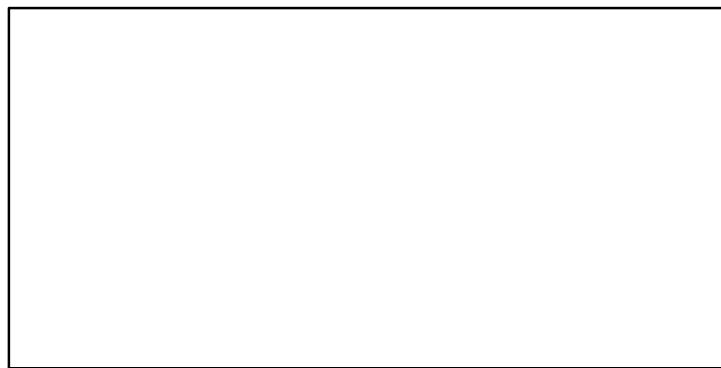
TAC\*, Cpair\*, Cadv\*



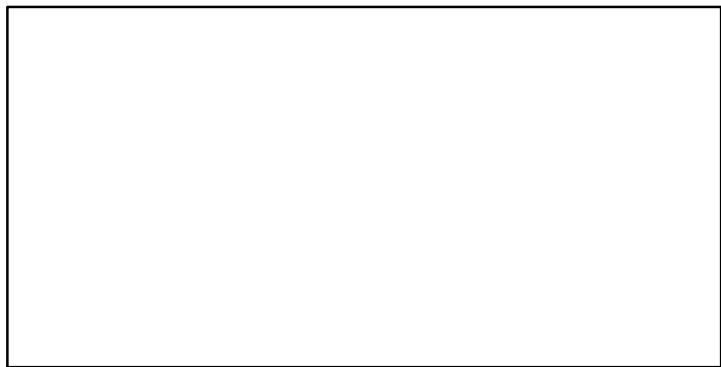
survB\*



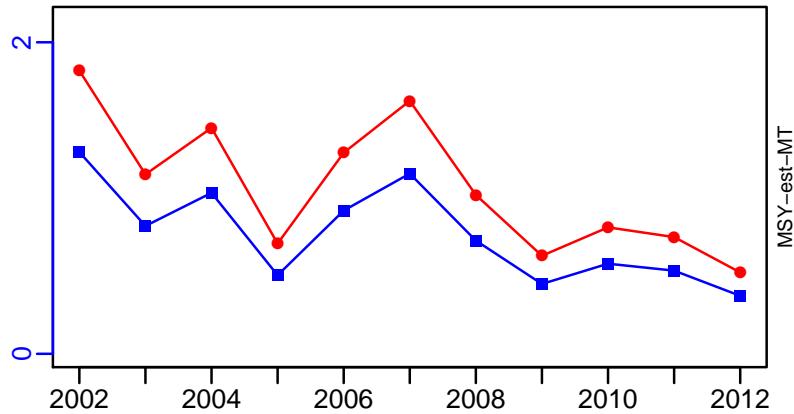
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2002–2012–OSIO)



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

## Surmullet Balearic Island [SMULLMEDGSA5]

<b>Metadata</b>	
<b>Scientific Name</b>	Mullus surmuletus
<b>Current Assess ID</b>	STECF-SMULLMEDGSA5-2000-2012-OSIO
<b>Area</b>	Balearic Island
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2012

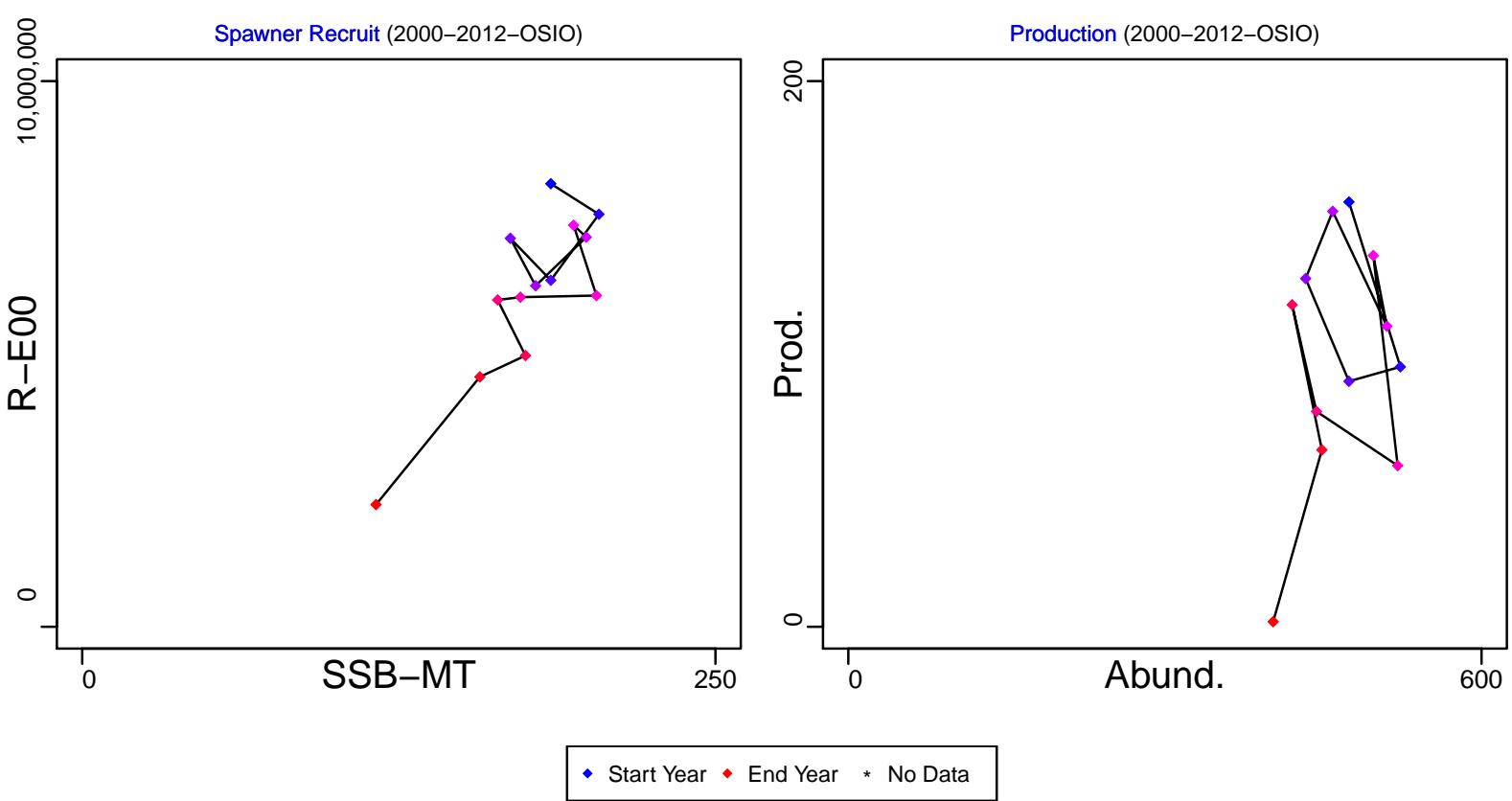
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2012	0.181
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	116	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	2,240,000	-	-
<b>F</b>	F-1/yr	2012	0.477	-	-
<b>ER</b>	ER-calc-ratio	2012	0.226	-	-
<b>TC</b>	TC-MT	2012	67		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2012	2.635		
<b>ER/ERmgt</b>	-	-	-		

Surmullet Balearic Island [SMULLMEDGSA5]

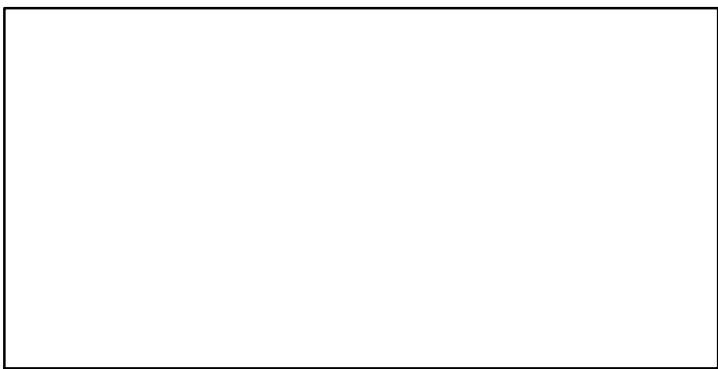
Kobe MSY\*

Kobe MGT\*

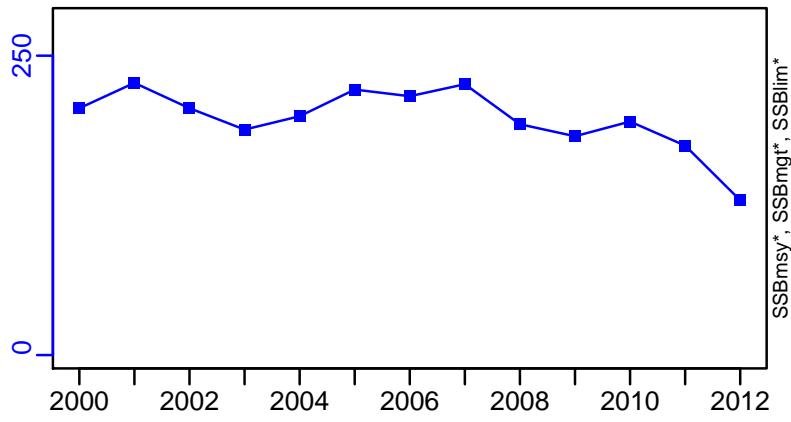


**Surmullet Balearic Island [SMULLMEDGSA5]**

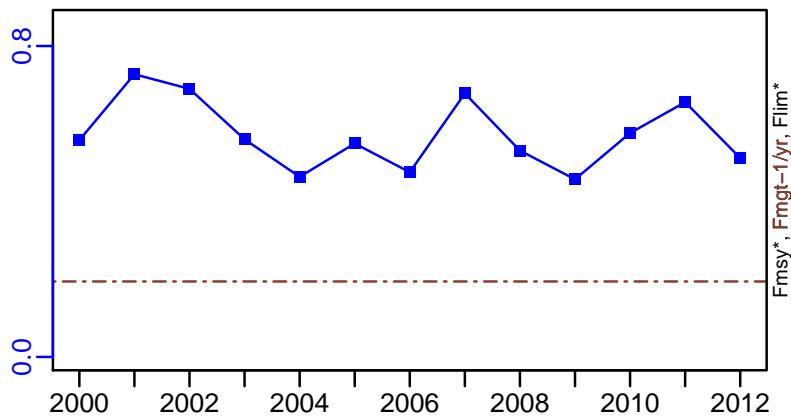
**TB\***



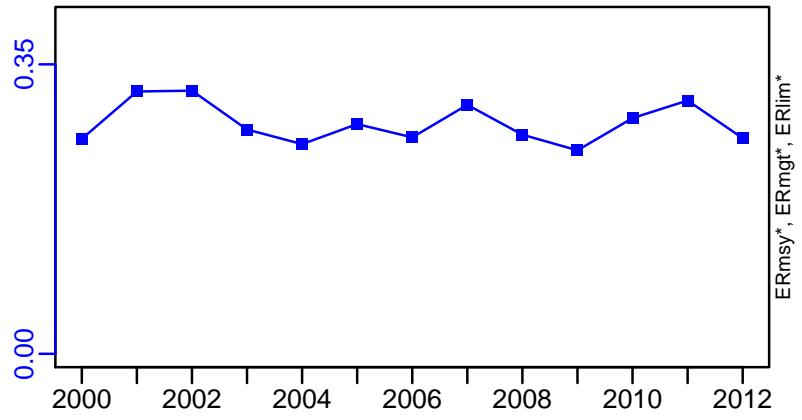
**SSB-MT (2000–2012–OSIO)**



**TN \***

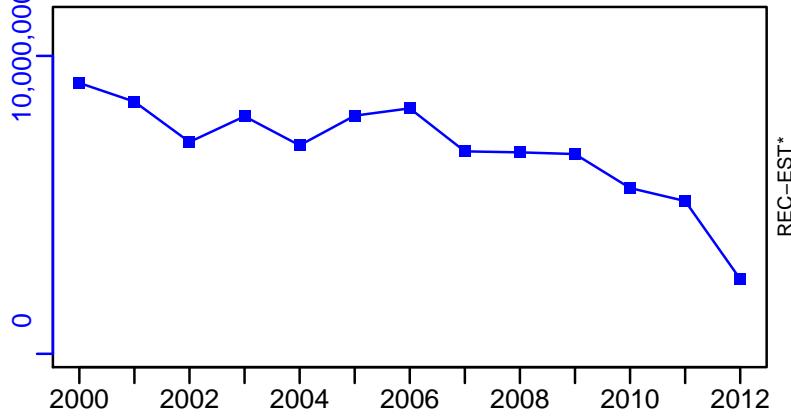


**ER-calc-ratio (2000–2012–OSIO)**



ER<sub>MSY</sub>\* , ER<sub>MGT</sub>\* , ER<sub>LIM</sub>\*

**R-E00 (2000–2012–OSIO)**



SSB<sub>MSY</sub>\* , SSB<sub>MGT</sub>\* , SSB<sub>LIM</sub>\*

F<sub>MSY</sub>\* , F<sub>MGT</sub>-1/yr , F<sub>LIM</sub>\*

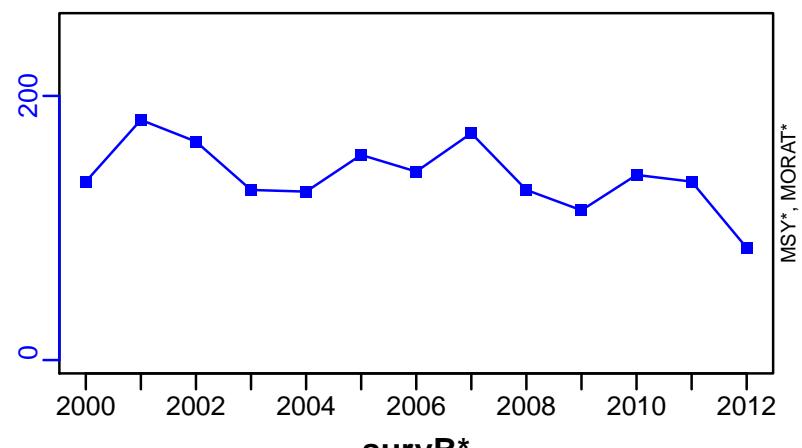
REC-EST\*

<span style="color: blue;">■</span> Listed time series	<span style="color: brown;">---</span> Target BRP	<span style="color: gray;">—</span> Rec-Est
<span style="color: purple;">-</span> MSY-based BRP	<span style="color: cyan;">----</span> Lim BRP	* No Data

**Surmullet Balearic Island [SMULLMEDGSA5]**

TC-MT, TL\*, RecC\* (2000–2012-OSIO)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

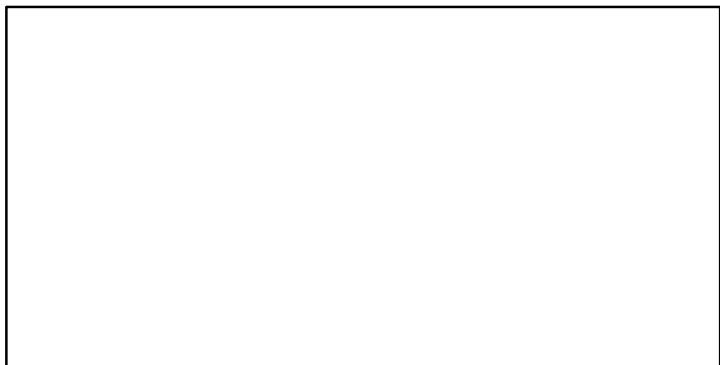
survB\*



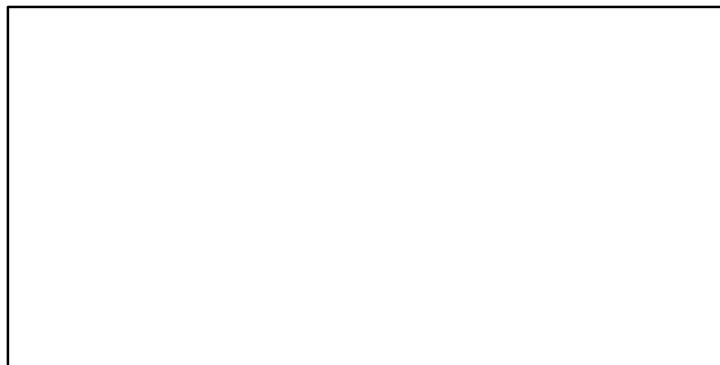
CPUE\*



EFFORT\*



CdivMSY\*



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

## Surmullet Ligurian and North Tyrrhenian Sea [SMULLMEDGSA9]

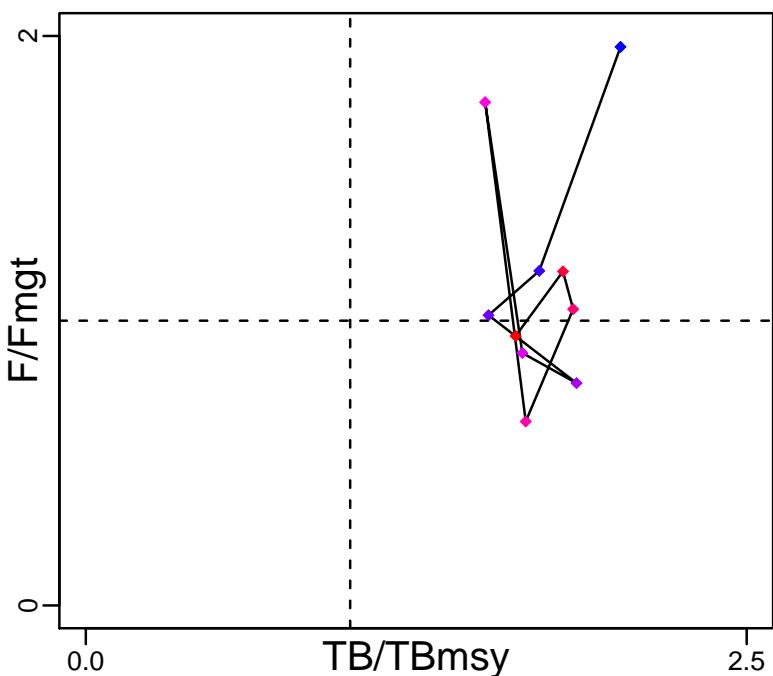
<b>Metadata</b>	
<b>Scientific Name</b>	Mullus surmuletus
<b>Current Assess ID</b>	STECF-SMULLMEDGSA9-2006-2015-OSIO
<b>Area</b>	Ligurian and North Tyrrhenian Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010, 2015

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-est-MT	2015	781
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-est-ratio	2015	0.564
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.52
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2015	440
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

