

European Union Stocks

v4.491 (Jan-06-2020)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgmt
1. ANCHIXa [Anchovy Portuguese Waters -East]	TB SSB	ER F	TB SSB	ER F
2. ANCHOBAYB [Anchovy Bay of Biscay]	TB SSB	ER F	TB SSB	ER F
3. ANGLVIIIC-IXa [Black bellied angler ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
4. ANGLVII-VIIAbd [Black bellied angler ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
5. ASHARNEATL [Angel shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
6. BERYXSPNEATL [Beryx spp Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
7. BJMACKXa2 [Blue jack mackerel Azores]	TB SSB	ER F	TB SSB	ER F
8. BKSFNEATL [Black scabbardfish Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
9. BLINGI-II-IIIa-IVa-VIII-IX-XII [Blue ling ICES 1-2-3a-4a-8-9-12]	TB SSB	ER F	TB SSB	ER F
10. BLINGVb-VI-VII [Blue ling ICES 5b-6-7]	TB SSB	ER F	TB SSB	ER F
11. BLRAYIVa-VI [Blonde ray ICES 4a-6]	TB SSB	ER F	TB SSB	ER F
12. BLRAYIVC-VIIId [Blonde ray ICES 4c-7d]	TB SSB	ER F	TB SSB	ER F
13. BLRAYIXa [Blonde ray Portuguese Waters -East]	TB SSB	ER F	TB SSB	ER F
14. BLRAYVIIafg [Blonde ray ICES 7afg]	TB SSB	ER F	TB SSB	ER F
15. BLRAYVIIe [Blonde ray Western English Channel]	TB SSB	ER F	TB SSB	ER F
16. BMDOGVIII-IXa [Blackmouth dogfish ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
17. BMDOGVI-VII [Blackmouth dogfish ICES 6-7]	TB SSB	ER F	TB SSB	ER F
18. BOARVI-VIII [Boarfish ICES 6-8]	TB SSB	ER F	TB SSB	ER F
19. BRILL2232 [Brill Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
20. BRILLIIla-IV-VIIId [Brill ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
21. BSKSHARNEATL [Basking shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
22. BWHITNEA [Blue whiting Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
23. CKRAYIIla-IV [Cuckoo ray ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
24. CKRAYIXa [Cuckoo ray Portuguese Waters -East]	TB SSB	ER F	TB SSB	ER F
25. CKRAYVIIIC [Cuckoo ray Bay of Biscay -South]	TB SSB	ER F	TB SSB	ER F
26. CKRAYVI-VII [Cuckoo ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
27. CODBA2224 [Atlantic cod Western Baltic]	TB SSB	ER F	TB SSB	ER F
28. CODBA2532 [Atlantic cod Eastern Baltic]	TB SSB	ER F	TB SSB	ER F
29. CODIIlaW-IV-VIIId [Atlantic cod ICES 3a(west)-4-7d]	TB SSB	ER F	TB SSB	ER F
30. CODIS [Atlantic cod Irish Sea]	TB SSB	ER F	TB SSB	ER F
31. CODKAT [Atlantic cod Kattegat]	TB SSB	ER F	TB SSB	ER F
32. CODVIA [Atlantic cod West of Scotland]	TB SSB	ER F	TB SSB	ER F
33. CODVIB [Atlantic cod Rockall Bank]	TB SSB	ER F	TB SSB	ER F
34. CODVIIlek [Atlantic cod Celtic Sea]	TB SSB	ER F	TB SSB	ER F
35. CUSKNEATL [Tusk Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
36. CUSKVa-XIV [Tusk ICES 5a-14]	TB SSB	ER F	TB SSB	ER F
37. CUSKVIB [Tusk Rockall Bank]	TB SSB	ER F	TB SSB	ER F
38. CUSKXII [Tusk North of Azores]	TB SSB	ER F	TB SSB	ER F
39. DAB2232 [Dab Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F

40. DABIIIa-IV [Dab ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
41. EBASSIVbc-VII [European seabass ICES 4bc-7]	TB SSB	ER F	TB SSB	ER F
42. EBASSVIa-VIIb-j [European seabass ICES 4a-7b-j]	TB SSB	ER F	TB SSB	ER F
43. EBASSVIIlab [European seabass ICES 8ab]	TB SSB	ER F	TB SSB	ER F
44. EBASSVIIlc-IXa [European seabass ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
45. EFLOUN2223 [European flounder Subdivisions 22-23]	TB SSB	ER F	TB SSB	ER F
46. EFLOUN2425 [European flounder Subdivisions 24-25]	TB SSB	ER F	TB SSB	ER F
47. EFLOUN26-28 [European flounder Subdivisions 26-28]	TB SSB	ER F	TB SSB	ER F
48. EFLOUN27-2932 [European flounder Subdivisions 27 and 29-32]	TB SSB	ER F	TB SSB	ER F
49. EFLOUNIIIa-IV [European flounder ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
50. EPOLLIV-IIIa [European pollack ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
51. EPOLLVIII-IXa [European pollack ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
52. FMEG8c9a [Fourspotted megrim ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
53. GFORKNEATL [Greater forkbeard Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
54. GGURNIIIa-IV-VIId [Grey gurnard ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
55. GHALV-VI-XII-XIV [Greenland halibut ICES 5-6-12-14]	TB SSB	ER F	TB SSB	ER F
56. GOLDREDV-VI-XII-XIV [Golden redfish ICES 5-6-12-14]	TB SSB	ER F	TB SSB	ER F
57. GSSMELTI-II-IIIa-IV [Greater silver smelt ICES 1-2-3a-4]	TB SSB	ER F	TB SSB	ER F
58. GSSMELTVIb-VII-VIII-IX-X-XII [Greater silver smelt ICES 6b-7-8-9-10-12]	TB SSB	ER F	TB SSB	ER F
59. HADIS [Haddock Irish Sea]	TB SSB	ER F	TB SSB	ER F
60. HADNS-IIIa-VIa [Haddock ICES 3a-4-6a]	TB SSB	ER F	TB SSB	ER F
61. HADROCK [Haddock Rockall Bank]	TB SSB	ER F	TB SSB	ER F
62. HADVIIb-k [Haddock ICES 7b-k]	TB SSB	ER F	TB SSB	ER F
63. HAKENRTN [Hake ICES 3a-4-6-7-8abd]	TB SSB	ER F	TB SSB	ER F
64. HAKESOTH [Hake ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
65. HERR2224IIIa [Herring ICES 22-24-3a]	TB SSB	ER F	TB SSB	ER F
66. HERR2529-32 [Herring Subdivisions 25-29 and 32]	TB SSB	ER F	TB SSB	ER F
67. HERR30-31 [Herring Subdivisions 30-31]	TB SSB	ER F	TB SSB	ER F
68. HERRNIRS [Herring Irish Sea]	TB SSB	ER F	TB SSB	ER F
69. HERRNS-IIIa-VIId [Herring ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
70. HERRRIGA [Herring Gulf of Riga East of Gotland]	TB SSB	ER F	TB SSB	ER F
71. HERRSIRS [Herring ICES 7a-g-h-j]	TB SSB	ER F	TB SSB	ER F
72. HERRVIa [Herring West of Scotland]	TB SSB	ER F	TB SSB	ER F
73. HERRVIaVIIbc [Herring ICES 5a-7bc]	TB SSB	ER F	TB SSB	ER F
74. HMACKIIIa-IVa-Vb-VIa-VII-VIII [Horse mackerel ICES 2a-4a-5b-6a-7-8]	TB SSB	ER F	TB SSB	ER F
75. HMACKIIIa-IVbc-VIId [Horse mackerel ICES 3a-4bc-7d]	TB SSB	ER F	TB SSB	ER F
76. HMACKIXa [Horse mackerel Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
77. KFSHARNEATL [Kitefin shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
78. LGSHARNEATL [Leafscale gulper shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
79. LINGNEATL [Ling Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
80. LSDOGIIIa-IV-VIId [Lesser spotted dogfish ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
81. LSDOGVIIab [Lesser spotted dogfish ICES 8abd]	TB SSB	ER F	TB SSB	ER F
82. LSDOGVIIlc-IXa [Lesser spotted dogfish ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
83. LSDOGVI-VIIabcefghij [Lesser spotted dogfish ICES 6-7abcefghij]	TB SSB	ER F	TB SSB	ER F
84. LSOLEIIIa-IV-VIId [Lemon sole ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
85. MACKNEICES [Mackerel ICES Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
86. MEG8c9a [Megrim ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F

87. MEGSPPIVa-VIa [Megrim spp ICES 4a-6a]	TB SSB	ER F	TB SSB	ER F
88. MEGSPPVlb [Megrim spp Rockall Bank]	TB SSB	ER F	TB SSB	ER F
89. MEGVII-VIIIabd [Megrim ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
90. NEPHFU10 [Norway lobster Noup (FU 10)]	TB SSB	ER F	TB SSB	ER F
91. NEPHFU11 [Norway lobster North Minch (FU 11)]	TB SSB	ER F	TB SSB	ER F
92. NEPHFU12 [Norway lobster South Minch (FU 12)]	TB SSB	ER F	TB SSB	ER F
93. NEPHFU13 [Norway lobster Firth of Clyde and Sound of Jura (FU 13)]	TB SSB	ER F	TB SSB	ER F
94. NEPHFU14 [Norway lobster Irish Sea East (FU 14)]	TB SSB	ER F	TB SSB	ER F
95. NEPHFU15 [Norway lobster Irish Sea West (FU 15)]	TB SSB	ER F	TB SSB	ER F
96. NEPHFU16 [Norway lobster Porcupine Bank (FU 16)]	TB SSB	ER F	TB SSB	ER F
97. NEPHFU17 [Norway lobster Aran Grounds (FU 17)]	TB SSB	ER F	TB SSB	ER F
98. NEPHFU19 [Norway lobster South East and West of IRL (FU 19)]	TB SSB	ER F	TB SSB	ER F
99. NEPHFU2021 [Norway lobster Labadie, Jones and Cockburn (FU 20-21)]	TB SSB	ER F	TB SSB	ER F
100. NEPHFU22 [Norway lobster Smalls (FU 22)]	TB SSB	ER F	TB SSB	ER F
101. NEPHFU25 [Norway lobster North Galicia (FU 25)]	TB SSB	ER F	TB SSB	ER F
102. NEPHFU2627 [Norway lobster West Galicia and North Portugal (FU 26-27)]	TB SSB	ER F	TB SSB	ER F
103. NEPHFU2829 [Norway lobster South-West and South Portugal (FU 28-29)]	TB SSB	ER F	TB SSB	ER F
104. NEPHFU30 [Norway lobster Gulf of Cadiz (FU 30)]	TB SSB	ER F	TB SSB	ER F
105. NEPHFU31 [Norway lobster Cantabrian Sea (FU 31)]	TB SSB	ER F	TB SSB	ER F
106. NEPHFU32 [Norway lobster Norwegian Deeps (FU 32)]	TB SSB	ER F	TB SSB	ER F
107. NEPHFU33 [Norway lobster Off Horn Reef (FU 33)]	TB SSB	ER F	TB SSB	ER F
108. NEPHFU34 [Norway lobster Devils Hole (FU 34)]	TB SSB	ER F	TB SSB	ER F
109. NEPHFU3-4 [Norway lobster Skagerak Kattegat (FU 3-4)]	TB SSB	ER F	TB SSB	ER F
110. NEPHFU5 [Norway lobster Botney Cut - Silver Pit (FU 5)]	TB SSB	ER F	TB SSB	ER F
111. NEPHFU6 [Norway lobster Farn Deeps (FU 6)]	TB SSB	ER F	TB SSB	ER F
112. NEPHFU7 [Norway lobster Fladen Ground (FU 7)]	TB SSB	ER F	TB SSB	ER F
113. NEPHFU8 [Norway lobster Firth of Forth (FU 8)]	TB SSB	ER F	TB SSB	ER F
114. NEPHFU9 [Norway lobster Moray Firth (FU 9)]	TB SSB	ER F	TB SSB	ER F
115. NEPHIV [Norway lobster North Sea]	TB SSB	ER F	TB SSB	ER F
116. NEPHVIa [Norway lobster West of Scotland]	TB SSB	ER F	TB SSB	ER F
117. NEPHVII [Norway lobster ICES 7]	TB SSB	ER F	TB SSB	ER F
118. NEPHVIIIab [Norway lobster ICES 8ab]	TB SSB	ER F	TB SSB	ER F
119. NPOUTIIla-IV [Norway pout ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
120. NPOUTVIa [Norway pout West of Scotland]	TB SSB	ER F	TB SSB	ER F
121. OROUGHYNEATL [Orange roughy Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
122. PANDALIIlaW-IVaE [Northern shrimp ICES 3a(west)-4a(east)]	TB SSB	ER F	TB SSB	ER F
123. PANDALIVa [Northern shrimp Northern North Sea]	TB SSB	ER F	TB SSB	ER F
124. PLAIC2123 [European plaice Subdivisions 21-23]	TB SSB	ER F	TB SSB	ER F
125. PLAIC2432 [European plaice Subdivisions 24-32]	TB SSB	ER F	TB SSB	ER F
126. PLAIC7d [European plaice Eastern English Channel]	TB SSB	ER F	TB SSB	ER F
127. PLAICCELT [European plaice Celtic Sea]	TB SSB	ER F	TB SSB	ER F
128. PLAICECHW [European plaice Western English Channel]	TB SSB	ER F	TB SSB	ER F
129. PLAICIS [European plaice Irish Sea]	TB SSB	ER F	TB SSB	ER F
130. PLAICNS [European plaice North Sea]	TB SSB	ER F	TB SSB	ER F
131. PLAICVIIbc [European plaice ICES 7bc]	TB SSB	ER F	TB SSB	ER F

132. PLAICVIIh-k [European plaice ICES 7h-k]	TB SSB	ER F	TB SSB	ER F
133. PLAICVIII-IXa [European plaice ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
134. POLLNS-VI-IIla [Pollock ICES 3a-4-6]	TB SSB	ER F	TB SSB	ER F
135. PORSHARNEATL [Porbeagle shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
136. RBRMIX [Red seabream ICES 9]	TB SSB	ER F	TB SSB	ER F
137. RBRMVI-VII-VIII [Red seabream ICES 6-7-8]	TB SSB	ER F	TB SSB	ER F
138. RBRMX [Red seabream Azores Grounds]	TB SSB	ER F	TB SSB	ER F
139. REDDEEPXIVb [Beaked redfish Southeast Greenland]	TB SSB	ER F	TB SSB	ER F
140. RGURNNEATL [Red gurnard Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
141. RHGRENNEATL [Roughhead grenadier Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
142. RNGENI-II-IV-Va2-VIII-IX-XIVab2 [Roundnose grenadier ICES 1-2-4-5a2-8-9-14ab2]	TB SSB	ER F	TB SSB	ER F
143. RNGENMATLR [Roundnose grenadier Mid-Atlantic Ridge]	TB SSB	ER F	TB SSB	ER F
144. RNGENVb-VI-VII-XIIb [Roundnose grenadier ICES 5b-6-7-12b]	TB SSB	ER F	TB SSB	ER F
145. RNGRENIlla [Roundnose grenadier Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
146. SARDPVIIIc-IXa [Sardine ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
147. SARDVII [Sardine ICES 7]	TB SSB	ER F	TB SSB	ER F
148. SARDVIIab [Sardine ICES 8abd]	TB SSB	ER F	TB SSB	ER F
149. SDRAYVI-VII [Sandy ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
150. SEELNSSA1 [Sand eel Sandeel Area 1]	TB SSB	ER F	TB SSB	ER F
151. SEELNSSA2 [Sand eel Sandeel Area 2]	TB SSB	ER F	TB SSB	ER F
152. SEELNSSA3 [Sand eel Sandeel Area 3]	TB SSB	ER F	TB SSB	ER F
153. SEELNSSA4 [Sand eel Sandeel Area 4]	TB SSB	ER F	TB SSB	ER F
154. SEELNSSA5 [Sand eel Sandeel Area 5]	TB SSB	ER F	TB SSB	ER F
155. SEELNSSA6 [Sand eel Sandeel Area 6]	TB SSB	ER F	TB SSB	ER F
156. SEELNSSA7 [Sand eel Sandeel Area 7]	TB SSB	ER F	TB SSB	ER F
157. SEELVla [Sand eel West of Scotland]	TB SSB	ER F	TB SSB	ER F
158. SERAYVIIde [Smalleyed ray ICES 7de]	TB SSB	ER F	TB SSB	ER F
159. SERAYVIIif-g [Smalleyed ray Celtic Sea]	TB SSB	ER F	TB SSB	ER F
160. SGRAYVI-VII [Shagreen ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
161. SHSPPNNEATL [Smooth hound Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
162. SOLECS [Common sole Celtic Sea]	TB SSB	ER F	TB SSB	ER F
163. SOLEIIlla-2224 [Common sole ICES 22-24-3a]	TB SSB	ER F	TB SSB	ER F
164. SOLEIS [Common sole Irish Sea]	TB SSB	ER F	TB SSB	ER F
165. SOLENS [Common sole North Sea]	TB SSB	ER F	TB SSB	ER F
166. SOLEVIIbc [Common sole ICES 7bc]	TB SSB	ER F	TB SSB	ER F
167. SOLEVIIld [Common sole Eastern English Channel]	TB SSB	ER F	TB SSB	ER F
168. SOLEVIIle [Common sole Western English Channel]	TB SSB	ER F	TB SSB	ER F
169. SOLEVIIh-k [Common sole ICES 7h-k]	TB SSB	ER F	TB SSB	ER F
170. SOLEVIIlab [Common sole ICES 8ab]	TB SSB	ER F	TB SSB	ER F
171. SOLEVIIlc-IXa [Common sole ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
172. SPRAT22-32 [Sprat Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
173. SPRATIIlla [Sprat Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
174. SPRATNS [Sprat North Sea]	TB SSB	ER F	TB SSB	ER F
175. SPRATVIId [Sprat ICES 7de]	TB SSB	ER F	TB SSB	ER F
176. SPRATVI-VIIabcfgijkl [Sprat ICES 6-7abcfgijkl]	TB SSB	ER F	TB SSB	ER F
177. SPRAYIIlla-IV-VIId [Spotted ray ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
178. SPRAYIXa [Spotted ray Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
179. SPRAYVIIlaefgh [Spotted ray ICES 7aefgh]	TB SSB	ER F	TB SSB	ER F

180. SPRAYVIII [Spotted ray Bay of Biscay]	TB SSB	ER F	TB SSB	ER F
181. SPRAYVI-VIbj [Spotted ray ICES 6-7bj]	TB SSB	ER F	TB SSB	ER F
182. SPURDNEATL [Spurdog Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
183. STRAYII-IIla-IV [Starry ray ICES 2-3a-4]	TB SSB	ER F	TB SSB	ER F
184. STRMULLIIla-IV-VIId [Striped red mullet ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
185. STRMULLVI-VIIabcefghijk-VIII-IXa [Striped red mullet ICES 6-7abcefghijk-8-9a]	TB SSB	ER F	TB SSB	ER F
186. STROUT22-32 [Sea trout Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
187. TBSKAIIla-IV-VIId [Thornback skate ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
188. TBSKAIXa [Thornback skate Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
189. TBSKAVI [Thornback skate ICES 6]	TB SSB	ER F	TB SSB	ER F
190. TBSKAVIIafg [Thornback skate ICES 7afg]	TB SSB	ER F	TB SSB	ER F
191. TBSKAVille [Thornback skate Western English Channel]	TB SSB	ER F	TB SSB	ER F
192. TBSKAVIII [Thornback skate Bay of Biscay]	TB SSB	ER F	TB SSB	ER F
193. TPSHARNEATL [Tope shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
194. TUR2232 [Turbot Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
195. TURIlla [Turbot Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
196. TURIV [Turbot North Sea]	TB SSB	ER F	TB SSB	ER F
197. URAYVIIde [Undulate ray ICES 7de]	TB SSB	ER F	TB SSB	ER F
198. URAYVIIlab [Undulate ray ICES 8ab]	TB SSB	ER F	TB SSB	ER F
199. WANGVIIlc-IXa [White anglerfish ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
200. WANGVII-VIIabld [White anglerfish ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
201. WHITIIla [Whiting Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
202. WHITNS-VIId [Whiting ICES 4-7d]	TB SSB	ER F	TB SSB	ER F
203. WHITVla [Whiting West of Scotland]	TB SSB	ER F	TB SSB	ER F
204. WHITVlb [Whiting Rockall Bank]	TB SSB	ER F	TB SSB	ER F
205. WHITVlla [Whiting Irish Sea]	TB SSB	ER F	TB SSB	ER F
206. WHITVllek [Whiting Celtic Sea]	TB SSB	ER F	TB SSB	ER F
207. WHITVIII-IXa [Whiting ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
208. WITFLOUNIIla-IV-VIId [Witch flounder ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F

Anchovy Portuguese Waters -East [ANCHIXa]

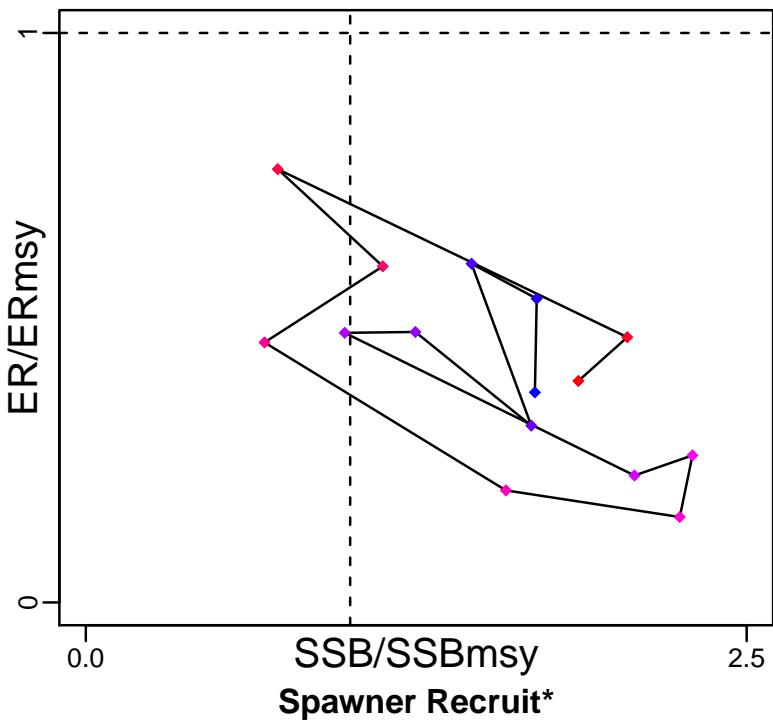
Metadata	
Scientific Name	Engraulis encrasicolus
Current Assess ID	WGHANSA-ANCHIXa-1989-2018-ICESIMP2018
Area	Portuguese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2016, 2016, 2018, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2016	14,598
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2016	0.651
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2018	2362
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	11,704
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-relative	2018	1440
Flim	-	-	-
ERlim	-	-	-

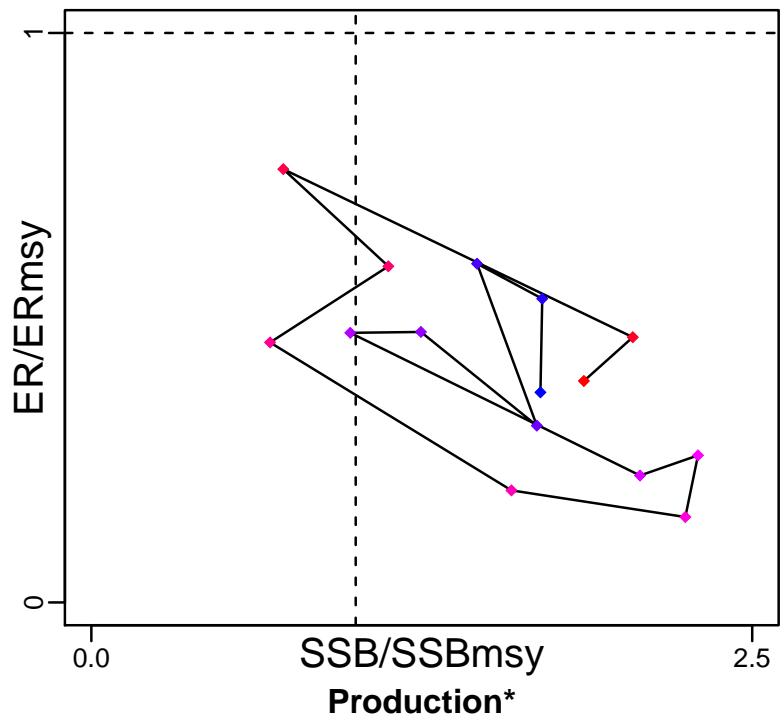
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-relative	2018	0.589	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-relative	2018	0.891	-	0 to 3	
ER	ER-ratio	2016	0.253	-	-	
TC	-	-	-			
TL	TL-MT	2016	9420			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2016	3.411			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2016	0.389			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Anchovy Portuguese Waters –East [ANCHIXa]

Kobe MSYpref (1989–2016–ICESIMP2018)



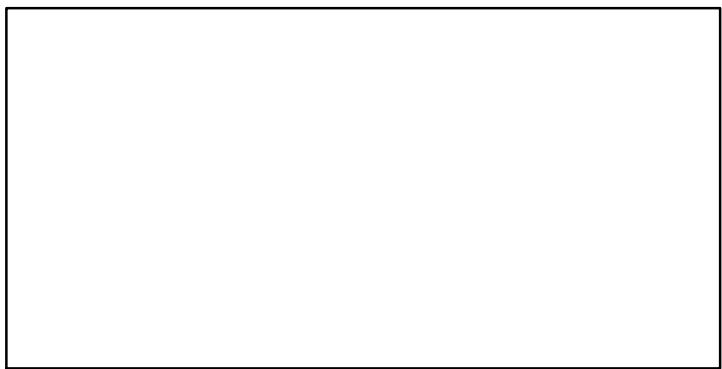
Kobe MGTpref (1989–2016–ICESIMP2018)



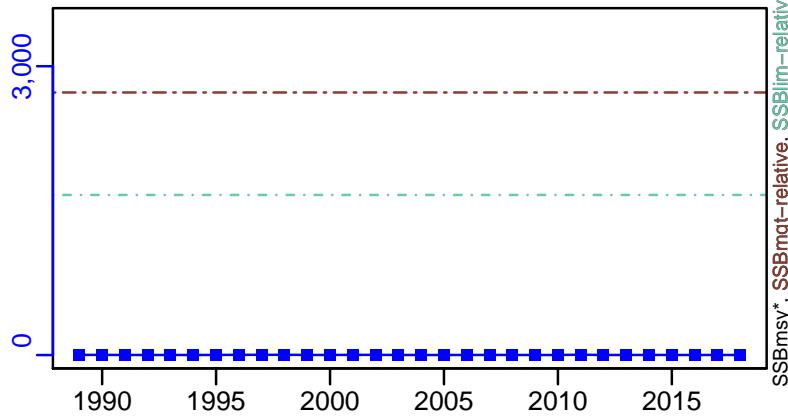
◆ Start Year ◆ End Year * No Data

Anchovy Portuguese Waters –East [ANCHIXa]

TB*



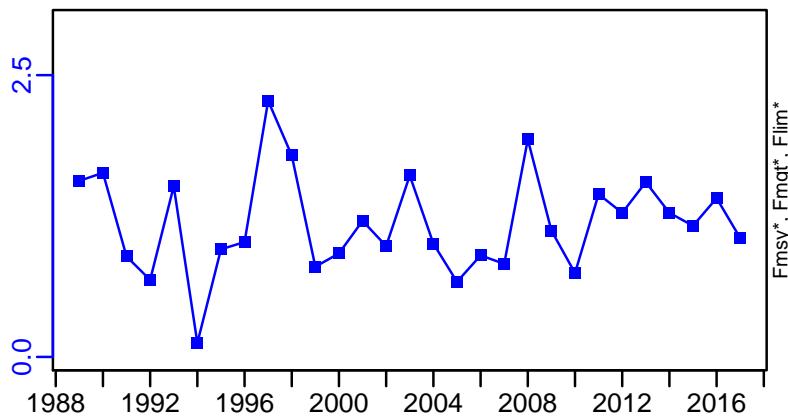
SSB-relative (1989–2018–ICESIMP2018)



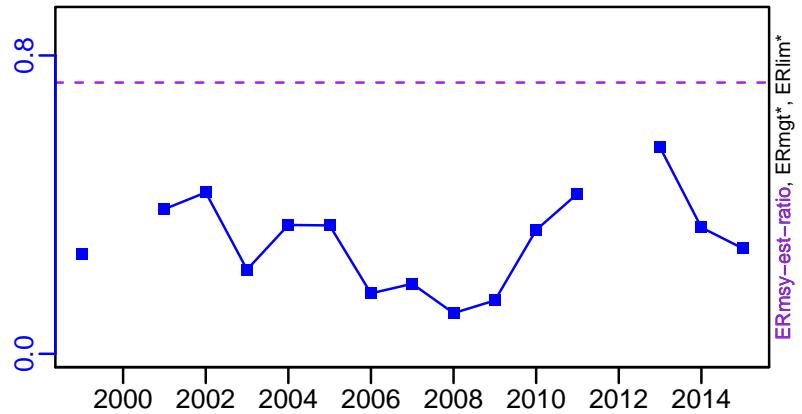
TN *



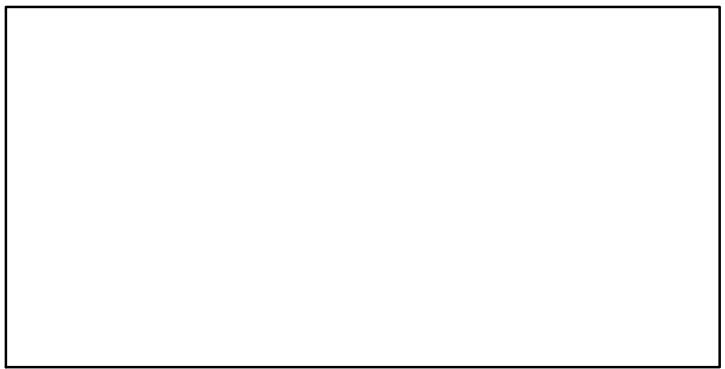
F-relative (1989–2018–ICESIMP2018)



ER-ratio (1989–2016–ICESIMP2018)



Recruits*

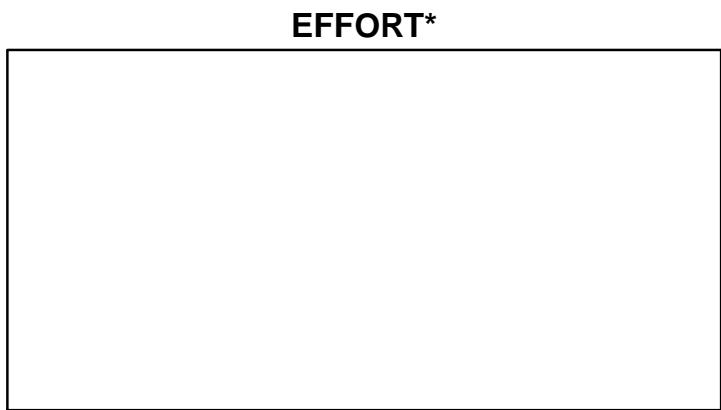
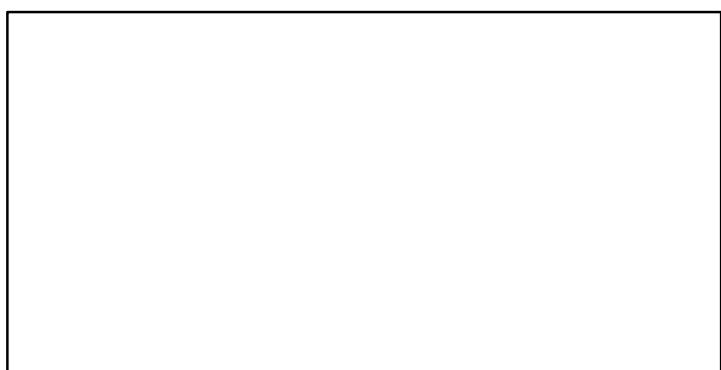
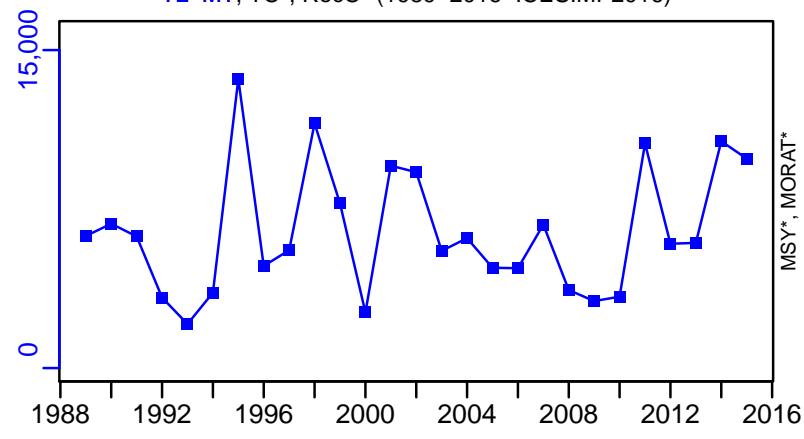


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

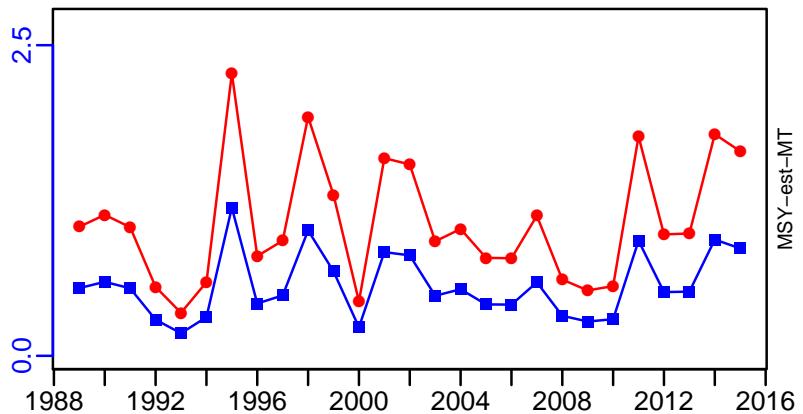
Anchovy Portuguese Waters –East [ANCHIXa]

TL–MT, TC*, RecC* (1989–2016–ICESIMP2016)

TAC*, Cpair*, Cadv*



TL–MT/MSY–est–MT, CdivMEANC–ratio, (1989–2016–ICESIMP2018)



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

Anchovy Bay of Biscay [ANCHOBAYB]

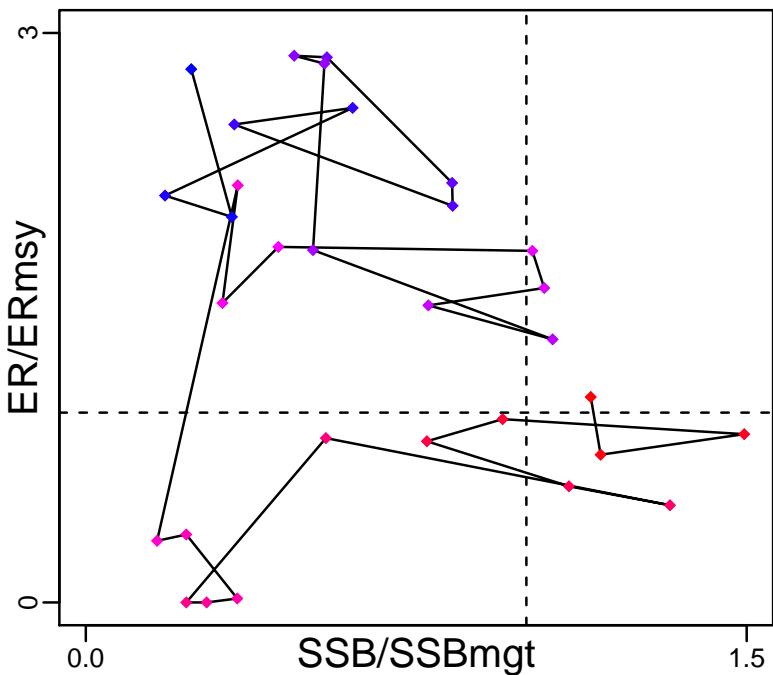
Metadata	
Scientific Name	Engraulis encrasicolus
Current Assess ID	WGHANSA-ANCHOBAYB-1986-2017-ICESIMP2018
Area	Bay of Biscay
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2014	49,781
SSBmsy	SSBmsy-est-MT	2015	50,243
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.24
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	89,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	36,070
M	M-1/yr	2007	1.2
TBlim	TBlim-MT	2014	21,000
SSBlim	SSBlim-MT	2017	21,000
Flim	-	-	-
ERlim	-	-	-

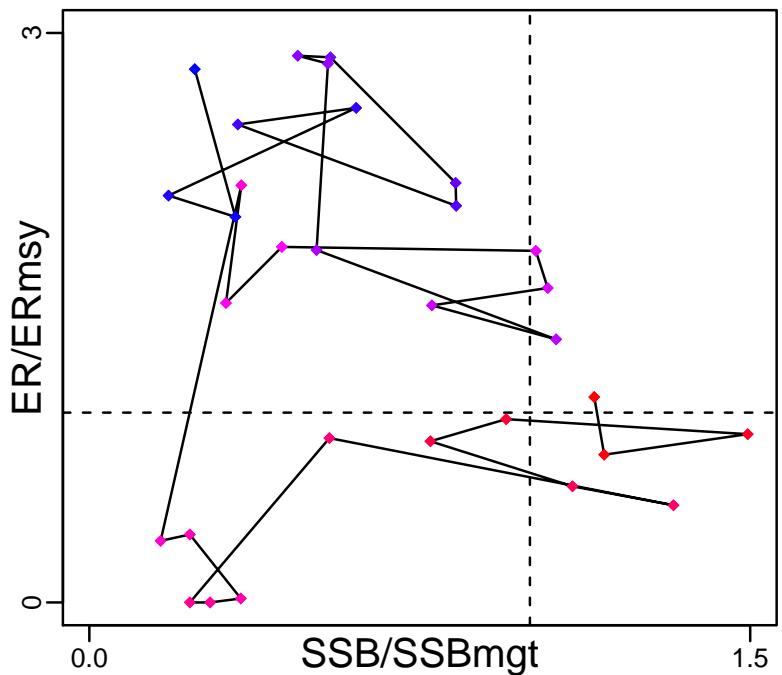
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	153,000	Both	-
SSB	SSB-MT	2017	102,000	Both	-
TN	-	-	-	-	-
R	R-MT	2017	98,700	-	1
F	F-1/yr	2014	0.222	-	1+
ER	ER-ratio	2017	0.26	-	-
TC	TC-MT	2017	26,500		
TL	TL-MT	2017	26,500		
TB/TBmsy	TB-MT/TBmsy-est-MT	2014	1.33		
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2015	2.926		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2017	1.082		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.146		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Anchovy Bay of Biscay [ANCHOBAYB]

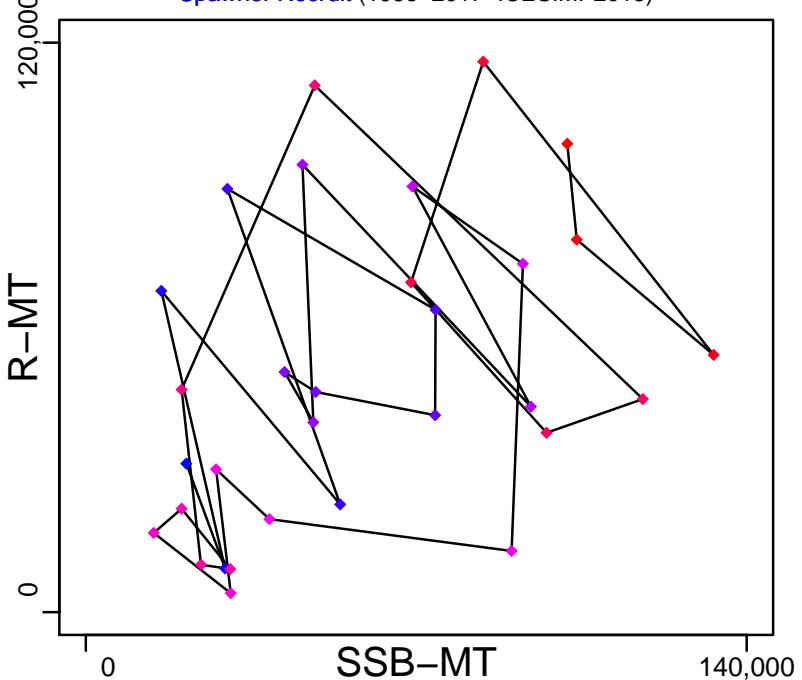
Kobe MSYpref (1986–2017–ICESIMP2018)



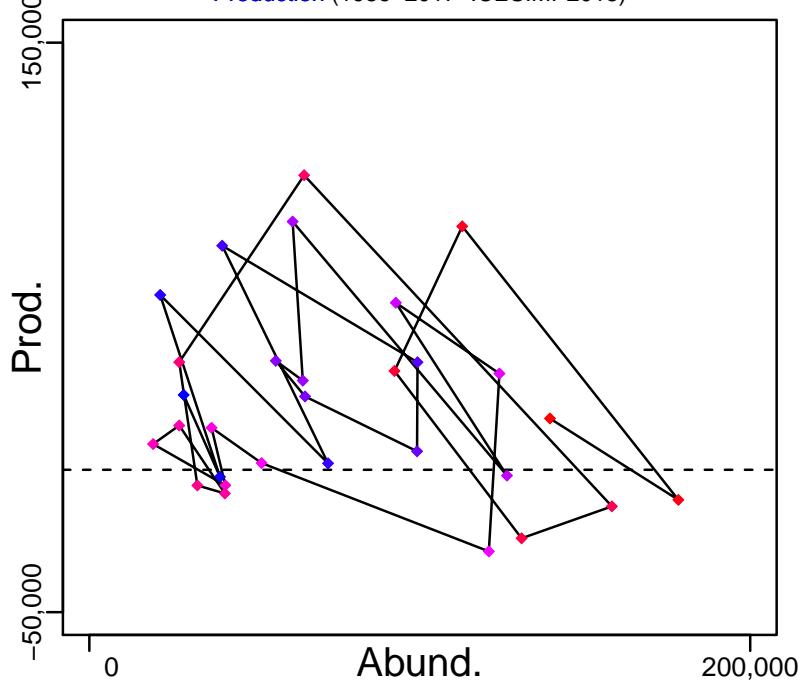
Kobe MGTpref (1986–2017–ICESIMP2018)



Spawner Recruit (1986–2017–ICESIMP2018)



Production (1986–2017–ICESIMP2018)

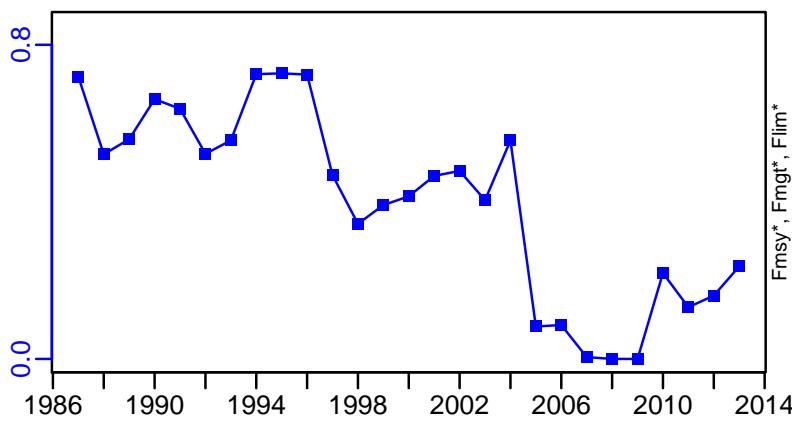
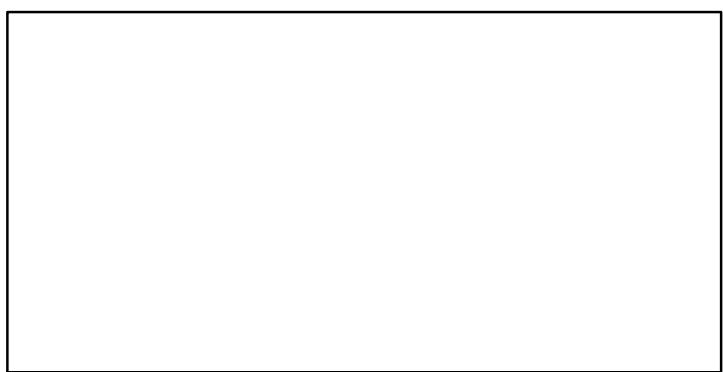
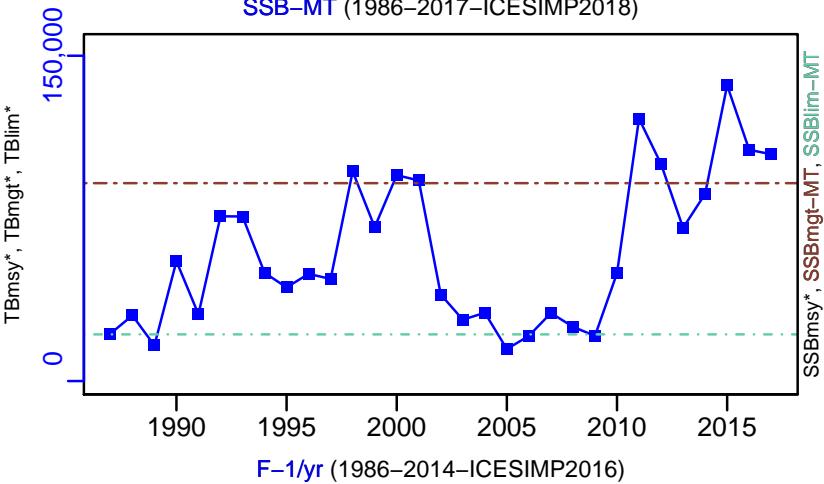
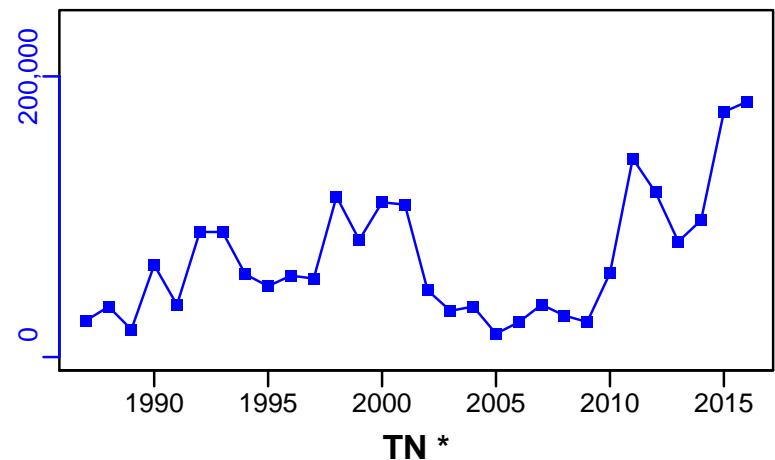


◆ Start Year ◆ End Year * No Data

Anchovy Bay of Biscay [ANCHOBAYB]

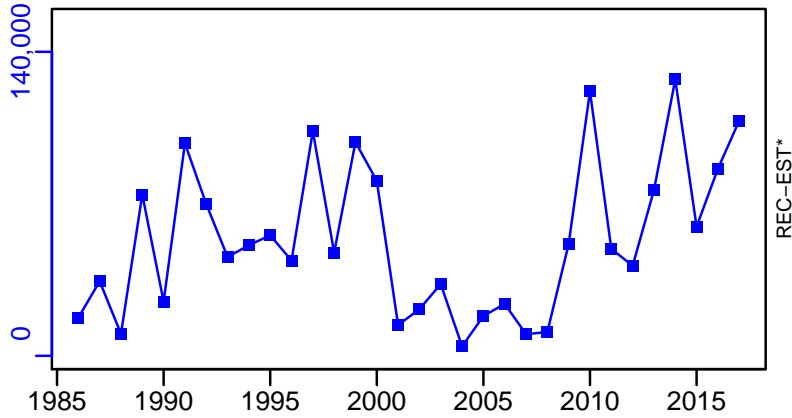
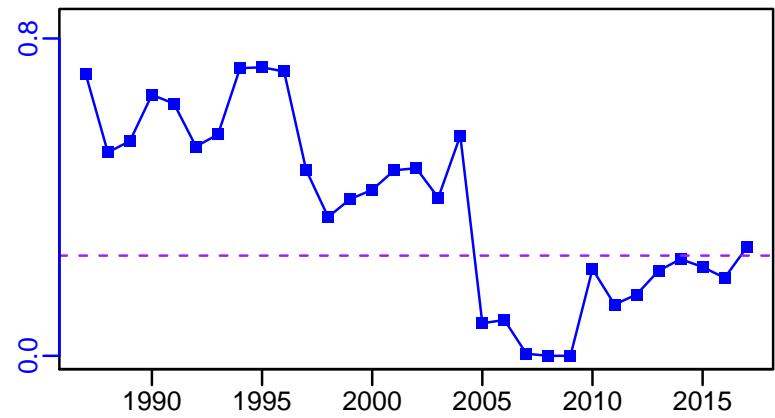
TB-MT (1986–2016–ICESIMP2018)

SSB-MT (1986–2017–ICESIMP2018)



ER-ratio (1986–2017–ICESIMP2018)

R-MT (1986–2017–ICESIMP2018)

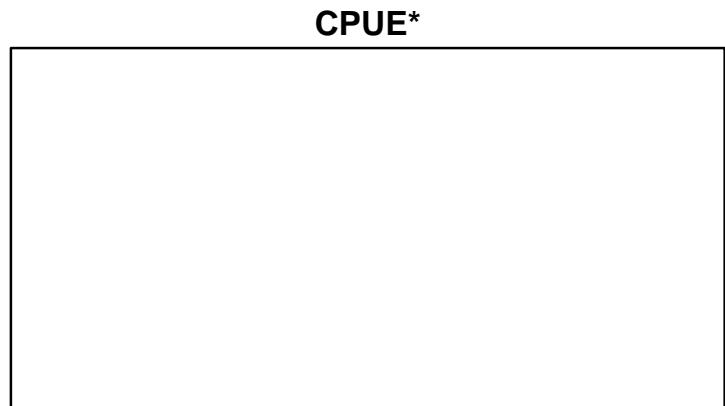
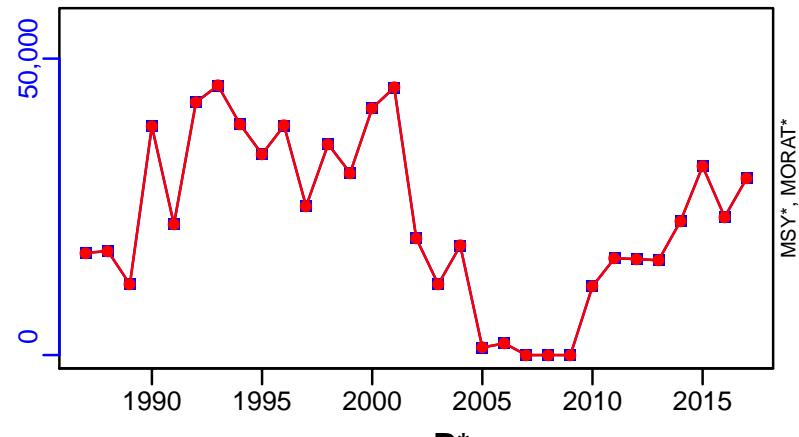


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

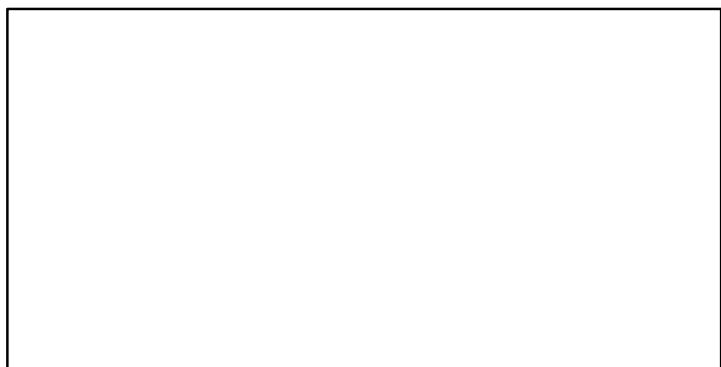
Anchovy Bay of Biscay [ANCHOBAYB]

TC-MT, TL-MT, RecC* (1986–2017–ICESIMP2018)

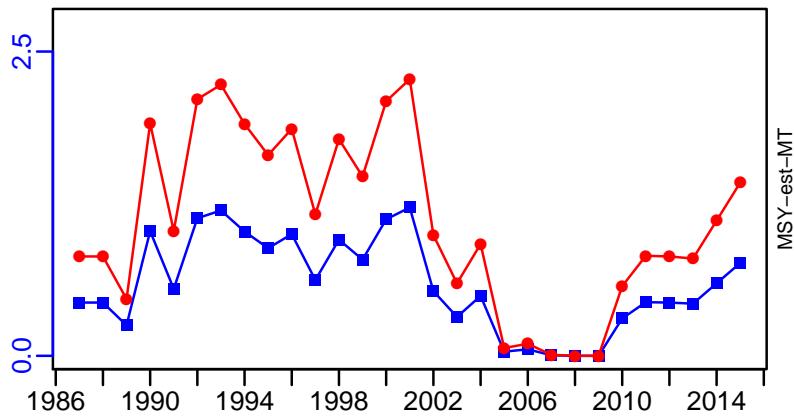
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1986–2015–ICESIMP2016)



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

Black bellied angler ICES 8c-9a [ANGLVIIIC-IXa]

Metadata	
Scientific Name	Lophius budegassa
Current Assess ID	WGBIE-ANGLVIIIC-IXa-1980-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018, 2011, 2012, 2013

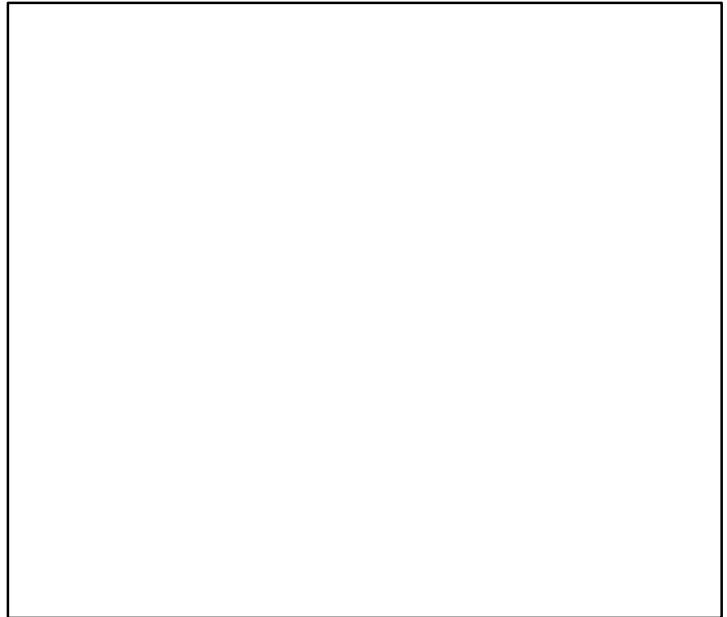
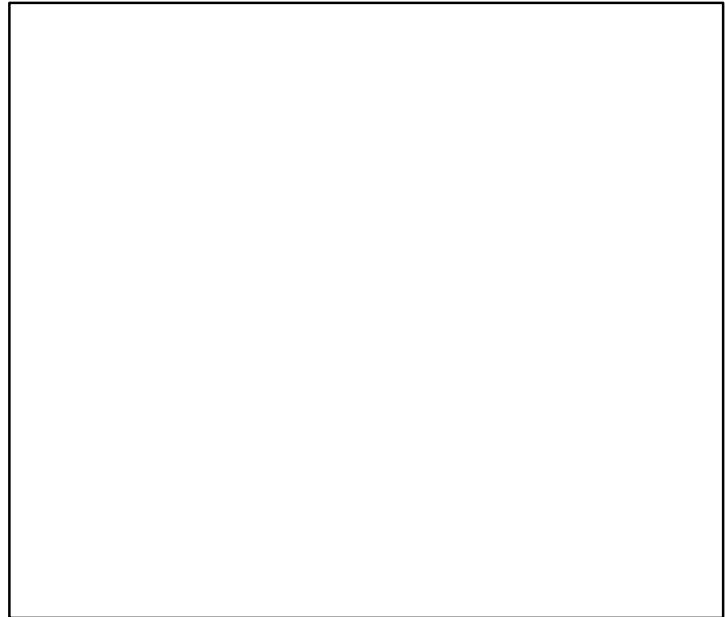
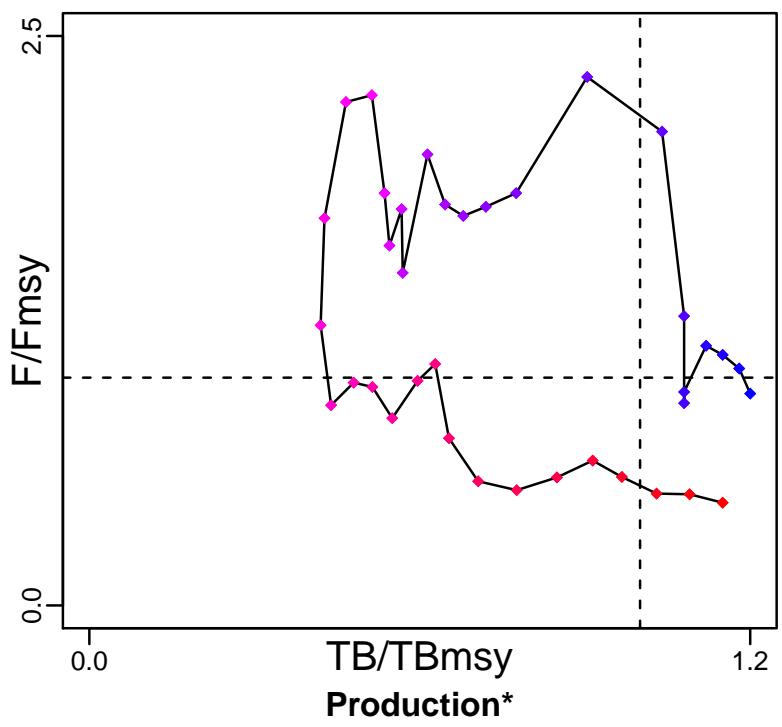
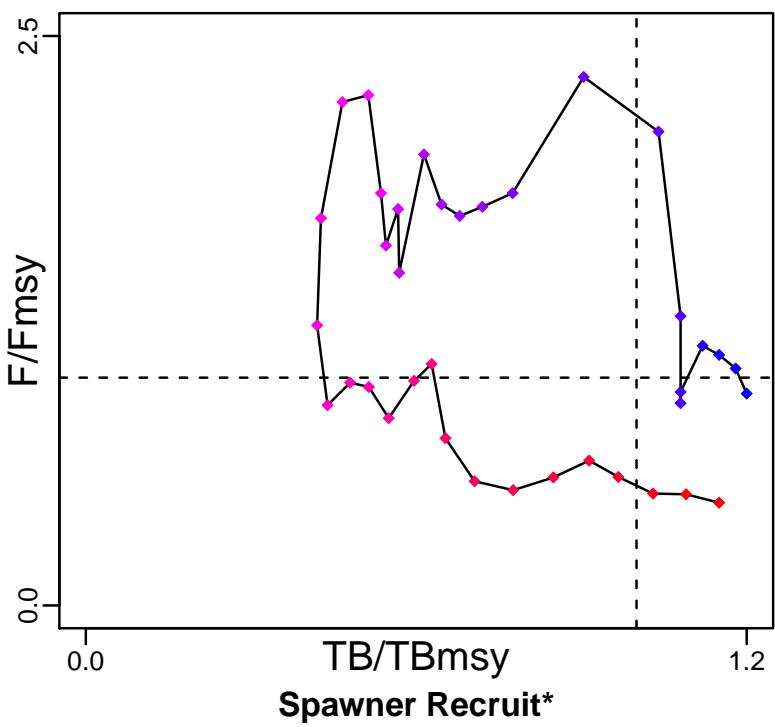
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-relative	2018	1.38	Both	-	
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	F-relative	2018	0.342	-	-	
ER	-	-	-	-	-	-
TC	-	-	-			
TL	TL-MT	2018	861			
TB/TBmsy	TBdivTBmsy-dimensionless	2017	1.2			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2016	1.11			
F/Fmsy	FdivFmsy-dimensionless	2017	0.451			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Black bellied angler ICES 8c–9a [ANGLVIIIC–IXa]

Kobe MSYpref (1980–2017–ICESIMP2018)

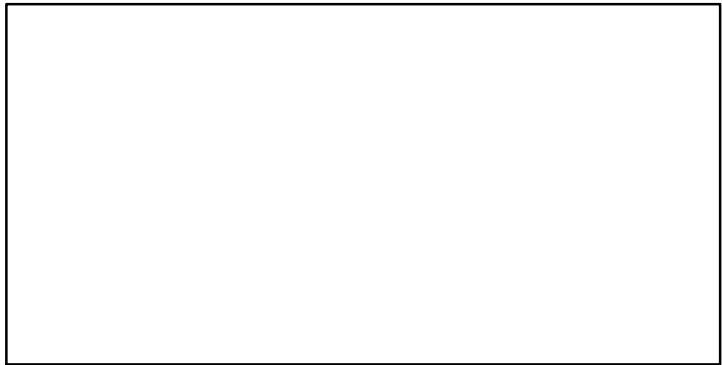
Kobe MGTpref (1980–2017–ICESIMP2018)



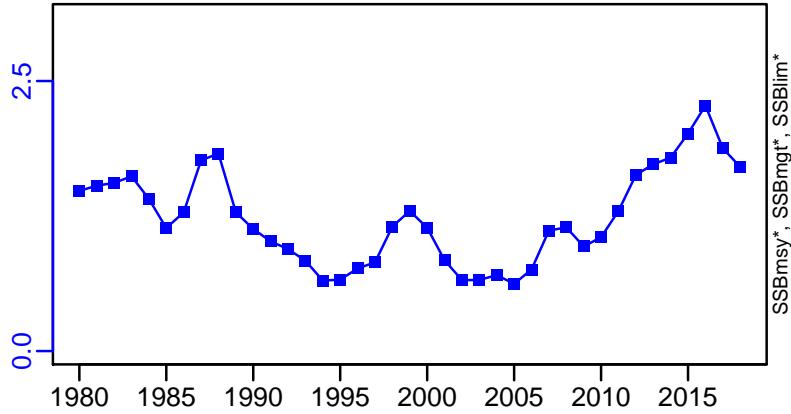
◆ Start Year	◆ End Year	*	No Data
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Black bellied angler ICES 8c–9a [ANGLVIIIC–IXa]

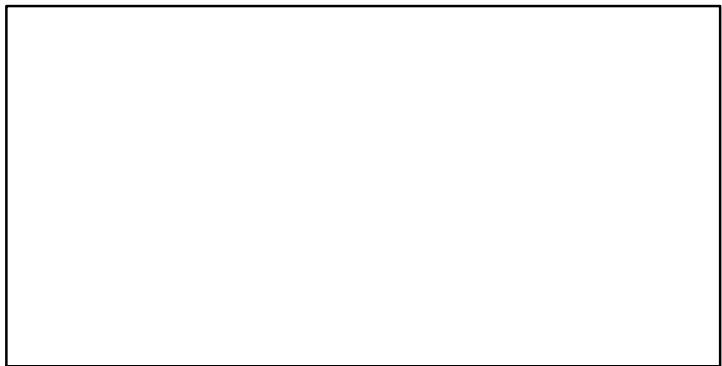
TB*



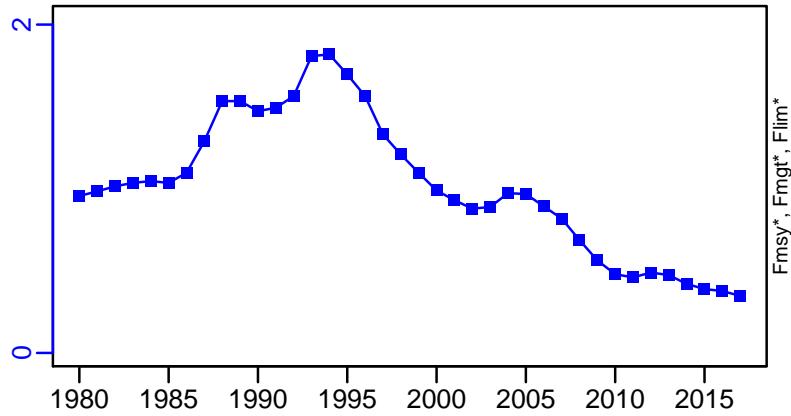
SSB-relative (1980–2018–ICESIMP2018)



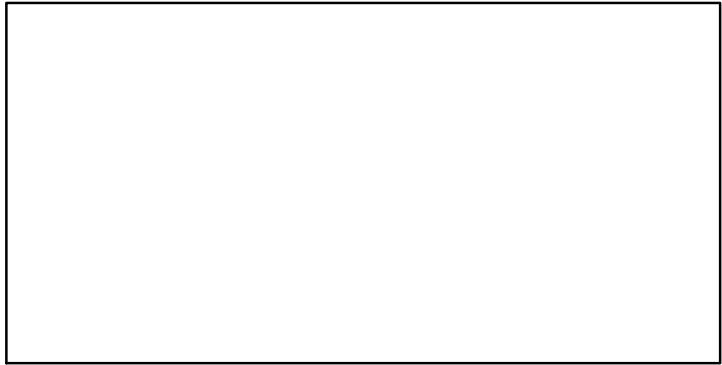
TN *



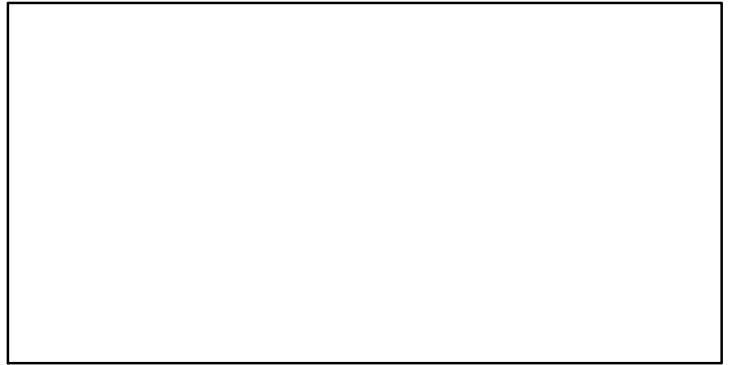
F-relative (1980–2018–ICESIMP2018)



ER*



Recruits*

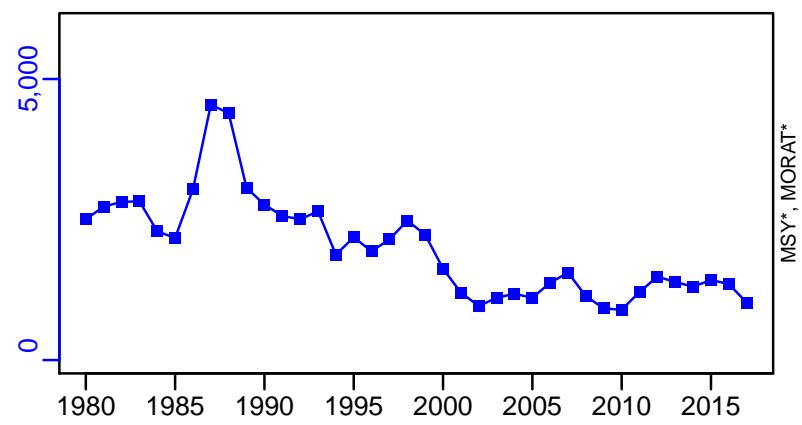


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Black bellied angler ICES 8c–9a [ANGLVIIIC–IXa]

TL–MT, TC*, RecC* (1980–2018–ICESIMP2018)

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 |

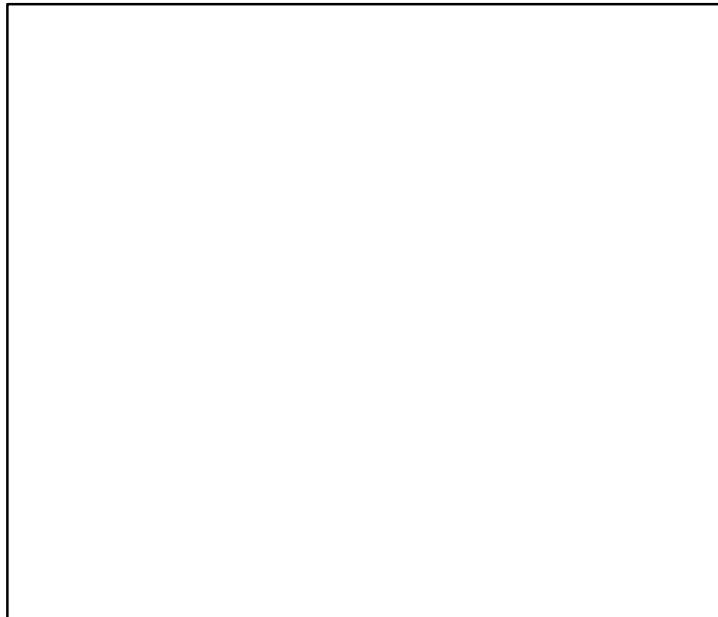
Black bellied angler ICES 7-8abd [ANGLVII-VIIIabd]

Metadata	
Scientific Name	Lophius budegassa
Current Assess ID	WGBIE-ANGLVII-VIIIabd-1986-2017-ICESIMP2018
Area	ICES 7-8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2017

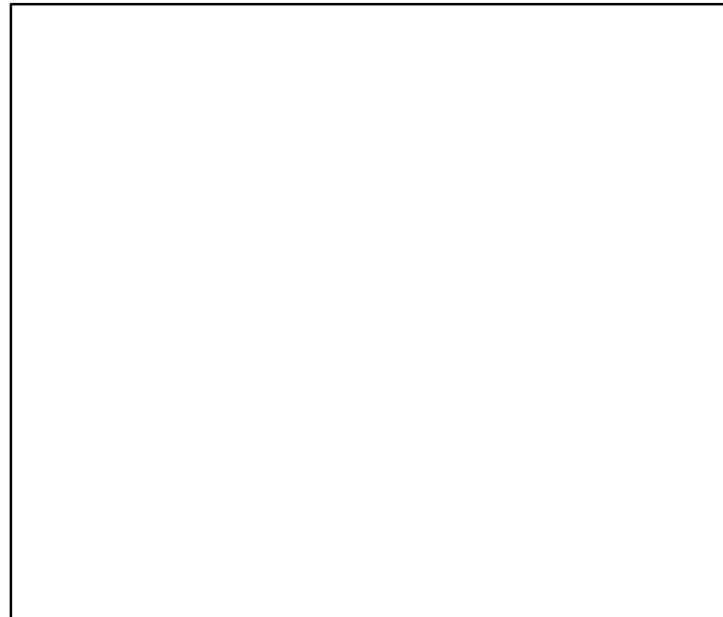
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2017	13,500			
TL	TL-MT	2017	11,700			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	FdivFmsy-dimensionless	2017	0.836			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*



Kobe MGT*



Spawner Recruit*



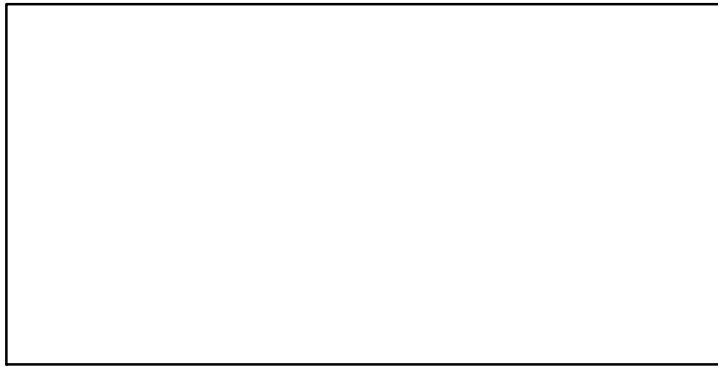
Production*



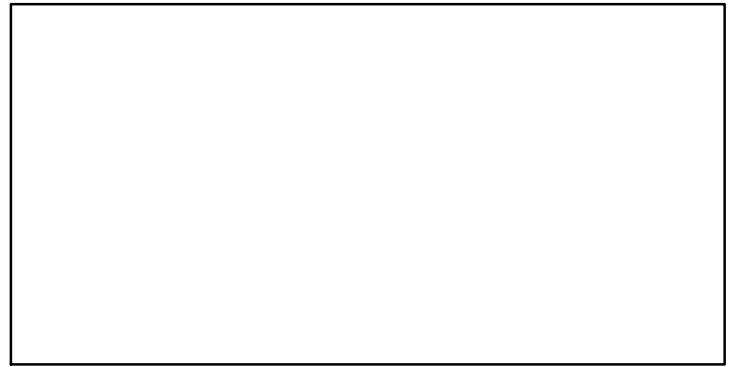
◆ Start Year ♦ End Year * No Data

Black bellied angler ICES 7–8abd [ANGLVII–VIIIab]

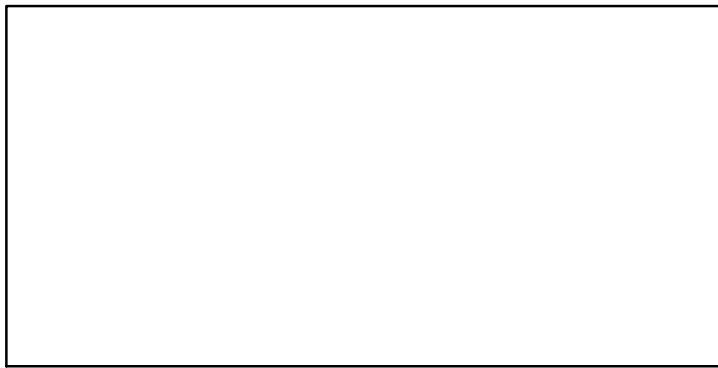
TB*



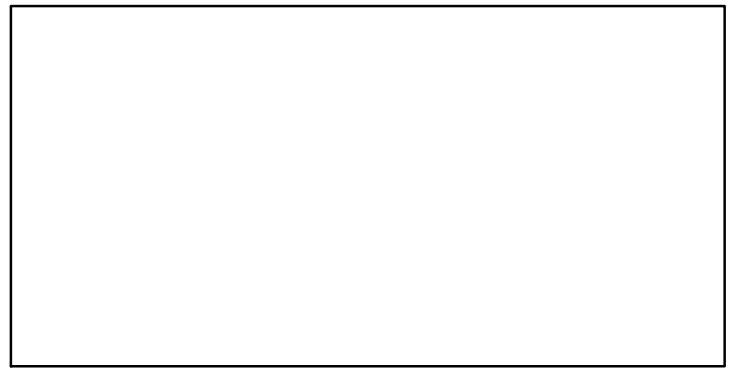
SSB*



TN *



F*



ER*



Recruits*

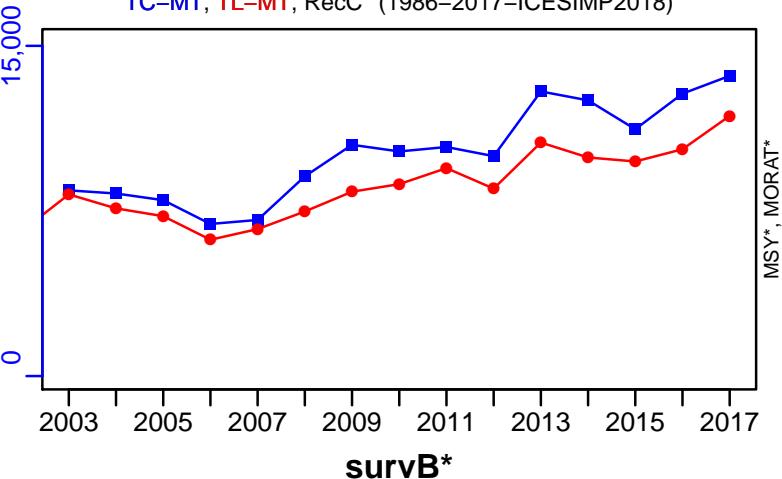


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Black bellied angler ICES 7–8abd [ANGLVII–VIIIab]

TC–MT, TL–MT, RecC* (1986–2017–ICESIMP2018)

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 |

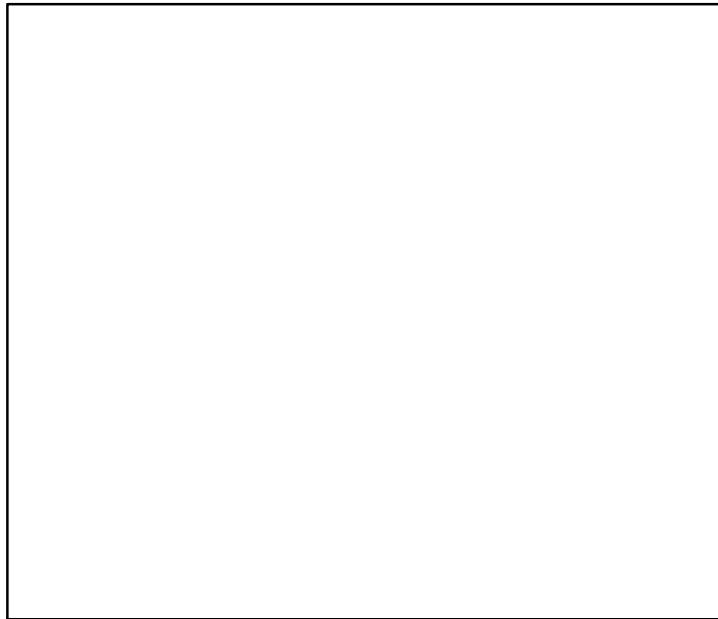
Angel shark Northeast Atlantic [ASHARNEATL]

Metadata	
Scientific Name	Squatina squatina
Current Assess ID	WGEF-ASHARNEATL-1973-2011-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2011

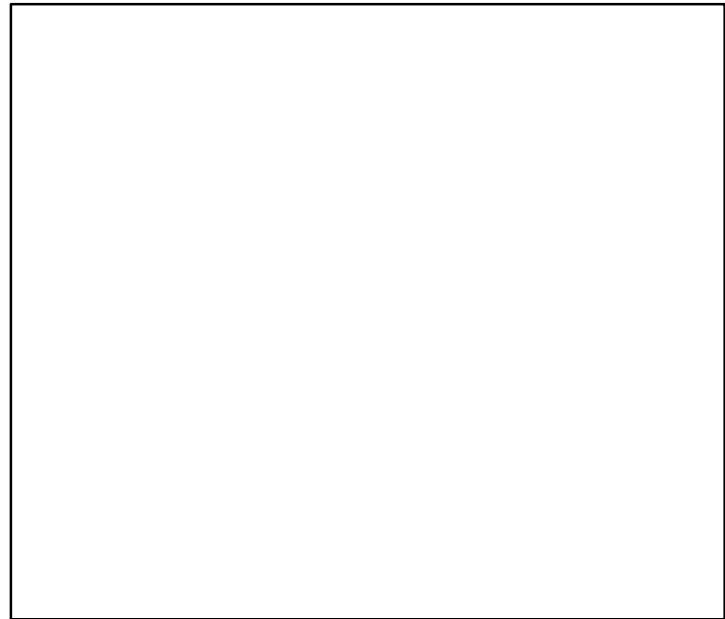
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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

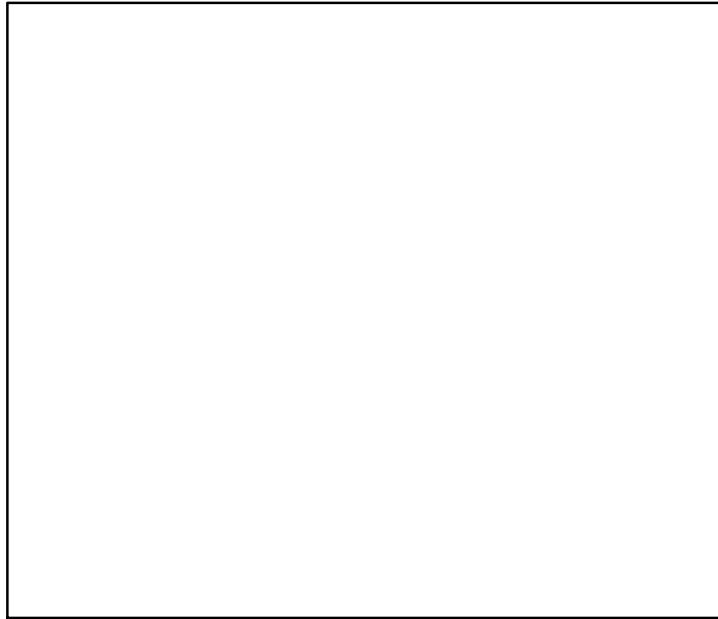
Kobe MSY*



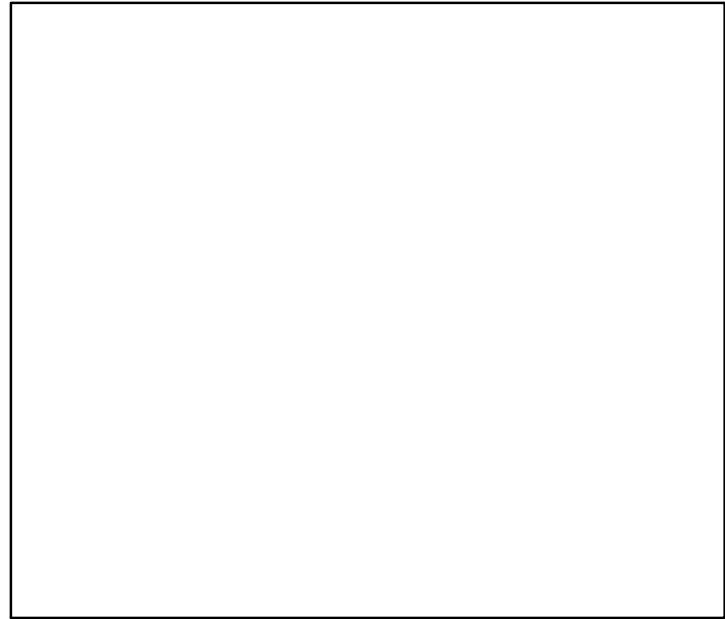
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Angel shark Northeast Atlantic [ASHARNEATL]

TB*



SSB*



TN *



F*



ER*



Recruits*

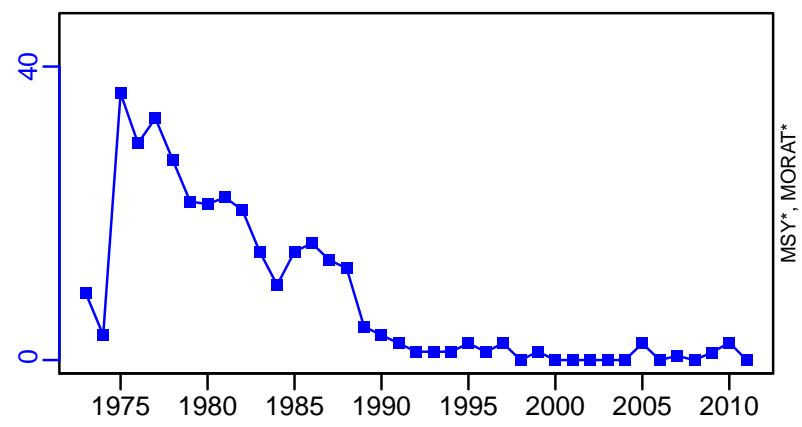


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Angel shark Northeast Atlantic [ASHARNEATL]

TL-MT, TC*, RecC* (1973–2011–ICESIMP2018)

TAC*, Cpair*, Cadv*



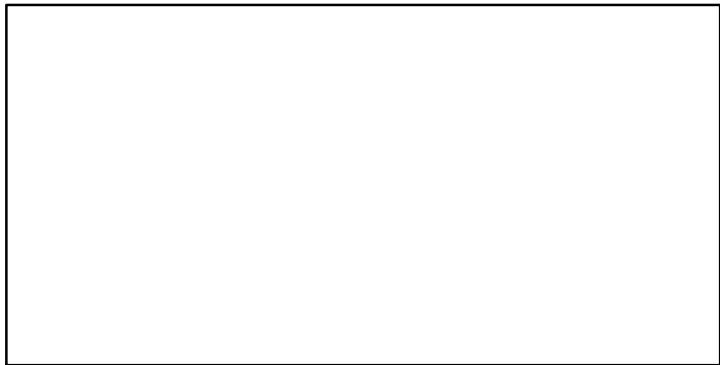
survB*



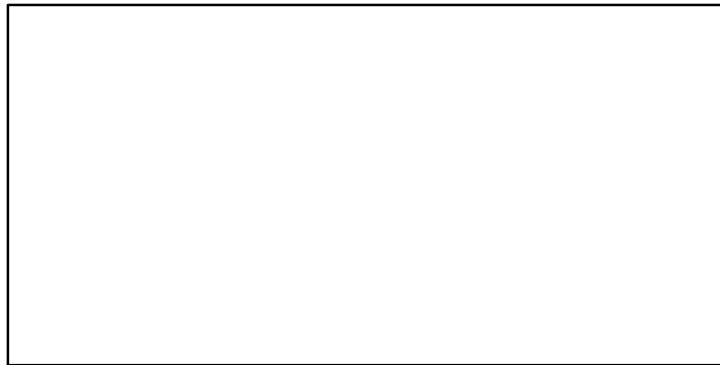
CPUE*



EFFORT*



CdivMSY*



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

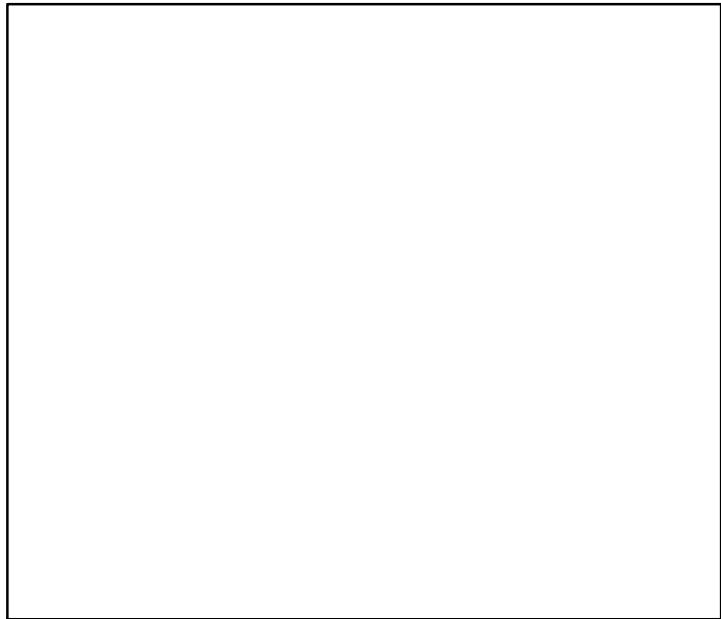
Beryx spp Northeast Atlantic [BERYXSPPNEATL]

Metadata	
Scientific Name	Beryx spp
Current Assess ID	WGDEEP-BERYXSPPNEATL-1988-2017-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2017

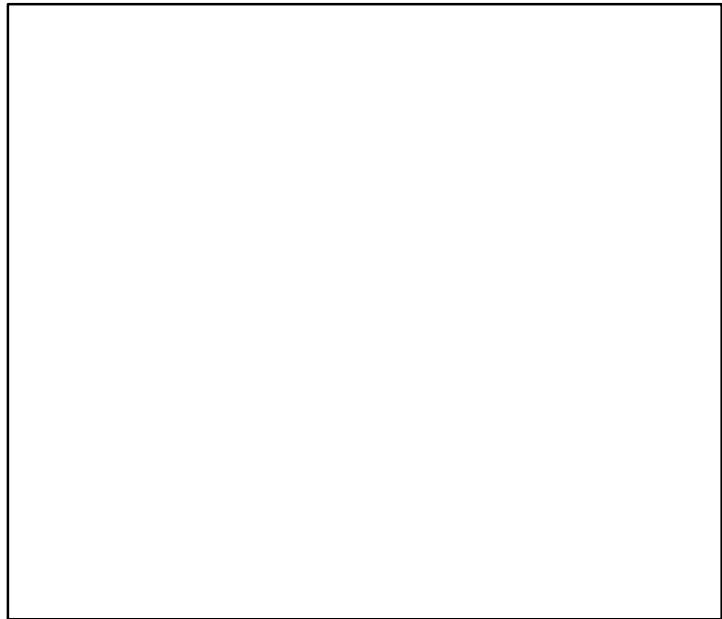
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	240		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

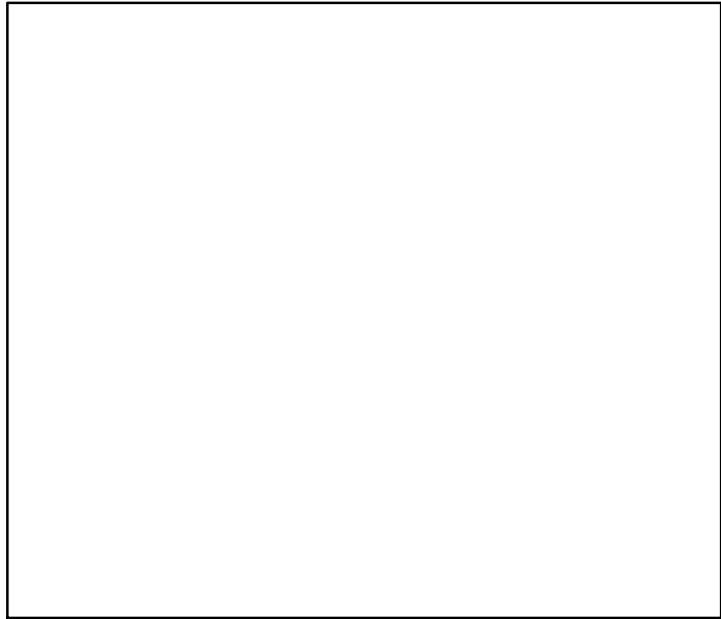
Kobe MSY*



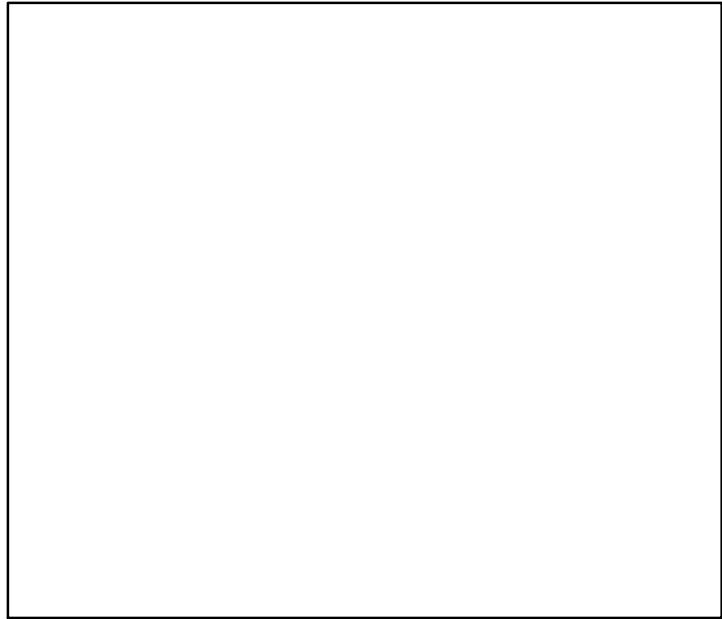
Kobe MGT*



Spawner Recruit*



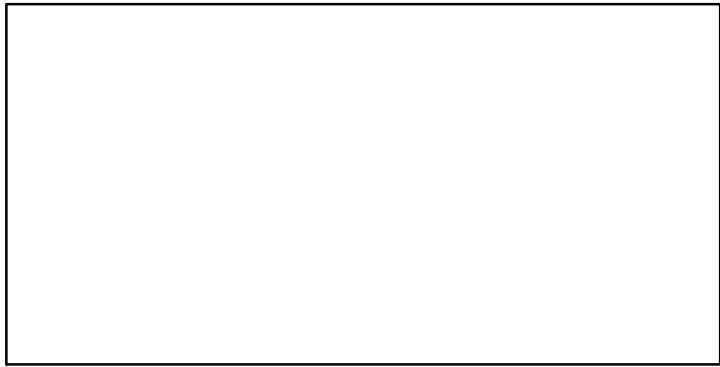
Production*



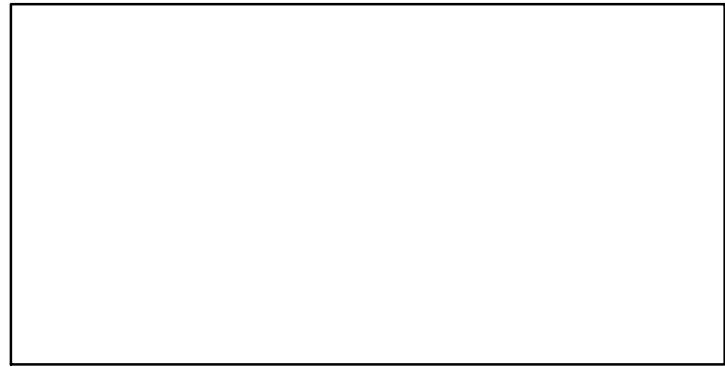
◆ Start Year ♦ End Year * No Data

Beryx spp Northeast Atlantic [BERYXSPPNEATL]

TB*



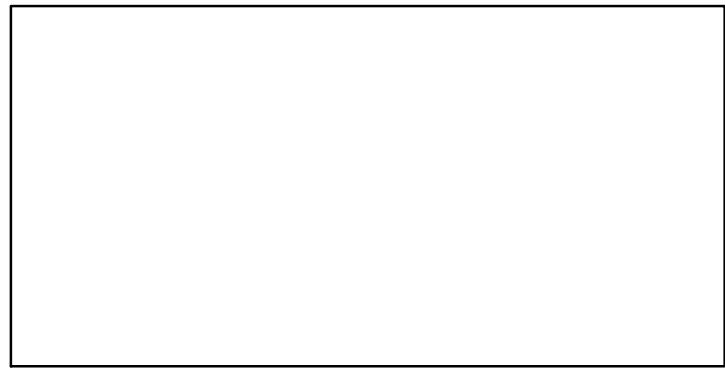
SSB*



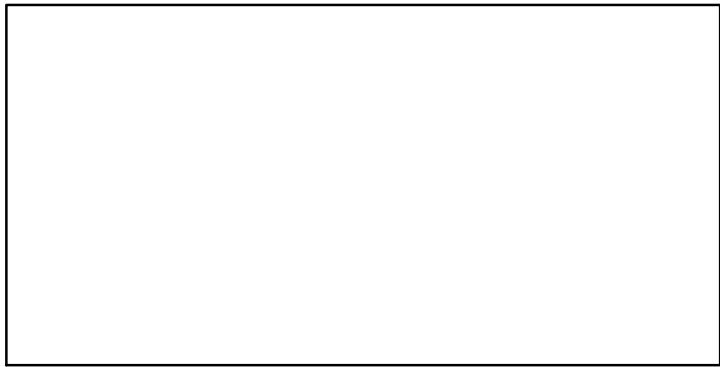
TN *



F*



ER*



Recruits*

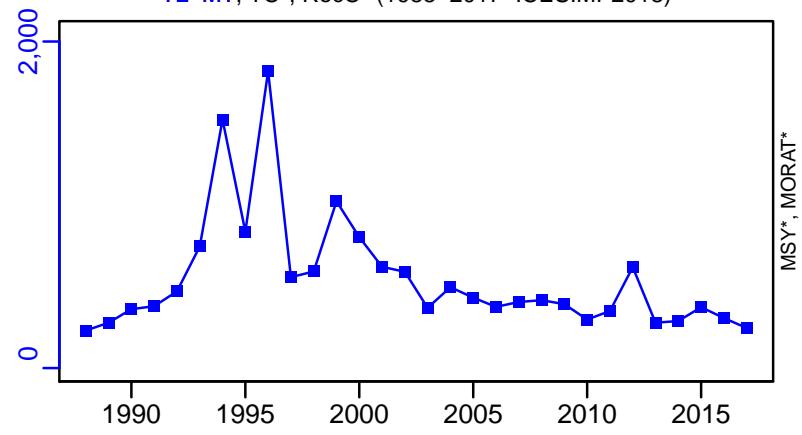


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Beryx spp Northeast Atlantic [BERYXSPPNEATL]

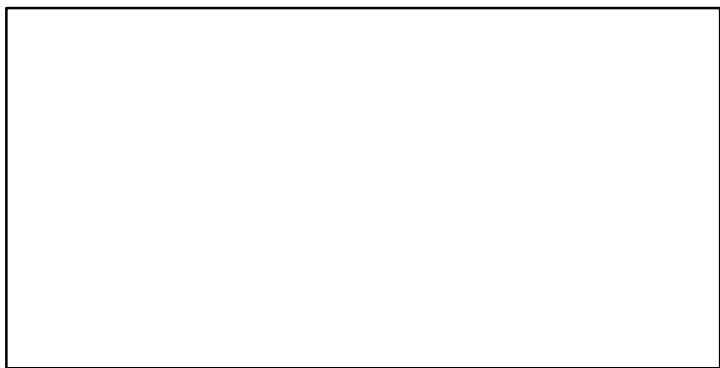
TL-MT, TC*, RecC* (1988–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*

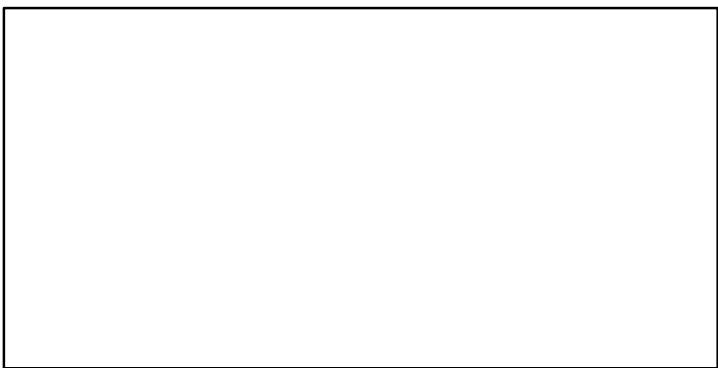


survB*

MSY*, MORAT*



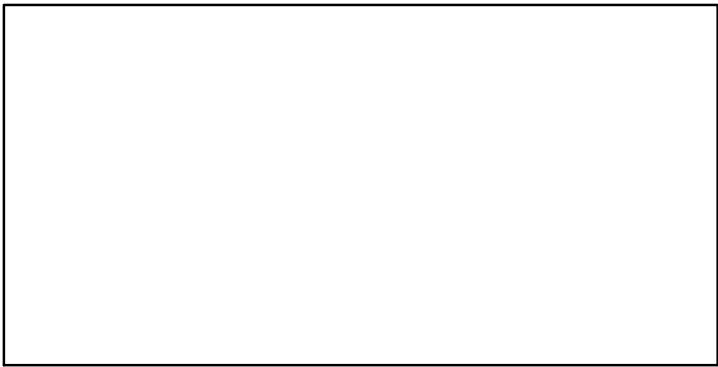
CPUE*



EFFORT*



CdivMSY*



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

Blue jack mackerel Azores [BJMACKXa2]

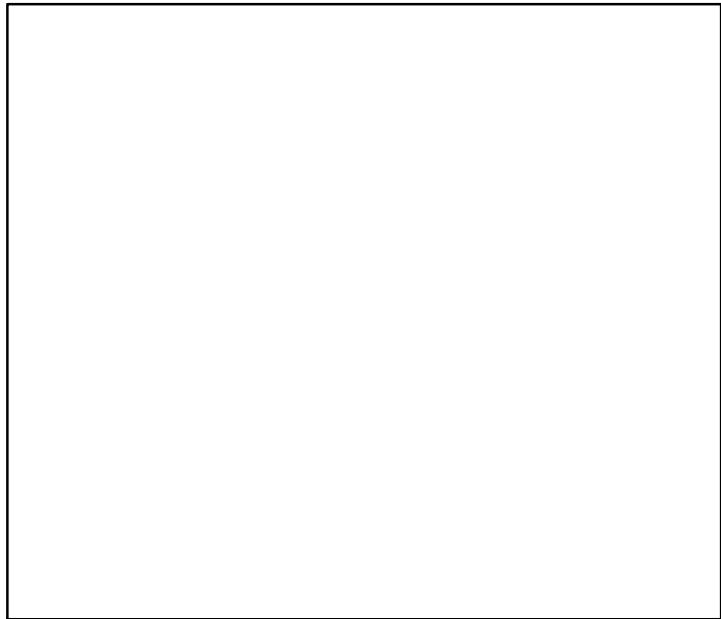
Metadata	
Scientific Name	Trachurus picturatus
Current Assess ID	WGHANSA-BJMACKXa2-1978-2017-ICESIMP2018
Area	Azores
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2016, 2017

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

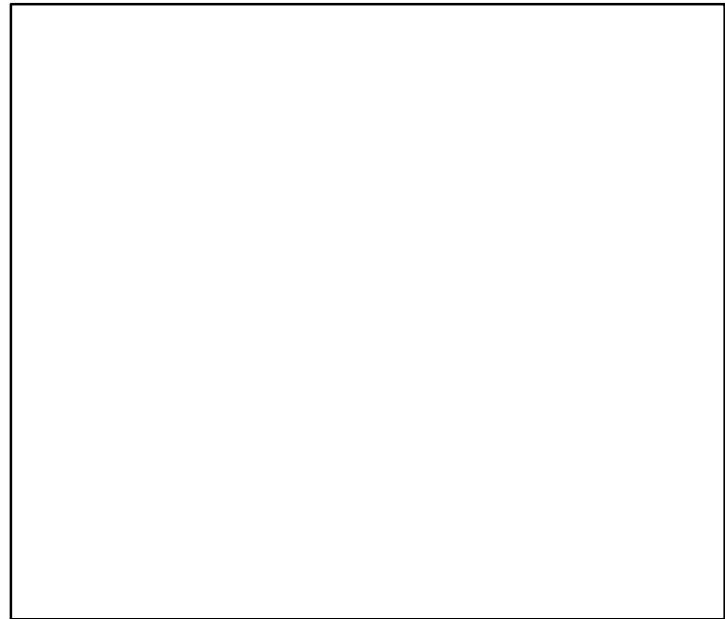
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1140		
TL	TL-MT	2017	991		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blue jack mackerel Azores [BJMACKXa2]

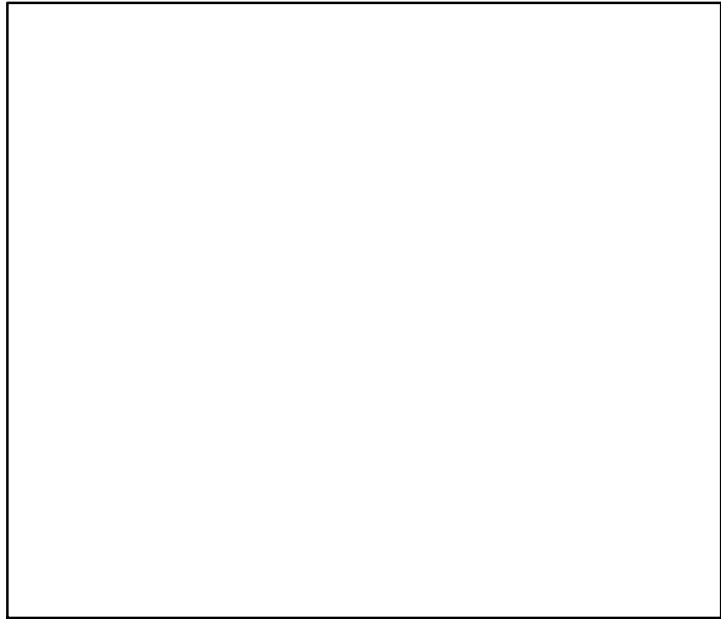
Kobe MSY*



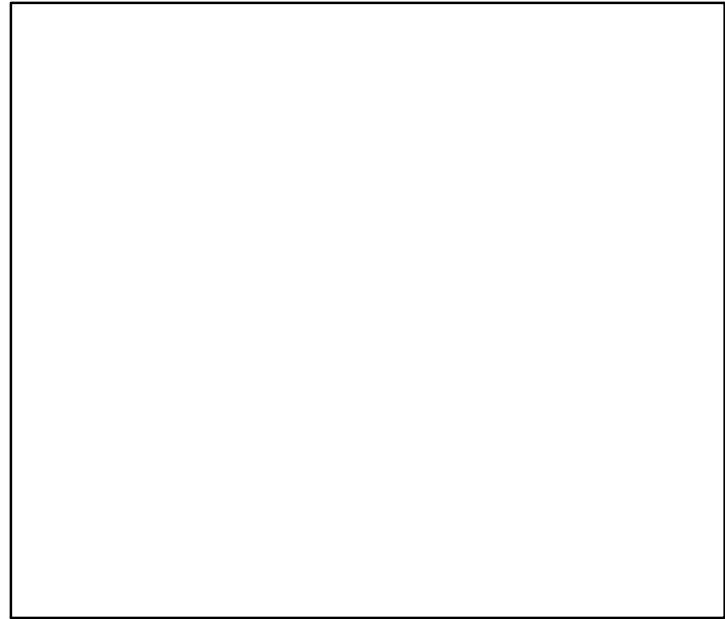
Kobe MGT*



Spawner Recruit*



Production*



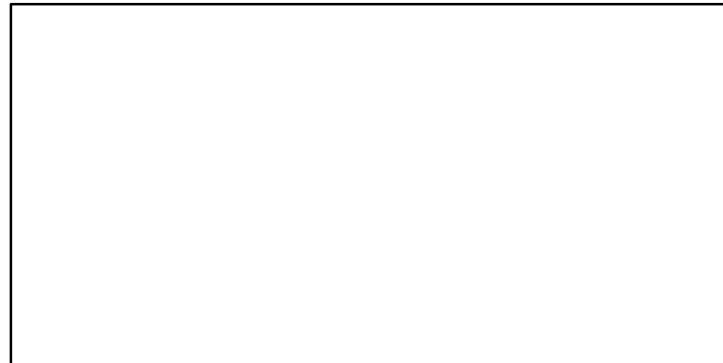
◆ Start Year ♦ End Year * No Data

Blue jack mackerel Azores [BJMACKXa2]

TB*



SSB*



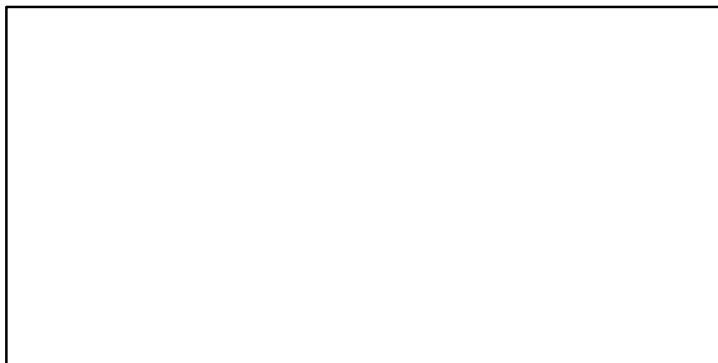
TN *



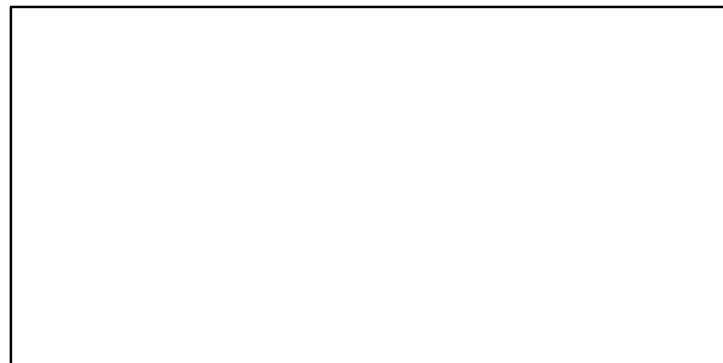
F*



ER*



Recruits*

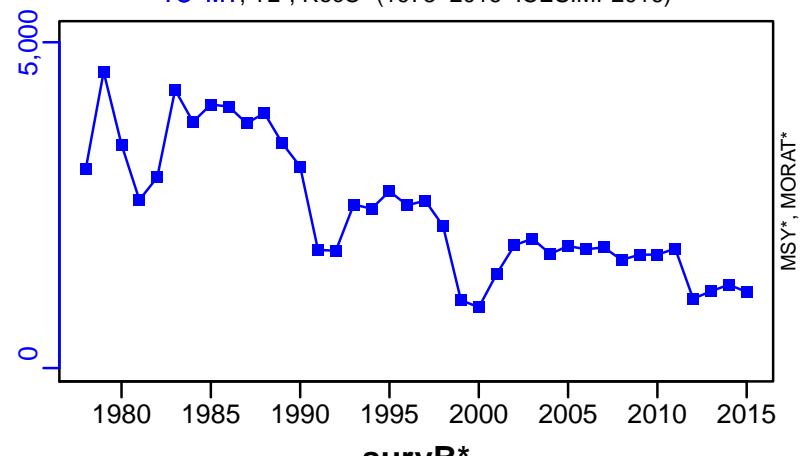


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

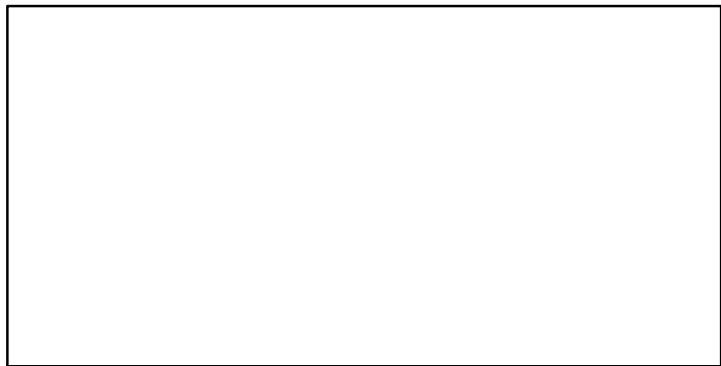
Blue jack mackerel Azores [BJMACKXa2]

TC-MT, TL*, RecC* (1978–2016—ICESIMP2016)

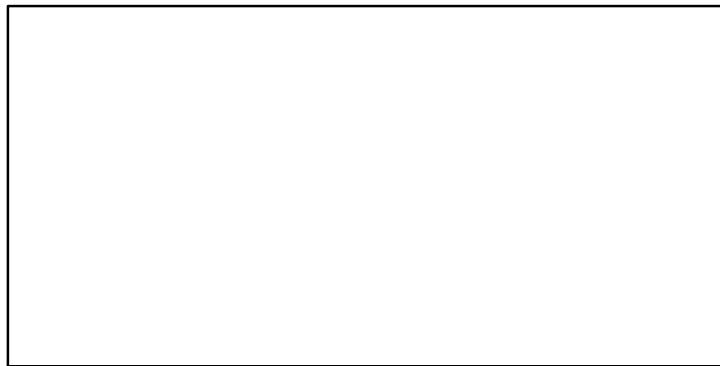
TAC*, Cpair*, Cadv*



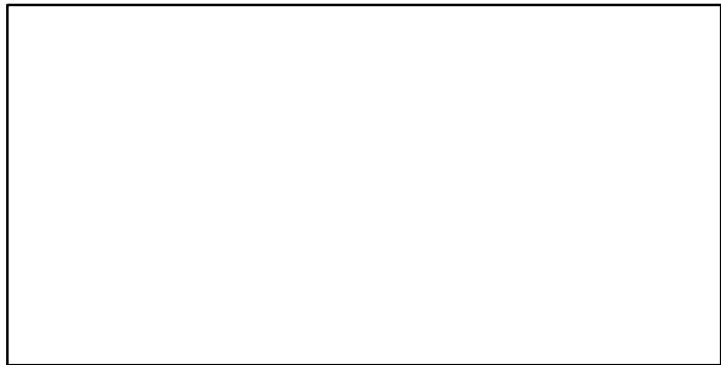
survB*



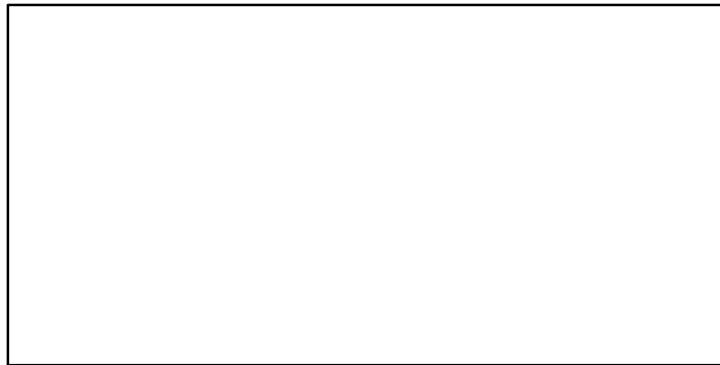
CPUE*



EFFORT*



CdivMSY*



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

Black scabbardfish Northeast Atlantic [BKSFNEATL]

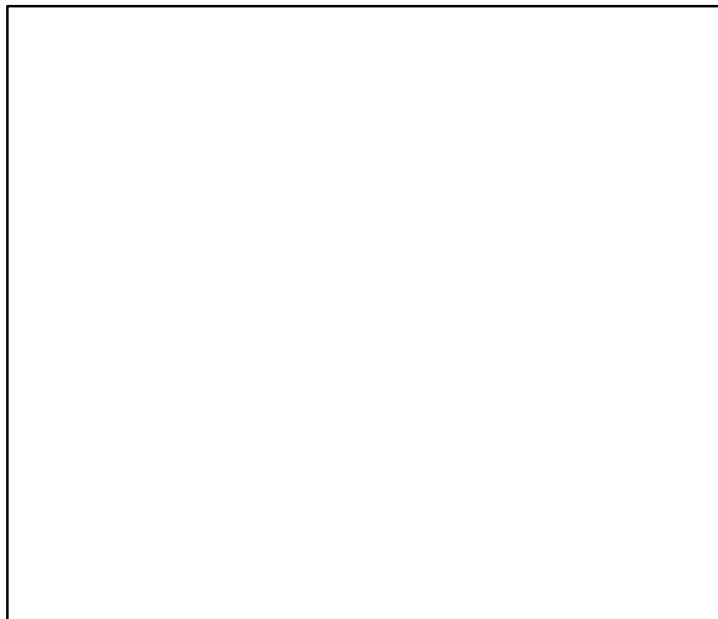
Metadata	
Scientific Name	Aphanopus carbo
Current Assess ID	WGDEEP-BKSFNEATL-1988-2017-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2017, 2013

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

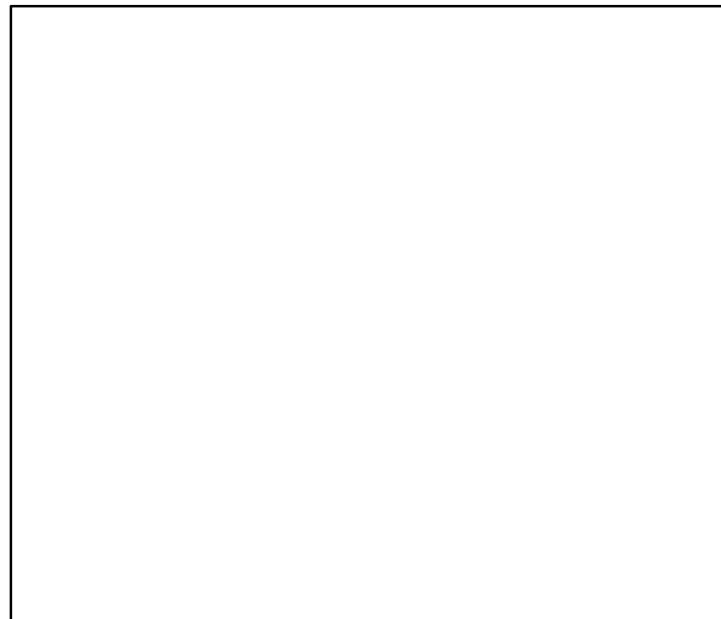
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-1/yr	2013	0.022	-	-	
ER	ER-ratio	2017	0.056	-	-	
TC	TC-MT	2017	5			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Black scabbardfish Northeast Atlantic [BKSFNEATL]

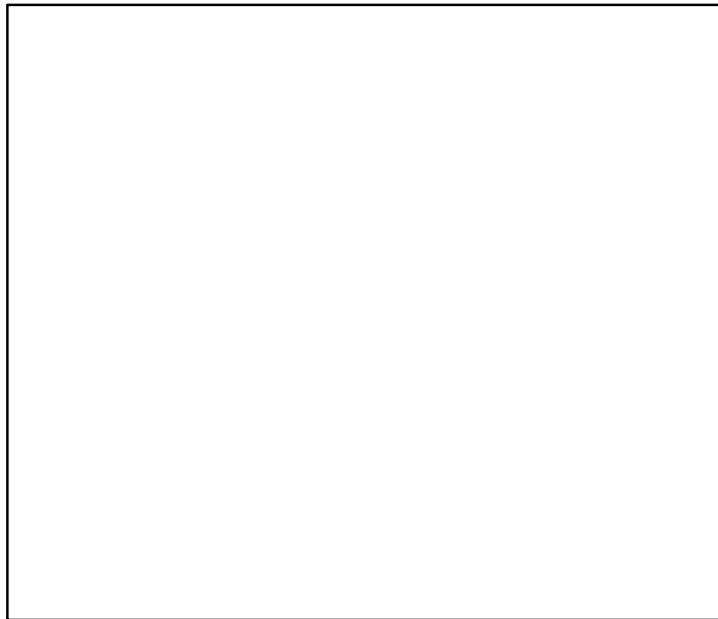
Kobe MSY*



Kobe MGT*



Spawner Recruit*



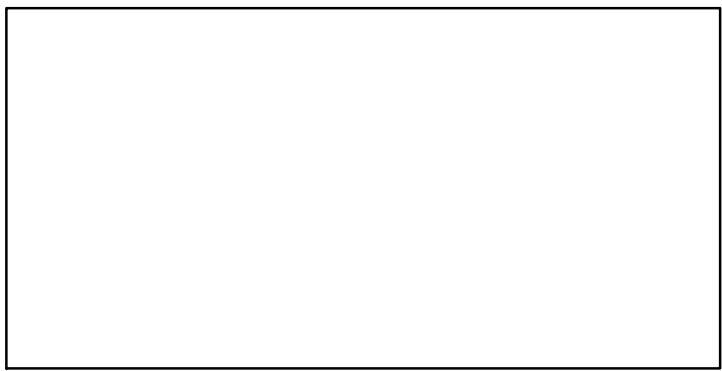
Production*



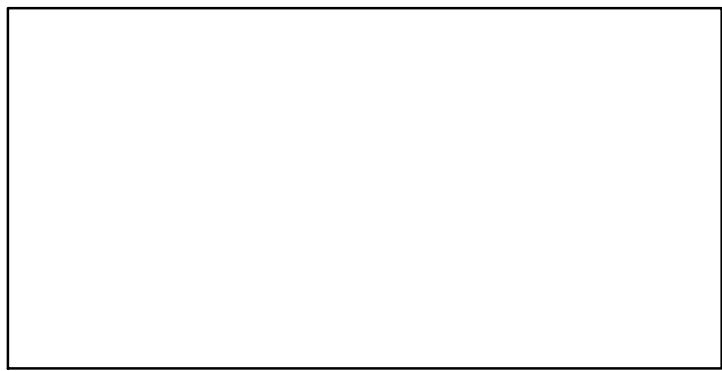
◆ Start Year ♦ End Year * No Data

Black scabbardfish Northeast Atlantic [BKSFNEATL]

TB*



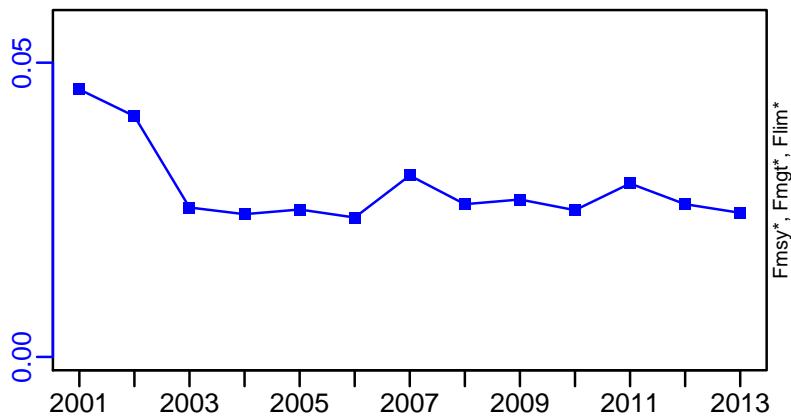
SSB*



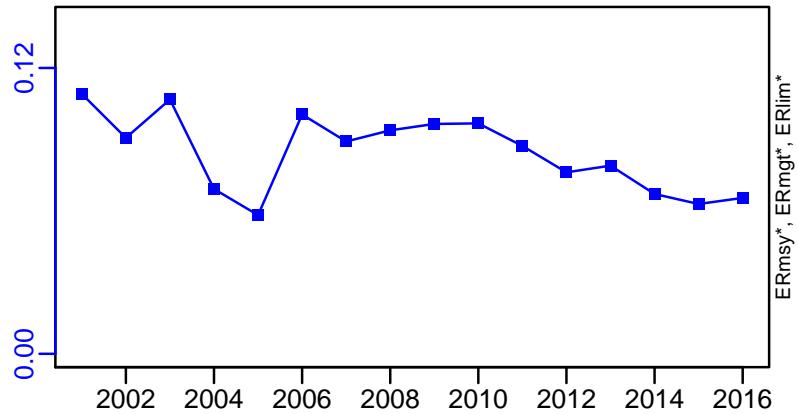
TN *



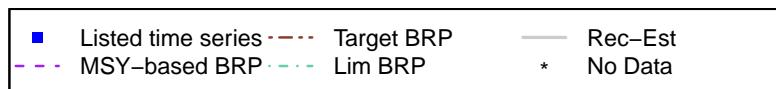
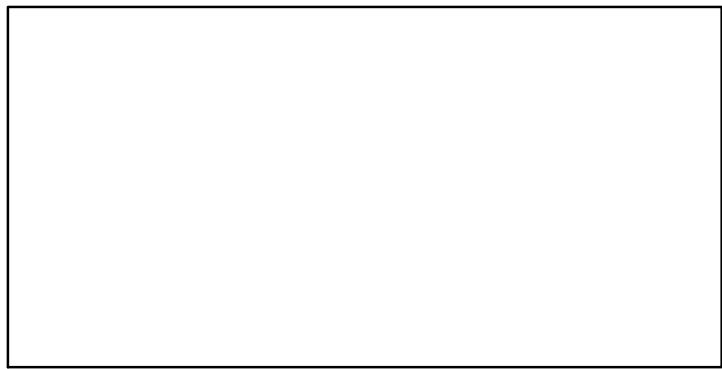
F-1/yr (2001–2013–ICESIMP2018)



ER-ratio (1988–2017–ICESIMP2018)



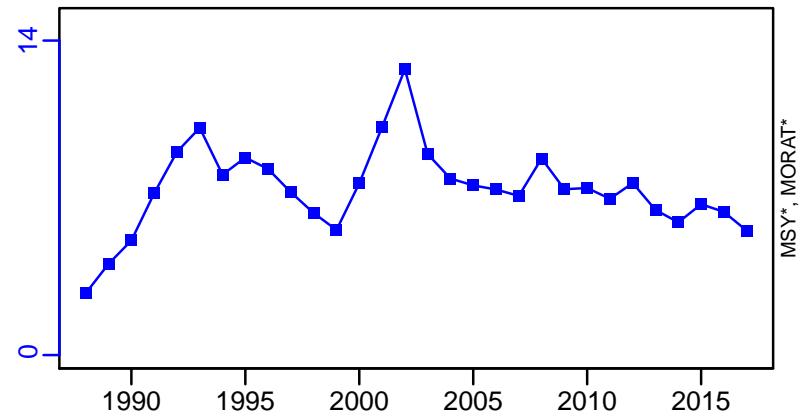
Recruits*



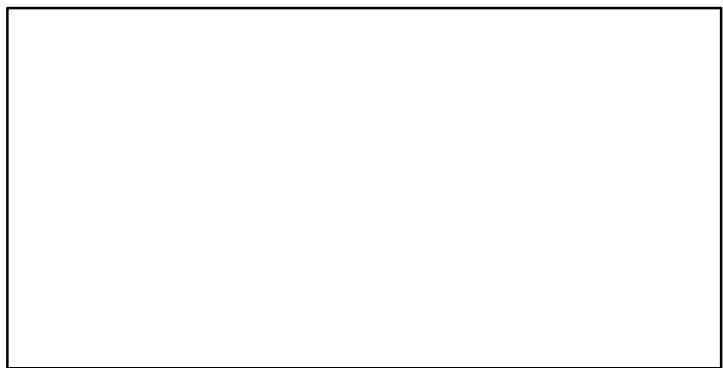
Black scabbardfish Northeast Atlantic [BKSFNEATL]

TC-MT, TL*, RecC* (1988–2017–ICESIMP2018)

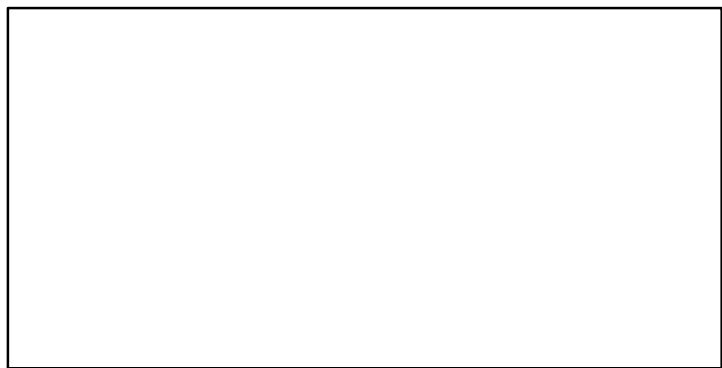
TAC*, Cpair*, Cadv*



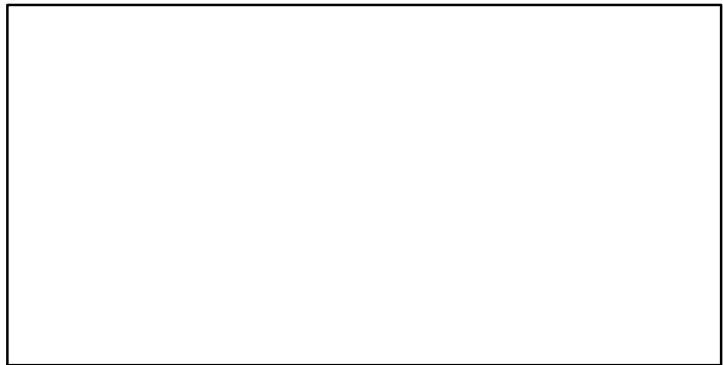
survB*



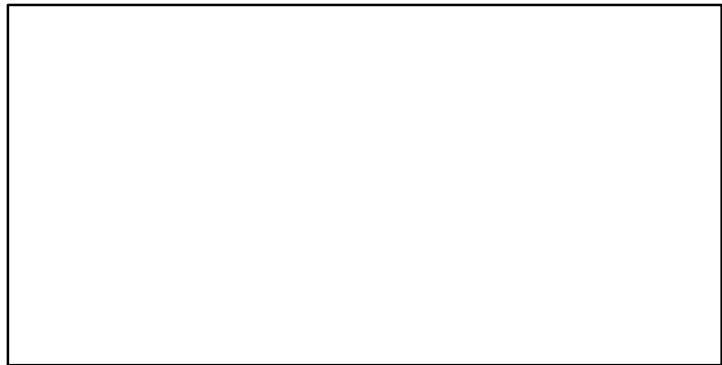
CPUE*



EFFORT*



CdivMSY*



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

Blue ling ICES 1-2-3a-4a-8-9-12 [BLINGI-II-IIIa-IVa-VIII-IX-XII]

Metadata	
Scientific Name	Molva dypterygia
Current Assess ID	WGDEEP-BLINGI-II-IIIa-IVa-VIII-IX-XII-1988-2016-ICESIMP2018
Area	ICES 1-2-3a-4a-8-9-12
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	240		
TL	TL-MT	2016	205		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Blue ling ICES 1–2–3a–4a–8–9–12 [BLINGI–II–IIIa–IVa–VIII–IX–XII]

TB*



SSB*



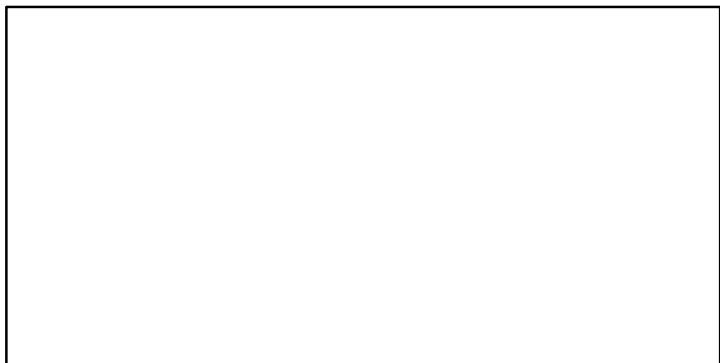
TN *



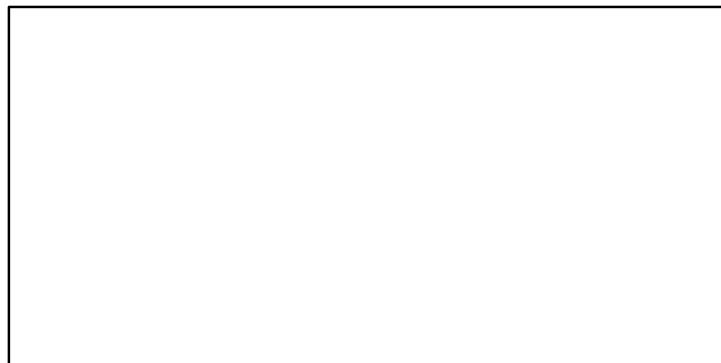
F*



ER*



Recruits*

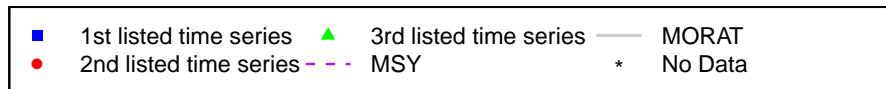
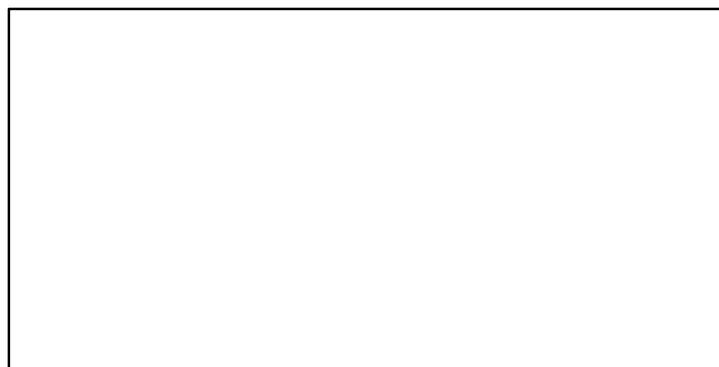
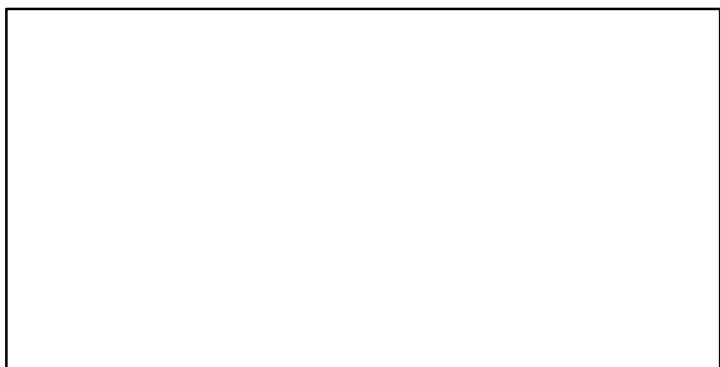
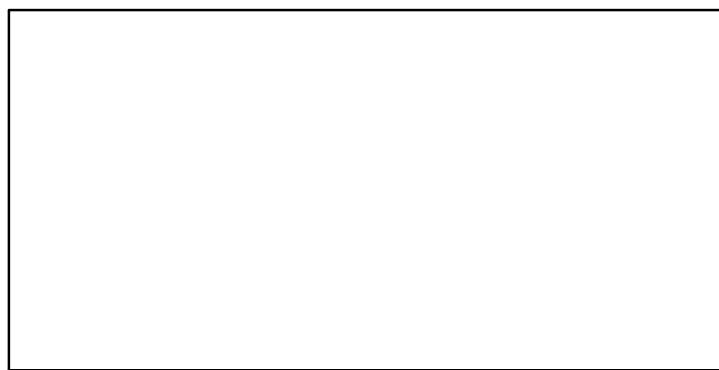
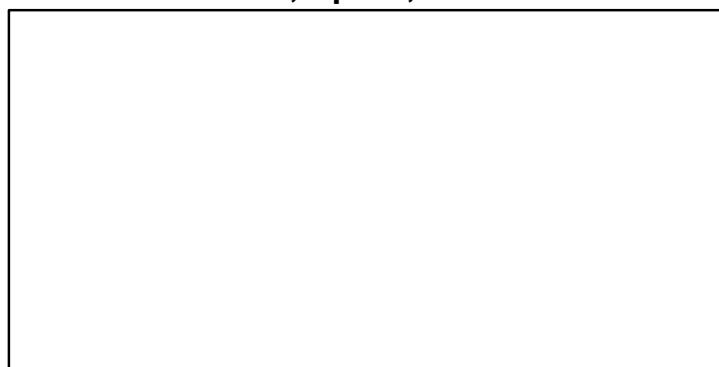
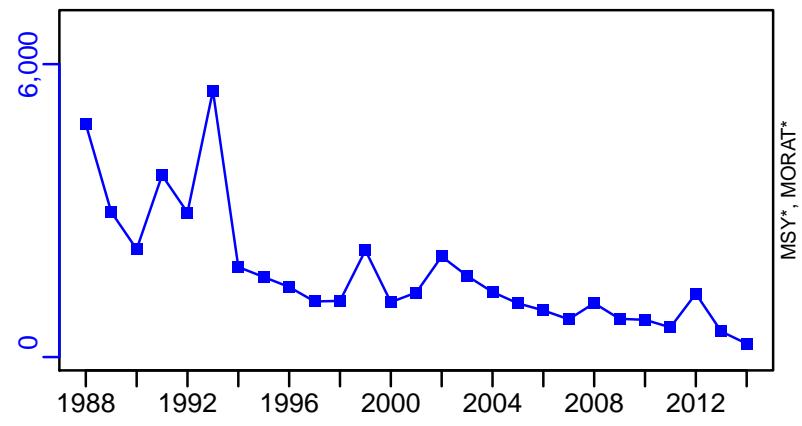


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Blue ling ICES 1–2–3a–4a–8–9–12 [BLINGI–II–IIIa–IVa–VIII–IX–XII]

TC–MT, TL*, RecC* (1988–2015–ICESIMP2016)

TAC*, Cpair*, Cadv*



Blue ling ICES 5b-6-7 [BLINGVb-VI-VII]

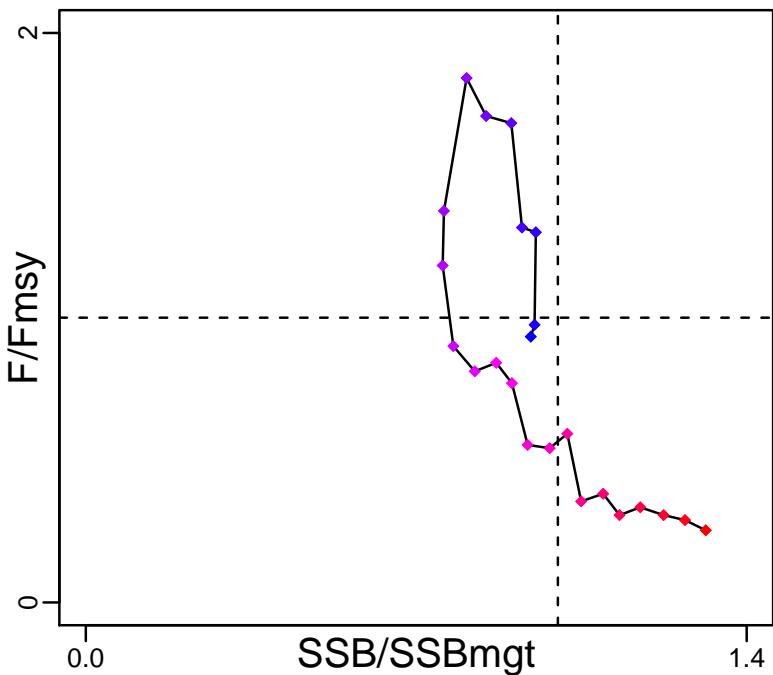
Metadata	
Scientific Name	Molva dypterygia
Current Assess ID	WGDEEP-BLINGVb-VI-VII-1966-2018-ICESIMP2018
Area	ICES 5b-6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2018, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2014	34,864
Fmsy	Fmsy-1/yr	2018	0.12
ERmsy	ERmsy-est-ratio	2018	0.055
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	75,000
Fmgt	Fmgt-1/yr	2018	0.12
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2014	10,230
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	54,000
Flim	Flim-1/yr	2018	0.17
ERlim	-	-	-

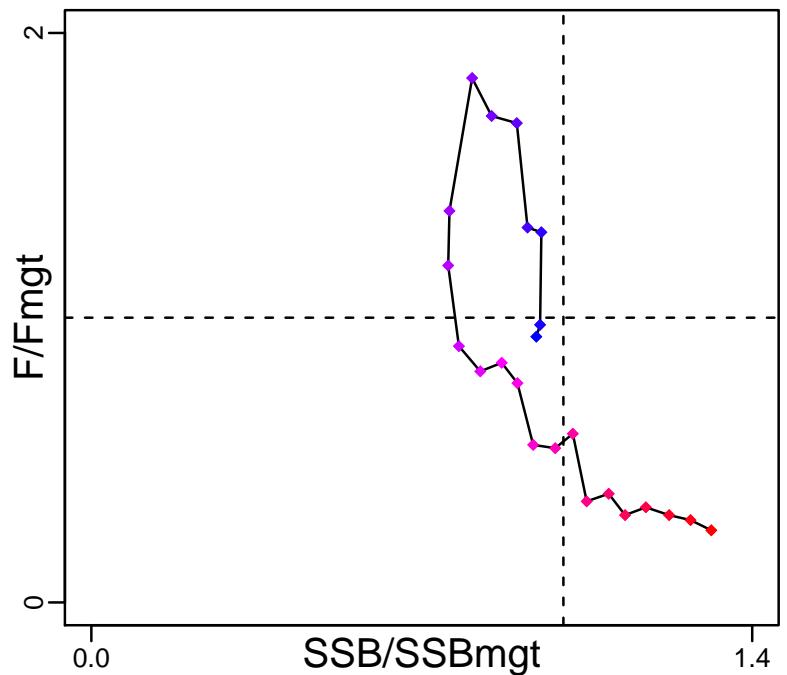
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2018	102,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3,480,000	-	9	
F	F-1/yr	2018	0.03	-	9 to 19	
ER	ER-calc-ratio	2018	0.012	-	-	
TC	TC-MT	2018	2670			
TL	TL-MT	2018	2670			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2014	1.956			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.253			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.216			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.36			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.253			
ER/ERmgt	-	-	-			

Blue ling ICES 5b–6–7 [BLINGVb–VI–VII]

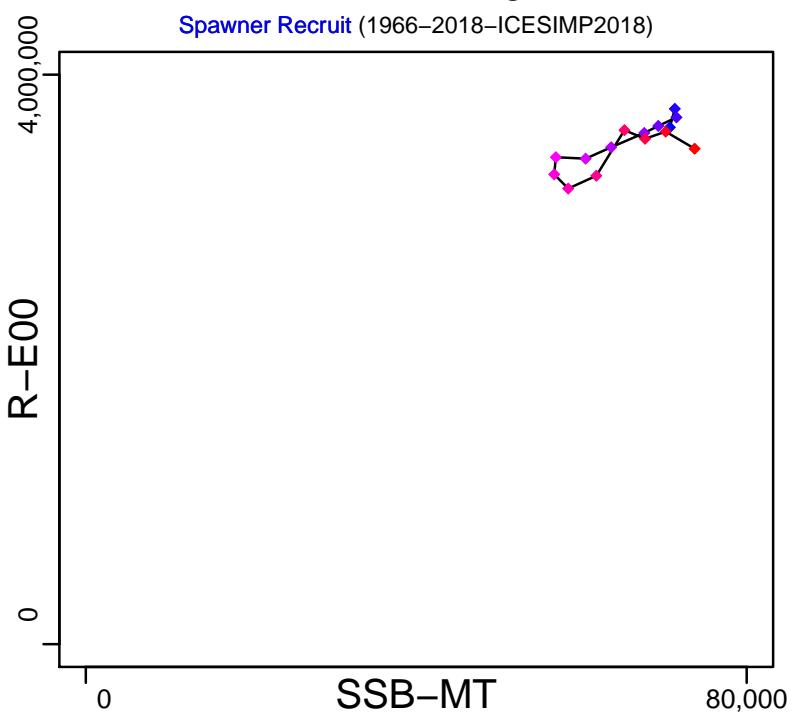
Kobe MSYpref (1966–2018–ICESIMP2018)



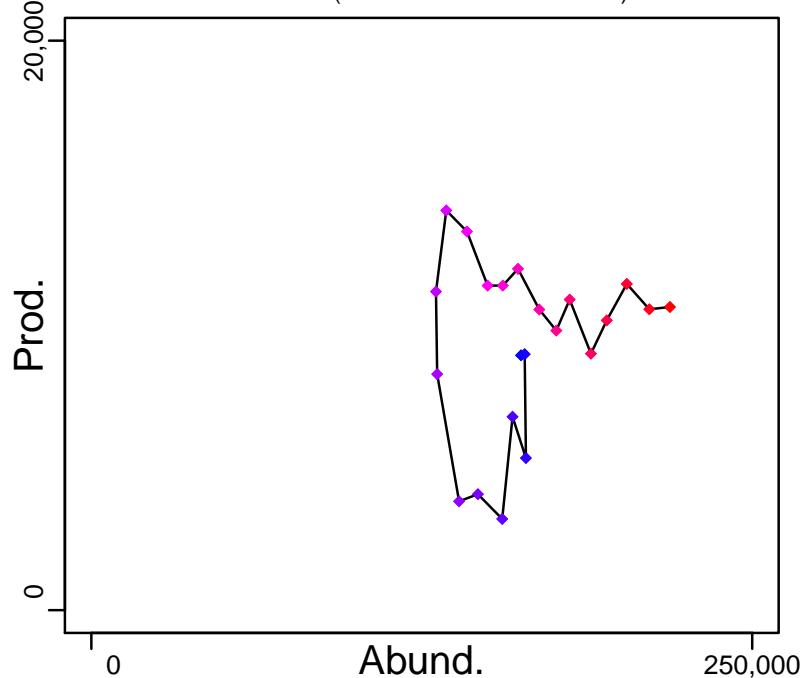
Kobe MGTpref (1966–2018–ICESIMP2018)



Spawner Recruit (1966–2018–ICESIMP2018)



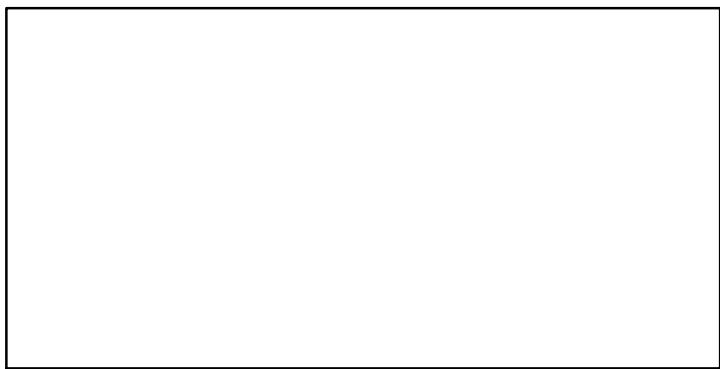
Production (1966–2018–ICESIMP2018)



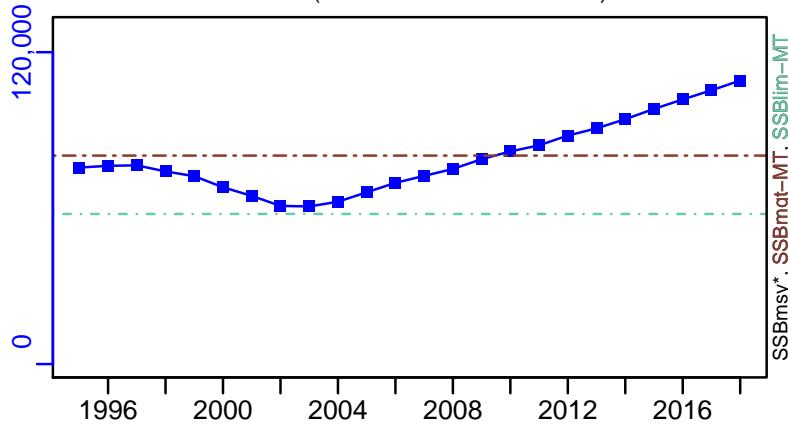
◆ Start Year ◆ End Year * No Data

Blue ling ICES 5b–6–7 [BLINGVb–VI–VII]

TB*



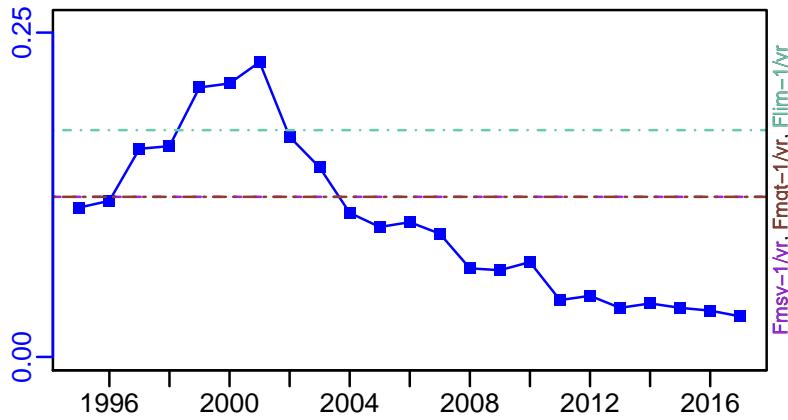
SSB-MT (1966–2018–ICESIMP2018)



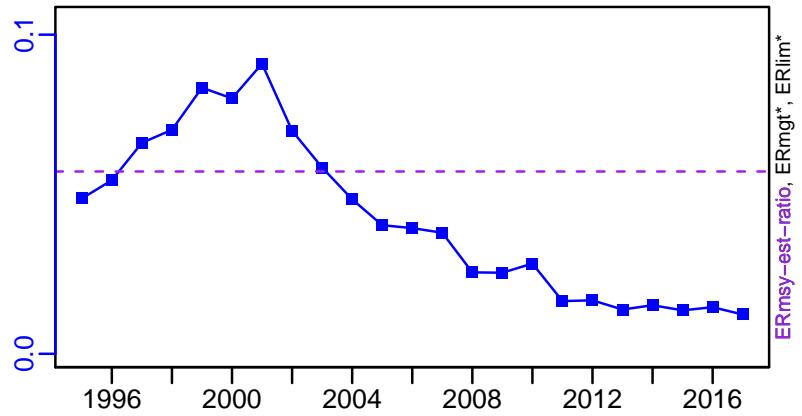
TN *



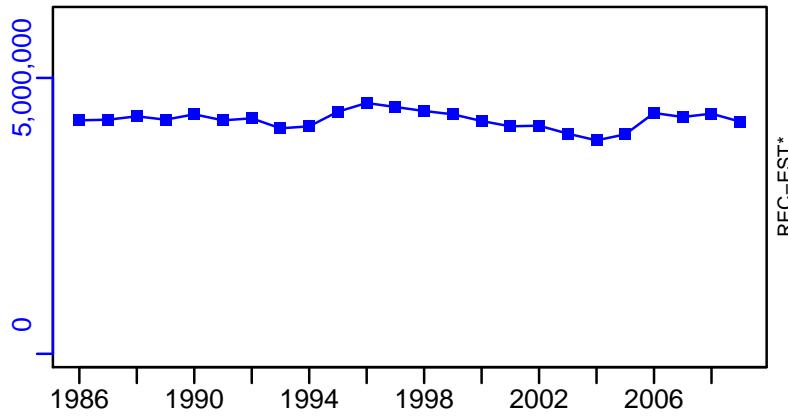
F-1/yr (1966–2018–ICESIMP2018)



ER-calc-ratio (1966–2018–ICESIMP2018)



R-E00 (1966–2018–ICESIMP2018)

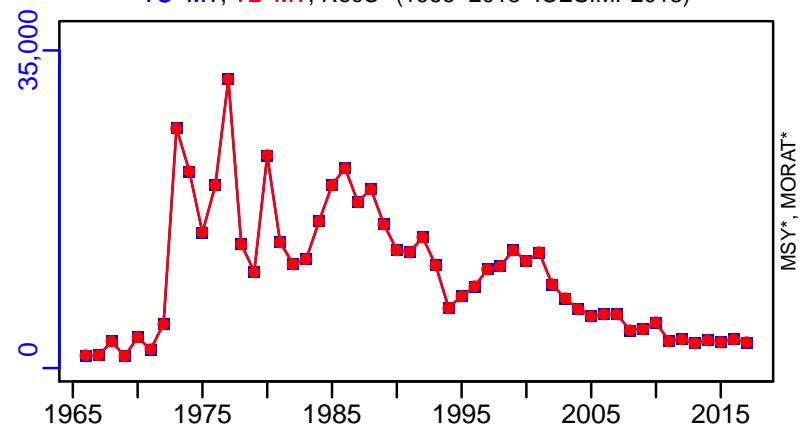


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Blue ling ICES 5b–6–7 [BLINGVb–VI–VII]

TC–MT, TL–MT, RecC* (1966–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



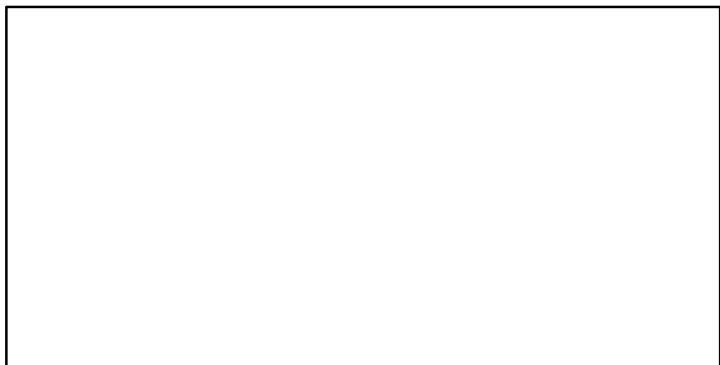
survB*



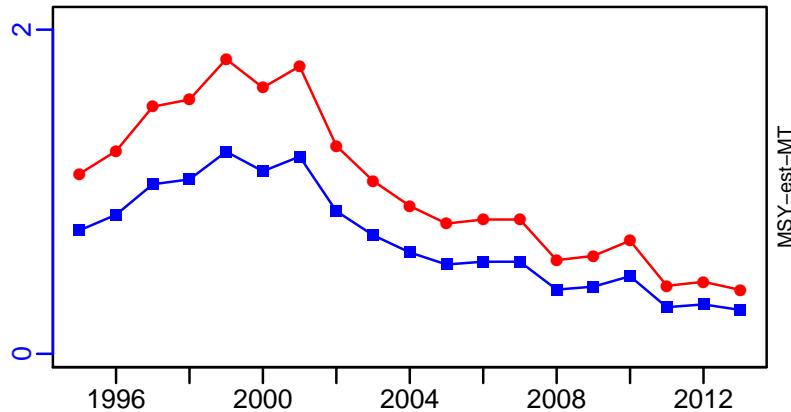
CPUE*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1986–2014–ICESIMP2016)



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

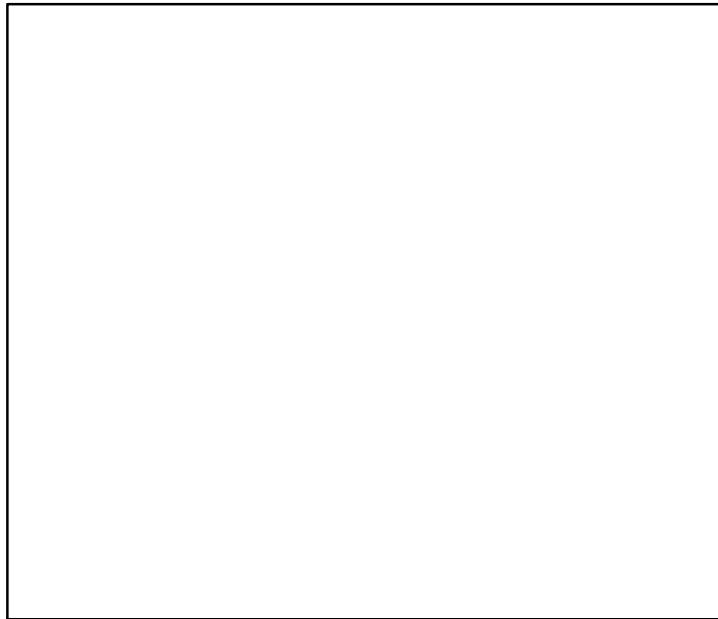
Blonde ray ICES 4a-6 [BLRAYIVa-VI]

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYIVa-VI-2009-2016-ICESIMP2018
Area	ICES 4a-6
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2016

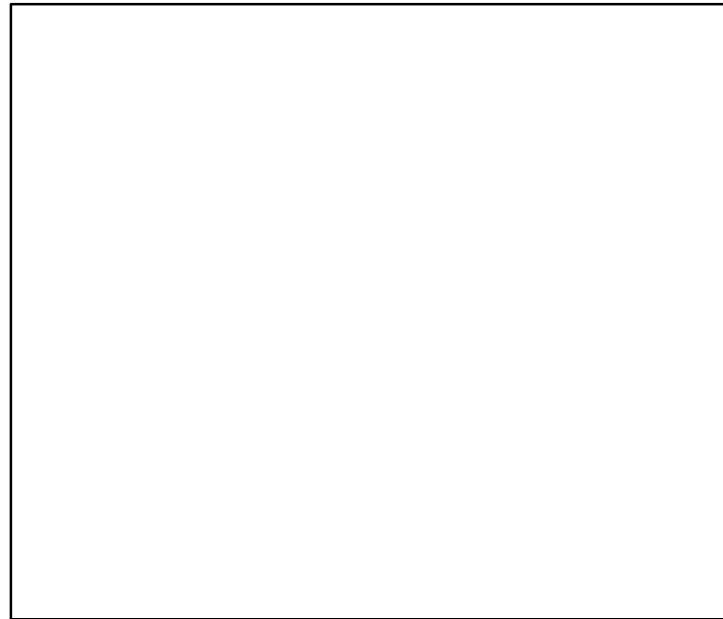
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	14		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

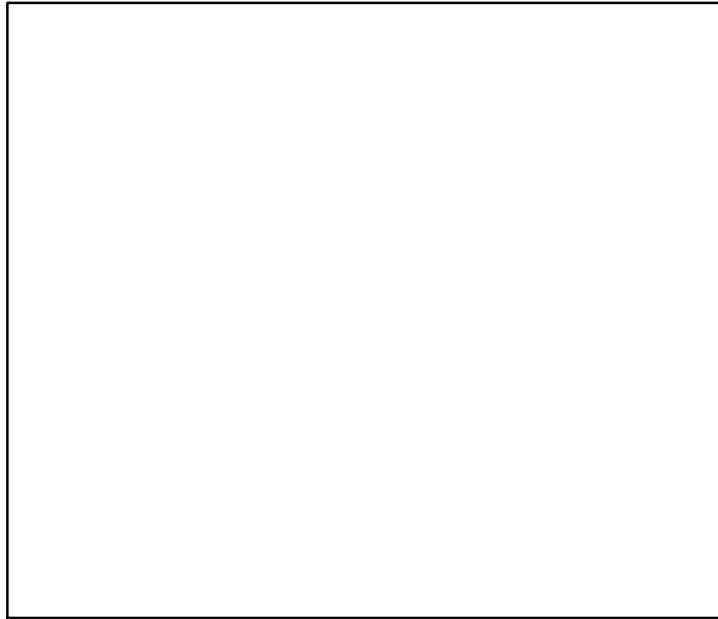
Kobe MSY*



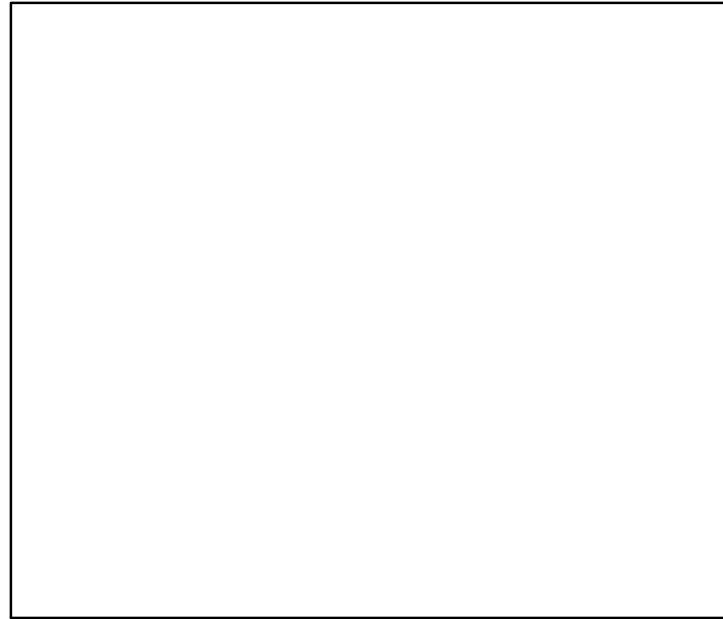
Kobe MGT*



Spawner Recruit*



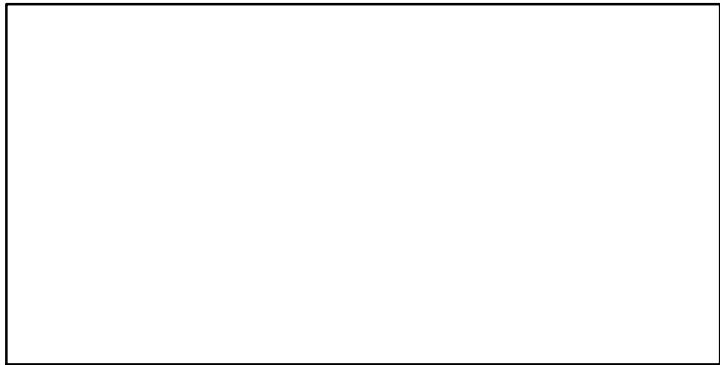
Production*



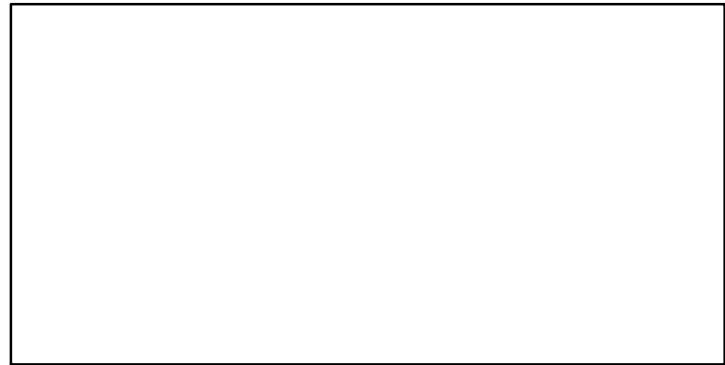
◆ Start Year ♦ End Year * No Data

Blonde ray ICES 4a–6 [BLRAYIVa–VI]

TB*



SSB*



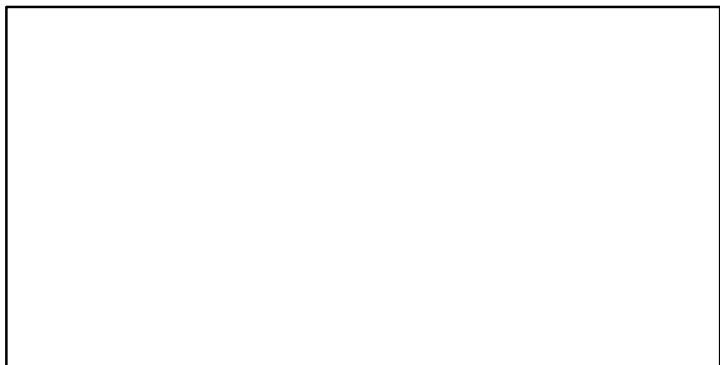
TN *



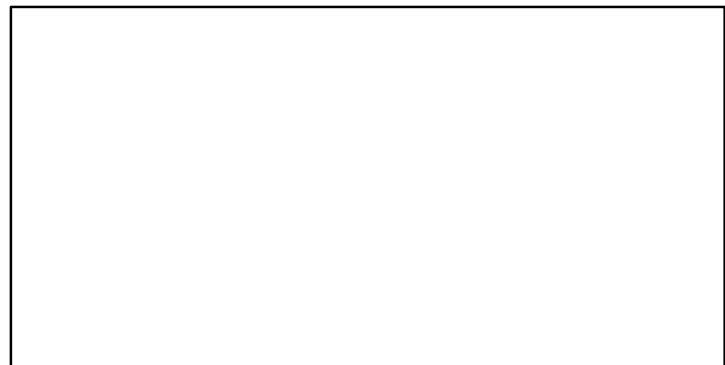
F*



ER*



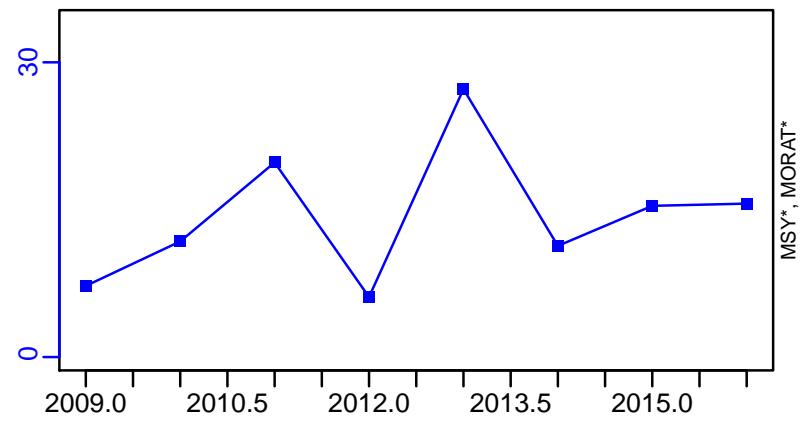
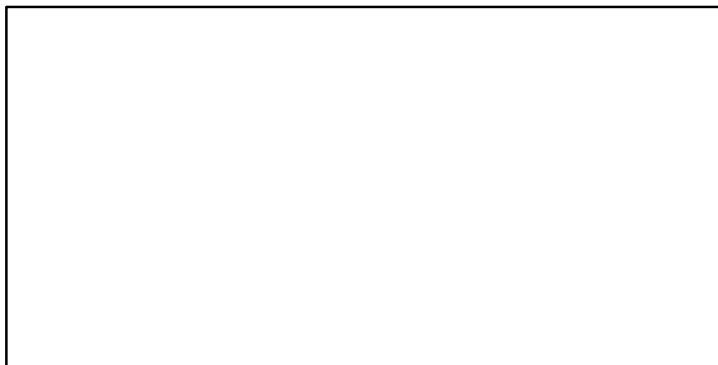
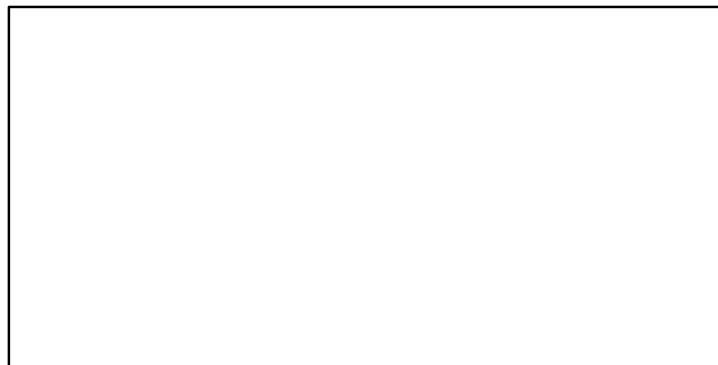
Recruits*



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

Blonde ray ICES 4a–6 [BLRAYIVa–VI]

TL-MT, TC*, RecC* (2009–2016–ICESIMP2018)

TAC*, Cpair*, Cadv***survB*****CPUE*****EFFORT*****CdivMSY***

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

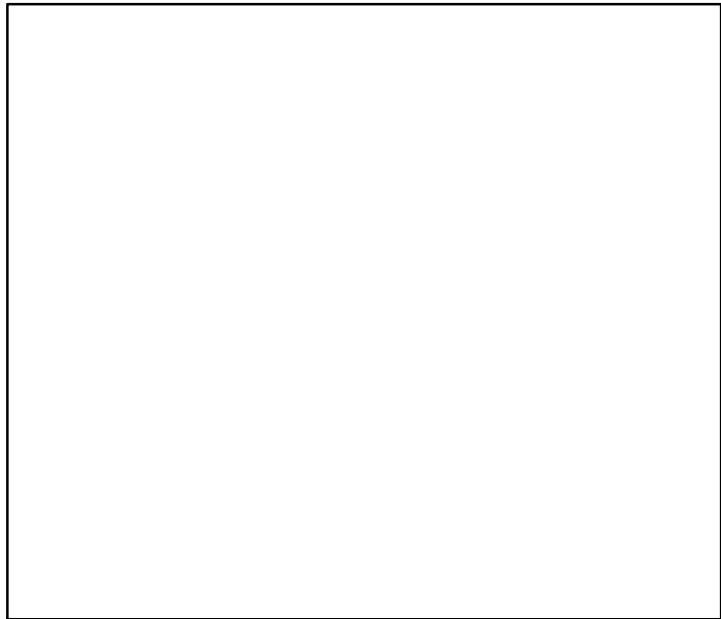
Blonde ray ICES 4c-7d [BLRAYIVc-VIId]

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYIVc-VIId-2009-2016-ICESIMP2018
Area	ICES 4c-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2016

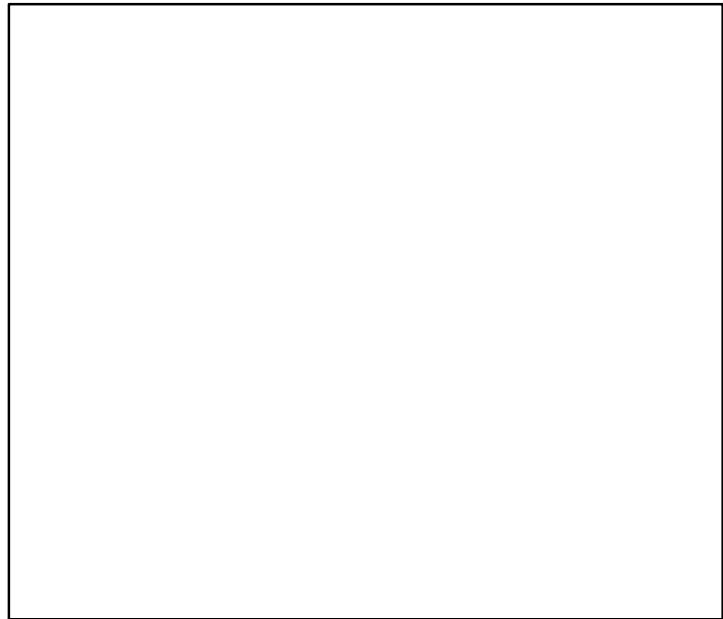
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	147		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

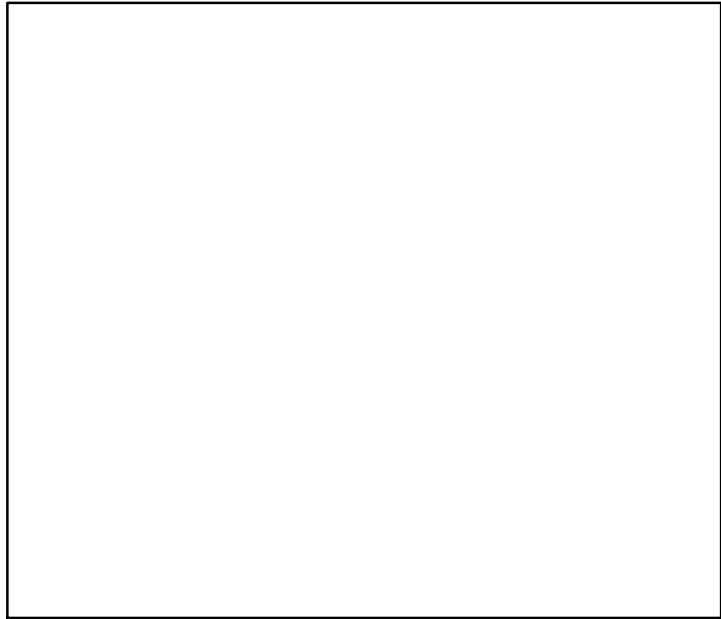
Kobe MSY*



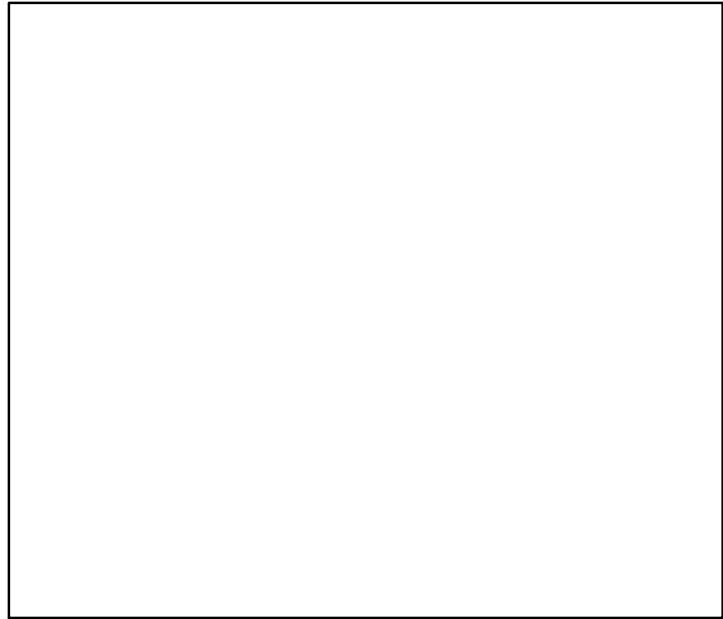
Kobe MGT*



Spawner Recruit*



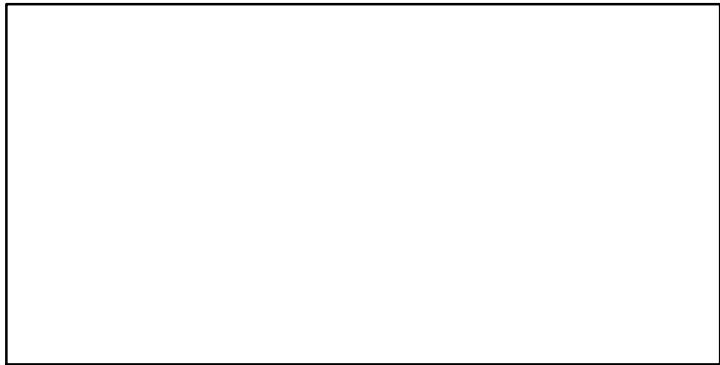
Production*



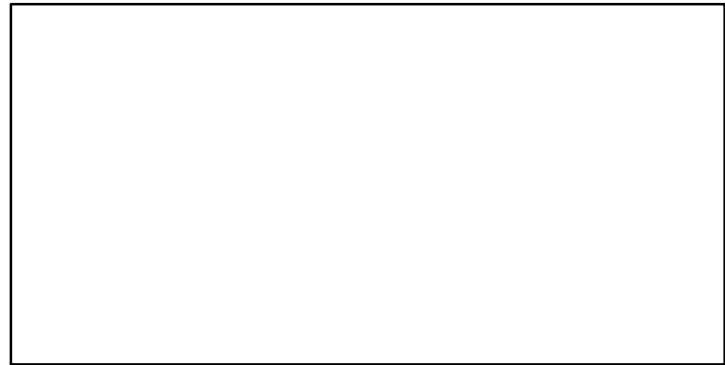
◆ Start Year ♦ End Year * No Data

Blonde ray ICES 4c–7d [BLRAYIVc–VIIId]

TB*



SSB*



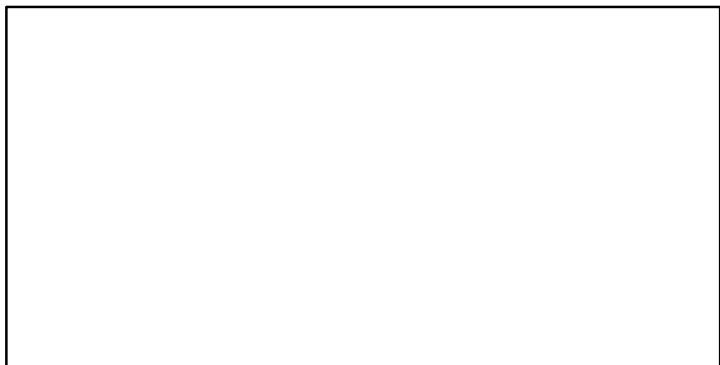
TN *



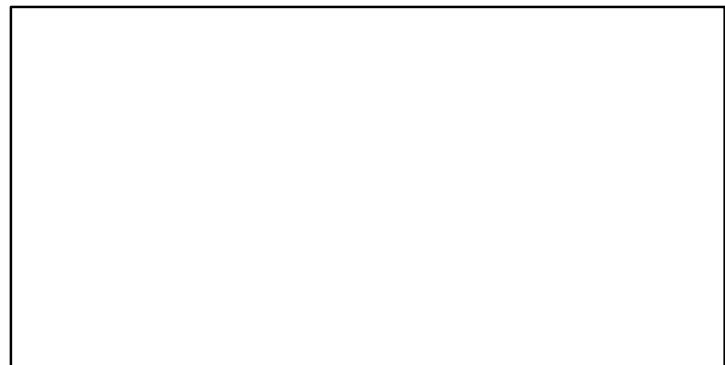
F*



ER*



Recruits*

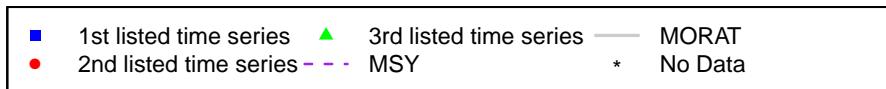
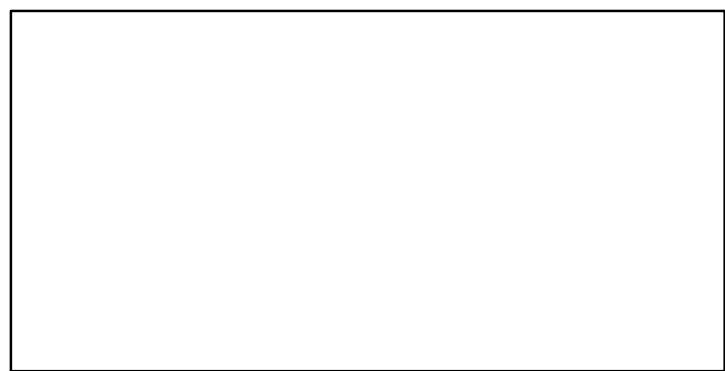
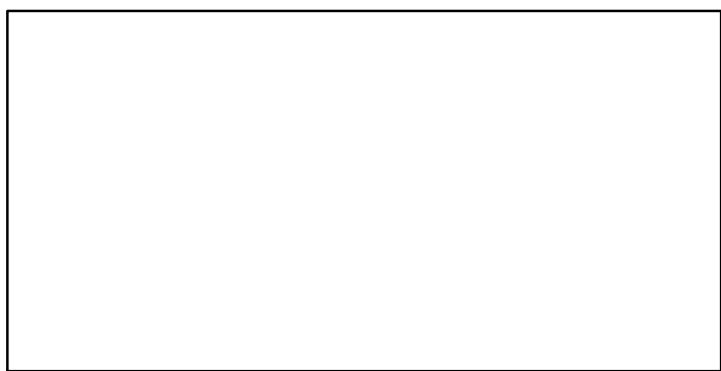
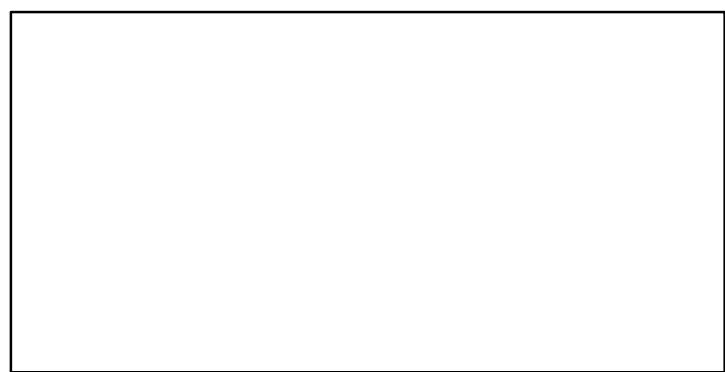
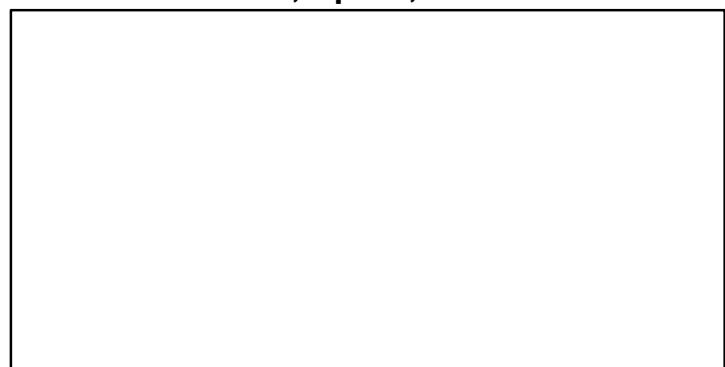
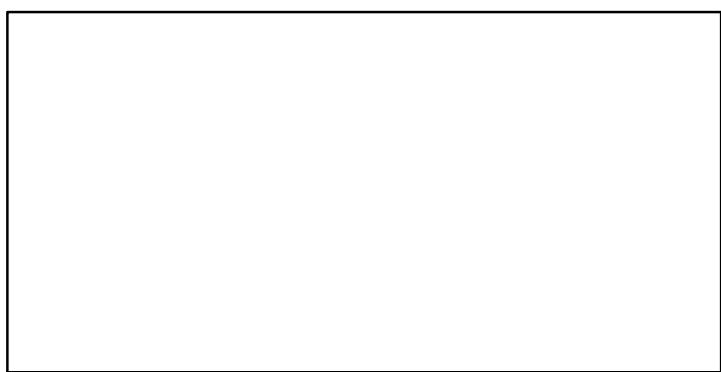
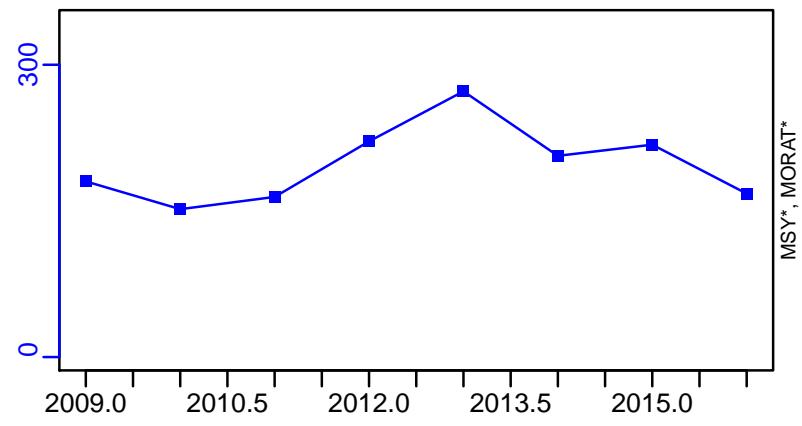


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Blonde ray ICES 4c–7d [BLRAYIVc–VIIId]

TL–MT, TC*, RecC* (2009–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



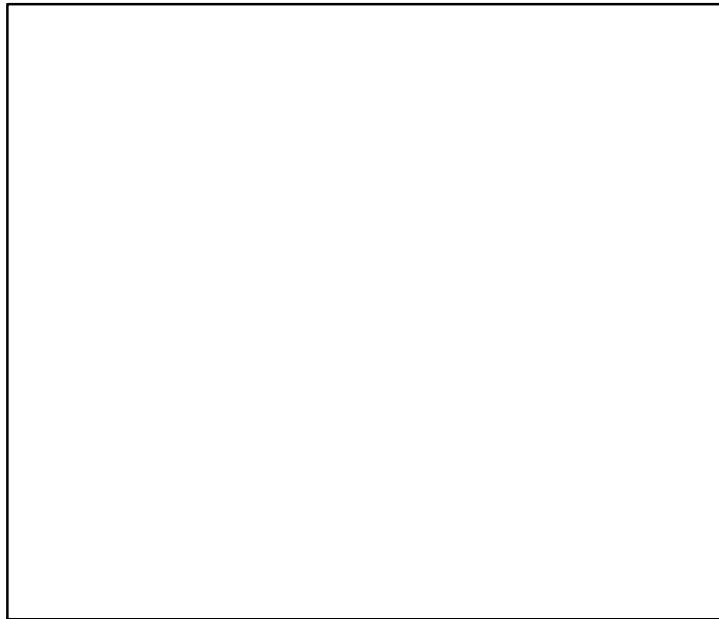
Blonde ray Portugese Waters -East [BLRAYIXa]

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYIXa-2005-2015-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

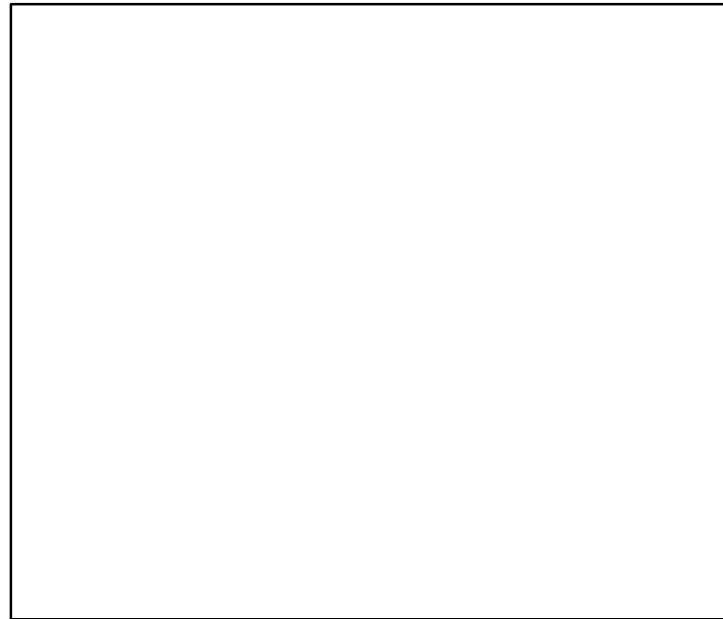
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.09	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	218		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

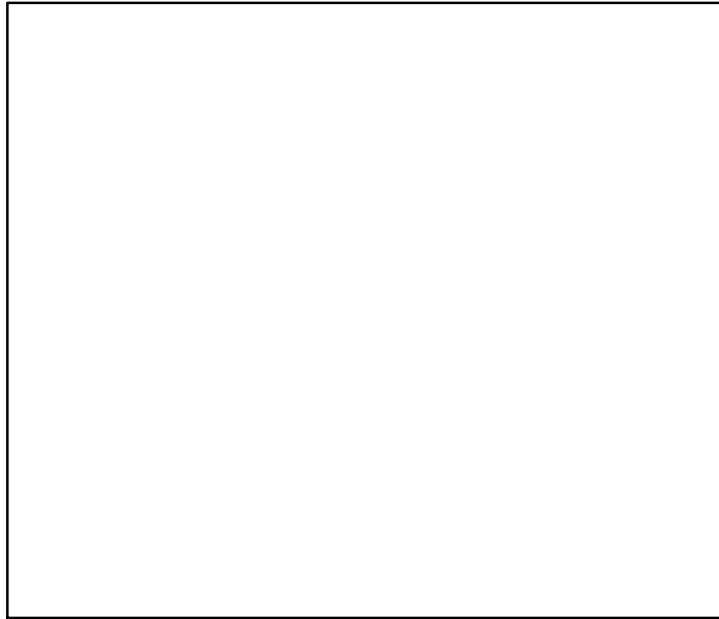
Kobe MSY*



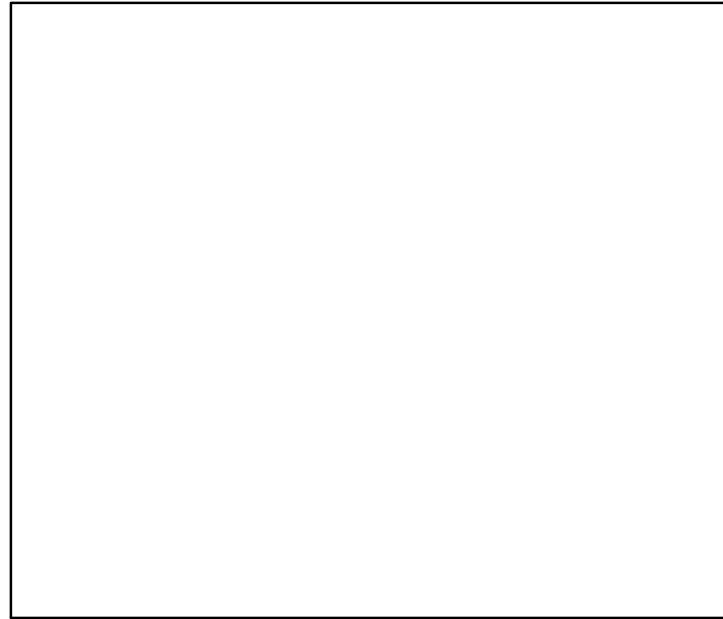
Kobe MGT*



Spawner Recruit*



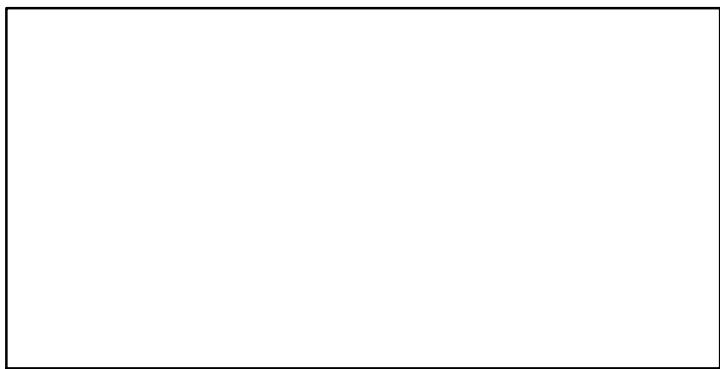
Production*



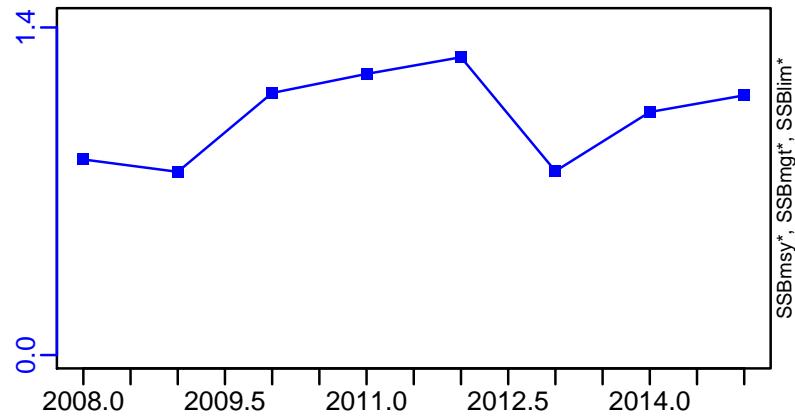
◆ Start Year ♦ End Year * No Data

Blonde ray Portuguese Waters –East [BLRAYIXa]

TB*



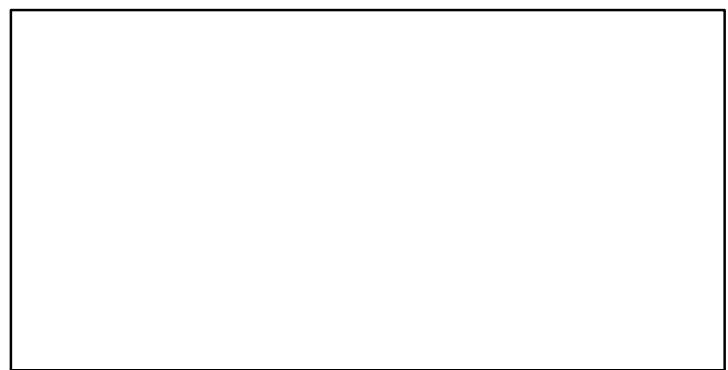
SSB–index (2005–2015–ICESIMP2018)



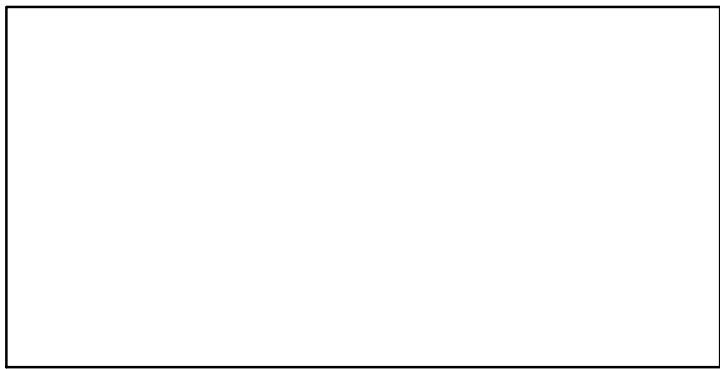
TN *



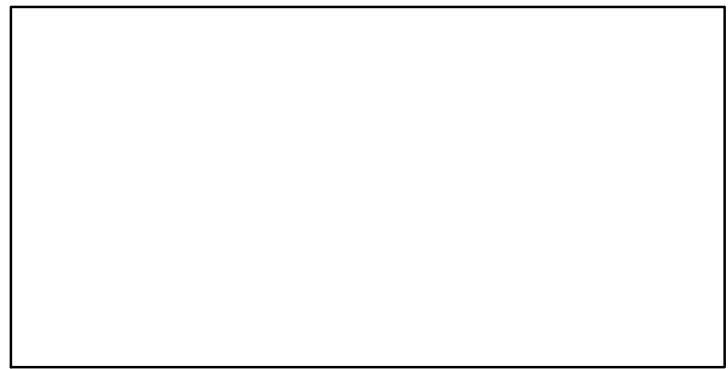
F*



ER*



Recruits*

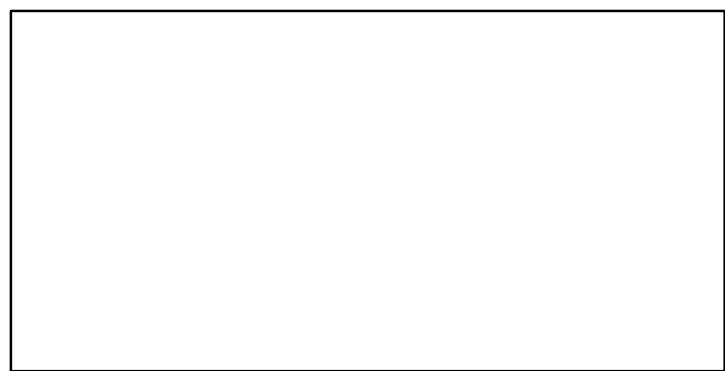
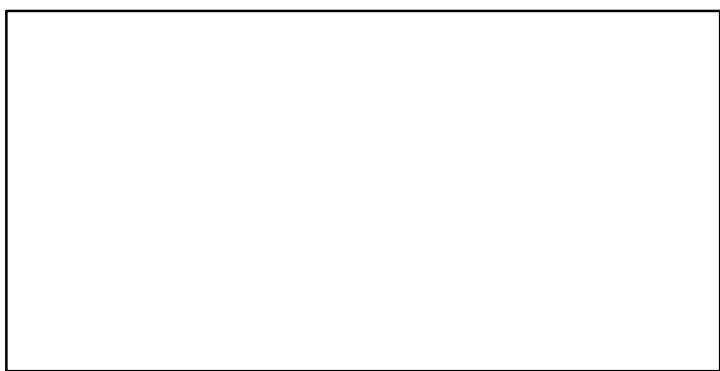
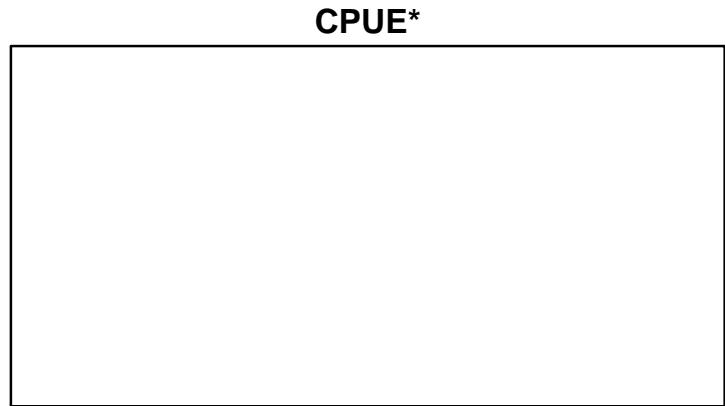
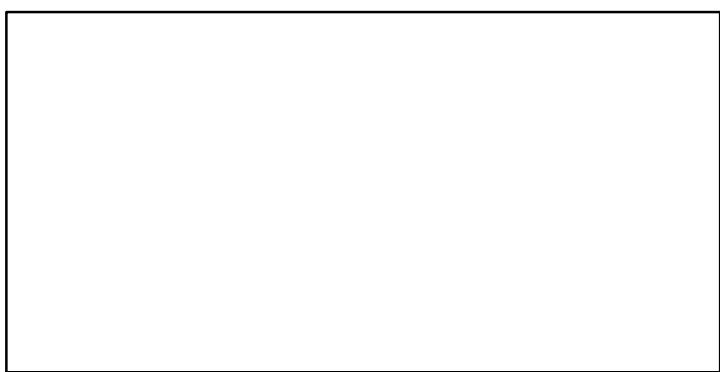
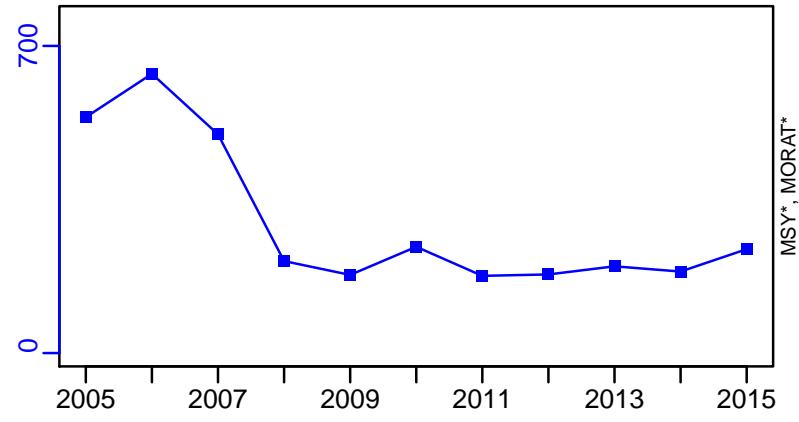


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Blonde ray Portuguese Waters –East [BLRAYIXa]

TL-MT, TC*, RecC* (2005–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

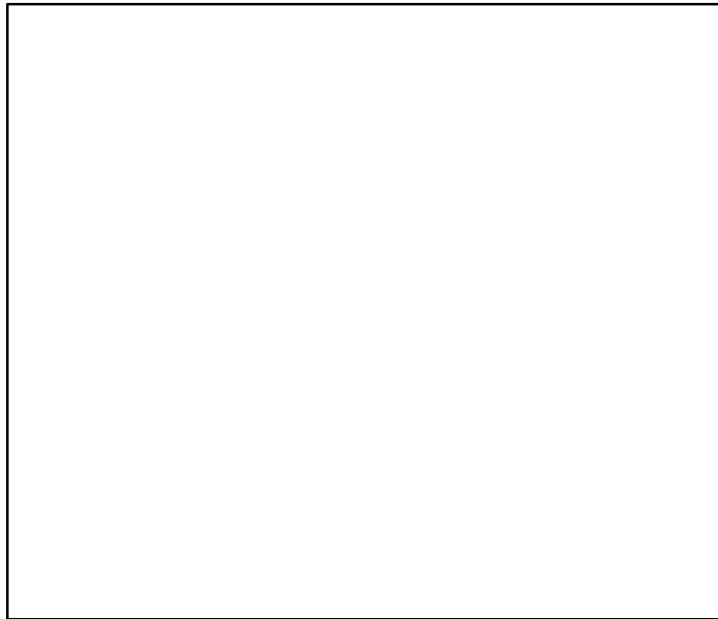
Blonde ray ICES 7afg [BLRAYVIIafg]

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYVIIafg-1993-2015-ICESIMP2018
Area	ICES 7afg
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

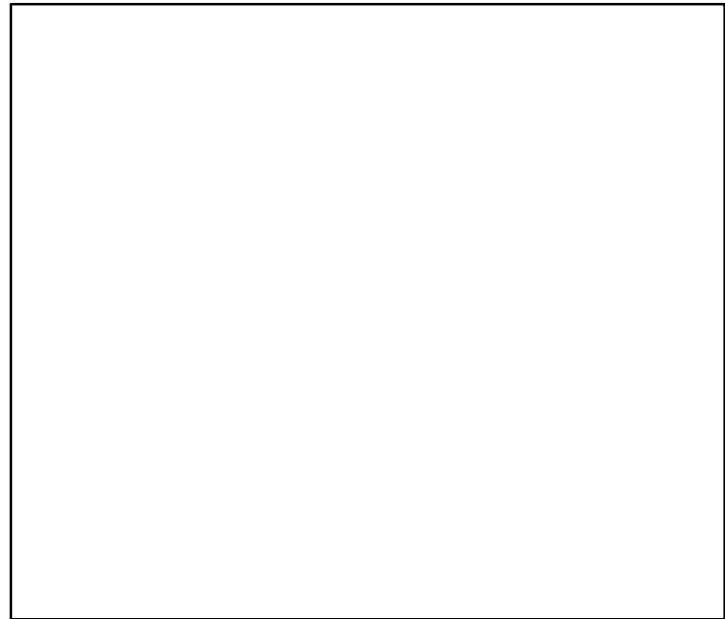
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	1170		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

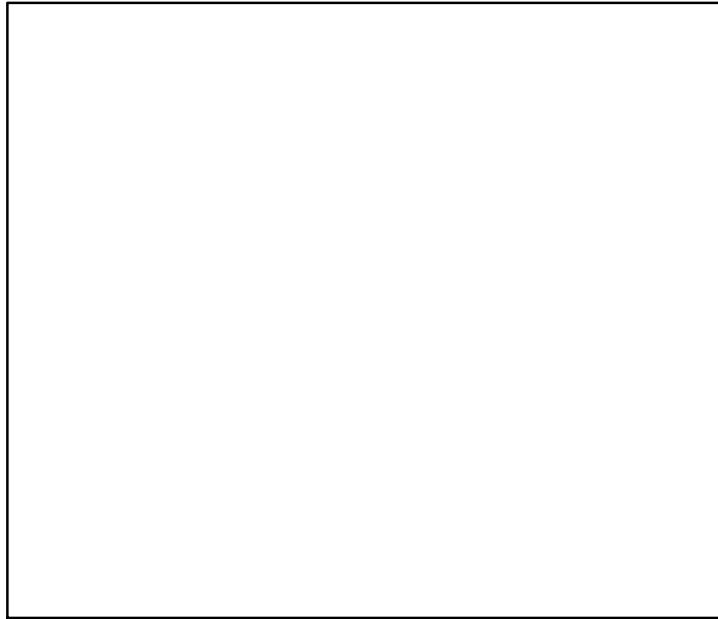
Kobe MSY*



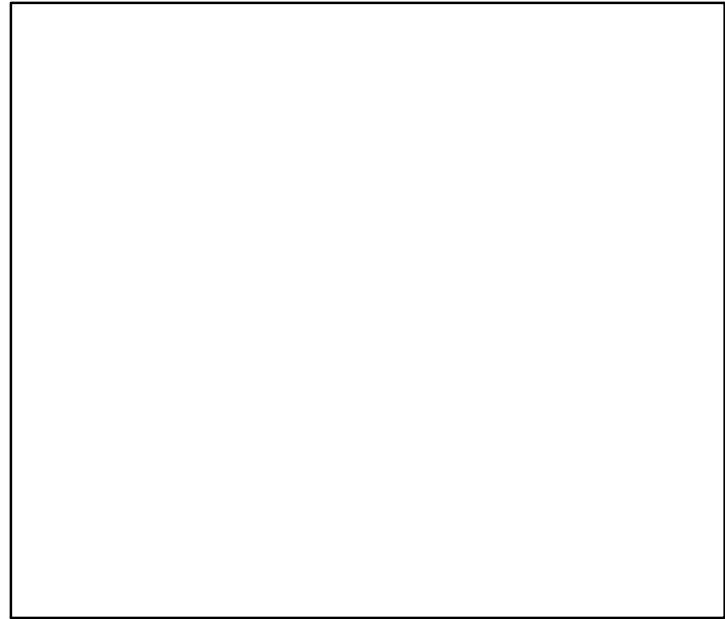
Kobe MGT*



Spawner Recruit*



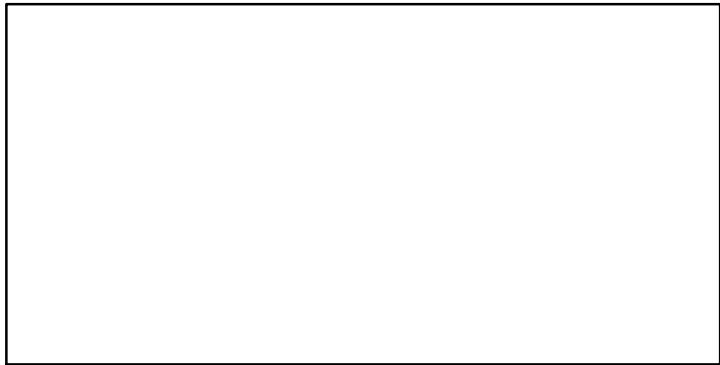
Production*



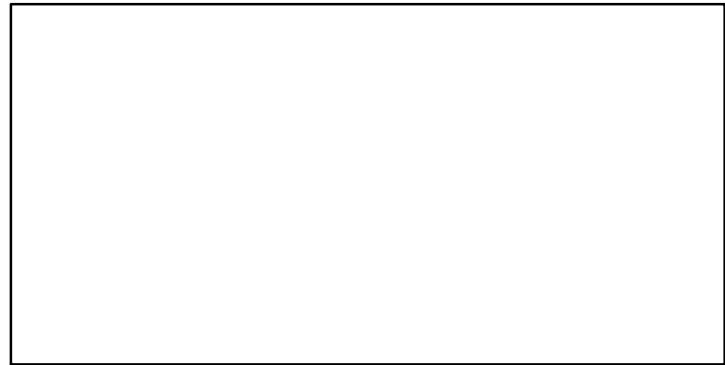
◆ Start Year ♦ End Year * No Data

Blonde ray ICES 7afg [BLRAYVIIafg]

TB*



SSB*



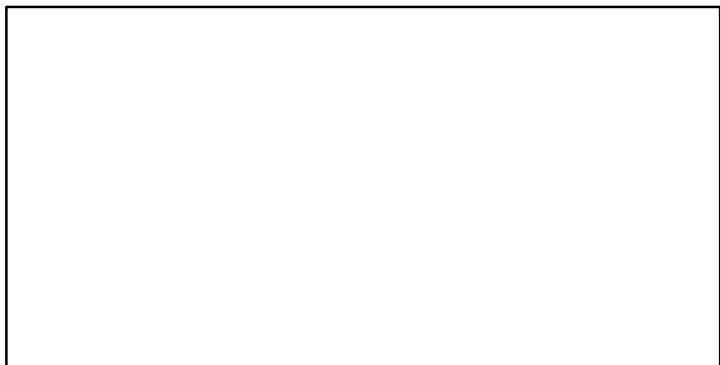
TN *



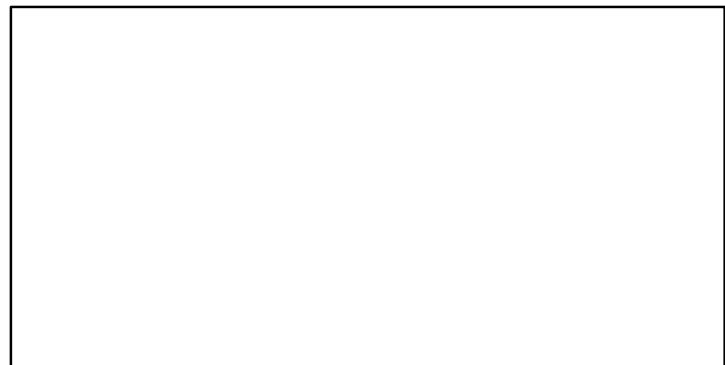
F*



ER*



Recruits*

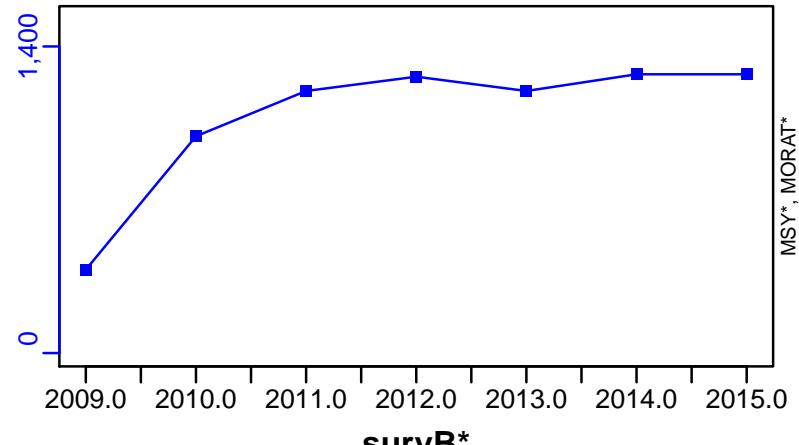


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Blonde ray ICES 7afg [BLRAYVIIafg]

TL-MT, TC*, RecC* (1993–2015–ICESIMP2018)

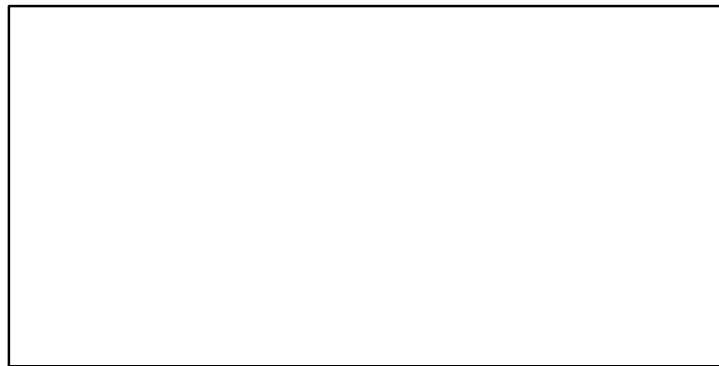
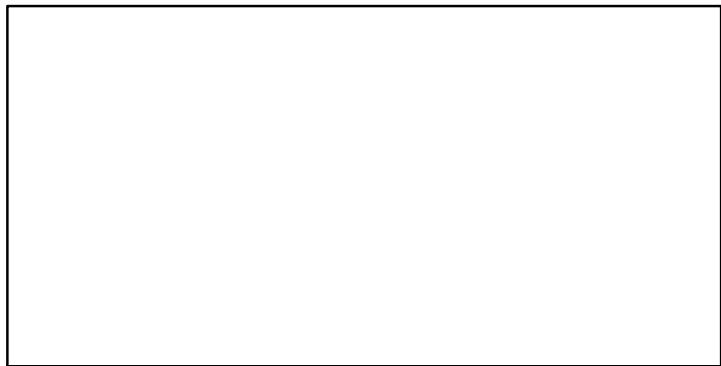
TAC*, Cpair*, Cadv*



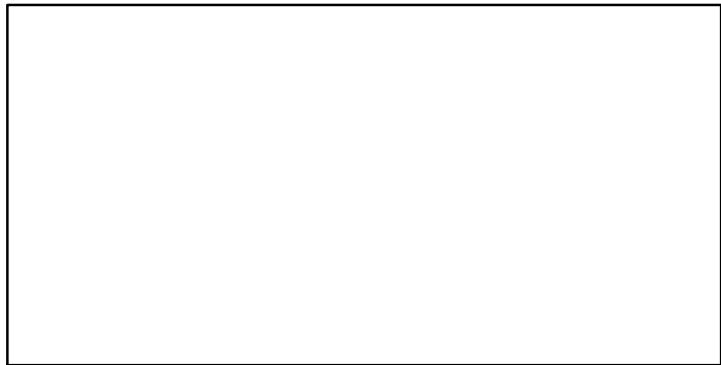
survB*

MSY*, MORAT*

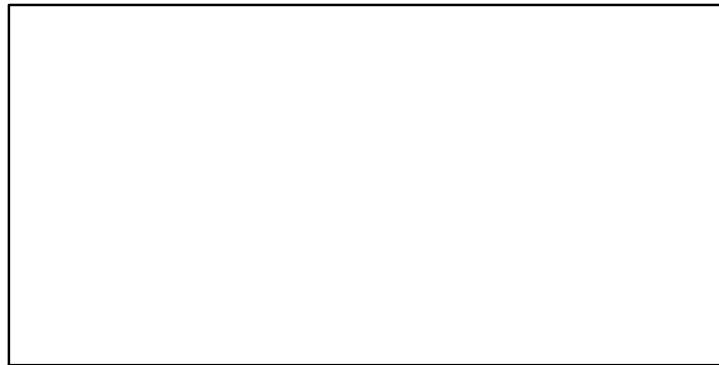
CPUE*



EFFORT*



CdivMSY*



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

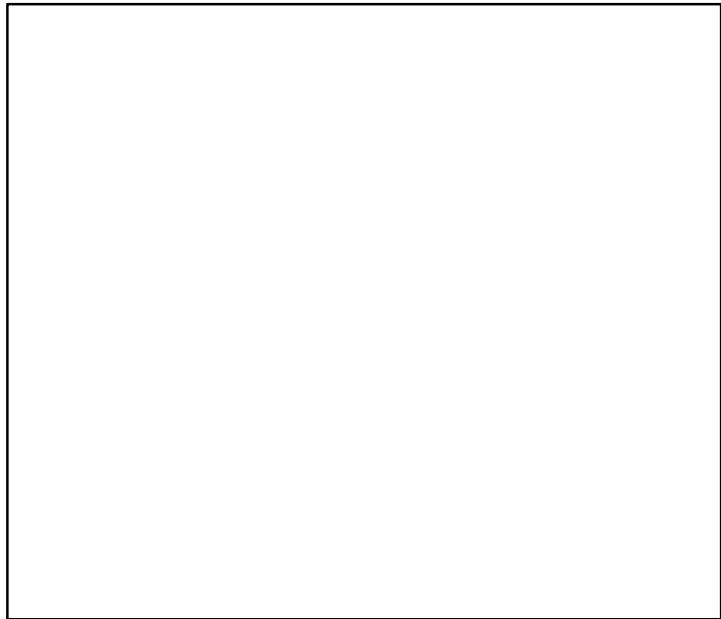
Blonde ray Western English Channel [BLRAYVIIe]