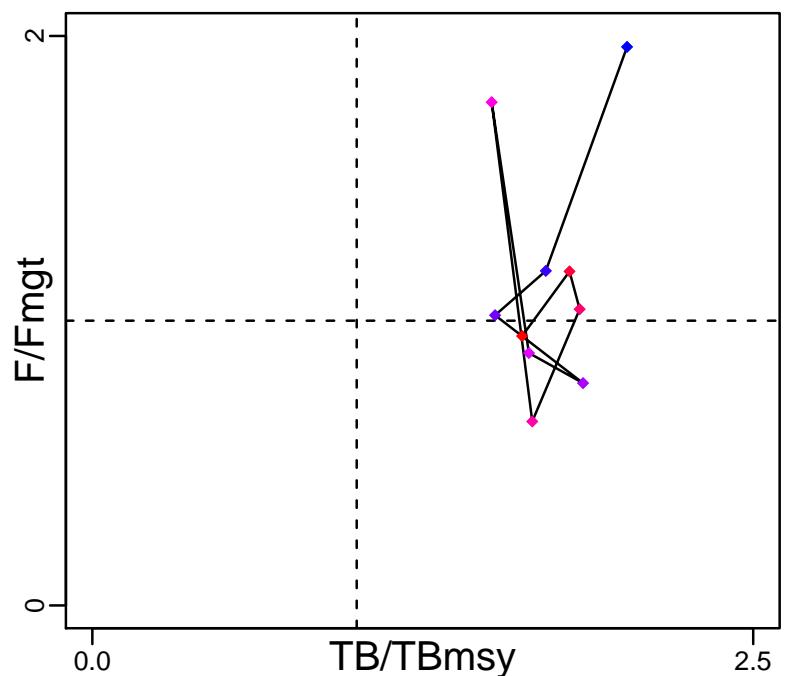
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2015	1270	-	-	
<b>SSB</b>	SSB-MT	2015	463	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2015	16,600,000	-	-	
<b>F</b>	F-1/yr	2015	0.492	-	-	
<b>ER</b>	ER-calc-ratio	2015	0.205	-	-	
<b>TC</b>	TC-MT	2015	260			
<b>TL</b>	TL-MT	2015	260			
<b>TB/TBmsy</b>	TB-MT/TBmsy-est-MT	2015	1.626			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	-	-	-			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2015	0.363			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.946			
<b>ER/ERmgt</b>	-	-	-			

**Surmullet Ligurian and North Tyrrhenian Sea [SMULLMEDGSA9]**

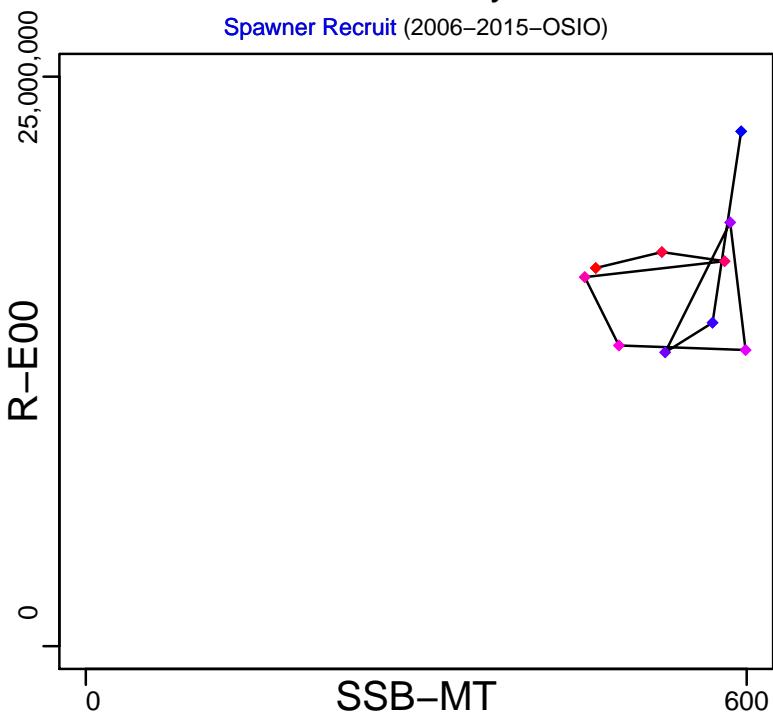
Kobe MSYpref (2006–2015–OSIO)



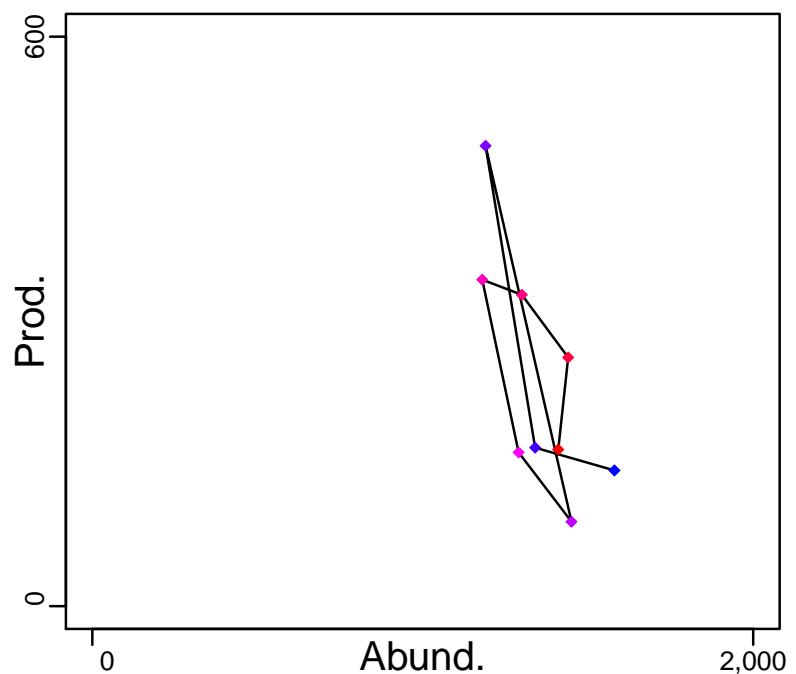
Kobe MGTPref (2006–2015–OSIO)



Spawner Recruit (2006–2015–OSIO)



Production (2006–2015–OSIO)

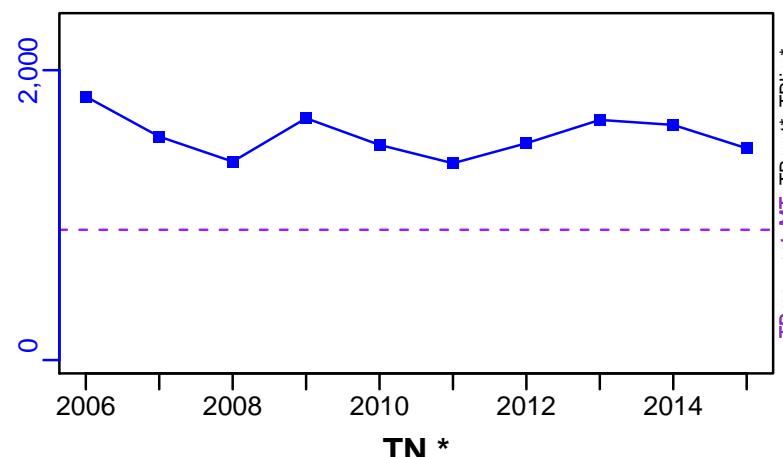


◆ Start Year   ◆ End Year   \* No Data

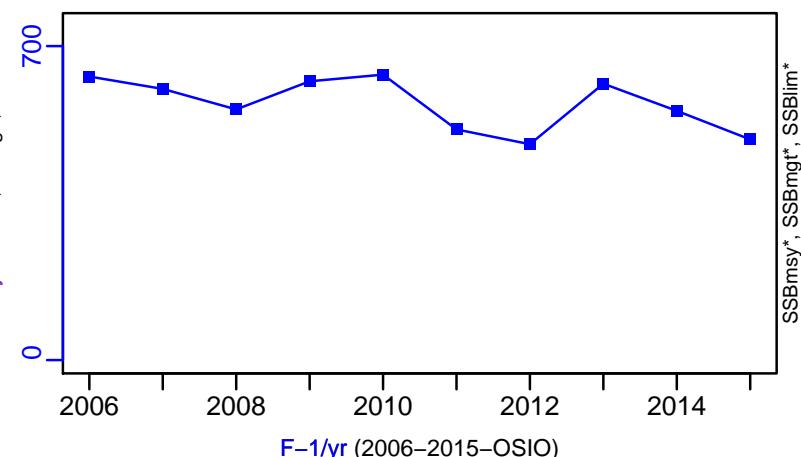
**Surmullet Ligurian and North Tyrrhenian Sea [SMULLMEDGSA9]**

TB-MT (2006–2015–OSIO)

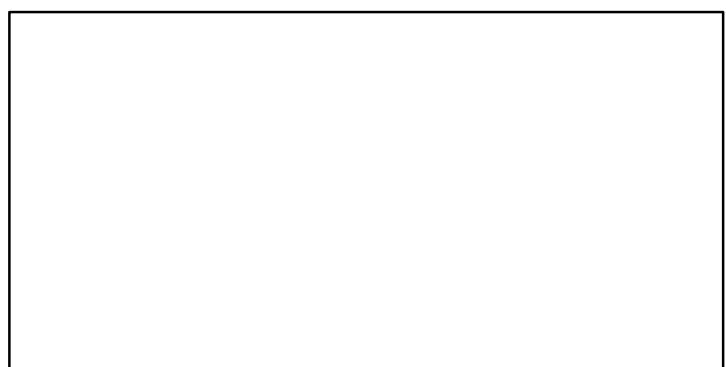
SSB-MT (2006–2015–OSIO)



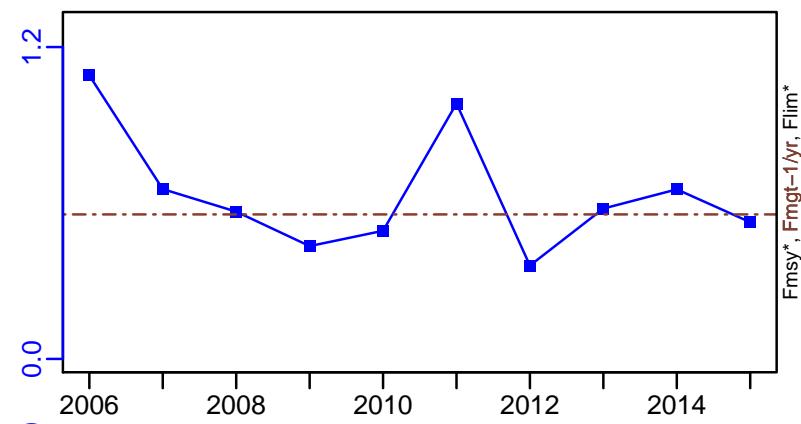
**TN \***



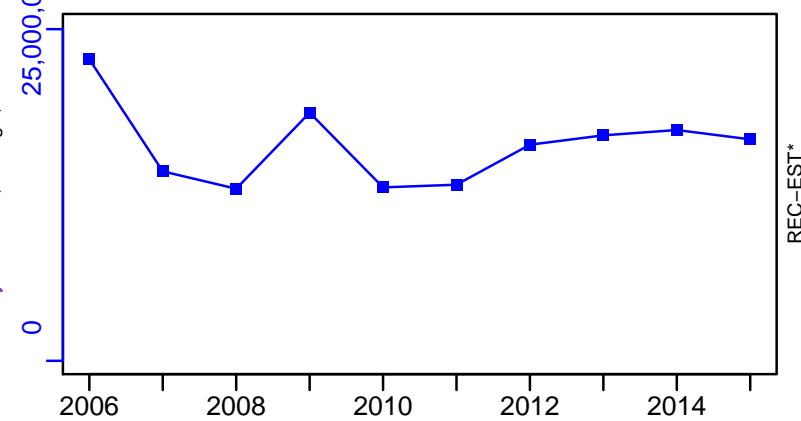
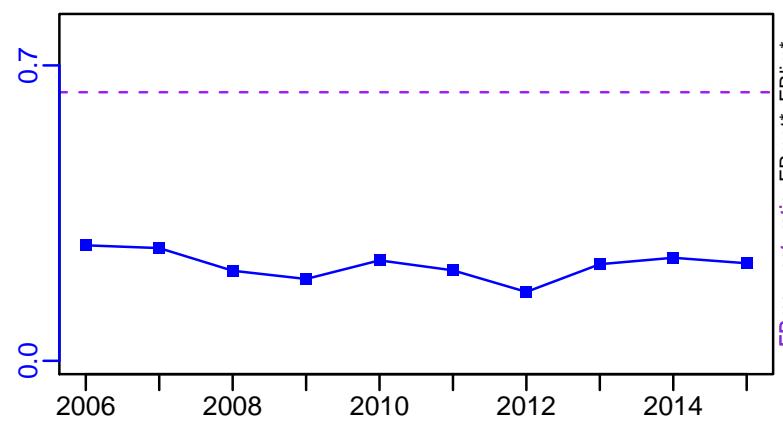
**F-1/yr (2006–2015–OSIO)**



ER-calc-ratio (2006–2015–OSIO)



R-E00 (2006–2015–OSIO)

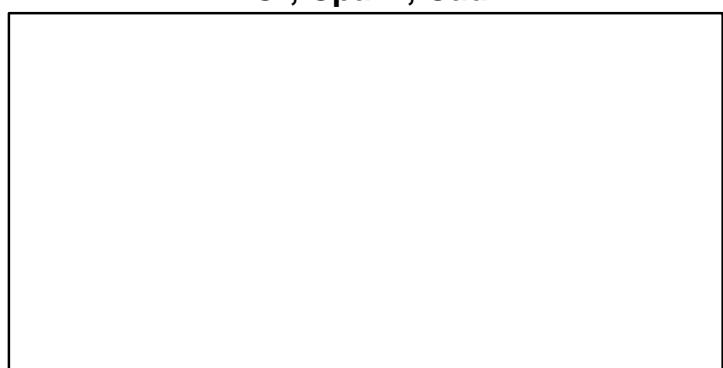
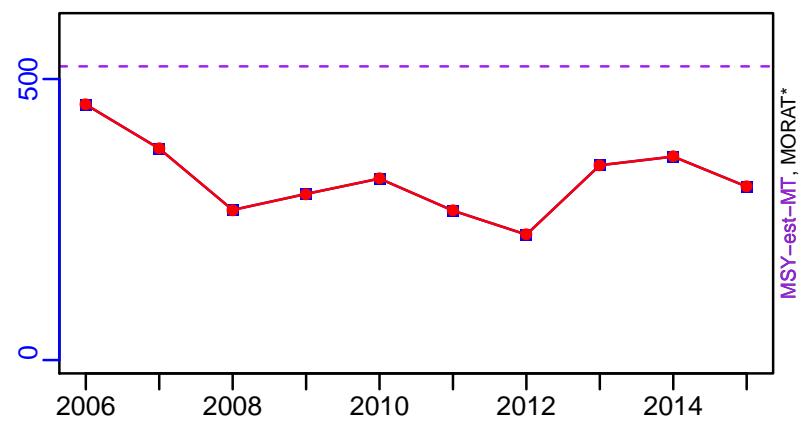


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

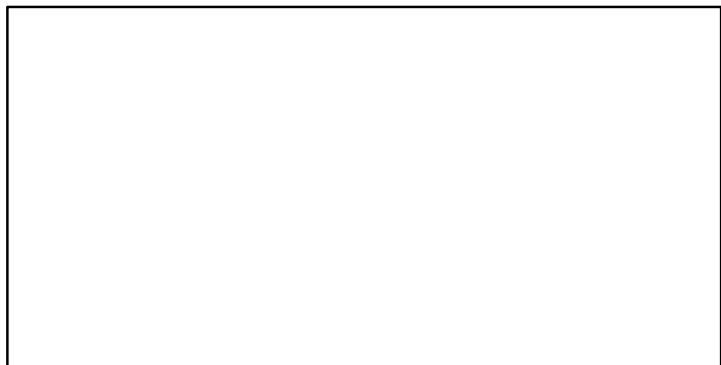
**Surmullet Ligurian and North Tyrrhenian Sea [SMULLMEDGSA9]**

TC-MT, TL-MT, RecC\* (2006–2015–OSIO)

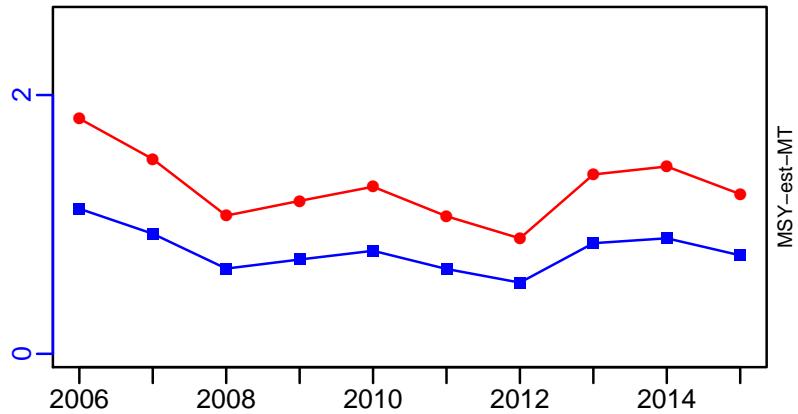
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-est-MT, CdivMEANC-ratio, (2006–2015–OSIO)



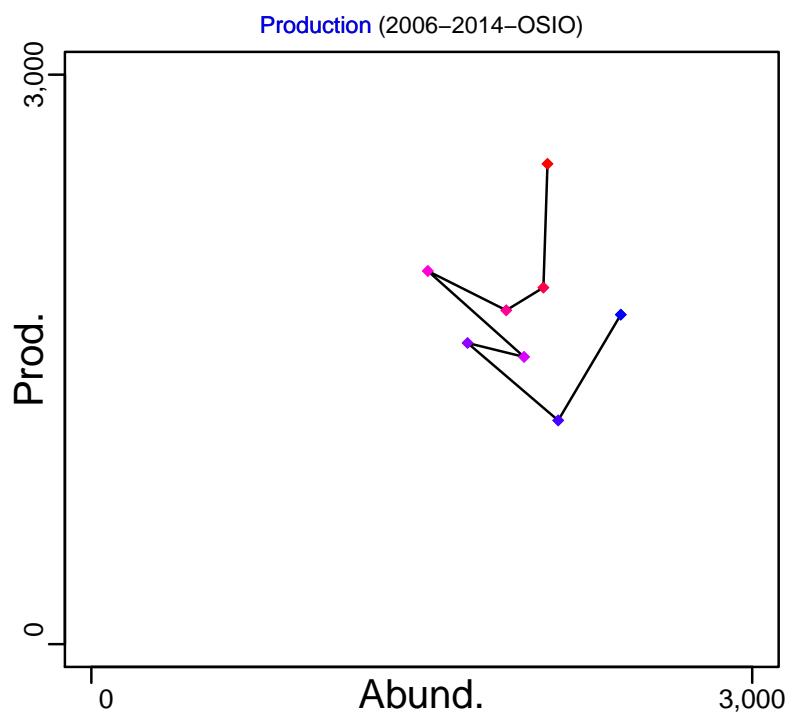
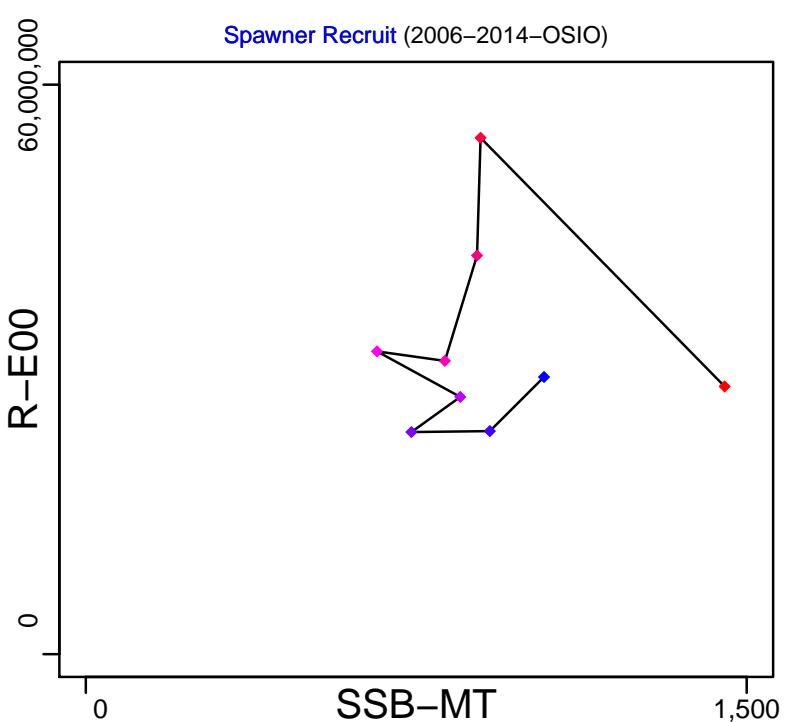
■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