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYVIIe-2009-2015-ICESIMP2018
Area	Western English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

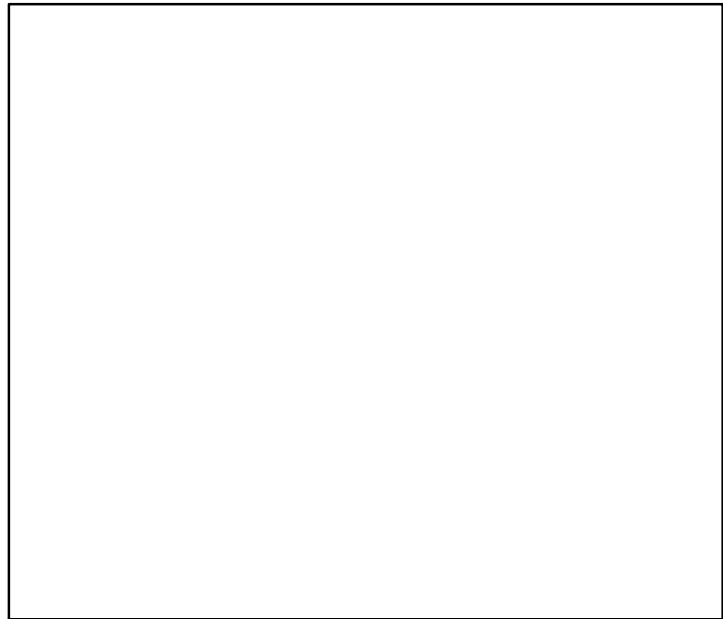
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	731		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

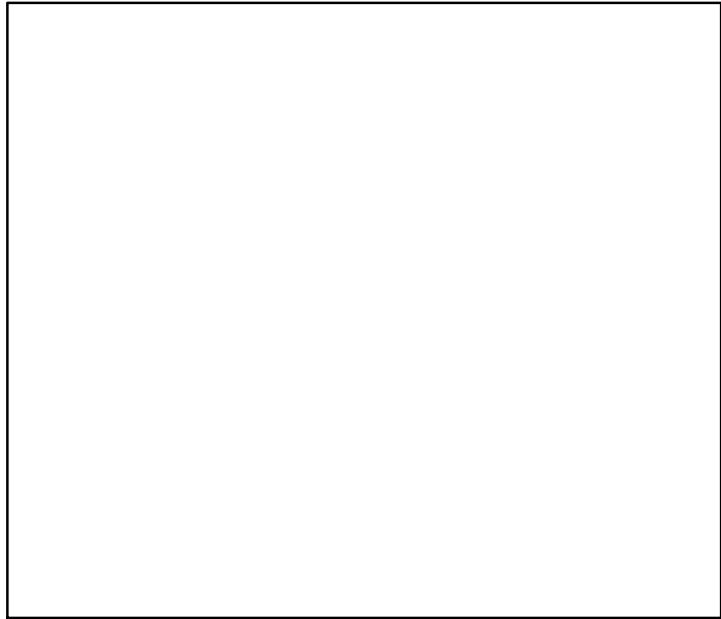
Kobe MSY*



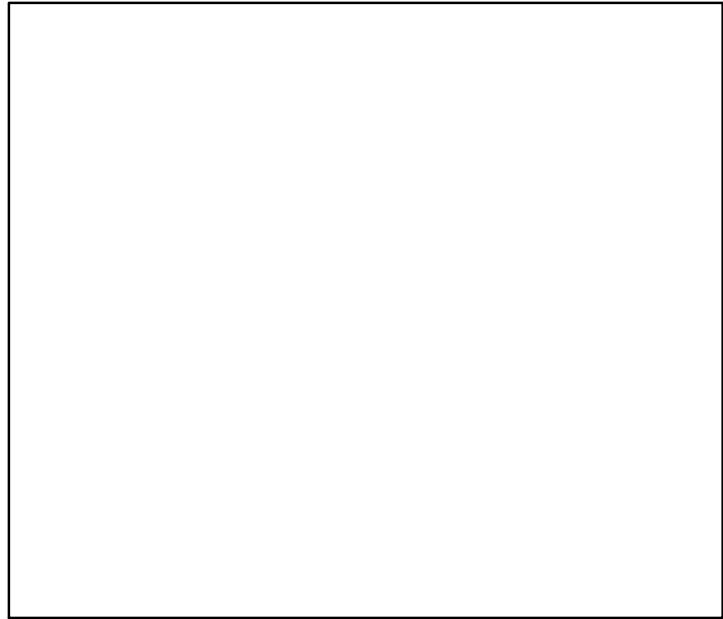
Kobe MGT*



Spawner Recruit*

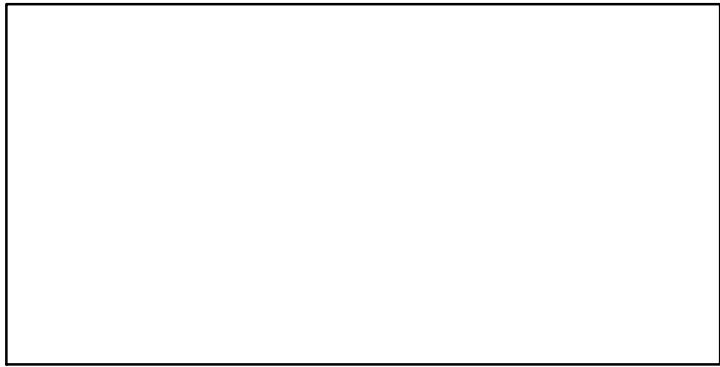


Production*

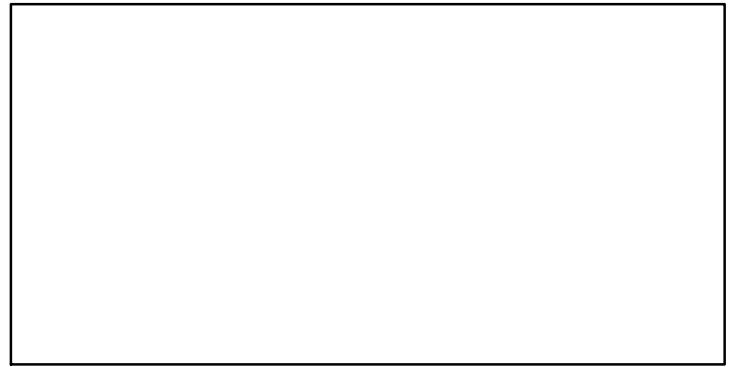


◆ Start Year ♦ End Year * No Data

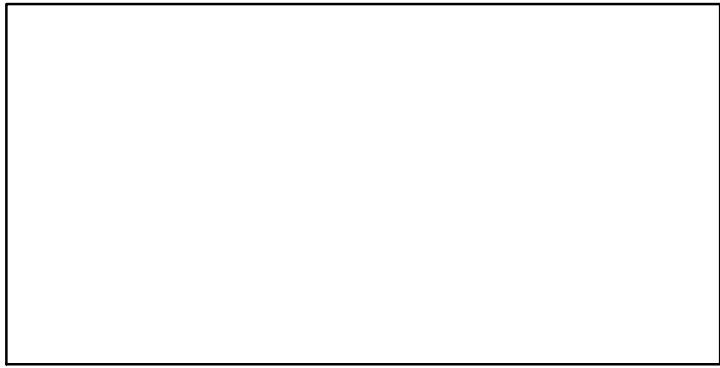
TB*



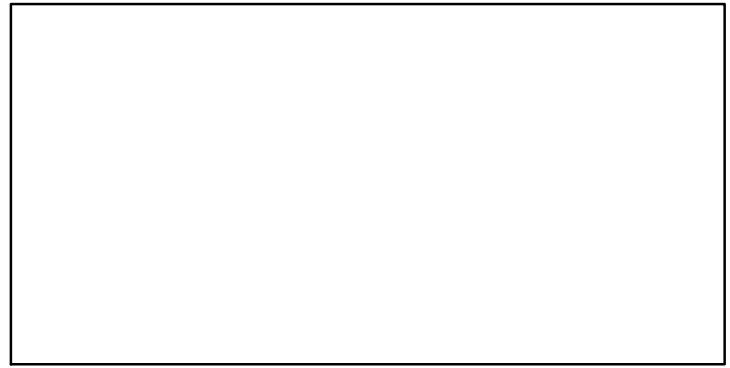
SSB*



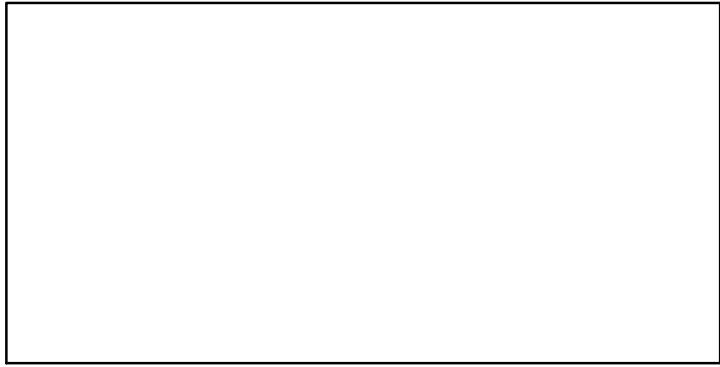
TN *



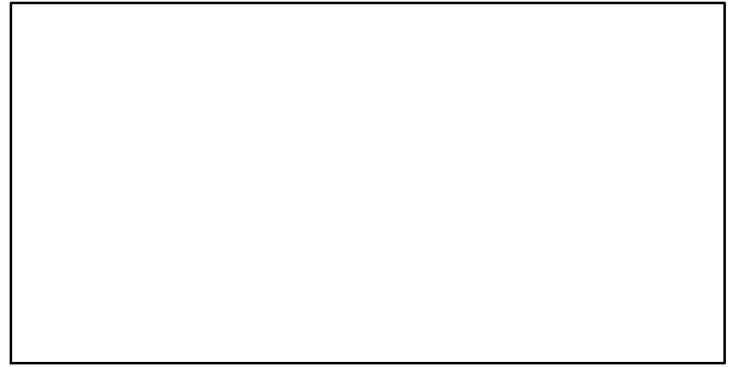
F*



ER*



Recruits*

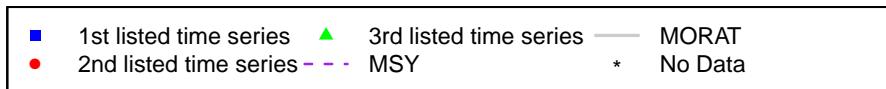
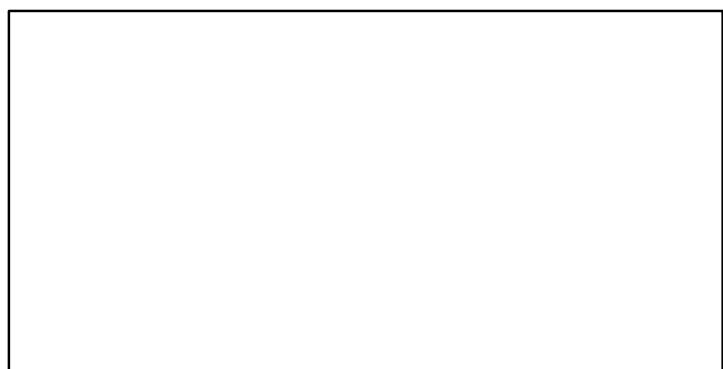
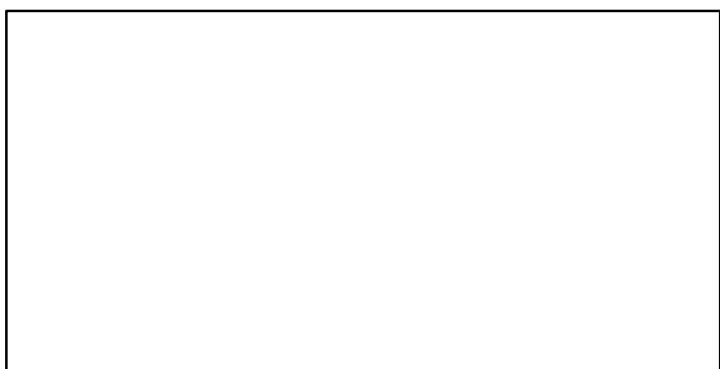
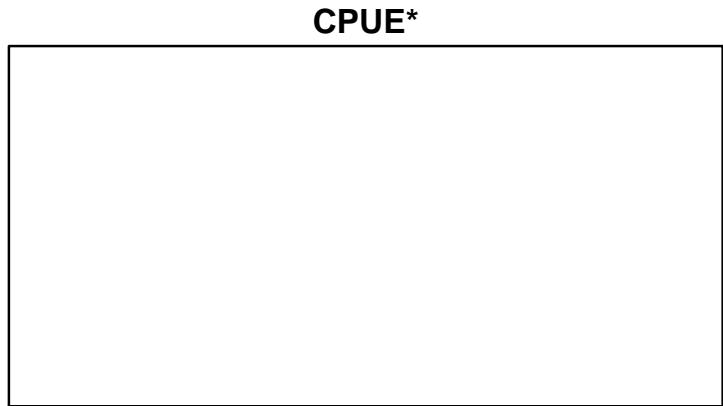
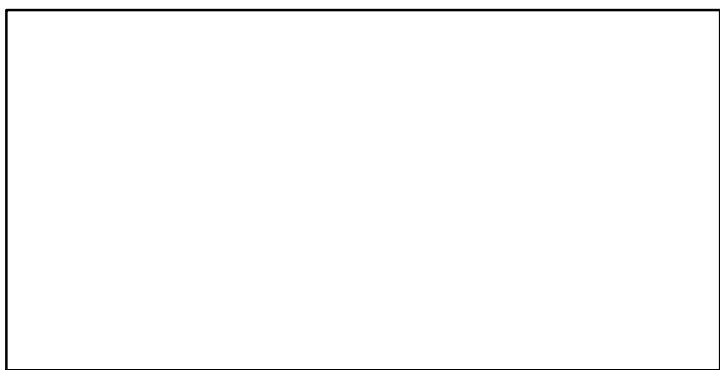
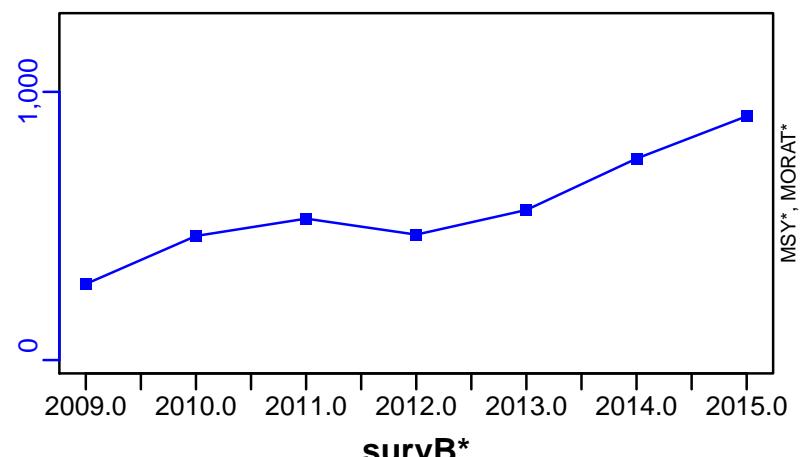


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Blonde ray Western English Channel [BLRAYVIIe]

TL-MT, TC*, RecC* (2009–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



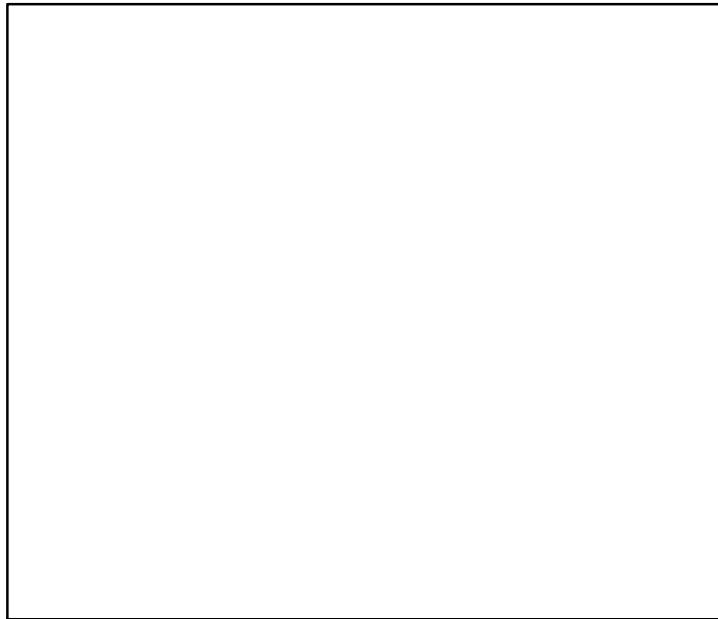
Blackmouth dogfish ICES 8-9a [BMDOGVIII-IXa]

Metadata	
Scientific Name	Galeus melastomus
Current Assess ID	WGEF-BMDOGVIII-IXa-1997-2016-ICESIMP2018
Area	ICES 8-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

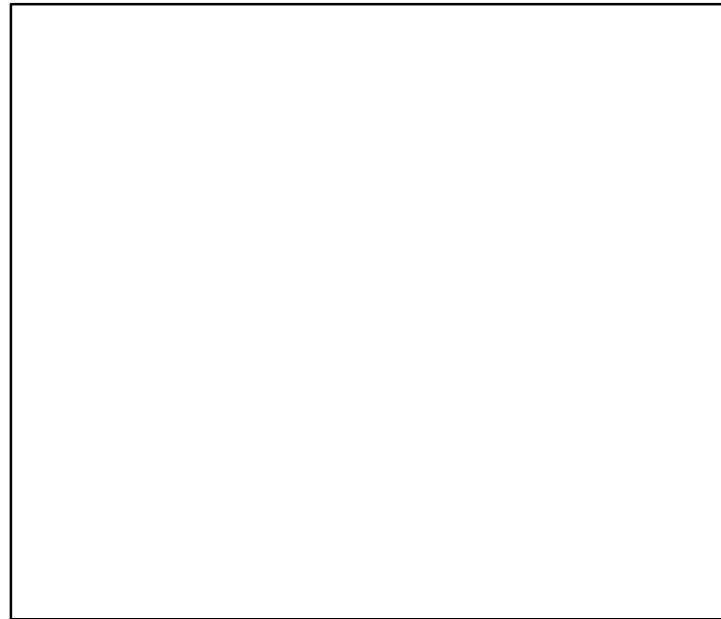
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.2	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	169		
TL	TL-MT	2016	167		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

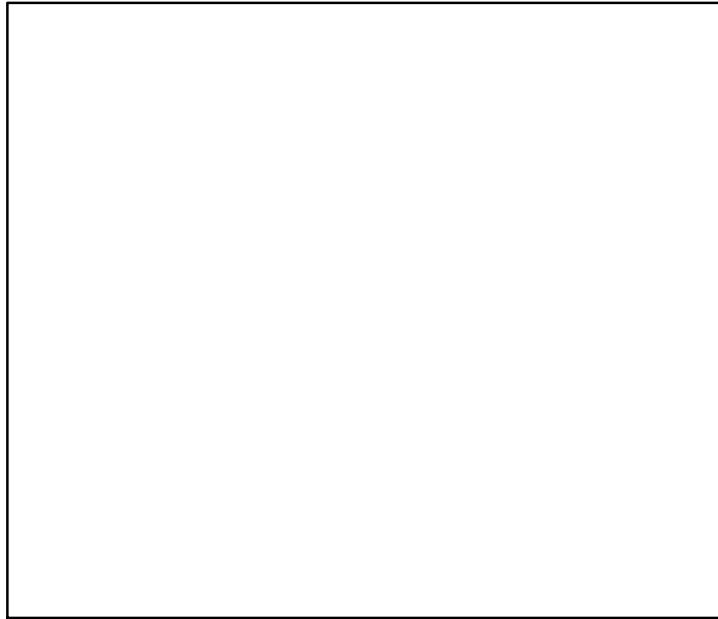
Kobe MSY*



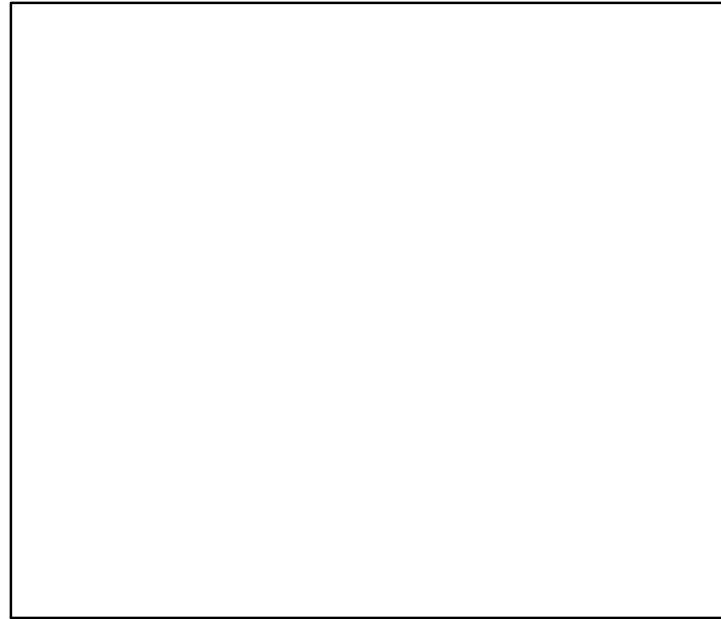
Kobe MGT*



Spawner Recruit*



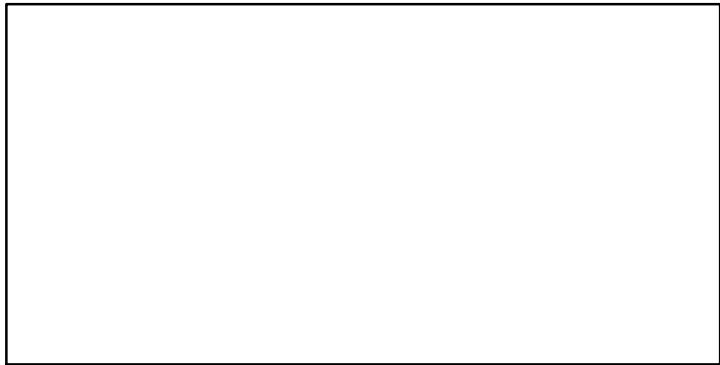
Production*



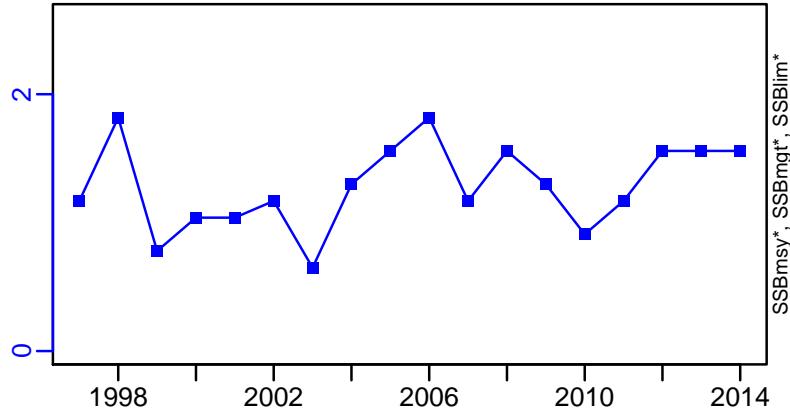
◆ Start Year ♦ End Year * No Data

Blackmouth dogfish ICES 8–9a [BMDOGVIII–IXa]

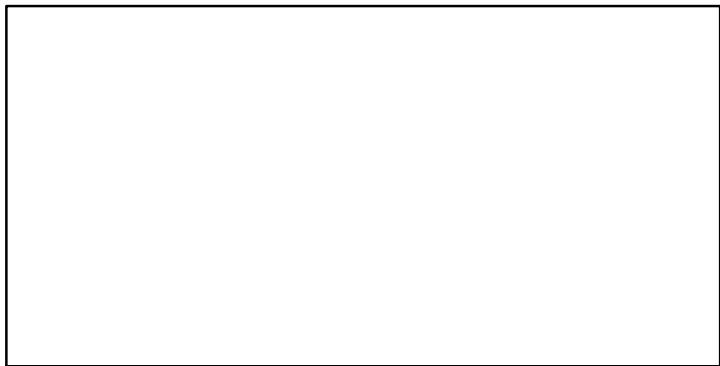
TB*



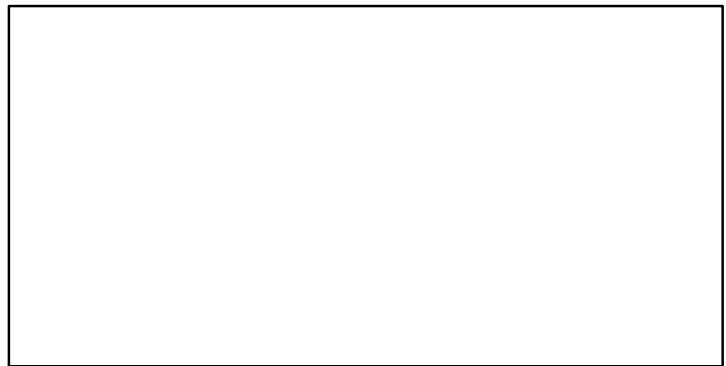
SSB–index (1997–2014–ICESIMP2018)



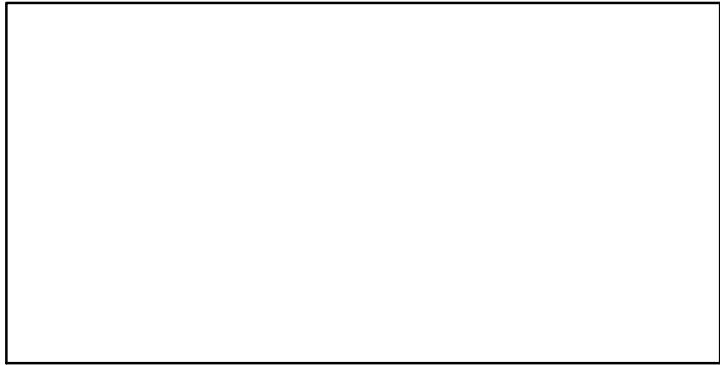
TN *



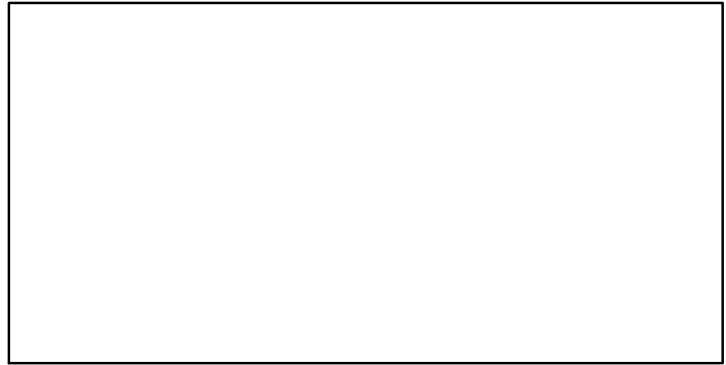
F*



ER*



Recruits*

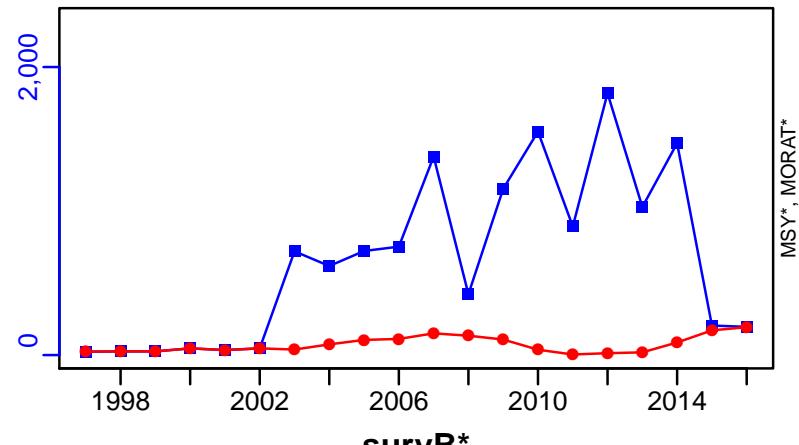


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

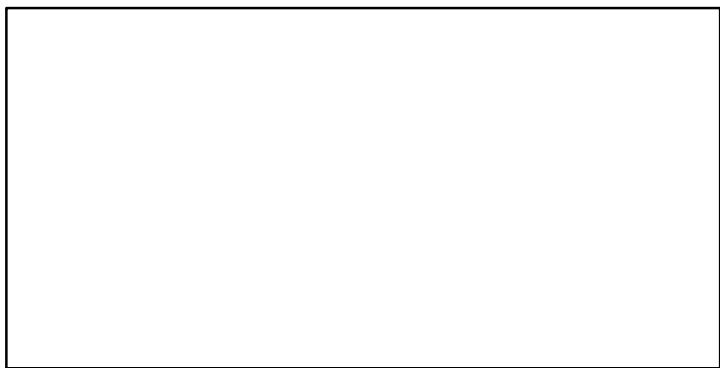
Blackmouth dogfish ICES 8–9a [BMDOGVIII–IXa]

TC–MT, TL–MT, RecC* (1997–2016–ICESIMP2018)

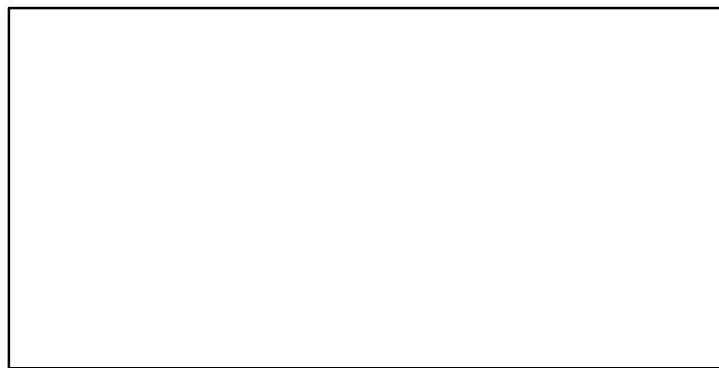
TAC*, Cpair*, Cadv*



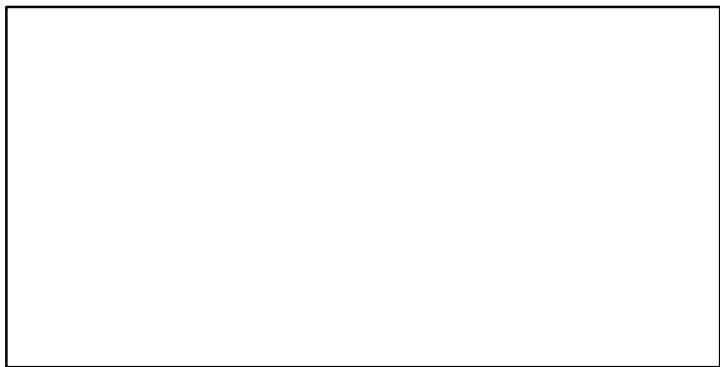
survB*



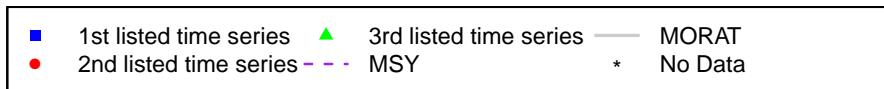
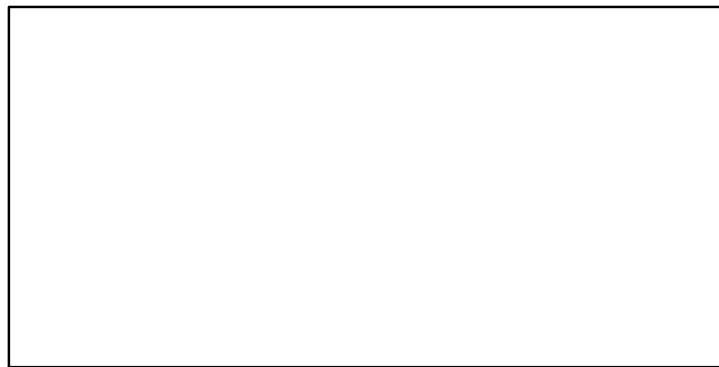
CPUE*



EFFORT*



CdivMSY*



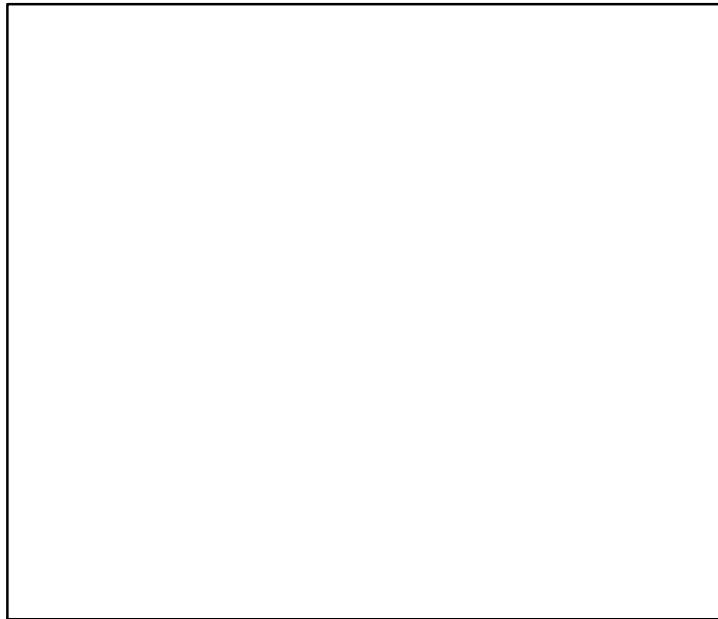
Blackmouth dogfish ICES 6-7 [BMDOGVI-VII]

Metadata	
Scientific Name	Galeus melastomus
Current Assess ID	WGEF-BMDOGVI-VII-2005-2016-ICESIMP2018
Area	ICES 6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

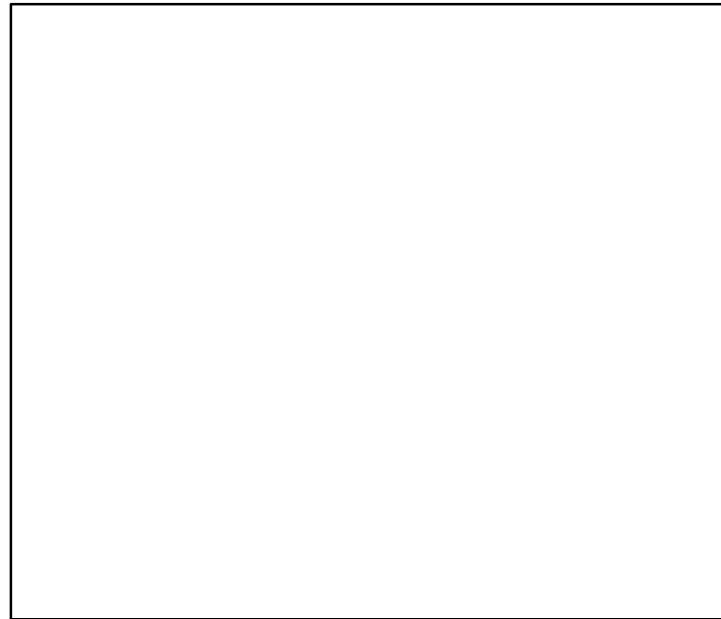
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	2.1	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	0.132		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

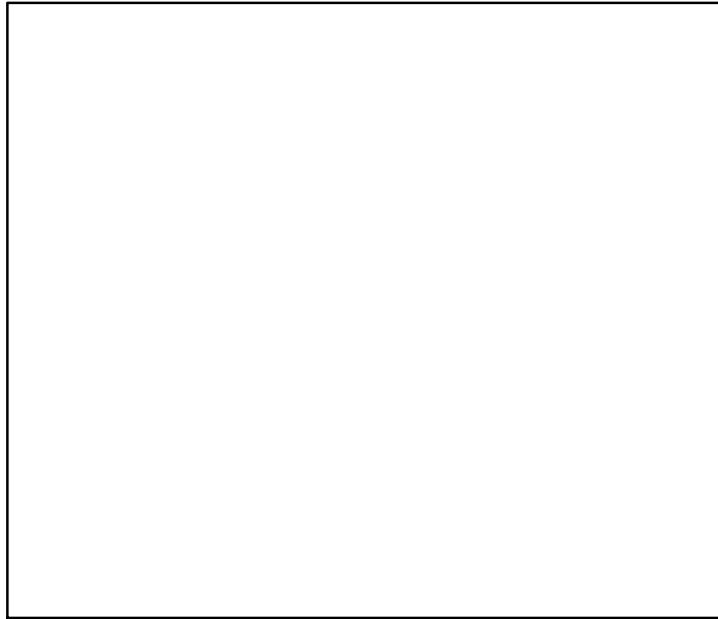
Kobe MSY*



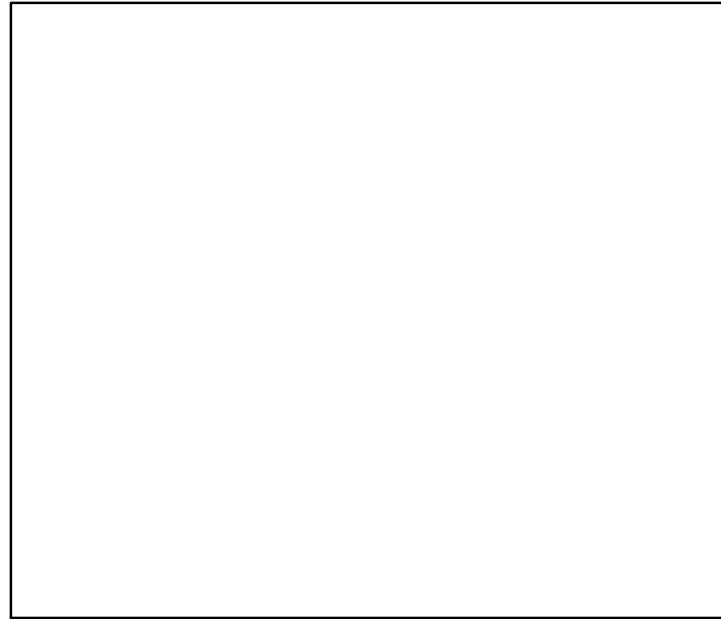
Kobe MGT*



Spawner Recruit*



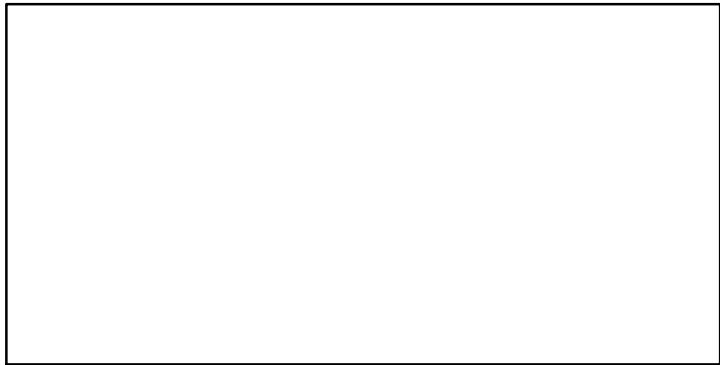
Production*



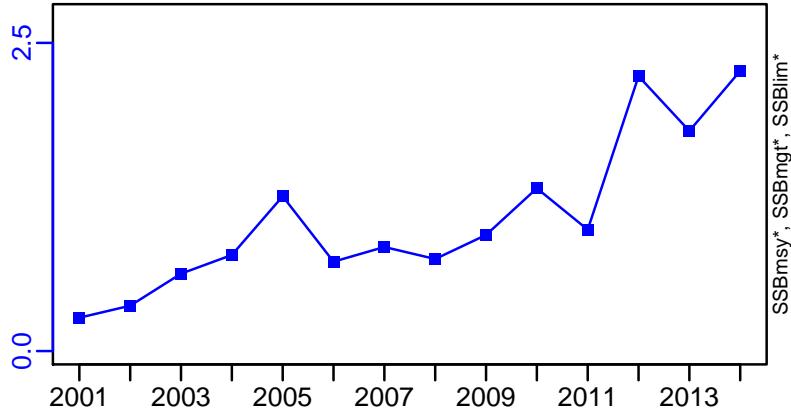
◆ Start Year ♦ End Year * No Data

Blackmouth dogfish ICES 6–7 [BMDOGVI–VII]

TB*



SSB–index (2001–2014–ICESIMP2018)



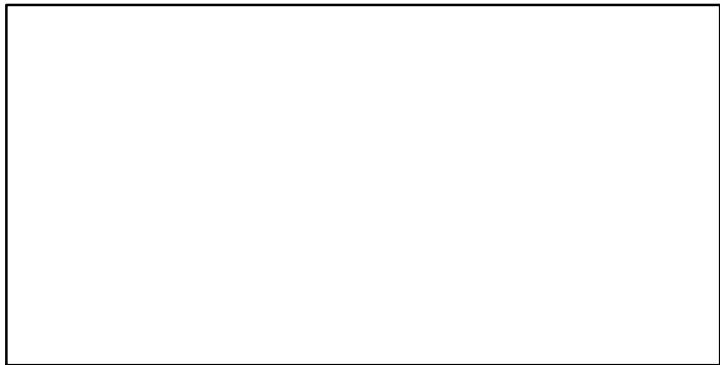
TN *



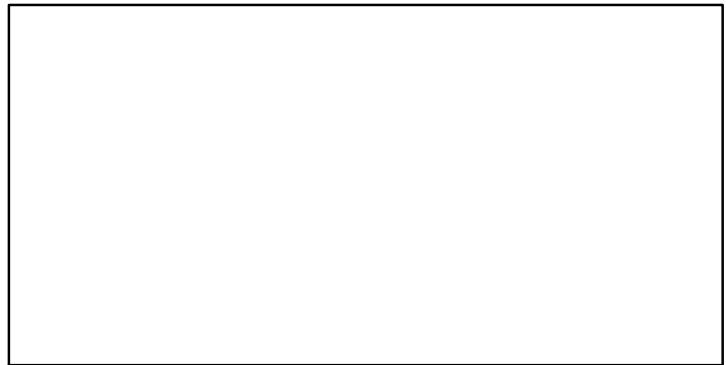
F*



ER*



Recruits*

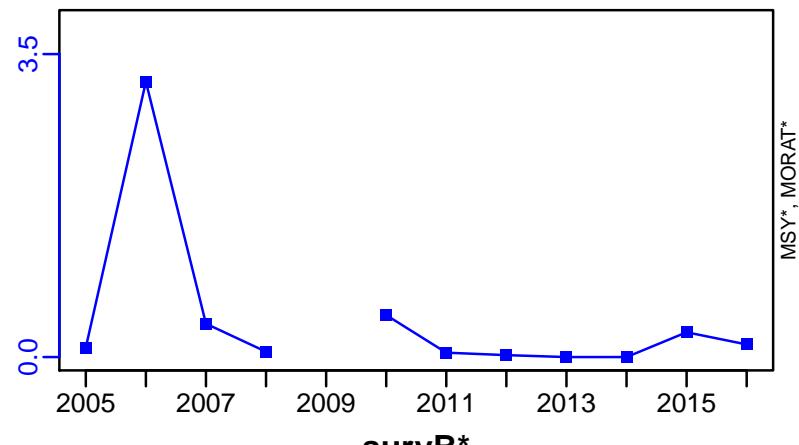


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Blackmouth dogfish ICES 6–7 [BMDOGVI–VII]

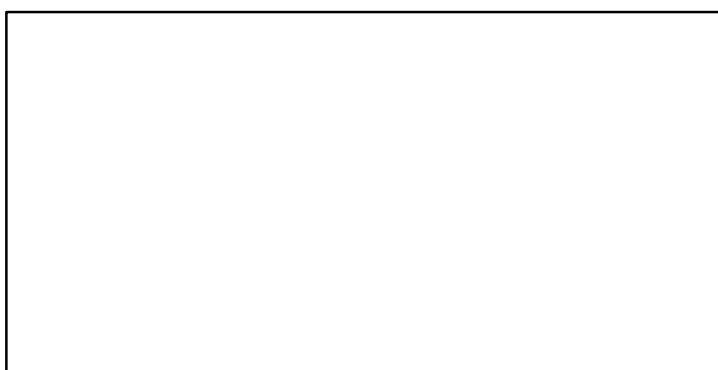
TL–MT, TC*, RecC* (2005–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*

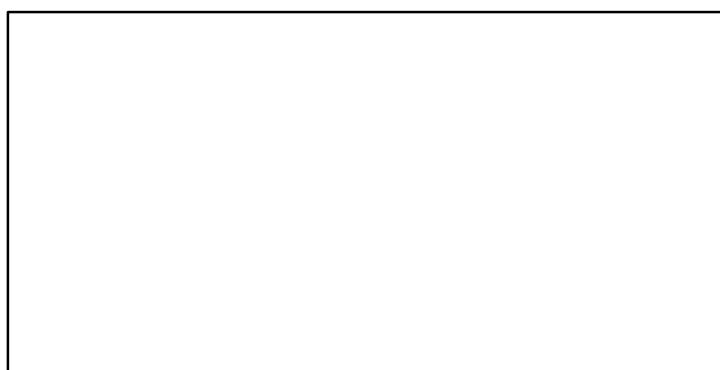


survB*

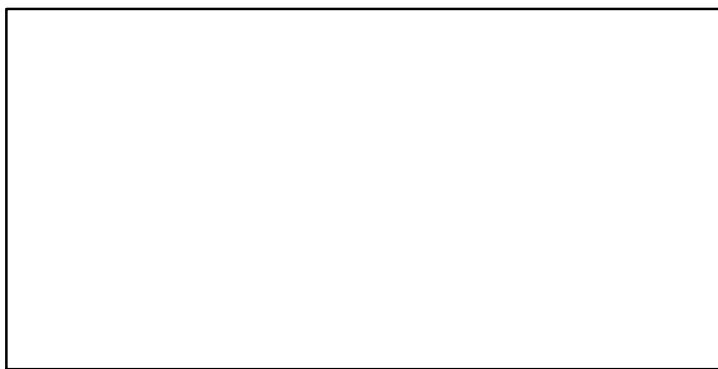
MSY*, MORAT*



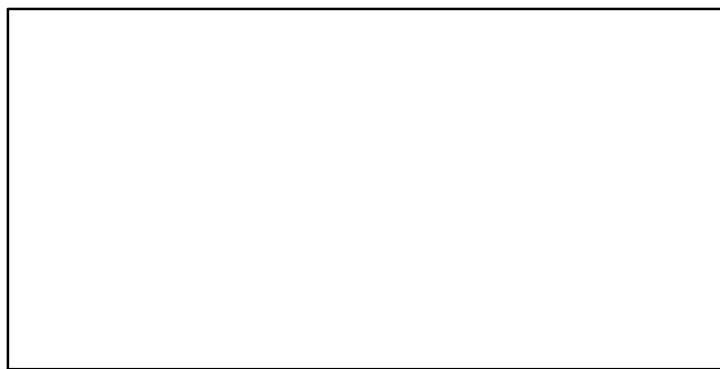
CPUE*



EFFORT*



CdivMSY*



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

Boarfish ICES 6-8 [BOARVI-VIII]

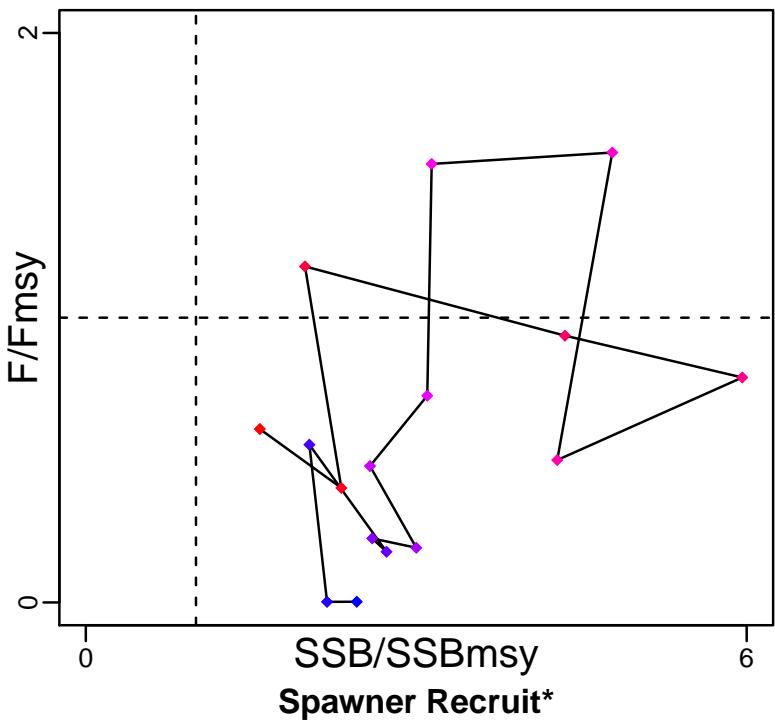
Metadata	
Scientific Name	Capros aper
Current Assess ID	WGWISE-BOARVI-VIII-1991-2017-ICESIMP2018
Area	ICES 6-8
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2013, 2014, 2016, 2017, 2015

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

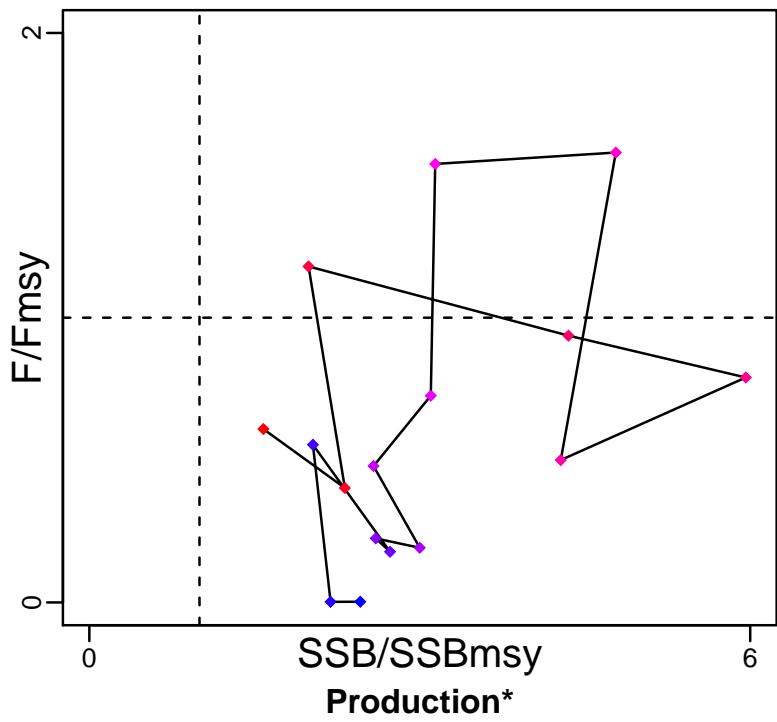
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-relative	2016	0.262	Both	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-relative	2016	0.581	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2017	19,300			
TL	TL-MT	2017	18,000			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2017	1.96			
F/Fmsy	FdivFmsy-dimensionless	2017	0.609			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Boarfish ICES 6–8 [BOARVI–VIII]

Kobe MSYpref (1991–2017–ICESIMP2018)



Kobe MGTpref (1991–2017–ICESIMP2018)



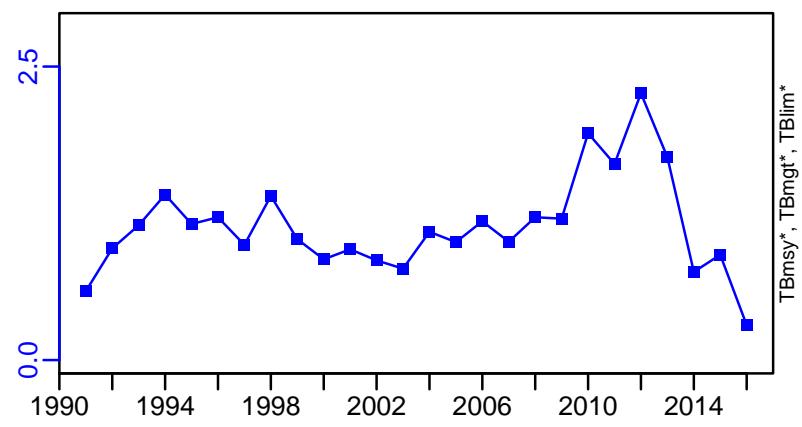
Spawner Recruit*

Production*

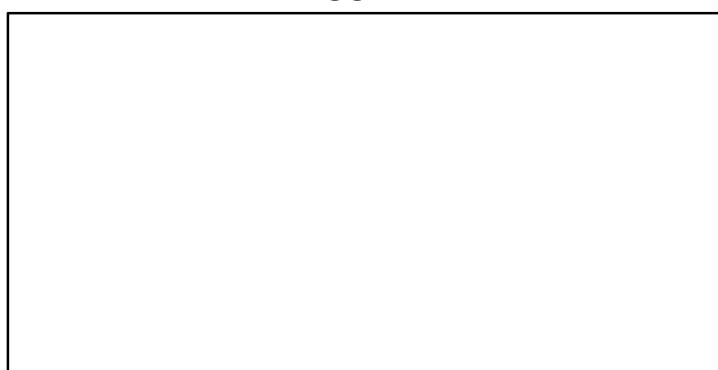
♦ Start Year ◆ End Year * No Data

Boarfish ICES 6–8 [BOARVI–VIII]

TB-relative (1991–2016–ICESIMP2018)



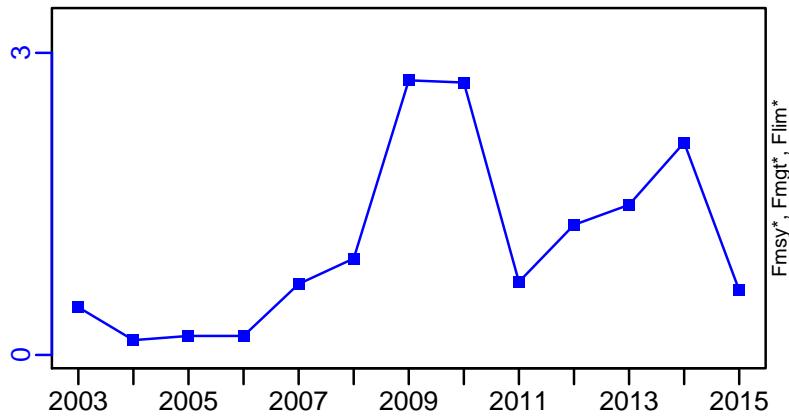
SSB*



TN *



F-relative (1991–2016–ICESIMP2018)



ER*



Recruits*

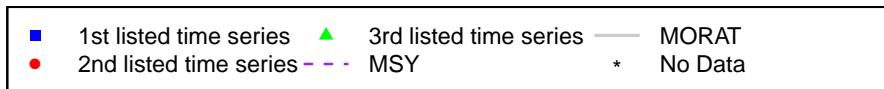
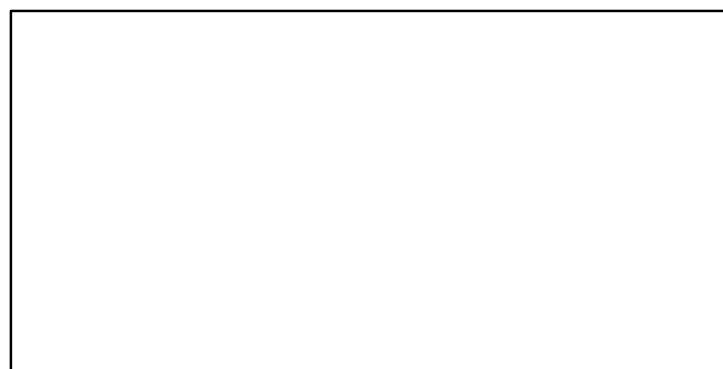
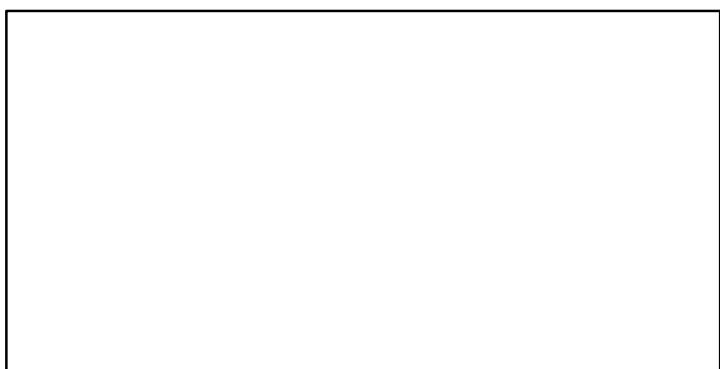
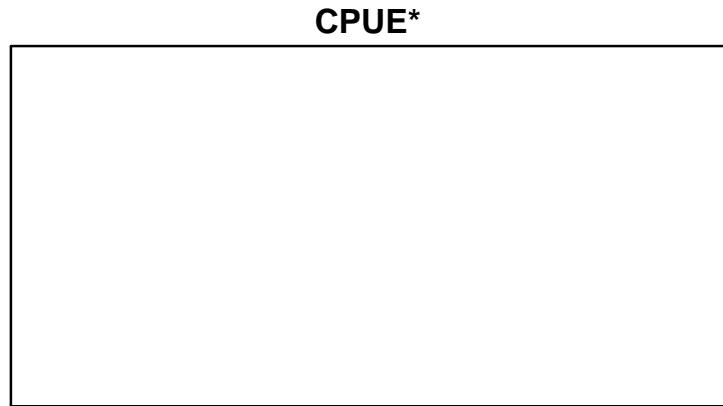
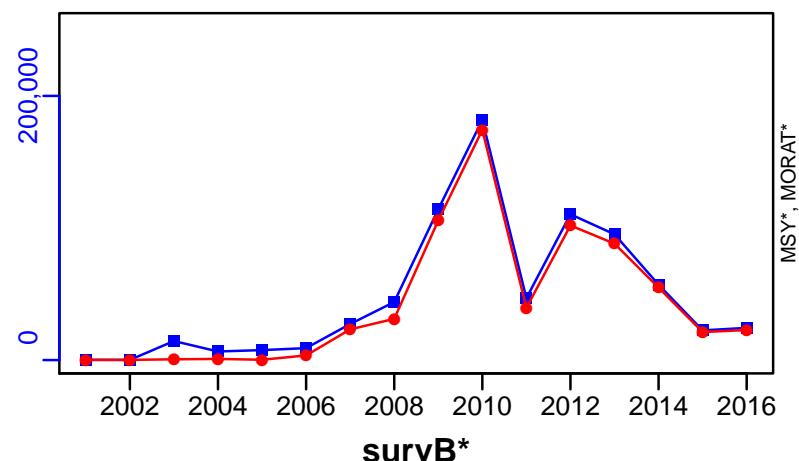


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Boarfish ICES 6–8 [BOARVI–VIII]

TC–MT, TL–MT, RecC* (1991–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



Brill Baltic Areas 22-32 [BRILL2232]

Metadata	
Scientific Name	Scophthalmus rhombus
Current Assess ID	WGBFAS-BRILL2232-1970-2016-ICESIMP2018
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2014, 2016, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	0.93	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	32		
TL	TL-MT	2016	40		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

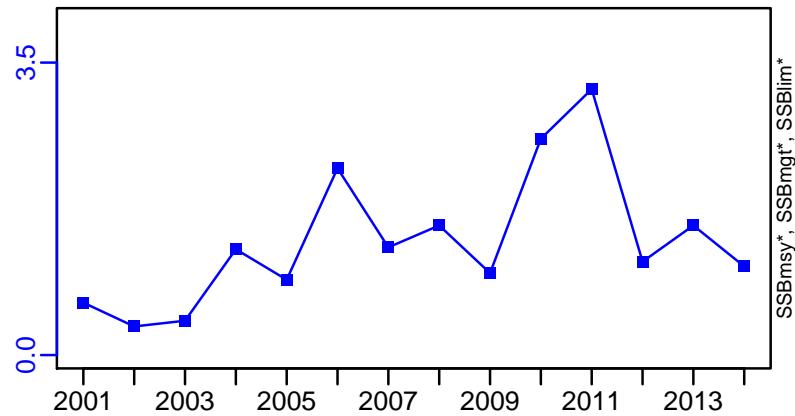
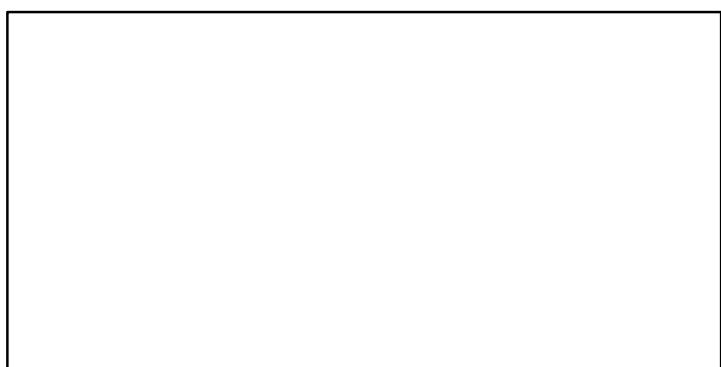
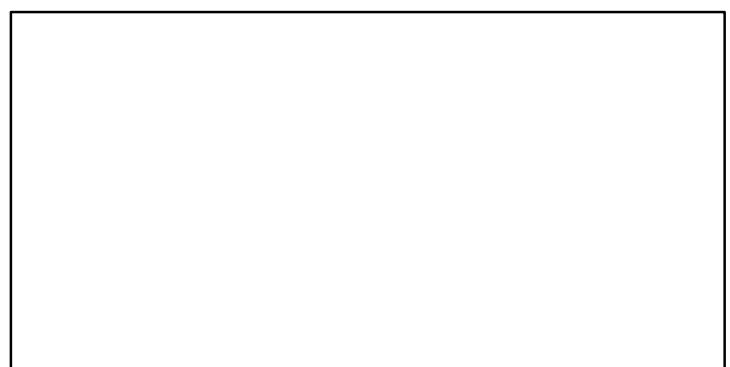
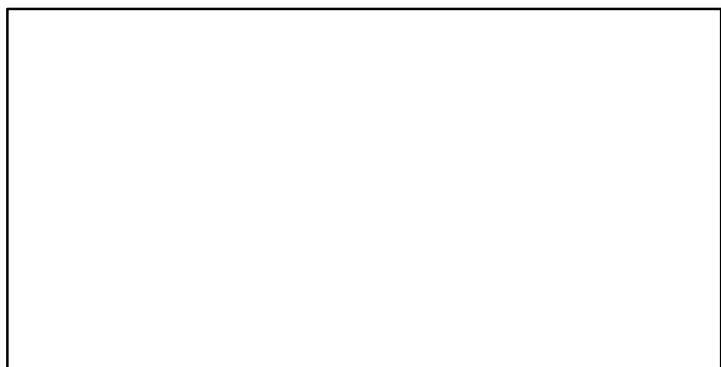
Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

TB*

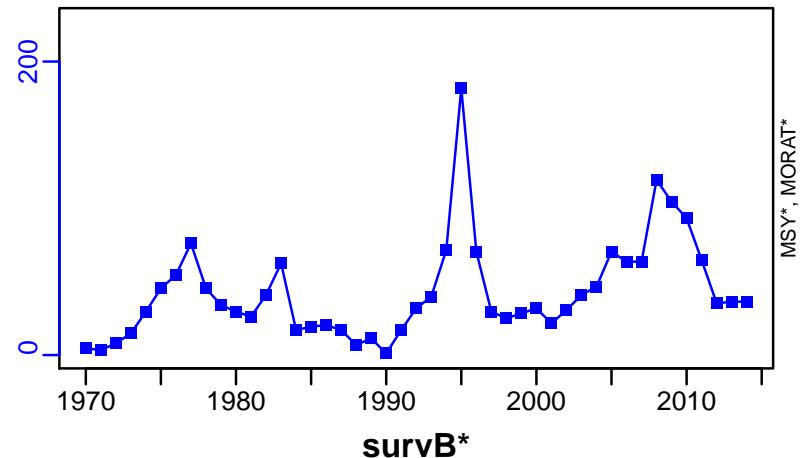
SSB-index (1970–2014–ICESIMP2018)

**TN *****F*****ER*****Recruits***

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

TC-MT, TL*, RecC* (1970–2014–ICESIMP2018)

TAC*, Cpair*, Cadv*



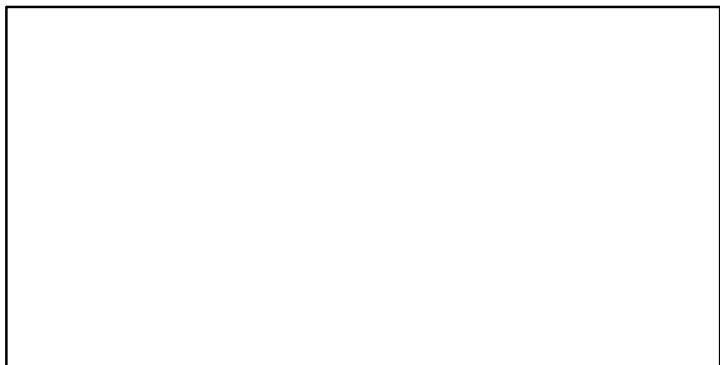
survB*



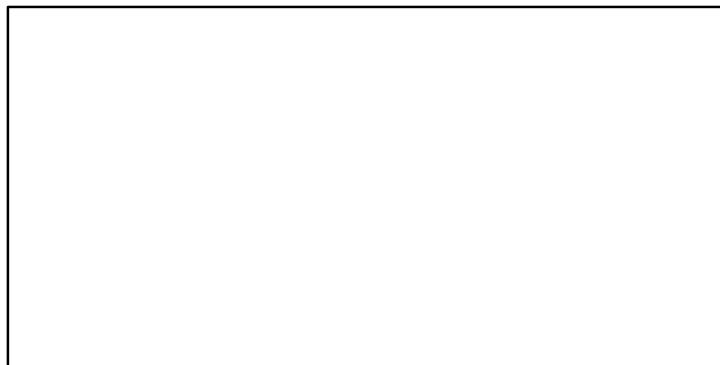
CPUE*



EFFORT*



CdivMSY*



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

Brill ICES 3a-4-7d [BRILLIIla-IV-VIId]

Metadata	
Scientific Name	Scophthalmus rhombus
Current Assess ID	WGNSSK-BRILLIIla-IV-VIId-1950-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2014, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	46	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	2620		
TL	TL-MT	2016	2440		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

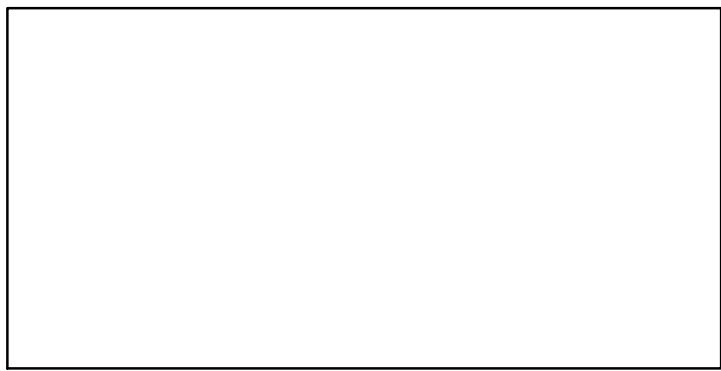
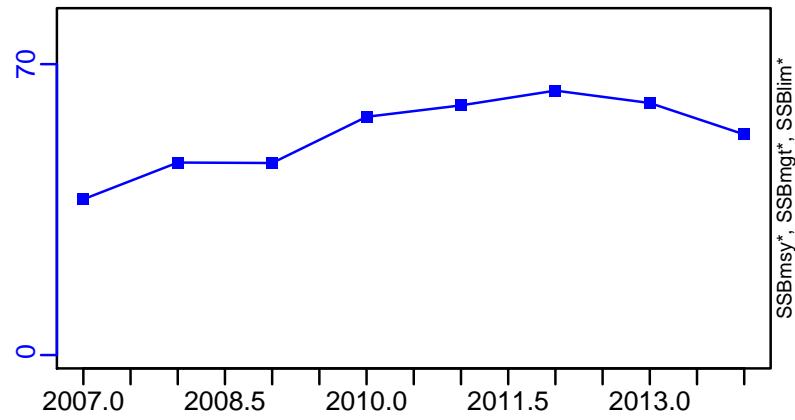
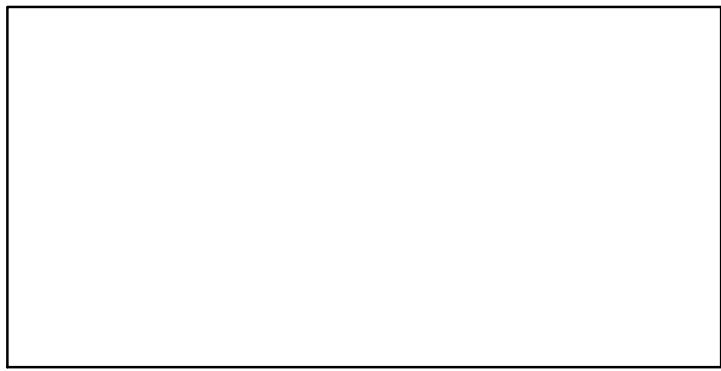
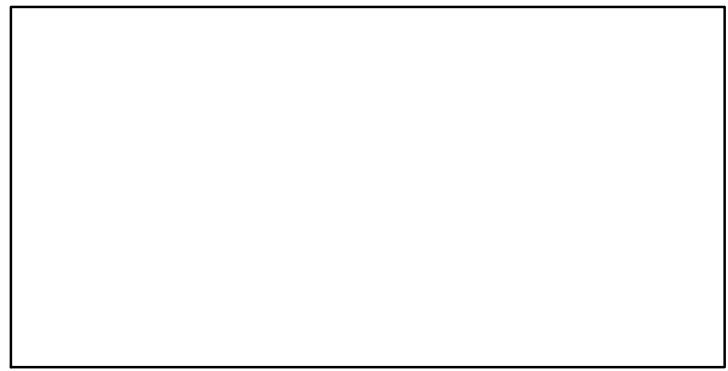
Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

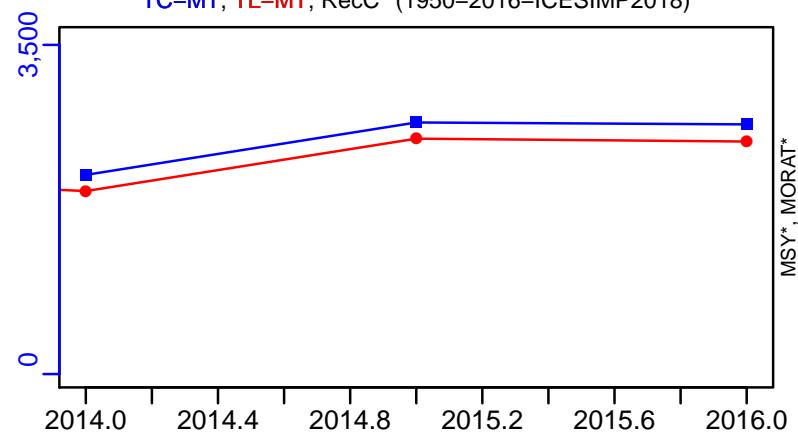
◆ Start Year ♦ End Year * No Data

TB***SSB–index (1950–2014–ICESIMP2018)****TN *****F*****ER*****Recruits***

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

TC–MT, TL–MT, RecC* (1950–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



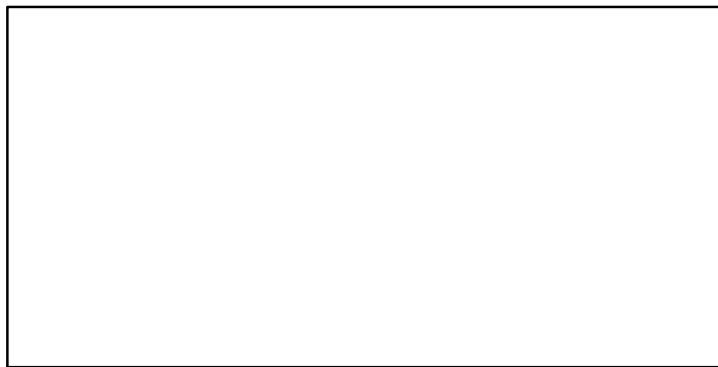
survB*



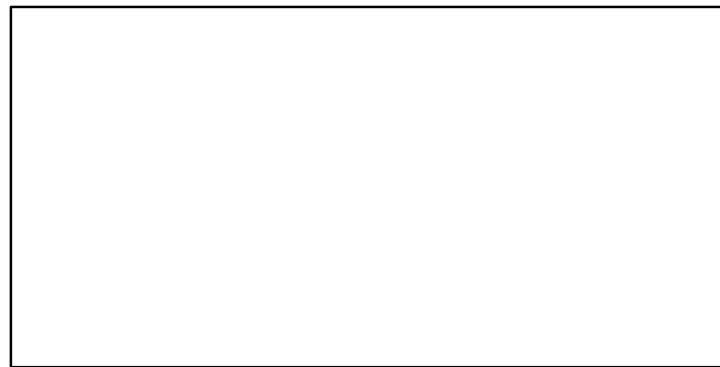
CPUE*



EFFORT*



CdivMSY*



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

Basking shark Northeast Atlantic [BSKSHARNEATL]

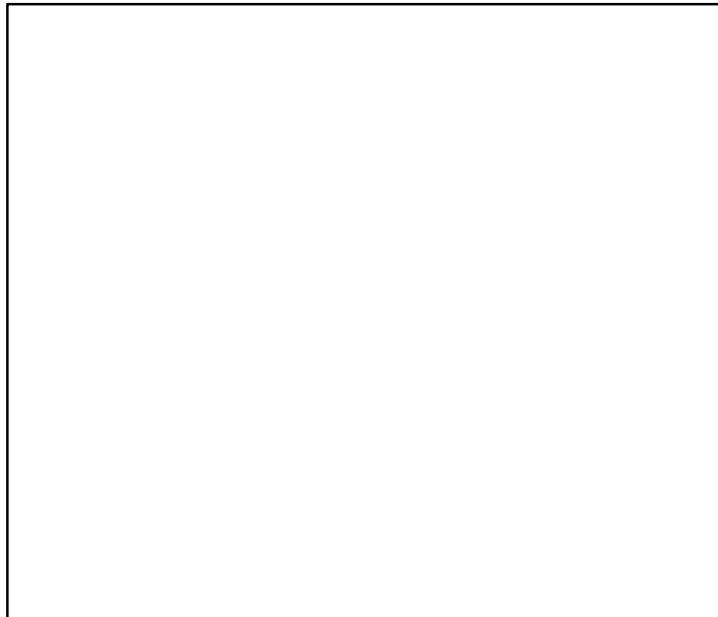
Metadata	
Scientific Name	Cetorhinus maximus
Current Assess ID	WGEF-BSKSHARNEATL-1977-2014-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014

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

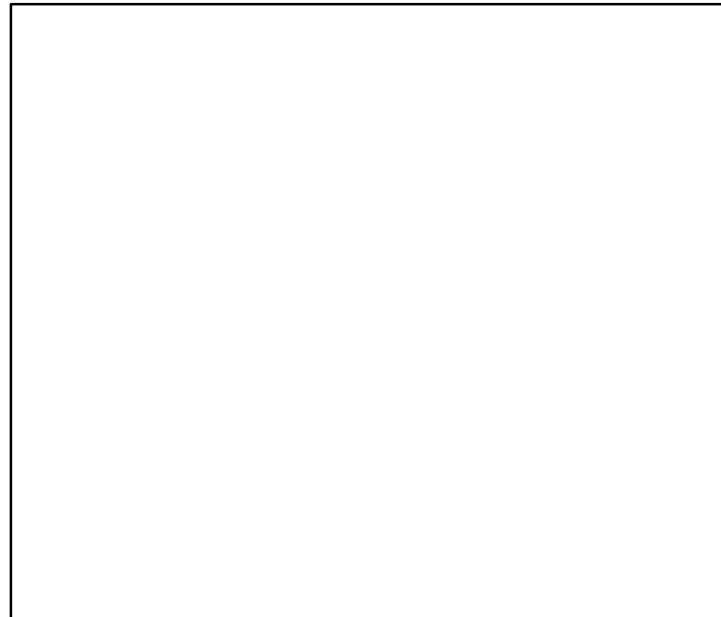
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Basking shark Northeast Atlantic [BSKSHARNEATL]

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Basking shark Northeast Atlantic [BSKSHARNEATL]

TB*



SSB*



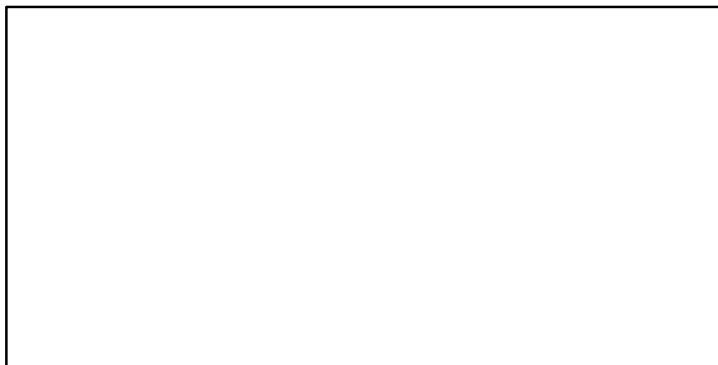
TN *



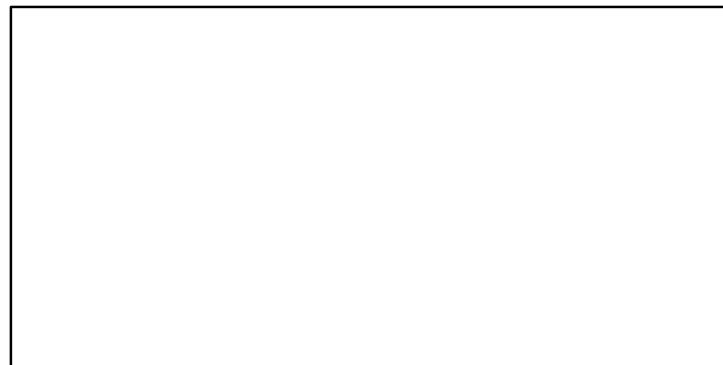
F*



ER*



Recruits*

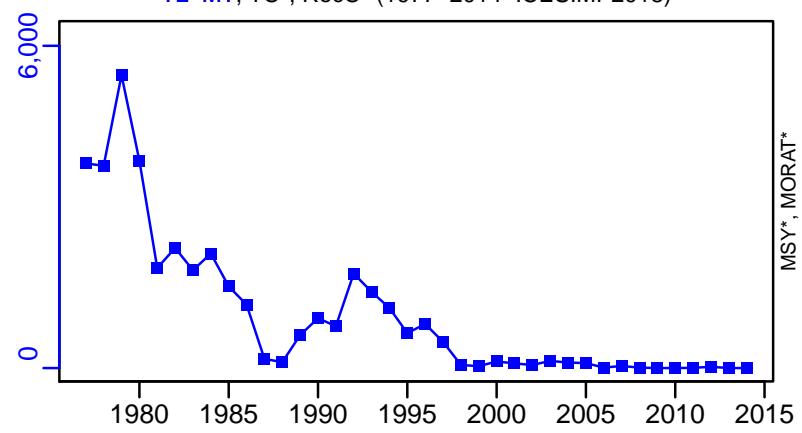


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Basking shark Northeast Atlantic [BSKSHARNEATL]

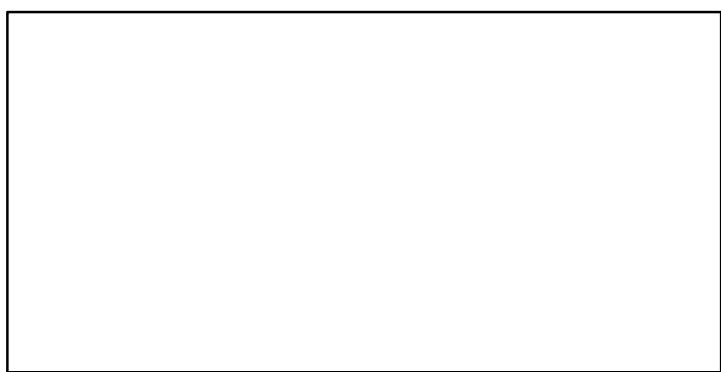
TL-MT, TC*, RecC* (1977–2014—ICESIMP2018)

TAC*, Cpair*, Cadv*

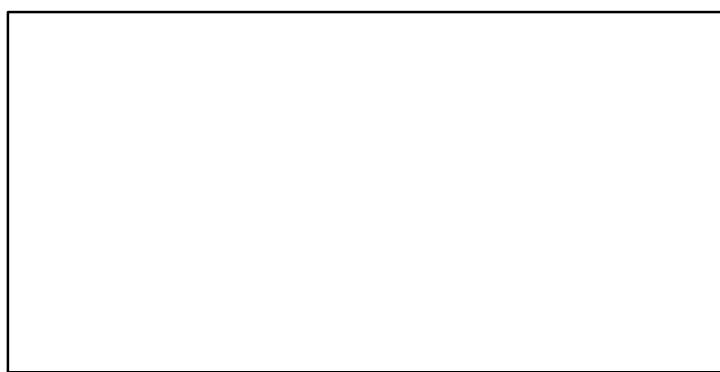


survB*

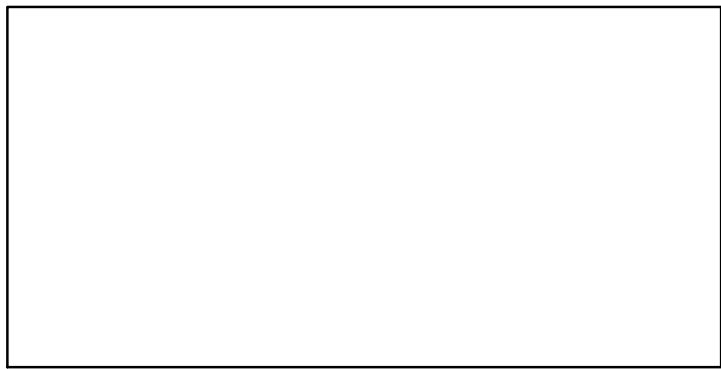
MSY*, MORAT*



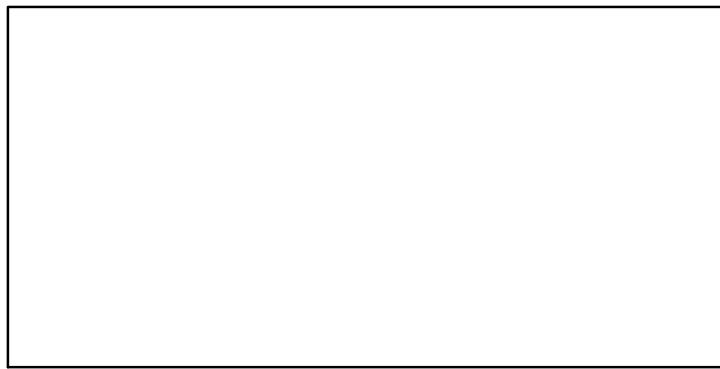
CPUE*



EFFORT*



CdivMSY*



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

Blue whiting Northeast Atlantic [BWHITNEA]

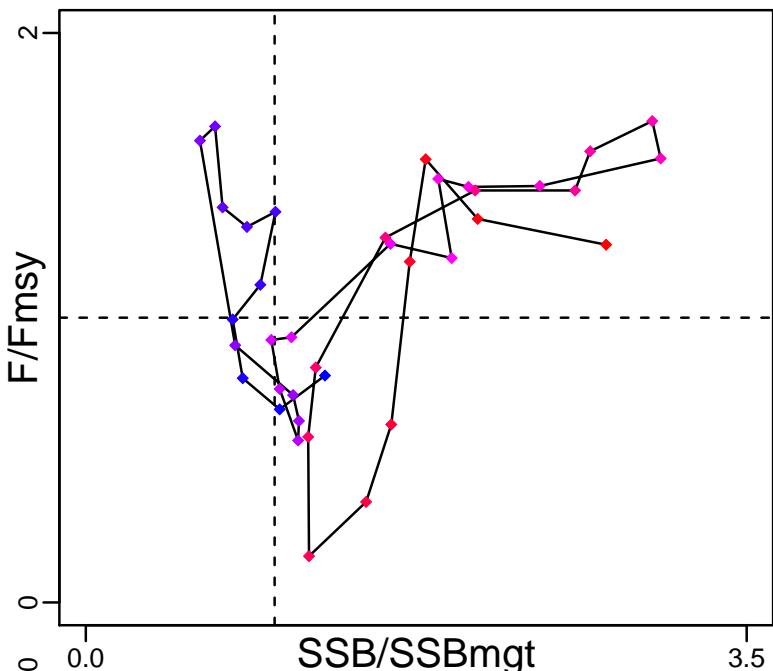
Metadata	
Scientific Name	Micromesistius poutassou
Current Assess ID	WGWISE-BWHITNEA-1980-2018-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2012, 2013, 2014, 2015, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	11,124,079
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.32
ERmsy	ERmsy-est-ratio	2018	0.352
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	2,250,000
Fmgt	Fmgt-1/yr	2018	0.32
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2012	1,616,060
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	1,500,000
Flim	Flim-1/yr	2018	0.88
ERlim	-	-	-

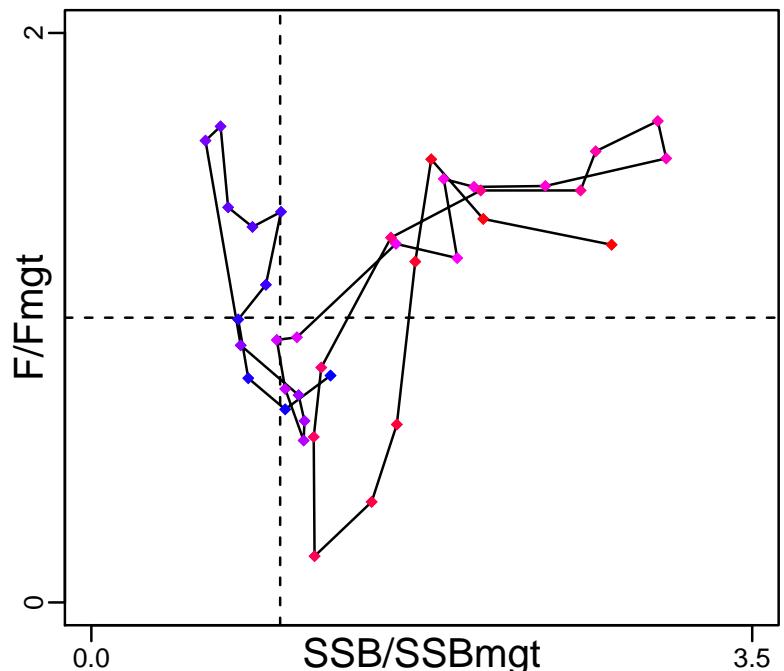
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	8,540,000	Both	-
SSB	SSB-MT	2018	5,910,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	8.86×10^9	-	1
F	F-1/yr	2018	0.402	-	3 to 7
ER	ER-calc-ratio	2018	0.183	-	-
TC	TC-MT	2018	1,560,000		
TL	TL-MT	2018	1,560,000		
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	0.567		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.256		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.519		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.627		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.256		
ER/ERmgt	-	-	-		

Blue whiting Northeast Atlantic [BWHITNEA]

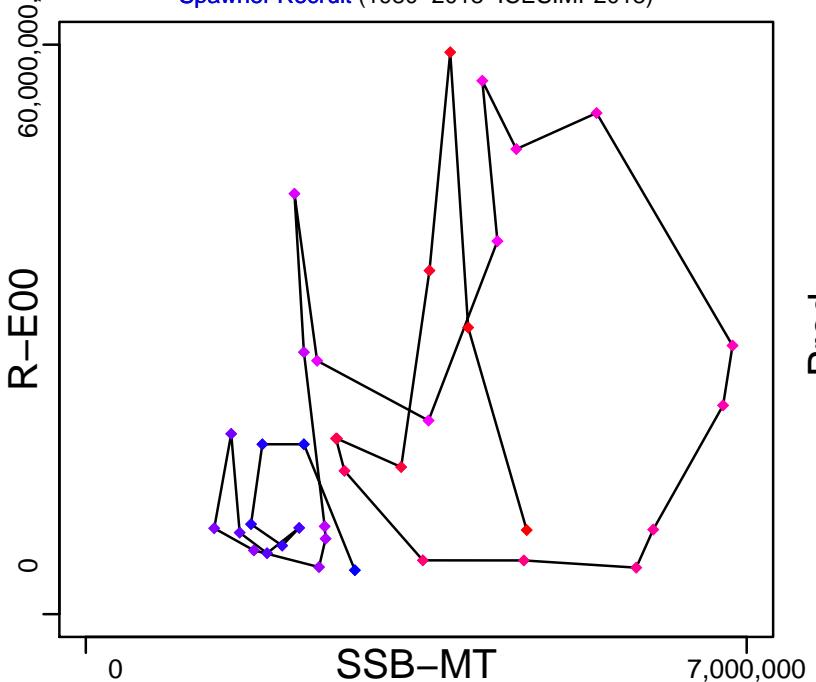
Kobe MSYpref (1980–2018–ICESIMP2018)



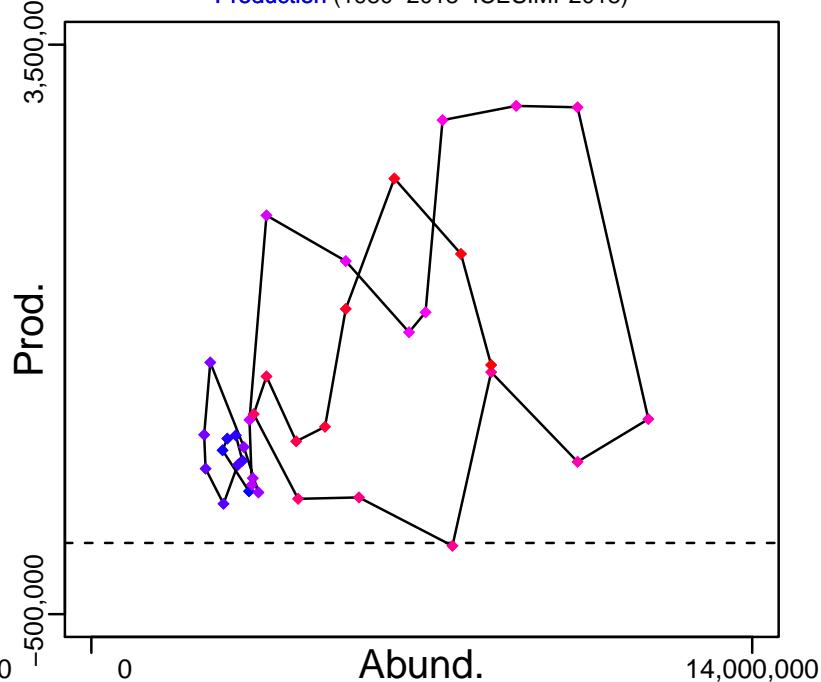
Kobe MGTpref (1980–2018–ICESIMP2018)



Spawner Recruit (1980–2018–ICESIMP2018)



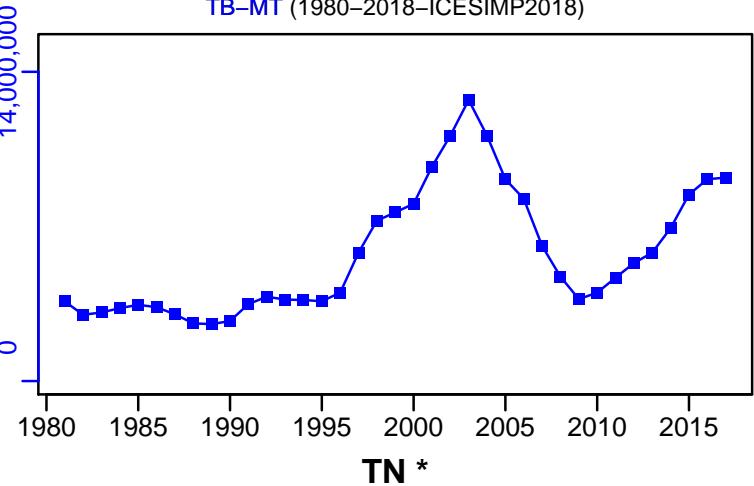
Production (1980–2018–ICESIMP2018)



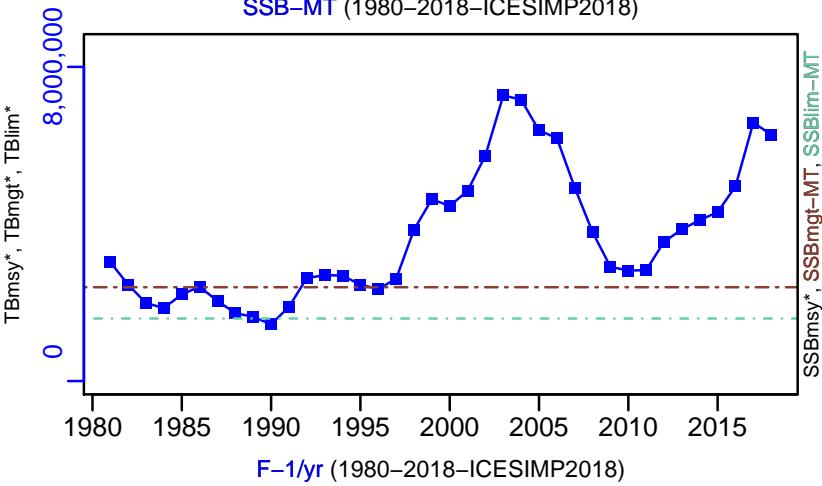
◆ Start Year ◆ End Year * No Data

Blue whiting Northeast Atlantic [BWHITNEA]

TB-MT (1980–2018–ICESIMP2018)



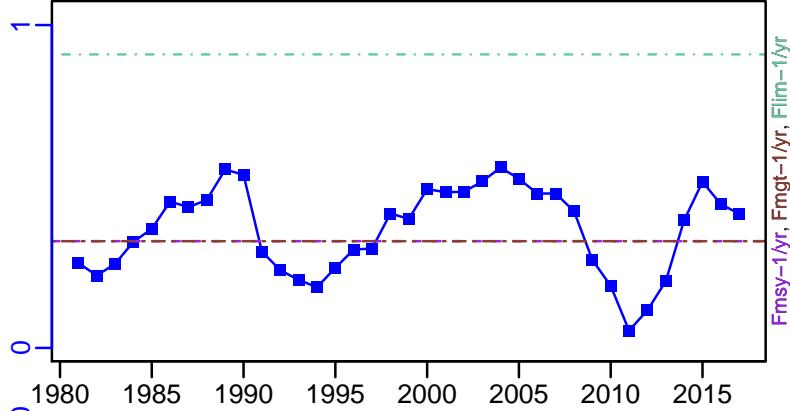
SSB-MT (1980–2018–ICESIMP2018)



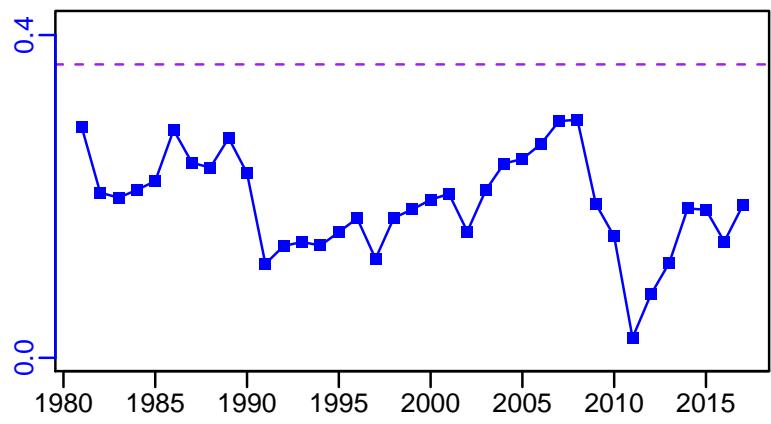
TN *



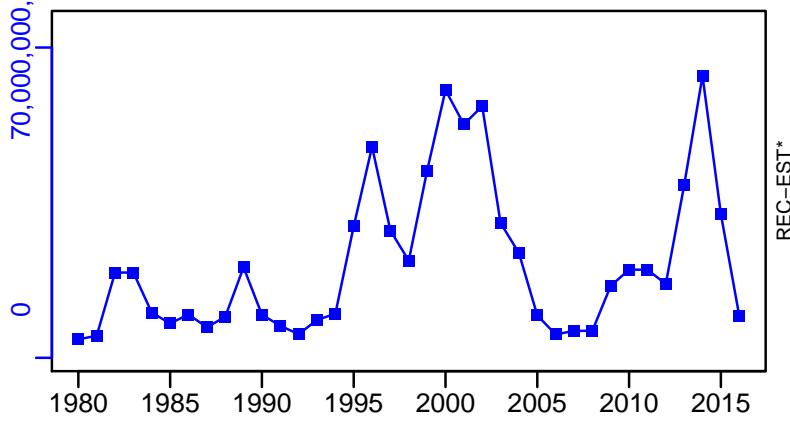
F-1/yr (1980–2018–ICESIMP2018)



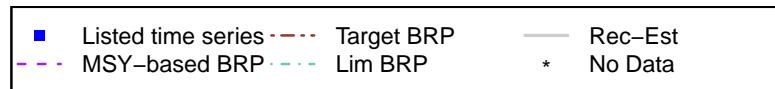
ER-calc-ratio (1980–2018–ICESIMP2018)



R-E00 (1980–2018–ICESIMP2018)



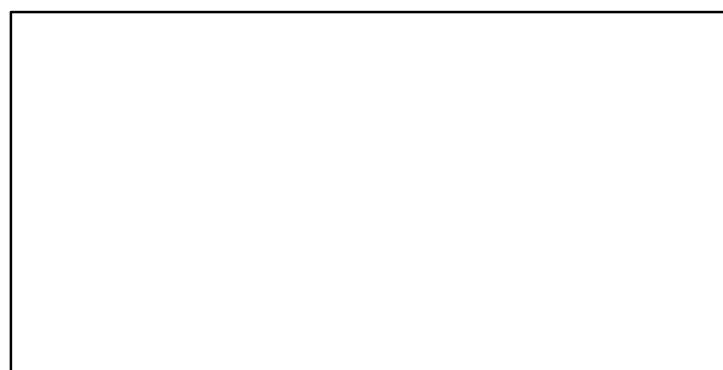
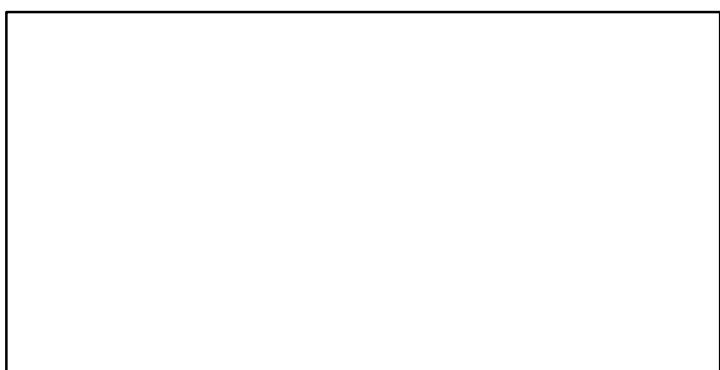
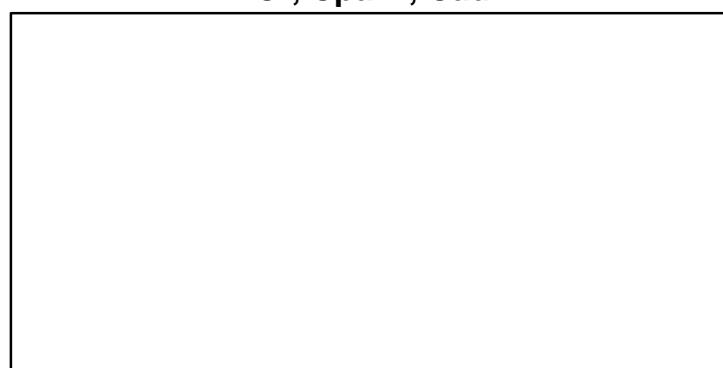
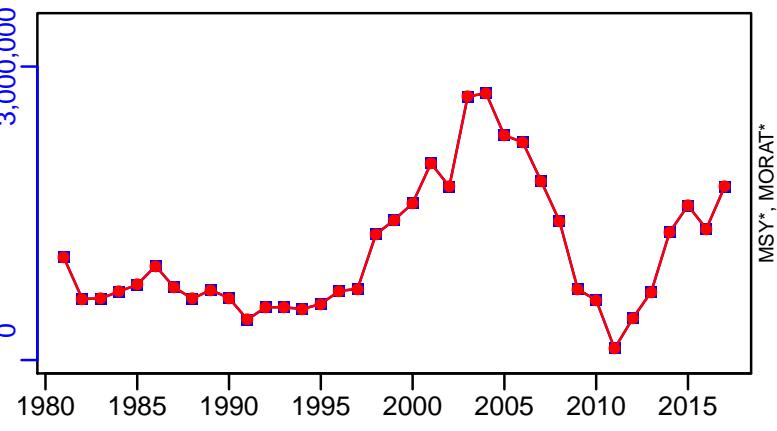
REC-EST*



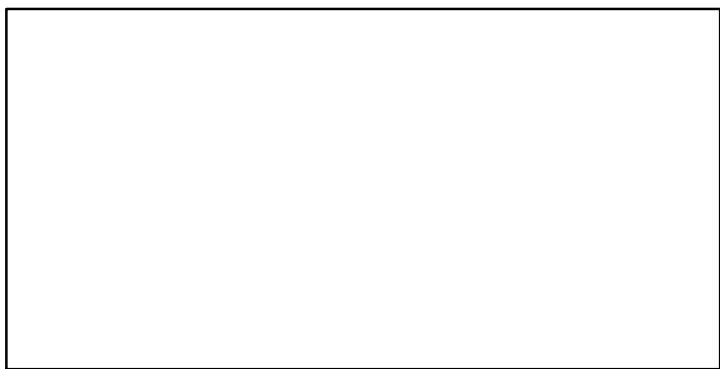
Blue whiting Northeast Atlantic [BWHITNEA]

TC-MT, TL-MT, RecC* (1980–2018–ICESIMP2018)

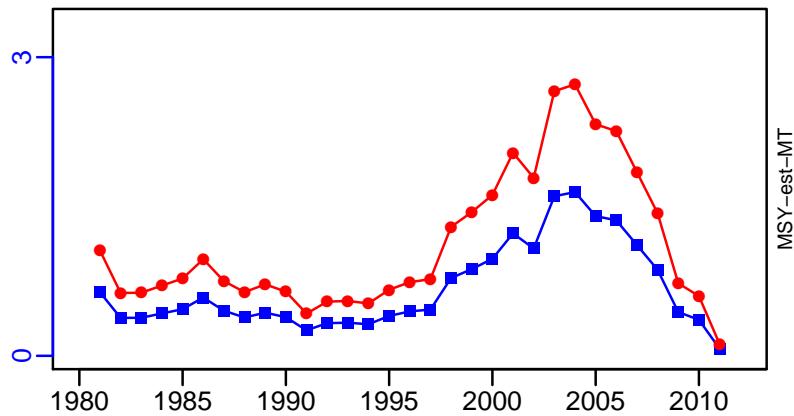
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1980–2012–CHING)



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

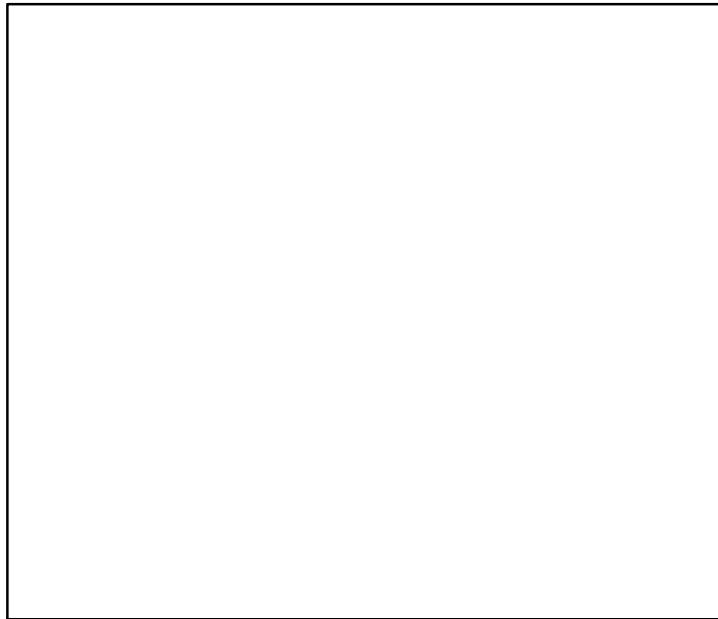
Cuckoo ray ICES 3a-4 [CKRAYIIIa-IV]

Metadata	
Scientific Name	Leucoraja naevus
Current Assess ID	WGEF-CKRAYIIIa-IV-2009-2016-ICESIMP2018
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

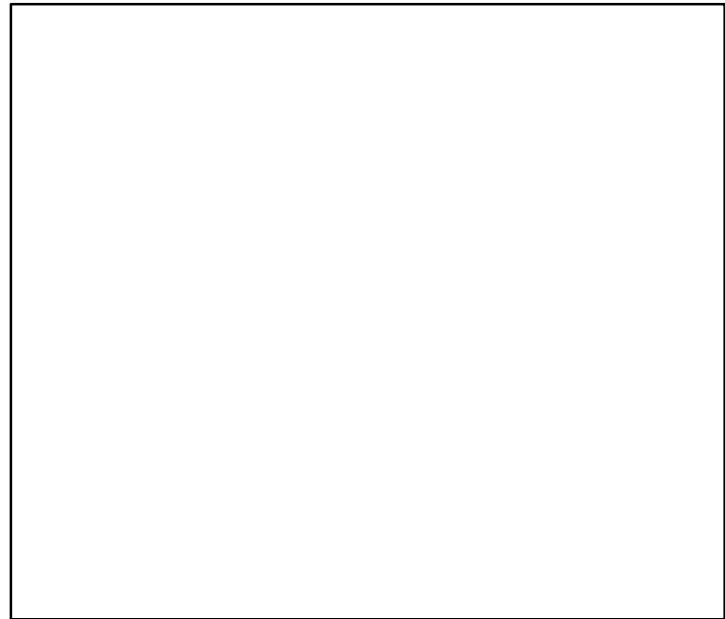
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.03	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	170		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

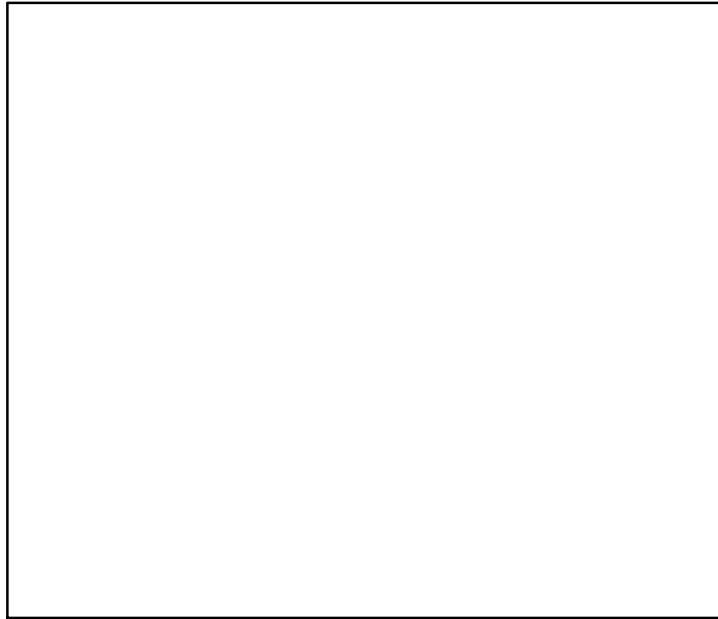
Kobe MSY*



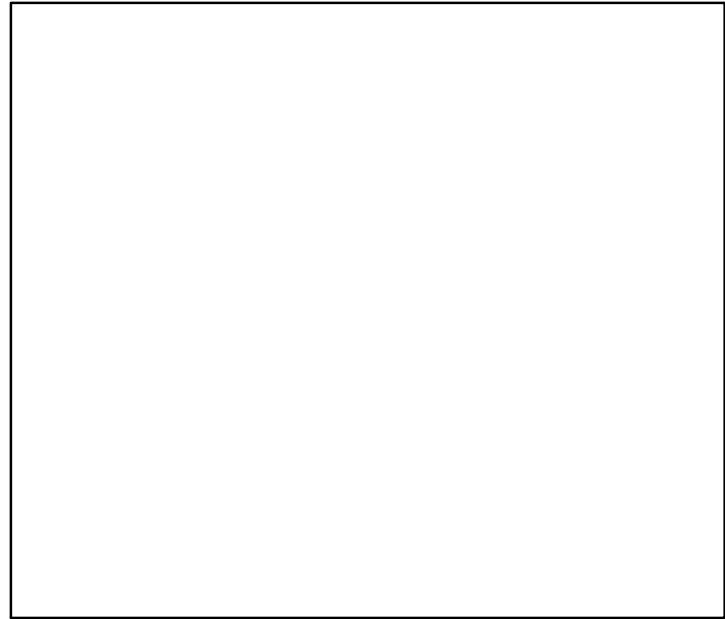
Kobe MGT*



Spawner Recruit*



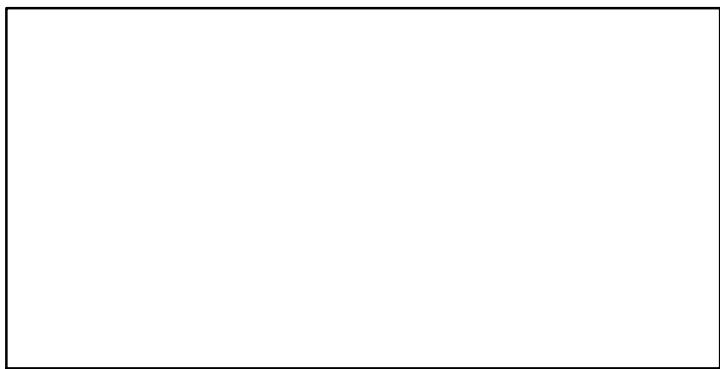
Production*



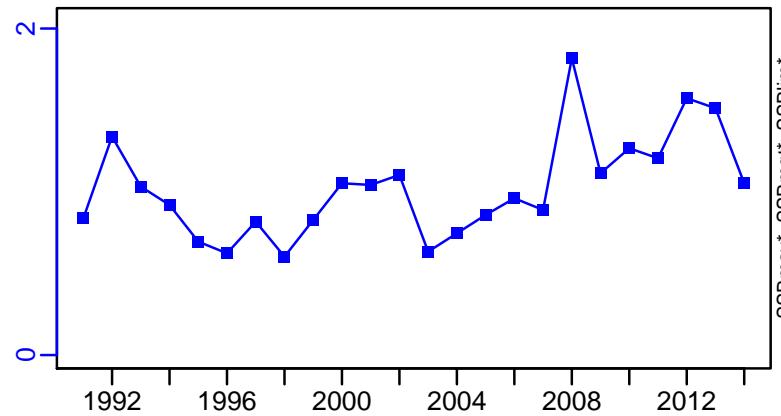
◆ Start Year ♦ End Year * No Data

Cuckoo ray ICES 3a–4 [CKRAYIIIa–IV]

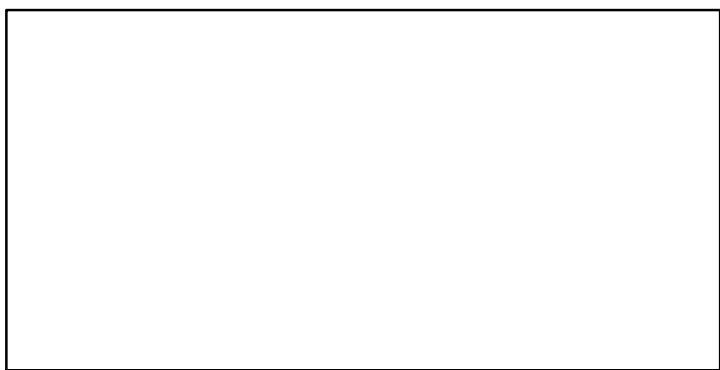
TB*



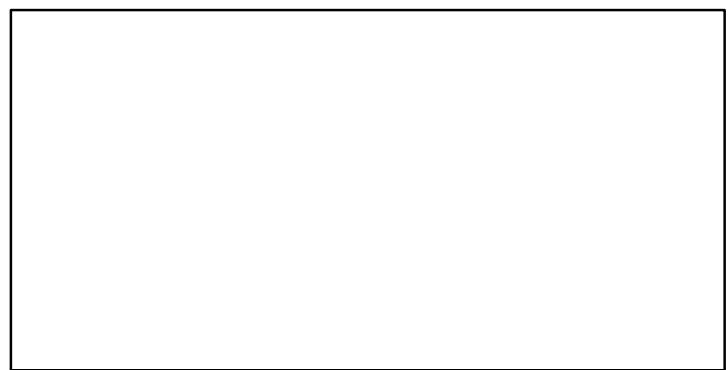
SSB-index (1991–2014–ICESIMP2018)



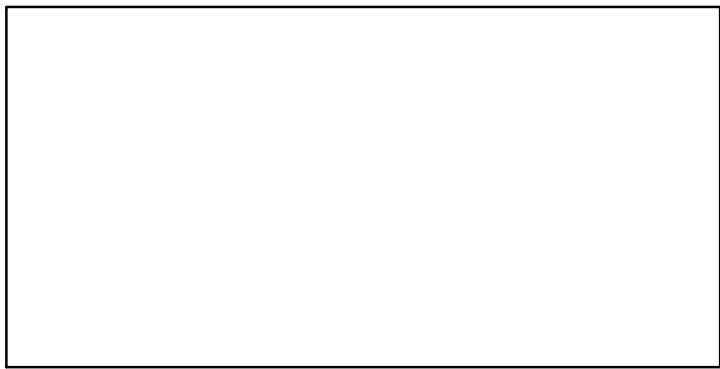
TN *



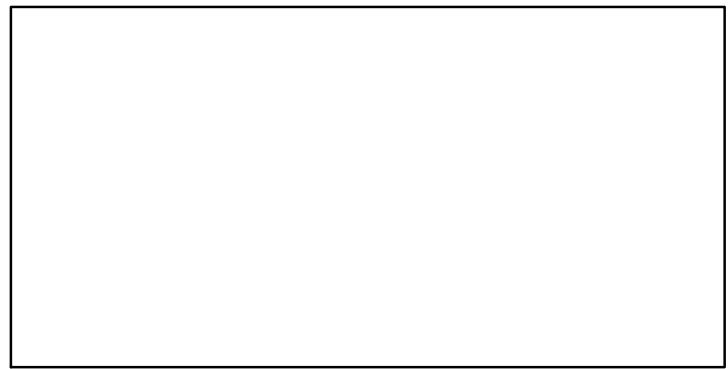
F*



ER*



Recruits*

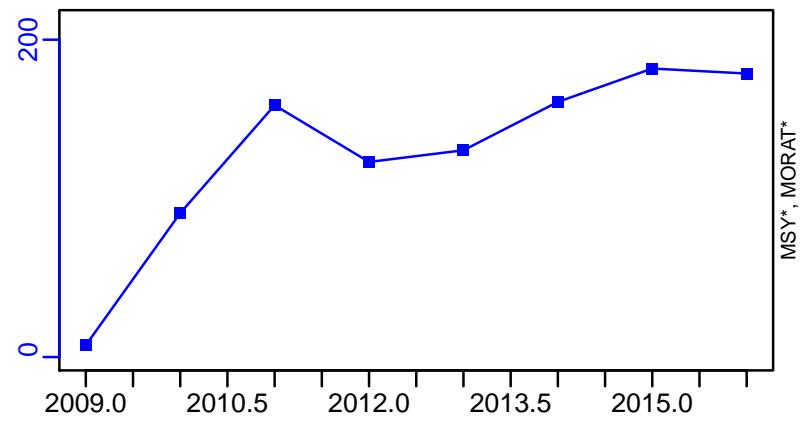


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Cuckoo ray ICES 3a-4 [CKRAYIIIa-IV]

TL-MT, TC*, RecC* (2009–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



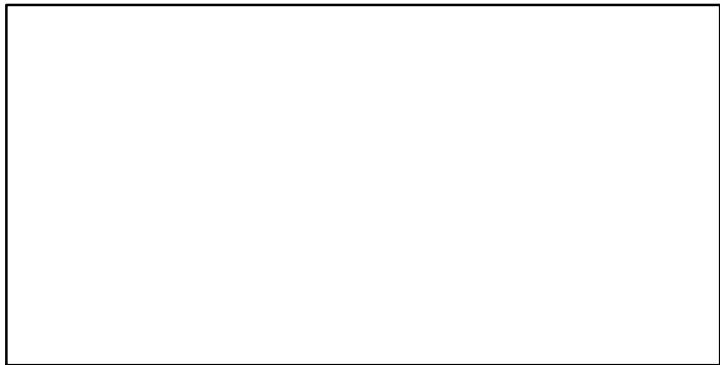
survB*



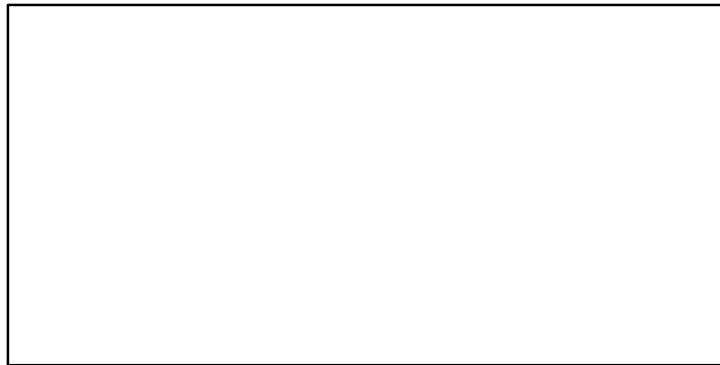
CPUE*



EFFORT*



CdivMSY*



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

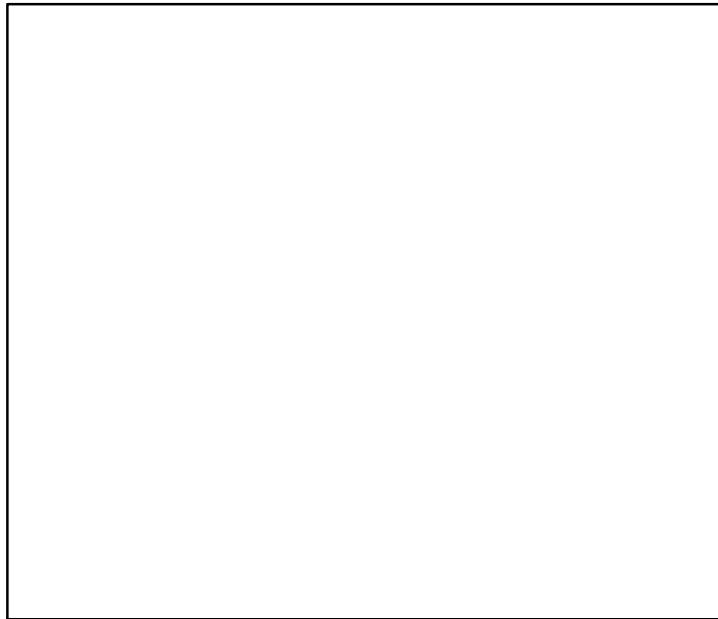
Cuckoo ray Portugese Waters -East [CKRAYIXa]

Metadata	
Scientific Name	Leucoraja naevus
Current Assess ID	WGEF-CKRAYIXa-1998-2015-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

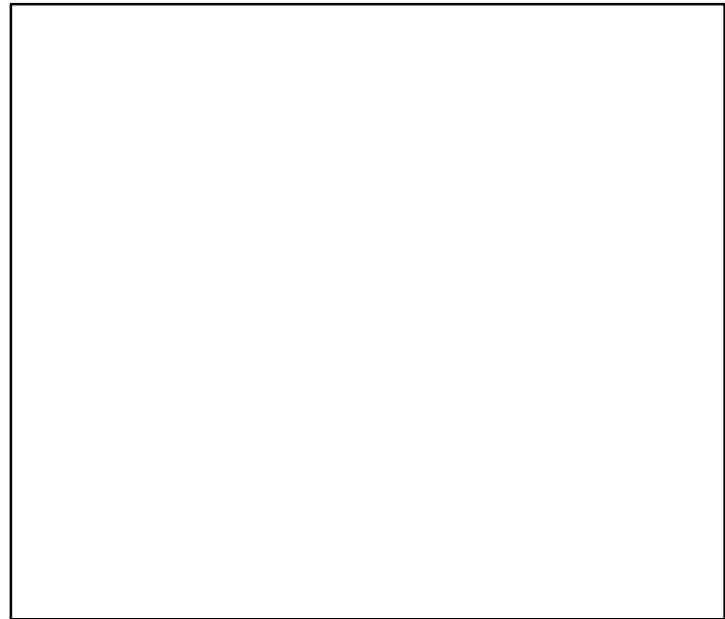
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	2.62	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	19		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

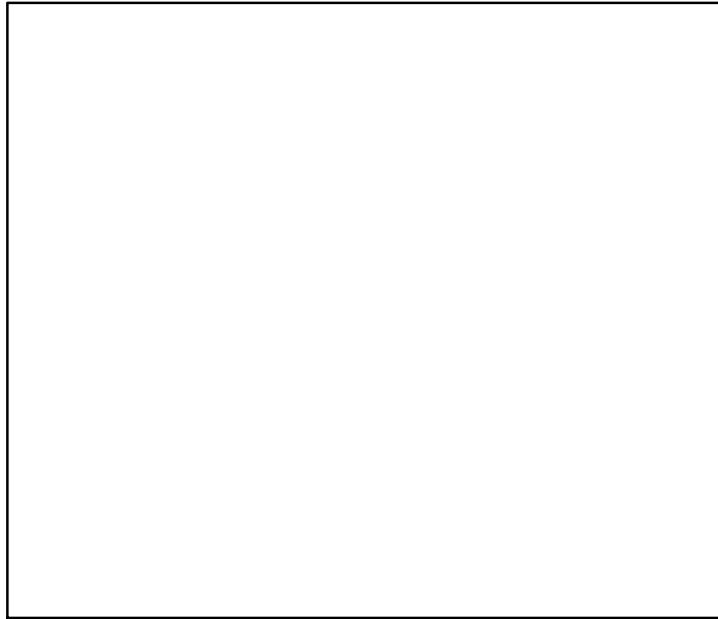
Kobe MSY*



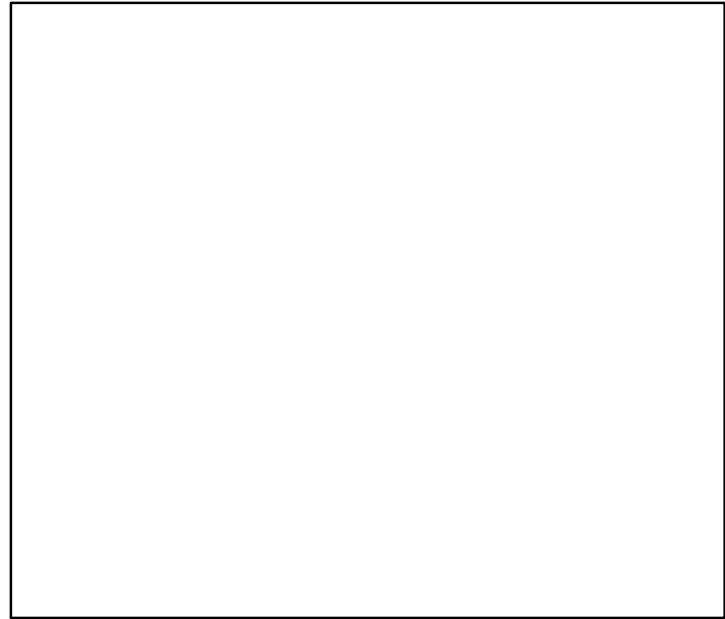
Kobe MGT*



Spawner Recruit*



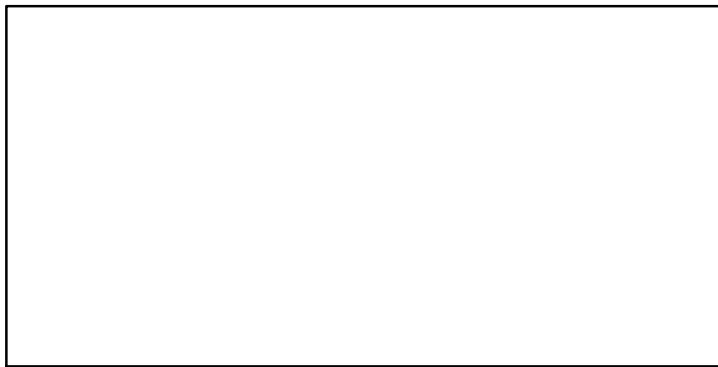
Production*



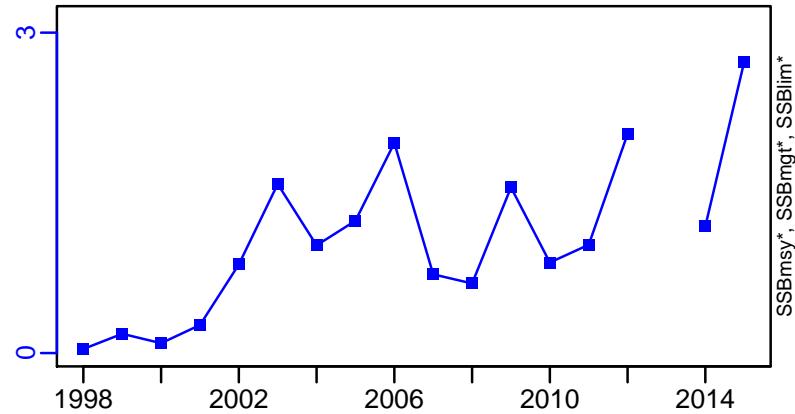
◆ Start Year ◆ End Year * No Data

Cuckoo ray Portugese Waters –East [CKRAYIXa]

TB*



SSB–index (1998–2015–ICESIMP2018)



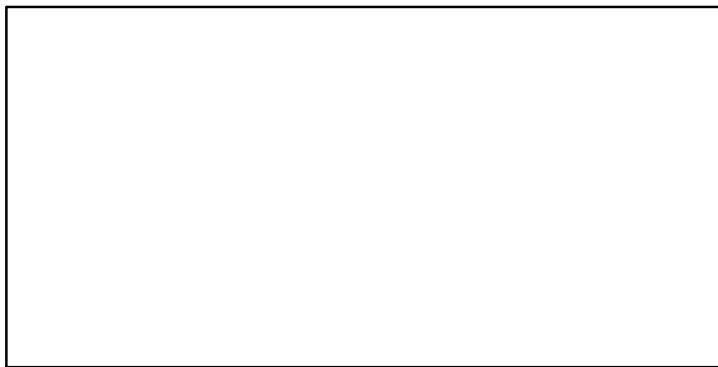
TN *



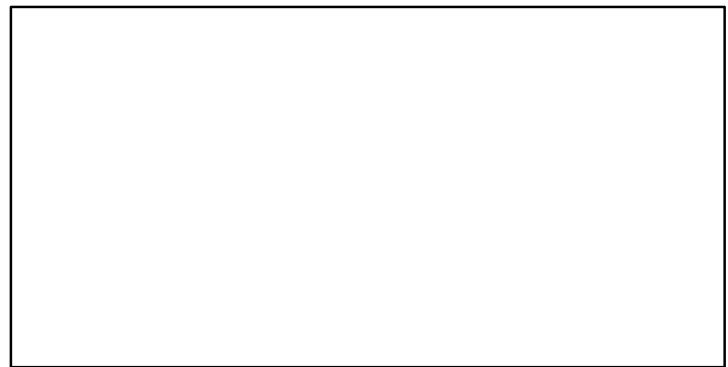
F*



ER*



Recruits*

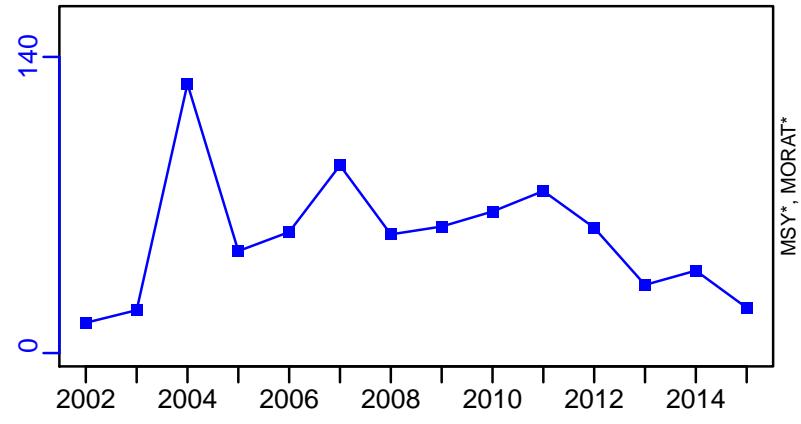


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Cuckoo ray Portuguese Waters –East [CKRAYIXa]

TL–MT, TC*, RecC* (1998–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



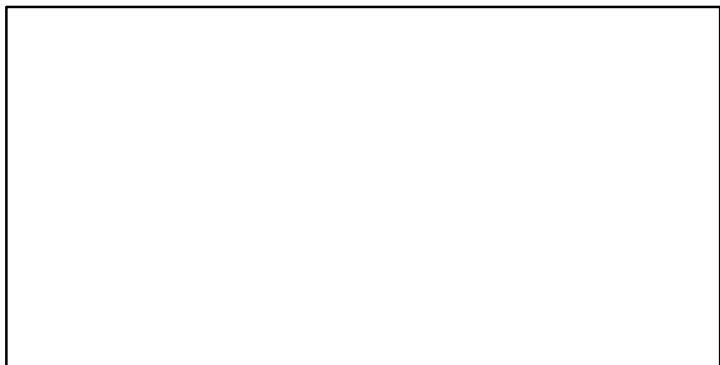
survB*



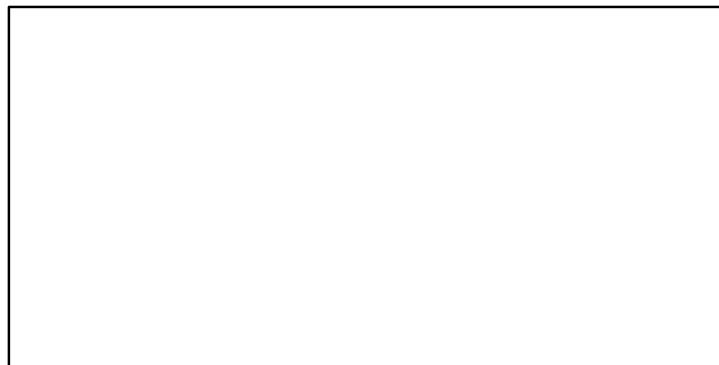
CPUE*



EFFORT*



CdivMSY*



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

Cuckoo ray Bay of Biscay -South [CKRAYVIIIC]

Metadata	
Scientific Name	Leucoraja naevus
Current Assess ID	WGEF-CKRAYVIIIC-1999-2015-ICESIMP2018
Area	Bay of Biscay -South
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	0.309	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	15		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

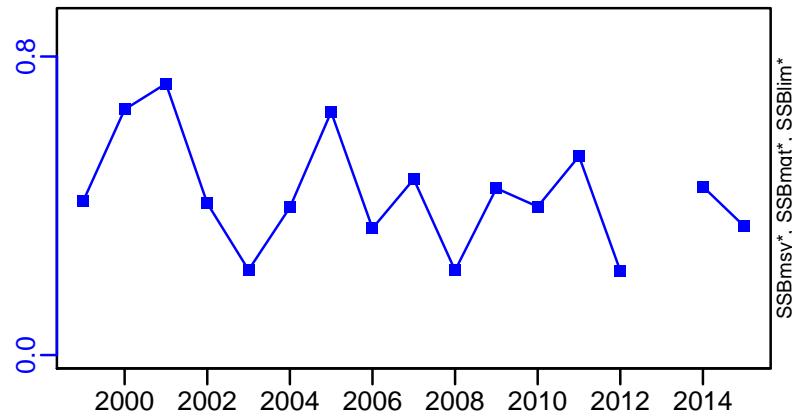
◆ Start Year ♦ End Year * No Data

Cuckoo ray Bay of Biscay –South [CKRAYVIIIC]

TB*

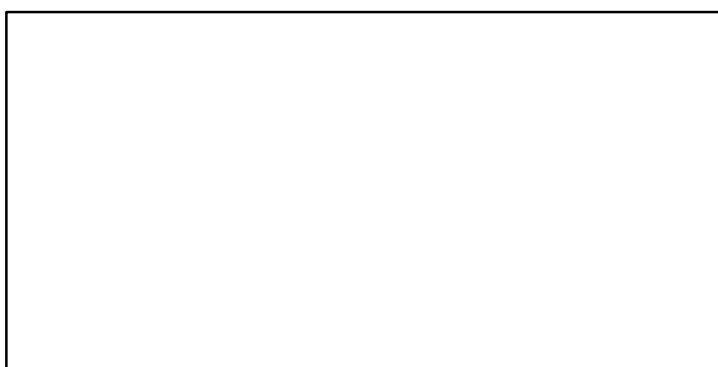


SSB–index (1999–2015–ICESIMP2018)

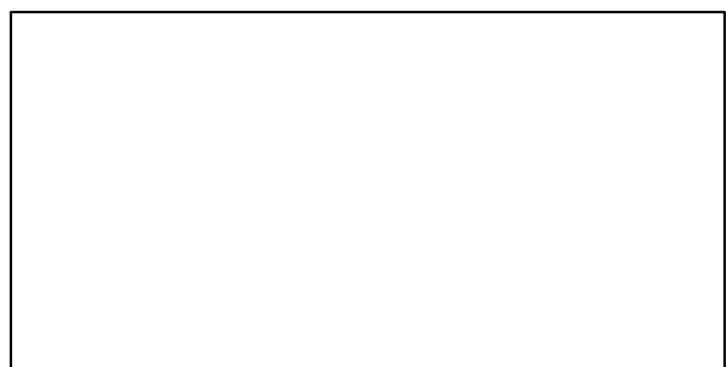


SSBm^{*}, SSBmgt^{*}, SSBLim^{*}

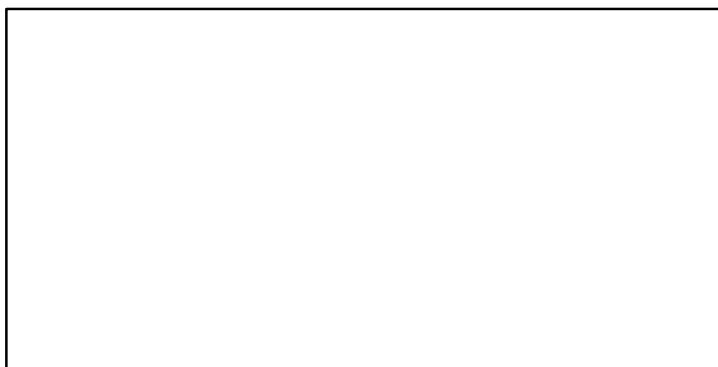
TN *



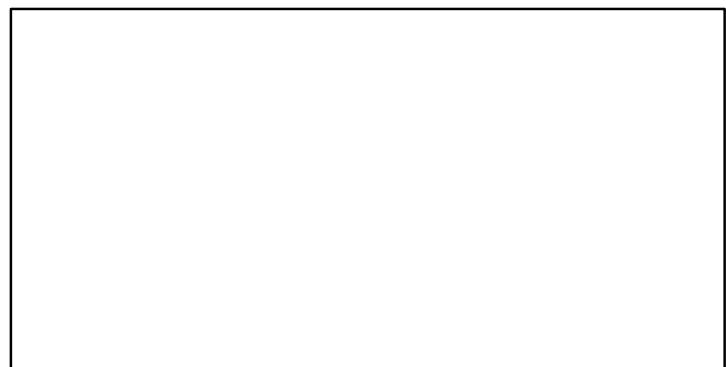
F*



ER*



Recruits*

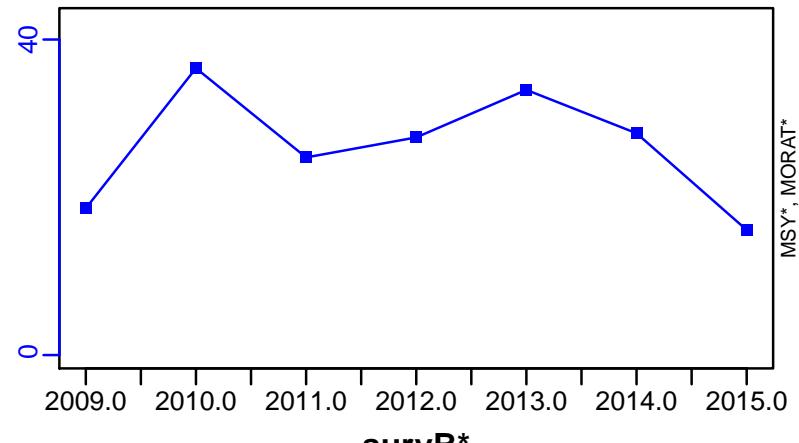


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Cuckoo ray Bay of Biscay –South [CKRAYVIIIC]

TL–MT, TC*, RecC* (1999–2015–ICESIMP2018)

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 |

Cuckoo ray ICES 6-7 [CKRAYVI-VII]

Metadata	
Scientific Name	Leucoraja naevus
Current Assess ID	WGEF-CKRAYVI-VII-2005-2015-ICESIMP2018
Area	ICES 6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.51	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	3360		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

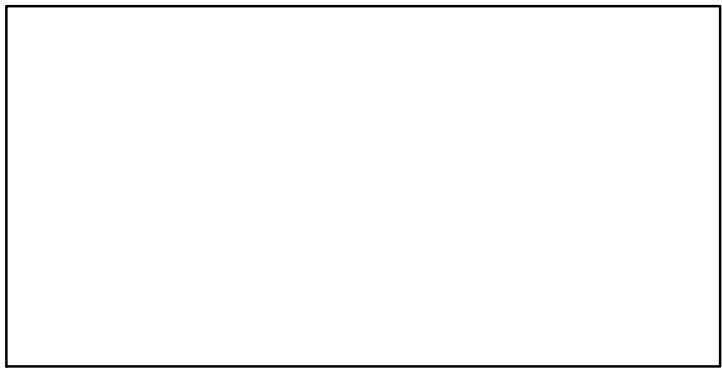
Spawner Recruit*

Production*

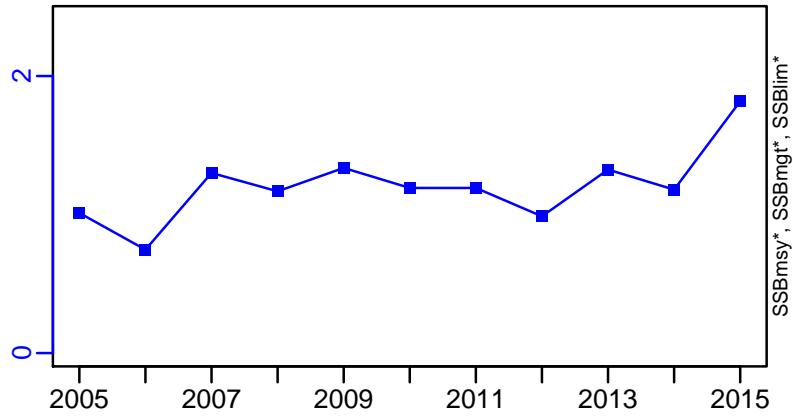
◆ Start Year ♦ End Year * No Data

Cuckoo ray ICES 6–7 [CKRAYVI–VII]

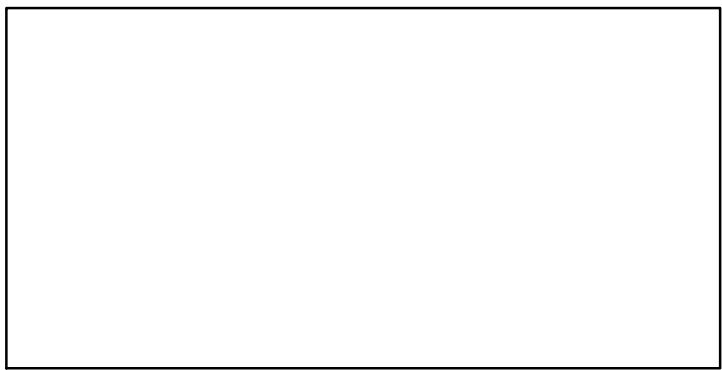
TB*



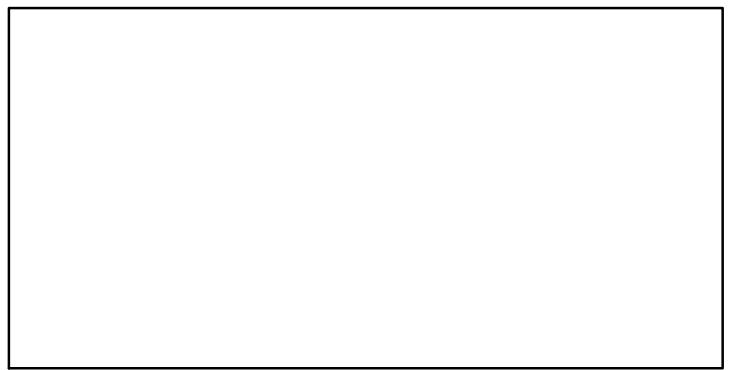
SSB–index (2005–2015–ICESIMP2018)



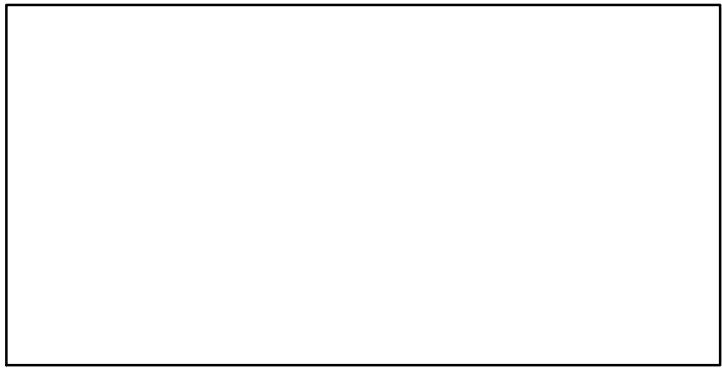
TN *



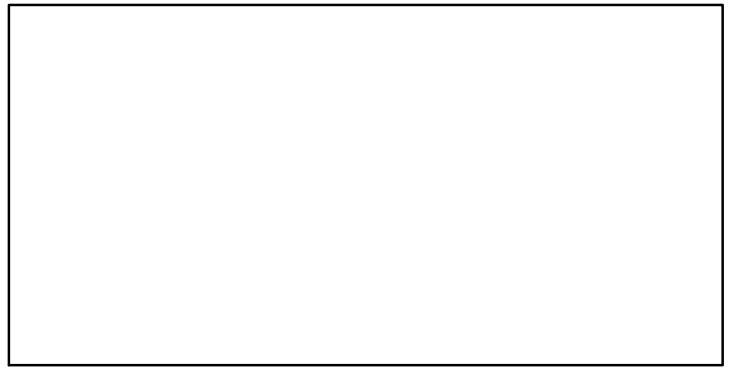
F*



ER*



Recruits*

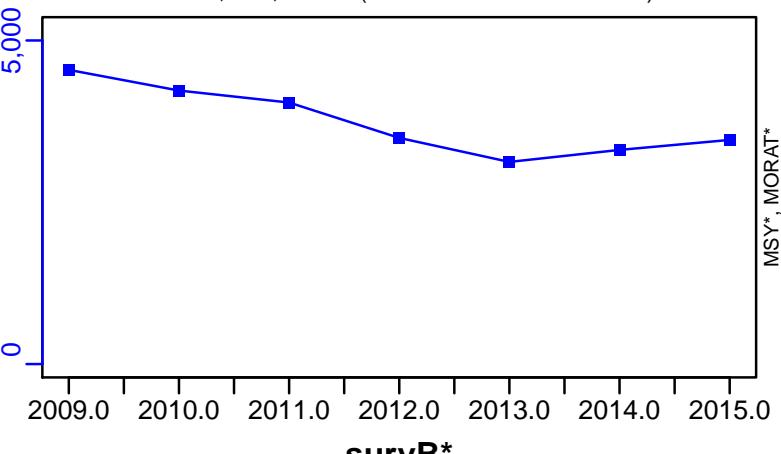


- | | | |
|---|--|---|
| ■ Listed time series
— MSY-based BRP | — Target BRP
— Lim BRP | — Rec-Est
* No Data |
|---|--|---|

Cuckoo ray ICES 6–7 [CKRAYVI–VII]

TL–MT, TC*, RecC* (2005–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



MSY*, MORAT*

survB*



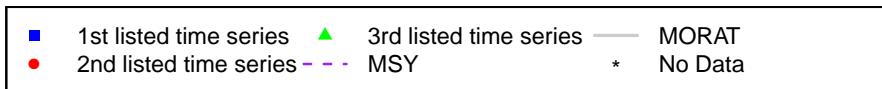
CPUE*



EFFORT*



CdivMSY*



Atlantic cod Western Baltic [CDBA2224]

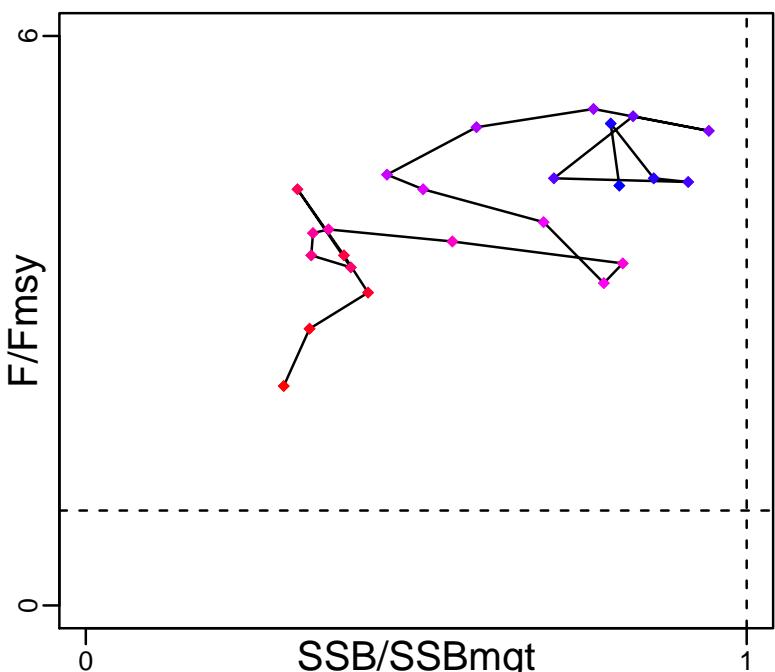
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGBFAS-CDBA2224-1993-2018-ICESIMP2018
Area	Western Baltic
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2012, 2013, 2014, 2015, 2016, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2012	37,236
Fmsy	Fmsy-1/yr	2018	0.26
ERmsy	ERmsy-est-ratio	2018	0.336
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	38,400
Fmgt	Fmgt-1/yr	2018	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	23,000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	27,400
Flim	Flim-1/yr	2018	1.01
ERlim	-	-	-

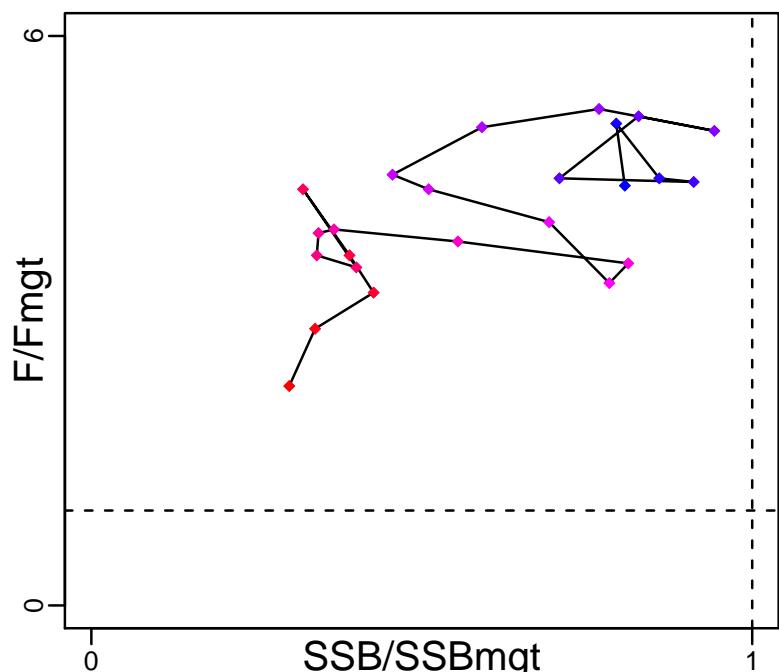
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	34,500	Both	-	
SSB	SSB-MT	2018	25,300	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1,630,000	-	1	
F	F-1/yr	2018	0.601	-	3 to 5	
ER	ER-calc-ratio	2018	0.324	-	-	
TC	TC-MT	2018	5050			
TL	TL-MT	2018	3920			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2012	0.975			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	2.312			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.965			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.659			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	2.312			
ER/ERmgt	-	-	-			

Atlantic cod Western Baltic [CODBA2224]

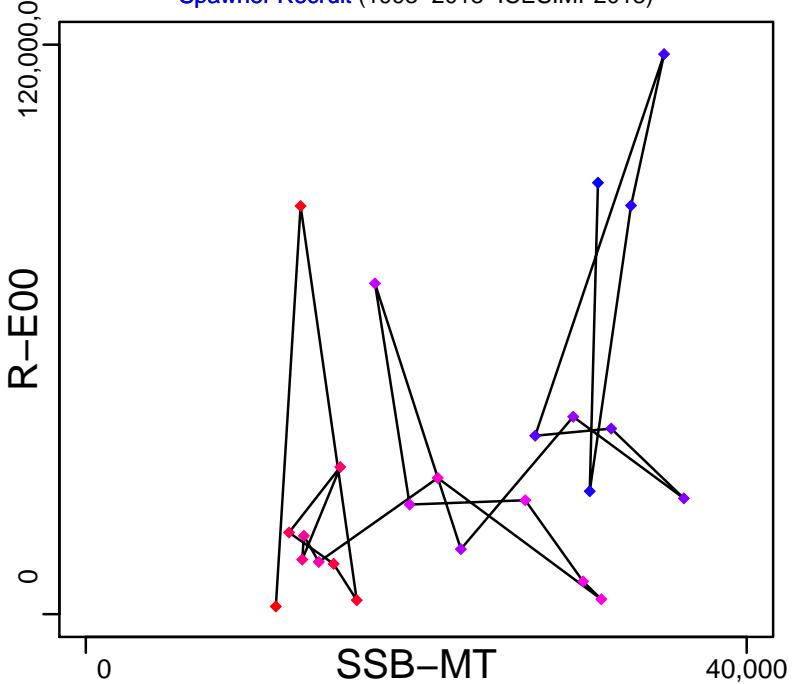
Kobe MSYpref (1993–2018–ICESIMP2018)



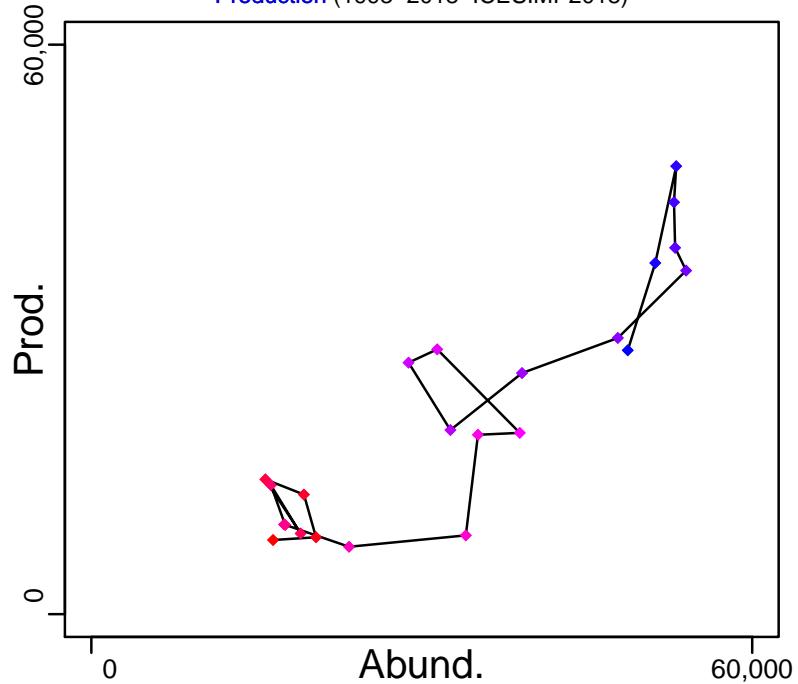
Kobe MGTpref (1993–2018–ICESIMP2018)



Spawner Recruit (1993–2018–ICESIMP2018)



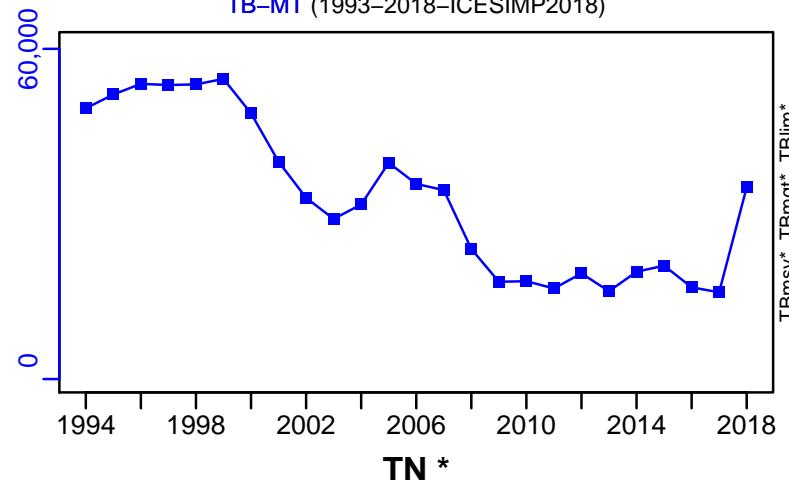
Production (1993–2018–ICESIMP2018)



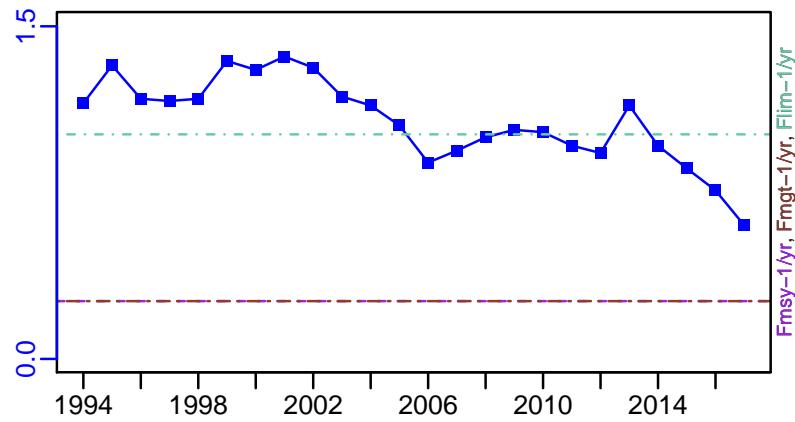
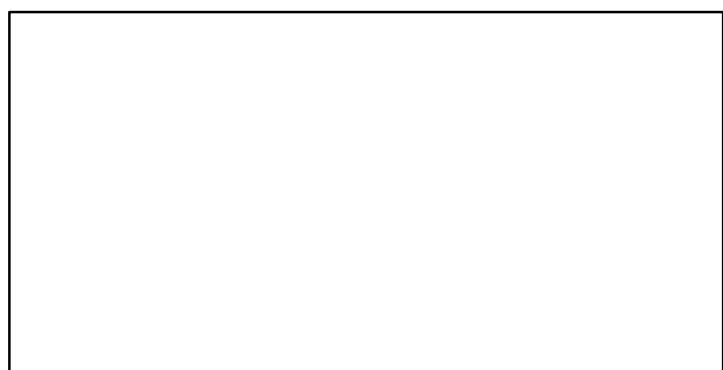
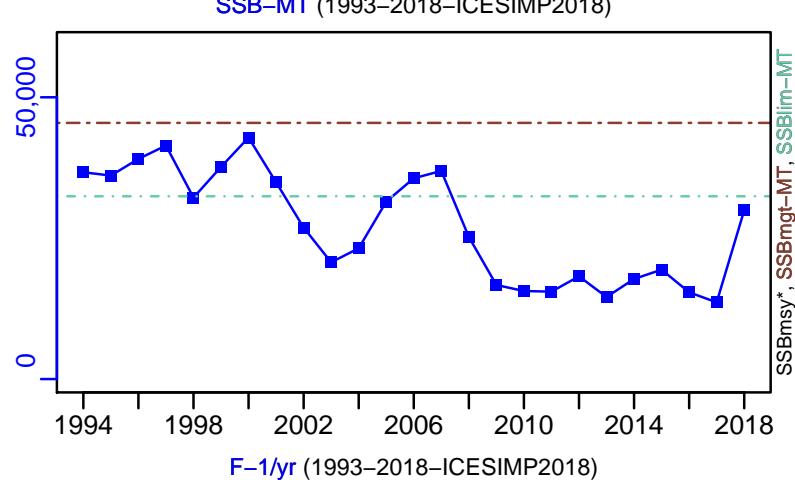
◆ Start Year ◆ End Year * No Data

Atlantic cod Western Baltic [CODBA2224]

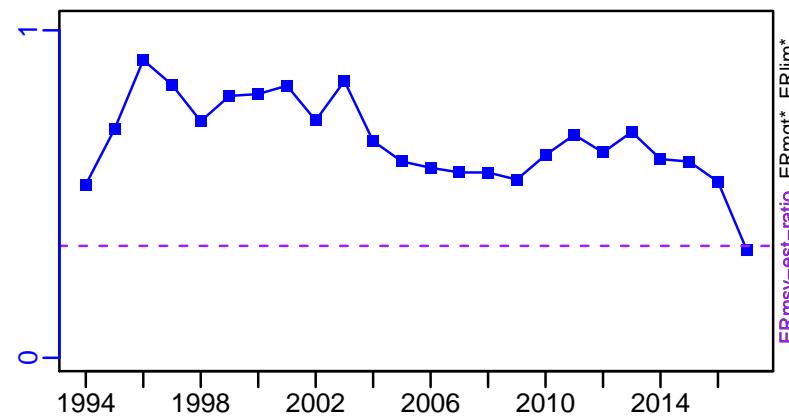
TB-MT (1993–2018–ICESIMP2018)



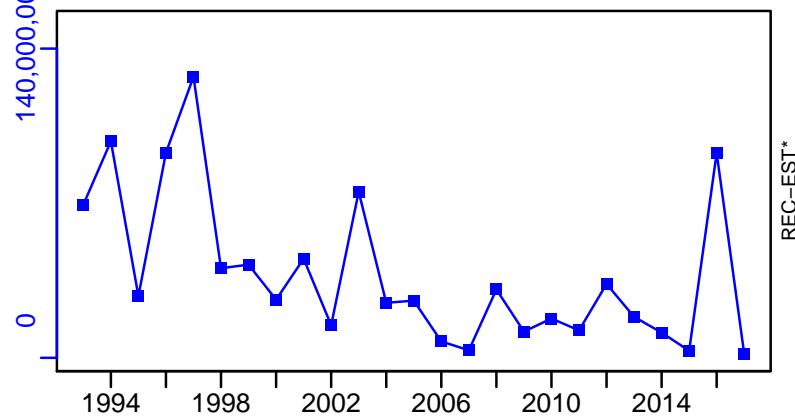
SSB-MT (1993–2018–ICESIMP2018)



ER-calc-ratio (1993–2018–ICESIMP2018)



R-E00 (1993–2018–ICESIMP2018)

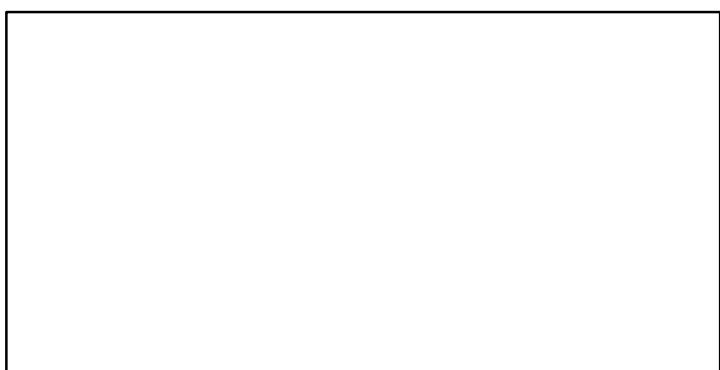
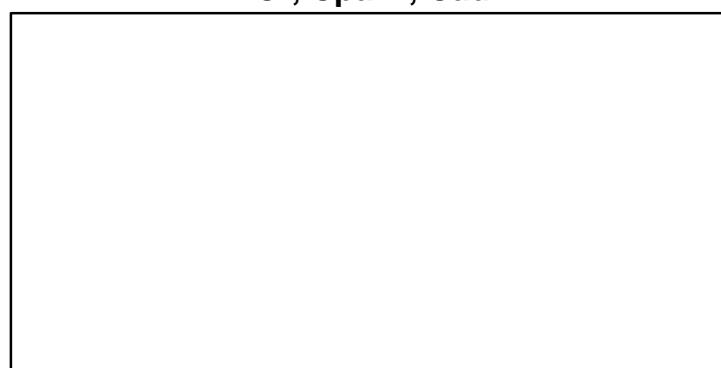
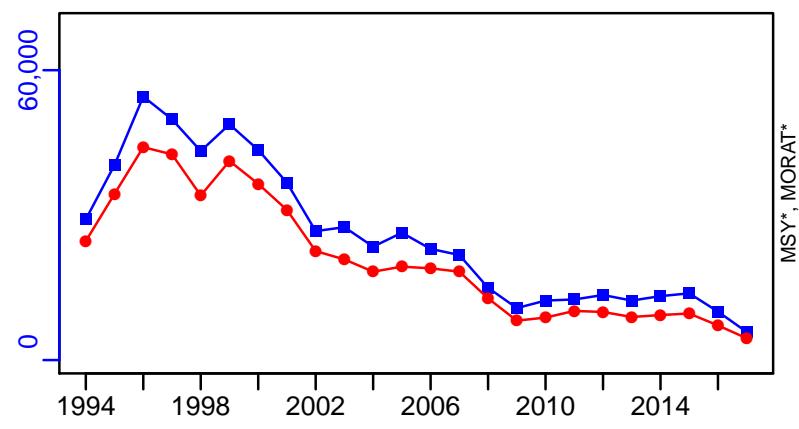


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

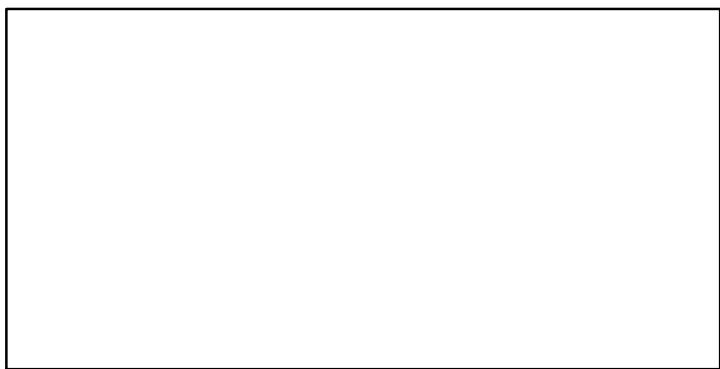
Atlantic cod Western Baltic [CODBA2224]

TC-MT, TL-MT, RecC* (1993–2018–ICESIMP2018)

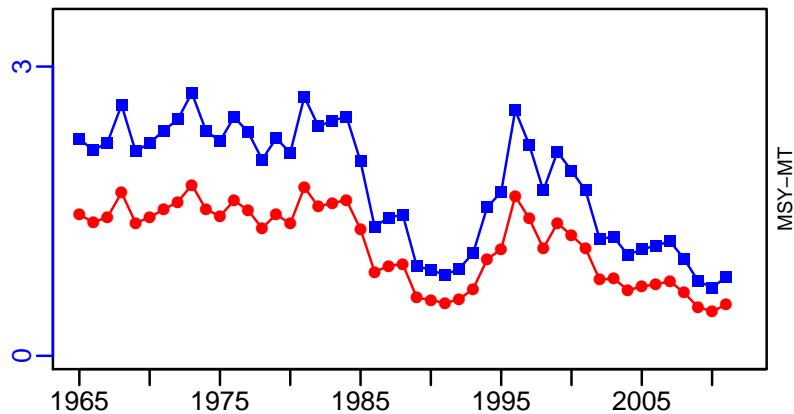
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-MT, CdiveMEANC-ratio, (1965–2012–CHING)



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

Atlantic cod Eastern Baltic [CODBA2532]

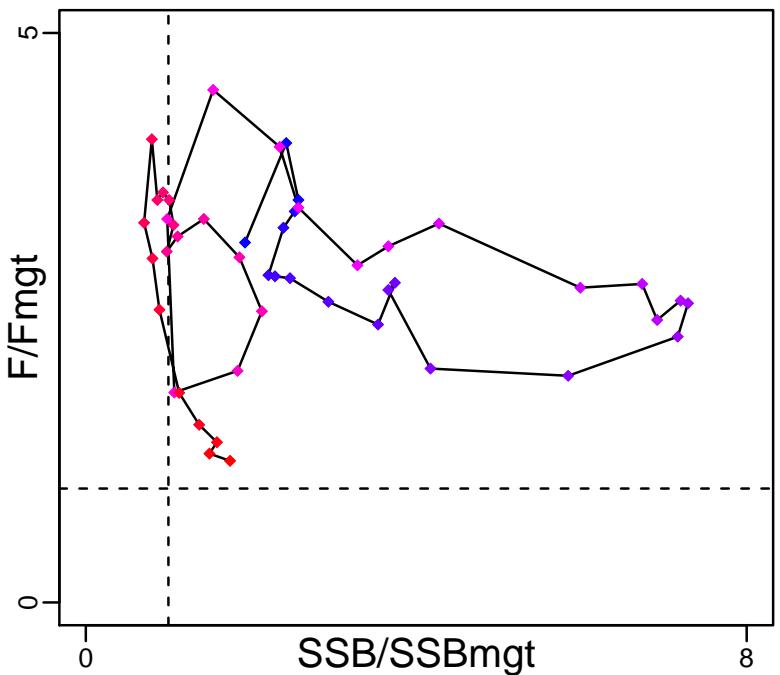
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGBFAS-CODBA2532-1965-2017-ICESIMP2018
Area	Eastern Baltic
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2013, 2016, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	1,517,840
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2012	0.3
ERmsy	ERmsy-est-ratio	2012	0.213
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2013	88,200
Fmgt	Fmgt-1/yr	2013	0.3
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2012	323,632
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2013	63,000
Flim	-	-	-
ERlim	-	-	-

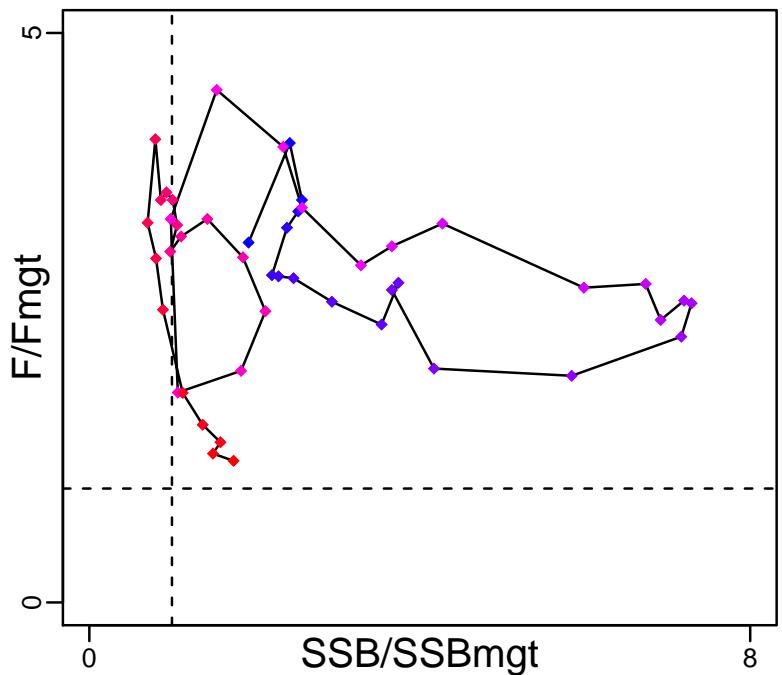
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2013	233,000	Both	-	
SSB	SSB-MT	2013	180,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2013	2.54×10^8	-	2	
F	F-1/yr	2013	0.373	-	4 to 6	
ER	ER-ratio	2016	0.344	-	-	
TC	TC-MT	2017	30,900			
TL	TL-MT	2017	25,300			
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	0.192			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2012	0.857			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2012	0.811			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2013	2.041			
F/Fmgt	F-1/yr/Fmgt-1/yr	2013	1.243			
ER/ERmgt	-	-	-			

Atlantic cod Eastern Baltic [CDBA2532]

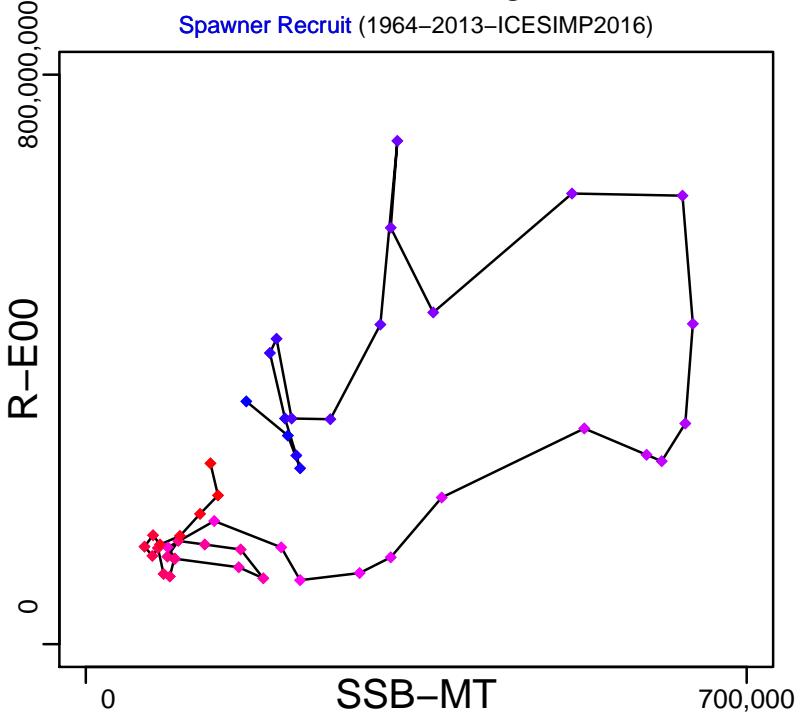
Kobe MSYpref (1964–2013–ICESIMP2016)



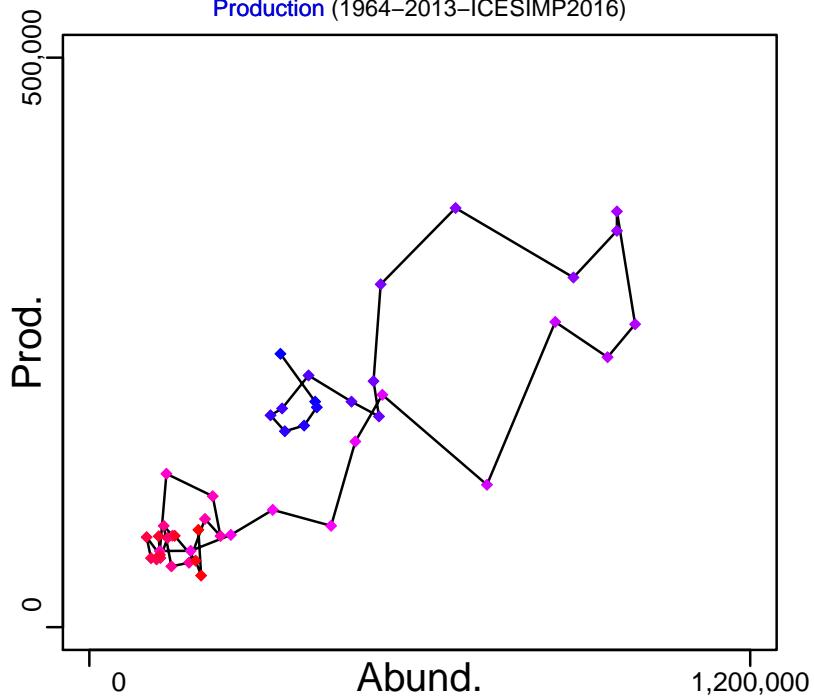
Kobe MGTpref (1964–2013–ICESIMP2016)



Spawner Recruit (1964–2013–ICESIMP2016)



Production (1964–2013–ICESIMP2016)

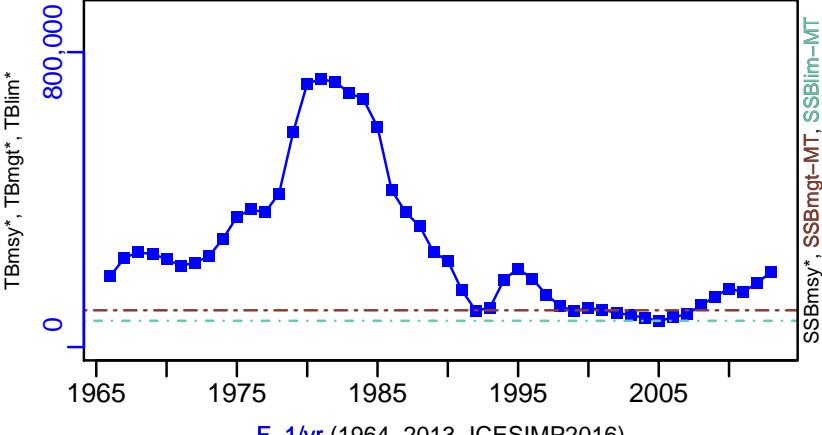
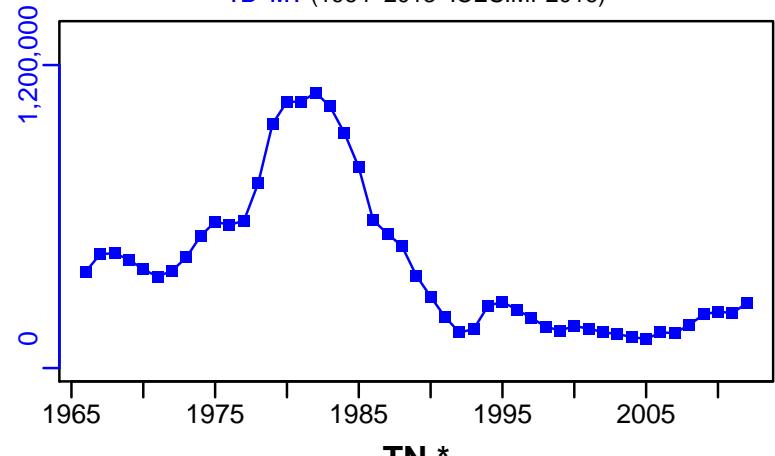


◆ Start Year ◆ End Year * No Data

Atlantic cod Eastern Baltic [CODBA2532]

TB-MT (1964–2013–ICESIMP2016)

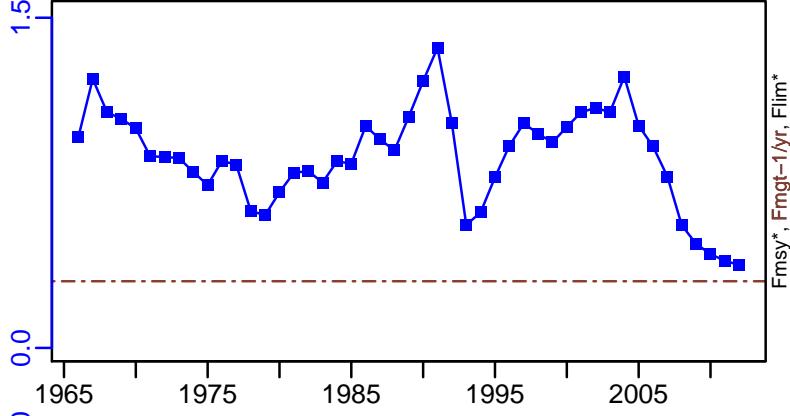
SSB-MT (1964–2013–ICESIMP2016)



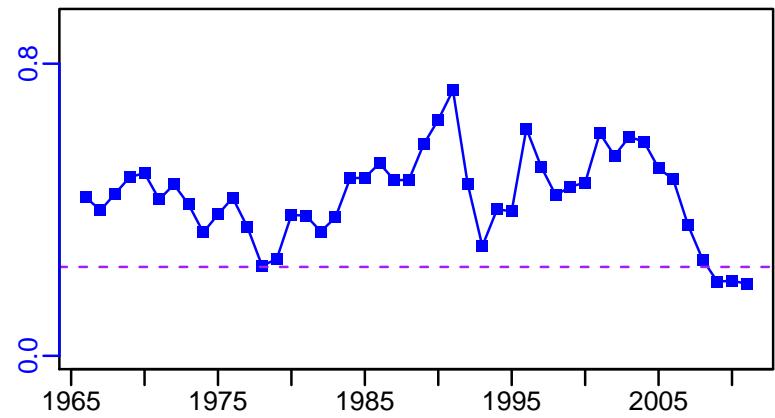
TN *



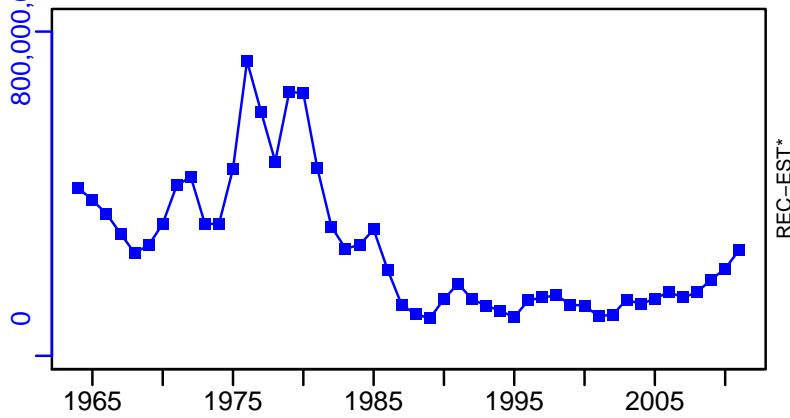
F-1/yr (1964–2013–ICESIMP2016)



ER-ratio (1966–2012–CHING)



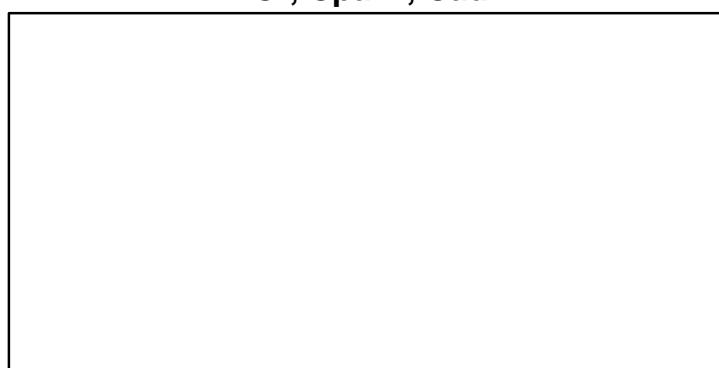
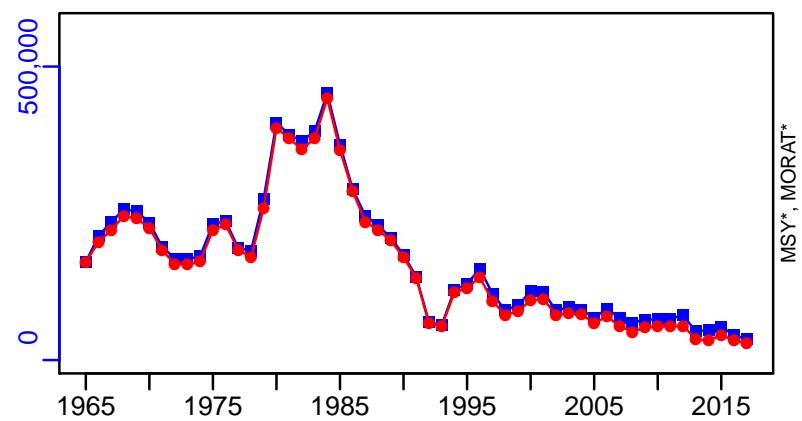
R-E00 (1964–2013–ICESIMP2016)



Atlantic cod Eastern Baltic [CODBA2532]

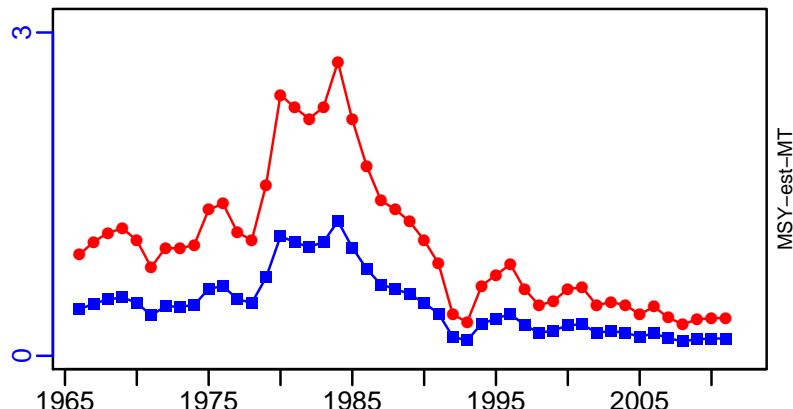
TC-MT, TL-MT, RecC* (1965–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



EFFORT*

TL-MT/MSY-est-MT, CdivMEANC-ratio, (1966–2012–CHING)



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

Atlantic cod ICES 3a(west)-4-7d [CODIIIaW-IV-VIId]

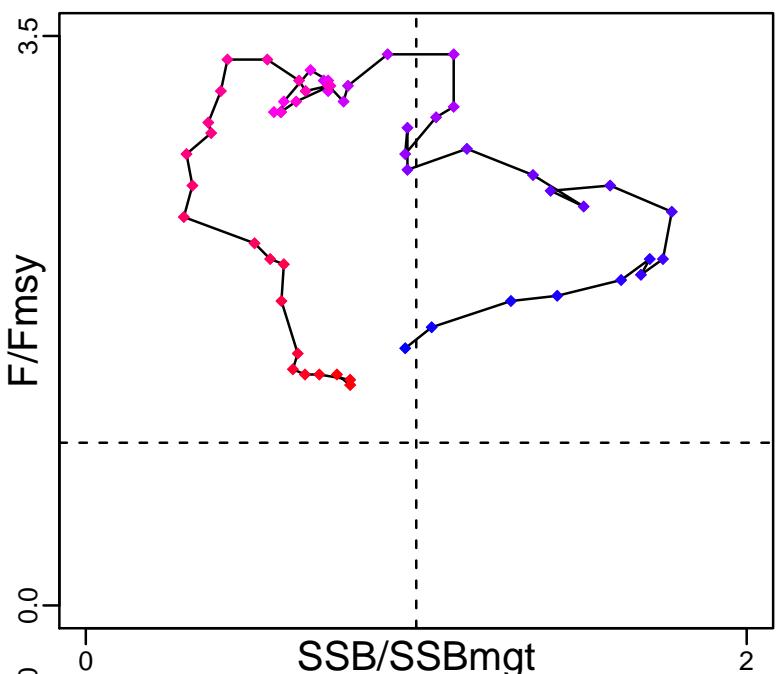
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGNSSK-CODIIIaW-IV-VIId-1962-2018-ICESIMP2018
Area	ICES 3a(west)-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2011, 2013, 2014, 2015, 2016, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	971,321
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.31
ERmsy	ERmsy-est-ratio	2018	0.455
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	150,000
Fmgt	Fmgt-1/yr	2018	0.4
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	267,310
M	-	-	-
TBlim	TBlim-MT	2011	70,000
SSBlim	SSBlim-MT	2018	107,000
Flim	Flim-1/yr	2018	0.54
ERlim	-	-	-

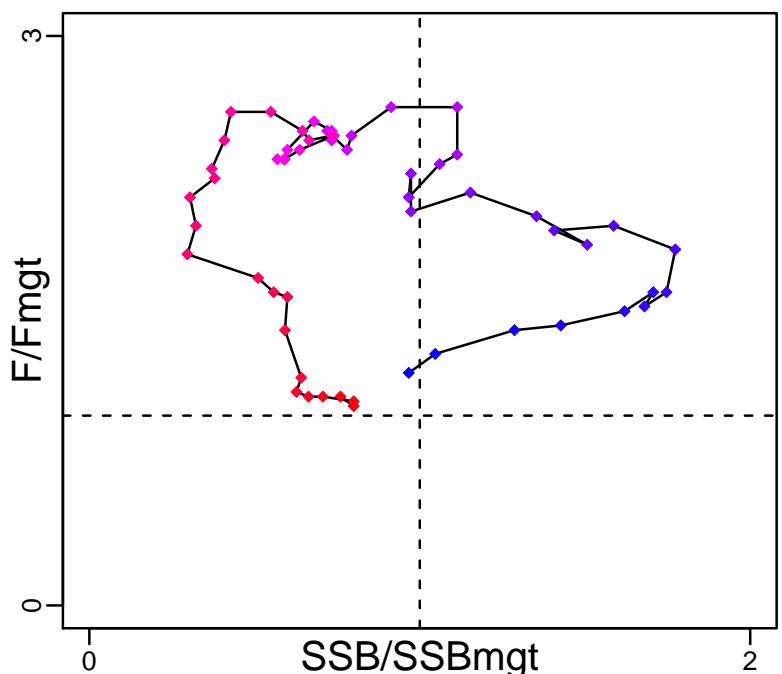
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	243,000	Both	-	
SSB	SSB-MT	2018	118,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	97,400,000	-	1	
F	F-1/yr	2018	0.44	-	-	
ER	ER-calc-ratio	2018	0.192	-	-	
TC	TC-MT	2018	46,700			
TL	TL-MT	2018	37,600			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.194			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.419			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.422			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.787			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.1			
ER/ERmgt	-	-	-			

Atlantic cod ICES 3a(west)–4–7d [CODIIIaW–IV–VIId]

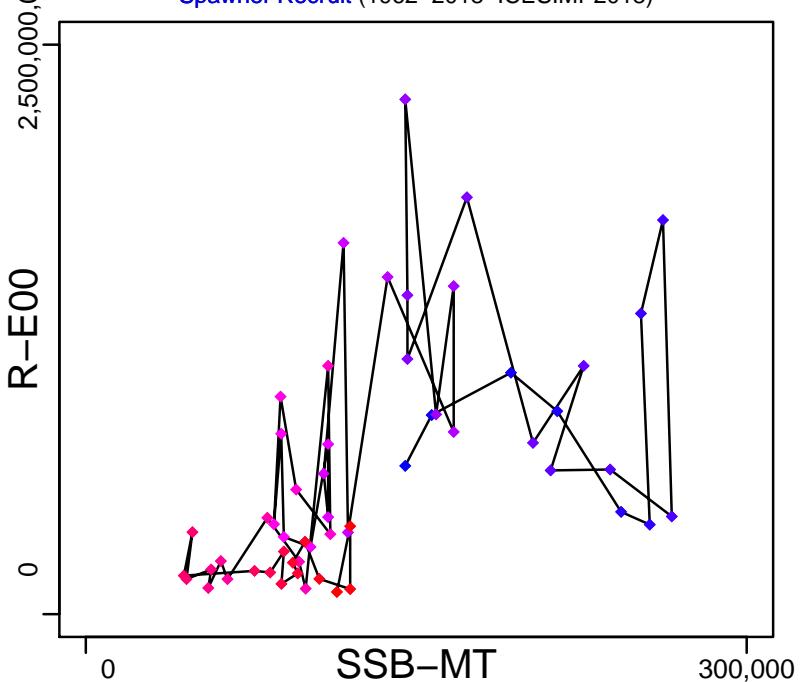
Kobe MSYpref (1962–2018–ICESIMP2018)



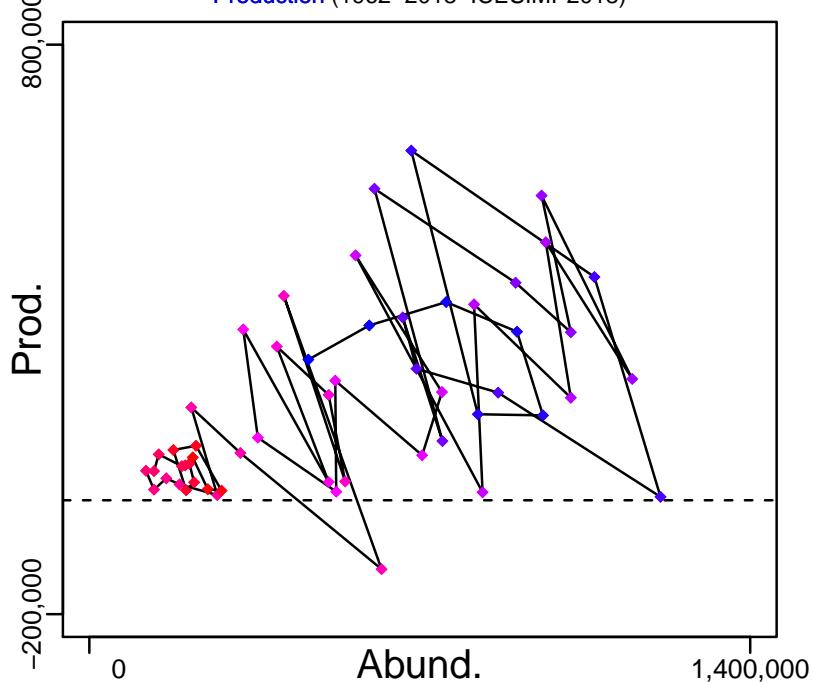
Kobe MGTpref (1962–2018–ICESIMP2018)



Spawner Recruit (1962–2018–ICESIMP2018)



Production (1962–2018–ICESIMP2018)

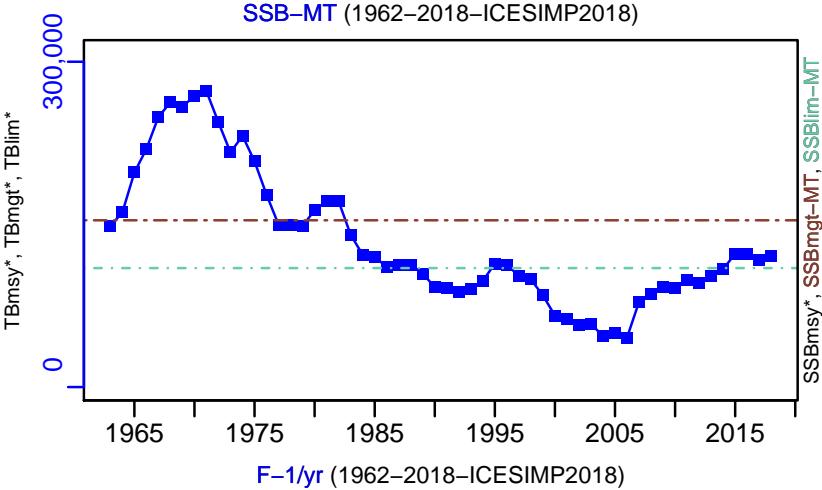
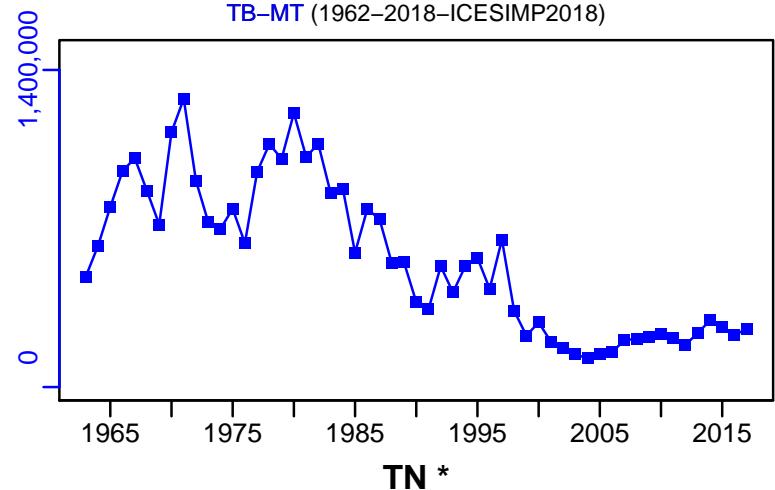


◆ Start Year ◆ End Year * No Data

Atlantic cod ICES 3a(west)–4–7d [CODIIIaW–IV–VIId]

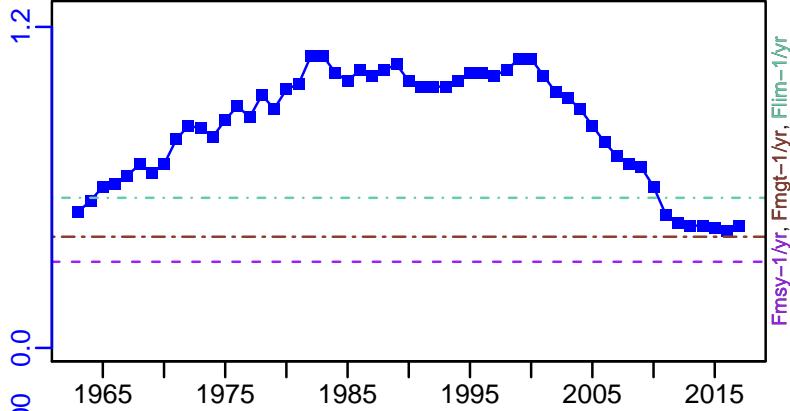
TB-MT (1962–2018–ICESIMP2018)

SSB-MT (1962–2018–ICESIMP2018)



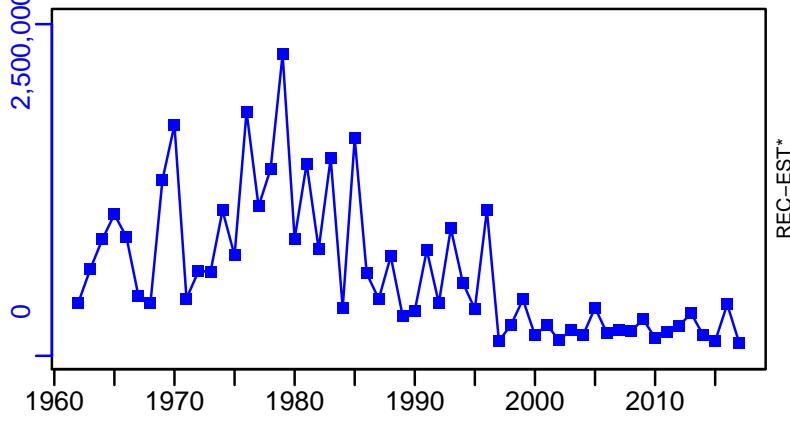
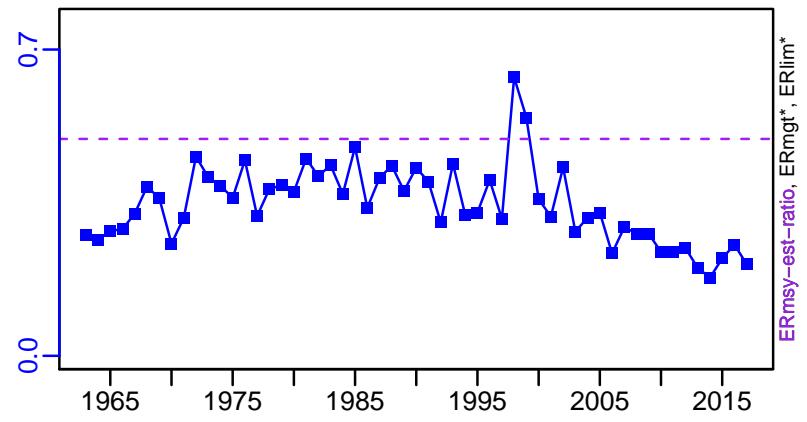
TN *

F-1/yr



ER-calc-ratio (1962–2018–ICESIMP2018)

R-E00 (1962–2018–ICESIMP2018)

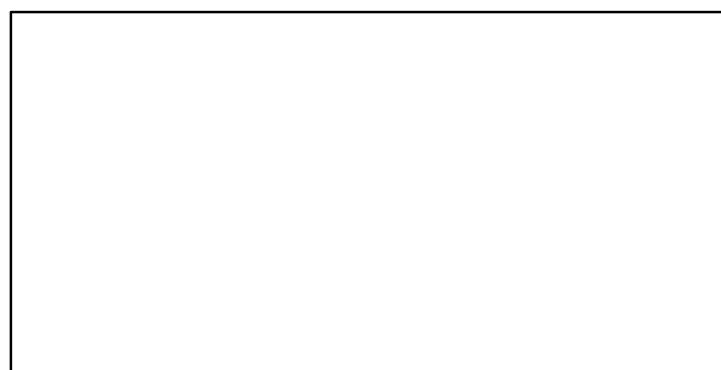
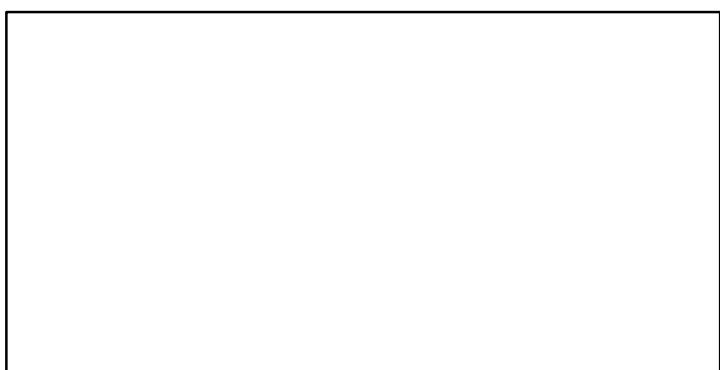
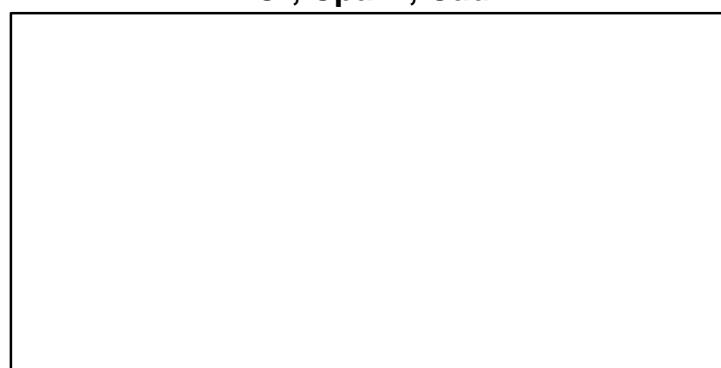
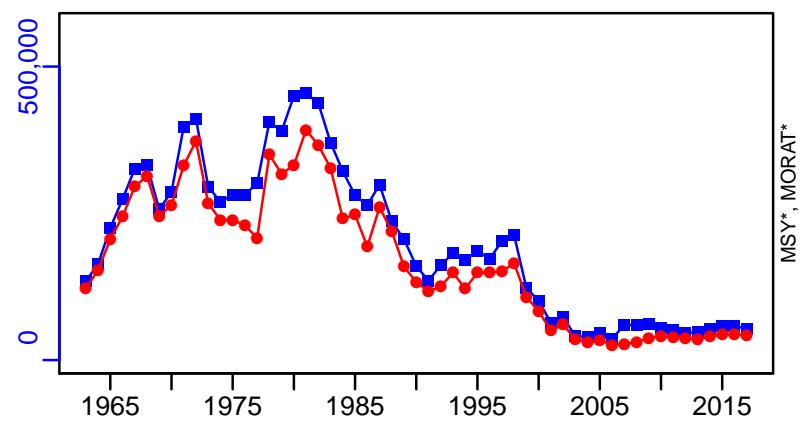


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

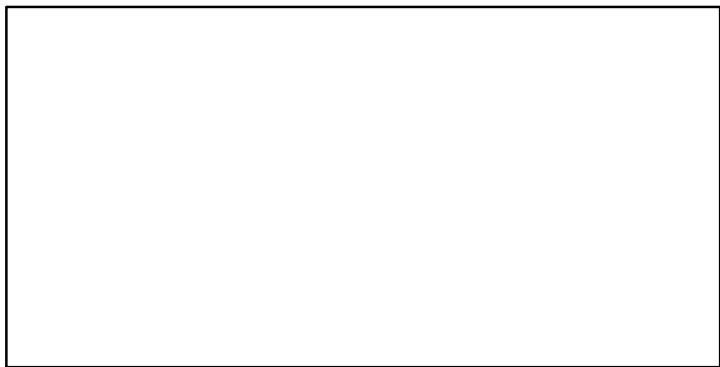
Atlantic cod ICES 3a(west)–4–7d [CODIIIaW–IV–VIId]

TC–MT, TL–MT, RecC* (1962–2018–ICESIMP2018)

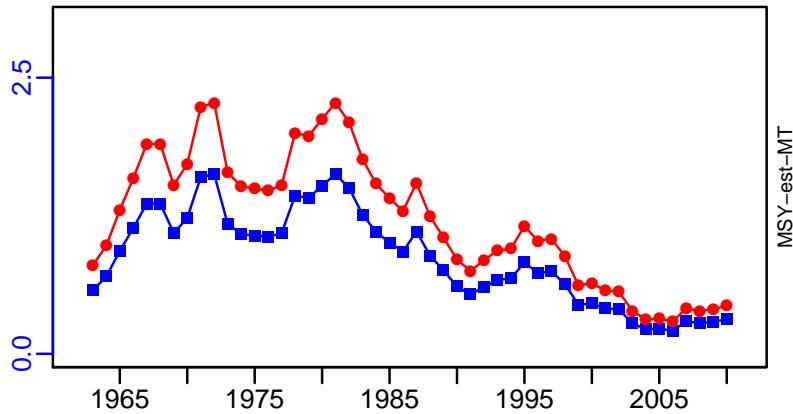
TAC*, Cpair*, Cadv*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1962–2011–NEUBAUER)



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

Atlantic cod Irish Sea [CODIS]

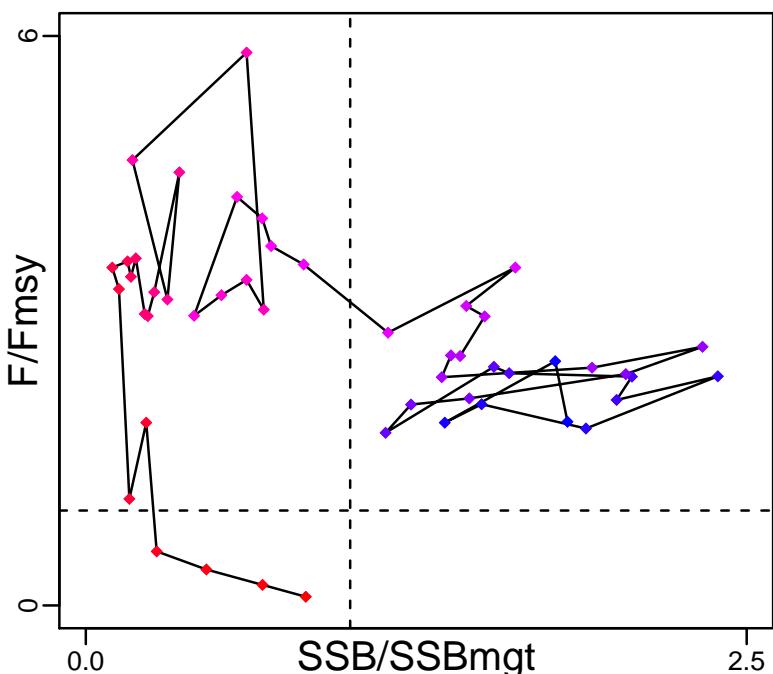
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODIS-1968-2017-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	11,929
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.309
ERmsy	ERmsy-est-ratio	2017	0.453
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	8616
Fmgt	Fmgt-1/yr	2017	0.309
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	4091
M	M-1/yr	2010	0.2
TBlim	TBlim-MT	2010	6000
SSBlim	SSBlim-MT	2017	6000
Flim	Flim-1/yr	2017	0.614
ERlim	-	-	-

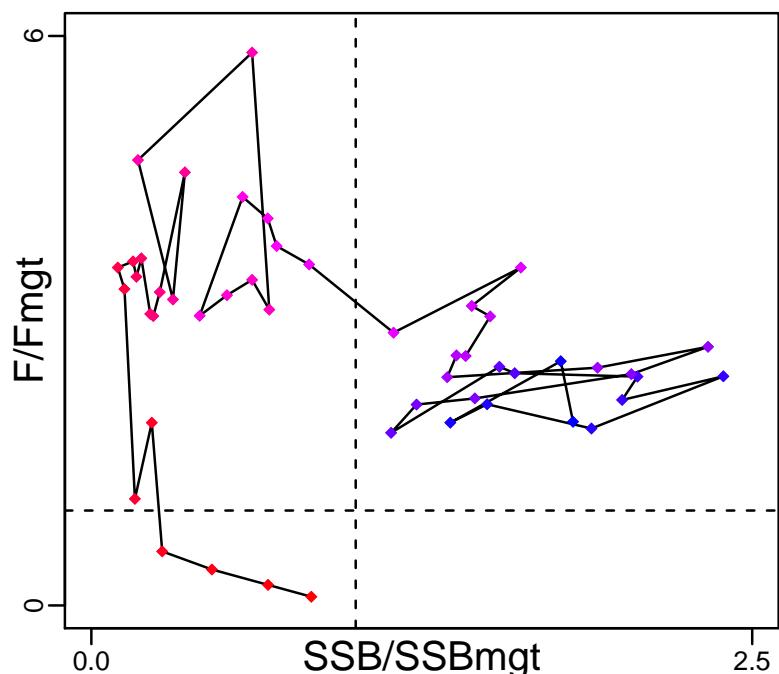
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	8650	Both	-	
SSB	SSB-MT	2017	10,300	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	5,510,000	-	0	
F	F-1/yr	2017	0.028	-	2 to 4	
ER	ER-calc-ratio	2017	0.016	-	-	
TC	TC-MT	2017	142			
TL	TL-MT	2017	83			
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	0.425			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.092			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.036			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.195			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.092			
ER/ERmgt	-	-	-			

Atlantic cod Irish Sea [CODIS]

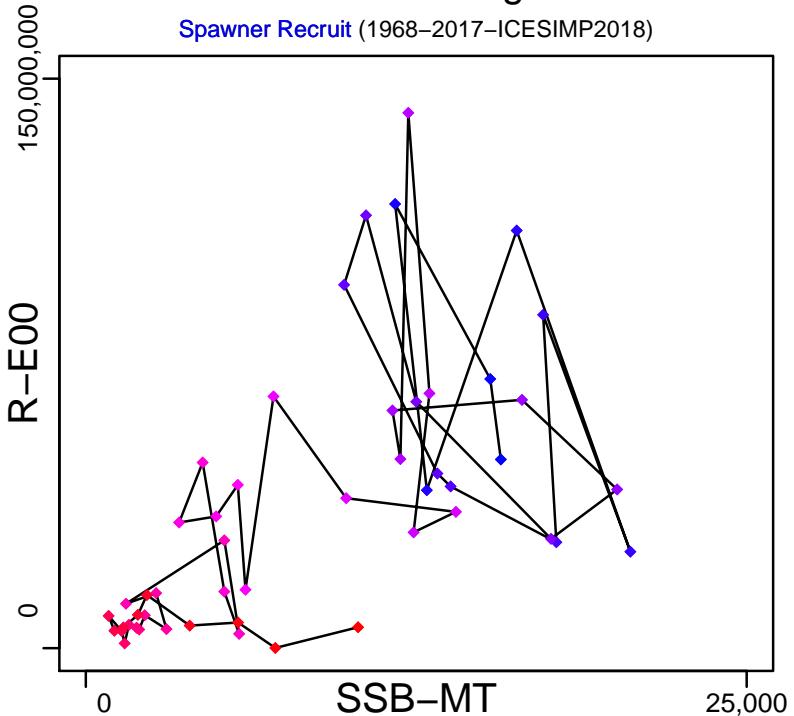
Kobe MSYpref (1968–2017–ICESIMP2018)



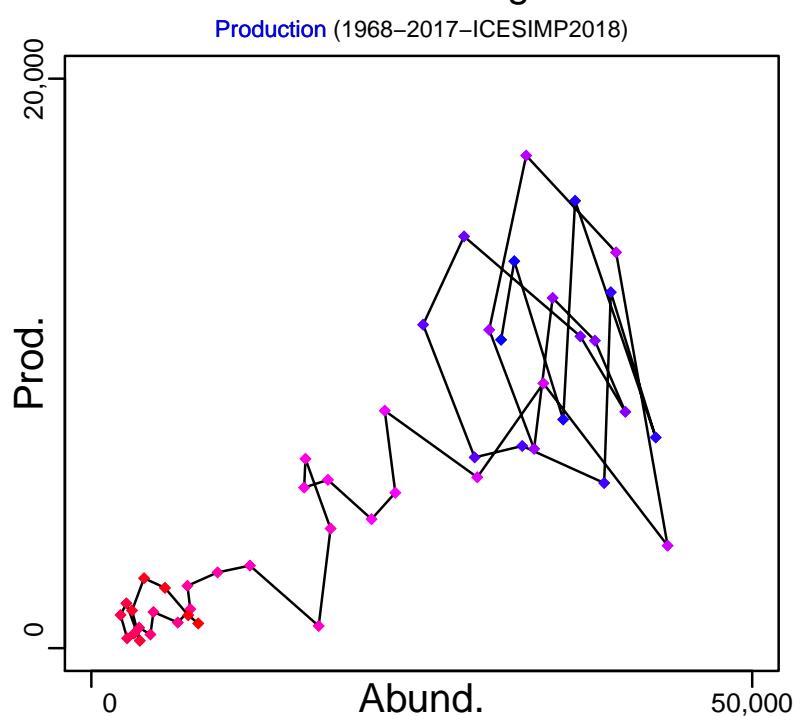
Kobe MGTpref (1968–2017–ICESIMP2018)



Spawner Recruit (1968–2017–ICESIMP2018)



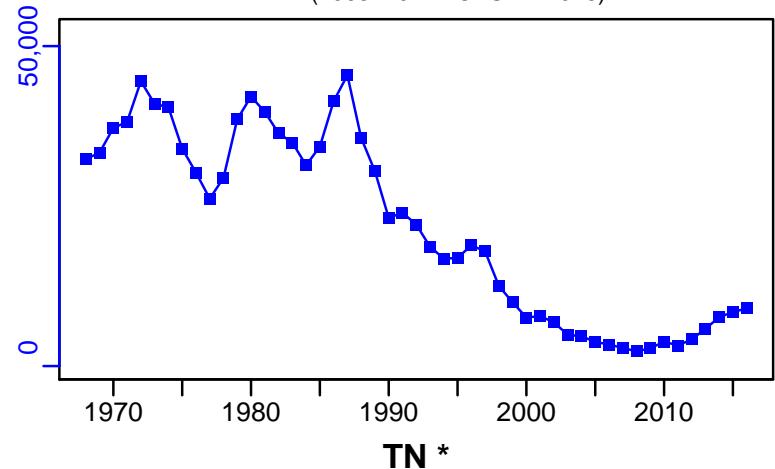
Production (1968–2017–ICESIMP2018)



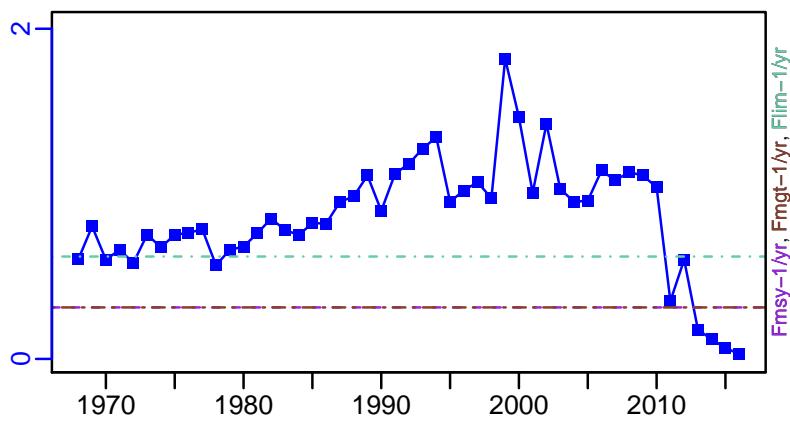
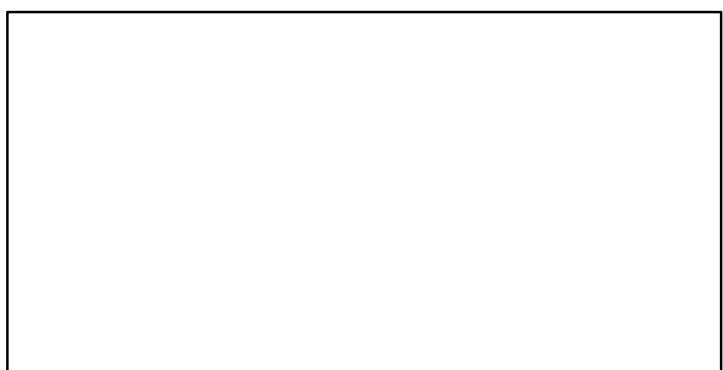
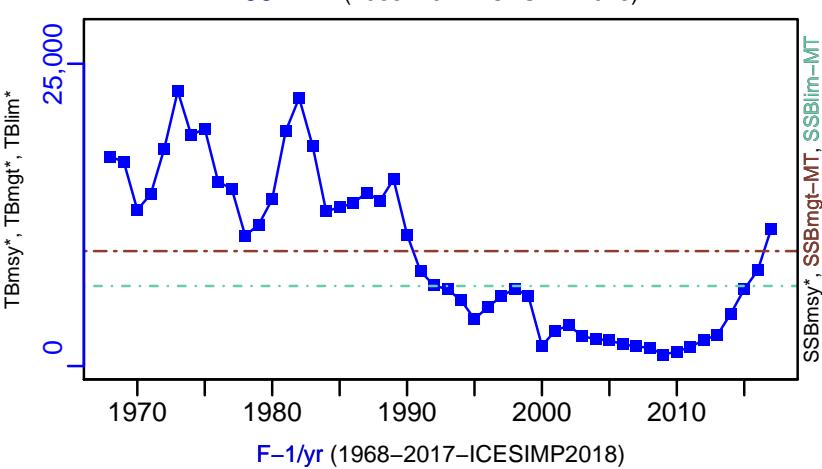
◆ Start Year ◆ End Year * No Data

Atlantic cod Irish Sea [CODIS]

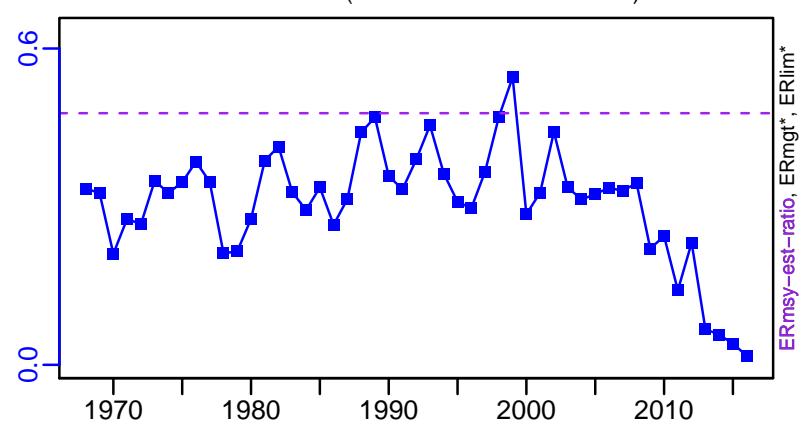
TB-MT (1968–2017–ICESIMP2018)



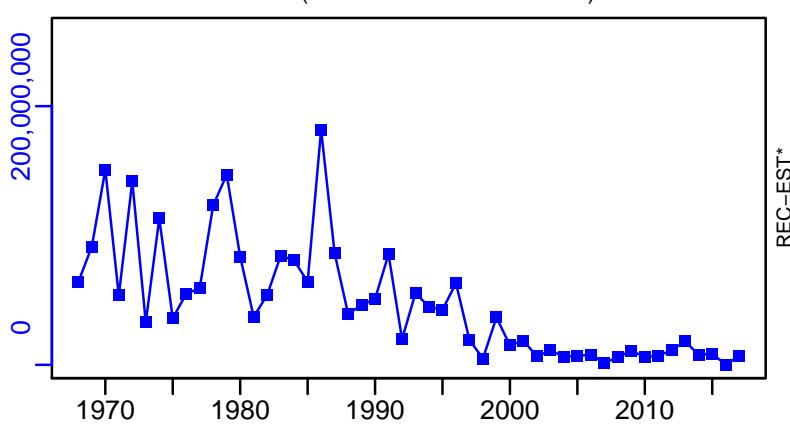
SSB-MT (1968–2017–ICESIMP2018)



ER-calc-ratio (1968–2017–ICESIMP2018)



R-E00 (1968–2017–ICESIMP2018)

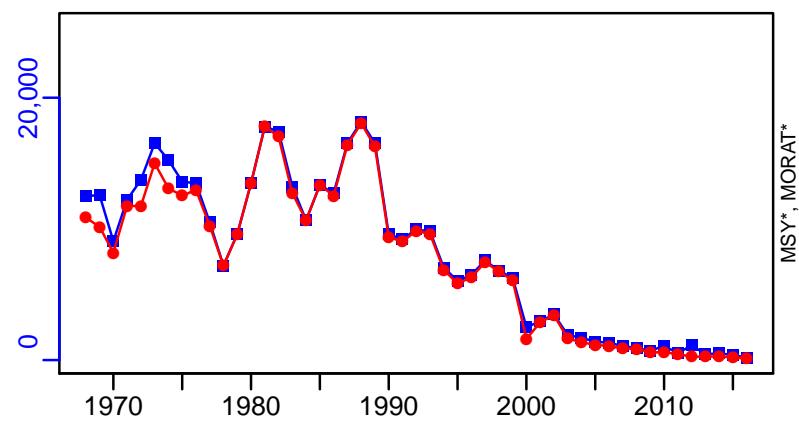


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Atlantic cod Irish Sea [CODIS]

TC-MT, TL-MT, RecC* (1968–2017–ICESIMP2018)

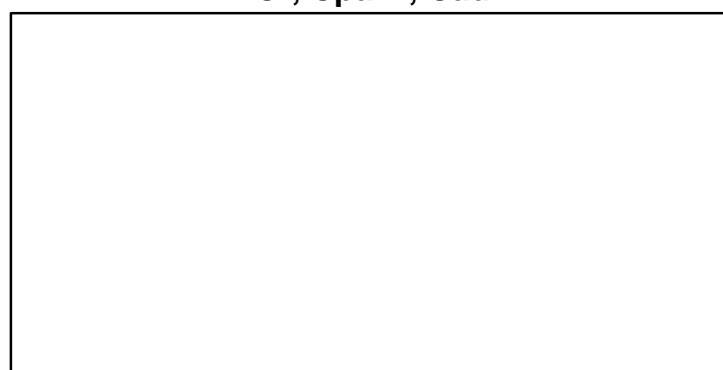
TAC*, Cpair*, Cadv*



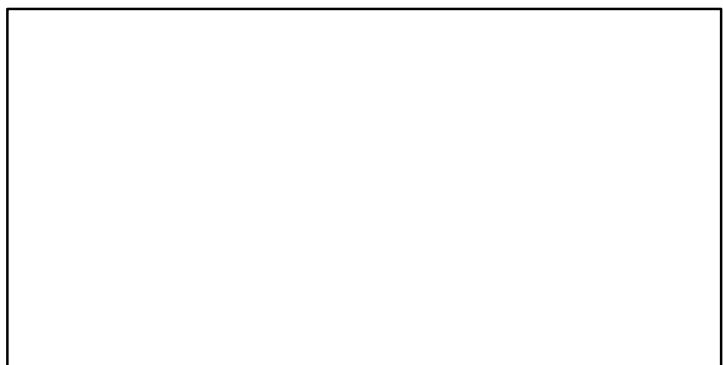
survB*

MSY*, MORAT*

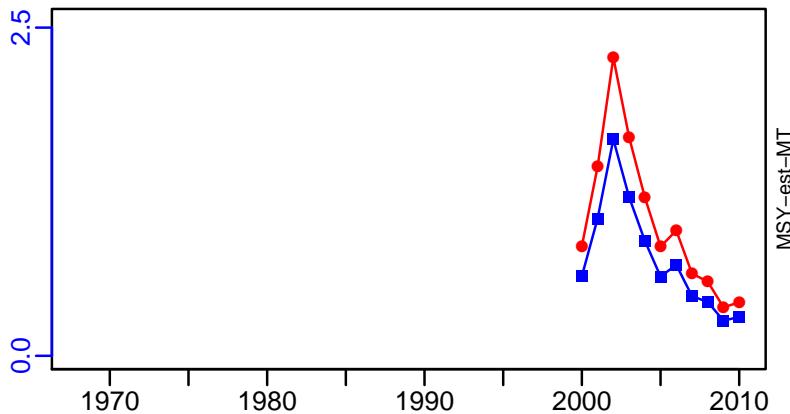
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1968–2010–NEUBAUER)



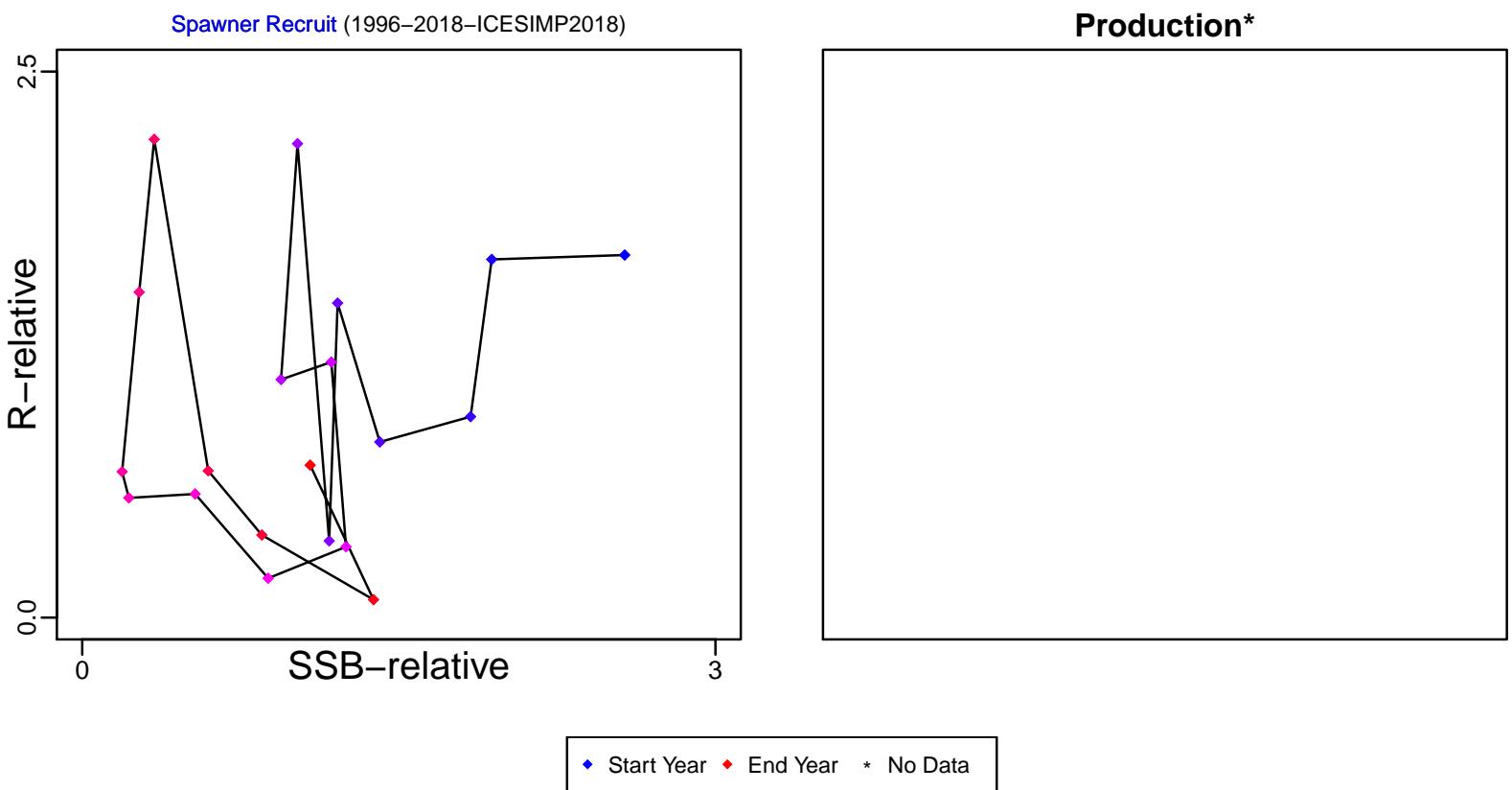
■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Atlantic cod Kattegat [CODKAT]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGBFAS-CODKAT-1996-2018-ICESIMP2018
Area	Kattegat
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2012, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	TBlim-MT	2012	6400
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

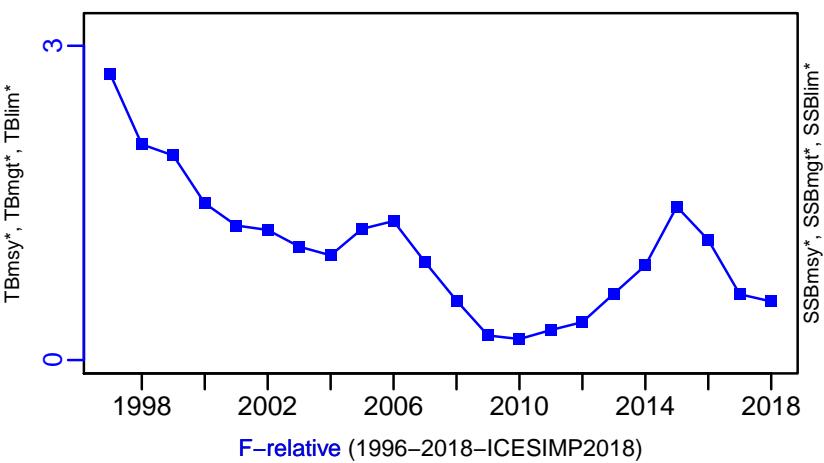
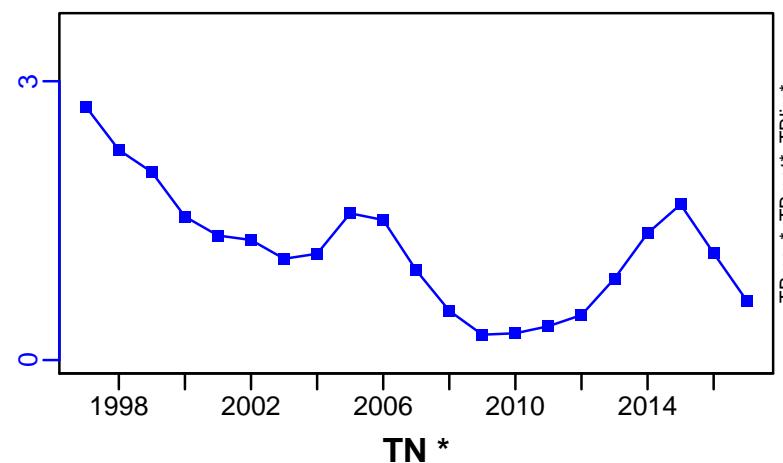
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-relative	2018	0.535	Both	-
SSB	SSB-relative	2018	0.527	Both	-
TN	-	-	-	-	-
R	R-relative	2018	0.698	-	1
F	F-relative	2018	0.53	-	-
ER	ER-ratio	2012	0.101	-	-
TC	TC-MT	2018	552		
TL	TL-MT	2018	294		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY***Kobe MGT***

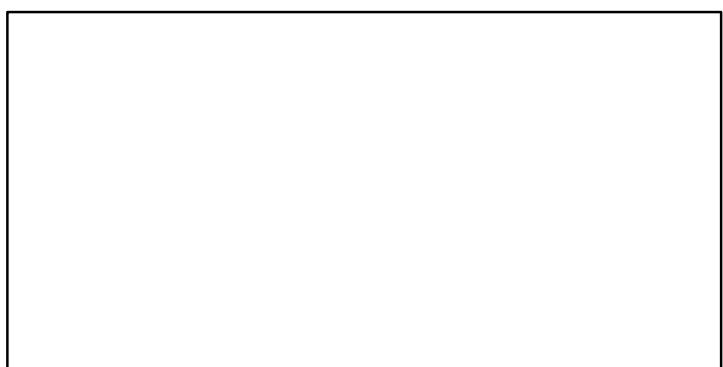
Atlantic cod Kattegat [CODKAT]

TB-relative (1996–2018–ICESIMP2018)

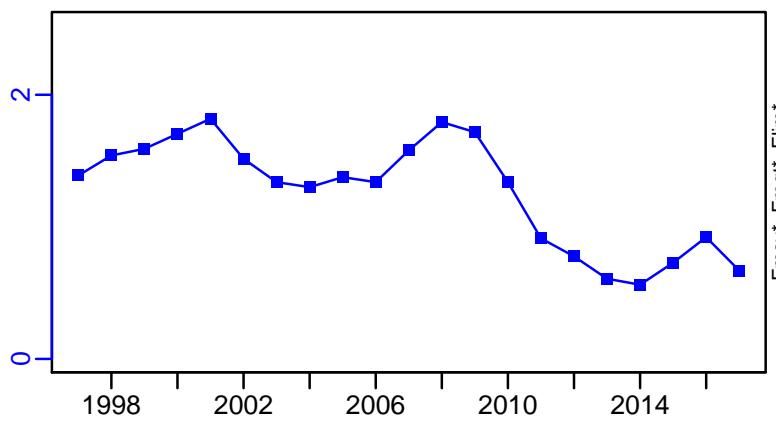
SSB-relative (1996–2018–ICESIMP2018)



TN *

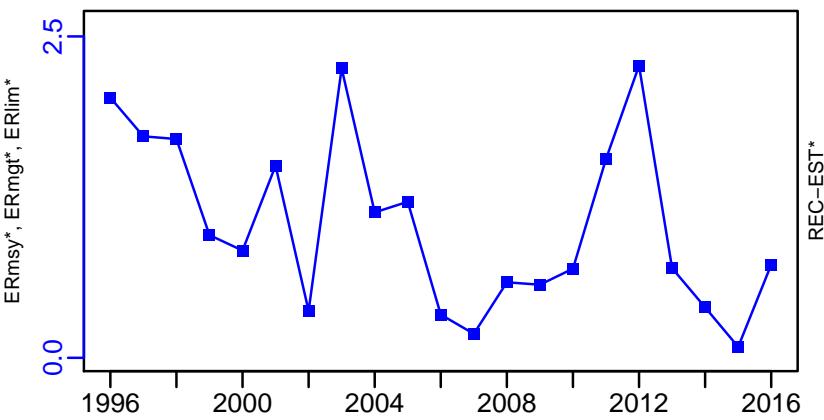
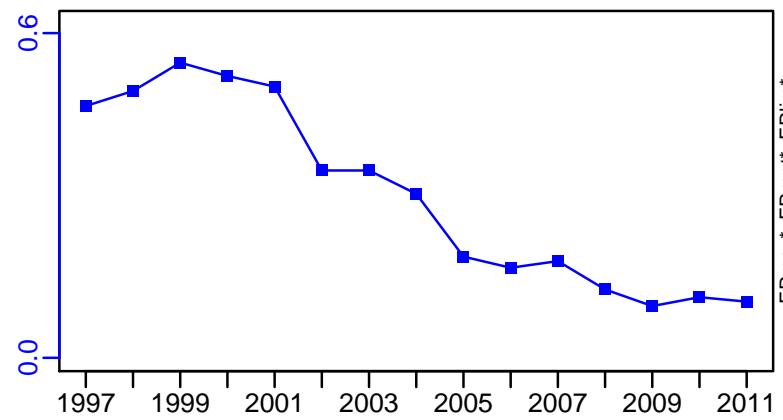


F-relative (1996–2018–ICESIMP2018)



ER-ratio (1971–2012–CHING)

R-relative (1996–2018–ICESIMP2018)

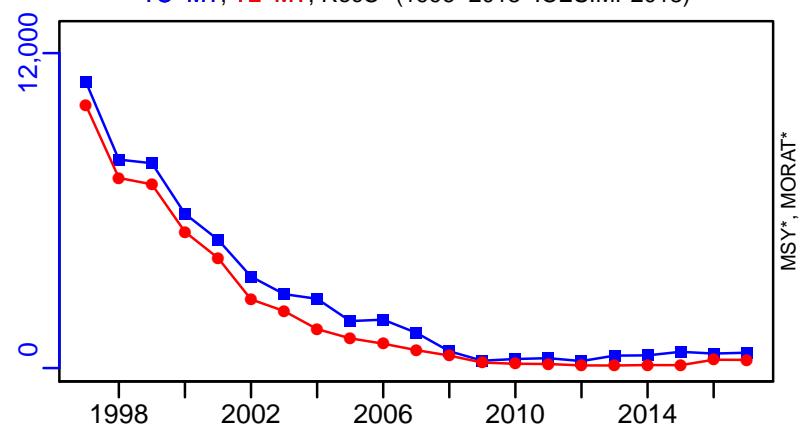


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

Atlantic cod Kattegat [CODKAT]

TC-MT, TL-MT, RecC* (1996–2018–ICESIMP2018)

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 |

Atlantic cod West of Scotland [CODVla]

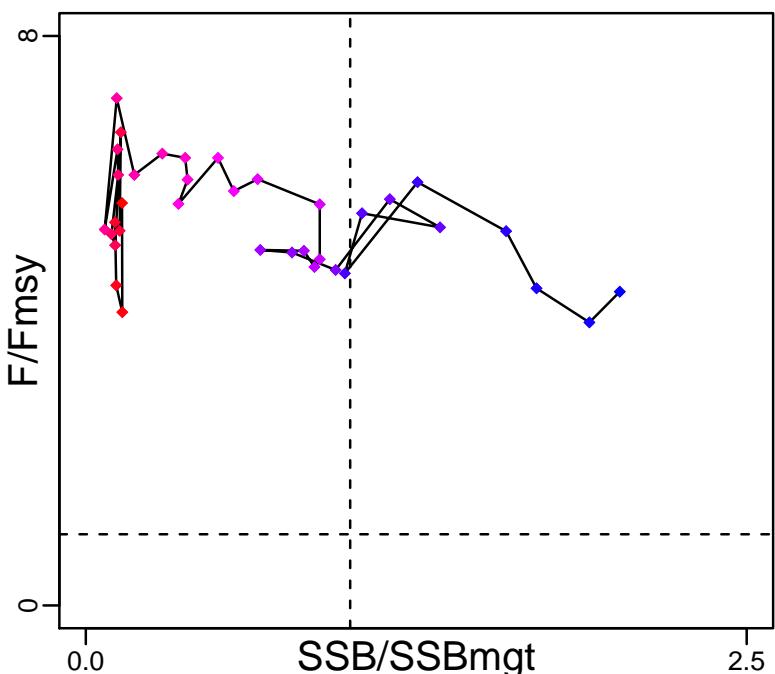
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVla-1980-2017-ICESIMP2018
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2017, 2012, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2012	22,000
Fmsy	Fmsy-1/yr	2017	0.167
ERmsy	ERmsy-est-ratio	2017	0.277
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	20,000
Fmgt	Fmgt-1/yr	2017	0.167
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2012	10,790
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	14,000
Flim	Flim-1/yr	2017	0.82
ERlim	-	-	-

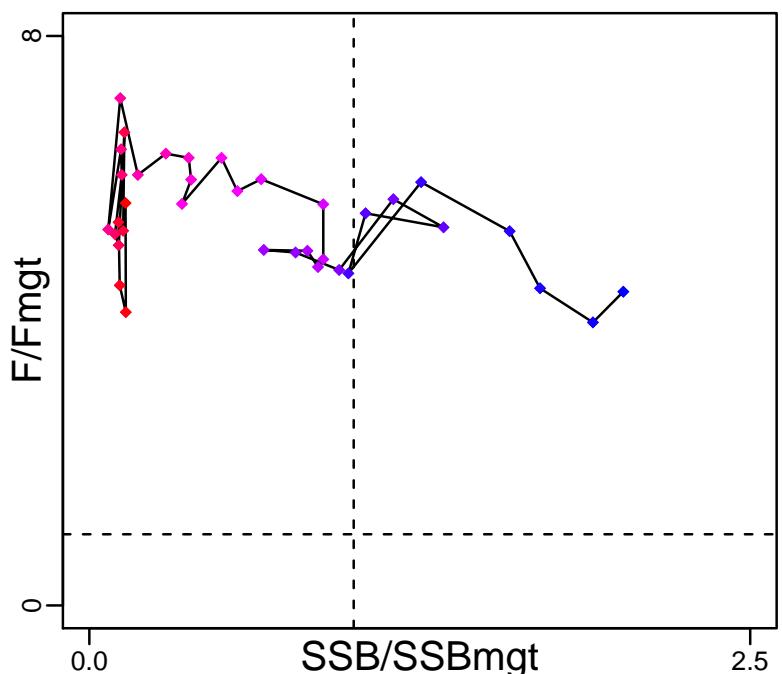
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	4250	Both	-	
SSB	SSB-MT	2017	2480	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	3,610,000	-	1	
F	F-1/yr	2017	0.944	-	2 to 5	
ER	ER-calc-ratio	2017	0.419	-	-	
TC	TC-MT	2017	1740			
TL	TL-MT	2017	892			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2012	0.169			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	5.653			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	1.513			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.124			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	5.653			
ER/ERmgt	-	-	-			

Atlantic cod West of Scotland [CODW]

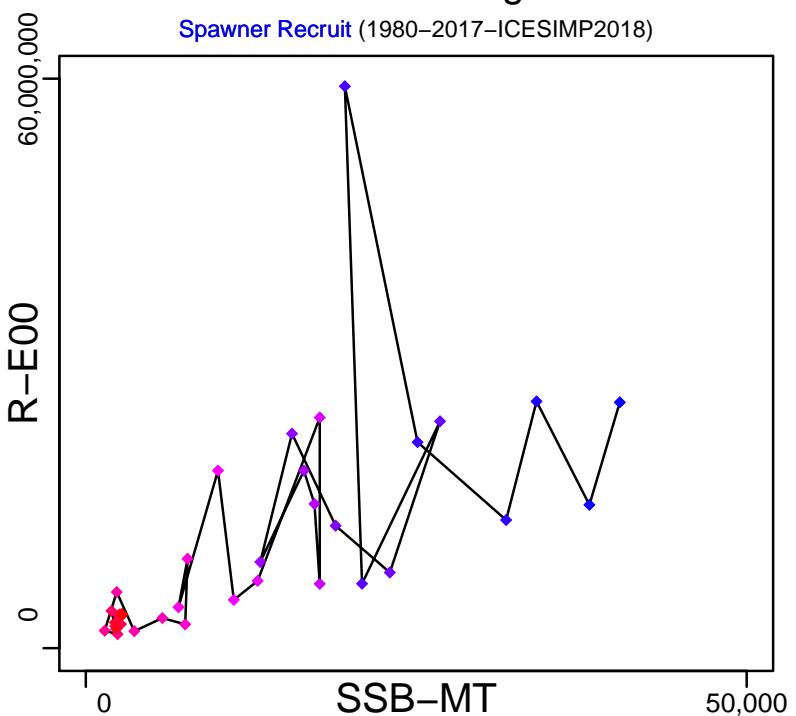
Kobe MSYpref (1980–2017–ICESIMP2018)



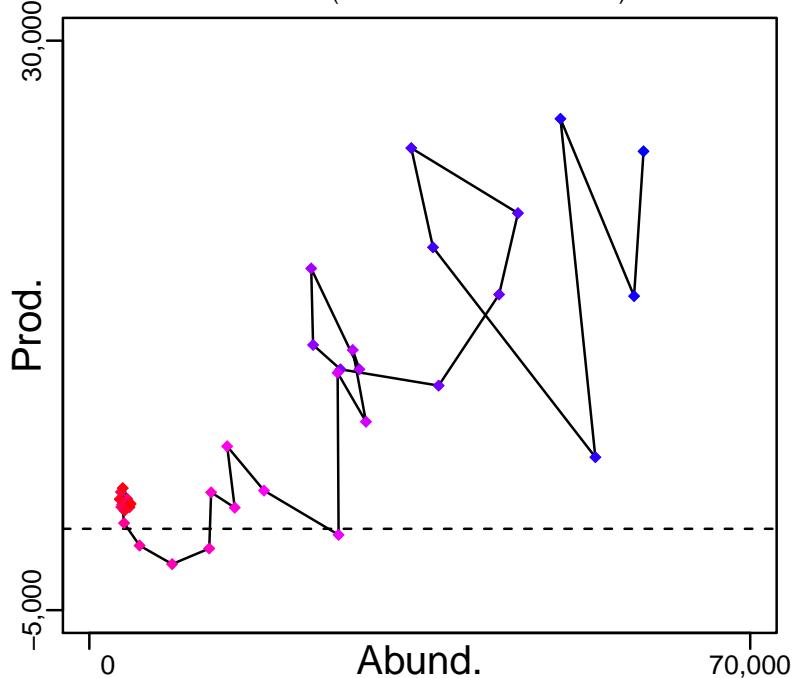
Kobe MGTpref (1980–2017–ICESIMP2018)



Spawner Recruit (1980–2017–ICESIMP2018)



Production (1980–2017–ICESIMP2018)

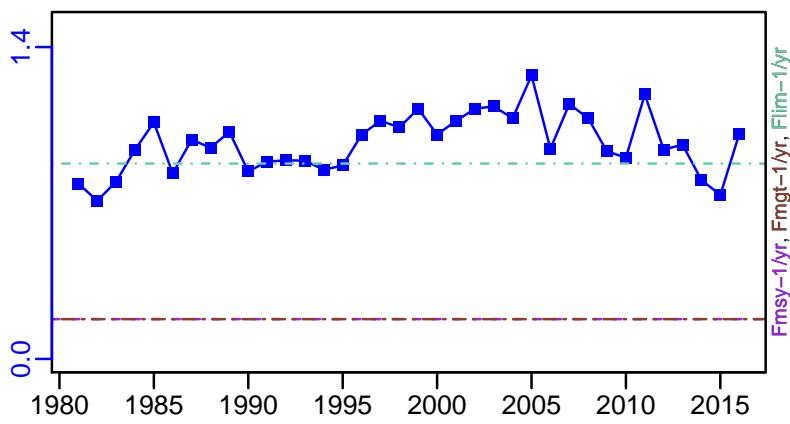
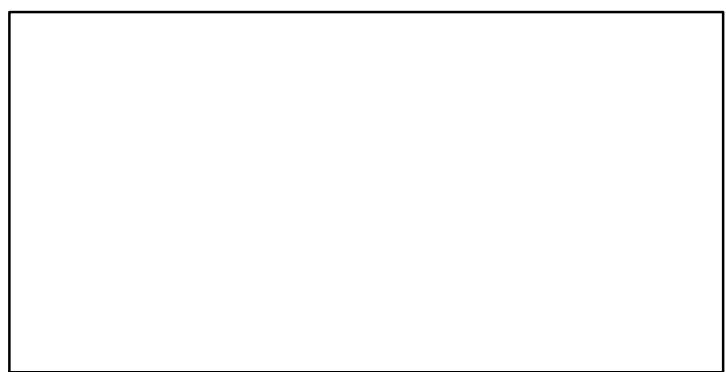
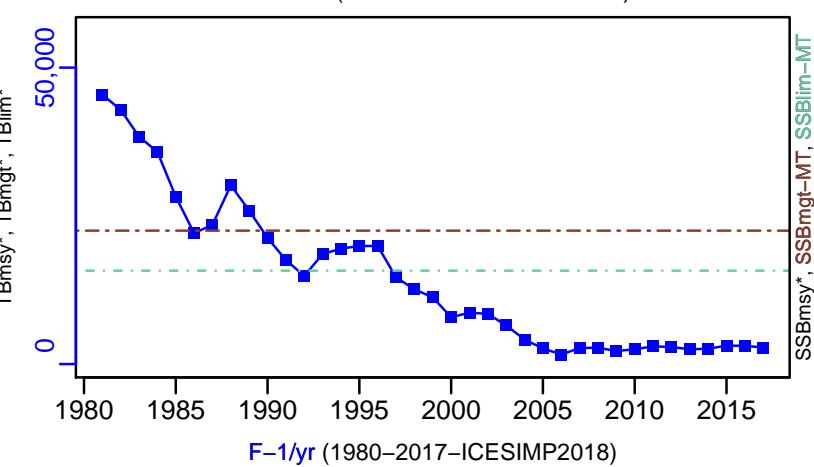
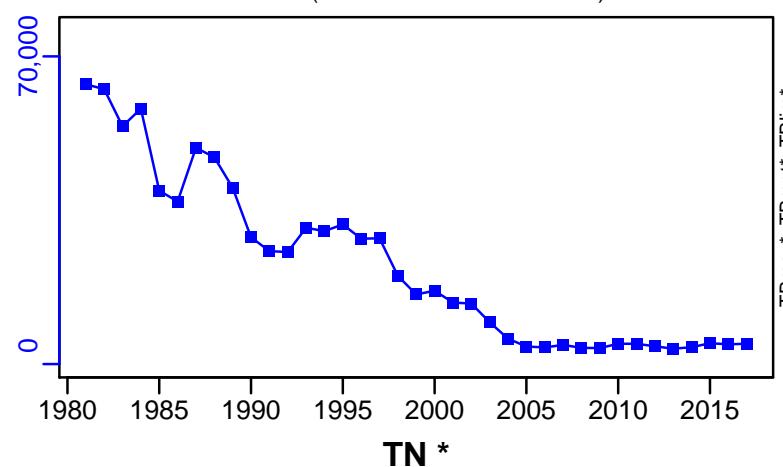


◆ Start Year ♦ End Year * No Data

Atlantic cod West of Scotland [CODW]

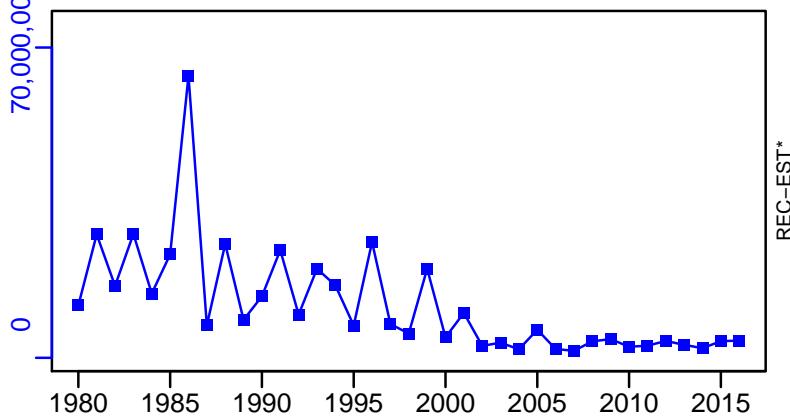
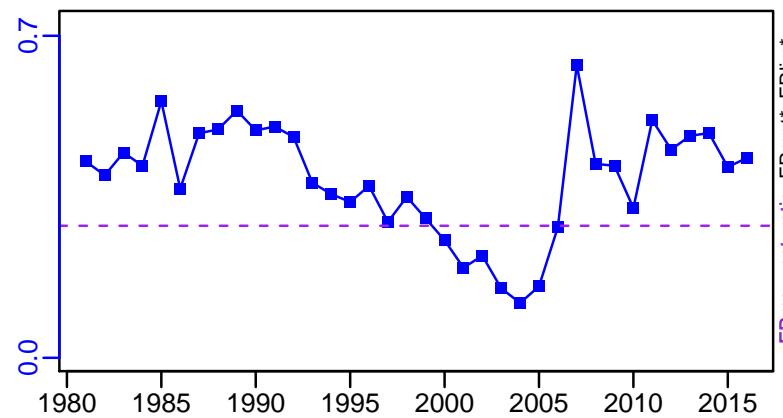
TB-MT (1980–2017–ICESIMP2018)

SSB-MT (1980–2017–ICESIMP2018)



ER-calc-ratio (1980–2017–ICESIMP2018)

R-E00 (1980–2017–ICESIMP2018)

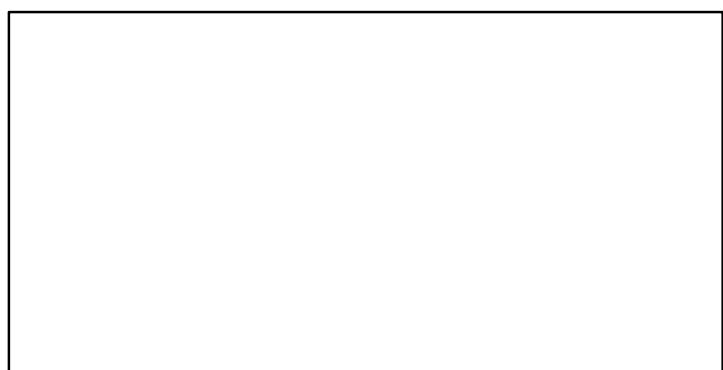
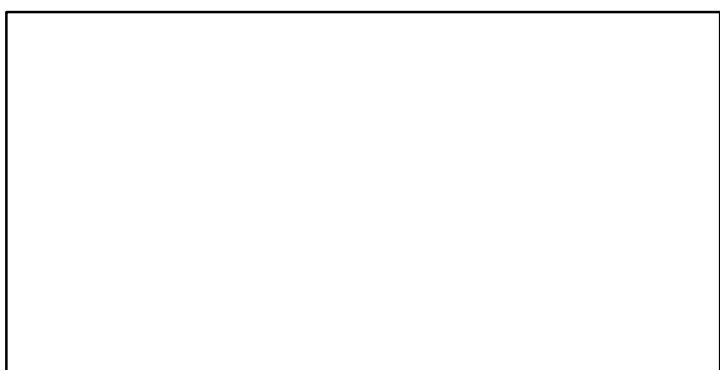
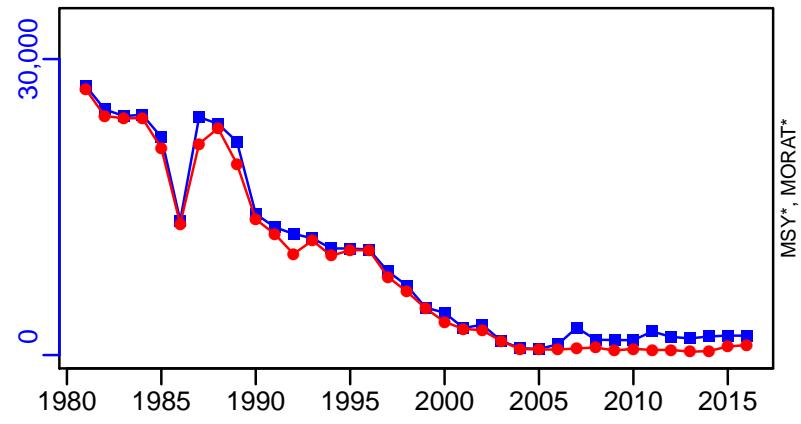


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

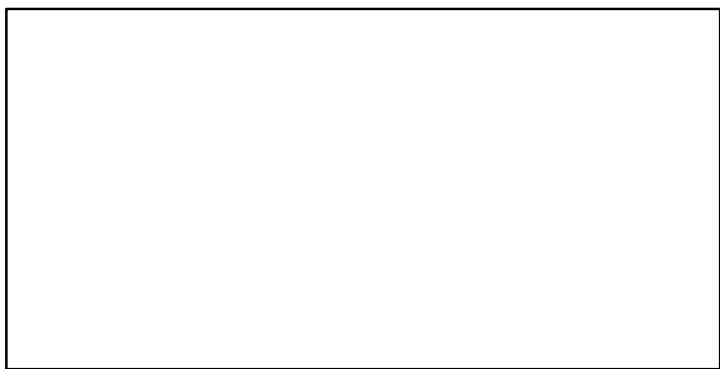
Atlantic cod West of Scotland [CODVia]

TC-MT, TL-MT, RecC* (1980–2017–ICESIMP2018)

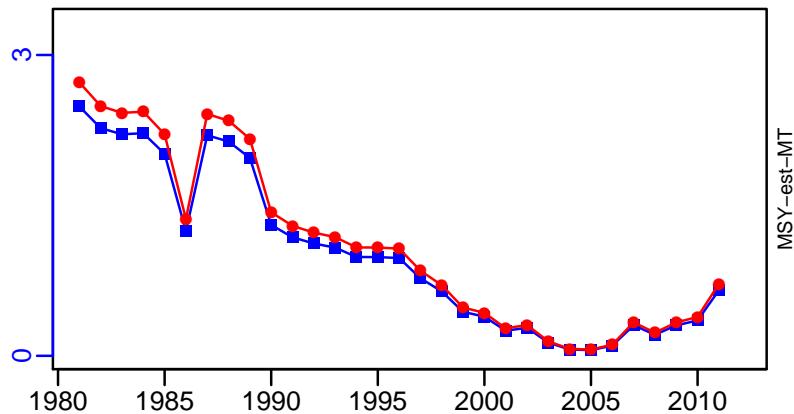
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdiveMEANC-ratio, (1981–2012–CHING)



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

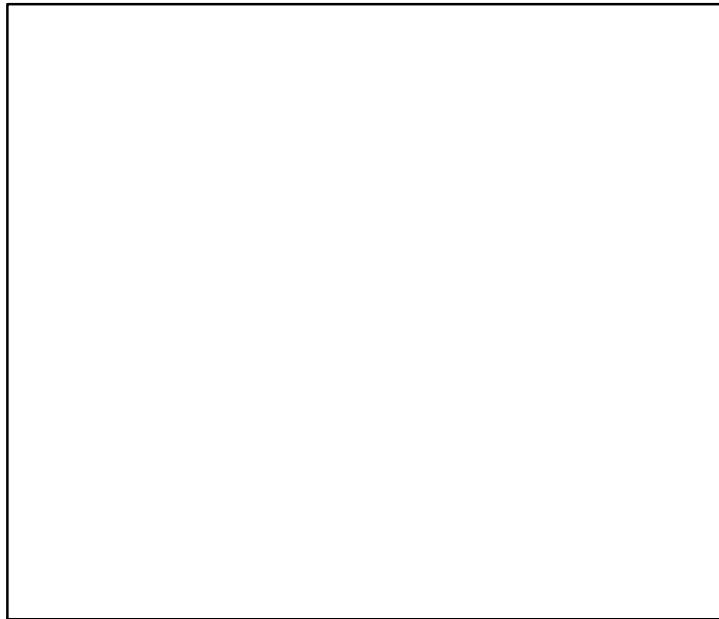
Atlantic cod Rockall Bank [CODVlb]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVlb-1984-2016-ICESIMP2018
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2016

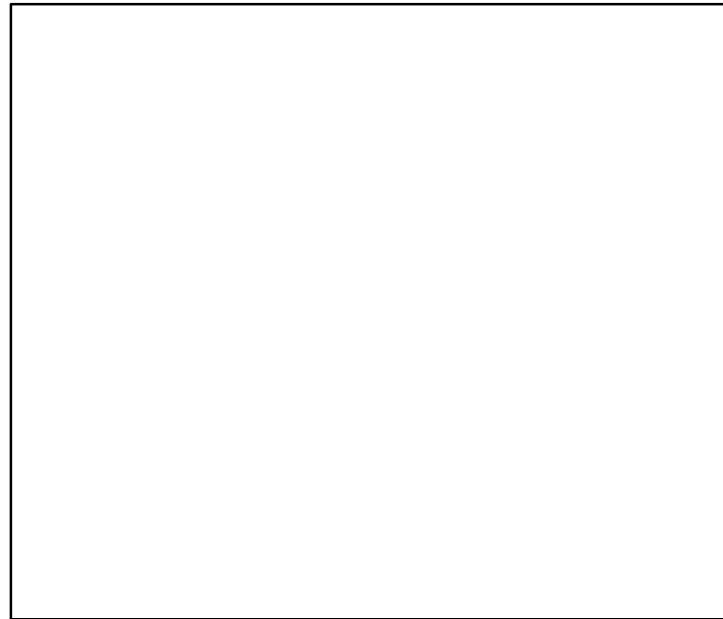
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	62		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

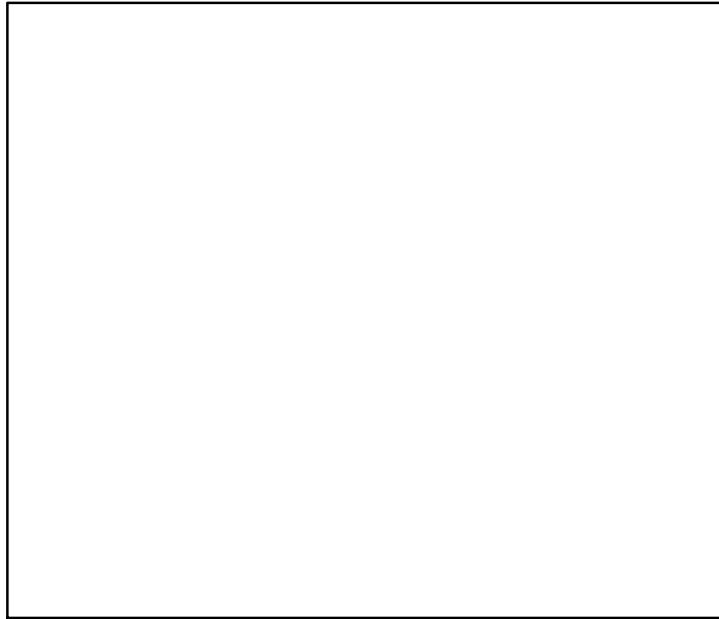
Kobe MSY*



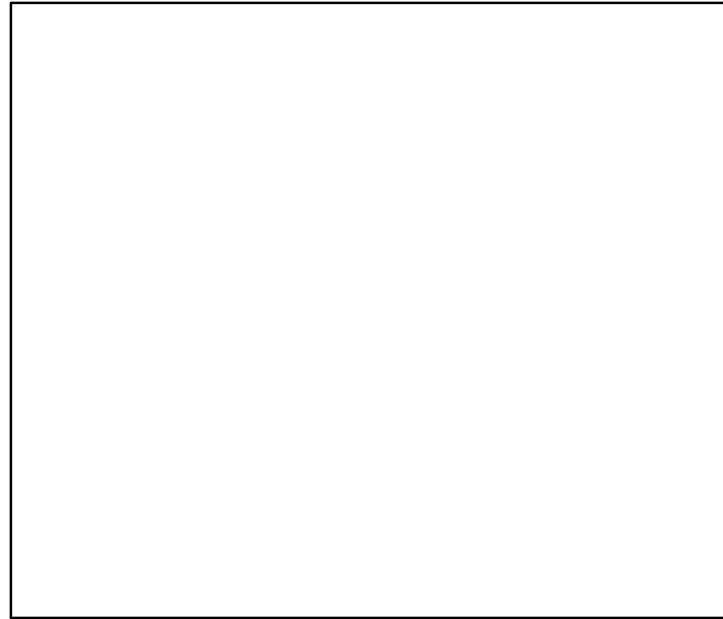
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Atlantic cod Rockall Bank [CODVlb]

TB*



SSB*



TN *



F*



ER*



Recruits*

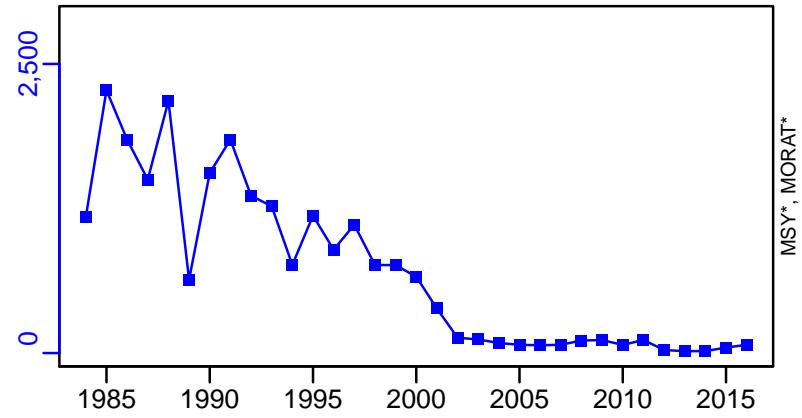


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Atlantic cod Rockall Bank [CODVlb]

TL-MT, TC*, RecC* (1984–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

Atlantic cod Celtic Sea [CODVilek]

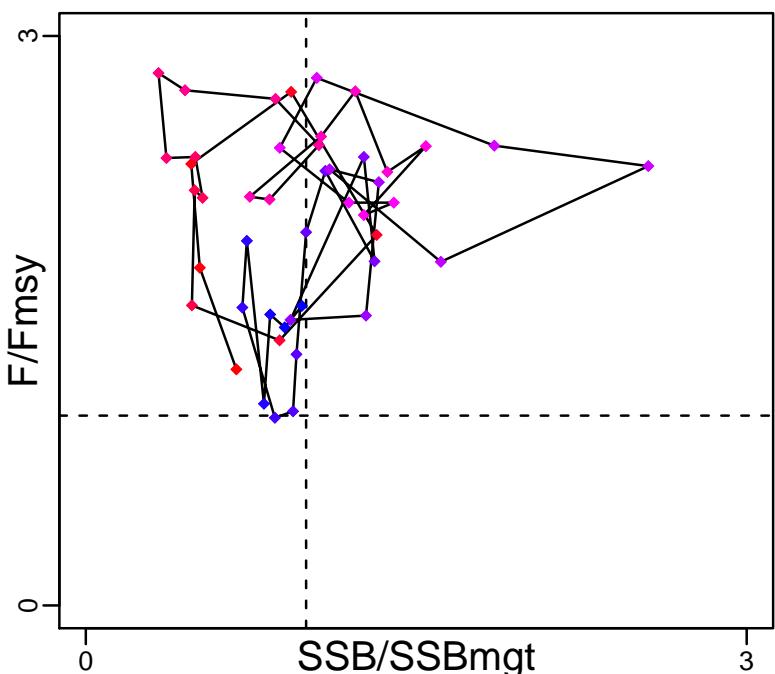
Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVilek-1970-2017-ICESIMP2018
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2012, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	46,613
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.353
ERmsy	ERmsy-est-ratio	2017	0.397
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	10,300
Fmgt	Fmgt-1/yr	2017	0.353
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	10,300
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	7300
Flim	Flim-1/yr	2017	0.807
ERlim	-	-	-

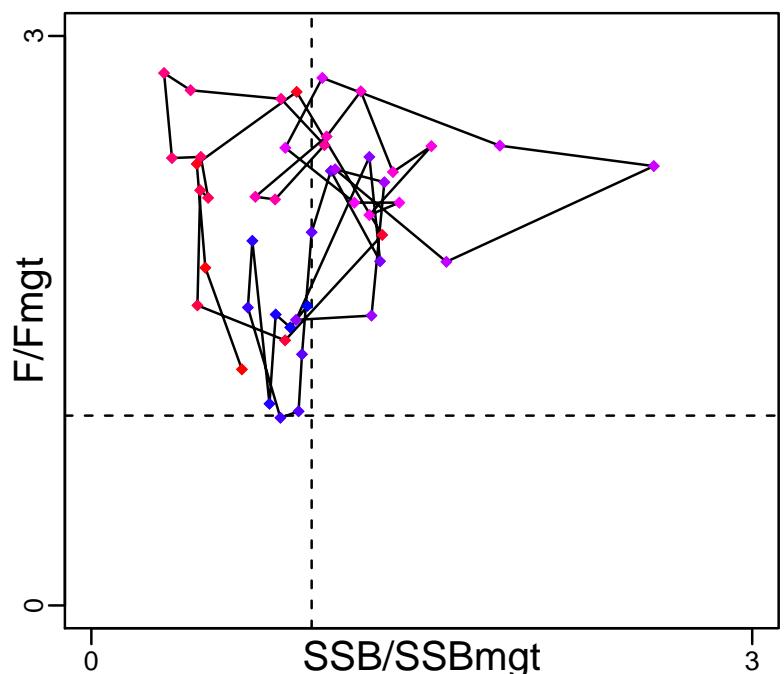
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	10,300	Both	-	
SSB	SSB-MT	2017	7140	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	4,510,000	-	1	
F	F-1/yr	2017	0.439	-	2 to 5	
ER	ER-calc-ratio	2017	0.342	-	-	
TC	TC-MT	2017	3520			
TL	TL-MT	2017	3300			
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	0.502			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.244			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.861			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.693			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	1.244			
ER/ERmgt	-	-	-			

Atlantic cod Celtic Sea [CODVIlek]

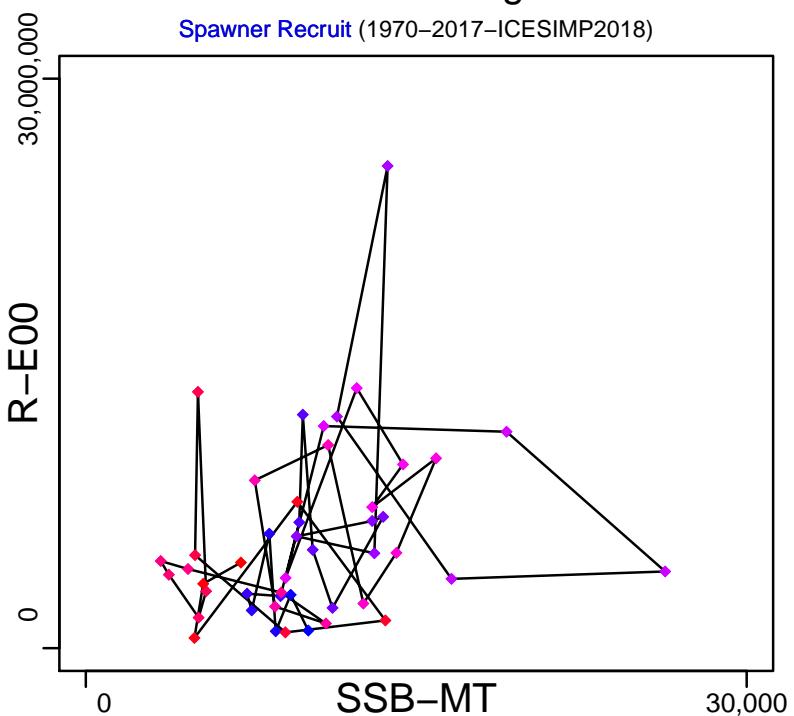
Kobe MSYpref (1970–2017–ICESIMP2018)



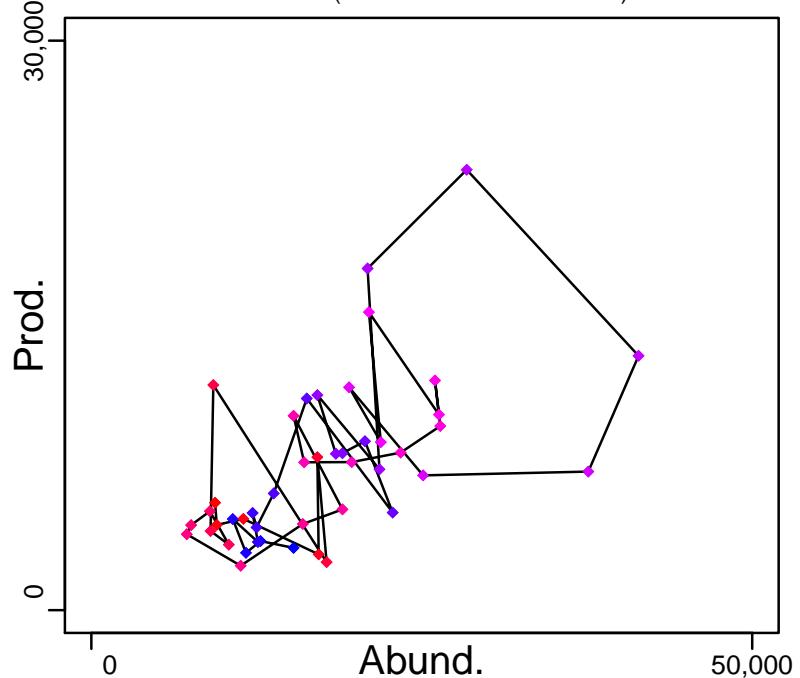
Kobe MGTpref (1970–2017–ICESIMP2018)



Spawner Recruit (1970–2017–ICESIMP2018)



Production (1970–2017–ICESIMP2018)

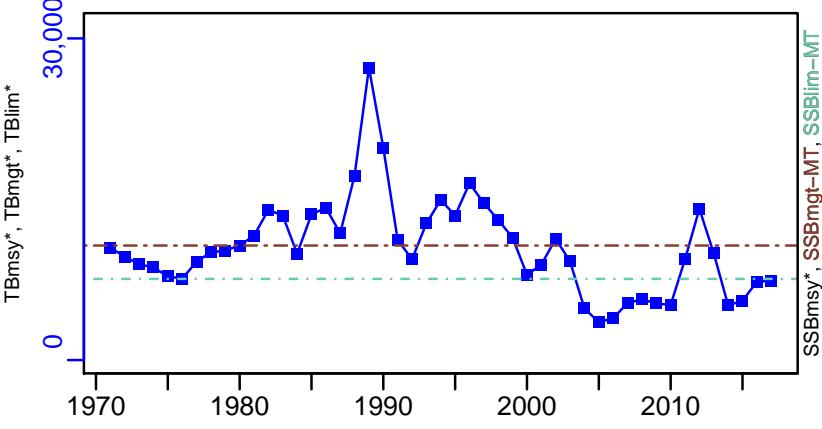
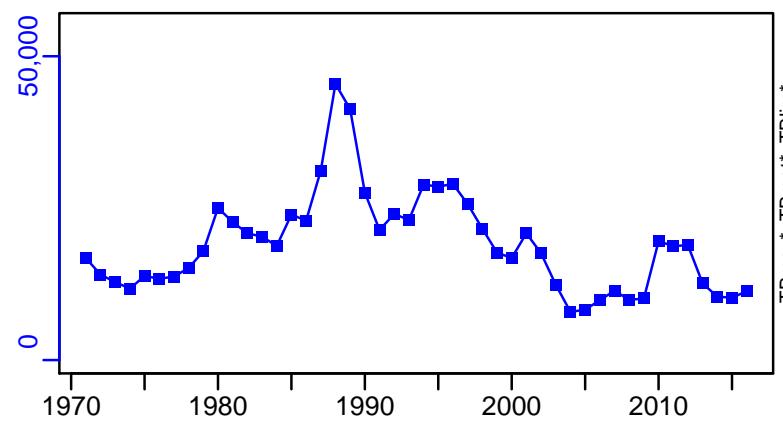


◆ Start Year ◆ End Year * No Data

Atlantic cod Celtic Sea [CODVIlek]

TB-MT (1970–2017–ICESIMP2018)

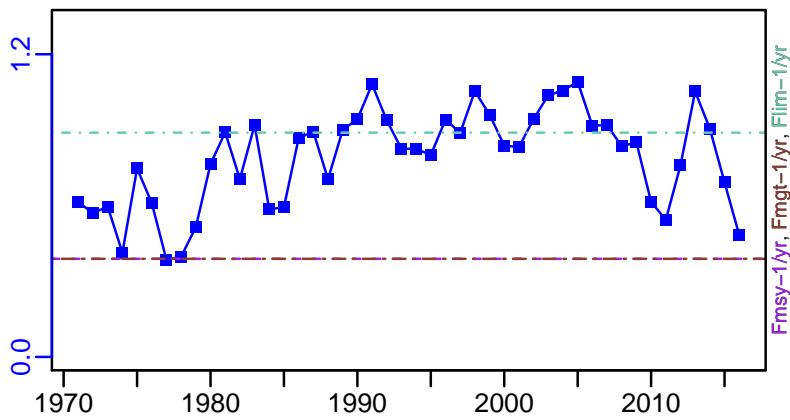
SSB-MT (1970–2017–ICESIMP2018)



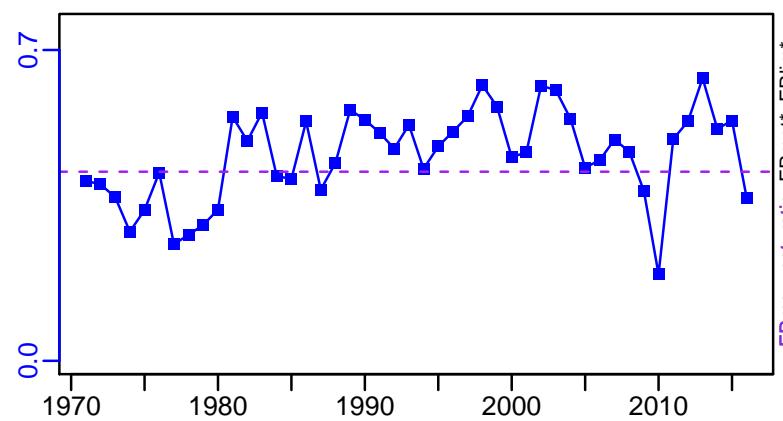
TN *



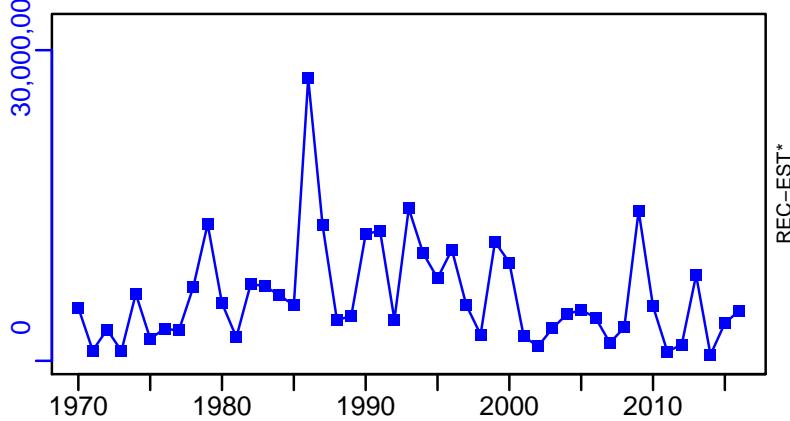
F-1/yr (1970–2017–ICESIMP2018)



ER-calc-ratio (1970–2017–ICESIMP2018)



R-E00 (1970–2017–ICESIMP2018)



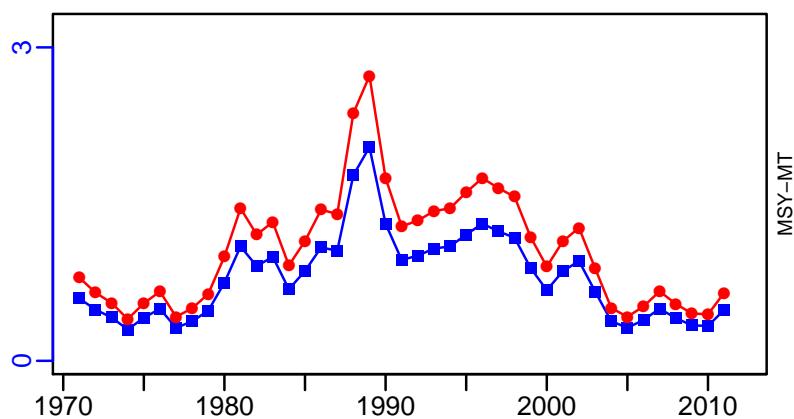
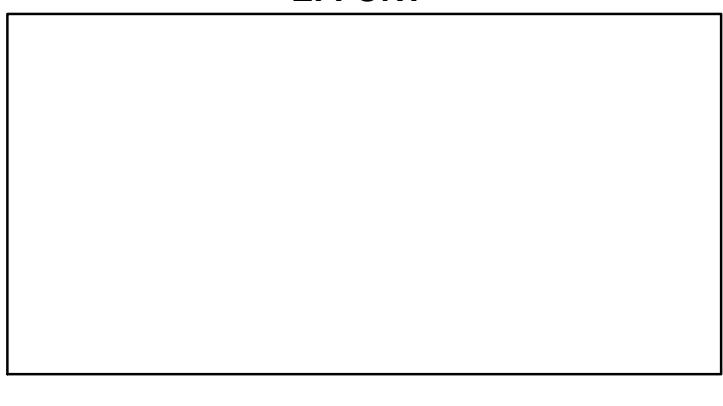
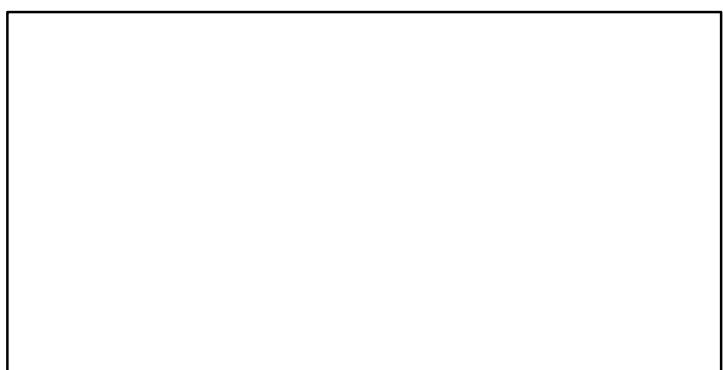
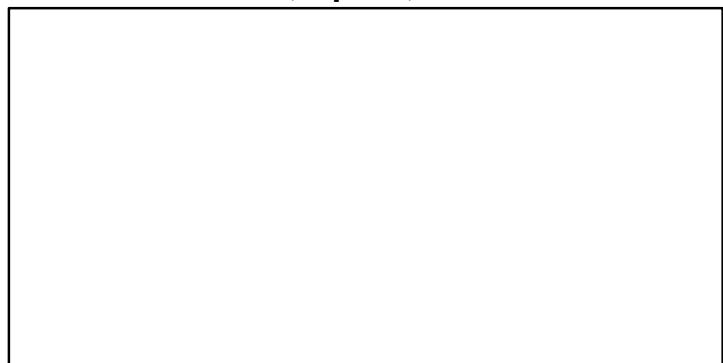
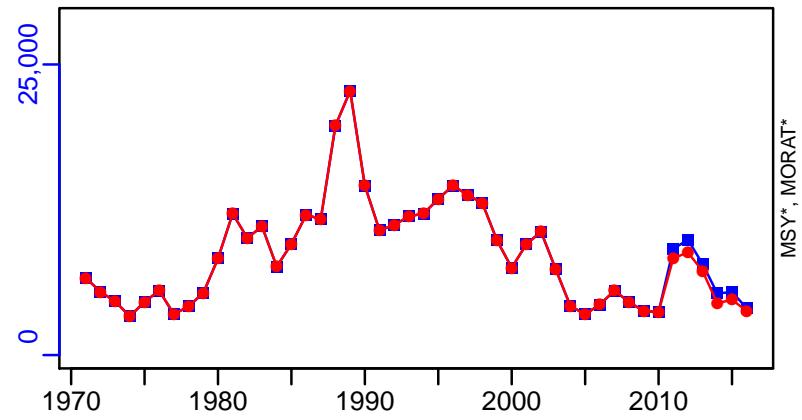
REC-EST*

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

Atlantic cod Celtic Sea [CODVIlek]

TC-MT, TL-MT, RecC* (1970–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

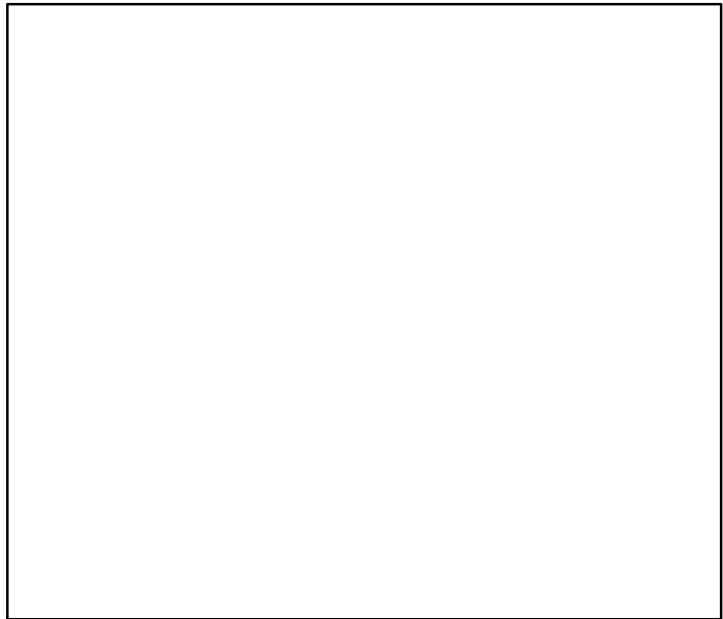
Tusk Northeast Atlantic [CUSKNEATL]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKNEATL-1988-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2014, 2016

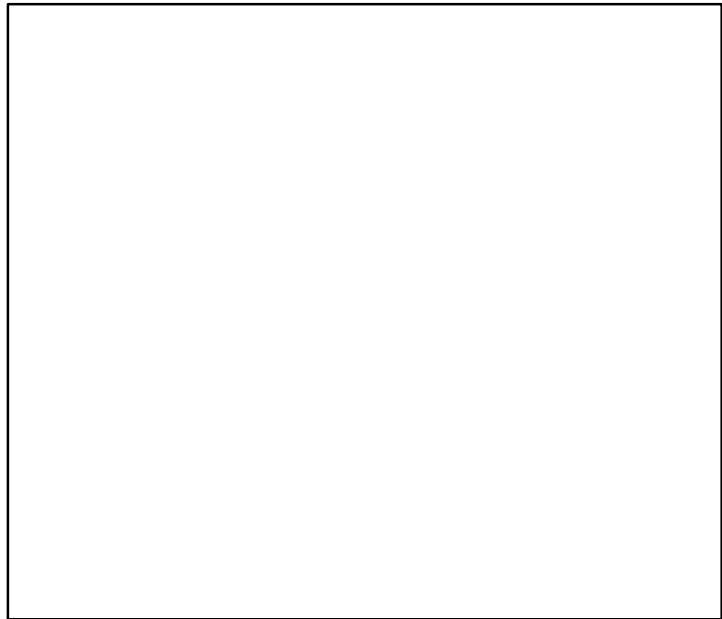
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	131	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	4590		
TL	TL-MT	2016	4820		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

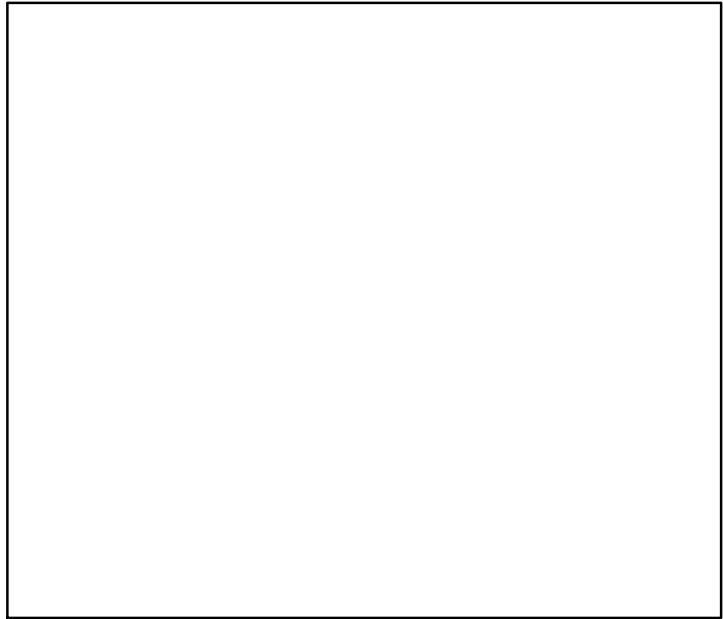
Kobe MSY*



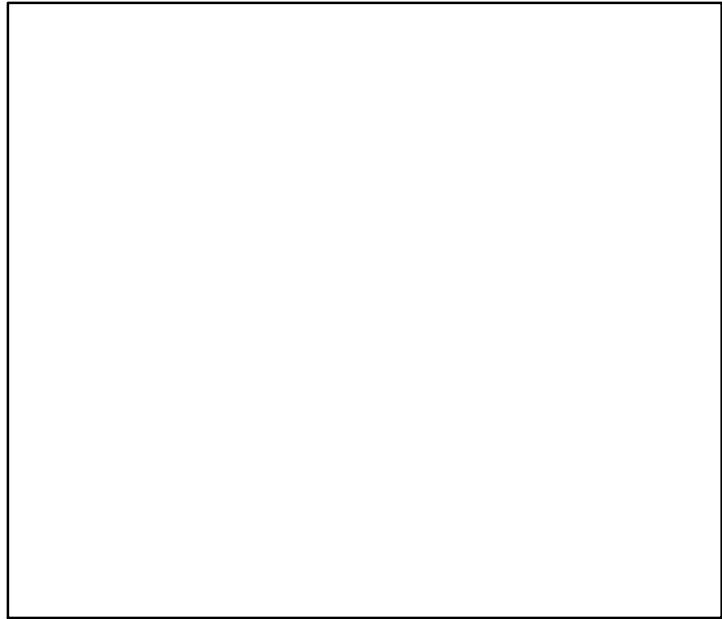
Kobe MGT*



Spawner Recruit*



Production*



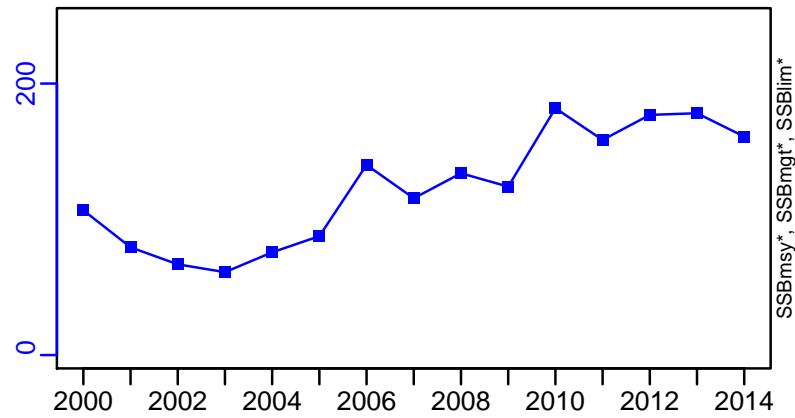
◆ Start Year ♦ End Year * No Data

Tusk Northeast Atlantic [CUSKNEATL]

TB*

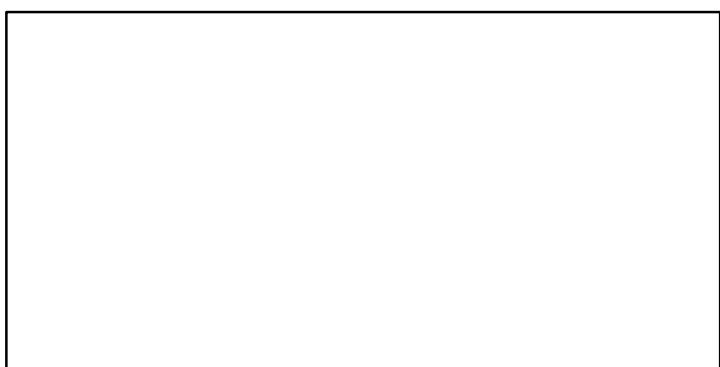


SSB-index (1988–2014–ICESIMP2018)

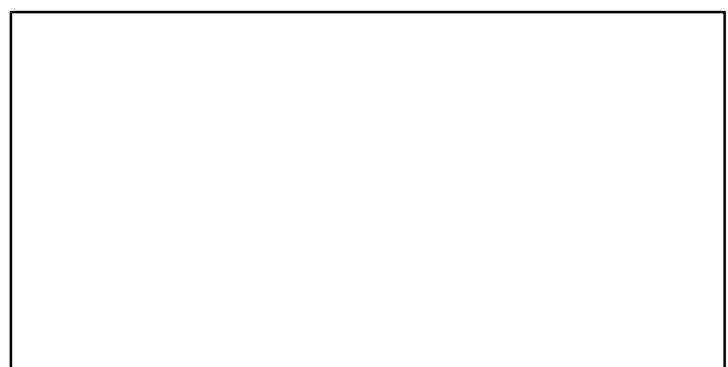


SSB_msy*, SSB_{mgt}*, SSB_{lim}*

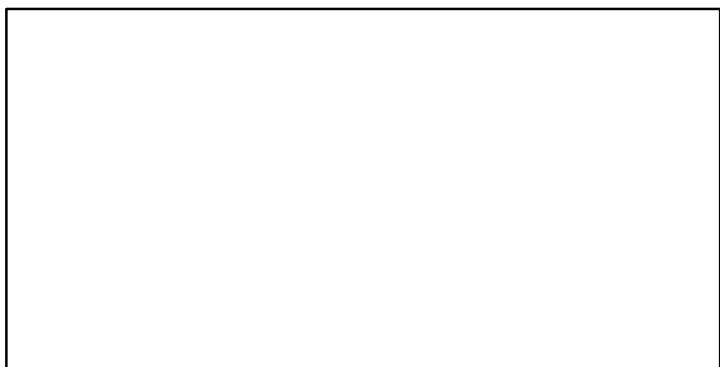
TN *



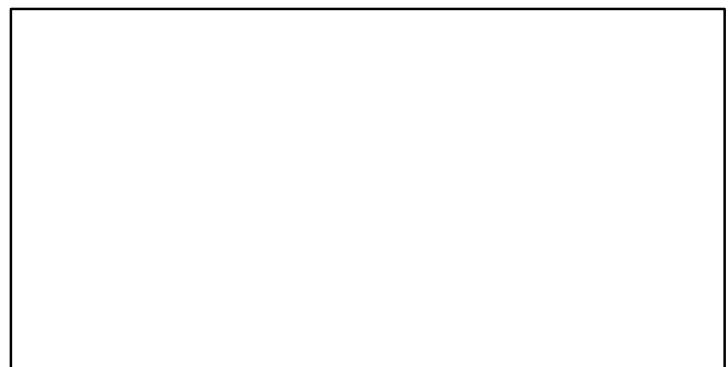
F*



ER*



Recruits*

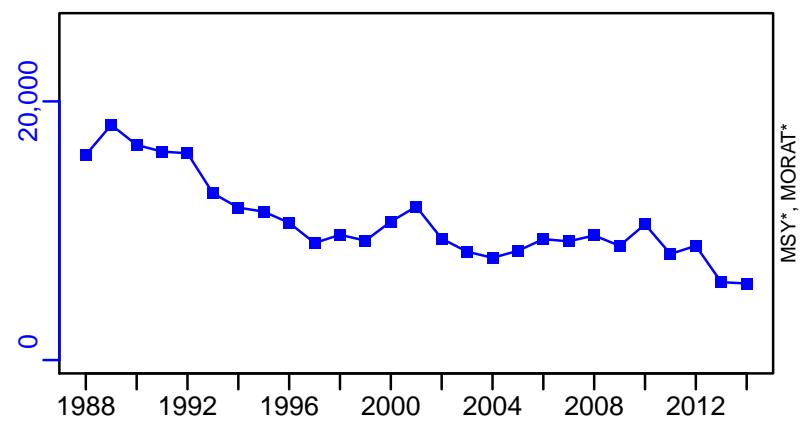


- Listed time series
- Target BRP
- Rec-Est
- MSY-based BRP
- Lim BRP
- * No Data

Tusk Northeast Atlantic [CUSKNEATL]

TC-MT, TL*, RecC* (1988–2014–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

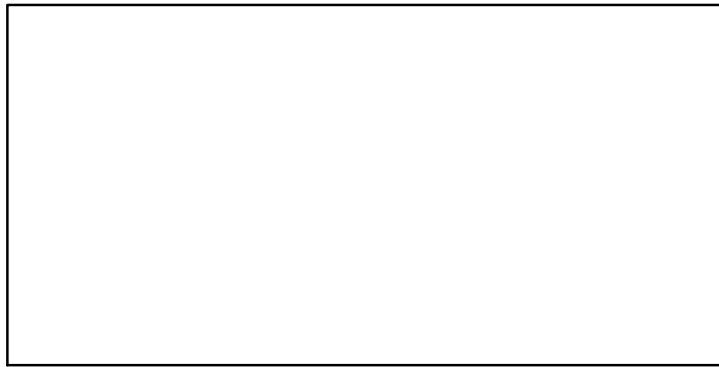
MSY*, MORAT*



CPUE*



EFFORT*



CdivMSY*



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

Tusk ICES 5a-14 [CUSKVa-XIV]

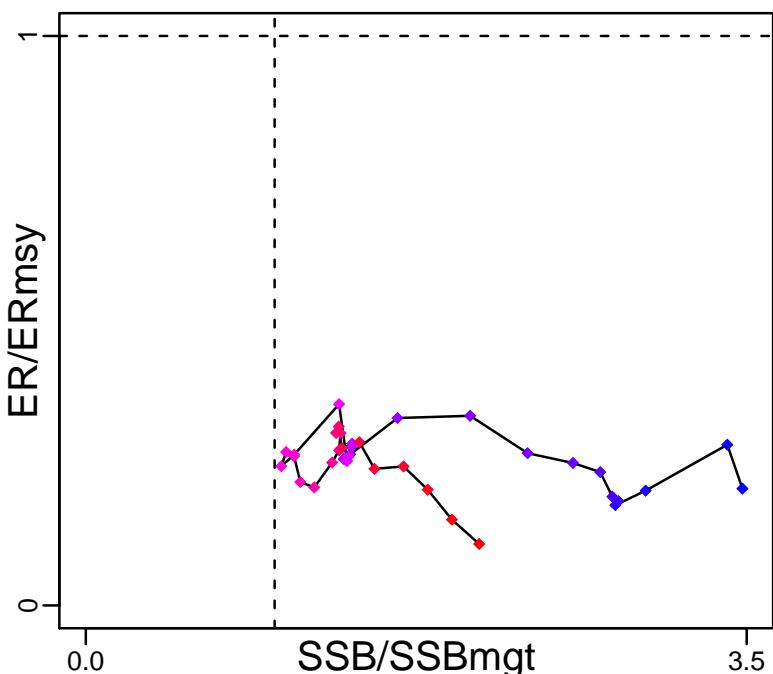
Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKVa-XIV-1979-2018-ICESIMP2018
Area	ICES 5a-14
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2014, 2017, 2018, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2016	60,151
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	0.2
ERmsy	ERmsy-est-ratio	2018	0.713
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	6240
Fmgt	Fmgt-1/yr	2016	0.2
ERmgt	ERmgt-ratio	2017	0.13
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	8434
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	4460
Flim	-	-	-
ERlim	-	-	-

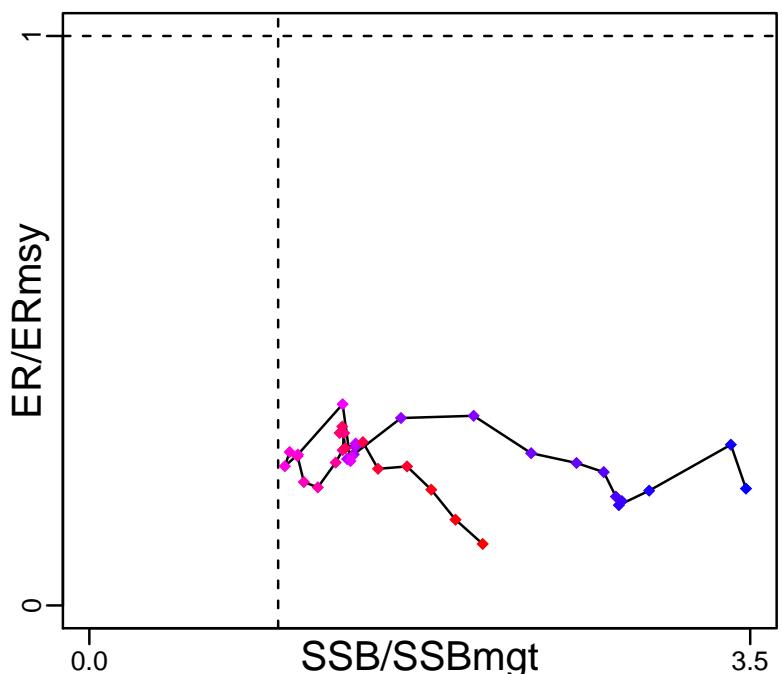
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	33,000	Both	-	
SSB	SSB-MT	2018	14,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	13,800,000	-	3	
F	F-1/yr	2018	0.088	-	-	
ER	ER-calc-ratio	2018	0.077	-	-	
TC	TC-MT	2017	3490			
TL	TL-MT	2018	2540			
TB/TBmsy	TB-MT/TBmsy-est-MT	2016	0.372			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	1.1			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.108			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.244			
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	1.1			
ER/ERmgt	-	-	-			

Tusk ICES 5a–14 [CUSKVa–XIV]

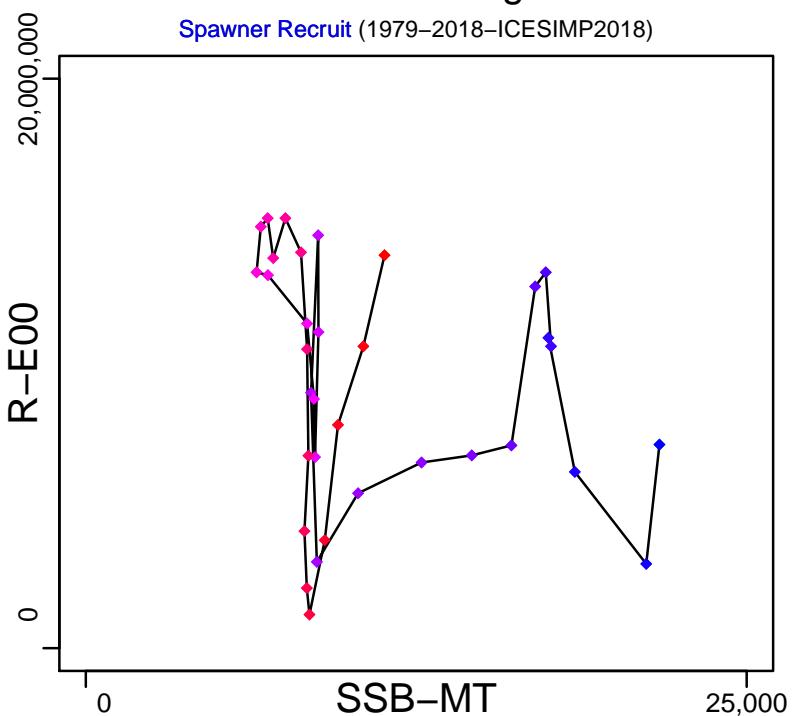
Kobe MSYpref (1979–2018–ICESIMP2018)



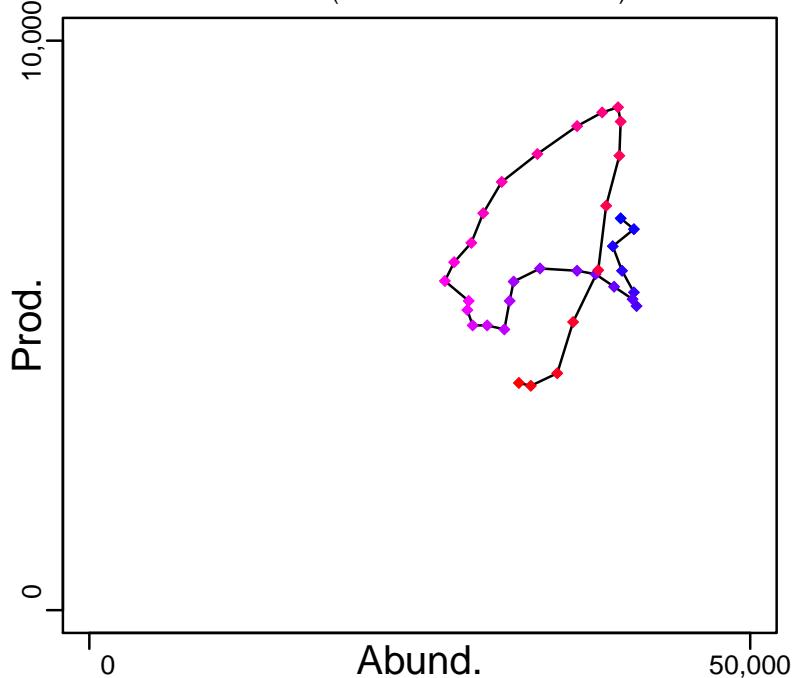
Kobe MGTpref (1979–2018–ICESIMP2018)



Spawner Recruit (1979–2018–ICESIMP2018)



Production (1979–2018–ICESIMP2018)

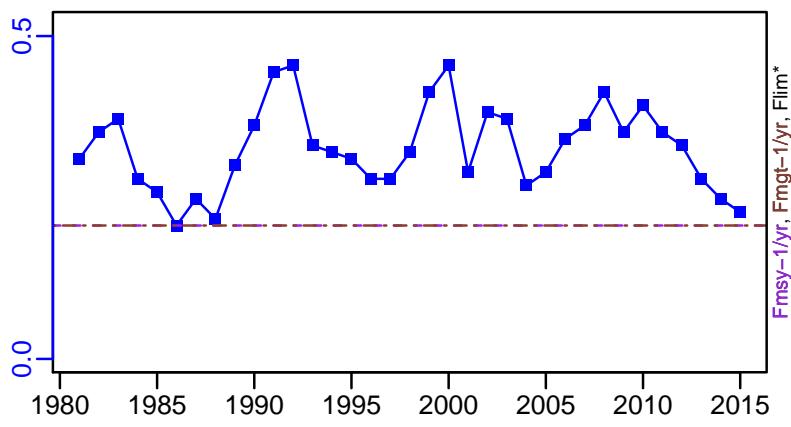
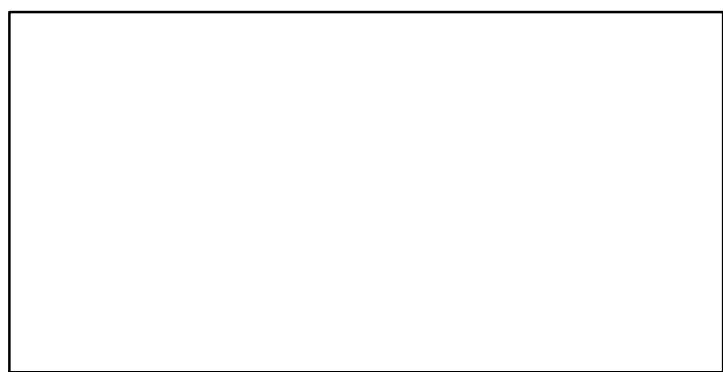
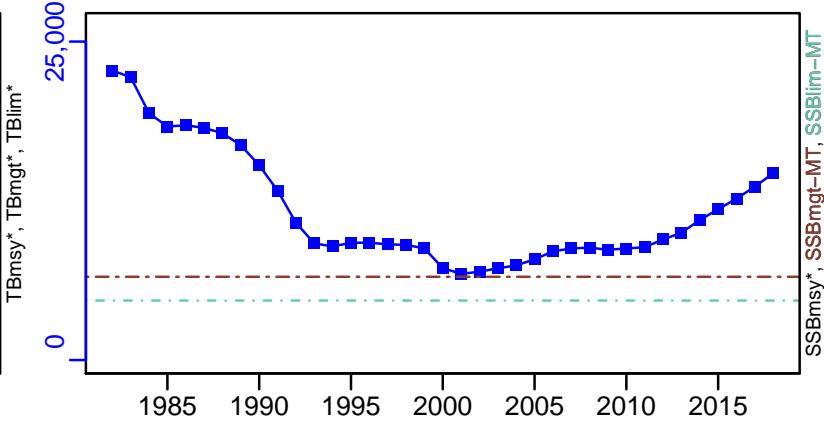
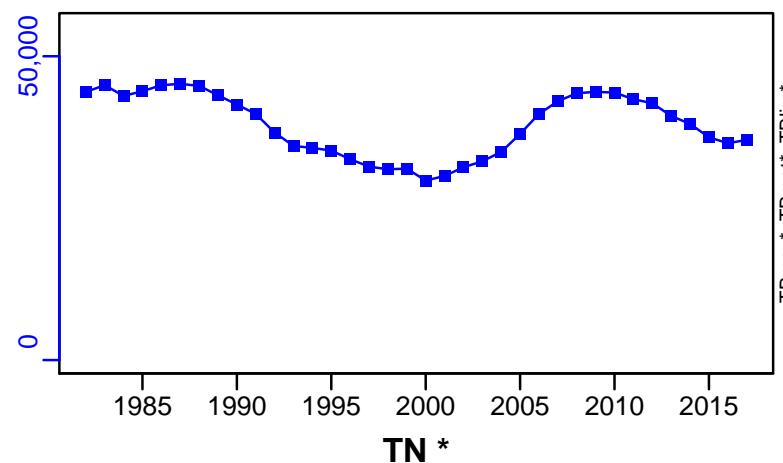


◆ Start Year ◆ End Year * No Data

Tusk ICES 5a–14 [CUSKVa–XIV]

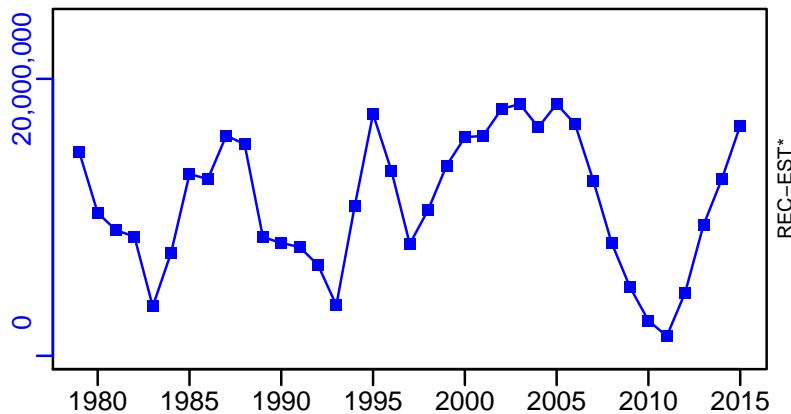
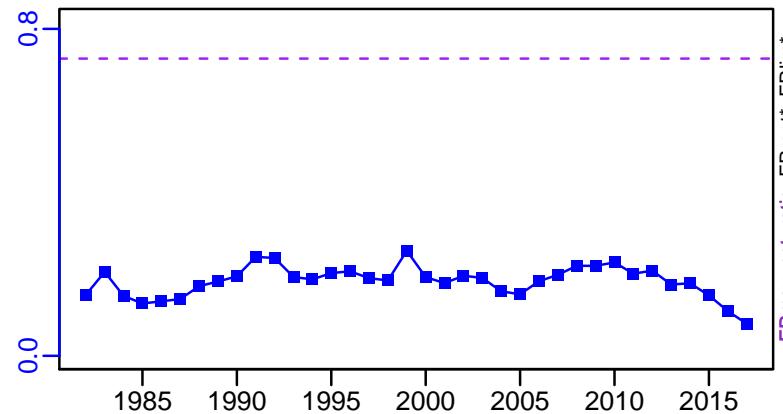
TB-MT (1979–2018–ICESIMP2018)

SSB-MT (1979–2018–ICESIMP2018)



ER-calc-ratio (1979–2018–ICESIMP2018)

R-E00 (1979–2018–ICESIMP2018)

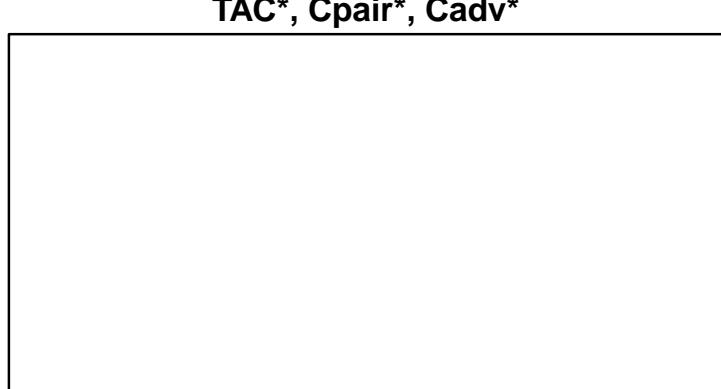
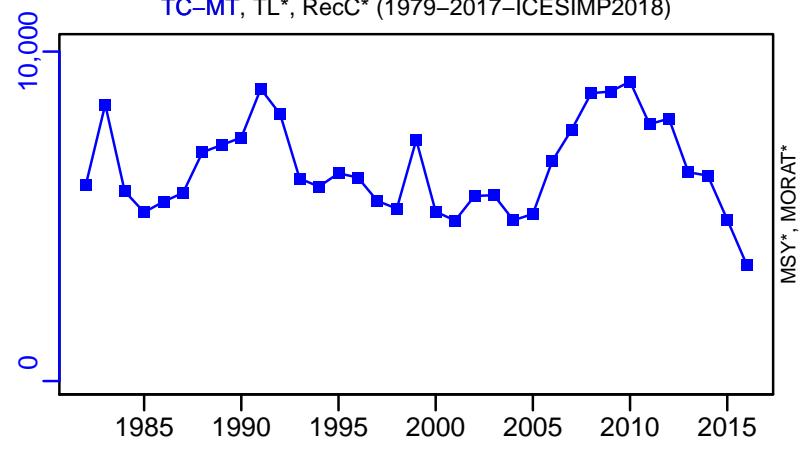


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

Tusk ICES 5a–14 [CUSKVa–XIV]

TC–MT, TL*, RecC* (1979–2017–ICESIMP2018)

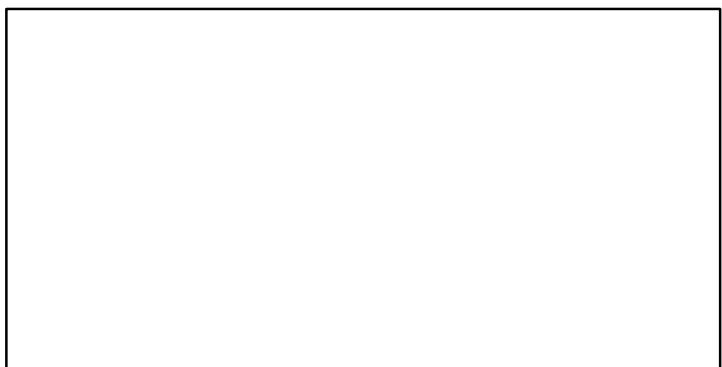
TAC*, Cpair*, Cadv*



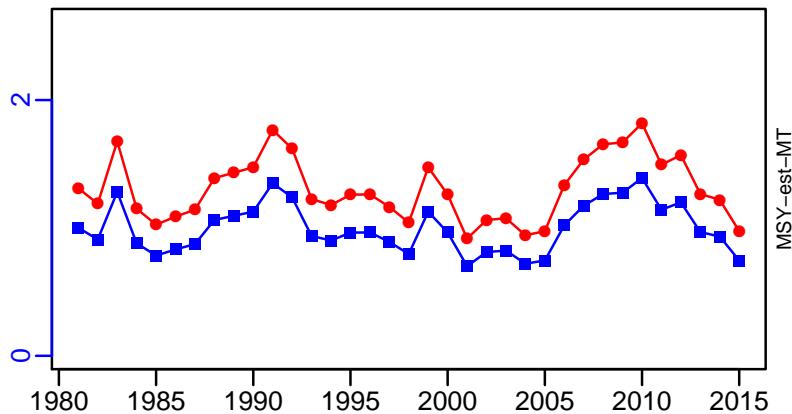
CPUE*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1981–2016–ICESIMP2016)



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

Tusk Rockall Bank [CUSKVIb]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKVIb-1988-2017-ICESIMP2018
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	47		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

TB*



SSB*



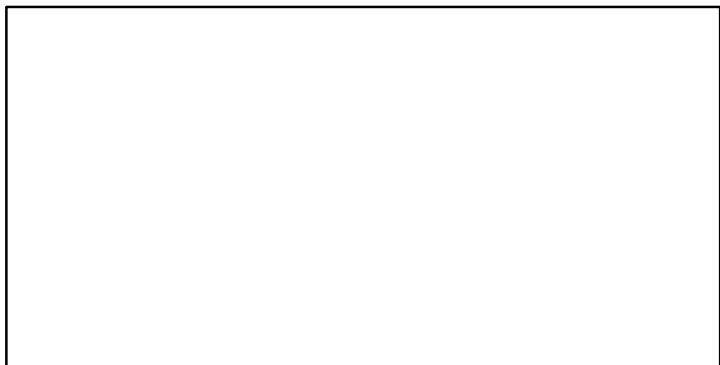
TN *



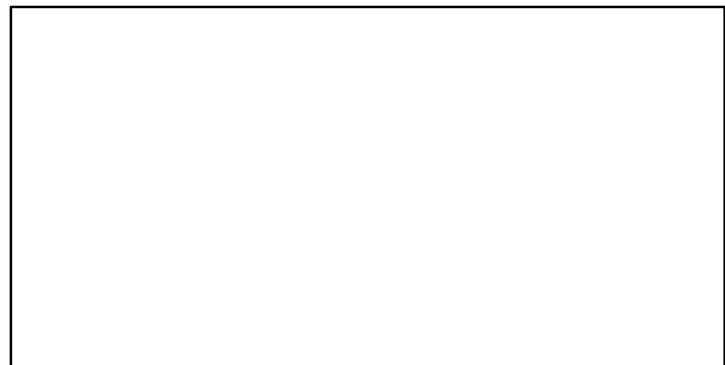
F*



ER*



Recruits*

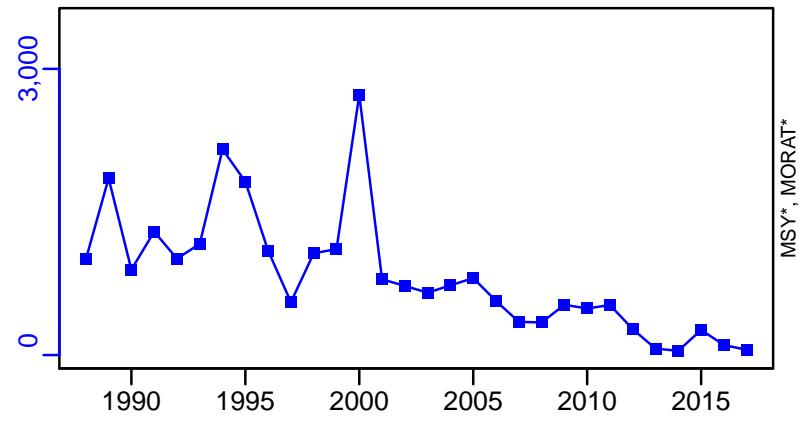


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Tusk Rockall Bank [CUSKVIb]

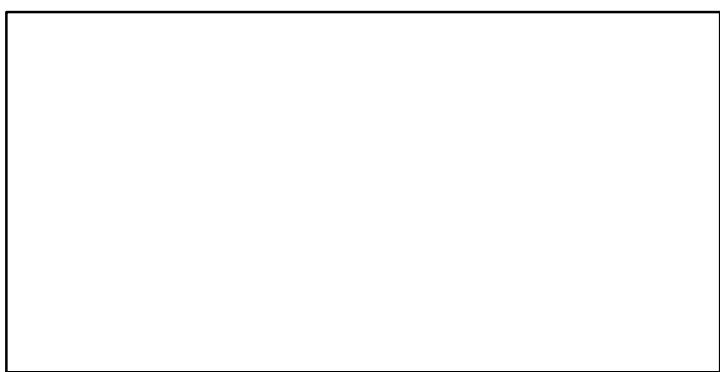
TL-MT, TC*, RecC* (1988–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*

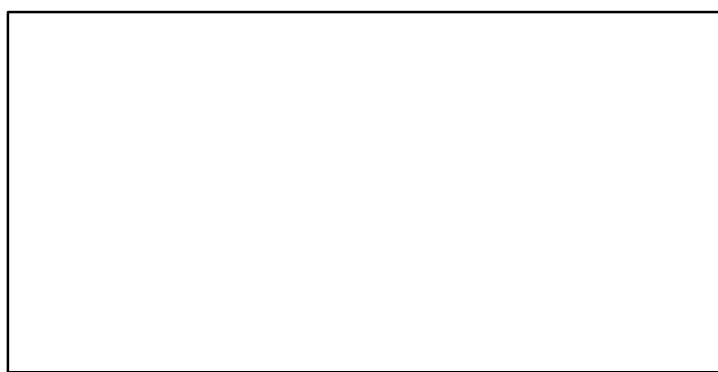


survB*

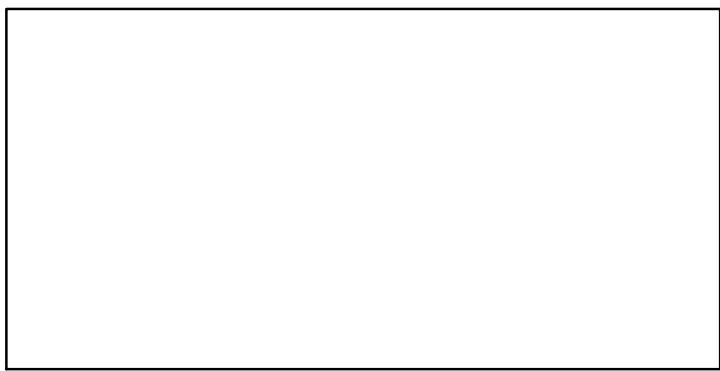
MSY*, MORAT*



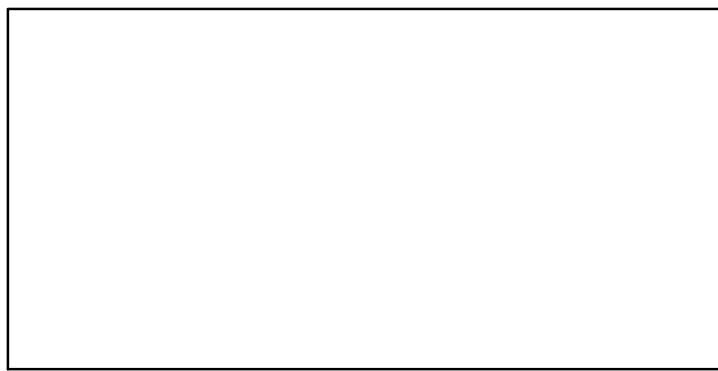
CPUE*



EFFORT*



CdivMSY*



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

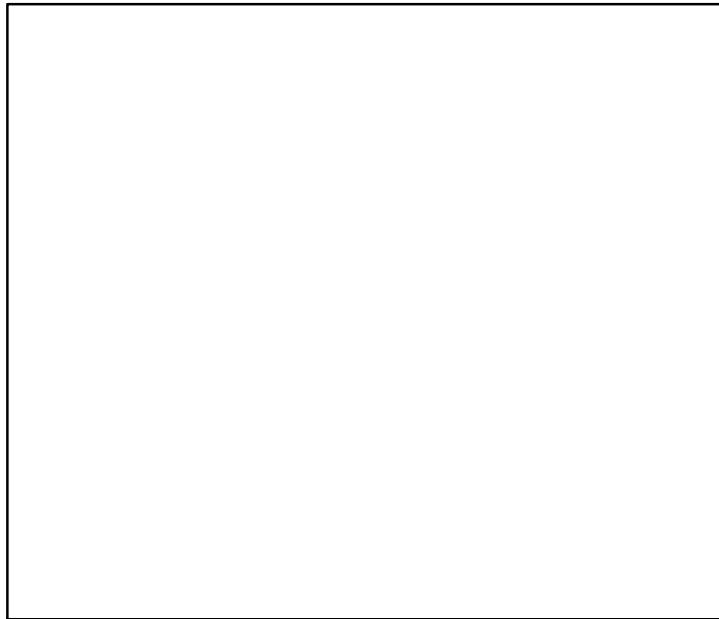
Tusk North of Azores [CUSKXII]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKXII-1988-2016-ICESIMP2018
Area	North of Azores
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2015, 2016

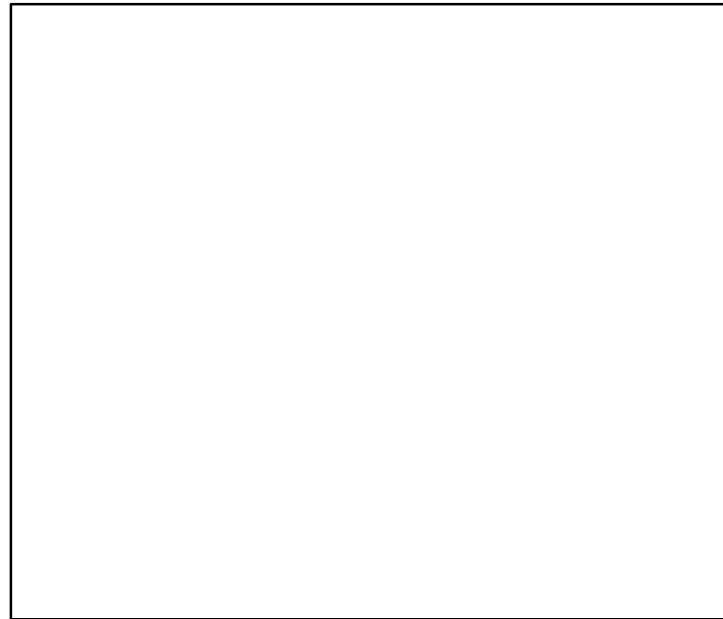
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

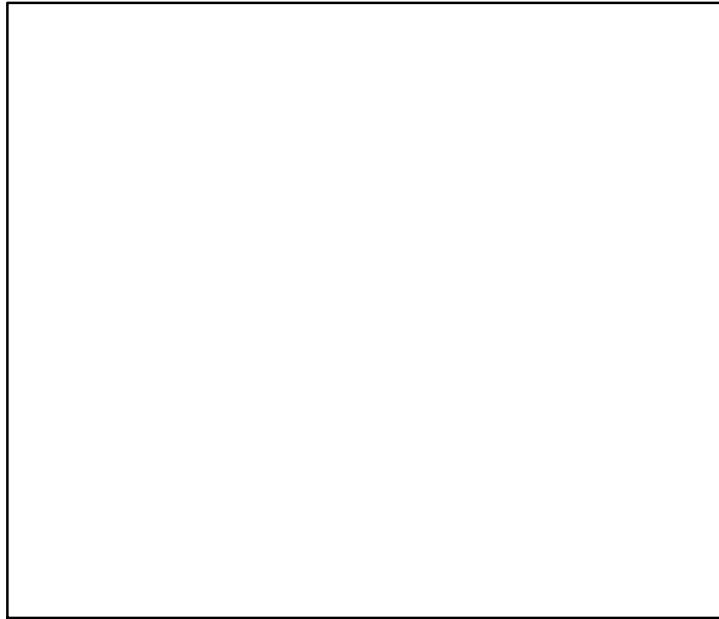
Kobe MSY*



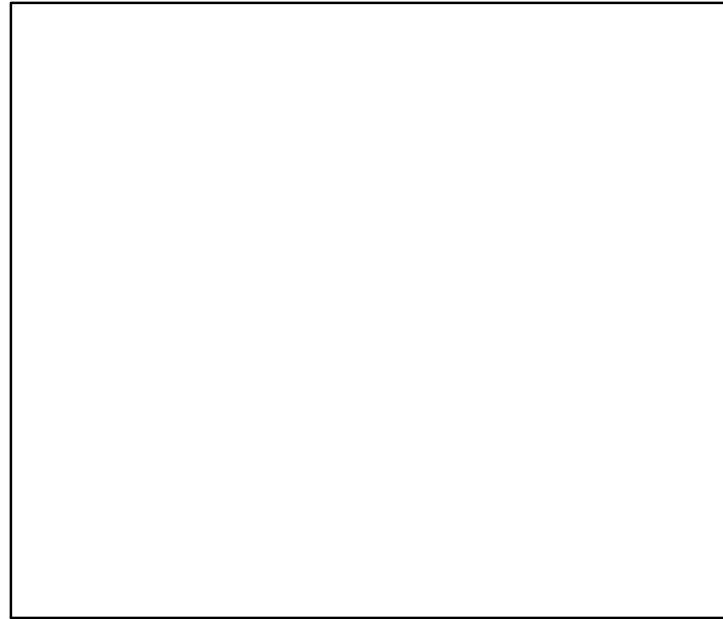
Kobe MGT*



Spawner Recruit*



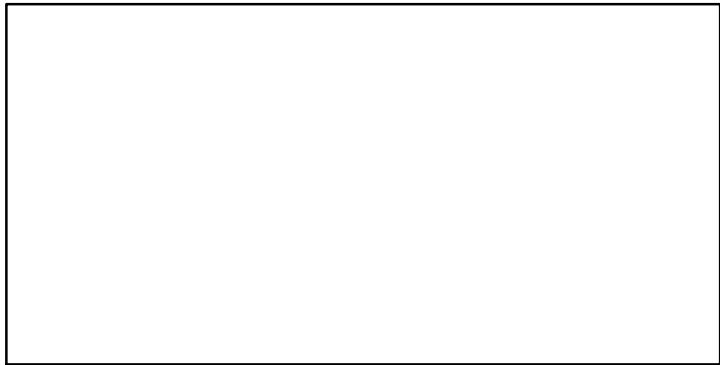
Production*



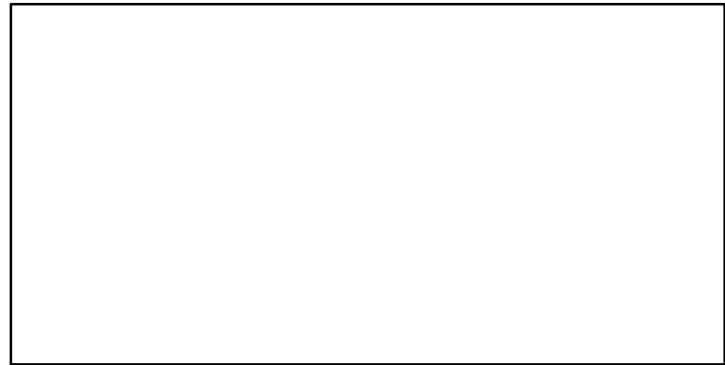
◆ Start Year ♦ End Year * No Data

Tusk North of Azores [CUSKXII]

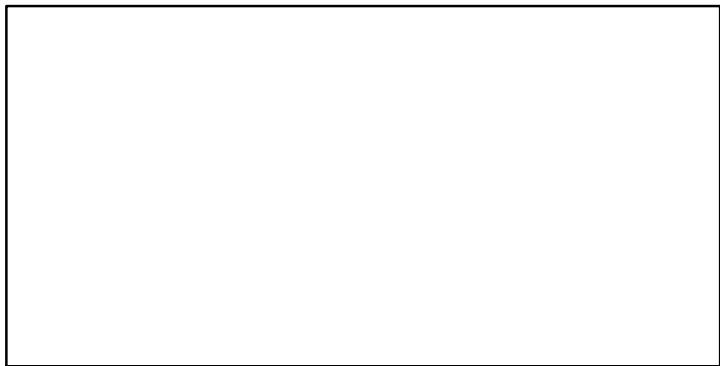
TB*



SSB*



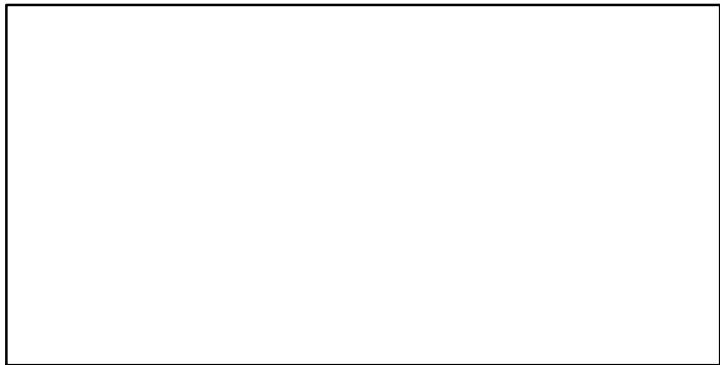
TN *



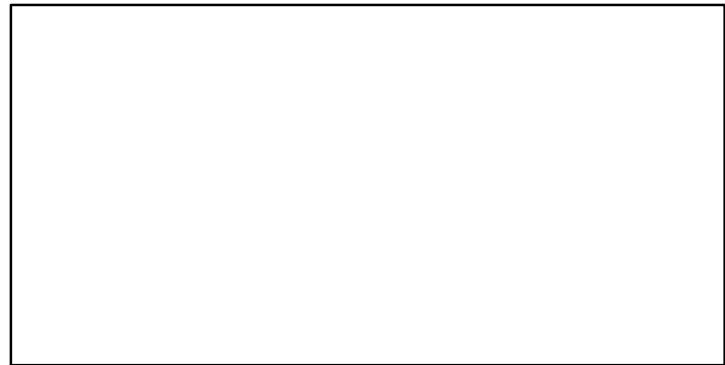
F*



ER*



Recruits*

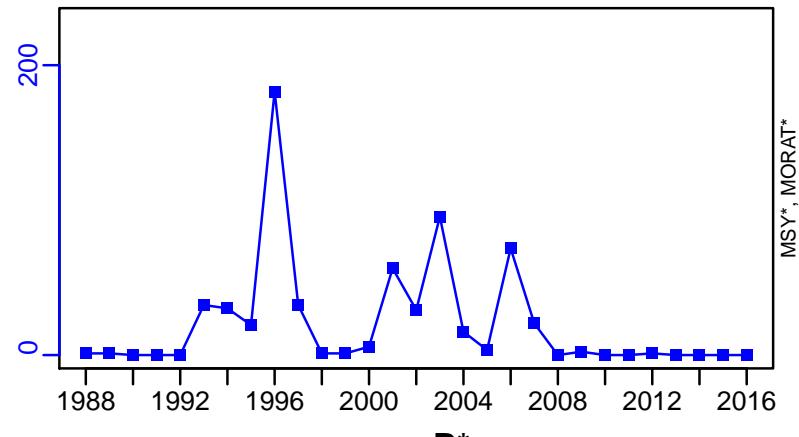


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Tusk North of Azores [CUSKXII]

TL-MT, TC*, RecC* (1988–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

MSY*, MORAT*



CPUE*



CdivMSY*

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

Dab Baltic Areas 22-32 [DAB2232]

Metadata	
Scientific Name	Limanda limanda
Current Assess ID	WGBFAS-DAB2232-1970-2016-ICESIMP2018
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	2360		
TL	TL-MT	2016	1270		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

TB*



SSB*



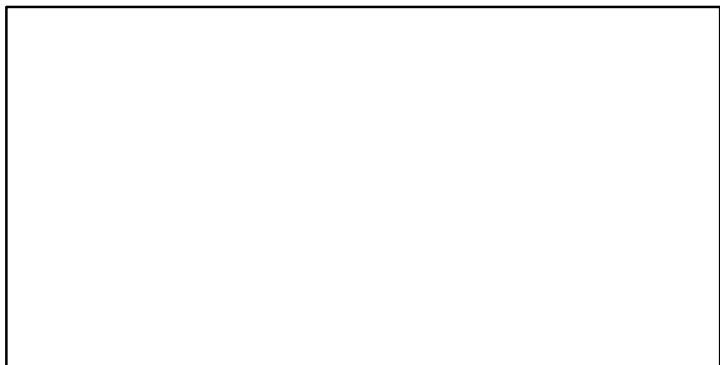
TN *



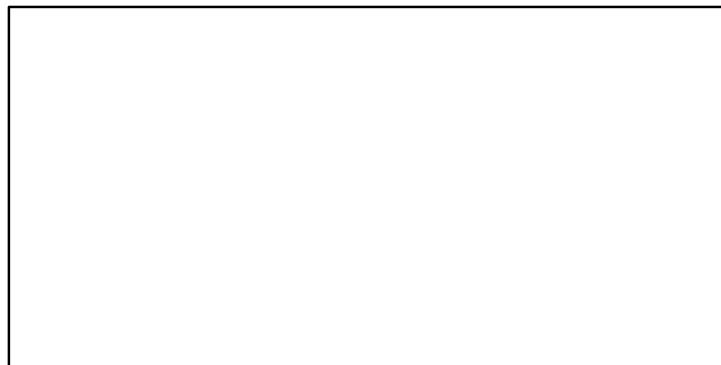
F*



ER*



Recruits*

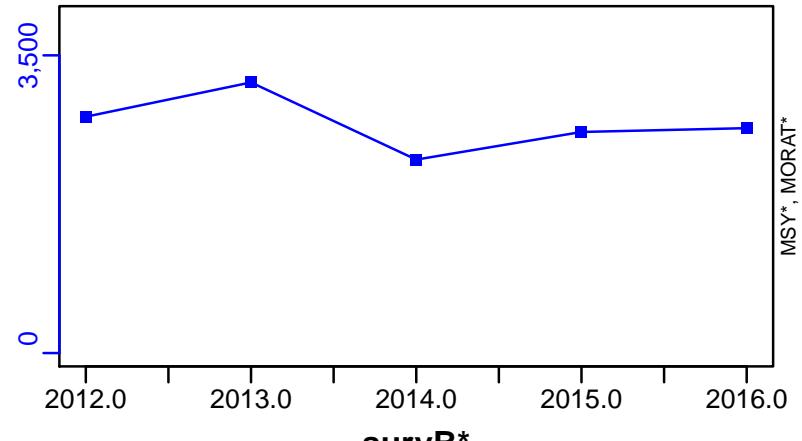


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Dab Baltic Areas 22–32 [DAB2232]

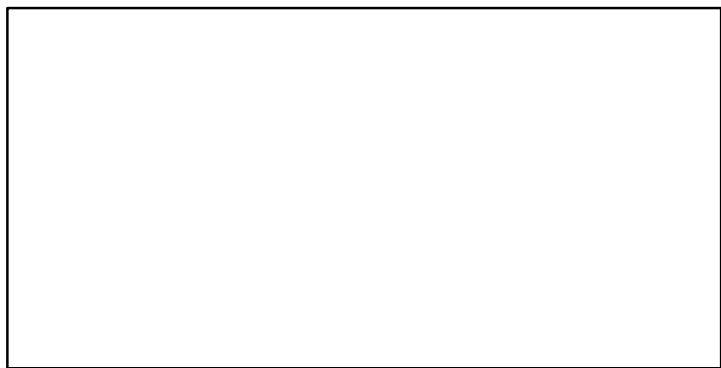
TC-MT, TL*, RecC* (1970–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*

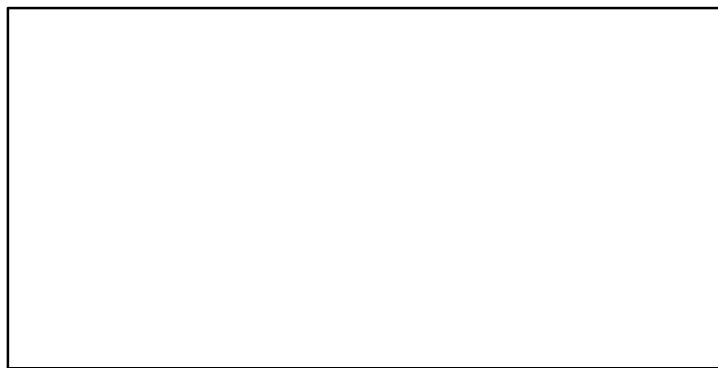


survB*

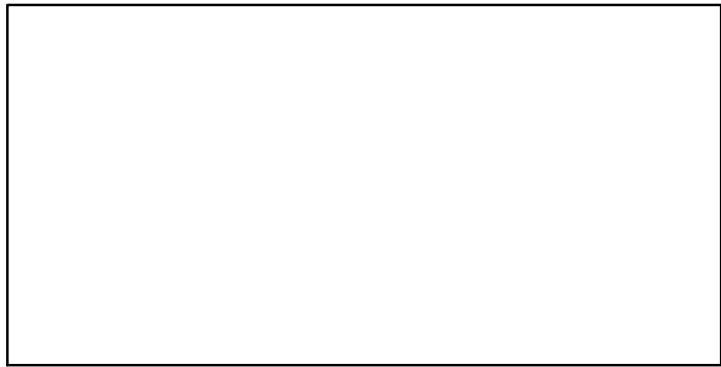
MSY*, MORAT*



CPUE*



EFFORT*



CdivMSY*



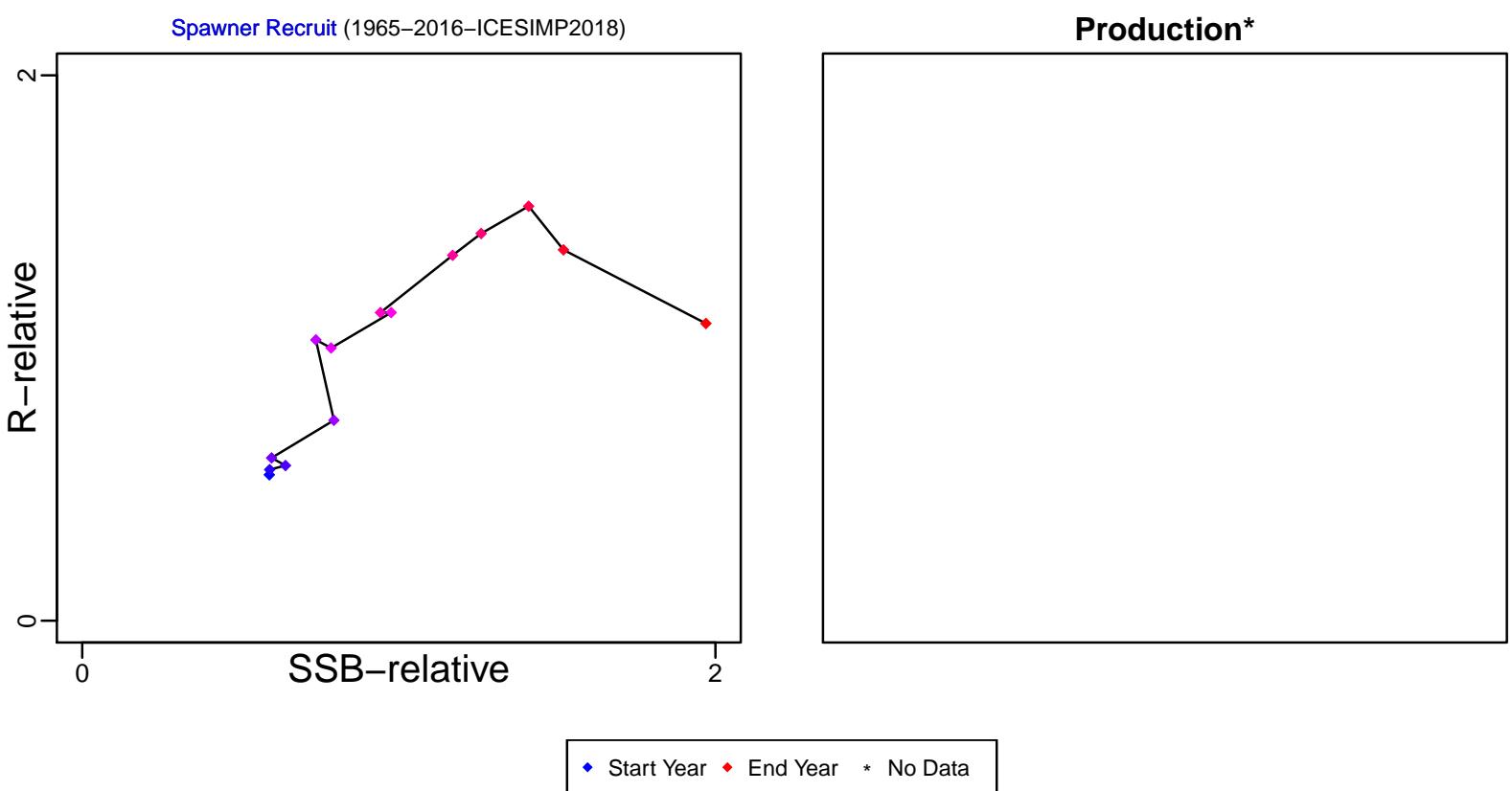
- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Dab ICES 3a-4 [DABIIIa-IV]

Metadata	
Scientific Name	Limanda limanda
Current Assess ID	WGNSSK-DABIIIa-IV-1965-2016-ICESIMP2018
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016

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

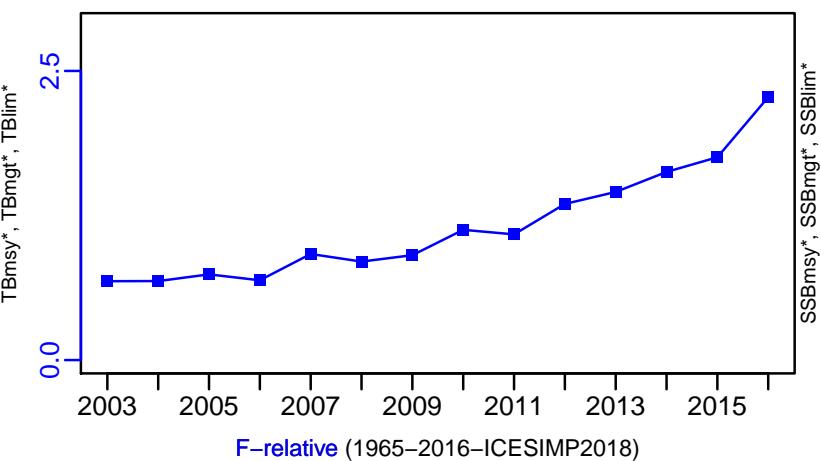
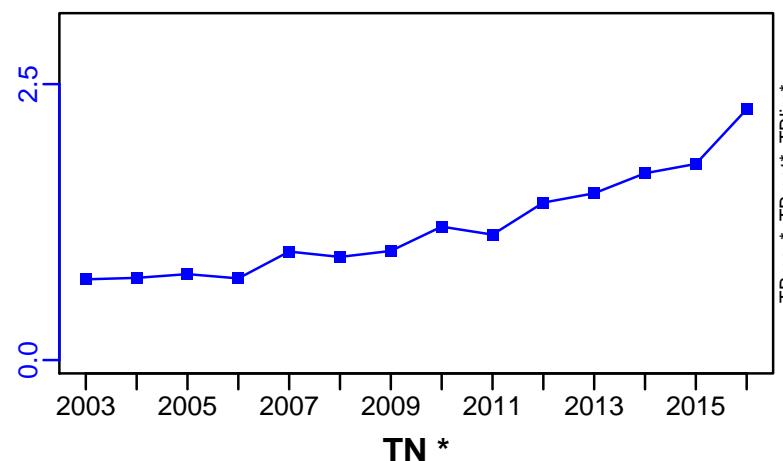
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-relative	2016	1.88	Both	-	
SSB	SSB-relative	2016	1.97	Both	-	
TN	-	-	-	-	-	
R	R-relative	2016	1.09	-	-	
F	F-relative	2016	0.766	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2016	49,900			
TL	TL-MT	2016	5090			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY***Kobe MGT***

Dab ICES 3a–4 [DABIIIa–IV]

TB-relative (1965–2016–ICESIMP2018)

SSB-relative (1965–2016–ICESIMP2018)



TN*

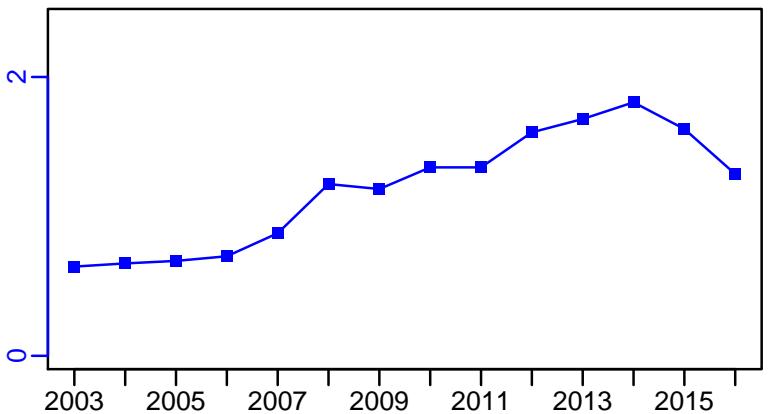
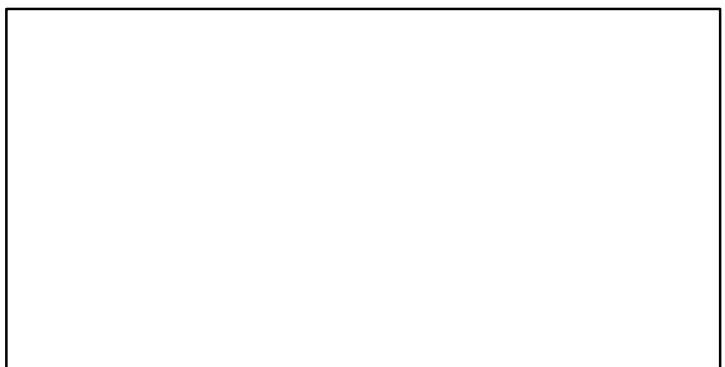
F-relative (1965–2016–ICESIMP2018)

F_ms^y* , F_mg^t* , F_ll^m*

ER*

R-relative (1965–2016–ICESIMP2018)

REC-EST*

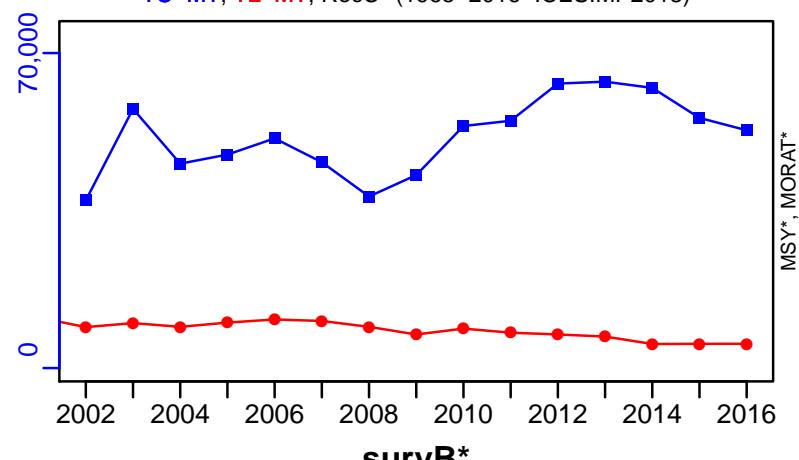


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - MSY-based BRP | ·· Lim BRP | * No Data |

Dab ICES 3a–4 [DABIIIa–IV]

TC–MT, TL–MT, RecC* (1965–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



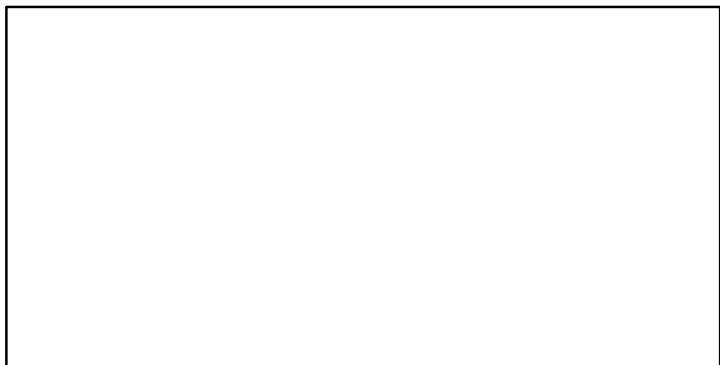
survB*



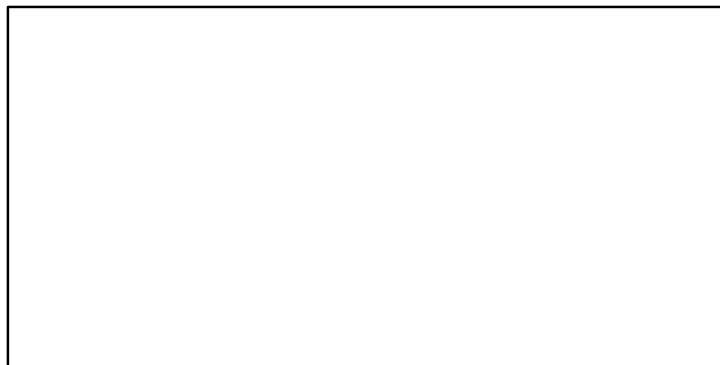
CPUE*



EFFORT*



CdivMSY*



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> ■ 1st listed time series ● 2nd listed time series | <ul style="list-style-type: none"> ▲ 3rd listed time series - - - MSY | <ul style="list-style-type: none"> — MORAT * No Data |
|--|---|--|

European seabass ICES 4bc-7 [EBASSIVbc-VII]

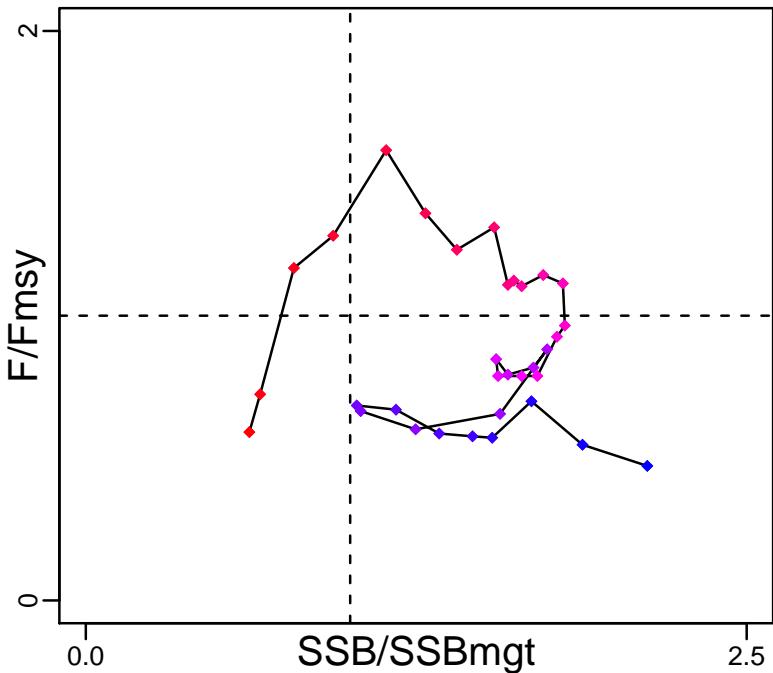
Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGCSE-EBASSIVbc-VII-1985-2018-ICESIMP2018
Area	ICES 4bc-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.203
ERmsy	ERmsy-est-ratio	2018	0.037
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	13,465
Fmgt	Fmgt-1/yr	2018	0.203
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	9618
Flim	Flim-1/yr	2018	0.295
ERlim	-	-	-

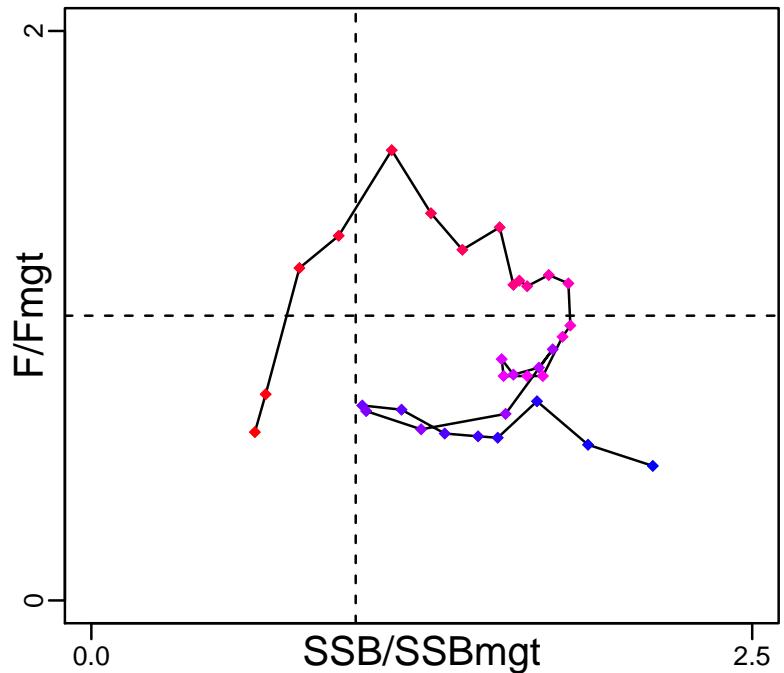
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	10,800	Both	-	
SSB	SSB-MT	2018	8510	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	16,400,000	-	0	
F	F-1/yr	2018	0.12	-	4 to 15	
ER	ER-calc-ratio	2018	0.087	-	-	
TC	TC-MT	2018	1150			
TL	TL-MT	2017	1300			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.591			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	2.374			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.632			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.591			
ER/ERmgt	-	-	-			

European seabass ICES 4bc–7 [EBASSIVbc–VII]

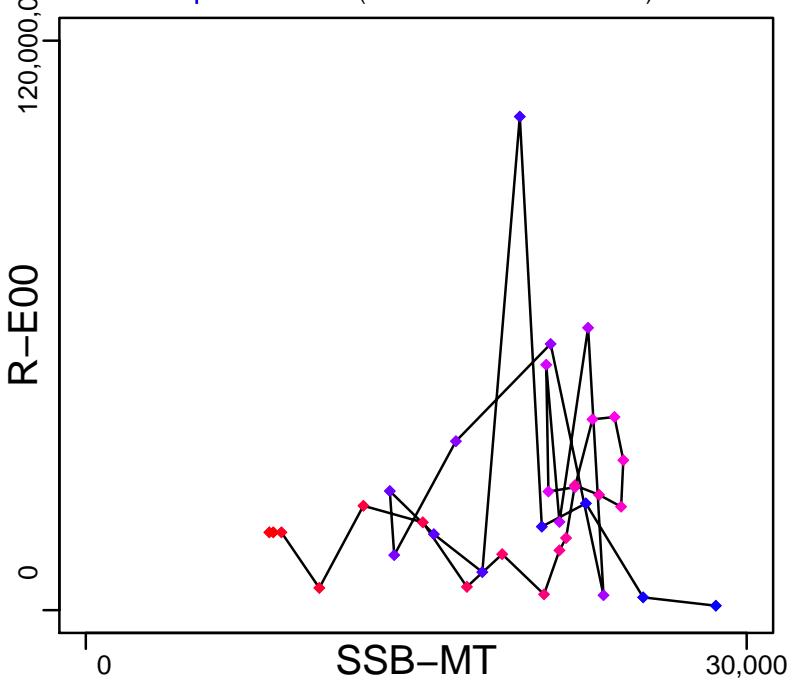
Kobe MSYpref (1985–2018–ICESIMP2018)



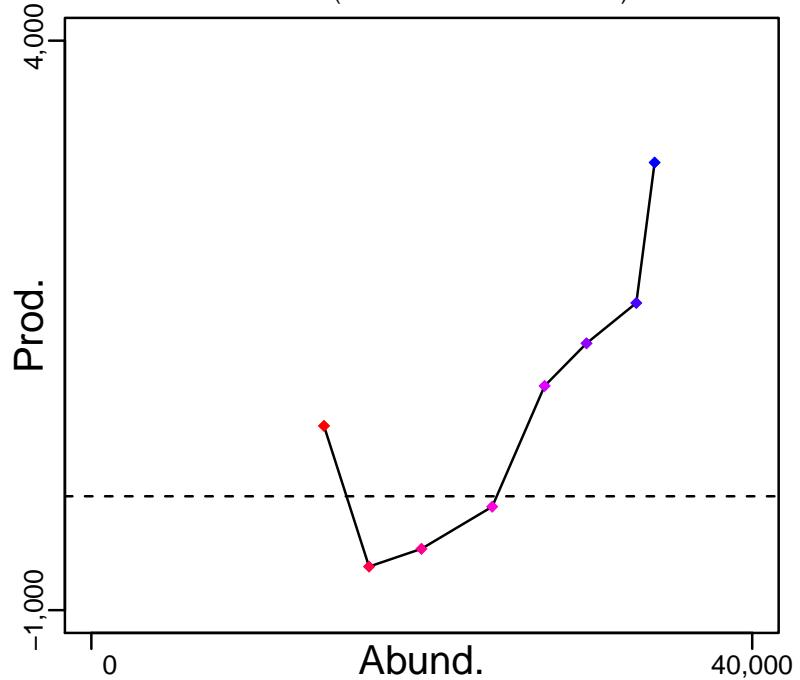
Kobe MGTpref (1985–2018–ICESIMP2018)



Spawner Recruit (1985–2018–ICESIMP2018)



Production (1985–2018–ICESIMP2018)

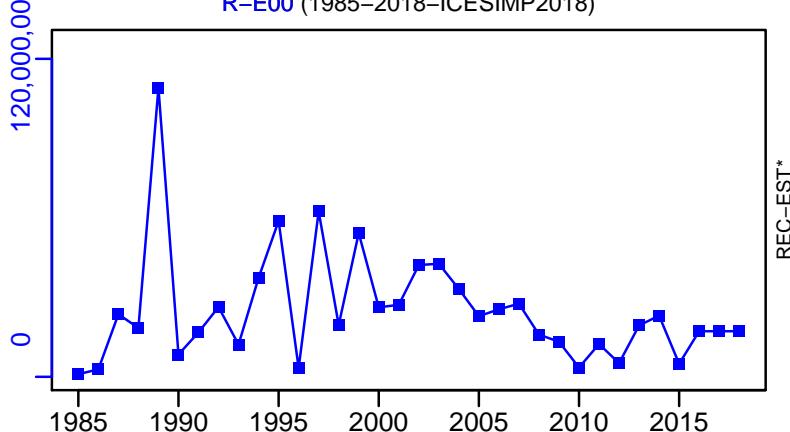
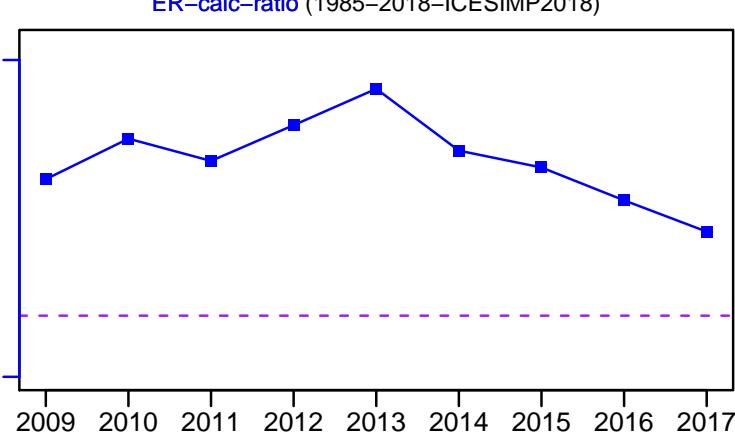
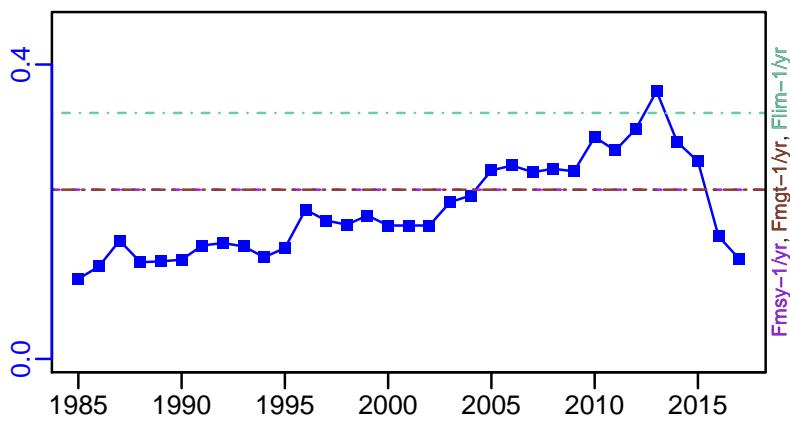
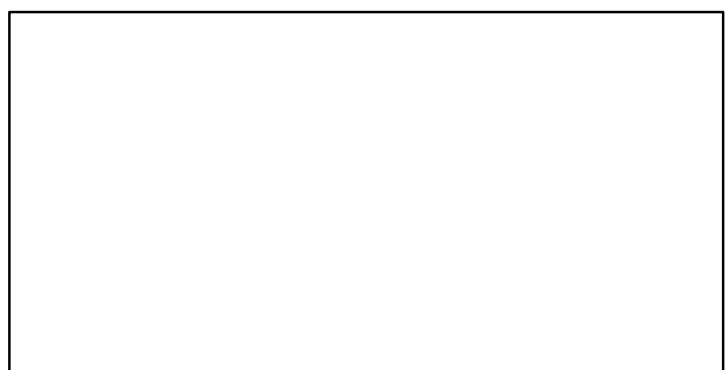
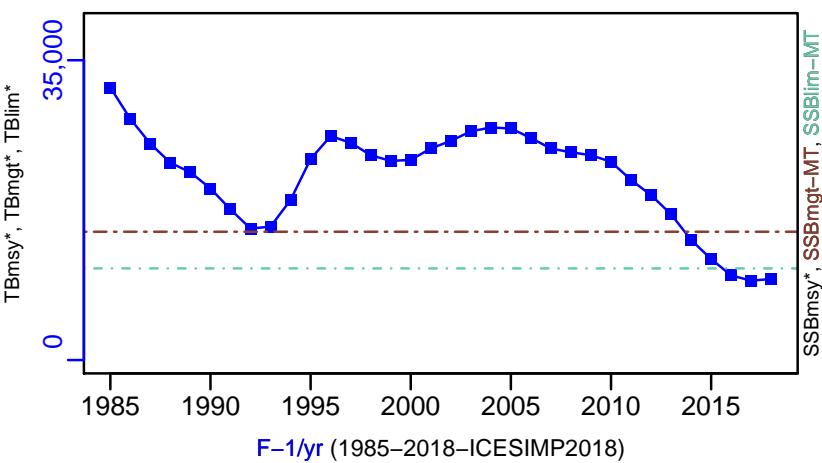
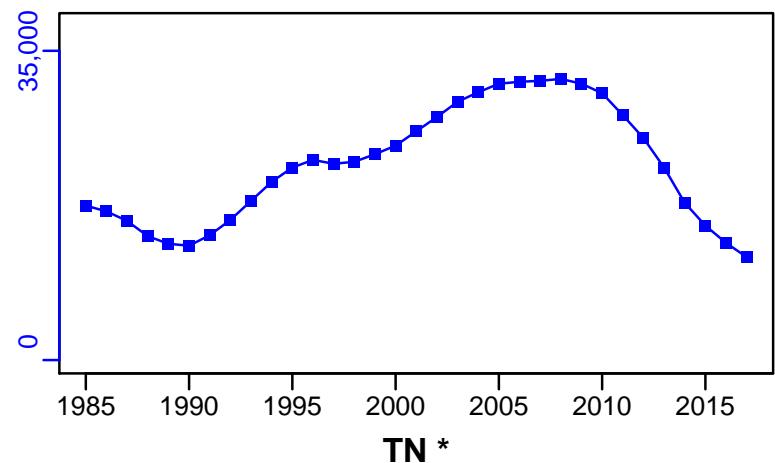


◆ Start Year ◆ End Year * No Data

European seabass ICES 4bc–7 [EBASSIVbc–VII]

TB-MT (1985–2017–ICESIMP2018)

SSB-MT (1985–2018–ICESIMP2018)

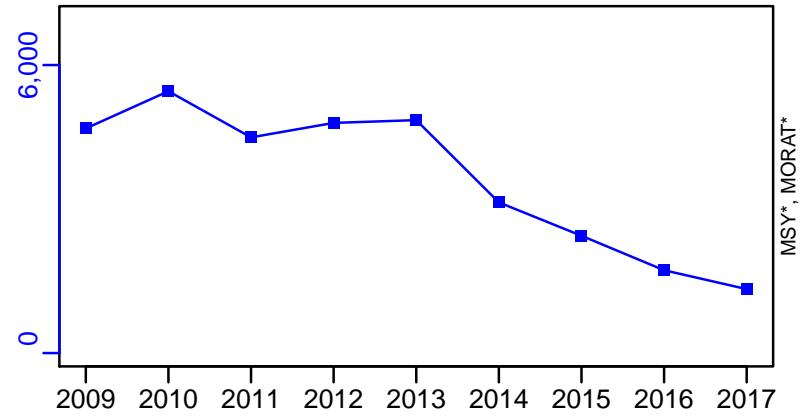


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

European seabass ICES 4bc–7 [EBASSIVbc–VII]

TC–MT, TL*, RecC* (1985–2018–ICESIMP2018)

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 ICES 4a-7b-j [EBASSVIa-VIIb-j]

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGCSE-EBASSVIa-VIIb-j-2000-2016-ICESIMP2018
Area	ICES 4a-7b-j
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	2		
TL	TL-MT	2016	0.1		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

TB*



SSB*



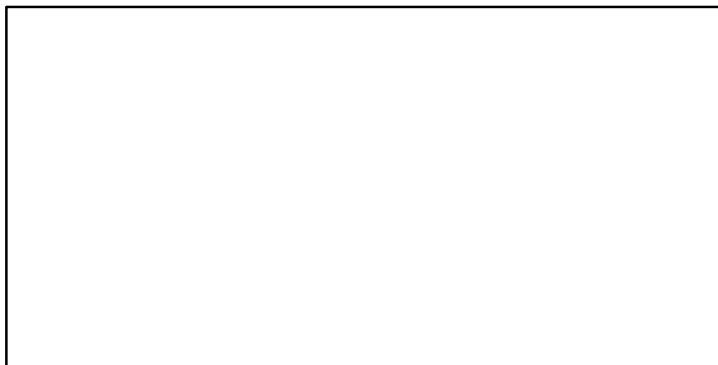
TN *



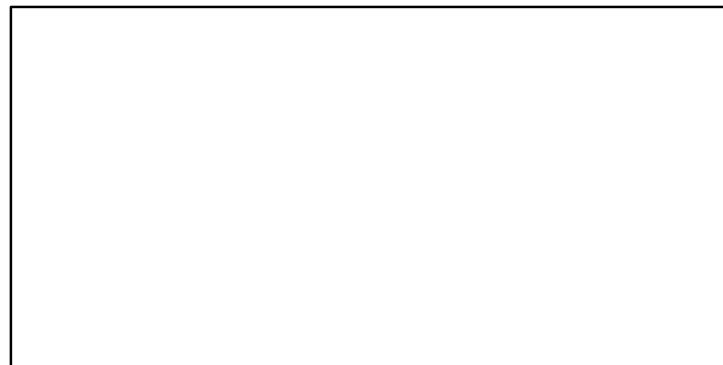
F*



ER*



Recruits*

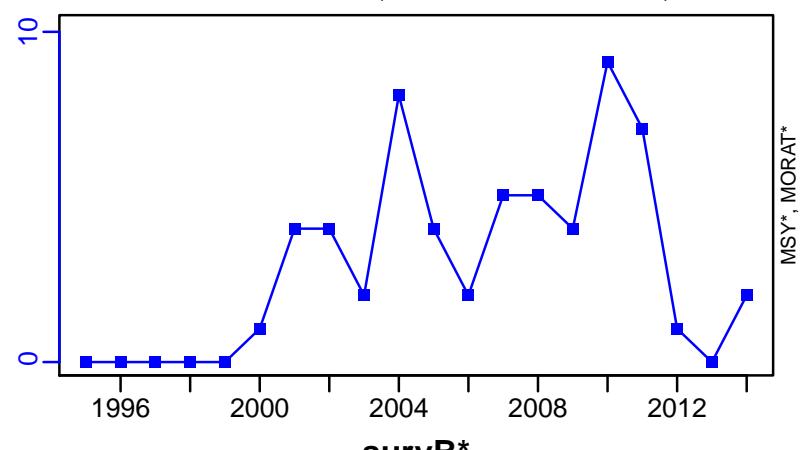


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European seabass ICES 4a–7b–j [EBASSVla–VIIb–j]

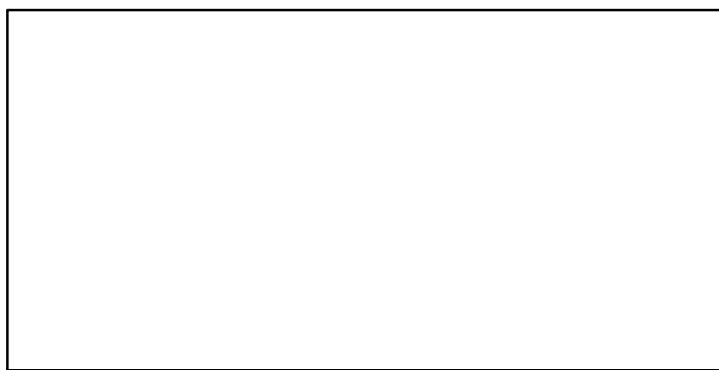
TC–MT, TL*, RecC* (1995–2015–ICESIMP2016)

TAC*, Cpair*, Cadv*



survB*

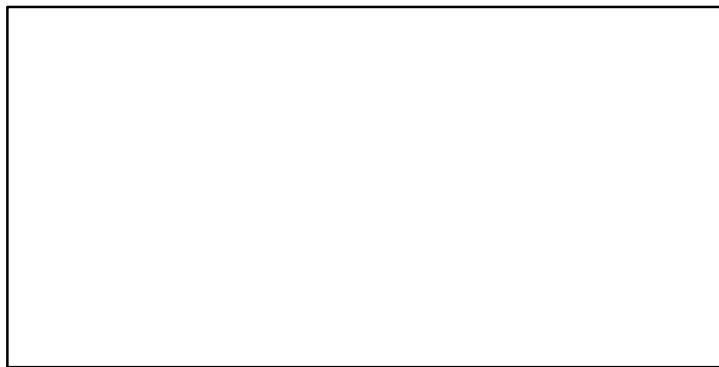
MSY*, MORAT*



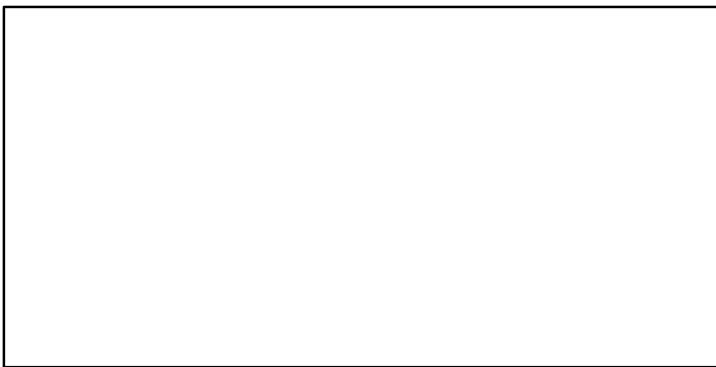
CPUE*



EFFORT*



CdivMSY*



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

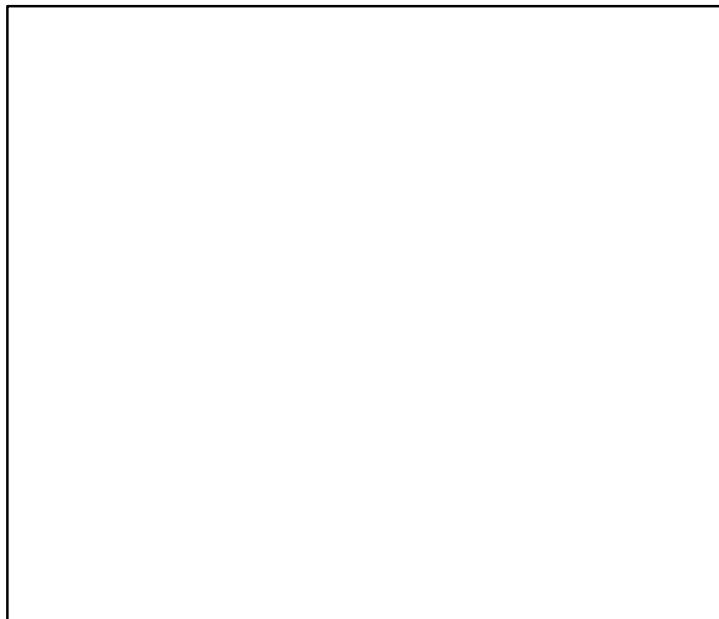
European seabass ICES 8ab [EBASSVIIlab]

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGBIE-EBASSVIIlab-2000-2016-ICESIMP2018
Area	ICES 8ab
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2016

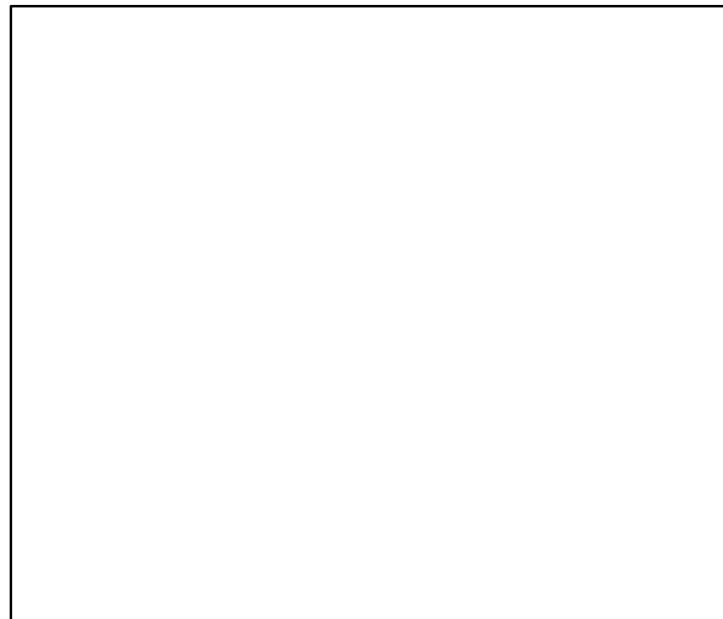
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.61	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2016	0.957	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2250		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

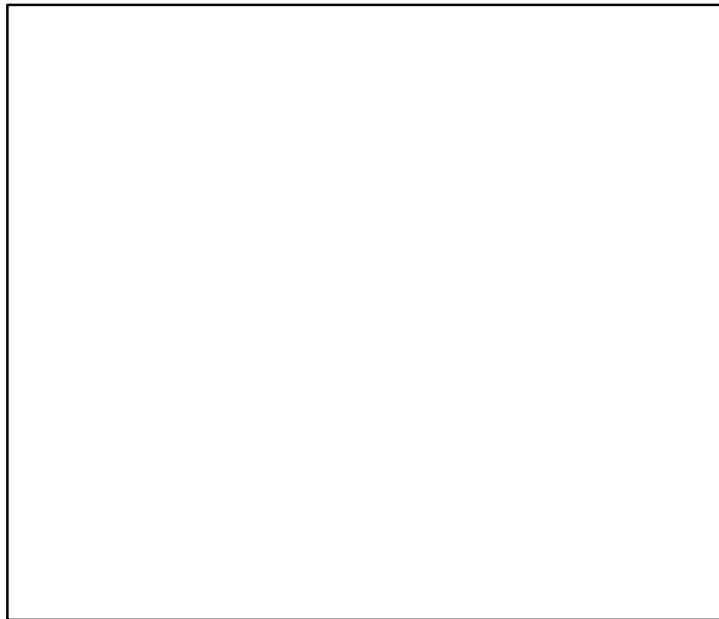
Kobe MSY*



Kobe MGT*



Spawner Recruit*



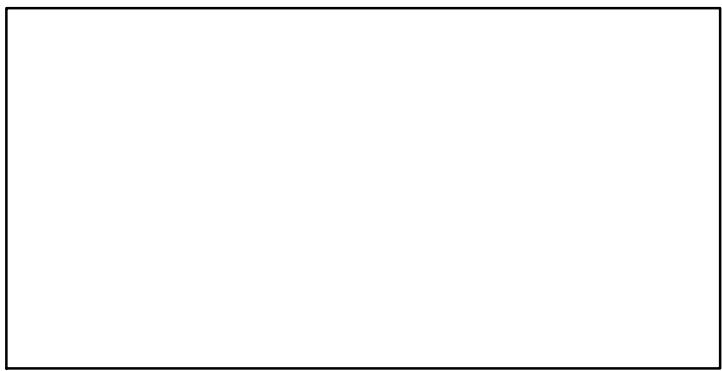
Production*



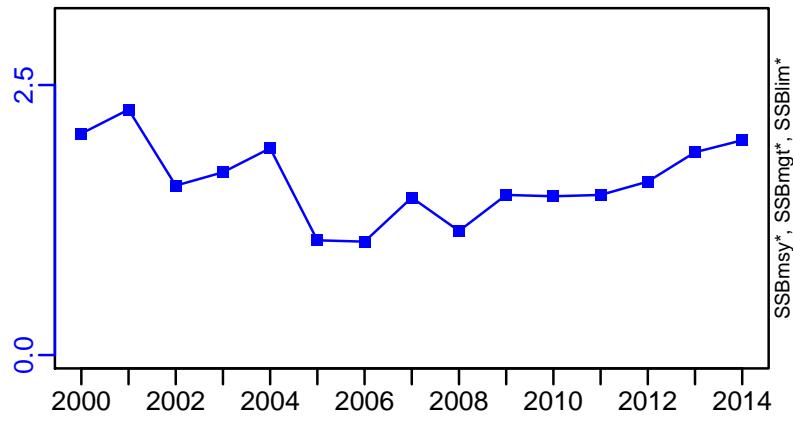
◆ Start Year ♦ End Year * No Data

European seabass ICES 8ab [EBASSVIIlab]

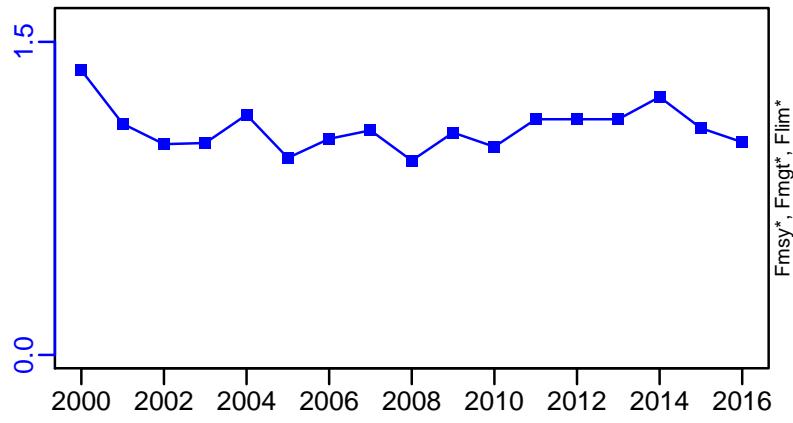
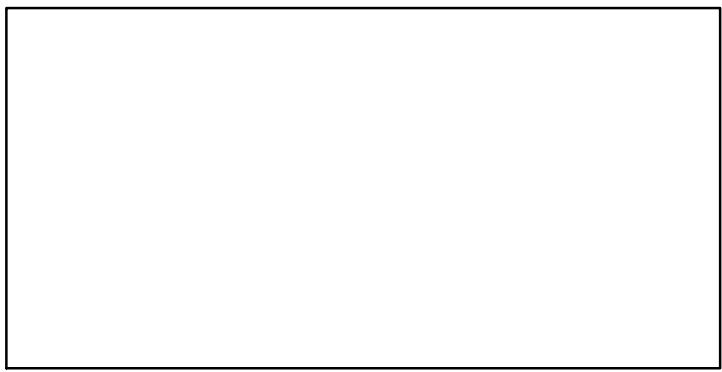
TB*



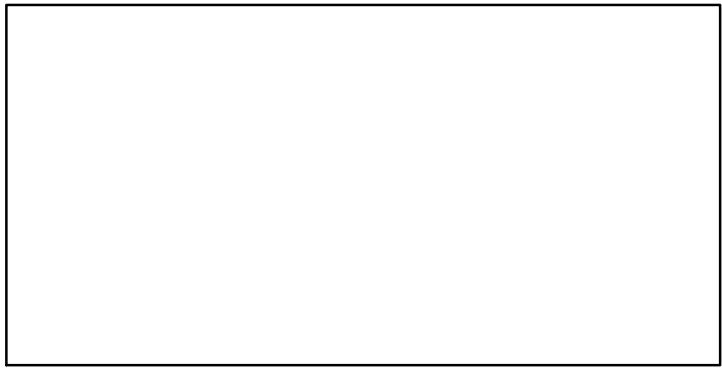
SSB-index (2000–2014–ICESIMP2018)



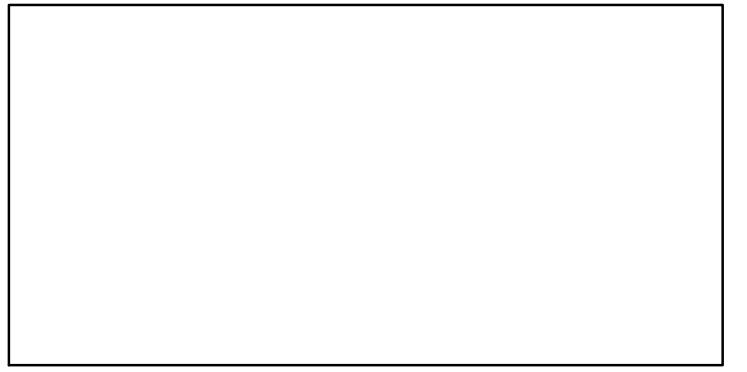
TN *



ER*



Recruits*

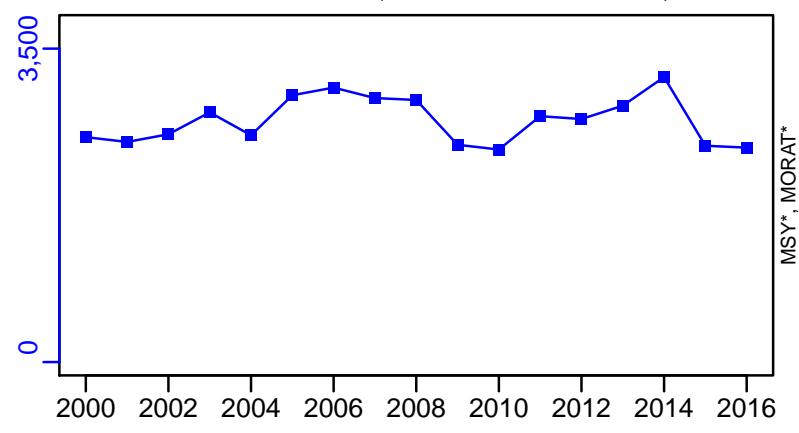


- Listed time series
- Target BRP
- MSY-based BRP
- Lim BRP
- Rec-Est
- * No Data

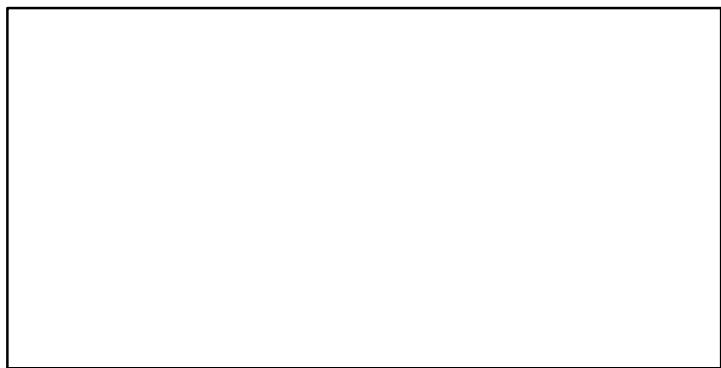
European seabass ICES 8ab [EBASSVIIlab]

TL-MT, TC*, RecC* (2000–2016—ICESIMP2018)

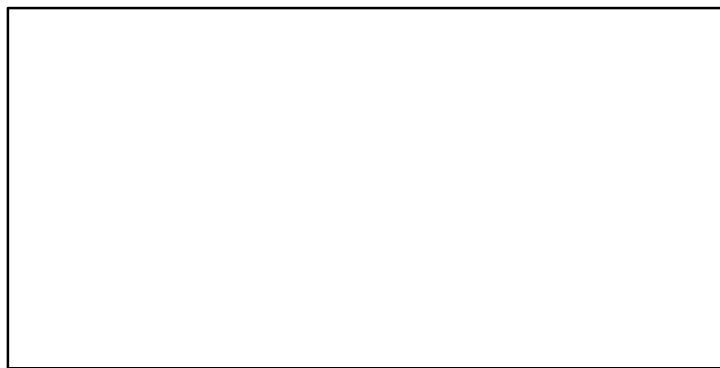
TAC*, Cpair*, Cadv*



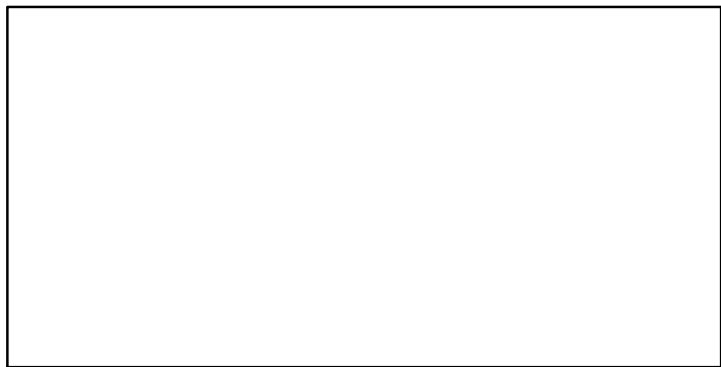
survB*



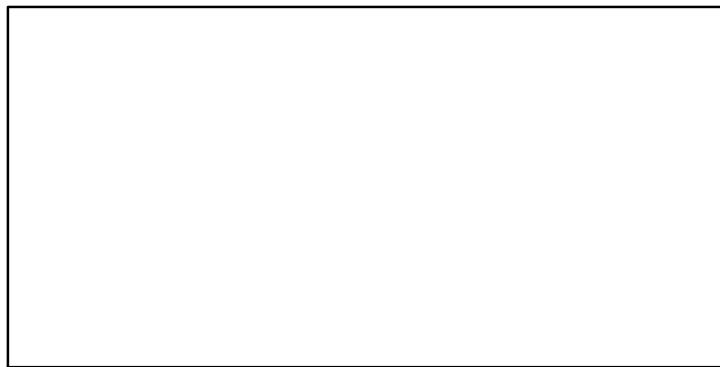
CPUE*



EFFORT*



CdivMSY*



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

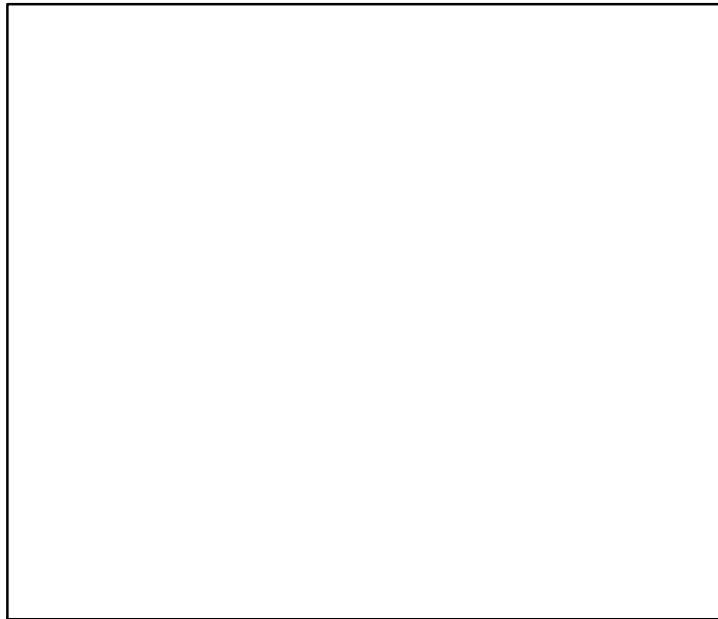
European seabass ICES 8c-9a [EBASSVIIIC-IXa]

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGBIE-EBASSVIIIC-IXa-1978-2016-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2015, 2016

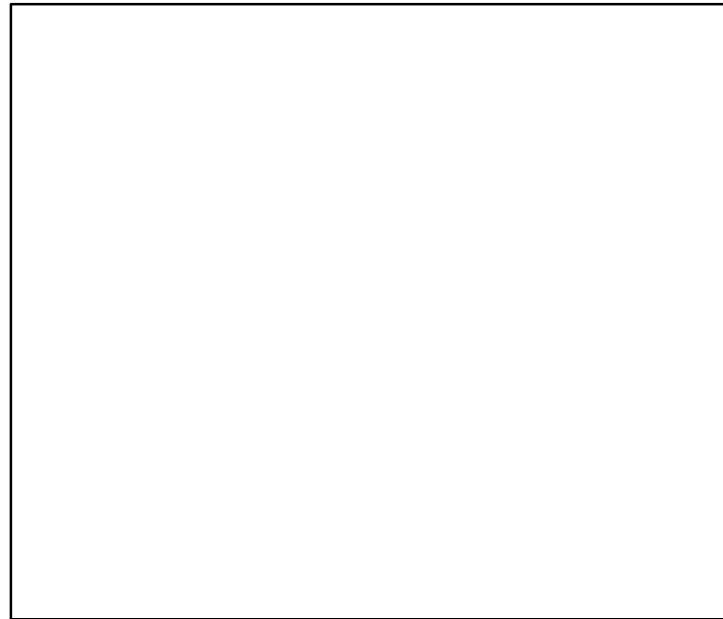
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	917		
TL	TL-MT	2016	947		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

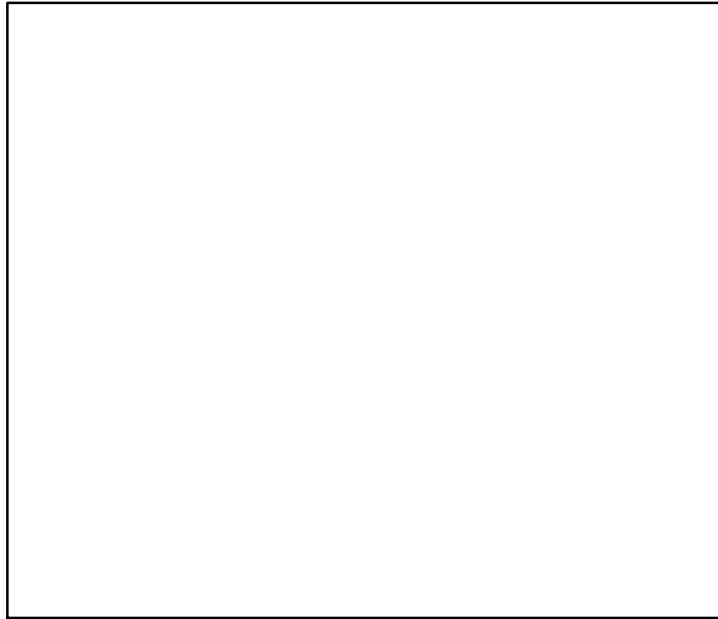
Kobe MSY*



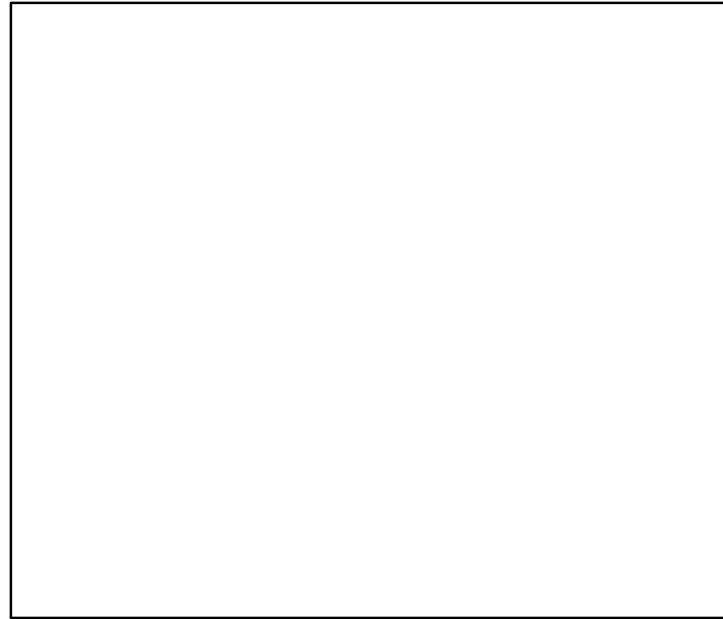
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

TB*



SSB*



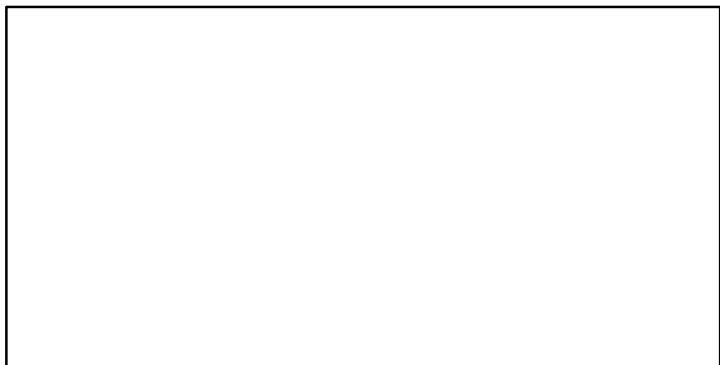
TN *



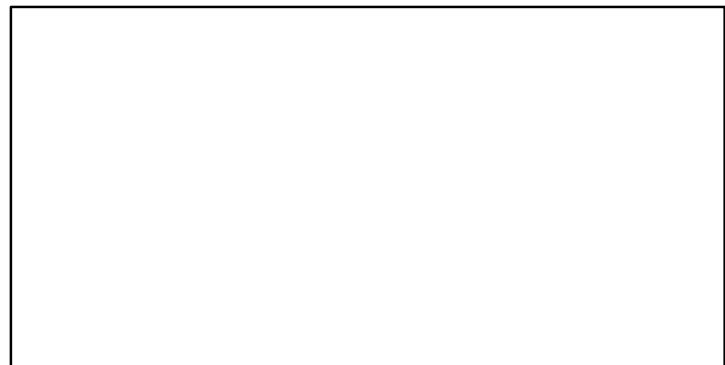
F*



ER*



Recruits*

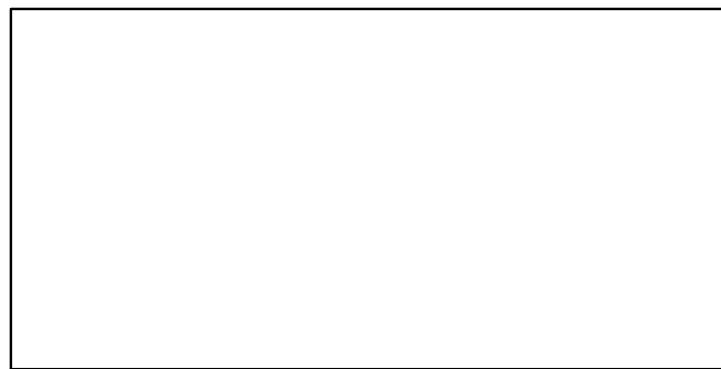
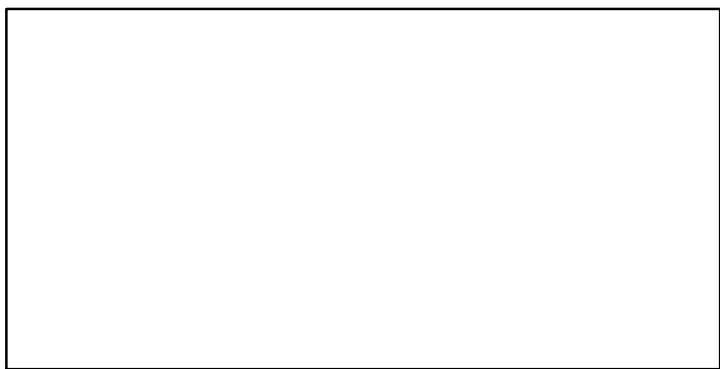
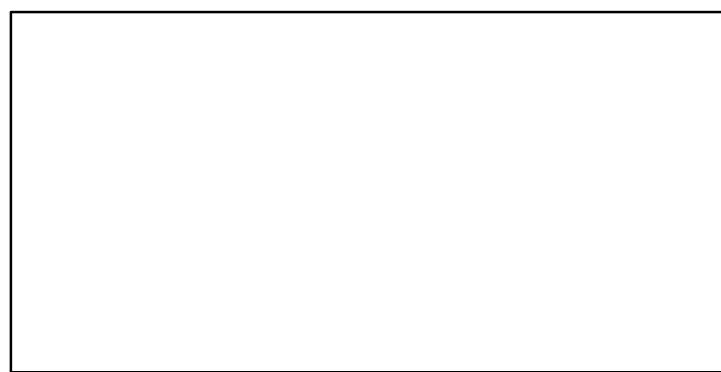
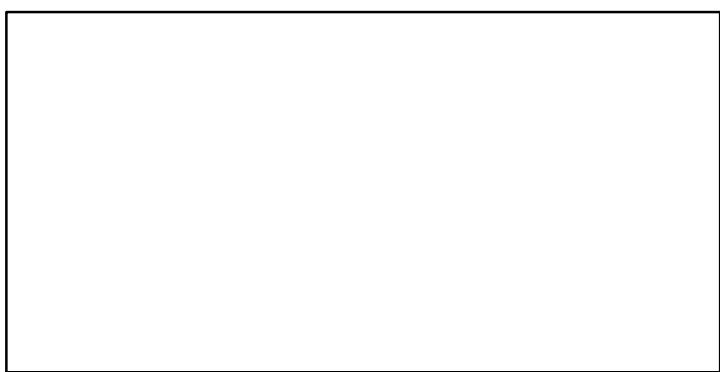
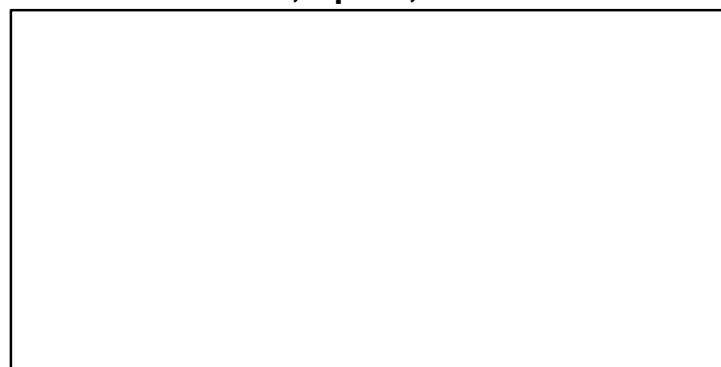
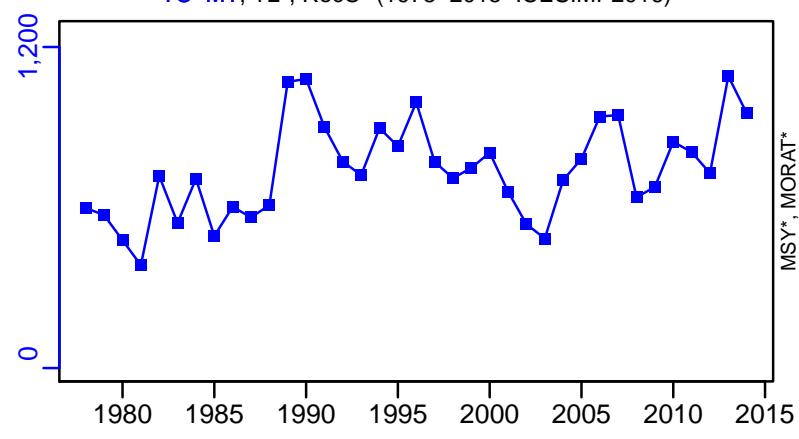


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European seabass ICES 8c–9a [EBASSVIIIC–IXa]

TC–MT, TL*, RecC* (1978–2015–ICESIMP2016)

TAC*, Cpair*, Cadv*



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

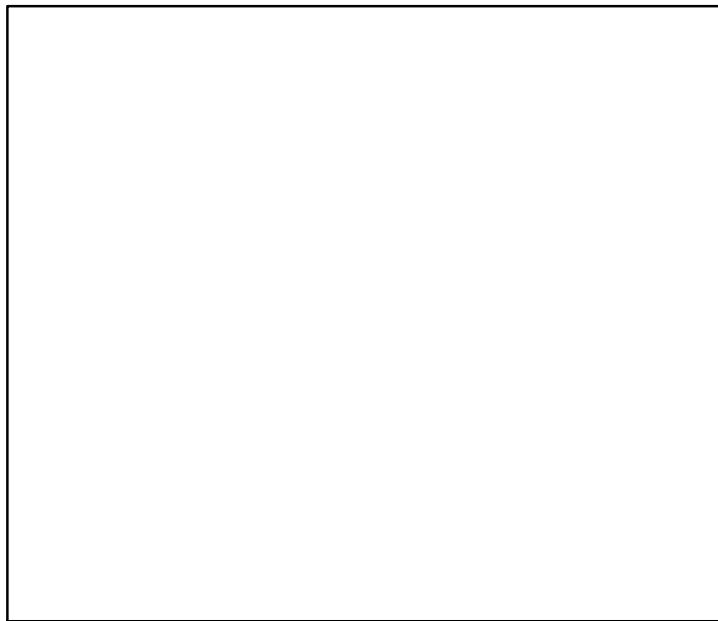
European flounder Subdivisions 22-23 [EFLOUN2223]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN2223-1973-2016-ICESIMP2018
Area	Subdivisions 22-23
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2014, 2016, 2016

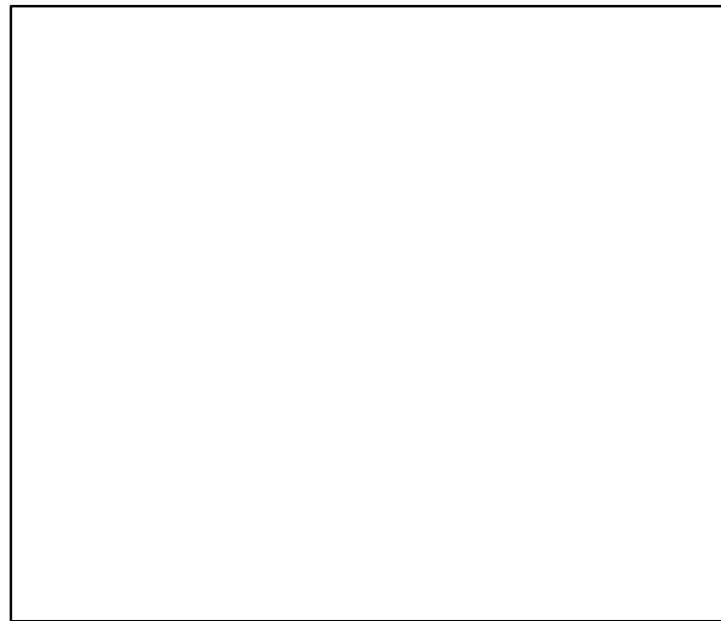
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	385	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1650		
TL	TL-MT	2016	1130		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

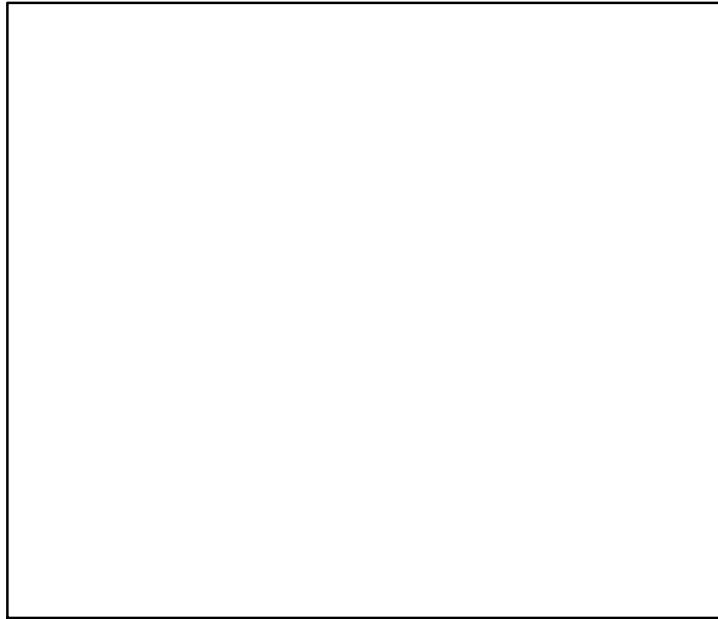
Kobe MSY*



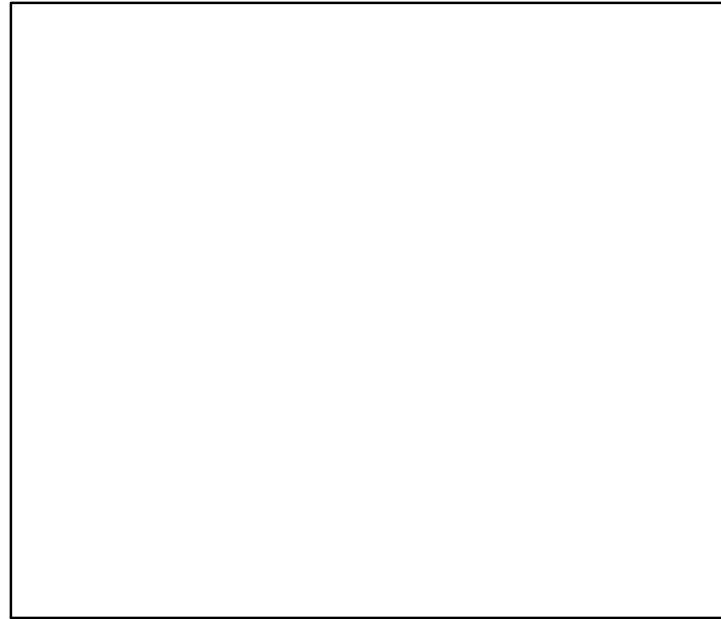
Kobe MGT*



Spawner Recruit*



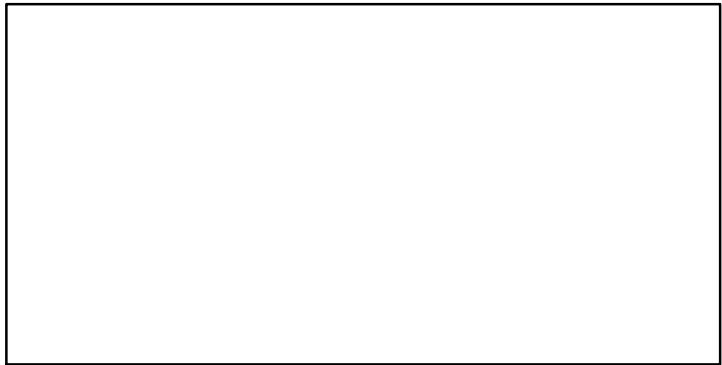
Production*



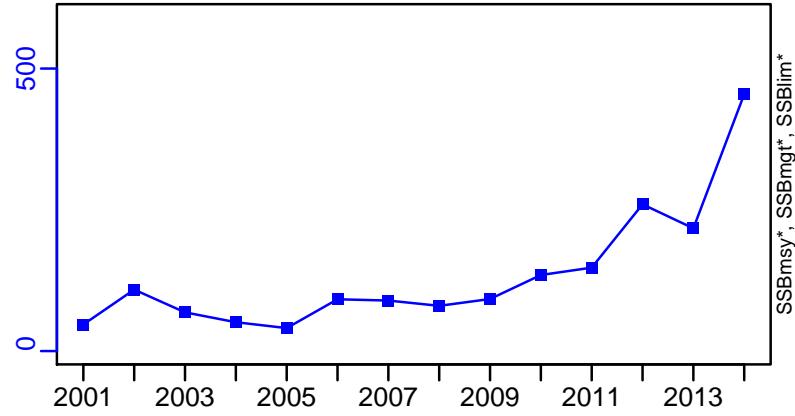
◆ Start Year ♦ End Year * No Data

European flounder Subdivisions 22–23 [EFLOUN2223]

TB*



SSB-index (1973–2014–ICESIMP2018)



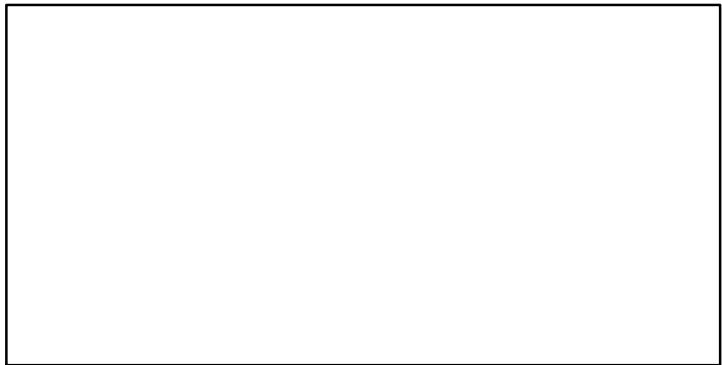
TN *



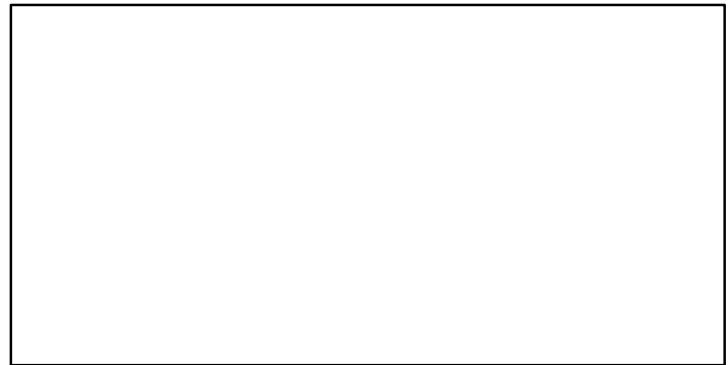
F*



ER*



Recruits*

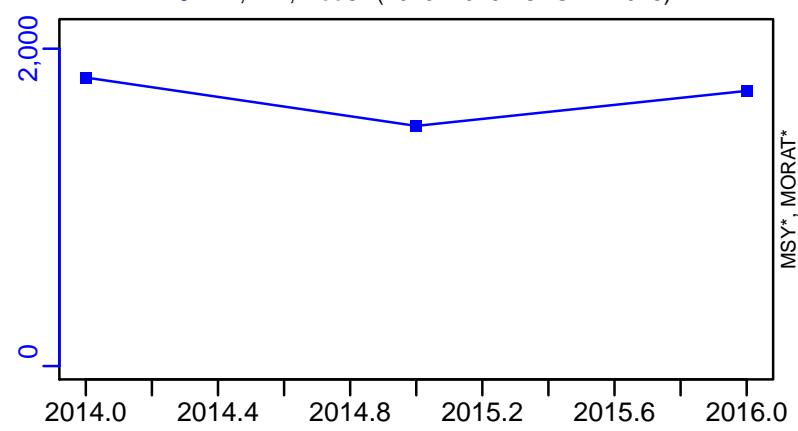


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

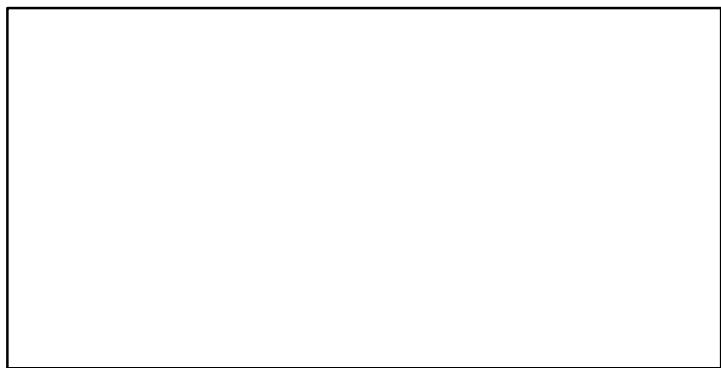
European flounder Subdivisions 22–23 [EFLOUN2223]

TC-MT, TL*, RecC* (1973–2016—ICESIMP2018)

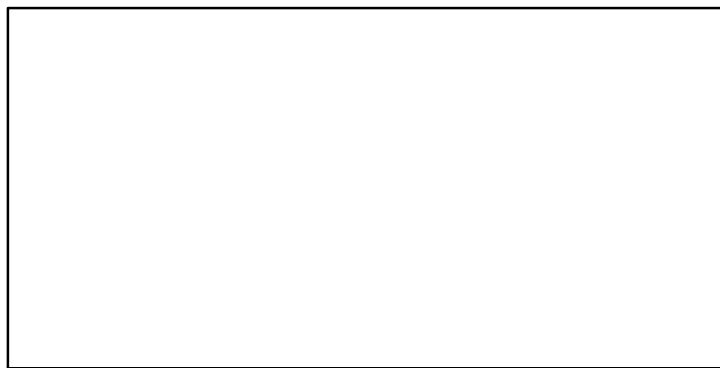
TAC*, Cpair*, Cadv*



survB*



CPUE*



EFFORT*



CdivMSY*



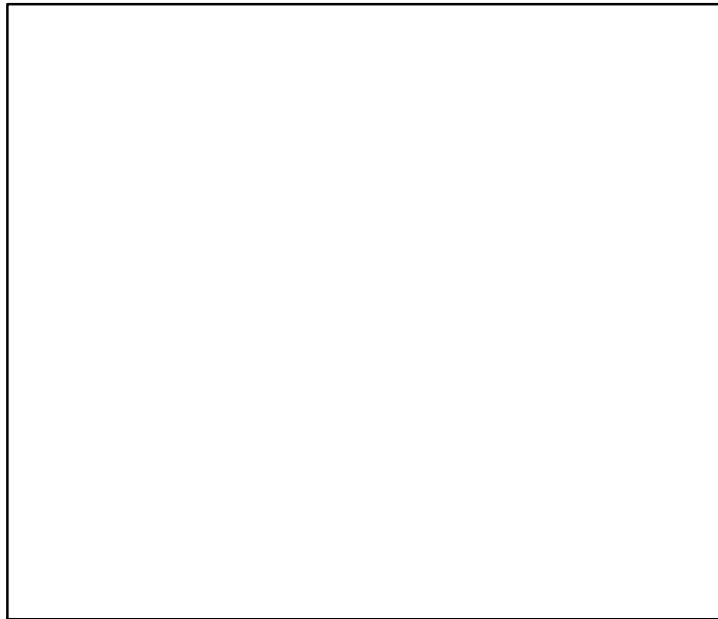
European flounder Subdivisions 24-25 [EFLOUN2425]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN2425-1973-2016-ICESIMP2018
Area	Subdivisions 24-25
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016, 2016

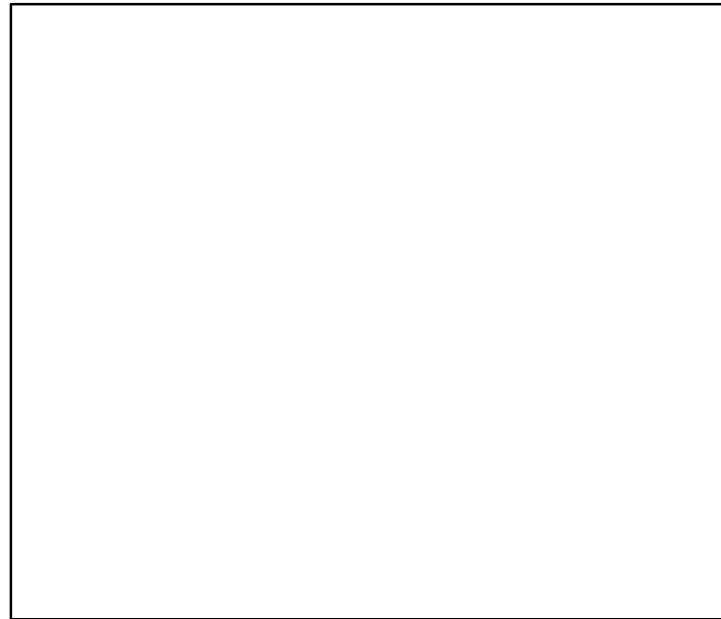
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	19,800		
TL	TL-MT	2016	11,100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

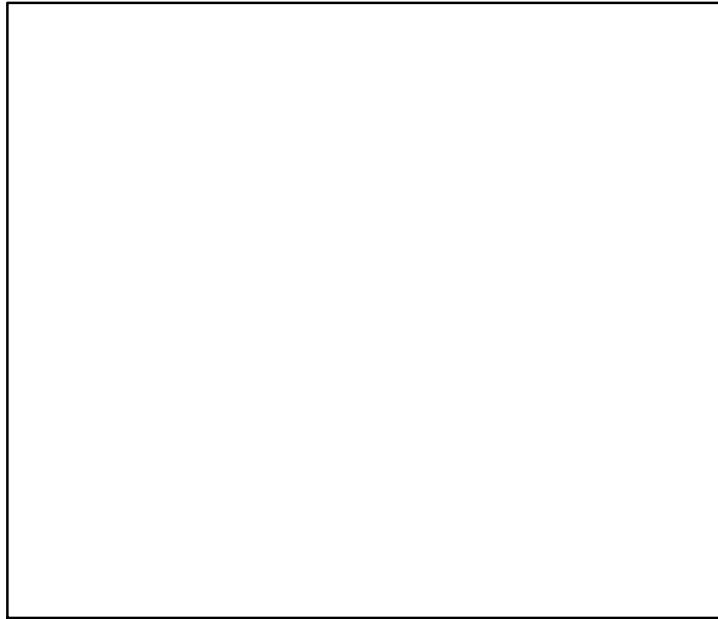
Kobe MSY*



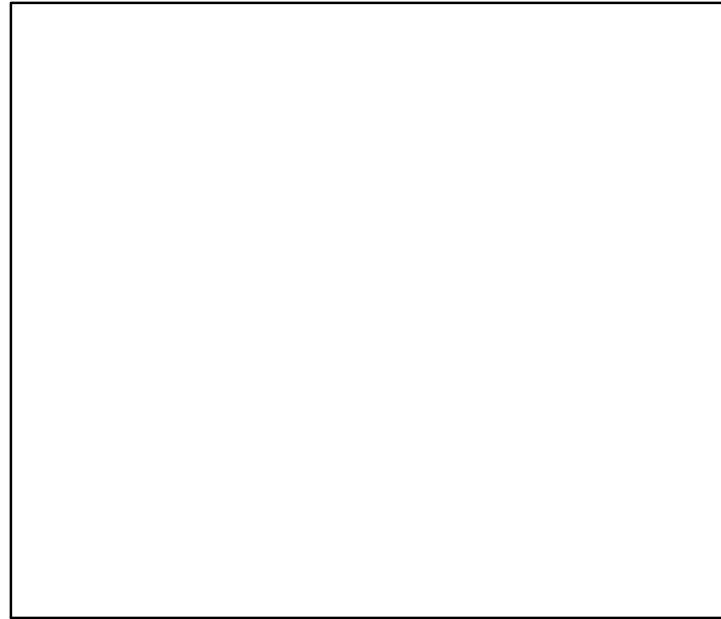
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

European flounder Subdivisions 24–25 [EFLOUN2425]