## Common sole Northern Adriatic Sea [SOLMEDGSA17]

<b>Metadata</b>	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	STECF-SOLMEDGSA17-2006-2014-OSIO
<b>Area</b>	Northern Adriatic Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2014

<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>ERrmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.35
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

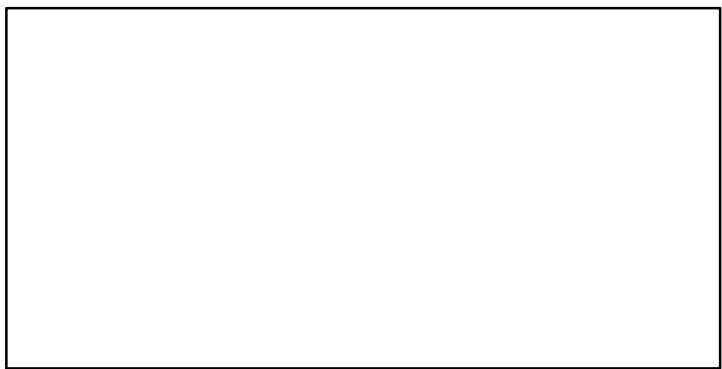
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	1450	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	28,200,000	-	-
<b>F</b>	F-1/yr	2014	0.634	-	-
<b>ER</b>	ER-calc-ratio	2014	0.612	-	-
<b>TC</b>	TC-MT	2014	2050		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERrmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	2.438		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\*****Kobe MGT\***

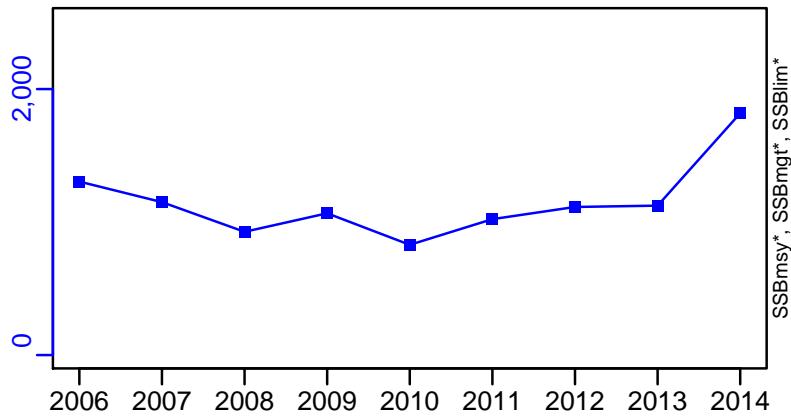
◆ Start Year   ◆ End Year   \* No Data

Common sole Northern Adriatic Sea [SOLMEDGSA17]

**TB\***



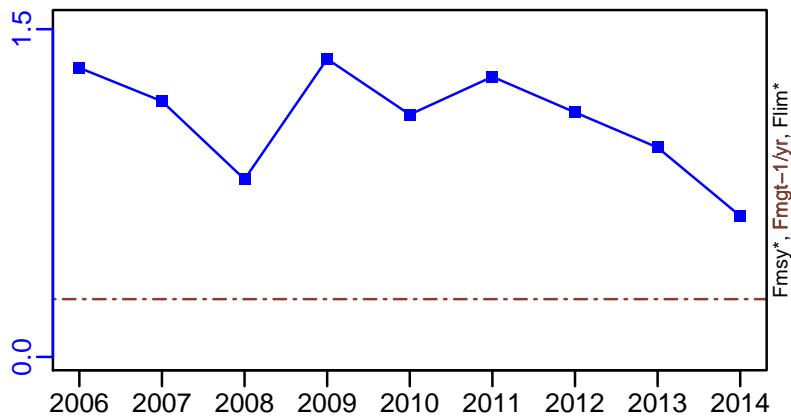
**SSB-MT** (2006–2014–OSIO)



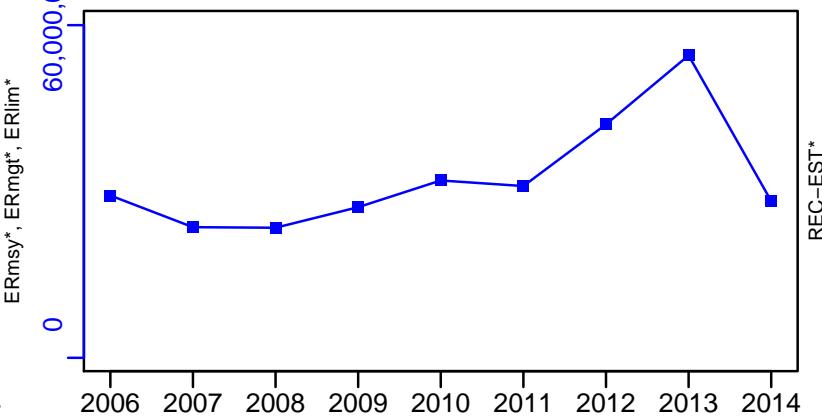
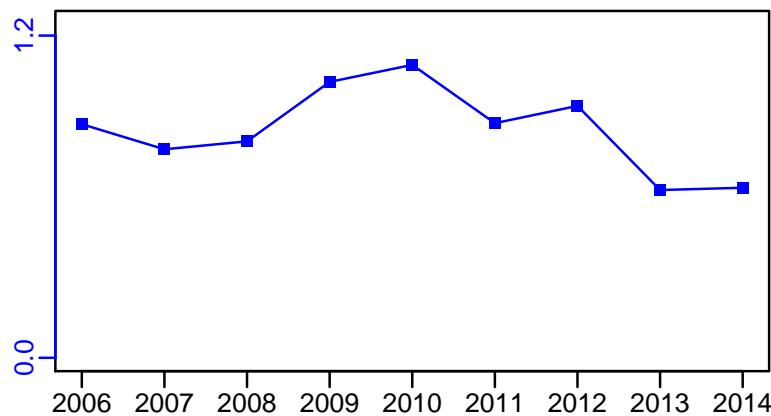
**TN \***



**F-1/yr** (2006–2014–OSIO)



**ER-calc-ratio** (2006–2014–OSIO)

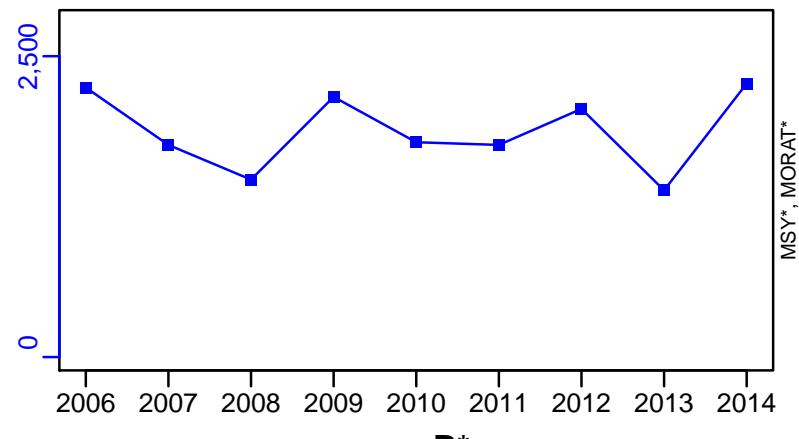


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

**Common sole Northern Adriatic Sea [SOLMEDGSA17]**

TC-MT, TL\*, RecC\* (2006–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



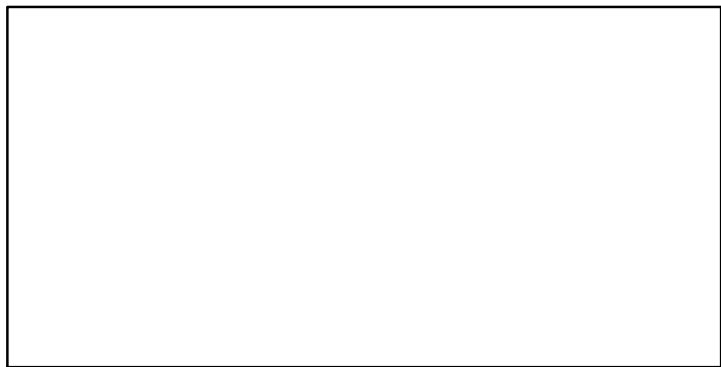
**survB\***



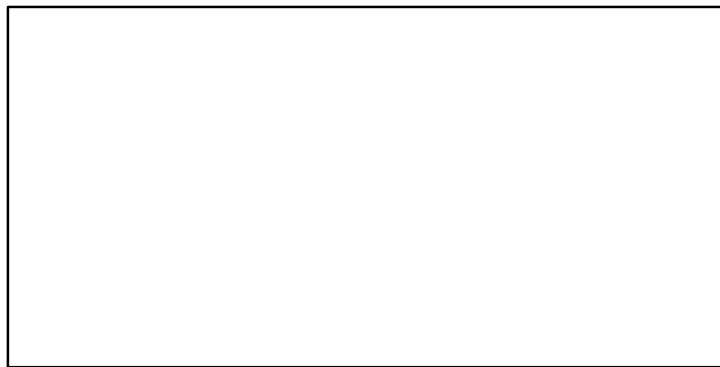
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Common sole Gulf of Lions [SOLMEDGSA7]

<b>Metadata</b>	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	STECF-SOLMEDGSA7-2011-2015-OSIO
<b>Area</b>	Gulf of Lions
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

<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>	Fmgt-1/yr	2015	0.085
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

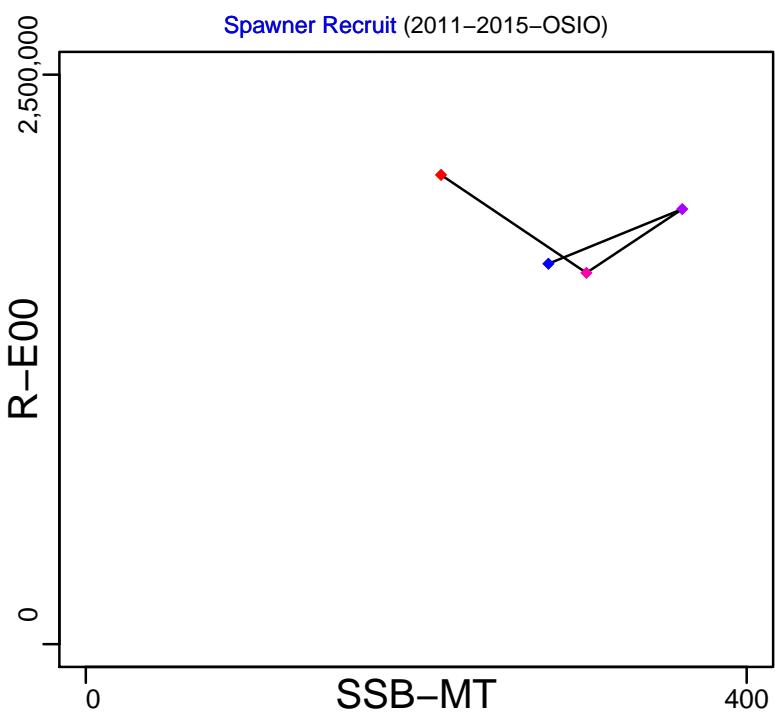
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	215	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	2,060,000	-	-
<b>F</b>	F-1/yr	2015	0.63	-	-
<b>ER</b>	ER-calc-ratio	2015	0.433	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	184		
<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>	F-1/yr/Fmgt-1/yr	2015	7.412		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2011–2015–OSIO)

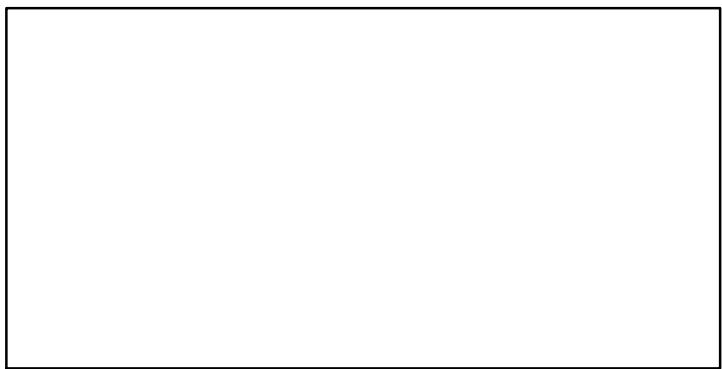
Production\*



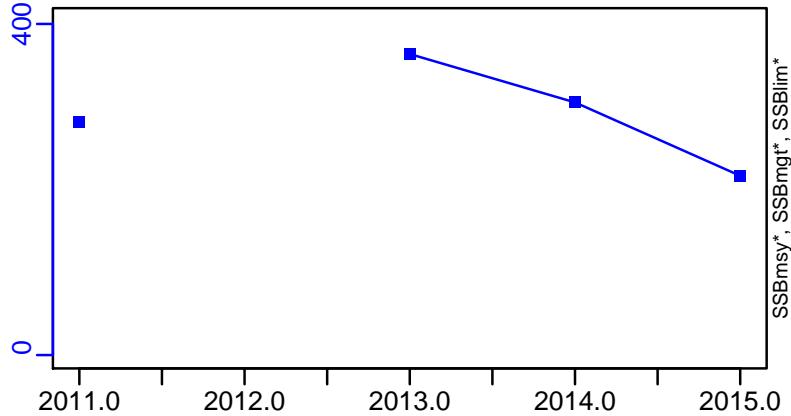
◆ Start Year ◆ End Year \* No Data

Common sole Gulf of Lions [SOLMEDGSA7]

**TB\***



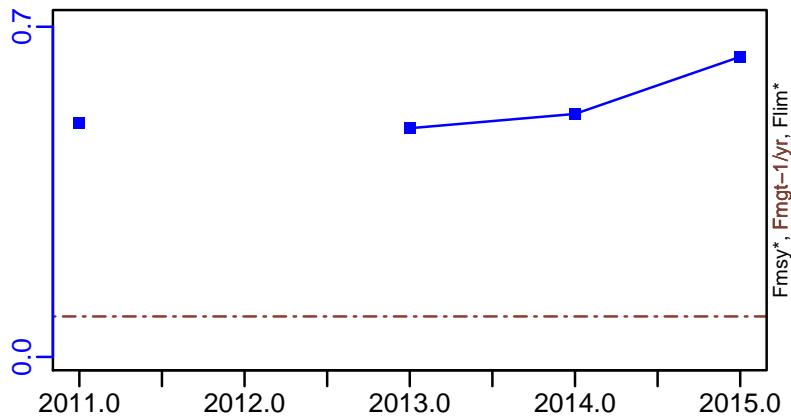
**SSB-MT (2011–2015–OSIO)**



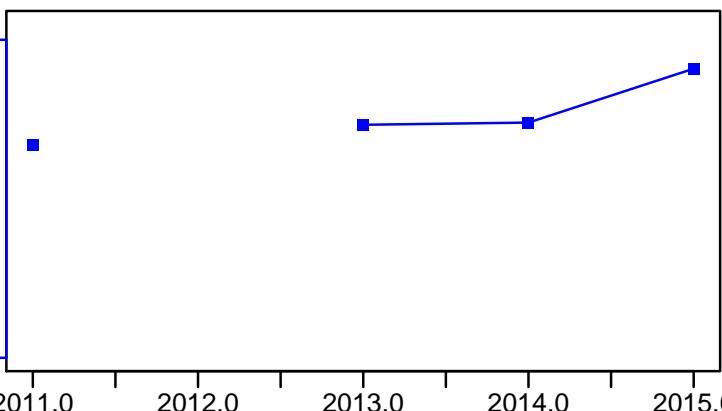
**TN \***



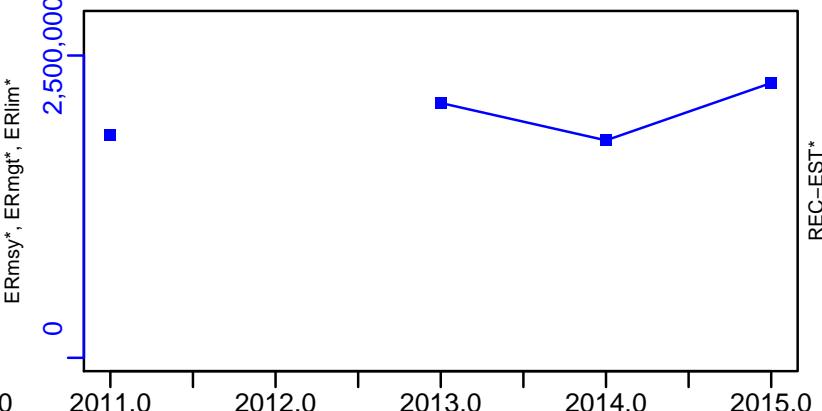
**F-1/yr (2011–2015–OSIO)**



**ER-calc-ratio (2011–2015–OSIO)**



**R-E00 (2011–2015–OSIO)**

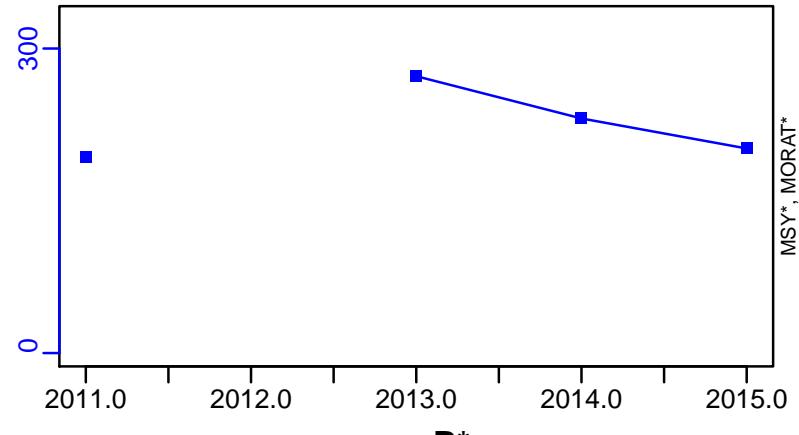


- Listed time series    - - - Target BRP    — Rec-Est
- - MSY-based BRP    - - Lim BRP    \* No Data