TB*



SSB*



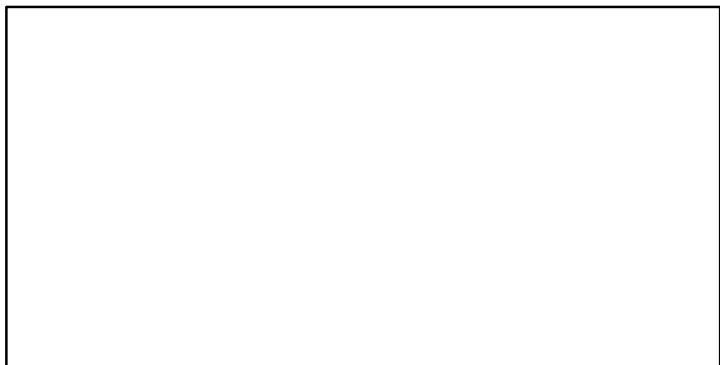
TN *



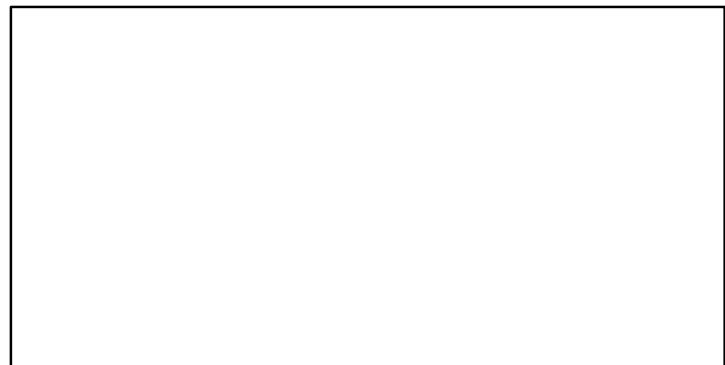
F*



ER*



Recruits*

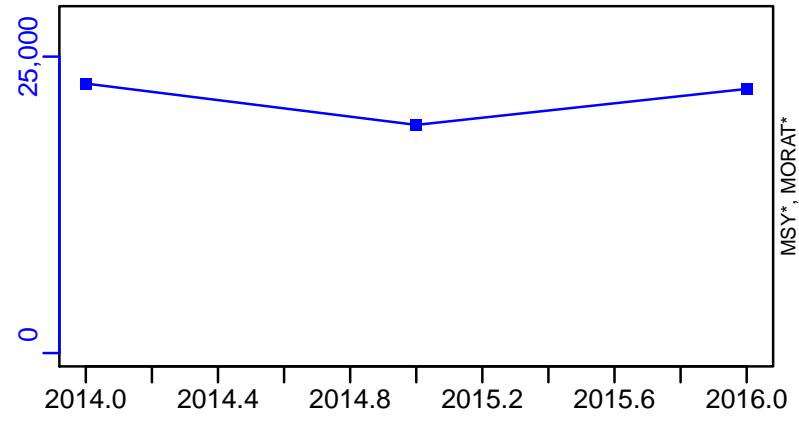


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

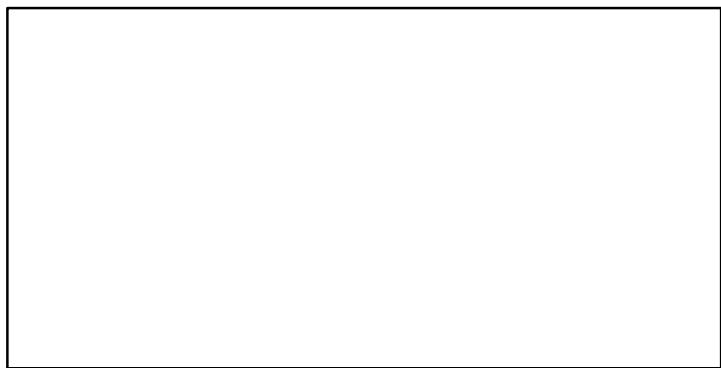
European flounder Subdivisions 24–25 [EFLOUN2425]

TC-MT, TL*, RecC* (1973–2016—ICESIMP2018)

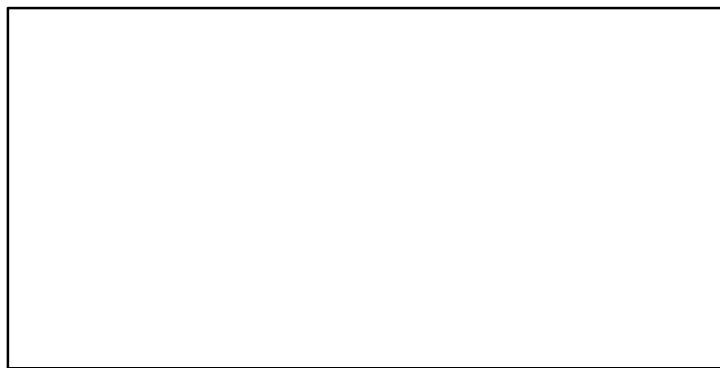
TAC*, Cpair*, Cadv*



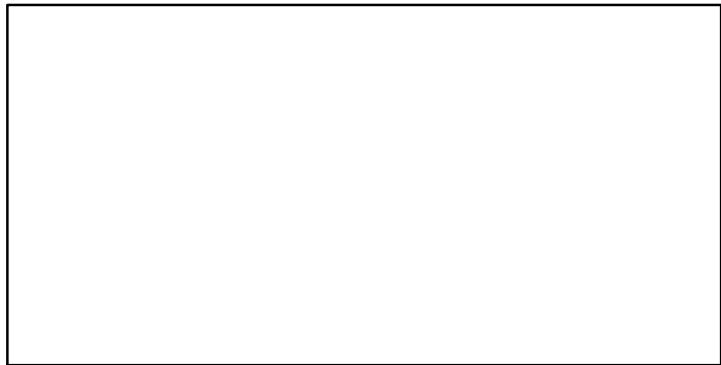
survB*



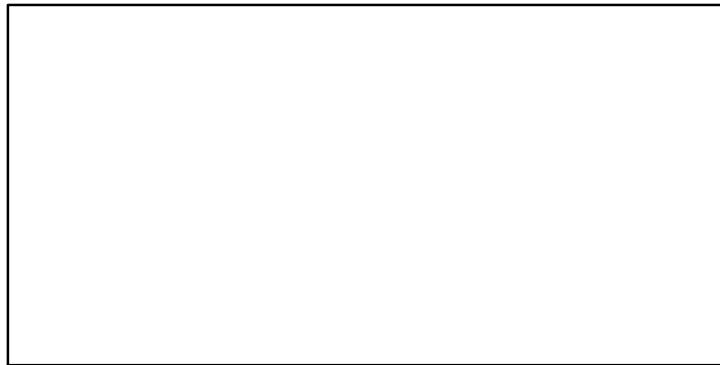
CPUE*



EFFORT*



CdivMSY*



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

European flounder Subdivisions 26-28 [EFLOUN26-28]

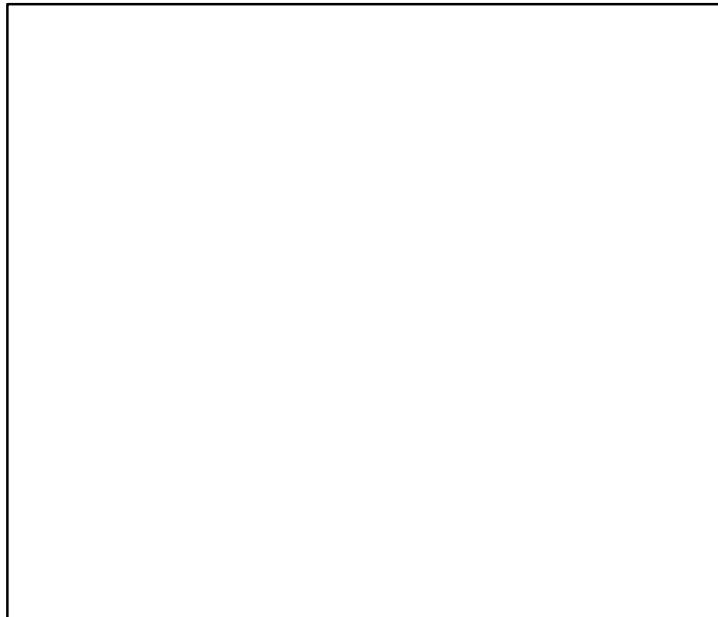
Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN26-28-1996-2016-ICESIMP2018
Area	Subdivisions 26-28
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016, 2016

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

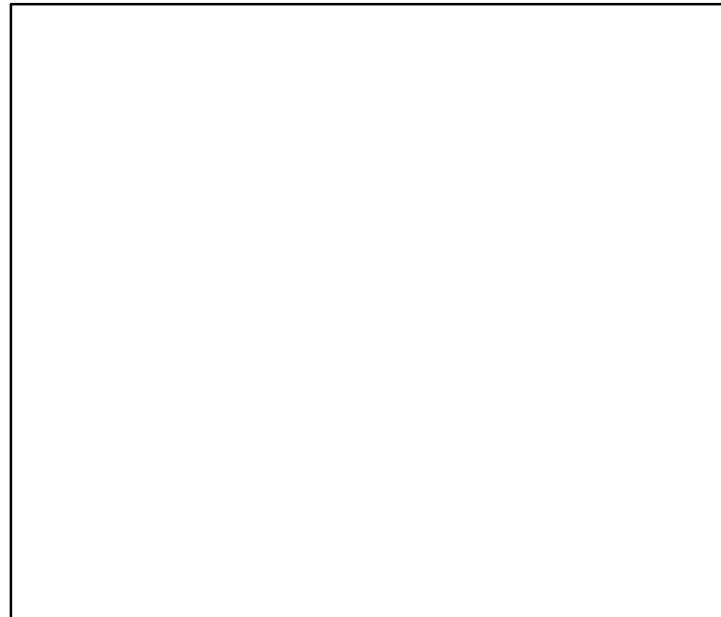
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	4440		
TL	TL-MT	2016	4440		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

European flounder Subdivisions 26–28 [EFLOUN26–28]

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

European flounder Subdivisions 26–28 [EFLOUN26–28]

TB*



SSB*



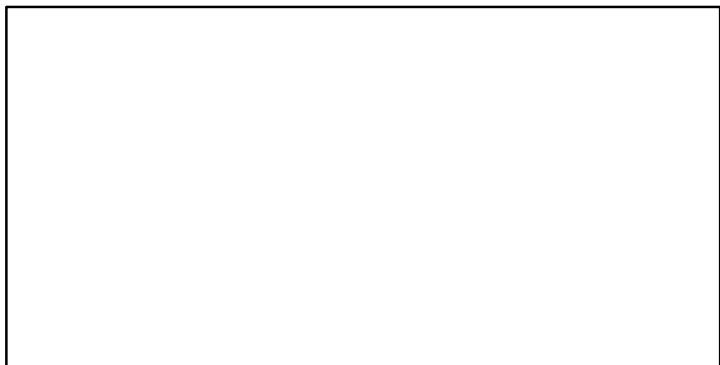
TN *



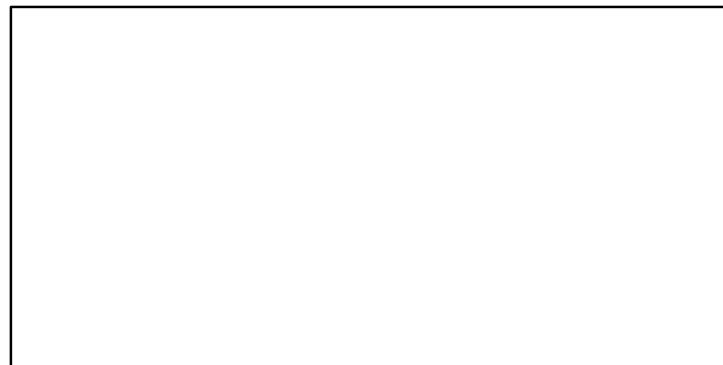
F*



ER*



Recruits*

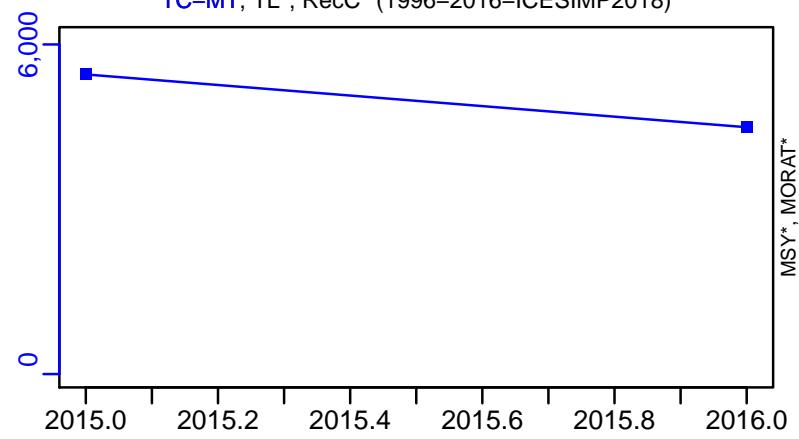


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

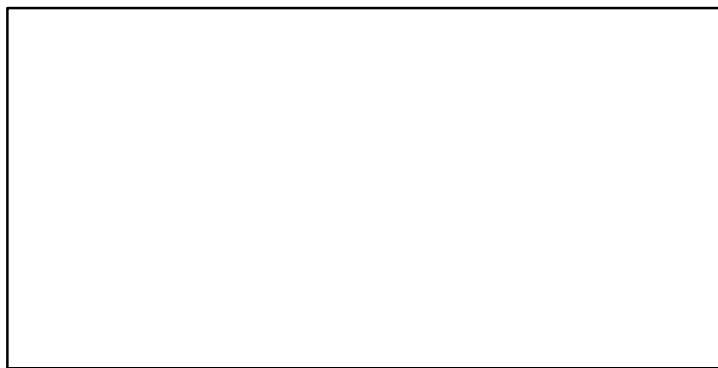
European flounder Subdivisions 26–28 [EFLOUN26–28]

TC-MT, TL*, RecC* (1996–2016–ICESIMP2018)

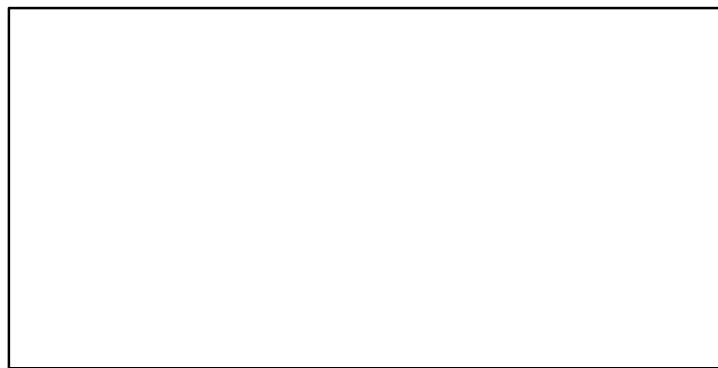
TAC*, Cpair*, Cadv*



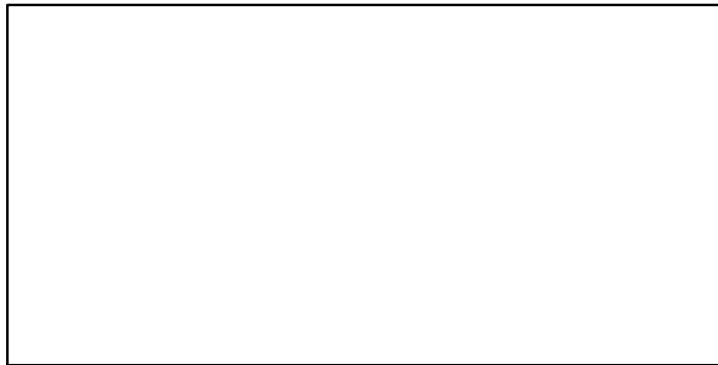
survB*



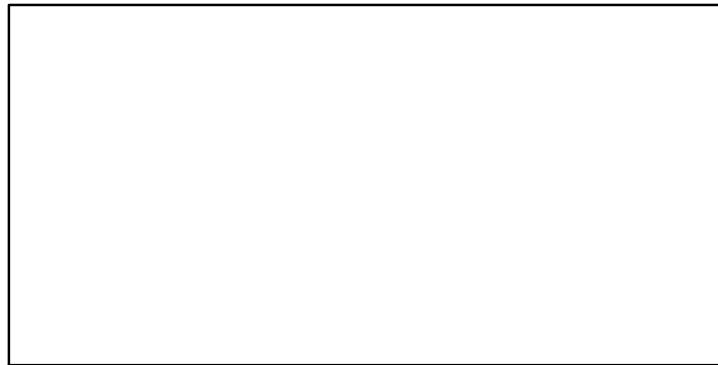
CPUE*



EFFORT*



CdivMSY*



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

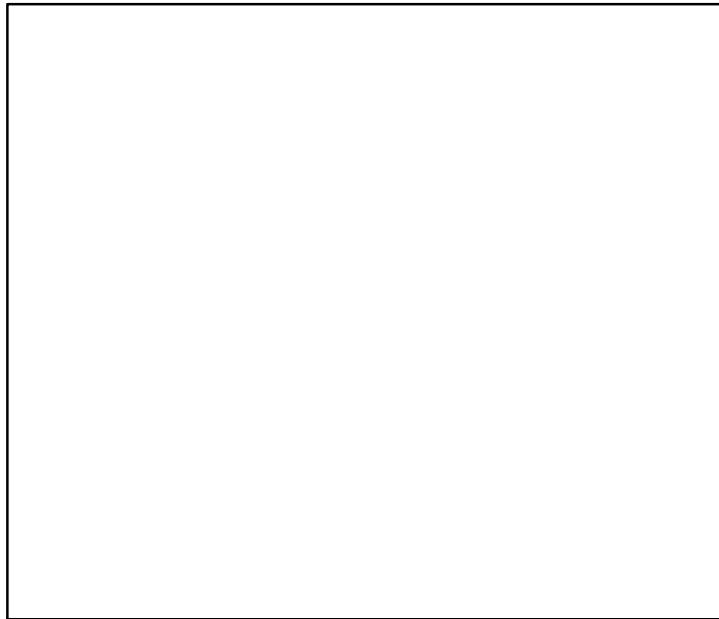
European flounder Subdivisions 27 and 29-32 [EFLOUN27-2932]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN27-2932-1980-2016-ICESIMP2018
Area	Subdivisions 27 and 29-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016, 2016

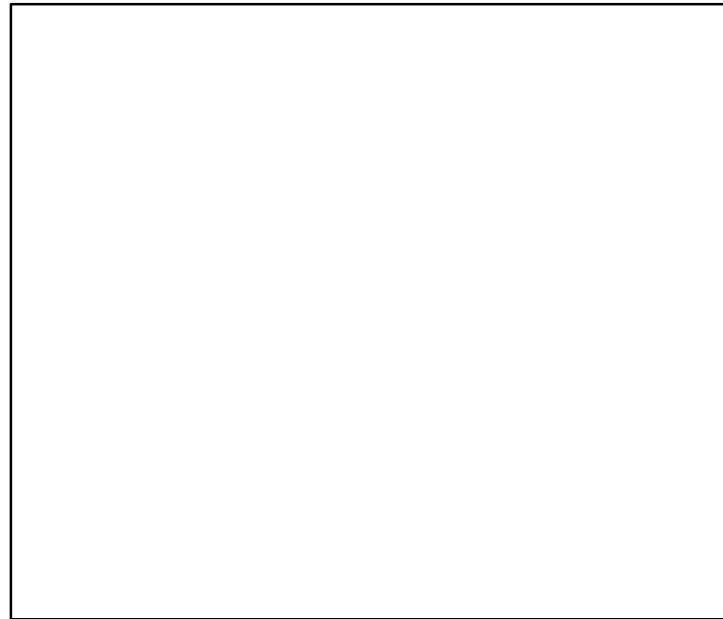
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	176		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

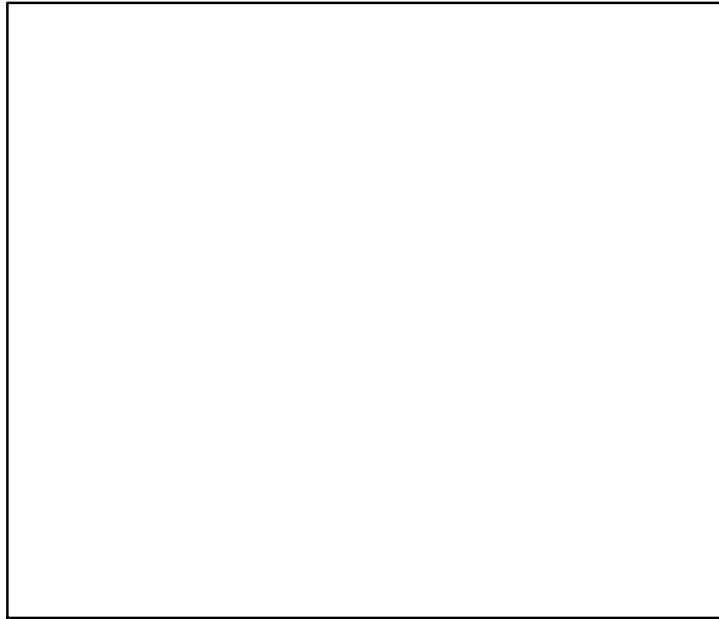
Kobe MSY*



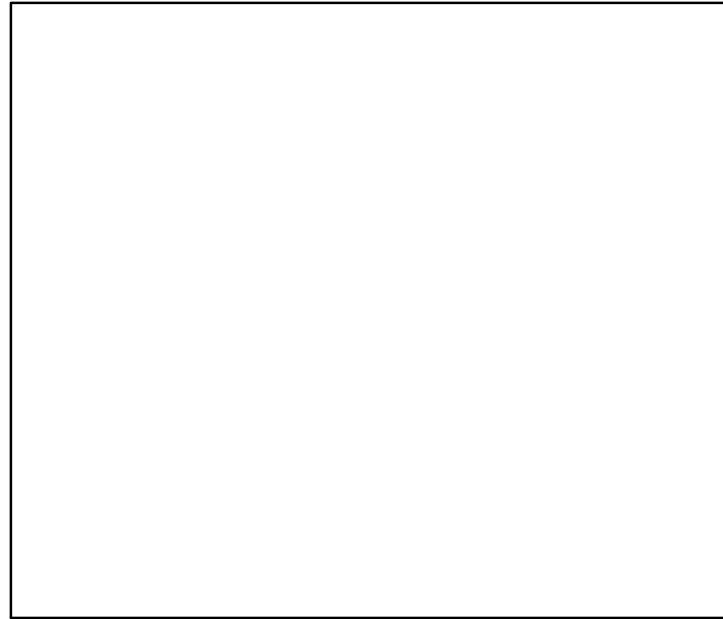
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

European flounder Subdivisions 27 and 29–32 [EFLOUN27–2932]

TB*



SSB*



TN *



F*



ER*



Recruits*

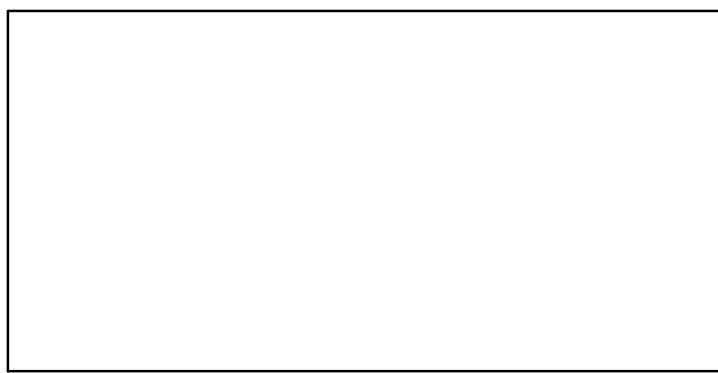
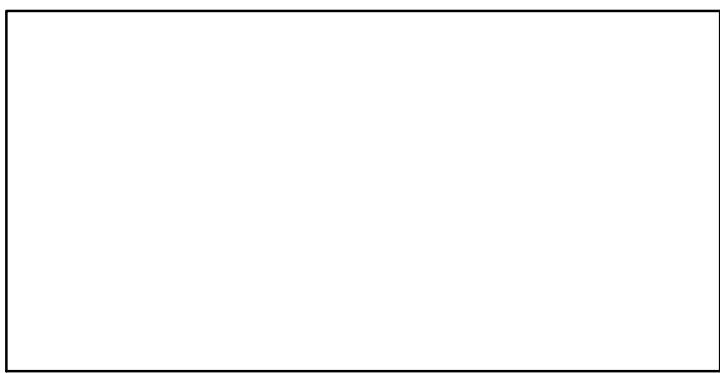
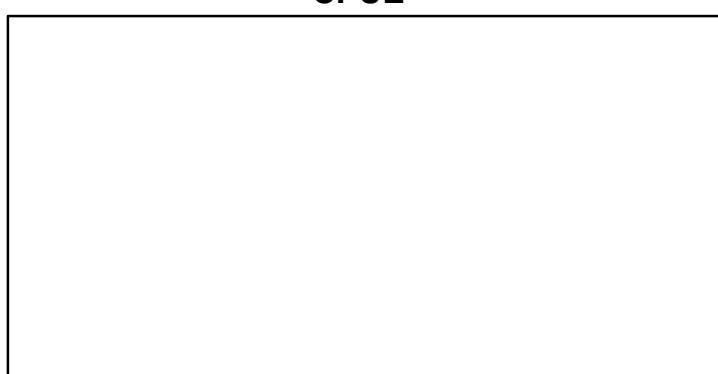
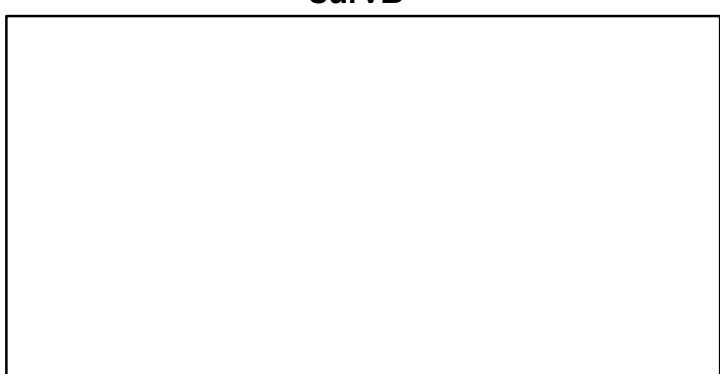
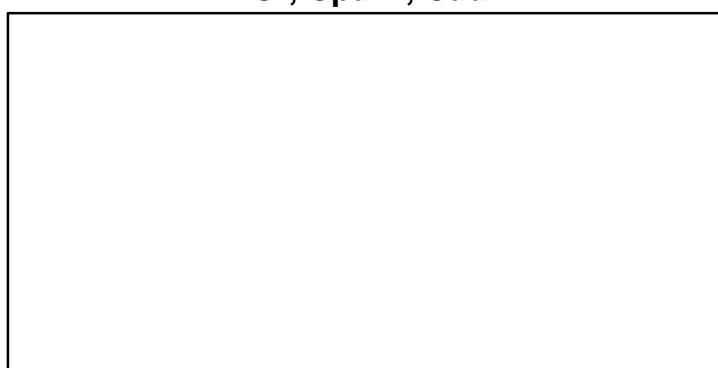
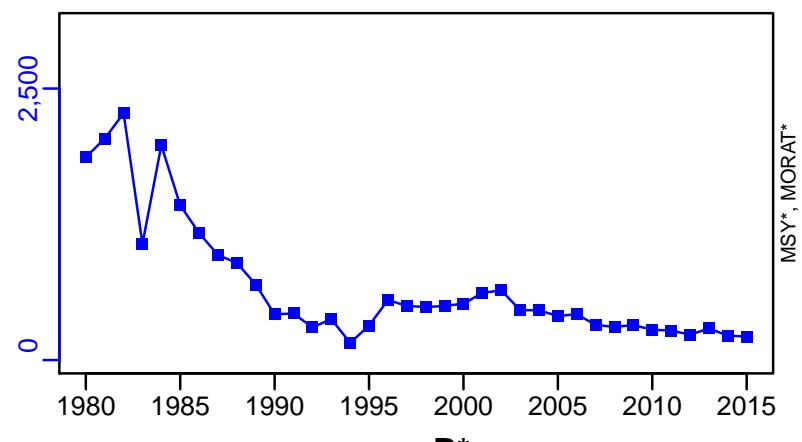


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European flounder Subdivisions 27 and 29–32 [EFLOUN27–2932]

TL-MT, TC*, RecC* (1980–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*



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

European flounder ICES 3a-4 [EFLOUNIIla-IV]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGNSSK-EFLOUNIIla-IV-1965-2016-ICESIMP2018
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	3.66	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	2440		
TL	TL-MT	2016	1750		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

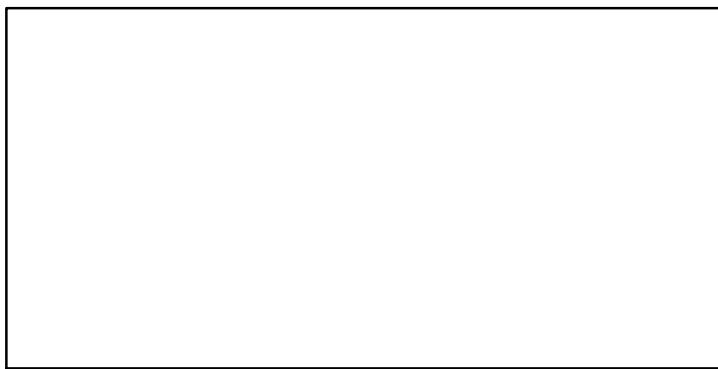
Spawner Recruit*

Production*

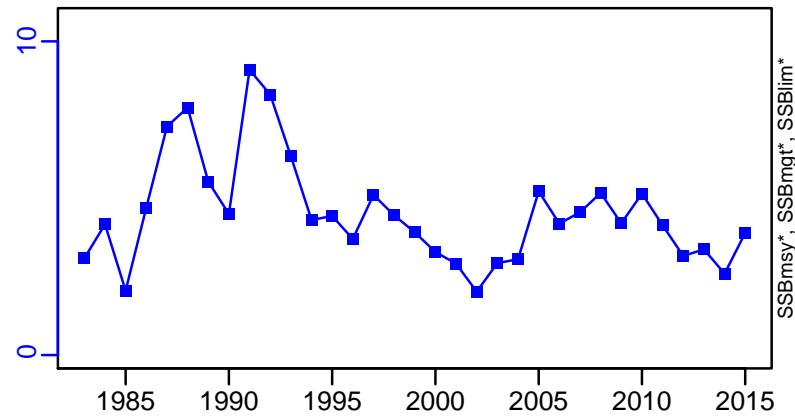
◆ Start Year ♦ End Year * No Data

European flounder ICES 3a–4 [EFLOUNIIla–IV]

TB*

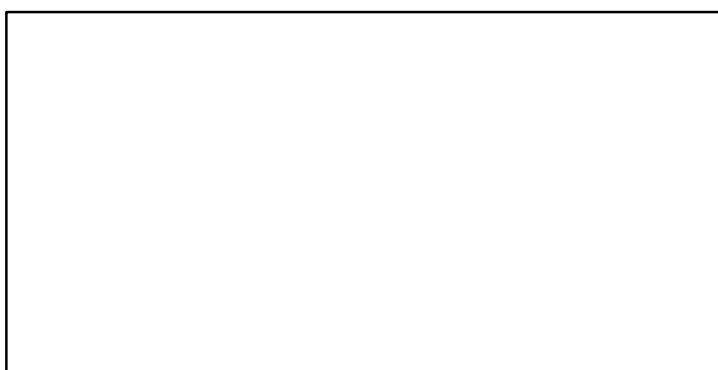


SSB-index (1950–2015–ICESIMP2018)

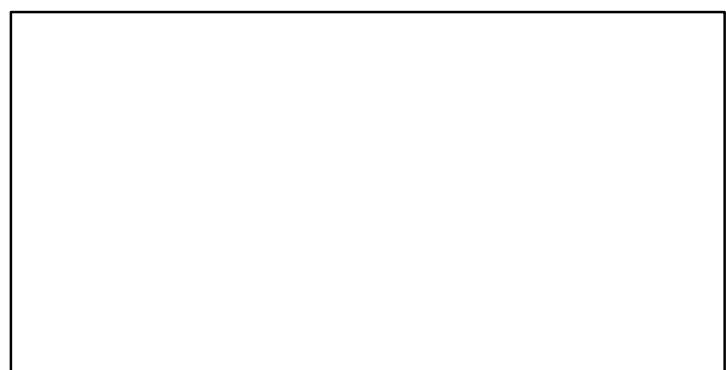


SSBm^{*}, SSBmgt^{*}, SSBlim^{*}

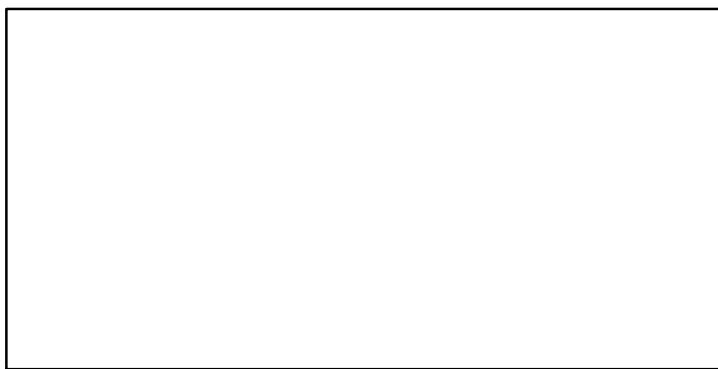
TN *



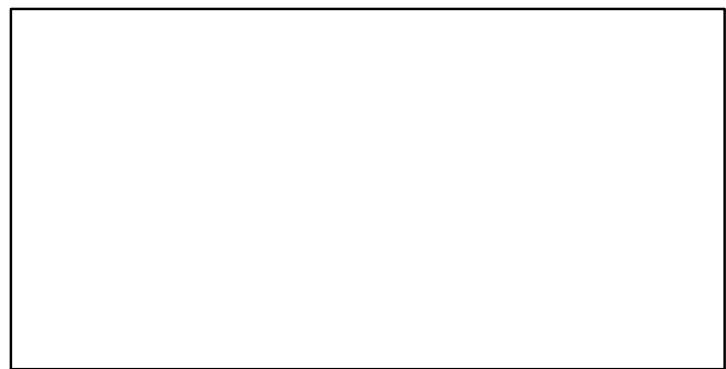
F*



ER*



Recruits*

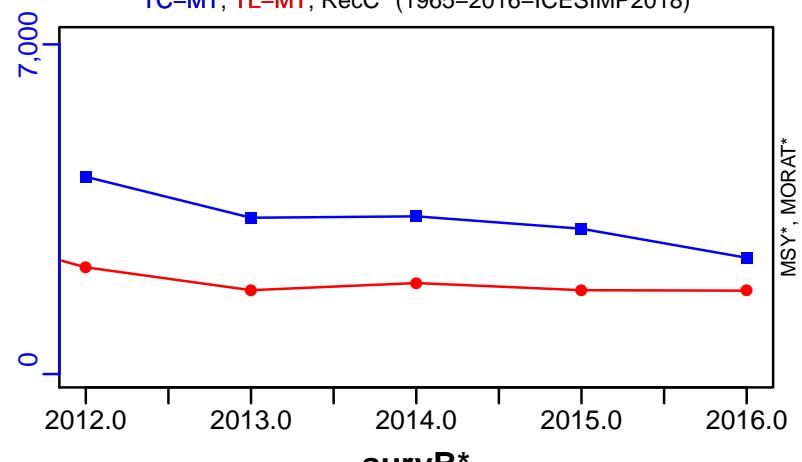


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

European flounder ICES 3a–4 [EFLOUNIIla–IV]

TC–MT, TL–MT, RecC* (1965–2016–ICESIMP2018)

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 |

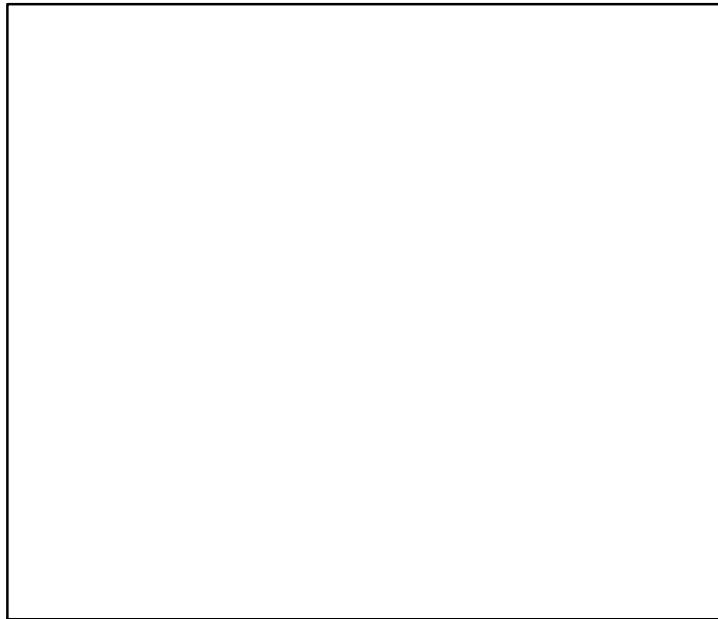
European pollack ICES 3a-4 [EPOLLIV-IIIa]

Metadata	
Scientific Name	Pollachius pollachius
Current Assess ID	WGNSSK-EPOLLIV-IIIa-1977-2017-ICESIMP2018
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

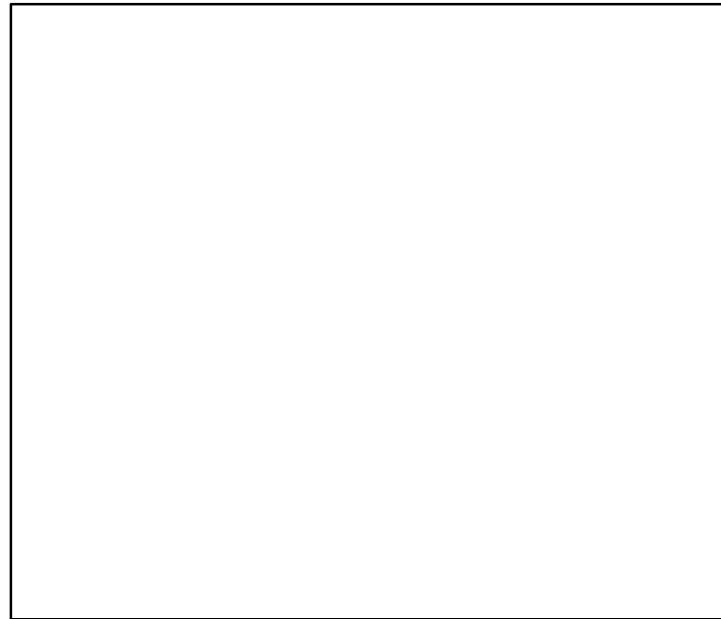
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	1910		
TL	TL-MT	2017	1900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

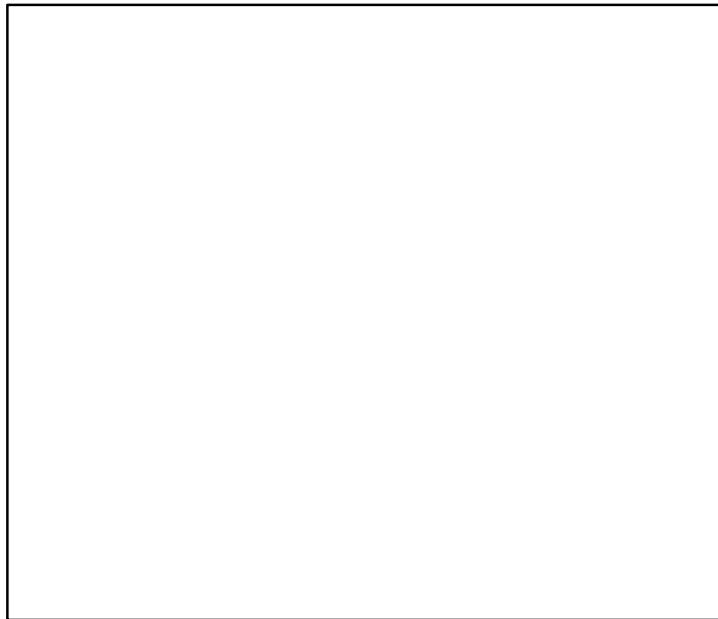
Kobe MSY*



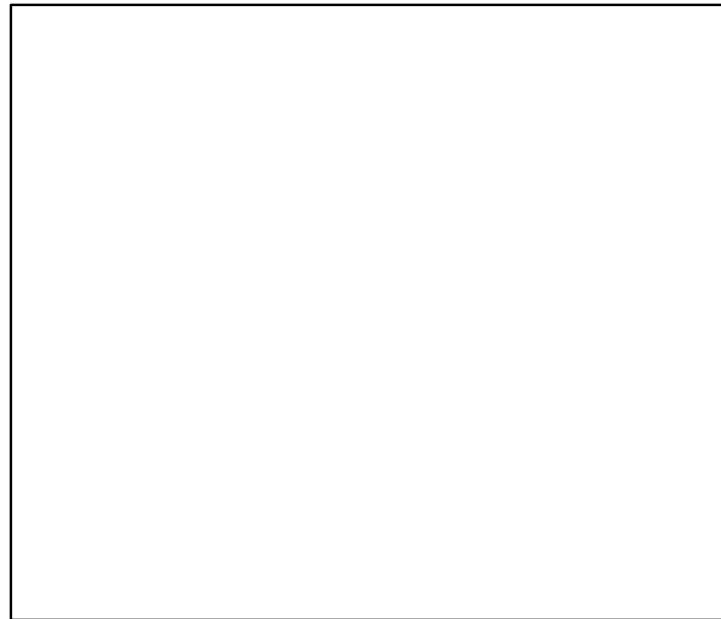
Kobe MGT*



Spawner Recruit*



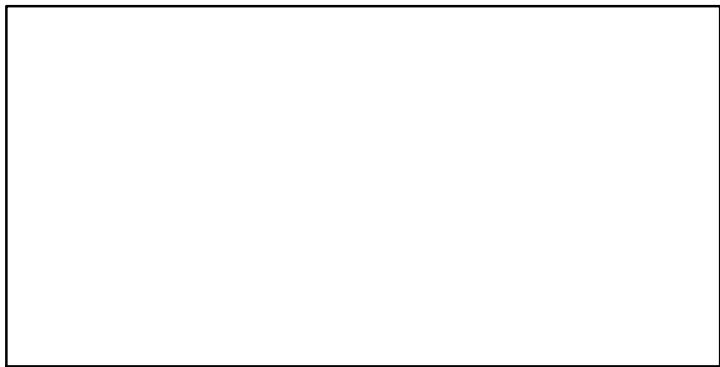
Production*



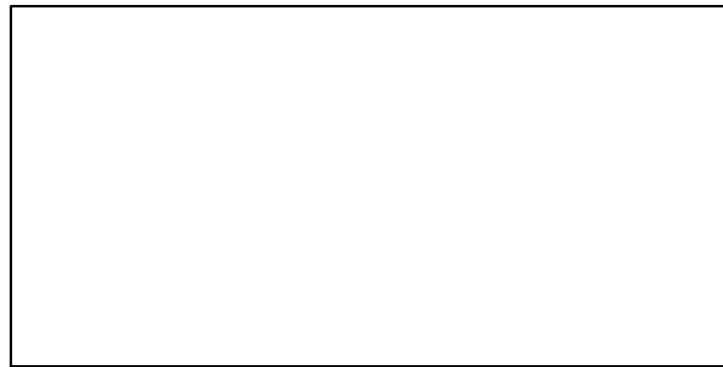
◆ Start Year ♦ End Year * No Data

European pollack ICES 3a–4 [EPOLLIV–IIIa]

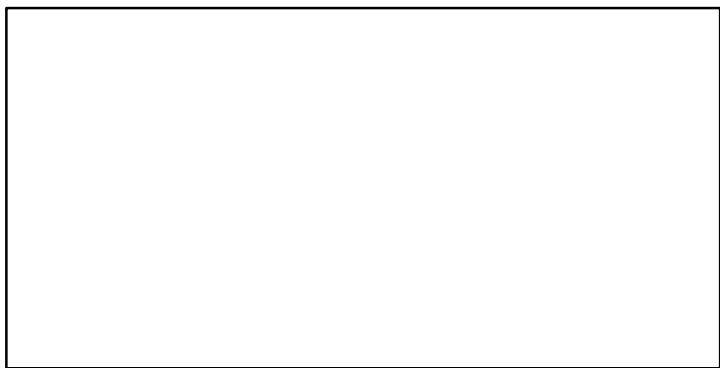
TB*



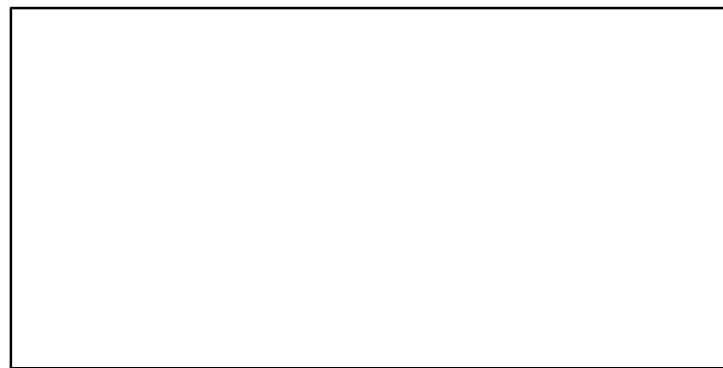
SSB*



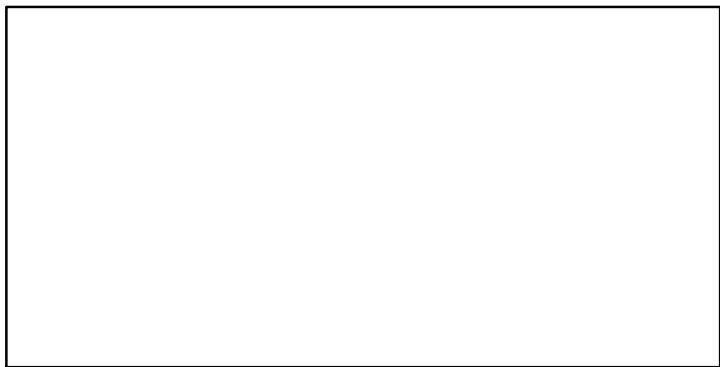
TN *



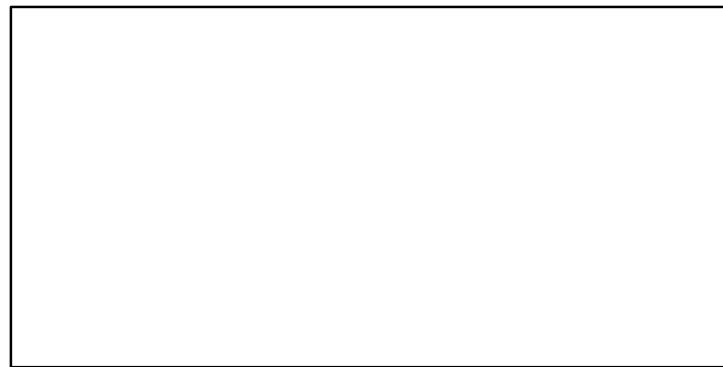
F*



ER*



Recruits*

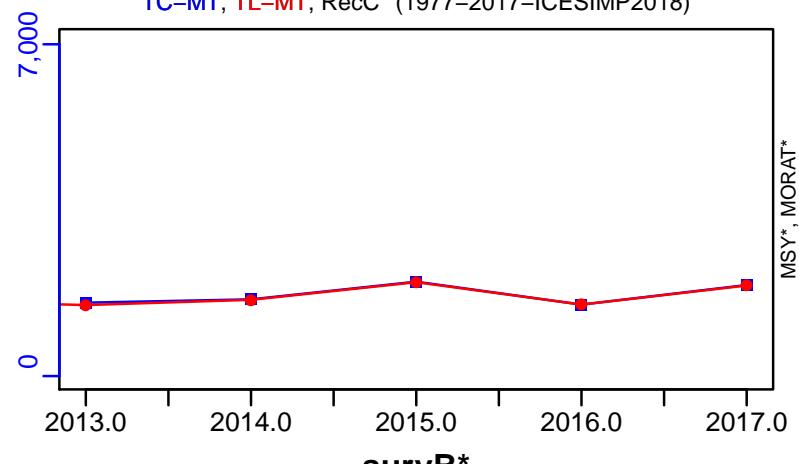


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European pollack ICES 3a–4 [EPOLLIV–IIIa]

TC–MT, TL–MT, RecC* (1977–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

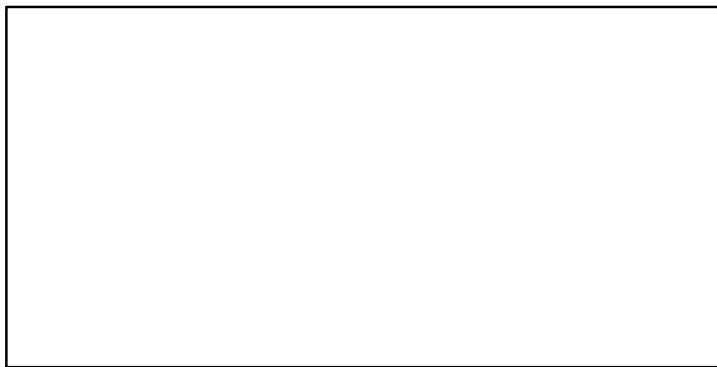
MSY*, MORAT*



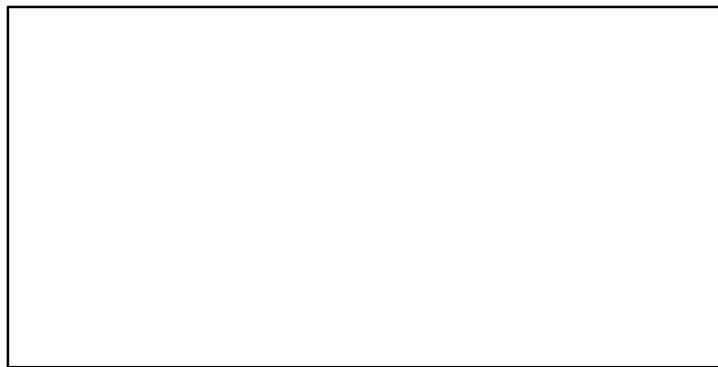
CPUE*



EFFORT*



CdivMSY*



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

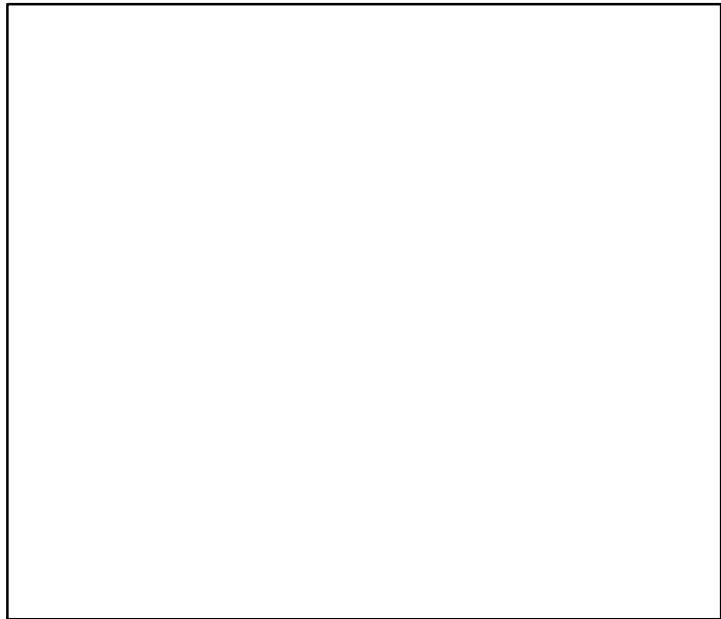
European pollack ICES 8-9a [EPOLLVIII-IXa]

Metadata	
Scientific Name	Pollachius pollachius
Current Assess ID	WGBIE-EPOLLVIII-IXa-1985-2016-ICESIMP2018
Area	ICES 8-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2015, 2016, 2016

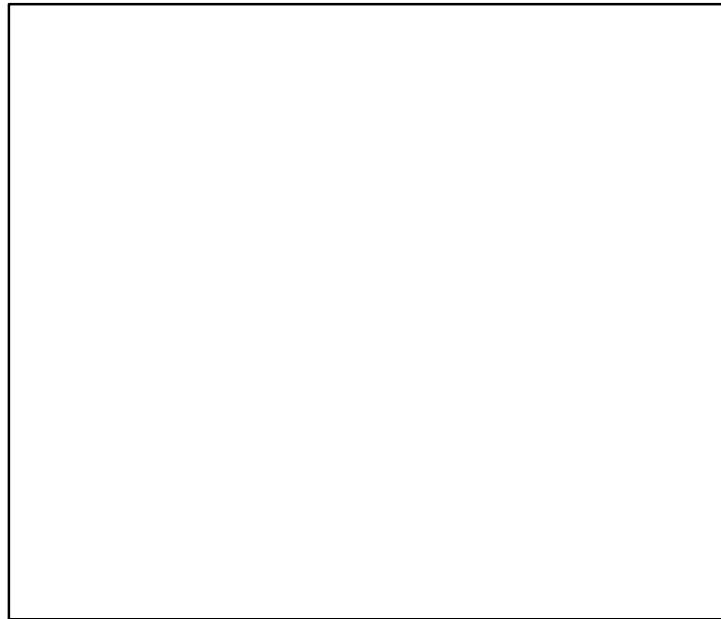
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1610		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



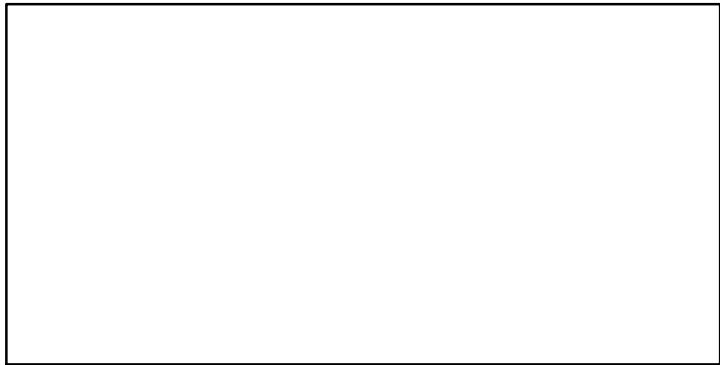
Production*



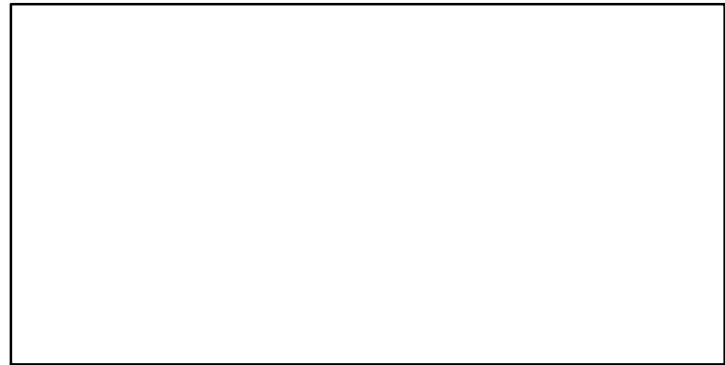
◆ Start Year ♦ End Year * No Data

European pollack ICES 8–9a [EPOLLVIII–IXa]

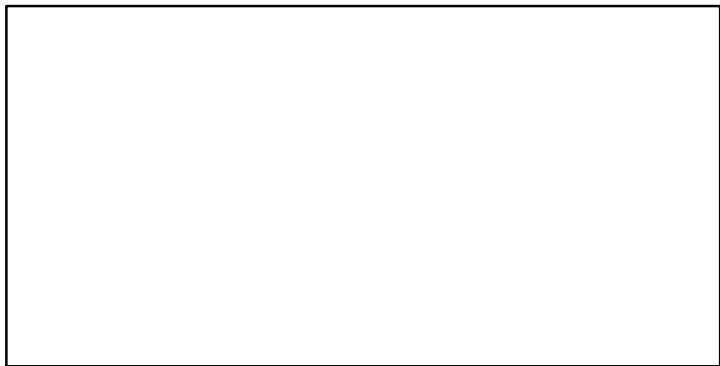
TB*



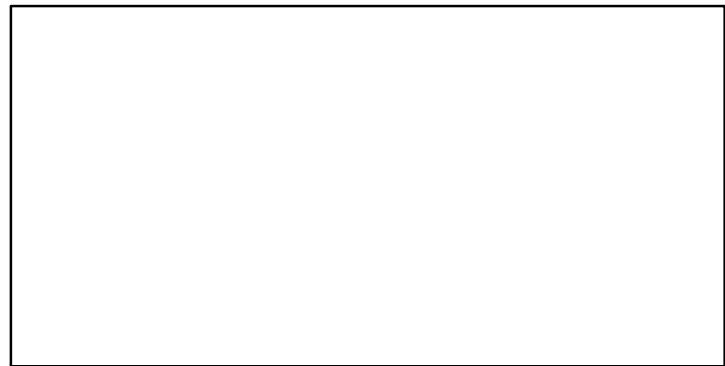
SSB*



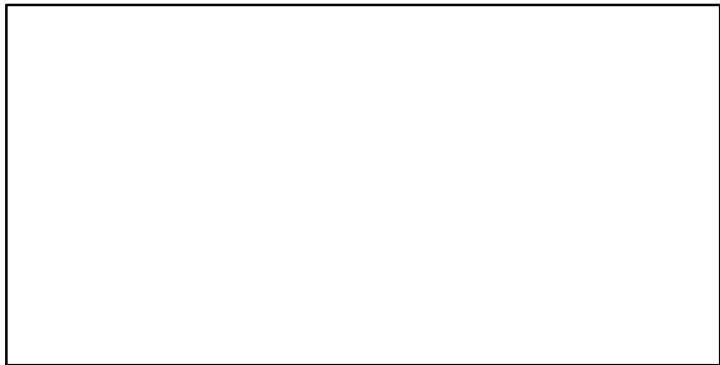
TN *



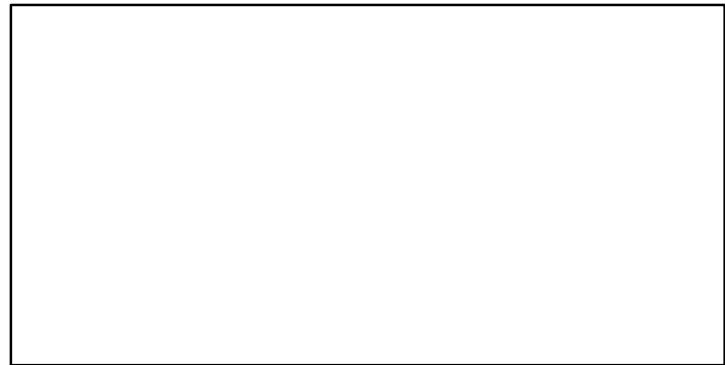
F*



ER*



Recruits*

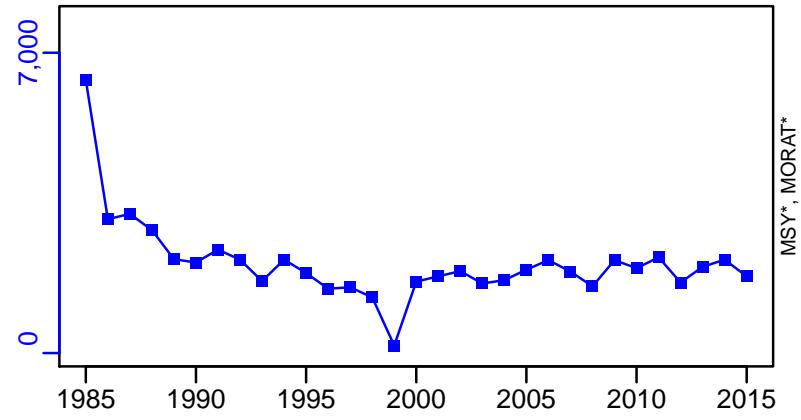


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

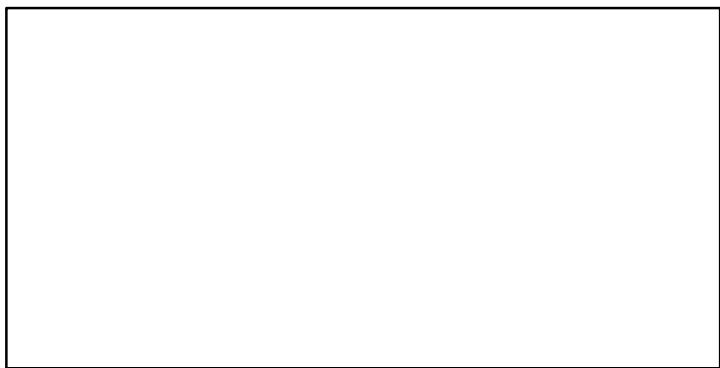
European pollack ICES 8–9a [EPOLLVIII–IXa]

TL–MT, TC*, RecC* (1985–2016–ICESIMP2016)

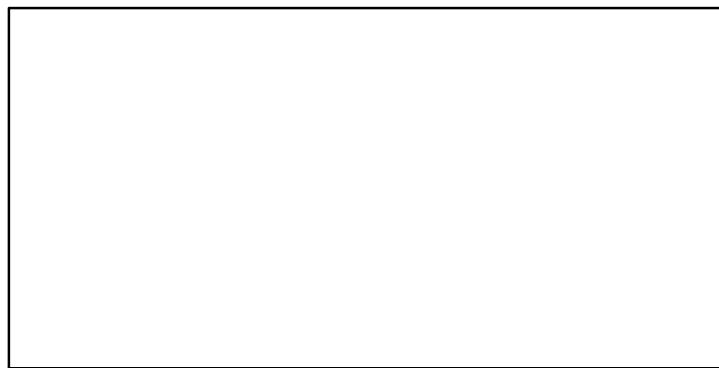
TAC*, Cpair*, Cadv*



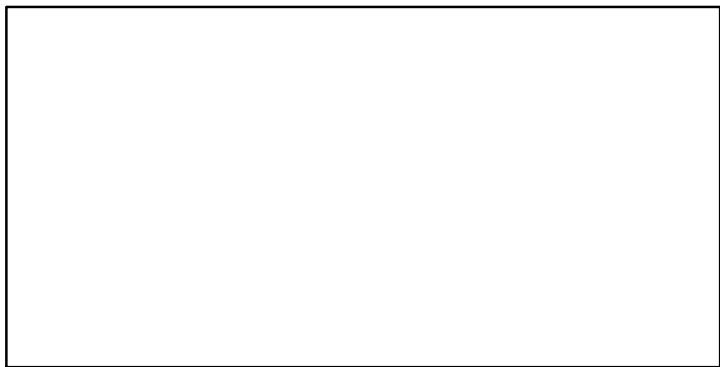
survB*



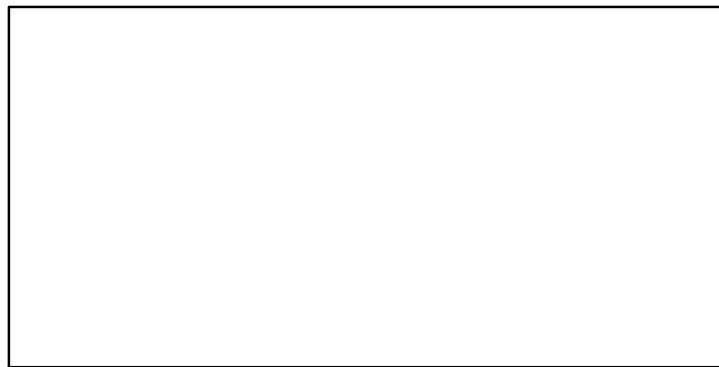
CPUE*



EFFORT*



CdivMSY*



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

Fourspotted megrim ICES 8c-9a [FMEG8c9a]

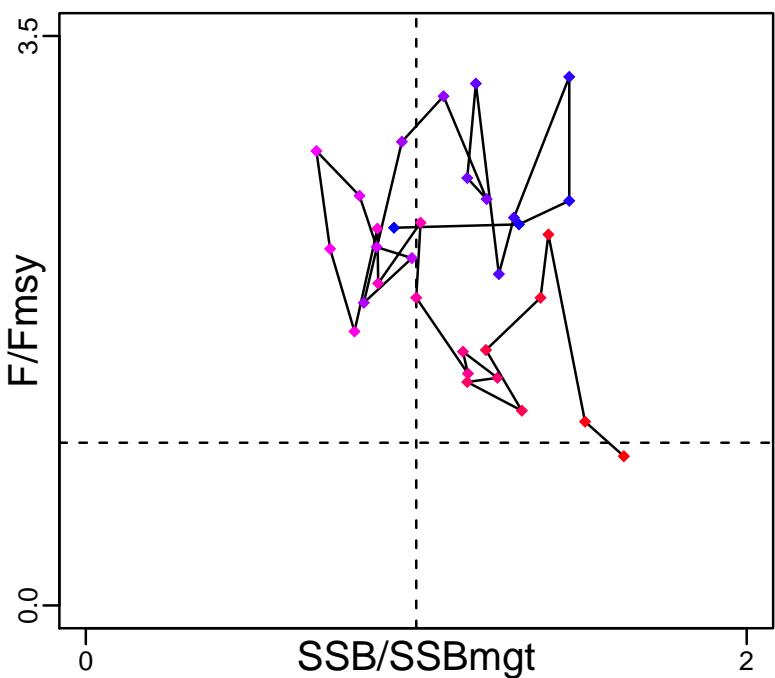
Metadata	
Scientific Name	Lepidorhombus boscii
Current Assess ID	WGBIE-FMEG8c9a-1986-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018, 2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	14,952
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.193
ERmsy	ERmsy-est-ratio	2018	0.335
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	4600
Fmgt	Fmgt-1/yr	2018	0.193
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2013	2138
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	3300
Flim	Flim-1/yr	2018	0.57
ERlim	-	-	-

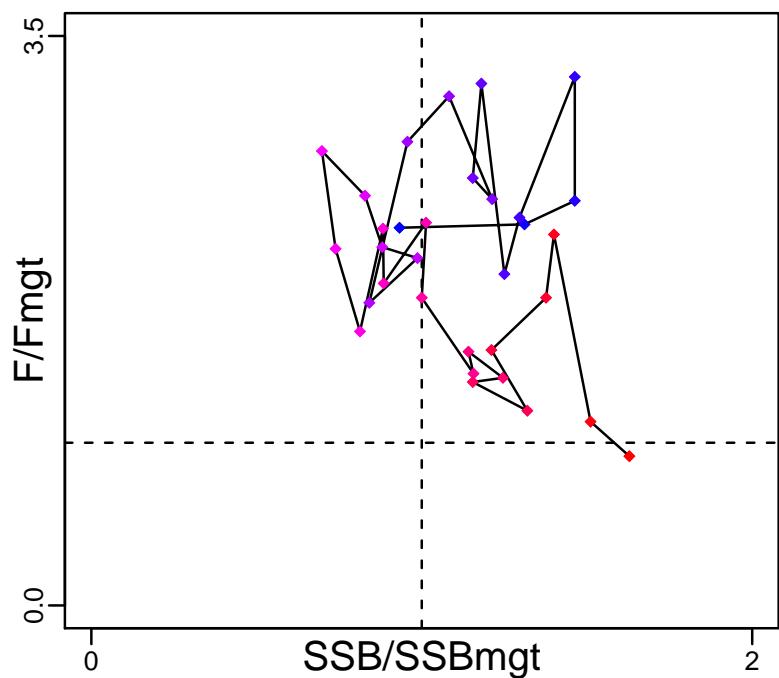
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	8490	Both	-	
SSB	SSB-MT	2018	7490	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	53,600,000	-	0	
F	F-1/yr	2018	0.177	-	2 to 4	
ER	ER-calc-ratio	2018	0.138	-	-	
TC	TC-MT	2018	1170			
TL	TL-MT	2018	926			
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	0.557			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.917			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.411			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.628			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.917			
ER/ERmgt	-	-	-			

Fourspotted megrim ICES 8c–9a [FMEG8c9a]

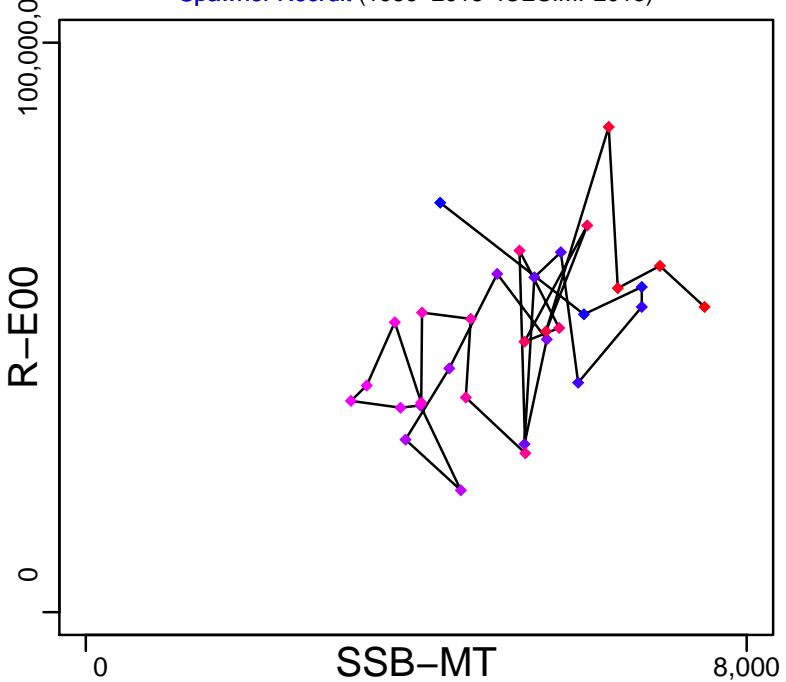
Kobe MSYpref (1986–2018–ICESIMP2018)



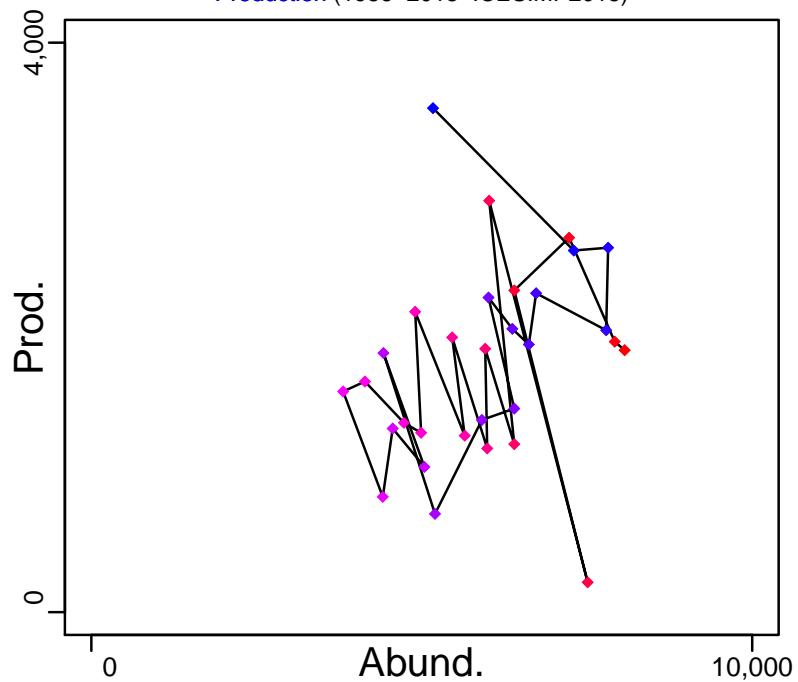
Kobe MGTpref (1986–2018–ICESIMP2018)



Spawner Recruit (1986–2018–ICESIMP2018)



Production (1986–2018–ICESIMP2018)

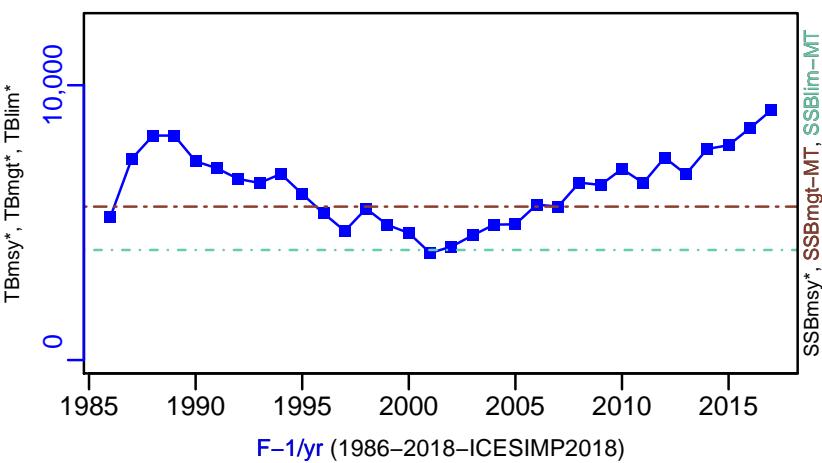
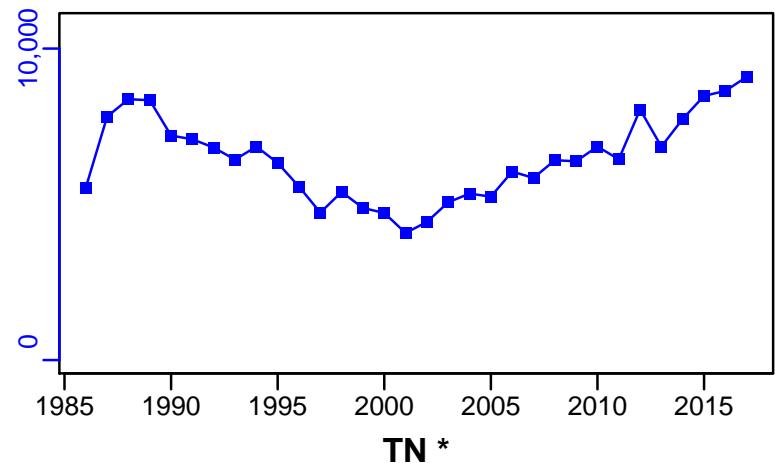


◆ Start Year ◆ End Year * No Data

Fourspotted megrim ICES 8c–9a [FMEG8c9a]

TB-MT (1986–2018–ICESIMP2018)

SSB-MT (1986–2018–ICESIMP2018)

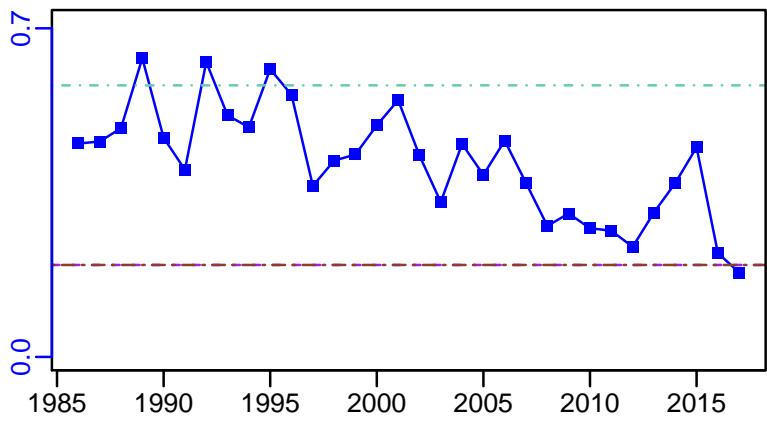
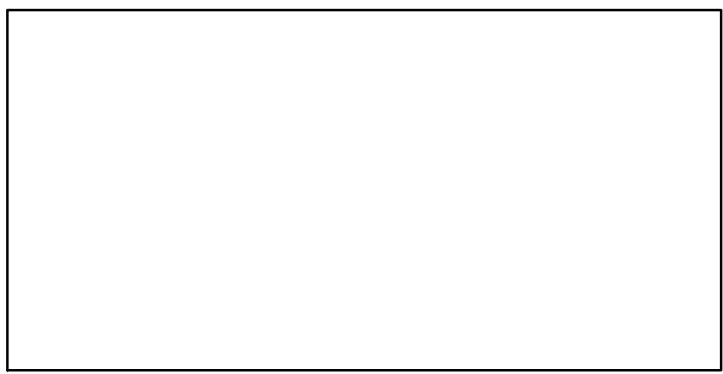


TN *

F-1/yr (1986–2018–ICESIMP2018)

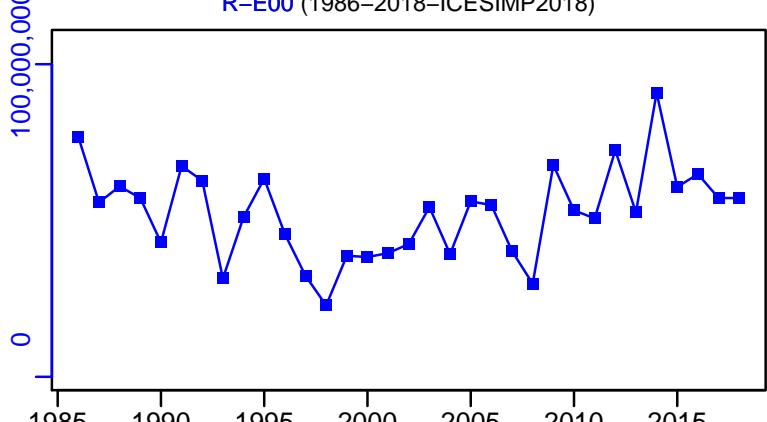
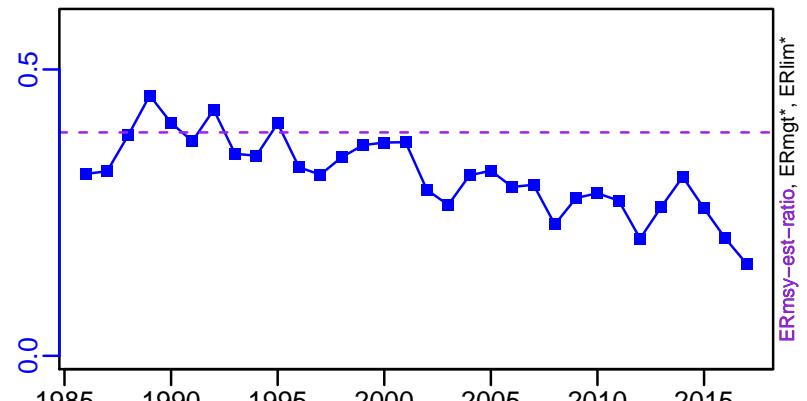
SSBmgt*, SSBlim-MT, SSBlim-MT

Fmgt-1/yr, Fmgt, Flim-1/yr, Flim-1/yr



ER-calc-ratio (1986–2018–ICESIMP2018)

R-E00 (1986–2018–ICESIMP2018)



ERmgt-est-ratio, ERlim*

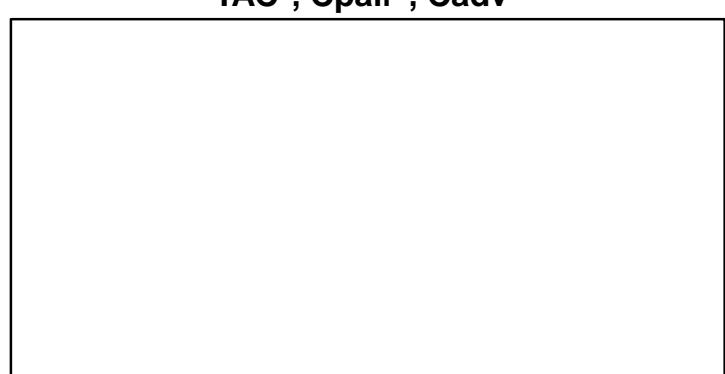
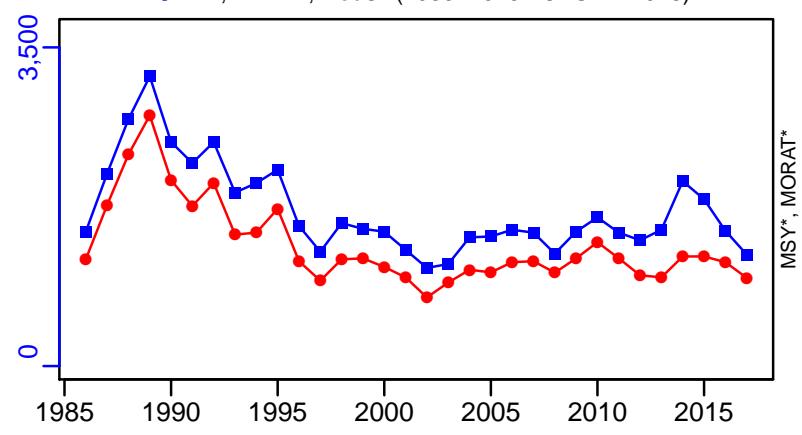
REC-EST*

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

Fourspotted megrim ICES 8c–9a [FMEG8c9a]

TC–MT, TL–MT, RecC* (1986–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



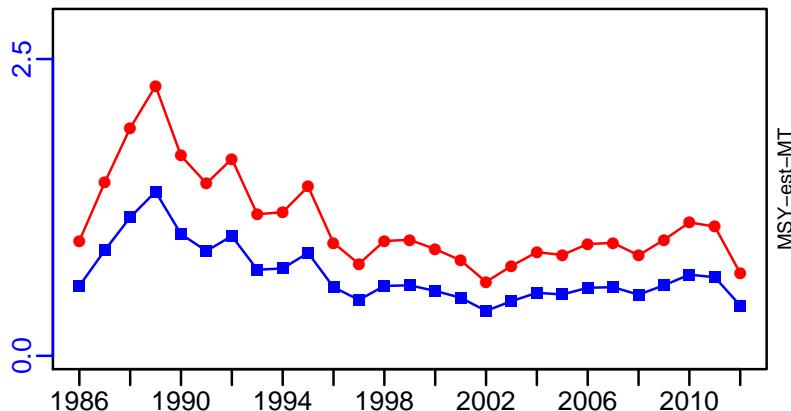
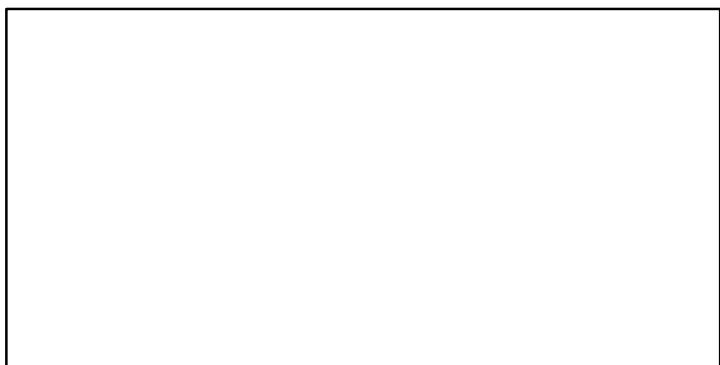
survB*

CPUE*



EFFORT*

TL–MT/MSY–est–MT, CdivMEANC–ratio, (1986–2013–ICESIMP2016)



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

Greater forkbeard Northeast Atlantic [GFORKNEATL]

Metadata	
Scientific Name	Phycis blennoides
Current Assess ID	WGDEEP-GFORKNEATL-2005-2017-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	2020		
TL	TL-MT	2017	1500		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Greater forkbeard Northeast Atlantic [GFORKNEATL]

TB*



SSB*



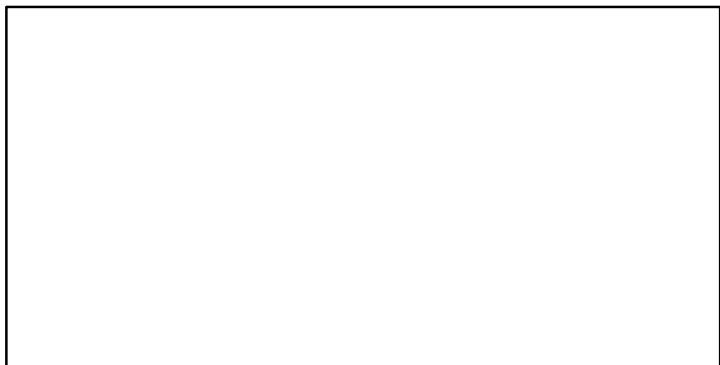
TN *



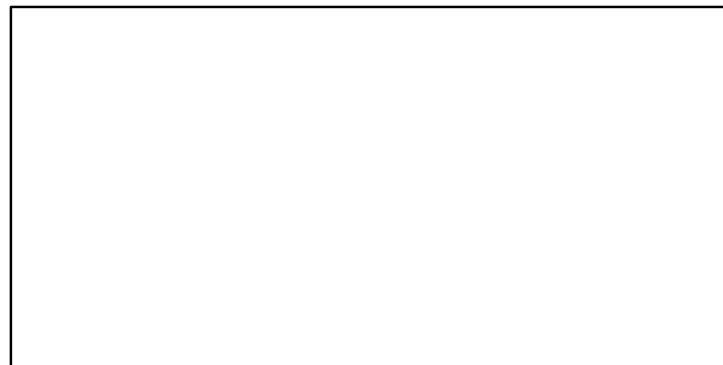
F*



ER*



Recruits*

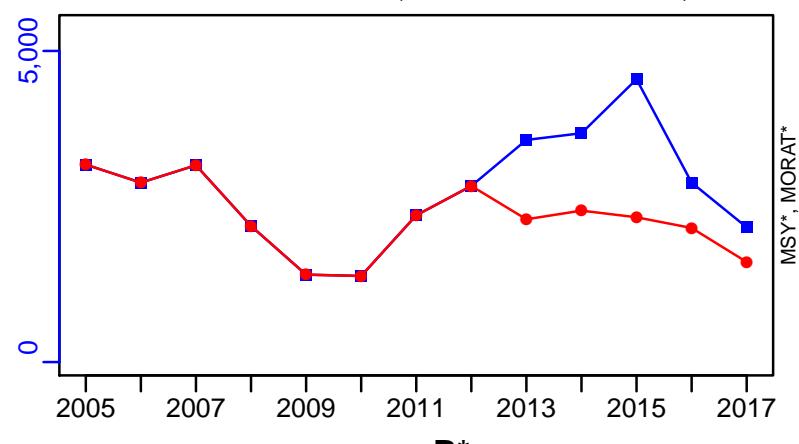


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Greater forkbeard Northeast Atlantic [GFORKNEATL]

TC-MT, TL-MT, RecC* (2005–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



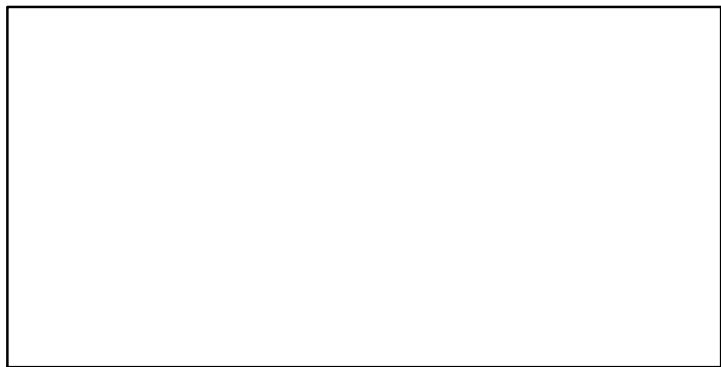
survB*



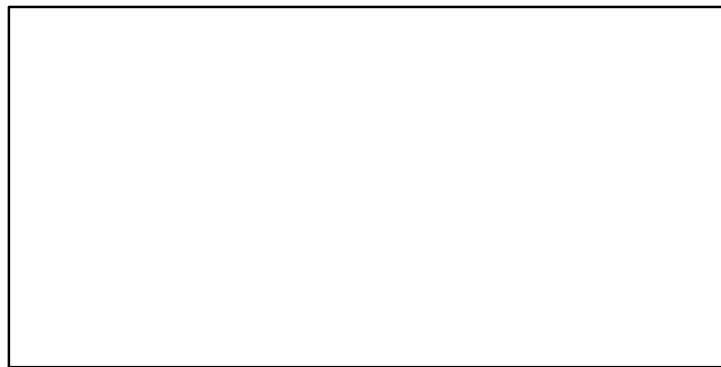
CPUE*



EFFORT*



CdivMSY*



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

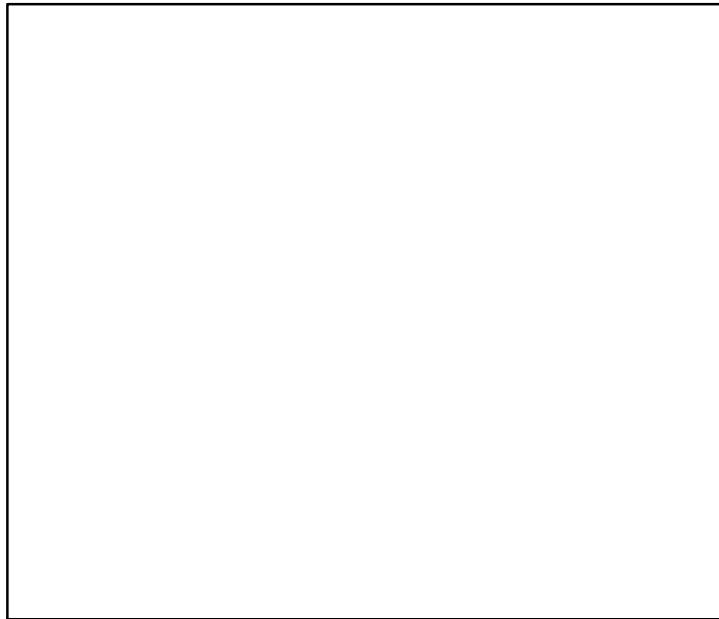
Grey gurnard ICES 3a-4-7d [GGURNIIIA-IV-VIId]

Metadata	
Scientific Name	Eutrigla gurnardus
Current Assess ID	WGNSSK-GGURNIIIA-IV-VIId-1983-2017-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

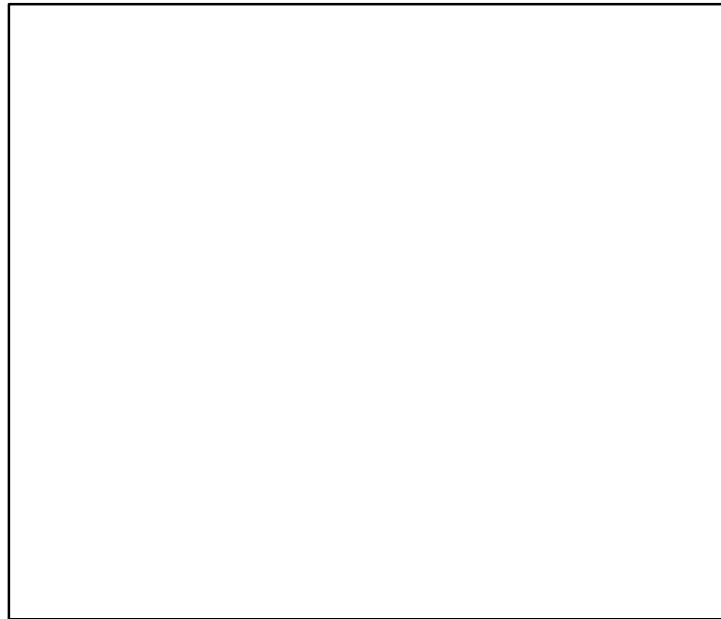
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	17,100		
TL	TL-MT	2017	3450		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

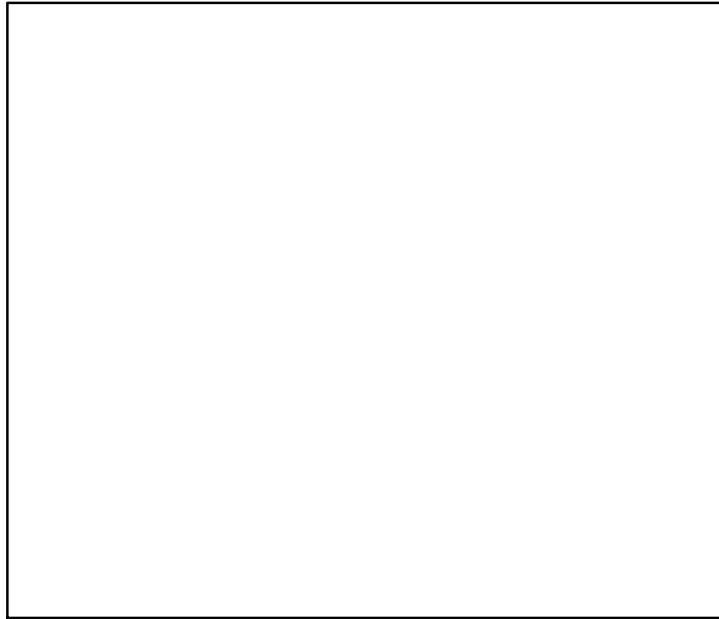
Kobe MSY*



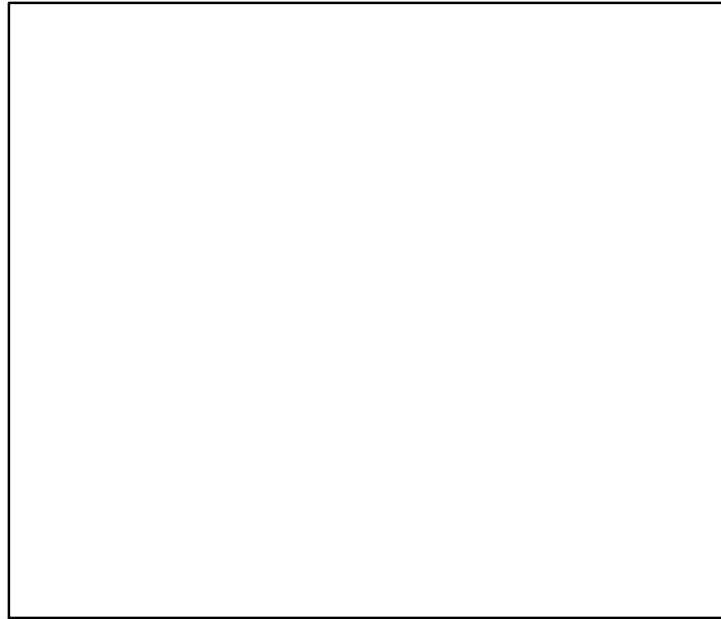
Kobe MGT*



Spawner Recruit*

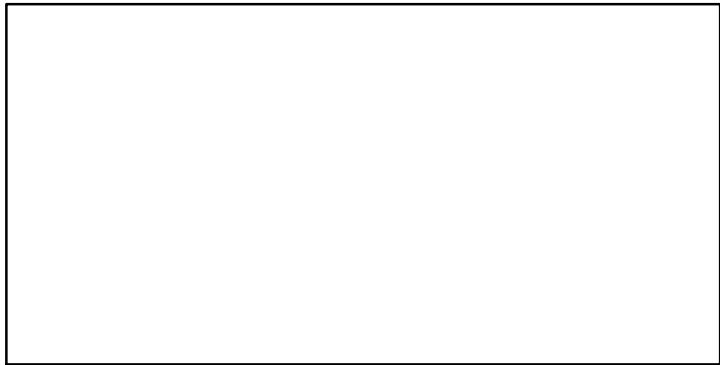


Production*

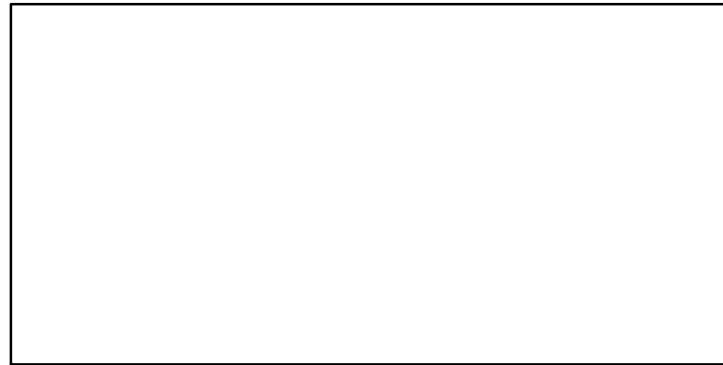


◆ Start Year ♦ End Year * No Data

TB*



SSB*



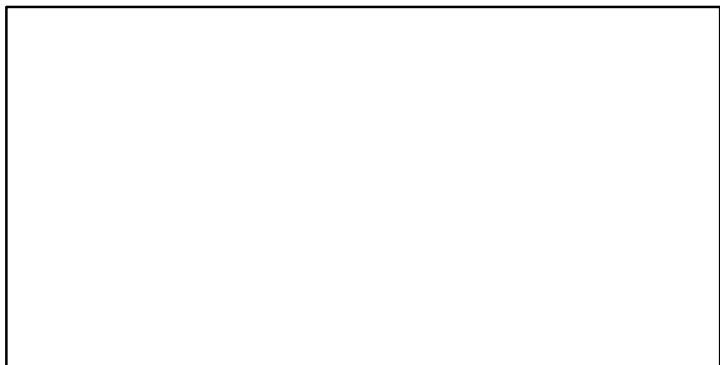
TN *



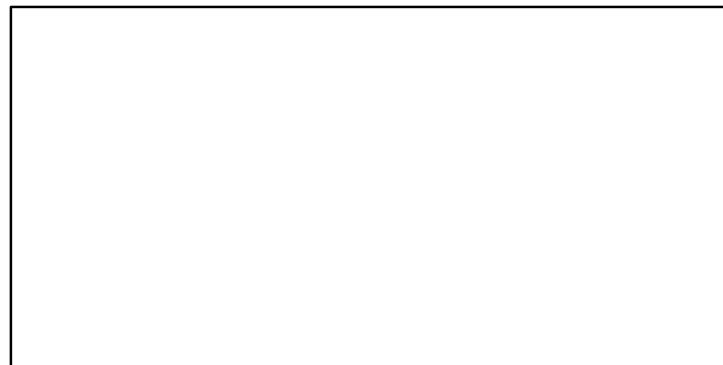
F*



ER*



Recruits*

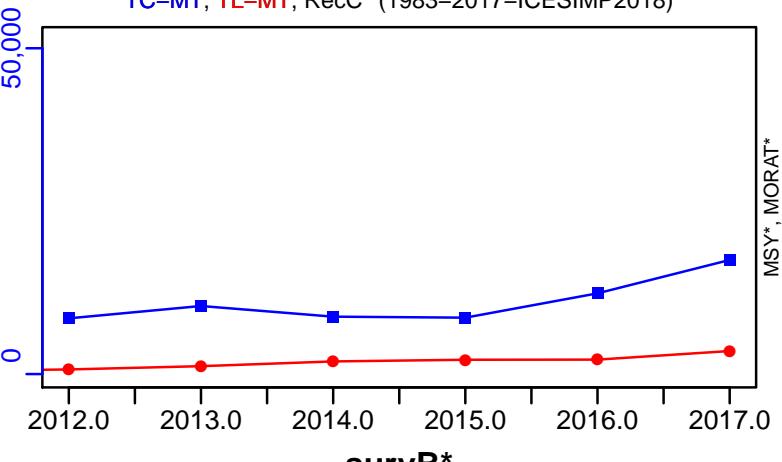


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Grey gurnard ICES 3a–4–7d [GGURNIIla–IV–VIIId]

TC–MT, TL–MT, RecC* (1983–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

Greenland halibut ICES 5-6-12-14 [GHALV-VI-XII-XIV]

Metadata	
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	NWWG-GHALV-VI-XII-XIV-1960-2018-ICESIMP2018
Area	ICES 5-6-12-14
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2012, 2013, 2014, 2015, 2016, 2017, 2018

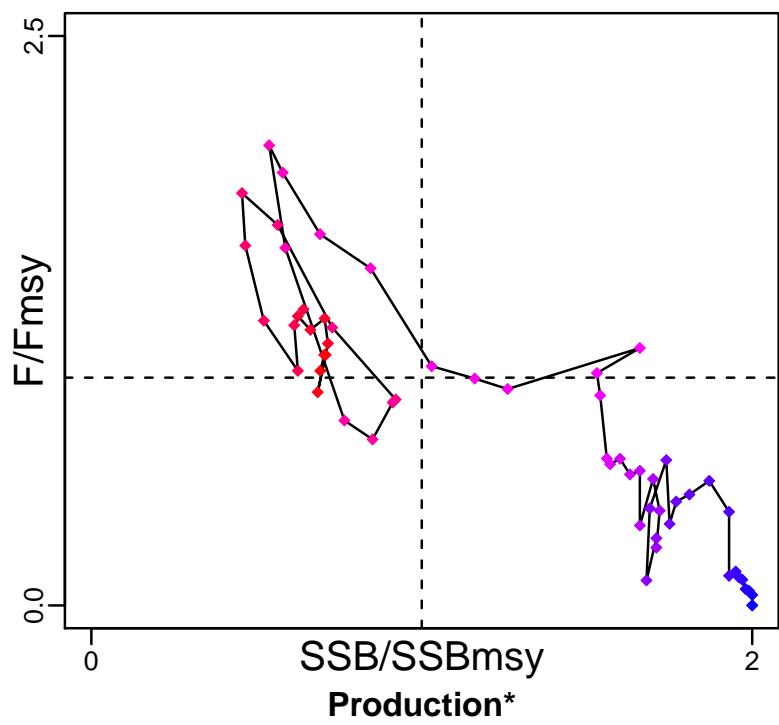
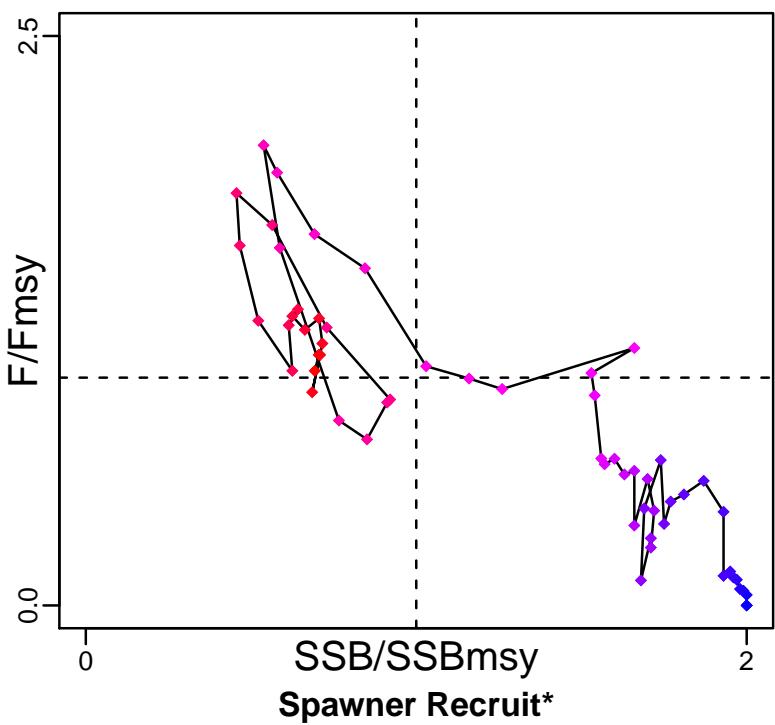
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2018	23,500			
TL	TL-MT	2017	25,400			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2018	0.713			
F/Fmsy	FdivFmsy-dimensionless	2018	1.03			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Greenland halibut ICES 5–6–12–14 [GHALV–VI–XII–XIV]

Kobe MSYpref (1960–2018–ICESIMP2018)

Kobe MGTpref (1960–2018–ICESIMP2018)



◆ Start Year	◆ End Year	*	No Data
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TB*



SSB*



TN *



F*



ER*



Recruits*

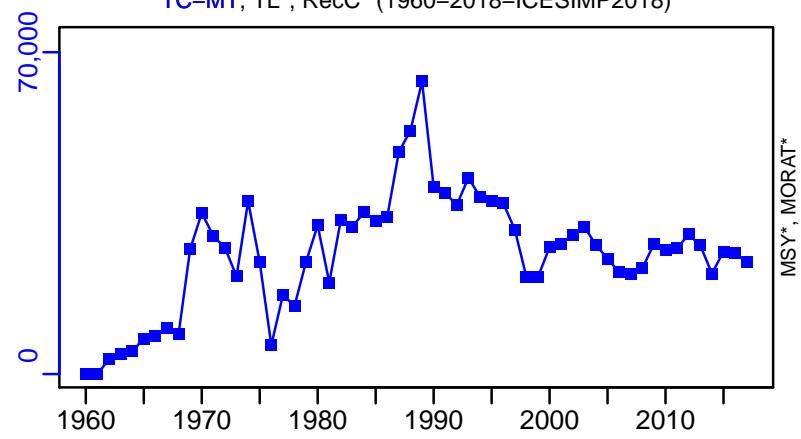


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

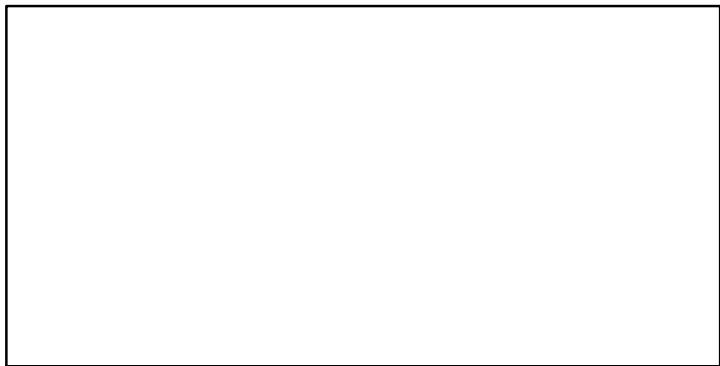
Greenland halibut ICES 5–6–12–14 [GHALV–VI–XII–XIV]

TC–MT, TL*, RecC* (1960–2018–ICESIMP2018)

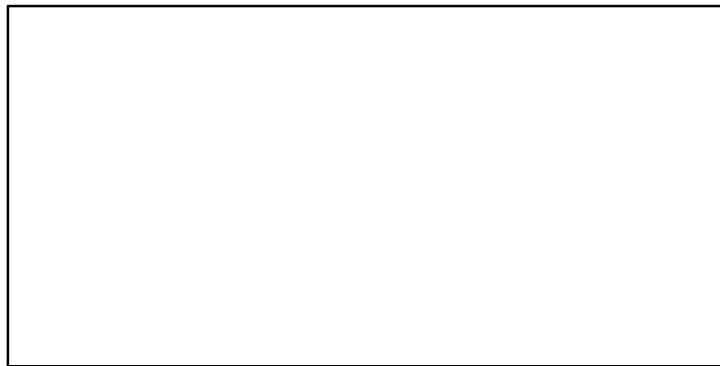
TAC*, Cpair*, Cadv*



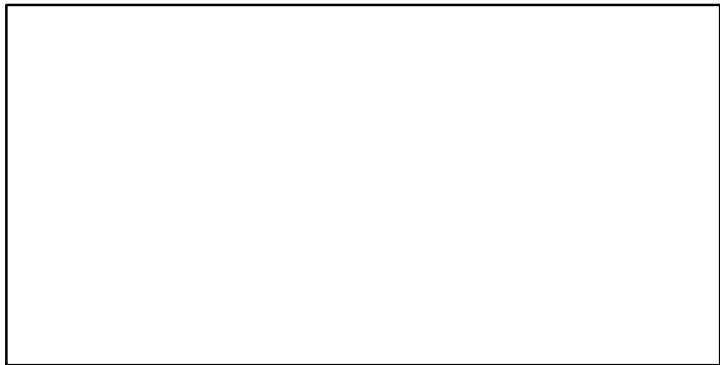
survB*



CPUE*



EFFORT*



CdivMSY*



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

Golden redfish ICES 5-6-12-14 [GOLDREDV-VI-XII-XIV]

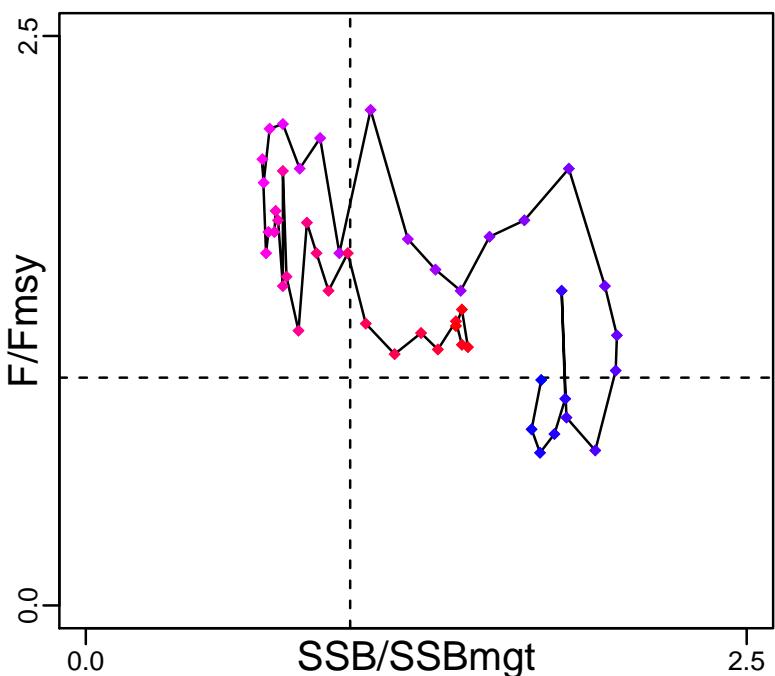
Metadata	
Scientific Name	Sebastes norvegicus
Current Assess ID	NWWG-GOLDREDV-VI-XII-XIV-1966-2018-ICESIMP2018
Area	ICES 5-6-12-14
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2014, 2017, 2018, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.097
ERmsy	ERmsy-est-ratio	2018	0.134
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	220,000
Fmgt	Fmgt-1/yr	2018	0.097
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	160,000
Flim	Flim-1/yr	2018	0.226
ERlim	-	-	-

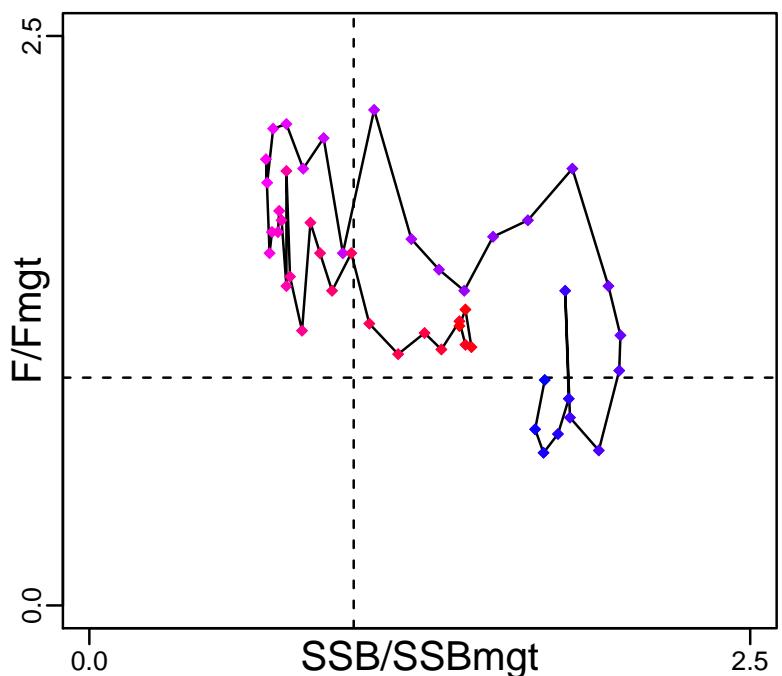
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	434,000	Both	-
SSB	SSB-MT	2018	296,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	4.5×10^7	-	5
F	F-1/yr	2018	0.119	-	9 to 19
ER	ER-calc-ratio	2018	0.122	-	-
TC	TC-MT	2018	56,000		
TL	TL-MT	2018	56,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.227		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.913		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.345		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.227		
ER/ERmgt	-	-	-		

Golden redfish ICES 5–6–12–14 [GOLDREDV–VI–XII–XIV]

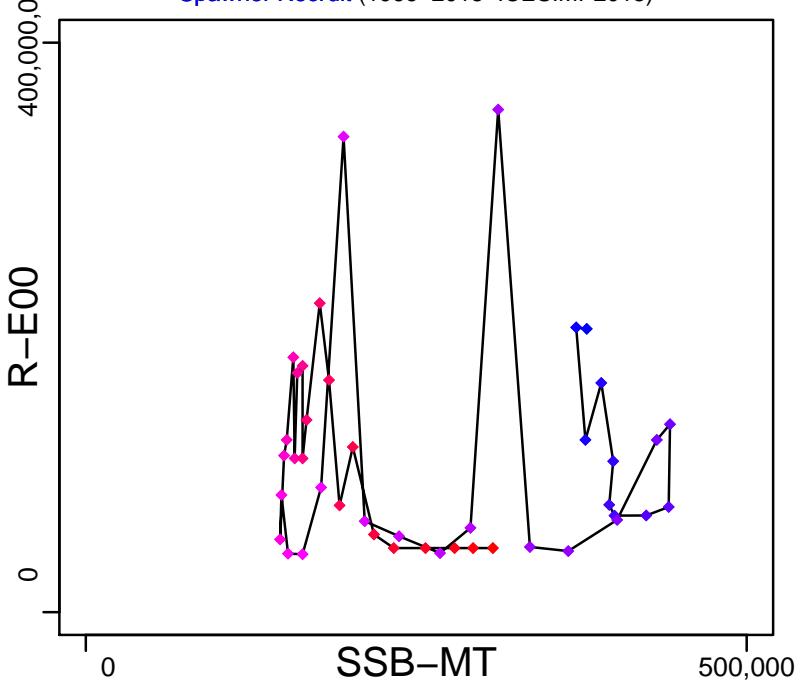
Kobe MSYpref (1966–2018–ICESIMP2018)



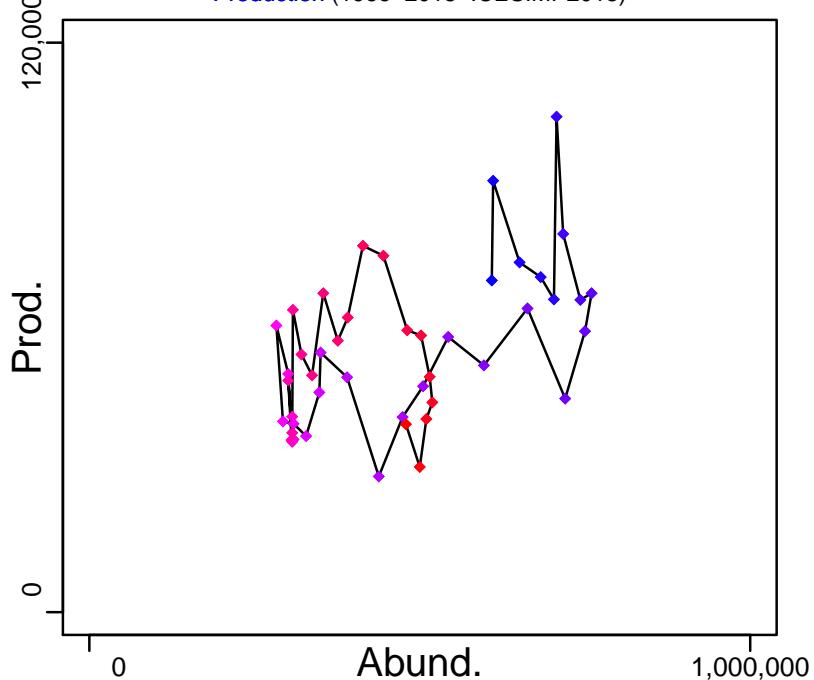
Kobe MGTpref (1966–2018–ICESIMP2018)



Spawner Recruit (1966–2018–ICESIMP2018)



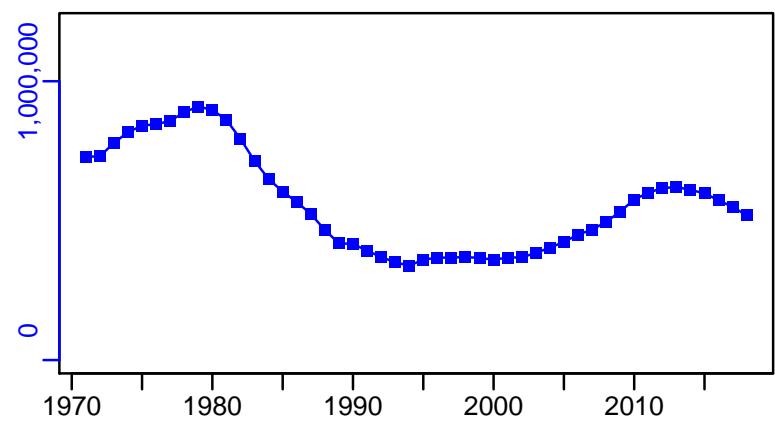
Production (1966–2018–ICESIMP2018)



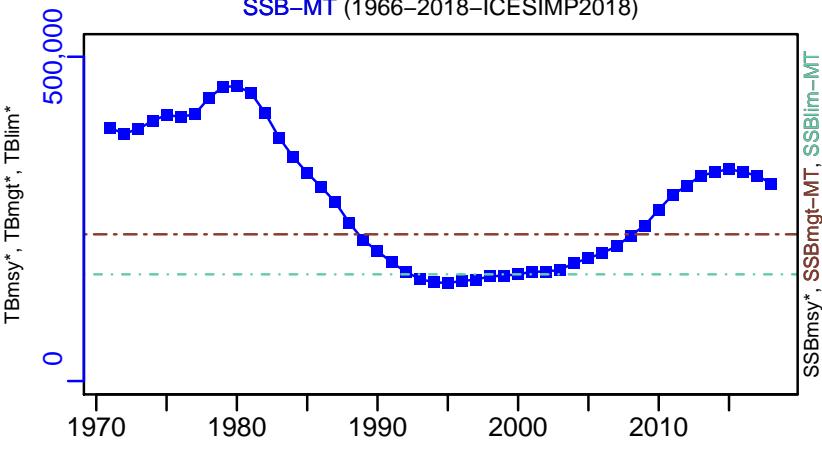
◆ Start Year ♦ End Year * No Data

Golden redfish ICES 5–6–12–14 [GOLDREDV–VI–XII–XIV]

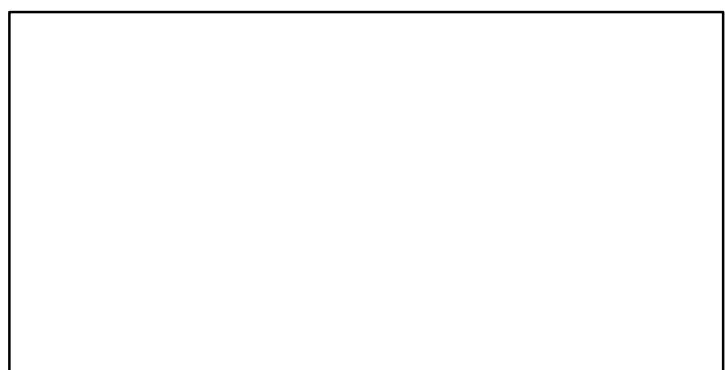
TB-MT (1966–2018–ICESIMP2018)



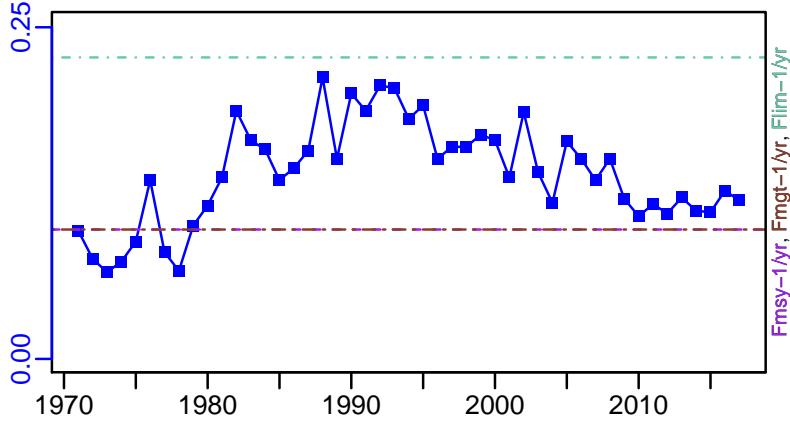
SSB-MT (1966–2018–ICESIMP2018)



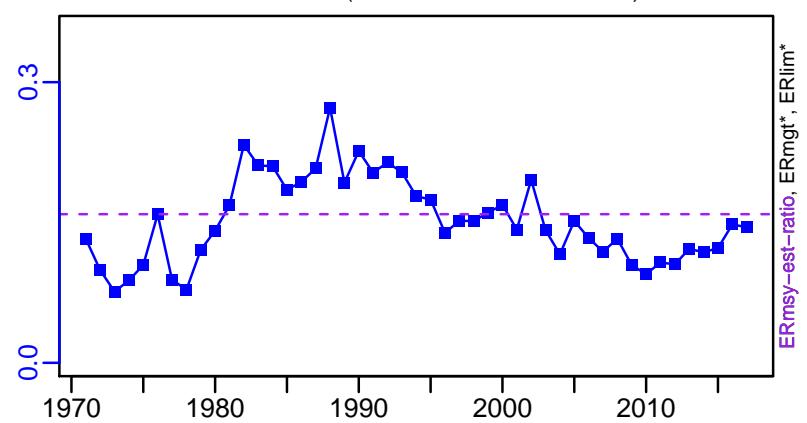
TN *



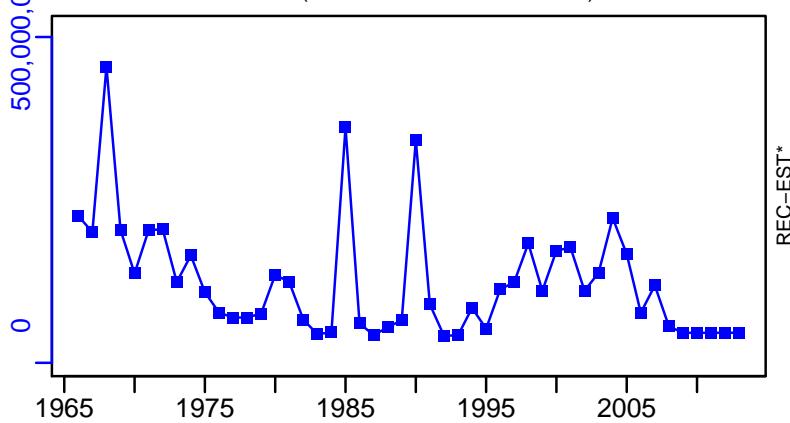
F-1/yr (1966–2018–ICESIMP2018)



ER-calc-ratio (1966–2018–ICESIMP2018)



R-E00 (1966–2018–ICESIMP2018)

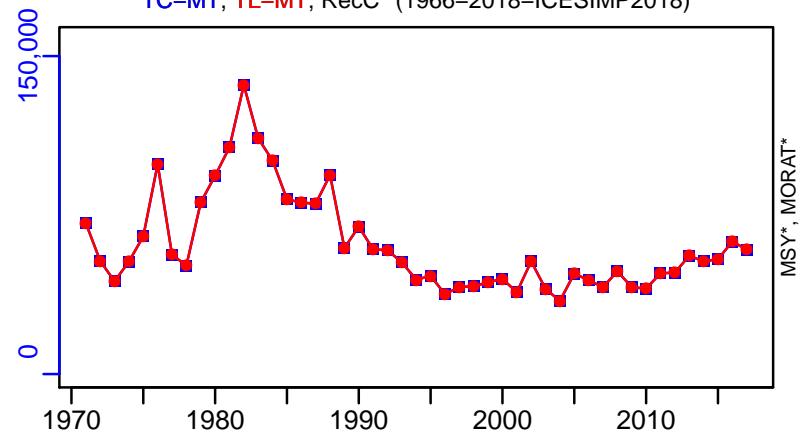


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

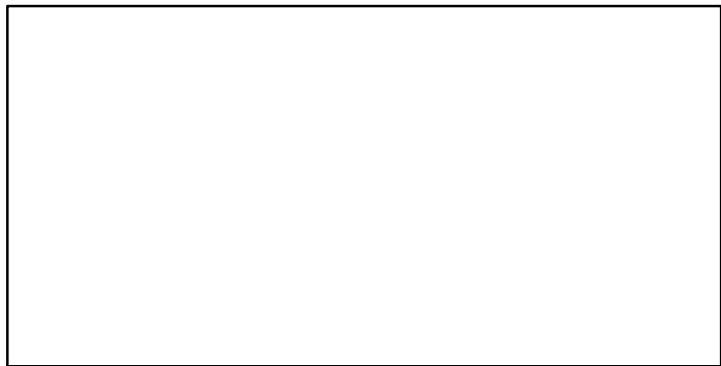
Golden redfish ICES 5–6–12–14 [GOLDREDV–VI–XII–XIV]

TC–MT, TL–MT, RecC* (1966–2018–ICESIMP2018)

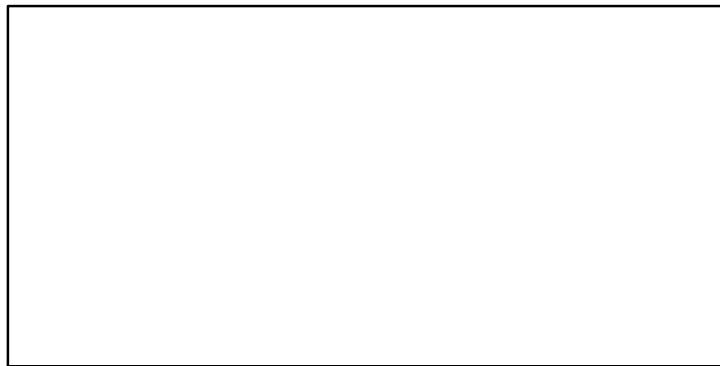
TAC*, Cpair*, Cadv*



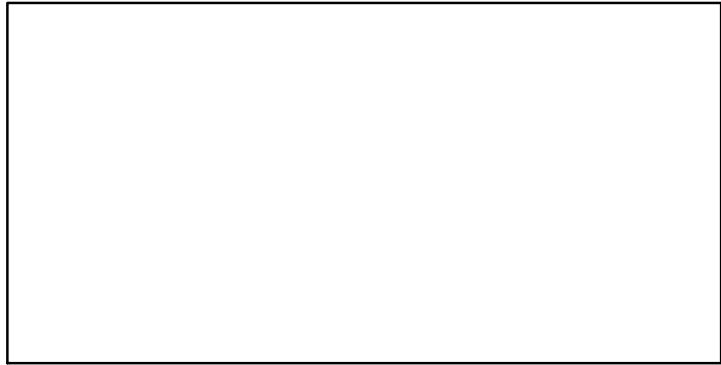
survB*



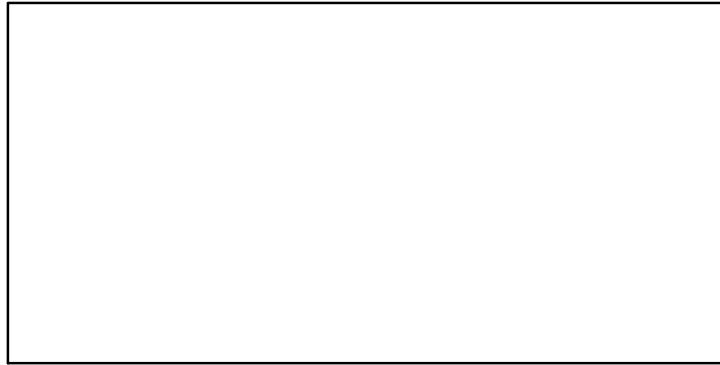
CPUE*



EFFORT*



CdivMSY*



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> ■ 1st listed time series ● 2nd listed time series | <ul style="list-style-type: none"> ▲ 3rd listed time series - - - MSY | <ul style="list-style-type: none"> — MORAT * No Data |
|--|---|--|

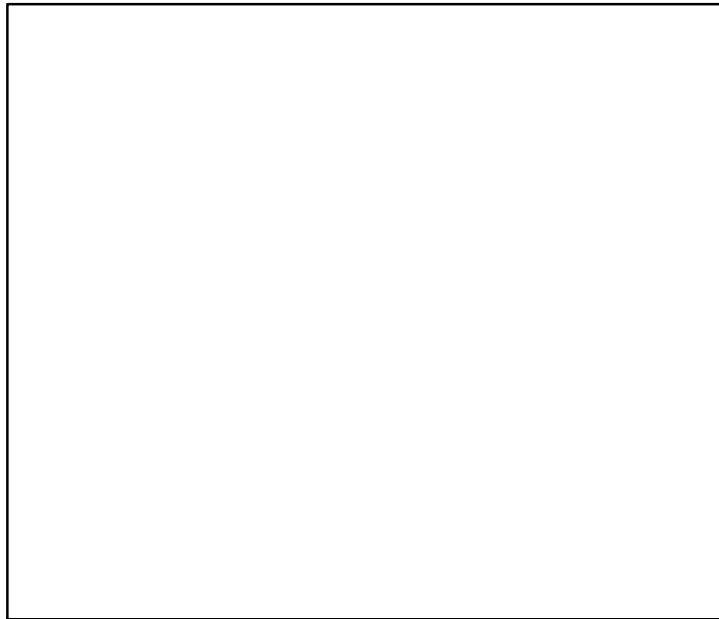
Greater silver smelt ICES 1-2-3a-4 [GSSMELTI-II-IIa-IV]

Metadata	
Scientific Name	Argentina silus
Current Assess ID	WGDEEP-GSSMELTI-II-IIa-IV-1988-2016-ICESIMP2018
Area	ICES 1-2-3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2014, 2016

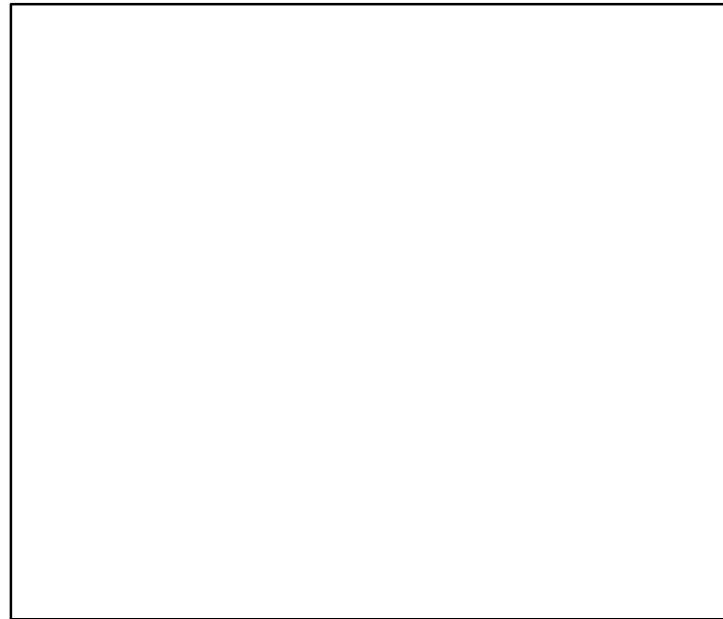
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	15,100		
TL	TL-MT	2016	18,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

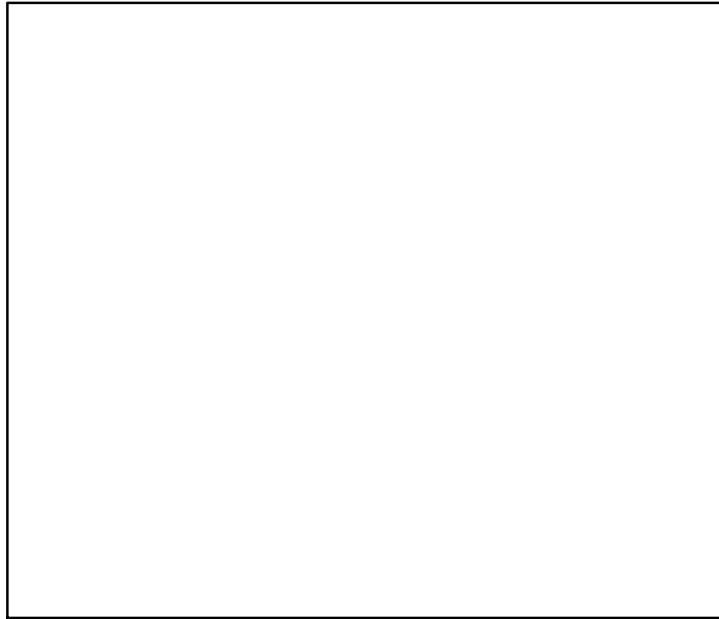
Kobe MSY*



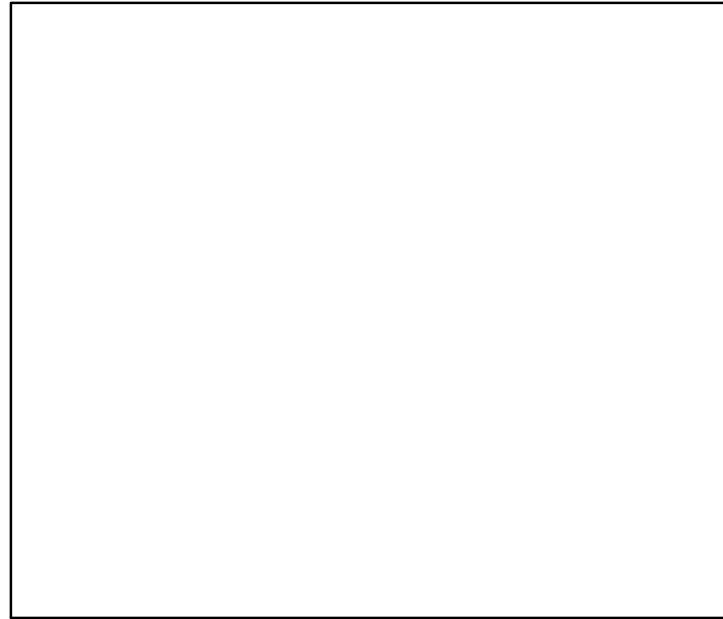
Kobe MGT*



Spawner Recruit*



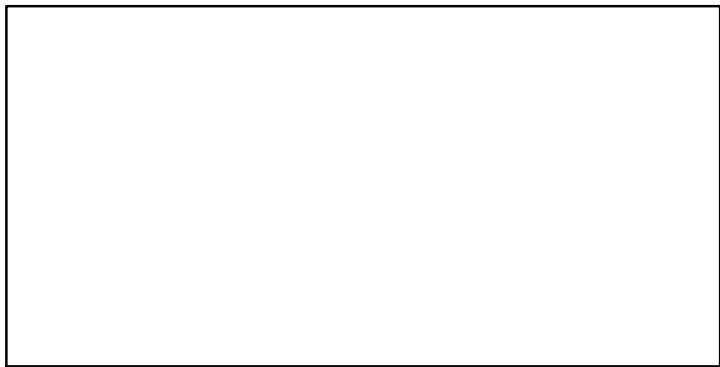
Production*



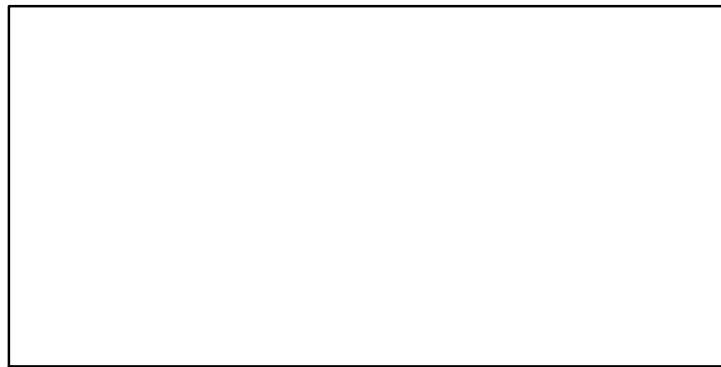
◆ Start Year ♦ End Year * No Data

Greater silver smelt ICES 1–2–3a–4 [GSSMELTI–II–IIIa–IV]

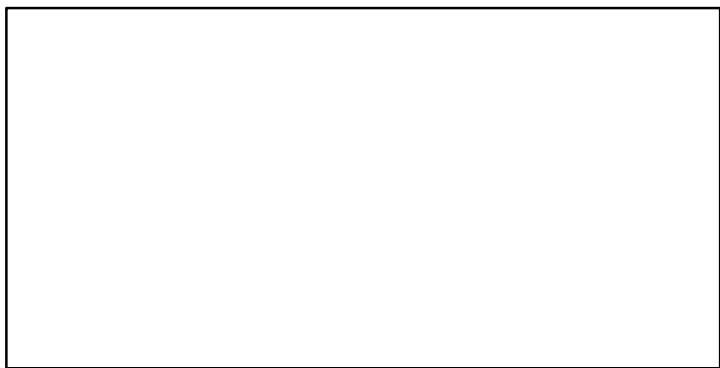
TB*



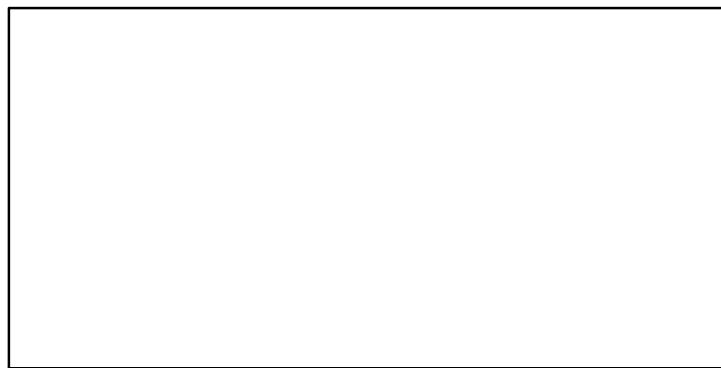
SSB*



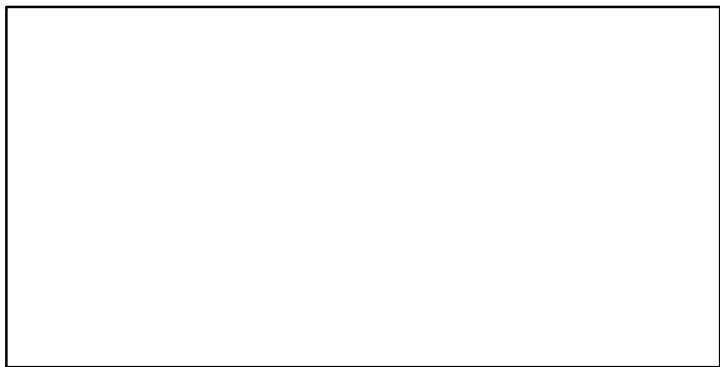
TN *



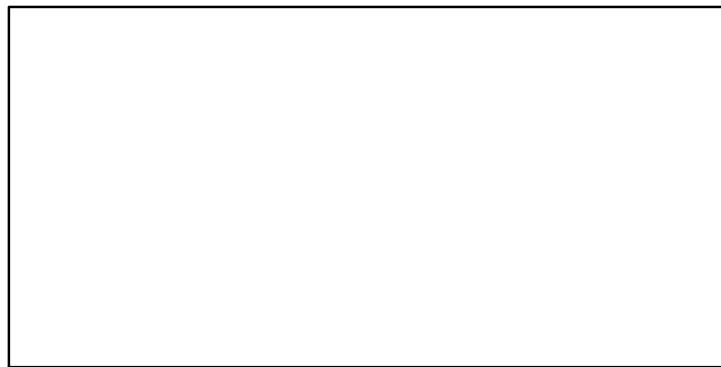
F*



ER*



Recruits*

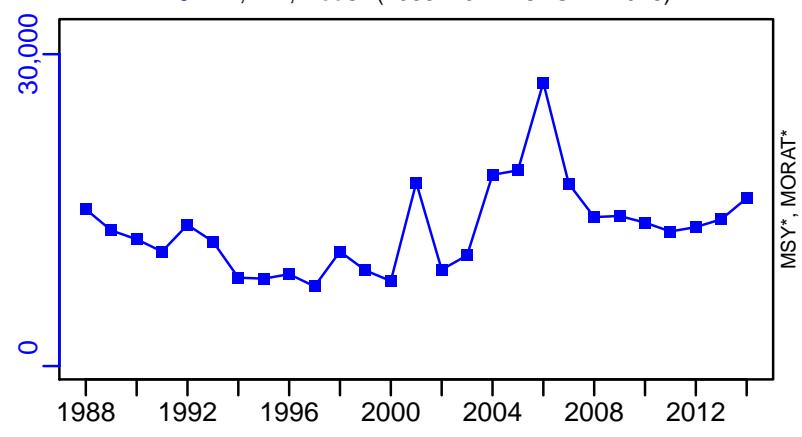


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Greater silver smelt ICES 1–2–3a–4 [GSSMELTI-II–IIIa–IV]

TC–MT, TL*, RecC* (1988–2014–ICESIMP2018)

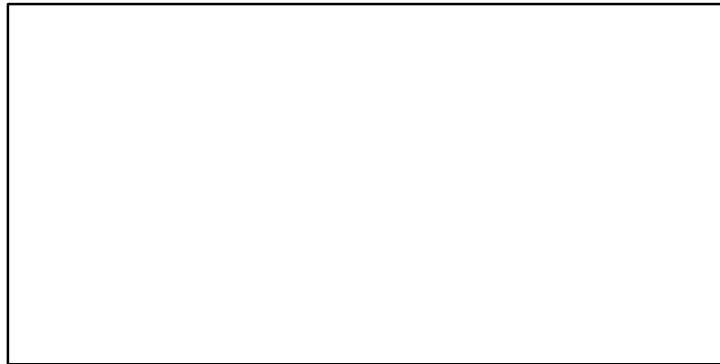
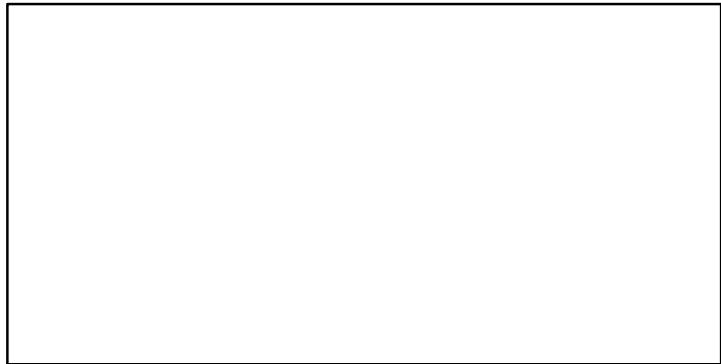
TAC*, Cpair*, Cadv*



survB*

MSY*, MORAT*

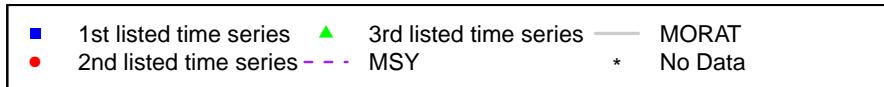
CPUE*



EFFORT*



CdivMSY*



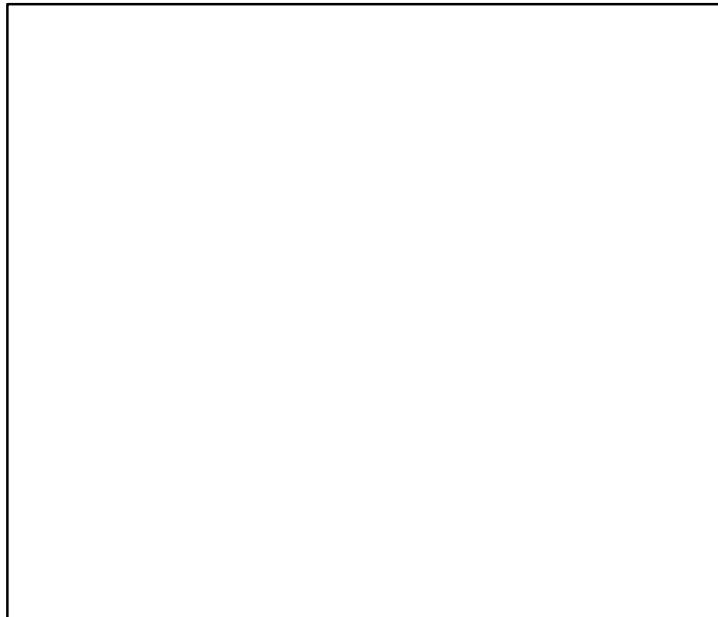
Greater silver smelt ICES 6b-7-8-9-10-12 [GSSMELTVIb-VII-VIII-IX-X-XII]

Metadata	
Scientific Name	Argentina silus
Current Assess ID	WGDEEP-GSSMELTVIb-VII-VIII-IX-X-XII-1966-2016-ICESIMP2018
Area	ICES 6b-7-8-9-10-12
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2014, 2016

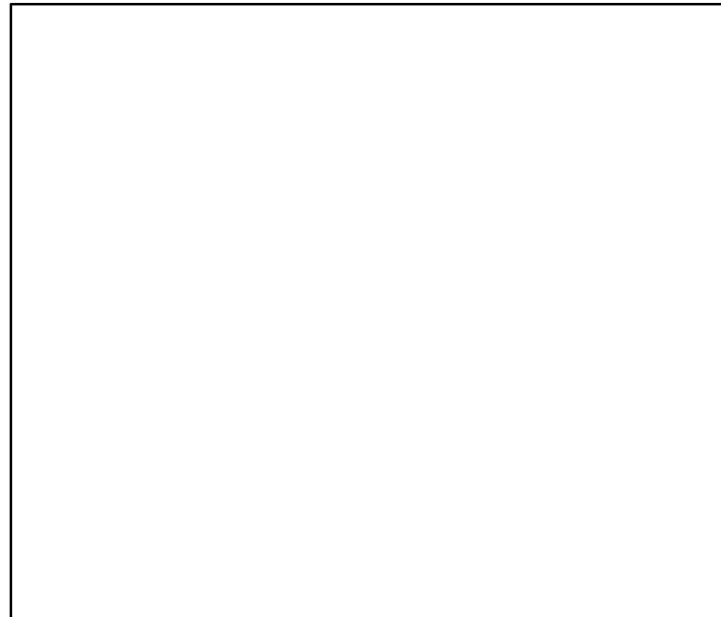
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Greater silver smelt ICES 6b–7–8–9–10–12 [GSSMELTVIb–VII–VIII–IX–X–XII]

TB*



SSB*



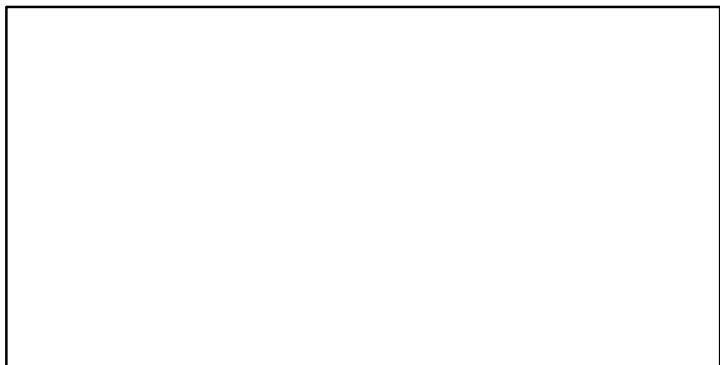
TN *



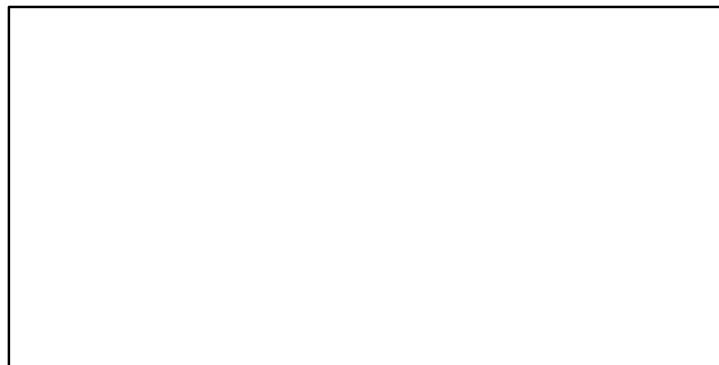
F*



ER*



Recruits*

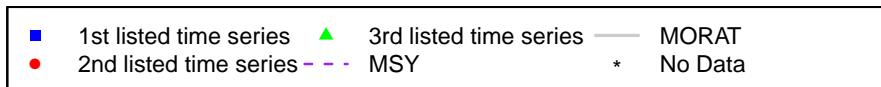
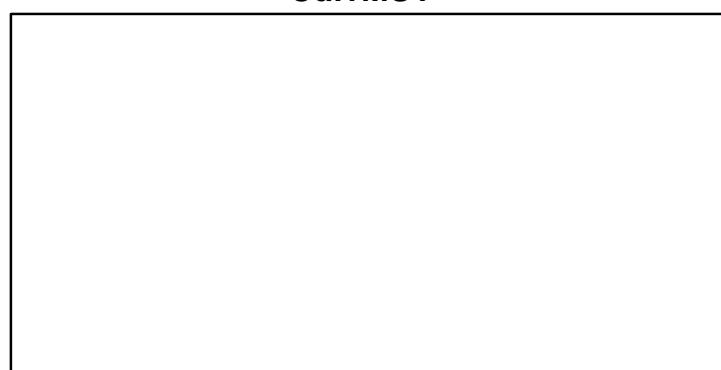
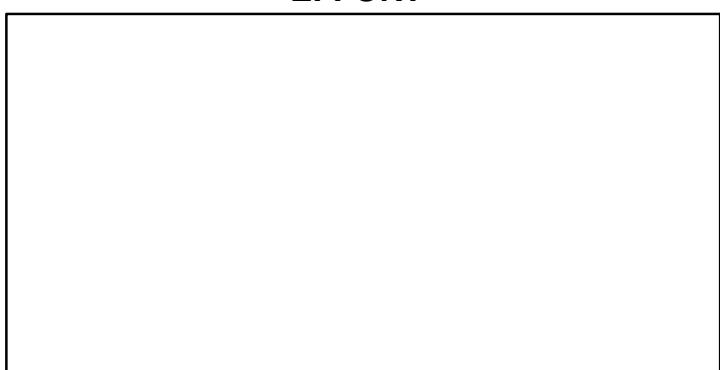
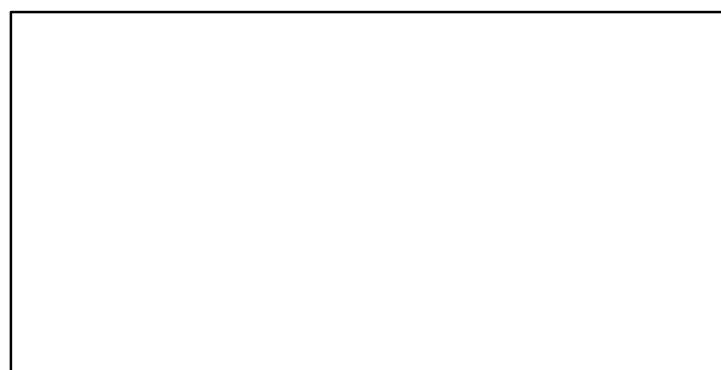
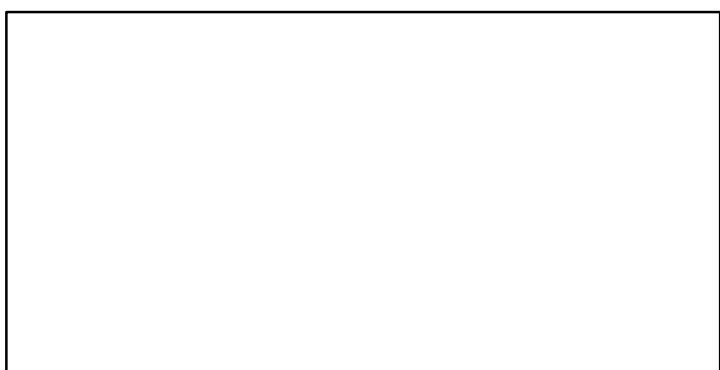
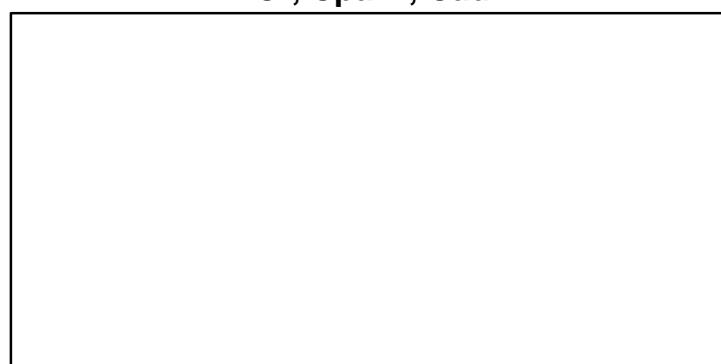
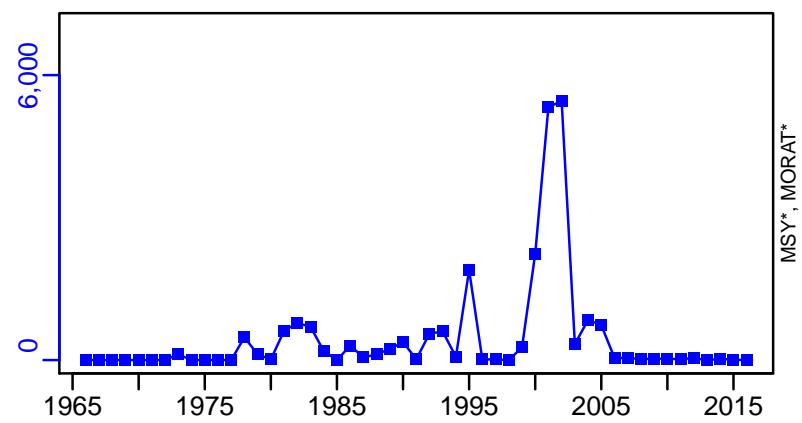


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Greater silver smelt ICES 6b–7–8–9–10–12 [GSSMELTVIb–VII–VIII–IX–X–XII]

TL–MT, TC*, RecC* (1966–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



Haddock Irish Sea [HADIS]

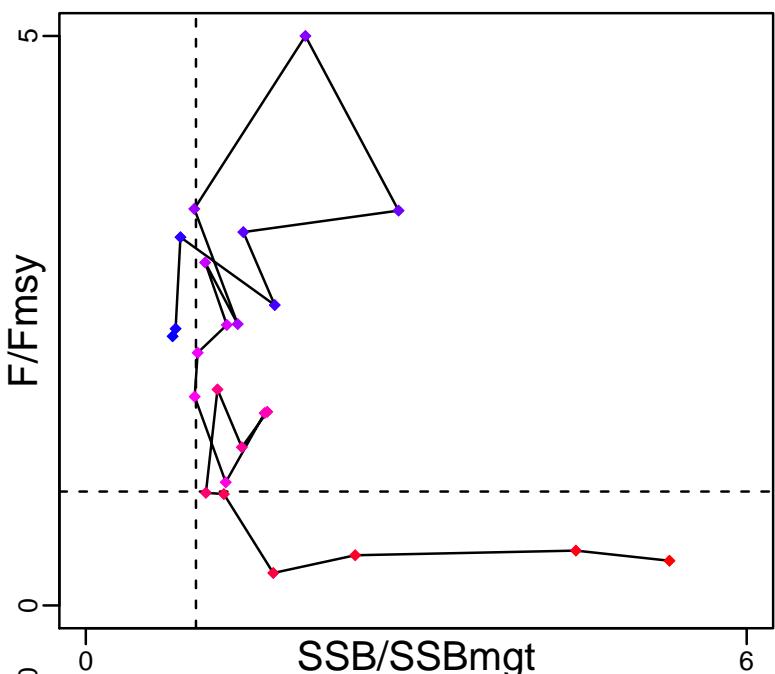
Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGCSE-HADIS-1993-2017-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2015, 2016, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.27
ERmsy	ERmsy-est-ratio	2017	0.129
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	2944
Fmgt	Fmgt-1/yr	2017	0.34
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	2300
Flim	Flim-1/yr	2017	0.47
ERlim	-	-	-

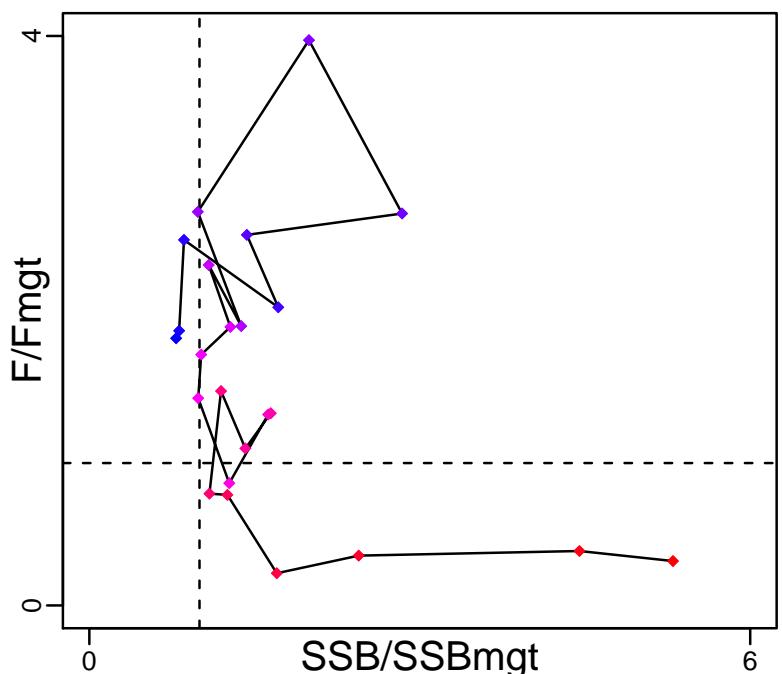
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	22,000	Both	-	
SSB	SSB-MT	2017	19,900	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	3.38×10^8	-	0	
F	F-1/yr	2017	0.106	-	-	
ER	ER-calc-ratio	2017	0.06	-	-	
TC	TC-MT	2017	1310			
TL	TL-MT	2017	1010			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.393			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.463			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	6.76			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.312			
ER/ERmgt	-	-	-			

Haddock Irish Sea [HADIS]

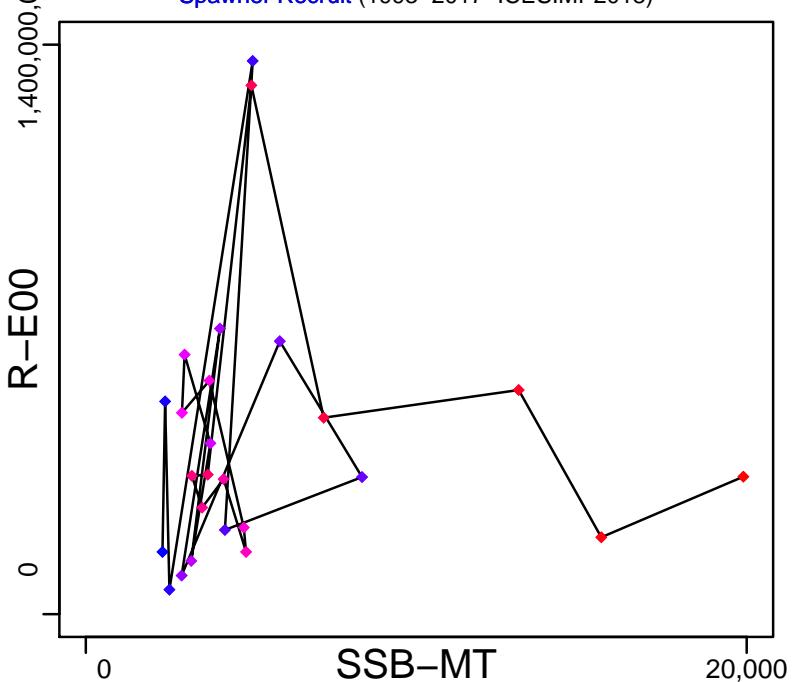
Kobe MSYpref (1993–2017–ICESIMP2018)



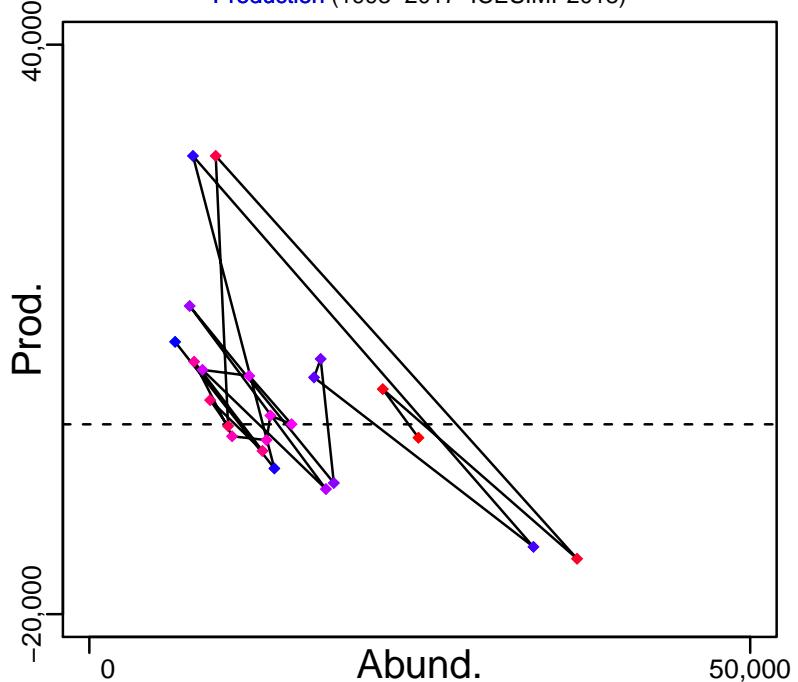
Kobe MGTpref (1993–2017–ICESIMP2018)



Spawner Recruit (1993–2017–ICESIMP2018)



Production (1993–2017–ICESIMP2018)

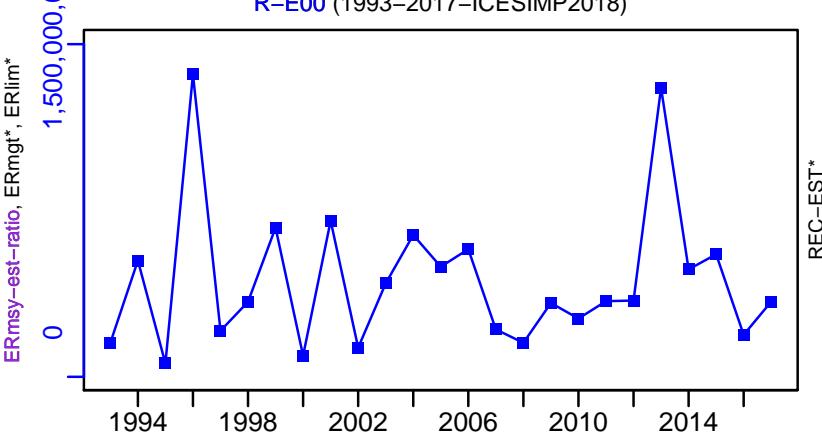
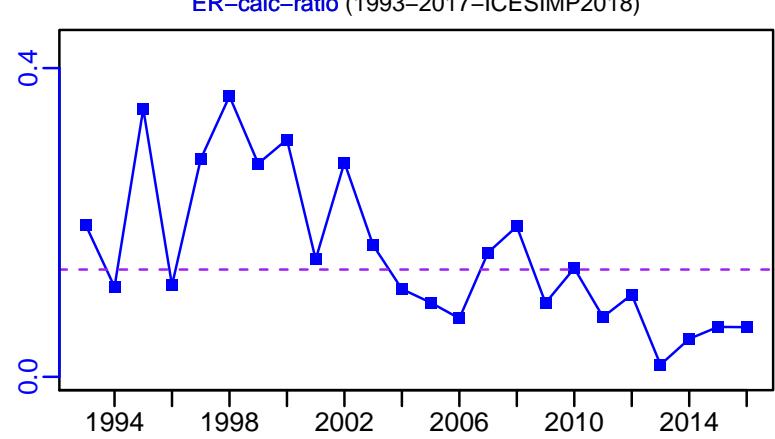
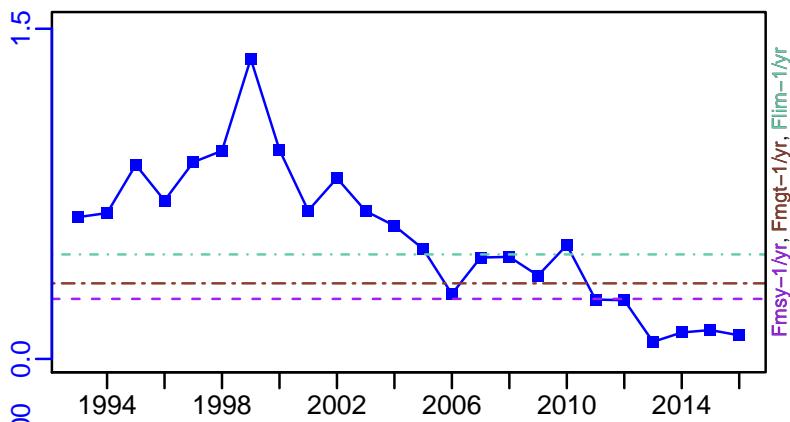
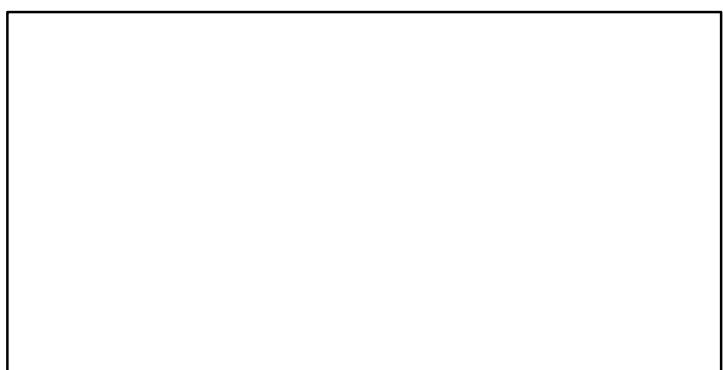
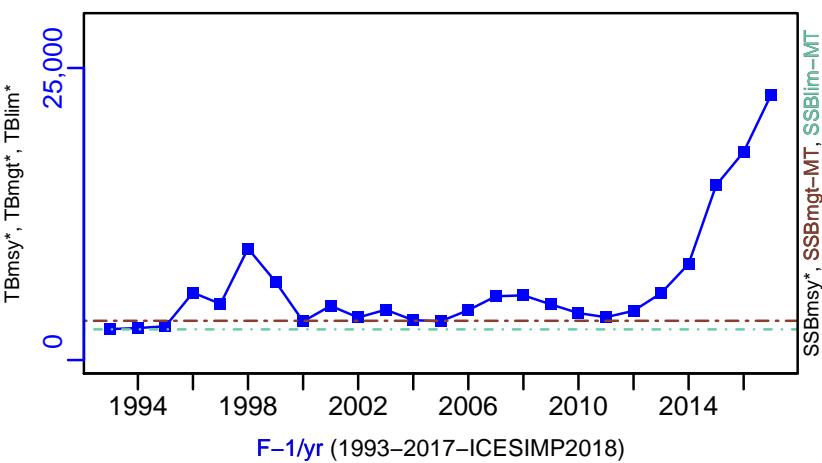
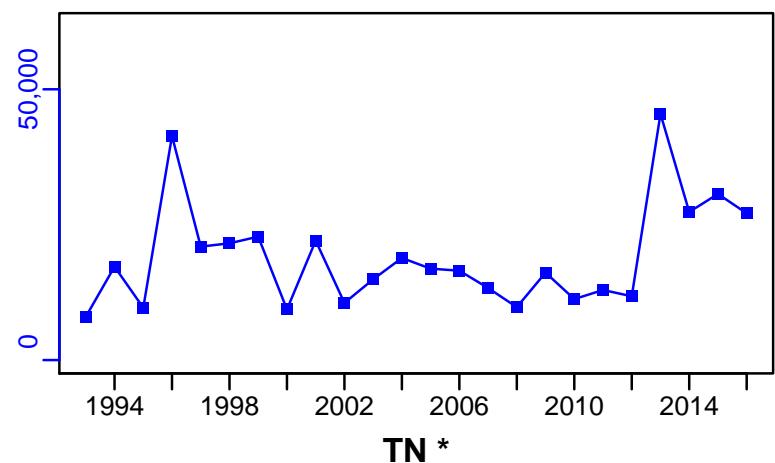


◆ Start Year	◆ End Year	*	No Data
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Haddock Irish Sea [HADIS]

TB-MT (1993–2017–ICESIMP2018)

SSB-MT (1993–2017–ICESIMP2018)

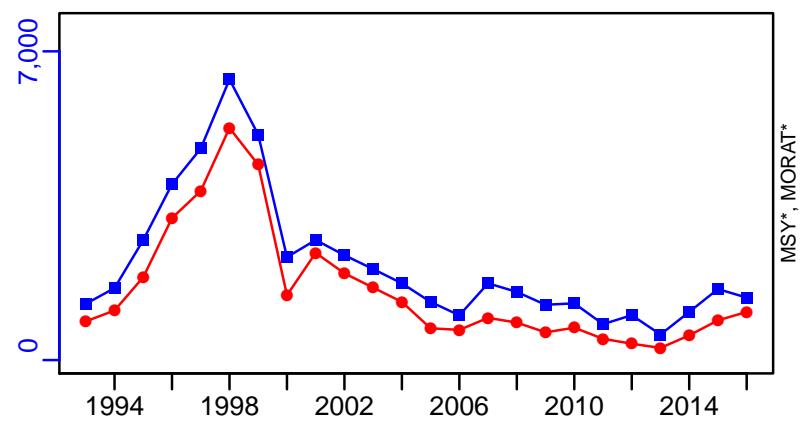


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Haddock Irish Sea [HADIS]

TC-MT, TL-MT, RecC* (1993–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

Haddock ICES 3a-4-6a [HADNS-IIla-Vla]

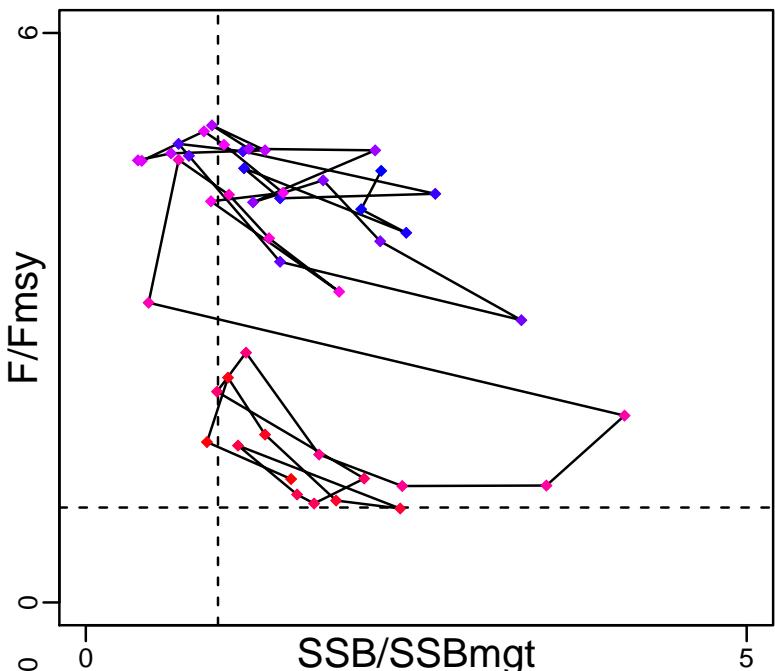
Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGNSSK-HADNS-IIla-Vla-1972-2018-ICESIMP2018
Area	ICES 3a-4-6a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2014, 2015, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.19
ERmsy	ERmsy-est-ratio	2018	0.172
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	132,000
Fmgt	Fmgt-1/yr	2018	0.19
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	94,000
Flim	Flim-1/yr	2018	0.39
ERlim	-	-	-

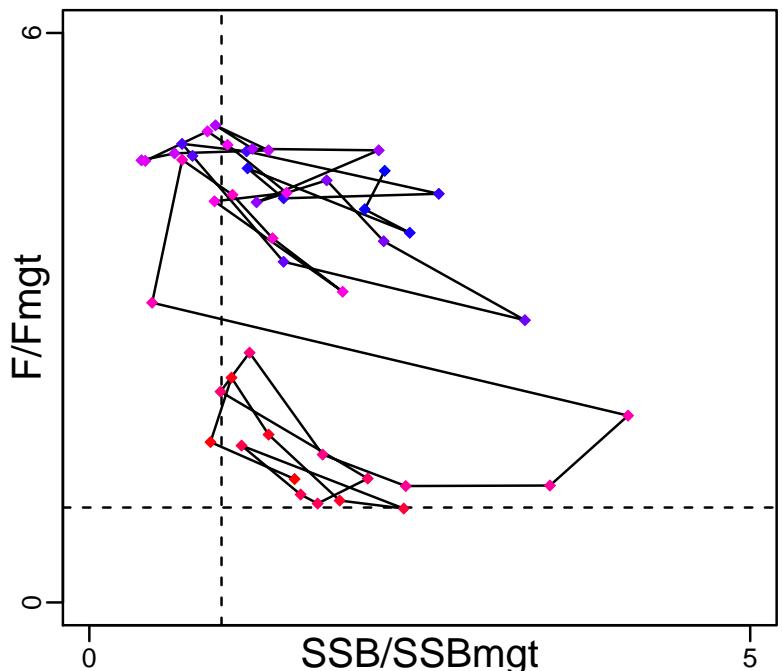
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	499,000	Both	-	
SSB	SSB-MT	2018	218,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3.53×10^9	-	0	
F	F-1/yr	2018	0.247	-	2 to 4	
ER	ER-calc-ratio	2018	0	-	-	
TC	TC-MT	2018	0			
TL	TL-MT	2018	0			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.3			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.652			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.3			
ER/ERmgt	-	-	-			

Haddock ICES 3a–4–6a [HADNS–IIIa–VIa]

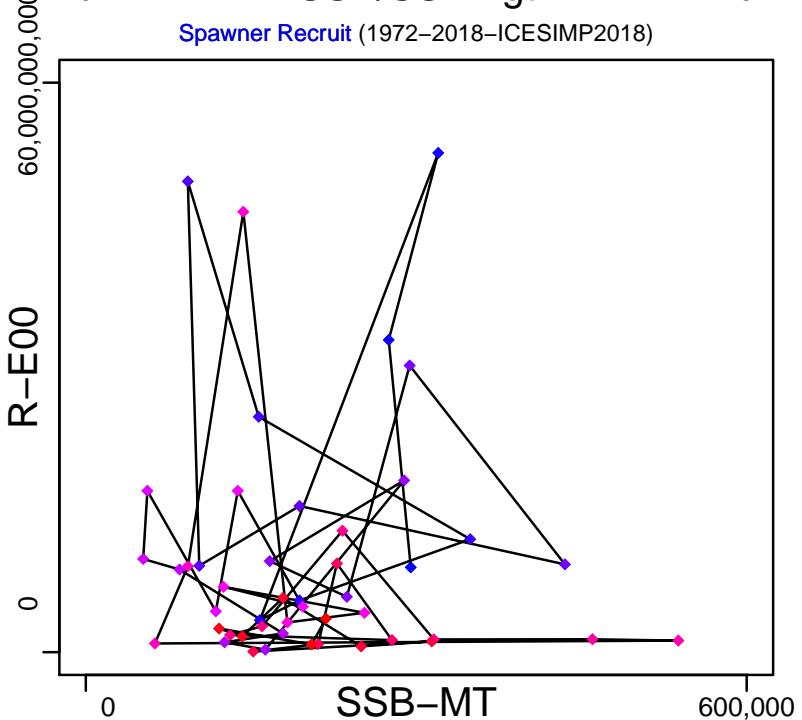
Kobe MSYpref (1972–2018–ICESIMP2018)



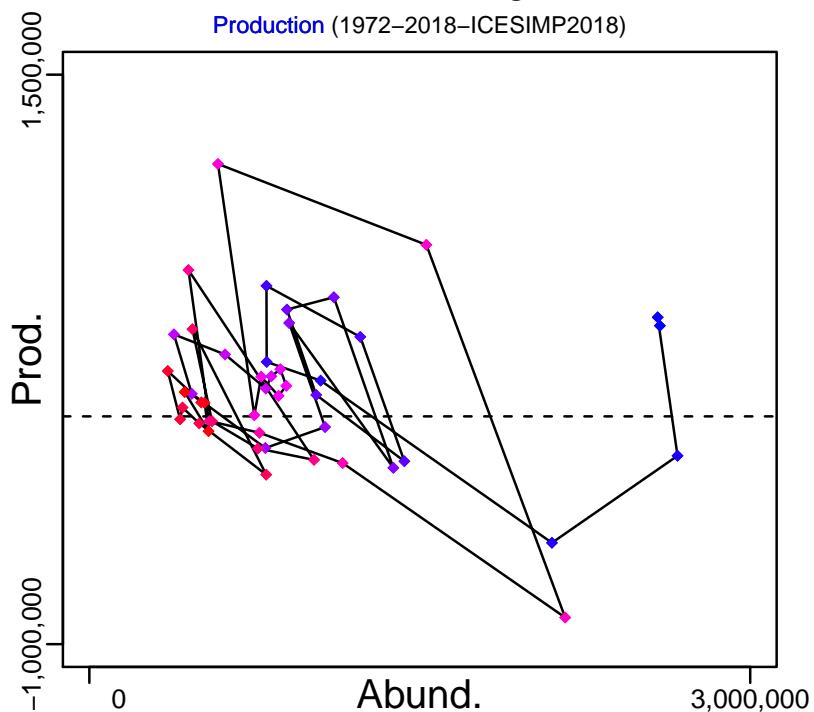
Kobe MGTpref (1972–2018–ICESIMP2018)



Spawner Recruit (1972–2018–ICESIMP2018)



Production (1972–2018–ICESIMP2018)

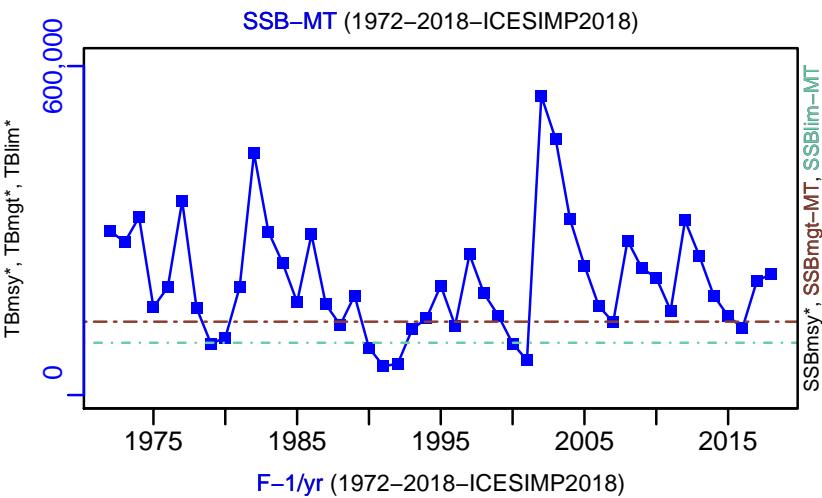
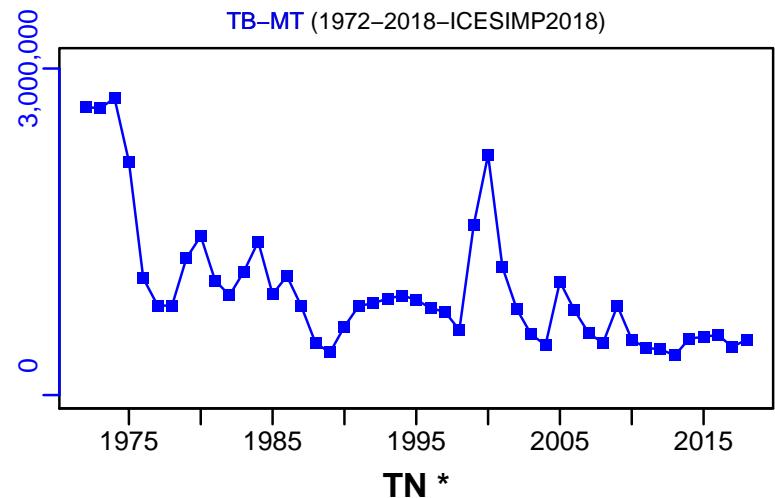


◆ Start Year	◆ End Year	*	No Data
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Haddock ICES 3a–4–6a [HADNS–IIIa–VIa]

TB-MT (1972–2018–ICESIMP2018)

SSB-MT (1972–2018–ICESIMP2018)

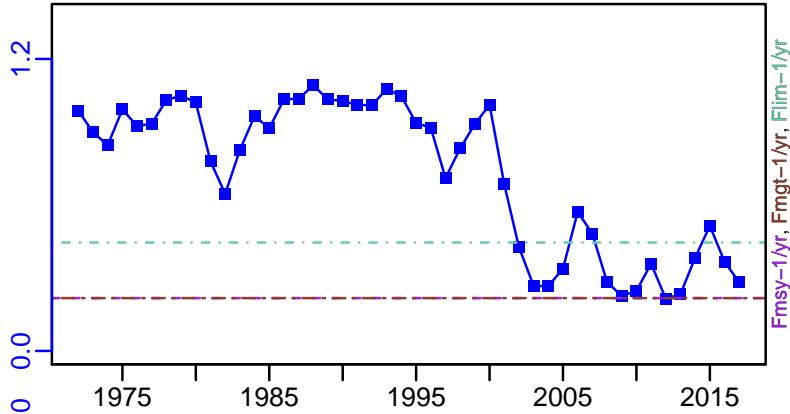


TN *

F-1/yr (1972–2018–ICESIMP2018)

SSB_{MSY*}, SSB_{Mgt}-MT, SSB_{lim}-MT

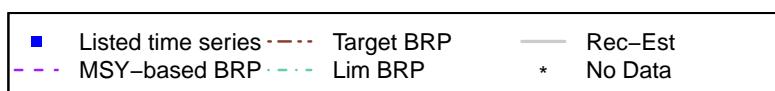
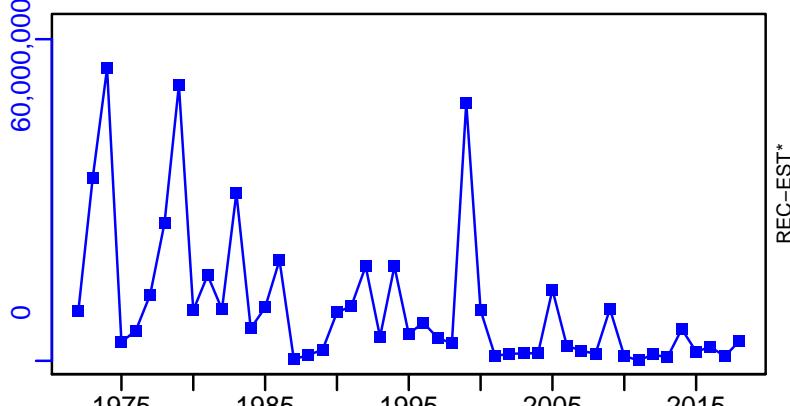
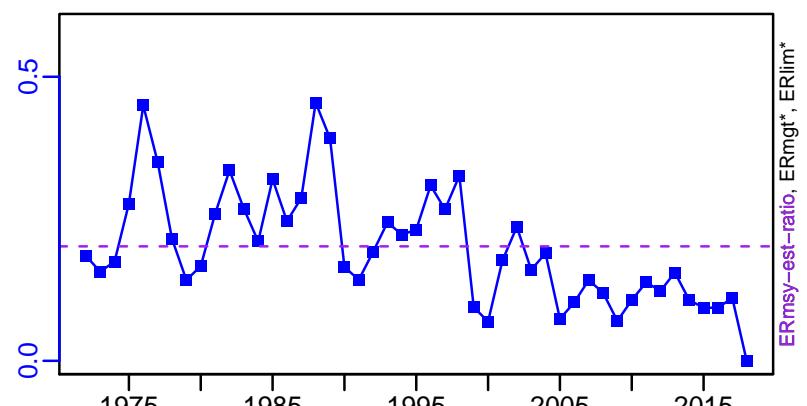
F_{MSY}-1/yr, F_{Mgt}-1/yr, F_{lim}-1/yr



ER-calc-ratio (1972–2018–ICESIMP2018)

R-E00 (1972–2018–ICESIMP2018)

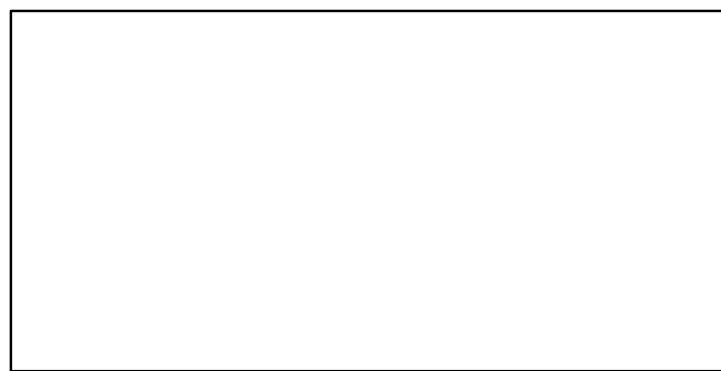
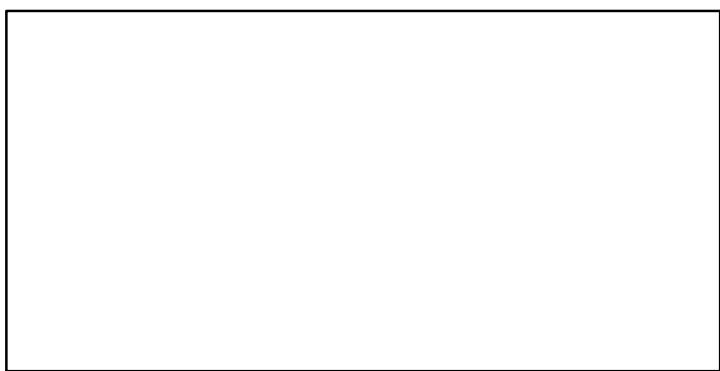
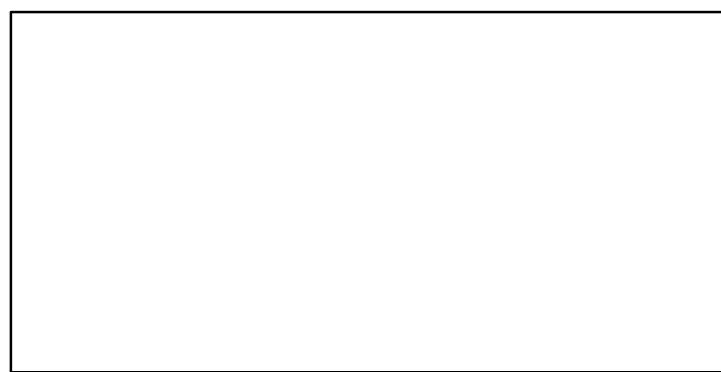
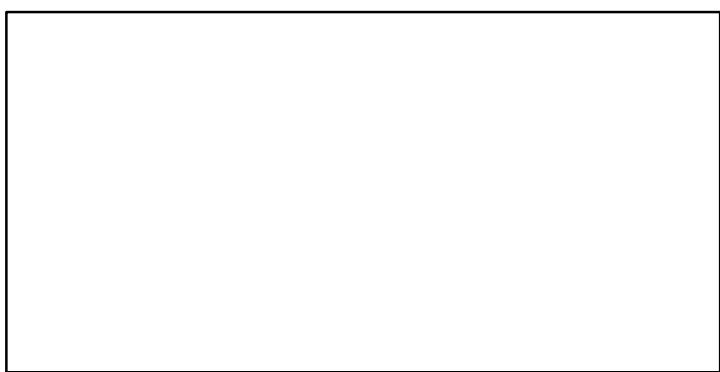
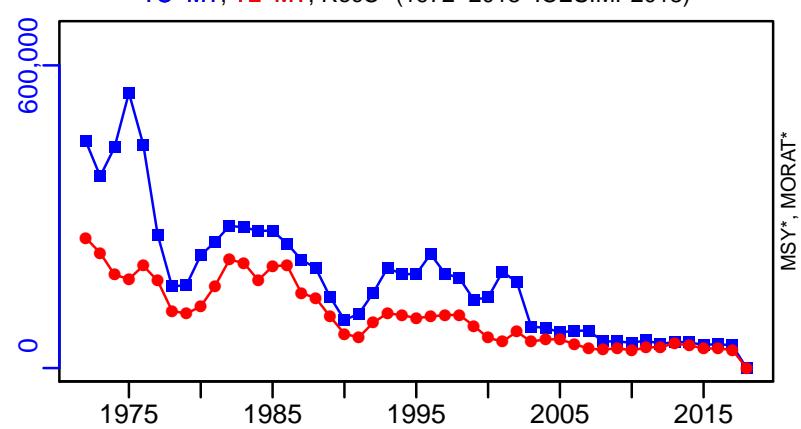
REC-EST*



Haddock ICES 3a–4–6a [HADNS–IIIa–VIa]

TC–MT, TL–MT, RecC* (1972–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Haddock Rockall Bank [HADROCK]

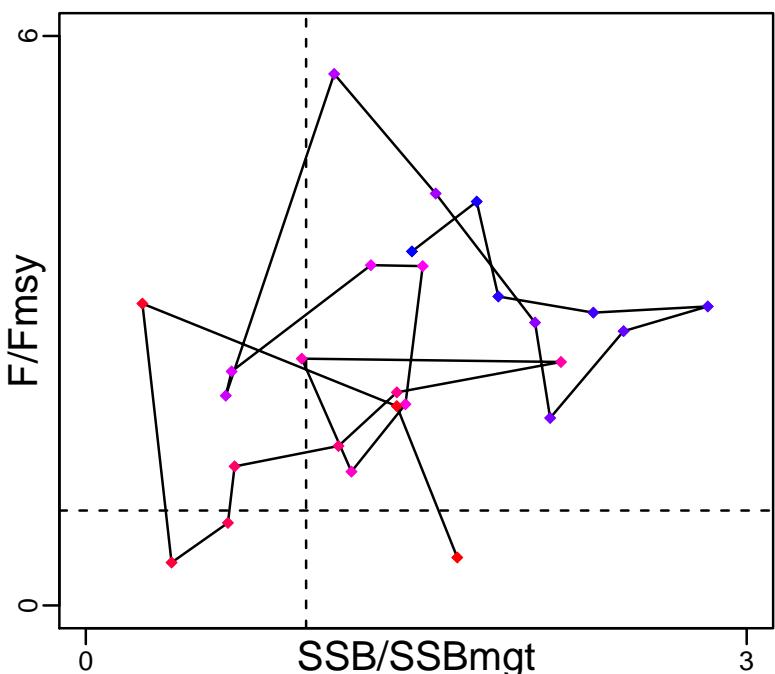
Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGCSE-HADROCK-1990-2017-ICESIMP2018
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.2
ERmsy	ERmsy-est-ratio	2017	0.416
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	10,200
Fmgt	Fmgt-1/yr	2017	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	9000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	6800
Flim	Flim-1/yr	2017	0.69
ERlim	-	-	-

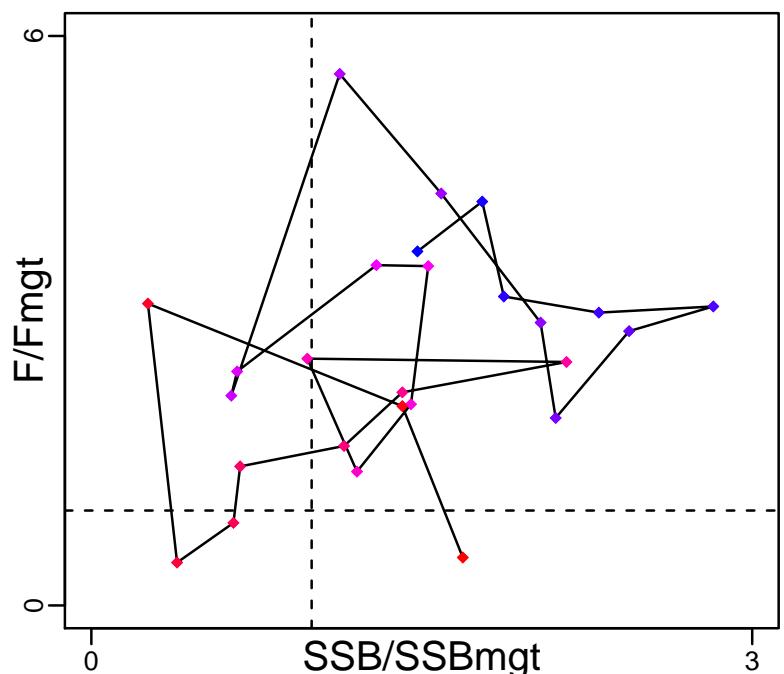
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	23,300	Both	-	
SSB	SSB-MT	2017	18,100	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	94,800,000	-	1	
F	F-1/yr	2017	0.101	-	2 to 5	
ER	ER-calc-ratio	2017	0.124	-	-	
TC	TC-MT	2017	2890			
TL	TL-MT	2017	2590			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.505			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.298			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.775			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.505			
ER/ERmgt	-	-	-			

Haddock Rockall Bank [HADROCK]

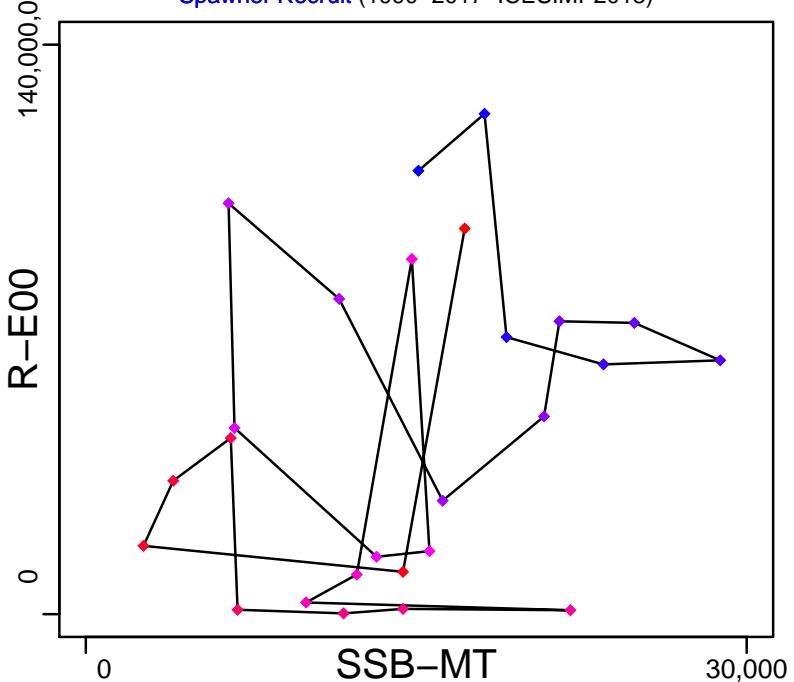
Kobe MSYpref (1990–2017–ICESIMP2018)



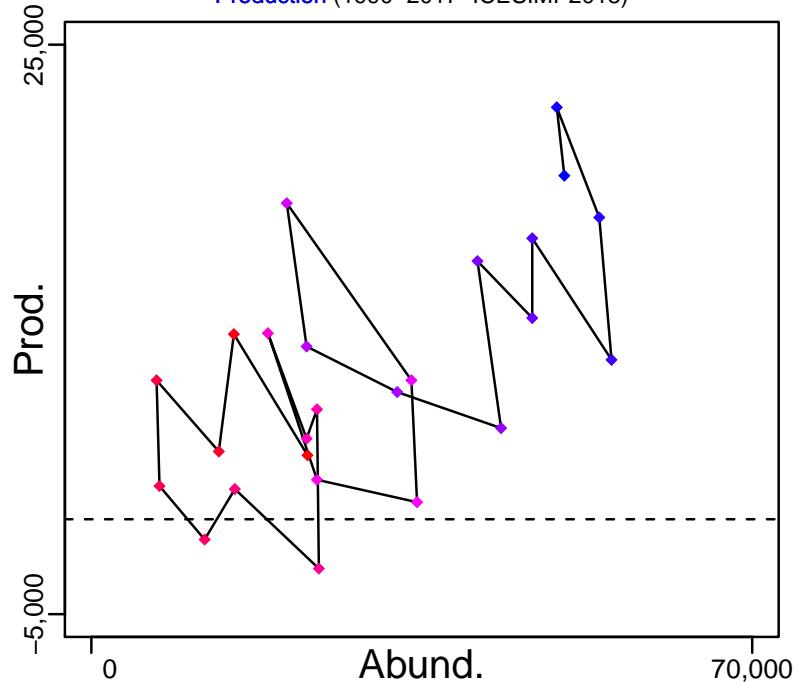
Kobe MGTpref (1990–2017–ICESIMP2018)



Spawner Recruit (1990–2017–ICESIMP2018)



Production (1990–2017–ICESIMP2018)

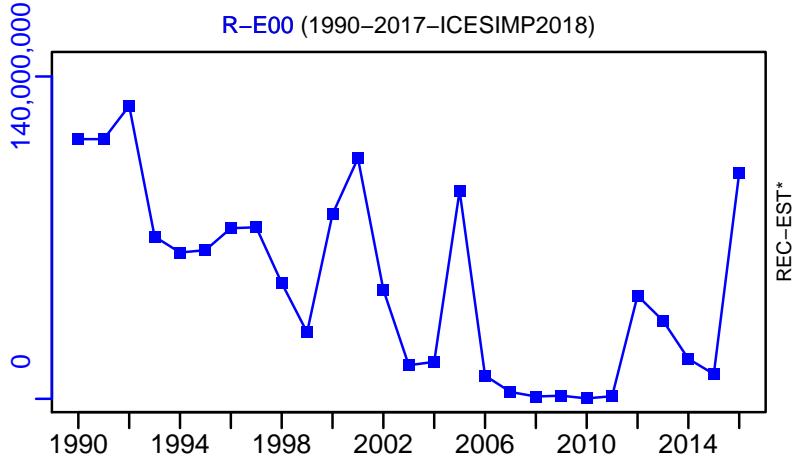
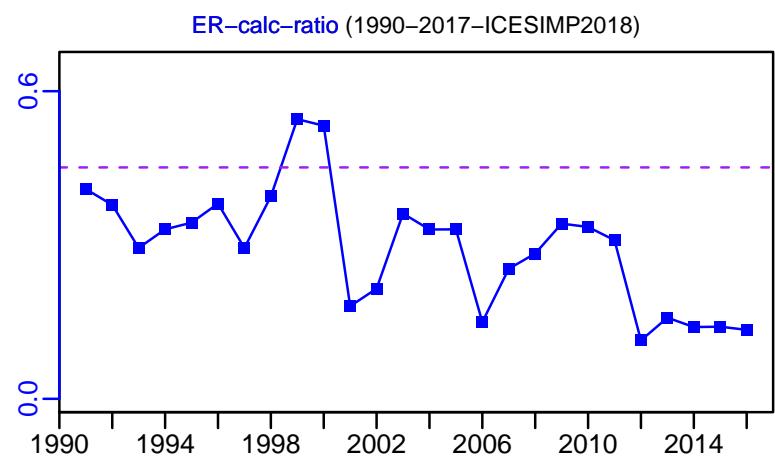
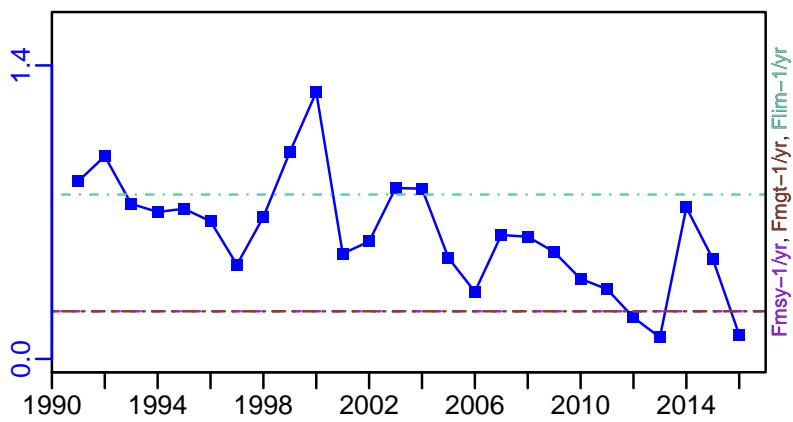
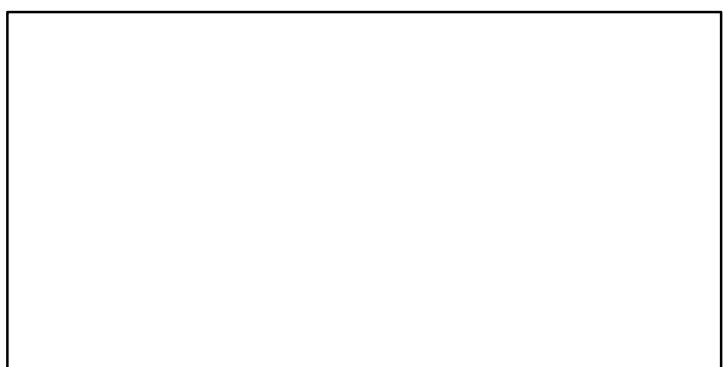
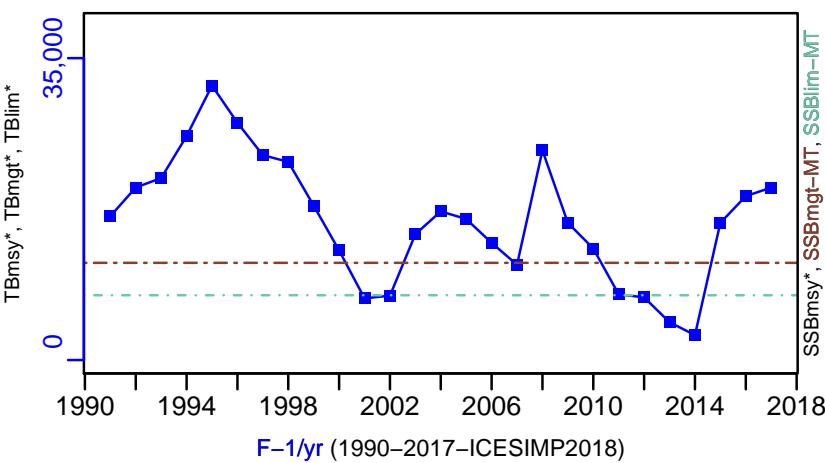
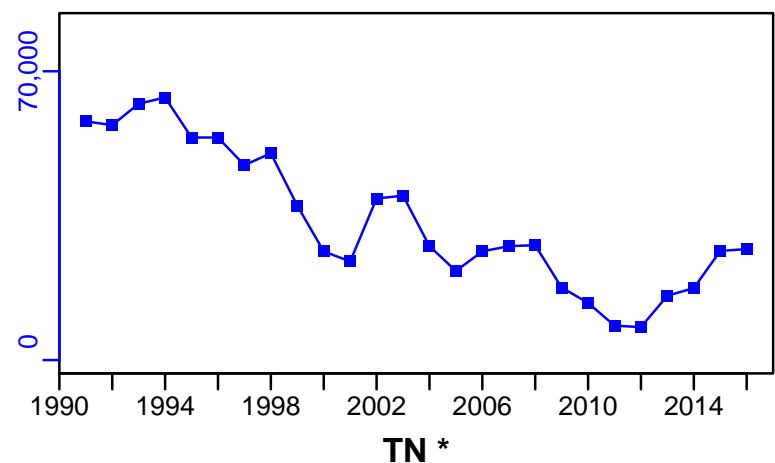


◆ Start Year ◆ End Year * No Data

Haddock Rockall Bank [HADROCK]

TB-MT (1990–2017–ICESIMP2018)

SSB-MT (1990–2017–ICESIMP2018)

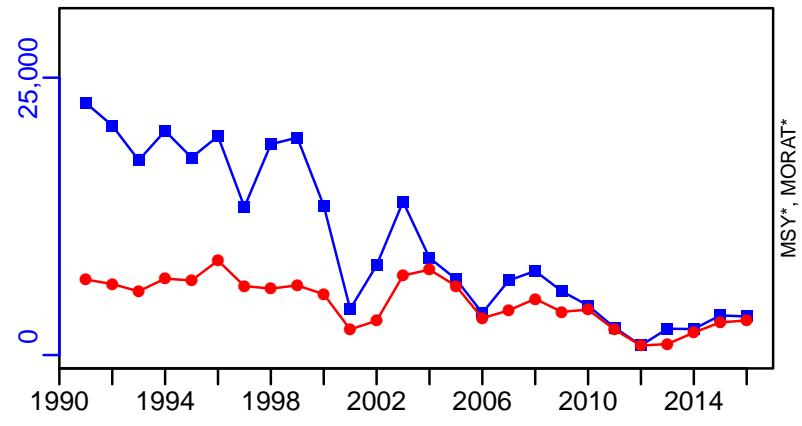


■ Listed time series	— Target BRP	— Rec-Est
- MSY-based BRP	- Lim BRP	* No Data

Haddock Rockall Bank [HADROCK]

TC-MT, TL-MT, RecC* (1990–2017–ICESIMP2018)

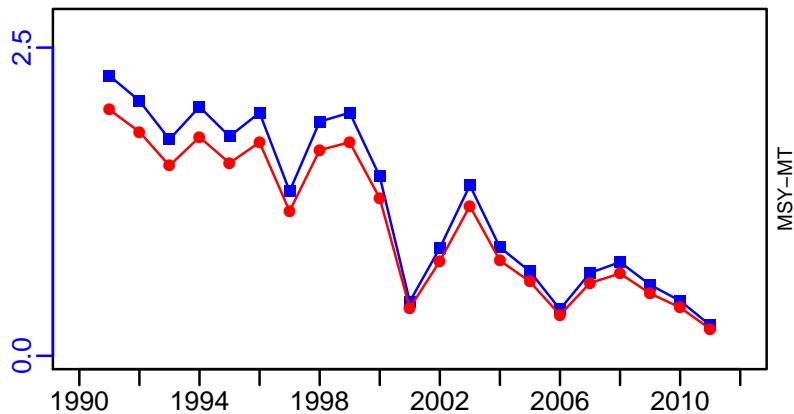
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1990–2012–CHING)



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

Haddock ICES 7b-k [HADVIIb-k]

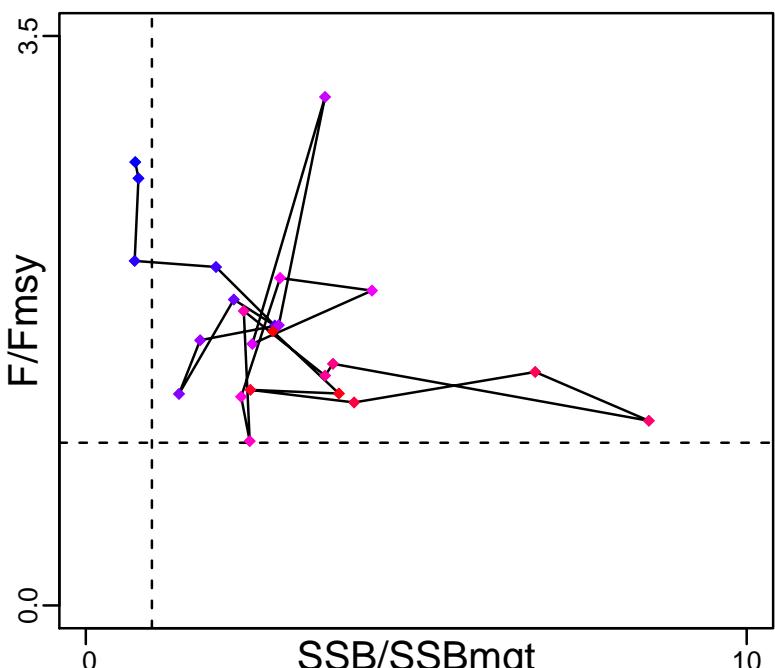
Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGCSE-HADVIIb-k-1993-2017-ICESIMP2018
Area	ICES 7b-k
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	65,742
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.4
ERmsy	ERmsy-est-ratio	2017	0.25
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	10,000
Fmgt	Fmgt-1/yr	2017	0.4
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2012	20,137
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	6700
Flim	Flim-1/yr	2017	1.41
ERlim	-	-	-

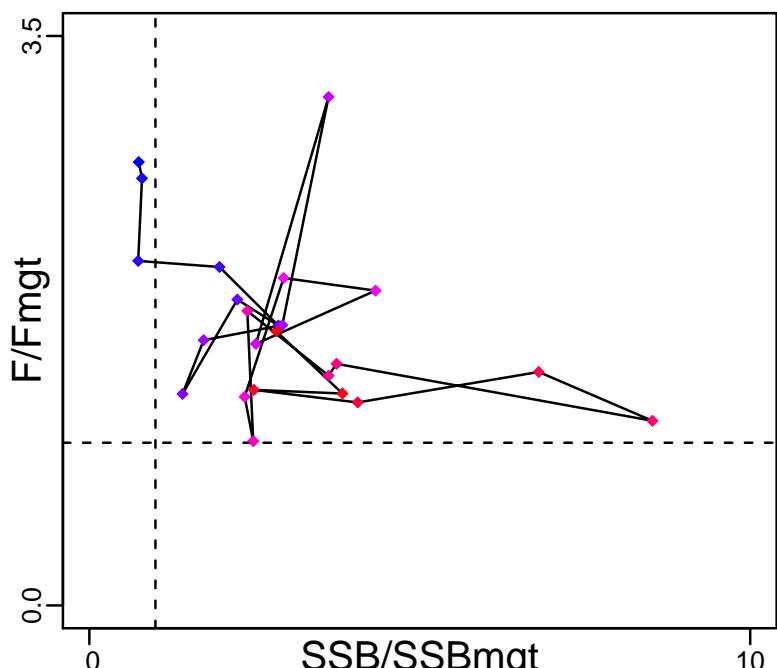
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	60,300	Both	-	
SSB	SSB-MT	2017	32,900	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	2.58×10^8	-	0	
F	F-1/yr	2017	0.674	-	-	
ER	ER-calc-ratio	2017	0.297	-	-	
TC	TC-MT	2017	17,900			
TL	TL-MT	2017	7590			
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	1.339			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.685			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	1.185			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	3.29			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	1.685			
ER/ERmgt	-	-	-			

Haddock ICES 7b–k [HADVIIb–k]