Common sole Gulf of Lions [SOLMEDGSA7]

TL-MT, TC\*, RecC\* (2011–2015–OSIO)

TAC\*, Cpair\*, Cadv\*



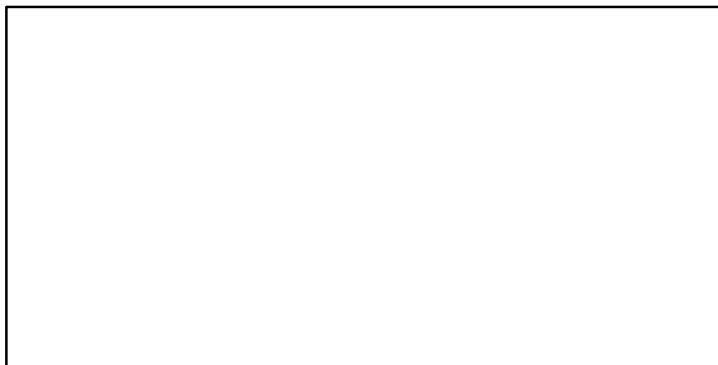
**survB\***



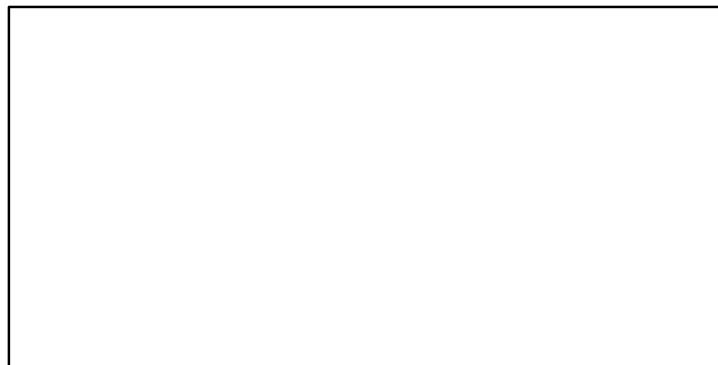
**CPUE\***



**EFFORT\***



**CdivMSY\***



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

## Sprat Black Sea [SPRBLKGSA29]

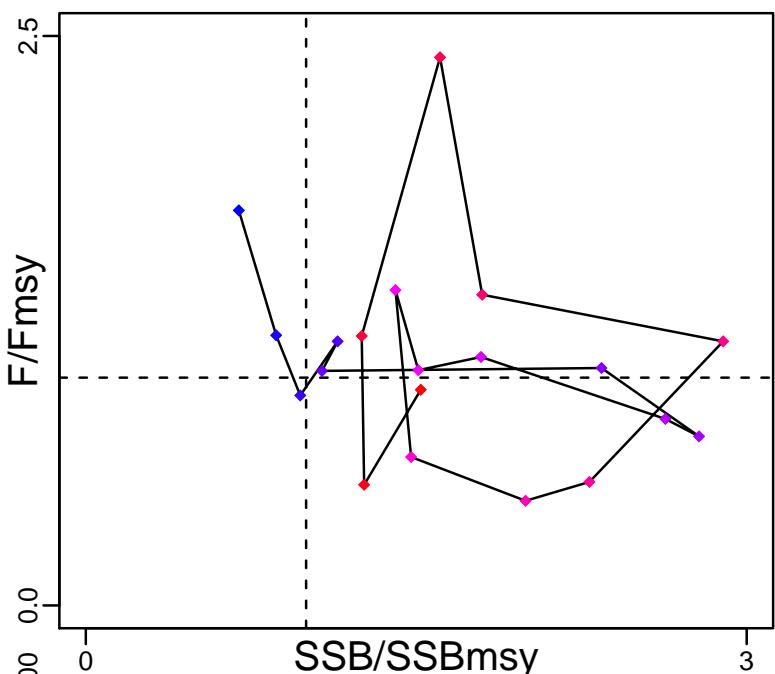
Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	STECF-SPRBLKGSA29-1995-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2010, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	182,836
<b>Fmsy</b>	Fmsy-1/yr	2014	0.64
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.286
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.64
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	342,927
<b>M</b>	M-1/yr	2010	0.95
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2010	0.64
<b>ERlim</b>	-	-	-

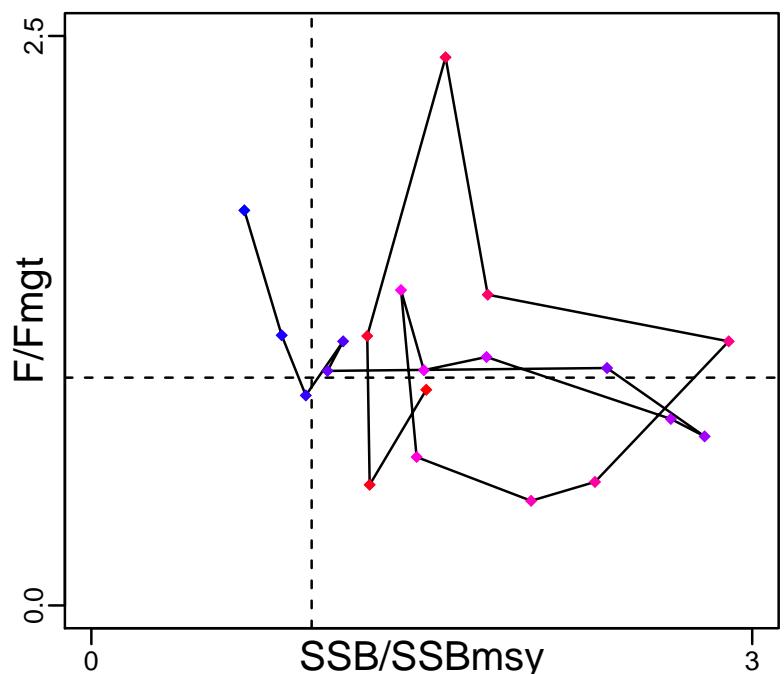
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	278,000	-	-	-
<b>TN</b>	-	-	-	-	-	-
<b>R</b>	R-E00	2014	$1.52 \times 10^{11}$	-	-	-
<b>F</b>	F-1/yr	2014	0.606	-	-	-
<b>ER</b>	ER-calc-ratio	2014	0.032	-	-	-
<b>TC</b>	TC-MT	2014	58,400			
<b>TL</b>	TL-MT	2010	91,700			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	1.52			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	0.947			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	0.112			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.947			
<b>ER/ERmgt</b>	-	-	-			

Sprat Black Sea [SPRBLKGSA29]

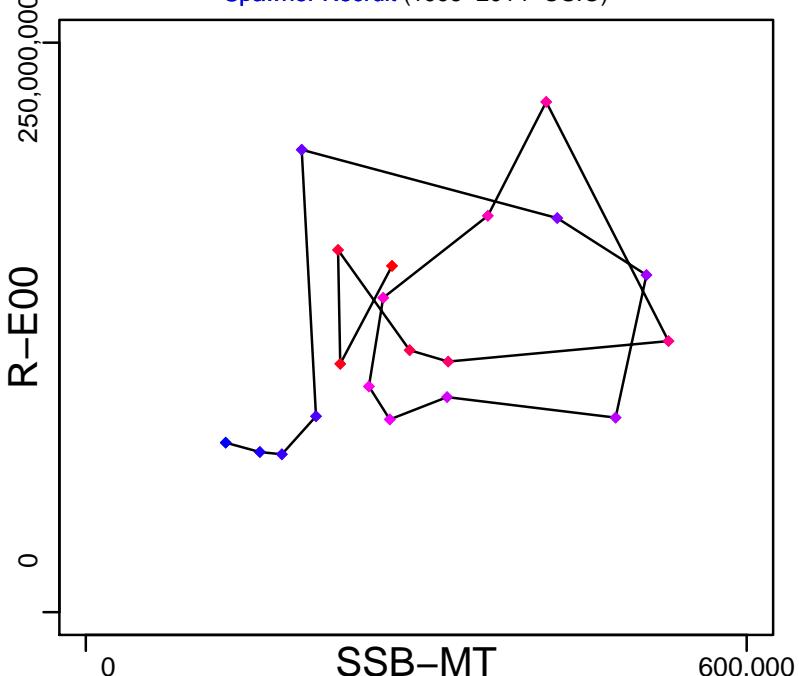
Kobe MSYpref (1995–2014–OSIO)



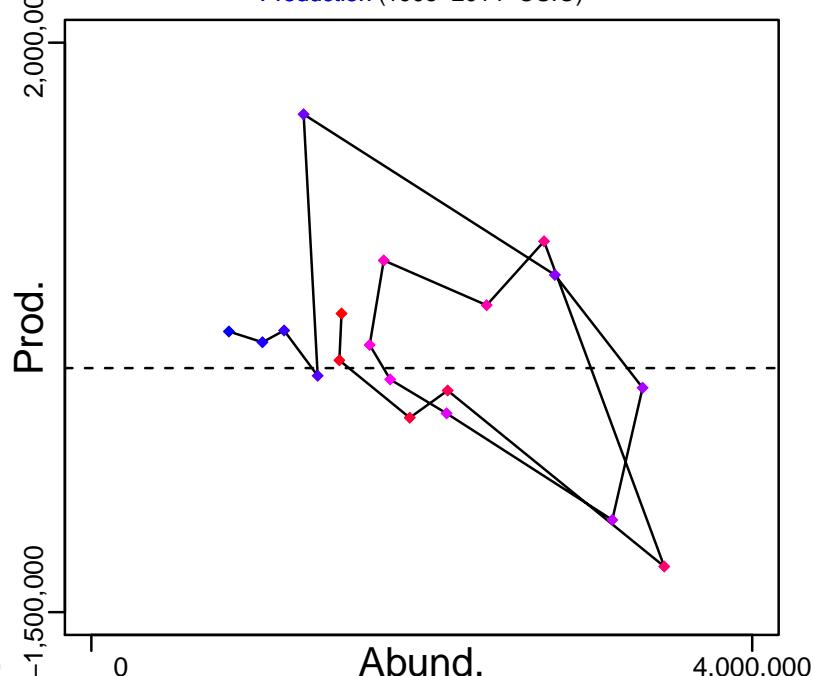
Kobe MGTpref (1995–2014–OSIO)



Spawner Recruit (1995–2014–OSIO)



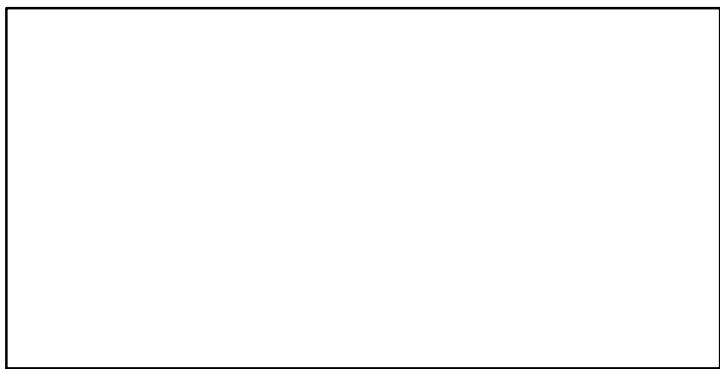
Production (1995–2014–OSIO)



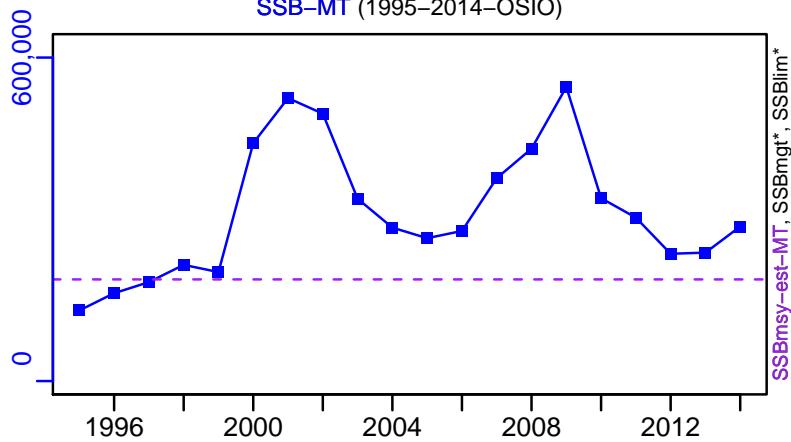
◆ Start Year ◆ End Year \* No Data

Sprat Black Sea [SPRBLKGSA29]

**TB\***



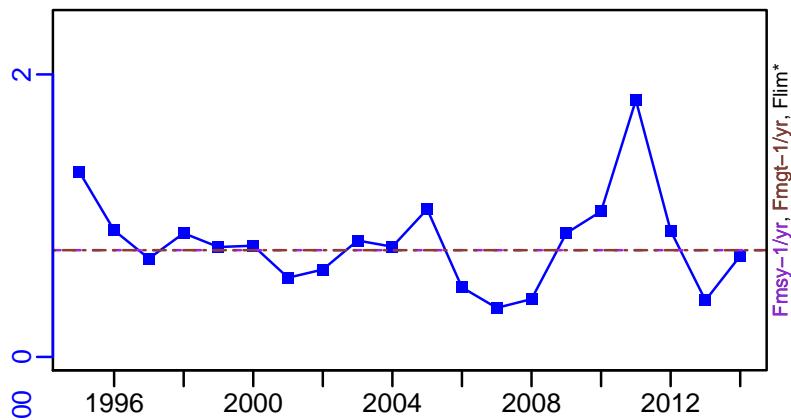
**SSB-MT (1995–2014–OSIO)**



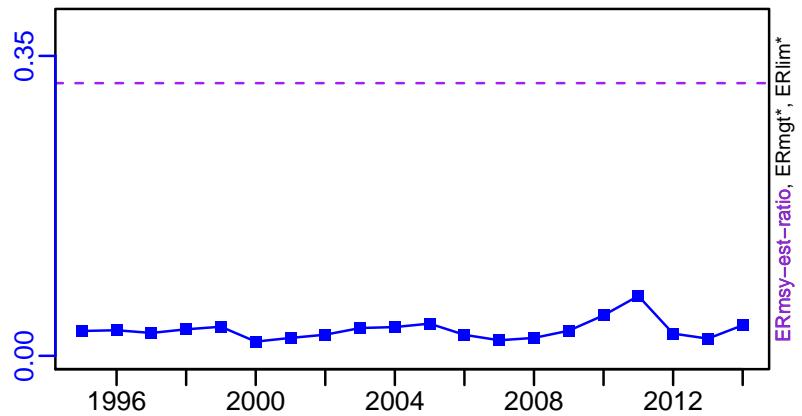
**TN \***



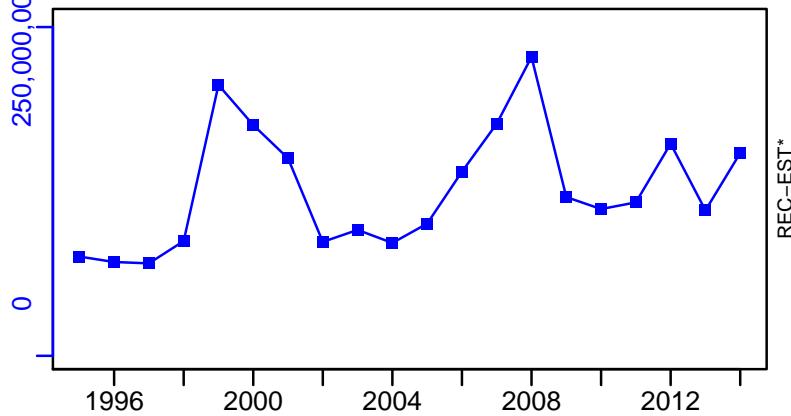
**F-1/yr (1995–2014–OSIO)**



**ER-calc-ratio (1995–2014–OSIO)**



**R-E00 (1995–2014–OSIO)**

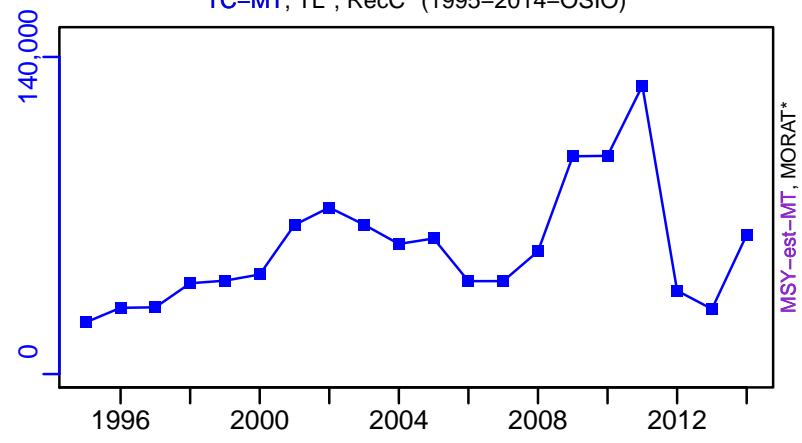


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

Sprat Black Sea [SPRBLKGSA29]

TC-MT, TL\*, RecC\* (1995–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



survB\*

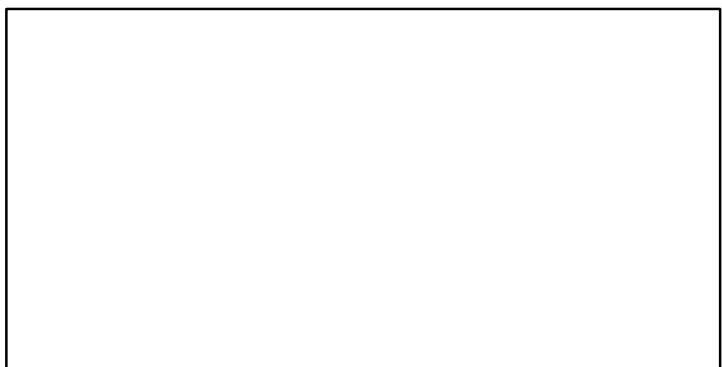
MSY-est-MT, MORAT\*



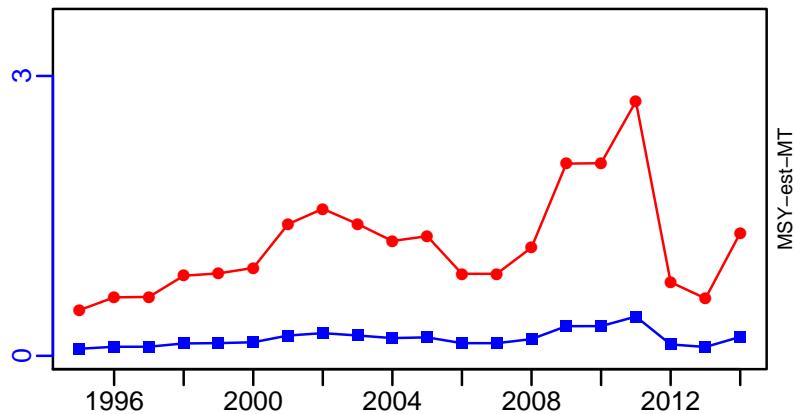
CPUE\*



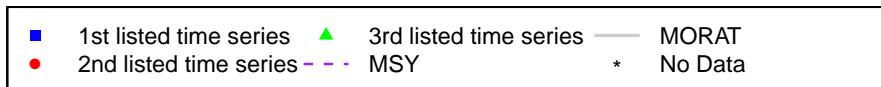
EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1995–2014–OSIO)