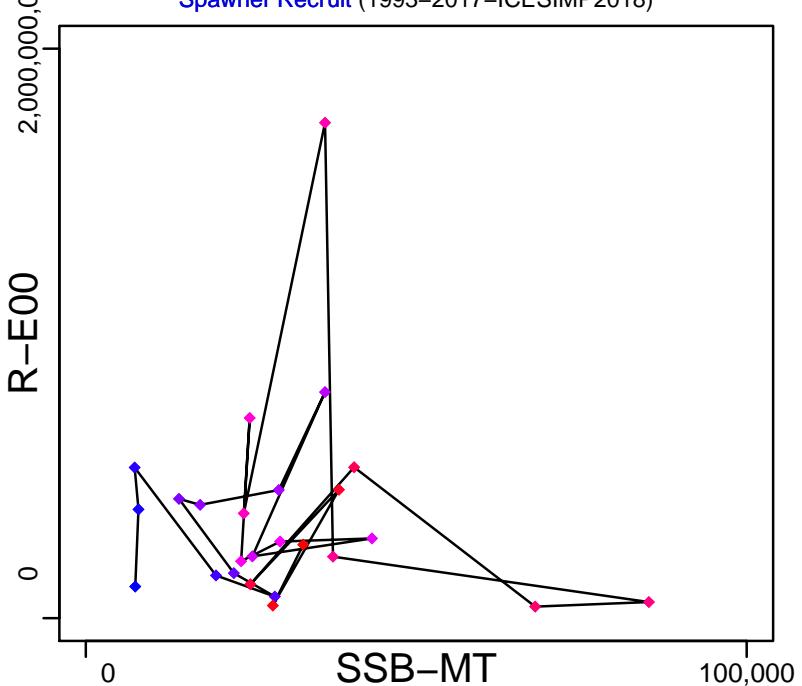
Kobe MSYpref (1993–2017–ICESIMP2018)



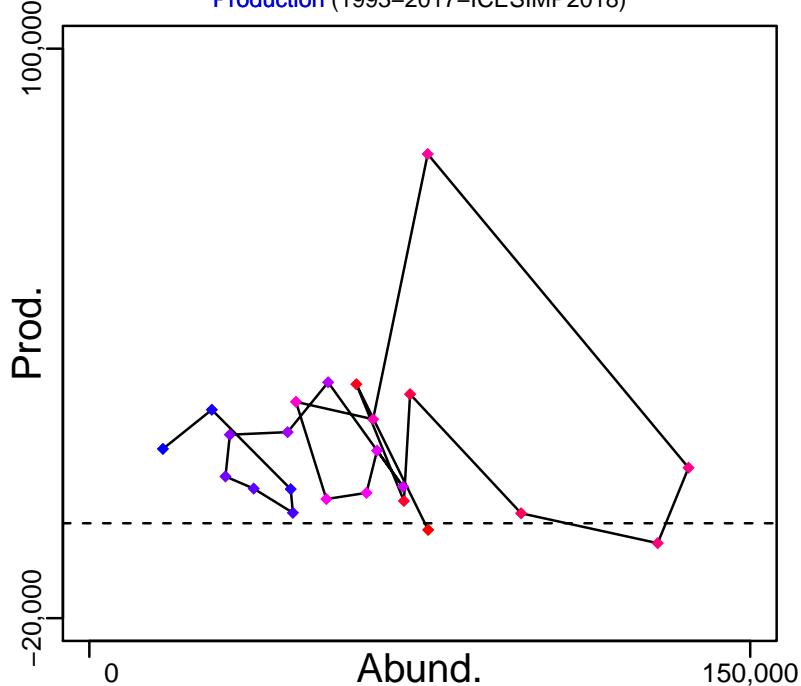
Kobe MGTpref (1993–2017–ICESIMP2018)



Spawner Recruit (1993–2017–ICESIMP2018)



Production (1993–2017–ICESIMP2018)

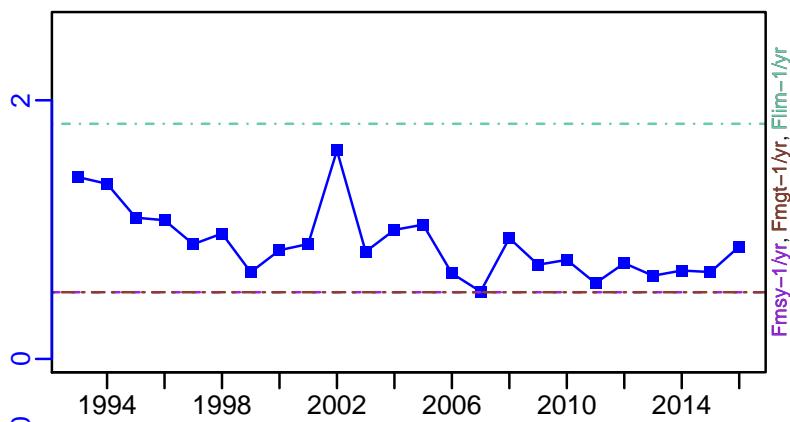
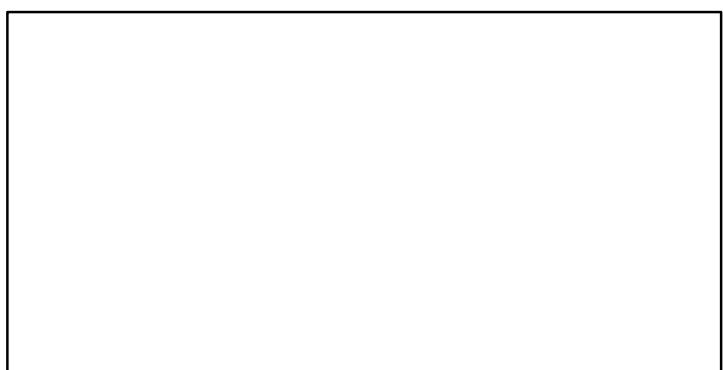
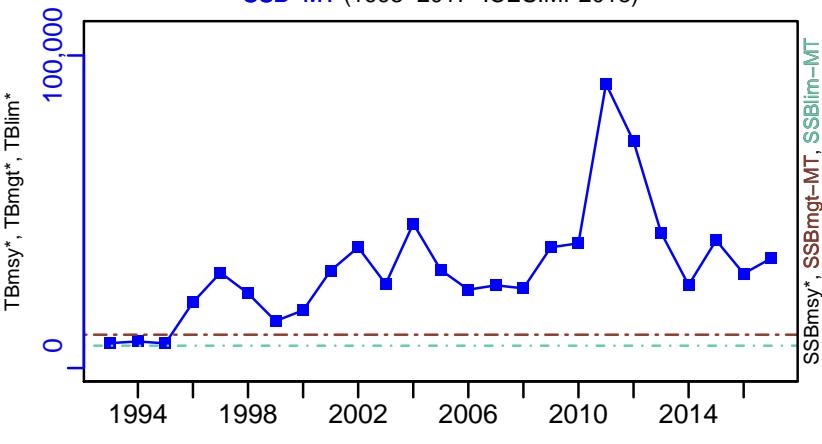
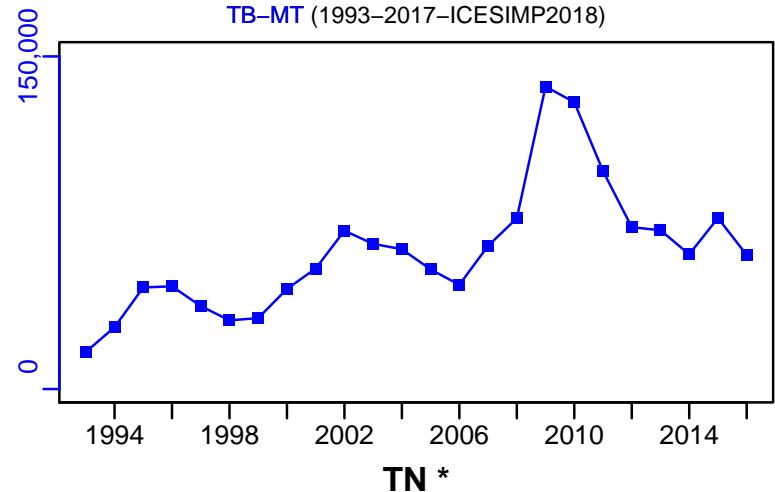


◆ Start Year ◆ End Year * No Data

Haddock ICES 7b–k [HADVIIb–k]

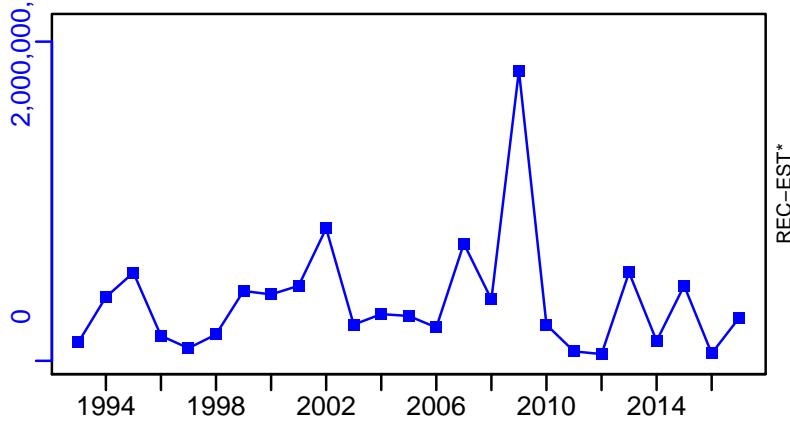
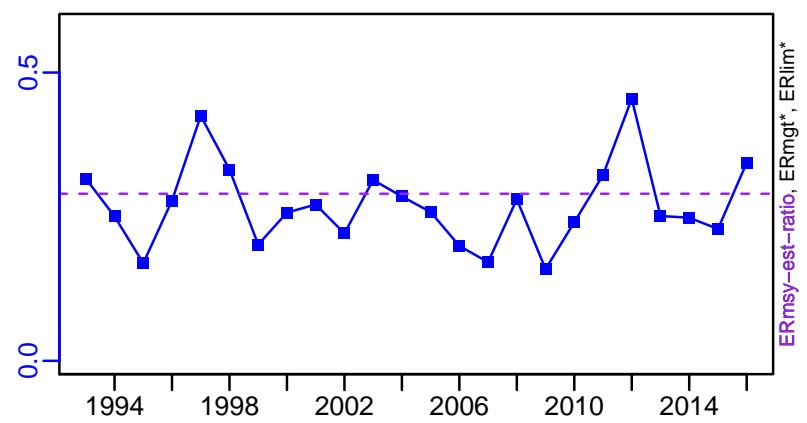
TB-MT (1993–2017–ICESIMP2018)

SSB-MT (1993–2017–ICESIMP2018)



ER-calc-ratio (1993–2017–ICESIMP2018)

R-E00 (1993–2017–ICESIMP2018)

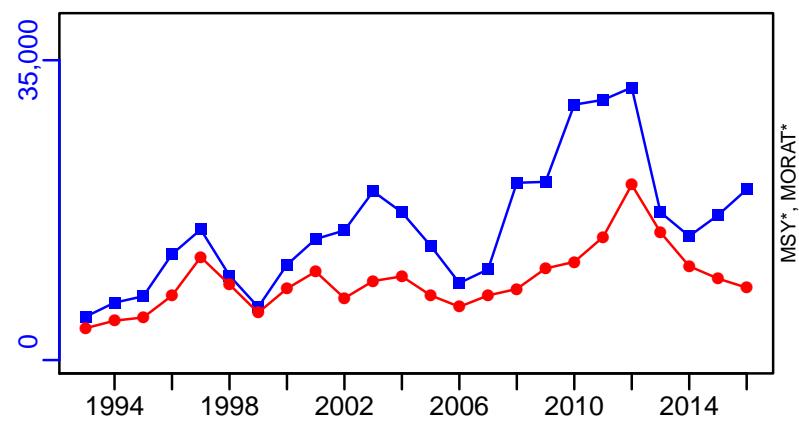


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Haddock ICES 7b–k [HADVIIb–k]

TC–MT, TL–MT, RecC* (1993–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



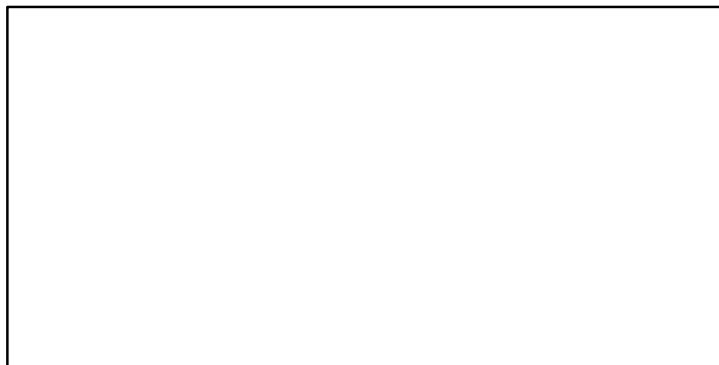
survB*



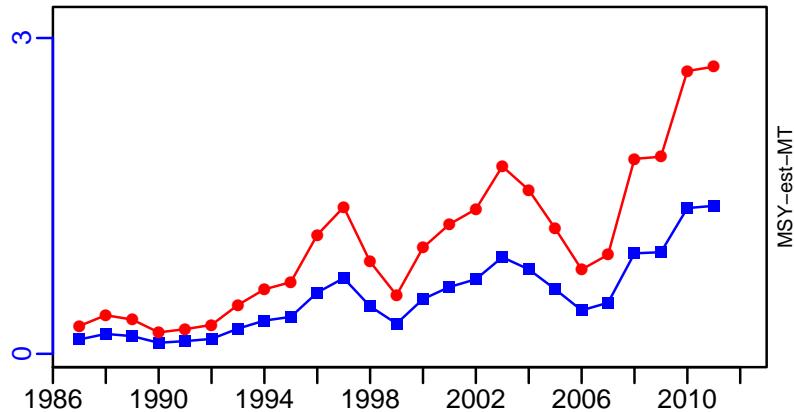
CPUE*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1987–2012–CHING)



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

Hake ICES 3a-4-6-7-8abd [HAKENRTN]

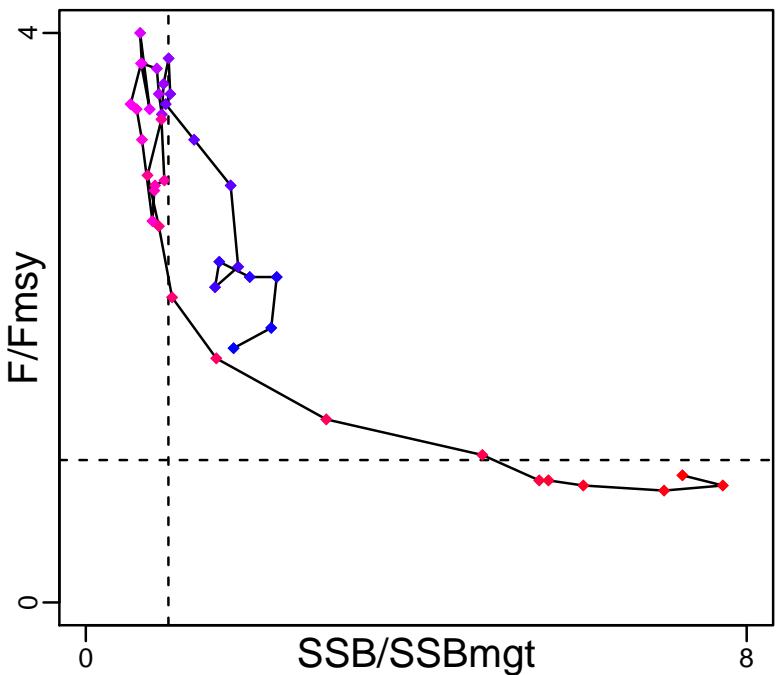
Metadata	
Scientific Name	Merluccius merluccius
Current Assess ID	WGBIE-HAKENRTN-1978-2018-ICESIMP2018
Area	ICES 3a-4-6-7-8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	271,388
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.28
ERmsy	ERmsy-est-ratio	2017	0.298
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	45,000
Fmgt	Fmgt-1/yr	2018	0.28
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2013	106,752
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	32,000
Flim	Flim-1/yr	2018	0.87
ERlim	-	-	-

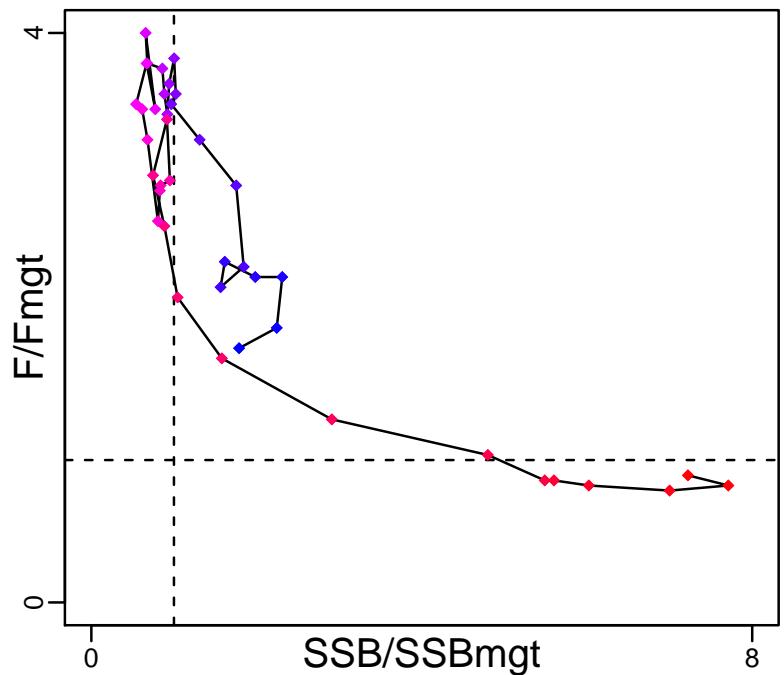
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	372,000	Both	-	
SSB	SSB-MT	2018	307,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3.04×10^8	-	0	
F	F-1/yr	2018	0.25	-	-	
ER	ER-calc-ratio	2018	0.296	-	-	
TC	TC-MT	2018	110,000			
TL	TL-MT	2018	105,000			
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	1.135			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.893			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	1.2			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	6.822			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.893			
ER/ERmgt	-	-	-			

Hake ICES 3a-4-6-7-8abd [HAKENRTN]

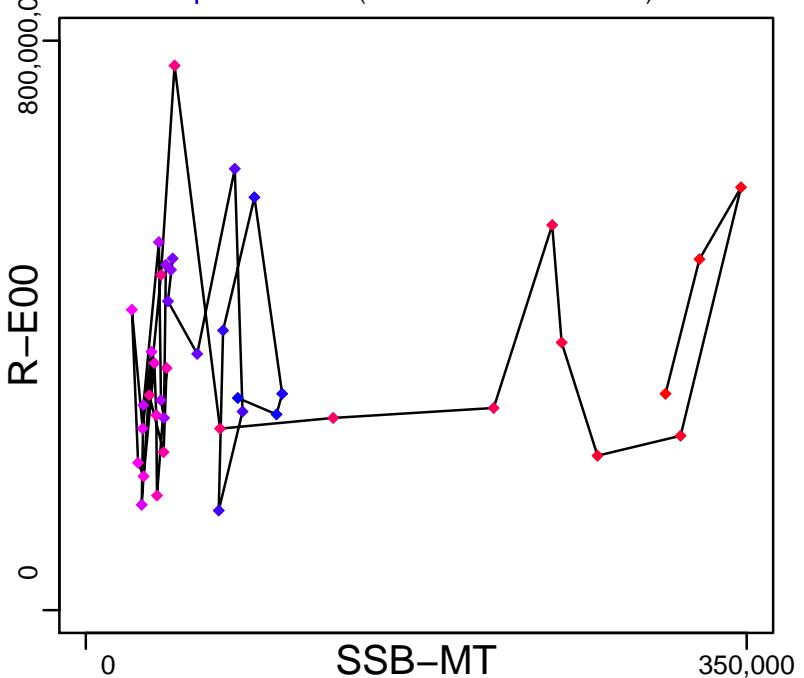
Kobe MSYpref (1978–2018–ICESIMP2018)



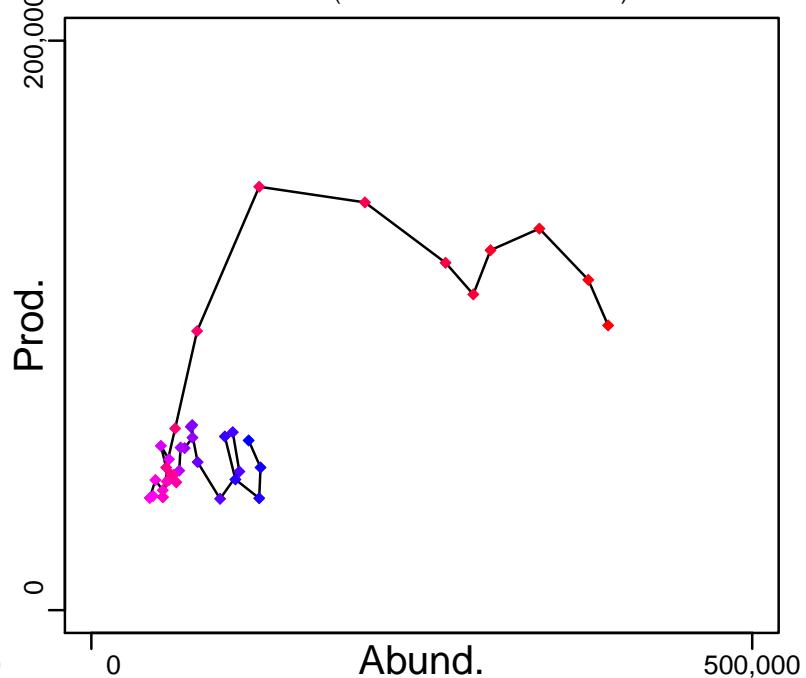
Kobe MGTpref (1978–2018–ICESIMP2018)



Spawner Recruit (1978–2018–ICESIMP2018)



Production (1978–2018–ICESIMP2018)

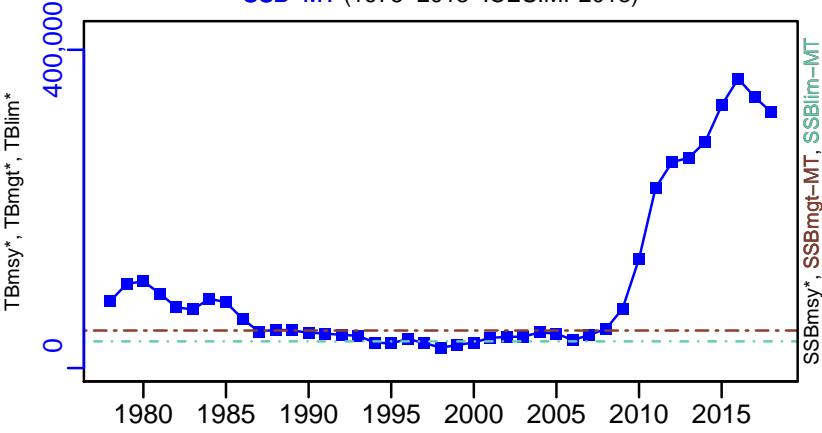
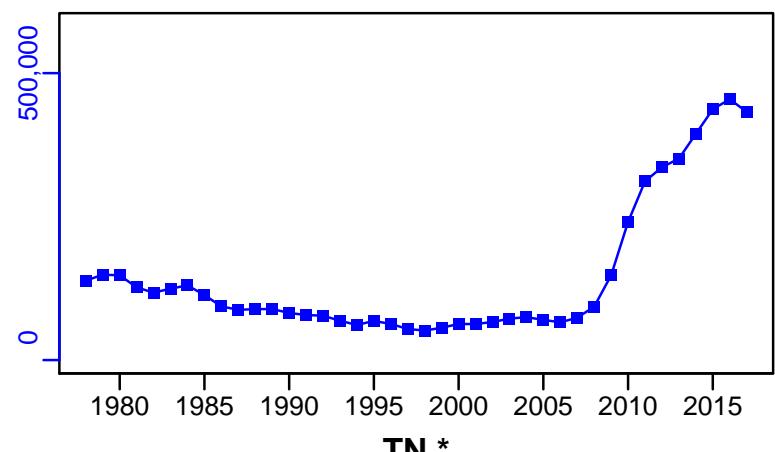


◆ Start Year ◆ End Year * No Data

Hake ICES 3a–4–6–7–8abd [HAKENRTN]

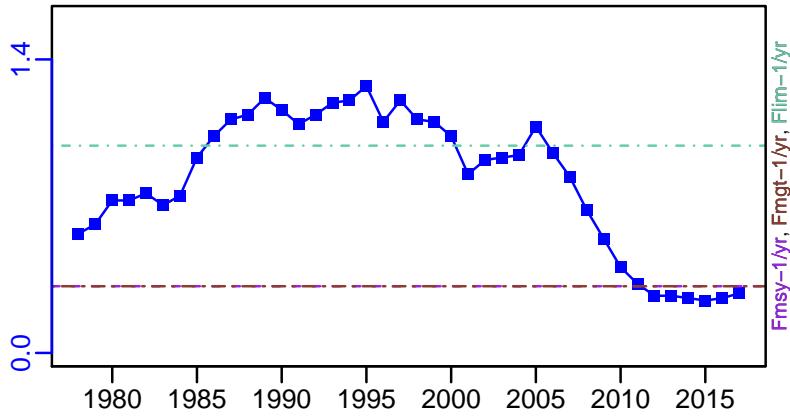
TB-MT (1978–2018–ICESIMP2018)

SSB-MT (1978–2018–ICESIMP2018)



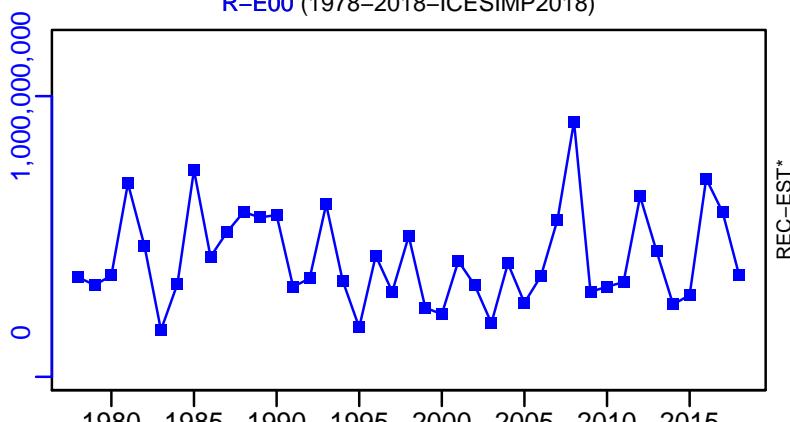
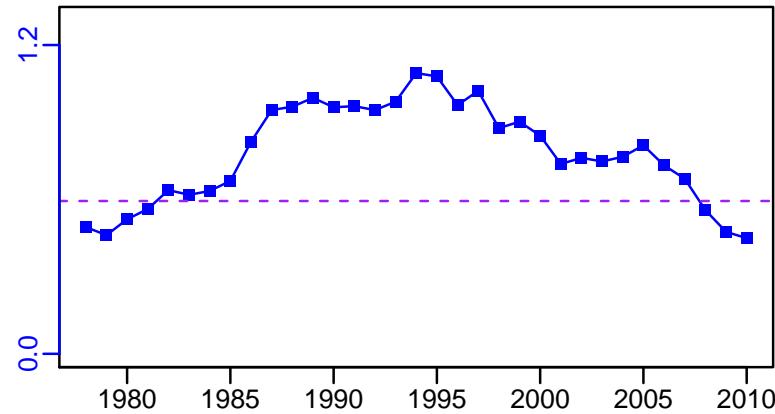
TN *

F-1/yr (1978–2018–ICESIMP2018)



ER-ratio (1961–2011–CHING)

R-E00 (1978–2018–ICESIMP2018)

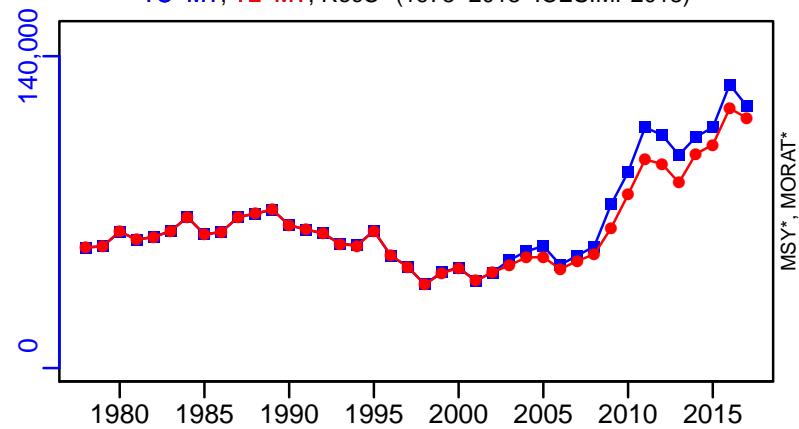


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Hake ICES 3a–4–6–7–8abd [HAKENRTN]

TC-MT, TL-MT, RecC* (1978–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



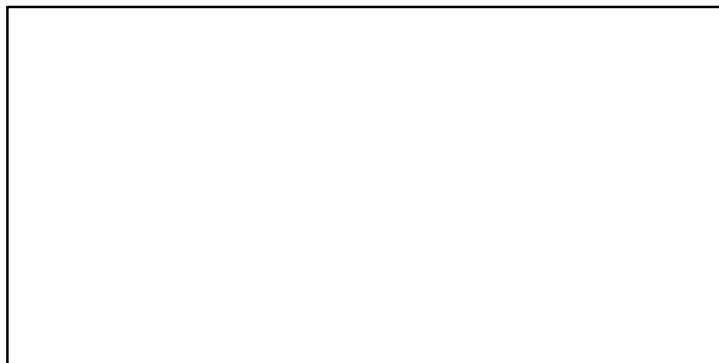
survB*



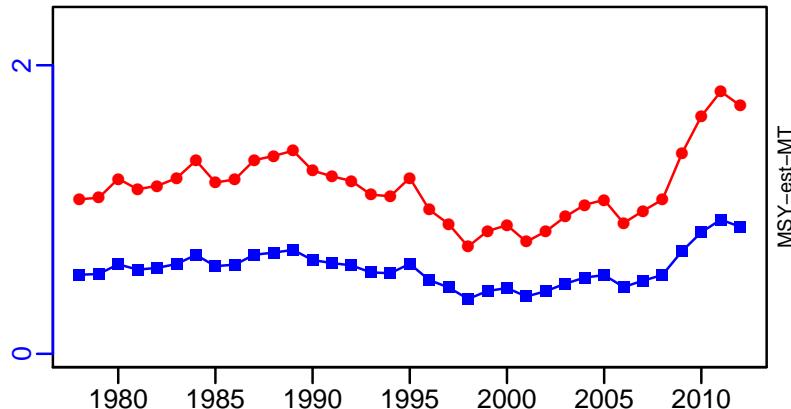
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2013–ICESIMP2016)



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

Hake ICES 8c-9a [HAKESOTH]

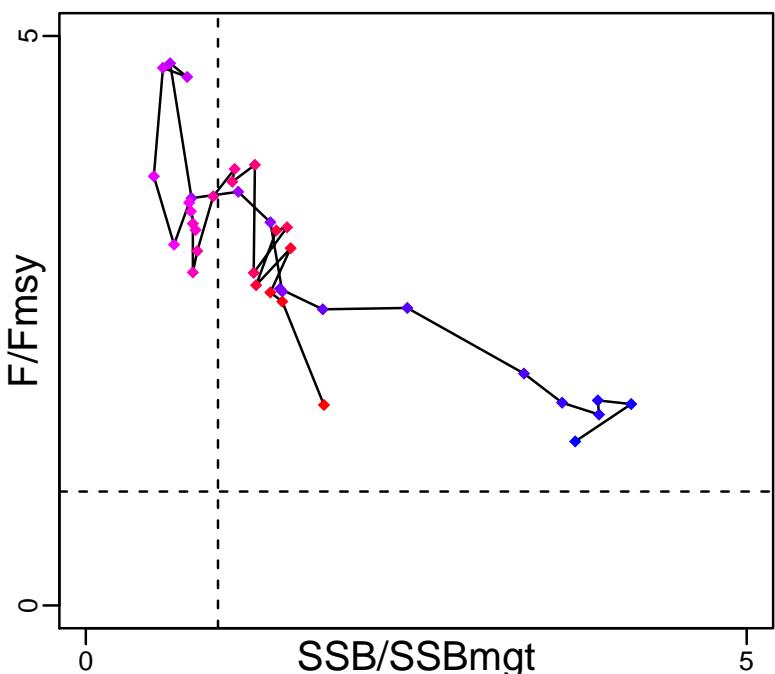
Metadata	
Scientific Name	Merluccius merluccius
Current Assess ID	WGBIE-HAKESOTH-1982-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018, 2011, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	39,990
SSBmsy	SSBmsy-est-MT	2014	30,444
Fmsy	Fmsy-1/yr	2018	0.25
ERmsy	ERmsy-est-ratio	2018	0.357
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	11,100
Fmgt	Fmgt-1/yr	2018	0.25
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	17,849
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	8000
Flim	Flim-1/yr	2018	1.05
ERlim	-	-	-

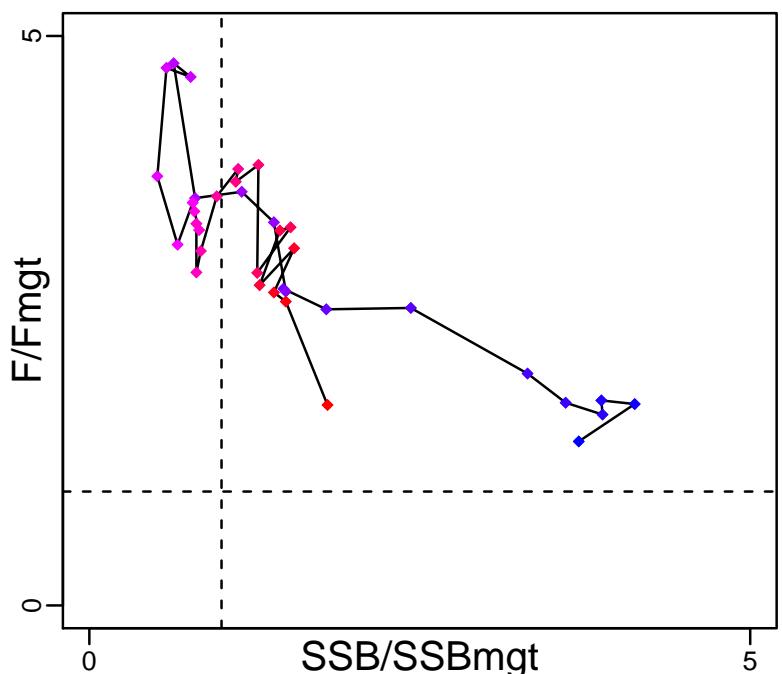
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	29,200	Both	-	
SSB	SSB-MT	2018	23,900	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	79,400,000	-	0	
F	F-1/yr	2018	0.44	-	1 to 3	
ER	ER-calc-ratio	2018	0.45	-	-	
TC	TC-MT	2018	10,800			
TL	TL-MT	2018	9100			
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	0.588			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2014	0.811			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.76			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.261			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.153			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.76			
ER/ERmgt	-	-	-			

Hake ICES 8c–9a [HAKESOTH]

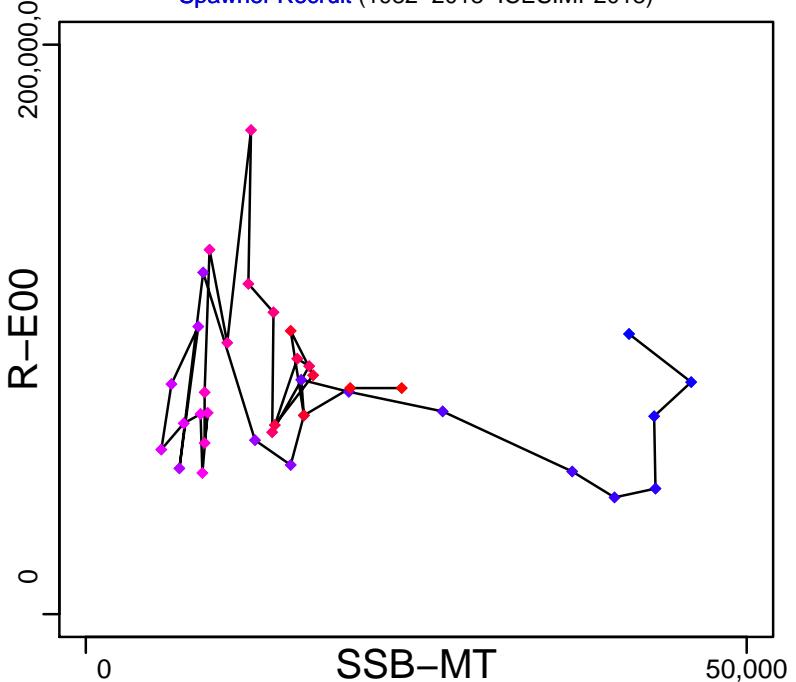
Kobe MSYpref (1982–2018–ICESIMP2018)



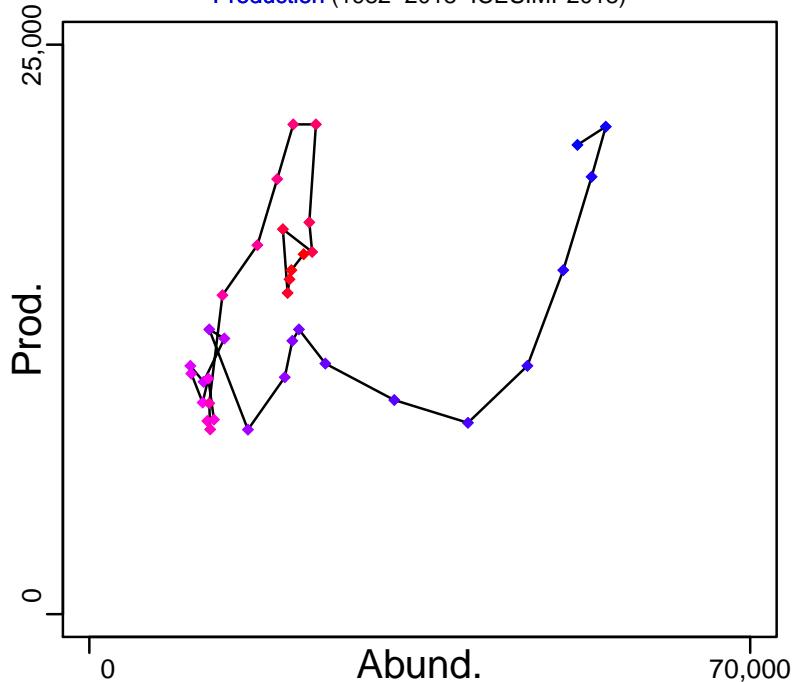
Kobe MGTpref (1982–2018–ICESIMP2018)



Spawner Recruit (1982–2018–ICESIMP2018)



Production (1982–2018–ICESIMP2018)

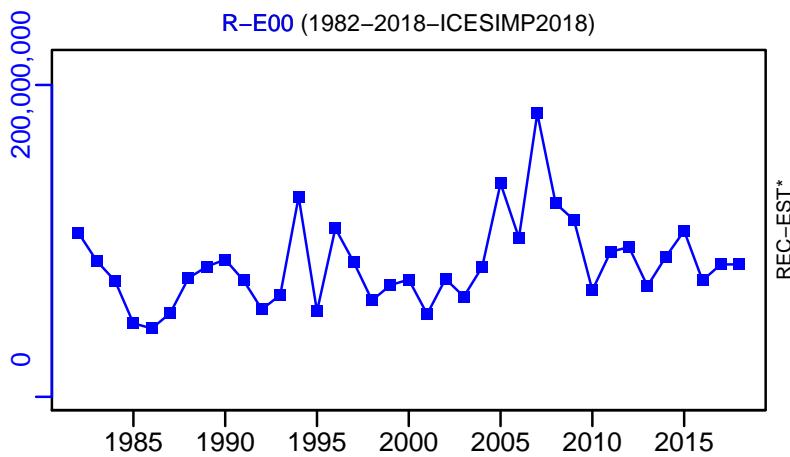
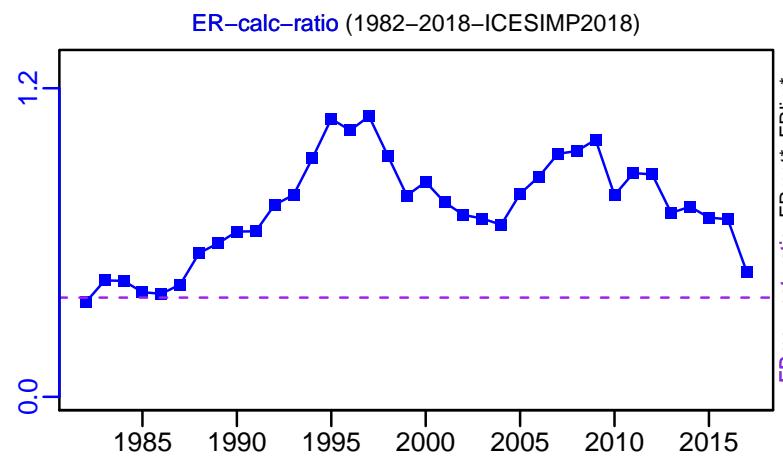
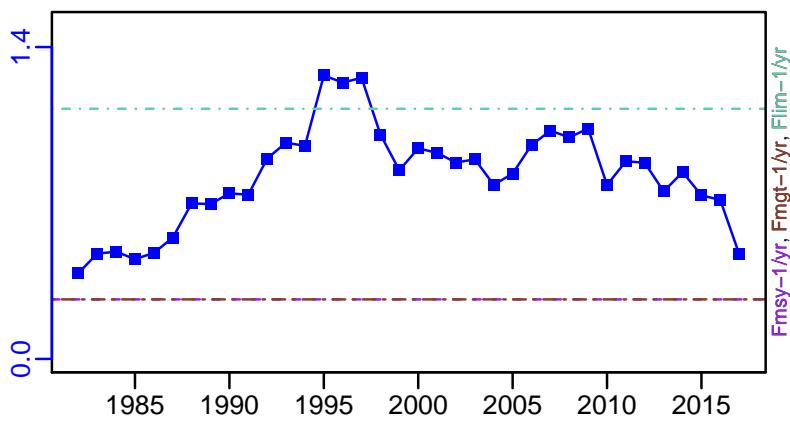
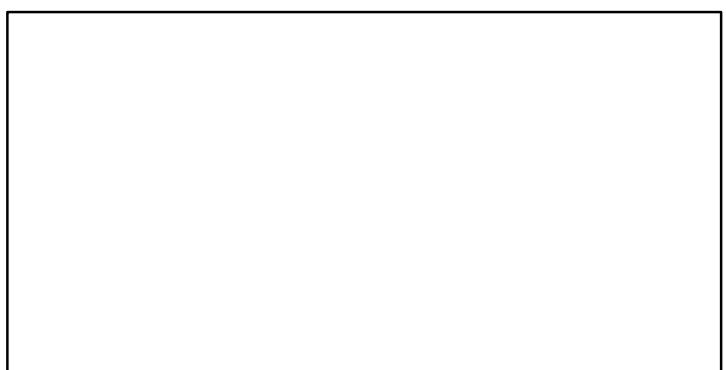
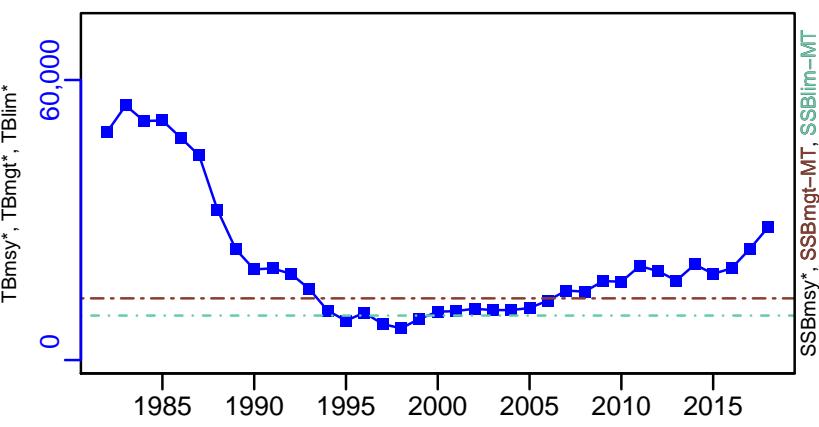
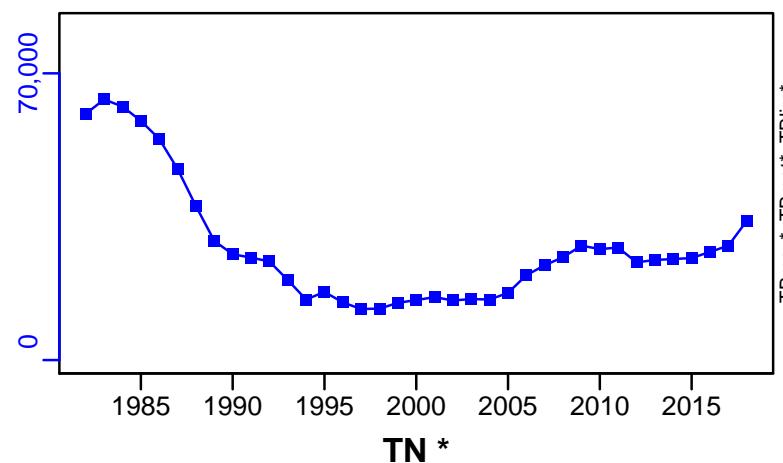


◆ Start Year ◆ End Year * No Data

Hake ICES 8c–9a [HAKESOTH]

TB-MT (1982–2018–ICESIMP2018)

SSB-MT (1982–2018–ICESIMP2018)

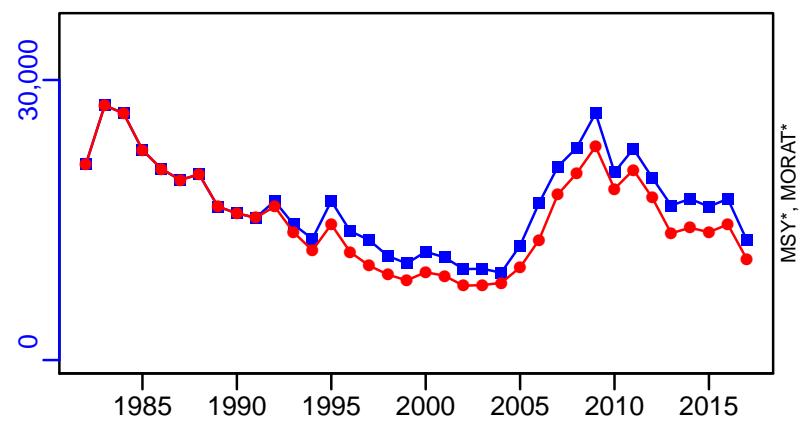


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

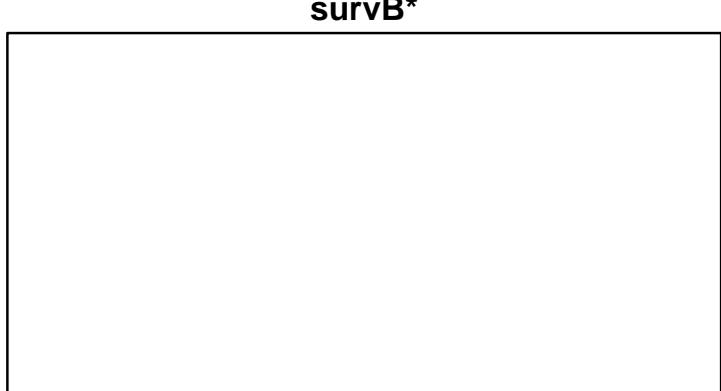
Hake ICES 8c–9a [HAKESOTH]

TC-MT, TL-MT, RecC* (1982–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



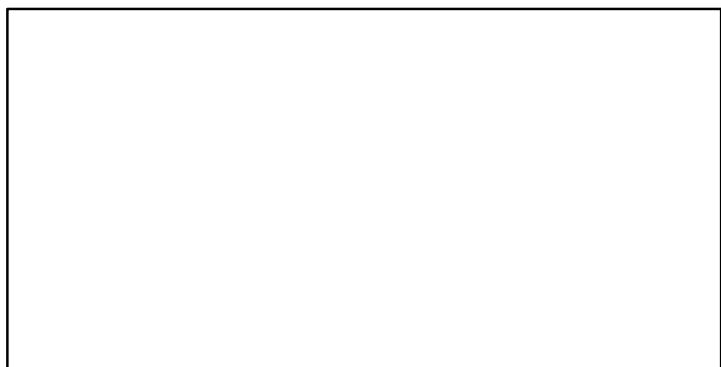
MSY*, MORAT*



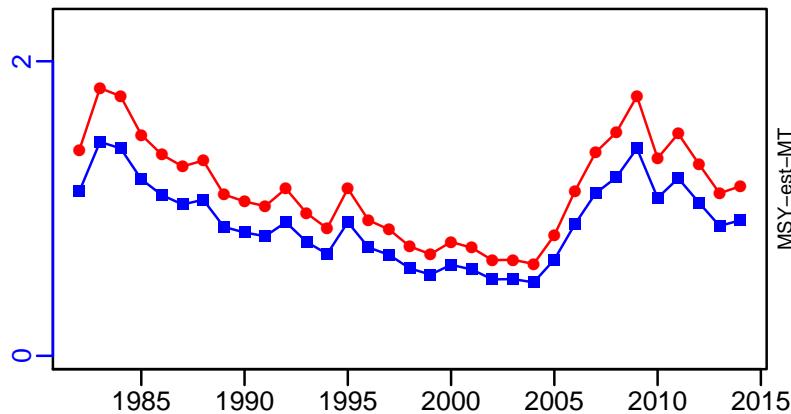
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1982–2015–ICESIMP2016)



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

Herring ICES 22-24-3a [HERR2224IIIa]

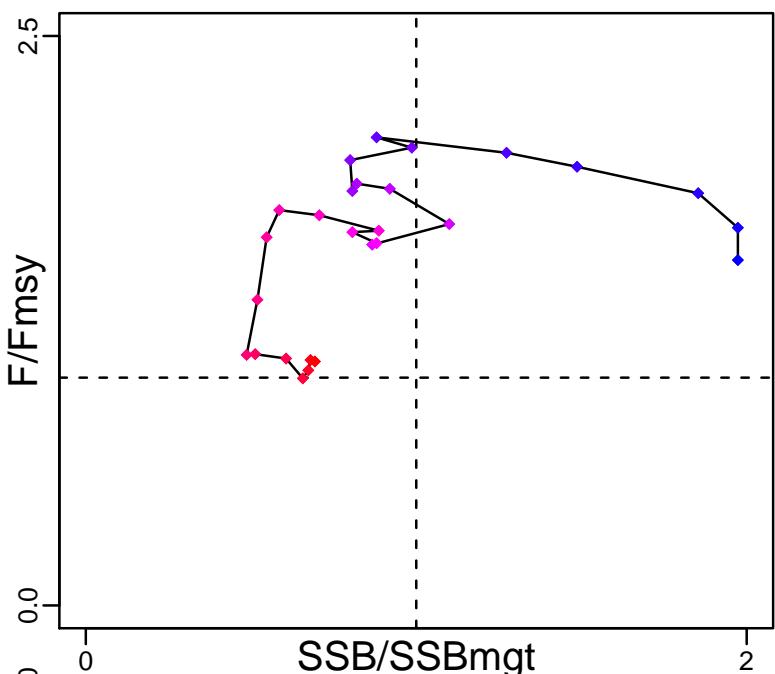
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERR2224IIIa-1991-2018-ICESIMP2018
Area	ICES 22-24-3a
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2011, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2011	110,000
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.31
ERmsy	ERmsy-est-ratio	2018	0.325
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	150,000
Fmgt	Fmgt-1/yr	2018	0.31
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	120,000
Flim	Flim-1/yr	2018	0.45
ERlim	-	-	-

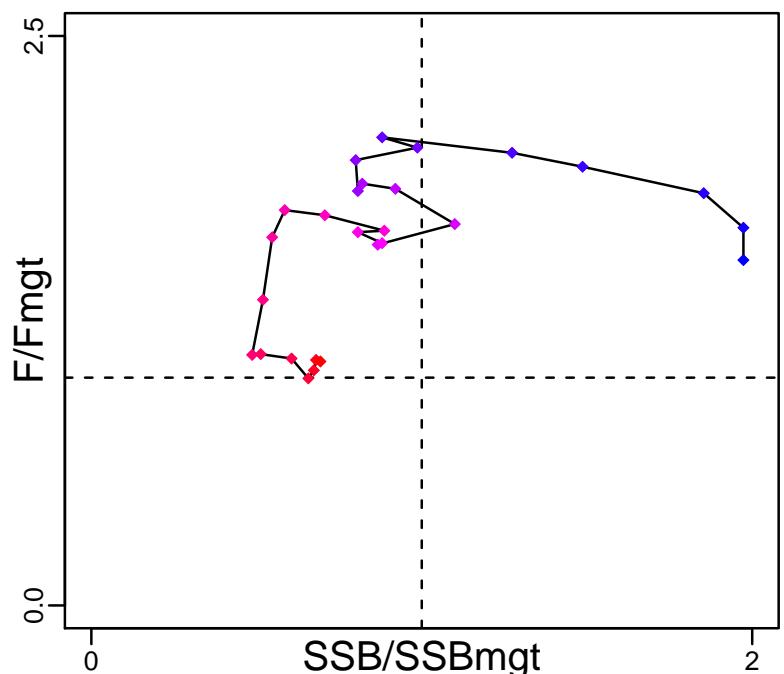
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	163,000	Both	-
SSB	SSB-MT	2018	104,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	1.37×10^9	-	0
F	F-1/yr	2018	0.332	-	3 to 6
ER	ER-calc-ratio	2018	0.284	-	-
TC	TC-MT	2018	46,300		
TL	TL-MT	2018	46,300		
TB/TBmsy	TB-MT/TBmsy-MT	2011	1.491		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.071		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.874		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.693		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.071		
ER/ERmgt	-	-	-		

Herring ICES 22–24–3a [HERR2224IIla]

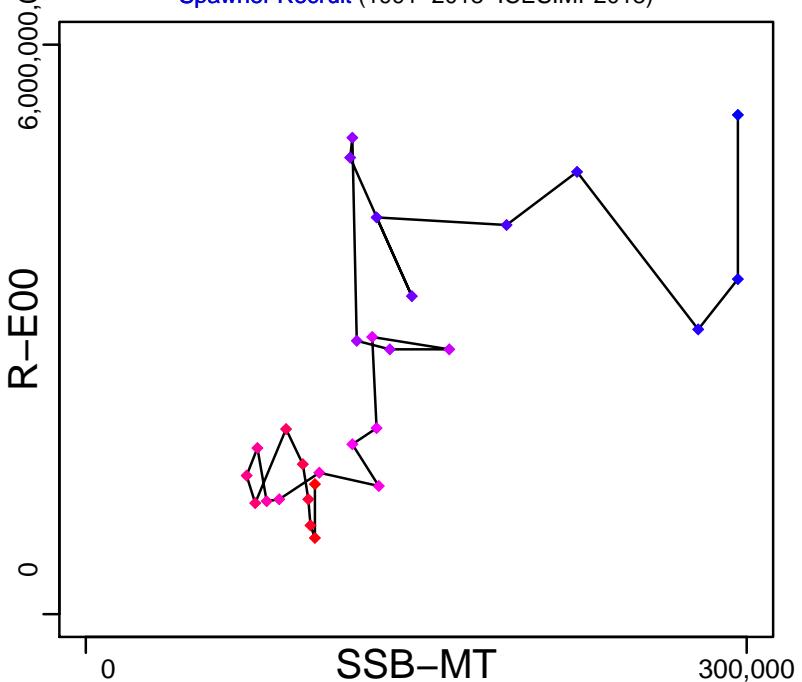
Kobe MSYpref (1991–2018–ICESIMP2018)



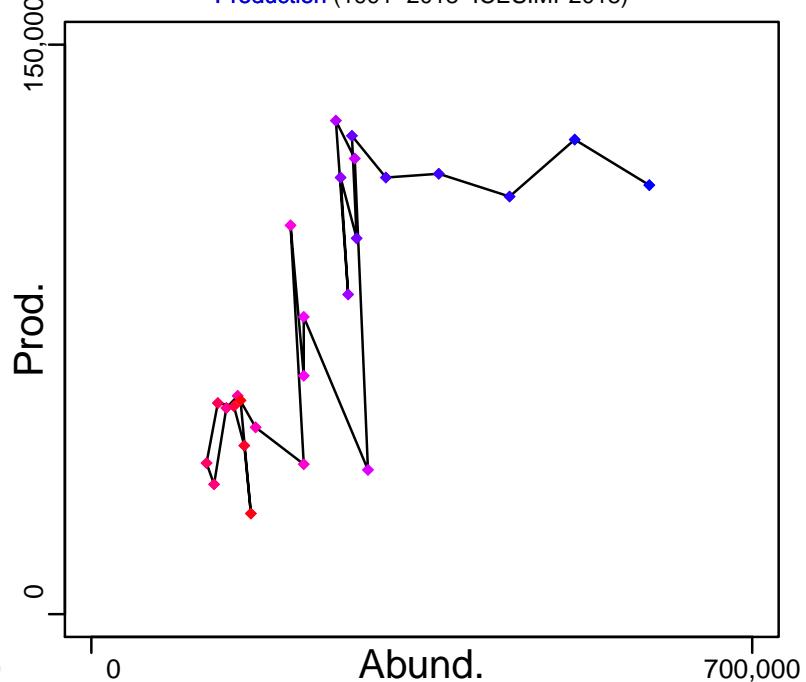
Kobe MGTpref (1991–2018–ICESIMP2018)



Spawner Recruit (1991–2018–ICESIMP2018)



Production (1991–2018–ICESIMP2018)

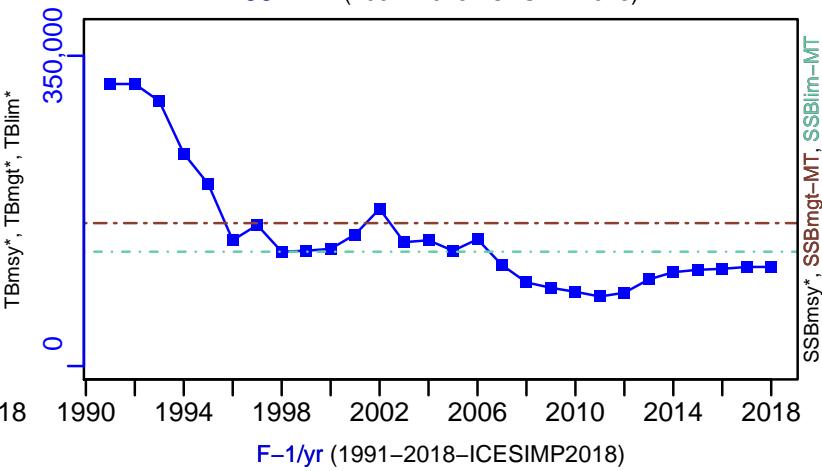
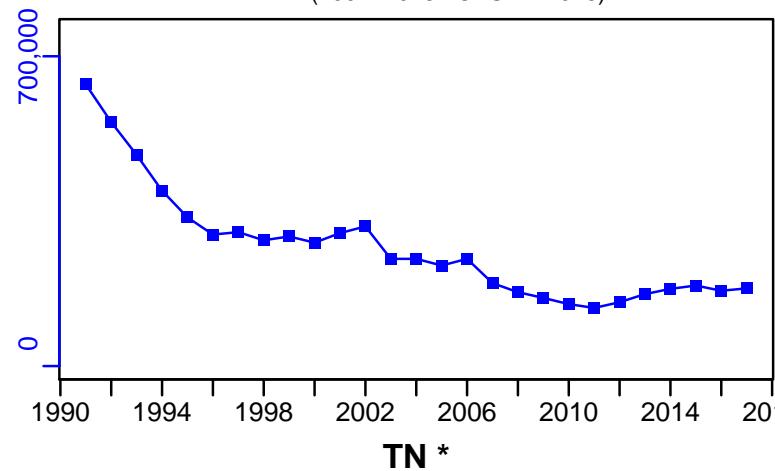


◆ Start Year ◆ End Year * No Data

Herring ICES 22–24–3a [HERR2224IIIa]

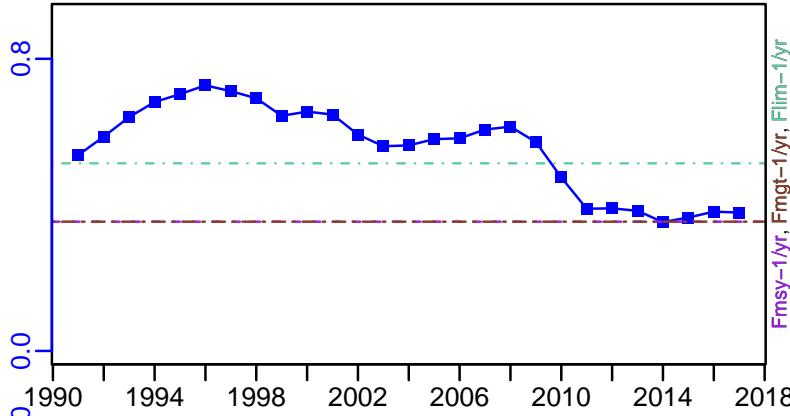
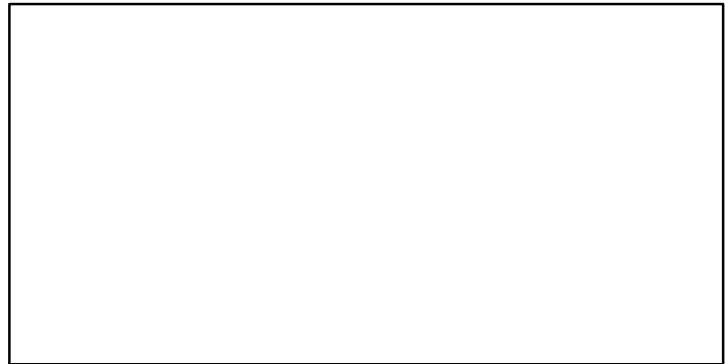
TB-MT (1991–2018–ICESIMP2018)

SSB-MT (1991–2018–ICESIMP2018)



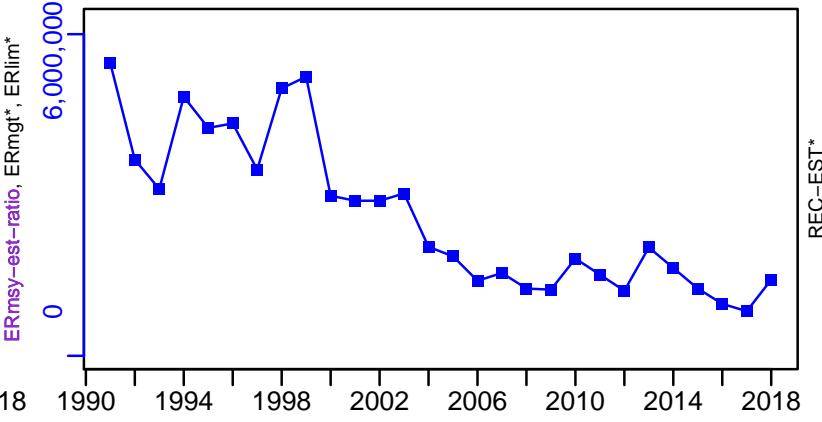
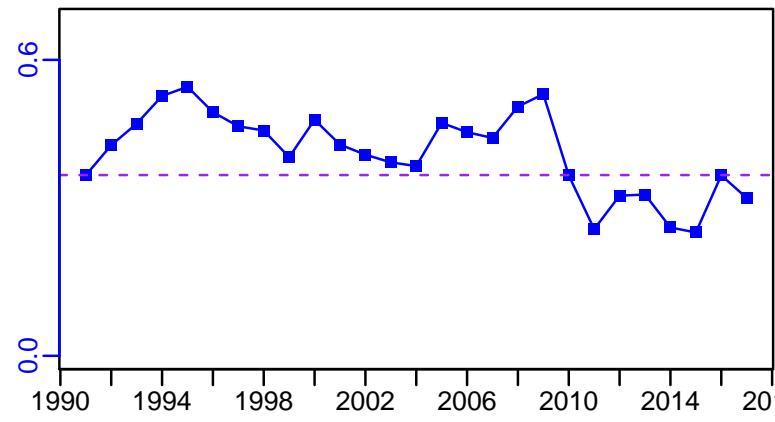
TN *

F-1/yr (1991–2018–ICESIMP2018)



ER-calc-ratio (1991–2018–ICESIMP2018)

R-E00 (1991–2018–ICESIMP2018)

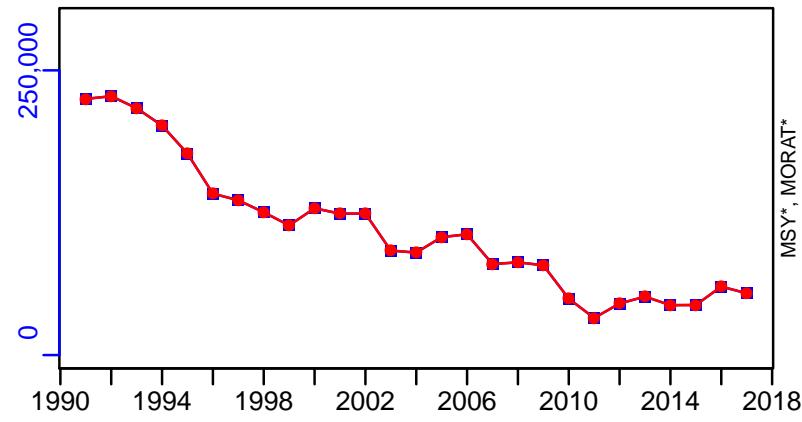


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Herring ICES 22–24–3a [HERR2224IIla]

TC-MT, TL-MT, RecC* (1991–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*



CPUE*



EFFORT*



CdivMSY*



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

Herring Subdivisions 25-29 and 32 [HERR2529-32]

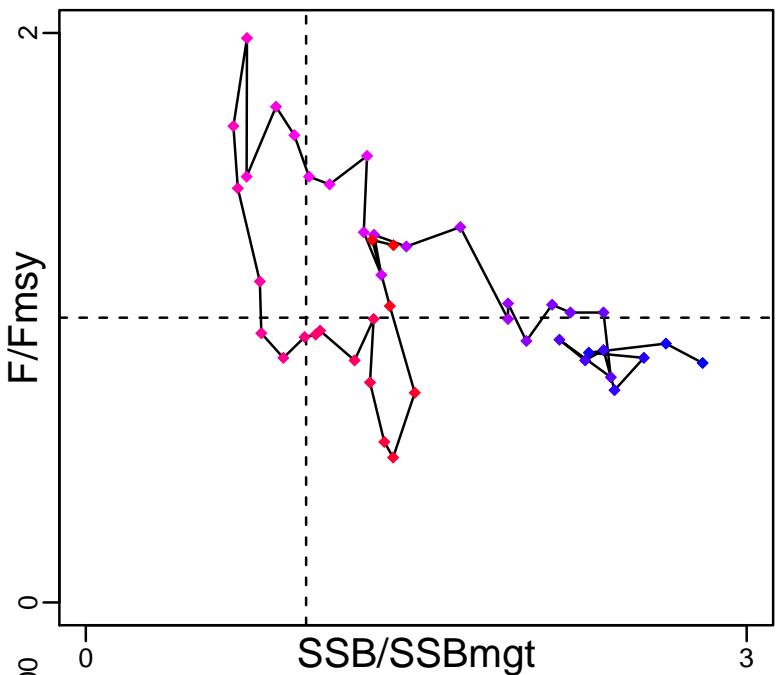
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERR2529-32-1973-2018-ICESIMP2018
Area	Subdivisions 25-29 and 32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.22
ERmsy	ERmsy-est-ratio	2018	0.11
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	6×10^5
Fmgt	Fmgt-1/yr	2018	0.22
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	430,000
Flim	Flim-1/yr	2018	0.52
ERlim	-	-	-

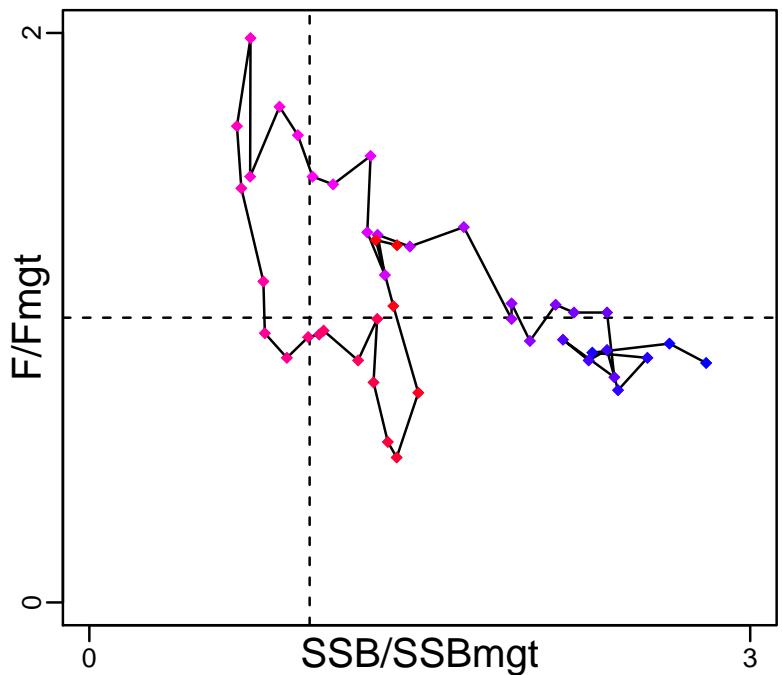
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	1,550,000	Both	-	
SSB	SSB-MT	2018	809,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.74×10^{10}	-	1	
F	F-1/yr	2018	0.276	-	3 to 6	
ER	ER-calc-ratio	2018	0.124	-	-	
TC	TC-MT	2018	203,000			
TL	TL-MT	2018	203,000			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.255			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.131			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.348			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.255			
ER/ERmgt	-	-	-			

Herring Subdivisions 25–29 and 32 [HERR2529–32]

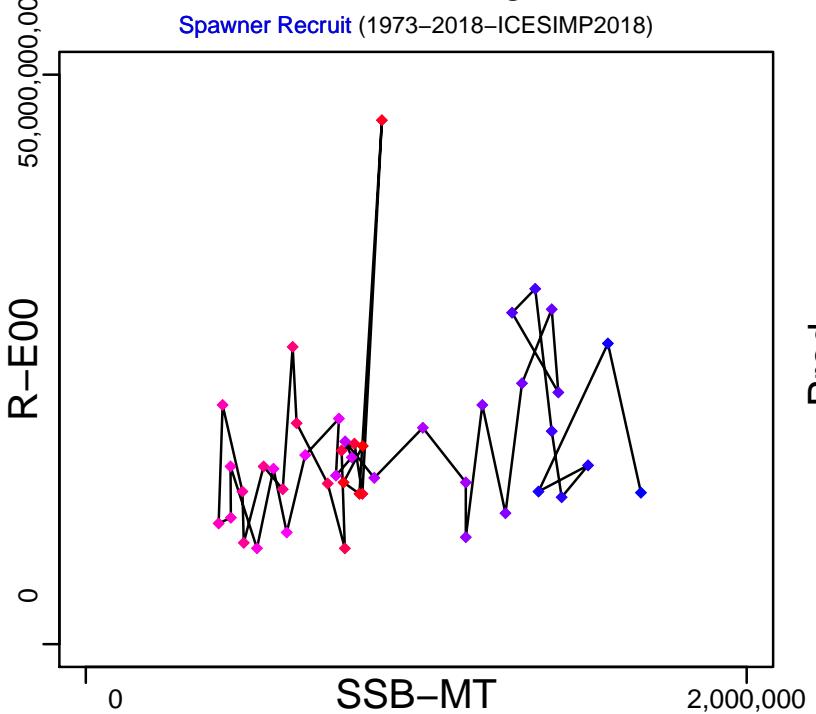
Kobe MSYpref (1973–2018–ICESIMP2018)



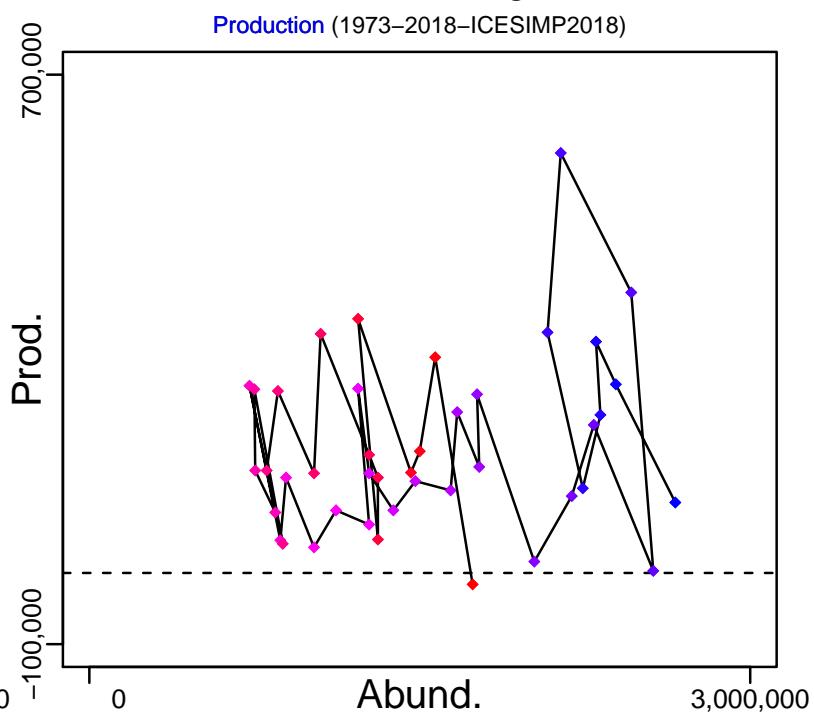
Kobe MGTpref (1973–2018–ICESIMP2018)



Spawner Recruit (1973–2018–ICESIMP2018)



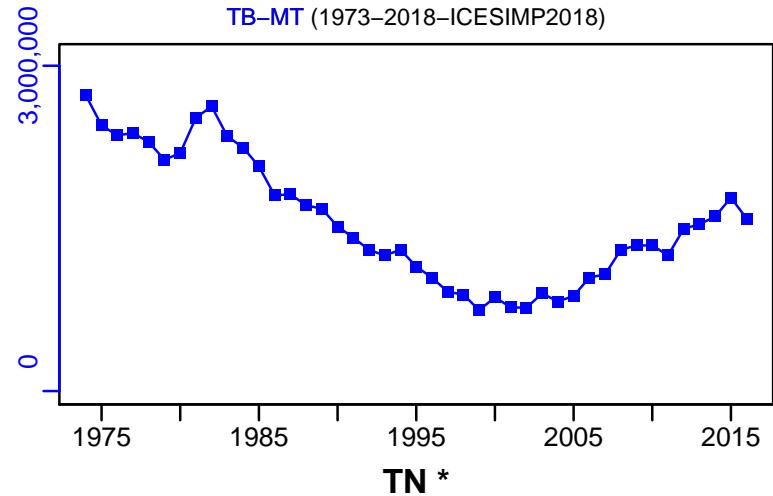
Production (1973–2018–ICESIMP2018)



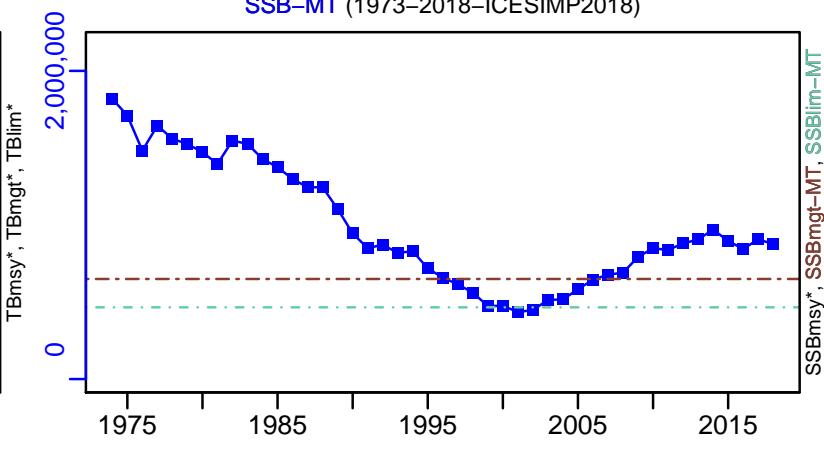
◆ Start Year ◆ End Year * No Data

Herring Subdivisions 25–29 and 32 [HERR2529–32]

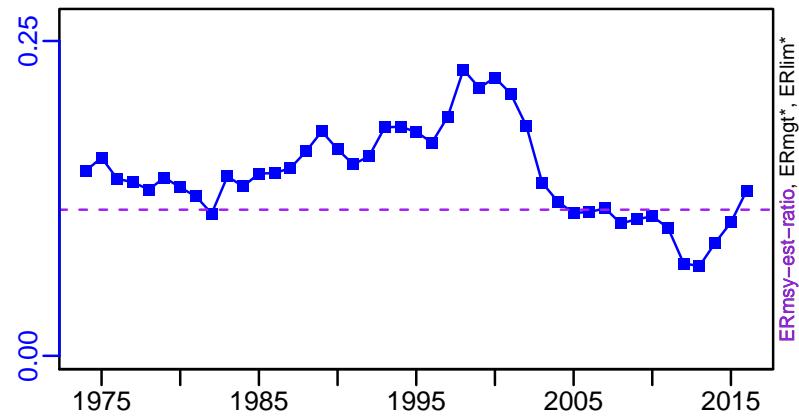
TB-MT (1973–2018–ICESIMP2018)



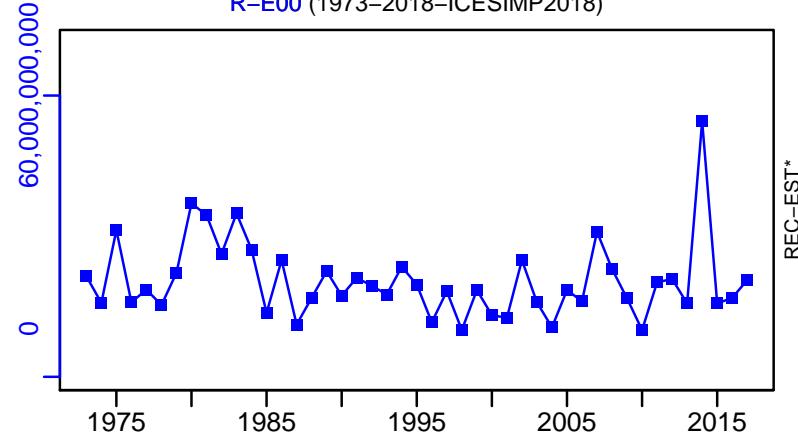
SSB-MT (1973–2018–ICESIMP2018)



ER-calc-ratio (1973–2018–ICESIMP2018)



R-E00 (1973–2018–ICESIMP2018)

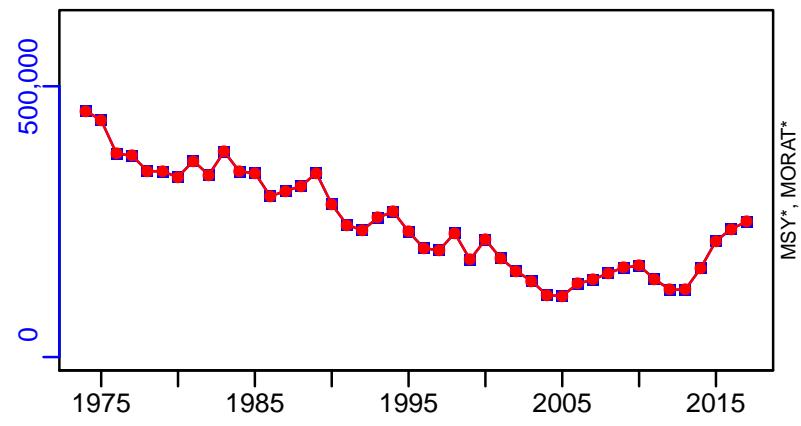


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

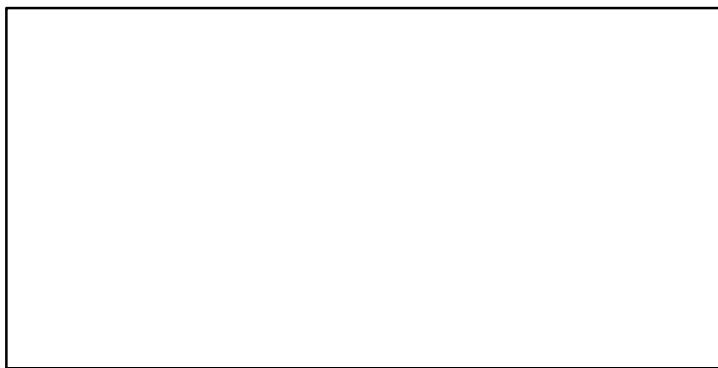
Herring Subdivisions 25–29 and 32 [HERR2529–32]

TC-MT, TL-MT, RecC* (1973–2018–ICESIMP2018)

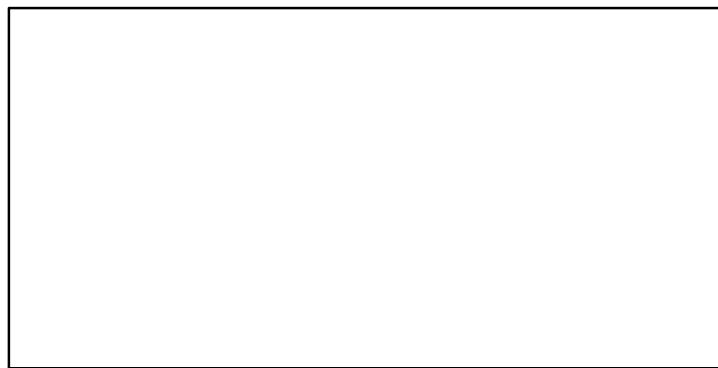
TAC*, Cpair*, Cadv*



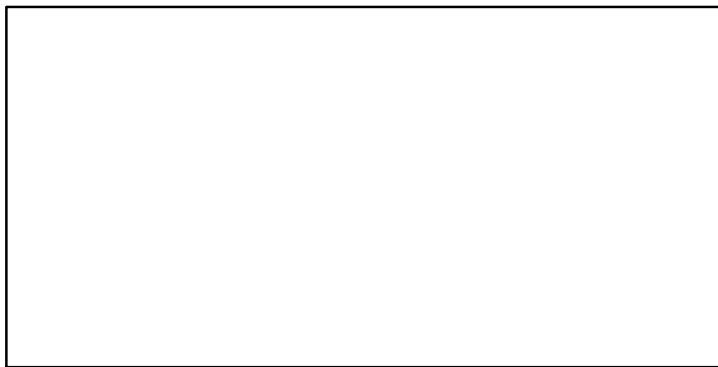
survB*



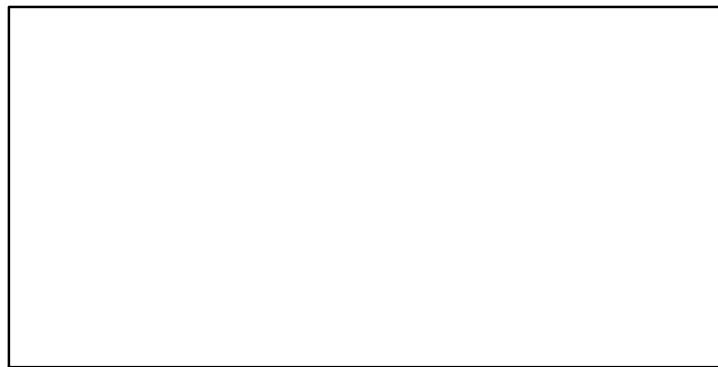
CPUE*



EFFORT*



CdivMSY*



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

Herring Subdivisions 30-31 [HERR30-31]

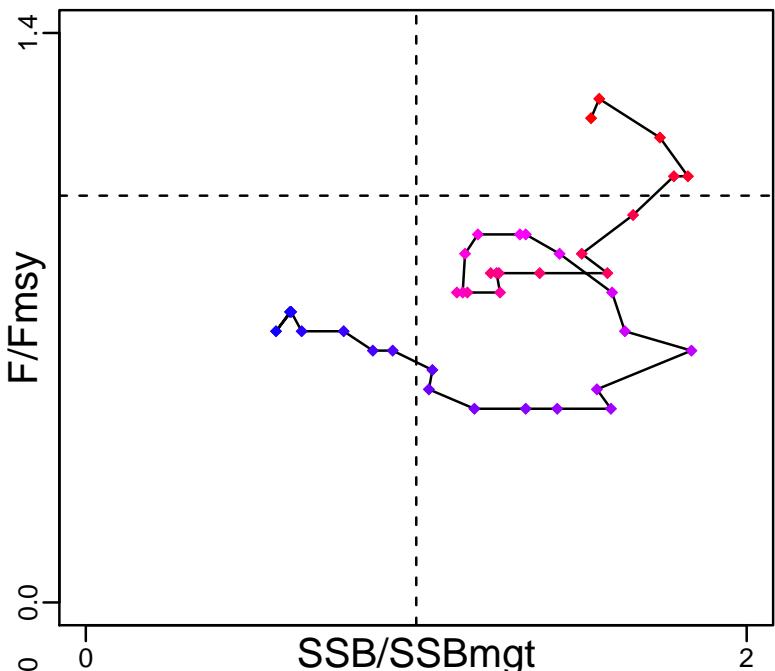
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERR30-31-1979-2018-ICESIMP2018
Area	Subdivisions 30-31
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.21
ERmsy	ERmsy-est-ratio	2018	0.179
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	283,180
Fmgt	Fmgt-1/yr	2018	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	202,272
Flim	Flim-1/yr	2018	0.29
ERlim	-	-	-

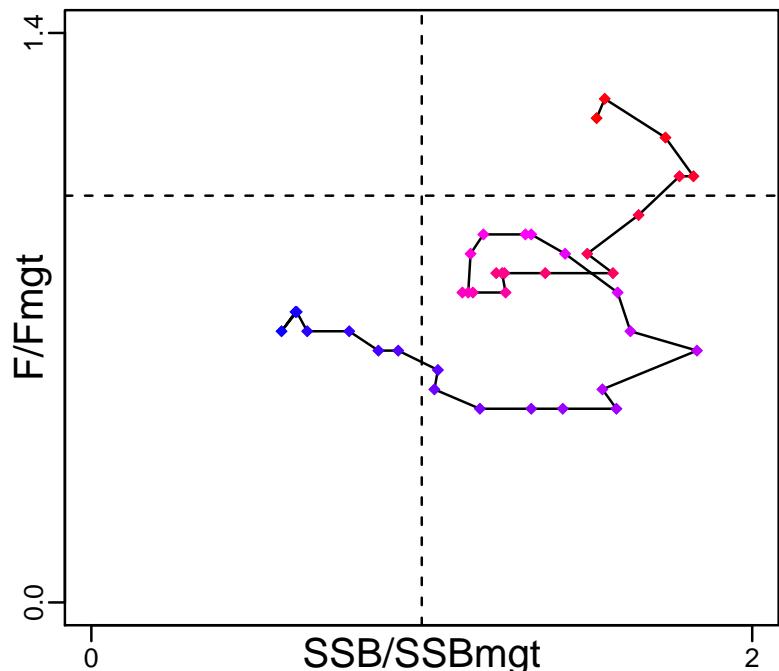
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	704,000	Both	-	
SSB	SSB-MT	2018	422,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	4.61×10^9	-	1	
F	F-1/yr	2018	0.25	-	3 to 7	
ER	ER-calc-ratio	2018	0.147	-	-	
TC	TC-MT	2017	130,000			
TL	TL-MT	2018	104,000			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.19			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.823			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.49			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.19			
ER/ERmgt	-	-	-			

Herring Subdivisions 30–31 [HERR30–31]

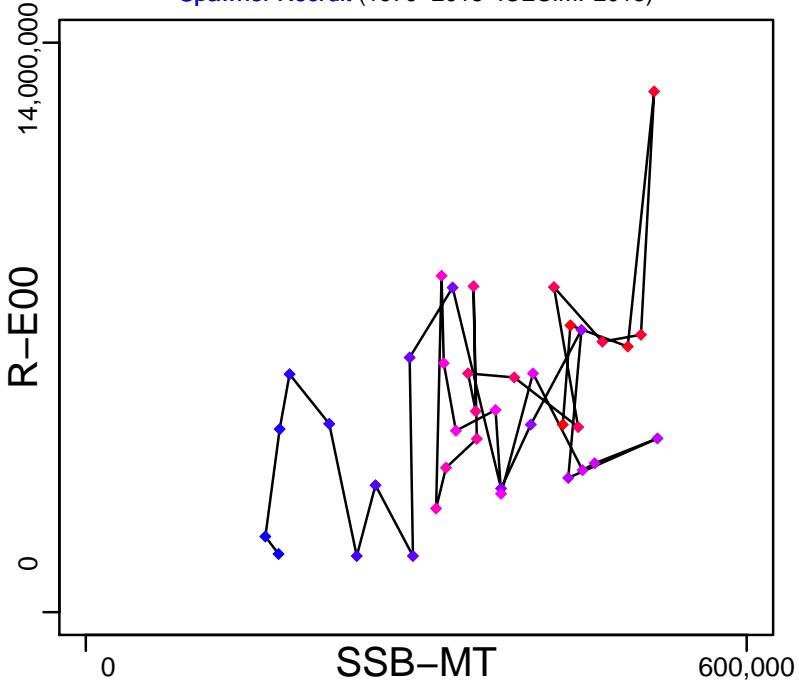
Kobe MSYpref (1979–2018–ICESIMP2018)



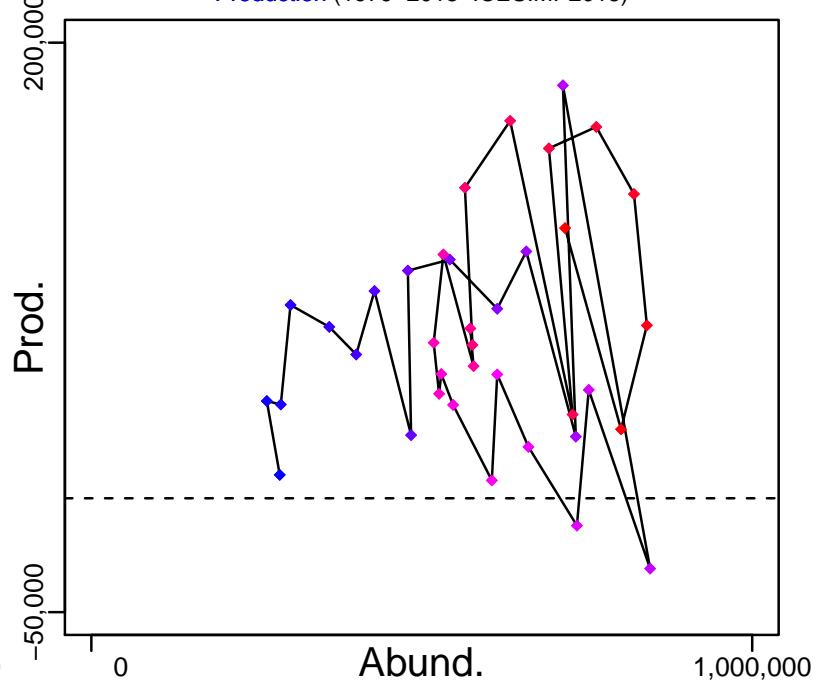
Kobe MGTpref (1979–2018–ICESIMP2018)



Spawner Recruit (1979–2018–ICESIMP2018)



Production (1979–2018–ICESIMP2018)

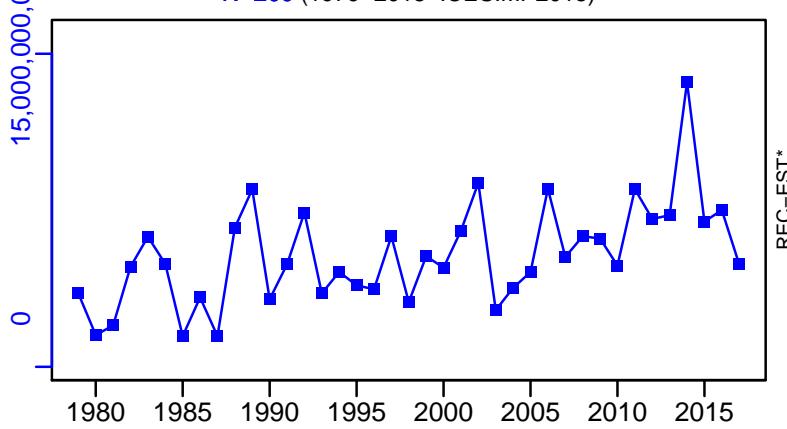
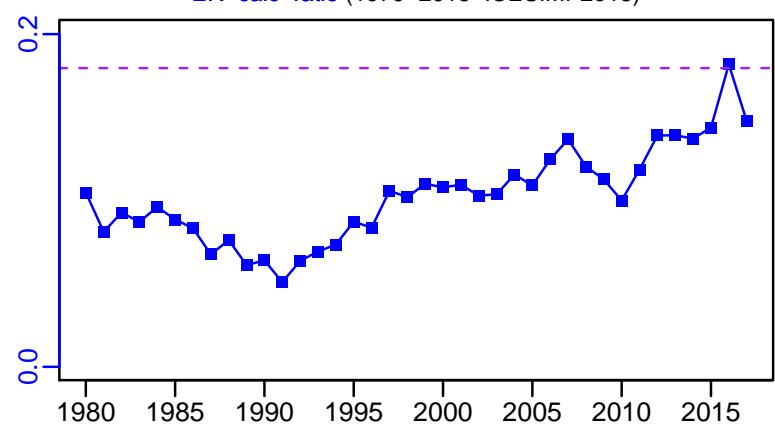
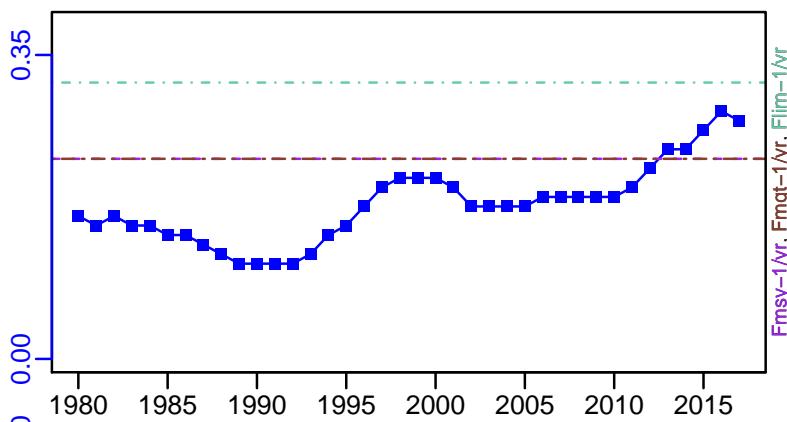
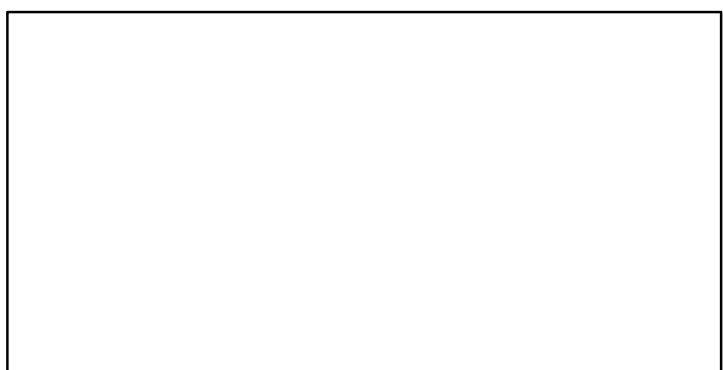
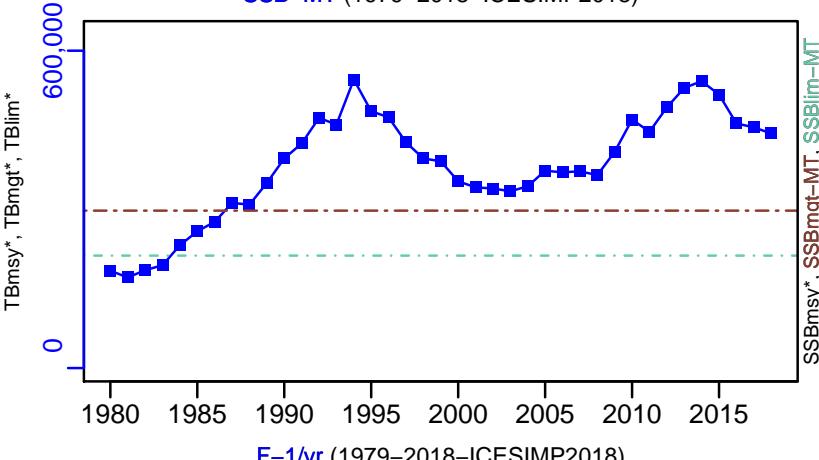
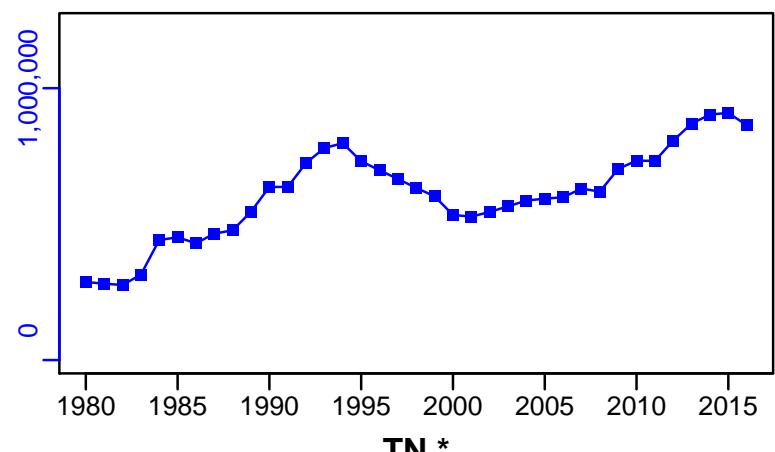


◆ Start Year ◆ End Year * No Data

Herring Subdivisions 30–31 [HERR30–31]

TB-MT (1979–2017–ICESIMP2018)

SSB-MT (1979–2018–ICESIMP2018)

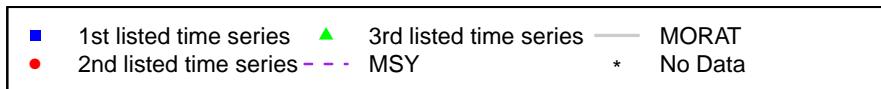
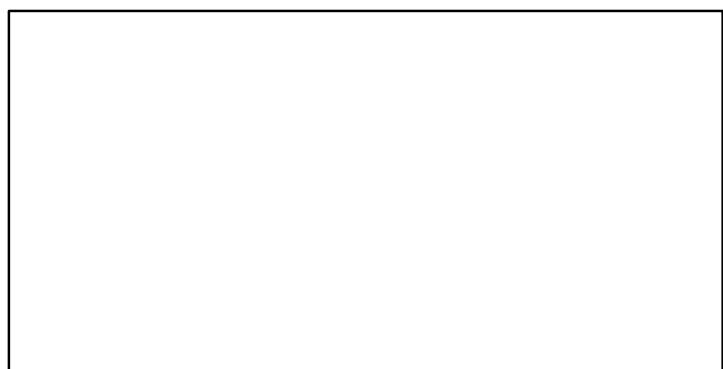
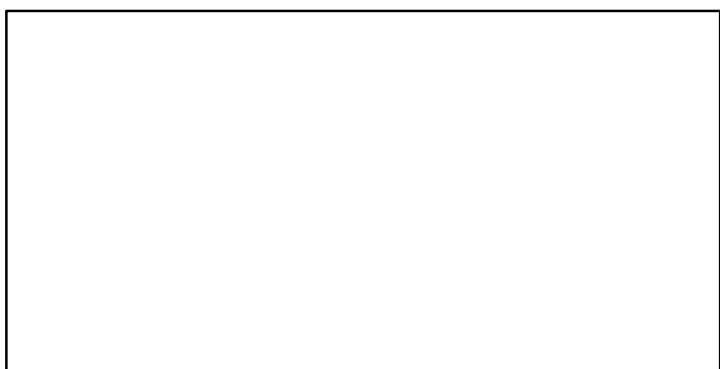
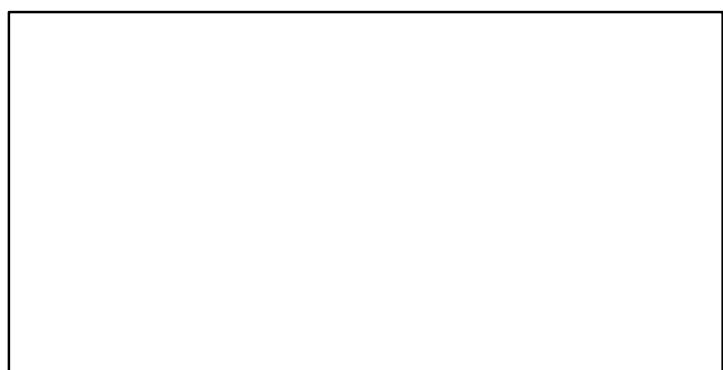
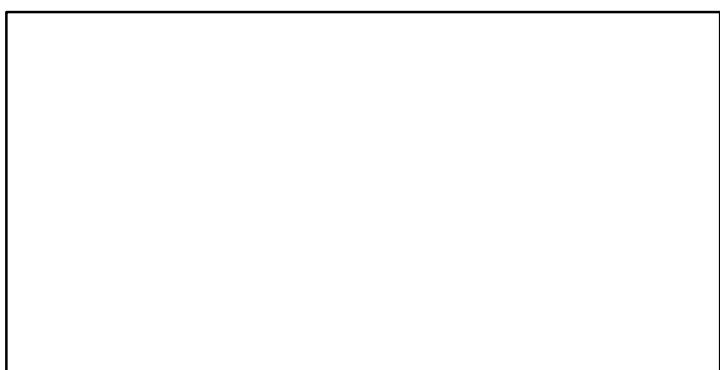
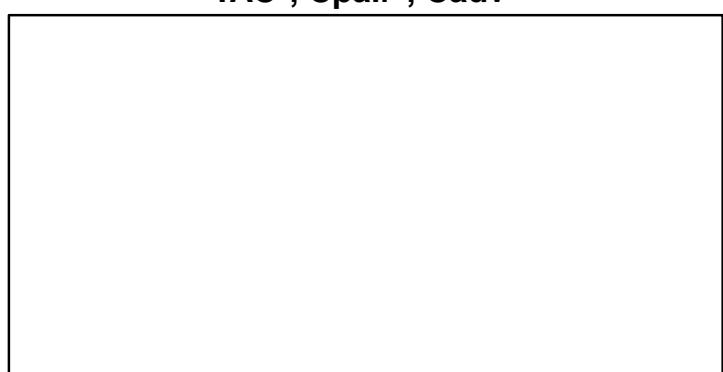
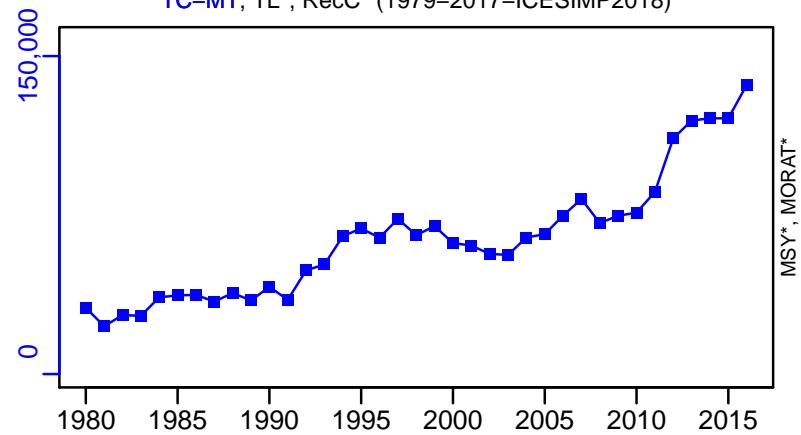


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

Herring Subdivisions 30–31 [HERR30–31]

TC–MT, TL*, RecC* (1979–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



Herring Irish Sea [HERRNIRS]

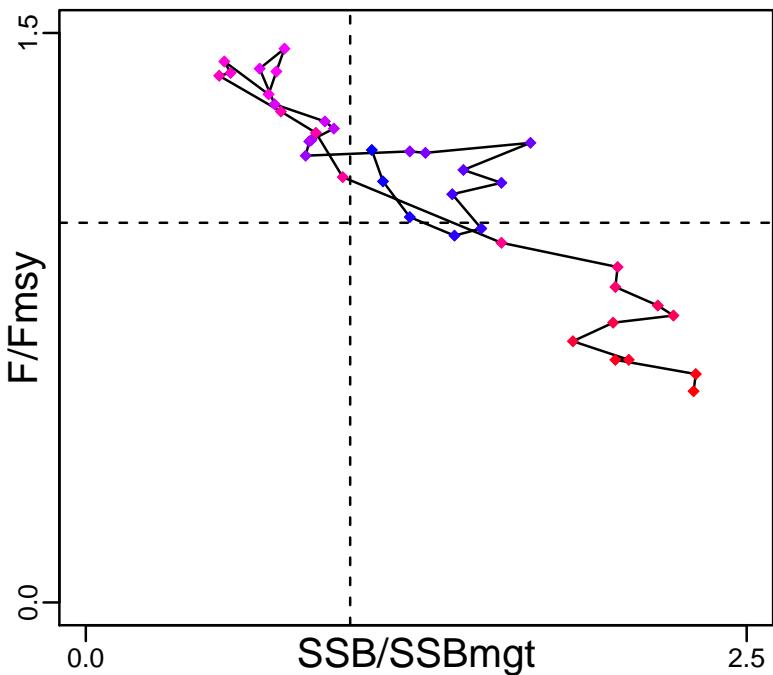
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRNIRS-1979-2018-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	141,328
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.266
ERmsy	ERmsy-est-ratio	2018	0.062
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	11,831
Fmgt	Fmgt-1/yr	2018	0.266
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	19,292
M	-	-	-
TBlim	TBlim-MT	2010	6000
SSBlim	SSBlim-MT	2018	8500
Flim	Flim-1/yr	2018	0.397
ERlim	-	-	-

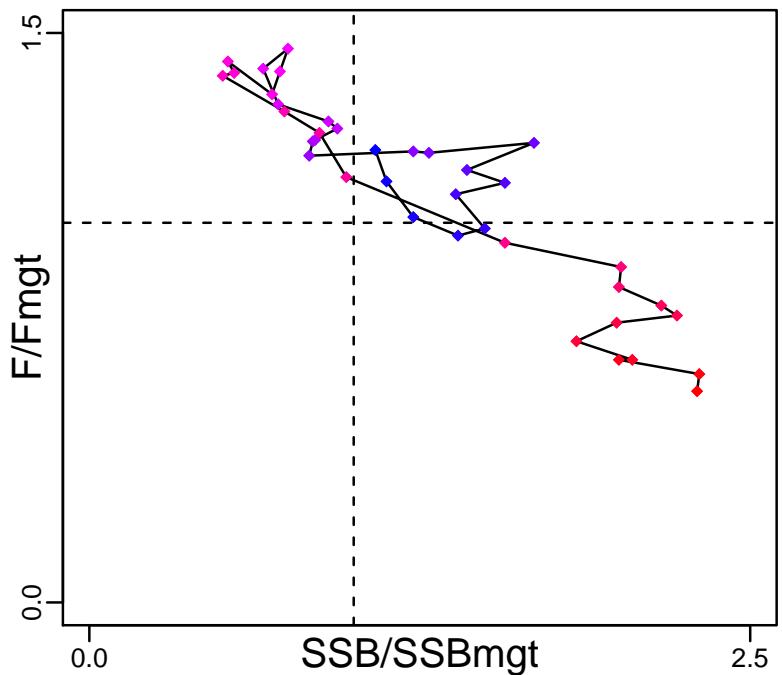
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	49,000	Both	-	
SSB	SSB-MT	2018	22,500	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3.1×10^8	-	1	
F	F-1/yr	2018	0.148	-	4 to 6	
ER	ER-calc-ratio	2018	0.08	-	-	
TC	TC-MT	2018	3900			
TL	TL-MT	2018	3900			
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	0.222			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.556			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.274			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.902			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.556			
ER/ERmgt	-	-	-			

Herring Irish Sea [HERRNIRS]

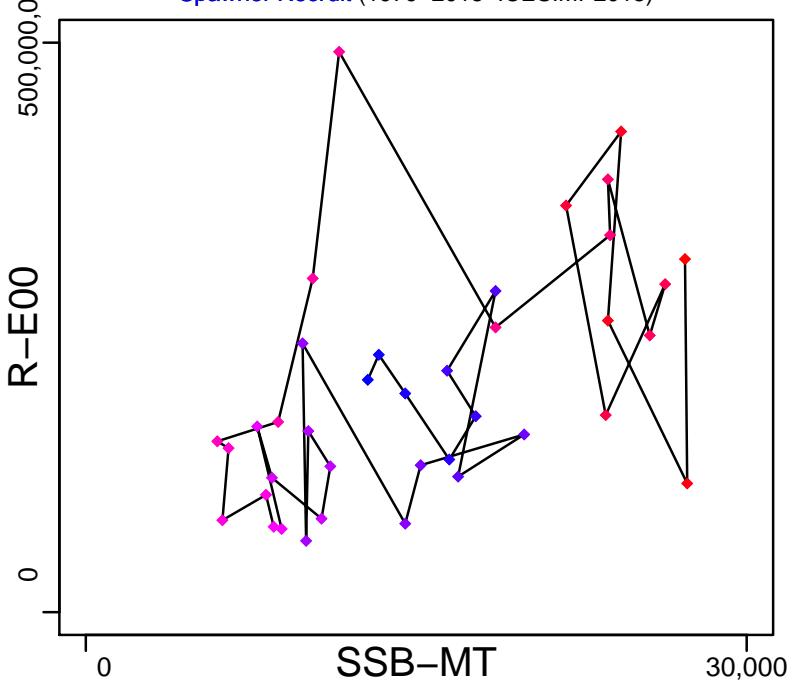
Kobe MSYpref (1979–2018–ICESIMP2018)



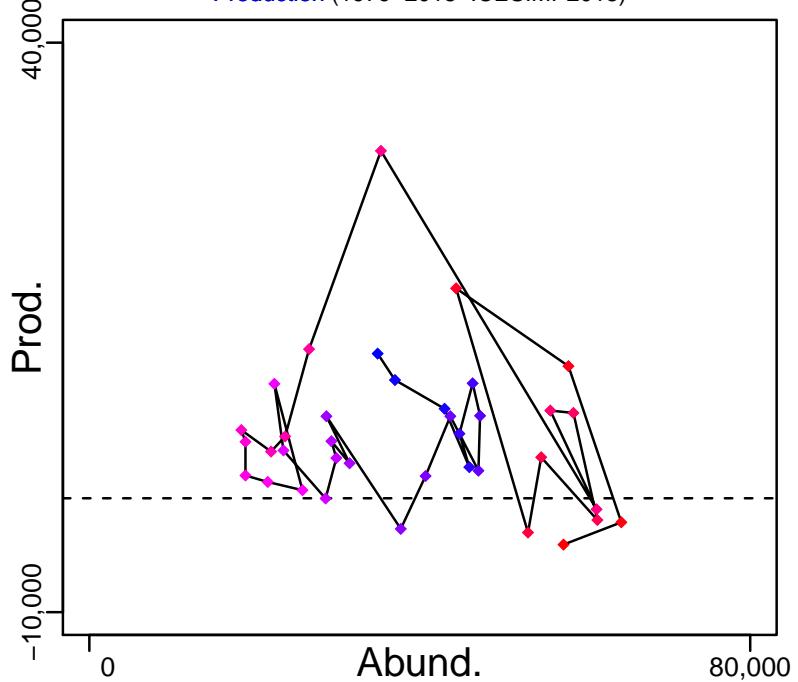
Kobe MGTpref (1979–2018–ICESIMP2018)



Spawner Recruit (1979–2018–ICESIMP2018)



Production (1979–2018–ICESIMP2018)

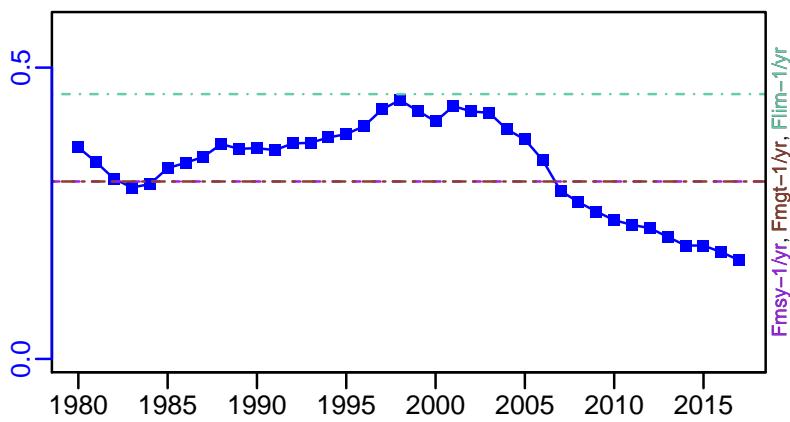
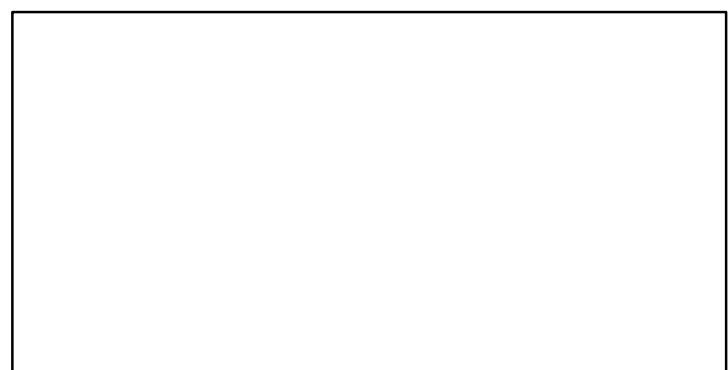
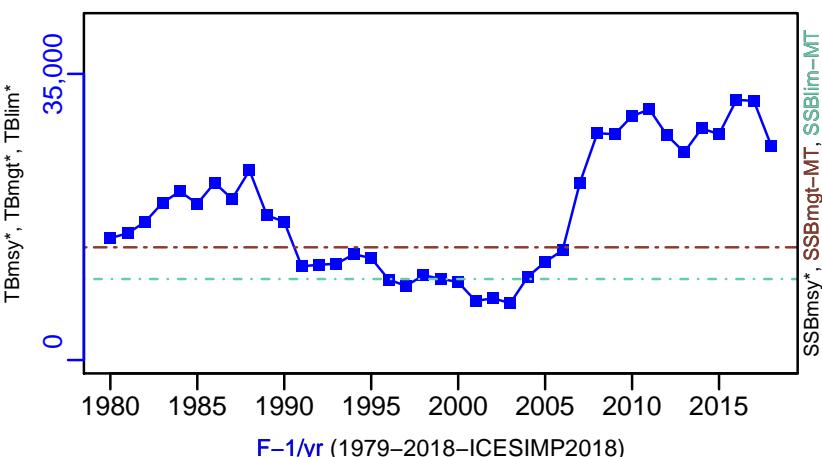
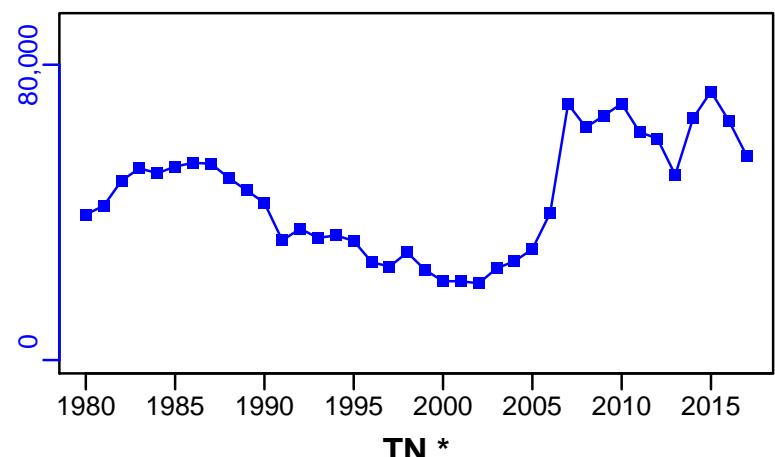


◆ Start Year ◆ End Year * No Data

Herring Irish Sea [HERRNIRS]

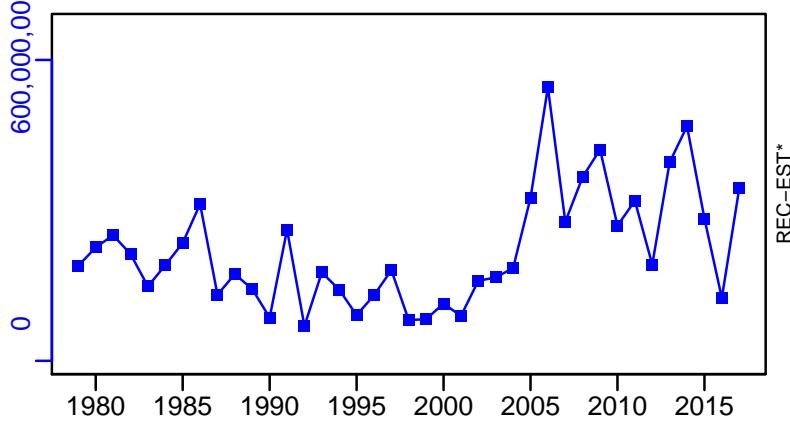
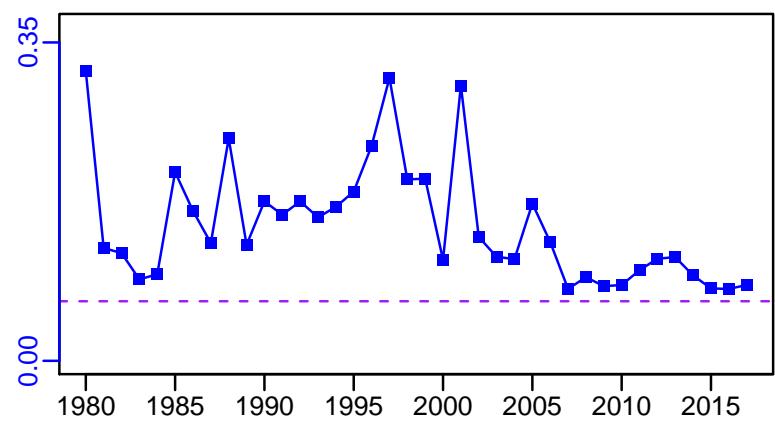
TB-MT (1979–2018–ICESIMP2018)

SSB-MT (1979–2018–ICESIMP2018)



ER-calc-ratio (1979–2018–ICESIMP2018)

R-E00 (1979–2018–ICESIMP2018)

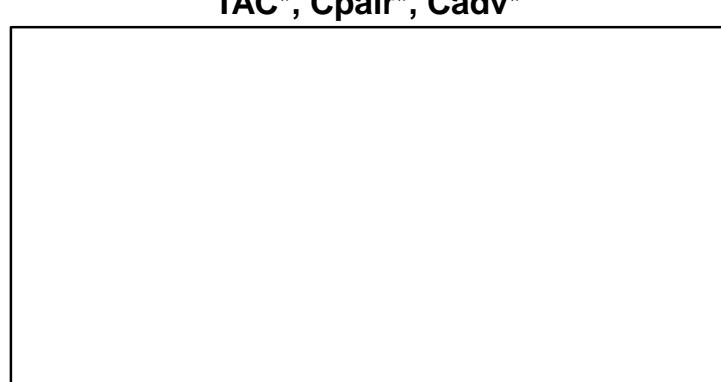
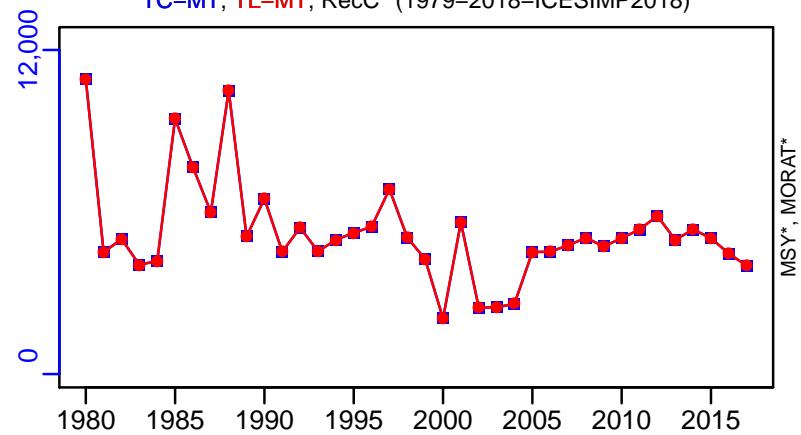


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Herring Irish Sea [HERRNIRS]

TC-MT, TL-MT, RecC* (1979–2018–ICESIMP2018)

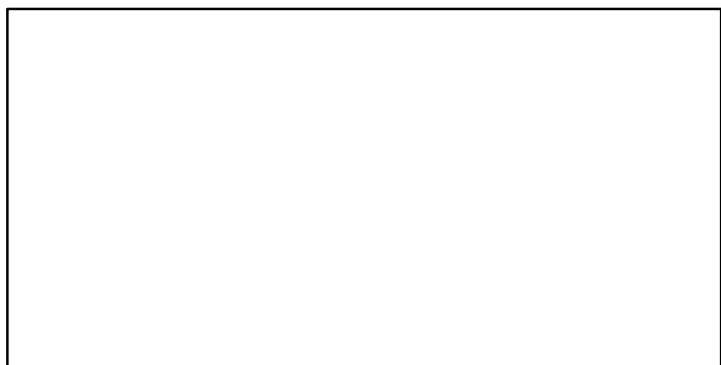
TAC*, Cpair*, Cadv*



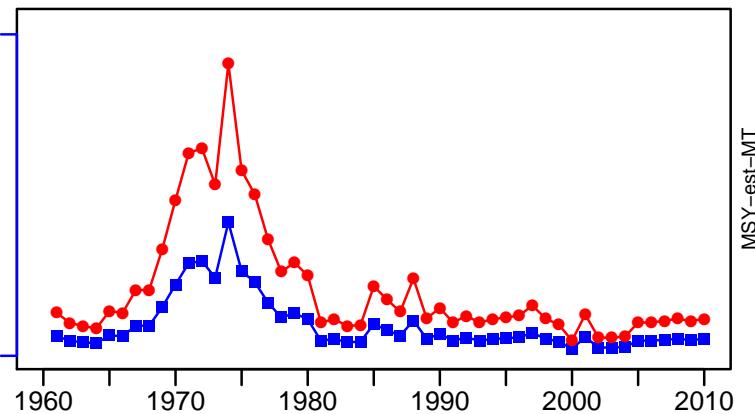
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdiveMEANC-ratio, (1960–2010–NEUBAUER)



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

Herring ICES 3a-4-7d [HERRNS-IIla-VIId]

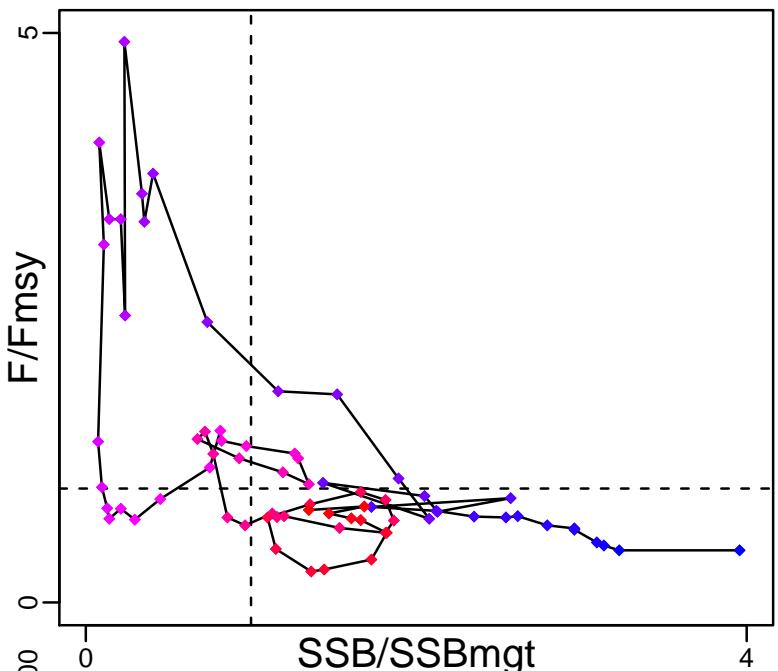
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRNS-IIla-VIId-1947-2018-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	3,489,386
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.26
ERmsy	ERmsy-est-ratio	2018	0.01
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	1,400,000
Fmgt	Fmgt-1/yr	2018	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	583,071
M	-	-	-
TBlim	TBlim-MT	2011	8×10^5
SSBlim	SSBlim-MT	2018	8×10^5
Flim	Flim-1/yr	2018	0.34
ERlim	-	-	-

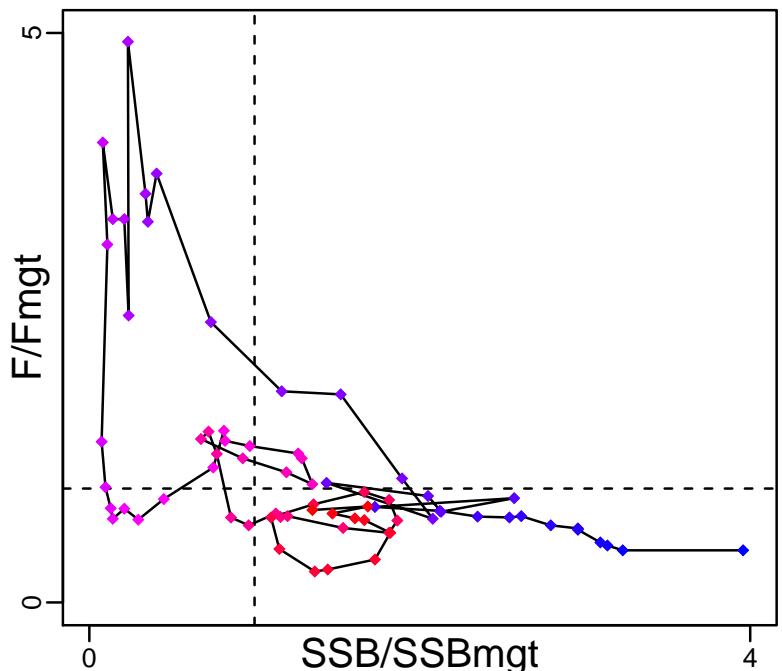
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	3,130,000	Both	-
SSB	SSB-MT	2018	1,530,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	3.57×10^{10}	-	0
F	F-1/yr	2018	0.211	-	2 to 6
ER	ER-calc-ratio	2018	0.136	-	-
TC	TC-MT	2018	498,000		
TL	TL-MT	2017	564,000		
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.92		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.812		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	13.674		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.093		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.812		
ER/ERmgt	-	-	-		

Herring ICES 3a-4-7d [HERRNS-IIla-VIId]

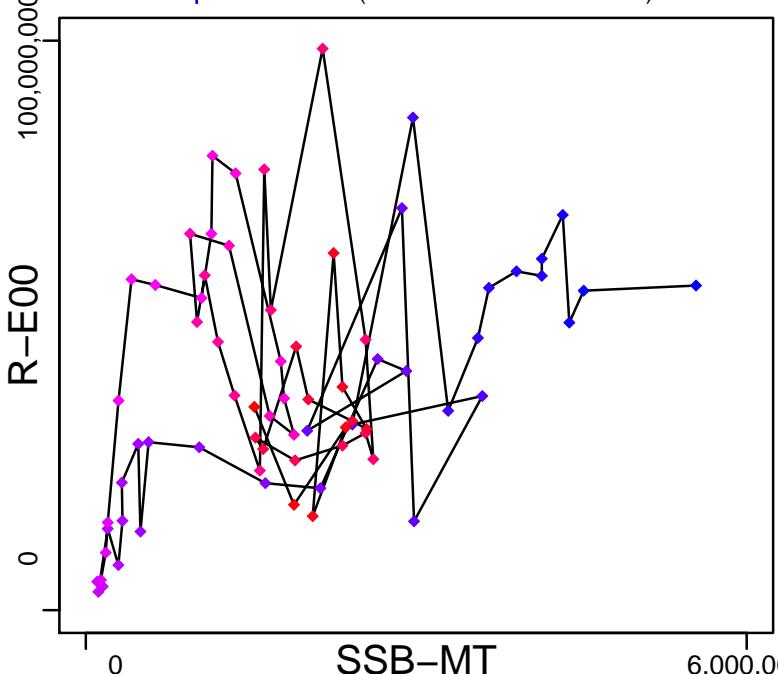
Kobe MSYpref (1947–2018–ICESIMP2018)



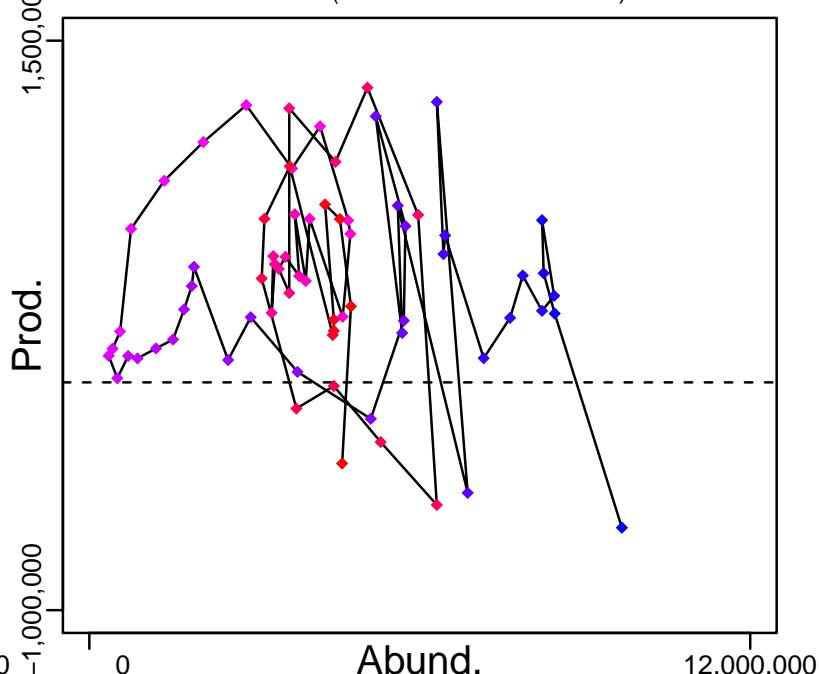
Kobe MGTpref (1947–2018–ICESIMP2018)



Spawner Recruit (1947–2018–ICESIMP2018)



Production (1947–2018–ICESIMP2018)

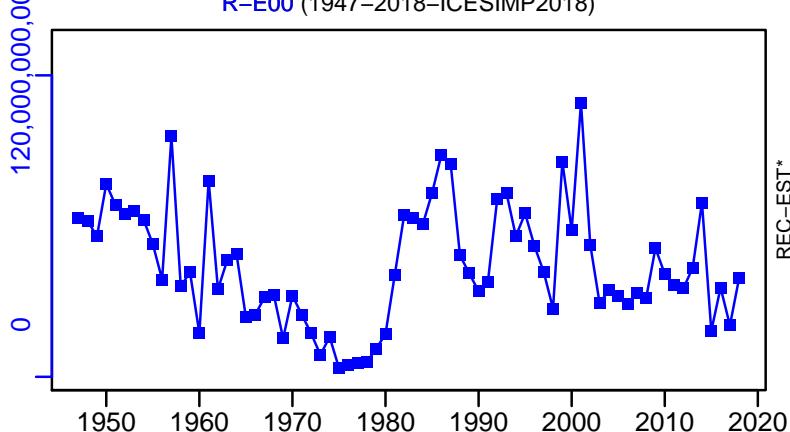
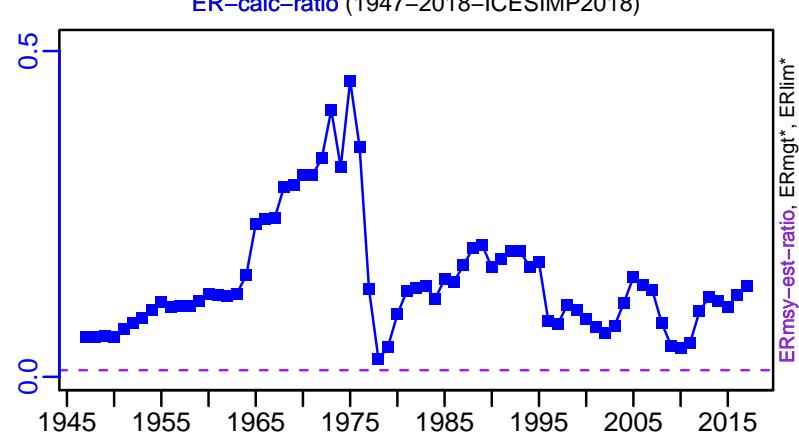
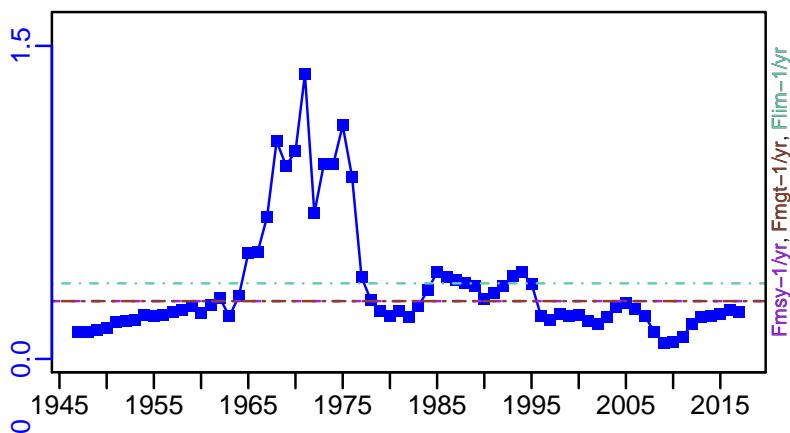
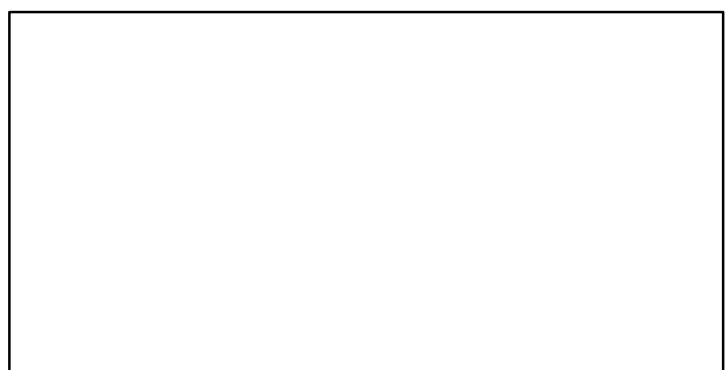
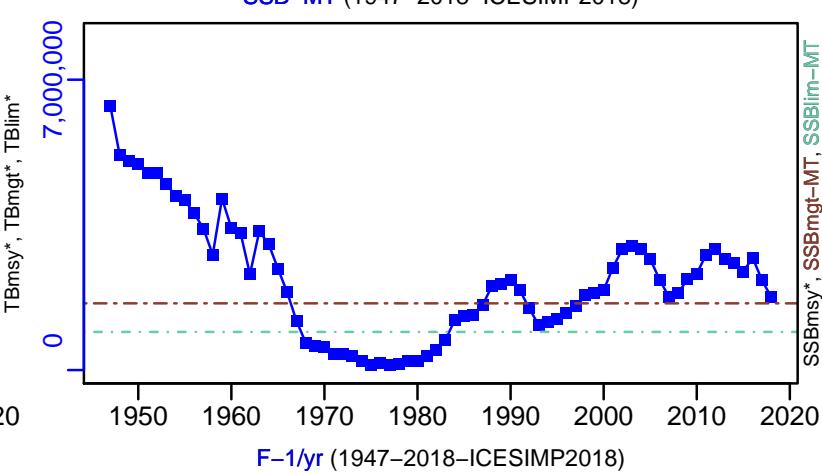
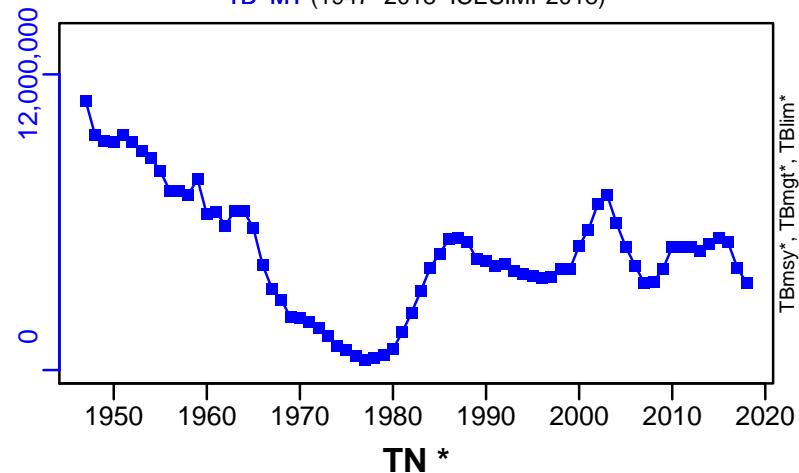


◆ Start Year ◆ End Year * No Data

Herring ICES 3a–4–7d [HERRNS–IIIa–VIIId]

TB-MT (1947–2018–ICESIMP2018)

SSB-MT (1947–2018–ICESIMP2018)

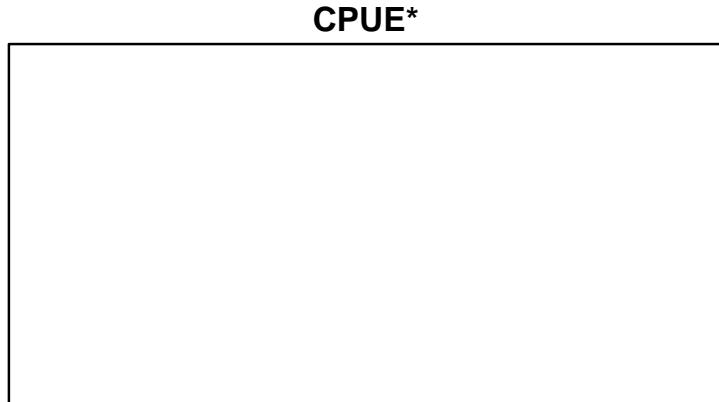
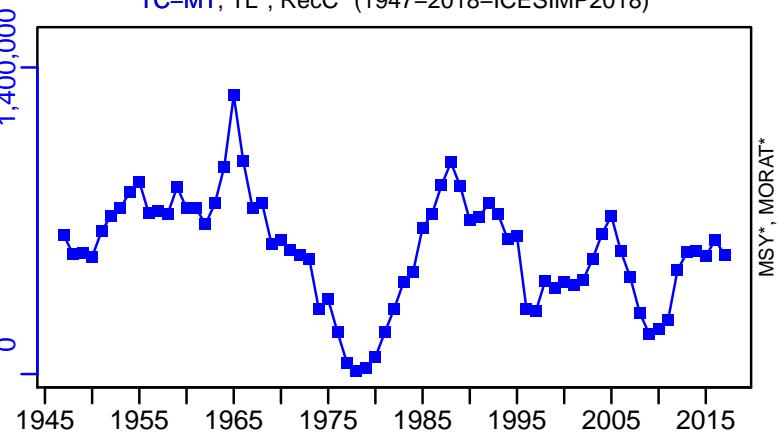


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

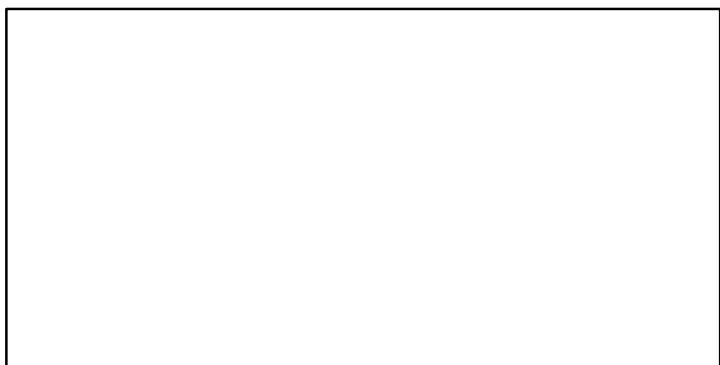
Herring ICES 3a–4–7d [HERRNS–IIIa–VIId]

TC–MT, TL*, RecC* (1947–2018–ICESIMP2018)

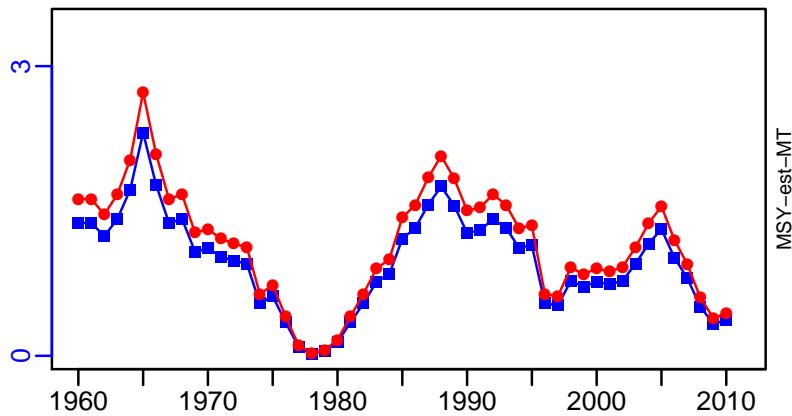
TAC*, Cpair*, Cadv*



EFFORT*



TL–MT/MSY–est–MT, CdiveMEANC–ratio, (1960–2011–NEUBAUER)



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

Herring Gulf of Riga East of Gotland [HERRRIGA]

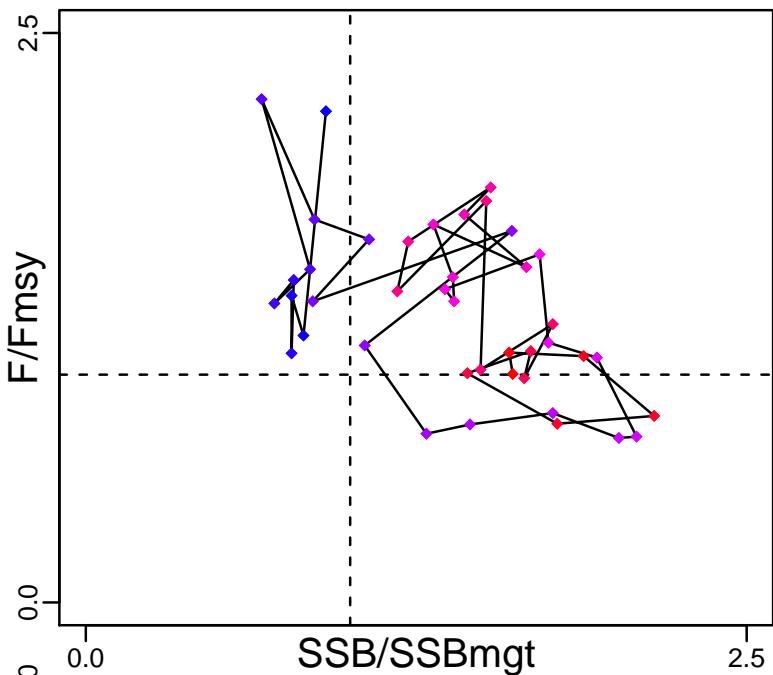
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERRRIGA-1976-2018-ICESIMP2018
Area	Gulf of Riga East of Gotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2011, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2011	60,000
Fmsy	Fmsy-1/yr	2018	0.32
ERmsy	ERmsy-est-ratio	2018	0.264
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	60,000
Fmgt	Fmgt-1/yr	2018	0.32
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	28,736
M	M-1/yr	2011	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	40,800
Flim	Flim-1/yr	2018	0.88
ERlim	-	-	-

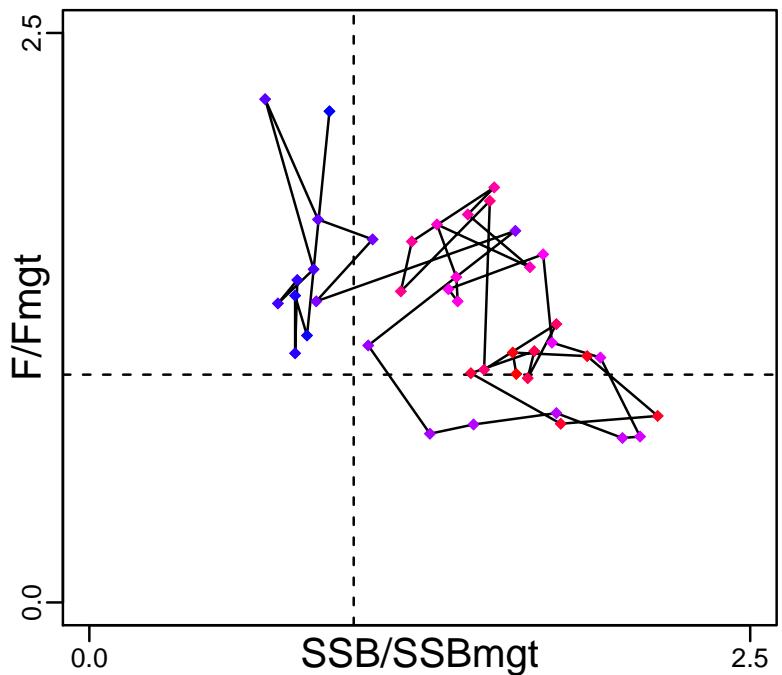
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	132,000	Both	-	
SSB	SSB-MT	2018	90,100	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3.06×10^9	-	1	
F	F-1/yr	2018	0.321	-	3 to 7	
ER	ER-calc-ratio	2018	0.213	-	-	
TC	TC-MT	2017	30,900			
TL	TL-MT	2018	28,100			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	1.262			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.003			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.807			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.502			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.003			
ER/ERmgt	-	-	-			

Herring Gulf of Riga East of Gotland [HERRRIGA]

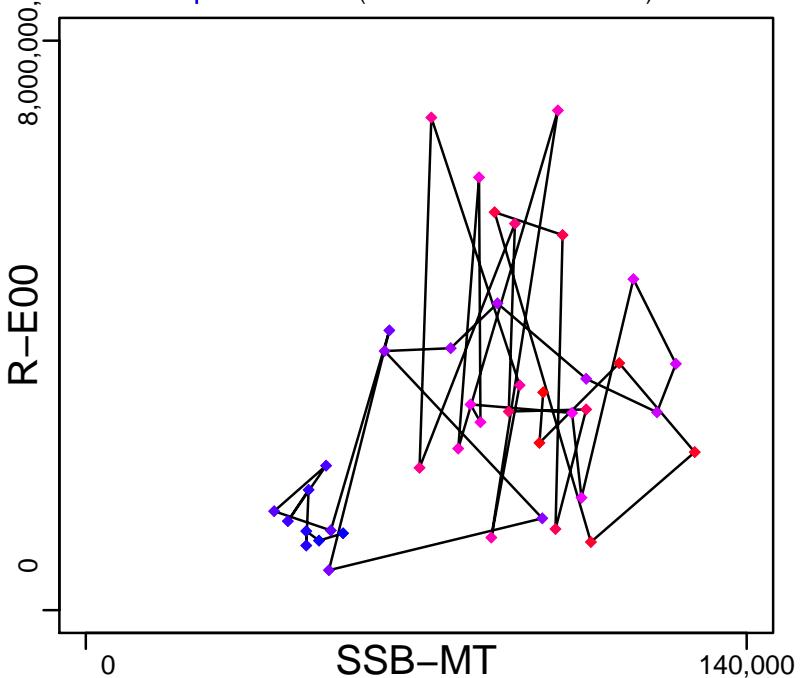
Kobe MSYpref (1976–2018–ICESIMP2018)



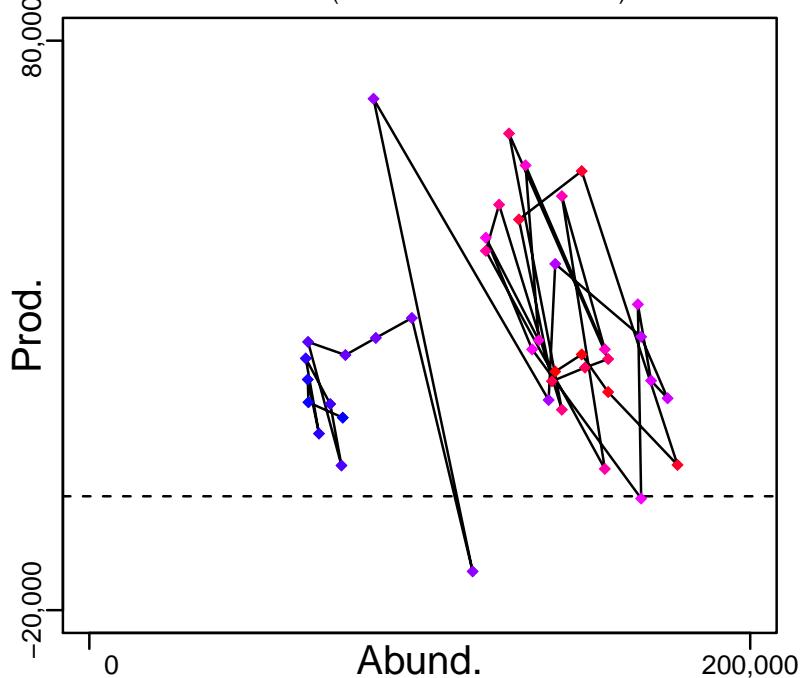
Kobe MGTpref (1976–2018–ICESIMP2018)



Spawner Recruit (1976–2018–ICESIMP2018)



Production (1976–2018–ICESIMP2018)

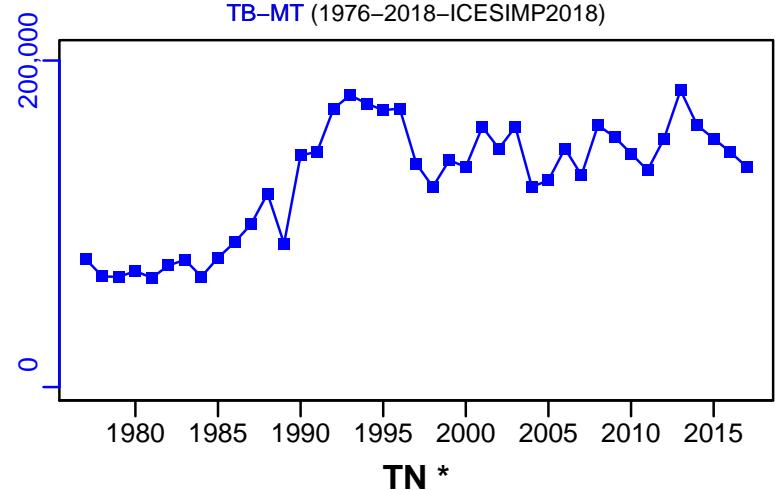


◆ Start Year ◆ End Year * No Data

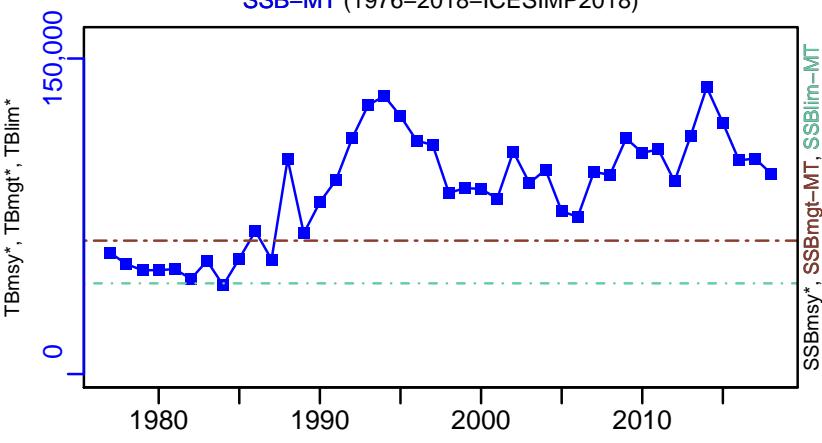
Herring Gulf of Riga East of Gotland [HERRRIGA]

TB-MT (1976–2018–ICESIMP2018)

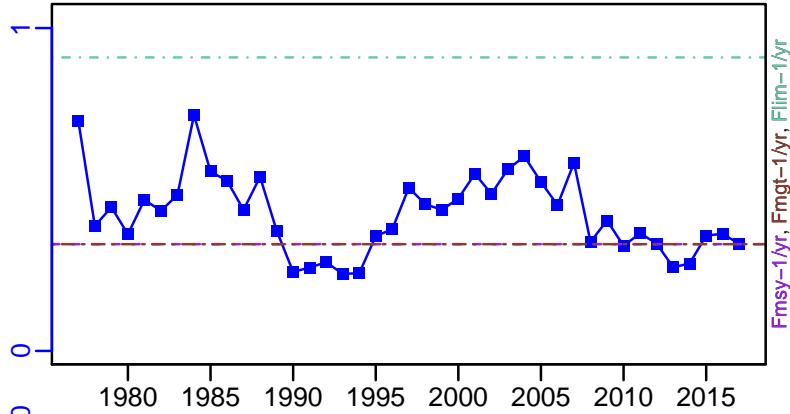
SSB-MT (1976–2018–ICESIMP2018)



TN *

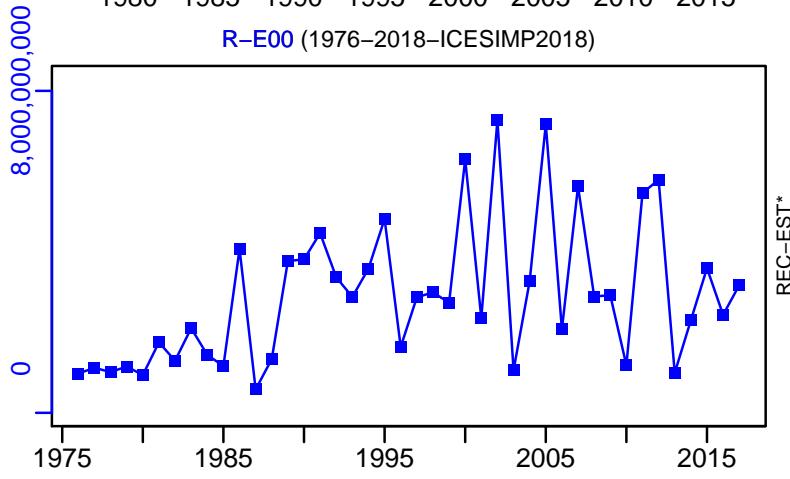
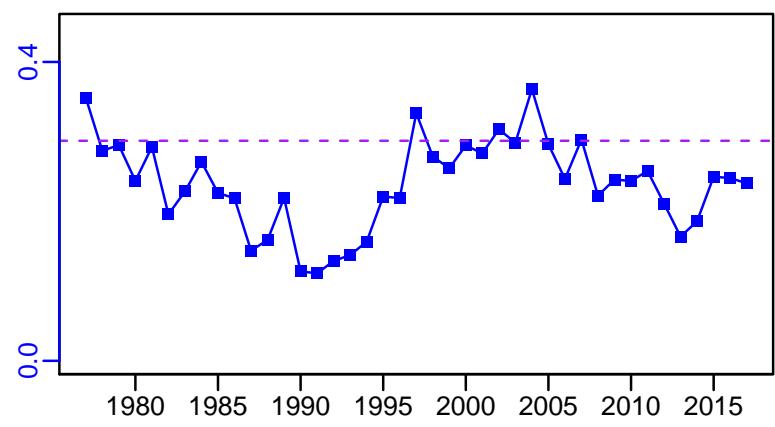


F-1/yr (1976–2018–ICESIMP2018)



ER-calc-ratio (1976–2018–ICESIMP2018)

R-E00 (1976–2018–ICESIMP2018)

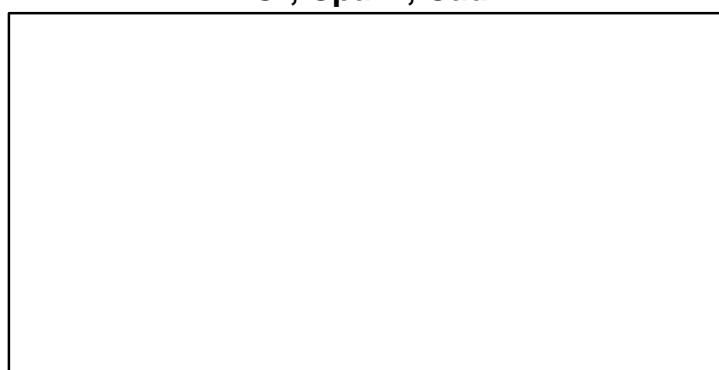
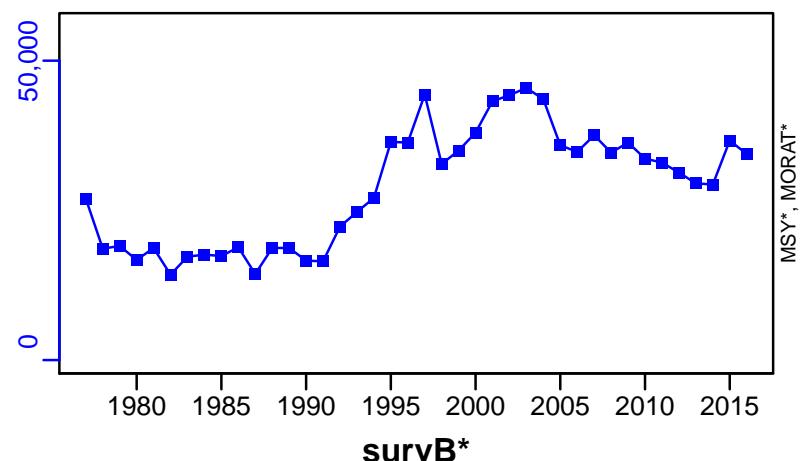


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

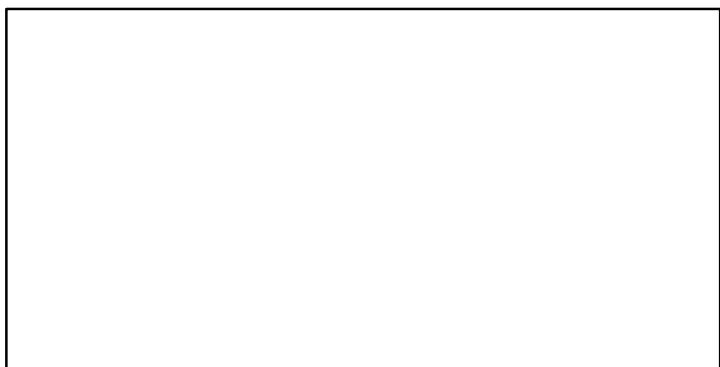
Herring Gulf of Riga East of Gotland [HERRRIGA]

TC-MT, TL*, RecC* (1976–2017–ICESIMP2018)

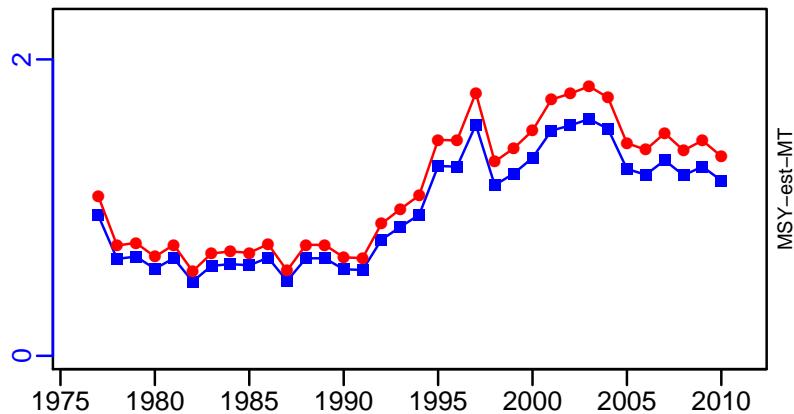
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdiveMEANC-ratio, (1976–2011–NEUBAUER)



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

Herring ICES 7a-g-h-j [HERRSIRS]

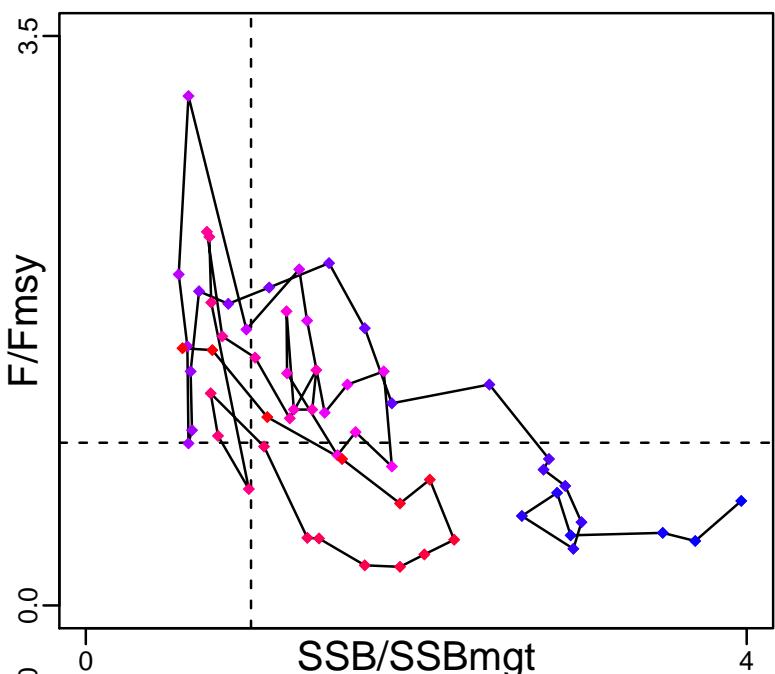
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRSIRS-1957-2018-ICESIMP2018
Area	ICES 7a-g-h-j
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	92,458
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.26
ERmsy	ERmsy-est-ratio	2018	0.135
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	61,000
Fmgt	Fmgt-1/yr	2018	0.23
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2012	23,196
M	-	-	-
TBlim	TBlim-MT	2010	26,000
SSBlim	SSBlim-MT	2018	54,000
Flim	Flim-1/yr	2018	0.45
ERlim	-	-	-

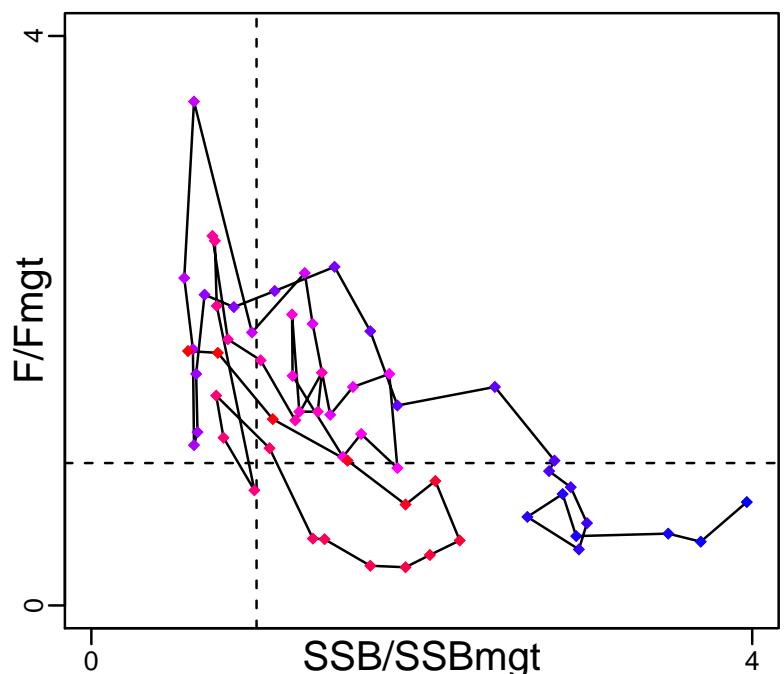
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	61,300	Both	-
SSB	SSB-MT	2018	34,200	Both	-
TN	-	-	-	-	-
R	R-E00	2018	4.38×10^8	-	1
F	F-1/yr	2018	0.411	-	2 to 5
ER	ER-calc-ratio	2018	0.176	-	-
TC	TC-MT	2018	10,800		
TL	TL-MT	2018	10,800		
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	1.763		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.581		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.302		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.561		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.787		
ER/ERmgt	-	-	-		

Herring ICES 7a-g-h-j [HERRSIRS]

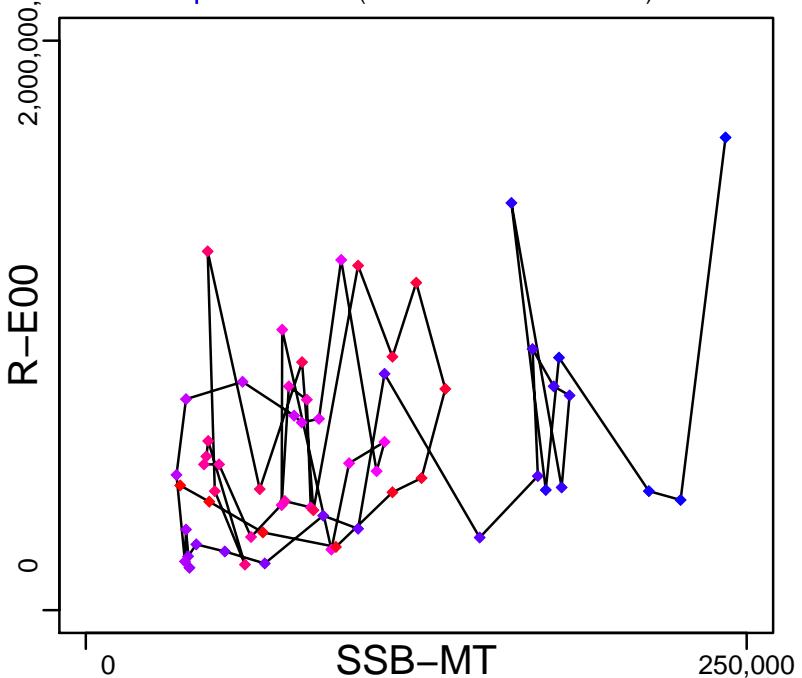
Kobe MSYpref (1957–2018–ICESIMP2018)



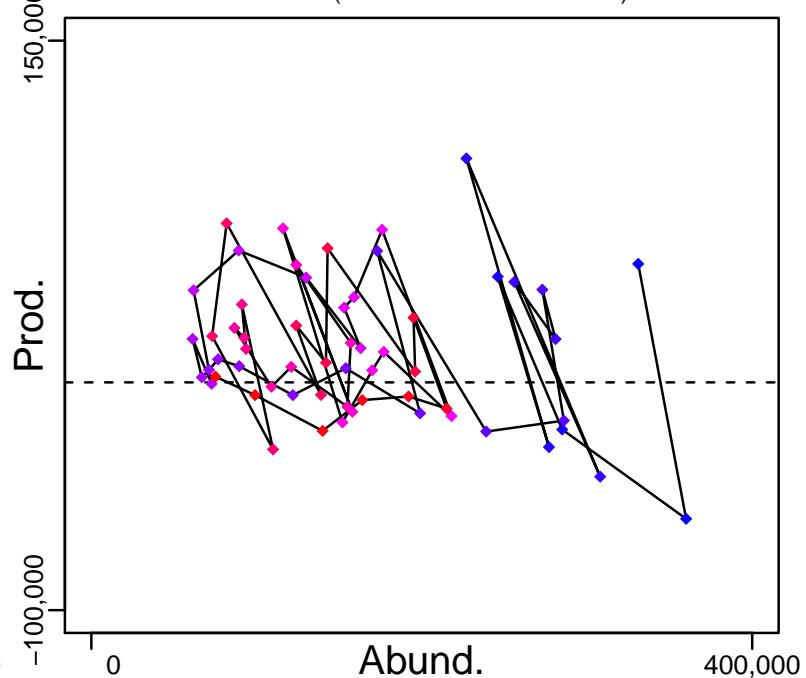
Kobe MGTpref (1957–2018–ICESIMP2018)



Spawner Recruit (1957–2018–ICESIMP2018)



Production (1957–2018–ICESIMP2018)

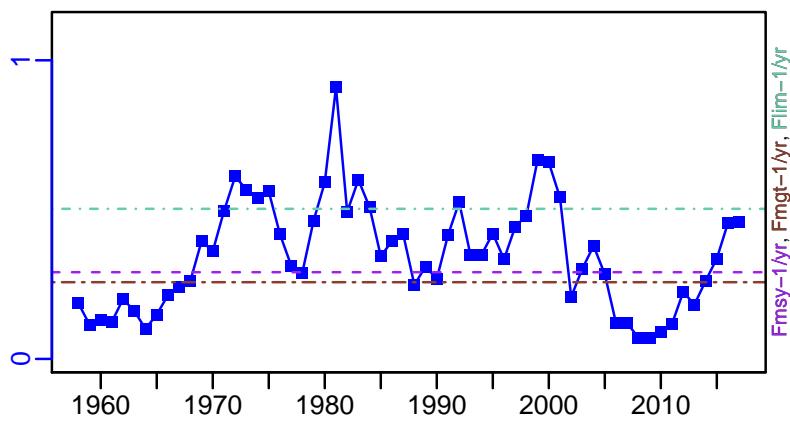
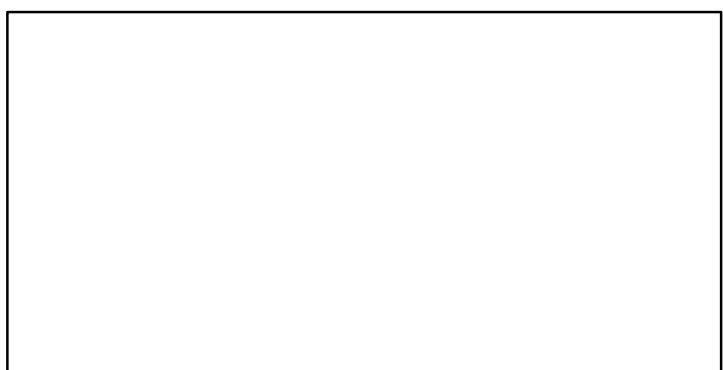
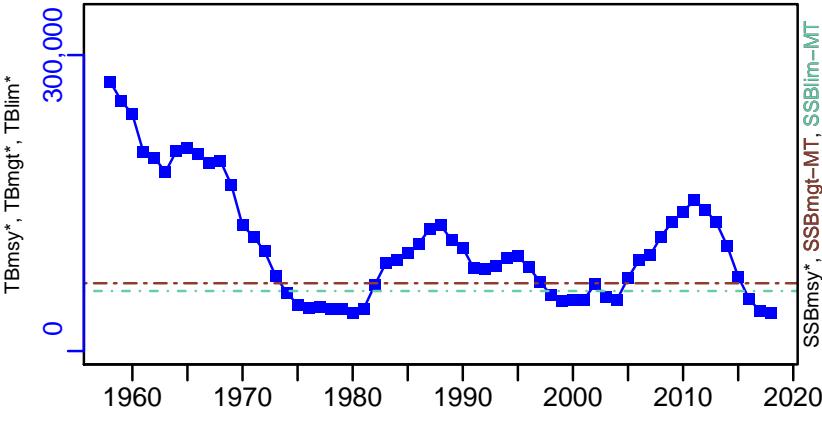
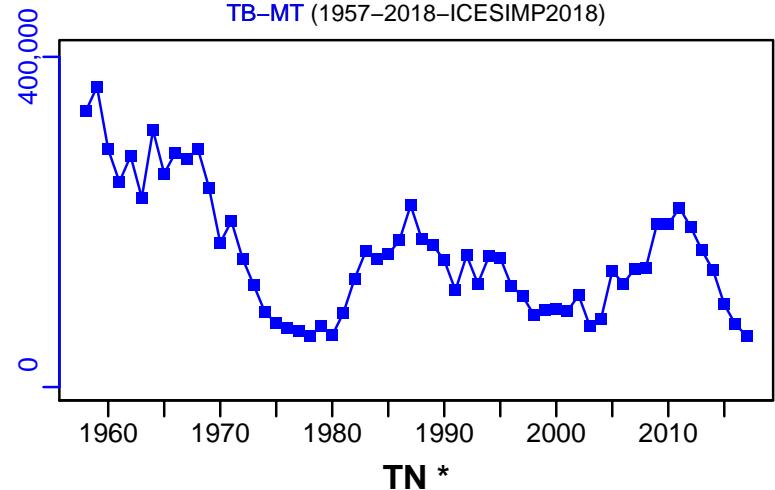


◆ Start Year ◆ End Year * No Data

Herring ICES 7a-g-h-j [HERRSIRS]

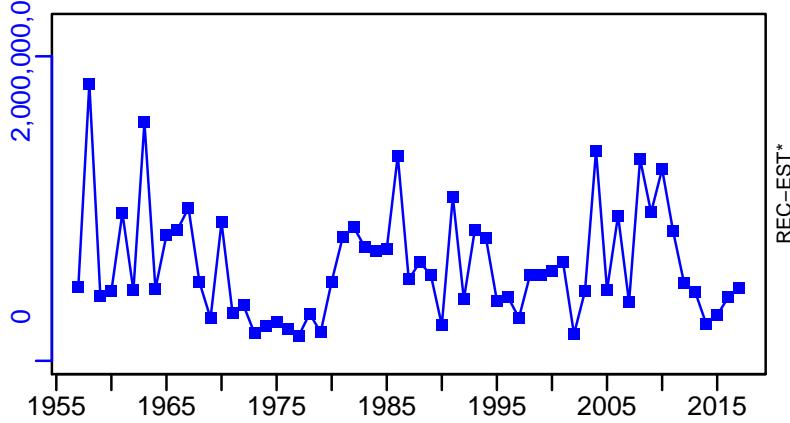
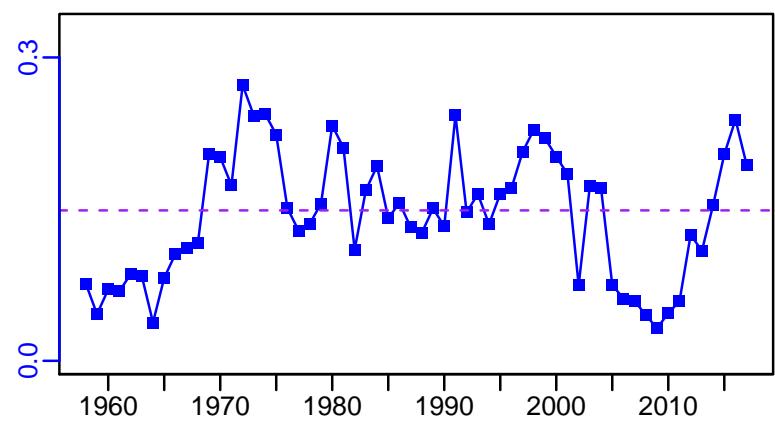
TB-MT (1957–2018–ICESIMP2018)

SSB-MT (1957–2018–ICESIMP2018)



ER-calc-ratio (1957–2018–ICESIMP2018)

R-E00 (1957–2018–ICESIMP2018)

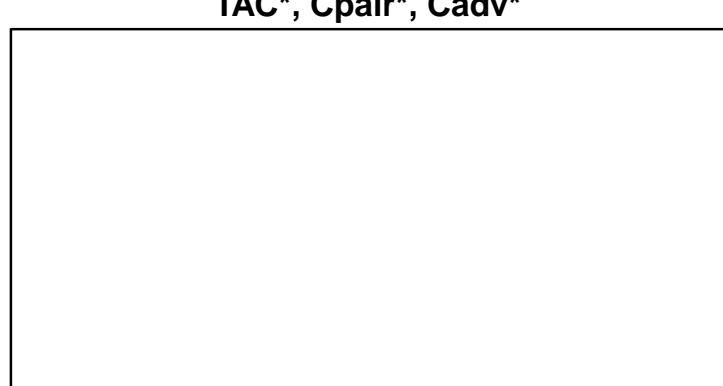
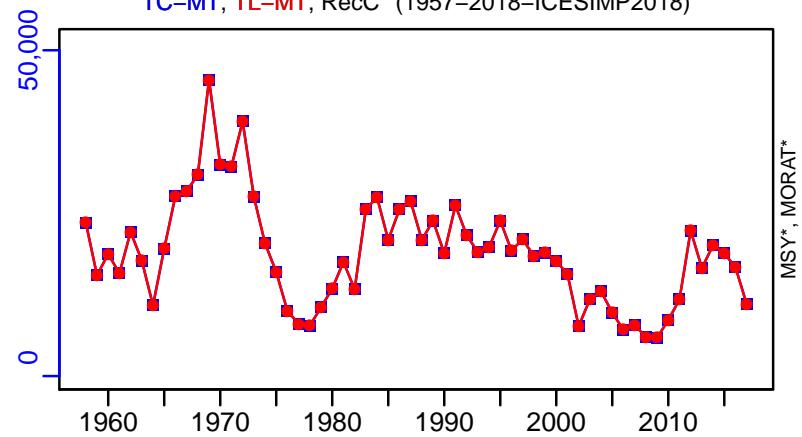


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Herring ICES 7a-g-h-j [HERRSIRS]

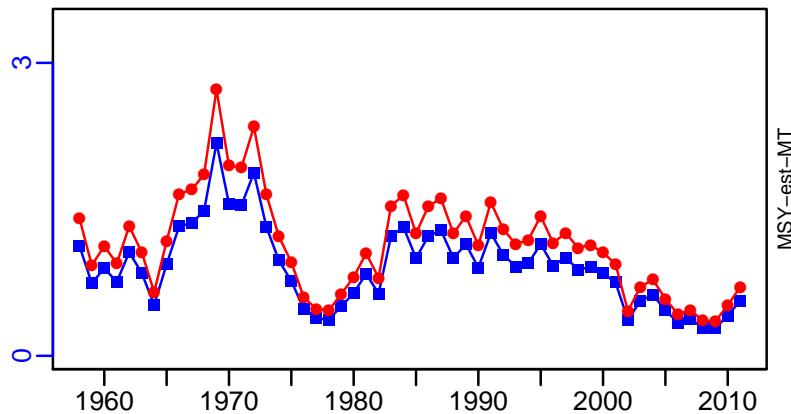
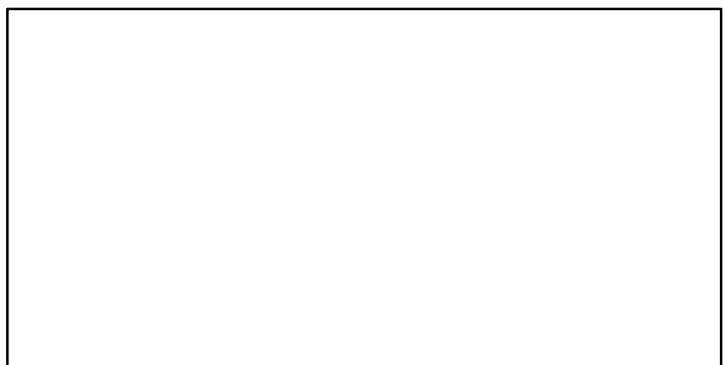
TC-MT, TL-MT, RecC* (1957–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



EFFORT*

TL-MT/MSY-est-MT, CdivMEANC-ratio, (1957–2012–ICESIMP2016)



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

Herring West of Scotland [HERRVla]

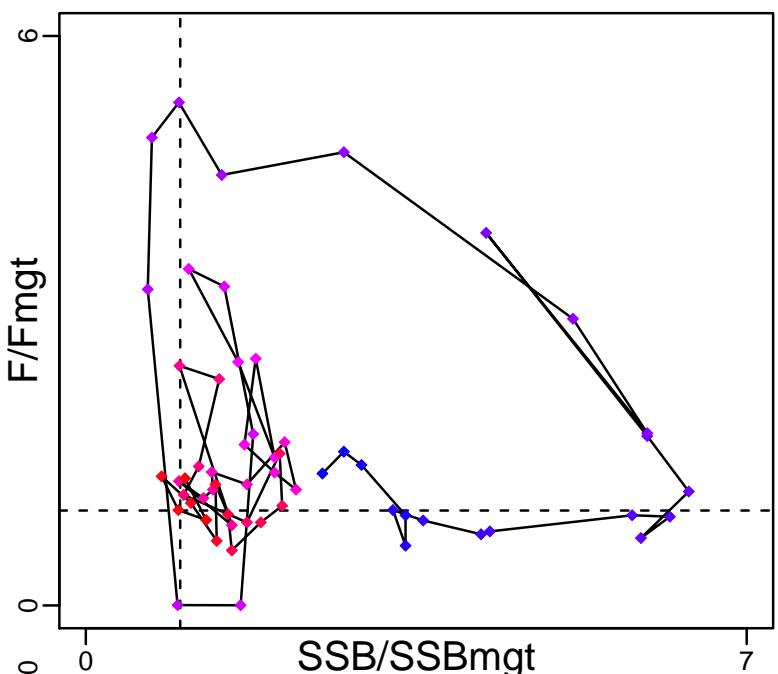
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRVla-1956-2014-ICESIMP2016
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2010, 2013, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	594,800
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2010	0.25
ERmsy	ERmsy-est-ratio	2013	0.155
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	75,000
Fmgt	Fmgt-1/yr	2014	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2013	91,953
M	-	-	-
TBlim	TBlim-MT	2010	50,000
SSBlim	SSBlim-MT	2014	50,000
Flim	-	-	-
ERlim	-	-	-

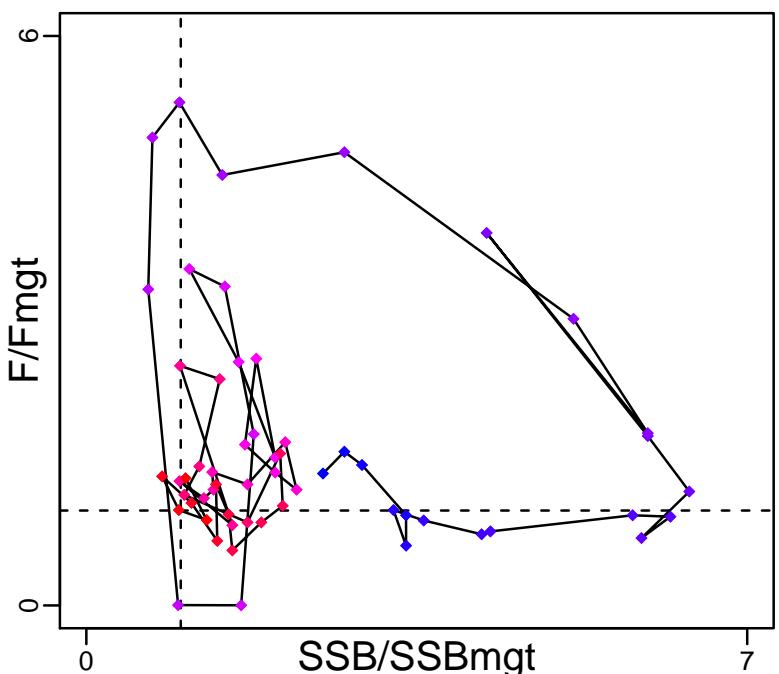
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2014	114,000	Both	-	
SSB	SSB-MT	2014	78,800	Both	-	
TN	-	-	-	-	-	
R	R-E00	2014	6×10^8	-	1	
F	F-1/yr	2014	0.268	-	3 to 6 ringer	
ER	ER-calc-ratio	2014	0.202	-	-	
TC	-	-	-			
TL	TL-MT	2014	23,000			
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	0.331			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	1.064			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2013	0.607			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.051			
F/Fmgt	F-1/yr/Fmgt-1/yr	2014	1.34			
ER/ERmgt	-	-	-			

Herring West of Scotland [HERRVla]

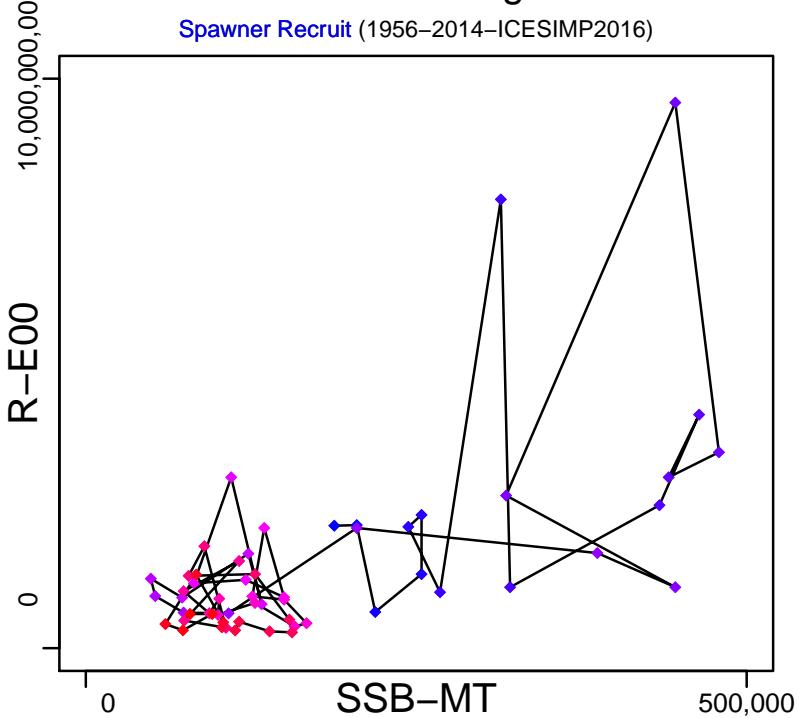
Kobe MSYpref (1956–2014–ICESIMP2016)



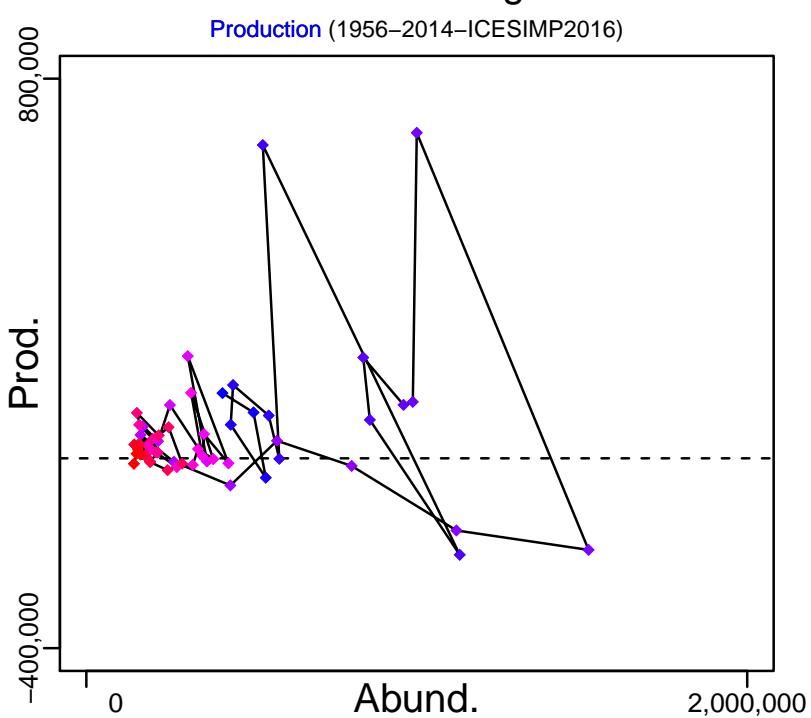
Kobe MGTpref (1956–2014–ICESIMP2016)



Spawner Recruit (1956–2014–ICESIMP2016)



Production (1956–2014–ICESIMP2016)

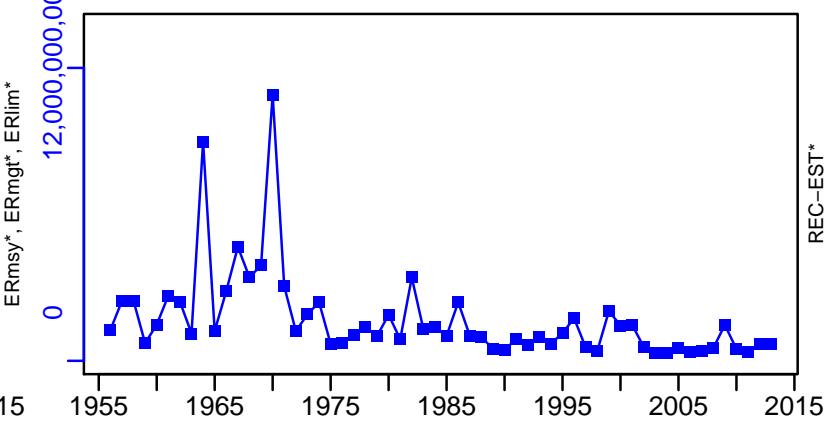
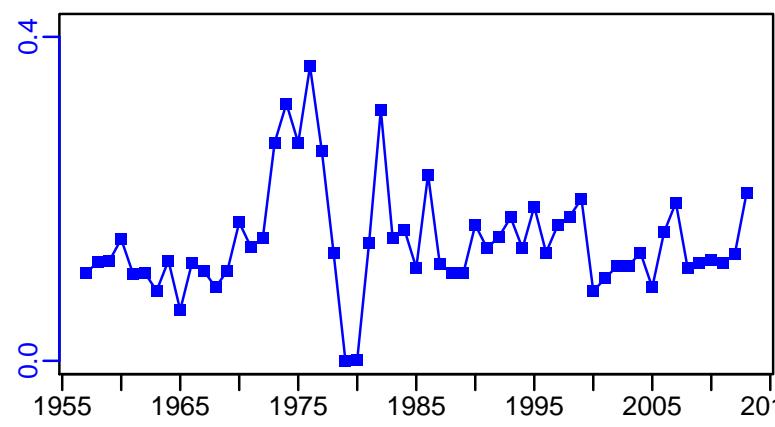
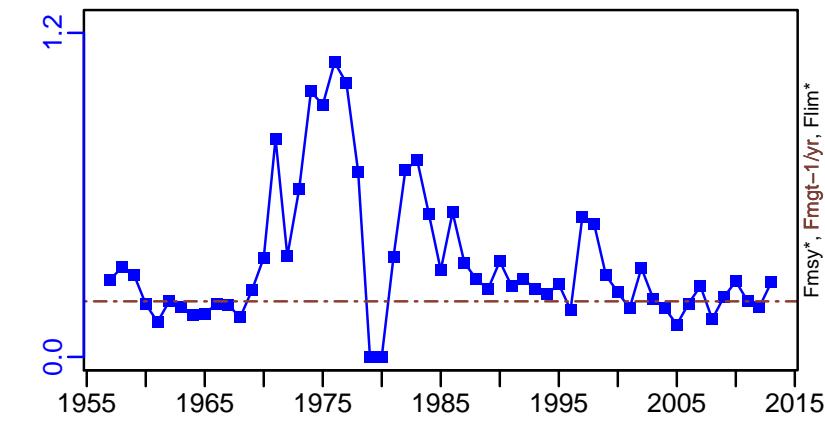
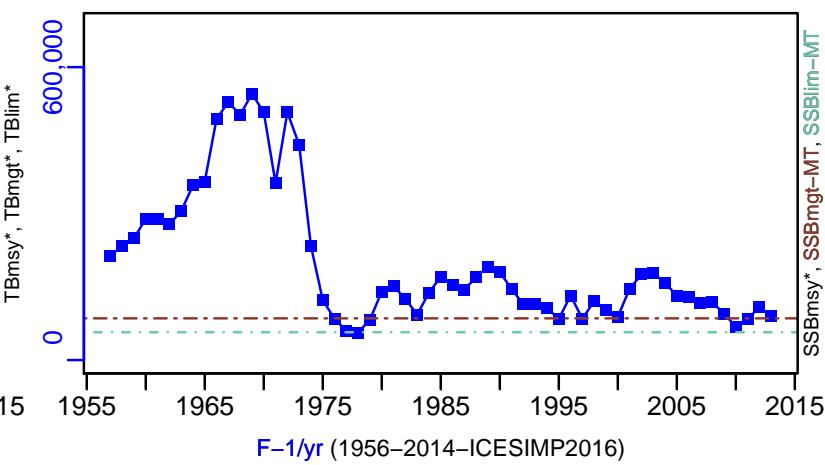
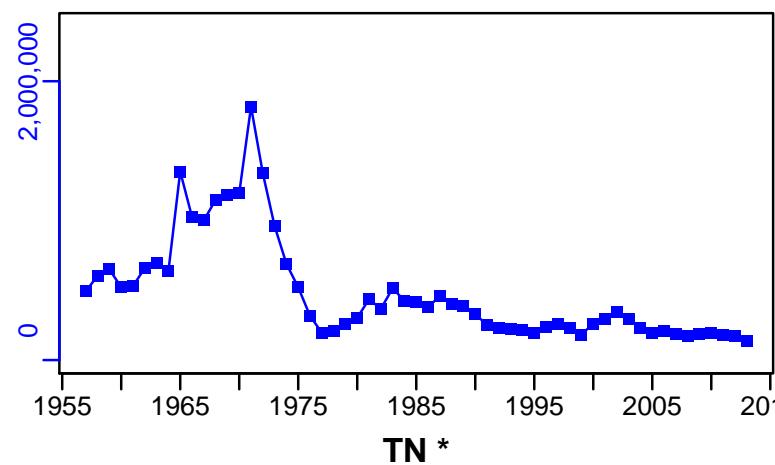


◆ Start Year ◆ End Year * No Data

Herring West of Scotland [HERRVla]

TB-MT (1956–2014–ICESIMP2016)

SSB-MT (1956–2014–ICESIMP2016)

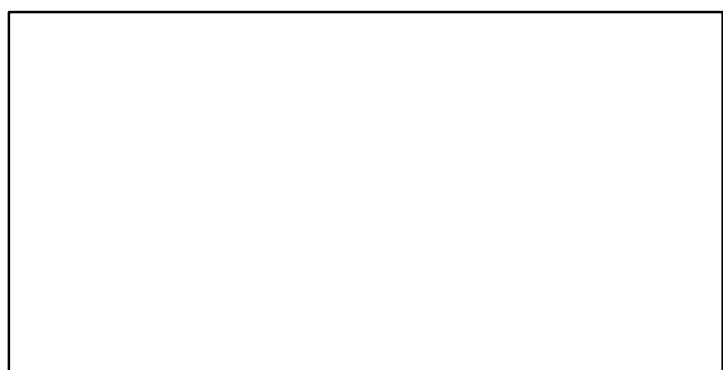
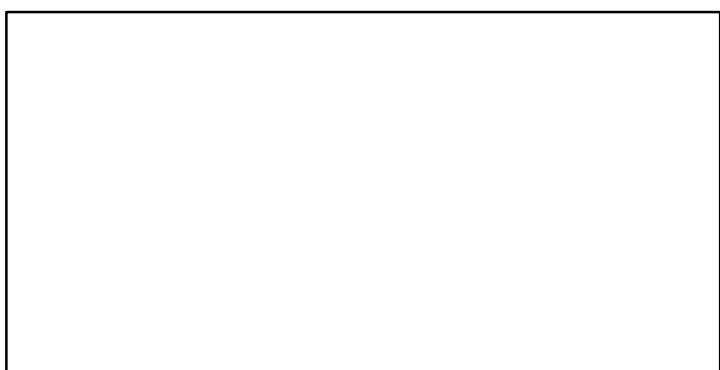
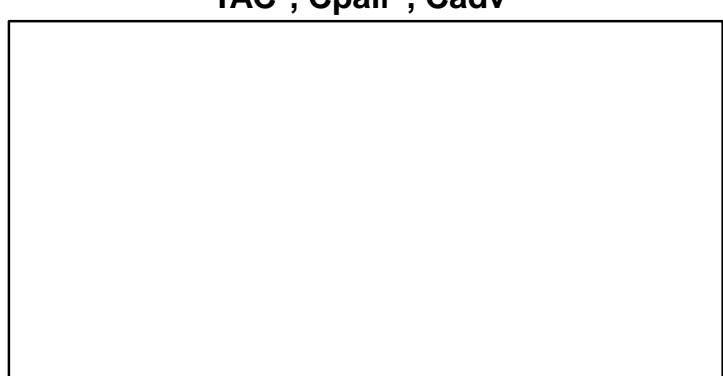
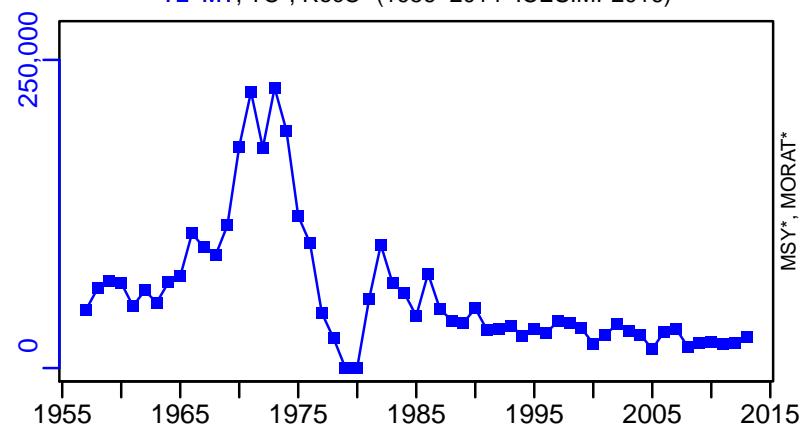


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

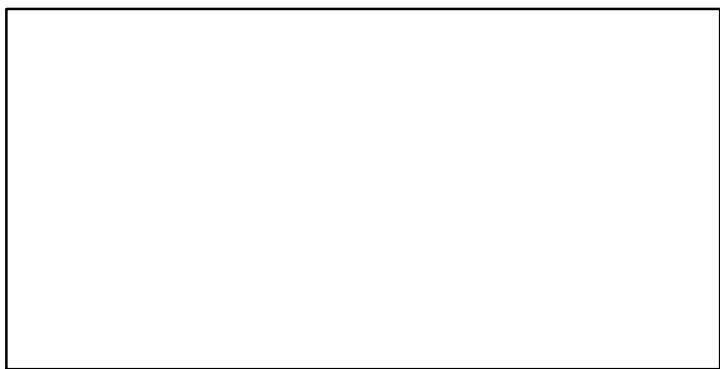
Herring West of Scotland [HERRV1a]

TL-MT, TC*, RecC* (1956–2014–ICESIMP2016)

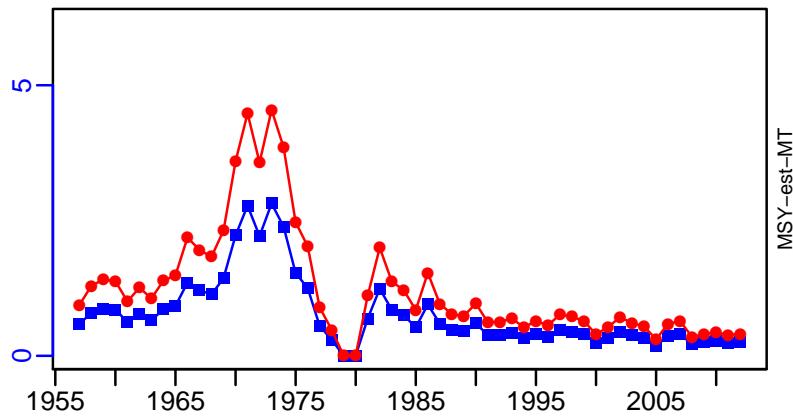
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1956–2013–ICESIMP2016)



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

Herring ICES 5a-7bc [HERRVlaVIIbc]

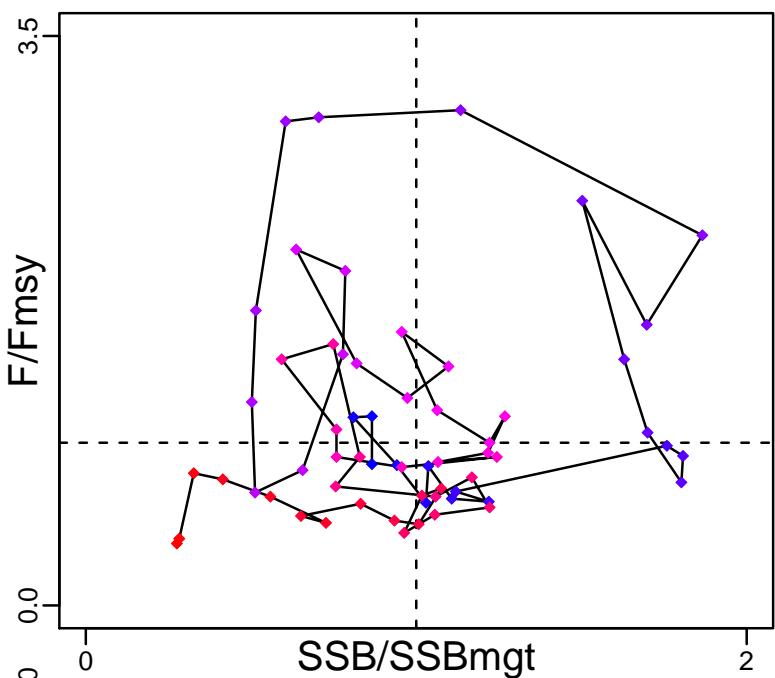
Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRVlaVIIbc-1956-2018-ICESIMP2018
Area	ICES 5a-7bc
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	202,004
SSBmsy	SSBmsy-est-MT	2010	94,868
Fmsy	Fmsy-1/yr	2018	0.16
ERmsy	ERmsy-est-ratio	2018	0.088
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	410,000
Fmgt	Fmgt-1/yr	2018	0.16
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2013	63,752
M	-	-	-
TBlim	TBlim-MT	2010	81,000
SSBlim	SSBlim-MT	2018	250,000
Flim	Flim-1/yr	2018	0.3
ERlim	-	-	-

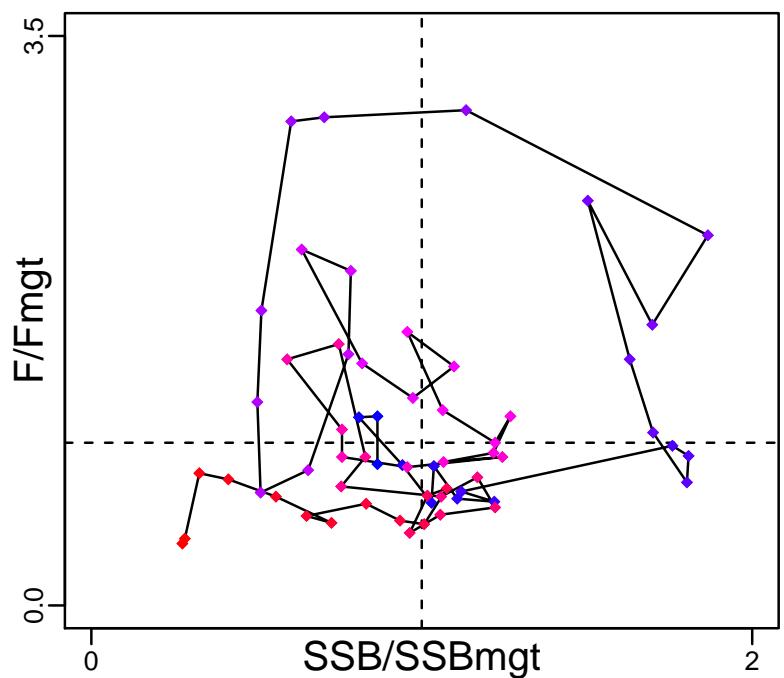
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	162,000	Both	-
SSB	SSB-MT	2018	91,500	Both	-
TN	-	-	-	-	-
R	R-E00	2018	4.4×10^8	-	1
F	F-1/yr	2018	0.061	-	3 to 6
ER	ER-calc-ratio	2018	0.04	-	-
TC	TC-MT	2018	6420		
TL	TL-MT	2018	6420		
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	8.96		
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2010	0.248		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.381		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.45		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.223		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.381		
ER/ERmgt	-	-	-		

Herring ICES 5a–7bc [HERRVlaVIIbc]

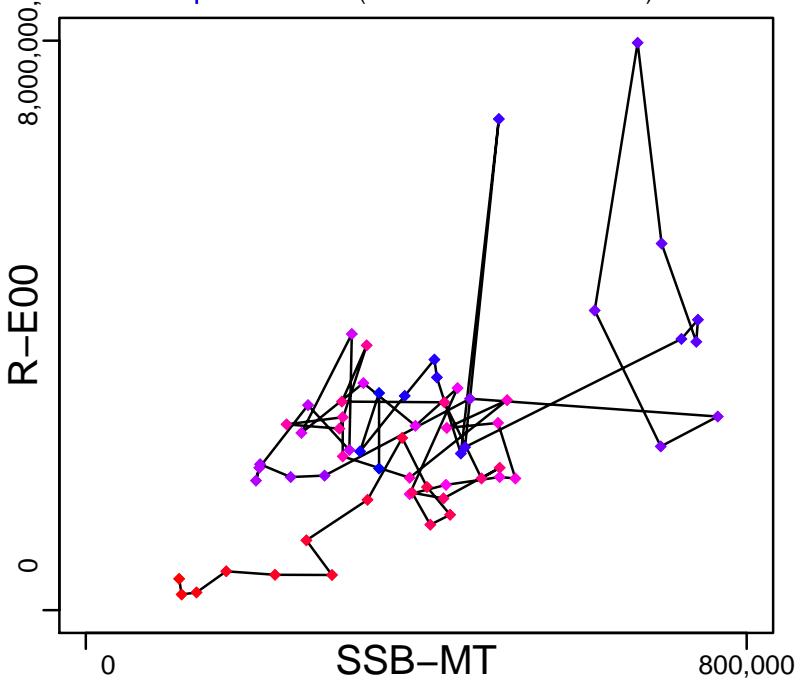
Kobe MSYpref (1956–2018–ICESIMP2018)



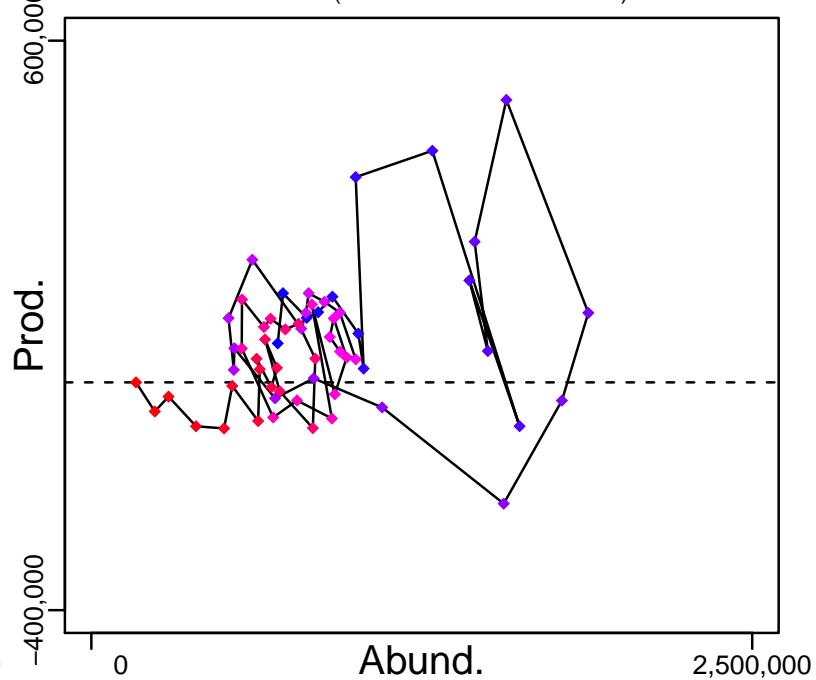
Kobe MGTpref (1956–2018–ICESIMP2018)



Spawner Recruit (1956–2018–ICESIMP2018)



Production (1956–2018–ICESIMP2018)

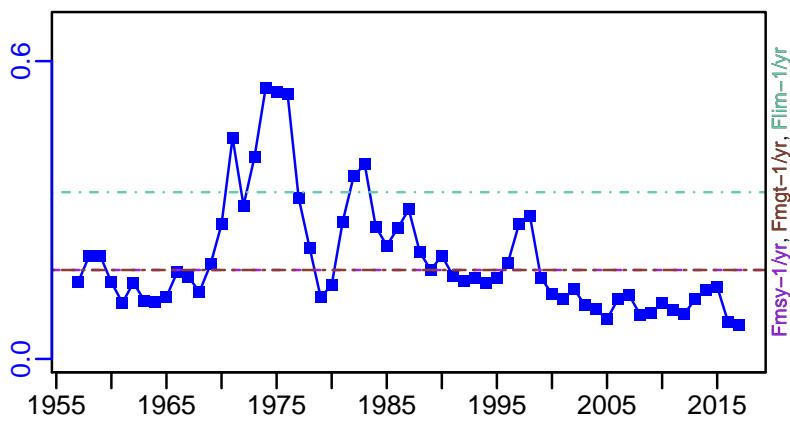
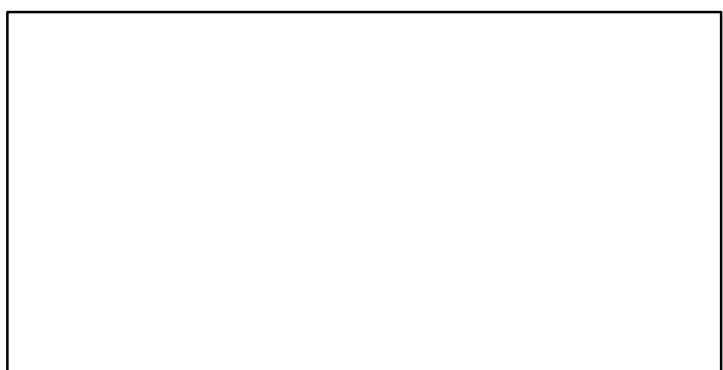
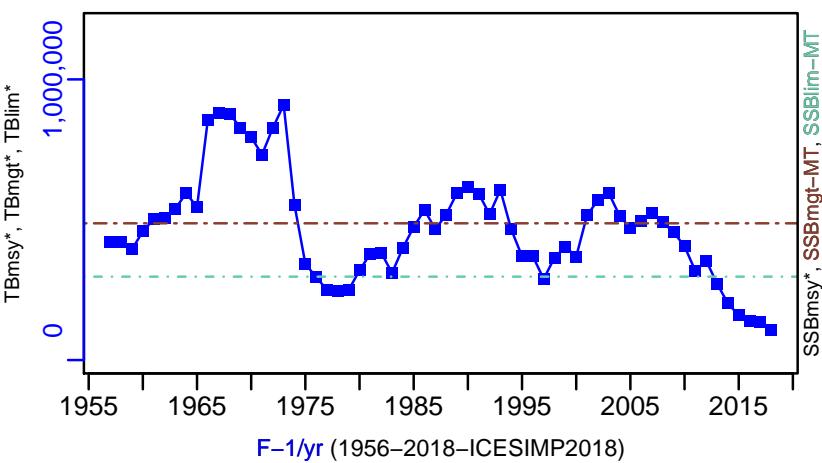
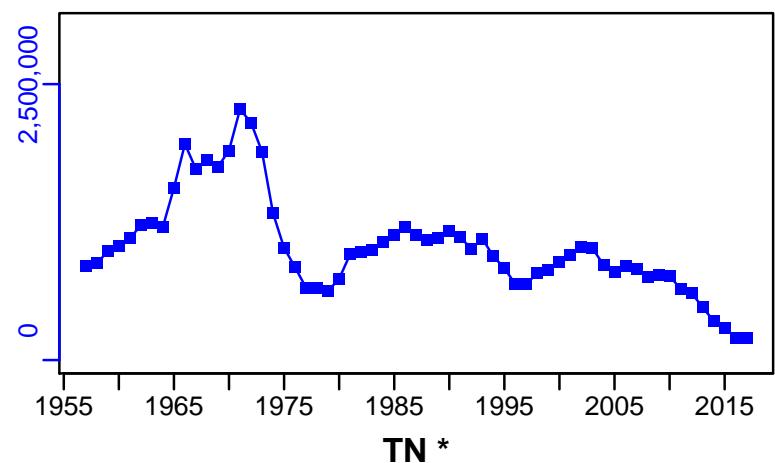


◆ Start Year ◆ End Year * No Data

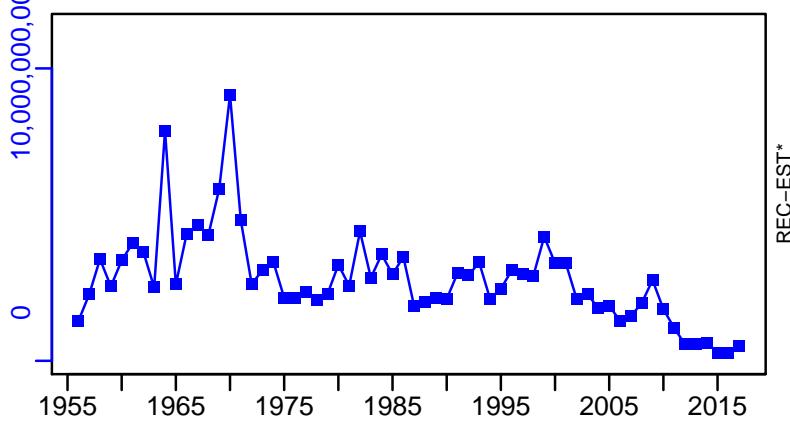
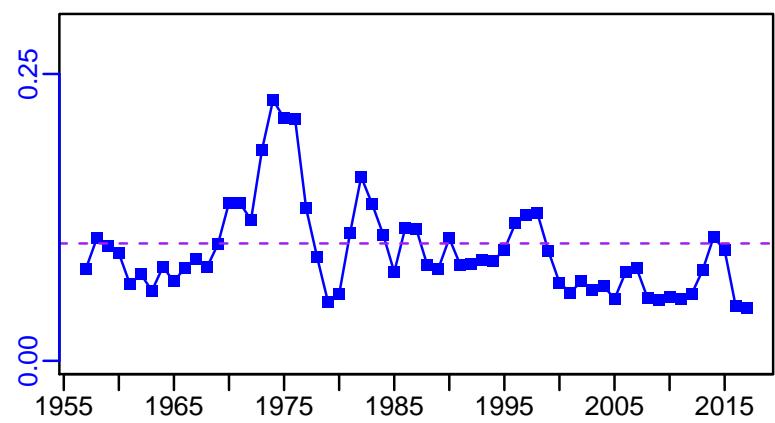
Herring ICES 5a–7bc [HERRVlaVIIbc]

TB-MT (1956–2018–ICESIMP2018)

SSB-MT (1956–2018–ICESIMP2018)



ER-calc-ratio (1956–2018–ICESIMP2018)

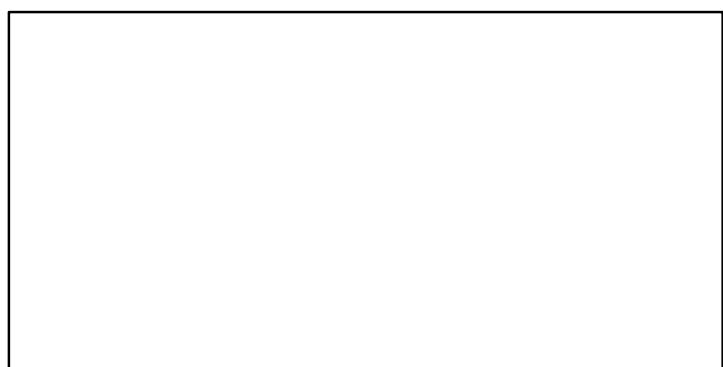
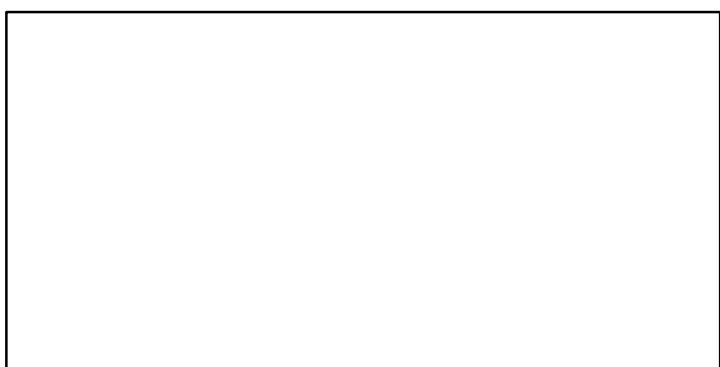
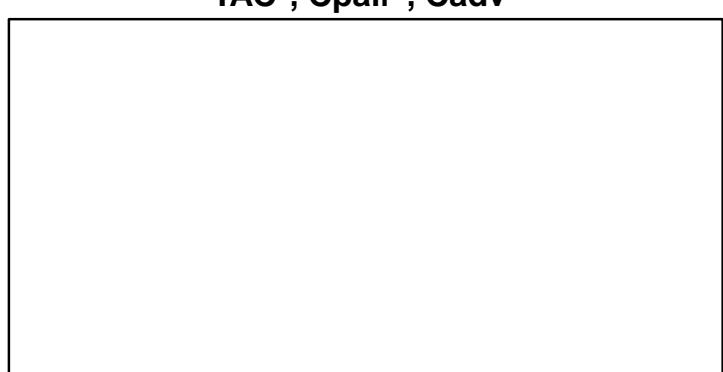
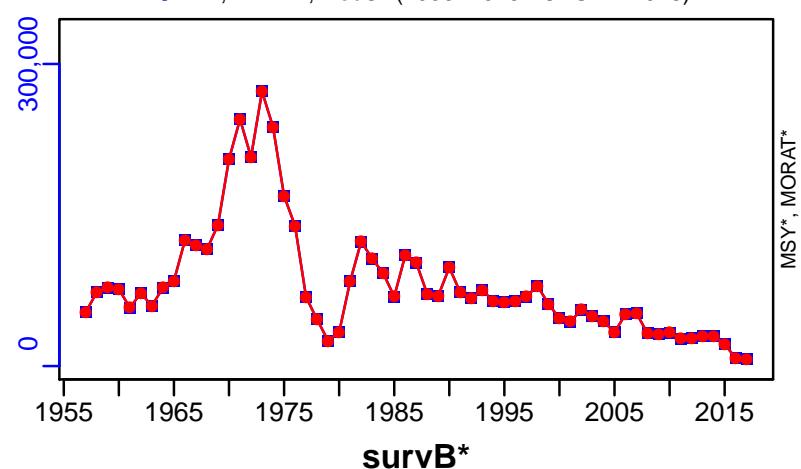


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

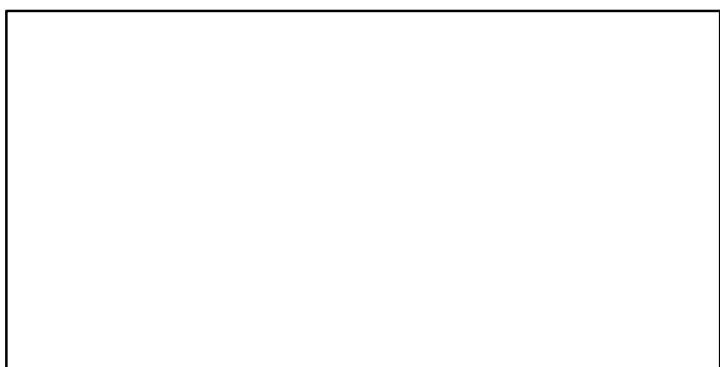
Herring ICES 5a–7bc [HERRVlaVIIbc]

TC–MT, TL–MT, RecC* (1956–2018–ICESIMP2018)

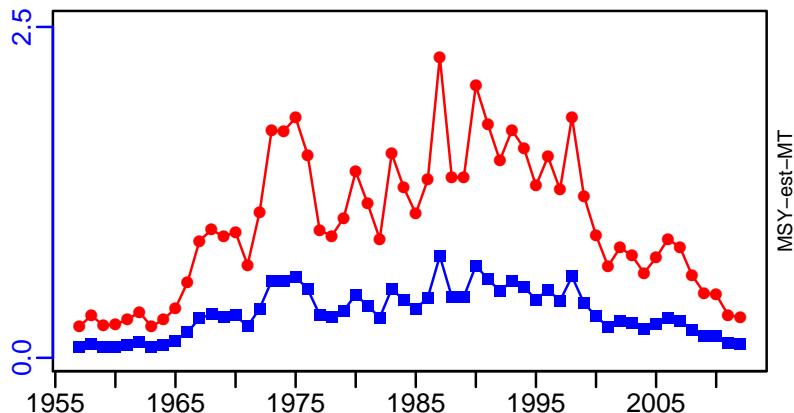
TAC*, Cpair*, Cadv*



EFFORT*



TL–MT/MSY–est–MT, CdivMEANC–ratio, (1956–2013–ICESIMP2016)



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

Horse mackerel ICES 2a-4a-5b-6a-7-8 [HMACKIIa-IVa-Vb-VIa-VII-VIII]

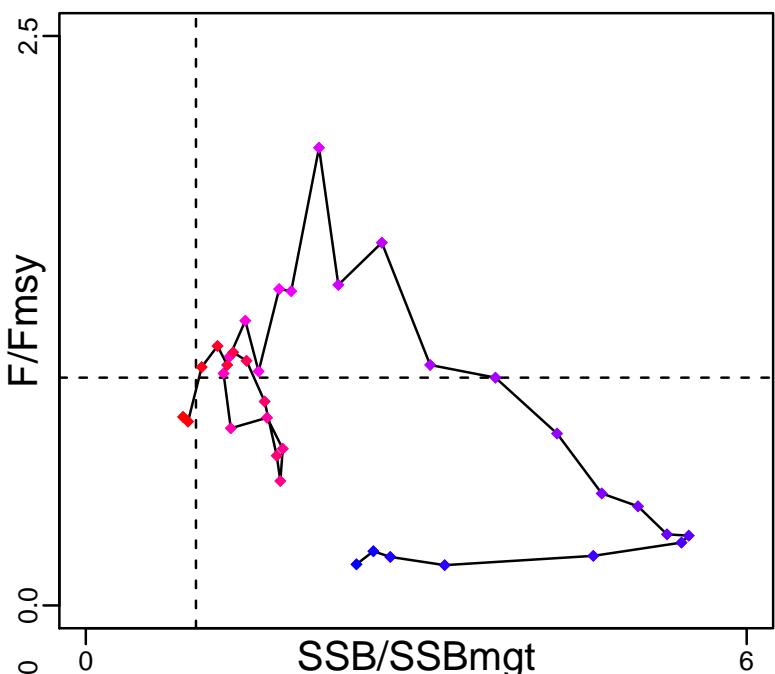
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGWISE-HMACKIIa-IVa-Vb-VIa-VII-VIII-1982-2017-ICESIMP2018
Area	ICES 2a-4a-5b-6a-7-8
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	2,482,584
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.108
ERmsy	ERmsy-est-ratio	2013	0.112
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	911,588
Fmgt	Fmgt-1/yr	2017	0.108
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2013	277,614
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	661,917
Flim	Flim-1/yr	2017	0.151
ERlim	-	-	-

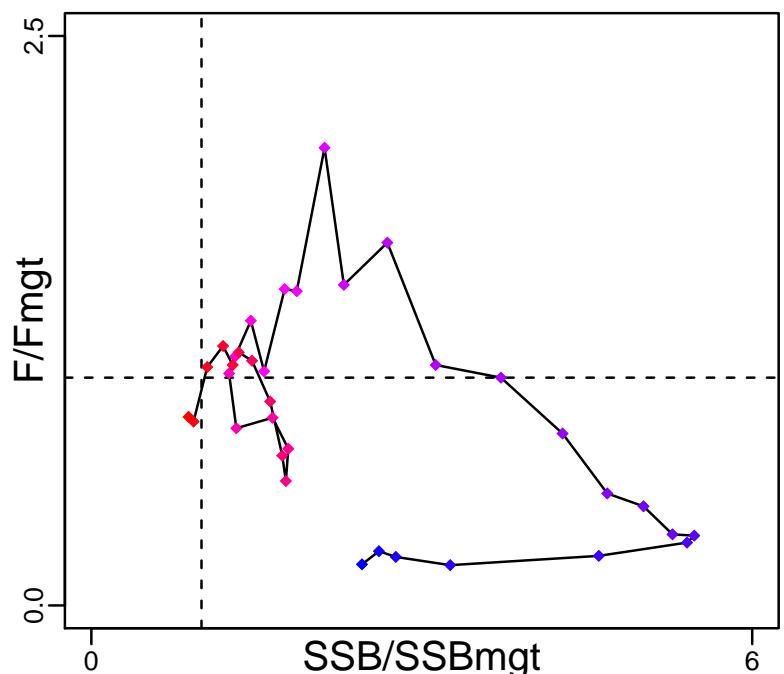
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	1,070,000	Both	-
SSB	SSB-MT	2017	782,000	Both	-
TN	-	-	-	-	-
R	R-E00	2017	2.52×10^9	-	0
F	F-1/yr	2017	0.089	-	1 to 10
ER	ER-calc-ratio	2017	0.098	-	-
TC	TC-MT	2017	98,800		
TL	TL-MT	2017	98,800		
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	0.512		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.828		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2013	1.218		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.858		
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.828		
ER/ERmgt	-	-	-		

Horse mackerel ICES 2a–4a–5b–6a–7–8 [HMACKIIa–IVa–Vb–VIa–VII–VIII]

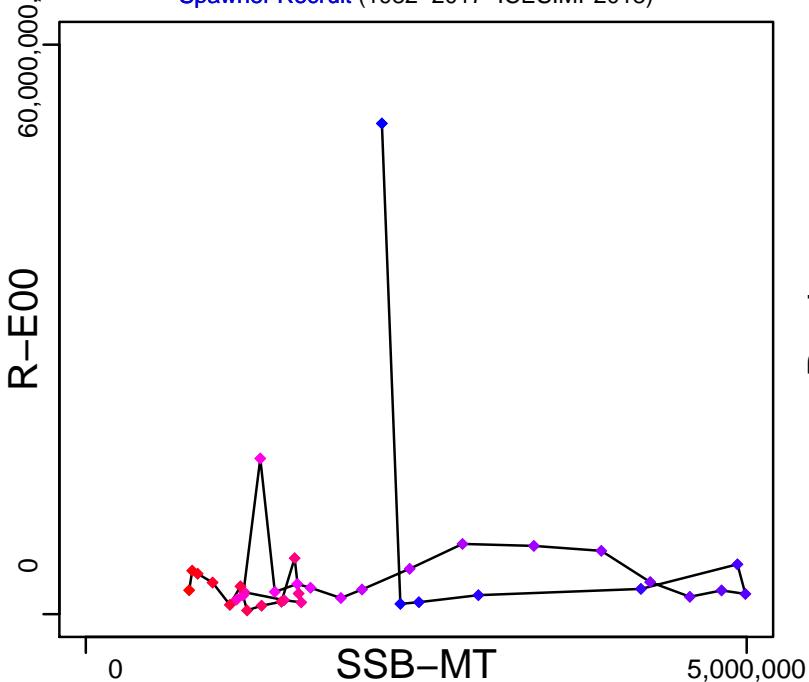
Kobe MSYpref (1982–2017–ICESIMP2018)



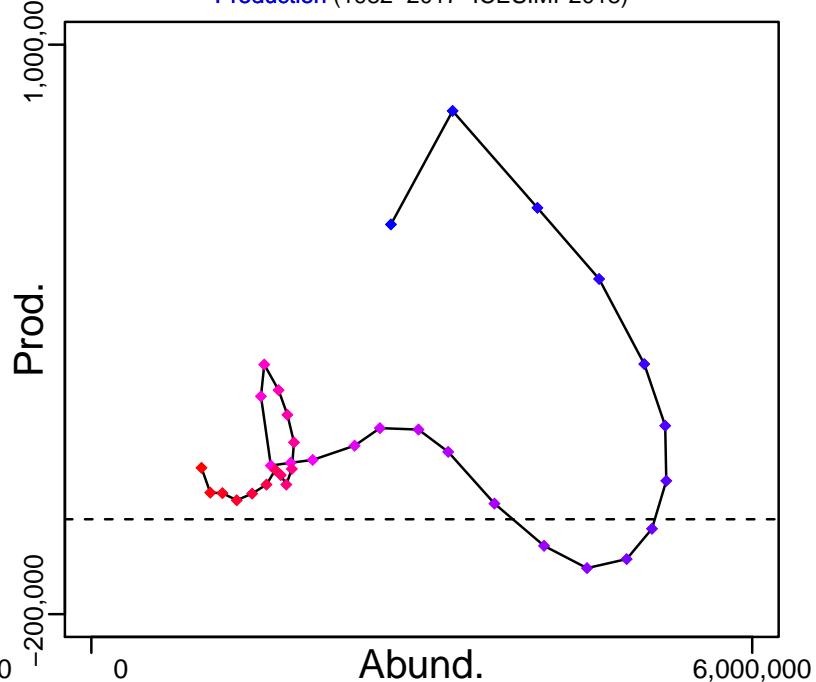
Kobe MGTpref (1982–2017–ICESIMP2018)



Spawner Recruit (1982–2017–ICESIMP2018)



Production (1982–2017–ICESIMP2018)

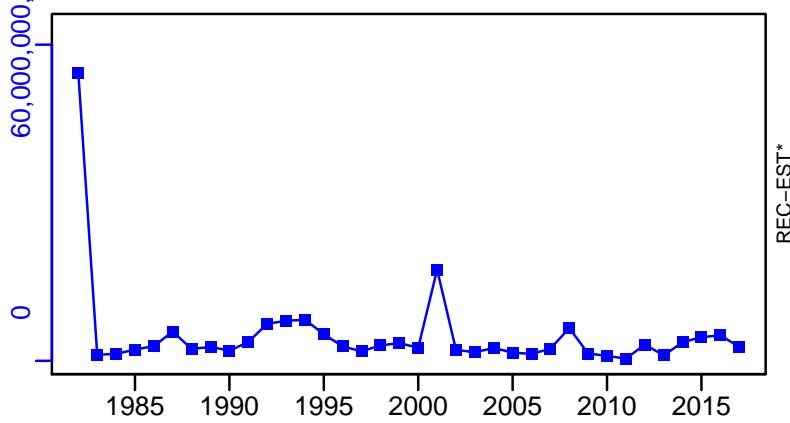
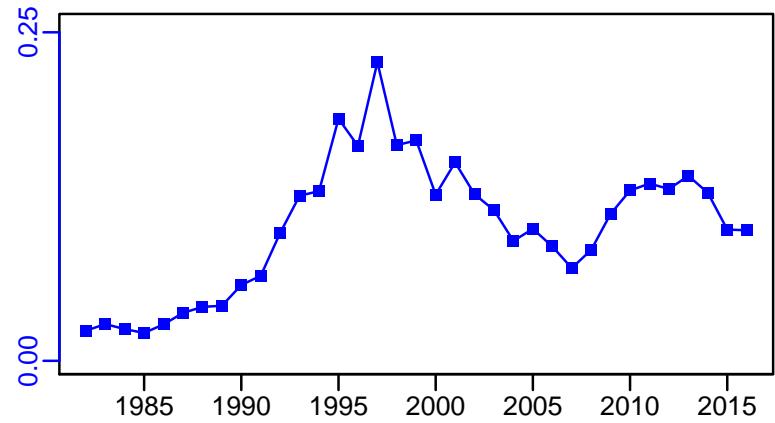
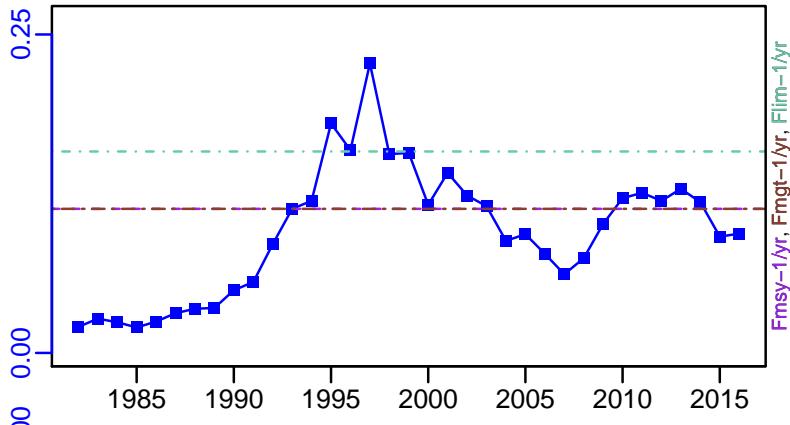
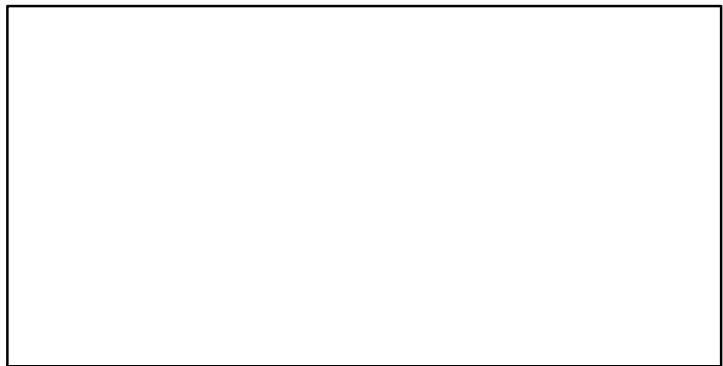
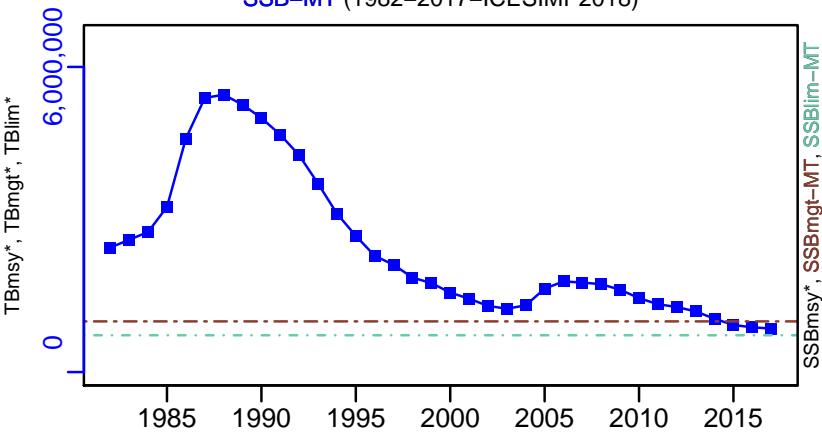
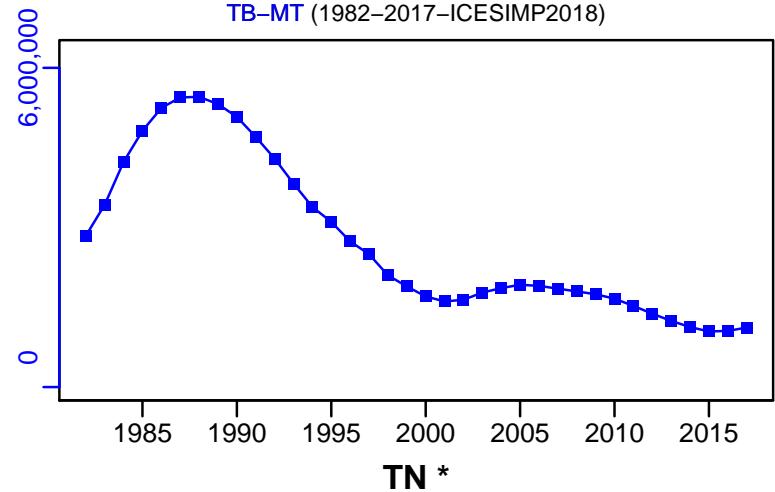


◆ Start Year ◆ End Year * No Data

Horse mackerel ICES 2a–4a–5b–6a–7–8 [HMACIIa–IVa–Vb–VIa–VII–VIII]

TB-MT (1982–2017–ICESIMP2018)

SSB-MT (1982–2017–ICESIMP2018)

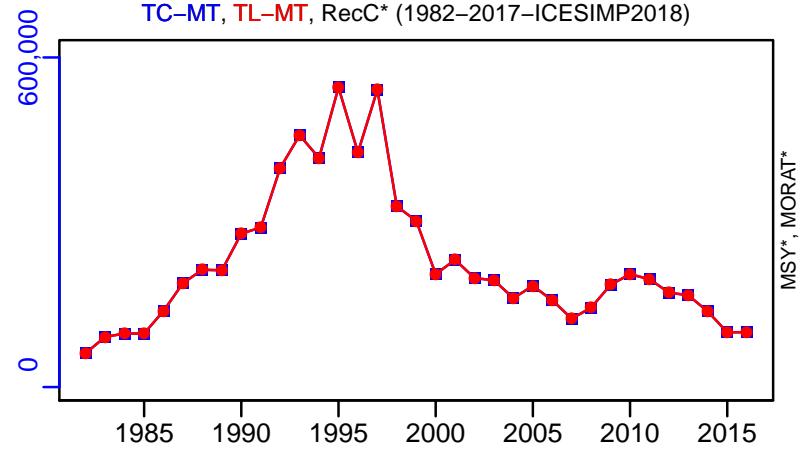


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Horse mackerel ICES 2a–4a–5b–6a–7–8 [HMACIIa–IVa–Vb–VIa–VII–VIII]

TC–MT, TL–MT, RecC* (1982–2017–ICESIMP2018)

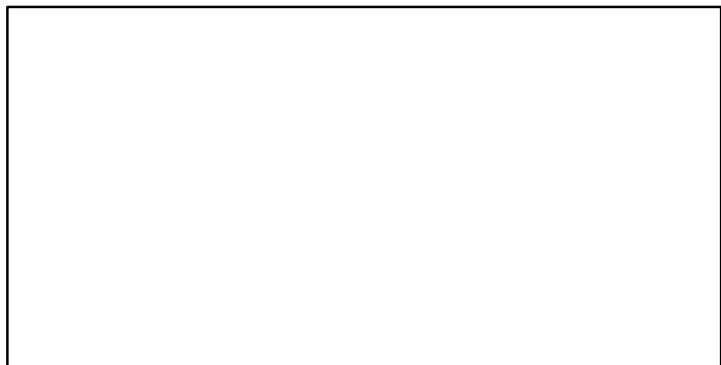
TAC*, Cpair*, Cadv*



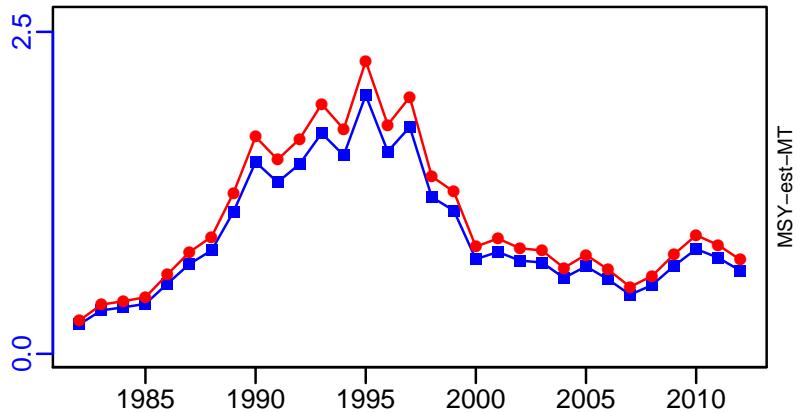
CPUE*



EFFORT*



TL–MT/MSY–est–MT, CdivMEANC–ratio, (1982–2013–ICESIMP2016)



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

Horse mackerel ICES 3a-4bc-7d [HMACKIIIa-IVbc-VIId]

Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGWISE-HMACKIIIa-IVbc-VIId-1982-2016-ICESIMP2018
Area	ICES 3a-4bc-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2015, 2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	16,900		
TL	TL-MT	2016	13,800		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Horse mackerel ICES 3a–4bc–7d [HMACKIIIa–IVbc–VId]

TB*



SSB*



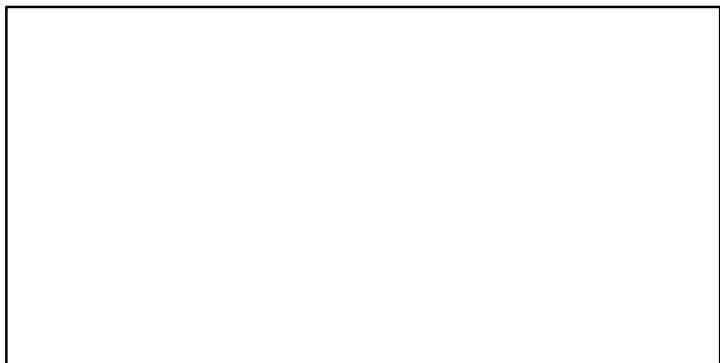
TN *



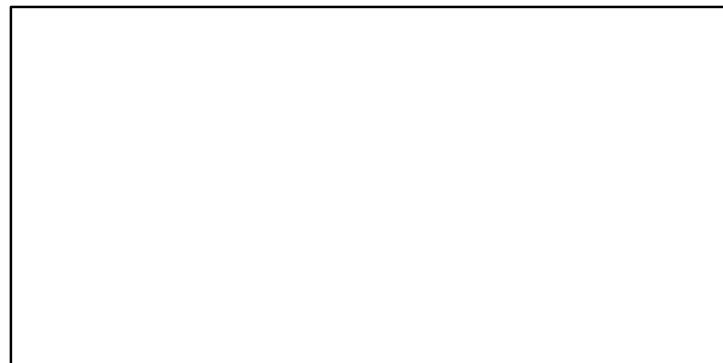
F*



ER*



Recruits*

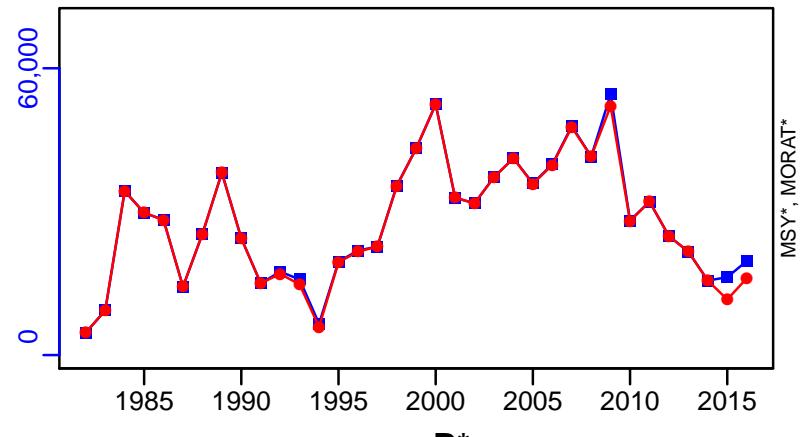


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Horse mackerel ICES 3a–4bc–7d [HMACKIIIa–IVbc–VIIId]

TC–MT, TL–MT, RecC* (1982–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



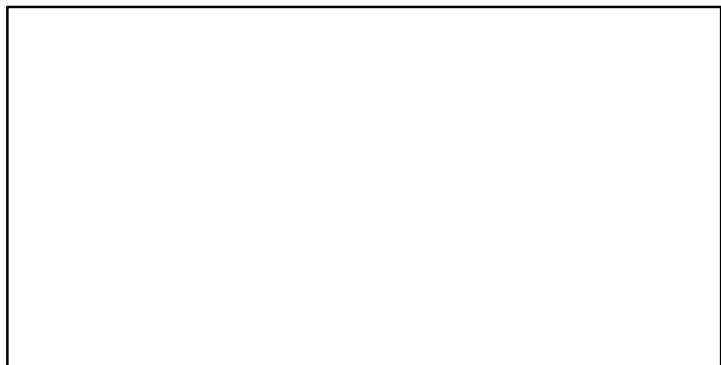
survB*



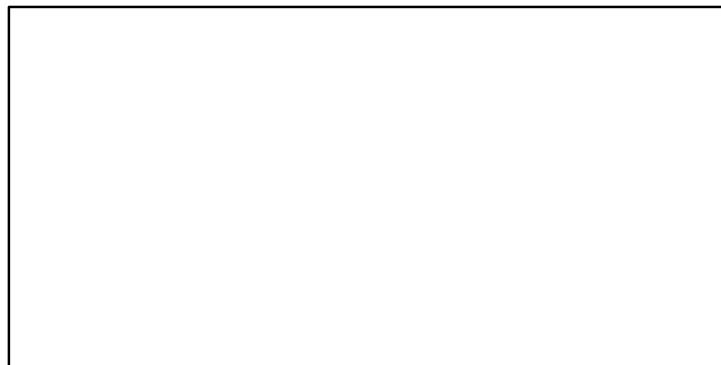
CPUE*



EFFORT*



CdivMSY*



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

Horse mackerel Portugese Waters -East [HMACKIXa]

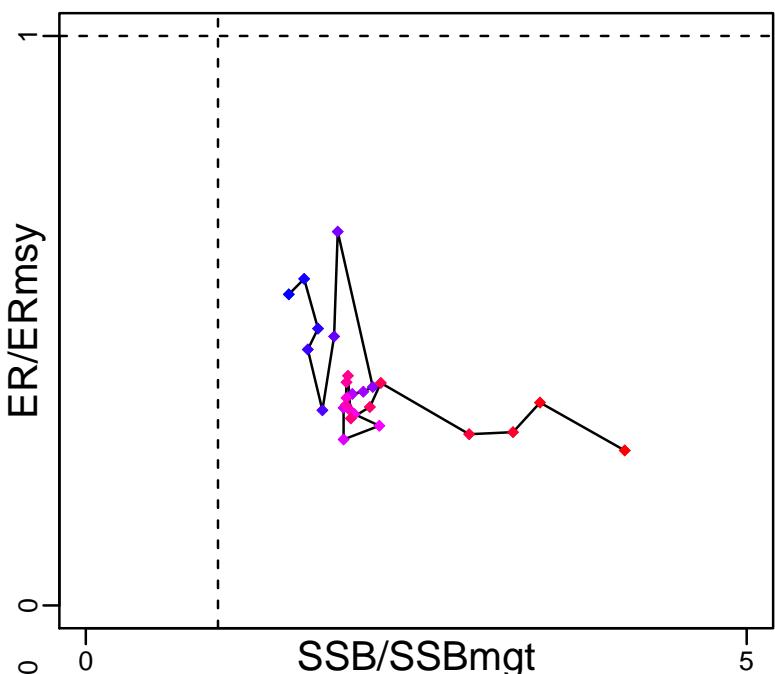
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGHANSA-HMACKIXa-1992-2018-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2015	230,366
Fmsy	Fmsy-1/yr	2017	0.11
ERmsy	ERmsy-est-ratio	2018	0.167
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	181,000
Fmgt	Fmgt-1/yr	2017	0.11
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	49,332
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	103,000
Flim	Flim-1/yr	2017	0.19
ERlim	-	-	-

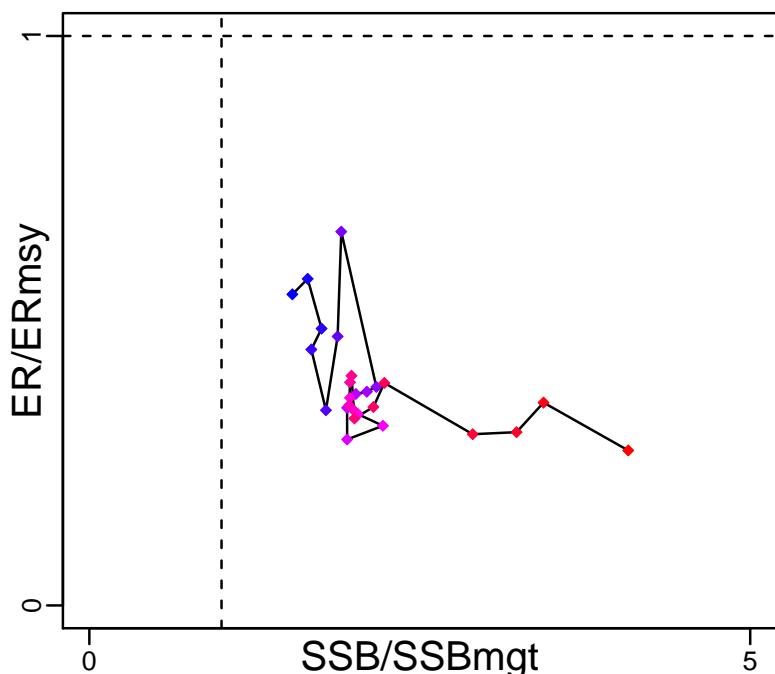
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2018	816,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	4.46×10^9	-	0	
F	F-1/yr	2017	0.077	-	2 to 10	
ER	ER-calc-ratio	2018	0.046	-	-	
TC	TC-MT	2018	36,900			
TL	TL-MT	2018	36,900			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2015	2.301			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.704			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.272			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	4.508			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.704			
ER/ERmgt	-	-	-			

Horse mackerel Portuguese Waters –East [HMACKIXa]

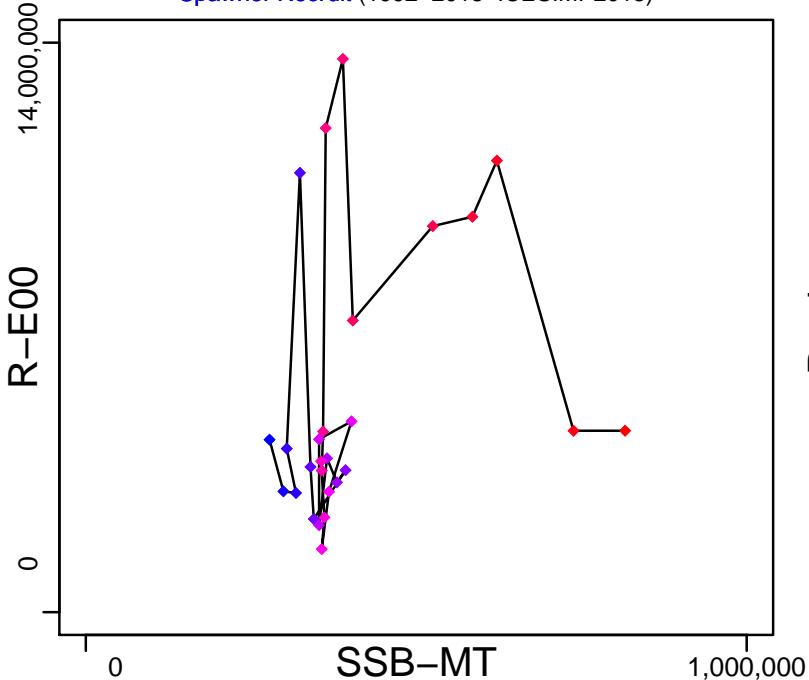
Kobe MSYpref (1992–2018–ICESIMP2018)



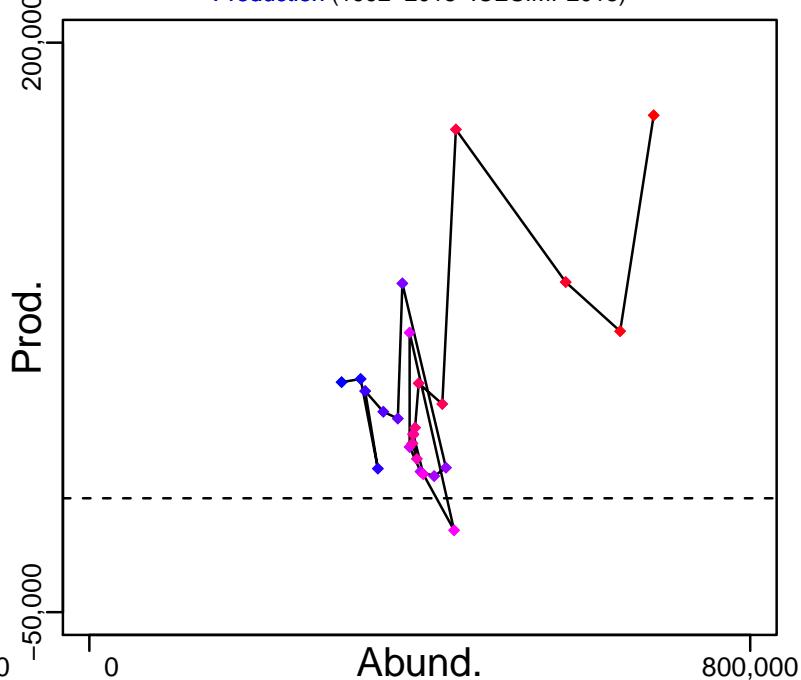
Kobe MGTpref (1992–2018–ICESIMP2018)



Spawner Recruit (1992–2018–ICESIMP2018)



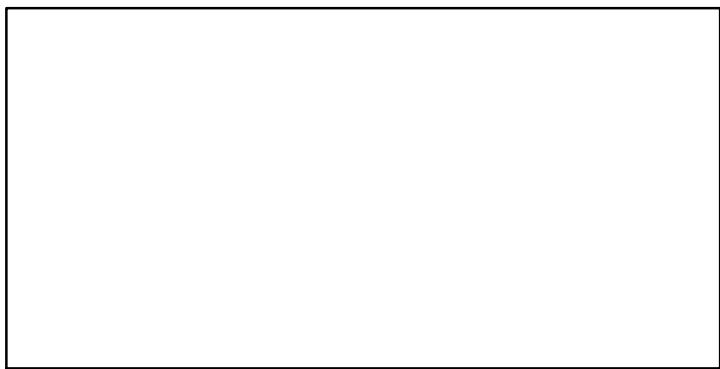
Production (1992–2018–ICESIMP2018)



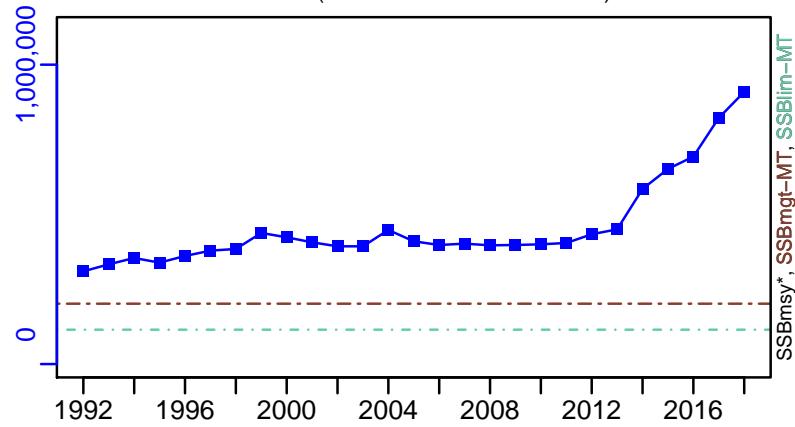
◆ Start Year ◆ End Year * No Data

Horse mackerel Portuguese Waters –East [HMACKIXa]

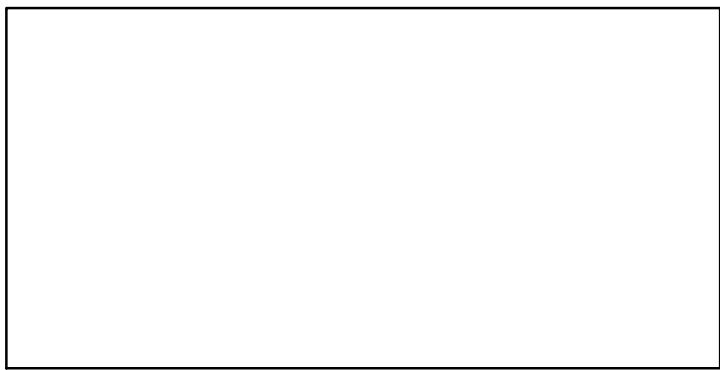
TB*



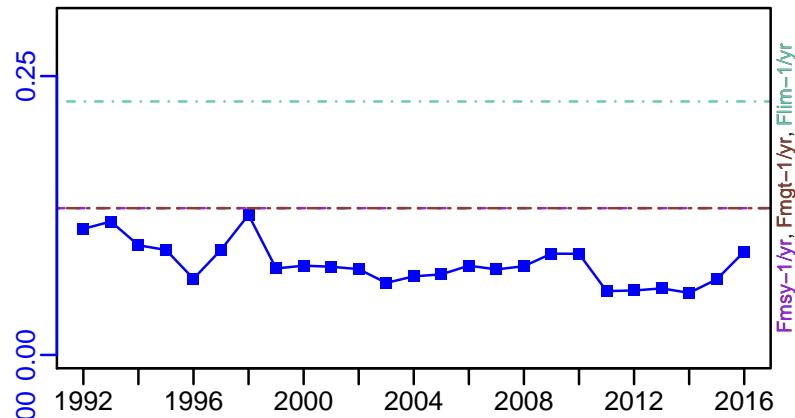
SSB-MT (1992–2018–ICESIMP2018)



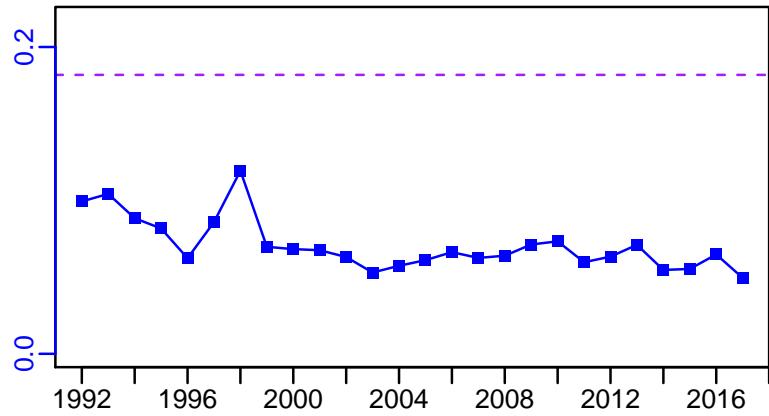
TN *



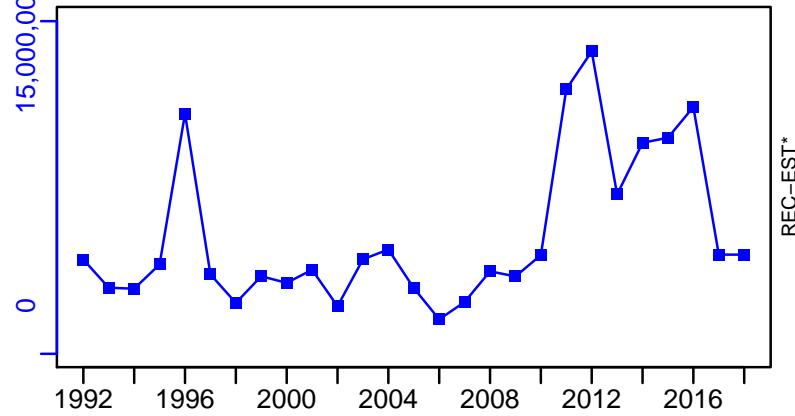
F-1/yr (1992–2017–ICESIMP2018)



ER-calc-ratio (1992–2018–ICESIMP2018)



R-E00 (1992–2018–ICESIMP2018)

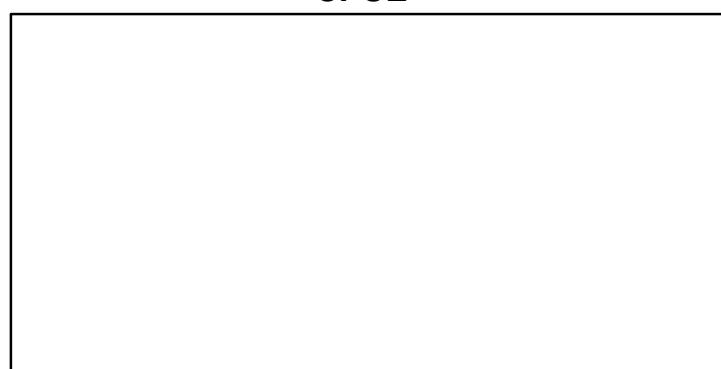
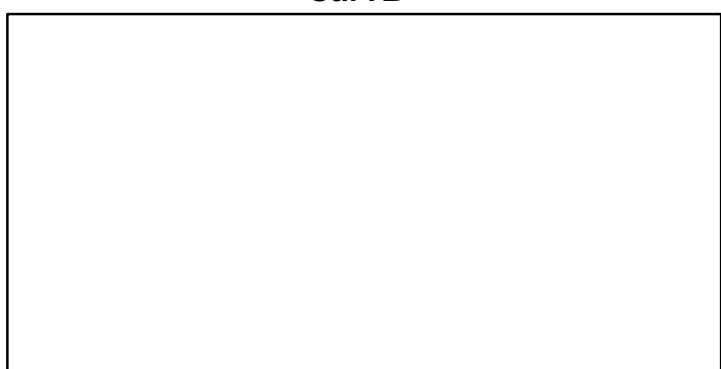
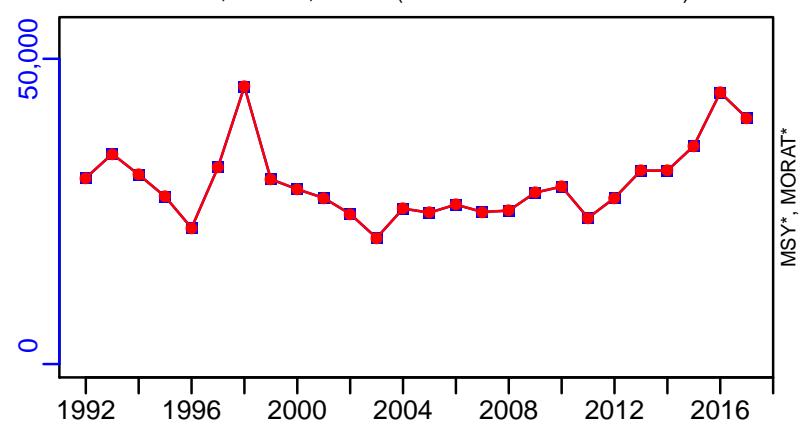


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

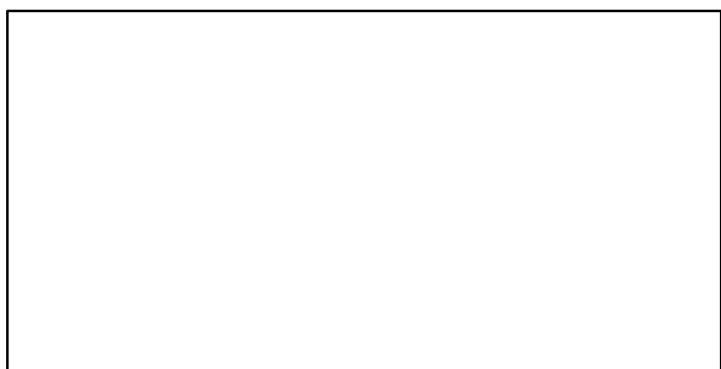
Horse mackerel Portuguese Waters –East [HMACKIXa]

TC–MT, TL–MT, RecC* (1992–2018–ICESIMP2018)

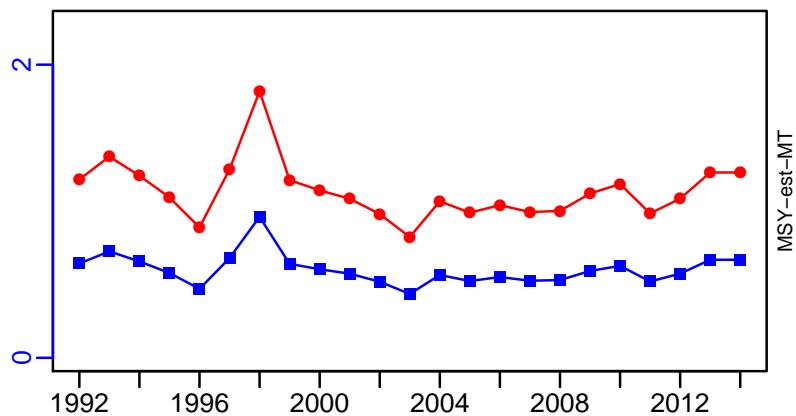
TAC*, Cpair*, Cadv*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1992–2015–ICESIMP2016)



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

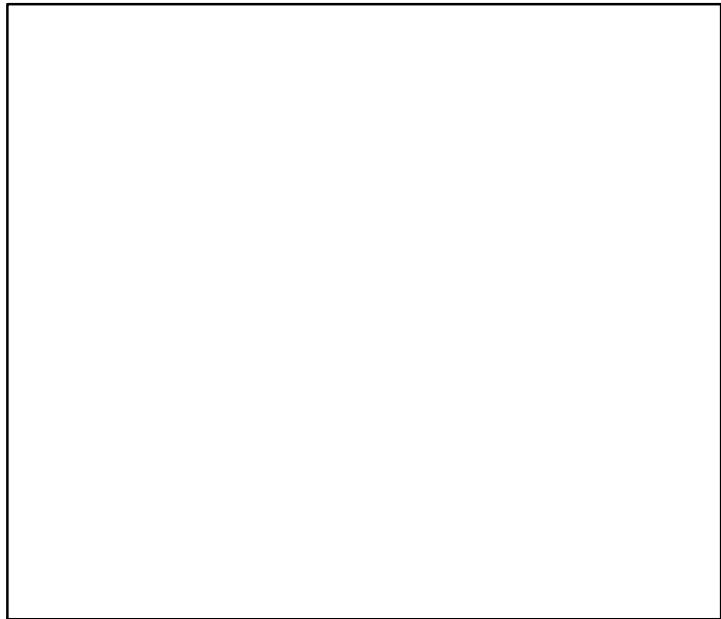
Kitefin shark Northeast Atlantic [KFSHARNEATL]

Metadata	
Scientific Name	Dalatias licha
Current Assess ID	WGEF-KFSHARNEATL-1988-2014-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014

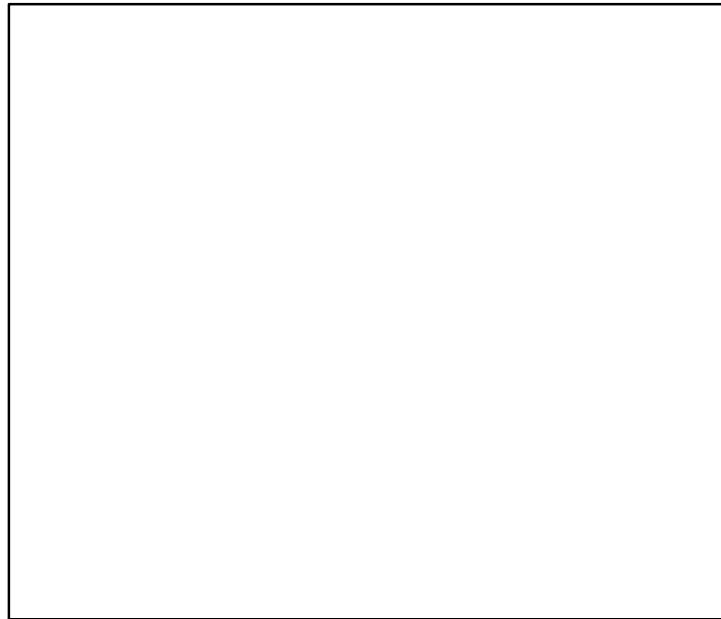
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

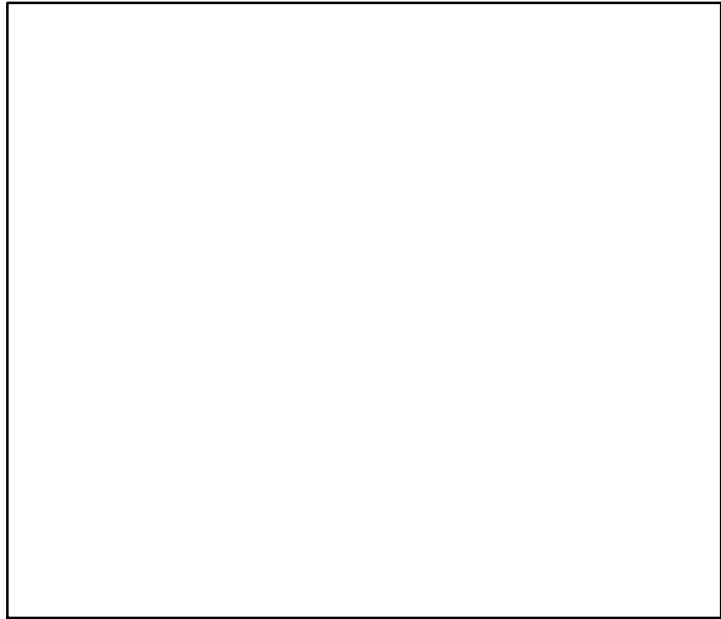
Kobe MSY*



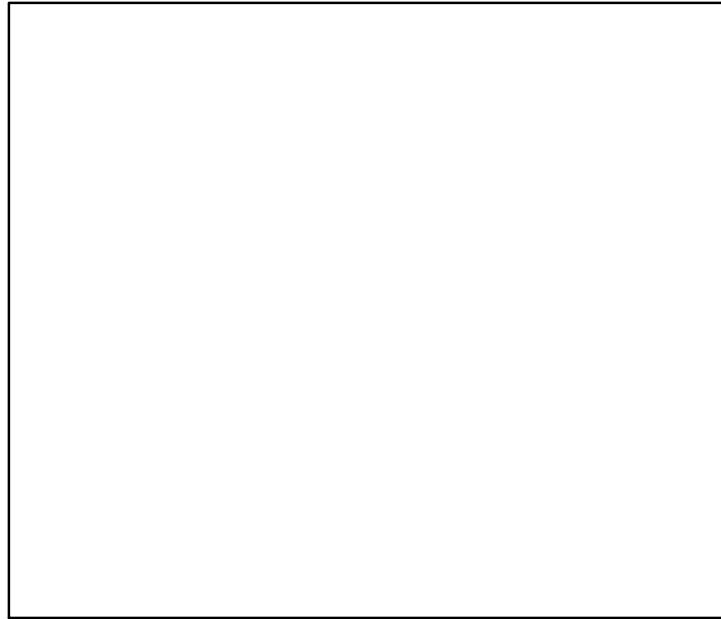
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Kitefin shark Northeast Atlantic [KFSHARNEATL]

TB*



SSB*



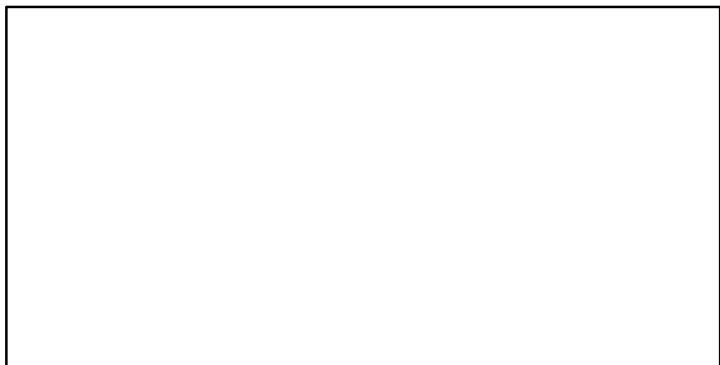
TN *



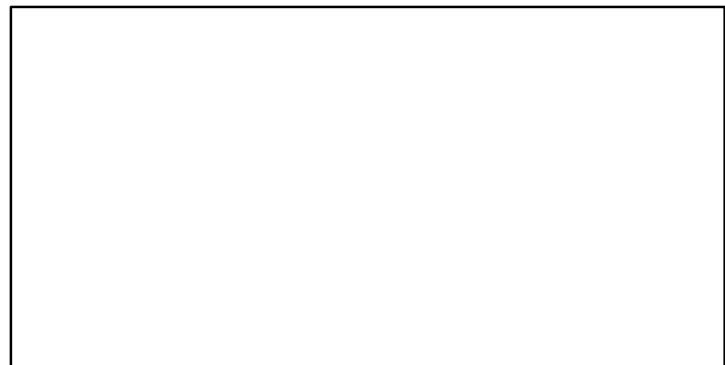
F*



ER*



Recruits*

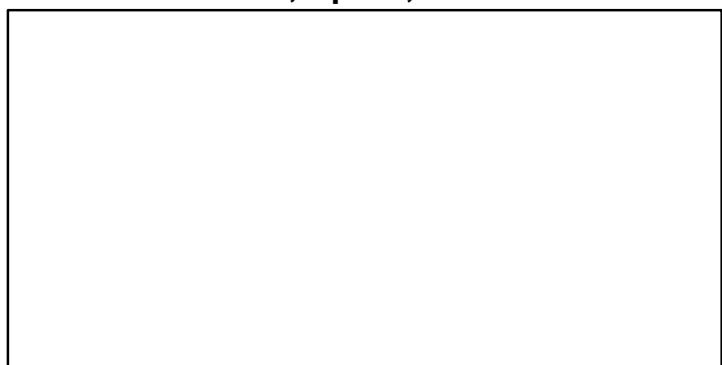
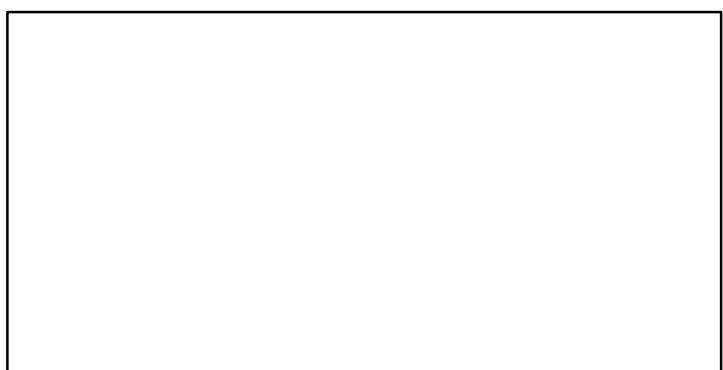
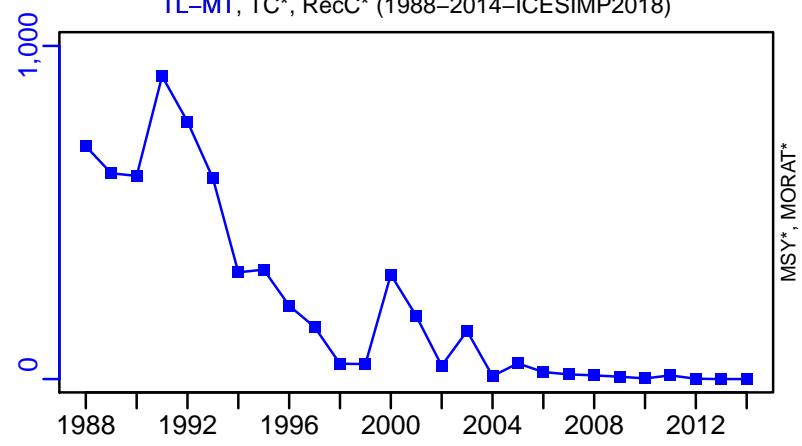


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

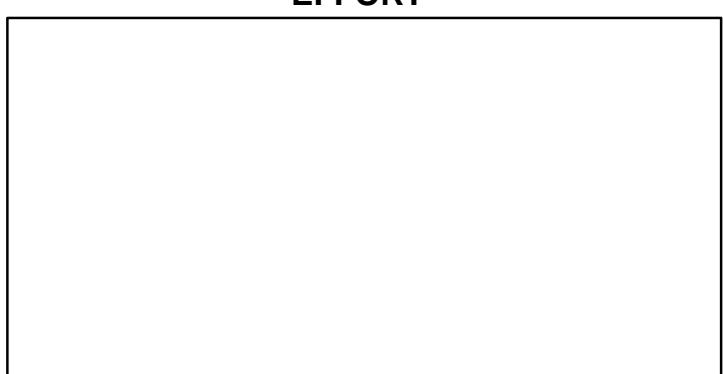
Kitefin shark Northeast Atlantic [KFSHARNEATL]

TL-MT, TC*, RecC* (1988–2014–ICESIMP2018)

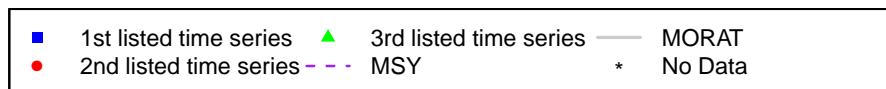
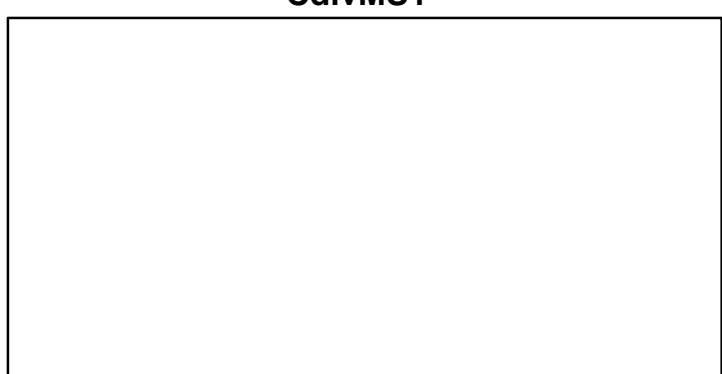
TAC*, Cpair*, Cadv*



CPUE*



CdivMSY*



Leafscale gulper shark Northeast Atlantic [LGSHARNEATL]

Metadata	
Scientific Name	Centrophorus squamosus
Current Assess ID	WGEF-LGSHARNEATL-1988-2014-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	33		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

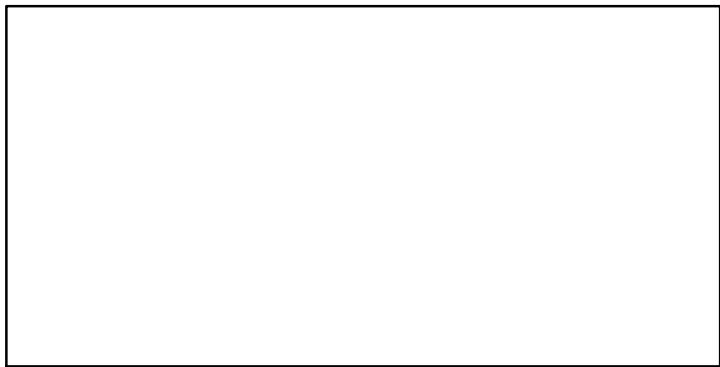
Spawner Recruit*

Production*

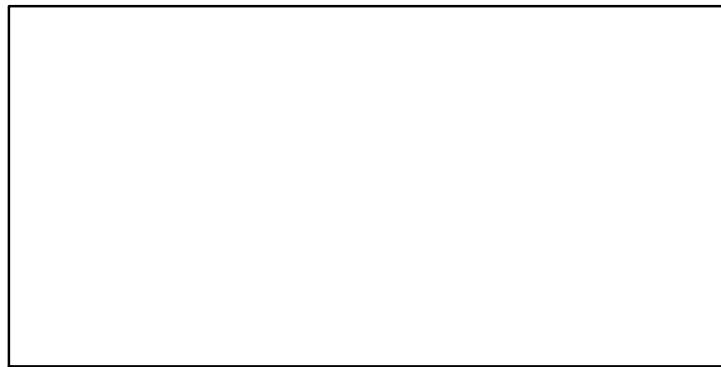
◆ Start Year ♦ End Year * No Data

Leafscale gulper shark Northeast Atlantic [LGSHEARNEATL]

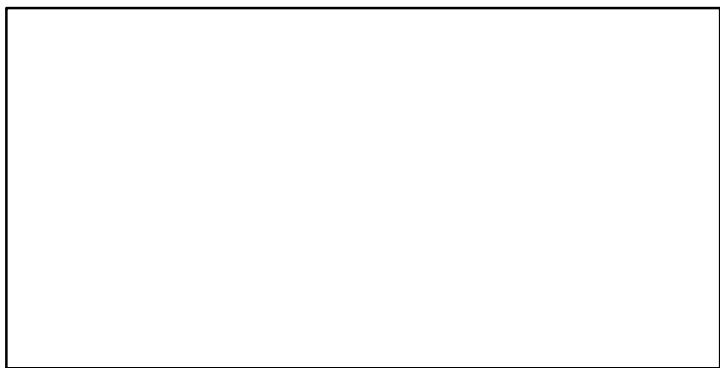
TB*



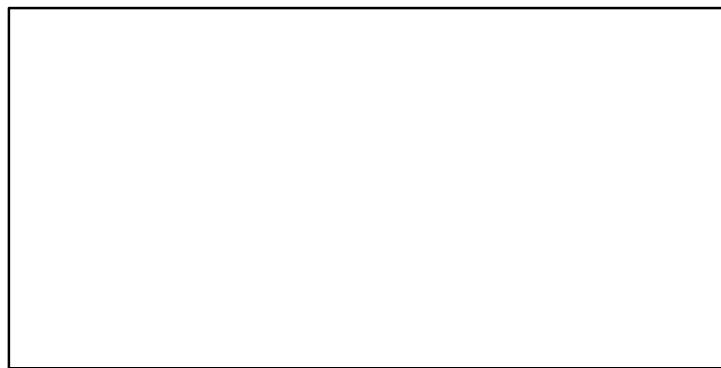
SSB*



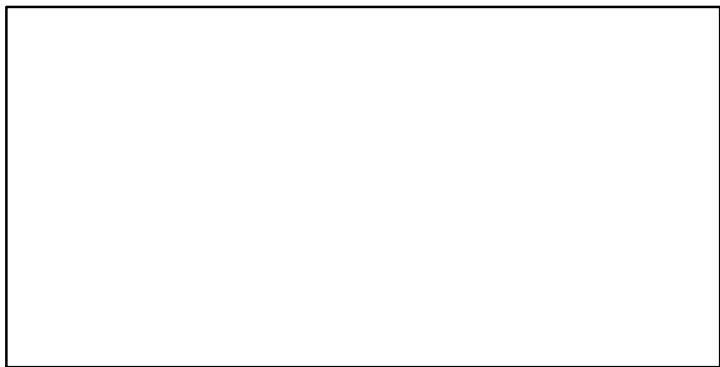
TN *



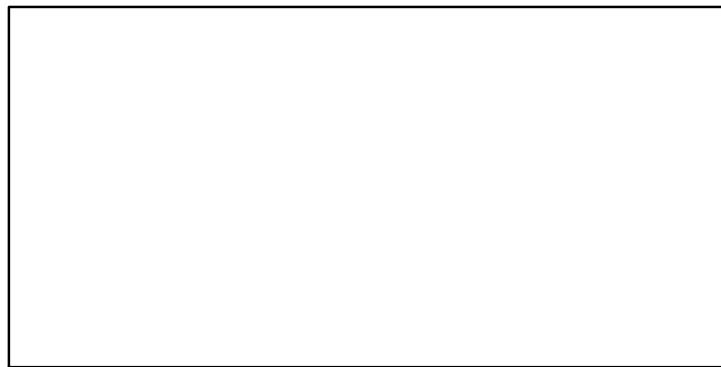
F*



ER*



Recruits*

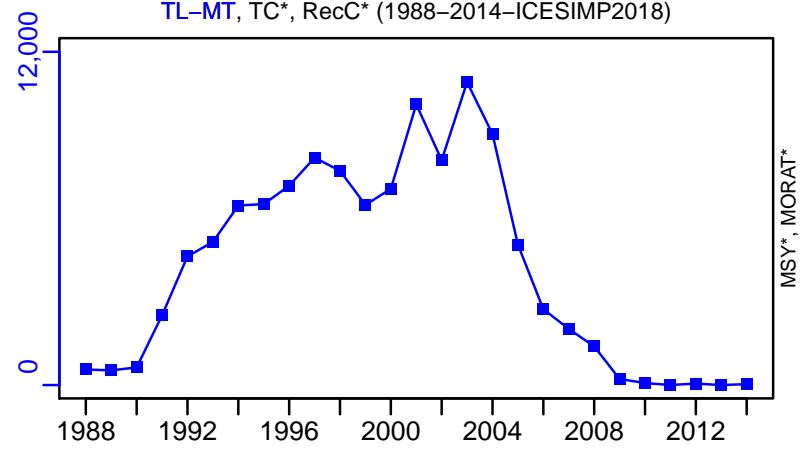


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Leafscale gulper shark Northeast Atlantic [LGSHARNEATL]

TL-MT, TC*, RecC* (1988–2014–ICESIMP2018)

TAC*, Cpair*, Cadv*



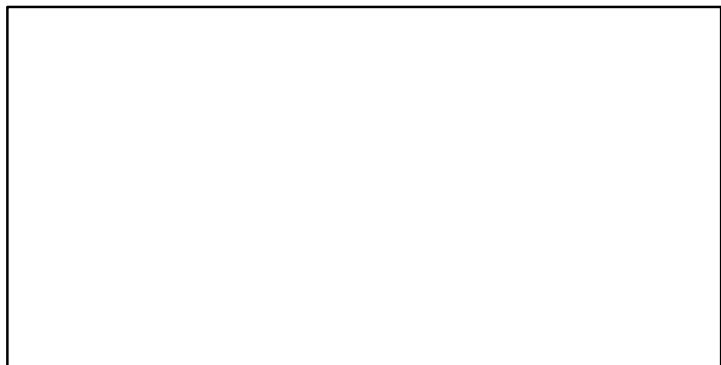
survB*



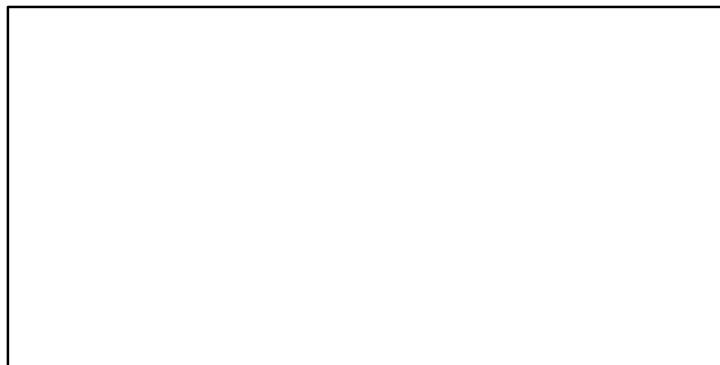
CPUE*



EFFORT*



CdivMSY*



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

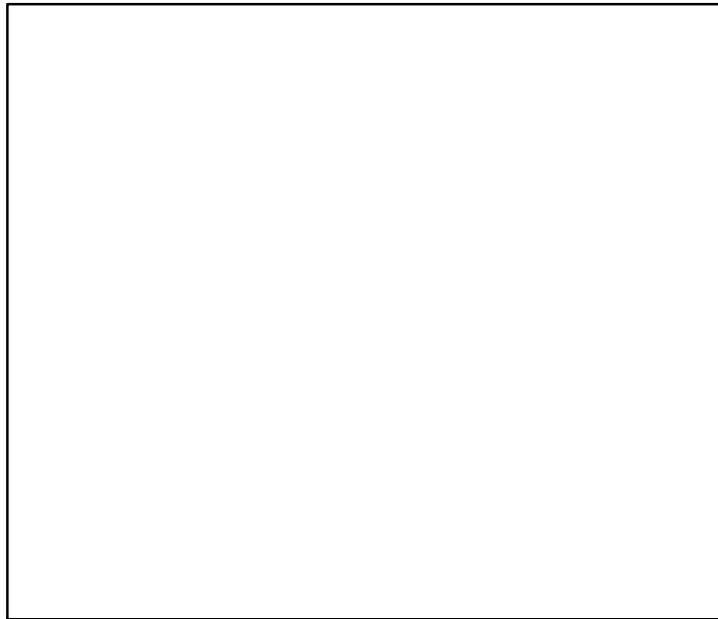
Ling Northeast Atlantic [LINGNEATL]

Metadata	
Scientific Name	Molva molva
Current Assess ID	WGDEEP-LINGNEATL-1988-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2014, 2016

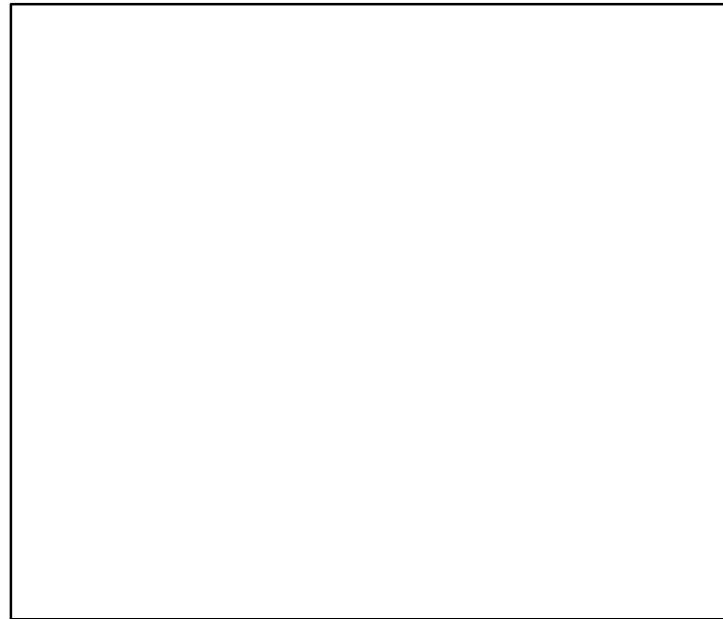
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	144	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	19,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

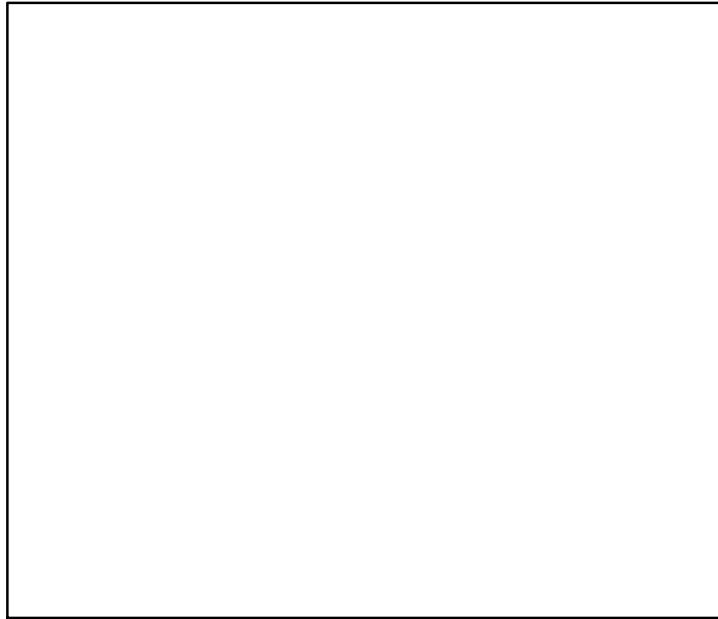
Kobe MSY*



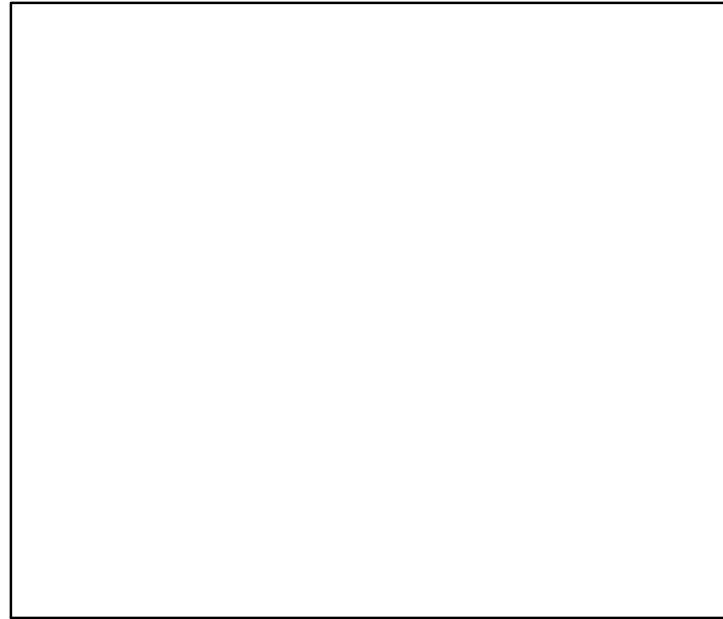
Kobe MGT*



Spawner Recruit*



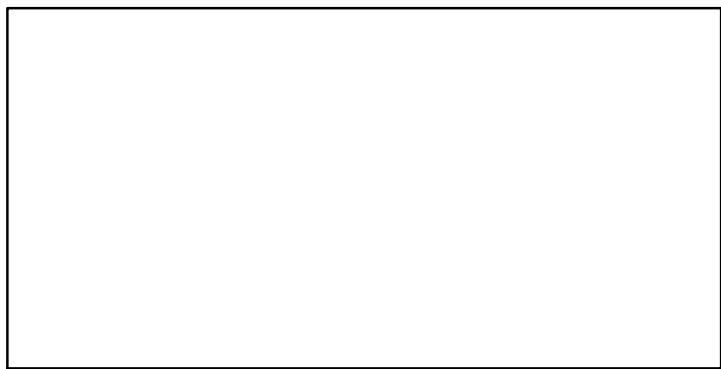
Production*



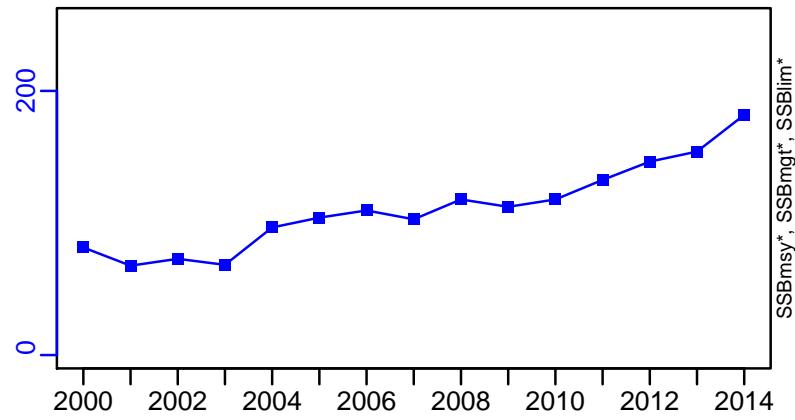
◆ Start Year ♦ End Year * No Data

Ling Northeast Atlantic [LINGNEATL]

TB*



SSB-index (1988–2014–ICESIMP2018)



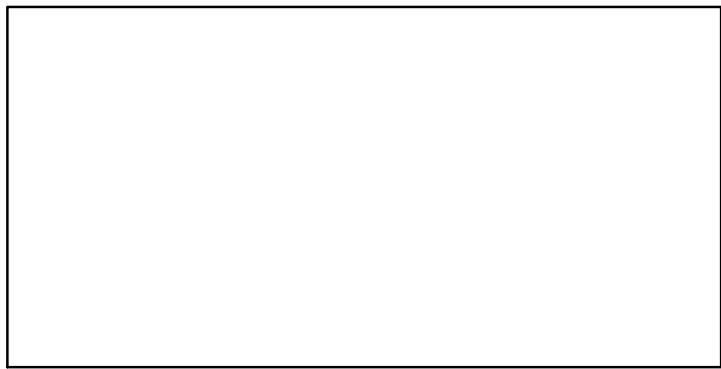
TN *



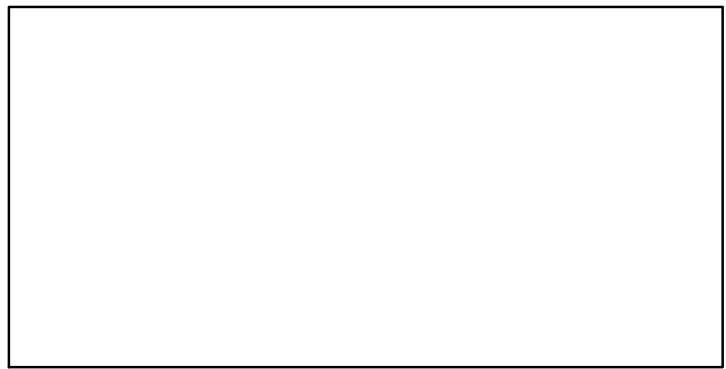
F*



ER*



Recruits*

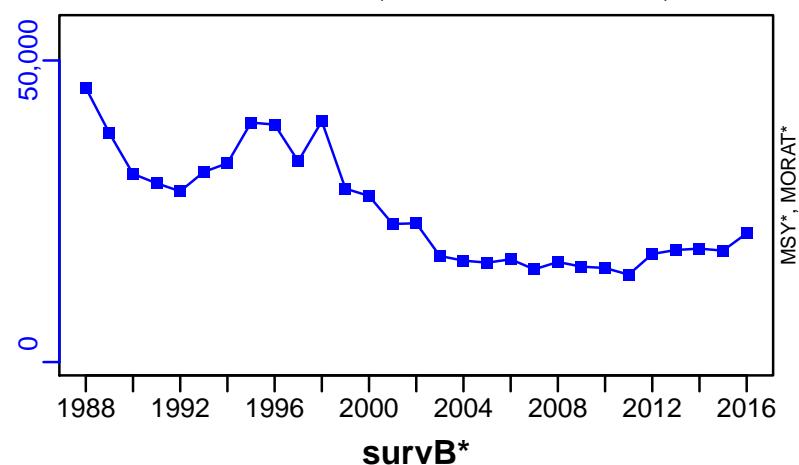


- | | | |
|---|--|---|
| ■ Listed time series
— MSY-based BRP | — Target BRP
— Lim BRP | — Rec-Est
* No Data |
|---|--|---|

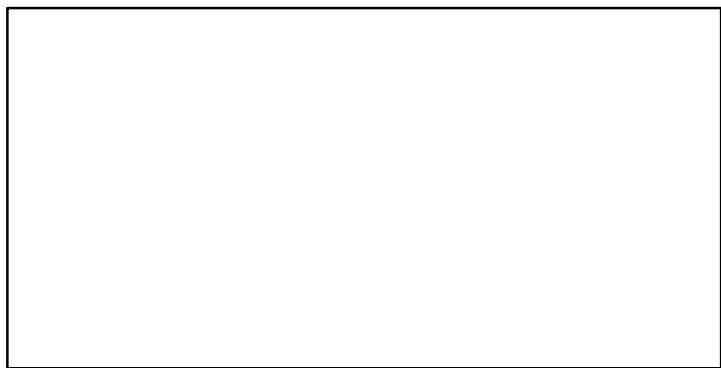
Ling Northeast Atlantic [LINGNEATL]

TL-MT, TC*, RecC* (1988–2016–ICESIMP2018)

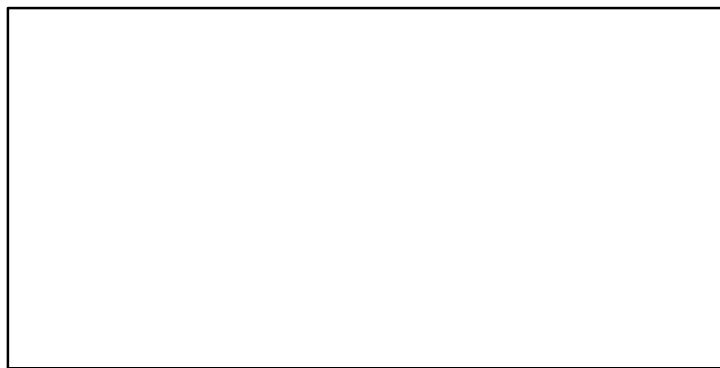
TAC*, Cpair*, Cadv*



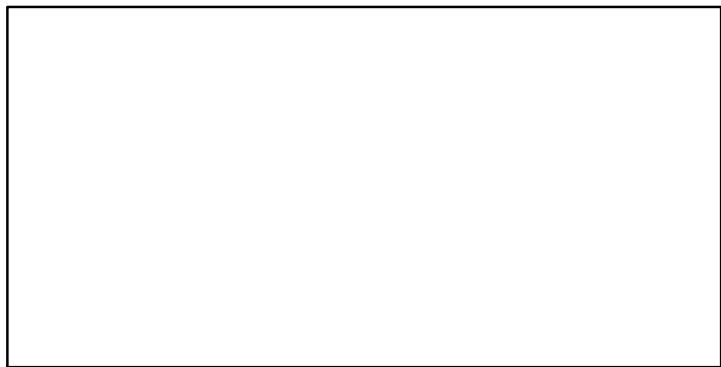
survB*



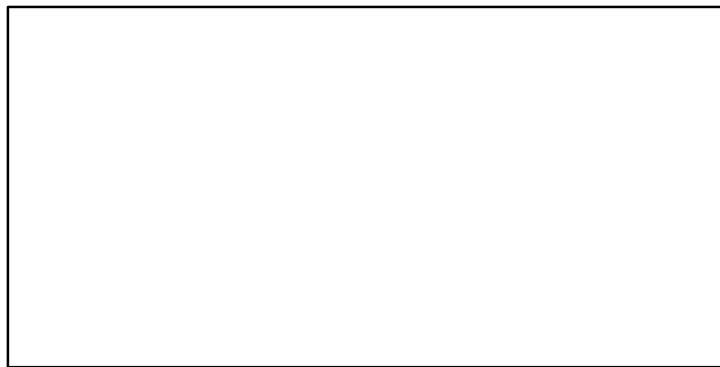
CPUE*



EFFORT*



CdivMSY*



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

Lesser spotted dogfish ICES 3a-4-7d [LSDOGIIIa-IV-VIId]

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGIIIa-IV-VIId-2005-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.93	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2970		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

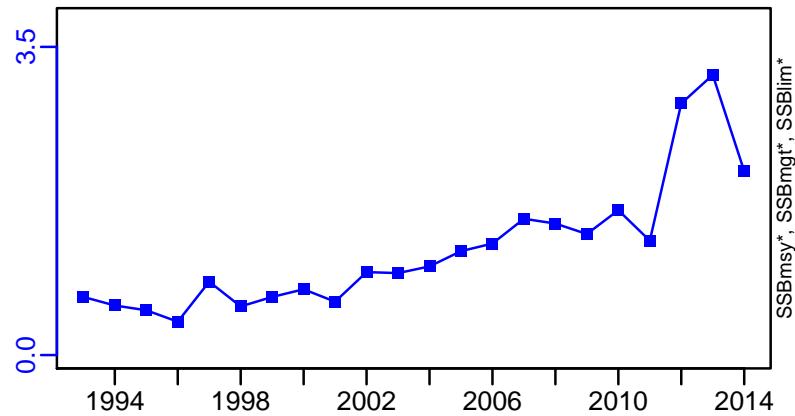
◆ Start Year ♦ End Year * No Data

Lesser spotted dogfish ICES 3a–4–7d [LSDOGIIa–IV–VIId]

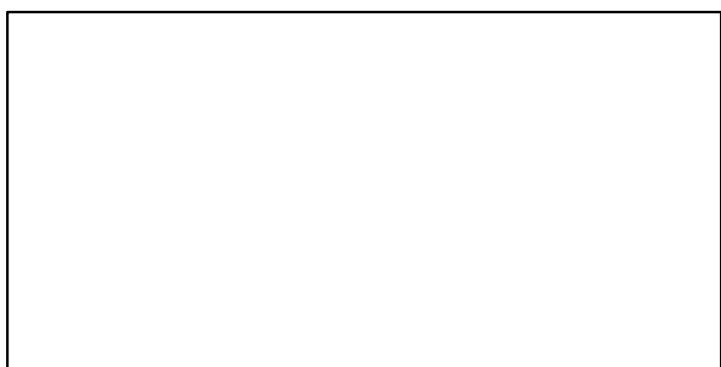
TB*



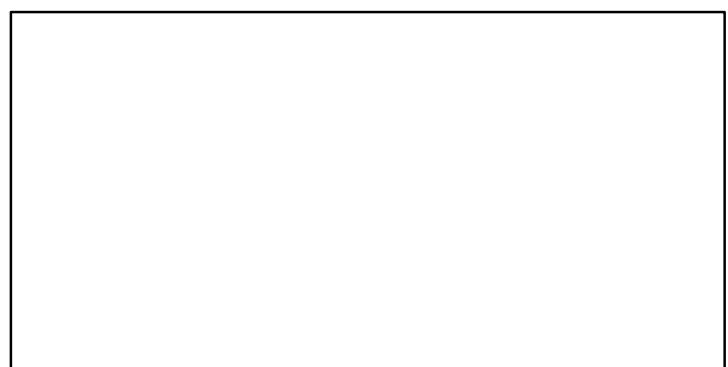
SSB-index (1993–2014–ICESIMP2018)



TN *



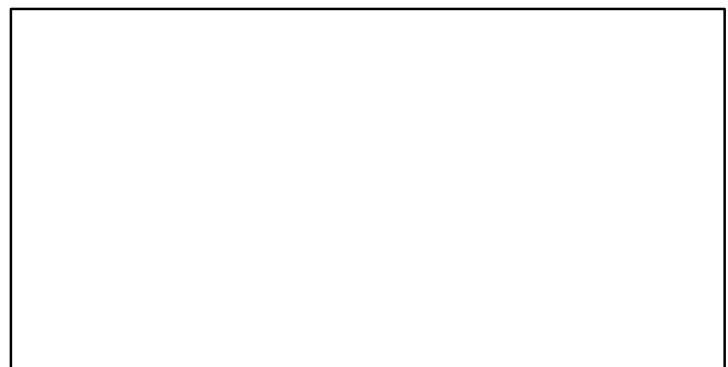
F*



ER*



Recruits*

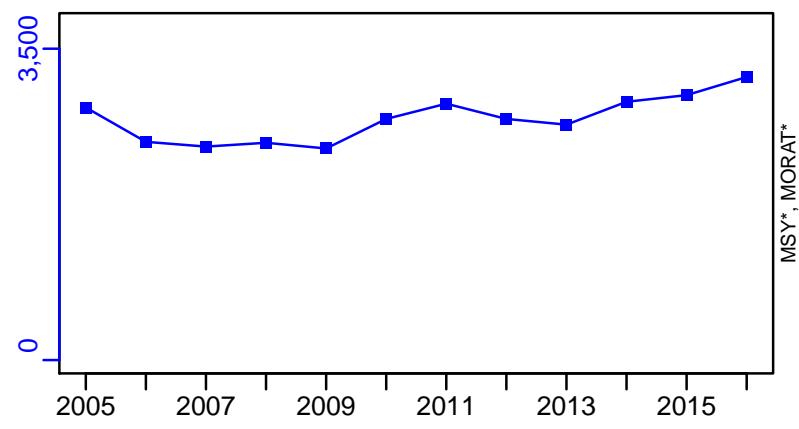


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

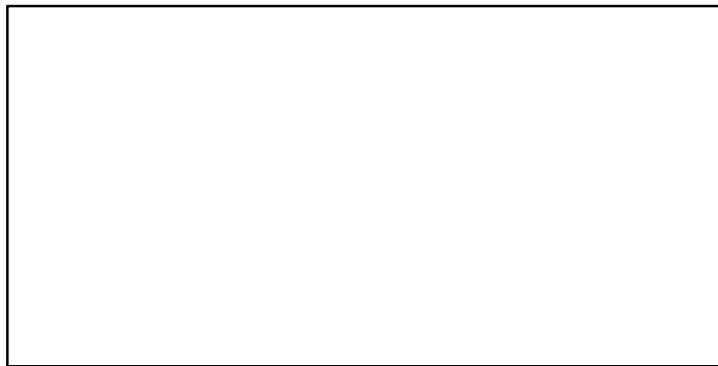
Lesser spotted dogfish ICES 3a–4–7d [LSDOGIIa–IV–VIId]

TL–MT, TC*, RecC* (2005–2016–ICESIMP2018)

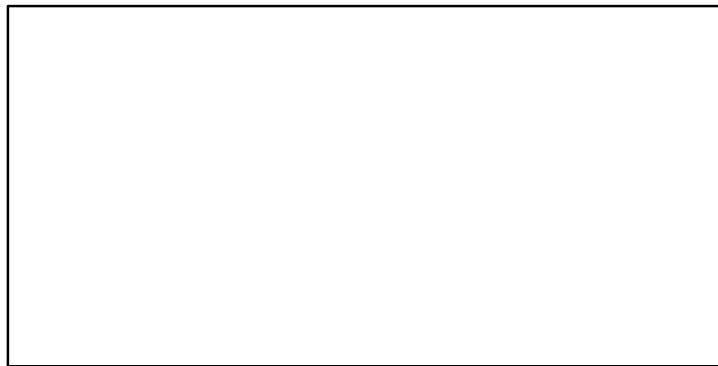
TAC*, Cpair*, Cadv*



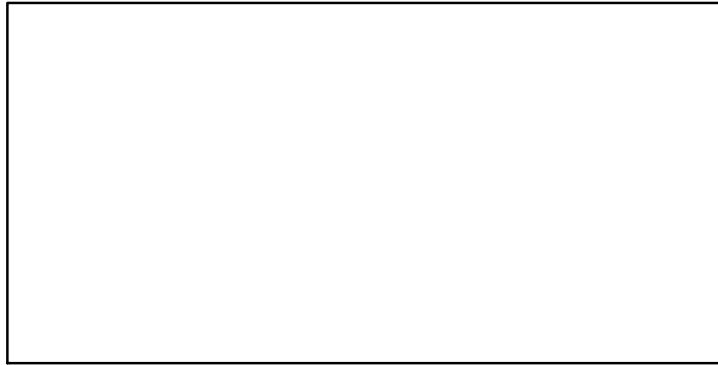
survB*



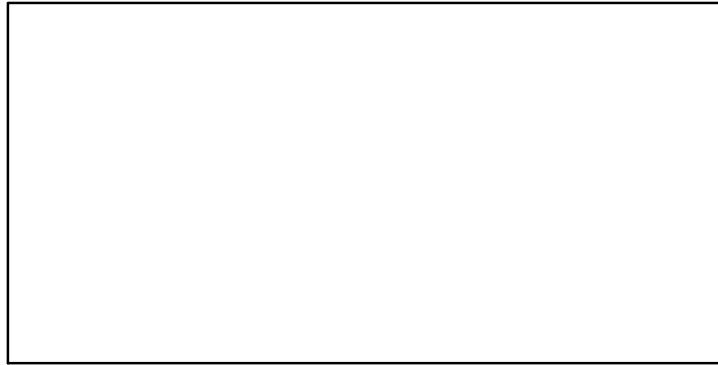
CPUE*



EFFORT*



CdivMSY*



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

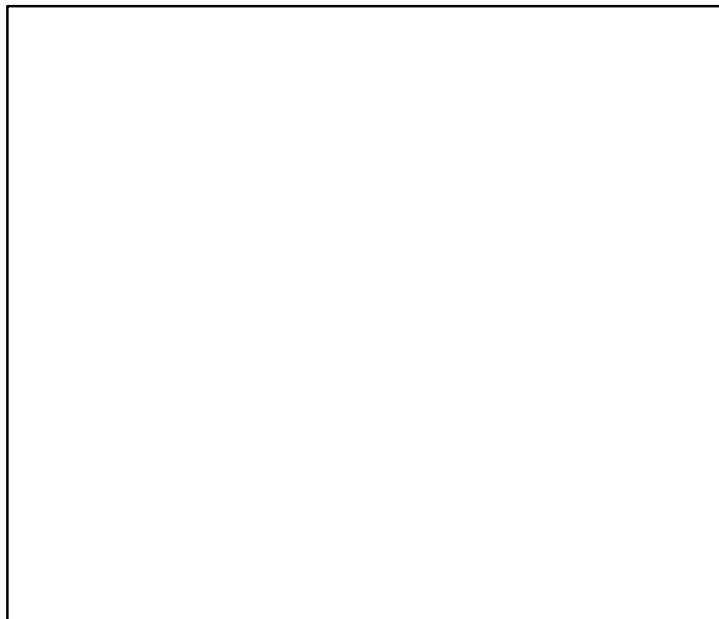
Lesser spotted dogfish ICES 8abd [LSDOGVIIab]

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVIIab-1997-2016-ICESIMP2018
Area	ICES 8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

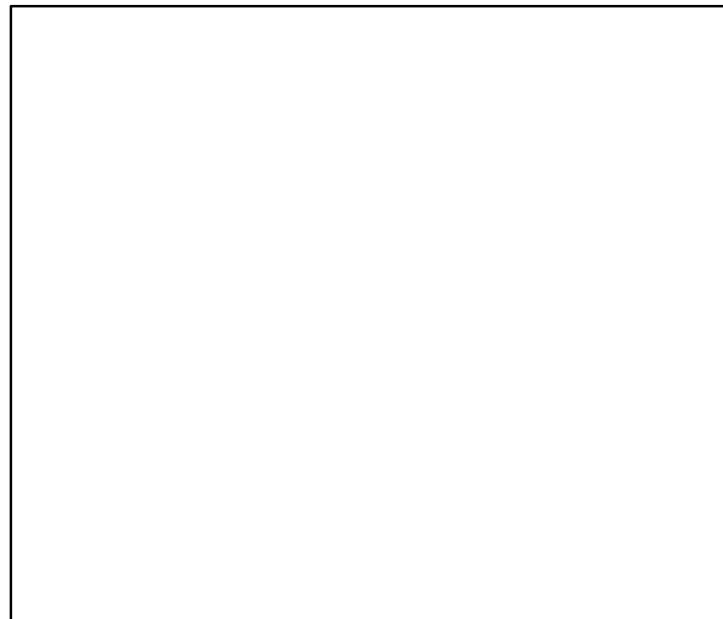
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.02	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	10,200		
TL	TL-MT	2016	1000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

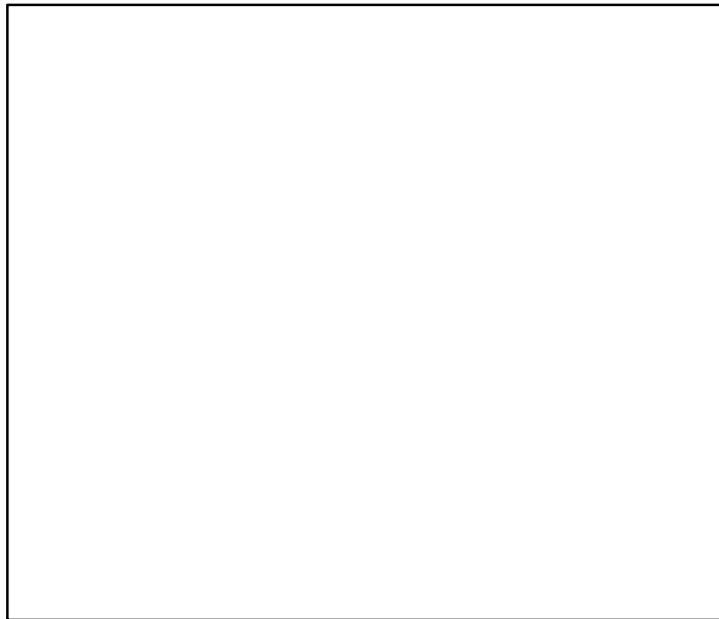
Kobe MSY*



Kobe MGT*



Spawner Recruit*



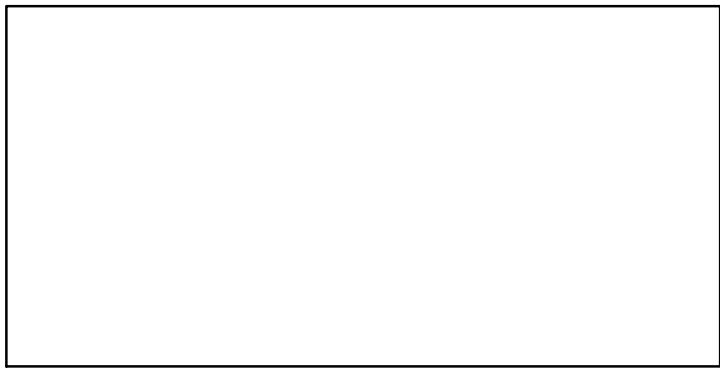
Production*



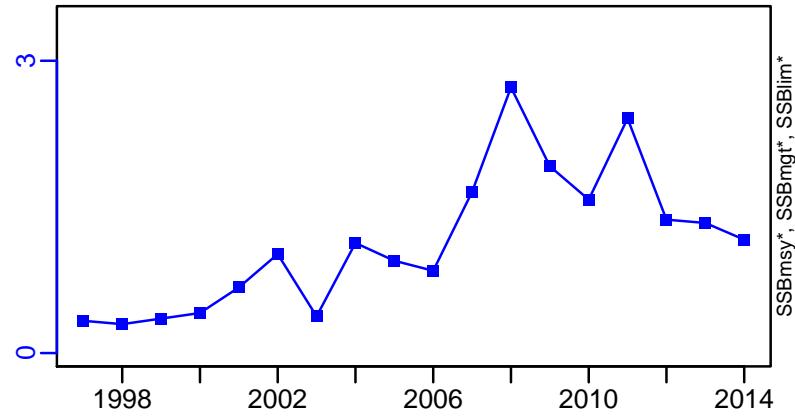
◆ Start Year ♦ End Year * No Data

Lesser spotted dogfish ICES 8abd [LSDOGVIIlabd]

TB*

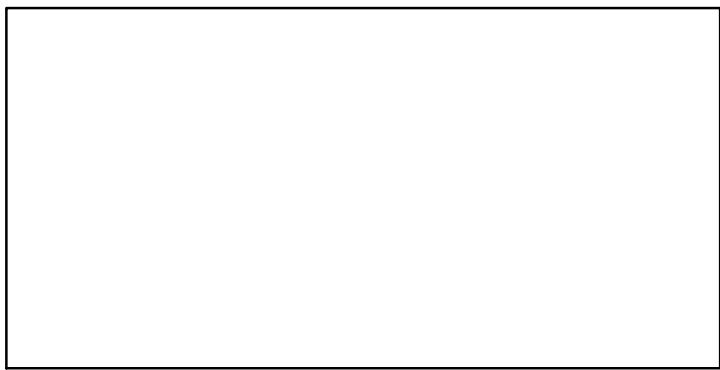


SSB-index (1997–2014–ICESIMP2018)

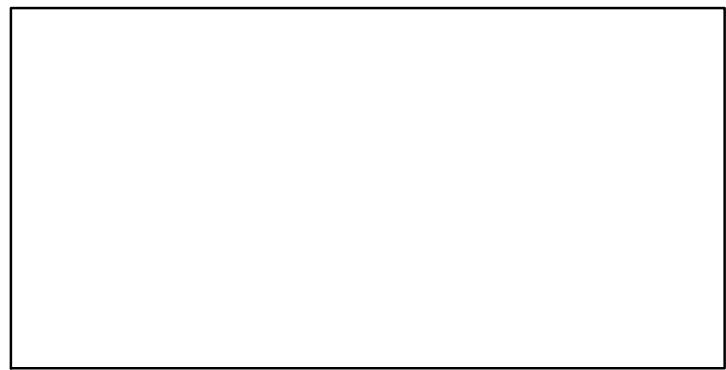


SSB_{mgt*}, SSB_{lim*}

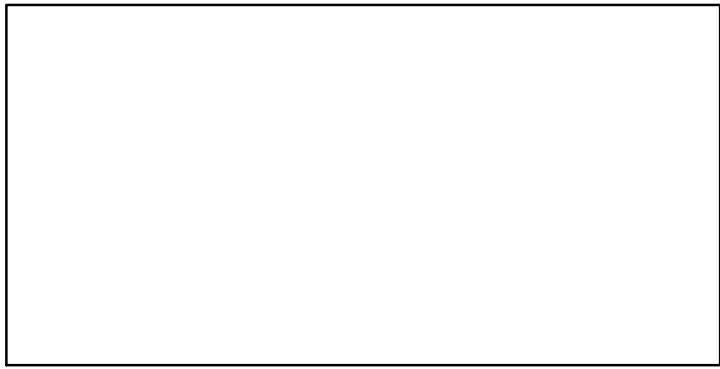
TN *



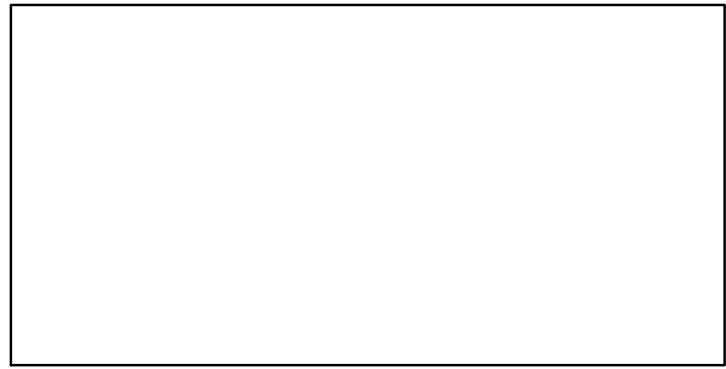
F*



ER*



Recruits*

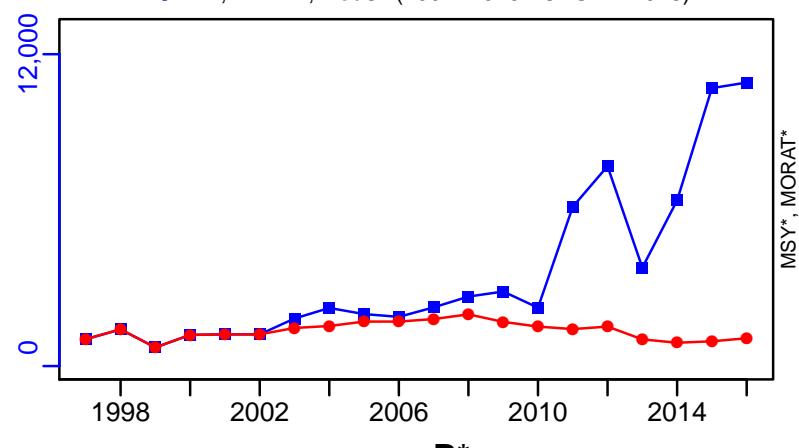


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Lesser spotted dogfish ICES 8abd [LSDOGVIIlabd]

TC-MT, TL-MT, RecC* (1997–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*



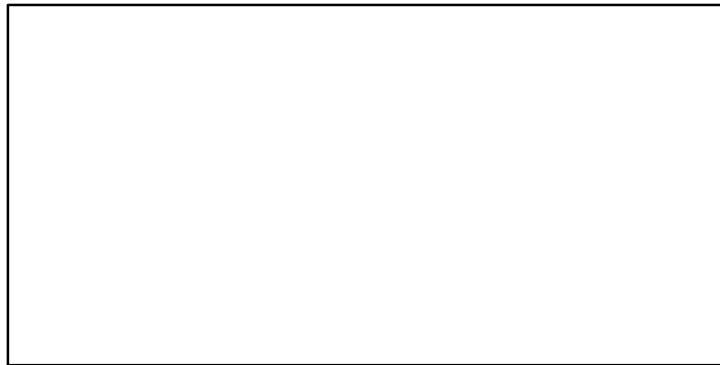
CPUE*



EFFORT*



CdivMSY*



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

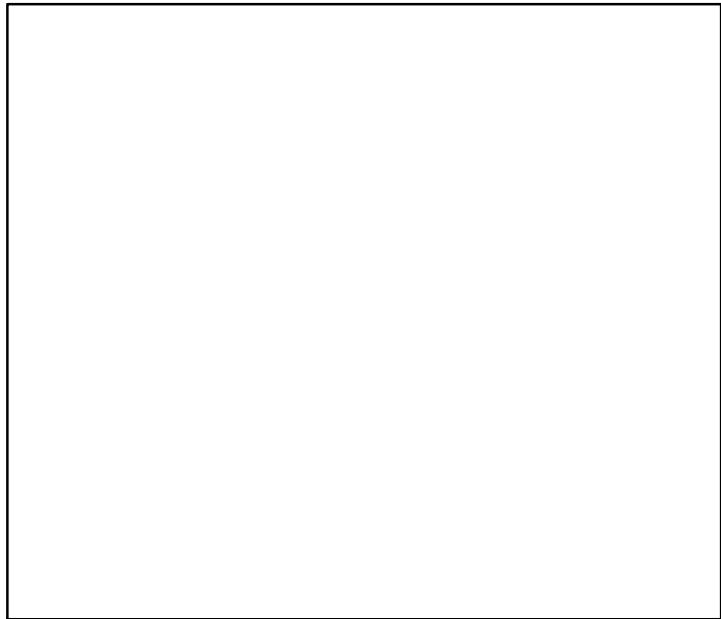
Lesser spotted dogfish ICES 8c-9a [LSDOGVIIIC-IXa]

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVIIIC-IXa-1996-2016-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2016, 2014

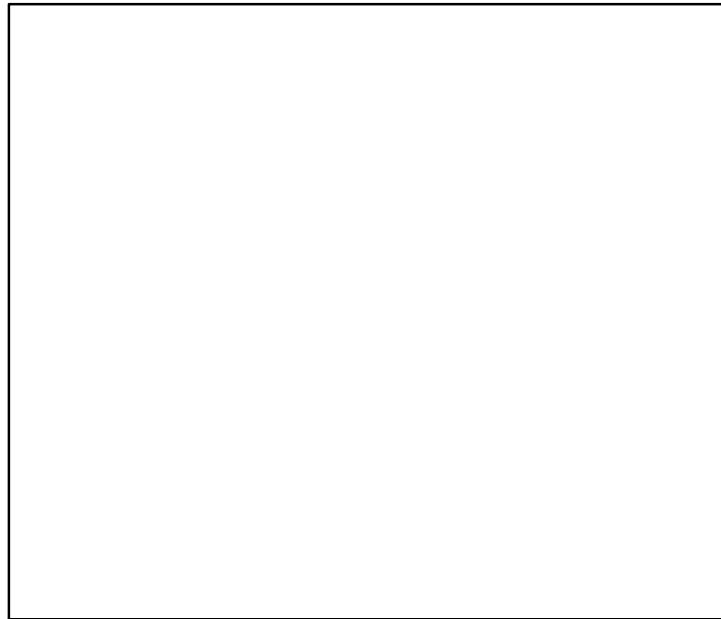
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.42	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	988		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

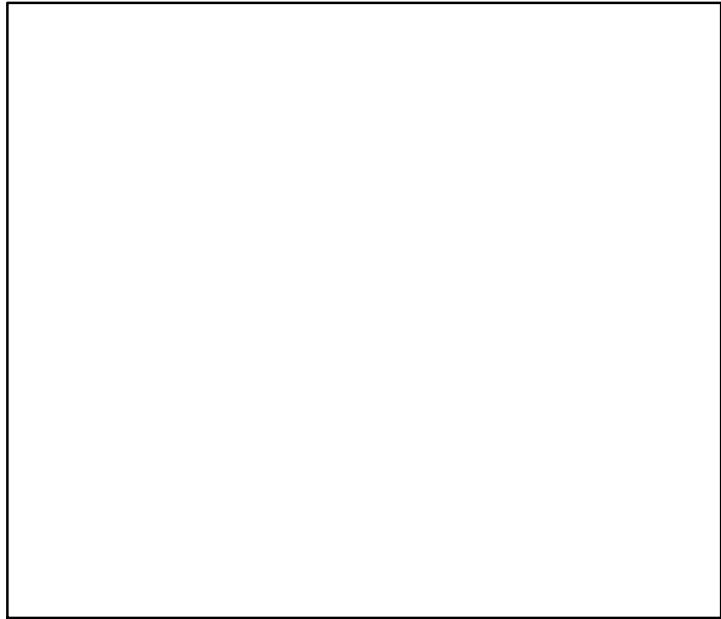
Kobe MSY*



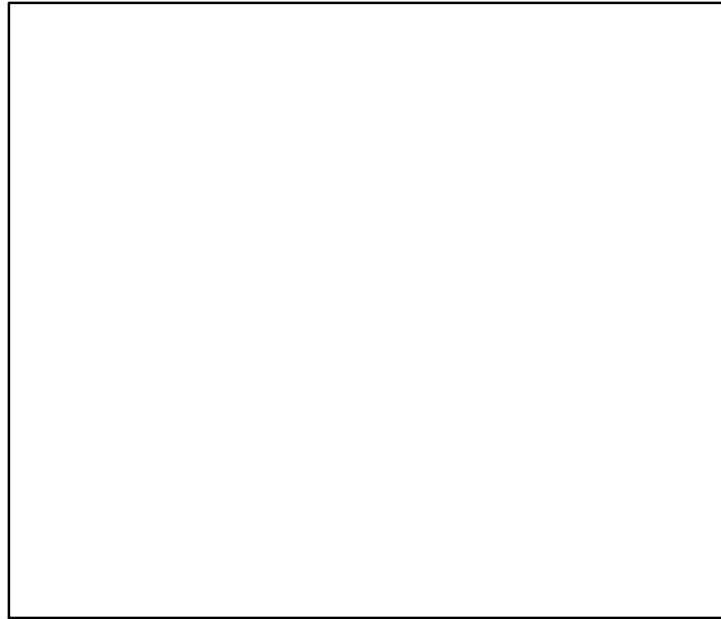
Kobe MGT*



Spawner Recruit*



Production*



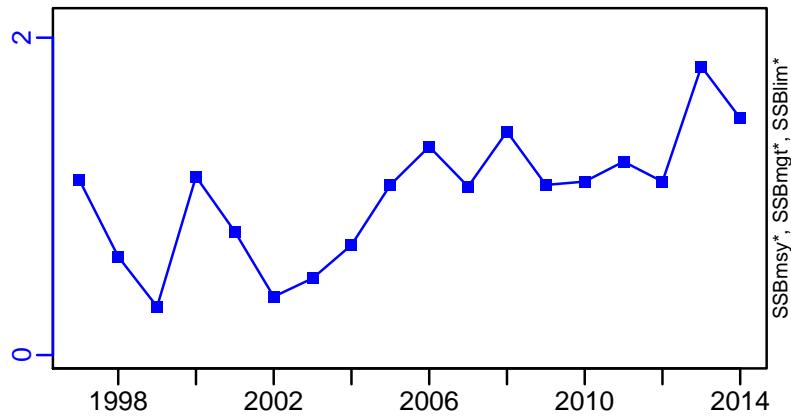
◆ Start Year ♦ End Year * No Data

Lesser spotted dogfish ICES 8c-9a [LSDOGVIIIC-IXa]

TB*



SSB-index (1997–2014–ICESIMP2018)



TN *



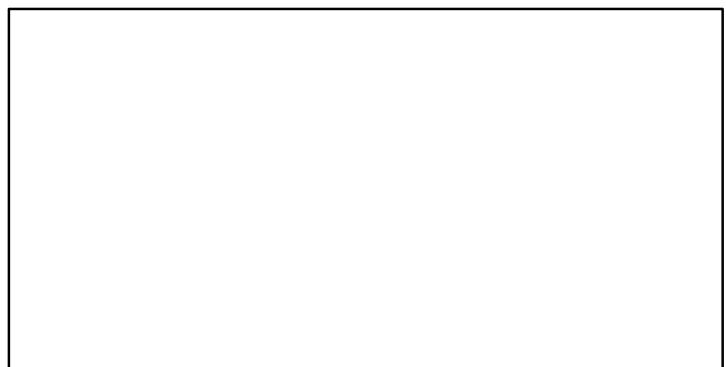
F*



ER*



Recruits*

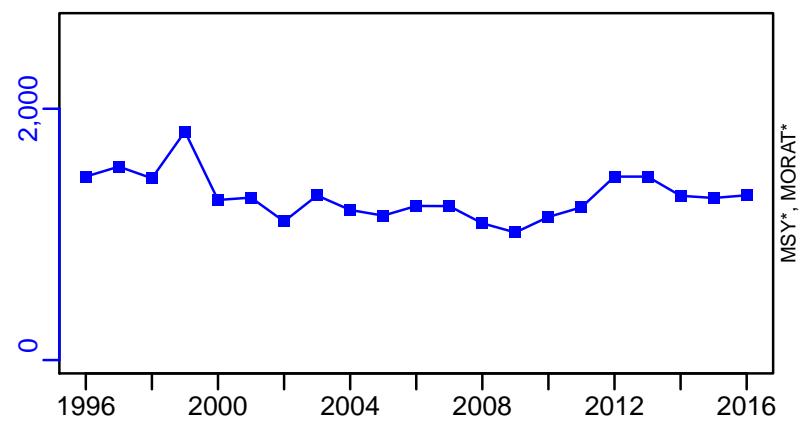


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Lesser spotted dogfish ICES 8c-9a [LSDOGVIIIC-IXa]

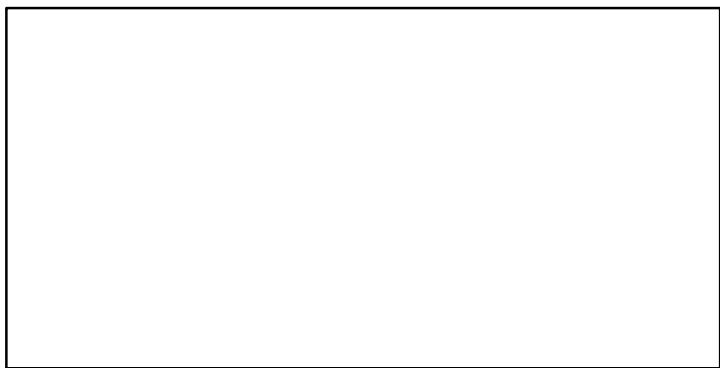
TL-MT, TC*, RecC* (1996–2016—ICESIMP2018)

TAC*, Cpair*, Cadv*

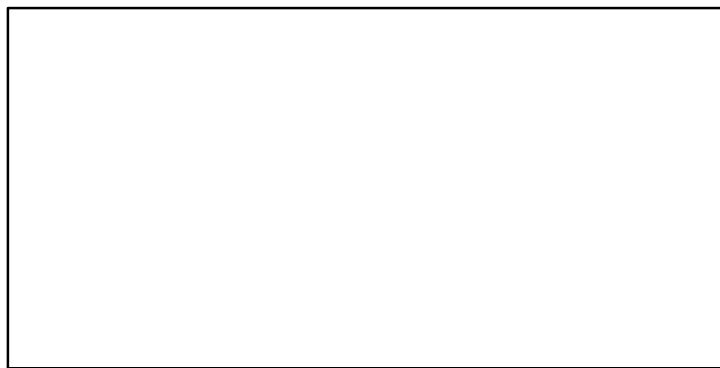


survB*

MSY*, MORAT*



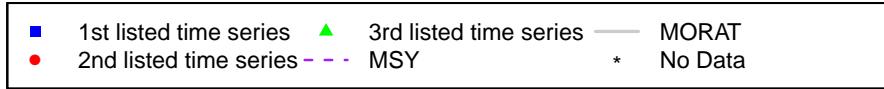
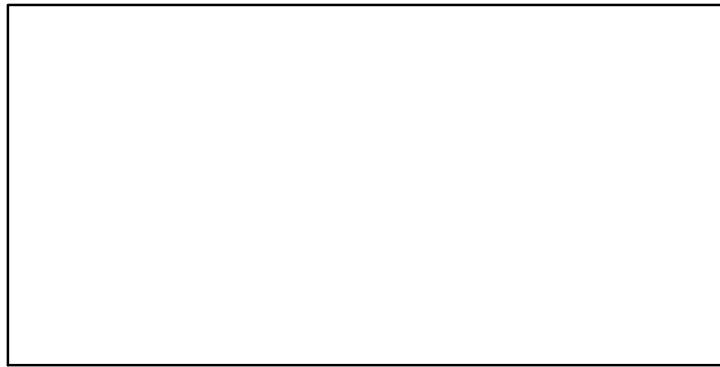
CPUE*



EFFORT*



CdivMSY*



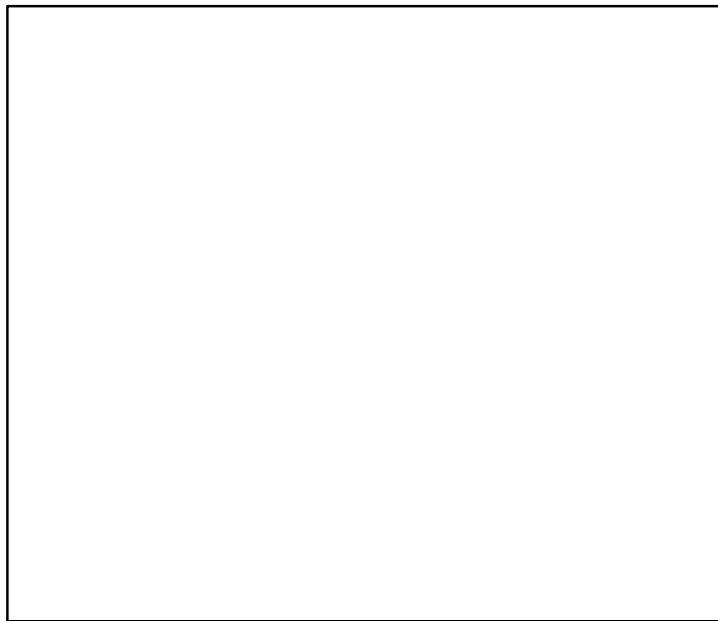
Lesser spotted dogfish ICES 6-7abcefghij [LSDOGVI-VIIabcefghij]

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVI-VIIabcefghij-2005-2016-ICESIMP2018
Area	ICES 6-7abcefghij
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

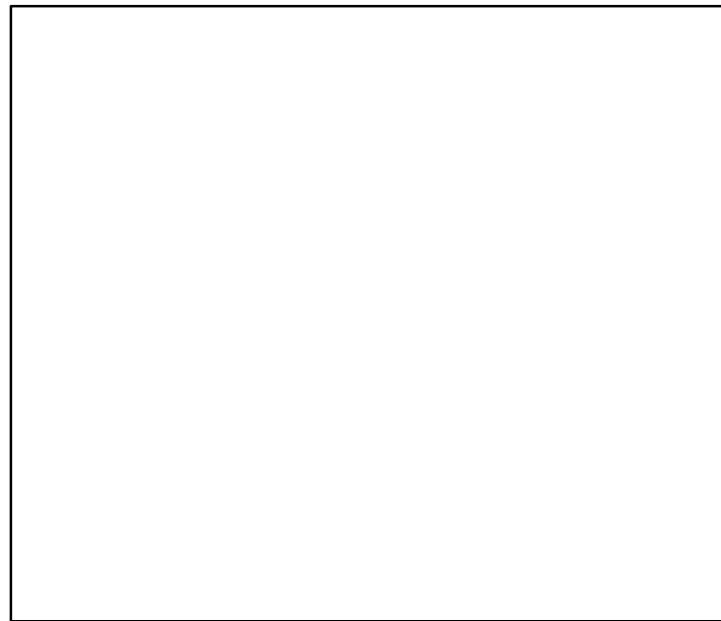
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	1.14	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	3930		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

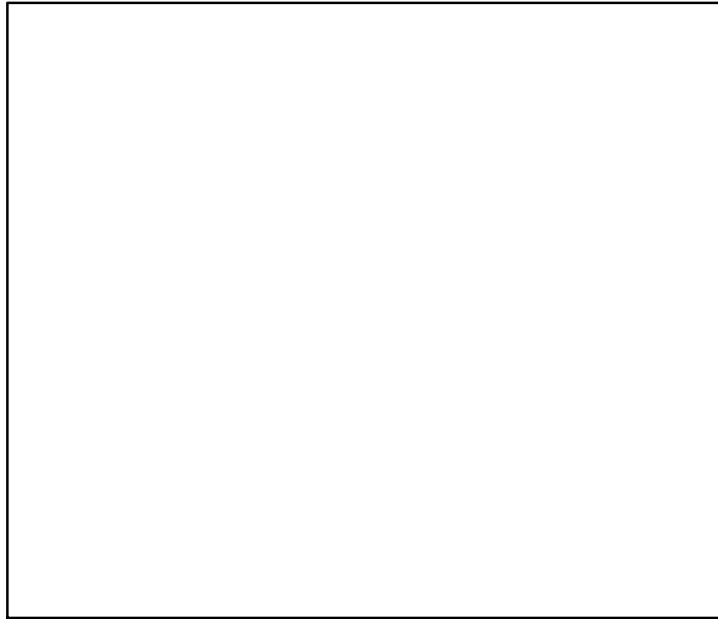
Kobe MSY*



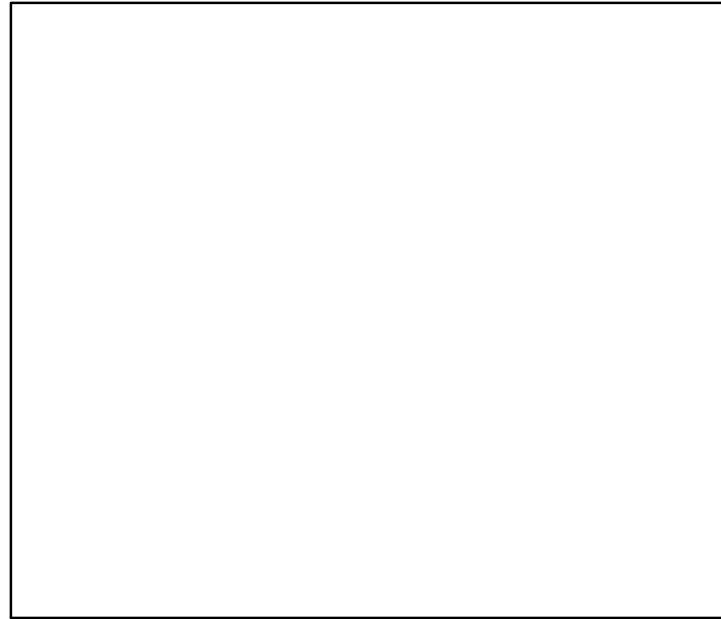
Kobe MGT*



Spawner Recruit*



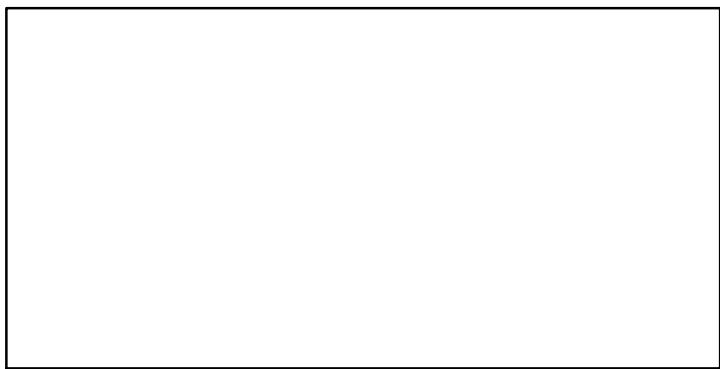
Production*



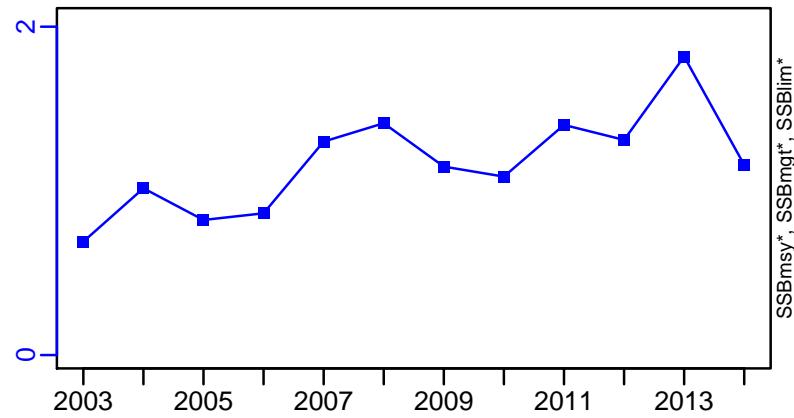
◆ Start Year ♦ End Year * No Data

Lesser spotted dogfish ICES 6–7abcefghij [LSDOGVI–VIIabcefghij]

TB*

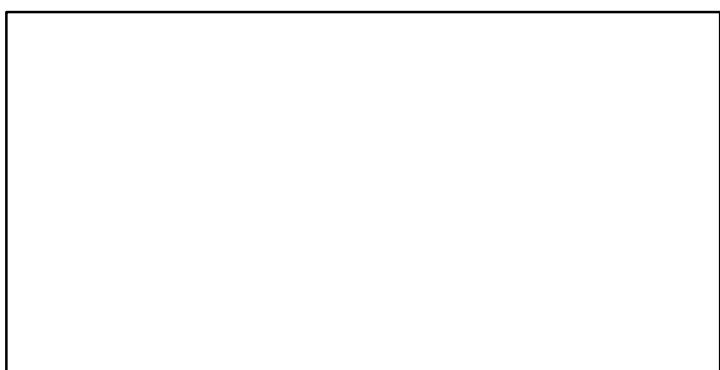


SSB-index (2003–2014–ICESIMP2018)

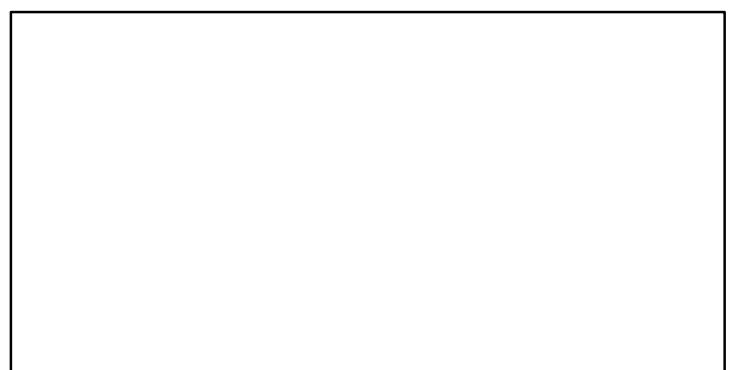


SSB_ms*, SSB_{mgt}*, SSB_{lim}*

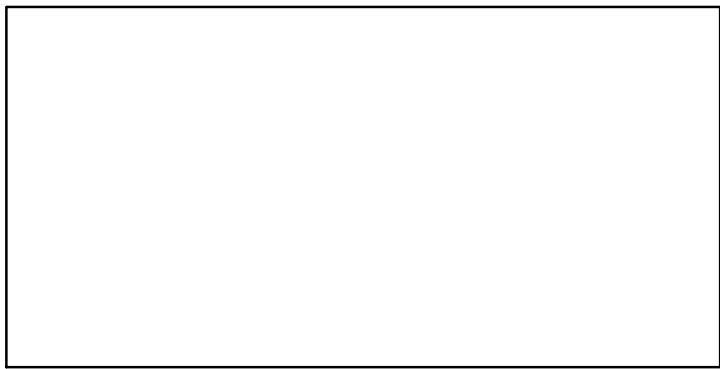
TN *



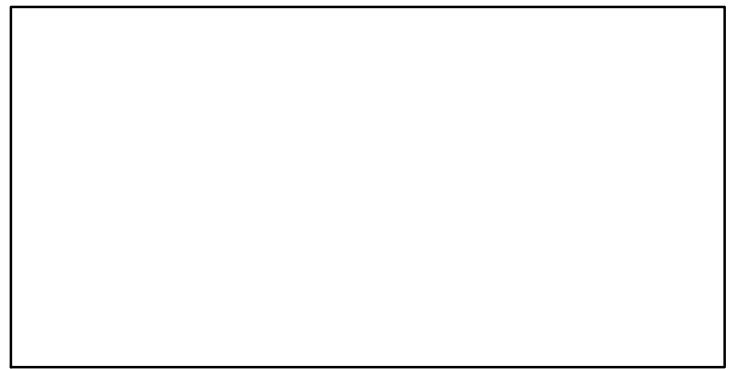
F*



ER*



Recruits*

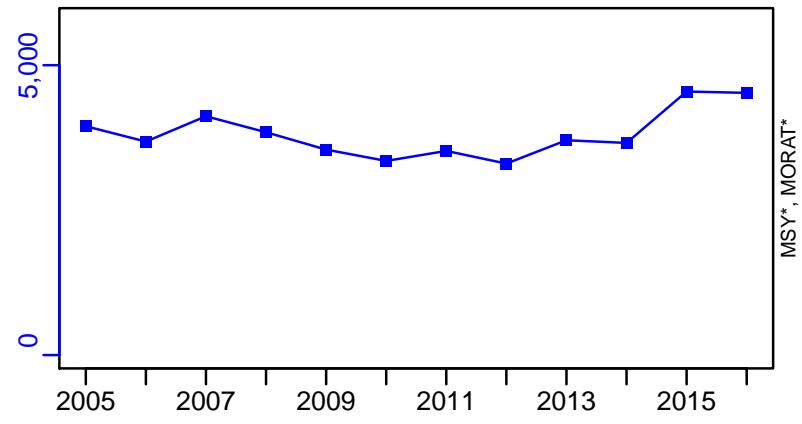


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

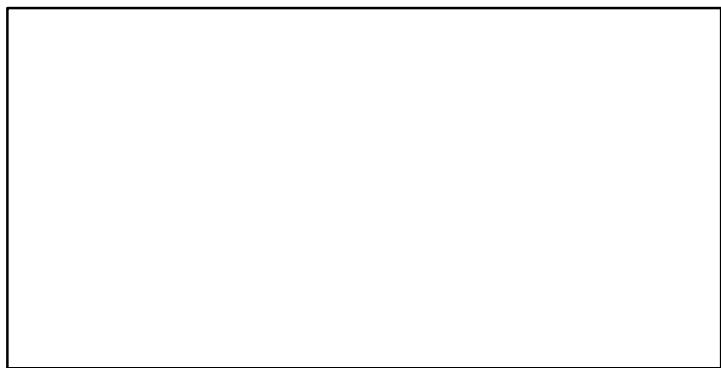
Lesser spotted dogfish ICES 6–7abcefghij [LSDOGVI–VIIabcefghij]

TL–MT, TC*, RecC* (2005–2016–ICESIMP2018)

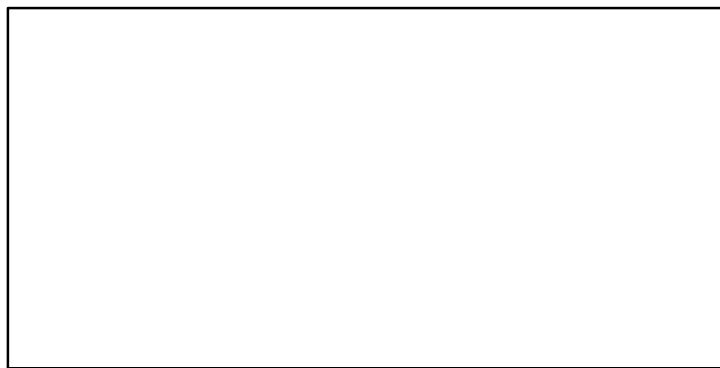
TAC*, Cpair*, Cadv*



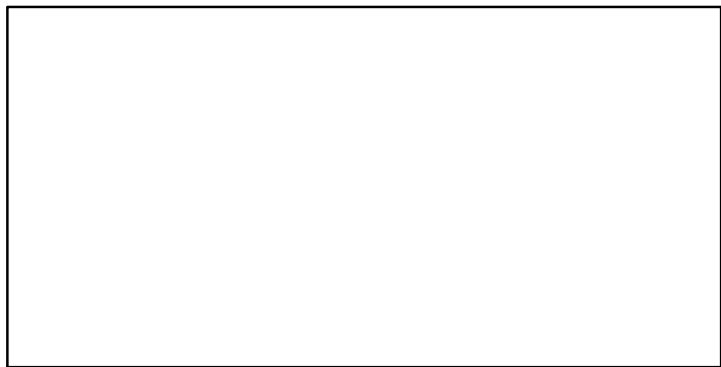
survB*



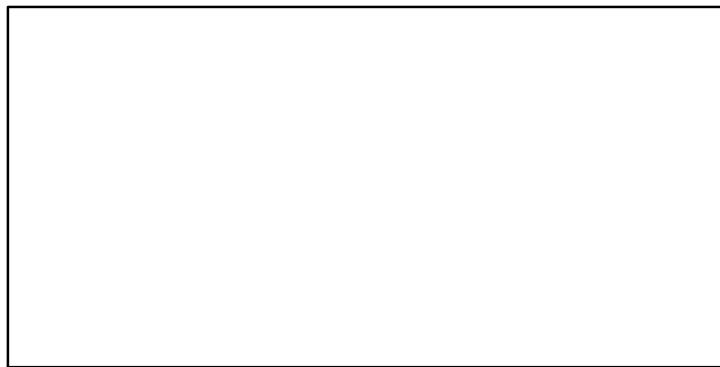
CPUE*



EFFORT*



CdivMSY*



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

Lemon sole ICES 3a-4-7d [LSOLEIIIA-IV-VIId]

Metadata	
Scientific Name	Microstomus kitt
Current Assess ID	WGNSSK-LSOLEIIIA-IV-VIId-1968-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.73	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	5010		
TL	TL-MT	2016	3780		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

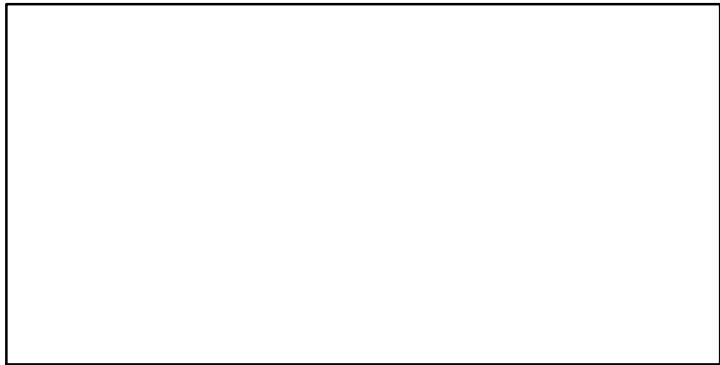
Spawner Recruit*

Production*

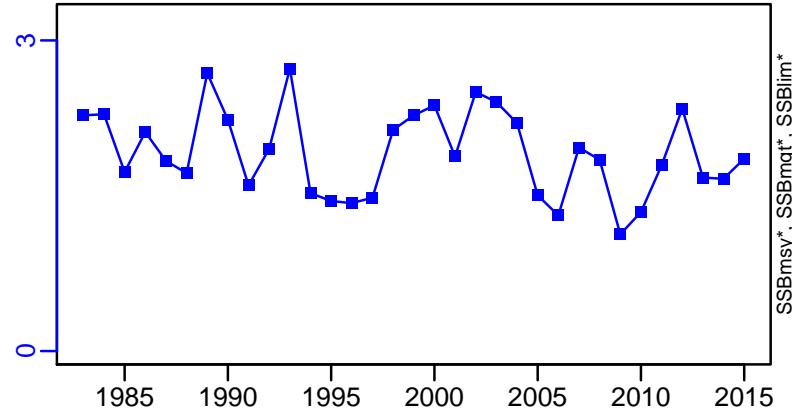
◆ Start Year ◆ End Year * No Data

Lemon sole ICES 3a–4–7d [LSOLEIIIa–IV–VIIId]

TB*



SSB-index (1983–2015–ICESIMP2018)



SSB_msy*, SSB_{mgt}*, SSB_{lim}*

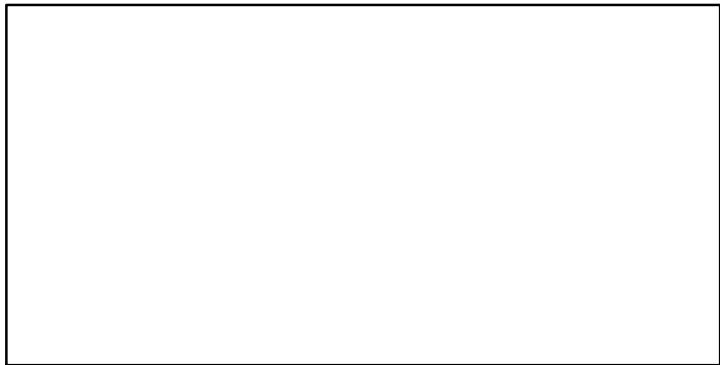
TN *



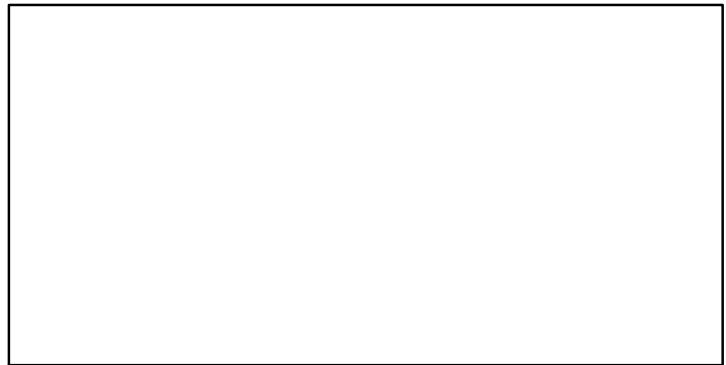
F*



ER*



Recruits*

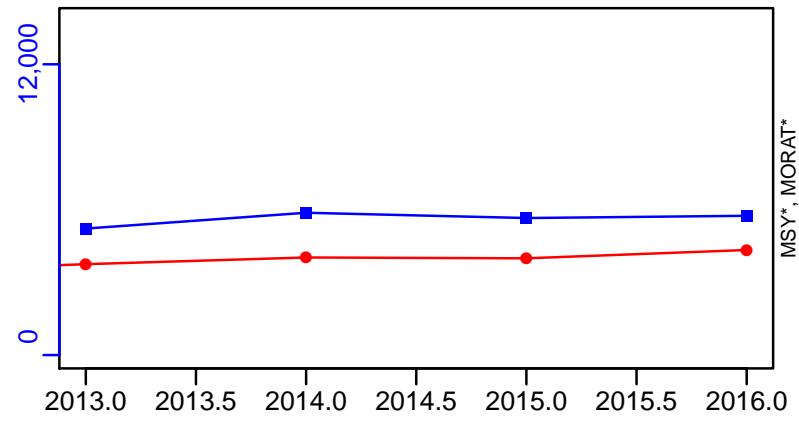


- Listed time series
- Target BRP
- MSY-based BRP
- Lim BRP
- Rec-Est
- * No Data

Lemon sole ICES 3a–4–7d [LSOLEIIIa–IV–VIIId]

TC–MT, TL–MT, RecC* (1968–2016–ICESIMP2018)

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 |

Mackerel ICES Northeast Atlantic [MACKNEICES]

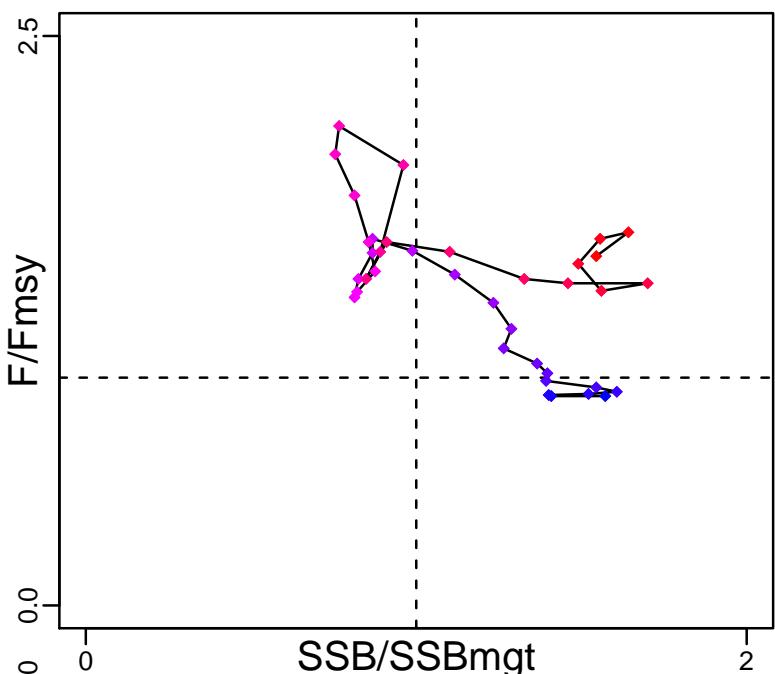
Metadata	
Scientific Name	Scomber scombrus
Current Assess ID	WGWISE-MACKNEICES-1980-2017-ICESIMP2018
Area	ICES Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2007, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2014	4,037,320
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.21
ERmsy	ERmsy-est-ratio	2017	0.212
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	2,570,000
Fmgt	Fmgt-1/yr	2017	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2014	726,365
M	M-1/yr	2007	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	1,940,000
Flim	Flim-1/yr	2017	0.48
ERlim	-	-	-

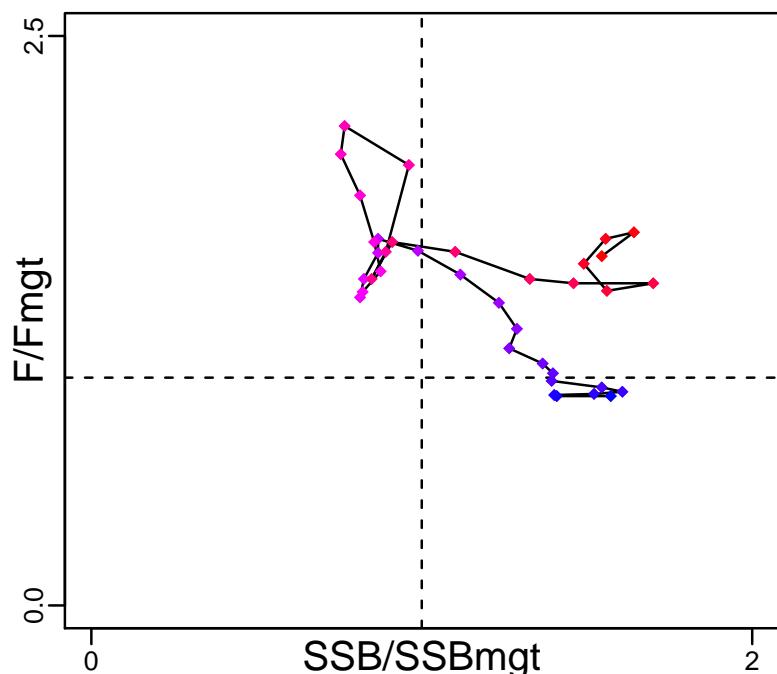
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	4,750,000	Both	-
SSB	SSB-MT	2017	3,440,000	Both	-
TN	-	-	-	-	-
R	R-E00	2017	4.26×10^9	-	0
F	F-1/yr	2017	0.322	-	4 to 8
ER	ER-calc-ratio	2017	0.229	-	-
TC	TC-MT	2017	1,090,000		
TL	TL-MT	2016	1,200,000		
TB/TBmsy	TB-MT/TBmsy-est-MT	2014	1.39		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.533		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	1.082		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.339		
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	1.533		
ER/ERmgt	-	-	-		

Mackerel ICES Northeast Atlantic [MACKNEICES]

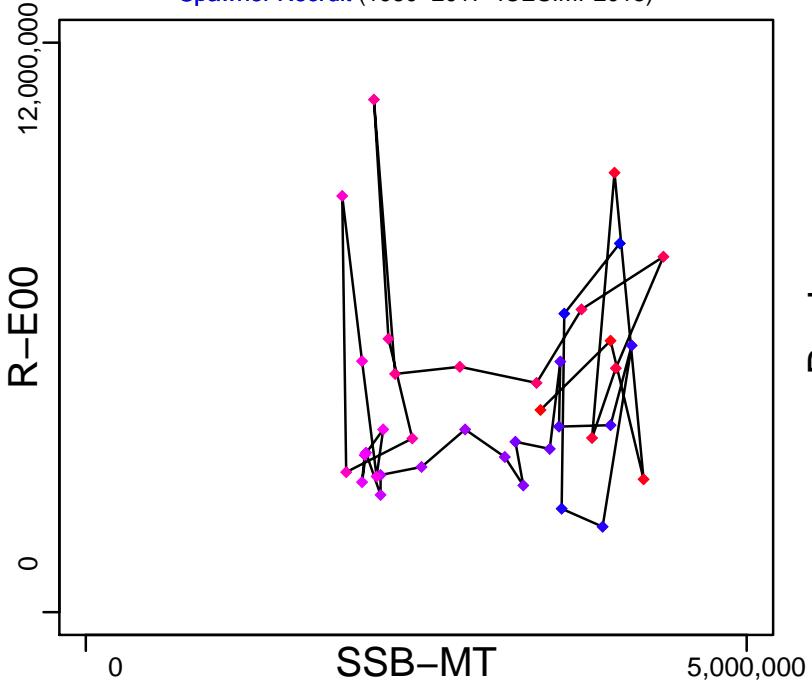
Kobe MSYpref (1980–2017–ICESIMP2018)



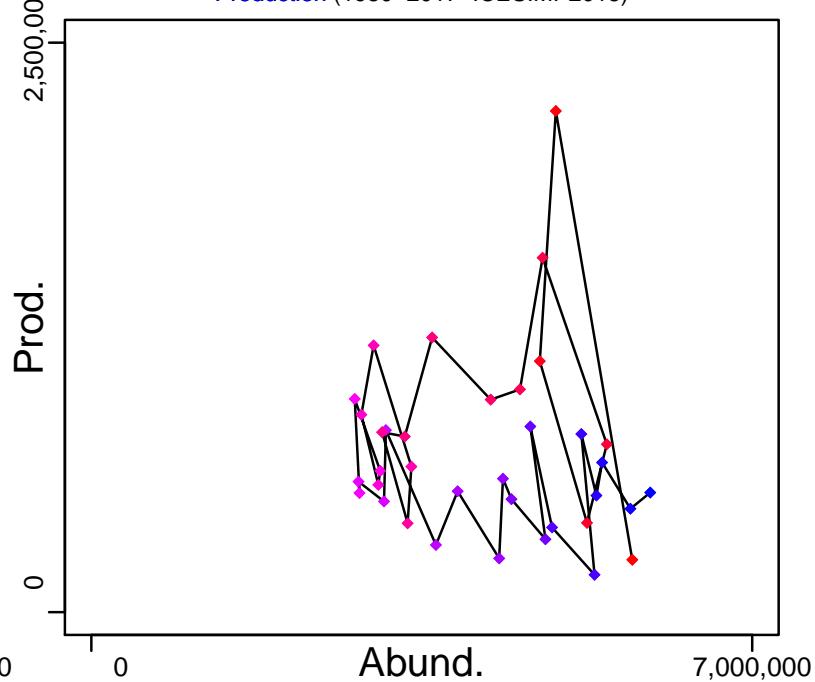
Kobe MGTpref (1980–2017–ICESIMP2018)



Spawner Recruit (1980–2017–ICESIMP2018)



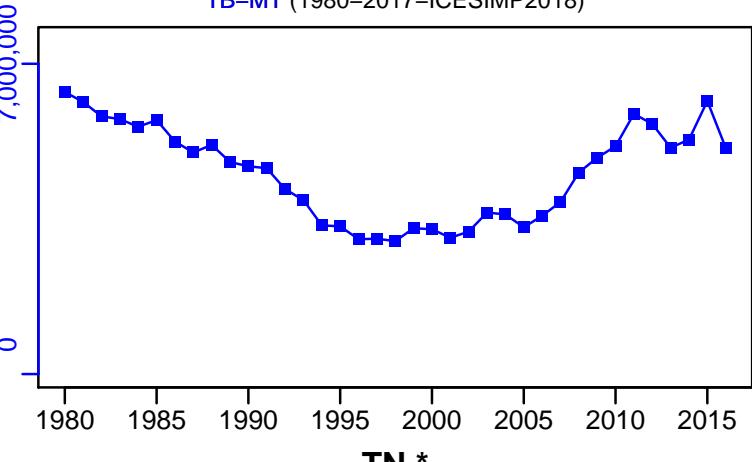
Production (1980–2017–ICESIMP2018)



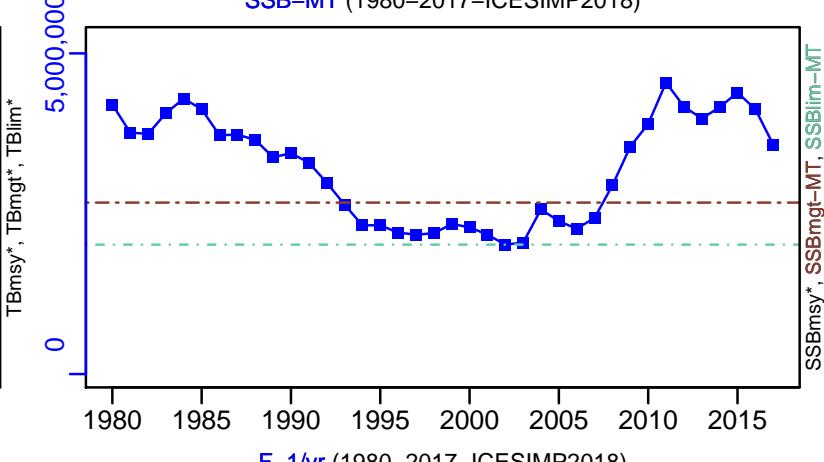
◆ Start Year ◆ End Year * No Data

Mackerel ICES Northeast Atlantic [MACKNEICES]

TB-MT (1980–2017–ICESIMP2018)



SSB-MT (1980–2017–ICESIMP2018)



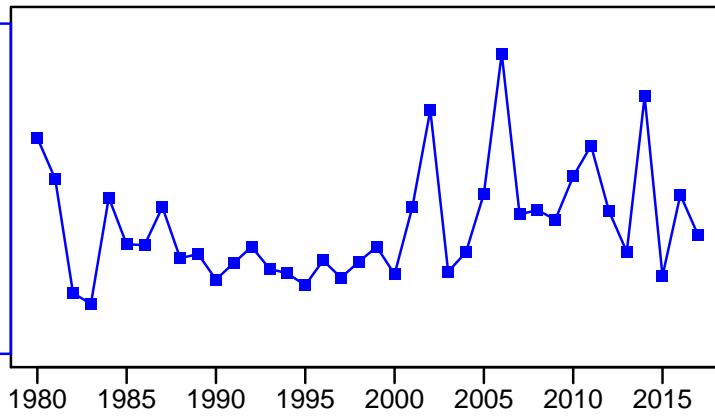
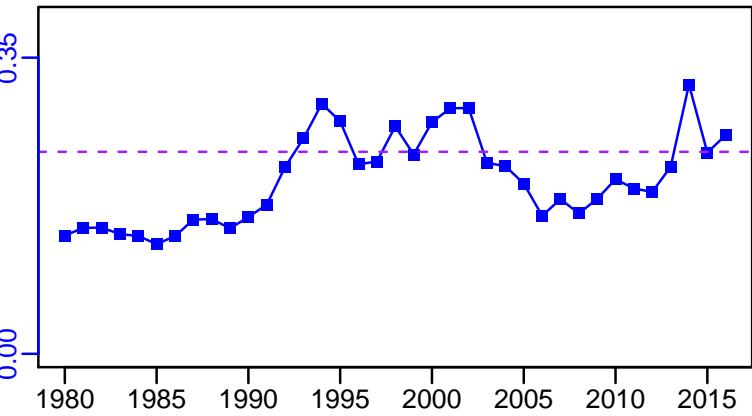
TN *

SSB^{msy*}, SSB^{mgt*-MT}, SSB^{lim*-MT}

F^{msy*-1/yr}, F^{mgt-1/yr}, F^{lim-1/yr}

ER-calc-ratio (1980–2017–ICESIMP2018)

R-E00 (1980–2017–ICESIMP2018)

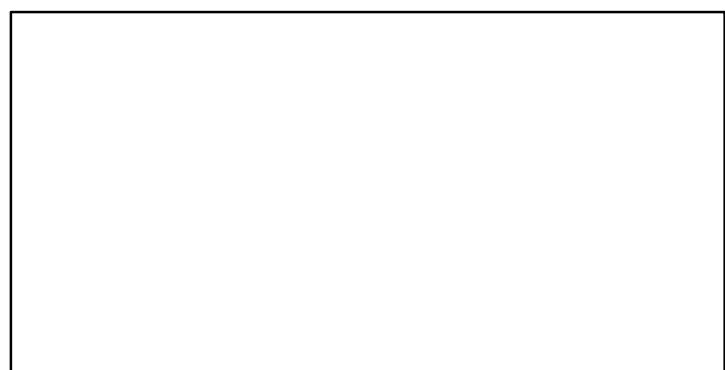
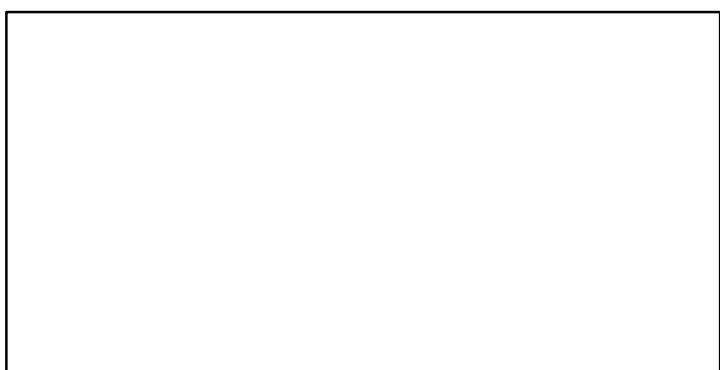
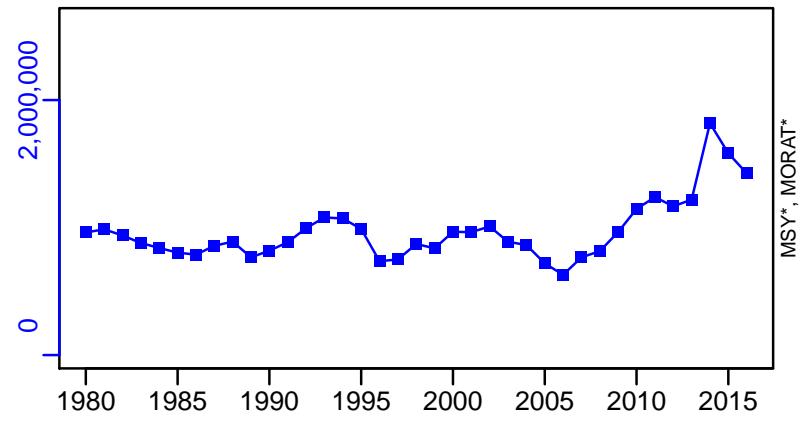


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

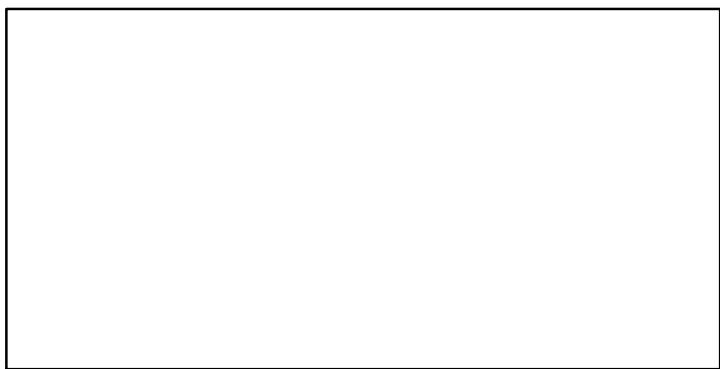
Mackerel ICES Northeast Atlantic [MACKNEICES]

TC-MT, TL*, RecC* (1980–2017–ICESIMP2018)

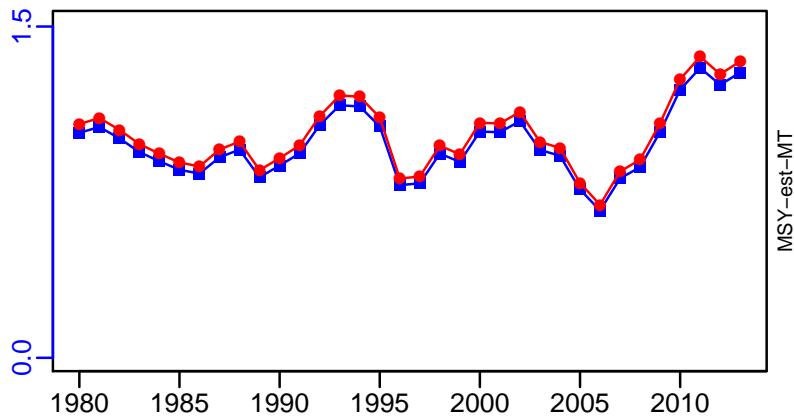
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1980–2014–ICESIMP2016)



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

Megrim ICES 8c-9a [MEG8c9a]

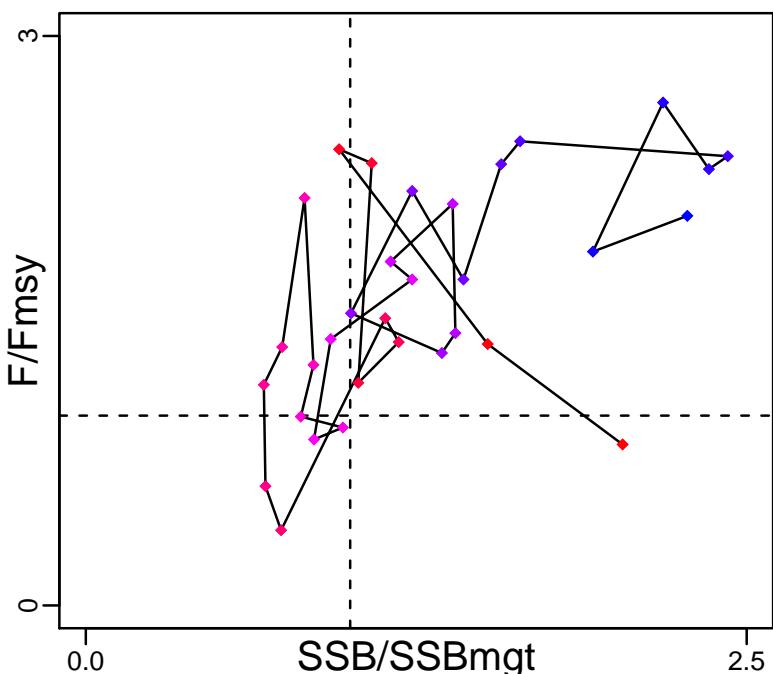
Metadata	
Scientific Name	Lepidorhombus whiffiagonis
Current Assess ID	WGBIE-MEG8c9a-1985-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018, 2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.191
ERmsy	ERmsy-est-ratio	2018	0.314
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	980
Fmgt	Fmgt-1/yr	2018	0.191
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	700
Flim	Flim-1/yr	2018	0.45
ERlim	-	-	-

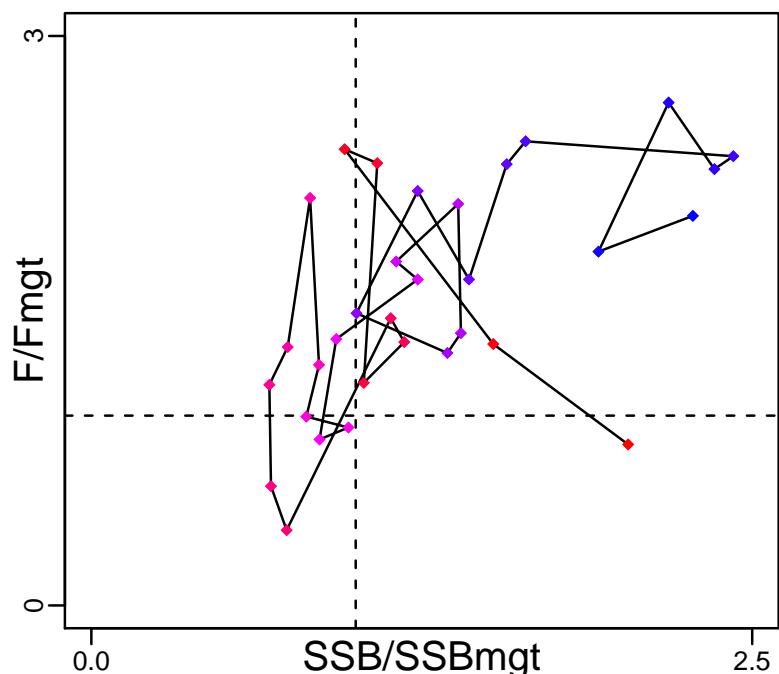
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	2260	Both	-
SSB	SSB-MT	2018	2500	Both	-
TN	-	-	-	-	-
R	R-E00	2018	3,560,000	-	1
F	F-1/yr	2018	0.162	-	2 to 4
ER	ER-calc-ratio	2018	0.127	-	-
TC	TC-MT	2018	288		
TL	TL-MT	2018	247		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.848		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.406		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.551		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.848		
ER/ERmgt	-	-	-		

Megrim ICES 8c–9a [MEG8c9a]

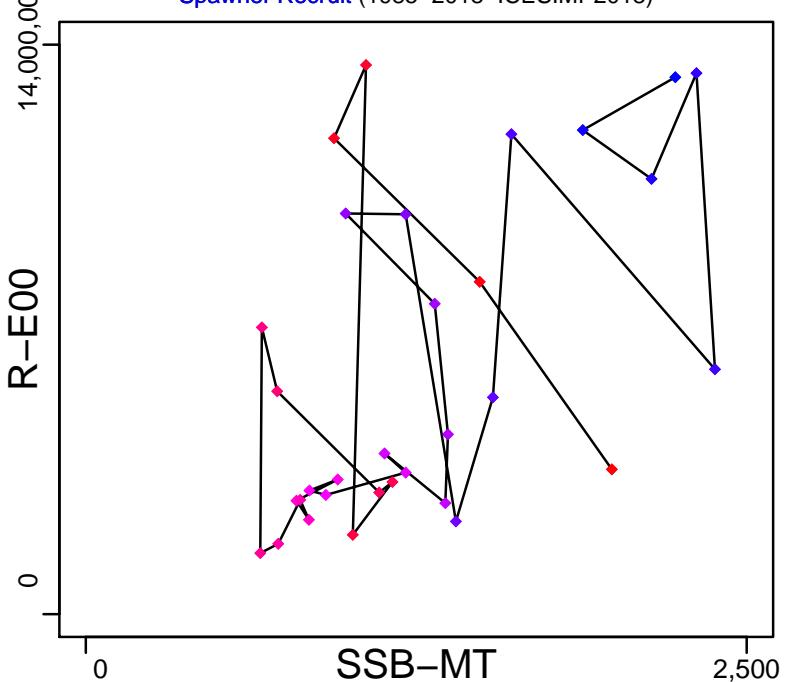
Kobe MSYpref (1985–2018–ICESIMP2018)



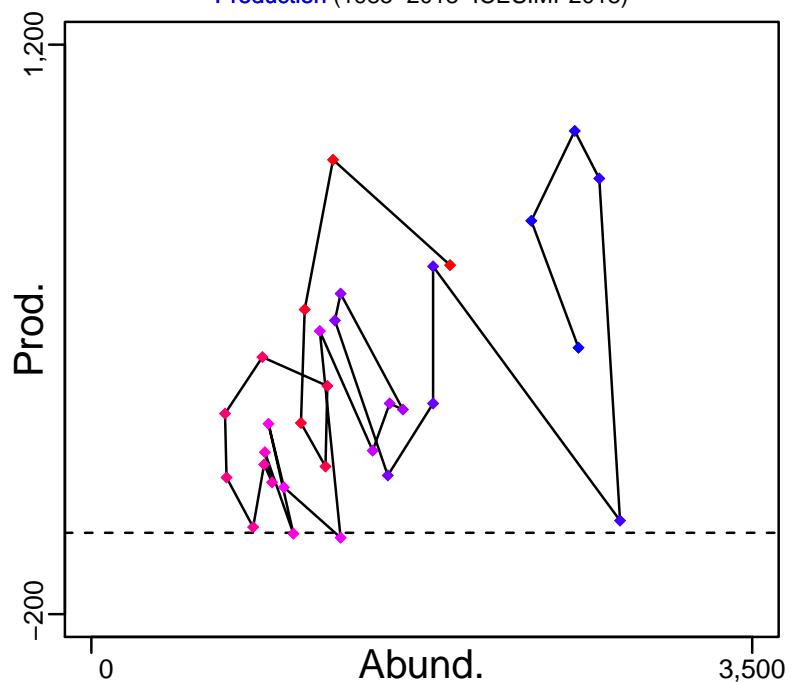
Kobe MGTpref (1985–2018–ICESIMP2018)



Spawner Recruit (1985–2018–ICESIMP2018)



Production (1985–2018–ICESIMP2018)

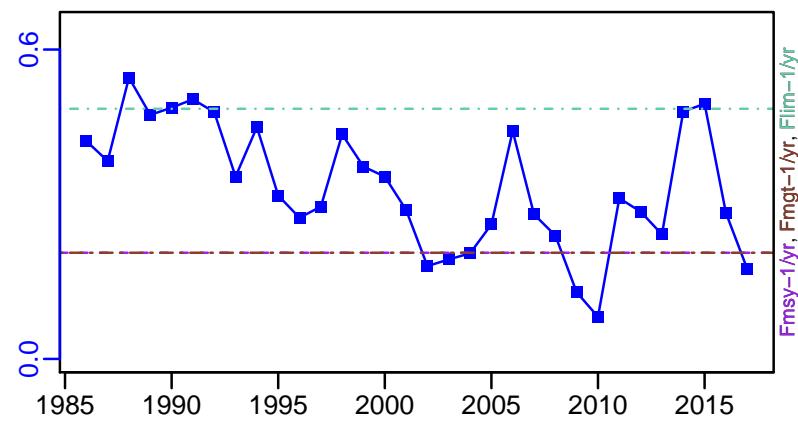
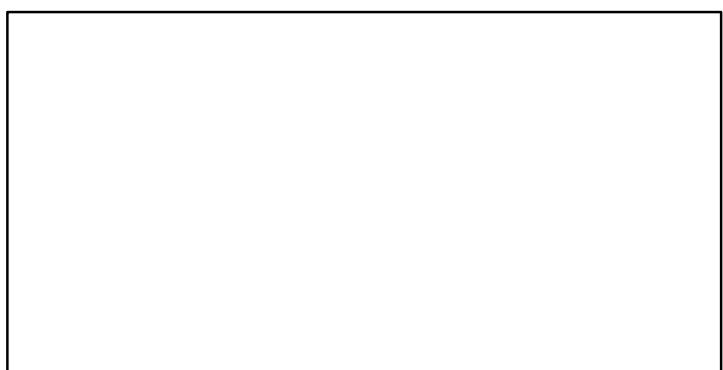
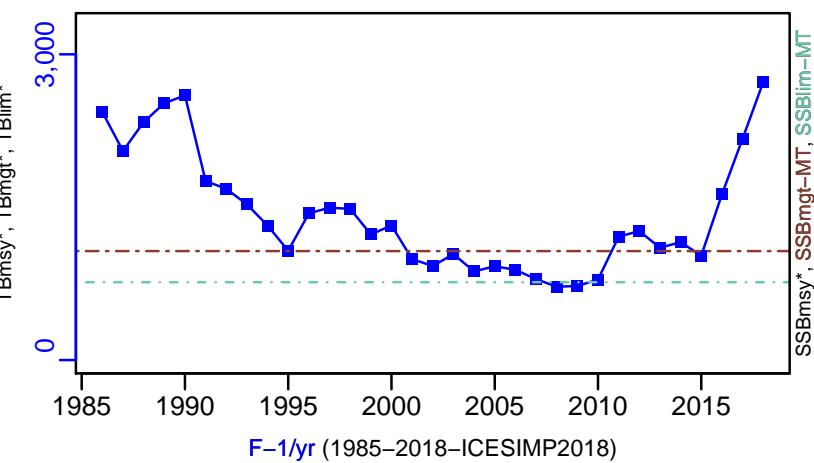
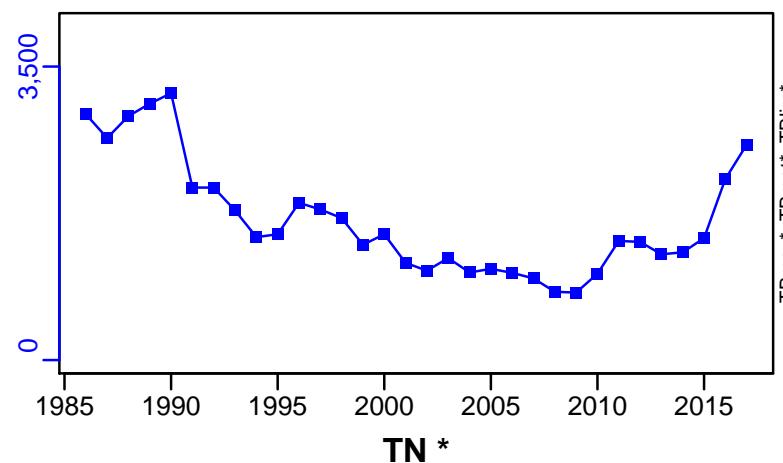


◆ Start Year ◆ End Year * No Data

Megrim ICES 8c–9a [MEG8c9a]

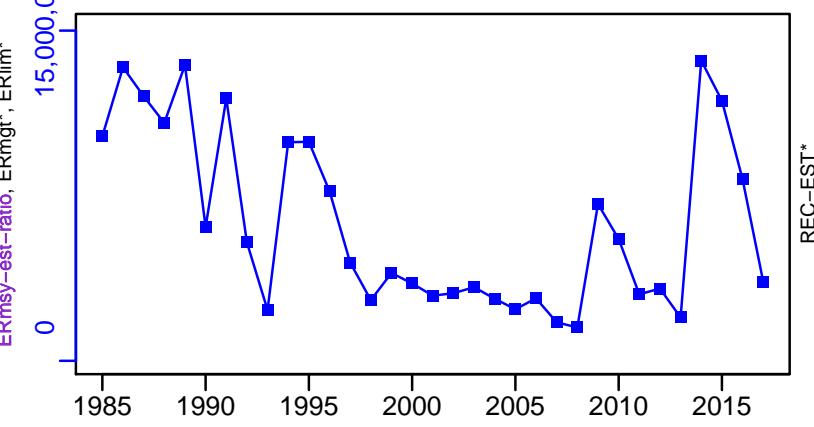
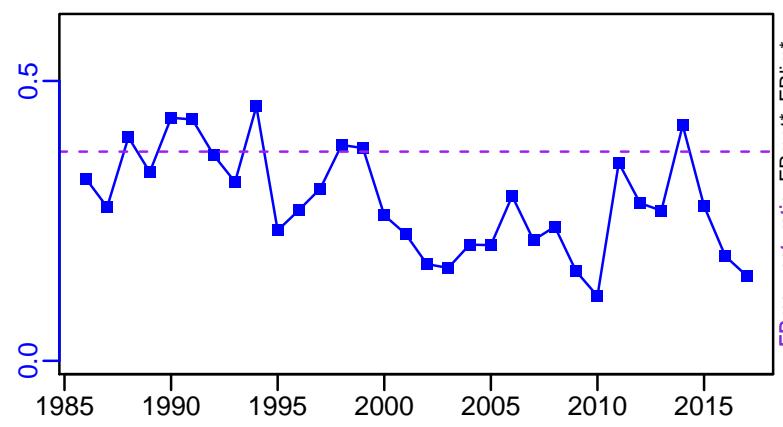
TB-MT (1985–2018–ICESIMP2018)

SSB-MT (1985–2018–ICESIMP2018)



ER-calc-ratio (1985–2018–ICESIMP2018)

R-E00 (1985–2018–ICESIMP2018)

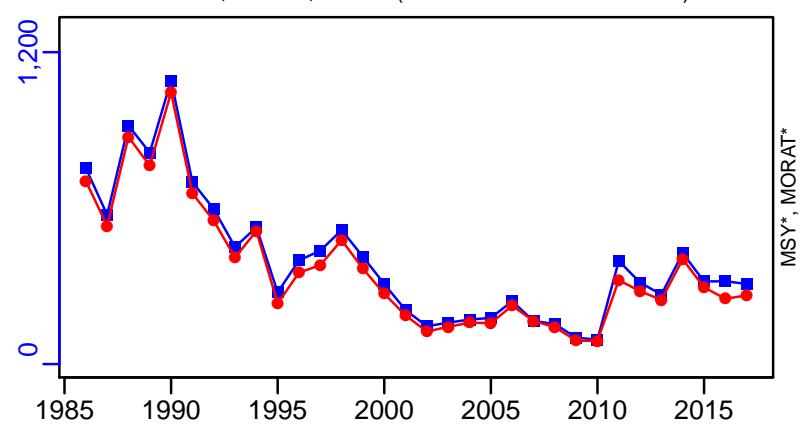


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Megrim ICES 8c–9a [MEG8c9a]

TC–MT, TL–MT, RecC* (1985–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

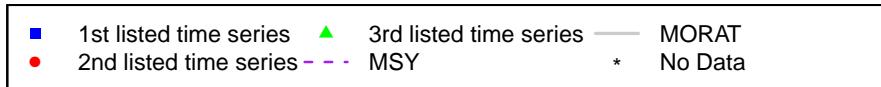
MSY*, MORAT*

TAC*, Cpair*, Cadv*

CPUE*

EFFORT*

CdivMSY*



Megrim spp ICES 4a-6a [MEGSPPIVa-VIa]

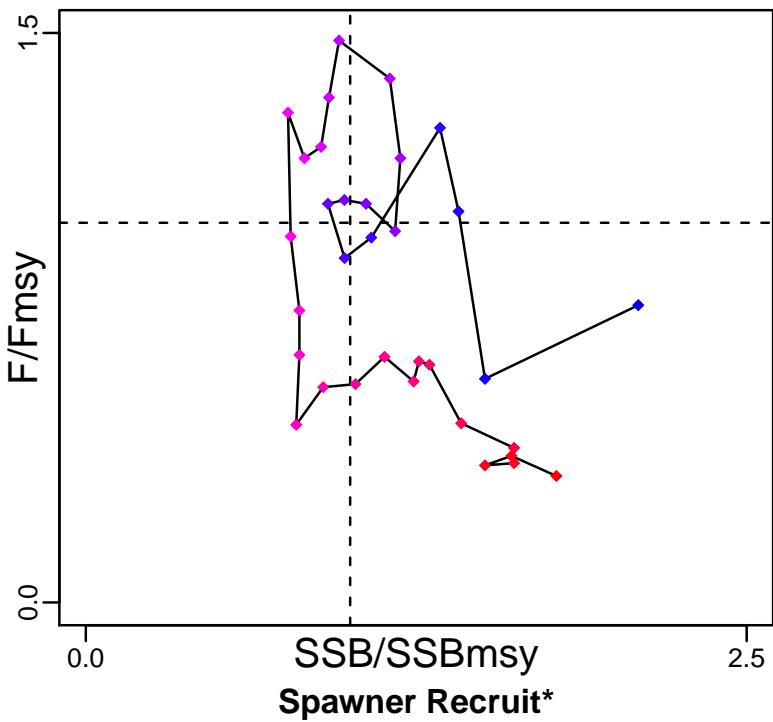
Metadata	
Scientific Name	Lepidorhombus spp
Current Assess ID	WGCSE-MEGSPPIVa-VIa-1985-2017-ICESIMP2018
Area	ICES 4a-6a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2012, 2013, 2015, 2016, 2017

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

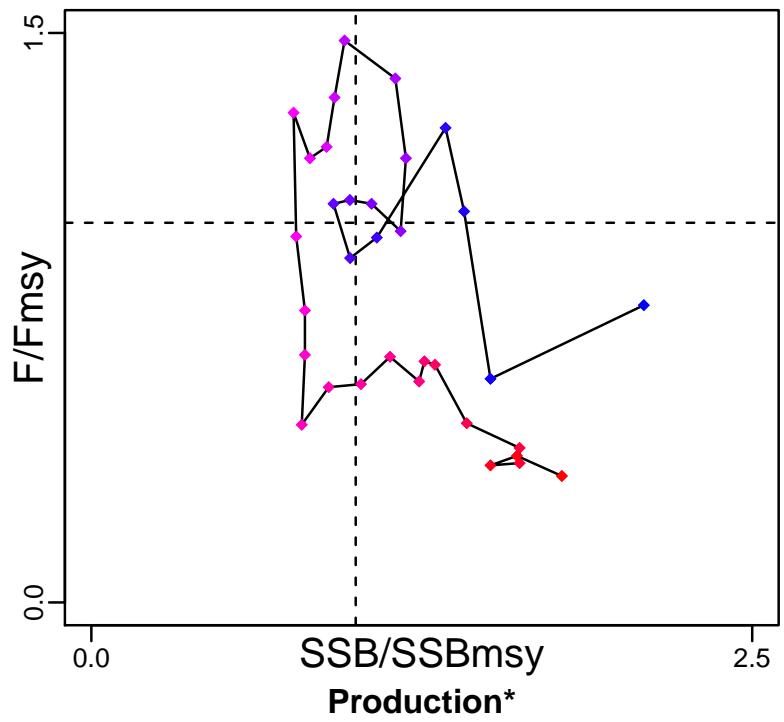
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	-	-	-	-	-	
TC	TC-MT	2017	2790			
TL	TL-MT	2017	2590			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2017	1.78			
F/Fmsy	FdivFmsy-dimensionless	2017	0.333			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Megrim spp ICES 4a–6a [MEGSPPIVa–VIa]

Kobe MSYpref (1985–2017–ICESIMP2018)



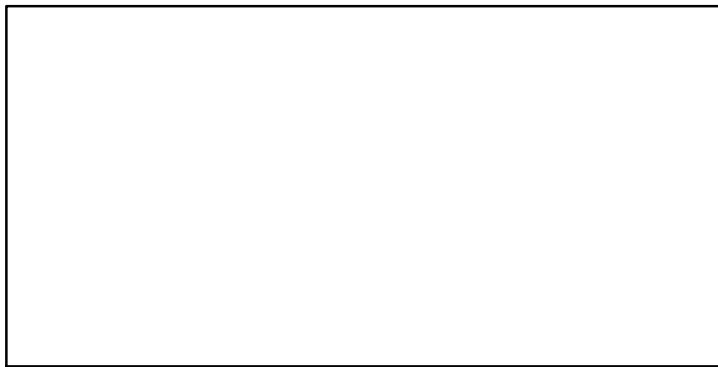
Kobe MGTpref (1985–2017–ICESIMP2018)



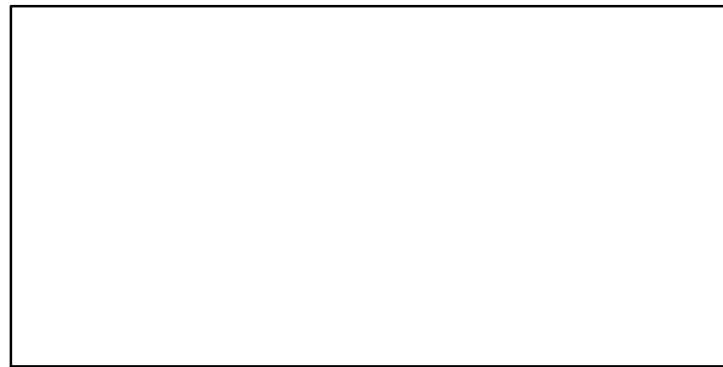
◆ Start Year	◆ End Year	* No Data
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Megrim spp ICES 4a–6a [MEGSPPIVa–VIa]

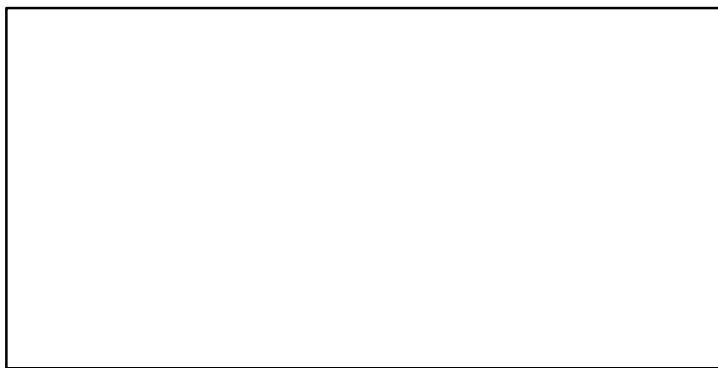
TB*



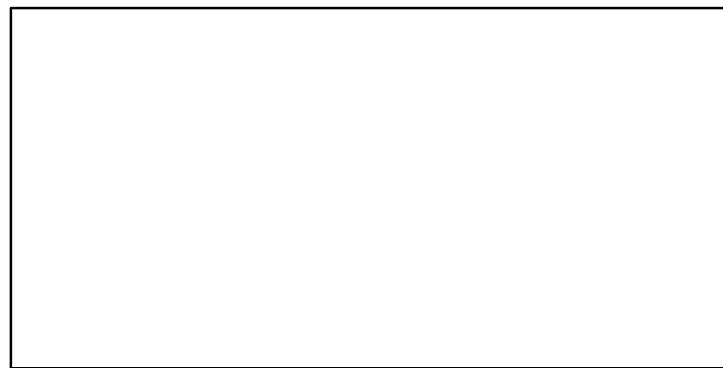
SSB*



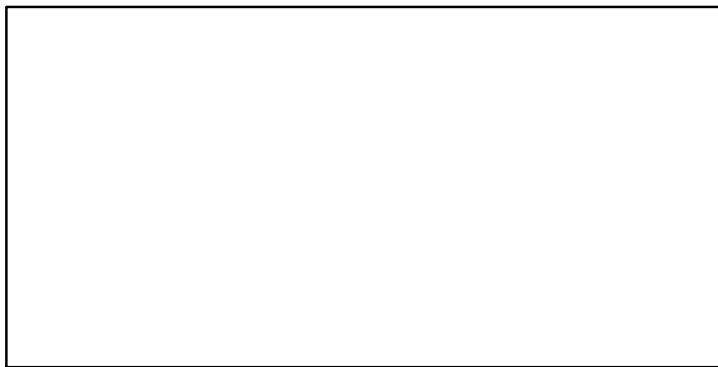
TN *



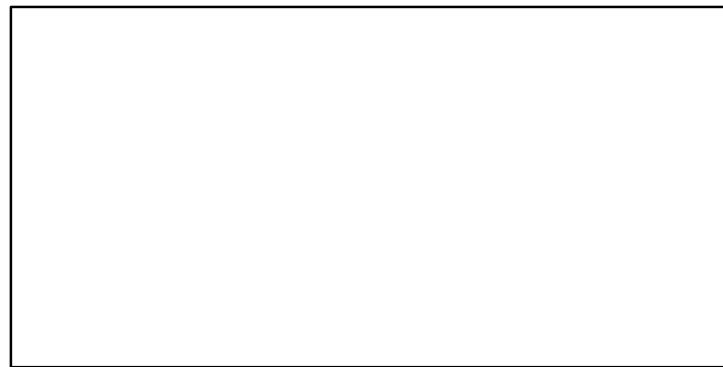
F*



ER*



Recruits*

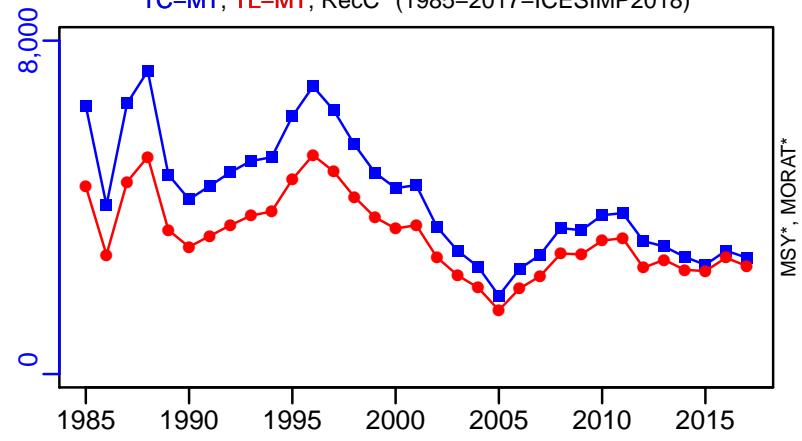


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

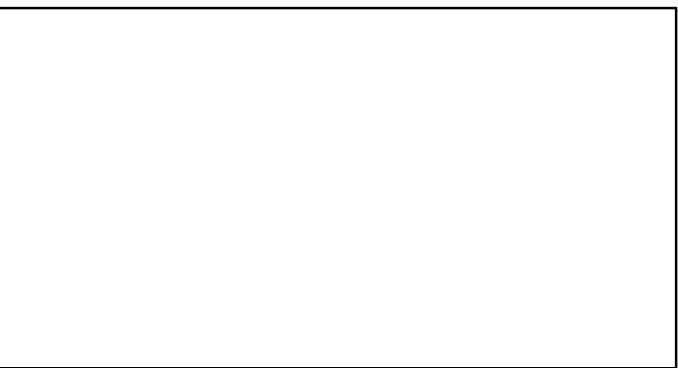
Megrim spp ICES 4a–6a [MEGSPPIVa–VIa]

TC–MT, TL–MT, RecC* (1985–2017–ICESIMP2018)

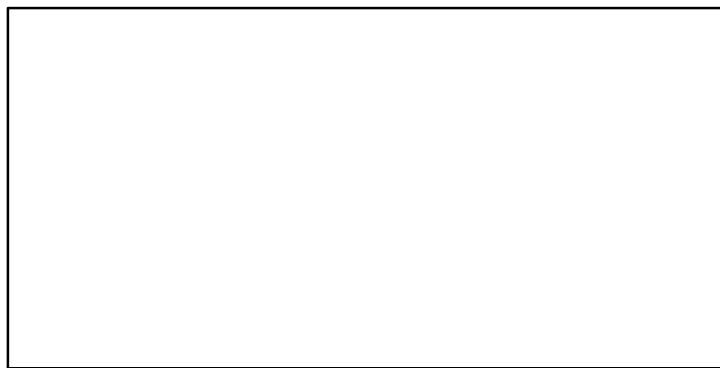
TAC*, Cpair*, Cadv*



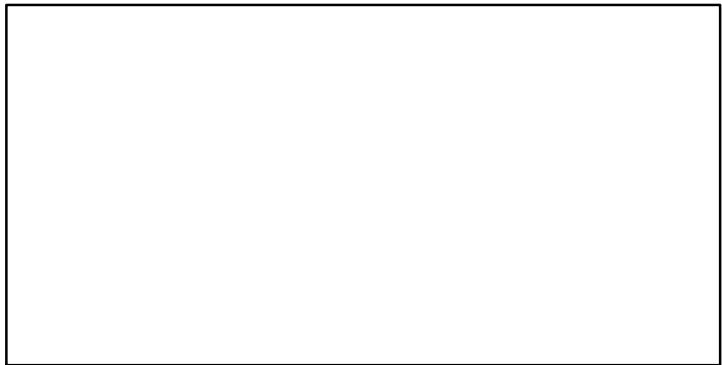
survB*



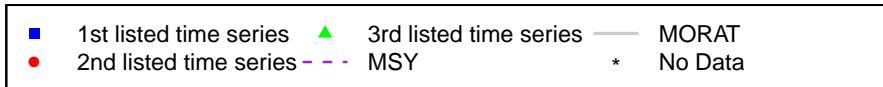
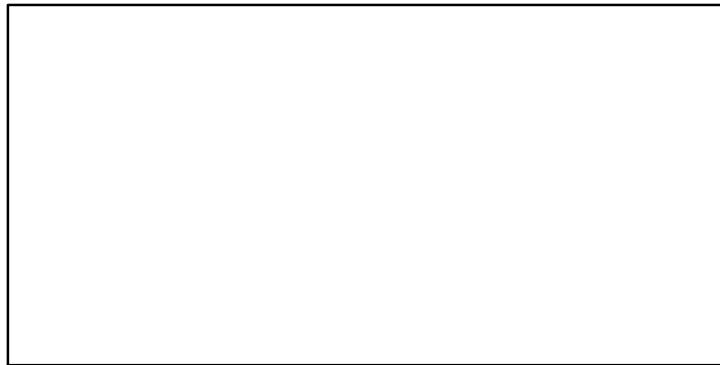
CPUE*



EFFORT*



CdivMSY*



Megrim spp Rockall Bank [MEGSPPVlb]

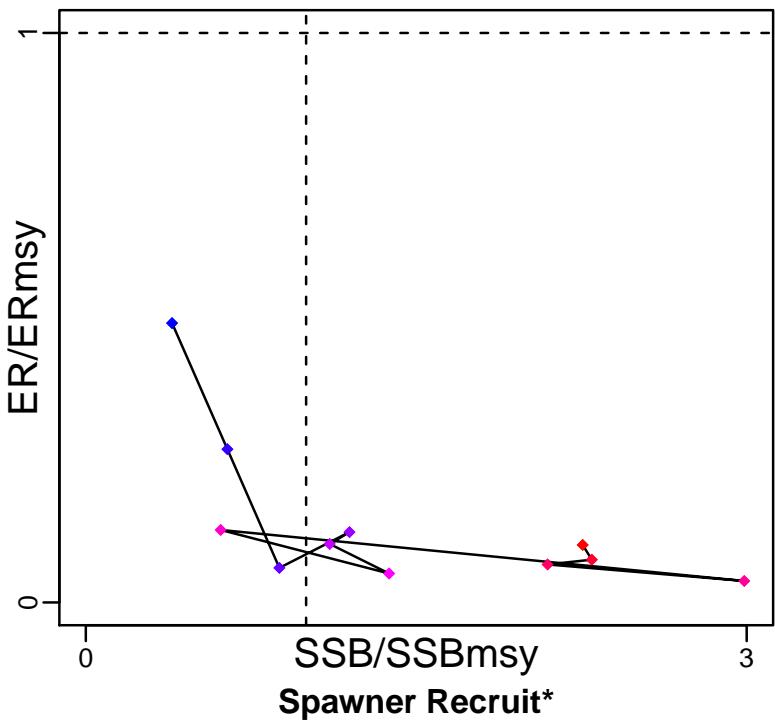
Metadata	
Scientific Name	Lepidorhombus spp
Current Assess ID	WGCSE-MEGSPPVlb-1991-2017-ICESIMP2018
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2016	1445
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2016	0.432
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	1989
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

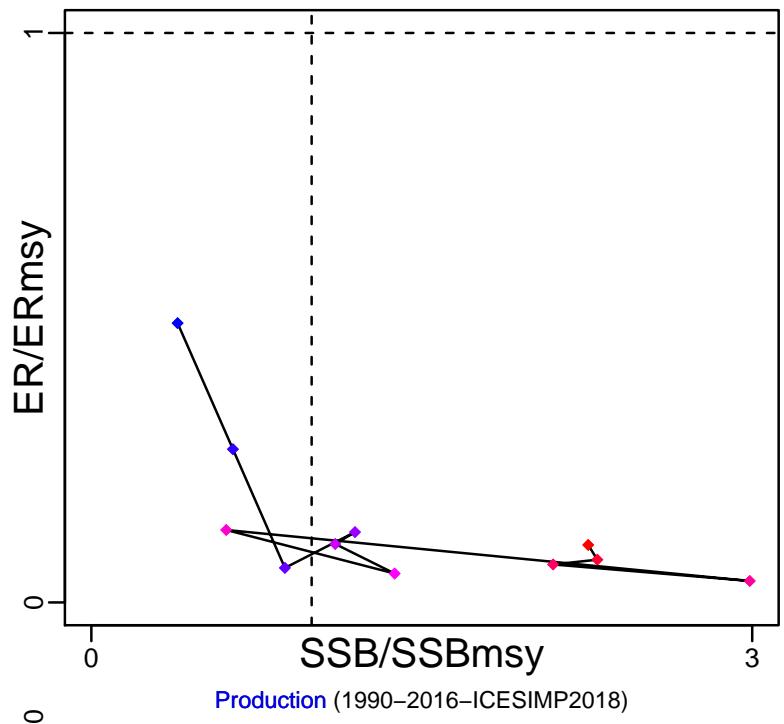
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-MT	2016	4510	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2016	0.044	-	-	
TC	-	-	-			
TL	TL-MT	2017	405			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2016	3.12			
F/Fmsy	FdivFmsy-dimensionless	2017	0.536			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.101			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Megrim spp Rockall Bank [MEGSPPVlb]

Kobe MSYpref (1990–2016–ICESIMP2018)

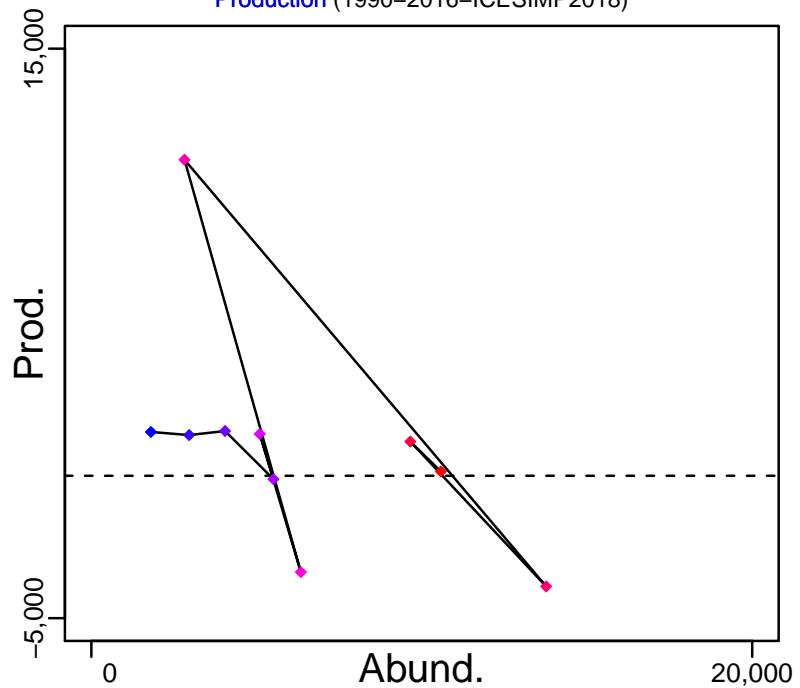


Kobe MGTpref (1990–2016–ICESIMP2018)



Spawner Recruit*

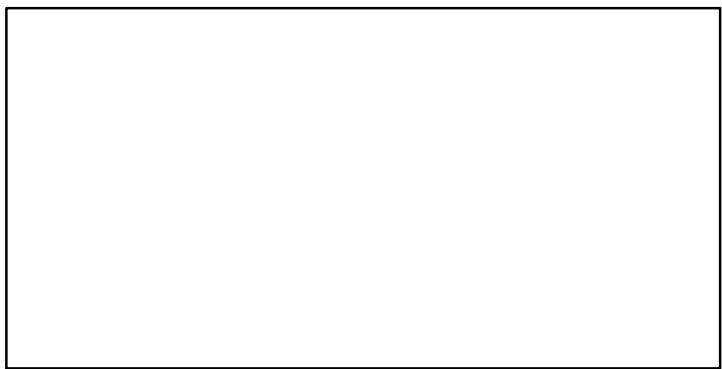
Production (1990–2016–ICESIMP2018)



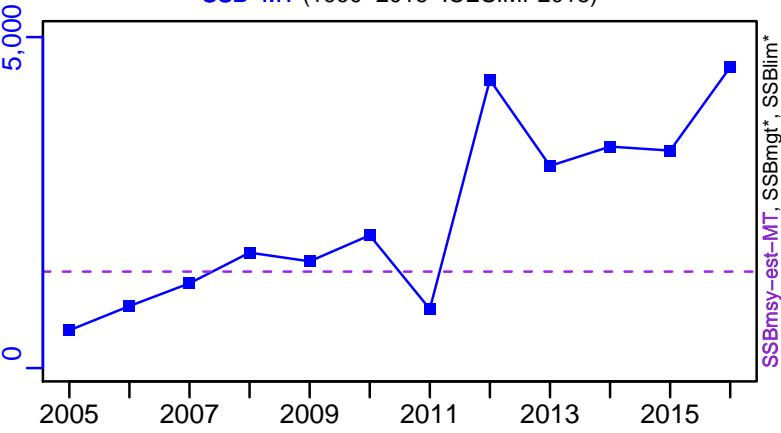
◆ Start Year ◆ End Year * No Data

Megrim spp Rockall Bank [MEGSPPVIb]

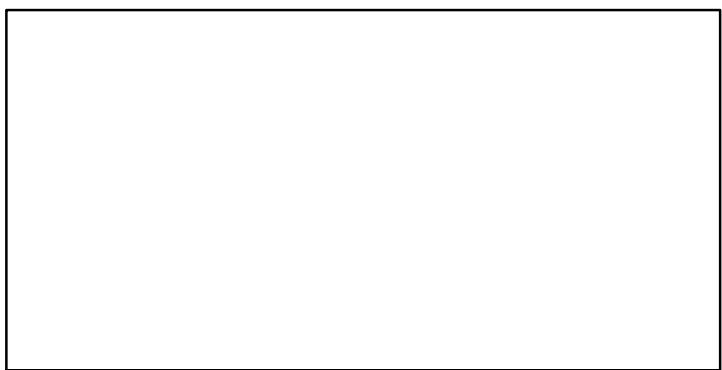
TB*



SSB-MT (1990–2016–ICESIMP2018)



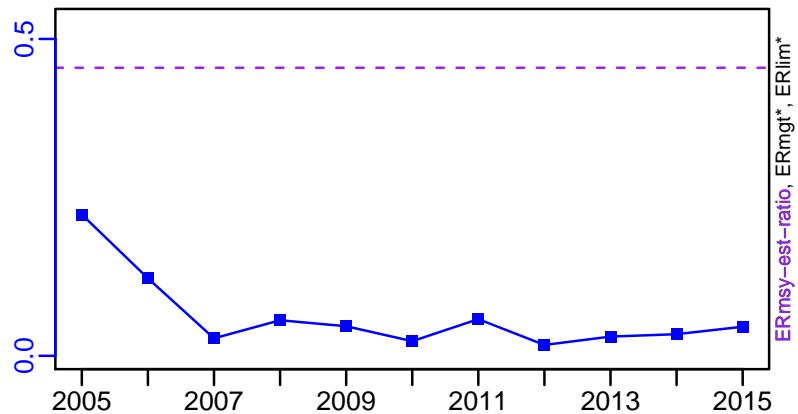
TN *



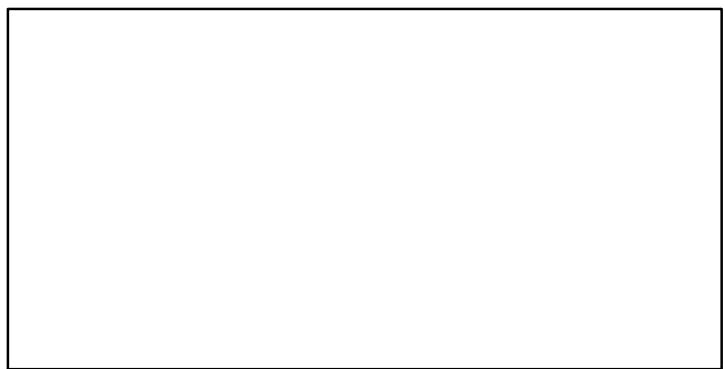
F*



ER-calc-ratio (1990–2016–ICESIMP2018)



Recruits*

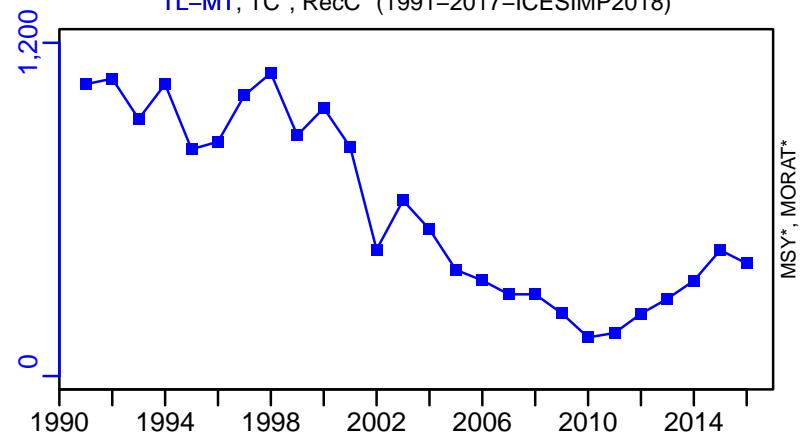


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	--- Lim BRP	* No Data

Megrim spp Rockall Bank [MEGSPPVIb]

TL-MT, TC*, RecC* (1991–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



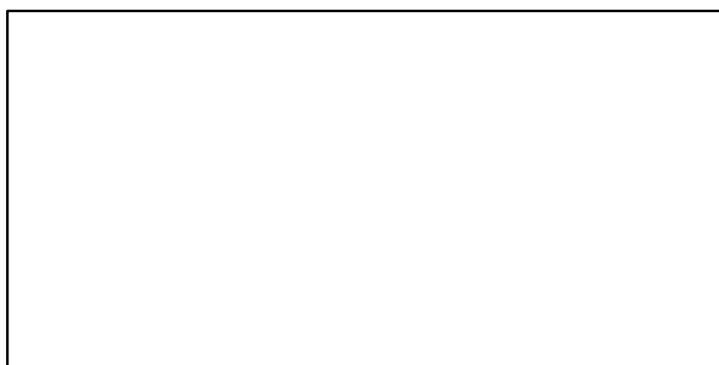
survB*



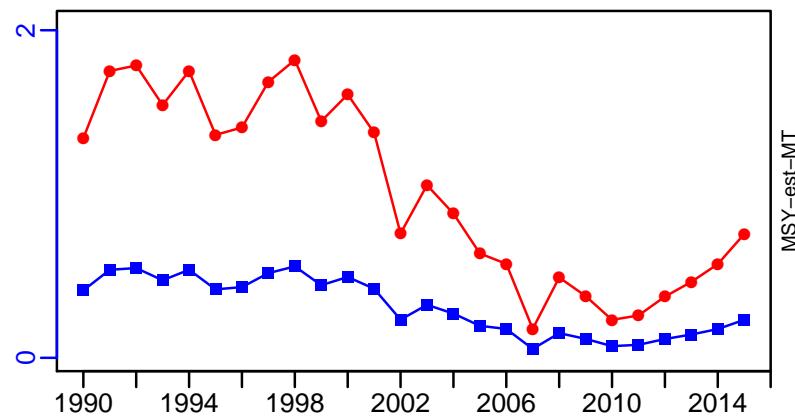
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1990–2016–ICESIMP2018)