MSY-est-MT



## Swordfish Mediterranean Sea [SWORDMED]

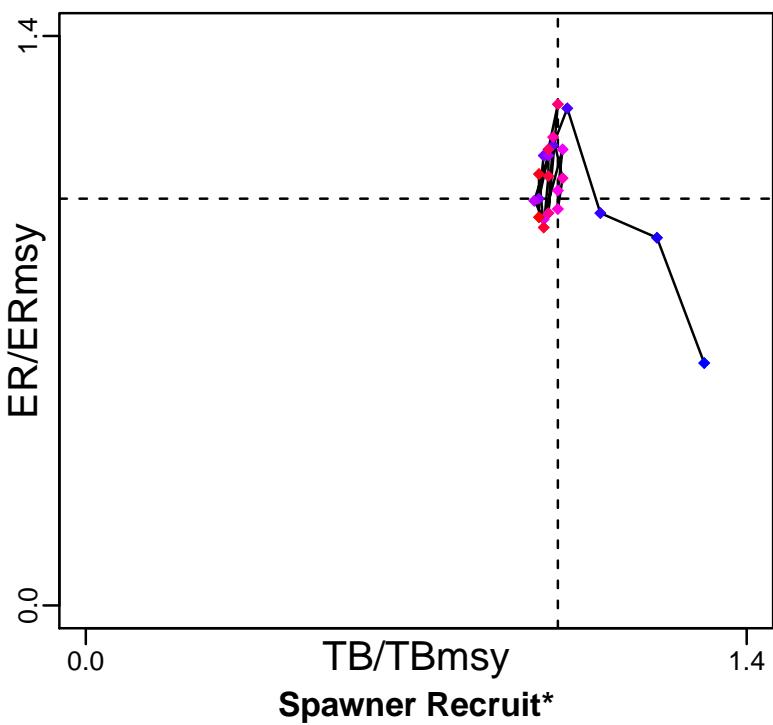
Metadata	
<b>Scientific Name</b>	Xiphias gladius
<b>Current Assess ID</b>	ICCAT-SWORDMED-1950-2009-CHING
<b>Area</b>	Mediterranean Sea
<b>Management Authority</b>	International Commission for the Conservation of Atlantic Tunas
<b>Assessor</b>	International Commission for the Conservation of Atlantic Tunas
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-extr-MT	2009	73,728
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2009	0.26
<b>ERmsy</b>	ERmsy-calc-ratio	2009	0.198
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2009	14,600
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

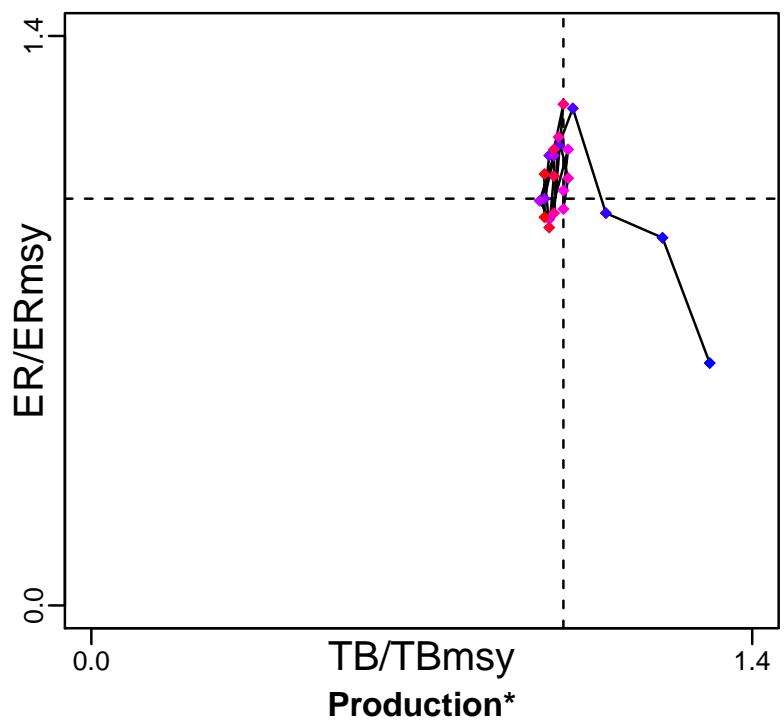
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2009	64,600	-	-	
<b>SSB</b>	SSB-MT	2009	33,600	-	3+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-ratio	2009	0.189	-	-	
<b>TC</b>	TC-MT	2009	9340			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2009	0.96			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2009	0.89			
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2009	0.954			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Swordfish Mediterranean Sea [SWORDMED]**

Kobe MSYpref (1950–2009–CHING)



Kobe MGTPref (1950–2009–CHING)



Spawner Recruit\*

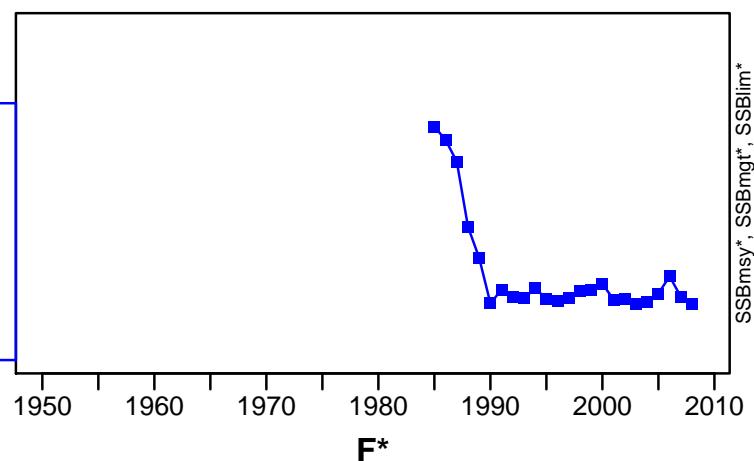
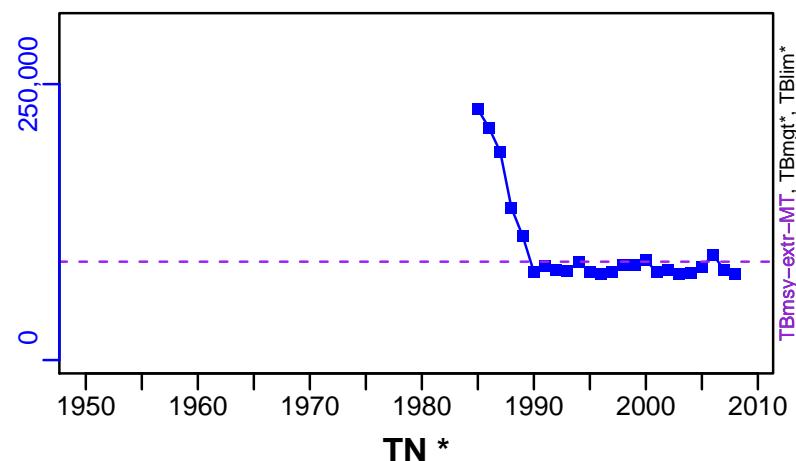
Production\*

◆ Start Year   ◆ End Year   \* No Data

### Swordfish Mediterranean Sea [SWORDMED]

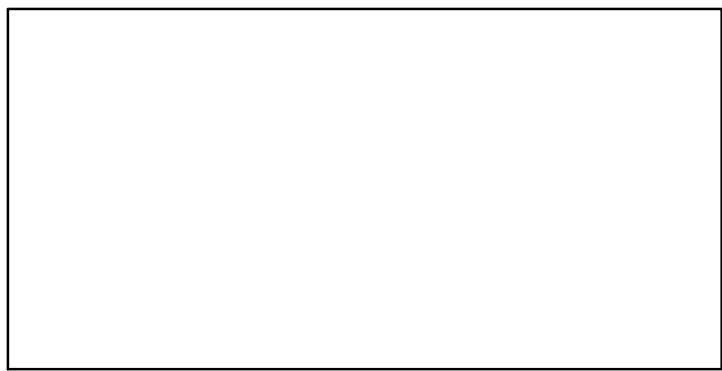
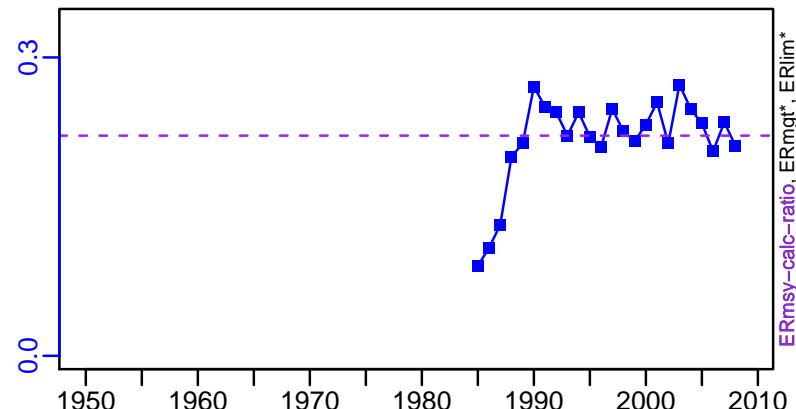
TB-MT (1950–2009–CHING)

SSB-MT (1950–2009–CHING)



ER-ratio (1950–2009–CHING)

Recruits\*

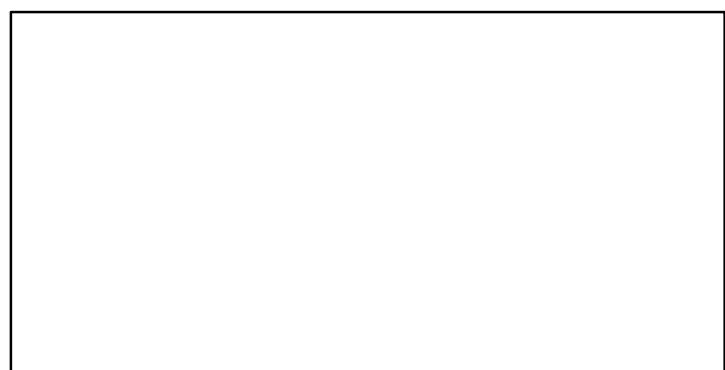
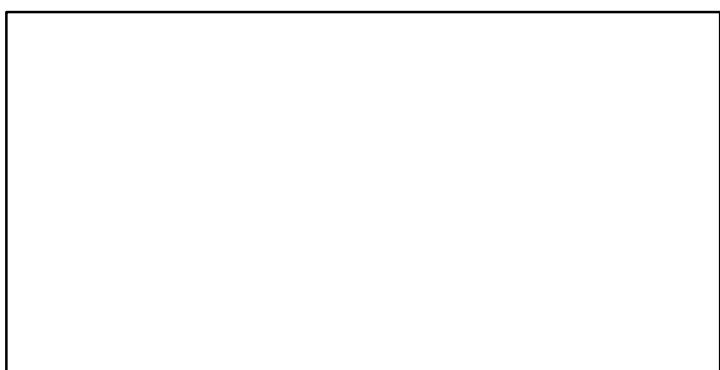
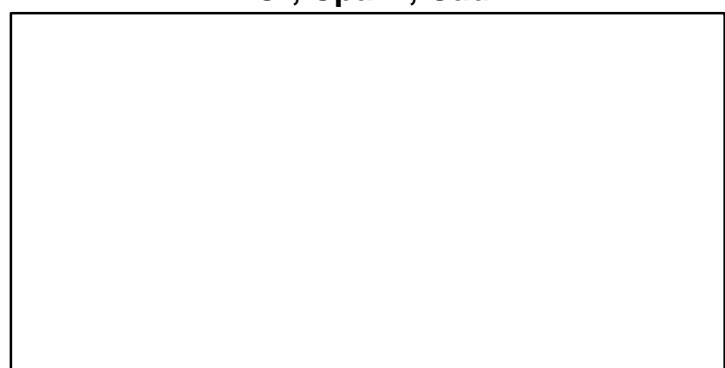
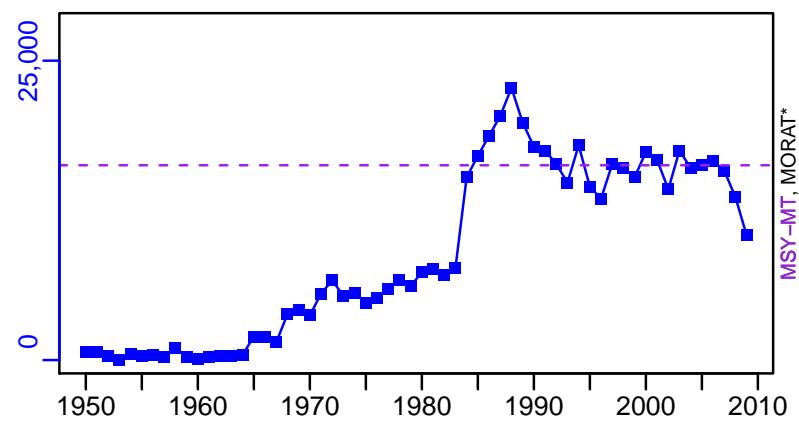


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | --- Lim BRP  | * No Data |

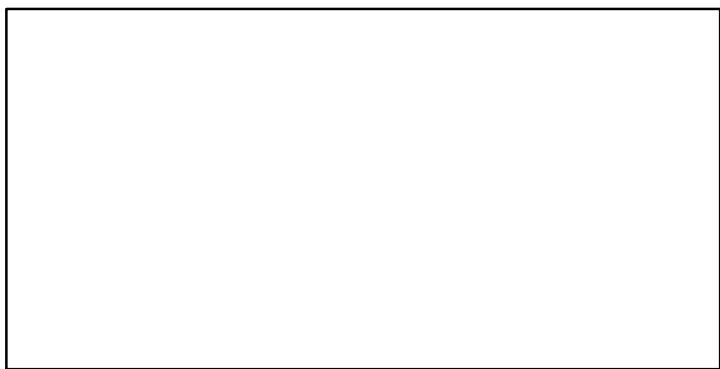
Swordfish Mediterranean Sea [SWORDMED]

TC-MT, TL\*, RecC\* (1950–2009–CHING)

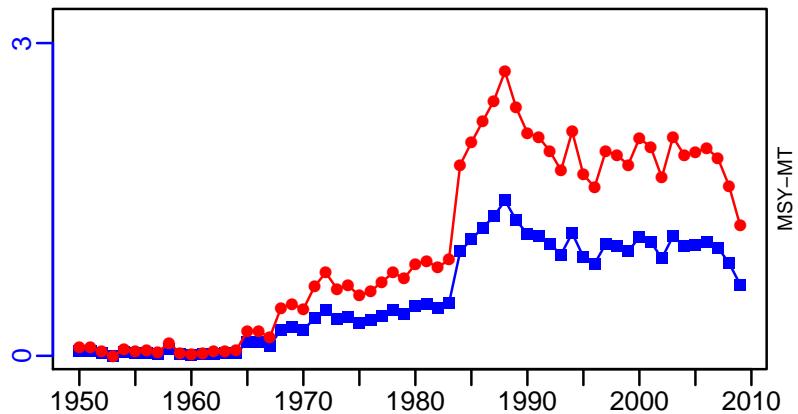
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2009–CHING)



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

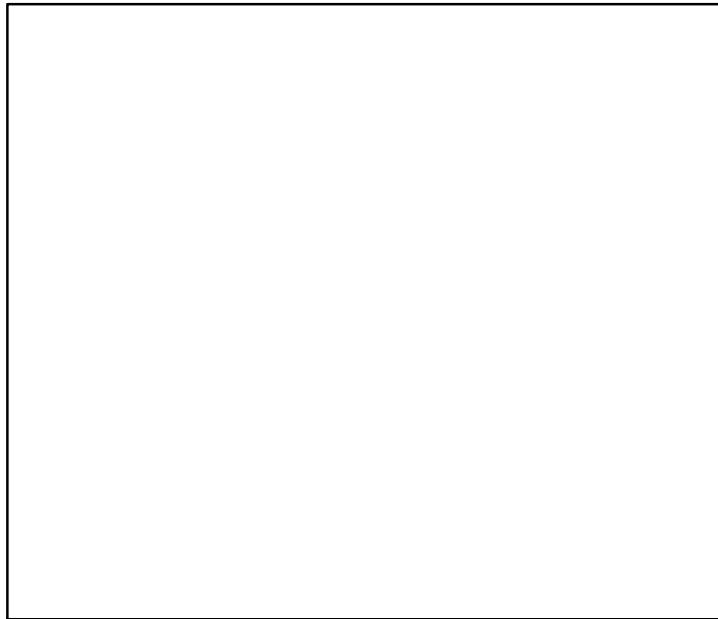
## Thornback skate Black Sea [TBSKAMEDGSA29]

<b>Metadata</b>	
<b>Scientific Name</b>	Raja clavata
<b>Current Assess ID</b>	STECF-TBSKAMEDGSA29-2008-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014

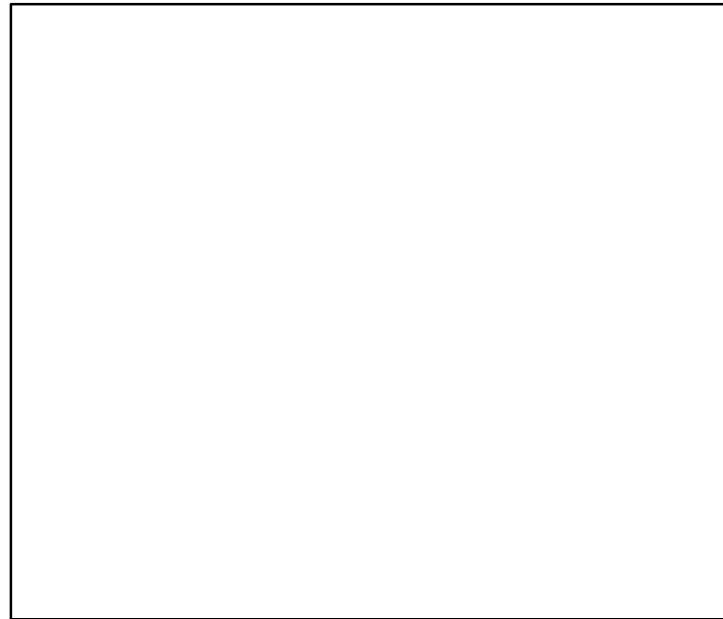
<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.16
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2014	0.21	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2014	96		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.312		
<b>ER/ERmgt</b>	-	-	-		

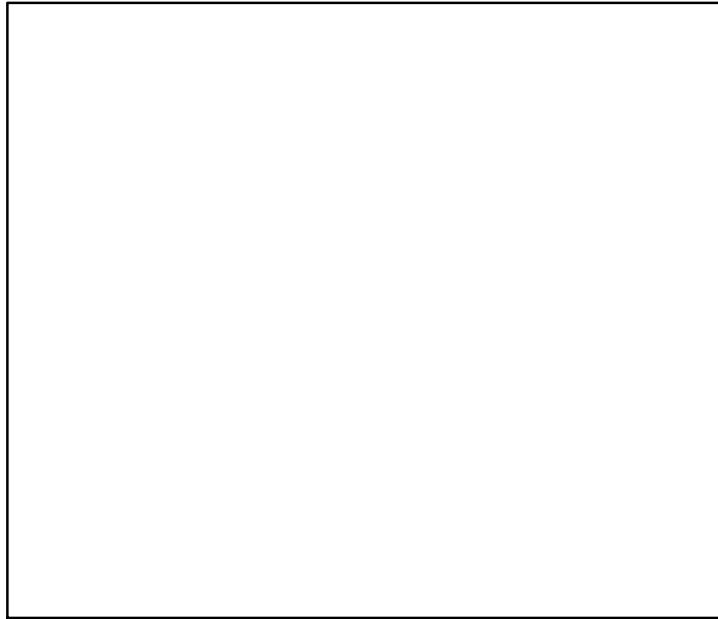
**Kobe MSY\***



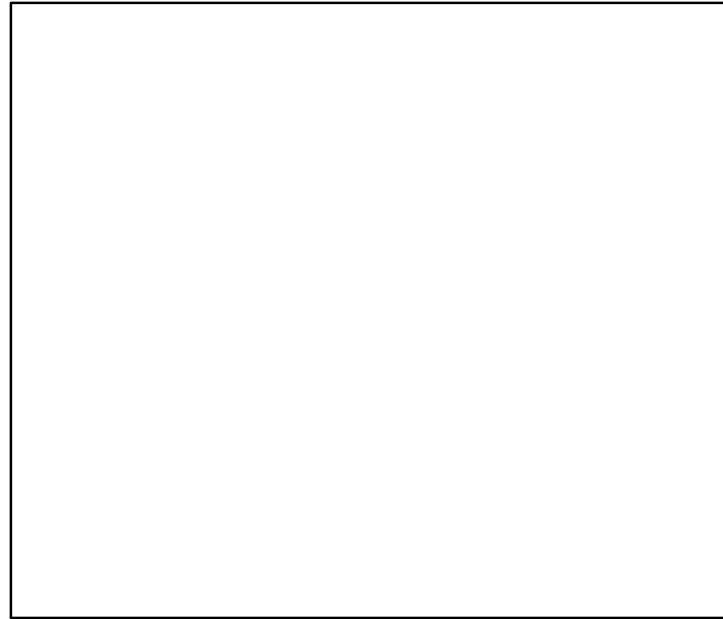
**Kobe MGT\***



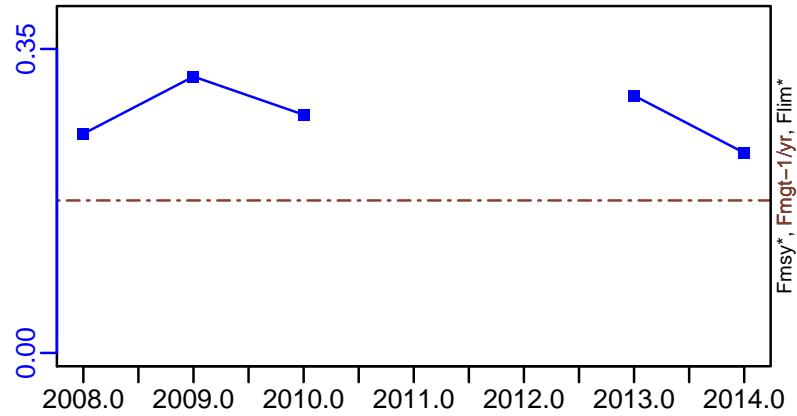
**Spawner Recruit\***



**Production\***



◆ Start Year ♦ End Year \* No Data

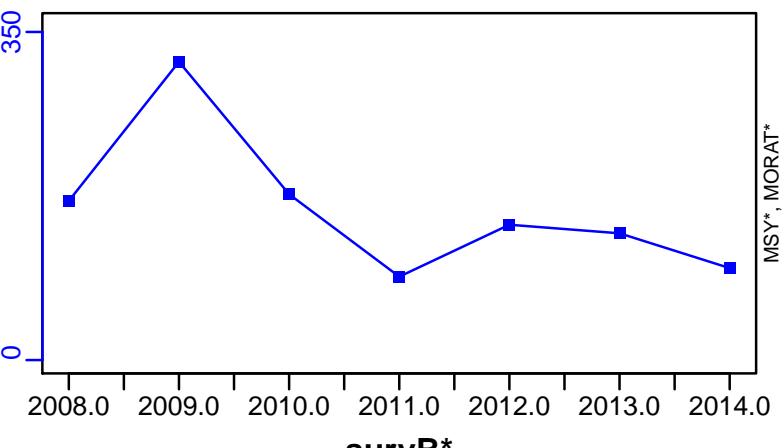
**TB\*****SSB\*****TN \*****F-1/yr** (2008–2014–OSIO)**ER\*****Recruits\***

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

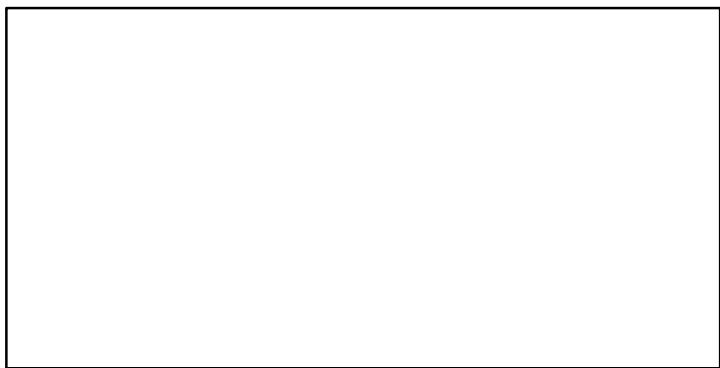
Thornback skate Black Sea [TBSKAMEDGSA29]

TC-MT, TL\*, RecC\* (2008–2014–OSIO)

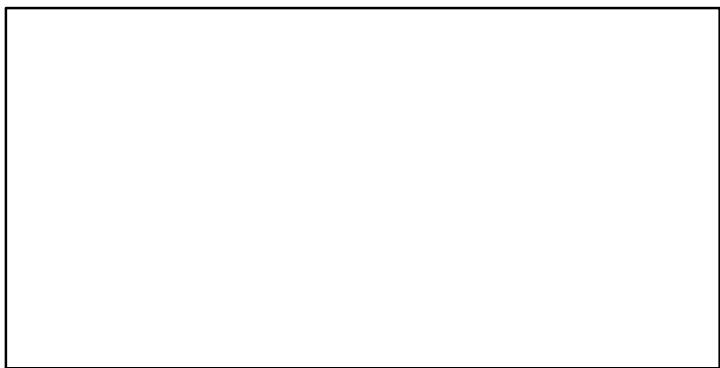
TAC\*, Cpair\*, Cadv\*



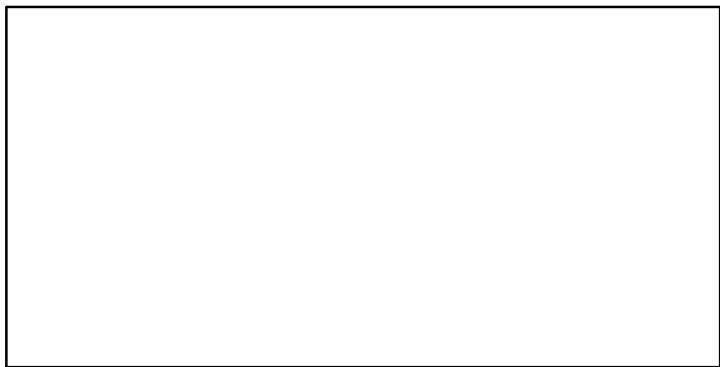
survB\*



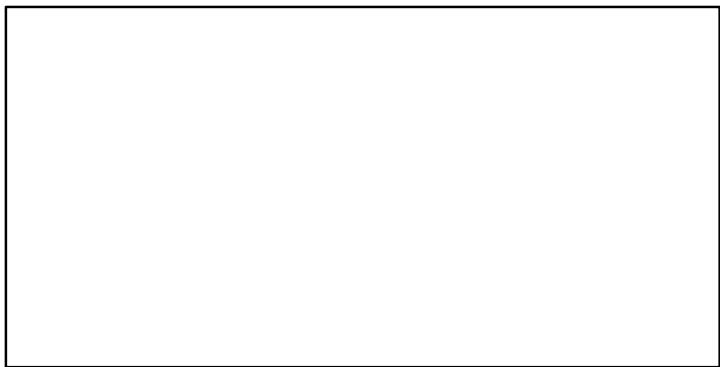
CPUE\*



EFFORT\*



CdivMSY\*



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

## Turbot Black Sea [TURBLKGSA29]

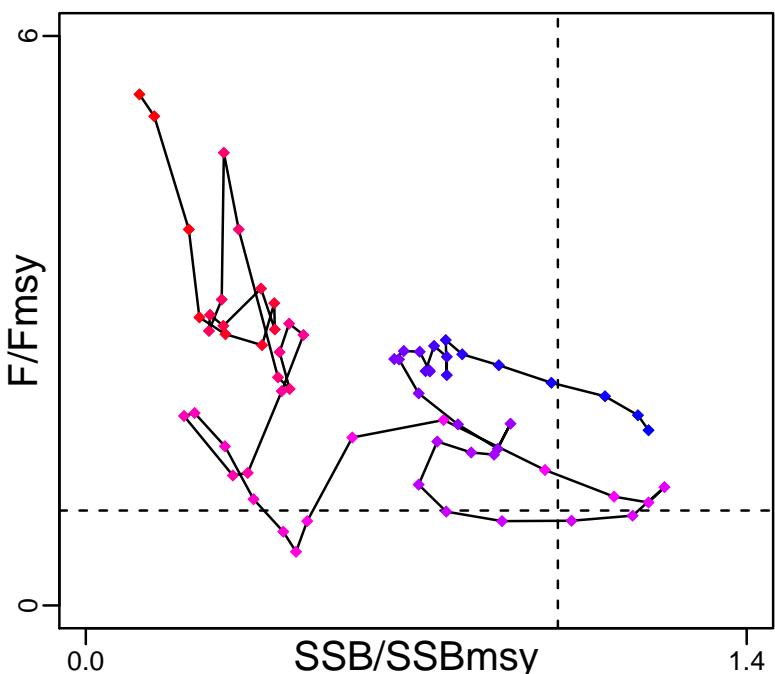
<b>Metadata</b>	
<b>Scientific Name</b>	Psetta maxima
<b>Current Assess ID</b>	STECF-TURBLKGSA29-1950-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2014, 2010

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	8892
<b>Fmsy</b>	Fmsy-1/yr	2014	0.26
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.067
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	2564
<b>M</b>	M-1/yr	2010	0.19
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	3535
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

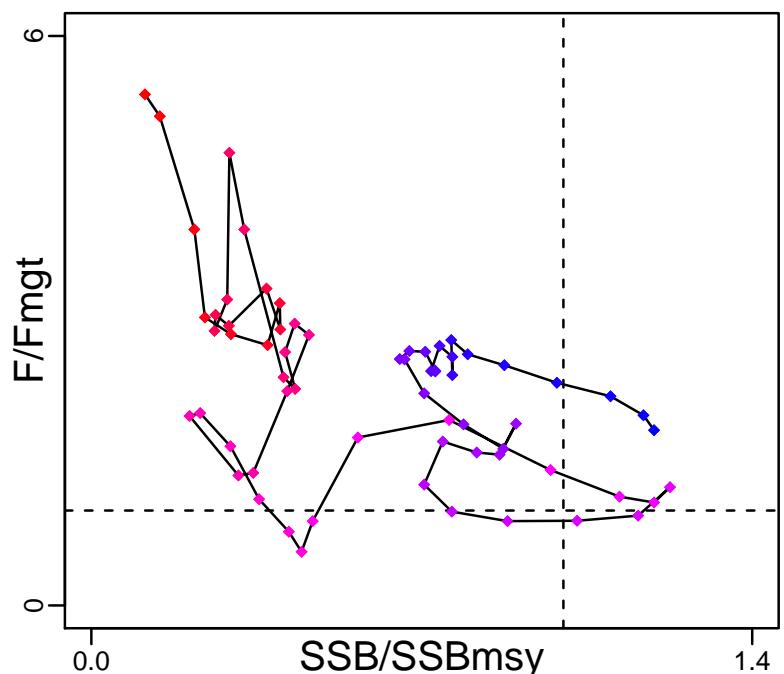
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	1010	-	4+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	716,000	-	-	
<b>F</b>	F-1/yr	2014	1.4	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.267	-	-	
<b>TC</b>	TC-MT	2014	1160			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.114			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	5.385			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	3.984			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	5.385			
<b>ER/ERmgt</b>	-	-	-			

Turbot Black Sea [TURBLKGSA29]

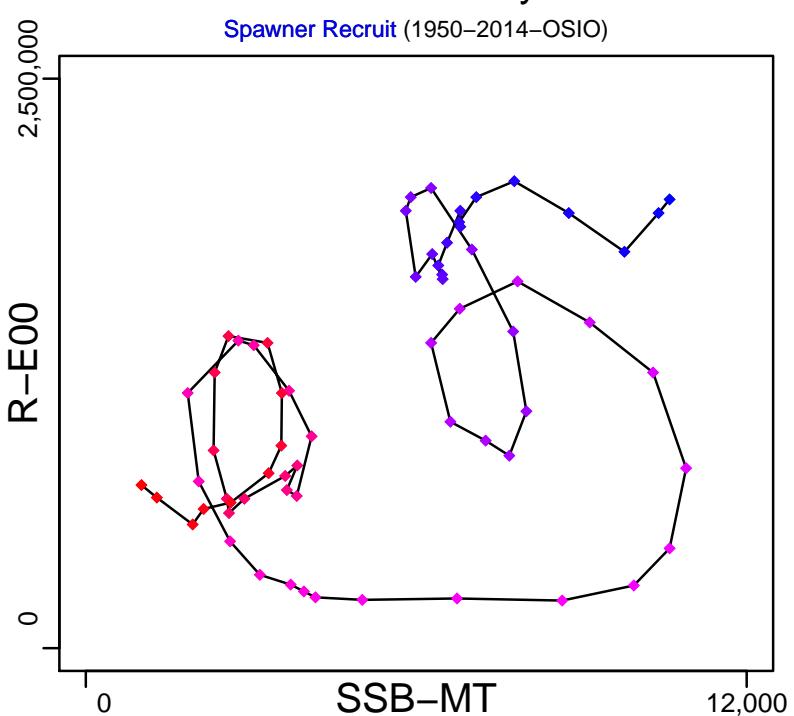
Kobe MSYpref (1950–2014–OSIO)



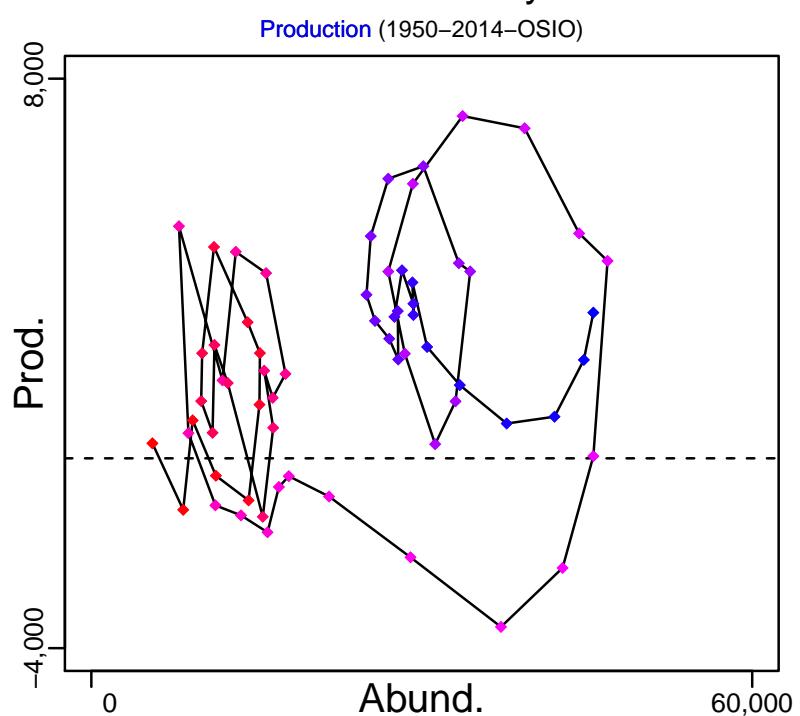
Kobe MGTpref (1950–2014–OSIO)



Spawner Recruit (1950–2014–OSIO)



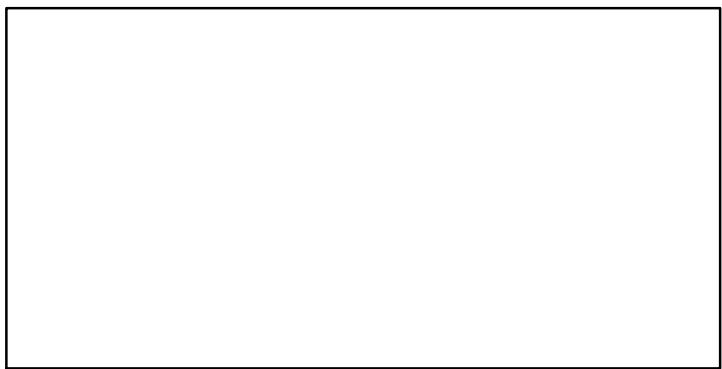
Production (1950–2014–OSIO)



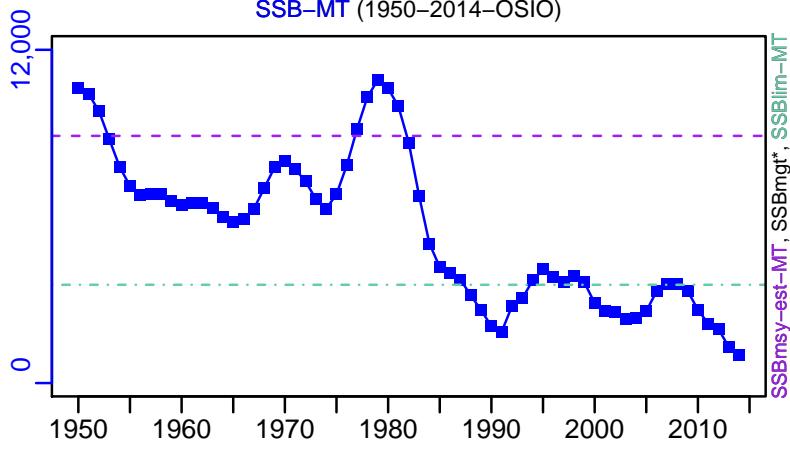
◆ Start Year ◆ End Year \* No Data

Turbot Black Sea [TURBLKGSA29]