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

Megrim ICES 7-8abd [MEGVII-VIIIabd]

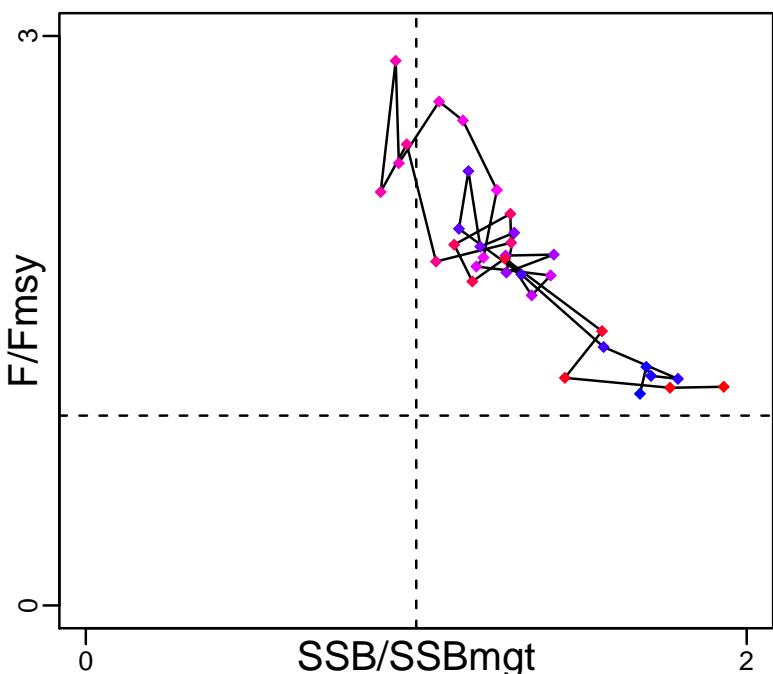
Metadata	
Scientific Name	Lepidorhombus whiffiagonis
Current Assess ID	WGBIE-MEGVII-VIIIabd-1983-2018-ICESIMP2018
Area	ICES 7-8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.191
ERmsy	ERmsy-est-ratio	2018	0.424
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	41,800
Fmgt	Fmgt-1/yr	2018	0.191
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	37,100
Flim	Flim-1/yr	2018	0.53
ERlim	-	-	-

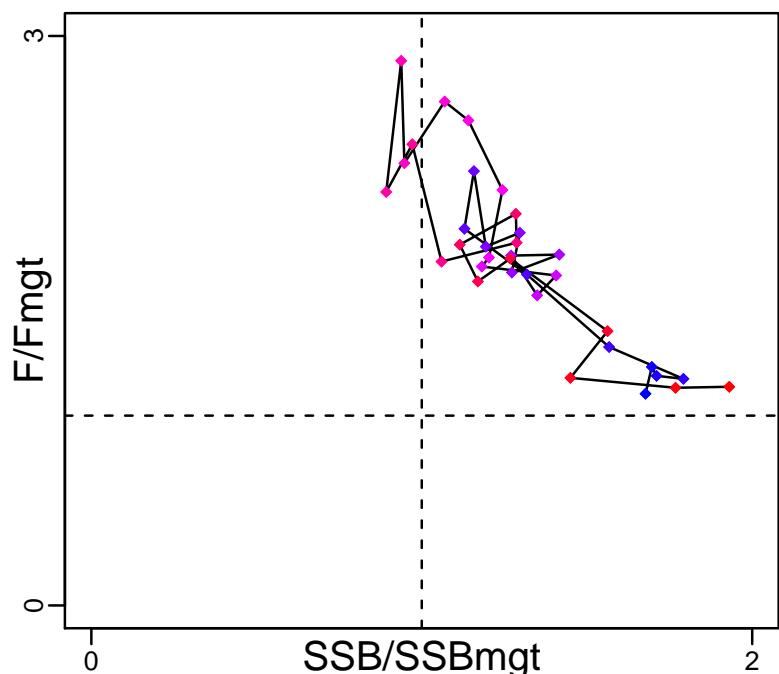
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	140,000	Both	-	
SSB	SSB-MT	2018	96,700	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	2.28×10^8	-	1	
F	F-1/yr	2018	0.22	-	3 to 6	
ER	ER-calc-ratio	2018	0.124	-	-	
TC	TC-MT	2018	16,000			
TL	TL-MT	2018	13,800			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.152			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.293			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.313			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.152			
ER/ERmgt	-	-	-			

Megrim ICES 7–8abd [MEGVII–VIIIab]

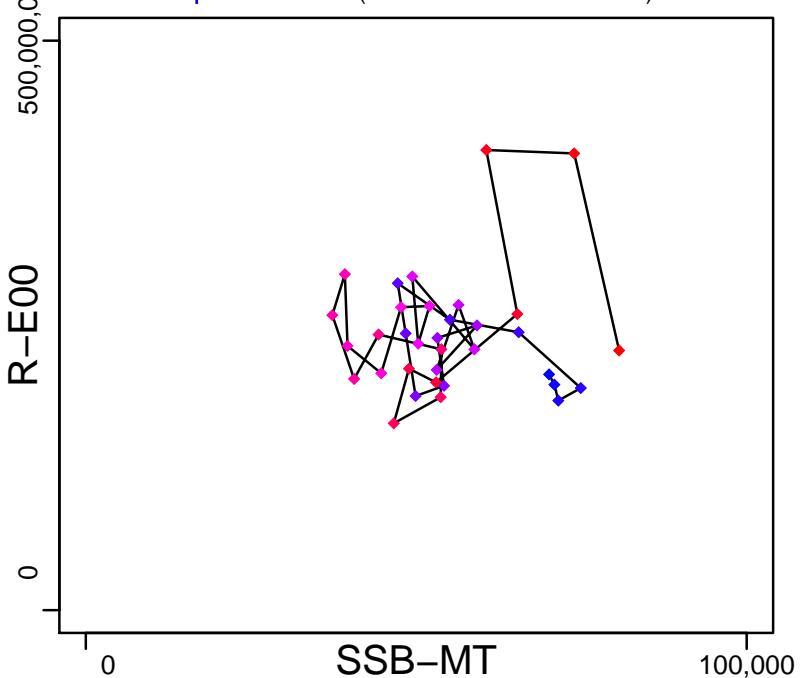
Kobe MSYpref (1983–2018–ICESIMP2018)



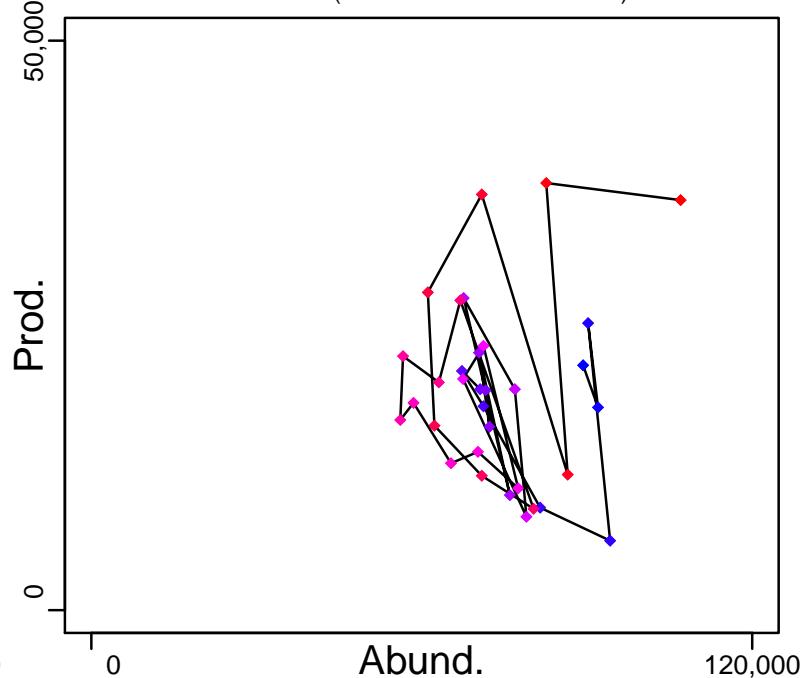
Kobe MGTpref (1983–2018–ICESIMP2018)



Spawner Recruit (1983–2018–ICESIMP2018)



Production (1983–2018–ICESIMP2018)

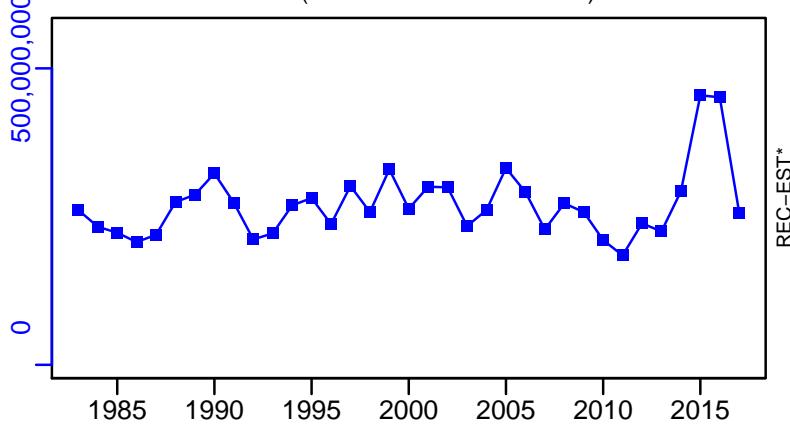
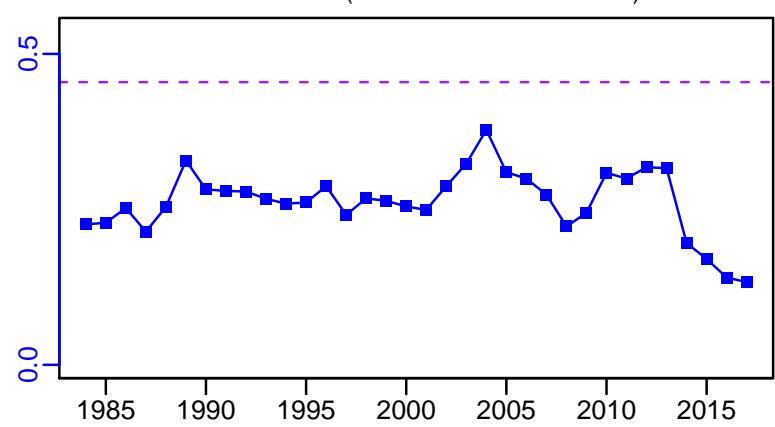
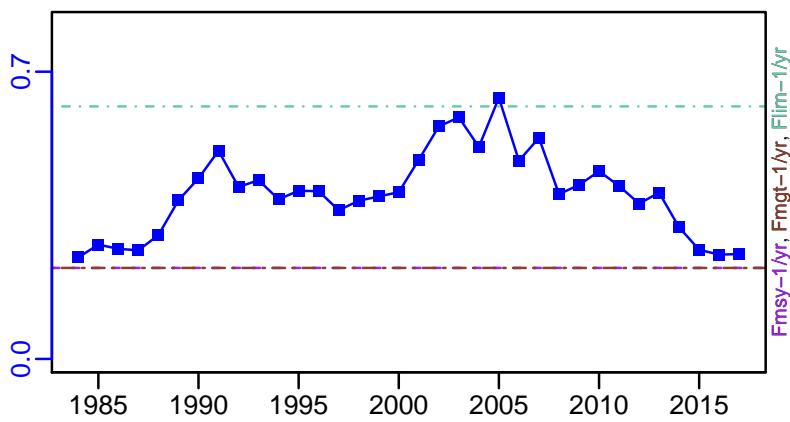
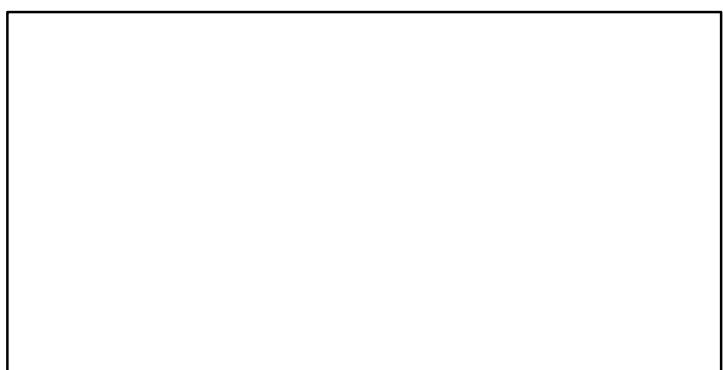
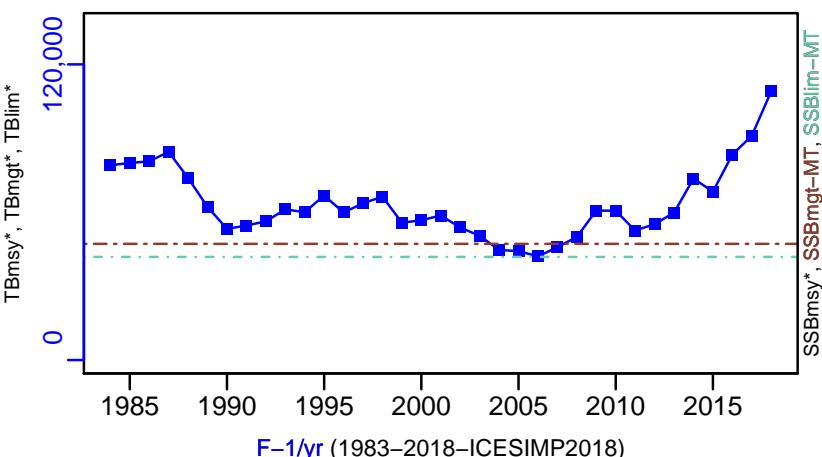
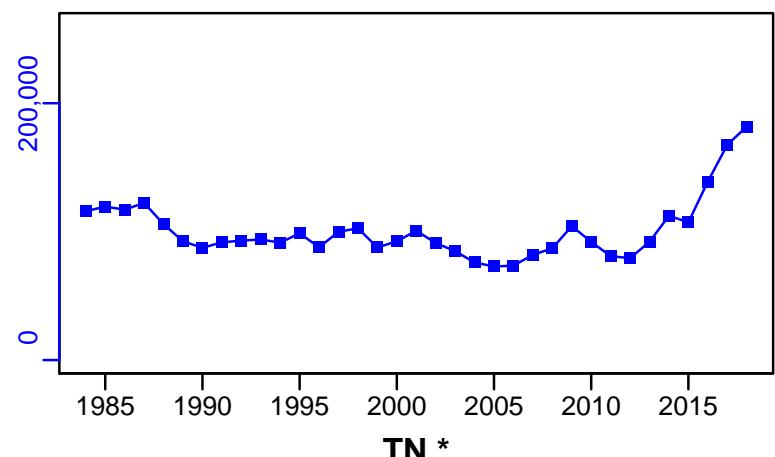


◆ Start Year ◆ End Year * No Data

Megrim ICES 7–8abd [MEGVII–VIIIab]

TB-MT (1983–2018–ICESIMP2018)

SSB-MT (1983–2018–ICESIMP2018)

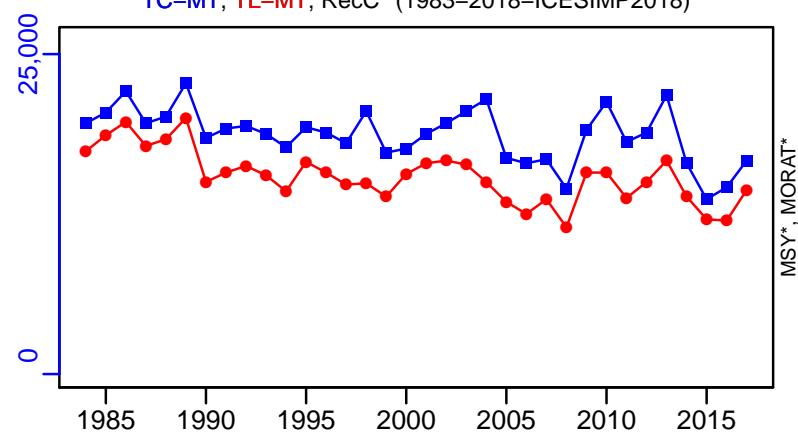


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

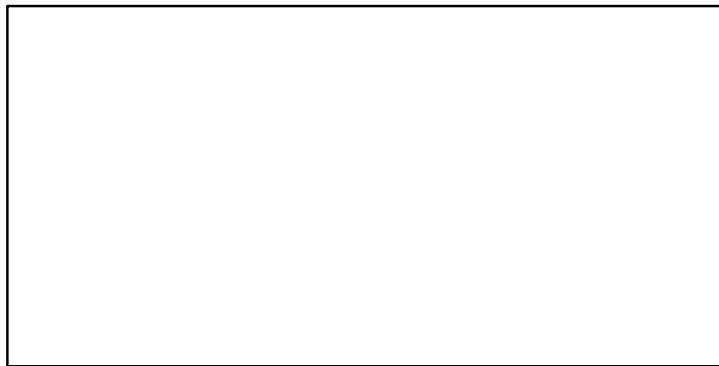
Megrim ICES 7–8abd [MEGVII–VIIIab]

TC–MT, TL–MT, RecC* (1983–2018–ICESIMP2018)

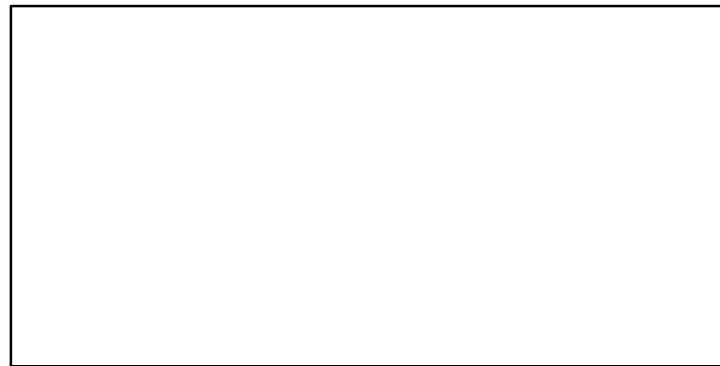
TAC*, Cpair*, Cadv*



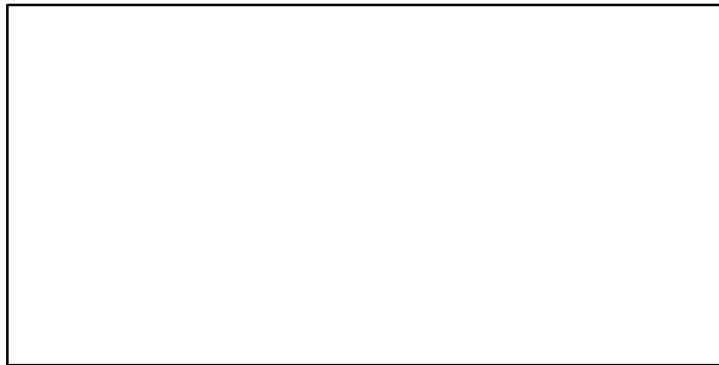
survB*



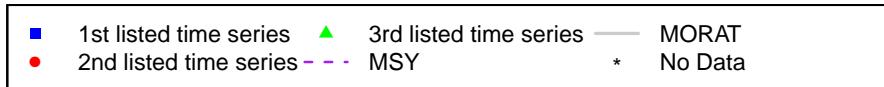
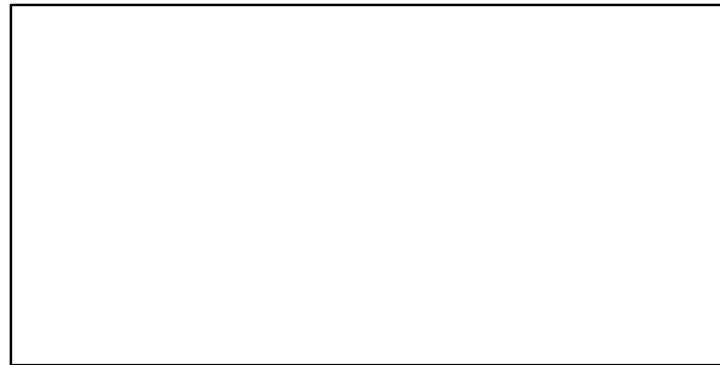
CPUE*



EFFORT*



CdivMSY*



Norway lobster Noup (FU 10) [NEPHFU10]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU10-1994-2017-ICESIMP2018
Area	Noup (FU 10)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	9		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

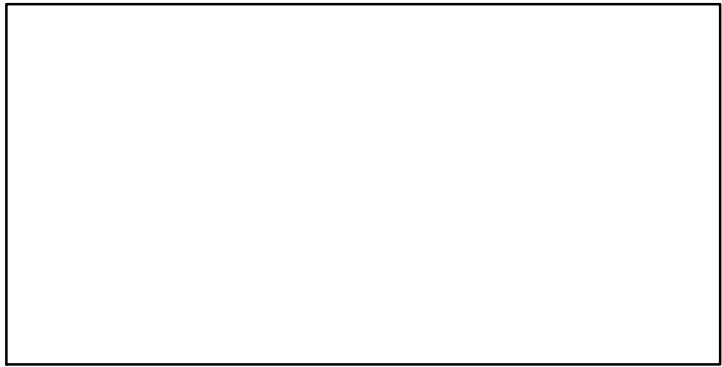
Spawner Recruit*

Production*

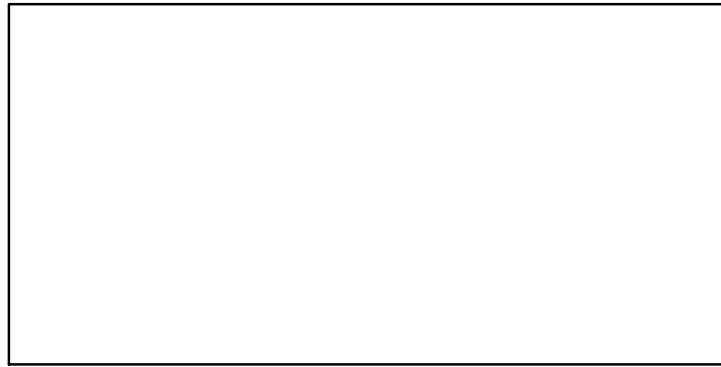
◆ Start Year ◆ End Year * No Data

Norway lobster Noup (FU 10) [NEPHFU10]

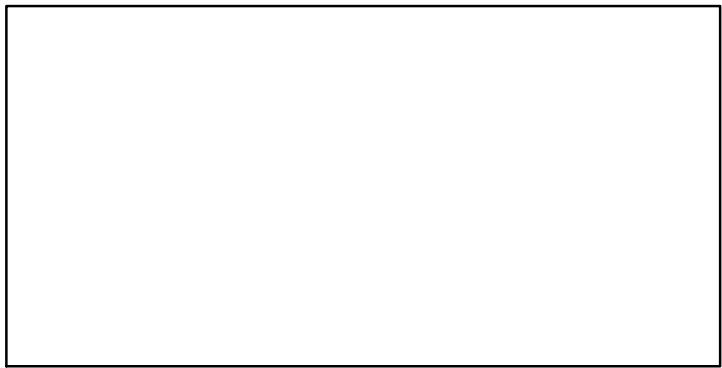
TB*



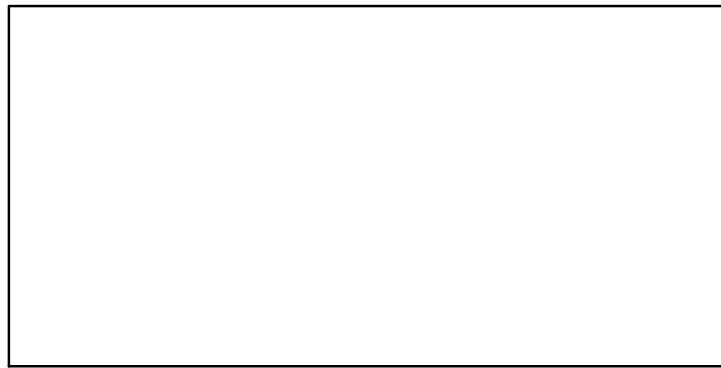
SSB*



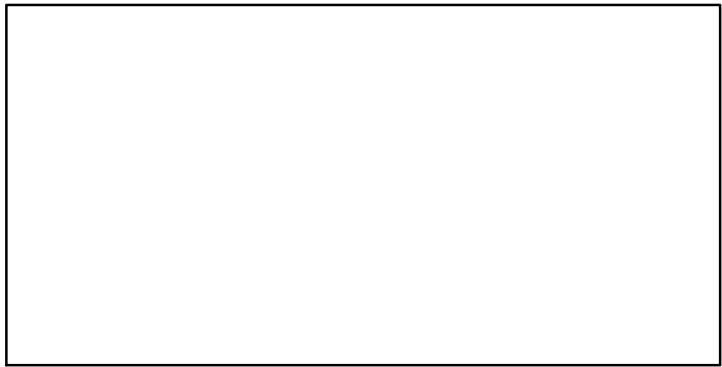
TN *



F*



ER*



Recruits*

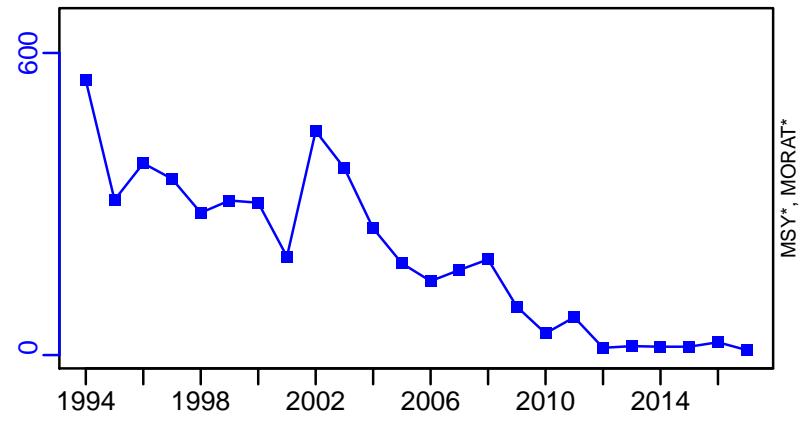


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

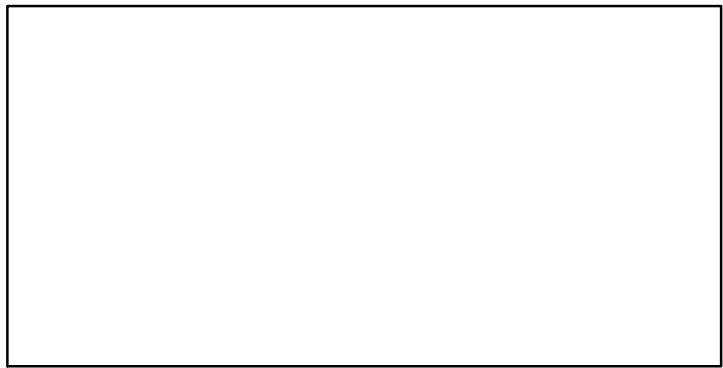
Norway lobster Noup (FU 10) [NEPHFU10]

TL-MT, TC*, RecC* (1994–2017–ICESIMP2018)

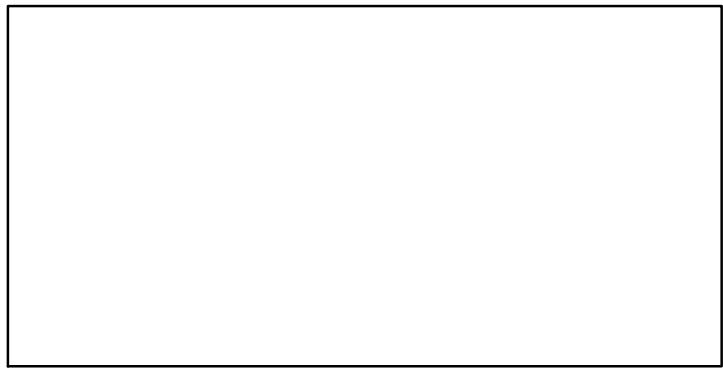
TAC*, Cpair*, Cadv*



survB*



CPUE*



EFFORT*



CdivMSY*



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

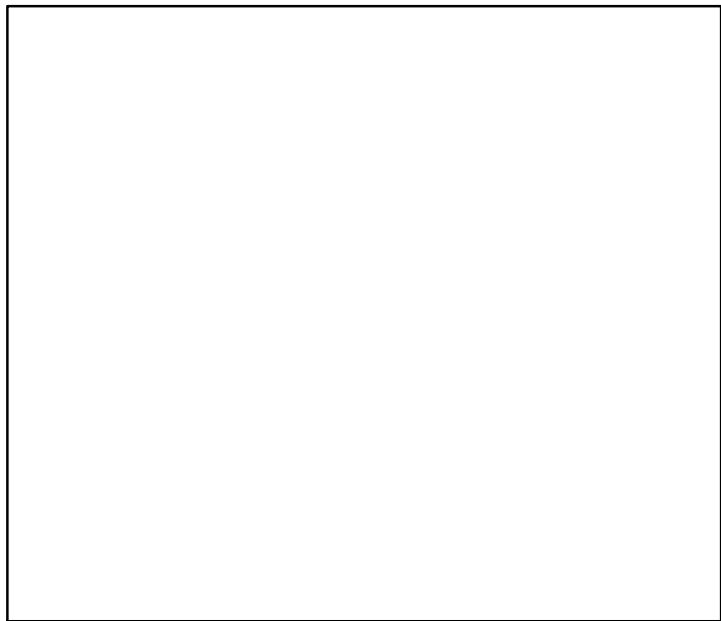
Norway lobster North Minch (FU 11) [NEPHFU11]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU11-1981-2016-ICESIMP2018
Area	North Minch (FU 11)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

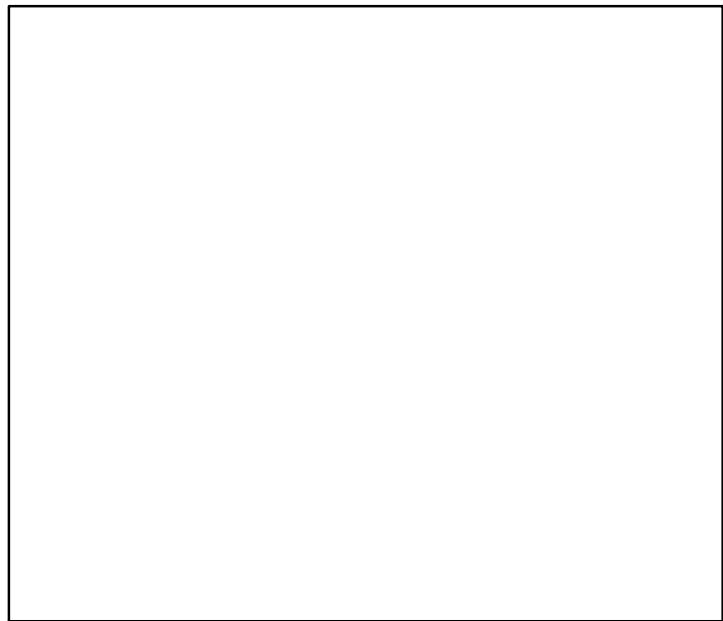
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.108
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.108
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.107	-	-
TC	TC-MT	2016	3800		
TL	TL-MT	2016	3530		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.991		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

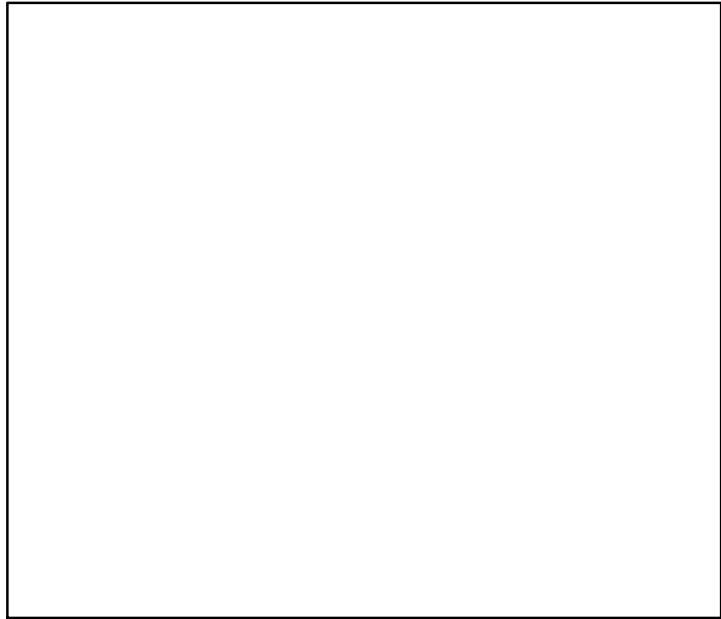
Kobe MSY*



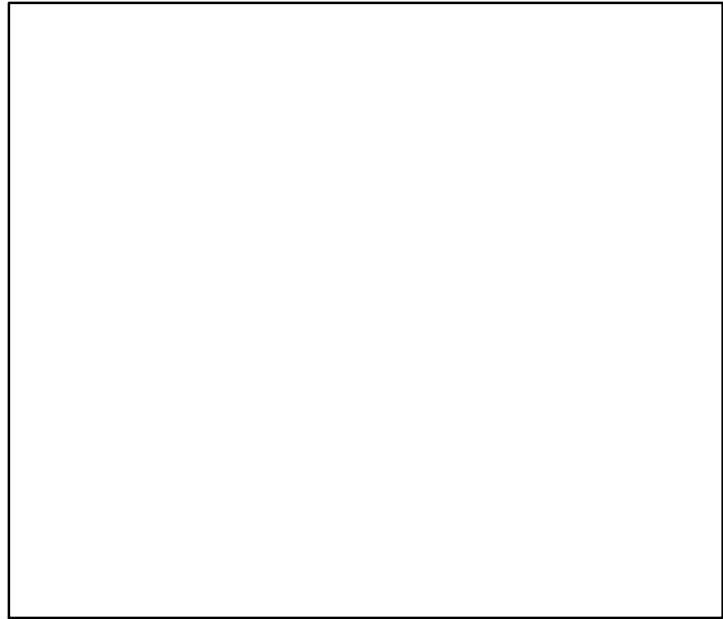
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Norway lobster North Minch (FU 11) [NEPHFU11]

TB*



SSB*



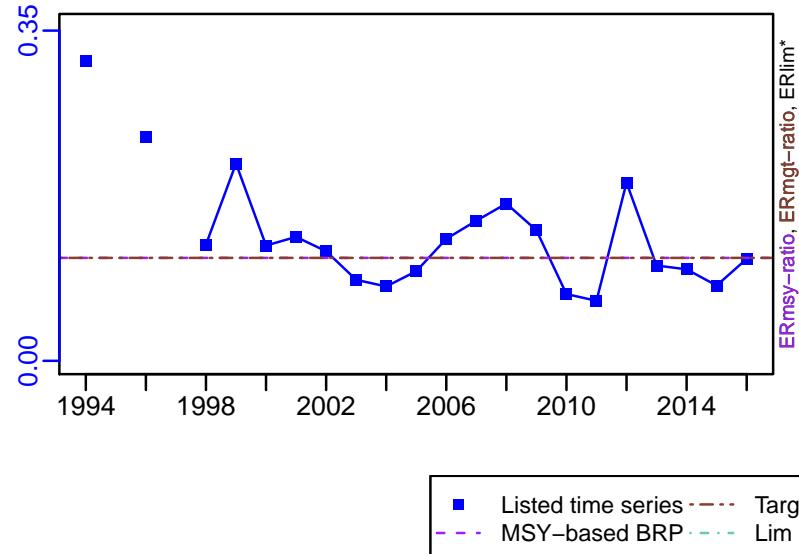
TN *



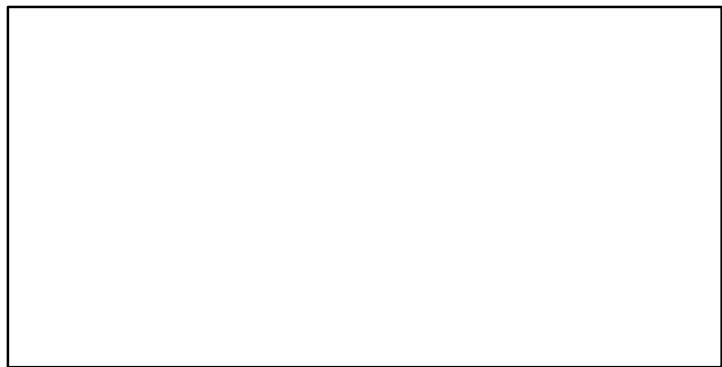
F*



ER-ratio (1981–2016–ICESIMP2018)



Recruits*

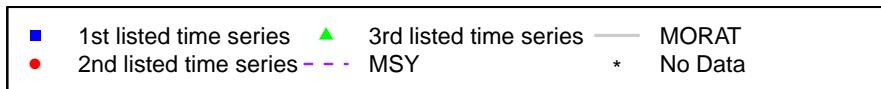
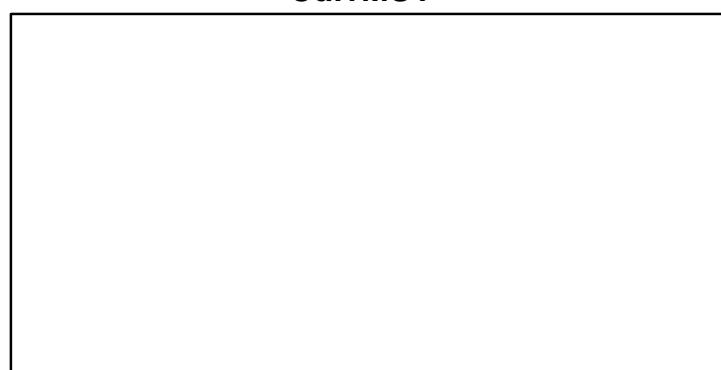
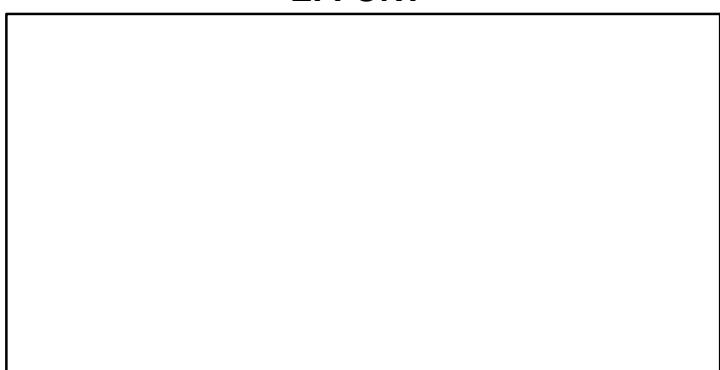
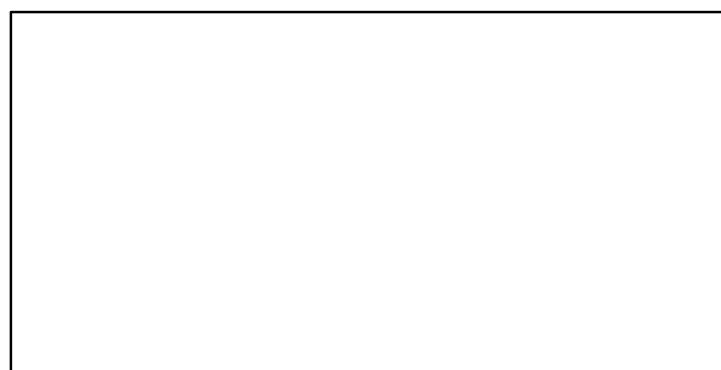
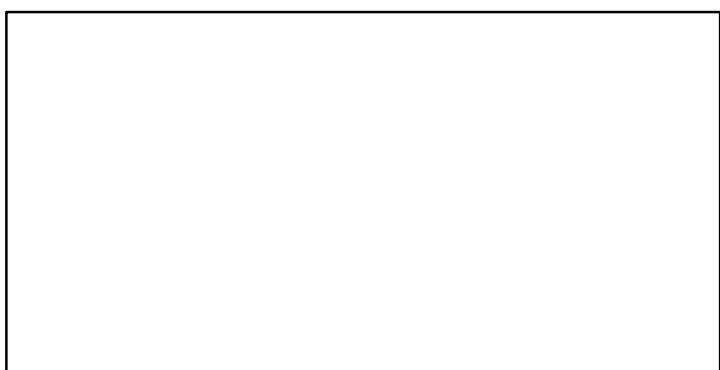
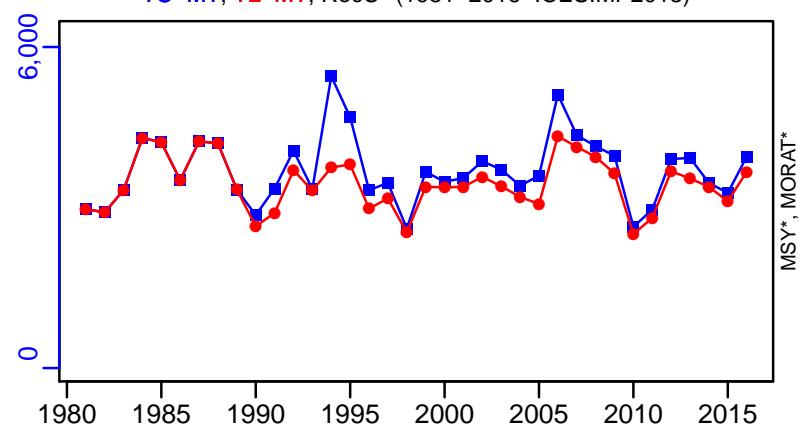


■ Listed time series	--- Target BRP	— Rec-Est
- - MSY-based BRP	... Lim BRP	* No Data

Norway lobster North Minch (FU 11) [NEPHFU11]

TC-MT, TL-MT, RecC* (1981–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



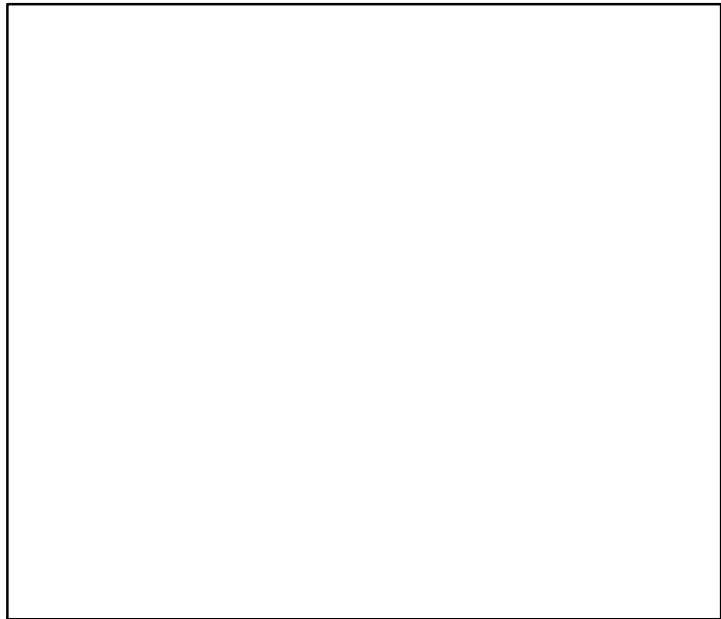
Norway lobster South Minch (FU 12) [NEPHFU12]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU12-1981-2016-ICESIMP2018
Area	South Minch (FU 12)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

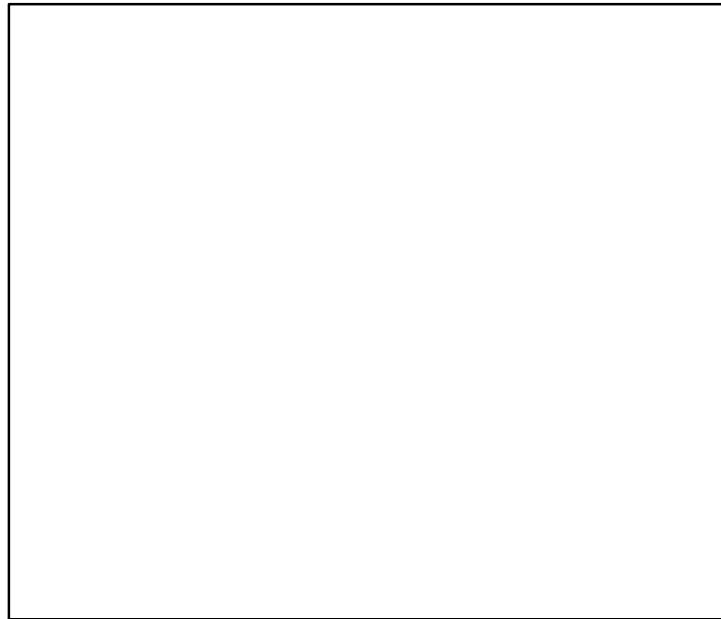
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.117
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.117
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.095	-	-
TC	TC-MT	2016	4770		
TL	TL-MT	2016	4400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.812		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

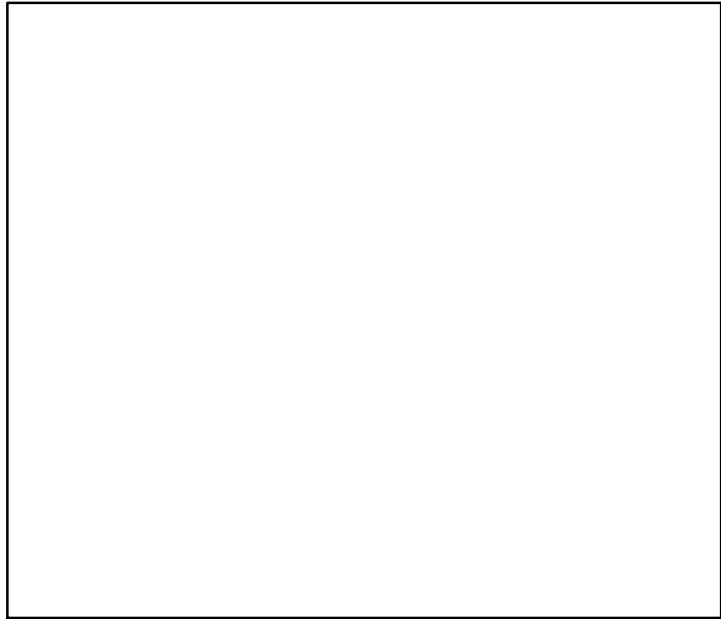
Kobe MSY*



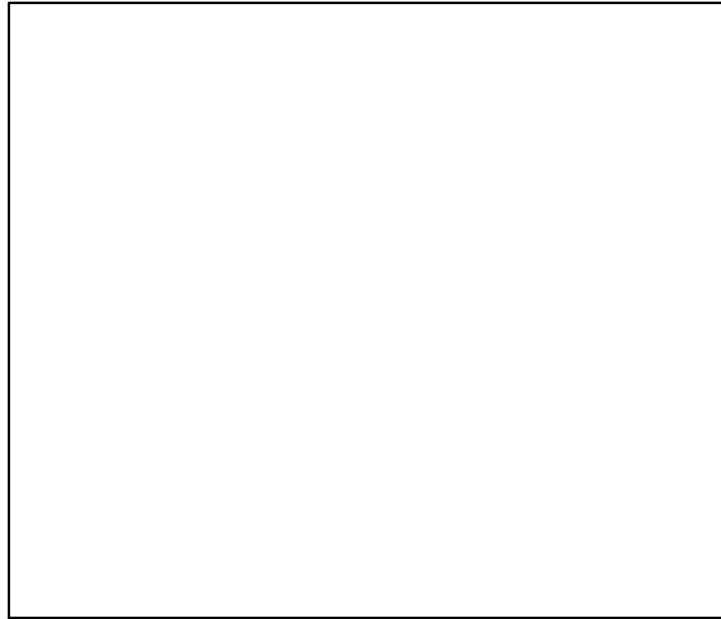
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Norway lobster South Minch (FU 12) [NEPHFU12]

TB*



SSB*



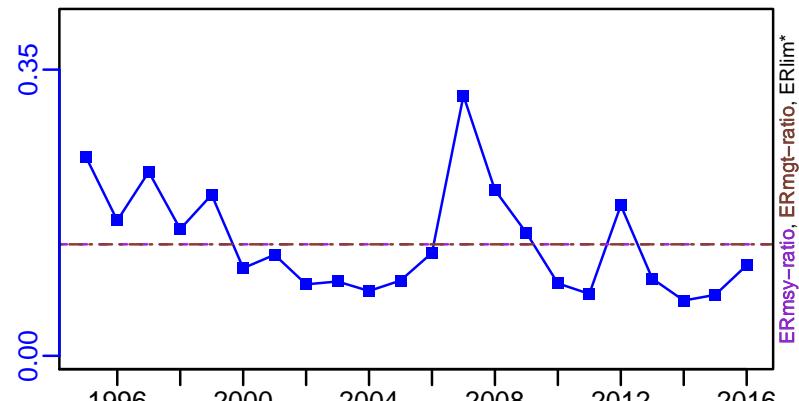
TN *



F*



ER-ratio (1981–2016–ICESIMP2018)



Recruits*

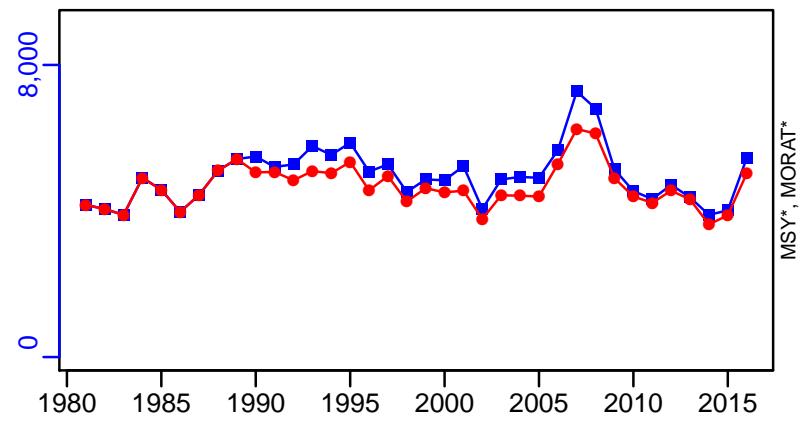


■ Listed time series	--- Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

Norway lobster South Minch (FU 12) [NEPHFU12]

TC-MT, TL-MT, RecC* (1981–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*



Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU13-1981-2016-ICESIMP2018
Area	Firth of Clyde and Sound of Jura (FU 13)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.151
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.151
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2016	0.176	-	-	
TC	TC-MT	2016	7080			
TL	TL-MT	2016	6450			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.166			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*

Kobe MGT*

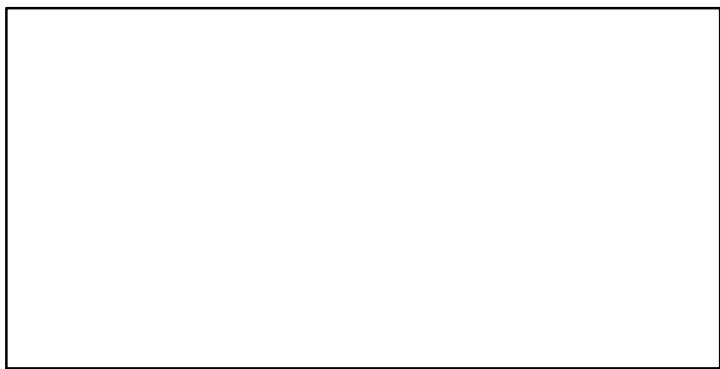
Spawner Recruit*

Production*

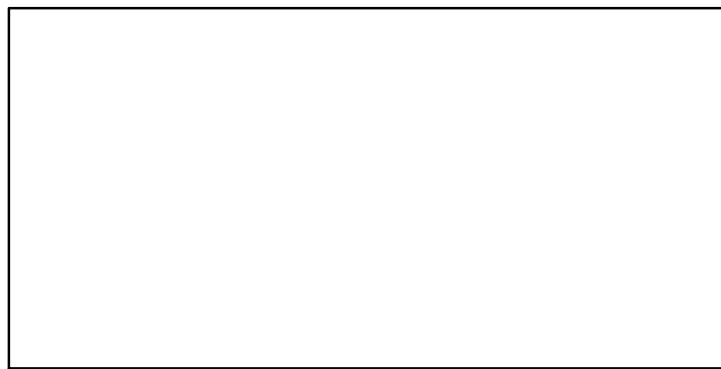
◆ Start Year ◆ End Year * No Data

Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

TB*



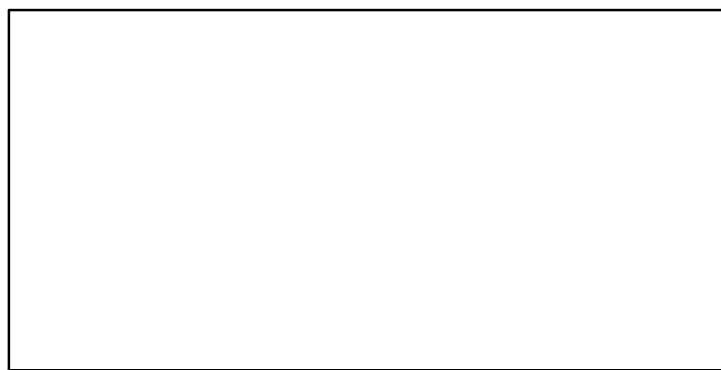
SSB*



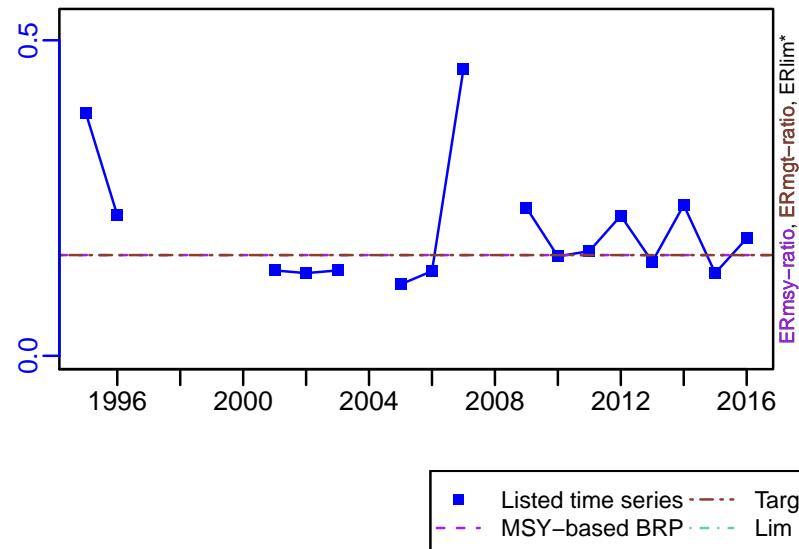
TN *



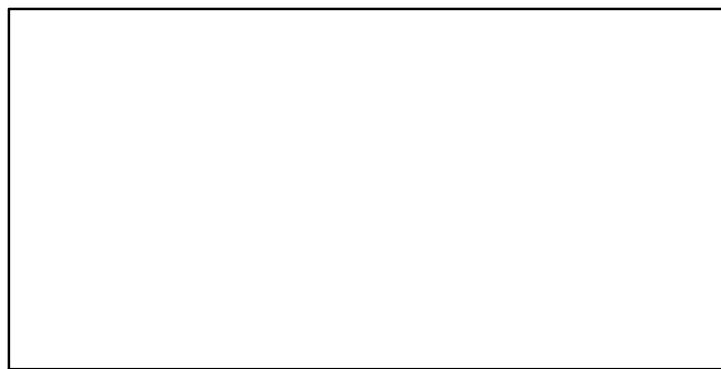
F*



ER-ratio (1981–2016–ICESIMP2018)



Recruits*

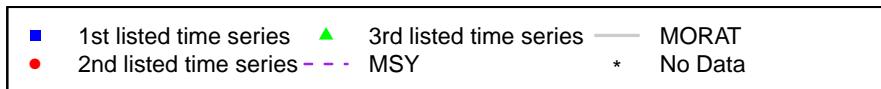
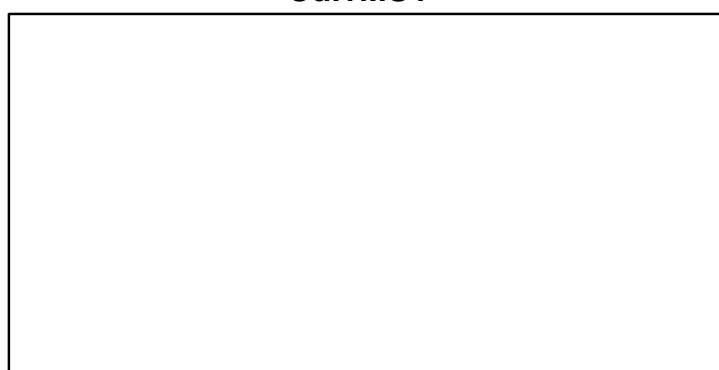
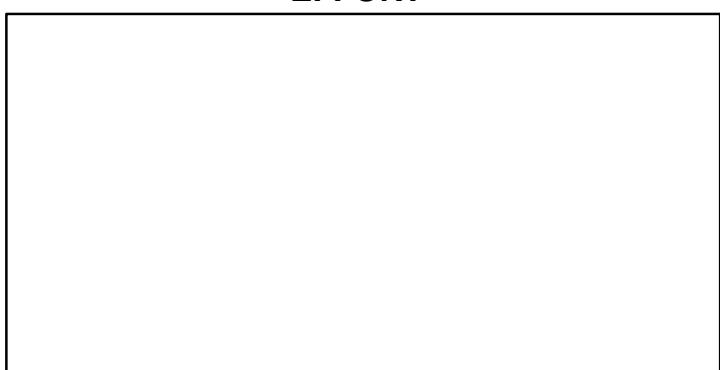
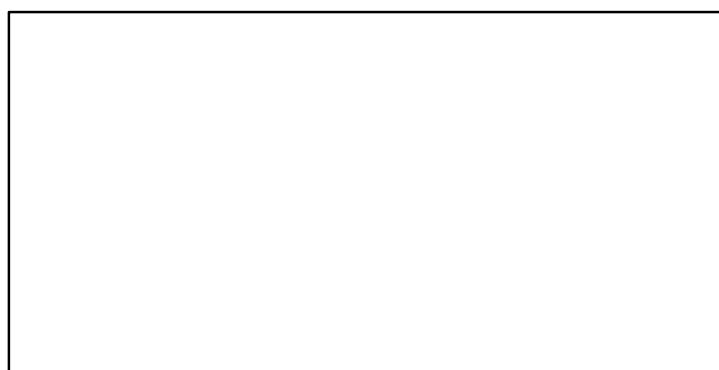
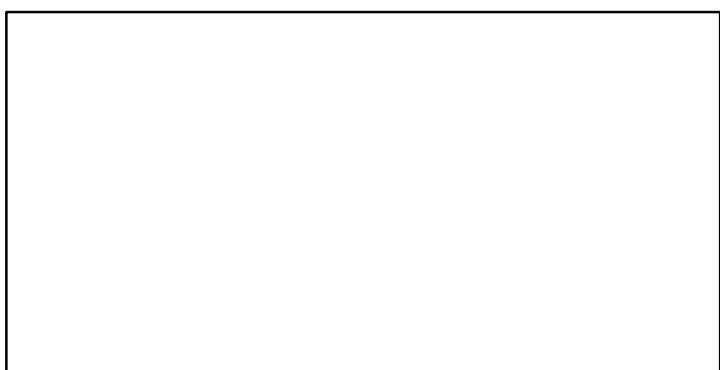
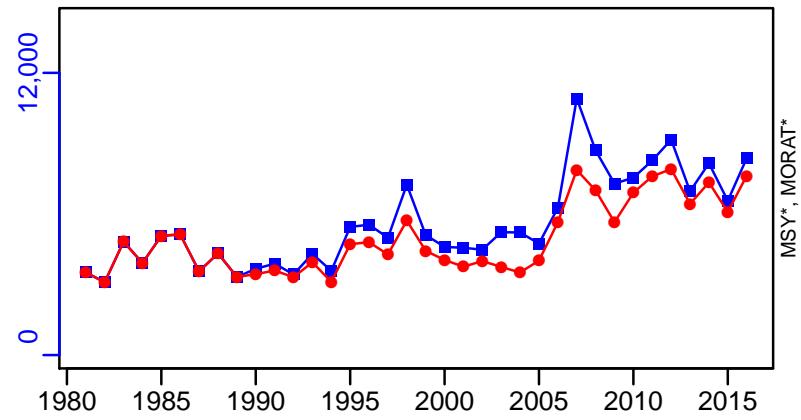


■ Listed time series	--- Target BRP	— Rec-Est
- - MSY-based BRP	... Lim BRP	* No Data

Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

TC-MT, TL-MT, RecC* (1981–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



Norway lobster Irish Sea East (FU 14) [NEPHFU14]

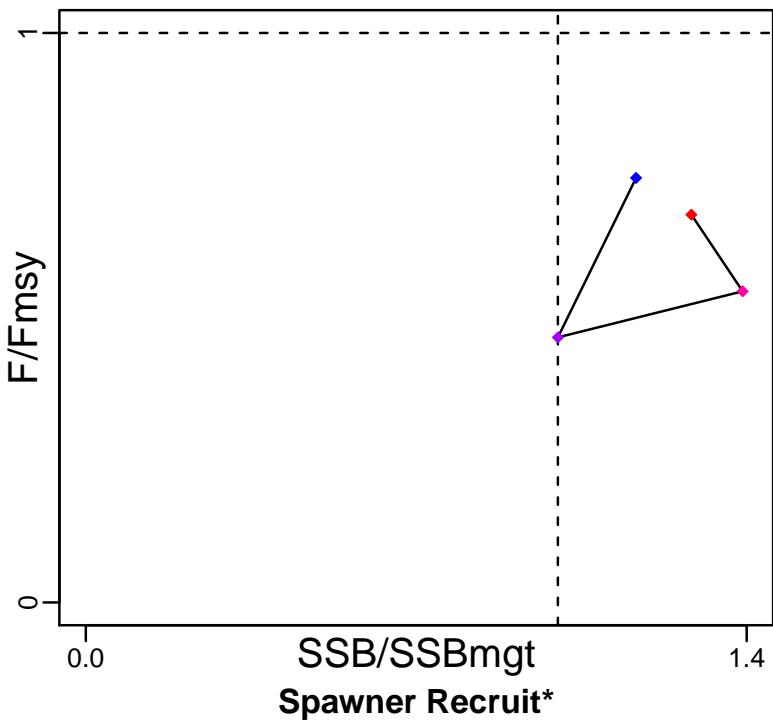
Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU14-2000-2016-ICESIMP2018
Area	Irish Sea East (FU 14)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2015	11
ERmsy	ERmsy-ratio	2016	0.11
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	350
Fmgt	Fmgt-1/yr	2015	11
ERmgt	ERmgt-ratio	2016	0.11
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

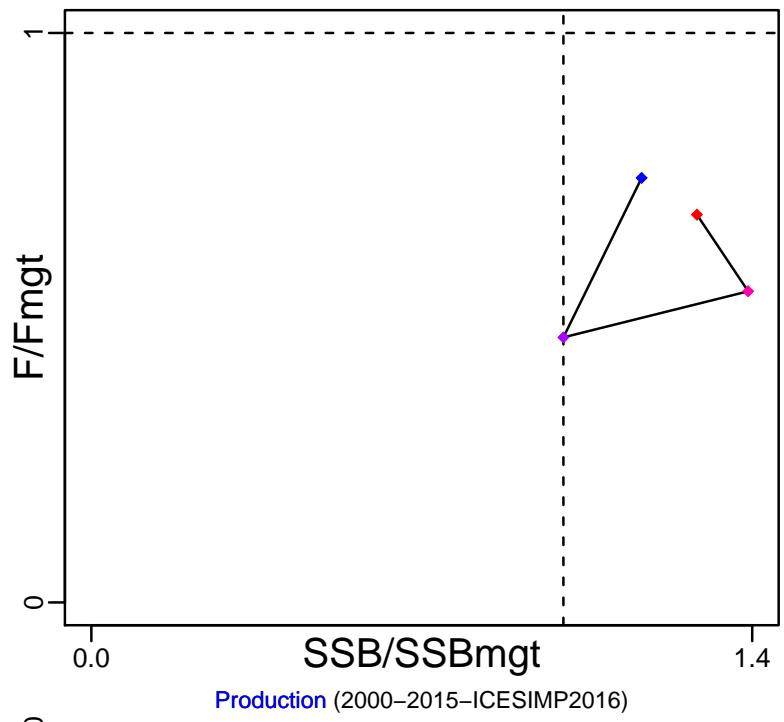
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2015	591	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2015	7.49	-	-
ER	ER-ratio	2016	0.038	-	-
TC	-	-	-		
TL	TL-MT	2016	237		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.681		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.346		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	1.689		
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.681		
ER/ERmgt	-	-	-		

Norway lobster Irish Sea East (FU 14) [NEPHFU14]

Kobe MSYpref (2000–2015–ICESIMP2016)

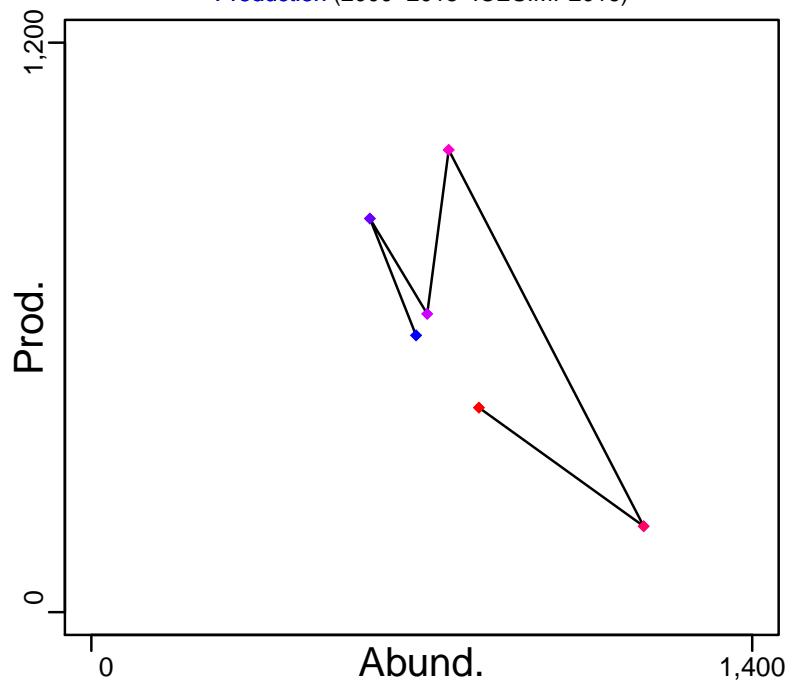
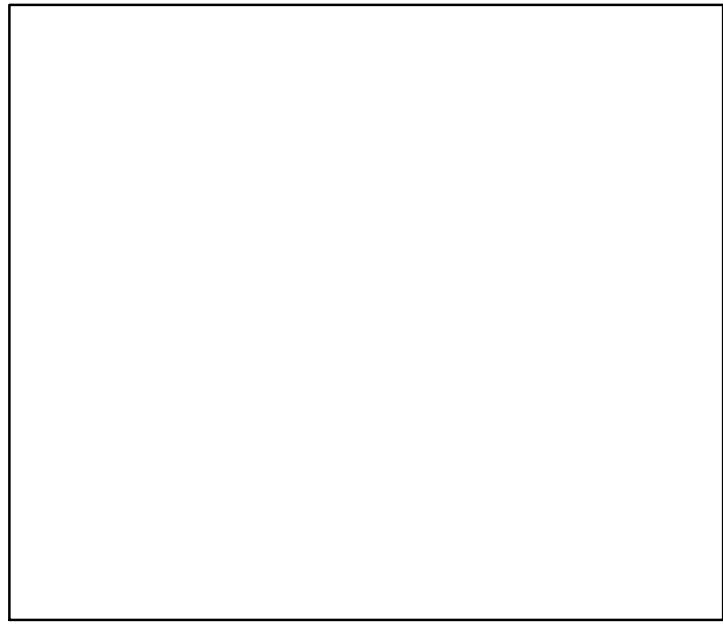


Kobe MGTpref (2000–2015–ICESIMP2016)



Spawner Recruit*

Production (2000–2015–ICESIMP2016)



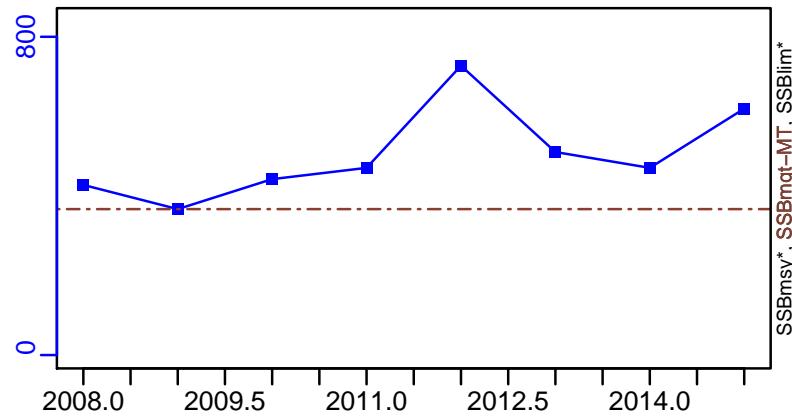
◆ Start Year ◆ End Year * No Data

Norway lobster Irish Sea East (FU 14) [NEPHFU14]

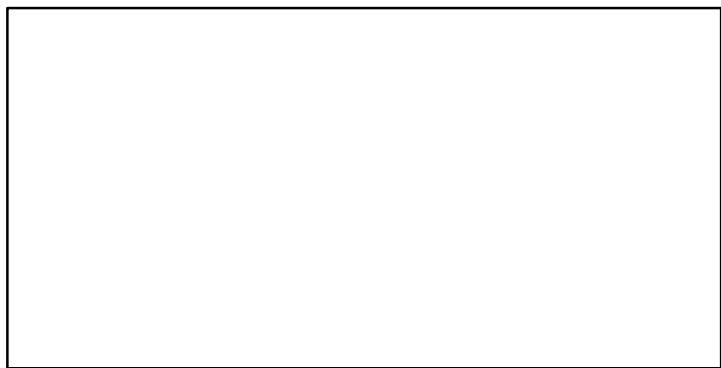
TB*



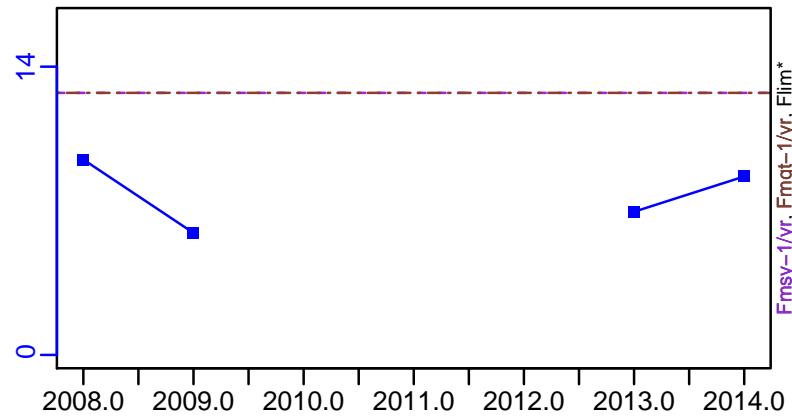
SSB-MT (2000–2015–ICESIMP2016)



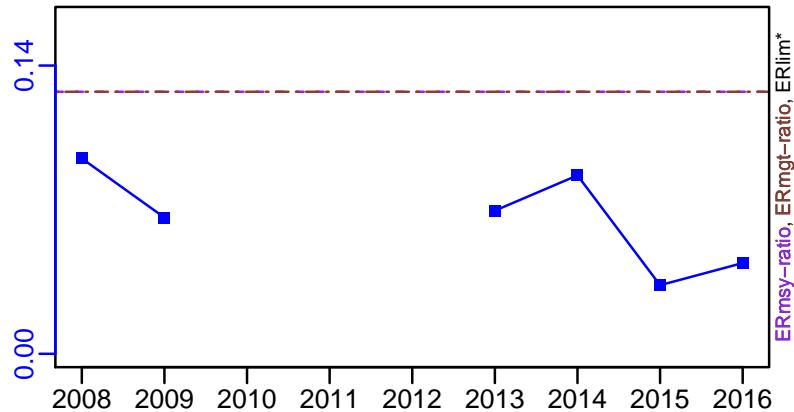
TN *



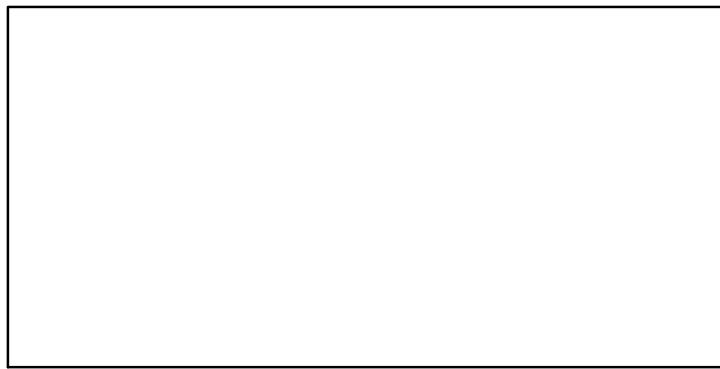
F-1/yr (2000–2015–ICESIMP2016)



ER-ratio (2000–2016–ICESIMP2018)



Recruits*

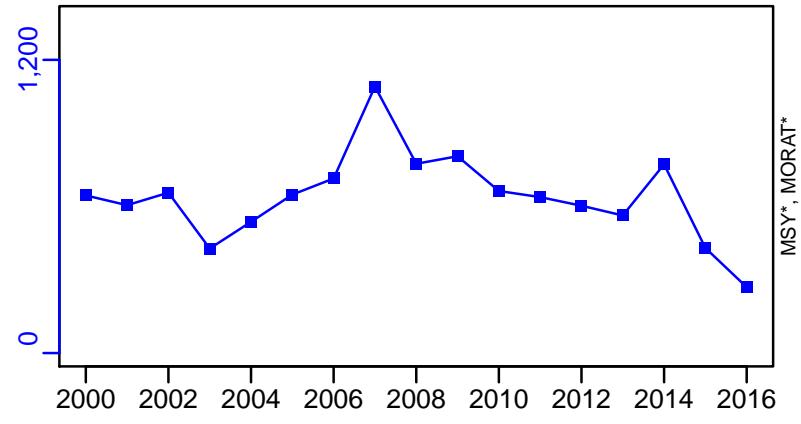


- Listed time series - - - Target BRP
- - - MSY-based BRP - - Lim BRP
- Rec-Est
- * No Data

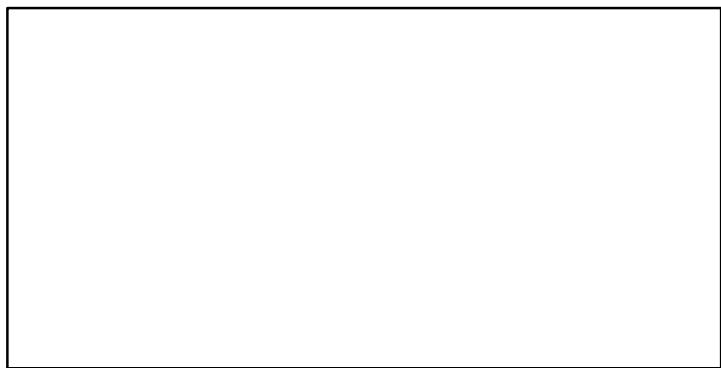
Norway lobster Irish Sea East (FU 14) [NEPHFU14]

TL-MT, TC*, RecC* (2000–2016—ICESIMP2018)

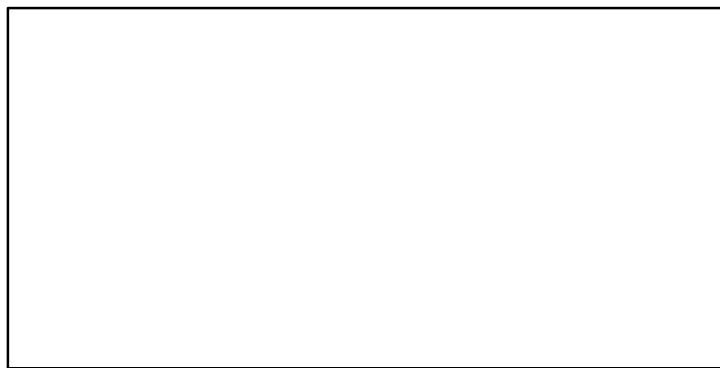
TAC*, Cpair*, Cadv*



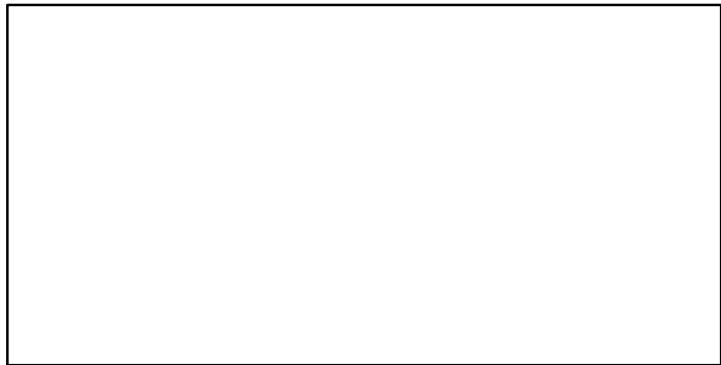
survB*



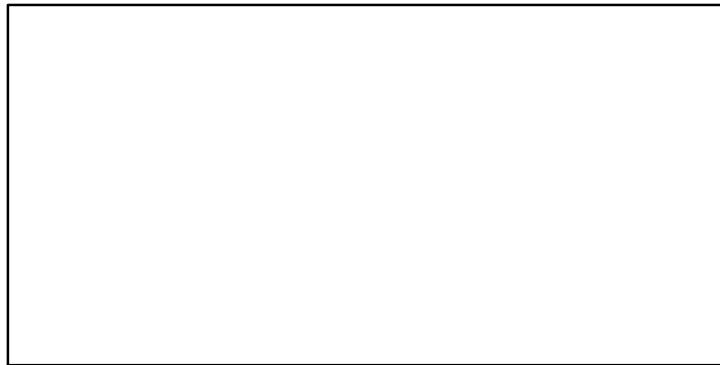
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Irish Sea West (FU 15) [NEPHFU15]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU15-1960-2016-ICESIMP2018
Area	Irish Sea West (FU 15)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	18.2
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	18.2
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	15.4	-	-
TC	-	-	-		
TL	TL-MT	2016	7320		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.846		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster Irish Sea West (FU 15) [NEPHFU15]

TB*



SSB*



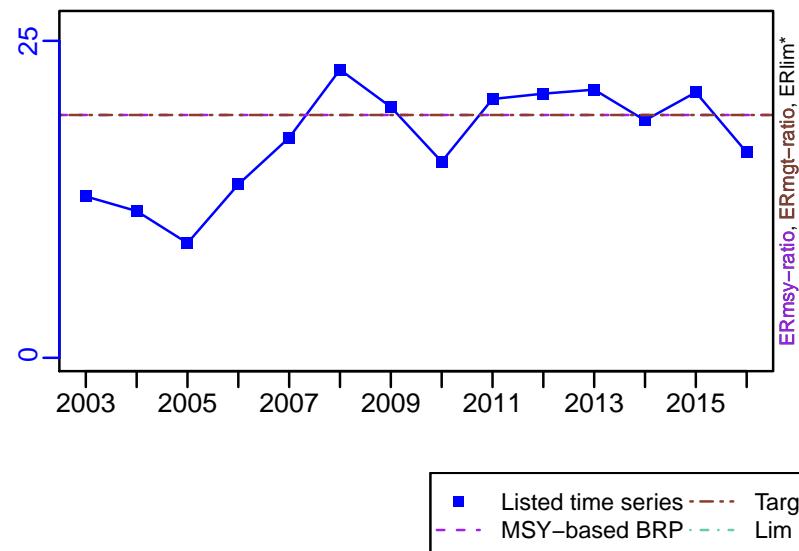
TN *



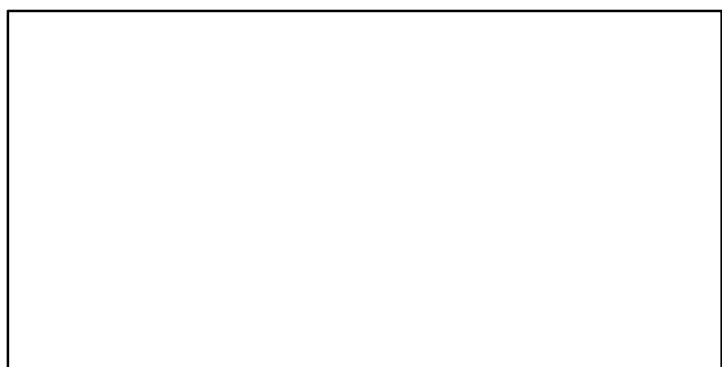
F*



ER-ratio (1960–2016–ICESIMP2018)



Recruits*

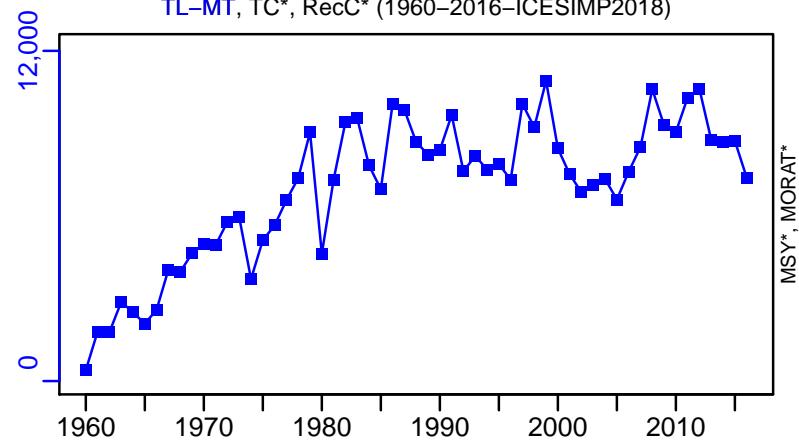


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	· · Lim BRP	* No Data

Norway lobster Irish Sea West (FU 15) [NEPHFU15]

TL-MT, TC*, RecC* (1960–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

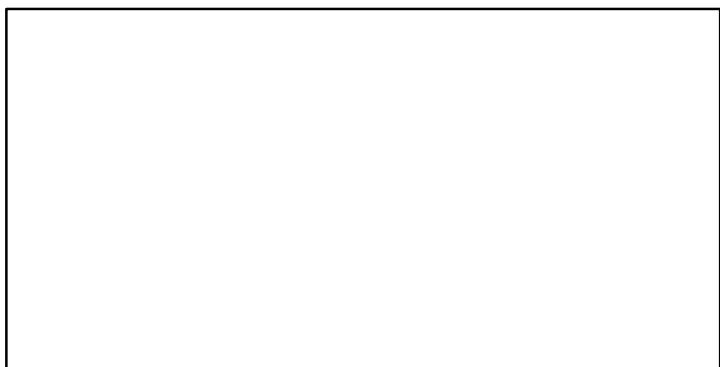
MSY*, MORAT*



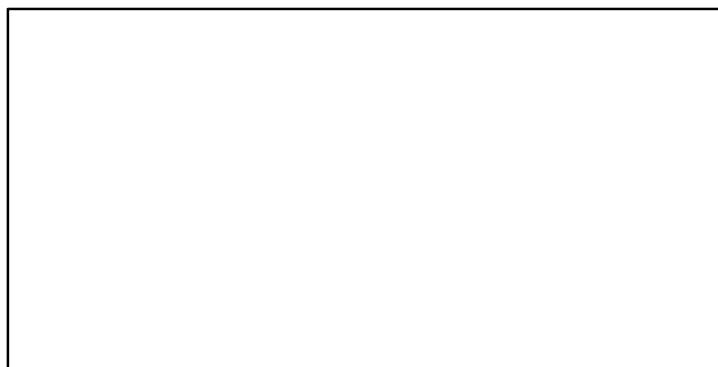
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU16-1979-2016-ICESIMP2018
Area	Porcupine Bank (FU 16)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	6.2
ERmsy	ERmsy-ratio	2016	0.062
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2016	6.2
ERmgt	ERmgt-ratio	2016	0.062
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-MT	2016	958	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-1/yr	2016	3.3	-	-	
ER	ER-ratio	2016	0.056	-	-	
TC	-	-	-			
TL	TL-MT	2016	2150			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.532			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.902			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.532			
ER/ERmgt	-	-	-			

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

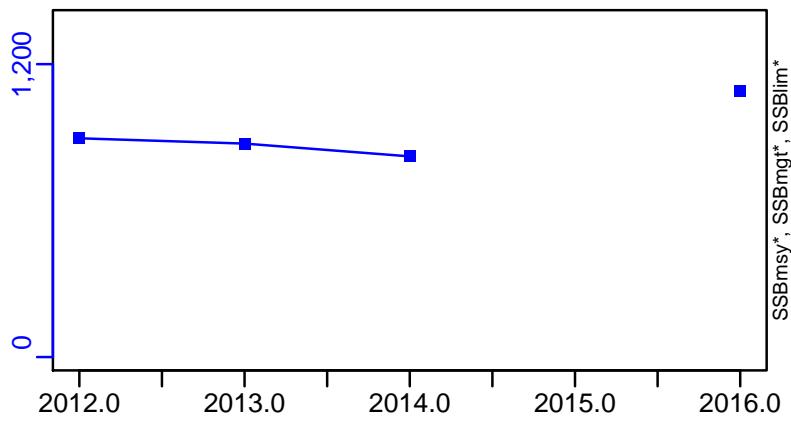
◆ Start Year ♦ End Year * No Data

Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

TB*



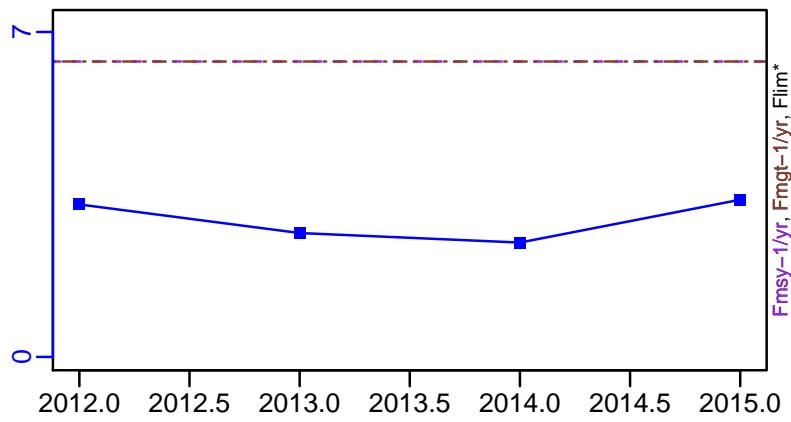
SSB-MT (1986–2016–ICESIMP2018)



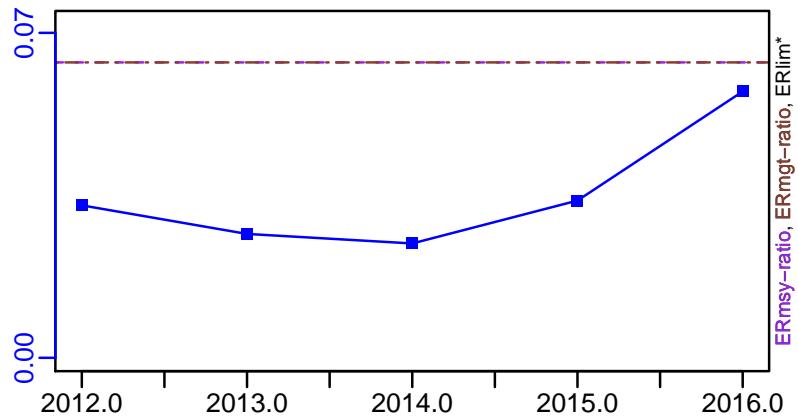
TN *



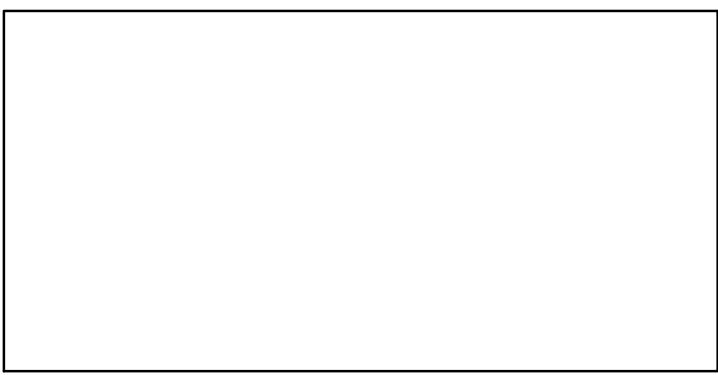
F-1/yr (1986–2016–ICESIMP2018)



ER-ratio (1979–2016–ICESIMP2018)



Recruits*

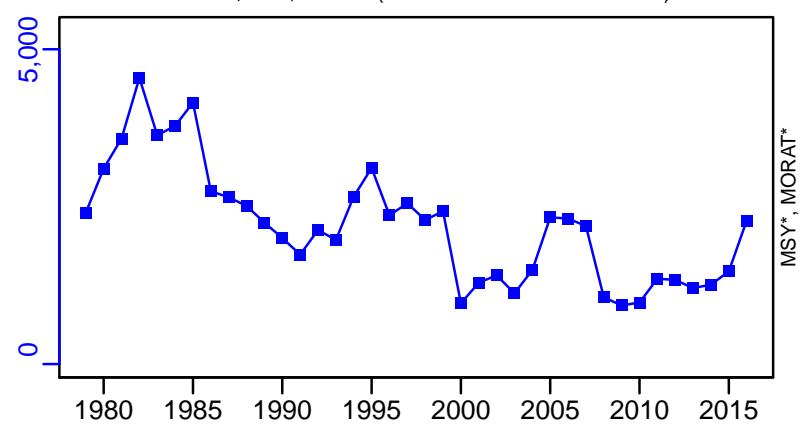


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

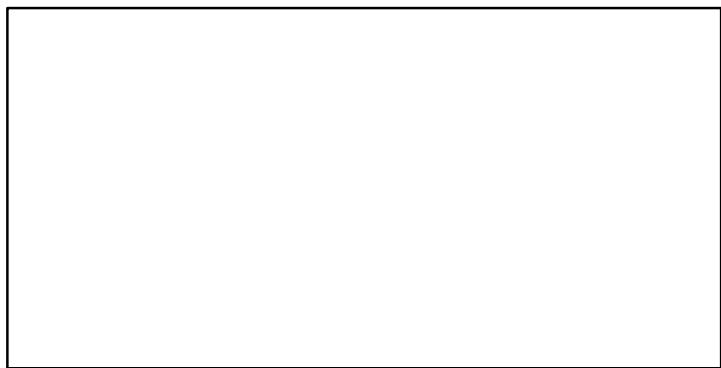
Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

TL-MT, TC*, RecC* (1979–2016–ICESIMP2018)

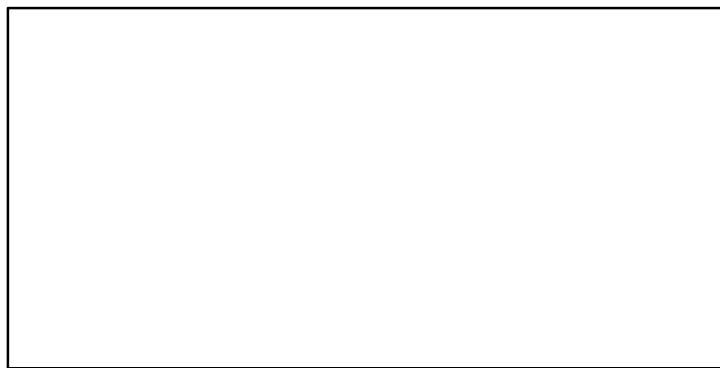
TAC*, Cpair*, Cadv*



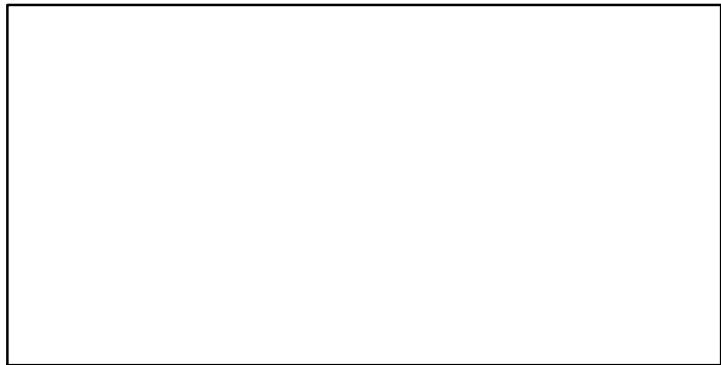
survB*



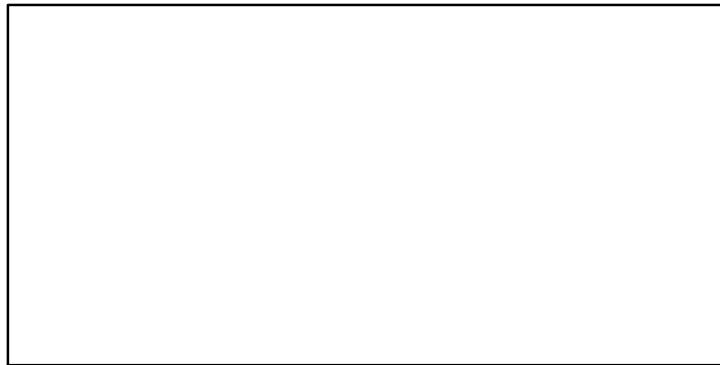
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Aran Grounds (FU 17) [NEPHFU17]

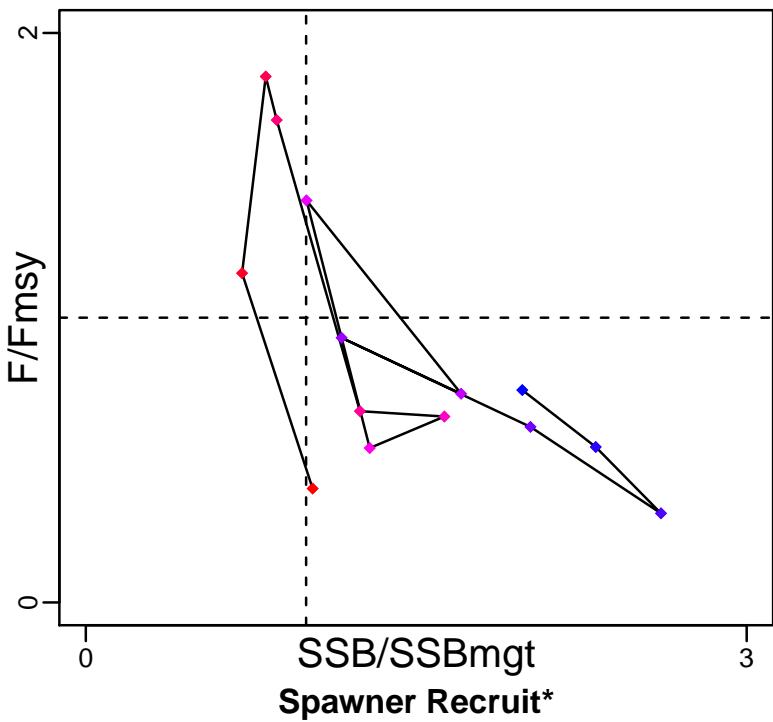
Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU17-1988-2016-ICESIMP2018
Area	Aran Grounds (FU 17)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	8.5
ERmsy	ERmsy-ratio	2016	0.085
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2016	540
Fmgt	Fmgt-1/yr	2016	8.5
ERmgt	ERmgt-ratio	2016	0.085
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

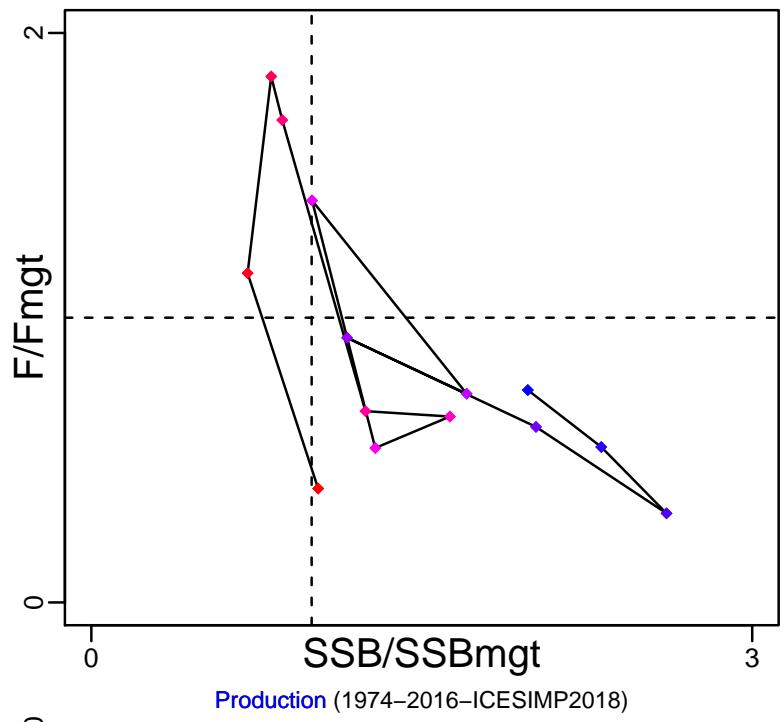
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-MT	2016	379	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-1/yr	2016	3.4	-	-	
ER	ER-calc-ratio	2016	0.399	-	-	
TC	-	-	-			
TL	TL-MT	2016	370			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.4			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.086			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	0.702			
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.4			
ER/ERmgt	-	-	-			

Norway lobster Aran Grounds (FU 17) [NEPHFU17]

Kobe MSYpref (1974–2016–ICESIMP2018)

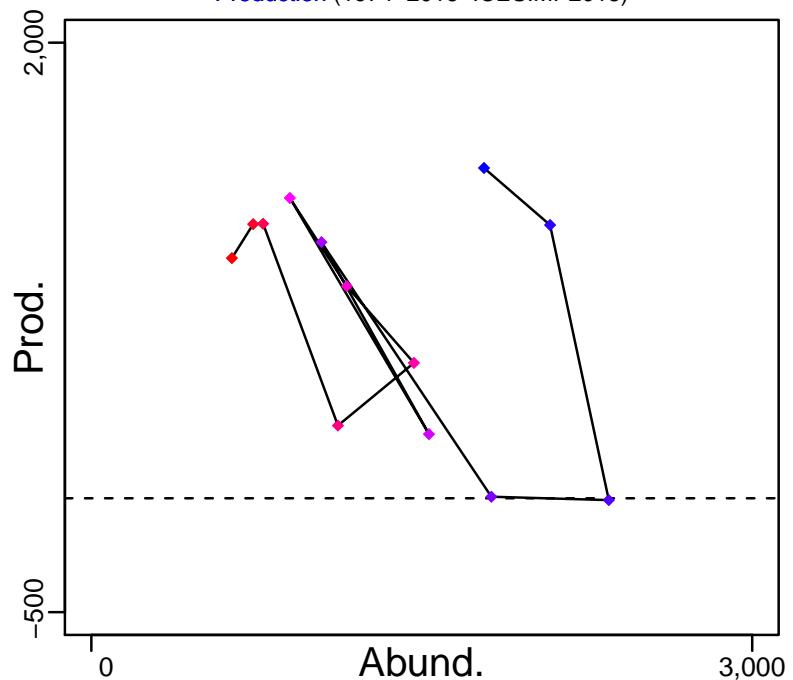
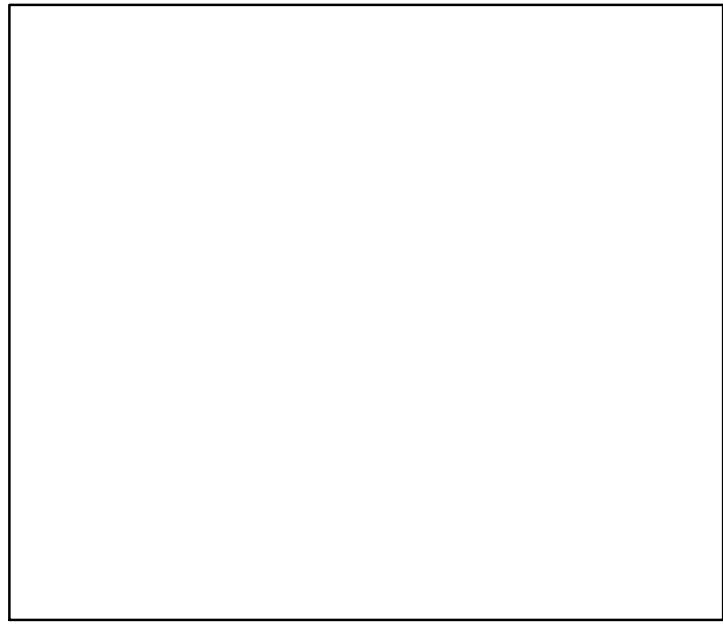


Kobe MGTpref (1974–2016–ICESIMP2018)



Spawner Recruit*

Production (1974–2016–ICESIMP2018)



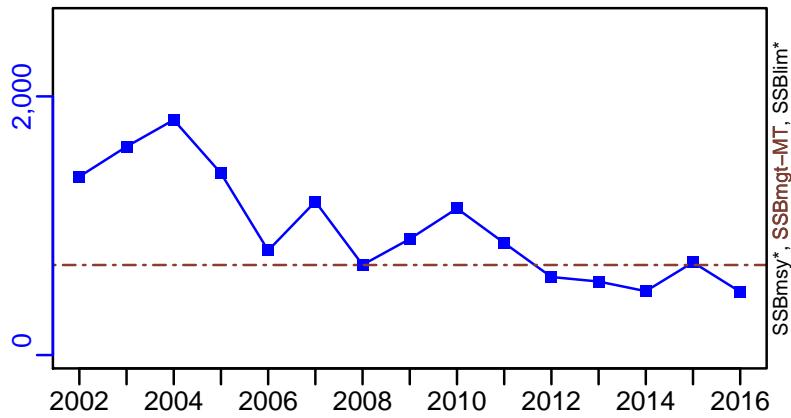
◆ Start Year ◆ End Year * No Data

Norway lobster Aran Grounds (FU 17) [NEPHFU17]

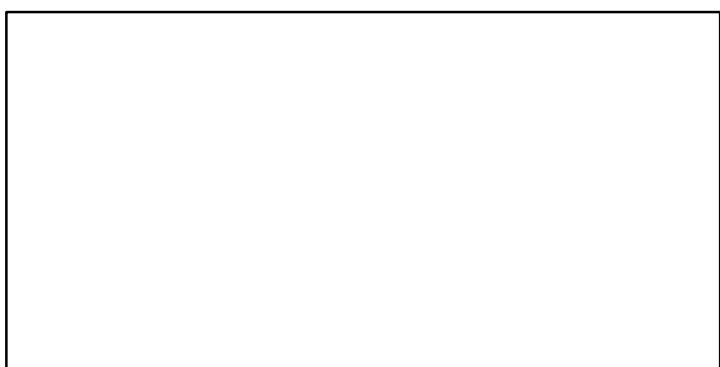
TB*



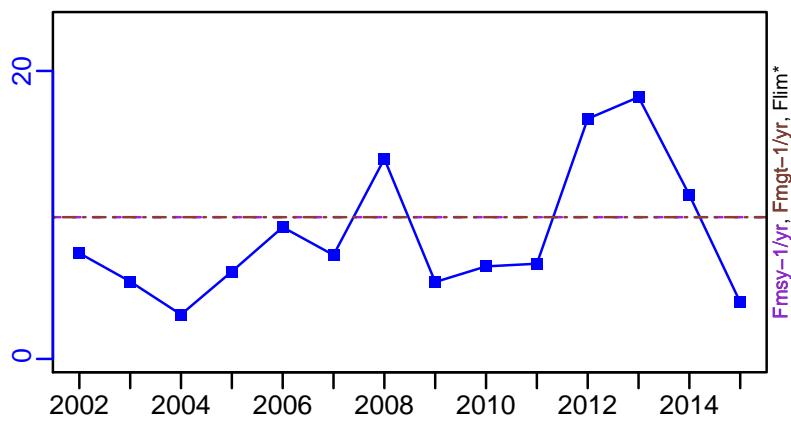
SSB-MT (1974–2016–ICESIMP2018)



TN *

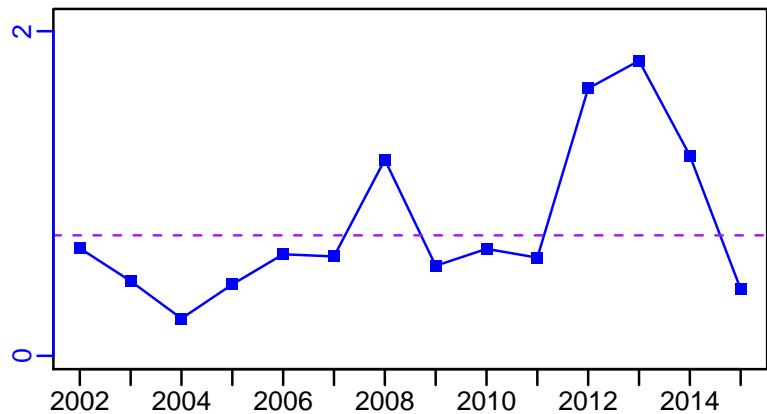


F-1/yr (1974–2016–ICESIMP2018)

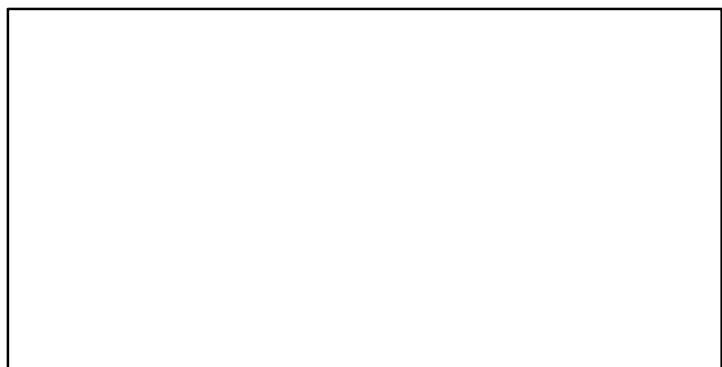


ER-calc-ratio (1974–2016–ICESIMP2018)

ER_{mgt}-est-ratio, ER_{mgt}* , ER_{lim}*



Recruits*

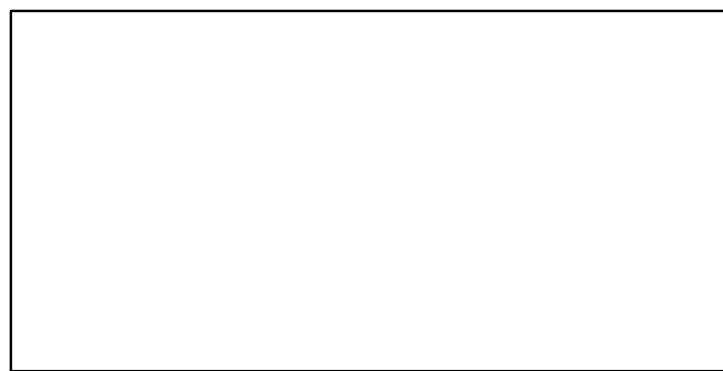
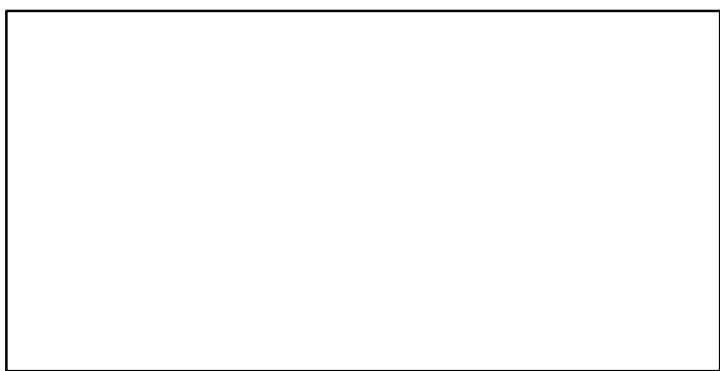
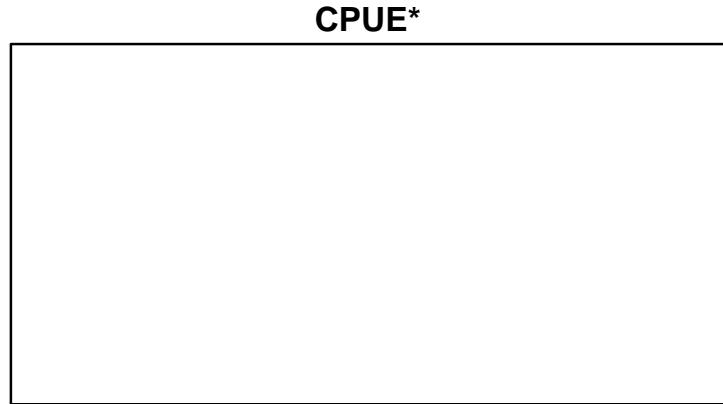
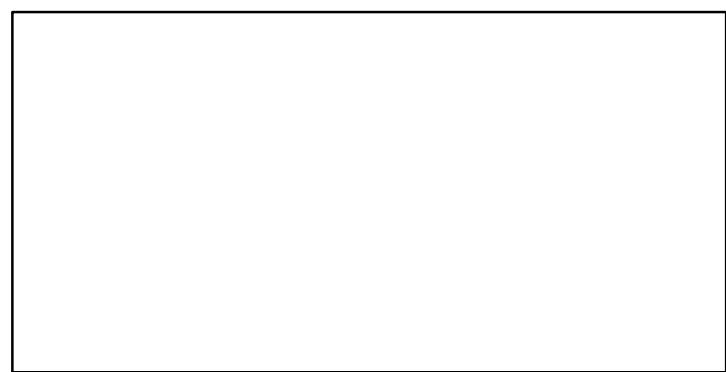
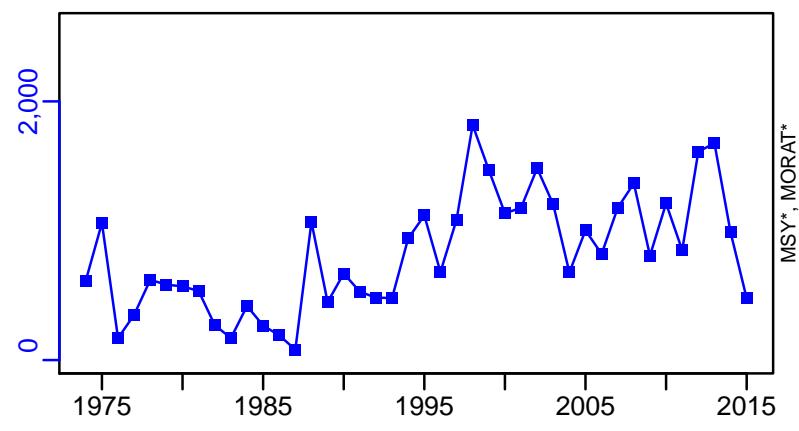


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Norway lobster Aran Grounds (FU 17) [NEPHFU17]

TL-MT, TC*, RecC* (1974–2016—ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU19-2006-2016-ICESIMP2018
Area	South East and West of IRL (FU 19)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.093
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.093
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.075	-	-
TC	-	-	-		
TL	TL-MT	2016	591		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.808		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

TB*



SSB*



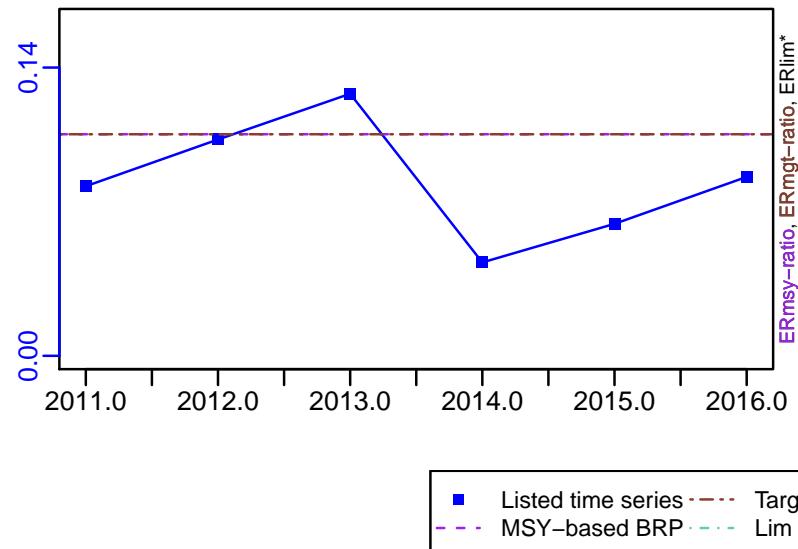
TN *



F*



ER-ratio (2006–2016–ICESIMP2018)



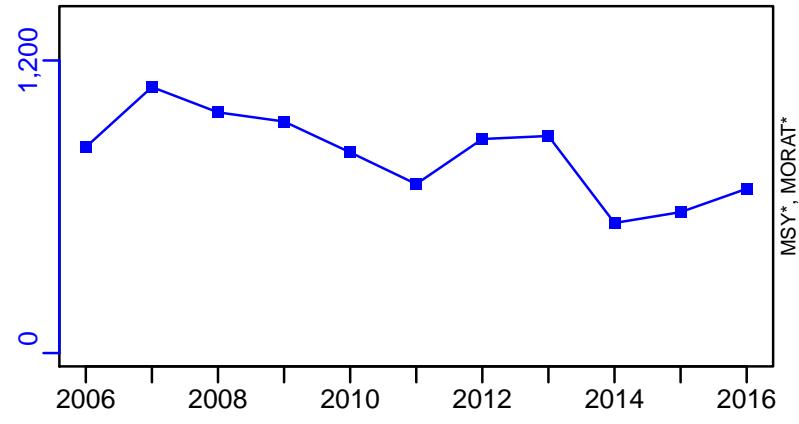
Recruits*



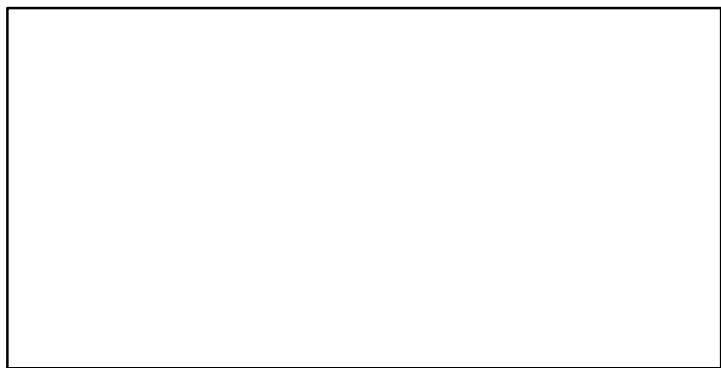
Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

TL-MT, TC*, RecC* (2006–2016–ICESIMP2018)

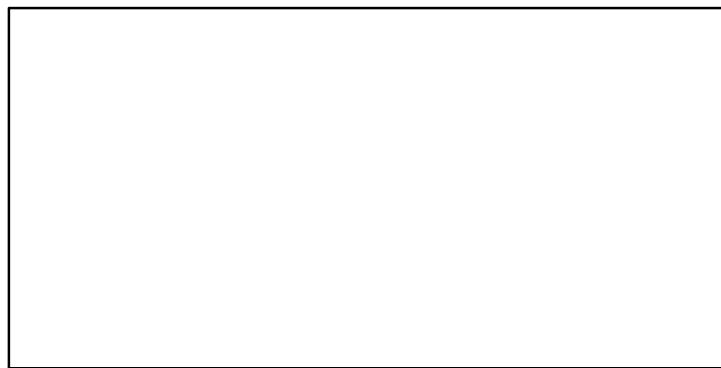
TAC*, Cpair*, Cadv*



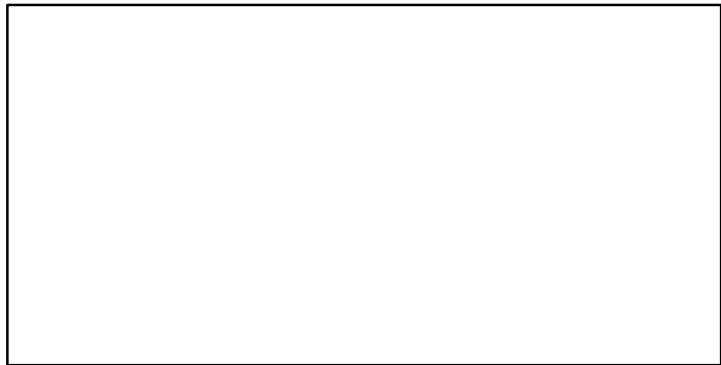
survB*



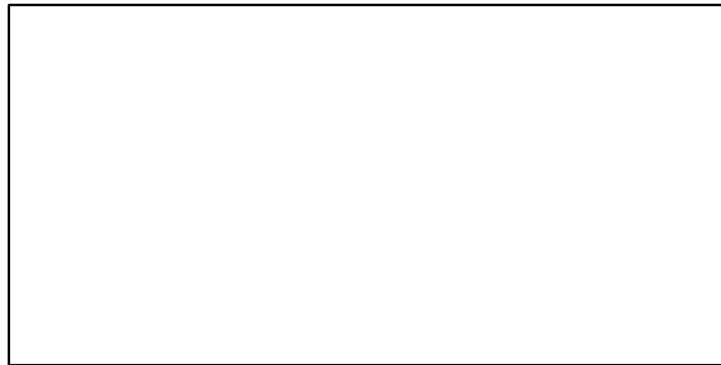
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Labadie, Jones and Cockburn (FU 20-21) [NEPHFU2021]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU2021-1995-2016-ICESIMP2018
Area	Labadie, Jones and Cockburn (FU 20-21)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.06
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.06
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.047	-	-
TC	-	-	-		
TL	TL-MT	2016	2450		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.783		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

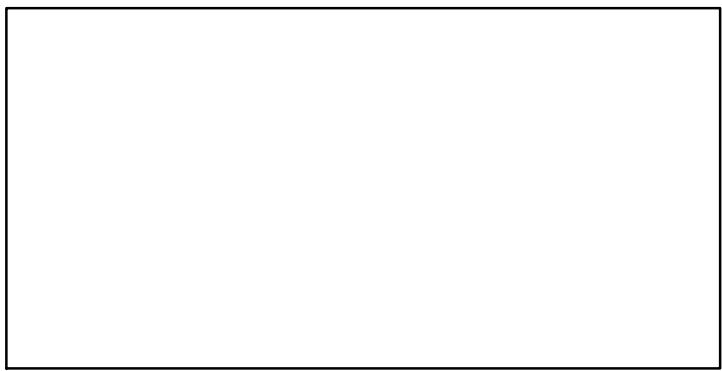
Kobe MGT*

Spawner Recruit*

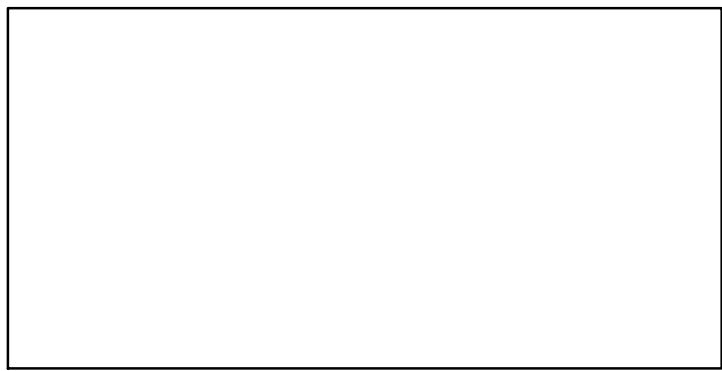
Production*

◆ Start Year ◆ End Year * No Data

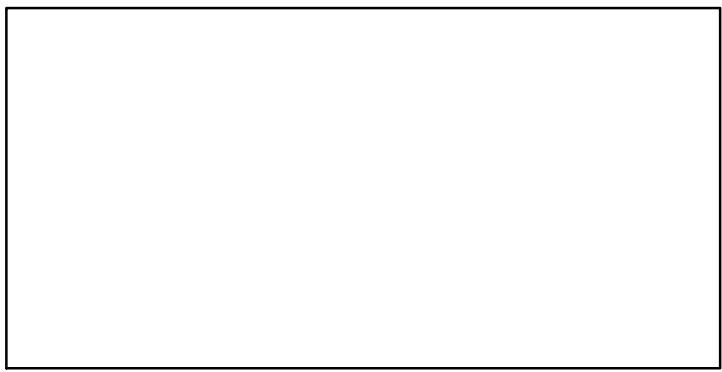
TB*



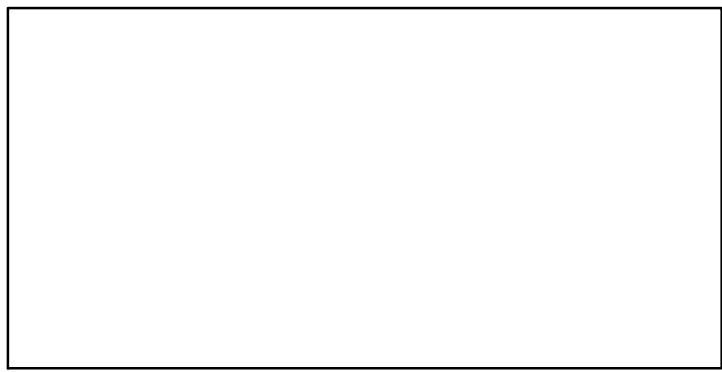
SSB*



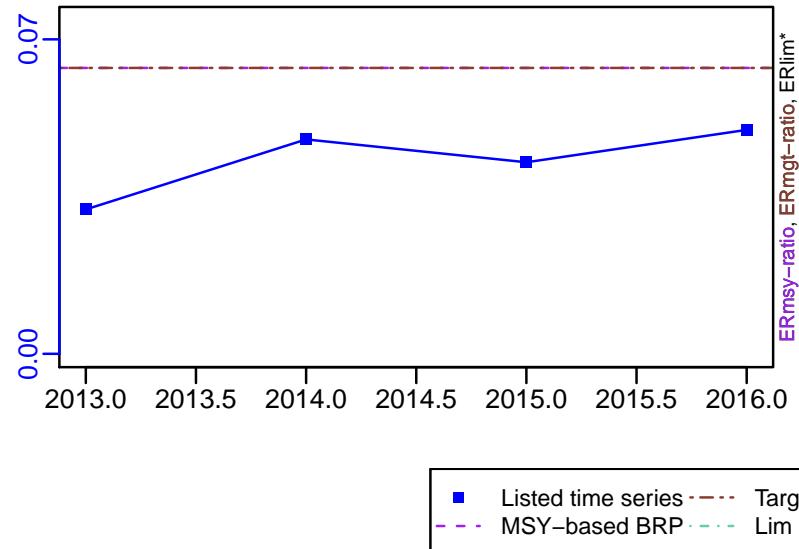
TN *



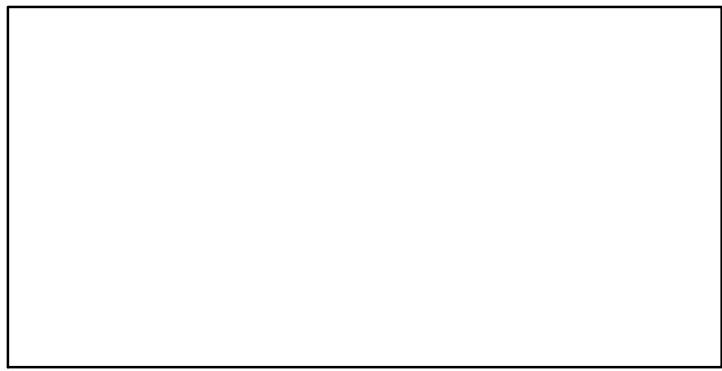
F*



ER-ratio (1995–2016–ICESIMP2018)



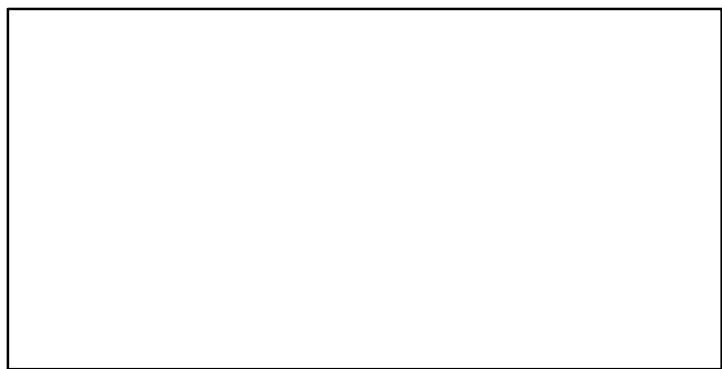
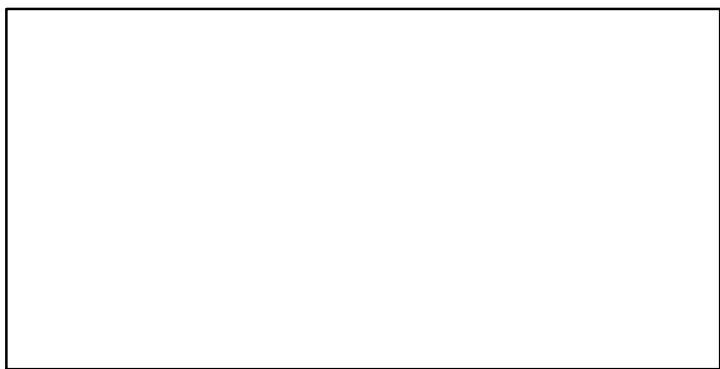
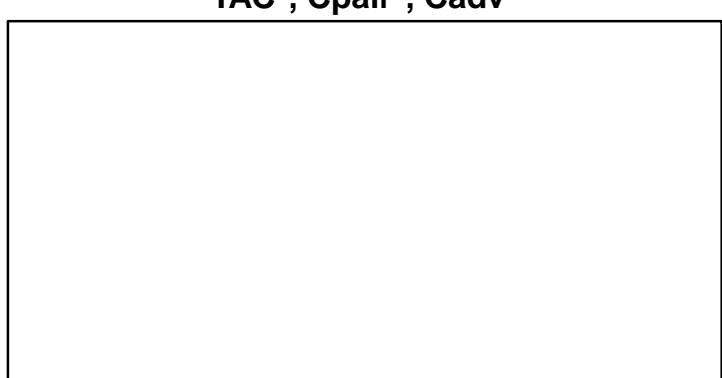
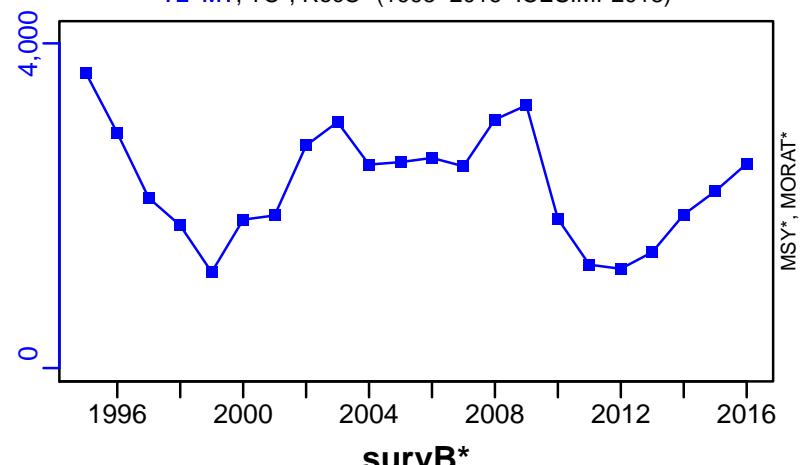
Recruits*



Norway lobster Labadie, Jones and Cockburn (FU 20–21) [NEPHFU2021]

TL-MT, TC*, RecC* (1995–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

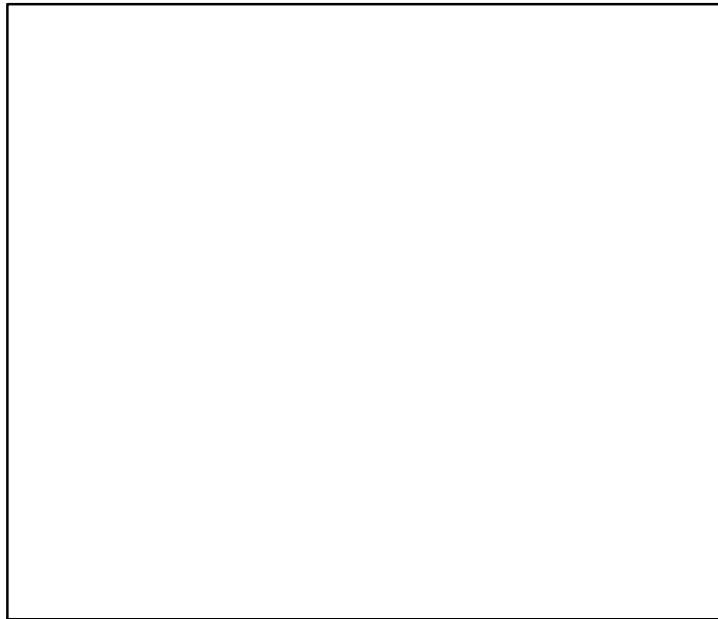
Norway lobster Smalls (FU 22) [NEPHFU22]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU22-1999-2016-ICESIMP2018
Area	Smalls (FU 22)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016

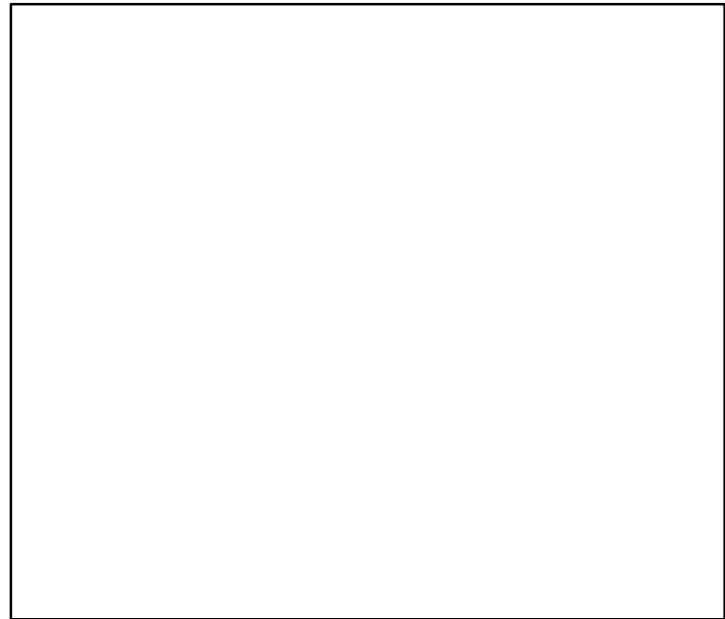
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.128
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.128
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.228	-	-
TC	-	-	-		
TL	TL-MT	2016	3280		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.781		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

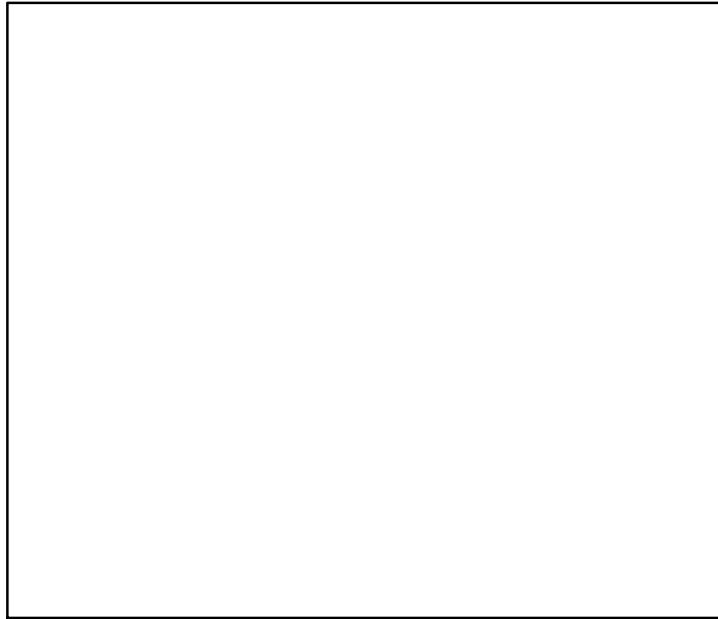
Kobe MSY*



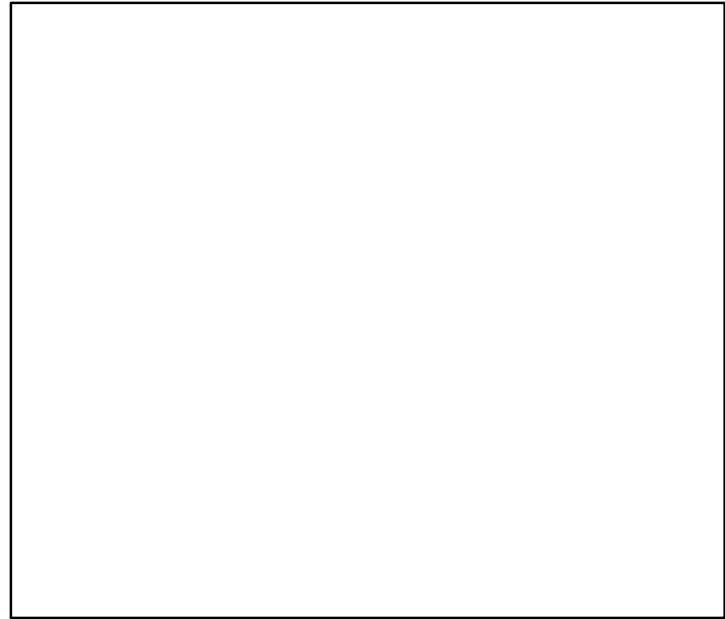
Kobe MGT*



Spawner Recruit*



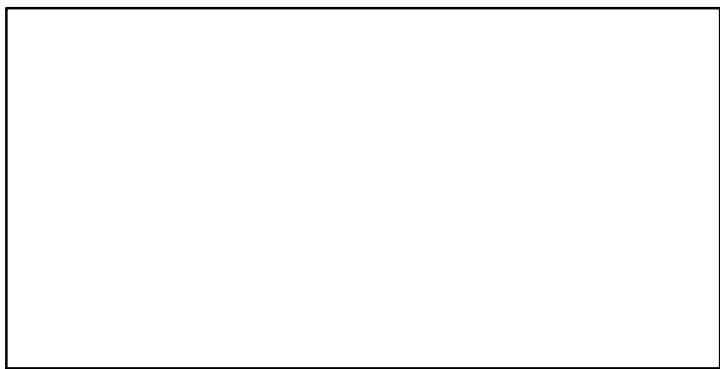
Production*



◆ Start Year ♦ End Year * No Data

Norway lobster Smalls (FU 22) [NEPHFU22]

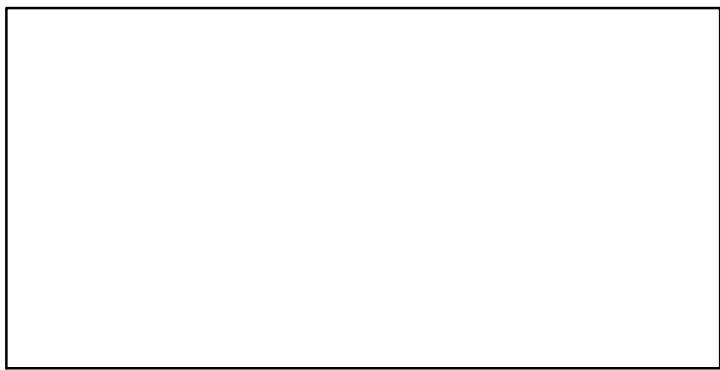
TB*



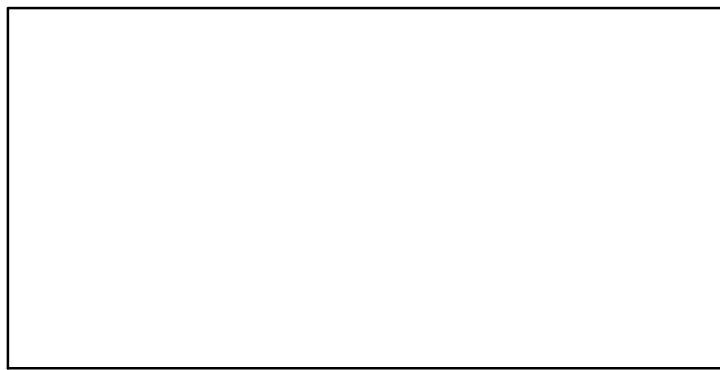
SSB*



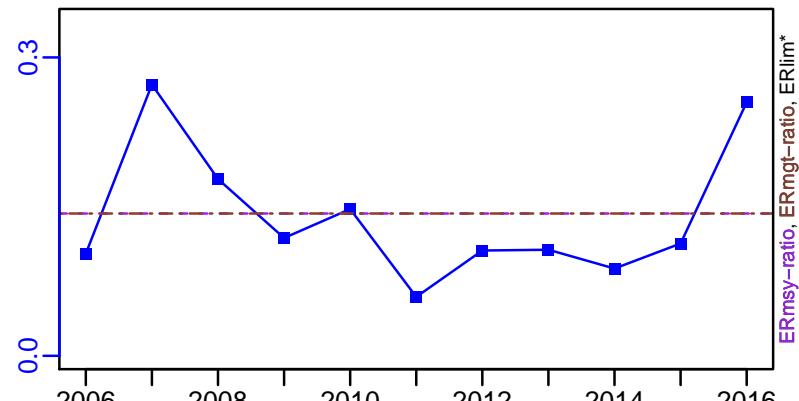
TN *



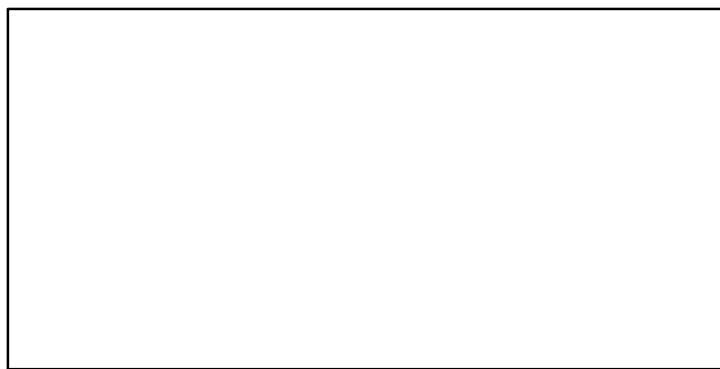
F*



ER-ratio (1999–2016–ICESIMP2018)



Recruits*

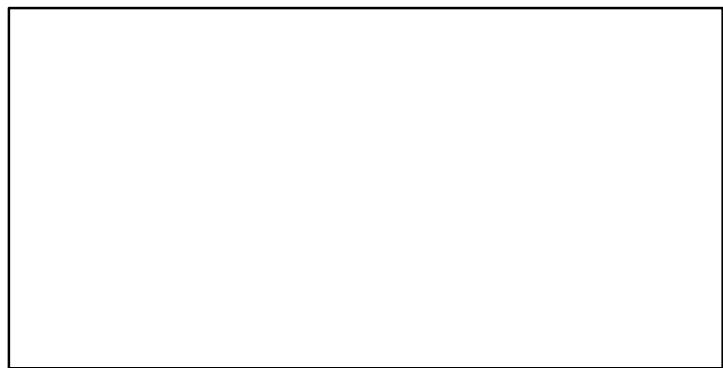
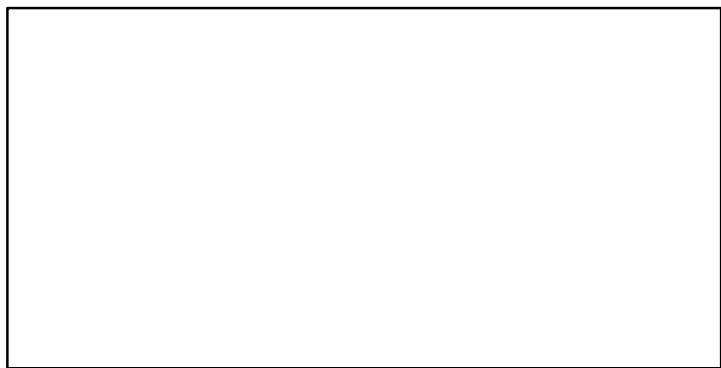
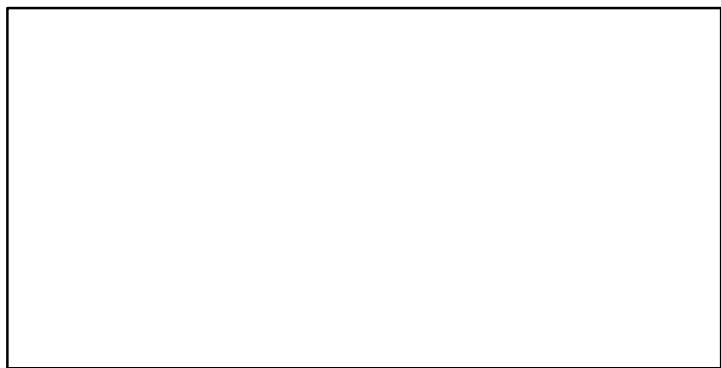
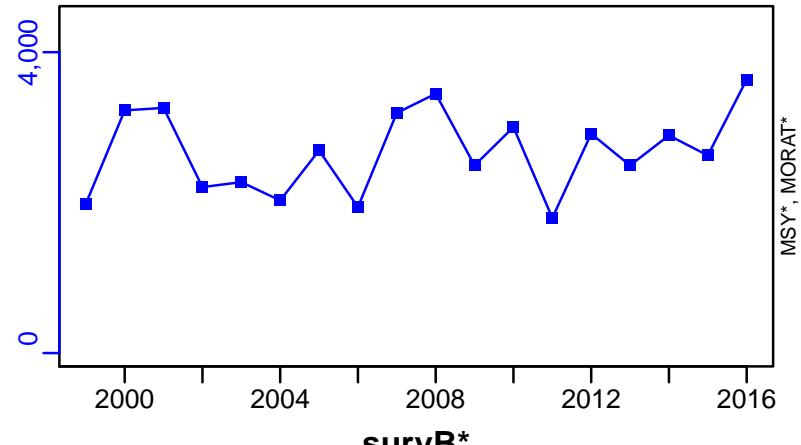


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

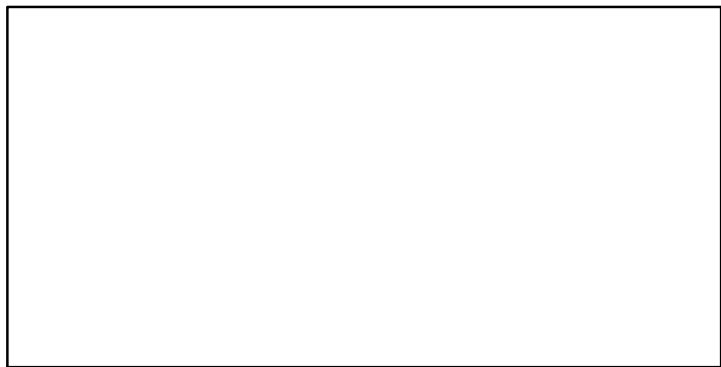
Norway lobster Small (FU 22) [NEPHFU22]

TL-MT, TC*, RecC* (1999–2016–ICESIMP2018)

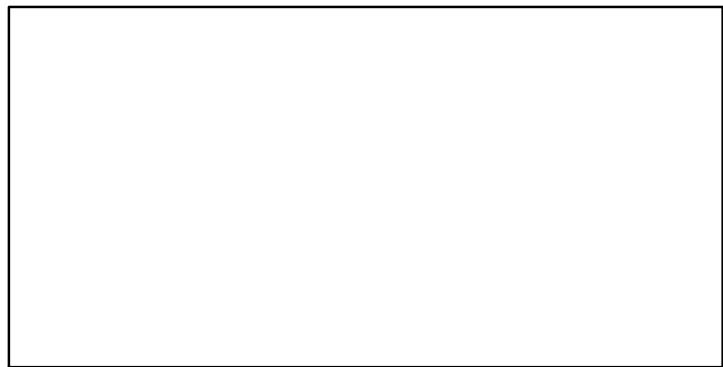
TAC*, Cpair*, Cadv*



EFFORT*



CdivMSY*



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

Norway lobster North Galicia (FU 25) [NEPHFU25]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU25-1975-2016-ICESIMP2016
Area	North Galicia (FU 25)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	14		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Norway lobster North Galicia (FU 25) [NEPHFU25]

TB*



SSB*



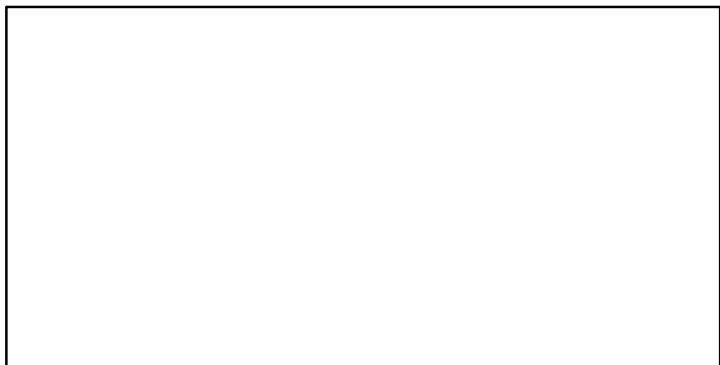
TN *



F*



ER*



Recruits*

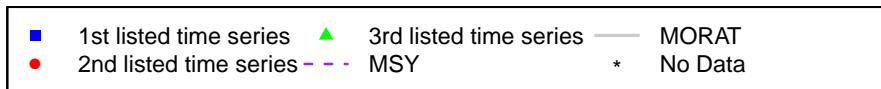
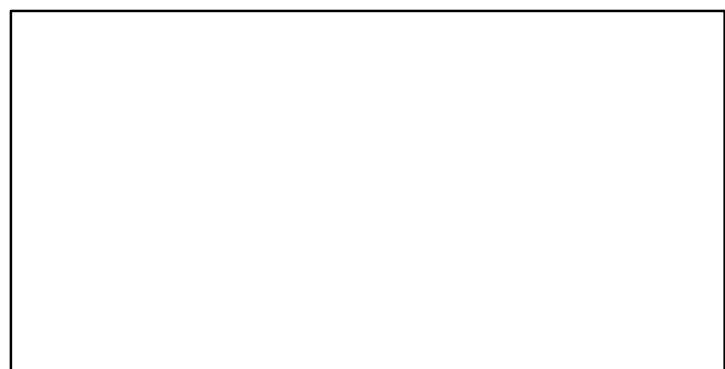
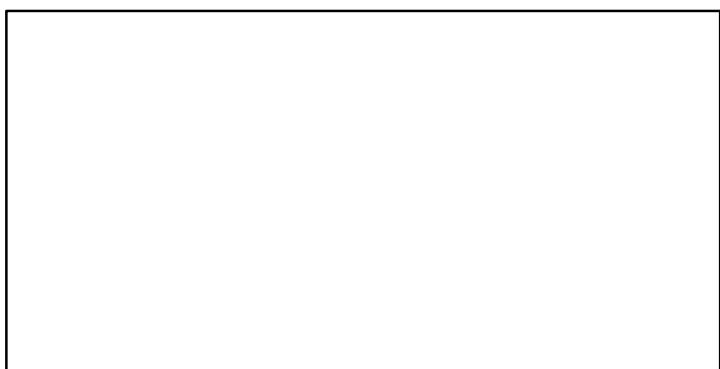
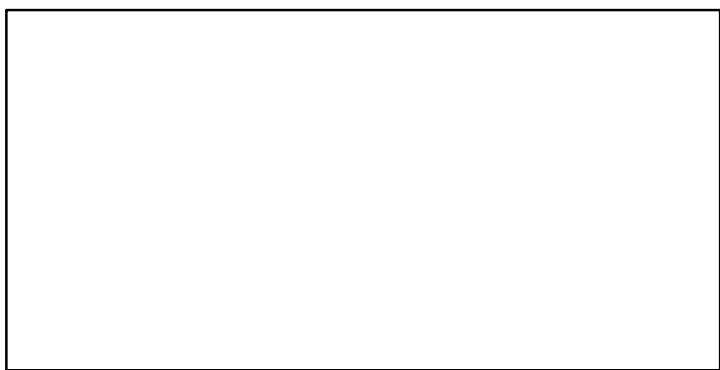
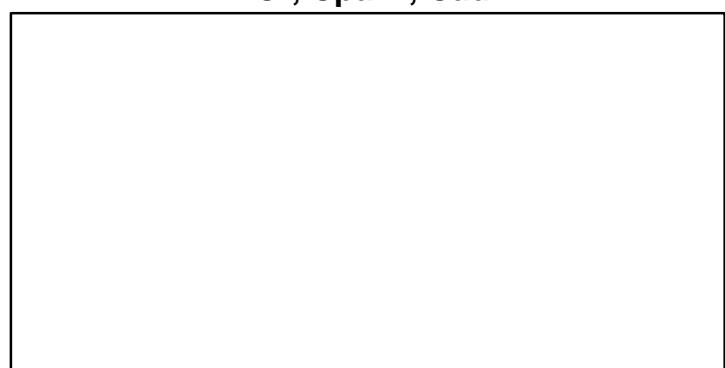
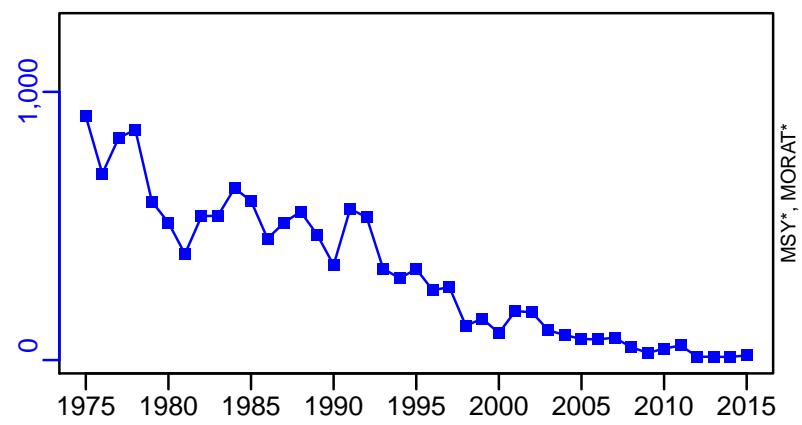


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Norway lobster North Galicia (FU 25) [NEPHFU25]

TL-MT, TC*, RecC* (1975–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*



Norway lobster West Galicia and North Portugal (FU 26-27) [NEPHFU2627]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU2627-1975-2016-ICESIMP2016
Area	West Galicia and North Portugal (FU 26-27)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1.53		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

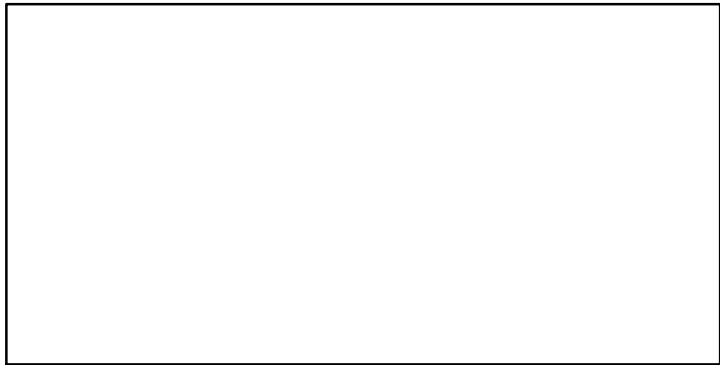
Kobe MGT*

Spawner Recruit*

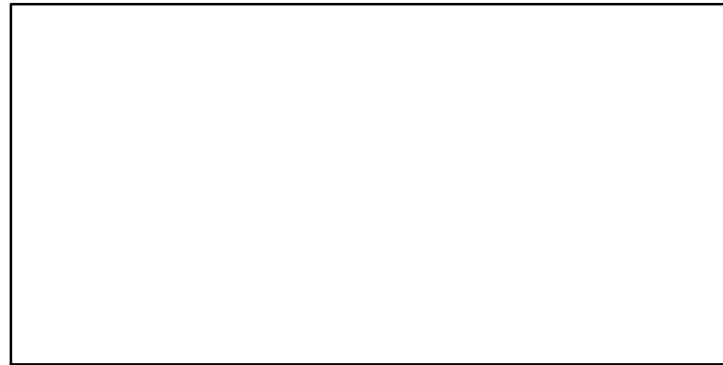
Production*

◆ Start Year ◆ End Year * No Data

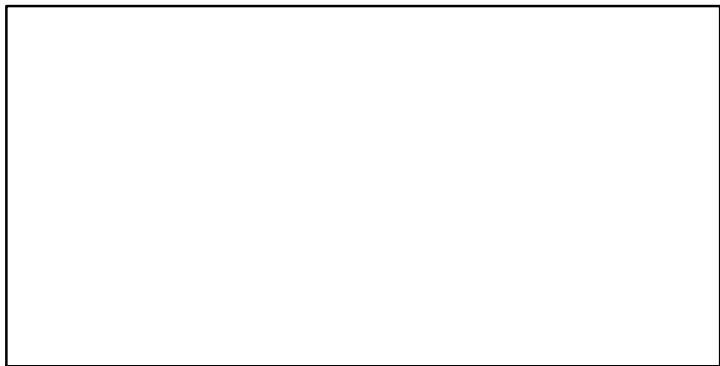
TB*



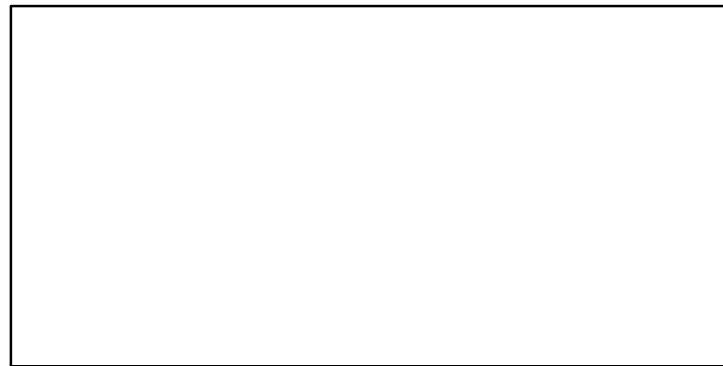
SSB*



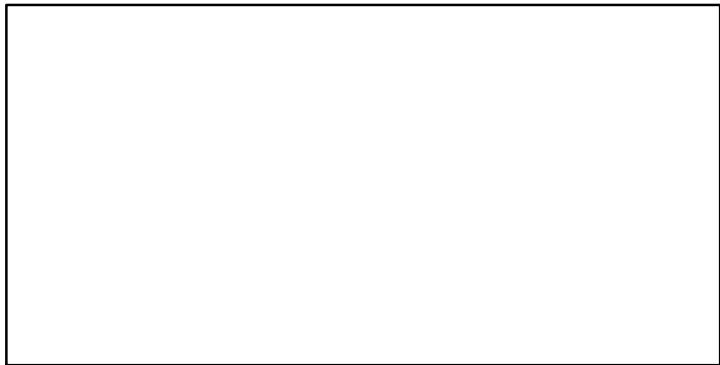
TN *



F*



ER*



Recruits*

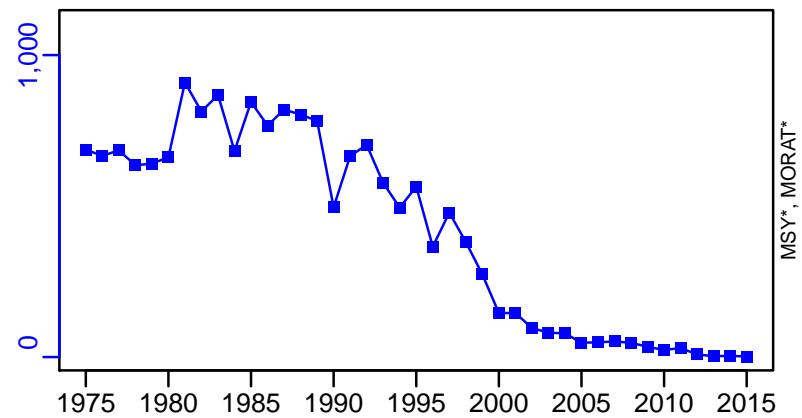


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Norway lobster West Galicia and North Portugal (FU 26–27) [NEPHFU2627]

TL-MT, TC*, RecC* (1975–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*



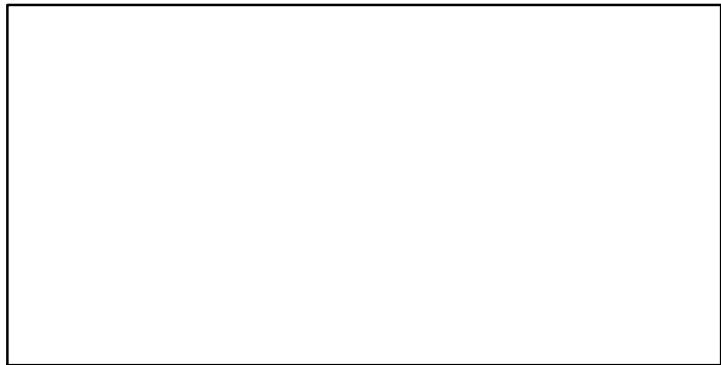
survB*



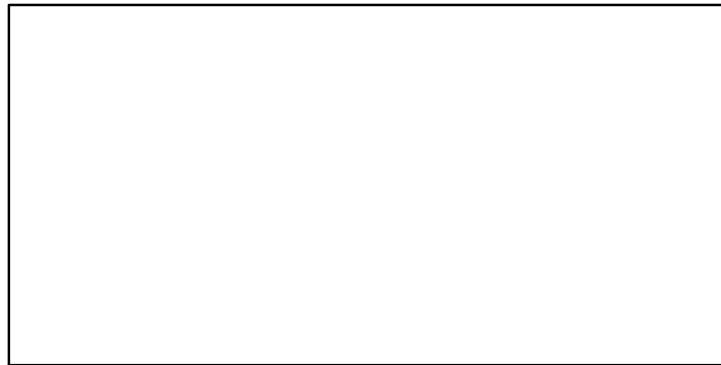
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster South-West and South Portugal (FU 28-29) [NEPHFU2829]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU2829-1984-2016-ICESIMP2018
Area	South-West and South Portugal (FU 28-29)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	0.22
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	-	-	-	-	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	F-1/yr	2016	0.099	-	-	
ER	-	-	-	-	-	
TC	-	-	-			
TL	TL-MT	2016	235			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.449			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Norway lobster South-West and South Portugal (FU 28–29) [NEPHFU2829]

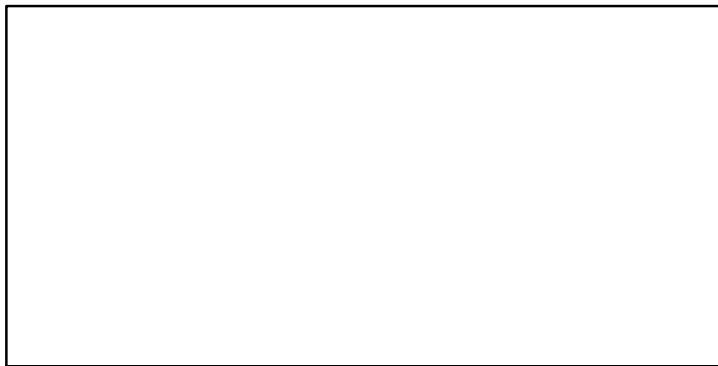
TB*



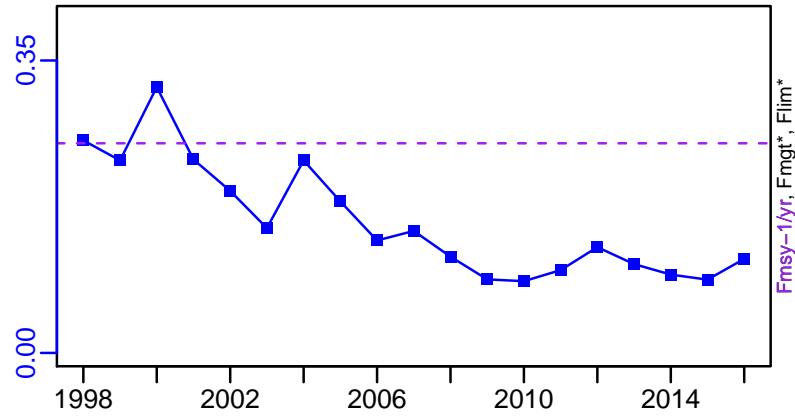
SSB*



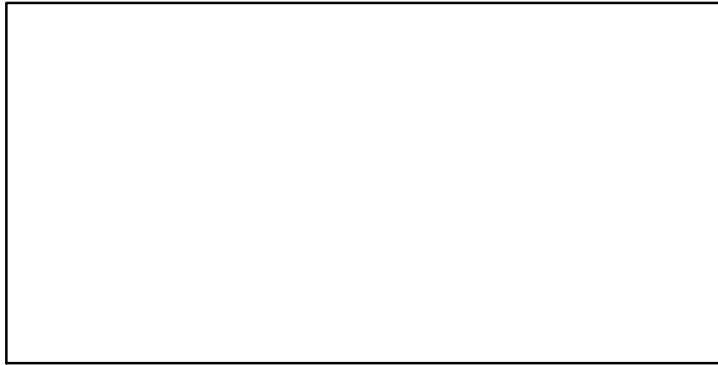
TN *



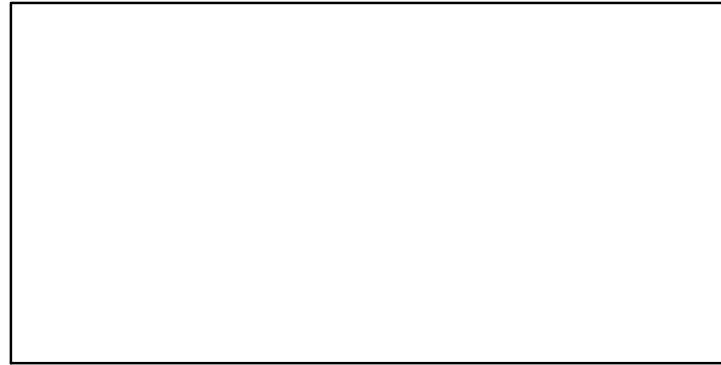
F-1/yr (1984–2016–ICESIMP2018)



ER*



Recruits*

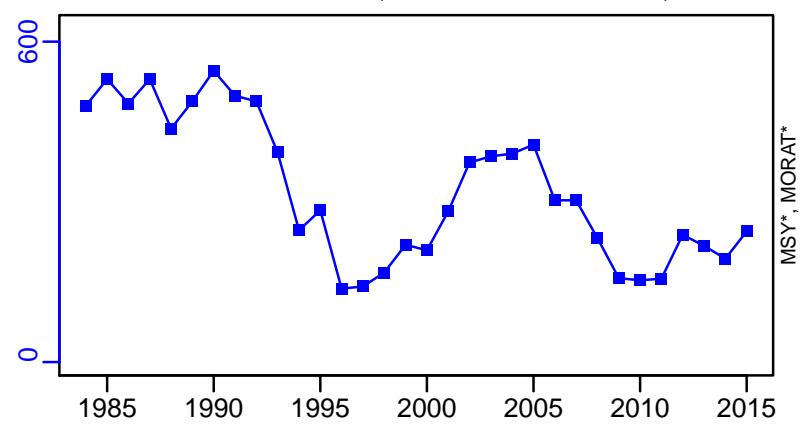


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

Norway lobster South-West and South Portugal (FU 28–29) [NEPHFU2829]

TL-MT, TC*, RecC* (1984–2016—ICESIMP2016)

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 Gulf of Cadiz (FU 30) [NEPHFU30]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU30-1994-2017-ICESIMP2018
Area	Gulf of Cadiz (FU 30)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2017	370	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2017	0.023	-	-
TC	-	-	-		
TL	TL-MT	2017	124		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERrmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

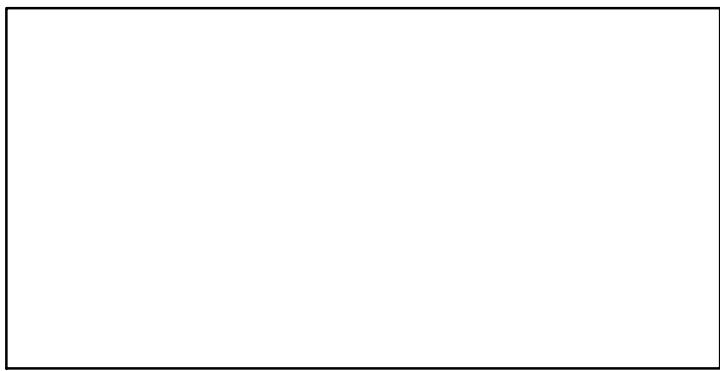
Spawner Recruit*

Production*

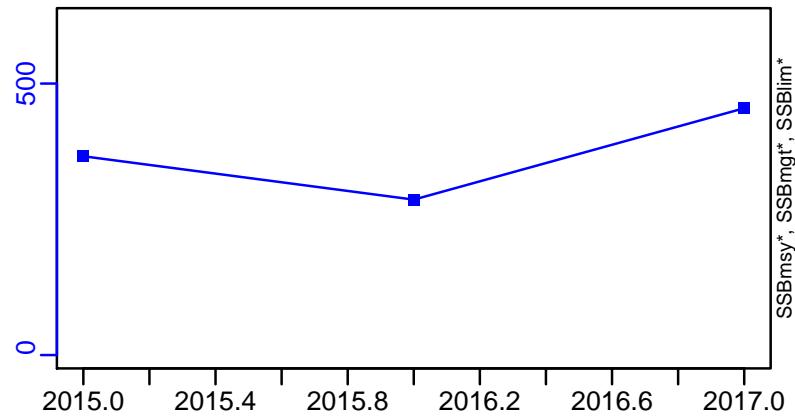
◆ Start Year ♦ End Year * No Data

Norway lobster Gulf of Cadiz (FU 30) [NEPHFU30]

TB*



SSB-E00 (1994–2017–ICESIMP2018)



SSB_ms^y, SSB_mg^t, SSB_ll^m*

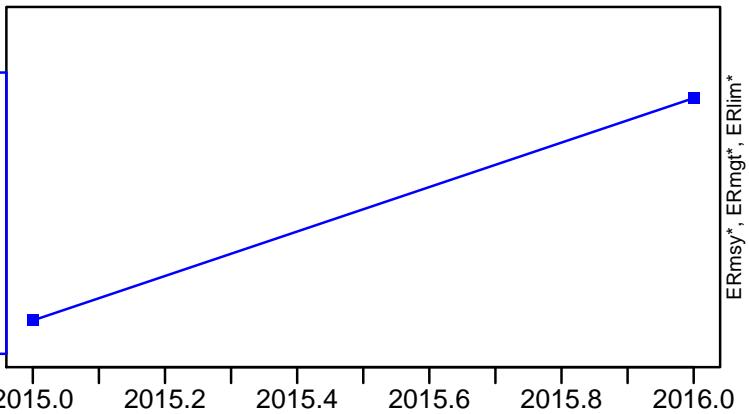
TN *



F*

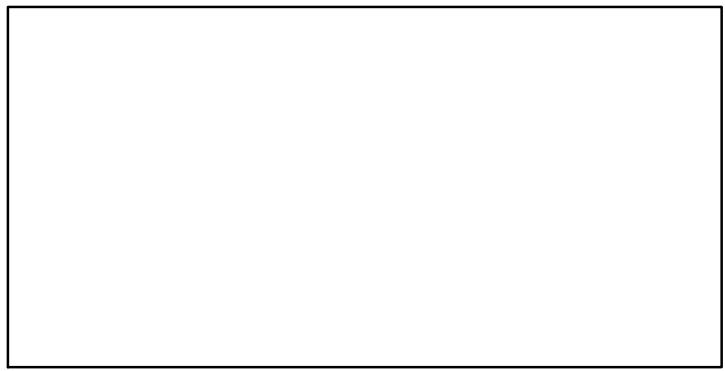


ER-ratio (1994–2017–ICESIMP2018)



ER_ms^y, ER_mg^t, ER_ll^m*

Recruits*

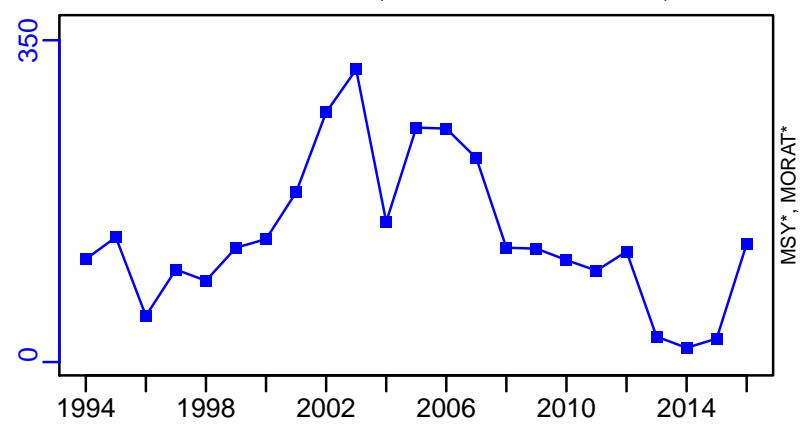


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Norway lobster Gulf of Cadiz (FU 30) [NEPHFU30]

TL-MT, TC*, RecC* (1994–2017–ICESIMP2018)

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 |

Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU31-1983-2016-ICESIMP2016
Area	Cantabrian Sea (FU 31)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	4.26		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

TB*



SSB*



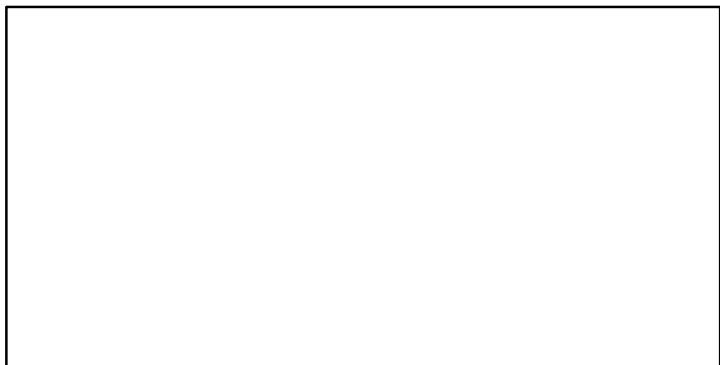
TN *



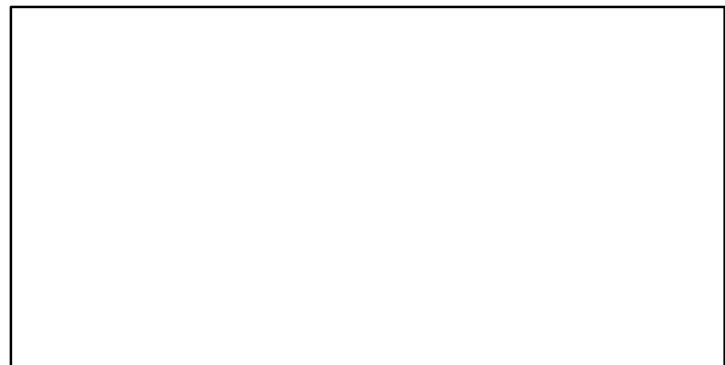
F*



ER*



Recruits*

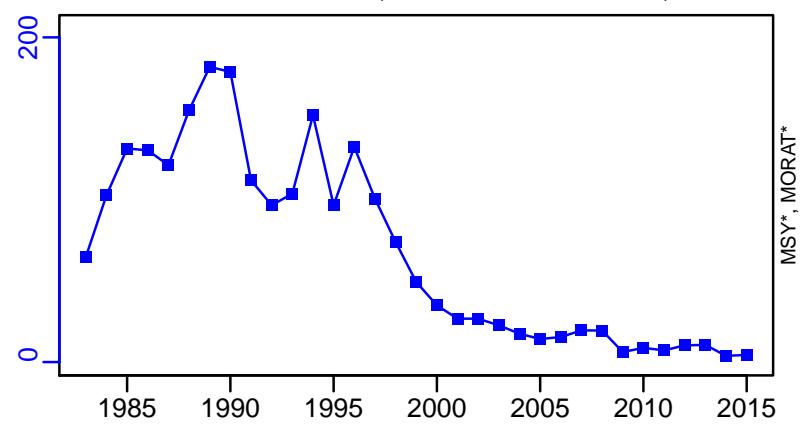


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

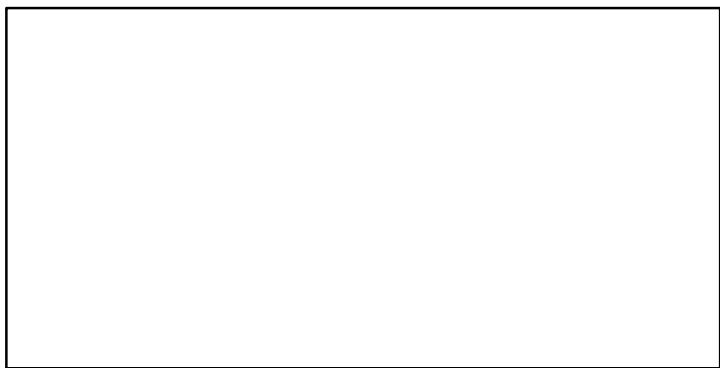
Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

TL-MT, TC*, RecC* (1983–2016—ICESIMP2016)

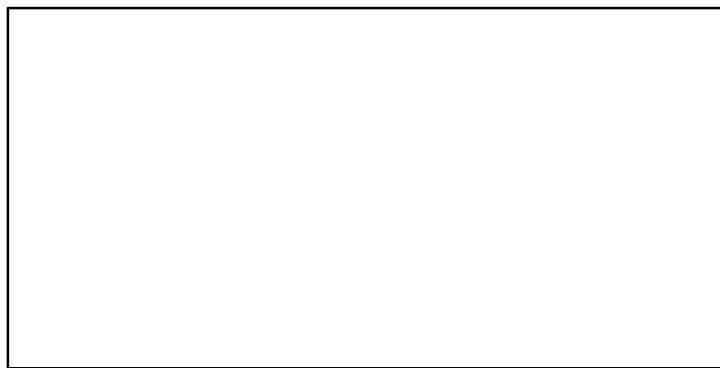
TAC*, Cpair*, Cadv*



survB*



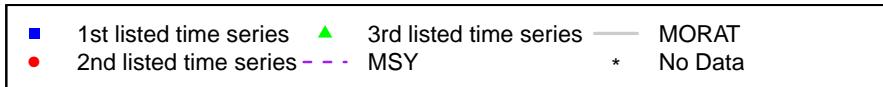
CPUE*



EFFORT*



CdivMSY*



Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU32-1987-2017-ICESIMP2018
Area	Norwegian Deeps (FU 32)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	198		
TL	TL-MT	2017	53		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

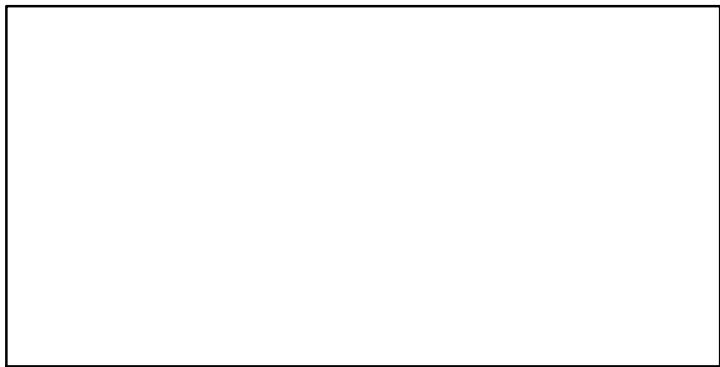
Spawner Recruit*

Production*

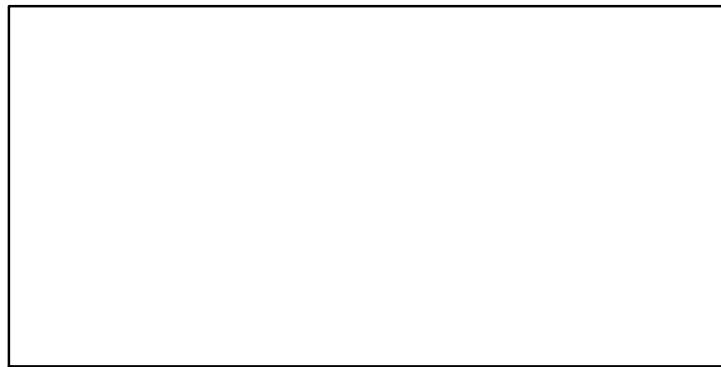
◆ Start Year ◆ End Year * No Data

Norway lobster Norwegian Deep (FU 32) [NEPHFU32]

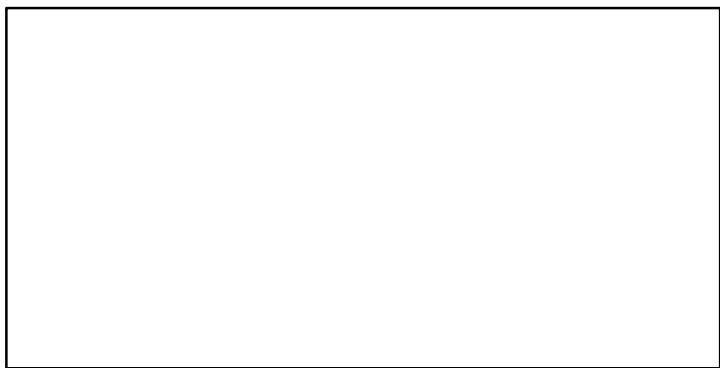
TB*



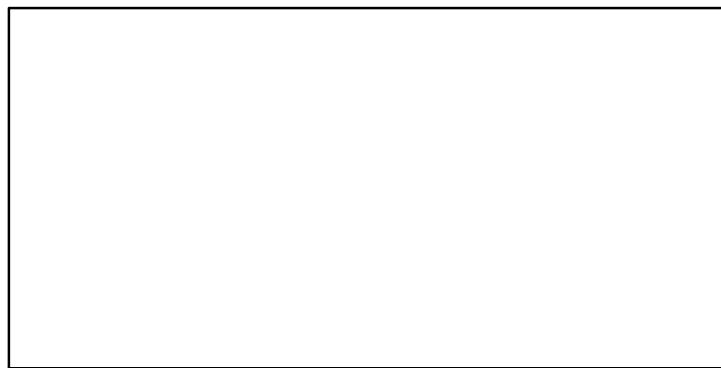
SSB*



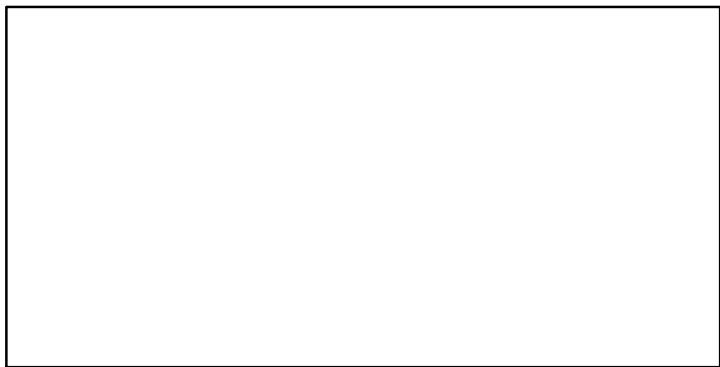
TN *



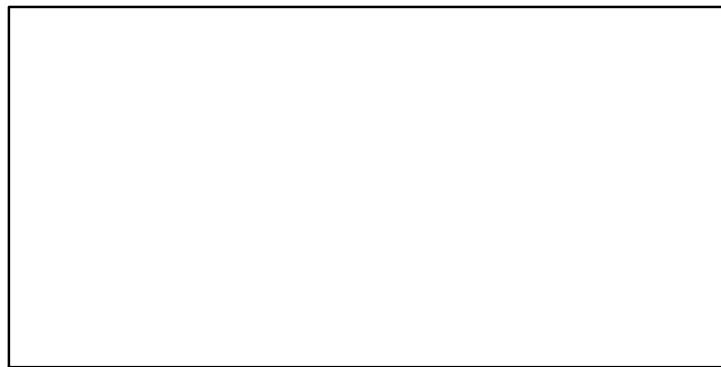
F*



ER*



Recruits*

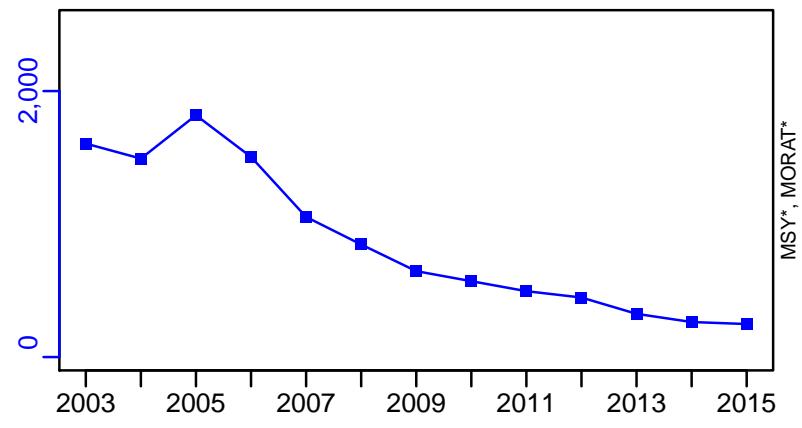


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

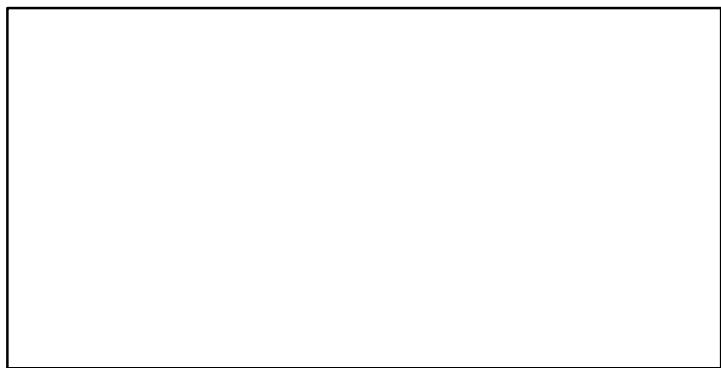
Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

TC-MT, TL*, RecC* (1987–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*

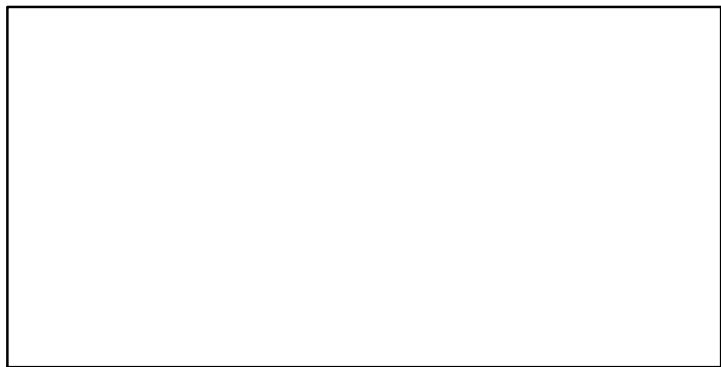


survB*

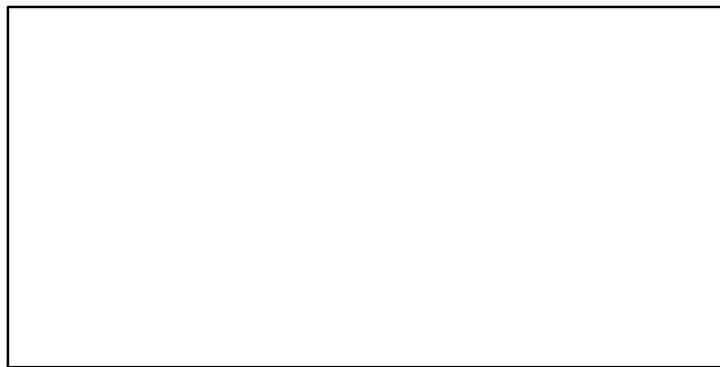


CPUE*

EFFORT*



CdivMSY*



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

Norway lobster Off Horn Reef (FU 33) [NEPHFU33]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU33-1993-2017-ICESIMP2018
Area	Off Horn Reef (FU 33)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	1470		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Norway lobster Off Horn Reef (FU 33) [NEPHFU33]

TB*



SSB*



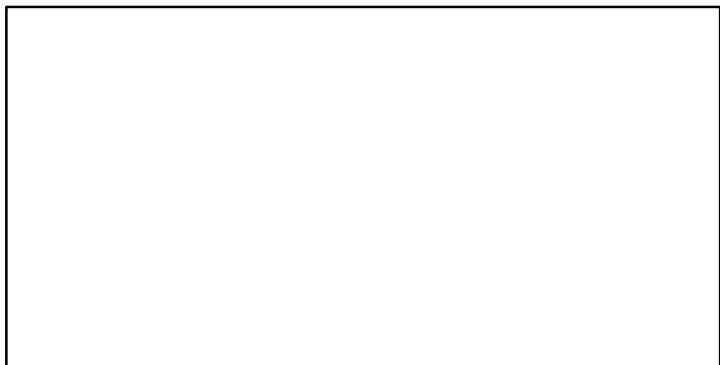
TN *



F*



ER*



Recruits*

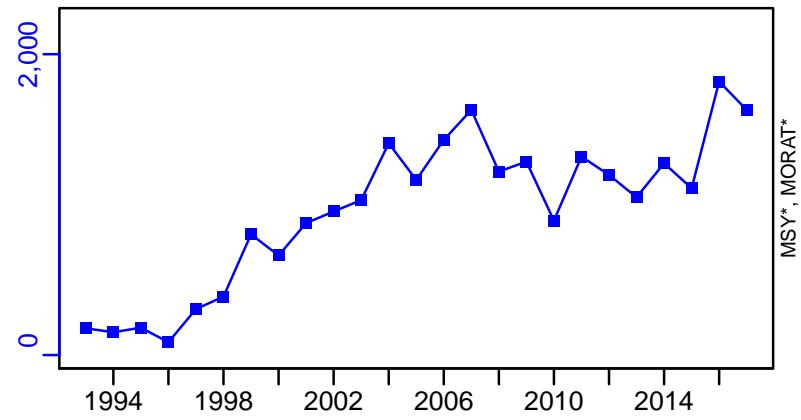


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

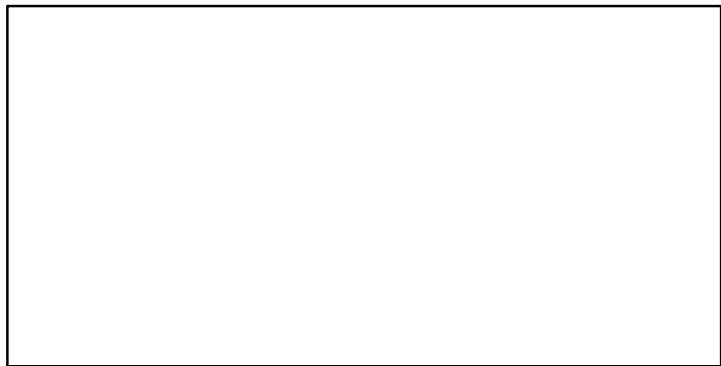
Norway lobster Off Horn Reef (FU 33) [NEPHFU33]

TL-MT, TC*, RecC* (1993–2017–ICESIMP2018)

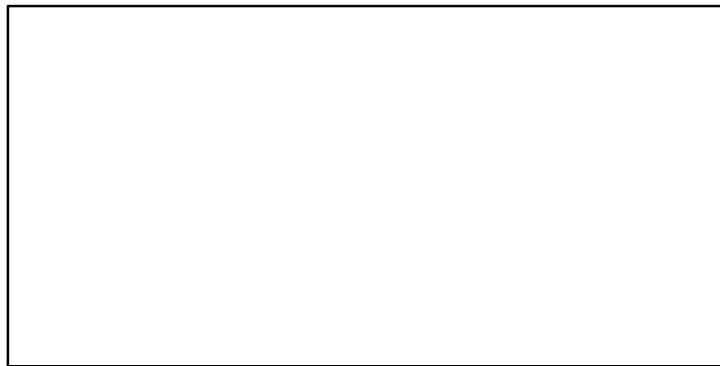
TAC*, Cpair*, Cadv*



survB*



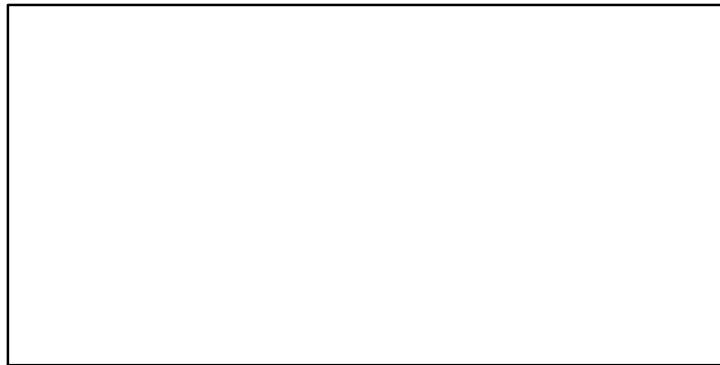
CPUE*



EFFORT*



CdivMSY*



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

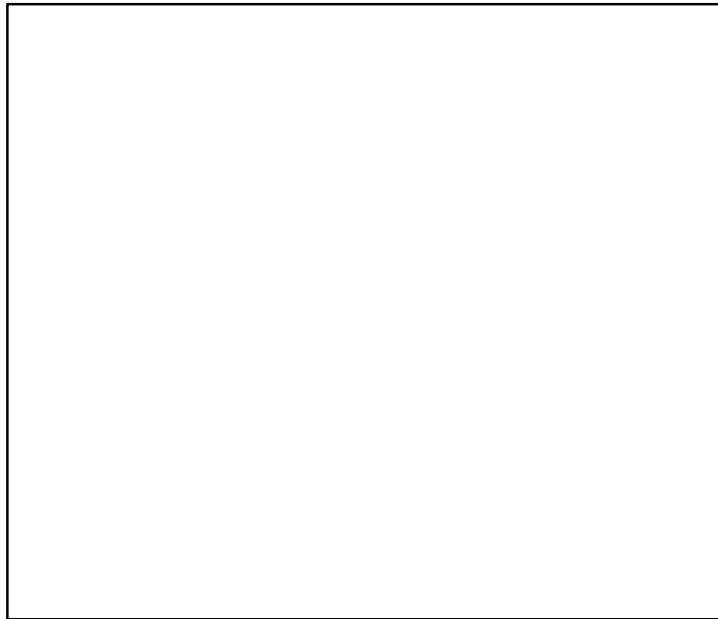
Norway lobster Devils Hole (FU 34) [NEPHFU34]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU34-2003-2017-ICESIMP2018
Area	Devils Hole (FU 34)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

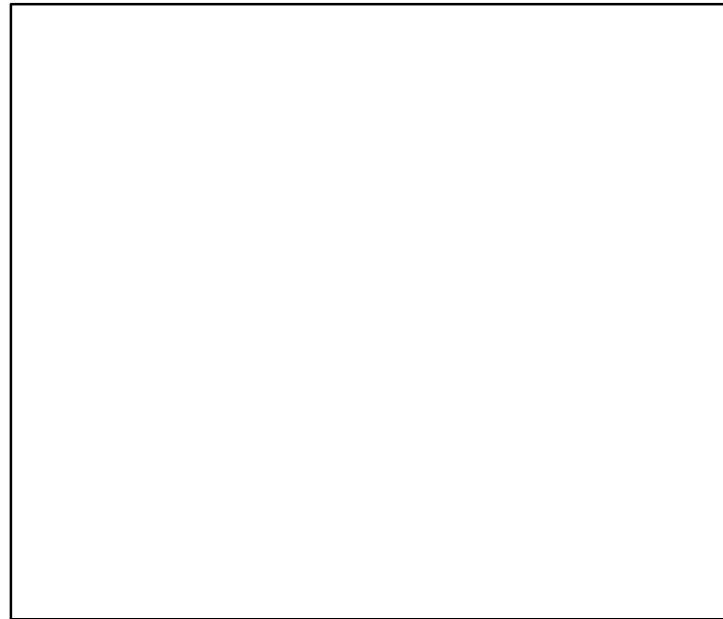
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	550		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

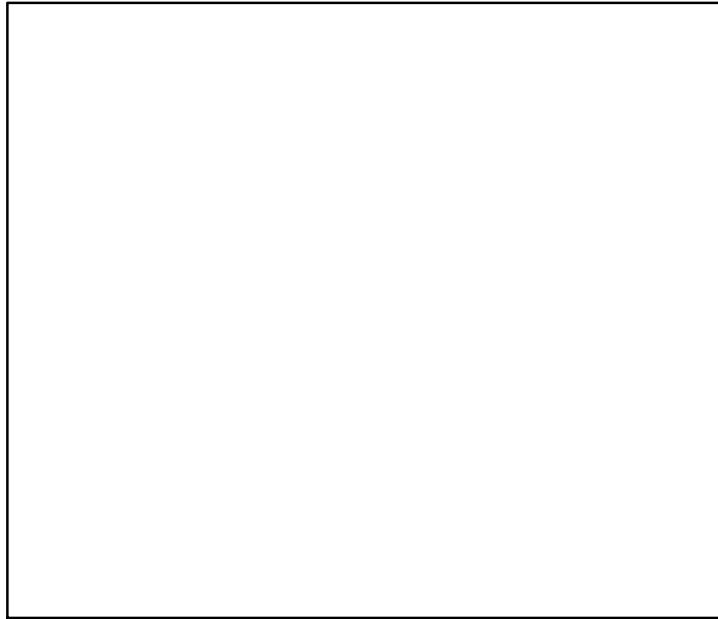
Kobe MSY*



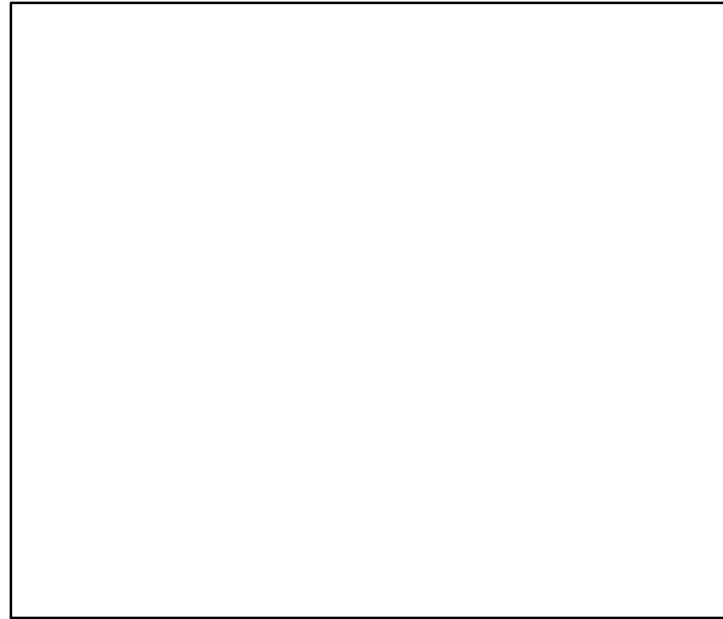
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Norway lobster Devils Hole (FU 34) [NEPHFU34]

TB*



SSB*



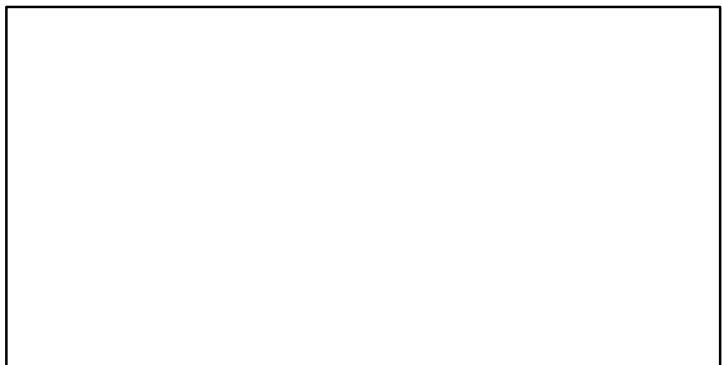
TN *



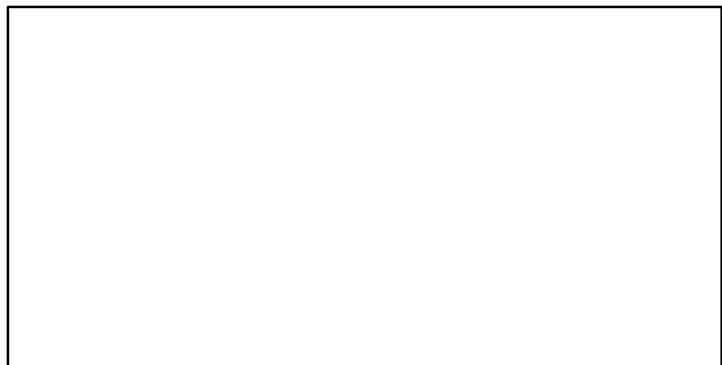
F*



ER*



Recruits*

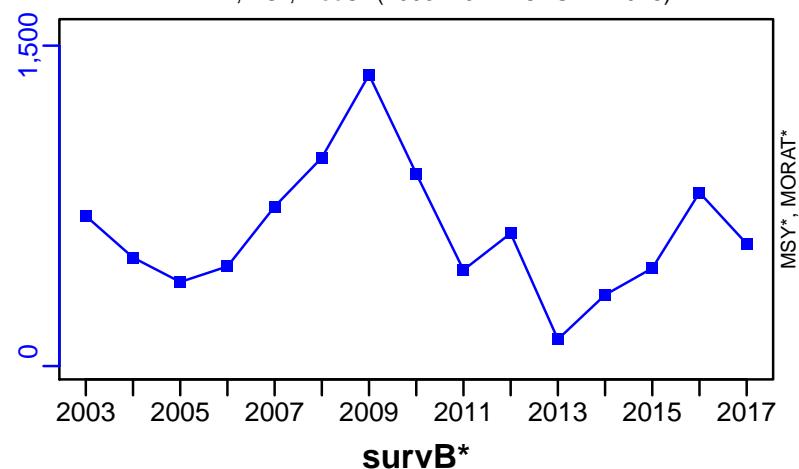


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

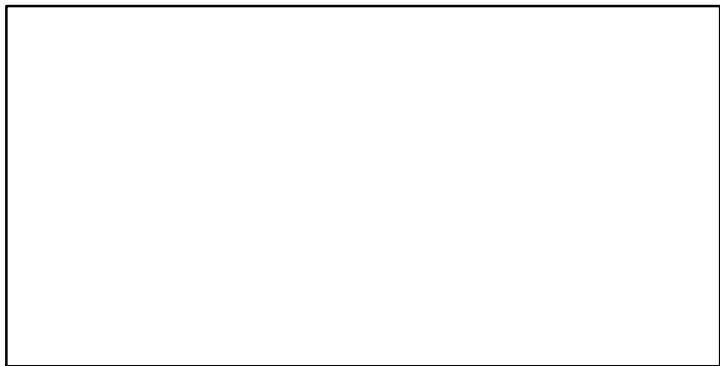
Norway lobster Devils Hole (FU 34) [NEPHFU34]

TL-MT, TC*, RecC* (2003–2017–ICESIMP2018)

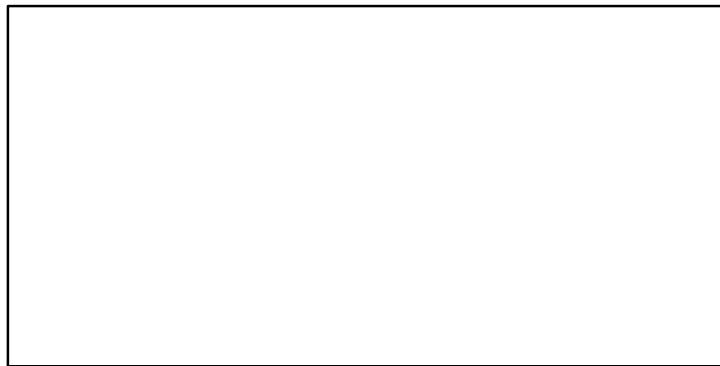
TAC*, Cpair*, Cadv*



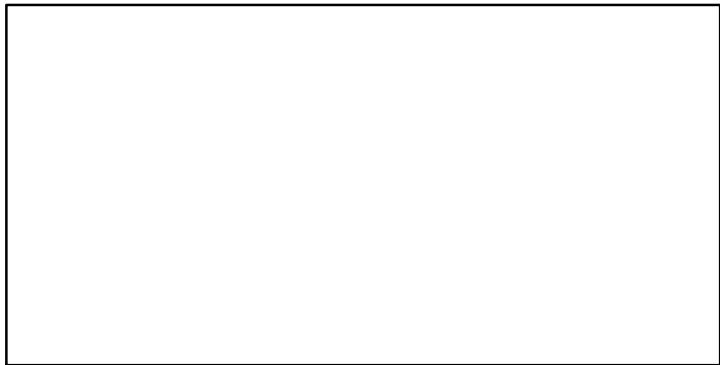
survB*



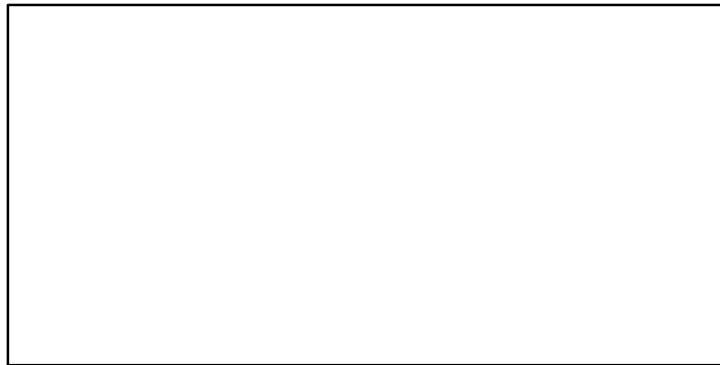
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Skagerak Kattegat (FU 3-4) [NEPHFU3-4]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU3-4-1960-2017-ICESIMP2018
Area	Skagerak Kattegat (FU 3-4)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2016, 2017, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.079
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.079
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	-	-	-	-	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	-	-	-	-	-	-
ER	ER-ratio	2016	0.031	-	-	-
TC	TC-MT	2017	6230			
TL	TL-MT	2017	5210			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.389			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Norway lobster Skagerak Kattegat (FU 3–4) [NEPHFU3–4]

Kobe MSY*

Kobe MGT*

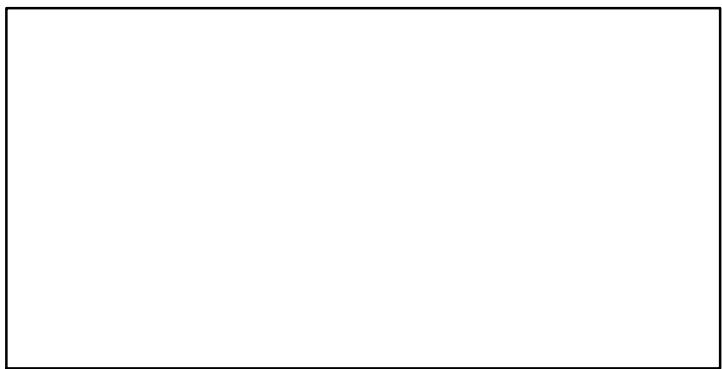
Spawner Recruit*

Production*

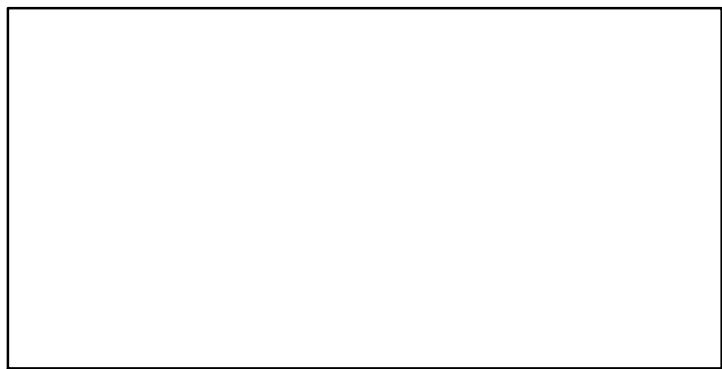
◆ Start Year ♦ End Year * No Data

Norway lobster Skagerak Kattegat (FU 3–4) [NEPHFU3–4]

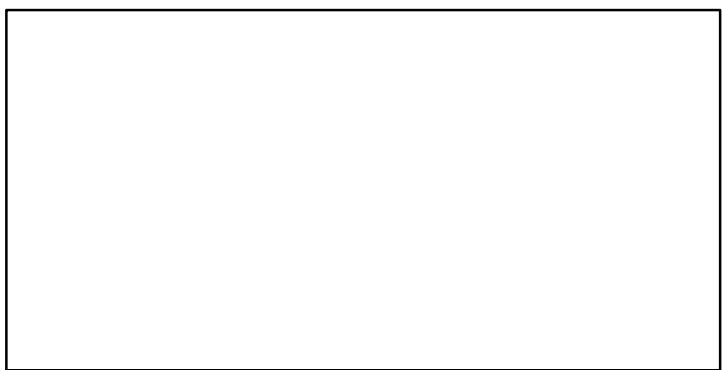
TB*



SSB*



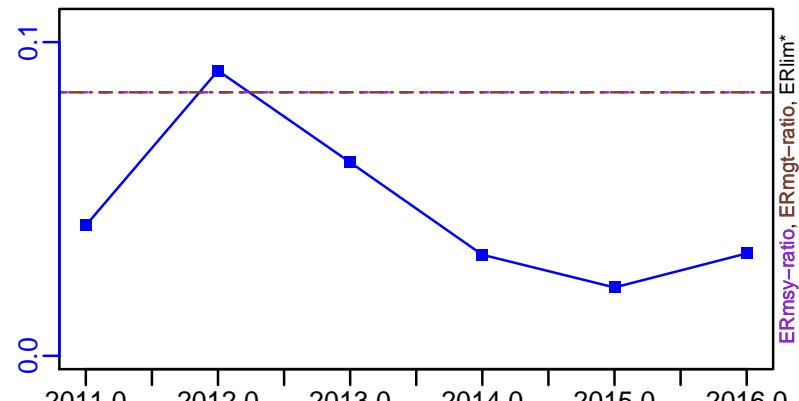
TN *



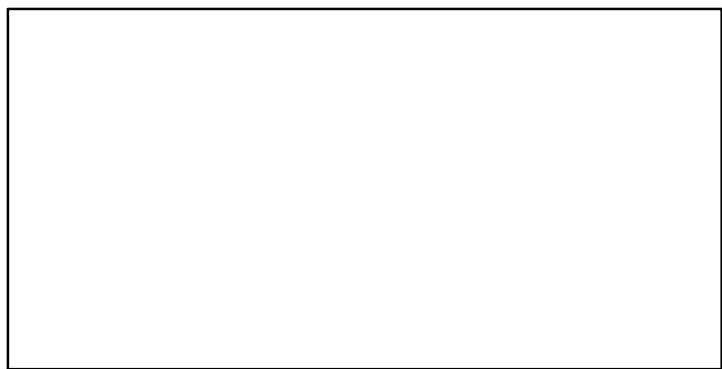
F*



ER-ratio (1960–2016–ICESIMP2018)



Recruits*

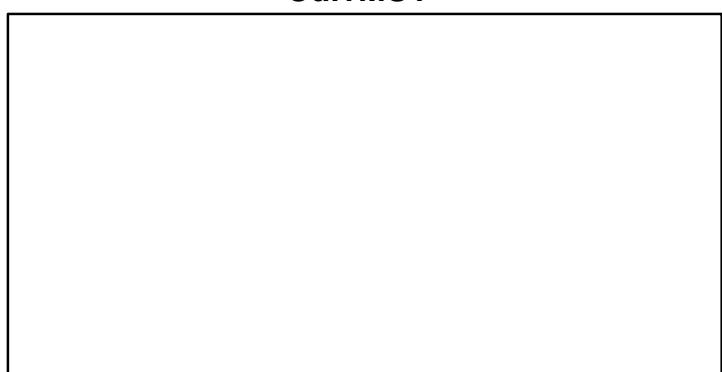
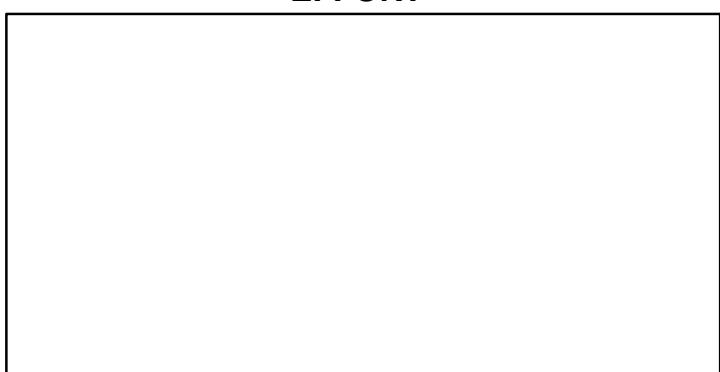
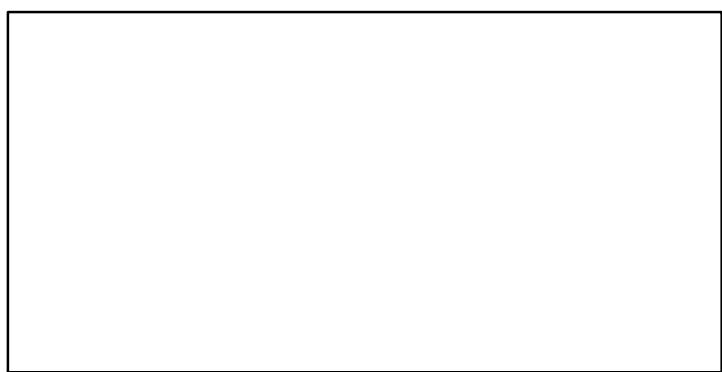
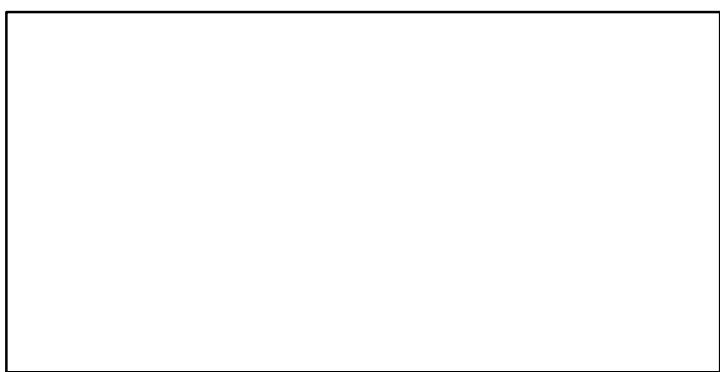
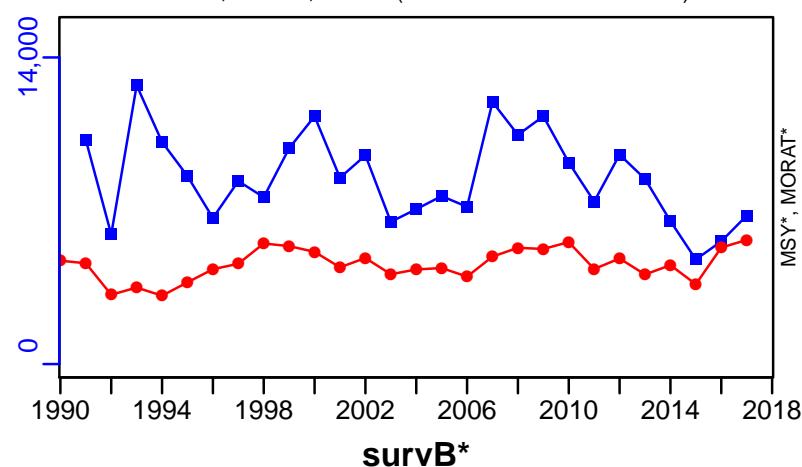