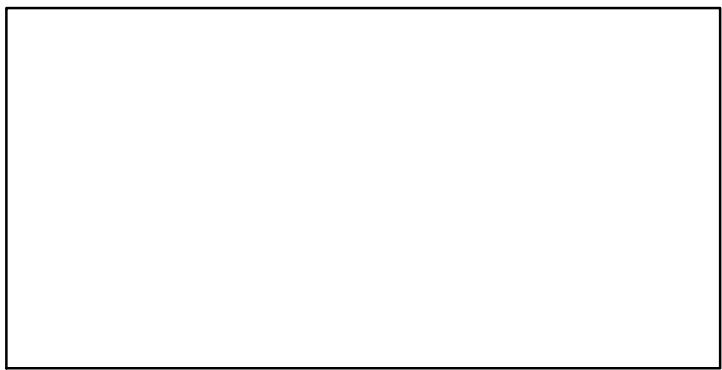
**TB\***



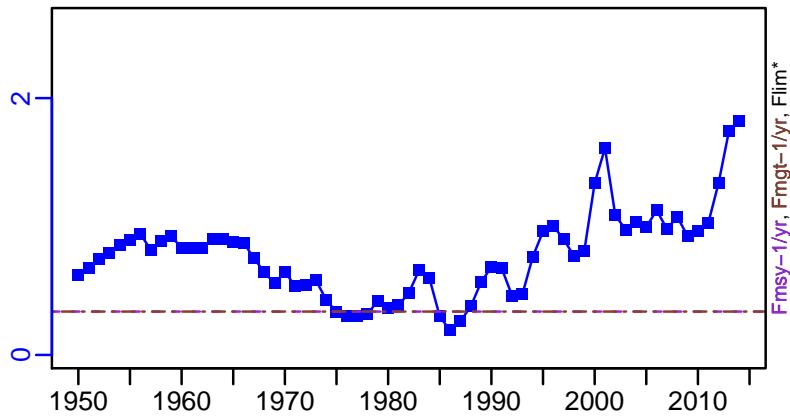
**SSB-MT (1950–2014–OSIO)**



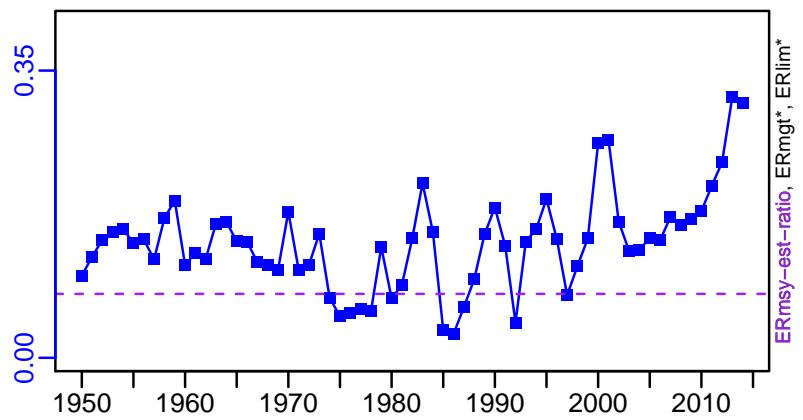
**TN \***



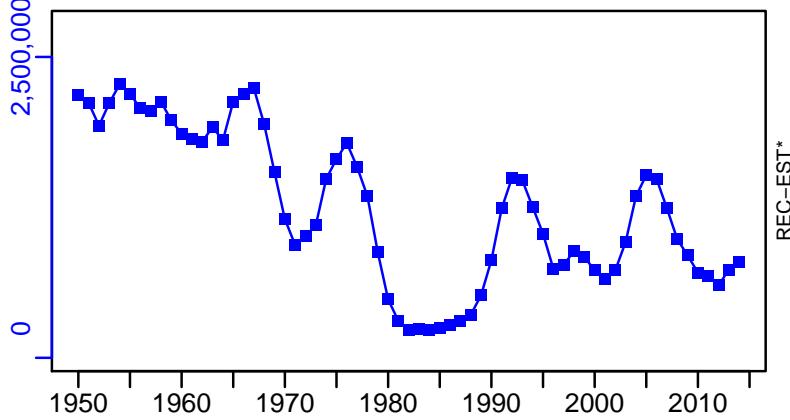
**F-1/yr (1950–2014–OSIO)**



**ER-calc-ratio (1950–2014–OSIO)**



**R-E00 (1950–2014–OSIO)**

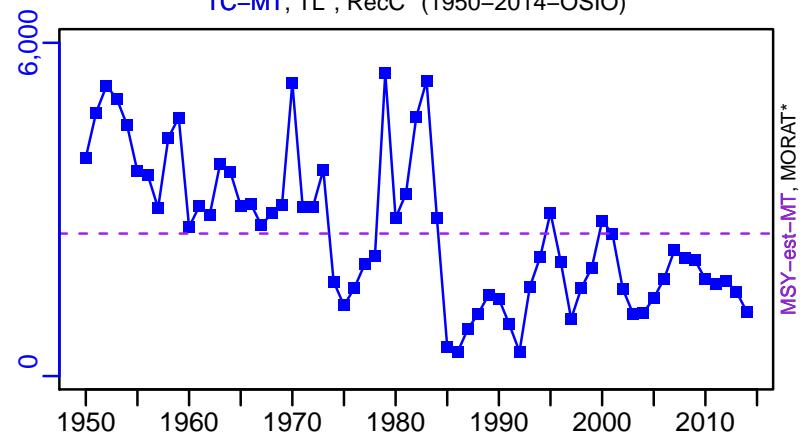


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	··· Lim BRP	* No Data

Turbot Black Sea [TURBLKGSA29]

TC-MT, TL\*, RecC\* (1950–2014–OSIO)

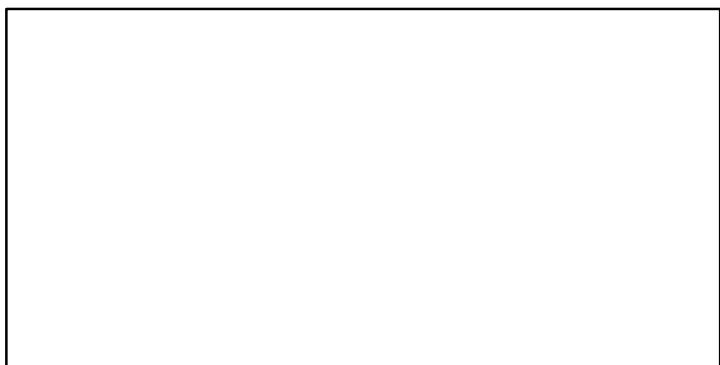
TAC\*, Cpair\*, Cadv\*



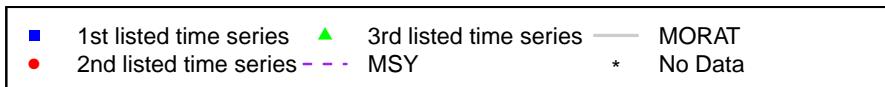
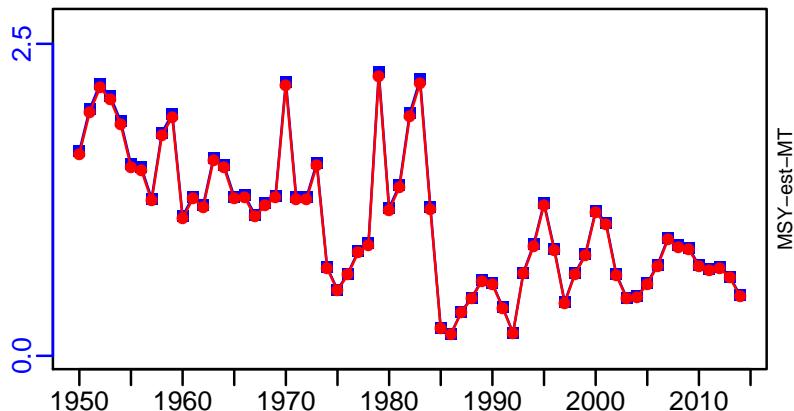
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1950–2014–OSIO)



## White anglerfish Geographical Sub-Areas 1-7 [WANGLGSA1-7]

<b>Metadata</b>	
<b>Scientific Name</b>	Lophius piscatorius
<b>Current Assess ID</b>	STECF-WANGLGSA1-7-2013-2015-OSIO
<b>Area</b>	Geographical Sub-Areas 1-7
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2015

<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>	Fmgt-1/yr	2015	0.22
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

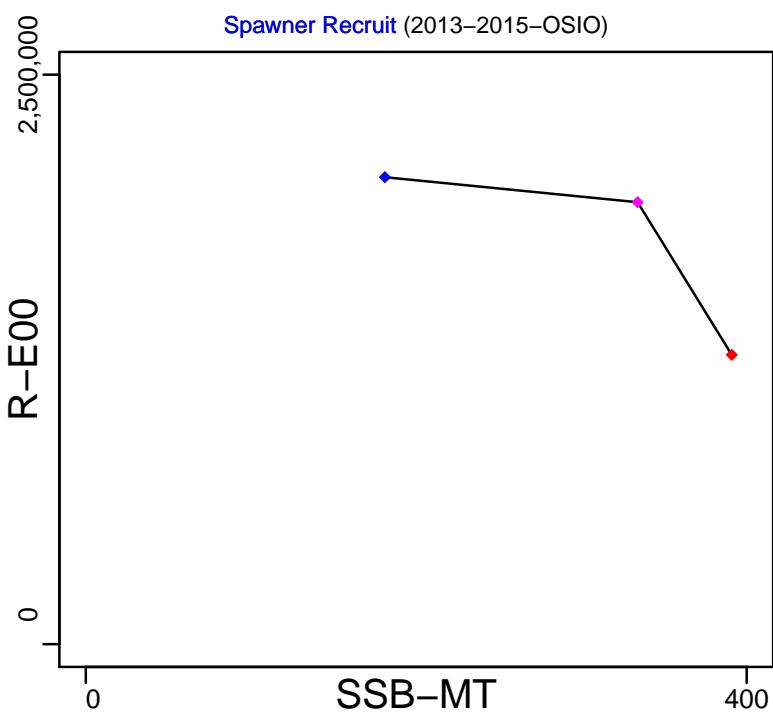
<b>Time Series</b>					
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	391	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,270,000	-	-
<b>F</b>	F-1/yr	2015	0.45	-	-
<b>ER</b>	ER-calc-ratio	2015	3.468	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	3520		
<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>	F-1/yr/Fmgt-1/yr	2015	2.045		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*

Kobe MGT\*

Spawner Recruit (2013–2015–OSIO)

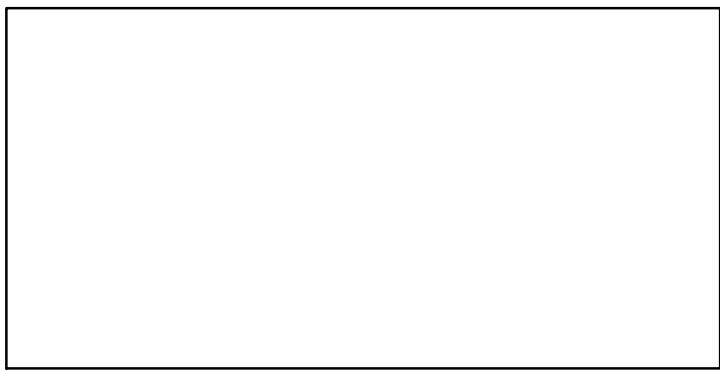
Production\*



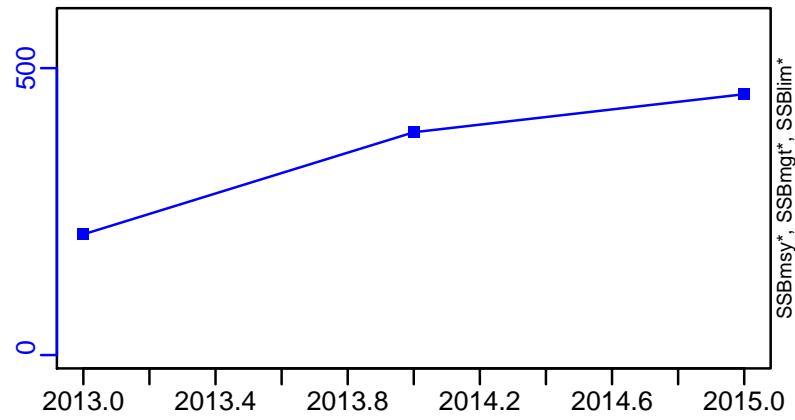
◆ Start Year   ◆ End Year   \* No Data

White anglerfish Geographical Sub-Areas 1–7 [WANGLGSA1–7]

**TB\***



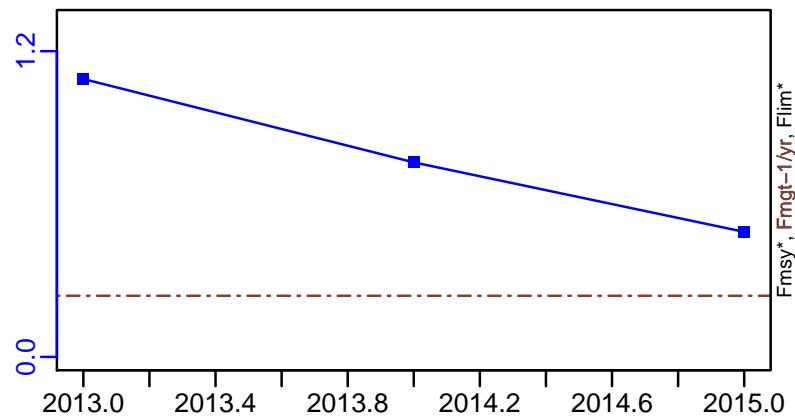
**SSB-MT (2013–2015–OSIO)**



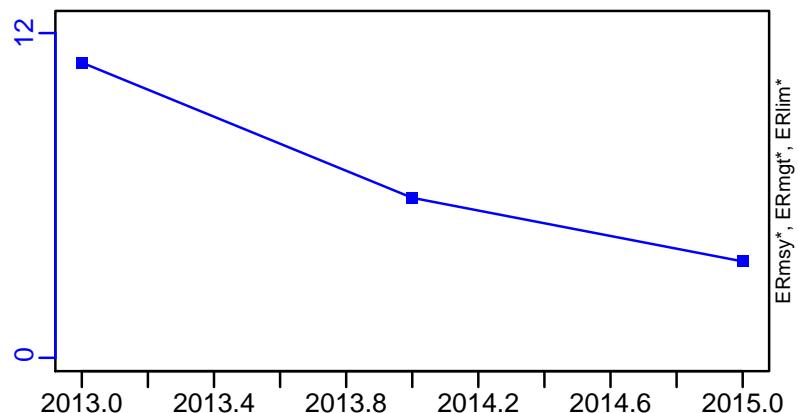
**TN \***



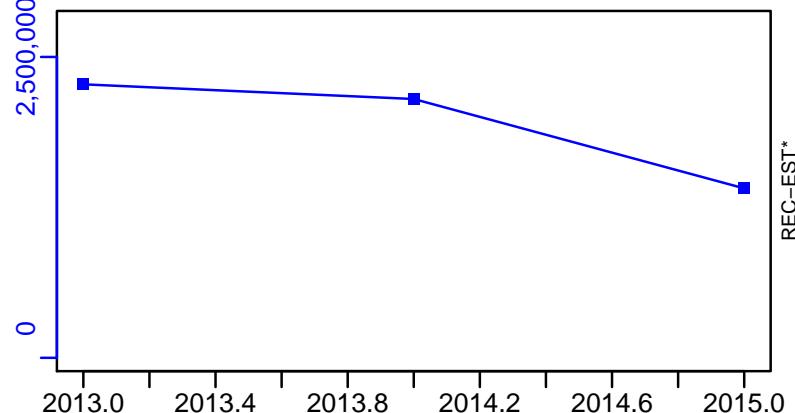
**F-1/yr (2013–2015–OSIO)**



**ER-calc-ratio (2013–2015–OSIO)**



**R-E00 (2013–2015–OSIO)**

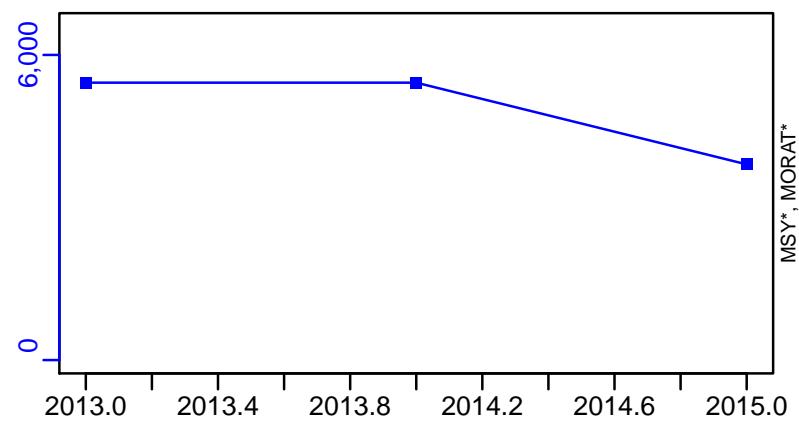


- Listed time series
- Target BRP
- MSY-based BRP
- Lim BRP
- Rec-Est
- \* No Data

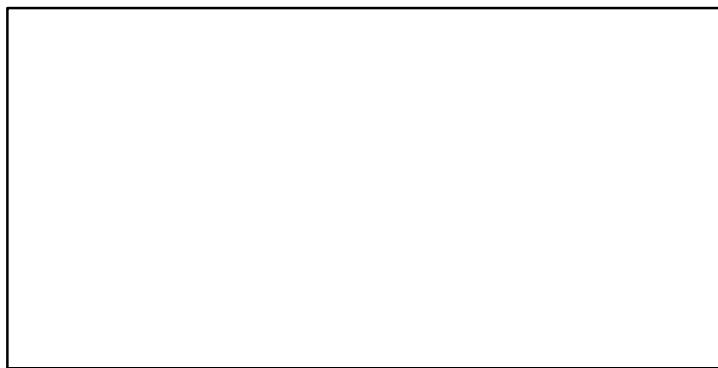
White anglerfish Geographical Sub-Areas 1–7 [WANGLGSA1–7]

TL–MT, TC\*, RecC\* (2013–2015–OSIO)

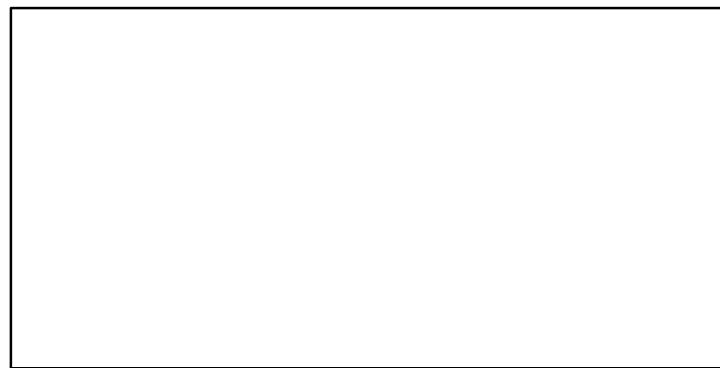
TAC\*, Cpair\*, Cadv\*



**survB\***



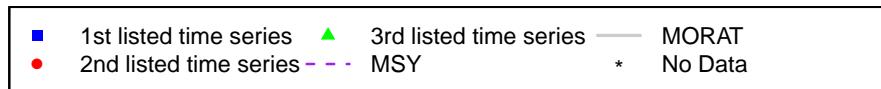
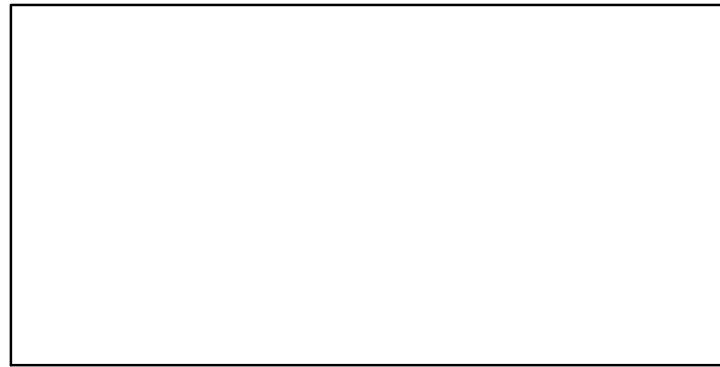
**CPUE\***



**EFFORT\***



**CdivMSY\***



## Whiting Black Sea [WHITMEDGSA29]

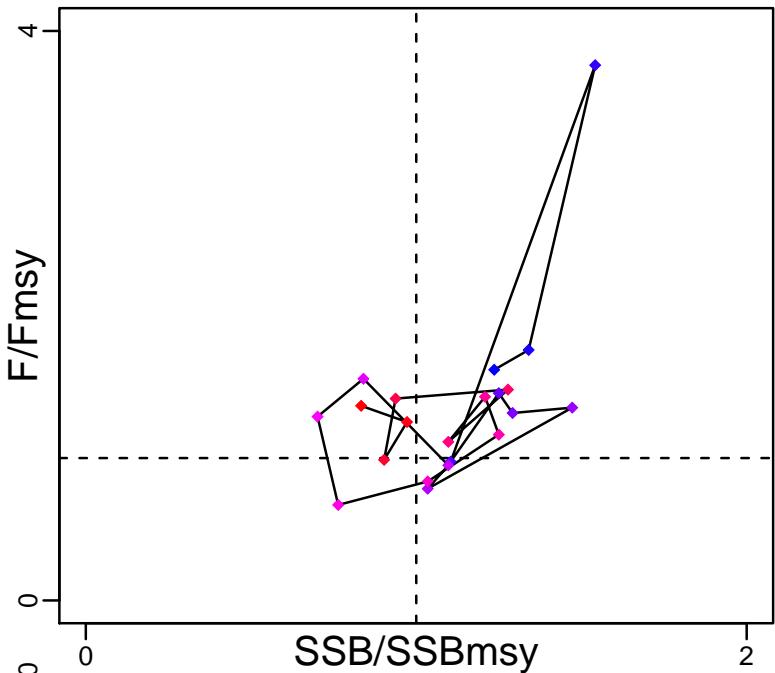
<b>Metadata</b>	
<b>Scientific Name</b>	Merlangius merlangus
<b>Current Assess ID</b>	STECF-WHITMEDGSA29-1994-2014-OSIO
<b>Area</b>	Black Sea
<b>Management Authority</b>	General Fisheries Council for the Mediterranean, DG MARE, and national states
<b>Assessor</b>	Scientific, Technical and Economic Committee for Fisheries
<b>Asmts in RAM</b>	2011, 2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-est-MT	2014	14,401
<b>Fmsy</b>	Fmsy-1/yr	2014	0.79
<b>ERmsy</b>	ERmsy-est-ratio	2014	0.293
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2014	0.79
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-est-MT	2014	9741
<b>M</b>	M-1/yr	2011	0.46
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

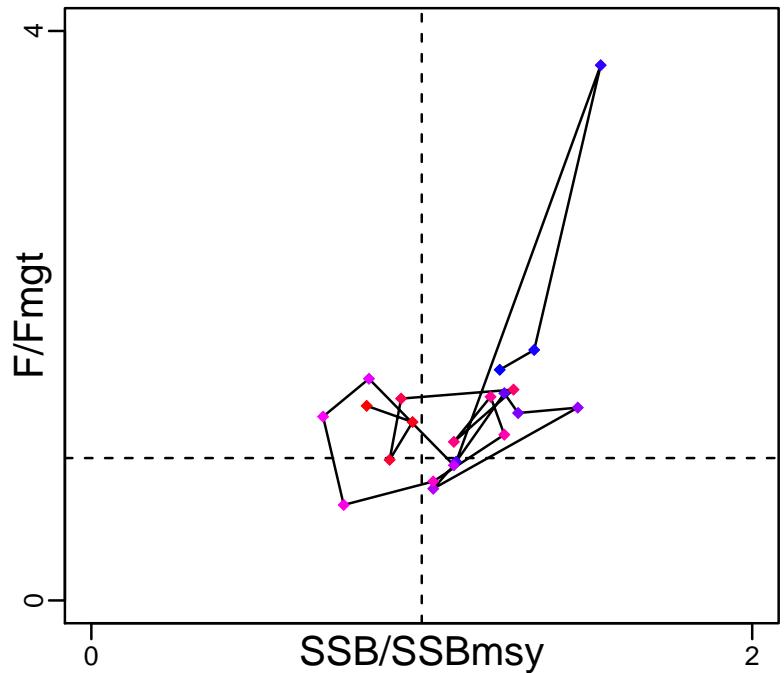
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	12,000	-	1+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	$2.32 \times 10^8$	-	-	
<b>F</b>	F-1/yr	2014	1.08	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.32	-	-	
<b>TC</b>	TC-MT	2014	8860			
<b>TL</b>	TL-MT	2011	8250			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-est-MT	2014	0.833			
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	1.367			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-est-ratio	2014	1.092			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.367			
<b>ER/ERmgt</b>	-	-	-			

Whiting Black Sea [WHITMEDGSA29]

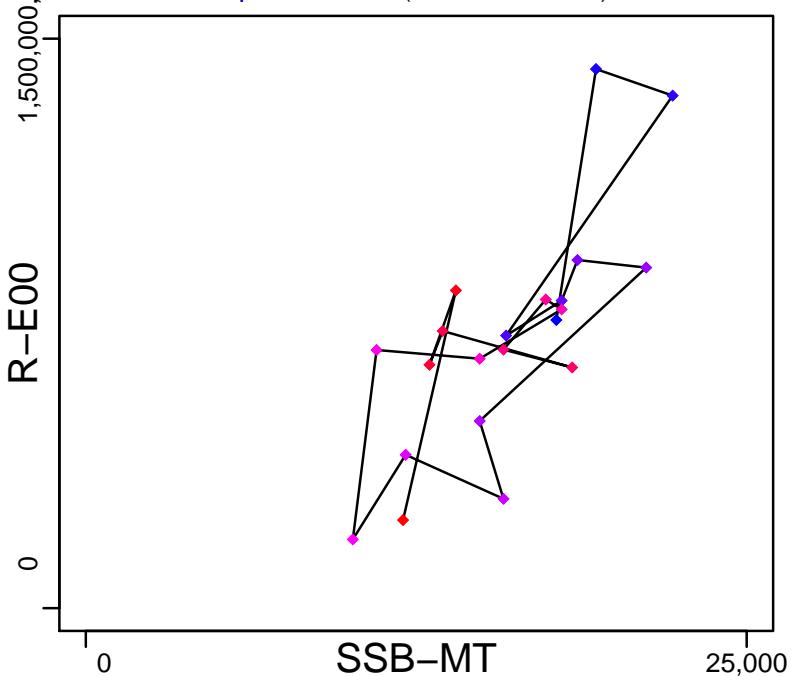
Kobe MSYpref (1994–2014–OSIO)



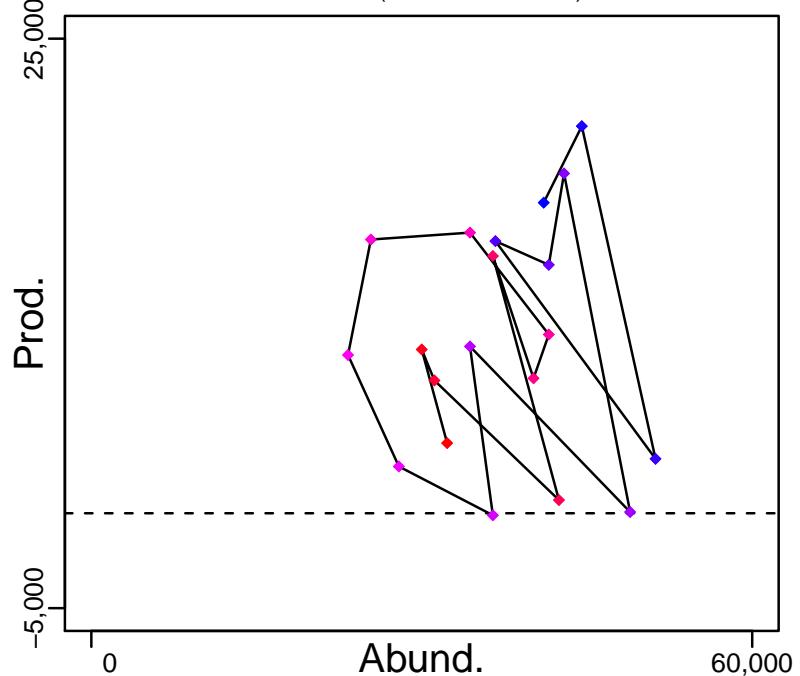
Kobe MGTpref (1994–2014–OSIO)



Spawner Recruit (1994–2014–OSIO)



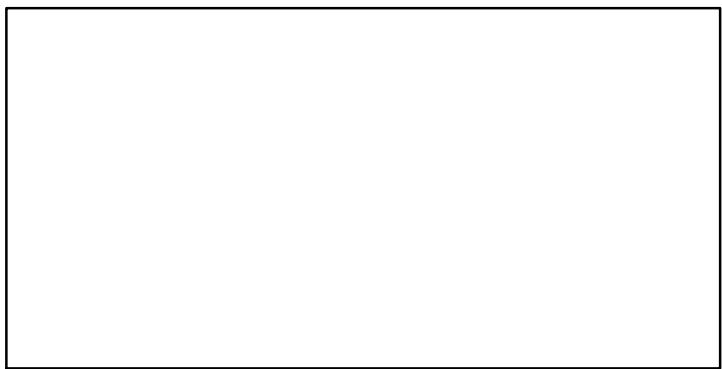
Production (1994–2014–OSIO)



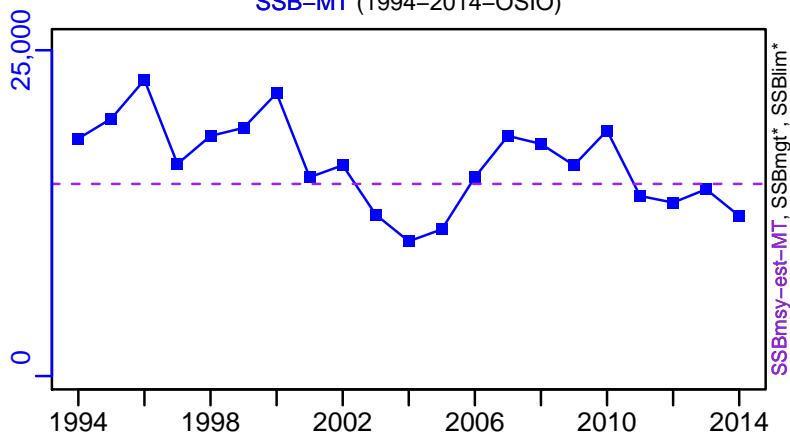
◆ Start Year   ◆ End Year   \* No Data

Whiting Black Sea [WHITMEDGSA29]

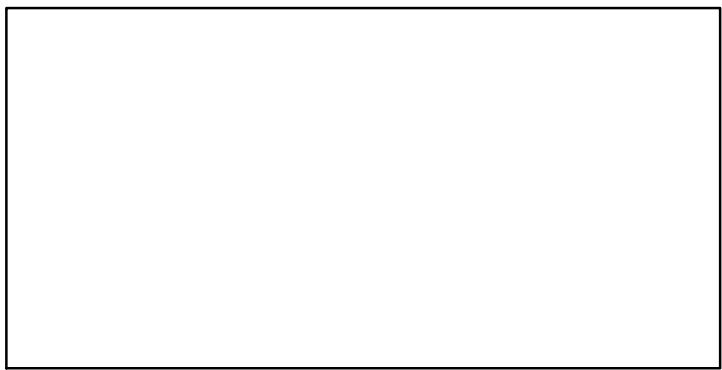
**TB\***



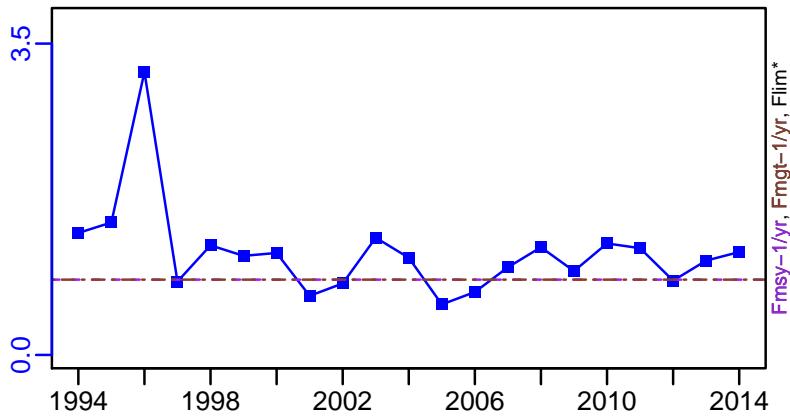
**SSB-MT (1994–2014–OSIO)**



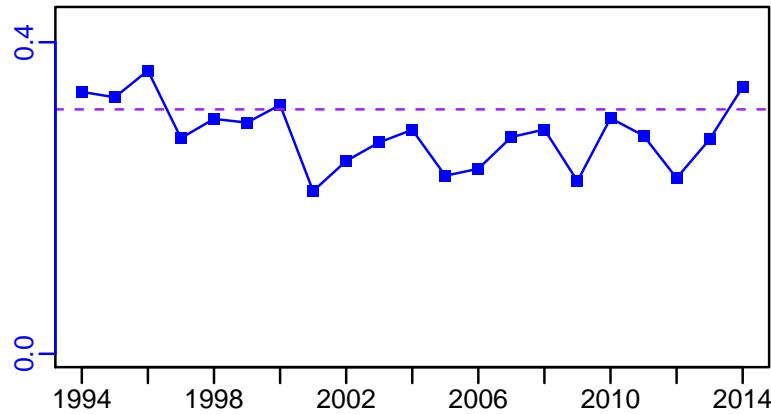
**TN \***



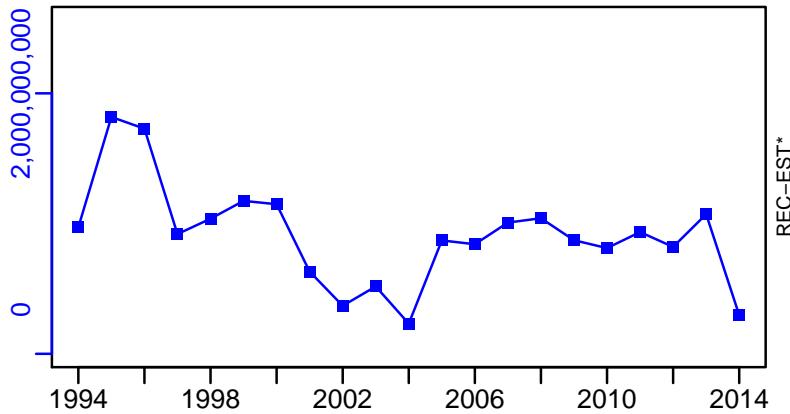
**F-1/yr (1994–2014–OSIO)**



**ER-calc-ratio (1994–2014–OSIO)**



**R-E00 (1994–2014–OSIO)**

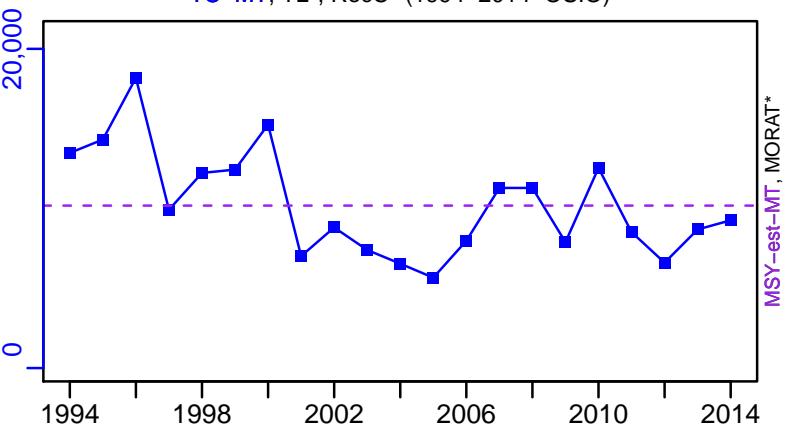


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	··· Lim BRP	* No Data

Whiting Black Sea [WHITMEDGSA29]

TC-MT, TL\*, RecC\* (1994–2014–OSIO)

TAC\*, Cpair\*, Cadv\*



MSY-est-MT, MORAT\*

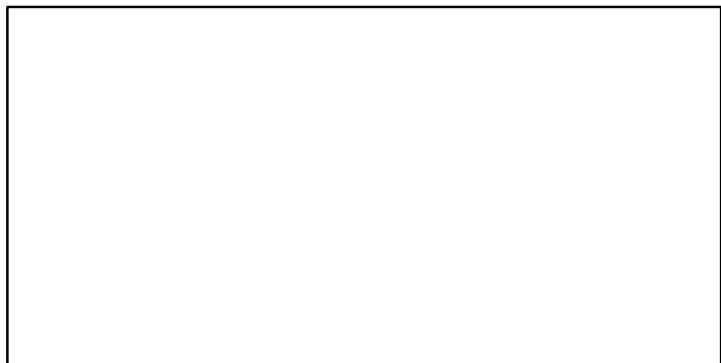
survB\*



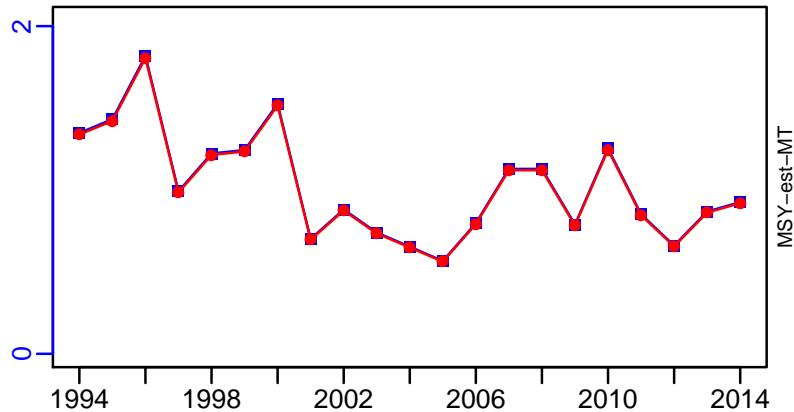
CPUE\*



EFFORT\*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1994–2014–OSIO)



MSY-est-MT

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