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Norway lobster Skagerak Kattegat (FU 3–4) [NEPHFU3–4]

TC-MT, TL-MT, RecC* (1960–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Norway lobster Botney Cut - Silver Pit (FU 5) [NEPHFU5]

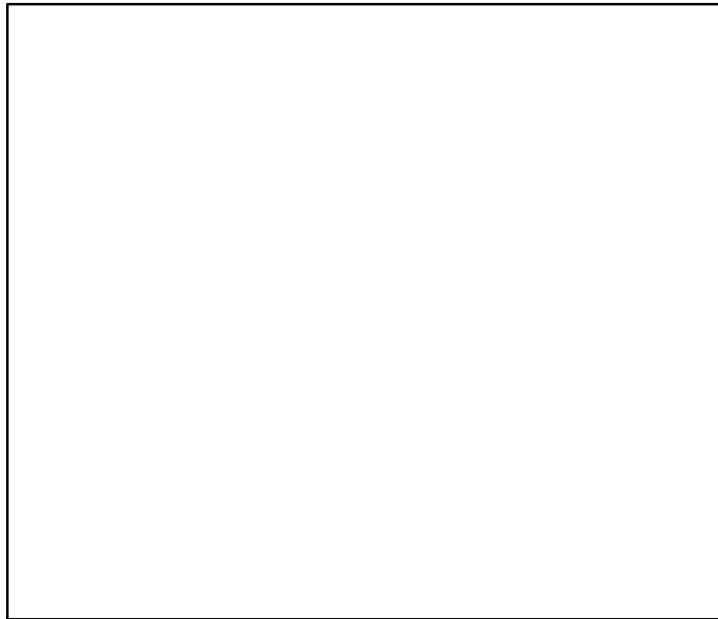
Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU5-1991-2017-ICESIMP2018
Area	Botney Cut - Silver Pit (FU 5)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2017

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

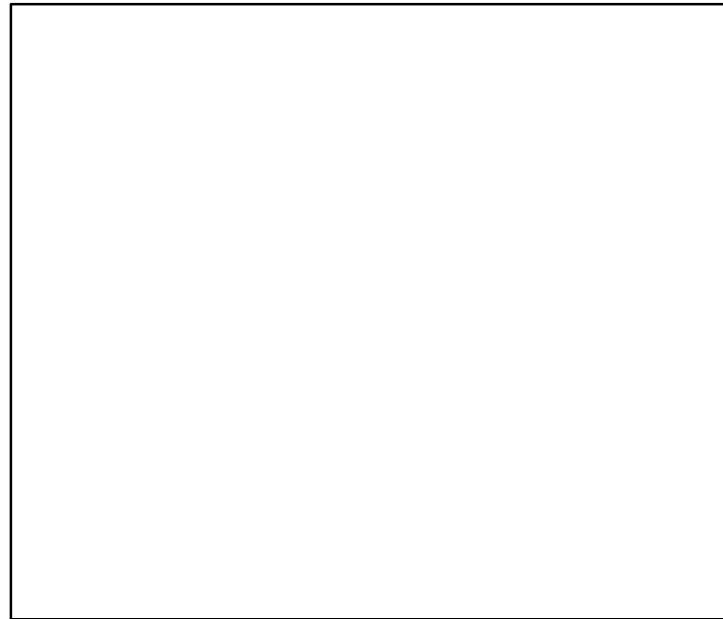
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	2110		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway lobster Botney Cut – Silver Pit (FU 5) [NEPHFU5]

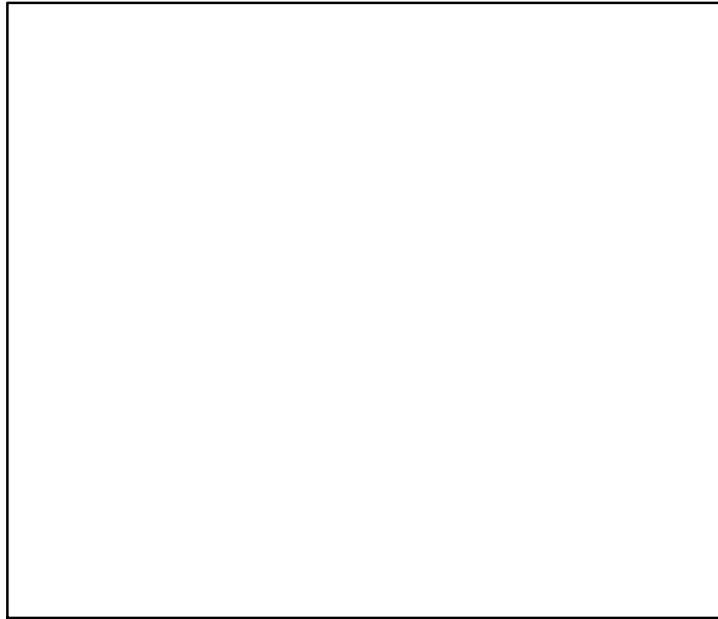
Kobe MSY*



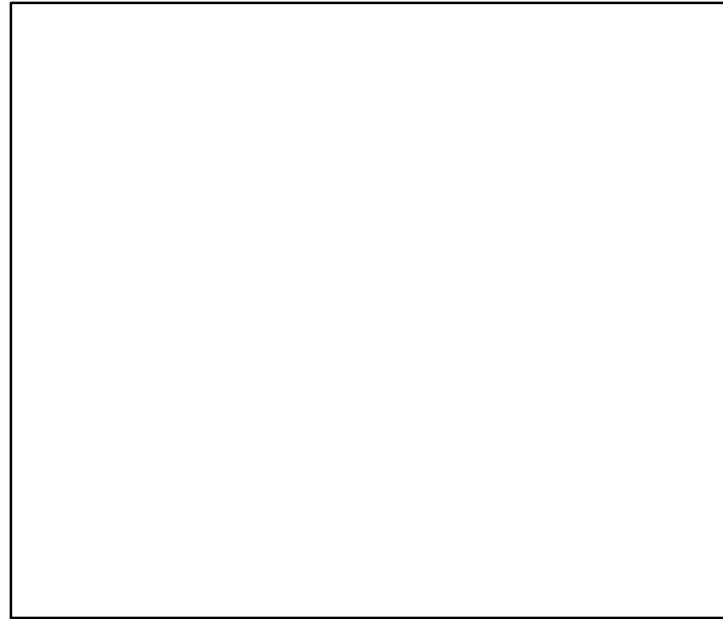
Kobe MGT*



Spawner Recruit*



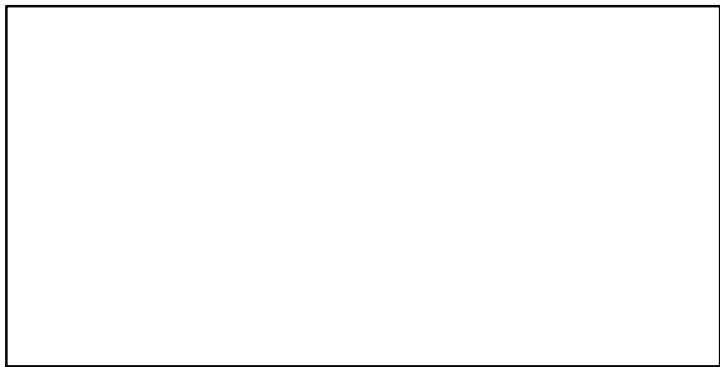
Production*



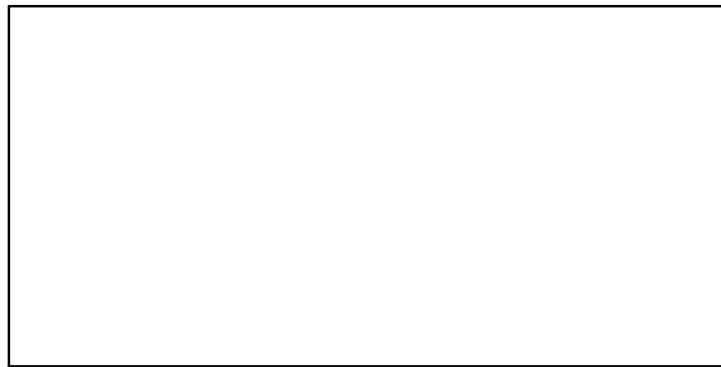
◆ Start Year ♦ End Year * No Data

Norway lobster Botney Cut – Silver Pit (FU 5) [NEPHFU5]

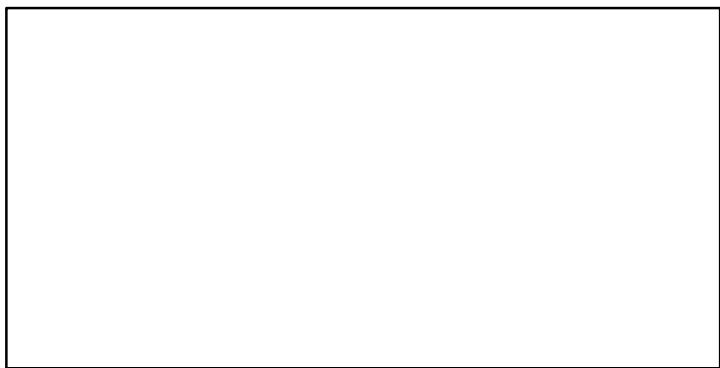
TB*



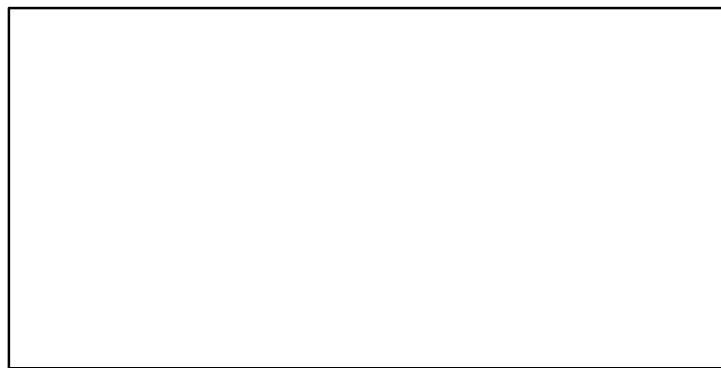
SSB*



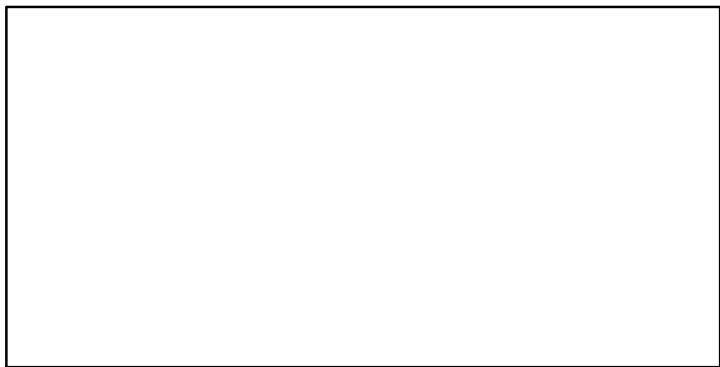
TN *



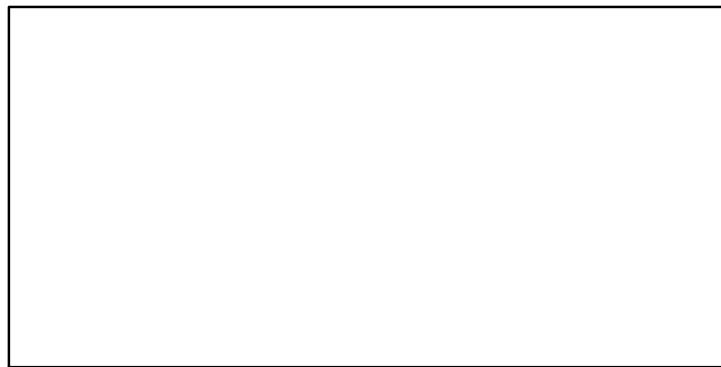
F*



ER*



Recruits*

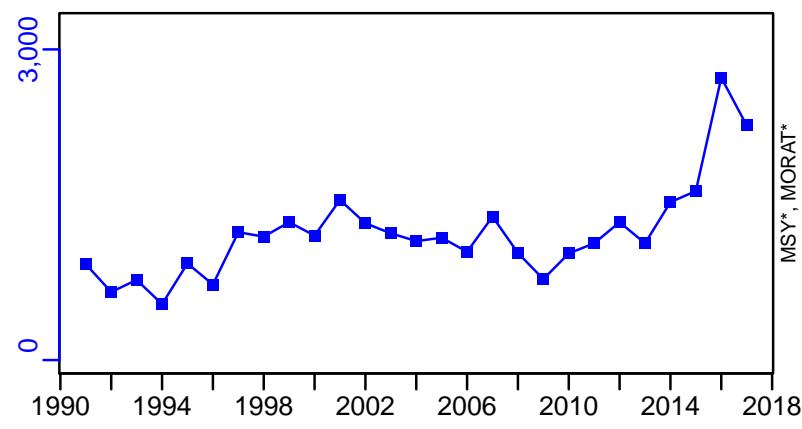


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

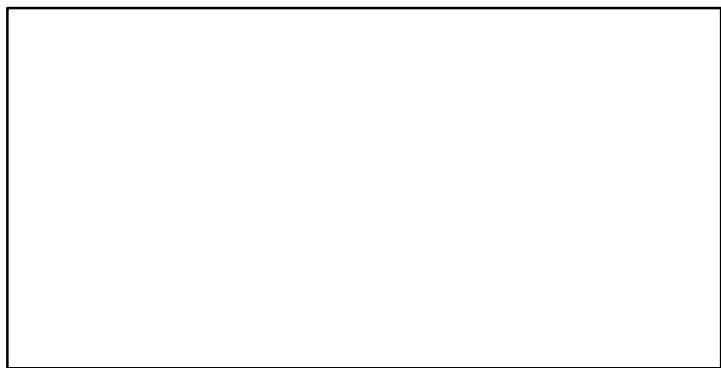
Norway lobster Botney Cut – Silver Pit (FU 5) [NEPHFU5]

TL-MT, TC*, RecC* (1991–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



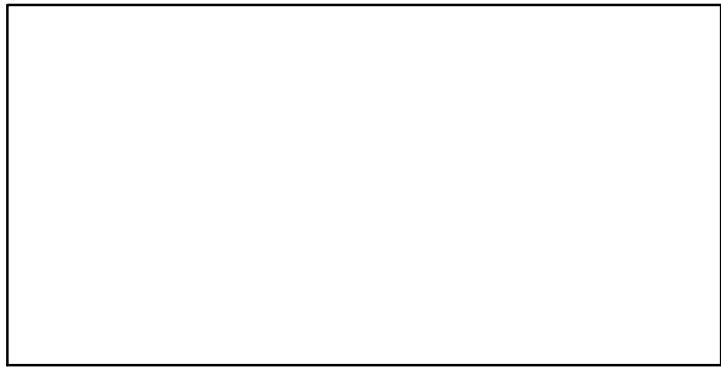
survB*



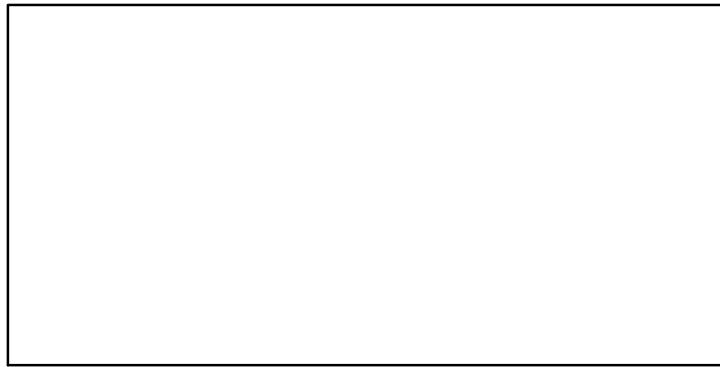
CPUE*



EFFORT*



CdivMSY*



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

Norway lobster Farm Deeps (FU 6) [NEPHFU6]

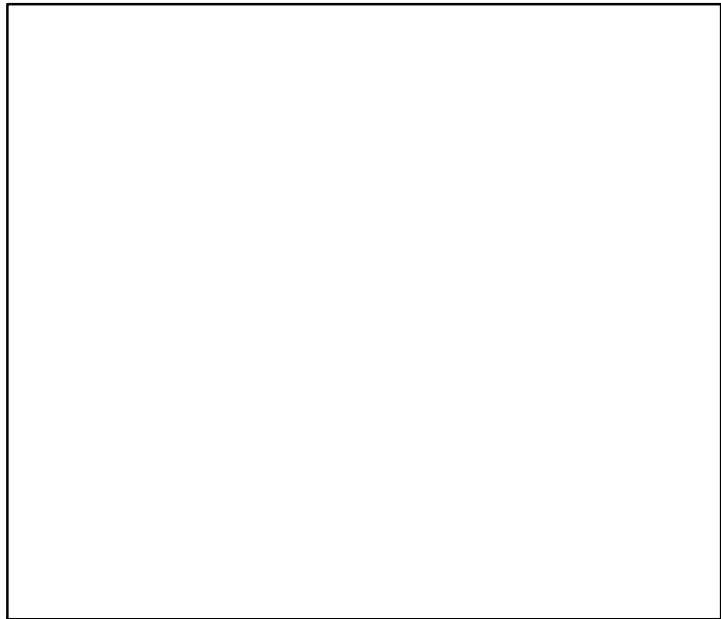
Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU6-1981-2016-ICESIMP2018
Area	Farn Deeps (FU 6)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.081
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.081
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

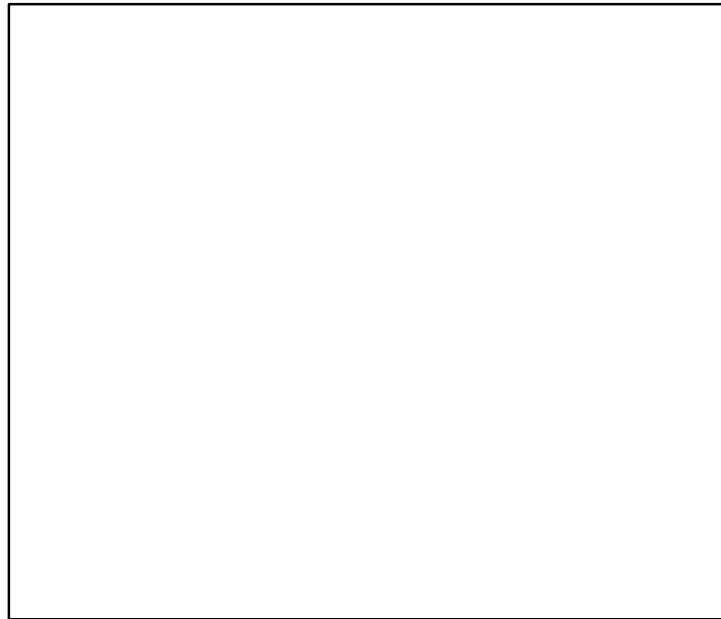
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	-	-	-	-	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	-	-	-	-	-	-
ER	ER-ratio	2016	0.116	-	-	-
TC	TC-MT	2016	2130			
TL	TL-MT	2016	1370			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.432			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Norway lobster Farm Deeps (FU 6) [NEPHFU6]

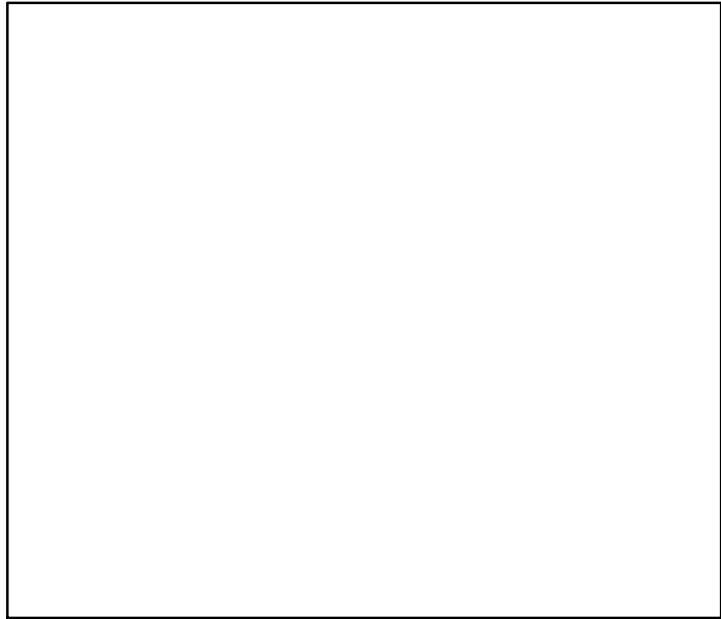
Kobe MSY*



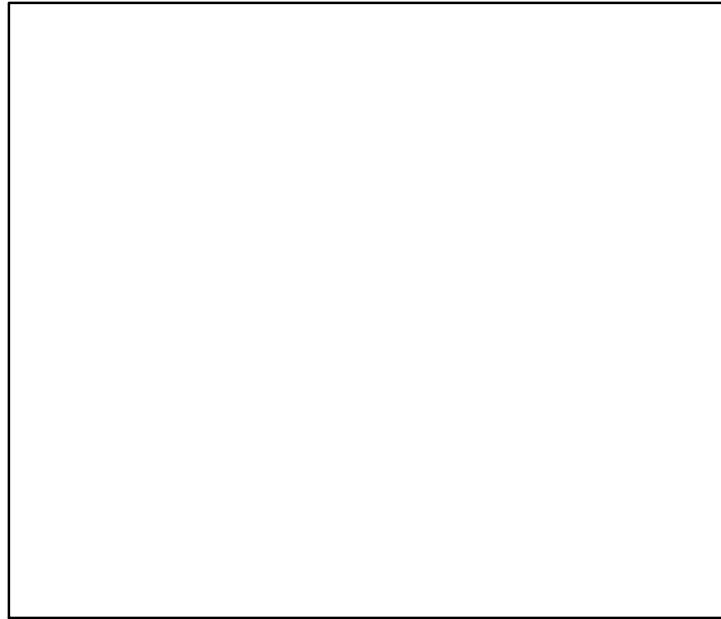
Kobe MGT*



Spawner Recruit*



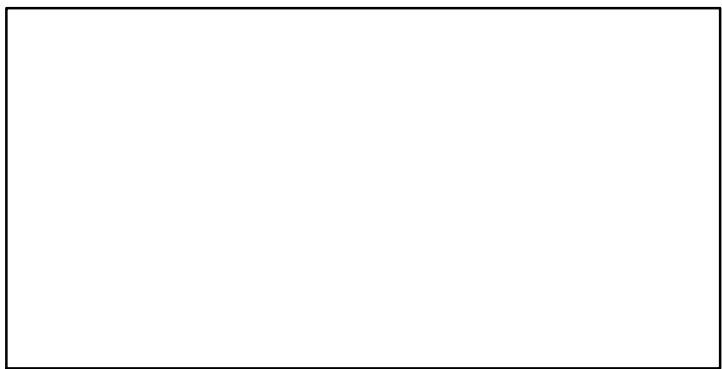
Production*



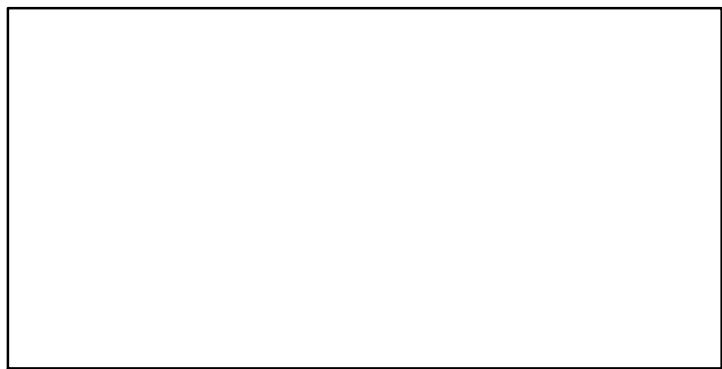
◆ Start Year ♦ End Year * No Data

Norway lobster Farm Deeps (FU 6) [NEPHFU6]

TB*



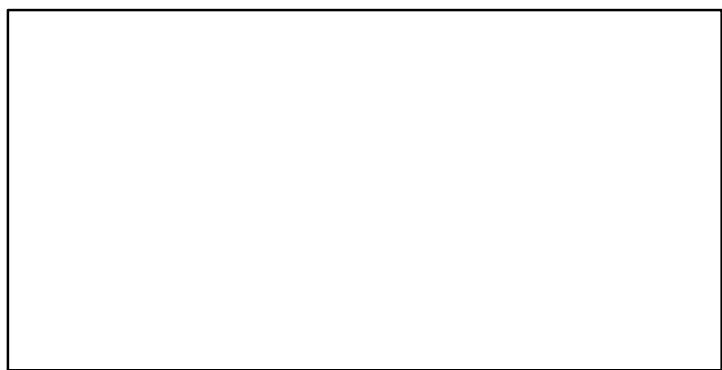
SSB*



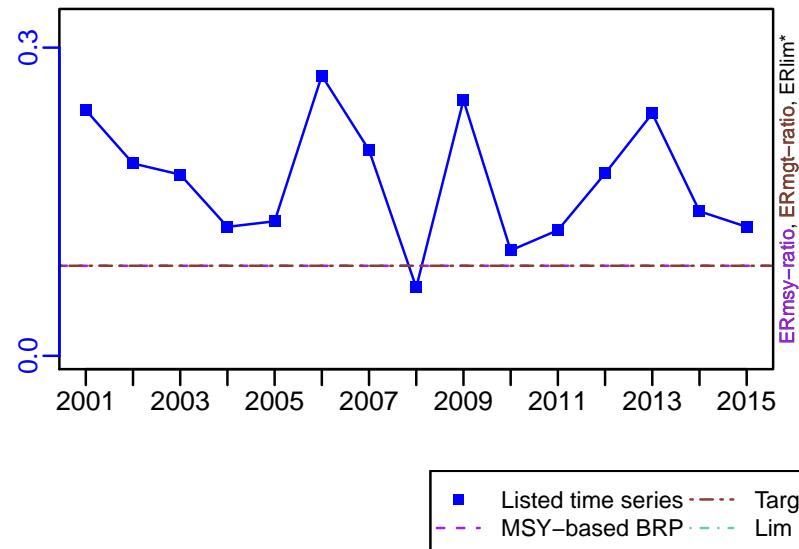
TN *



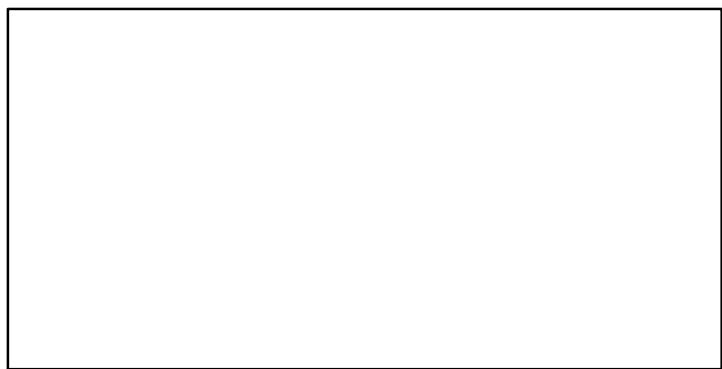
F*



ER-ratio (1981–2016–ICESIMP2016)



Recruits*

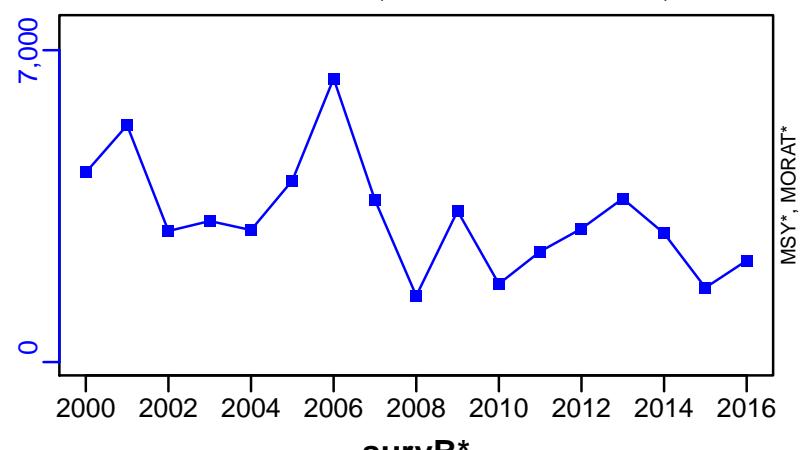


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	·· Lim BRP	* No Data

Norway lobster Farm Deeps (FU 6) [NEPHFU6]

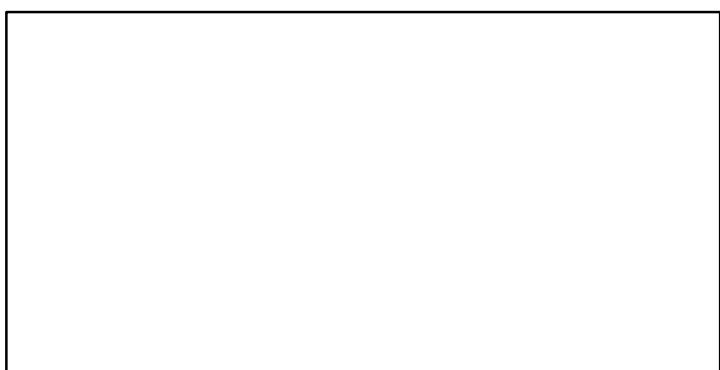
TC-MT, TL*, RecC* (1981–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*

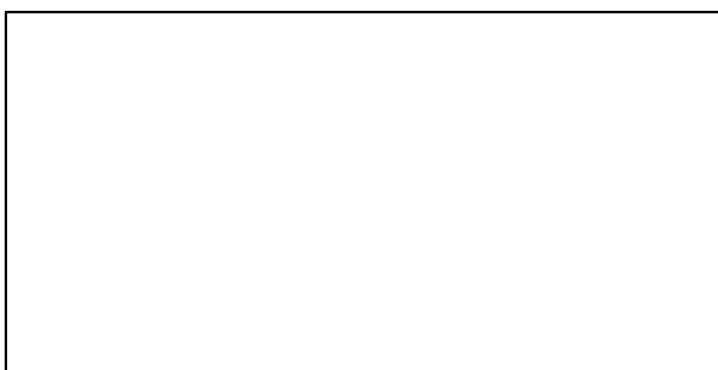


survB*

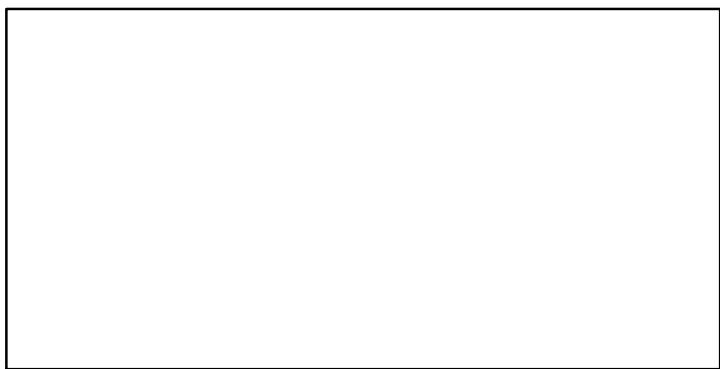
MSY*, MORAT*



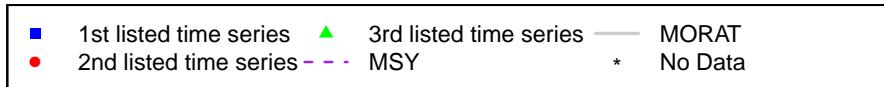
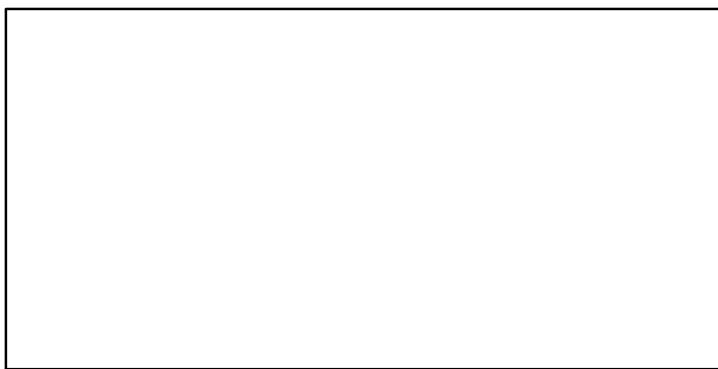
CPUE*



EFFORT*



CdivMSY*



Norway lobster Fladen Ground (FU 7) [NEPHFU7]

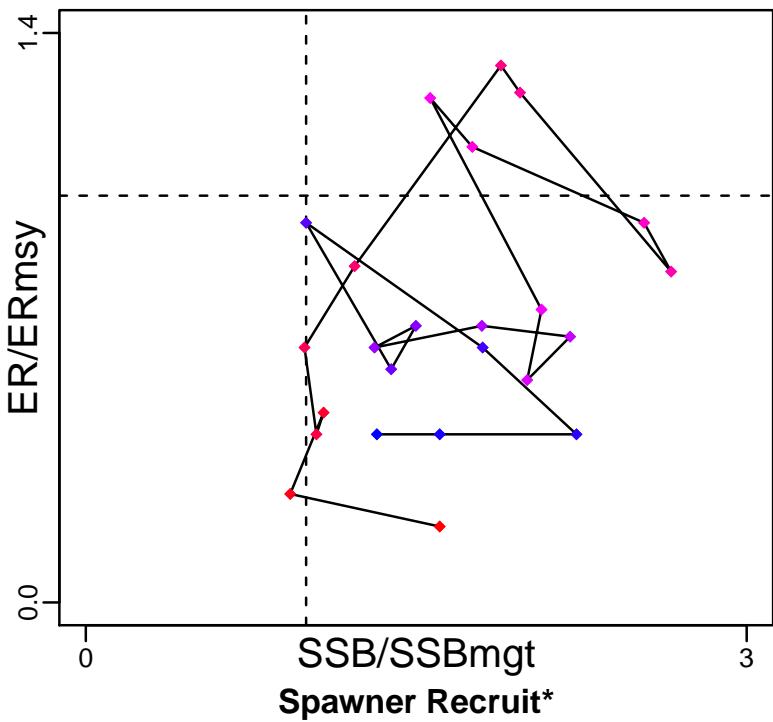
Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU7-1992-2017-ICESIMP2018
Area	Fladen Ground (FU 7)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	7.5
ERmsy	ERmsy-ratio	2017	0.075
TBmgt	-	-	-
SSBmgt	SSBmgt-E00	2017	2.77×10^9
Fmgt	Fmgt-1/yr	2016	7.5
ERmgt	ERmgt-ratio	2017	0.075
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

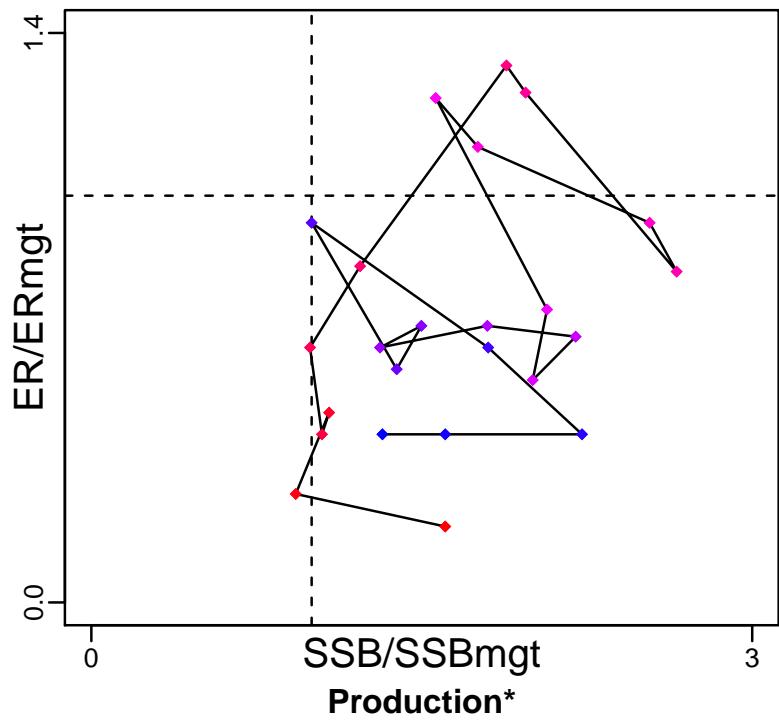
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-E00	2017	7.04×10^9	Both	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	F-1/yr	2016	2	-	-	-
ER	ER-ratio	2017	0.014	-	-	-
TC	-	-	-			
TL	TL-MT	2017	2400			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.267			
ER/ERmsy	ER-ratio/ERmsy-ratio	2017	0.187			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-E00/SSBmgt-E00	2017	2.542			
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.267			
ER/ERmgt	-	-	-			

Norway lobster Fladen Ground (FU 7) [NEPHFU7]

Kobe MSYpref (1992–2017–ICESIMP2018)



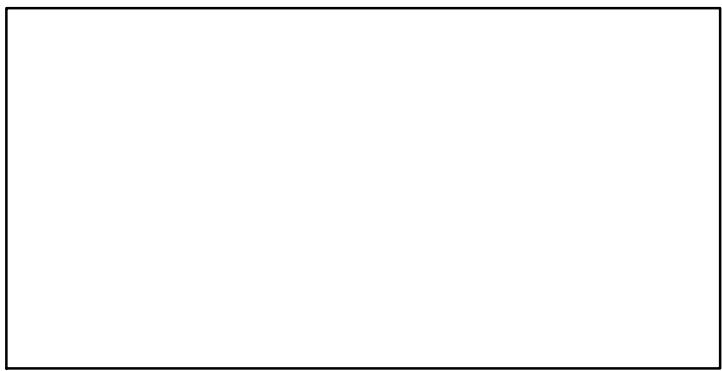
Kobe MGTpref (1992–2017–ICESIMP2018)



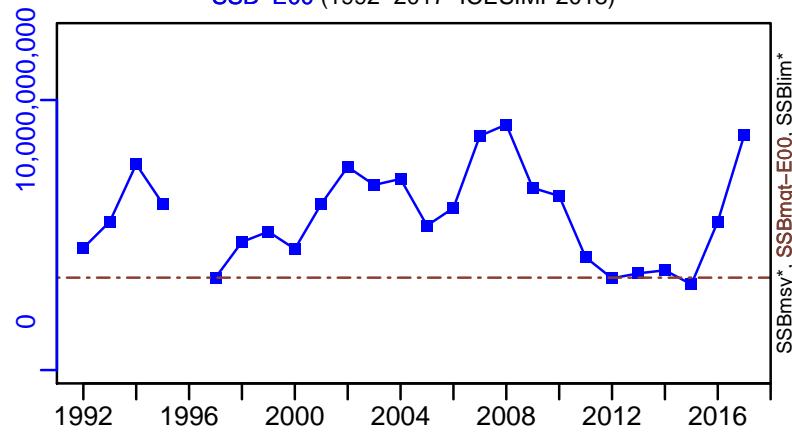
◆ Start Year ◆ End Year * No Data

Norway lobster Fladen Ground (FU 7) [NEPHFU7]

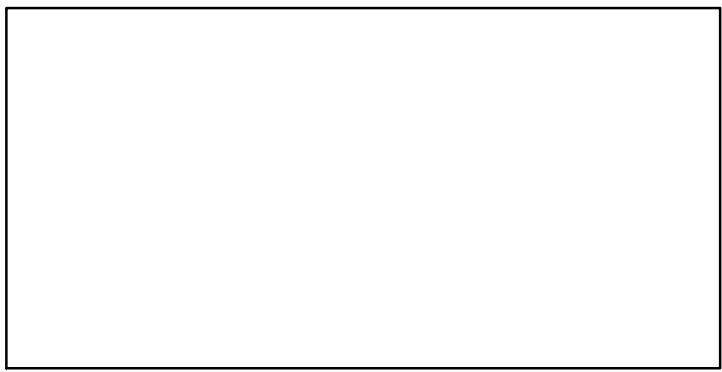
TB*



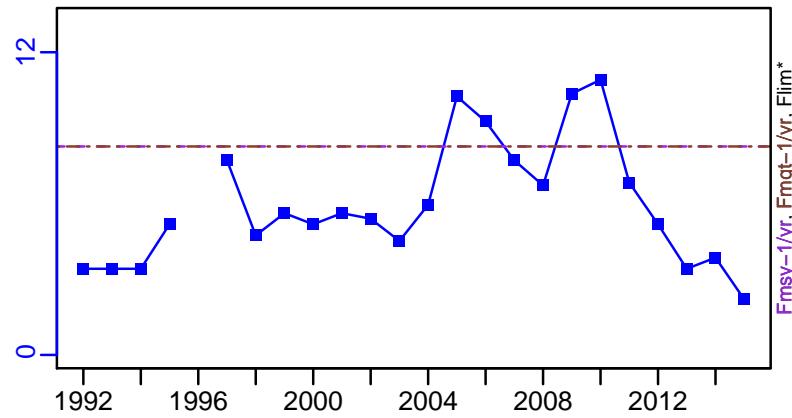
SSB-E00 (1992–2017–ICESIMP2018)



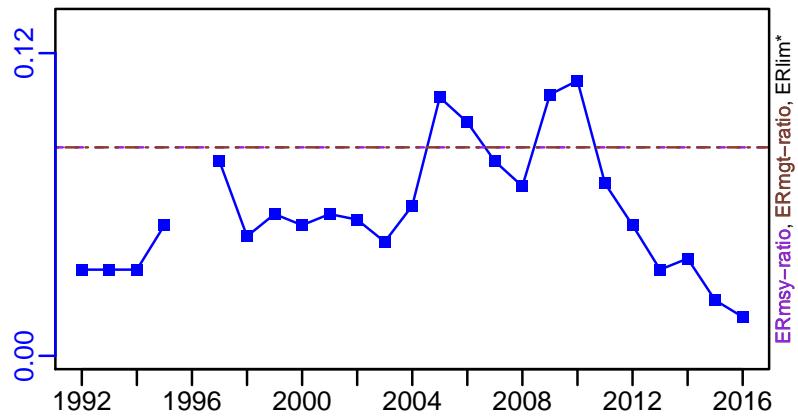
TN *



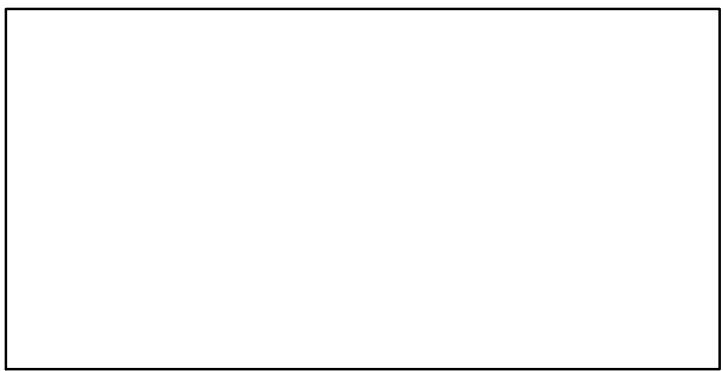
F-1/yr (1992–2016–ICESIMP2018)



ER-ratio (1992–2017–ICESIMP2018)



Recruits*

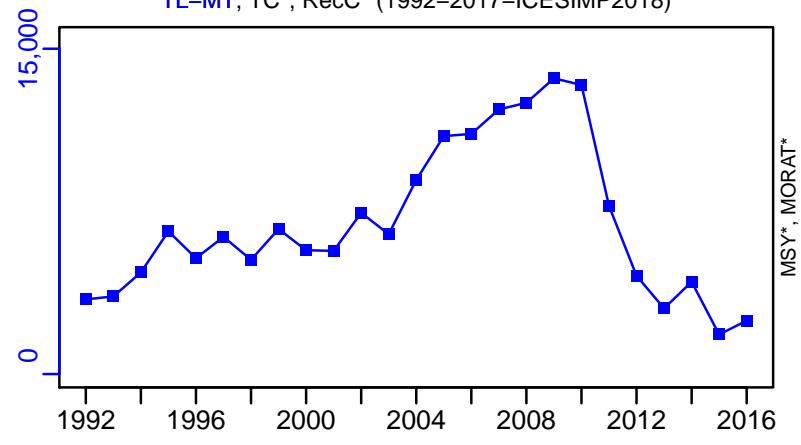


- Listed time series - - - Target BRP — Rec-Est
- - MSY-based BRP - - Lim BRP * No Data

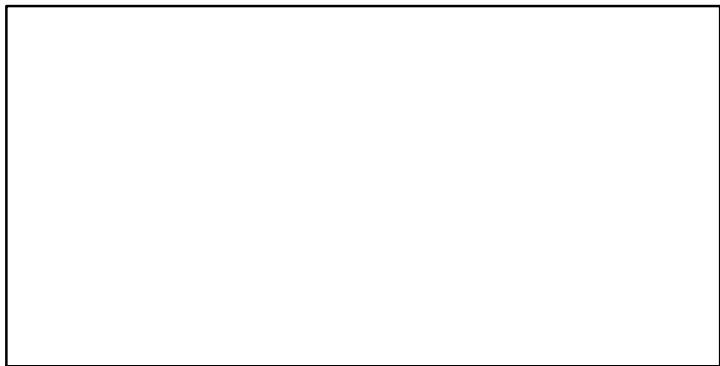
Norway lobster Fladen Ground (FU 7) [NEPHFU7]

TL-MT, TC*, RecC* (1992–2017–ICESIMP2018)

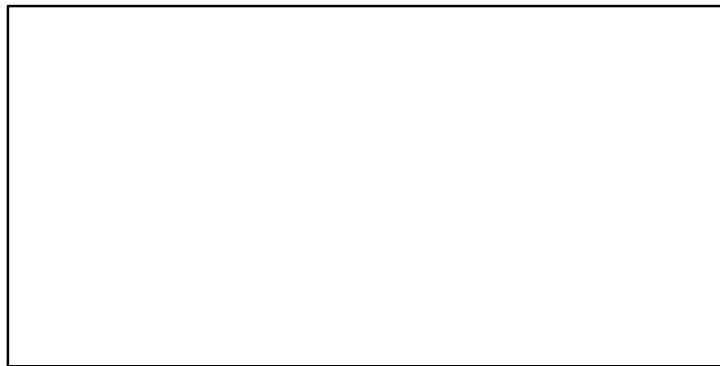
TAC*, Cpair*, Cadv*



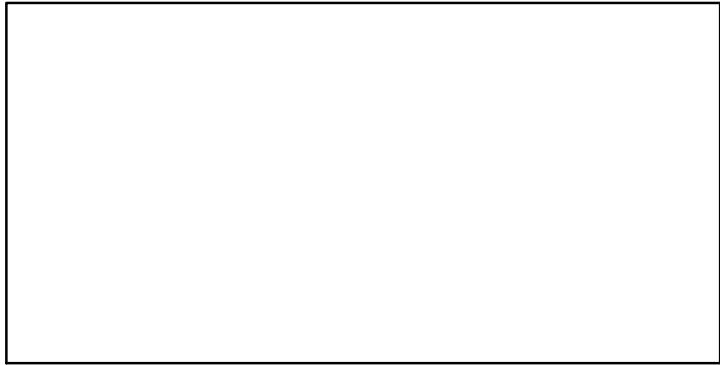
survB*



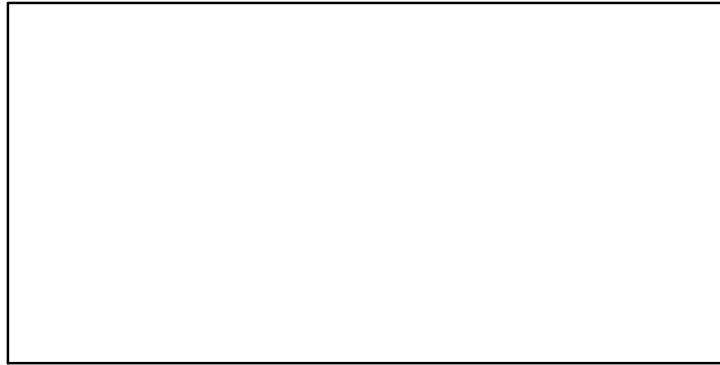
CPUE*



EFFORT*



CdivMSY*



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

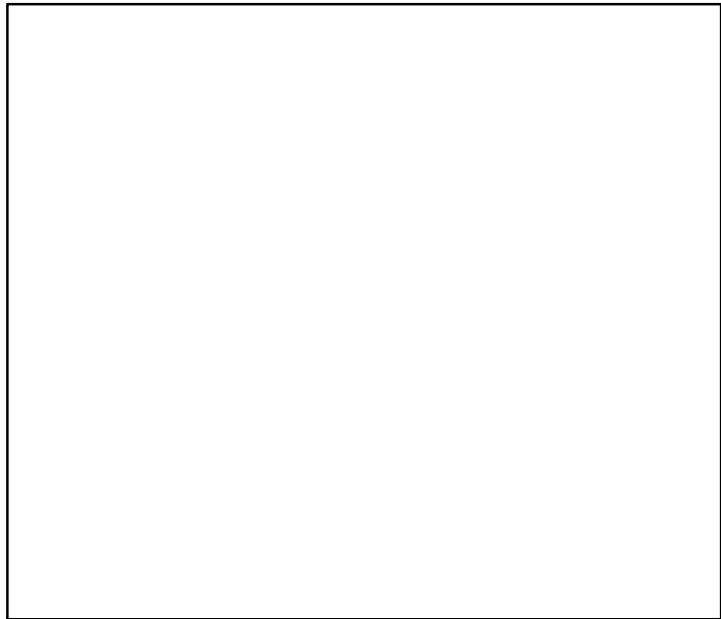
Norway lobster Firth of Forth (FU 8) [NEPHFU8]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU8-1993-2016-ICESIMP2018
Area	Firth of Forth (FU 8)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016, 2016

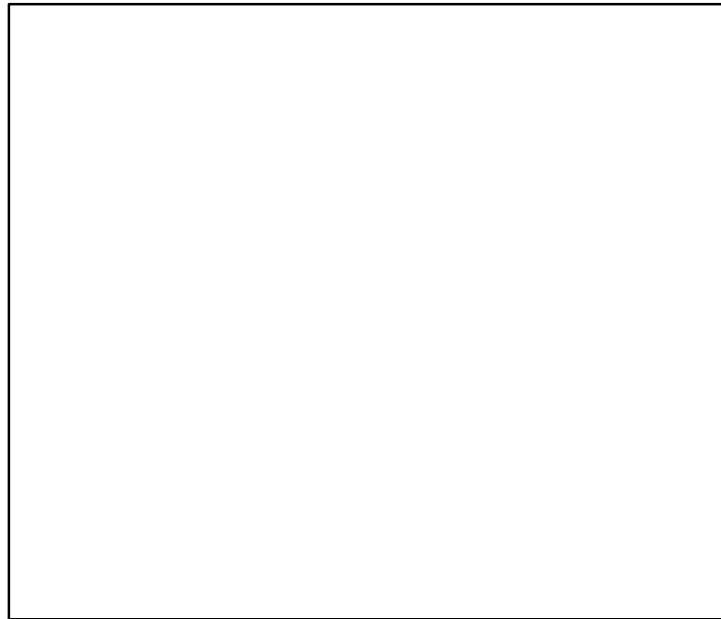
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.163
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.163
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	-	-	-	-	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	-	-	-	-	-	-
ER	ER-ratio	2016	0.168	-	-	-
TC	-	-	-			
TL	TL-MT	2016	1890			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.031			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

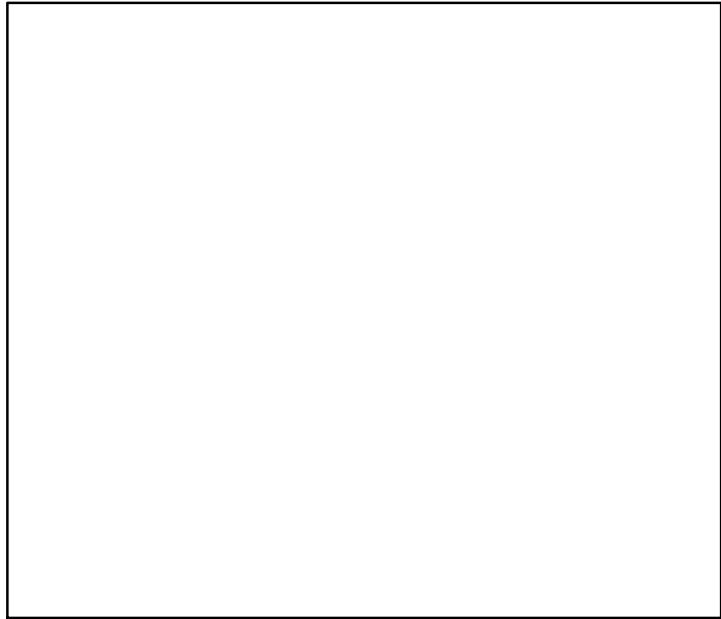
Kobe MSY*



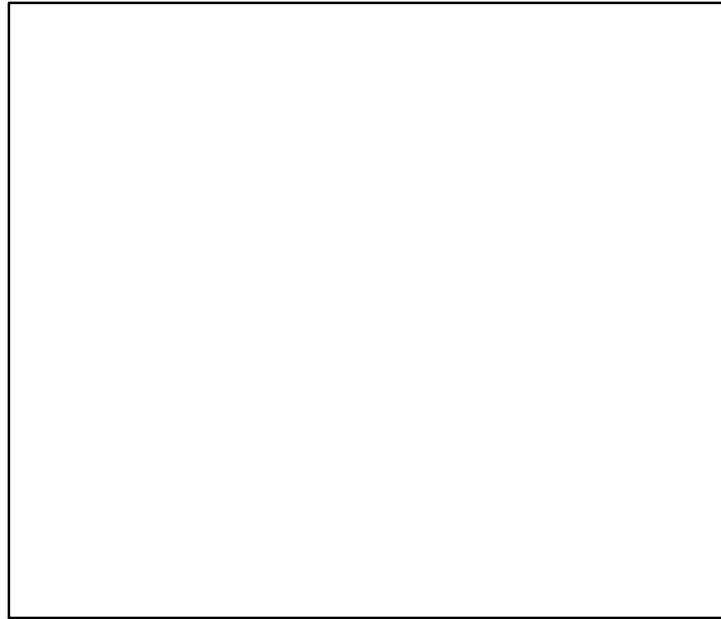
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Norway lobster Firth of Forth (FU 8) [NEPHFU8]

TB*



SSB*



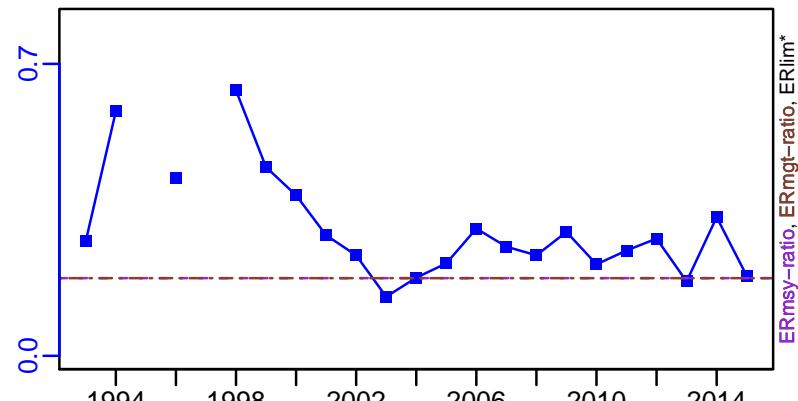
TN *



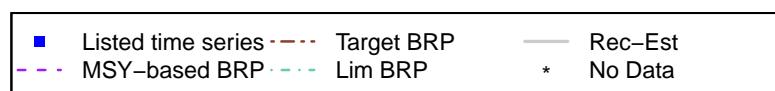
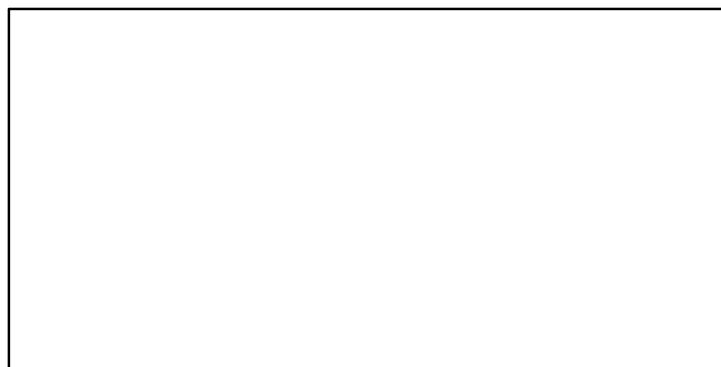
F*



ER-ratio (1993–2016–ICESIMP2016)



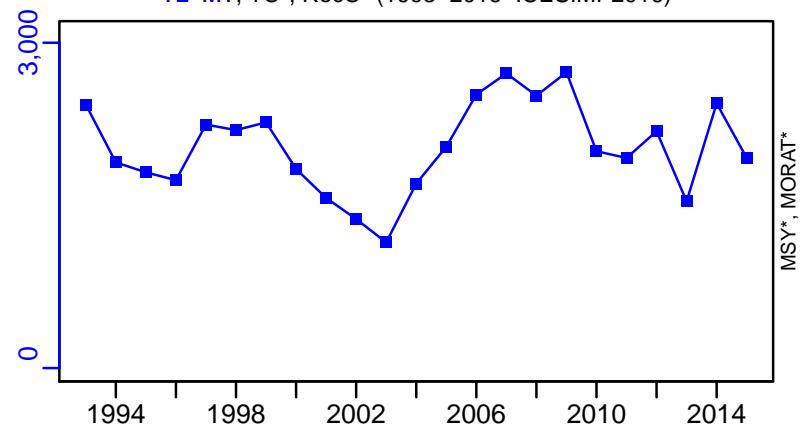
Recruits*



Norway lobster Firth of Forth (FU 8) [NEPHFU8]

TL-MT, TC*, RecC* (1993–2016—ICESIMP2016)

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 Moray Firth (FU 9) [NEPHFU9]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU9-1993-2017-ICESIMP2018
Area	Moray Firth (FU 9)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2017	0.118
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2017	0.118
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2017	0.105	-	-
TC	-	-	-		
TL	TL-MT	2017	1120		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2017	0.89		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Norway lobster Moray Firth (FU 9) [NEPHFU9]

TB*



SSB*



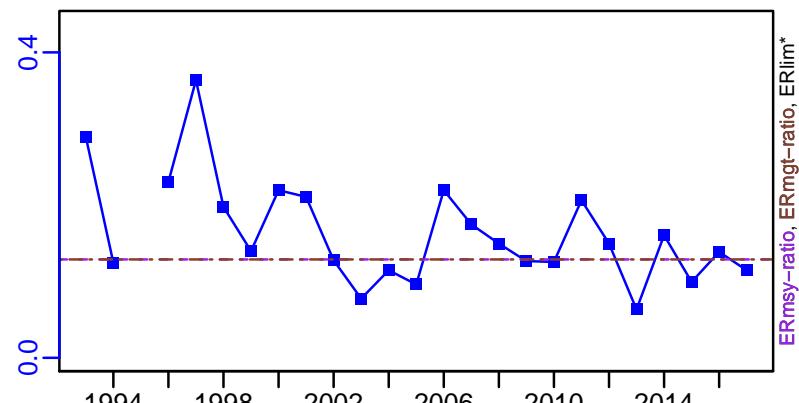
TN *



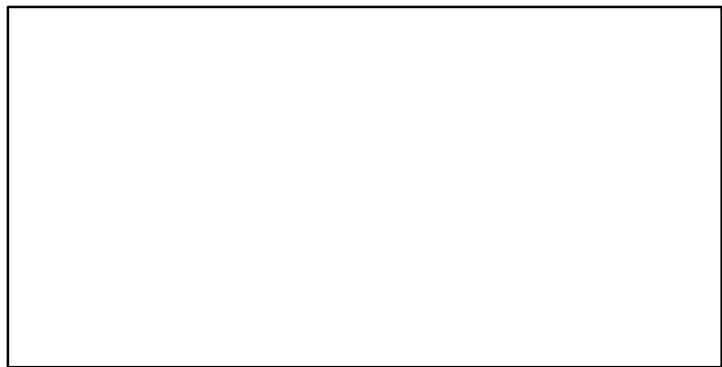
F*



ER-ratio (1993–2017–ICESIMP2018)



Recruits*

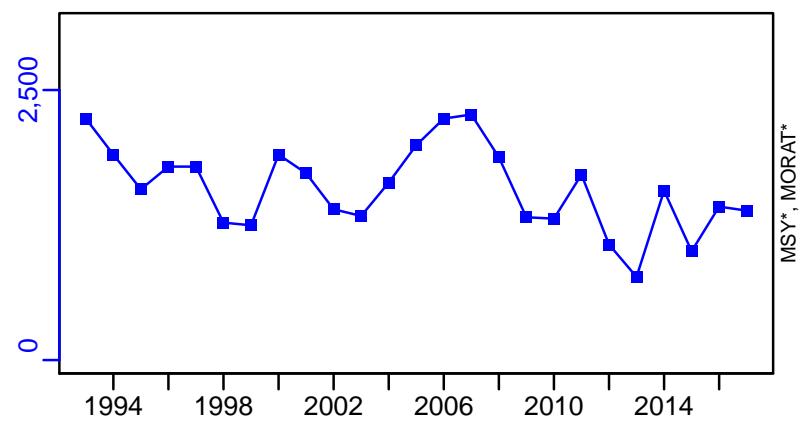


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

Norway lobster Moray Firth (FU 9) [NEPHFU9]

TL-MT, TC*, RecC* (1993–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

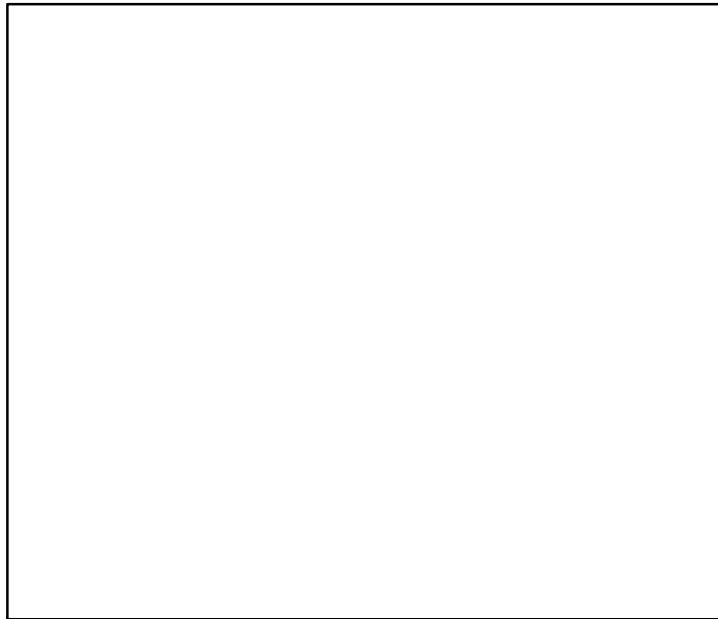
Norway lobster North Sea [NEPHIV]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHIV-2010-2016-ICESIMP2018
Area	North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2014, 2016

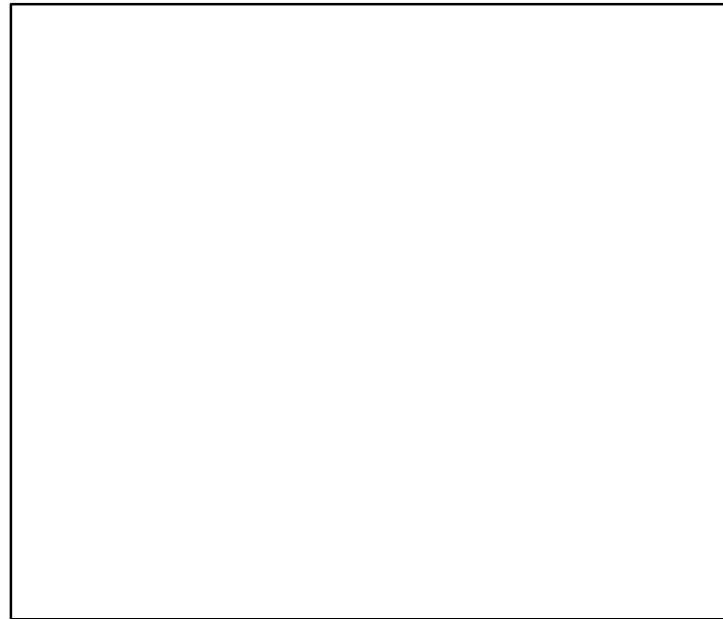
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	966		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

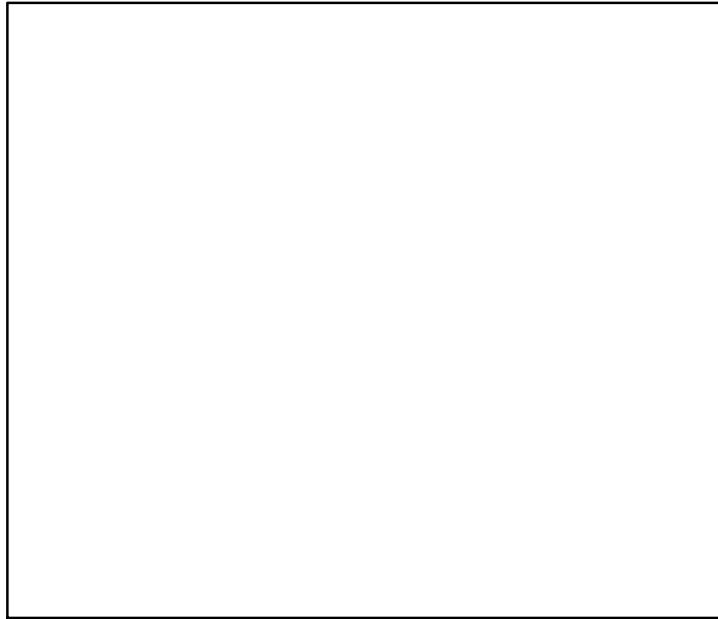
Kobe MSY*



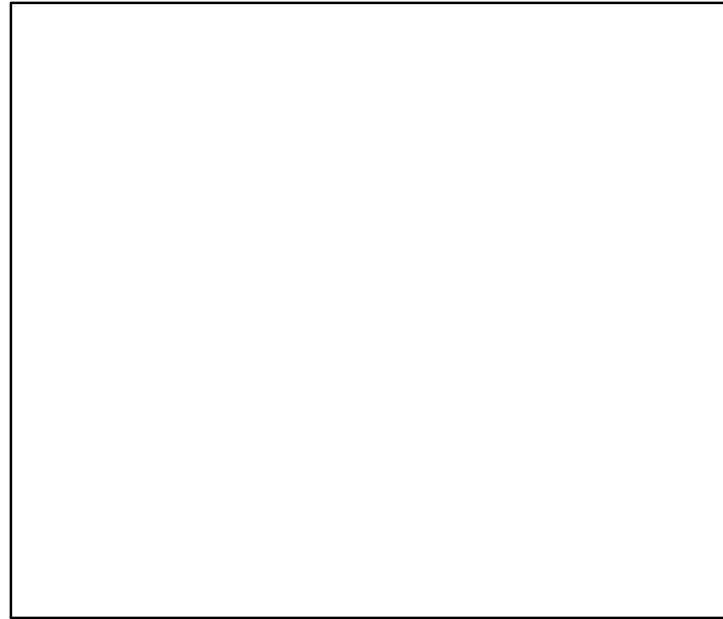
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Norway lobster North Sea [NEPHIV]

TB*



SSB*



TN *



F*



ER*



Recruits*

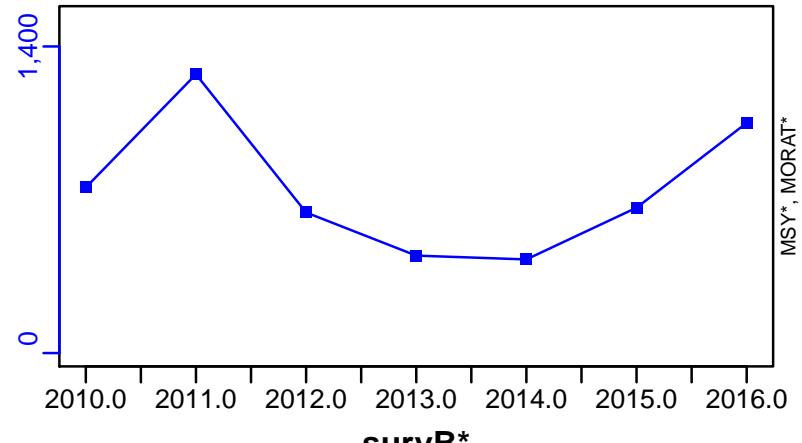


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Norway lobster North Sea [NEPHIV]

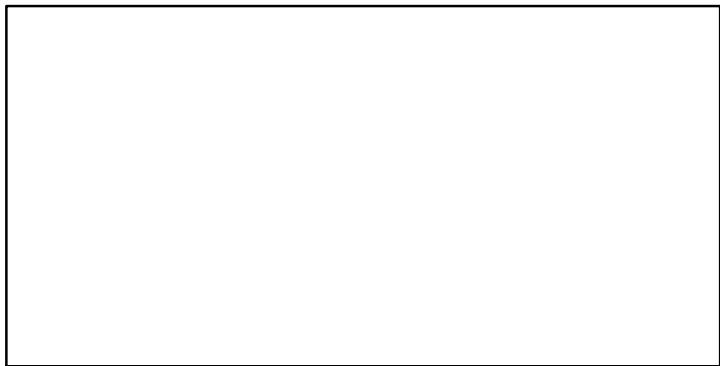
TL-MT, TC*, RecC* (2010–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*

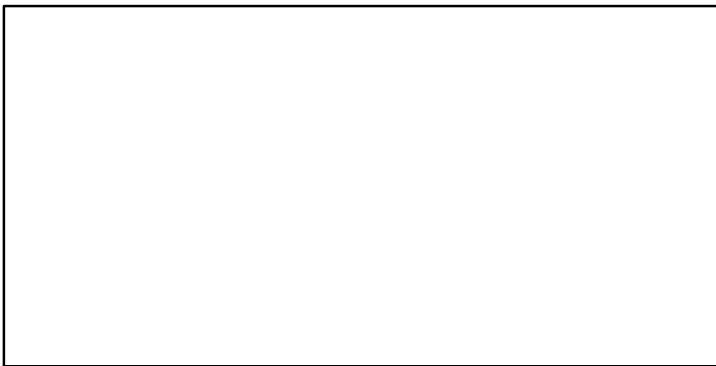


survB*

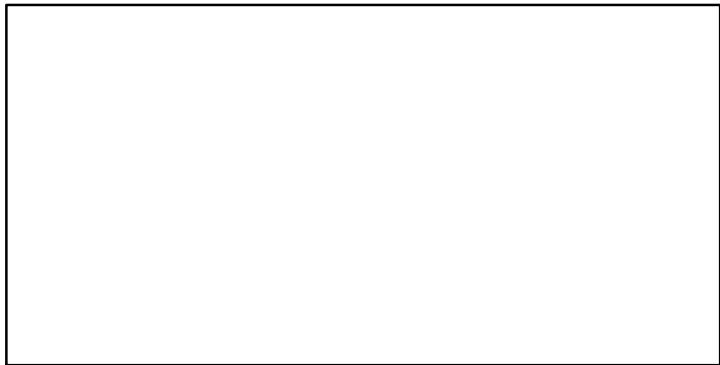
MSY*, MORAT*



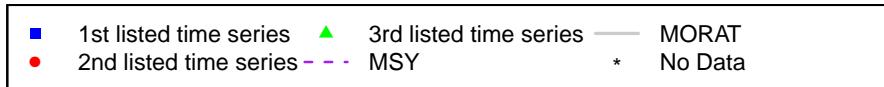
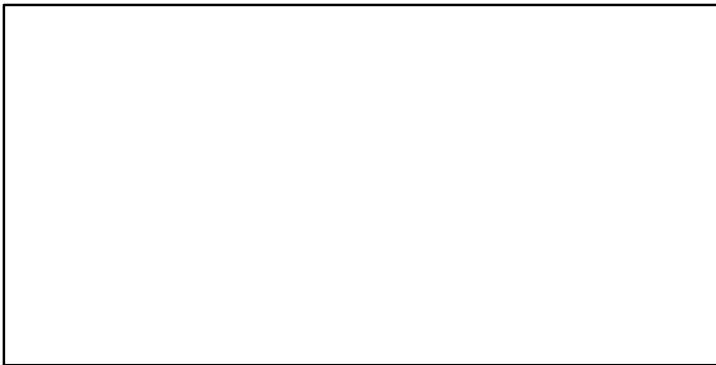
CPUE*



EFFORT*



CdivMSY*



Norway lobster West of Scotland [NEPHV1a]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHV1a-1981-2016-ICESIMP2018
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	236		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

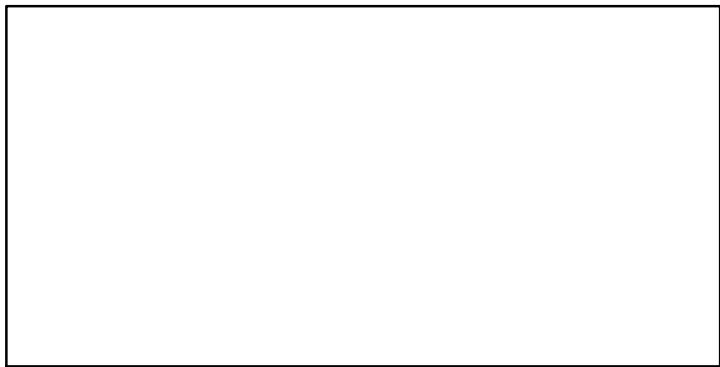
Spawner Recruit*

Production*

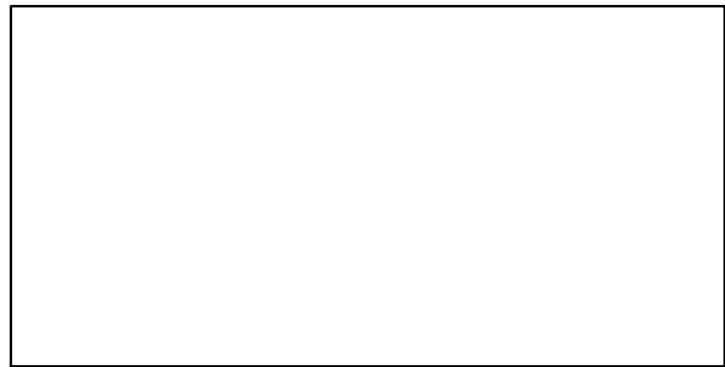
◆ Start Year ♦ End Year * No Data

Norway lobster West of Scotland [NEPHVla]

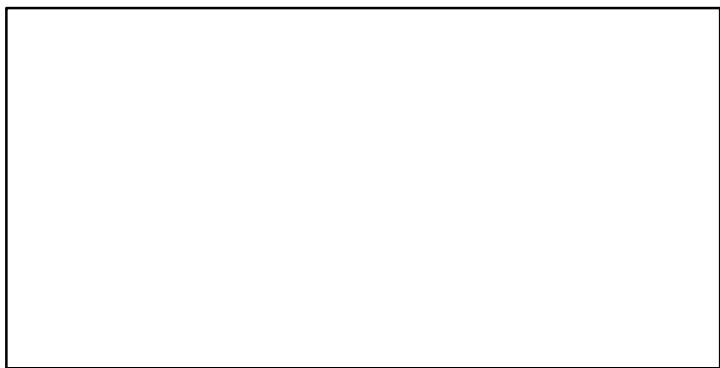
TB*



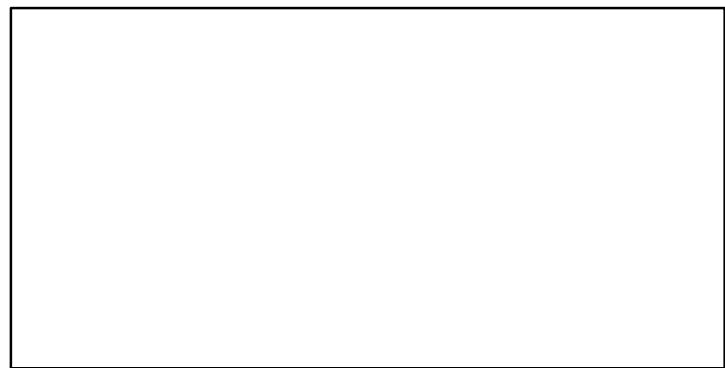
SSB*



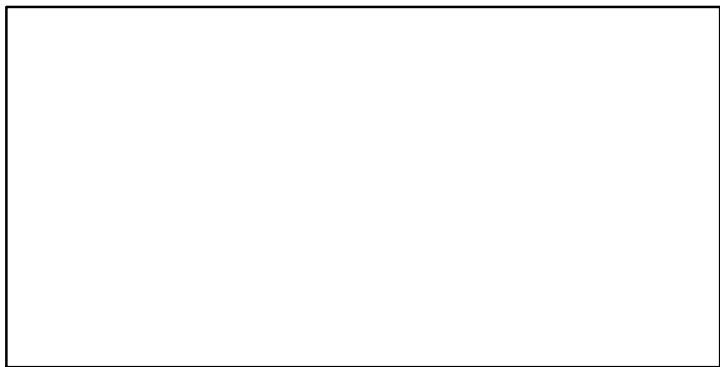
TN *



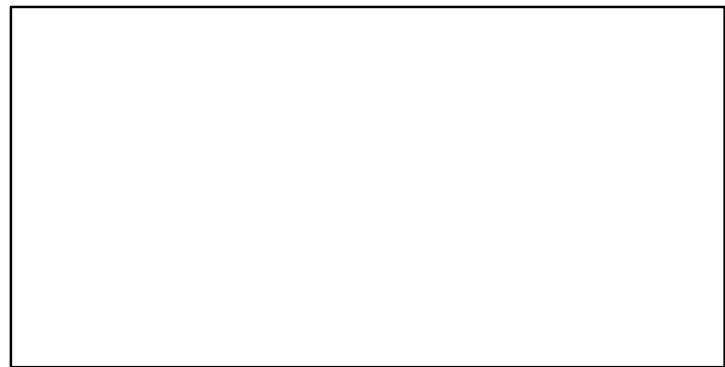
F*



ER*



Recruits*

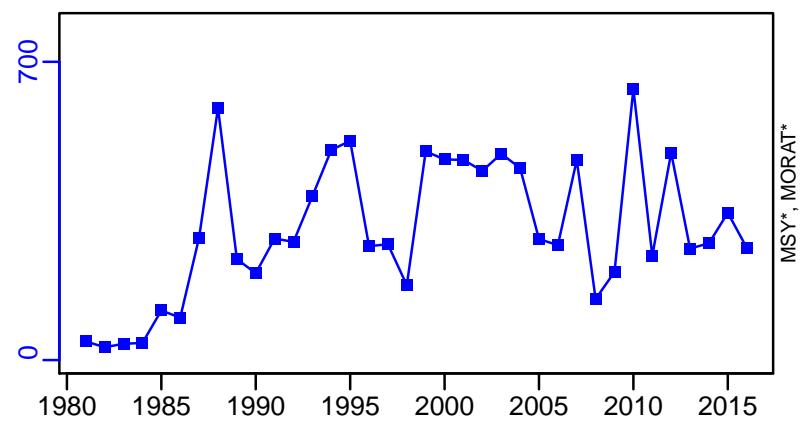


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Norway lobster West of Scotland [NEPHVla]

TL-MT, TC*, RecC* (1981–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



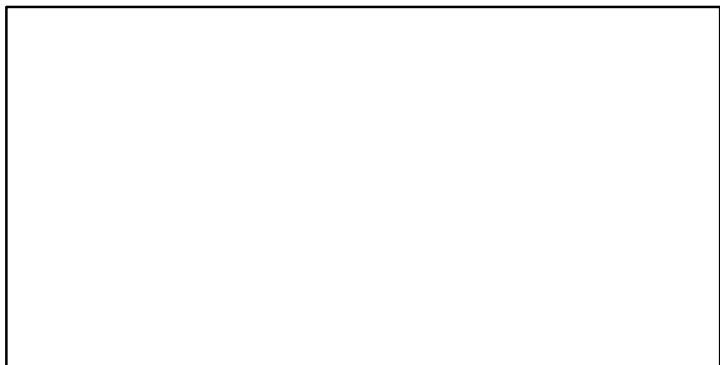
survB*



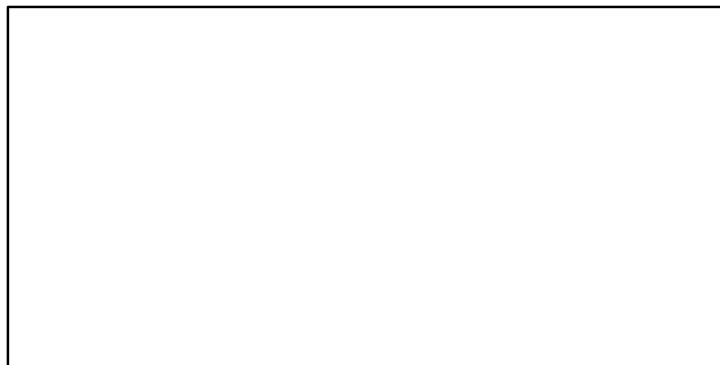
CPUE*



EFFORT*



CdivMSY*



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

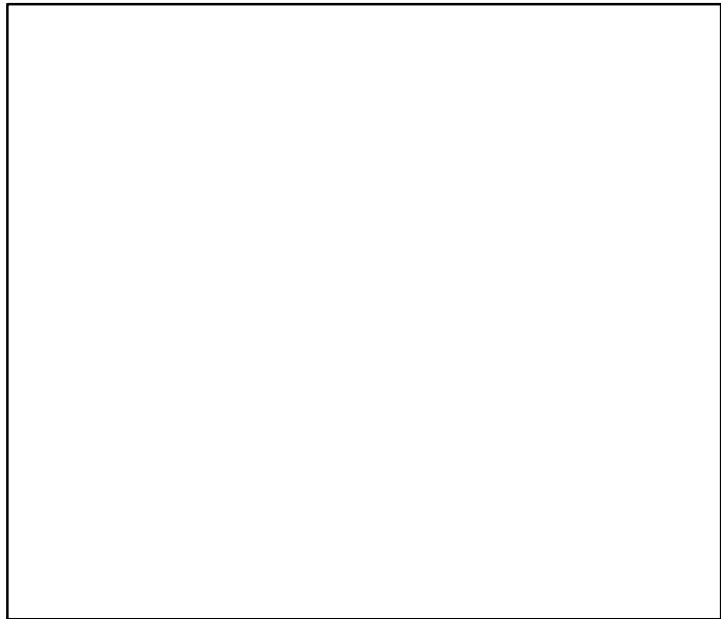
Norway lobster ICES 7 [NEPHVII]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHVII-1978-2016-ICESIMP2018
Area	ICES 7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2014

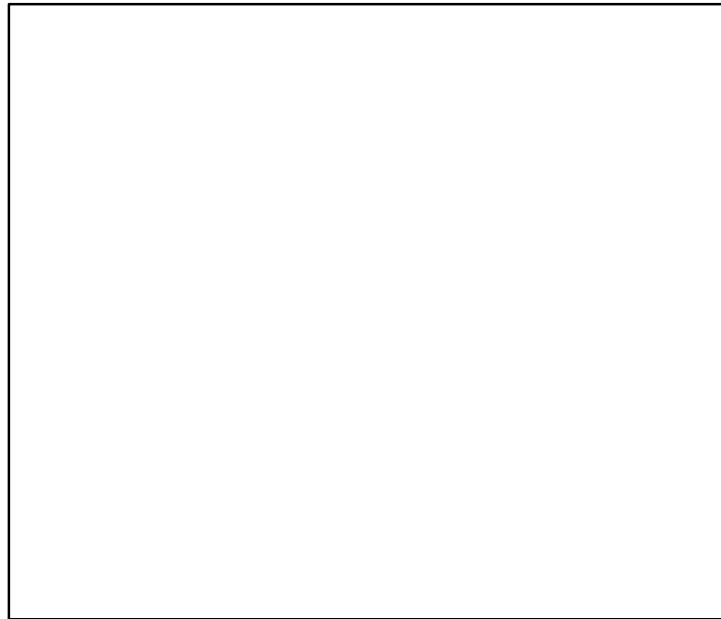
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	119		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

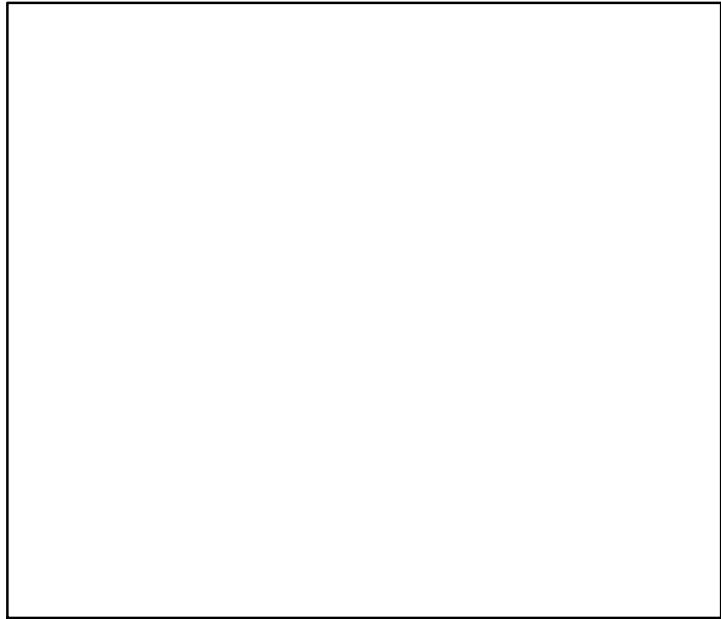
Kobe MSY*



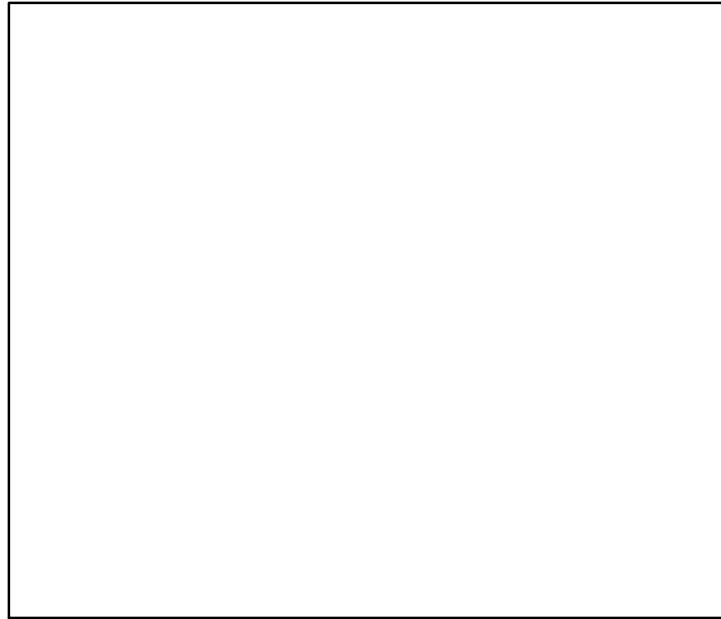
Kobe MGT*



Spawner Recruit*

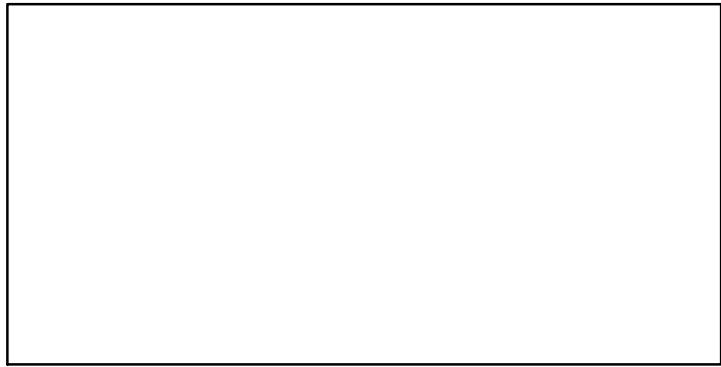


Production*

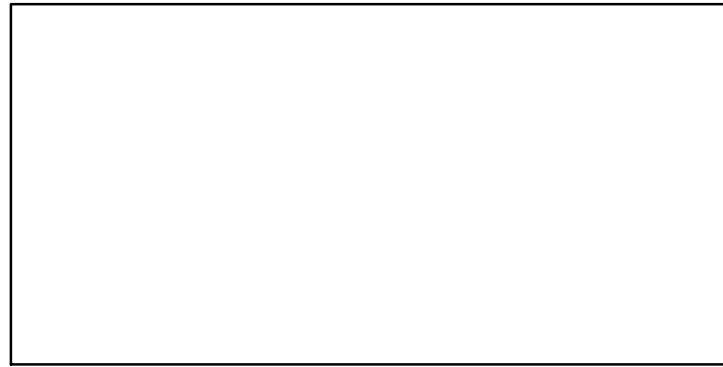


◆ Start Year ♦ End Year * No Data

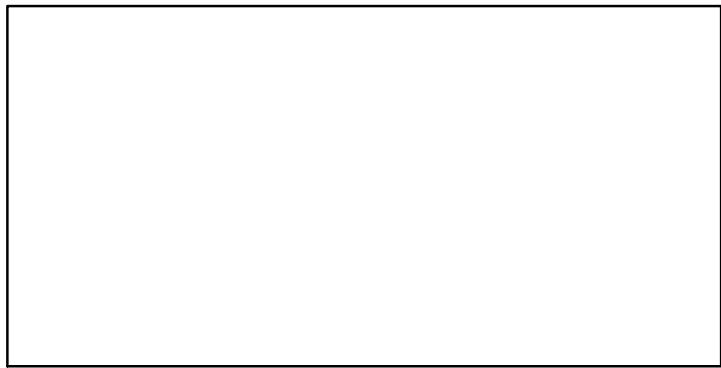
TB*



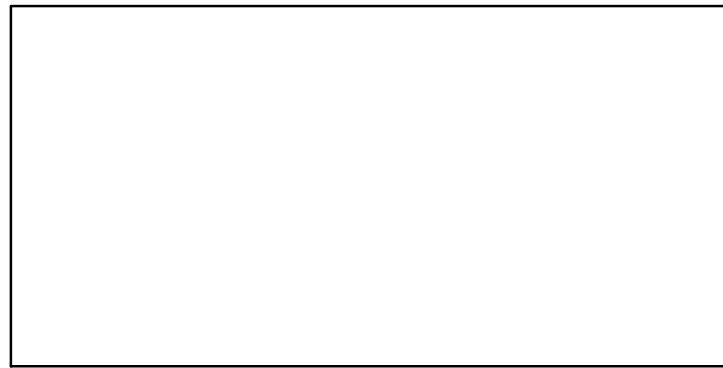
SSB*



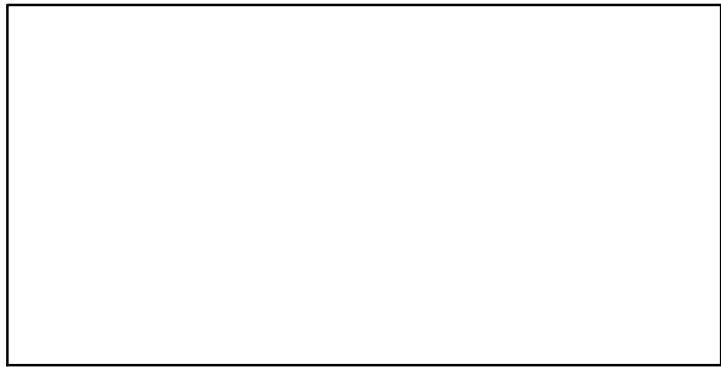
TN *



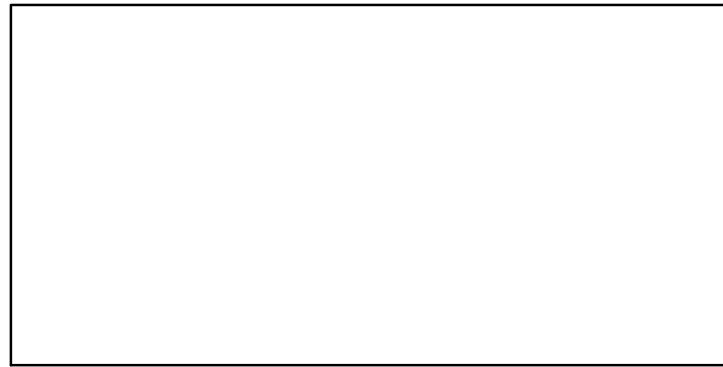
F*



ER*



Recruits*

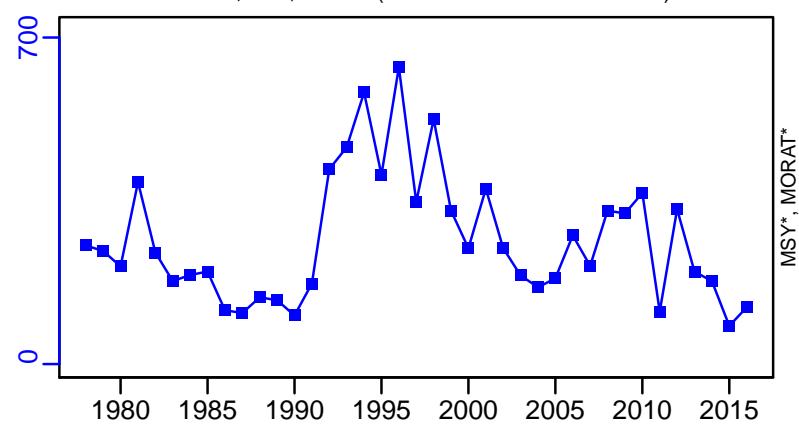


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

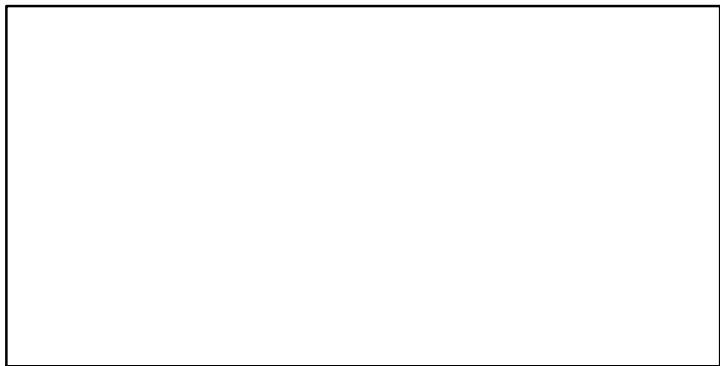
Norway lobster ICES 7 [NEPHVII]

TL-MT, TC*, RecC* (1978–2016–ICESIMP2018)

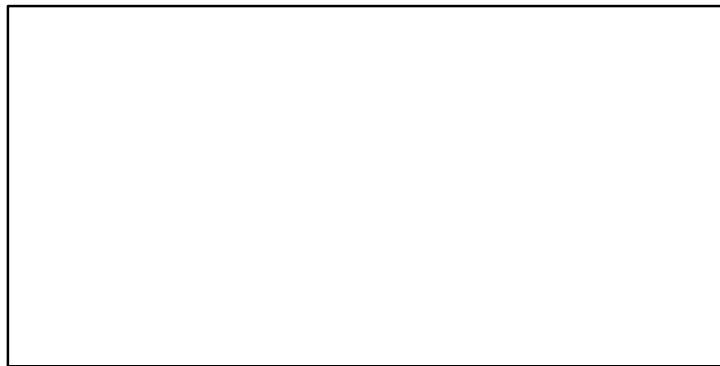
TAC*, Cpair*, Cadv*



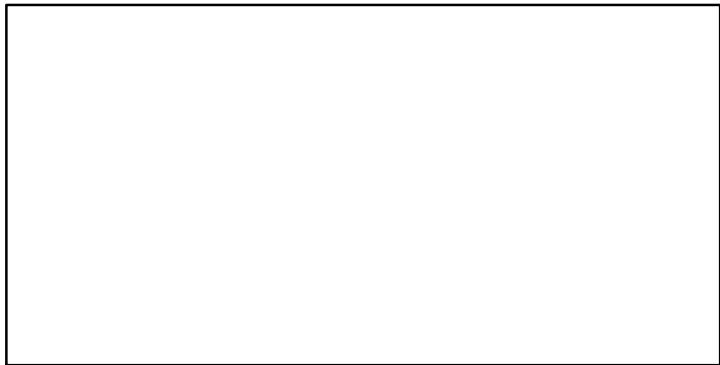
survB*



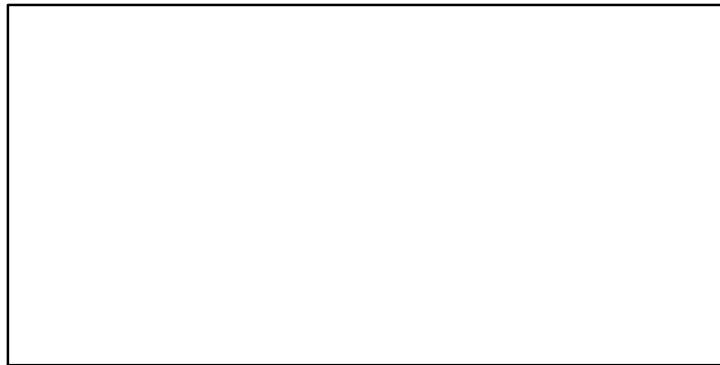
CPUE*



EFFORT*



CdivMSY*



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

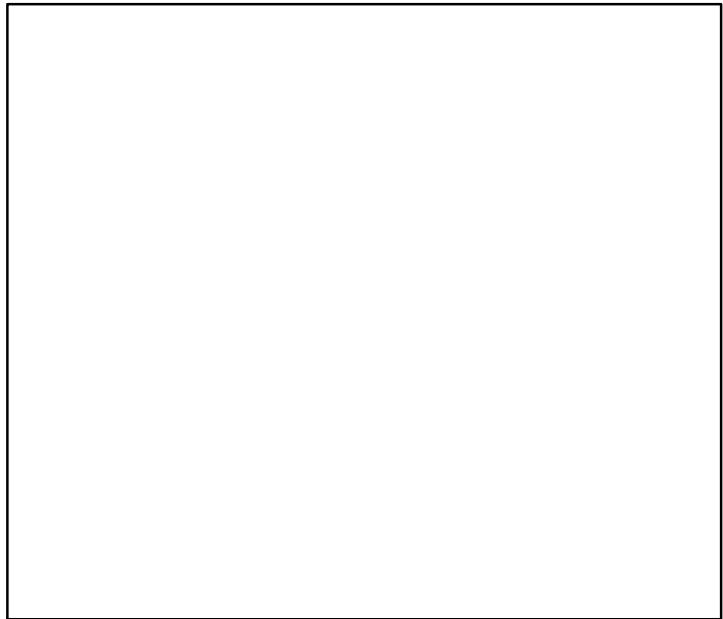
Norway lobster ICES 8ab [NEPHVIIIfab]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHVIIIfab-1987-2017-ICESIMP2018
Area	ICES 8ab
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2017

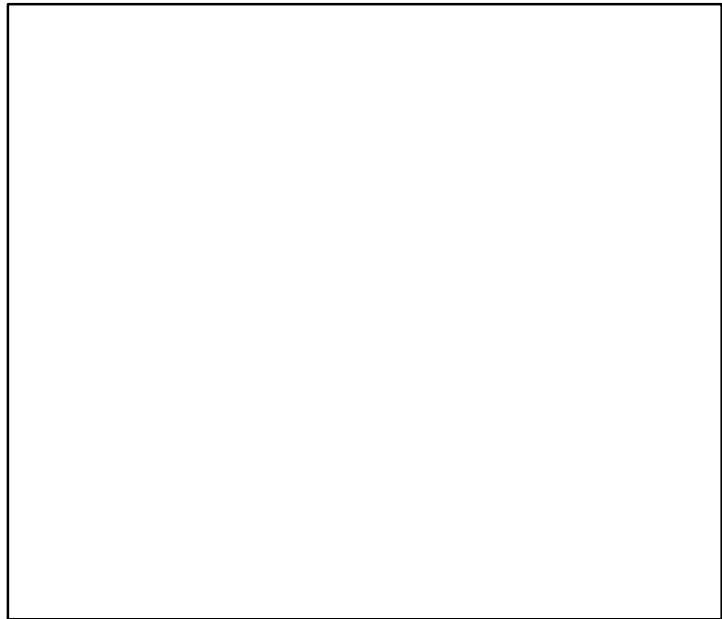
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	7.7
ERmsy	ERmsy-ratio	2017	0.077
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2016	7.7
ERmgt	ERmgt-ratio	2017	0.077
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2017	3370	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2016	6	-	-
ER	ER-ratio	2017	0.072	-	-
TC	TC-MT	2017	6620		
TL	TL-MT	2017	4090		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.779		
ER/ERmsy	ER-ratio/ERmsy-ratio	2017	0.942		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.779		
ER/ERmgt	-	-	-		

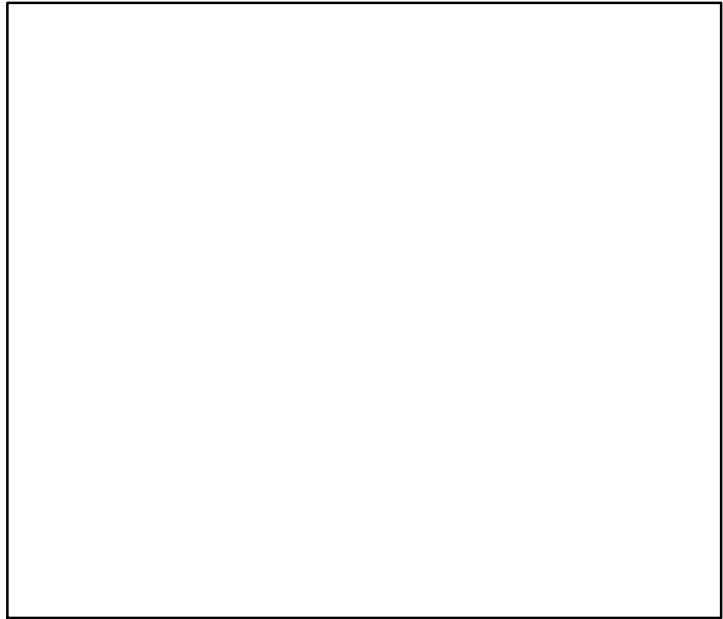
Kobe MSY*



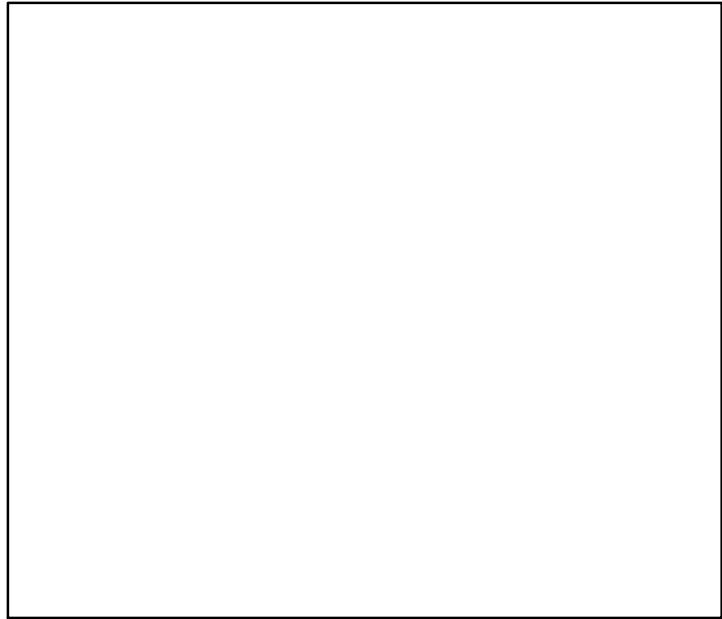
Kobe MGT*



Spawner Recruit*



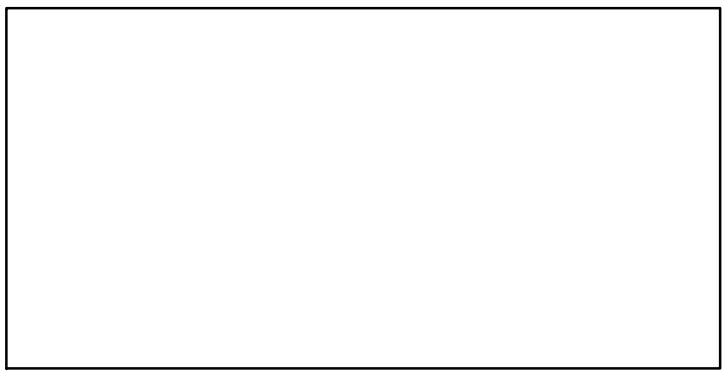
Production*



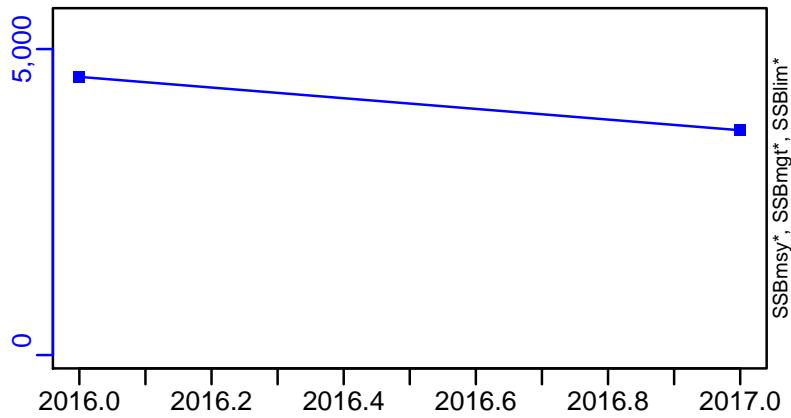
◆ Start Year ♦ End Year * No Data

Norway lobster ICES 8ab [NEPHVIIlab]

TB*



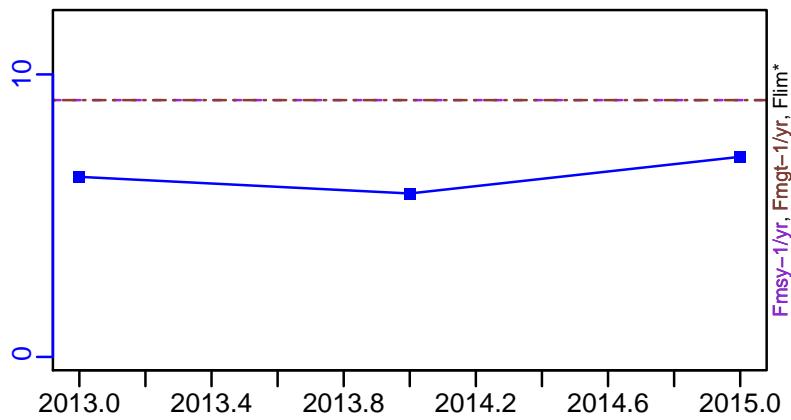
SSB-E00 (1987–2017–ICESIMP2018)



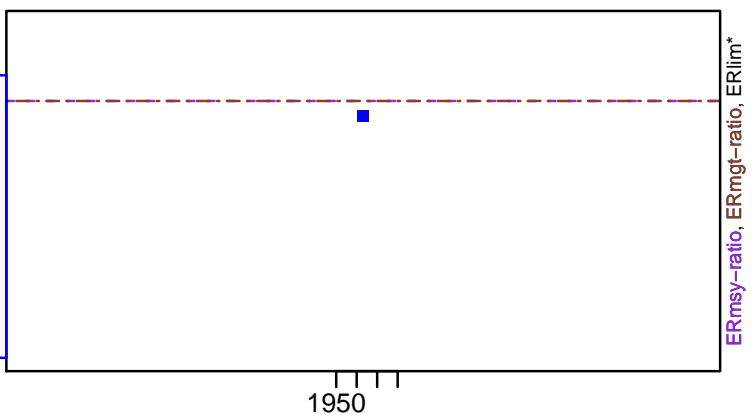
TN *



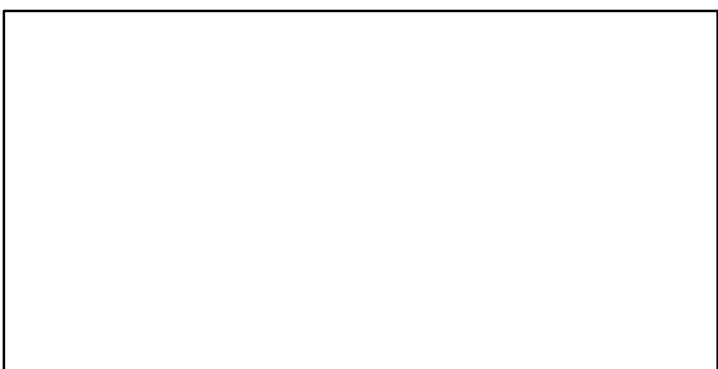
F-1/yr (1987–2016–ICESIMP2018)



ER-ratio (1987–2017–ICESIMP2018)



Recruits*

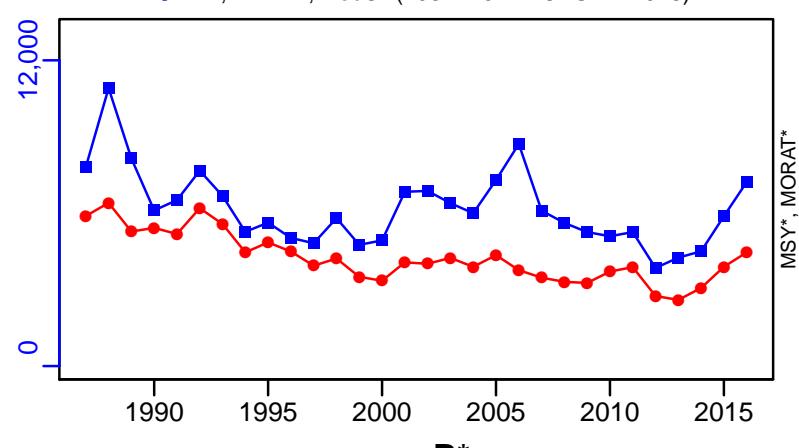


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

Norway lobster ICES 8ab [NEPHVIIlab]

TC-MT, TL-MT, RecC* (1987–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

Norway pout ICES 3a-4 [NPOUTIIla-IV]

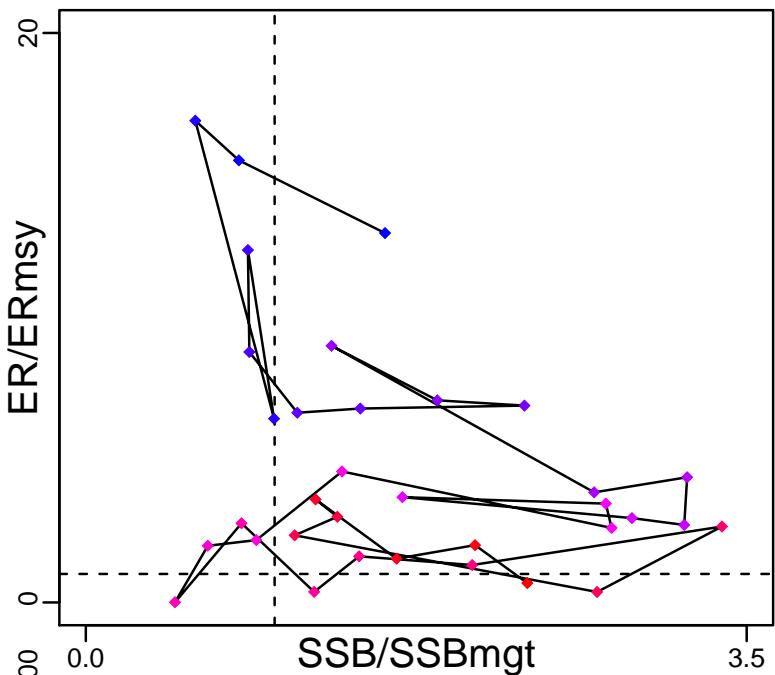
Metadata	
Scientific Name	Trisopterus esmarkii
Current Assess ID	WGNSSK-NPOUTIIla-IV-1984-2017-ICESIMP2018
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2011, 2013, 2014, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2011	390,644
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.089
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	65,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	207,682
M	-	-	-
TBlim	TBlim-MT	2011	1×10^5
SSBlim	SSBlim-MT	2017	39,450
Flim	-	-	-
ERlim	-	-	-

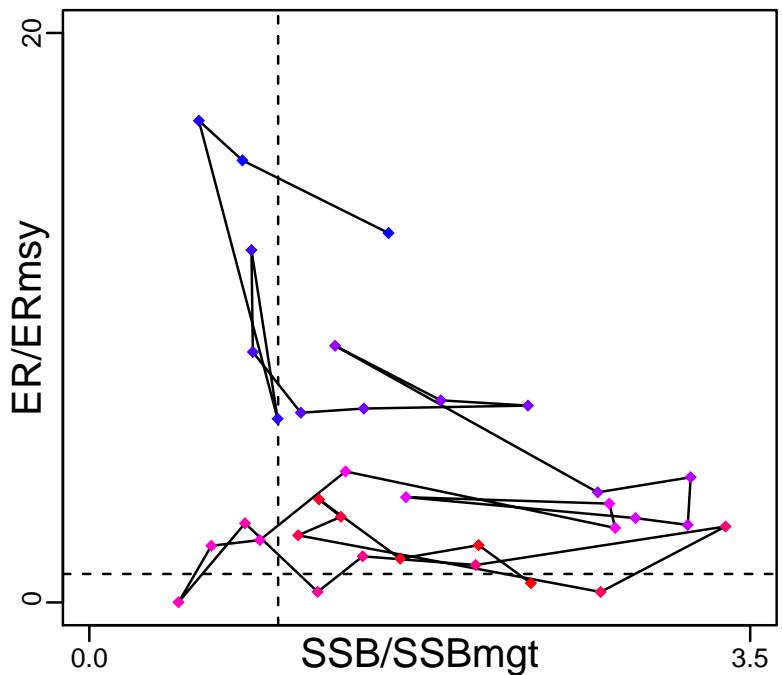
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	497,000	Both	-	
SSB	SSB-MT	2017	152,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	3.72×10^{10}	-	0	
F	F-1/yr	2017	0.243	-	1 to 2	
ER	ER-calc-ratio	2017	0.061	-	-	
TC	TC-MT	2017	30,100			
TL	TL-MT	2017	13,600			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2011	0.817			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.679			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	2.338			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Norway pout ICES 3a–4 [NPOUTIIIa–IV]

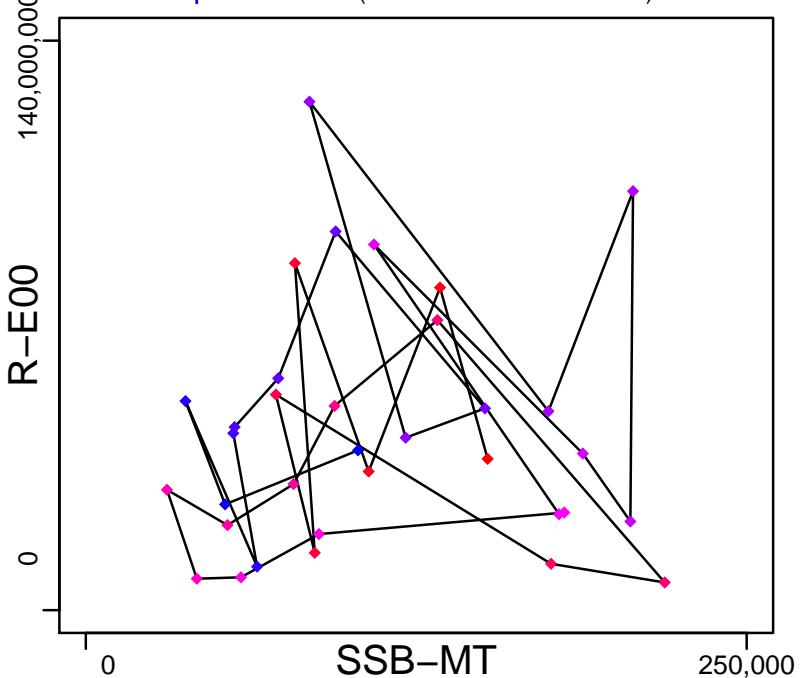
Kobe MSYpref (1984–2017–ICESIMP2018)



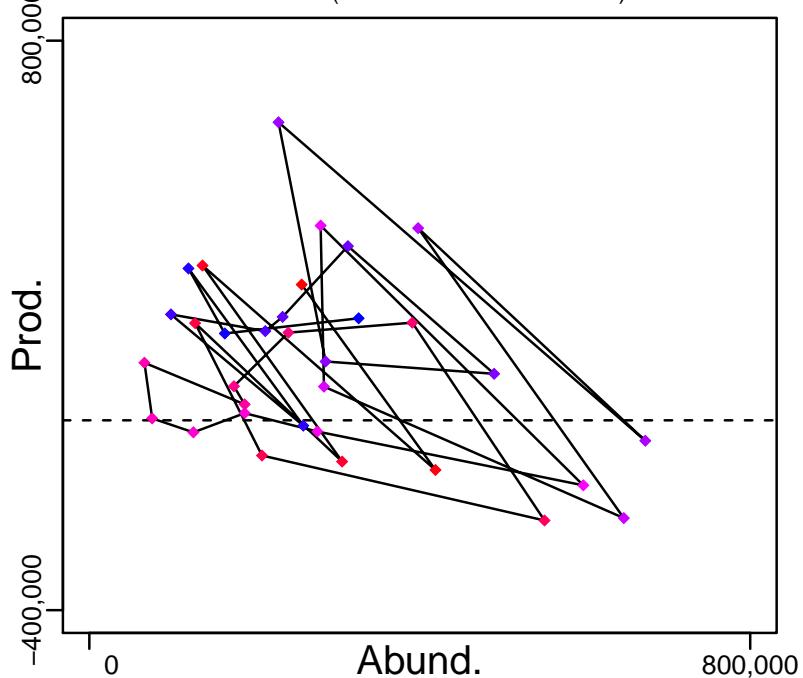
Kobe MGTpref (1984–2017–ICESIMP2018)



Spawner Recruit (1984–2017–ICESIMP2018)



Production (1984–2017–ICESIMP2018)

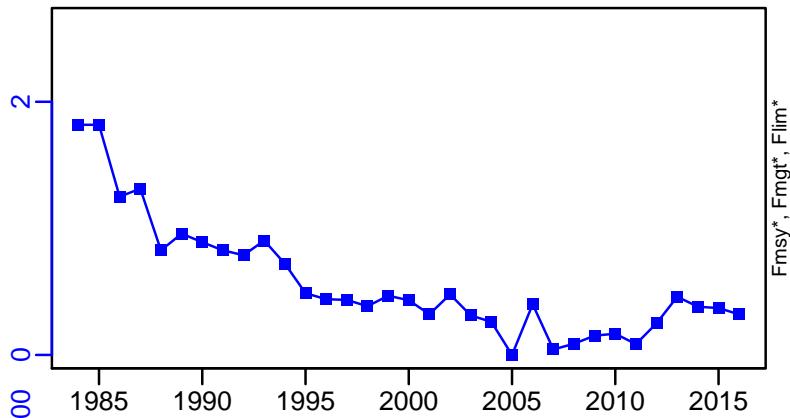
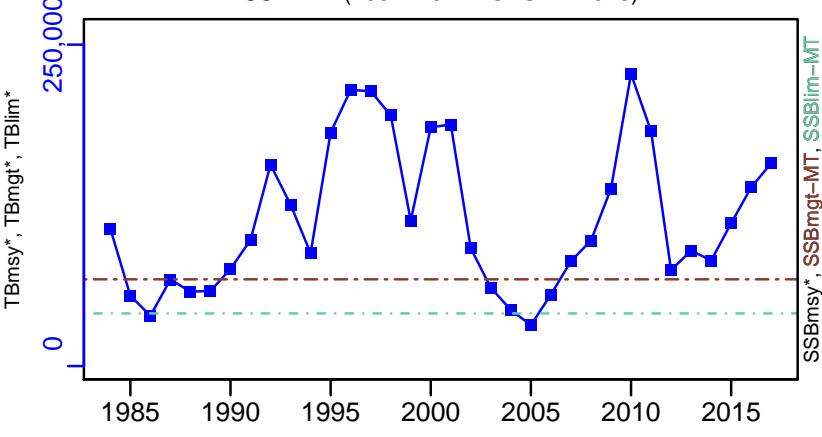
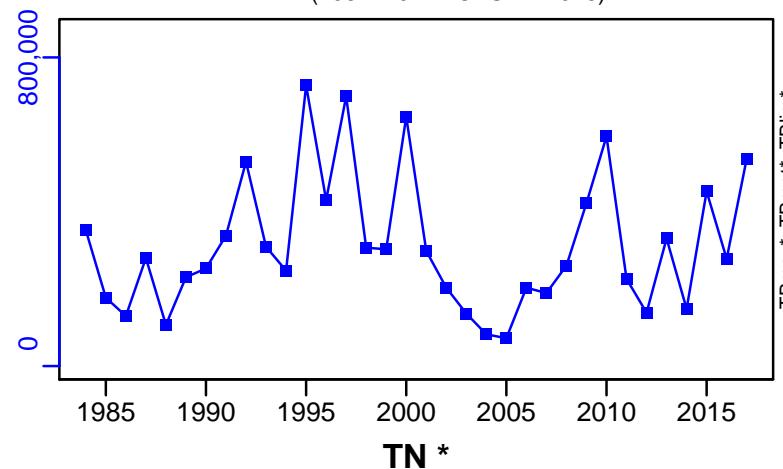


◆ Start Year ◆ End Year * No Data

Norway pout ICES 3a–4 [NPOUTIIIa–IV]

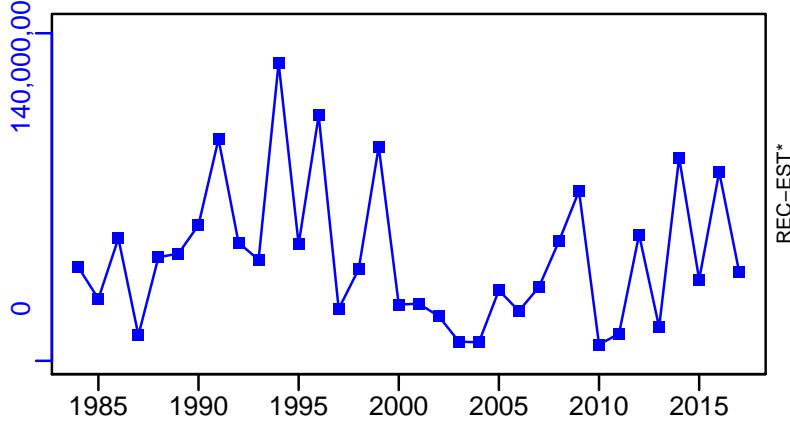
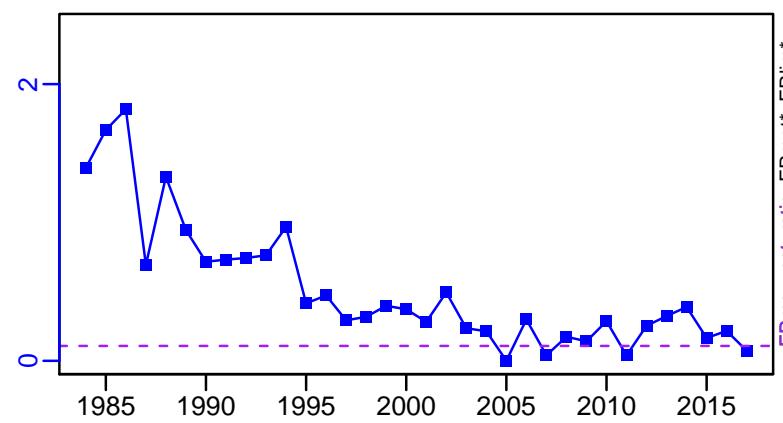
TB-MT (1984–2017–ICESIMP2018)

SSB-MT (1984–2017–ICESIMP2018)



ER-calc-ratio (1984–2017–ICESIMP2018)

R-E00 (1984–2017–ICESIMP2018)

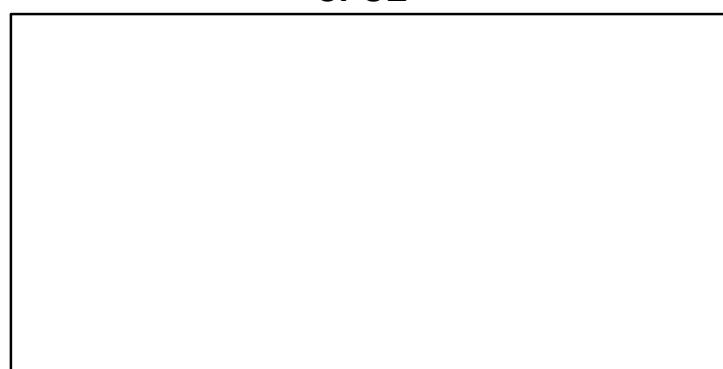
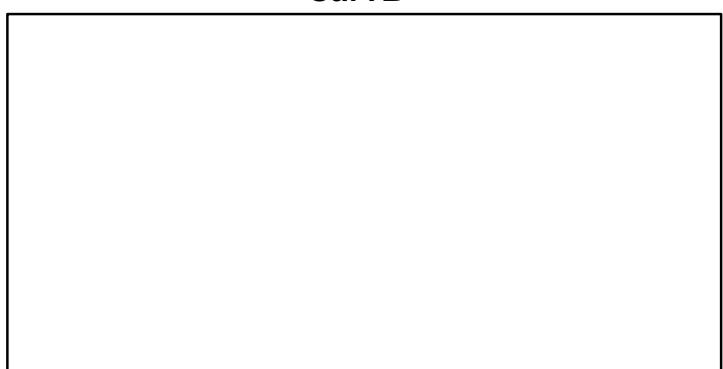
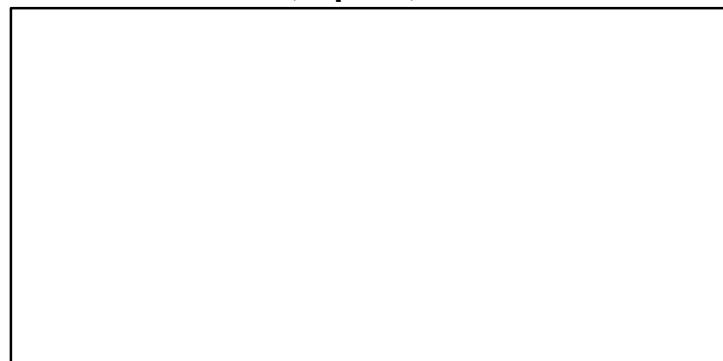
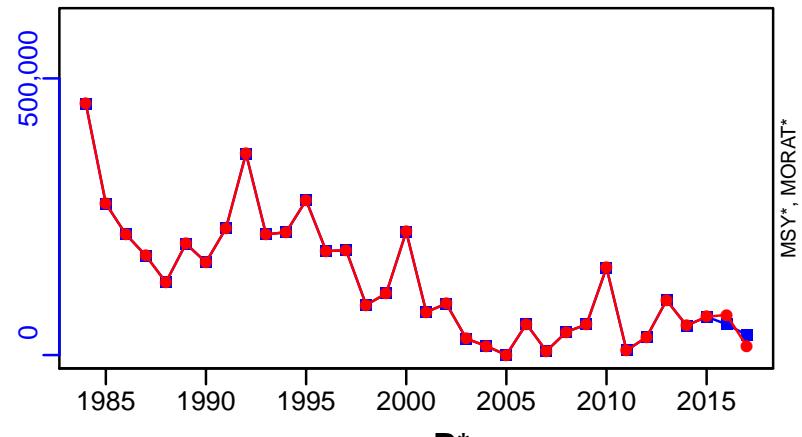


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

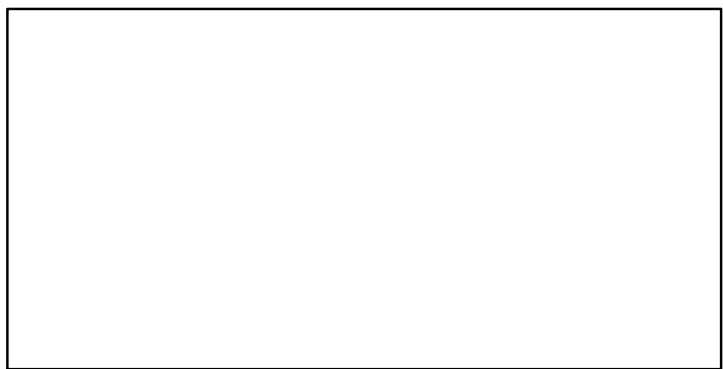
Norway pout ICES 3a–4 [NPOUTIIIa–IV]

TC–MT, TL–MT, RecC* (1984–2017–ICESIMP2018)

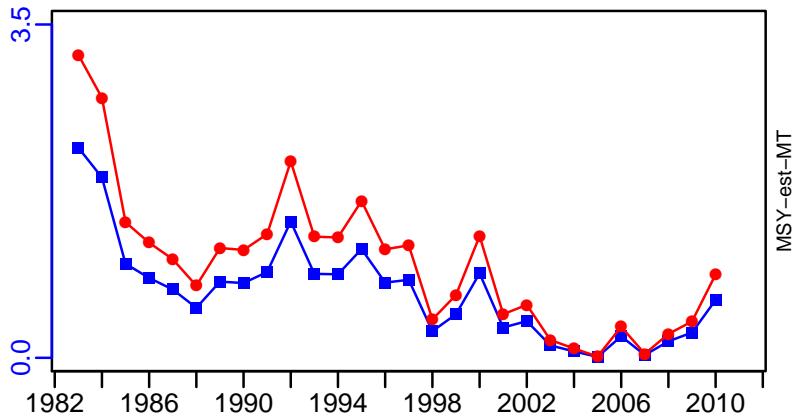
TAC*, Cpair*, Cadv*



EFFORT*



TL–MT/MSY–est–MT, CdiveMEANC–ratio, (1983–2011–NEUBAUER)



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

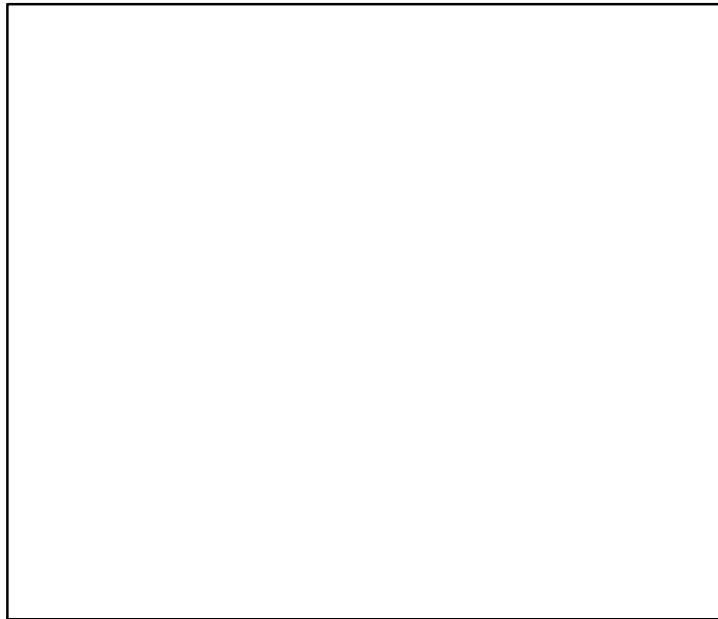
Norway pout West of Scotland [NPOUTVla]

Metadata	
Scientific Name	Trisopterus esmarkii
Current Assess ID	WGNSSK-NPOUTVla-1970-2015-ICESIMP2018
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015

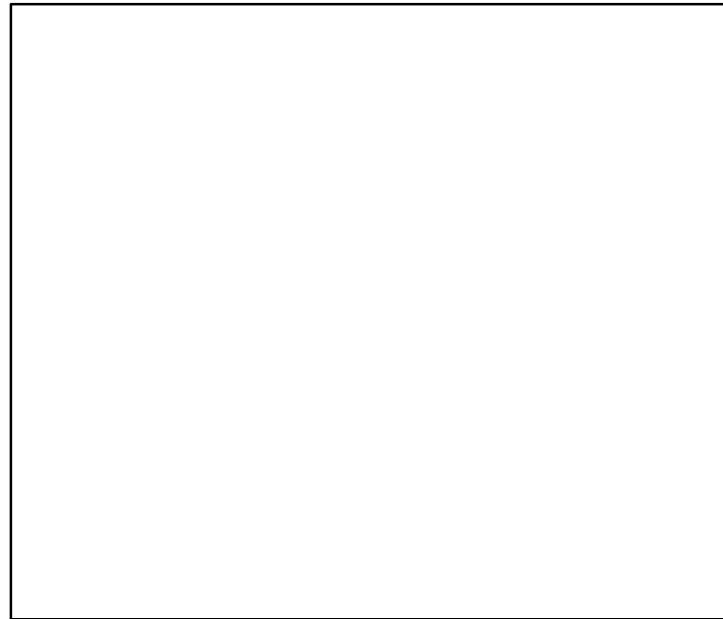
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	1.22		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

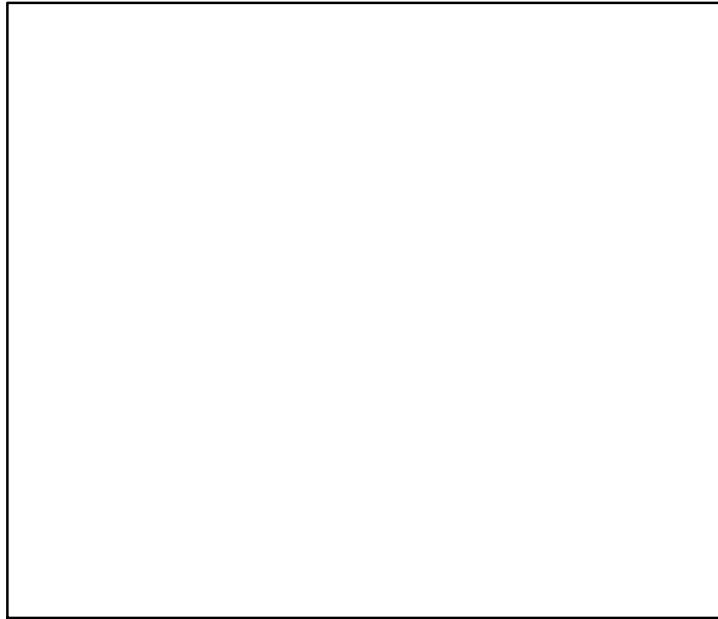
Kobe MSY*



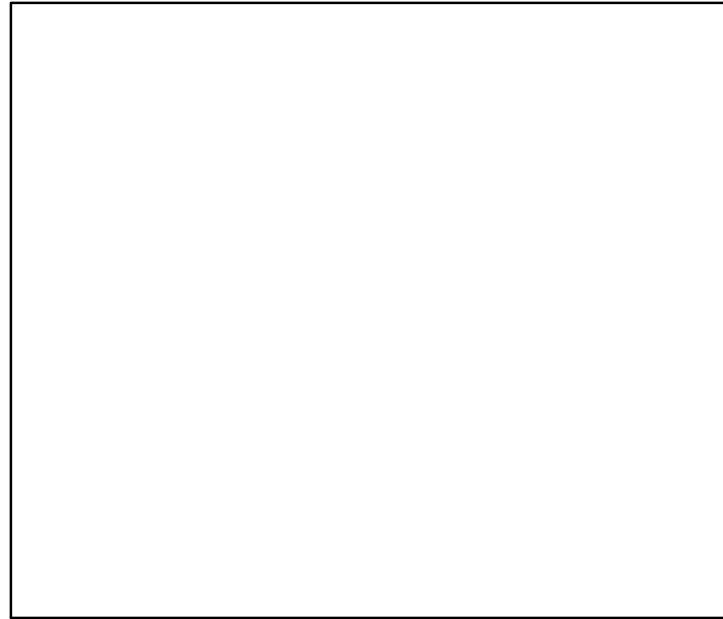
Kobe MGT*



Spawner Recruit*



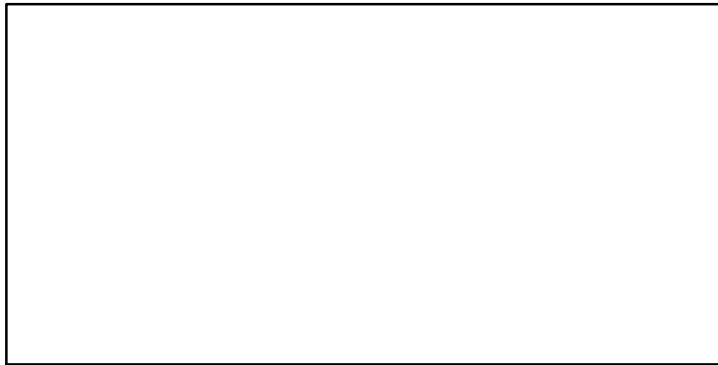
Production*



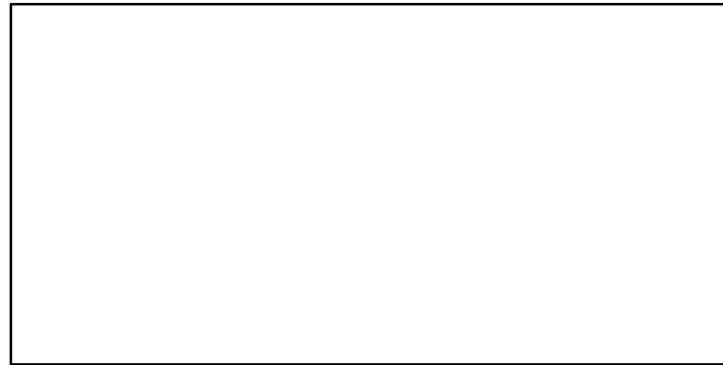
◆ Start Year ♦ End Year * No Data

Norway pout West of Scotland [NPOUTVla]

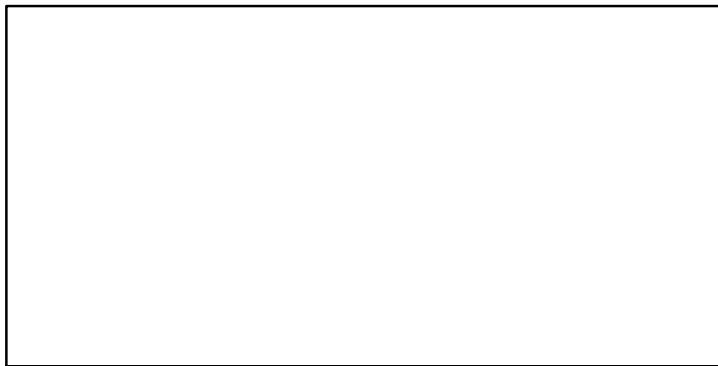
TB*



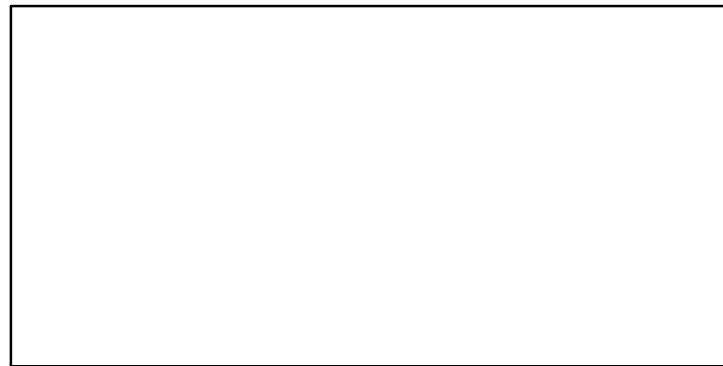
SSB*



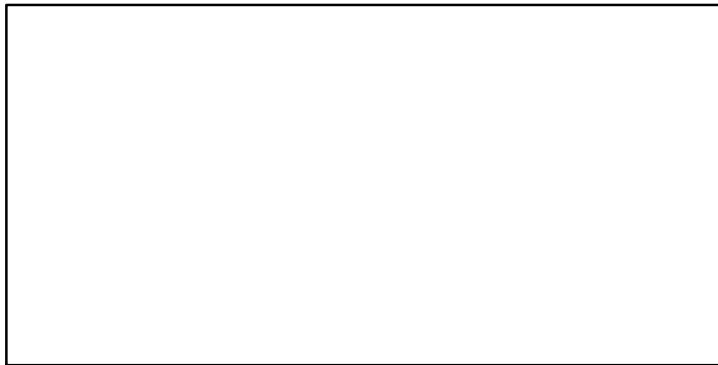
TN *



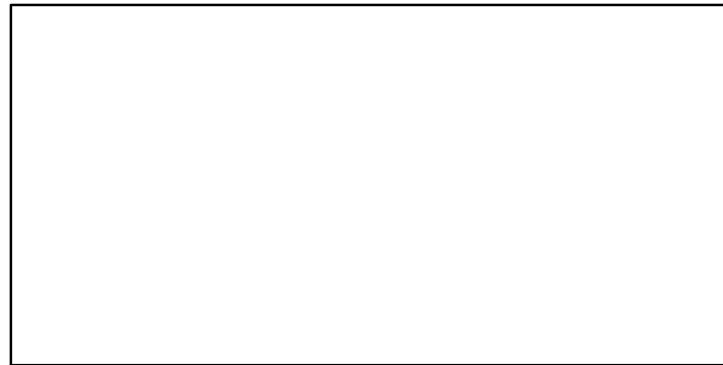
F*



ER*



Recruits*

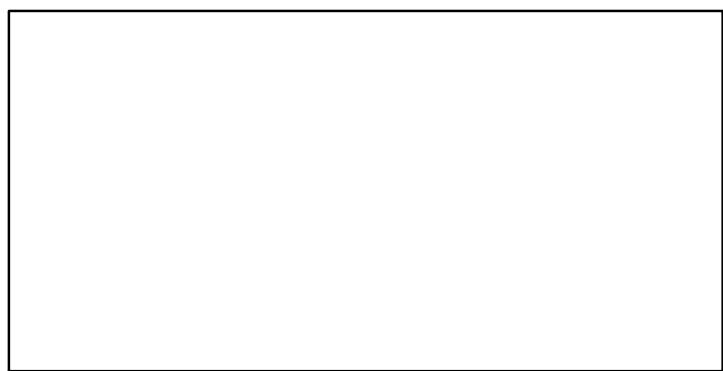
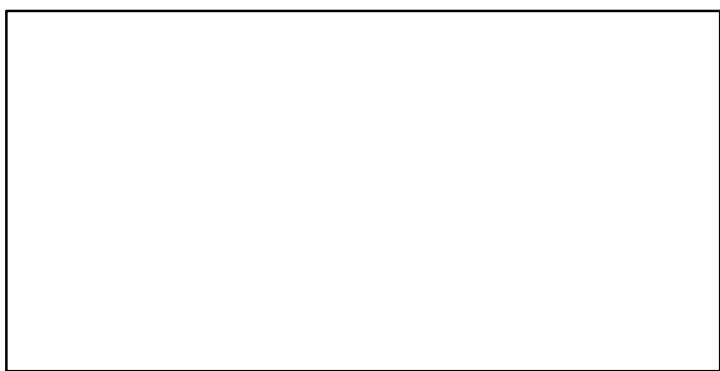
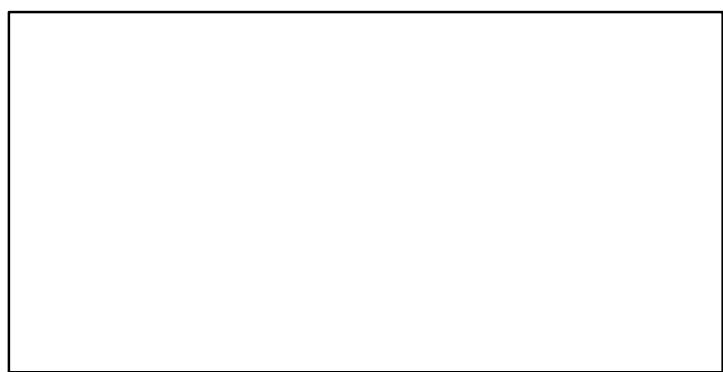
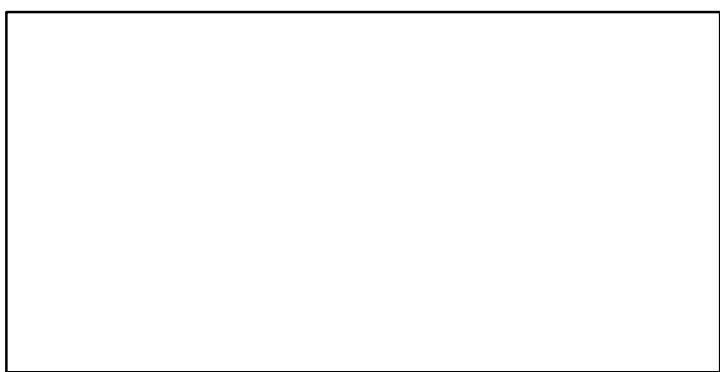
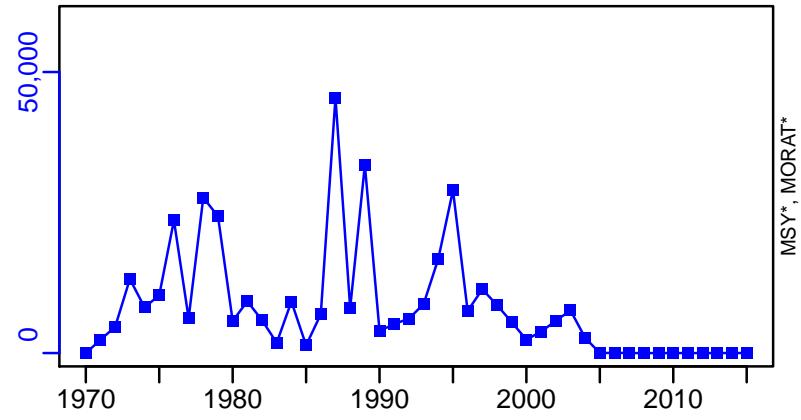


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Norway pout West of Scotland [NPOUTVla]

TL-MT, TC*, RecC* (1970–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Orange roughy Northeast Atlantic [OROUGHYNEATL]

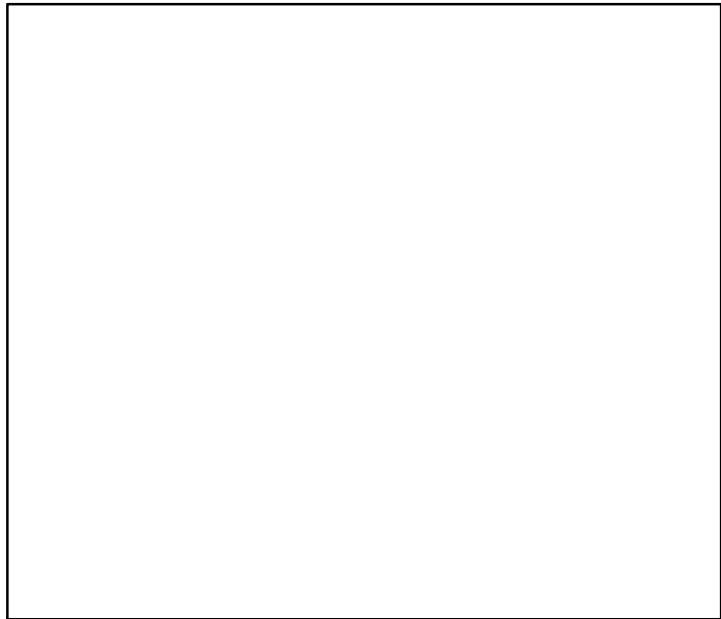
Metadata	
Scientific Name	Hoplostethus atlanticus
Current Assess ID	WGDEEP-OROUGHYNEATL-1988-2016-ICESIMP2016
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016

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

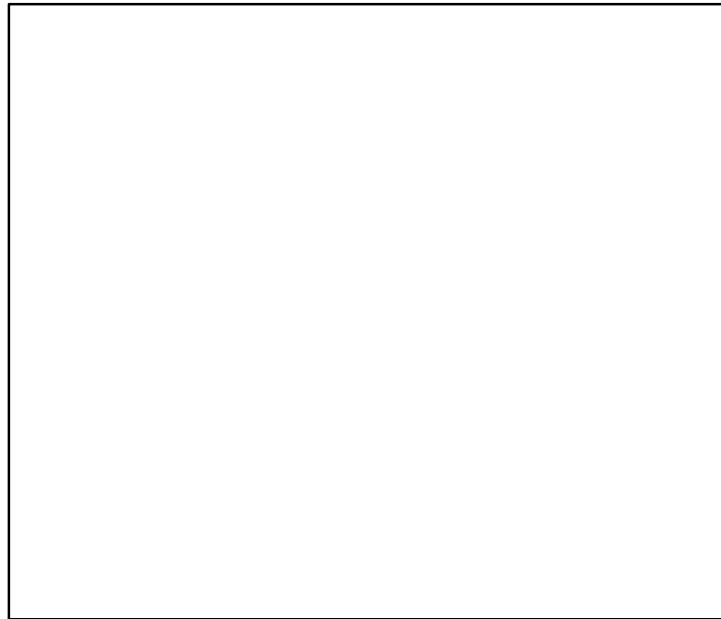
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	48		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Orange roughy Northeast Atlantic [OROUGHYNEATL]

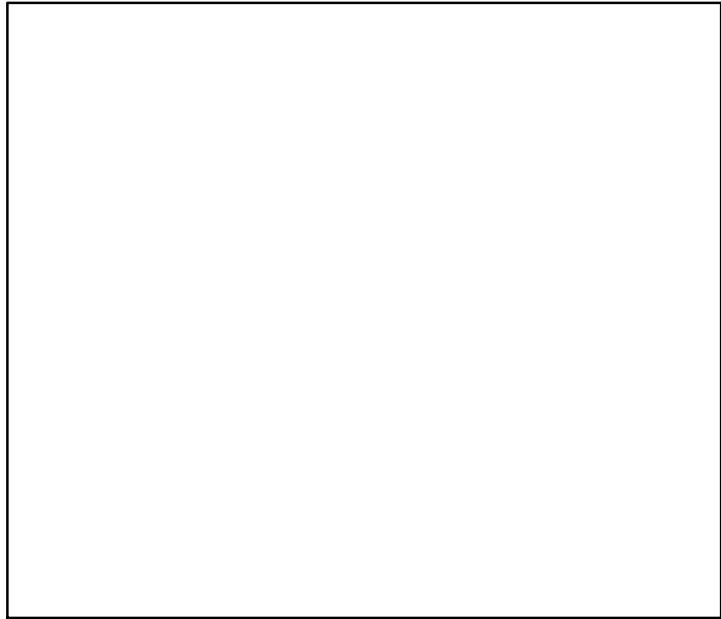
Kobe MSY*



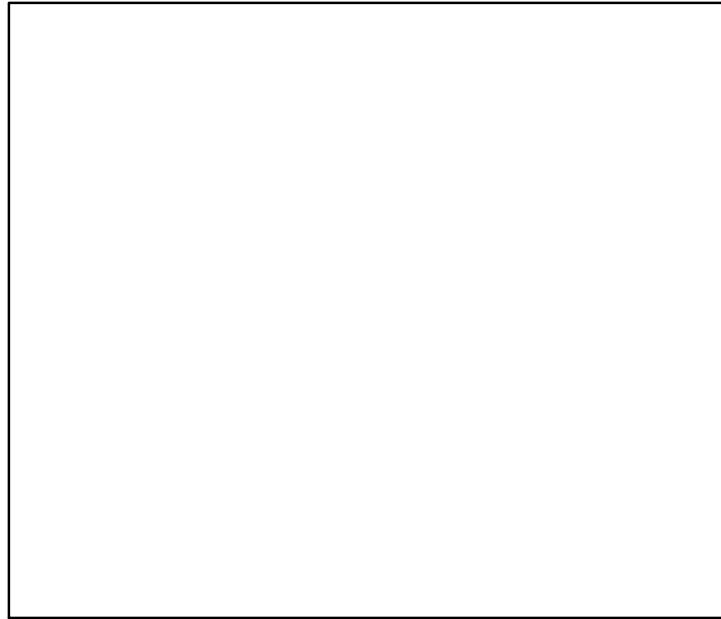
Kobe MGT*



Spawner Recruit*



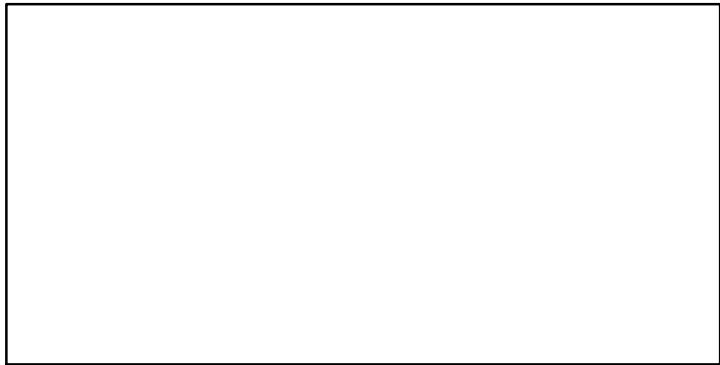
Production*



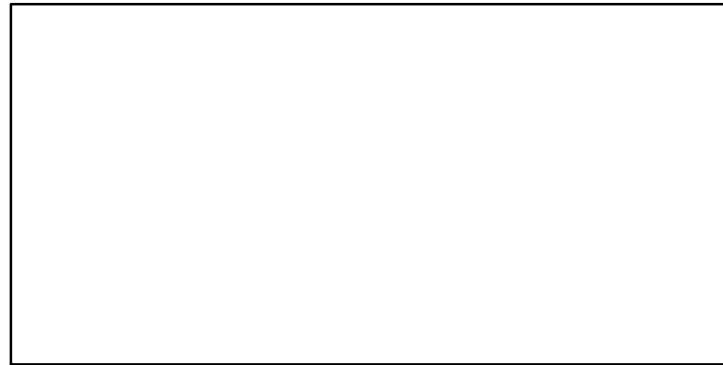
♦ Start Year ♦ End Year * No Data

Orange roughy Northeast Atlantic [OROUGHYNEATL]

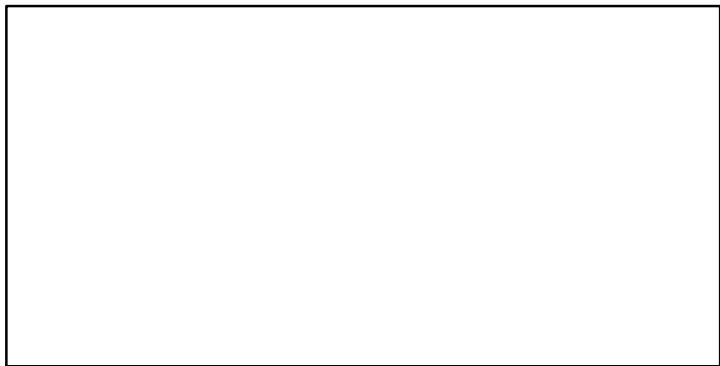
TB*



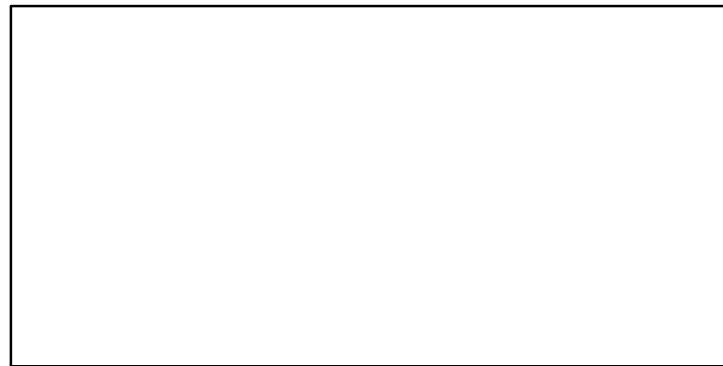
SSB*



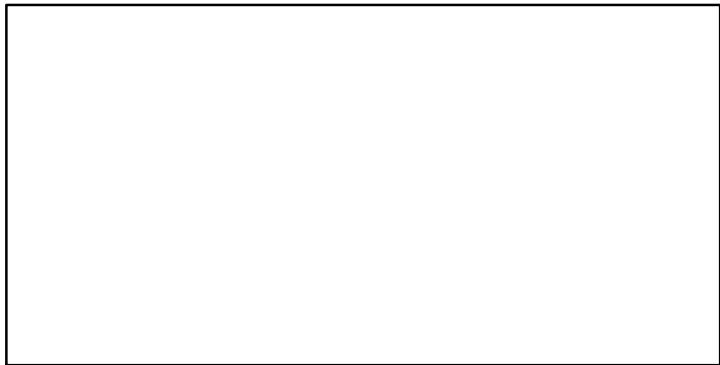
TN *



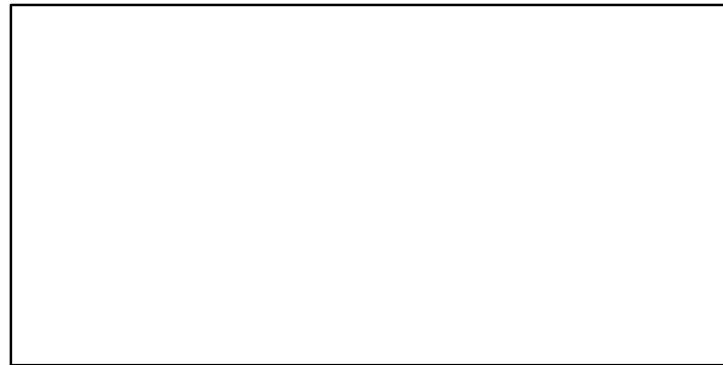
F*



ER*



Recruits*

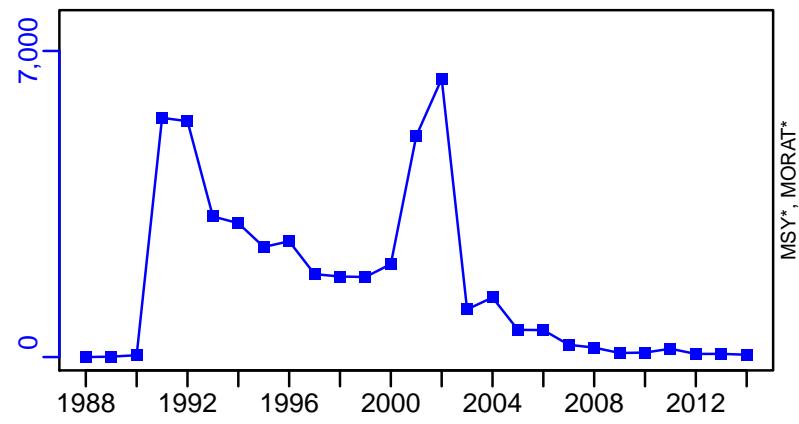


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Orange roughy Northeast Atlantic [OROUGHYNEATL]

TL-MT, TC*, RecC* (1988–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*



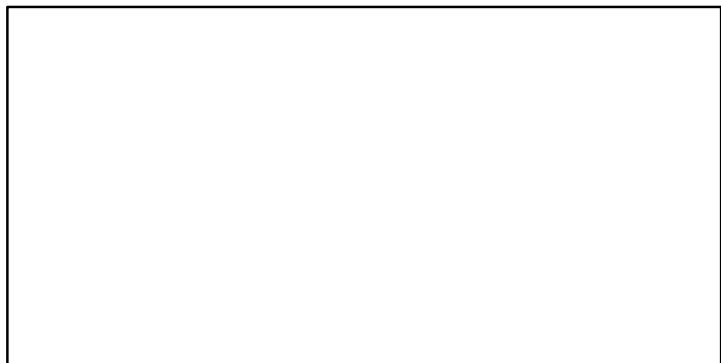
survB*



CPUE*



EFFORT*



CdivMSY*



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

Northern shrimp ICES 3a(west)-4a(east) [PANDALIIIaW-IVaE]

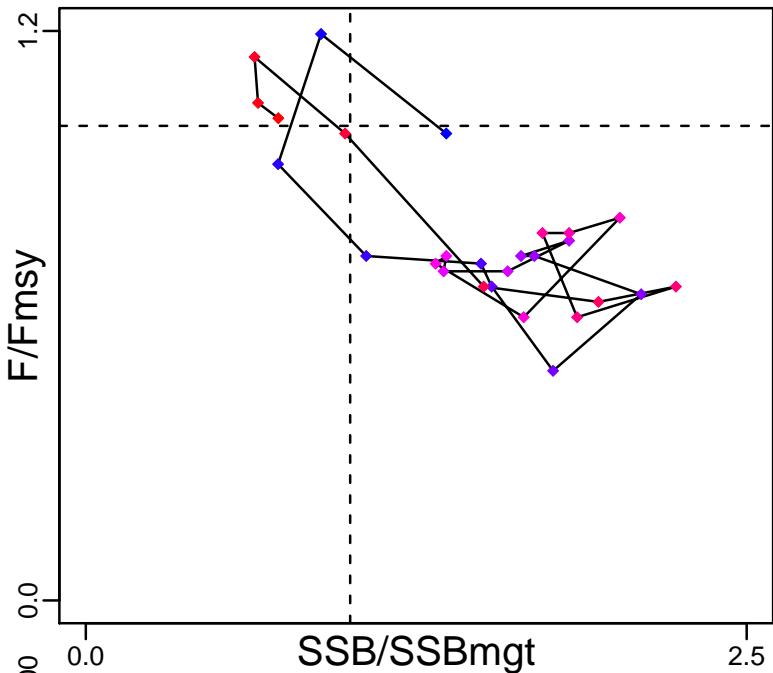
Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	NIPAG-PANDALIIIaW-IVaE-1988-2015-ICESIMP2016
Area	ICES 3a(west)-4a(east)
Management Authority	International Council for the Exploration of the Sea
Assessor	Joint NAFO and ICES Pandalus Assessment Working Group
Asmts in RAM	2013, 2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2015	0.62
ERmsy	ERmsy-est-ratio	2015	0.393
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	9900
Fmgt	Fmgt-1/yr	2015	0.62
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	6300
Flim	Flim-1/yr	2015	1
ERlim	-	-	-

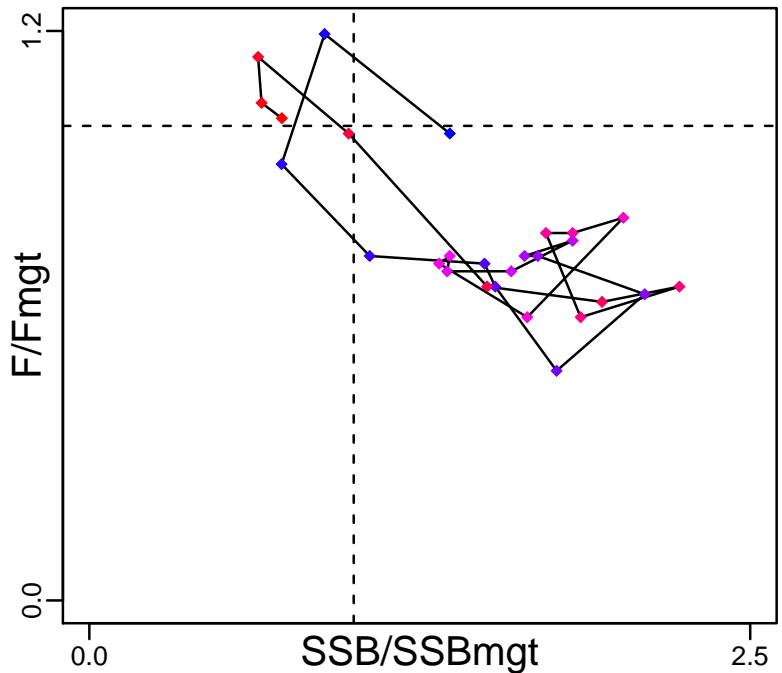
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	29,400	Both	-	
SSB	SSB-MT	2015	12,300	Both	-	
TN	-	-	-	-	-	
R	R-E00	2015	8.59×10^9	-	0	
F	F-1/yr	2015	0.63	-	1 to 3	
ER	ER-calc-ratio	2015	0.412	-	-	
TC	TC-MT	2015	12,100			
TL	TL-MT	2015	9950			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2014	1.1			
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	1.016			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	1.048			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	1.242			
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	1.016			
ER/ERmgt	-	-	-			

Northern shrimp ICES 3a(west)–4a(east) [PANDALIIIaW–IVaE]

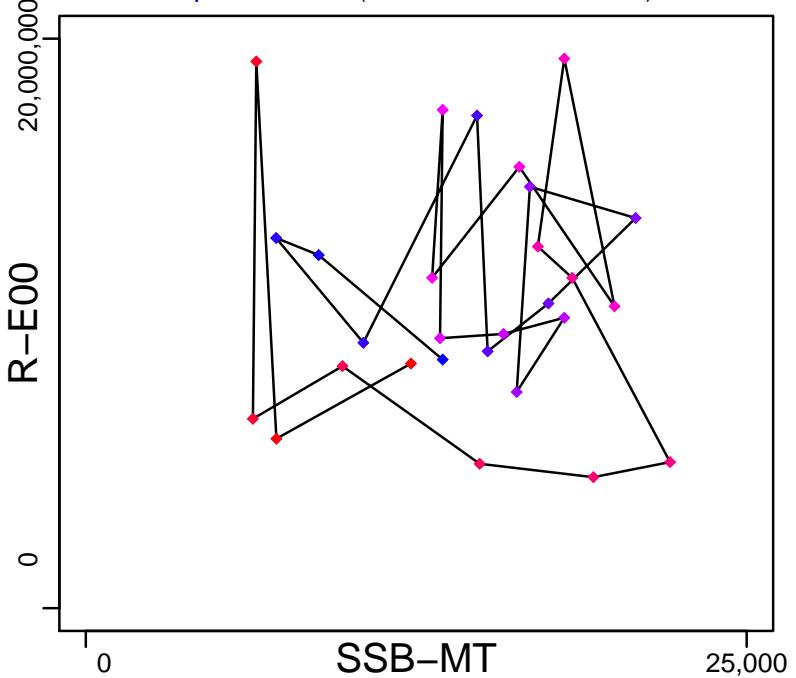
Kobe MSYpref (1988–2015–ICESIMP2016)



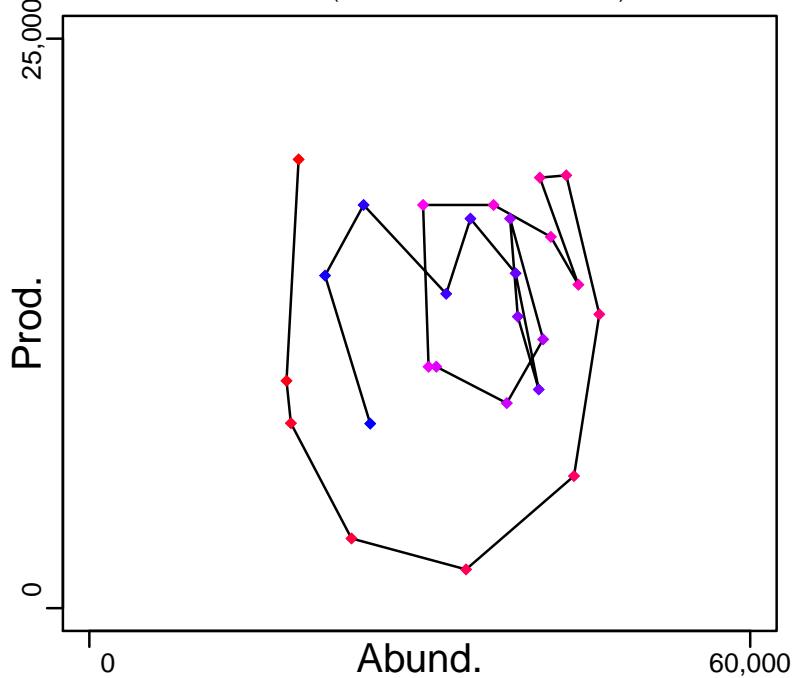
Kobe MGTpref (1988–2015–ICESIMP2016)



Spawner Recruit (1988–2015–ICESIMP2016)



Production (1988–2015–ICESIMP2016)

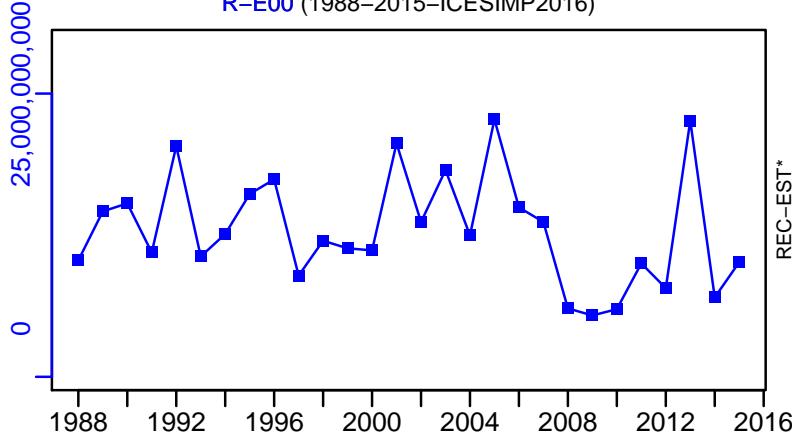
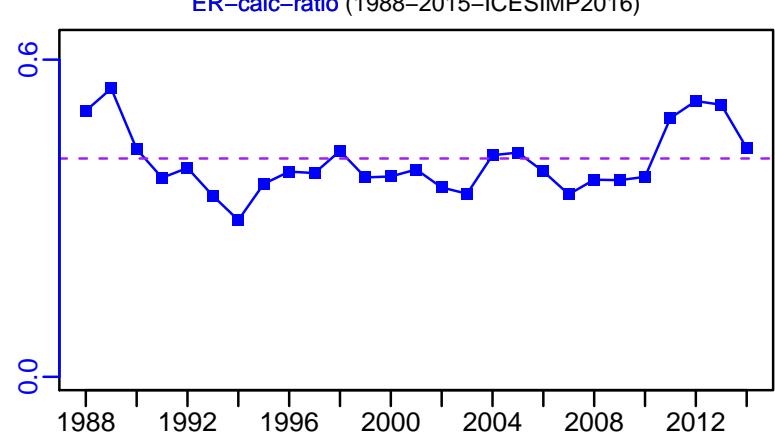
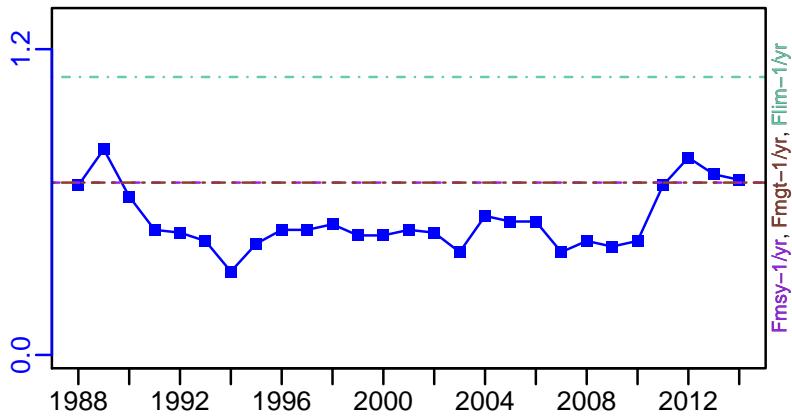
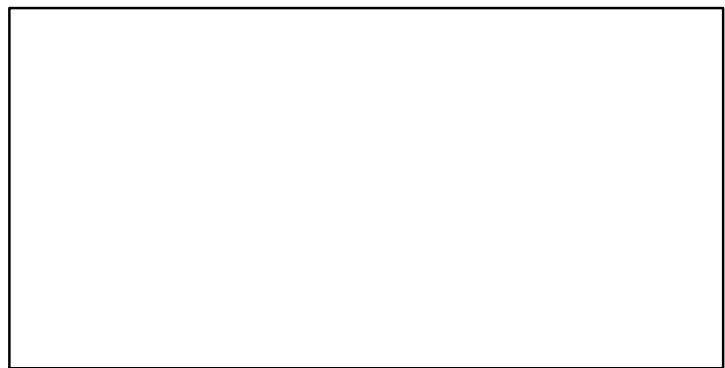
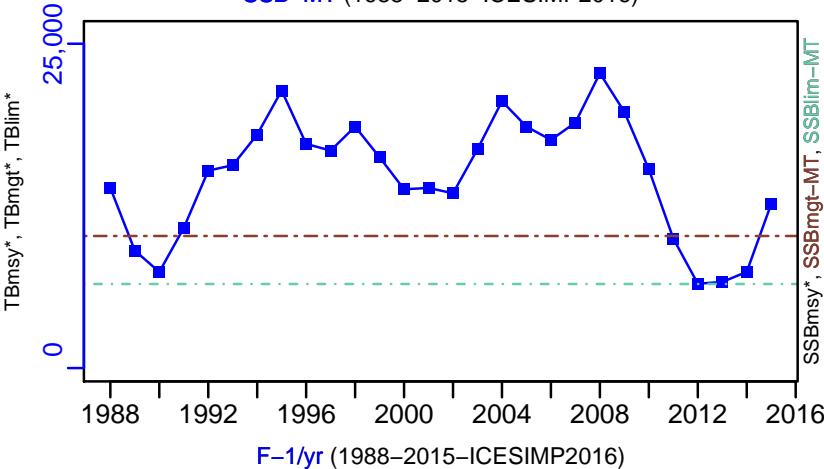
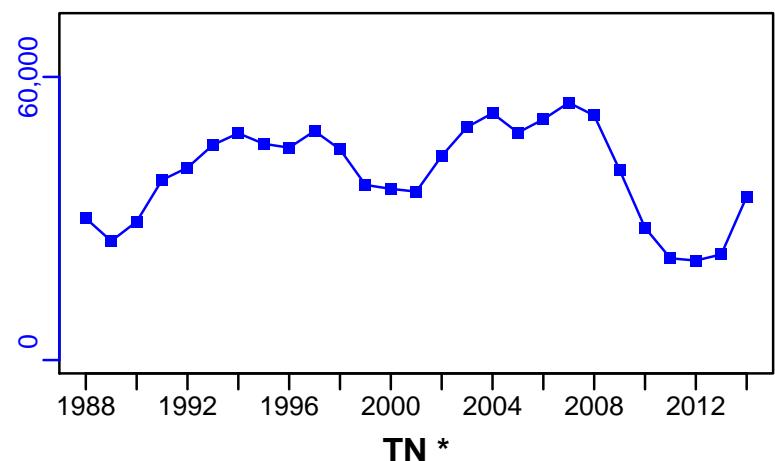


◆ Start Year ◆ End Year * No Data

Northern shrimp ICES 3a(west)–4a(east) [PANDALIIaW–IVaE]

TB-MT (1988–2015–ICESIMP2016)

SSB-MT (1988–2015–ICESIMP2016)

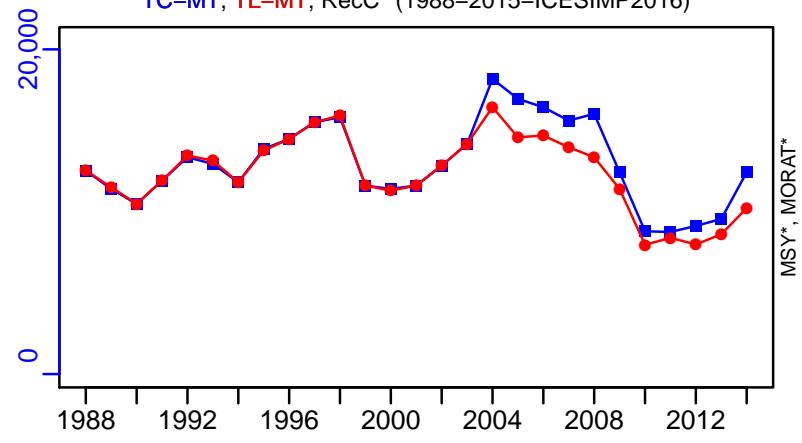


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

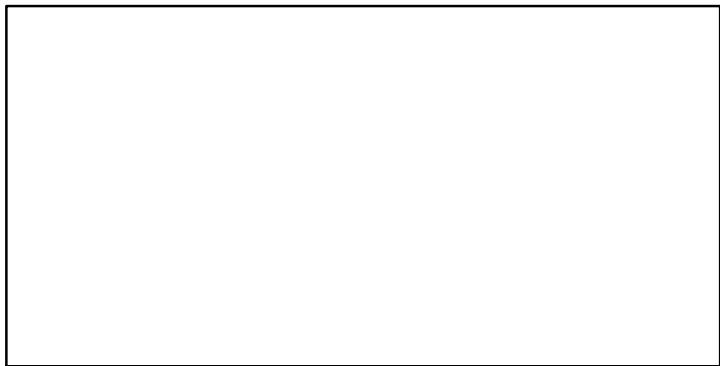
Northern shrimp ICES 3a(west)–4a(east) [PANDALIIIaW–IVaE]

TC-MT, TL-MT, RecC* (1988–2015–ICESIMP2016)

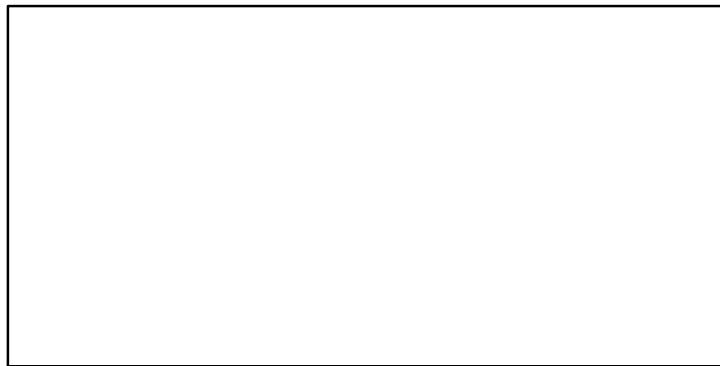
TAC*, Cpair*, Cadv*



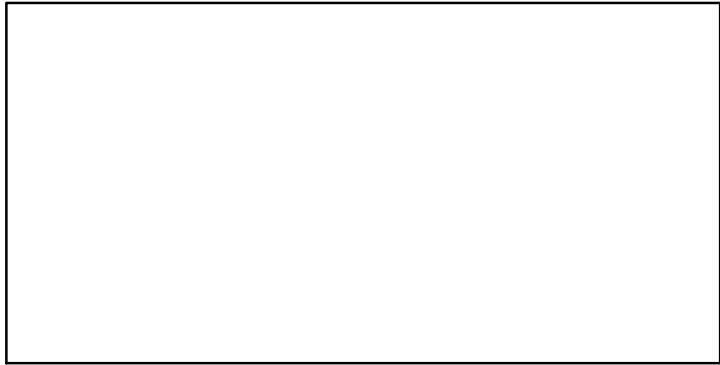
survB*



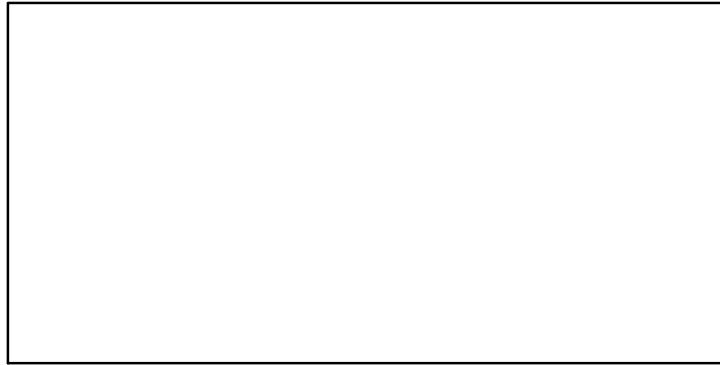
CPUE*



EFFORT*



CdivMSY*



Northern shrimp Northern North Sea [PANDALIVa]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	NIPAG-PANDALIVa-1970-2015-ICESIMP2016
Area	Northern North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Joint NAFO and ICES Pandalus Assessment Working Group
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Northern shrimp Northern North Sea [PANDALIVa]

TB*



SSB*



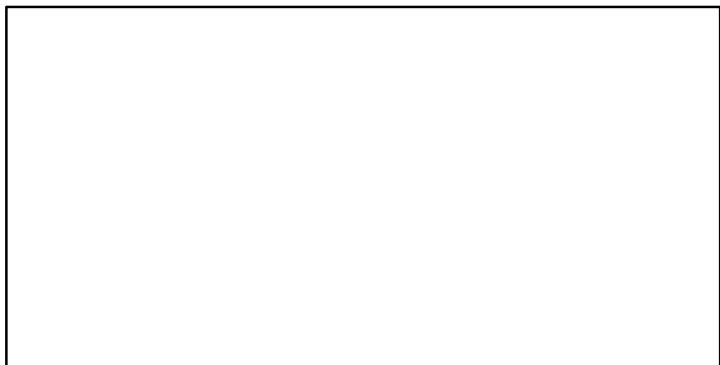
TN *



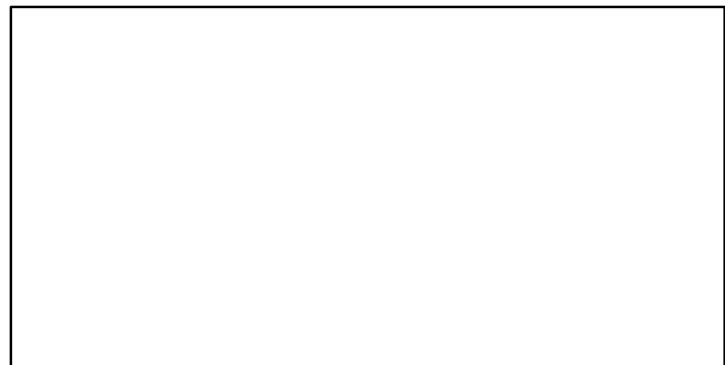
F*



ER*



Recruits*

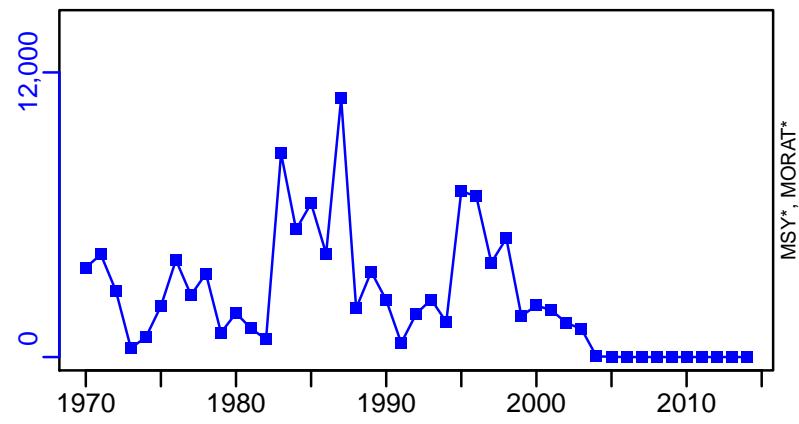


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

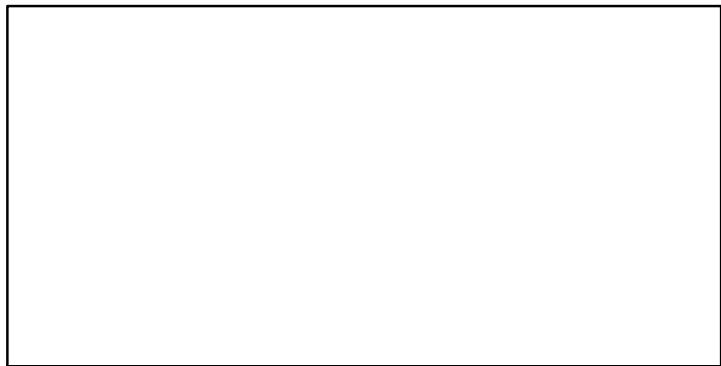
Northern shrimp Northern North Sea [PANDALIVa]

TL-MT, TC*, RecC* (1970–2015–ICESIMP2016)

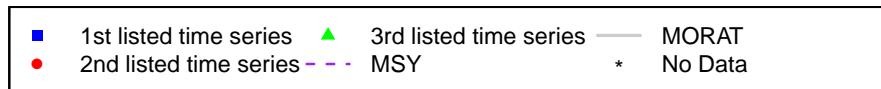
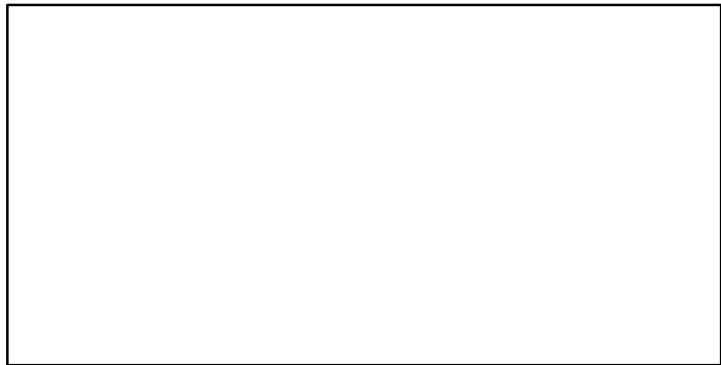
TAC*, Cpair*, Cadv*



CPUE*



CdivMSY*



European plaice Subdivisions 21-23 [PLAIC2123]

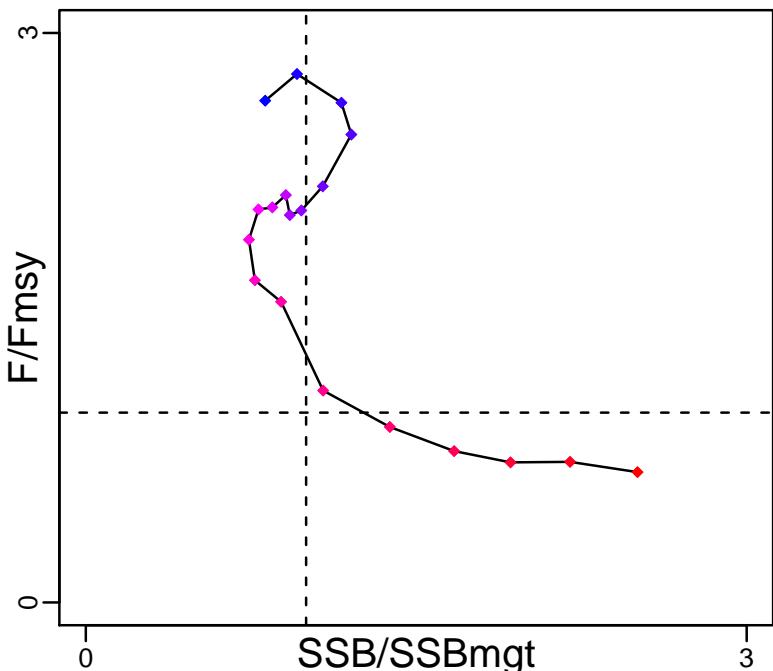
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBFAS-PLAIC2123-1998-2018-ICESIMP2018
Area	Subdivisions 21-23
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.37
ERmsy	ERmsy-est-ratio	2018	0.664
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	5550
Fmgt	Fmgt-1/yr	2018	0.37
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	4077
Flim	Flim-1/yr	2018	1.01
ERlim	-	-	-

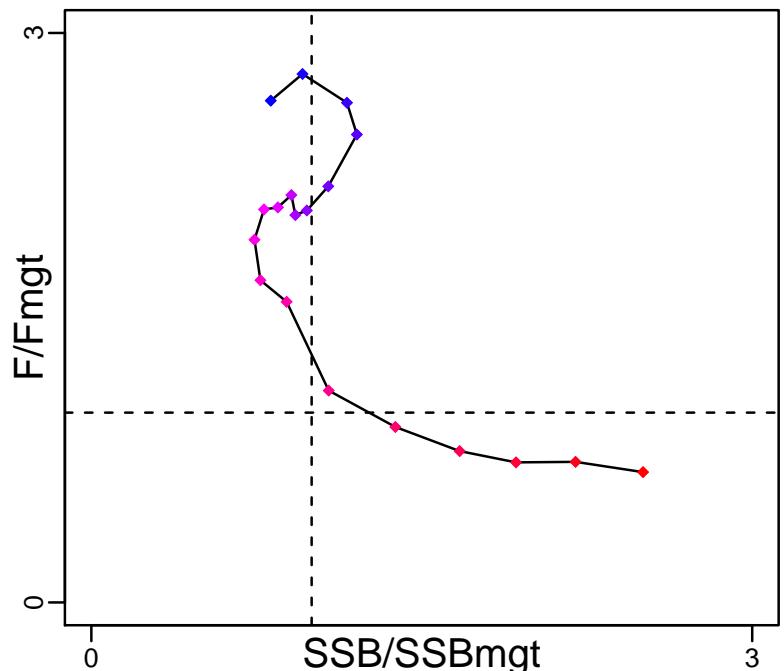
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	21,700	Both	-	
SSB	SSB-MT	2018	16,900	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	82,900,000	-	1	
F	F-1/yr	2018	0.254	-	3 to 5	
ER	ER-calc-ratio	2018	0.238	-	-	
TC	TC-MT	2018	4240			
TL	TL-MT	2018	3250			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.686			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.359			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	3.045			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.686			
ER/ERmgt	-	-	-			

European plaice Subdivisions 21–23 [PLAIC2123]

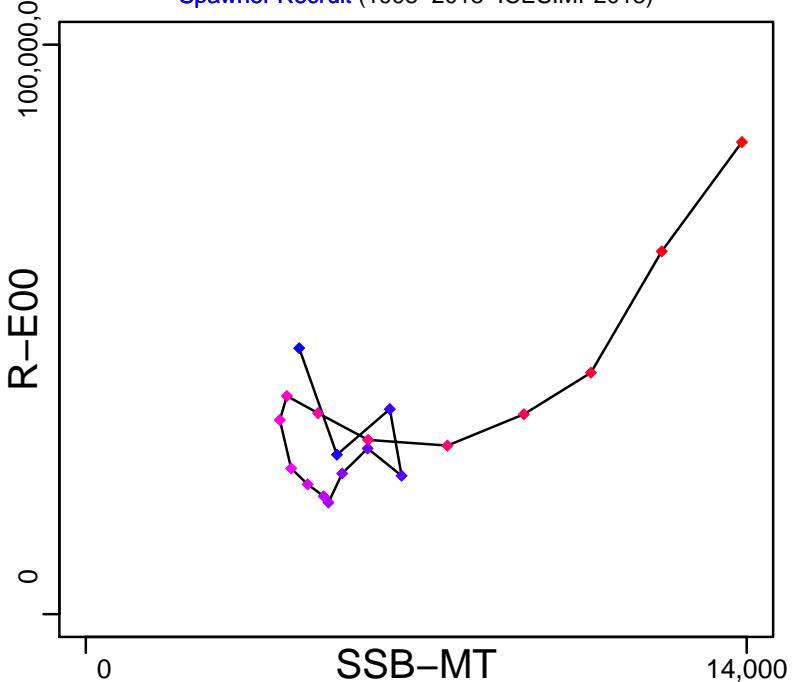
Kobe MSYpref (1998–2018–ICESIMP2018)



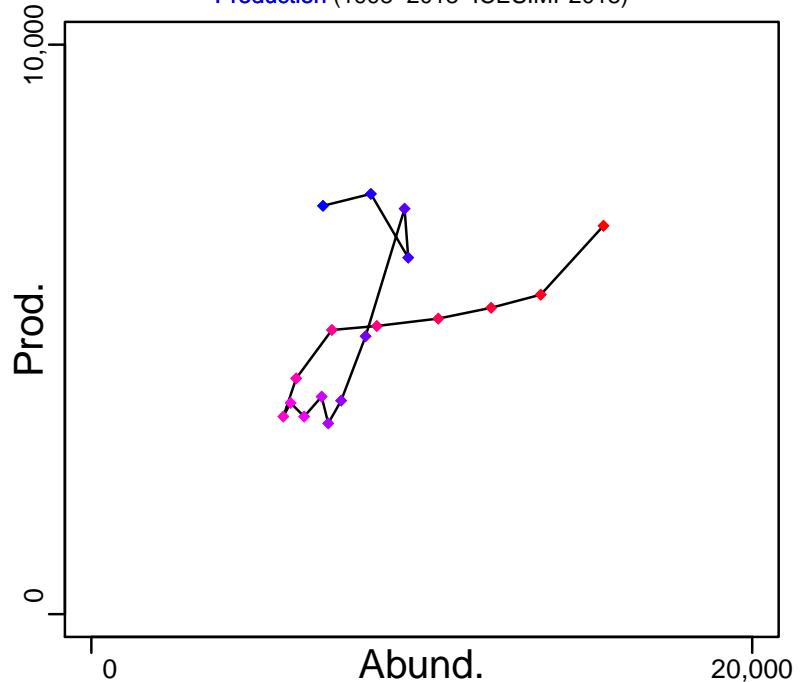
Kobe MGTpref (1998–2018–ICESIMP2018)



Spawner Recruit (1998–2018–ICESIMP2018)



Production (1998–2018–ICESIMP2018)

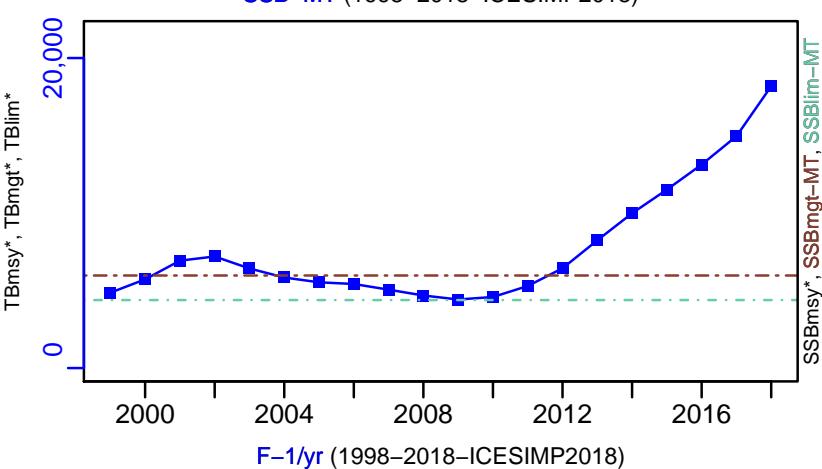
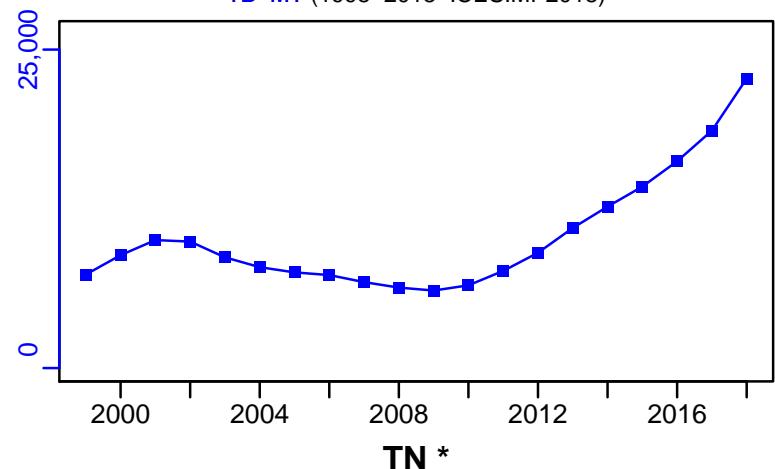


◆ Start Year ◆ End Year * No Data

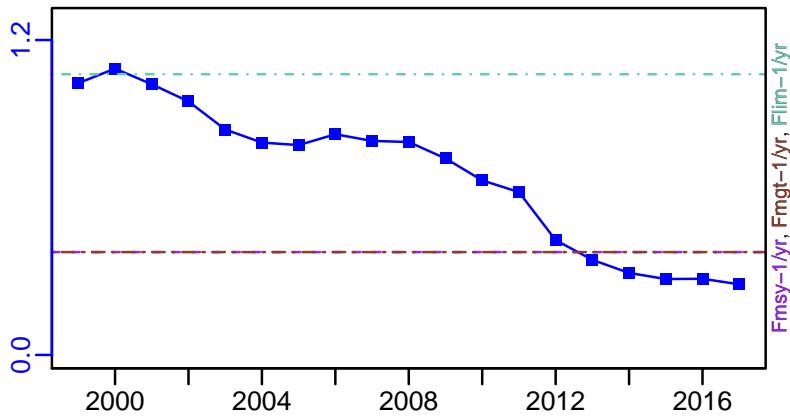
European plaice Subdivisions 21–23 [PLAIC2123]

TB-MT (1998–2018–ICESIMP2018)

SSB-MT (1998–2018–ICESIMP2018)

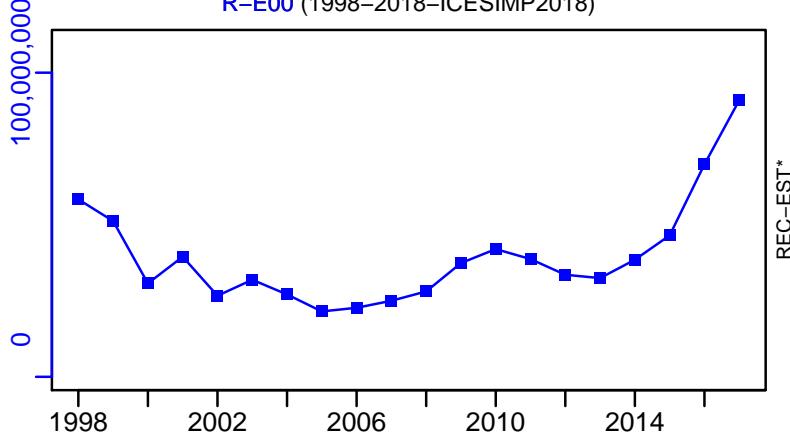
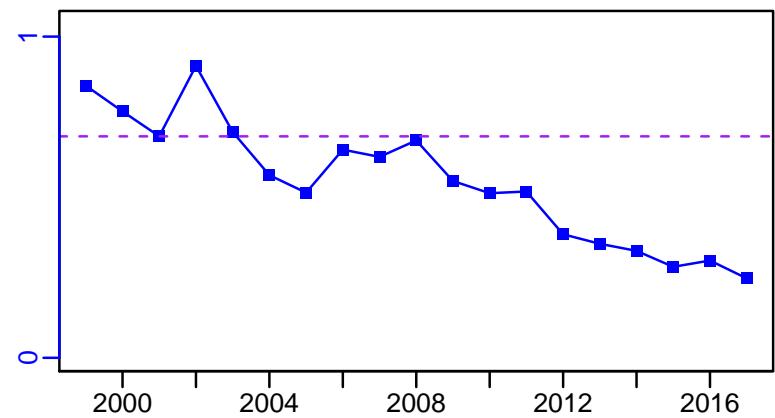


TN *



ER-calc-ratio (1998–2018–ICESIMP2018)

R-E00 (1998–2018–ICESIMP2018)

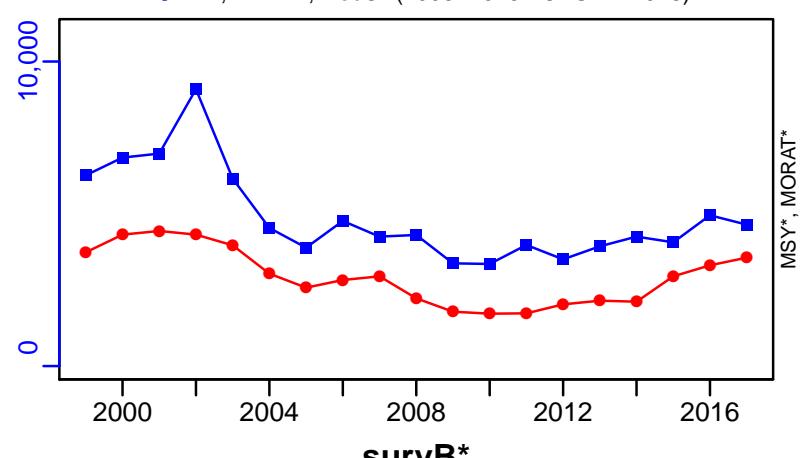


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

European plaice Subdivisions 21–23 [PLAIC2123]

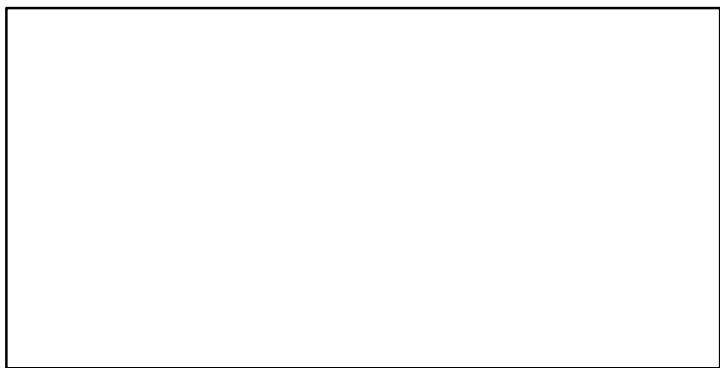
TC-MT, TL-MT, RecC* (1998–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*

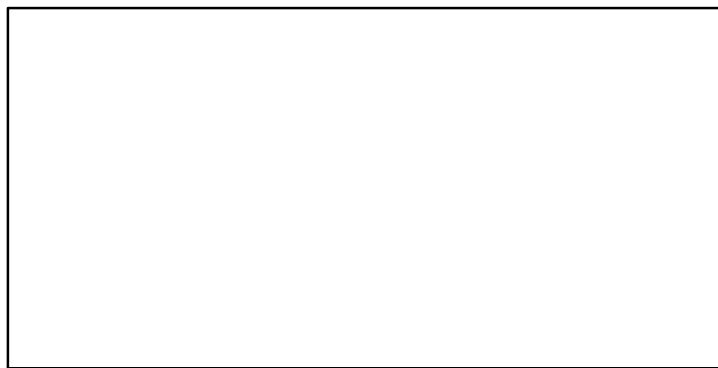


survB*

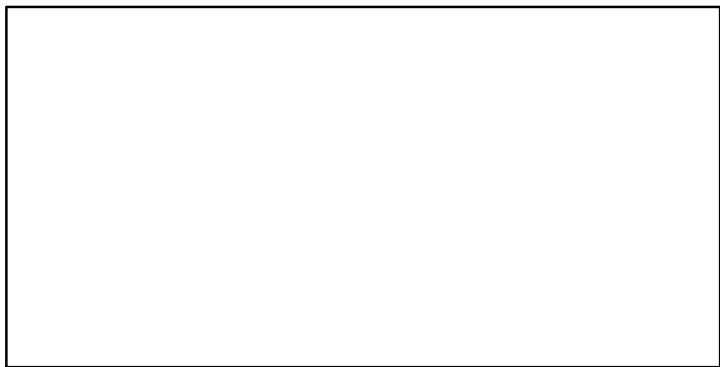
MSY*, MORAT*



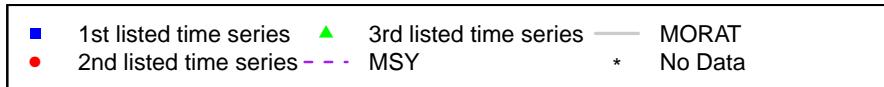
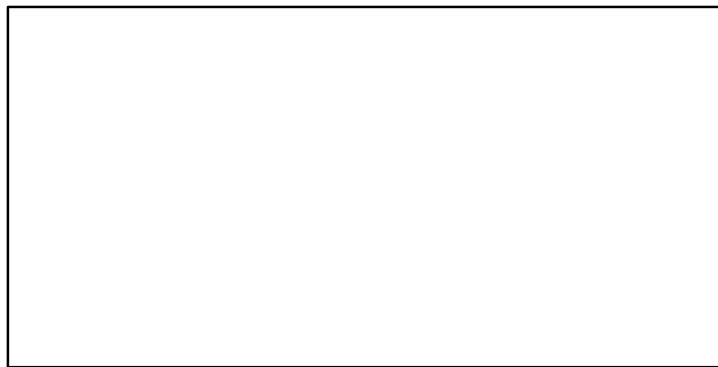
CPUE*



EFFORT*



CdivMSY*



European plaice Subdivisions 24-32 [PLAIC2432]

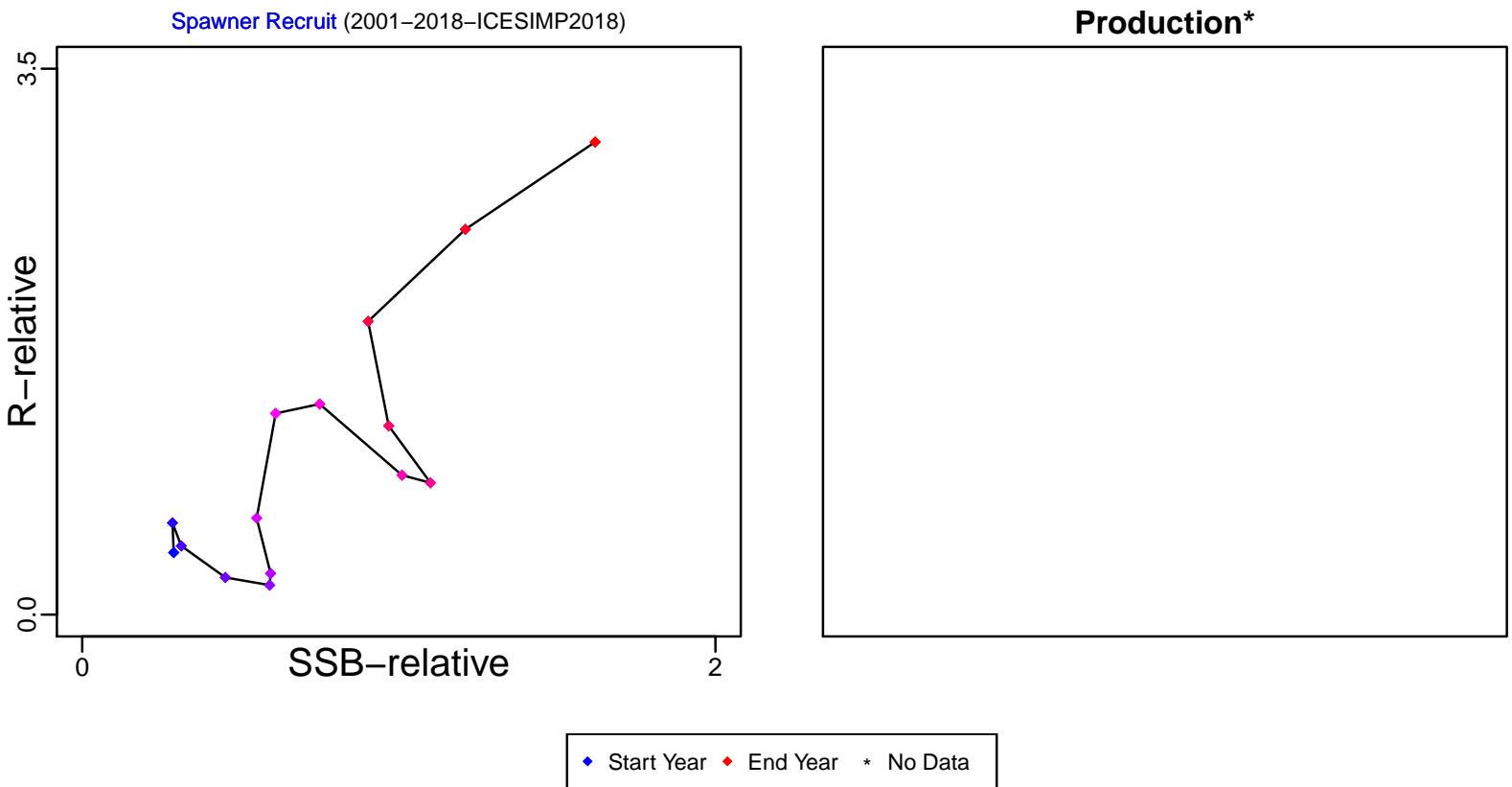
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBFAS-PLAIC2432-2001-2018-ICESIMP2018
Area	Subdivisions 24-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2015, 2016, 2017, 2018

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-relative	2018	2.82	Both	-
SSB	SSB-relative	2018	3.43	Both	-
TN	-	-	-	-	-
R	R-relative	2018	3.03	-	1
F	F-relative	2018	0.358	-	2 to 5
ER	-	-	-	-	-
TC	TC-MT	2018	1030		
TL	TL-MT	2018	650		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERrmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

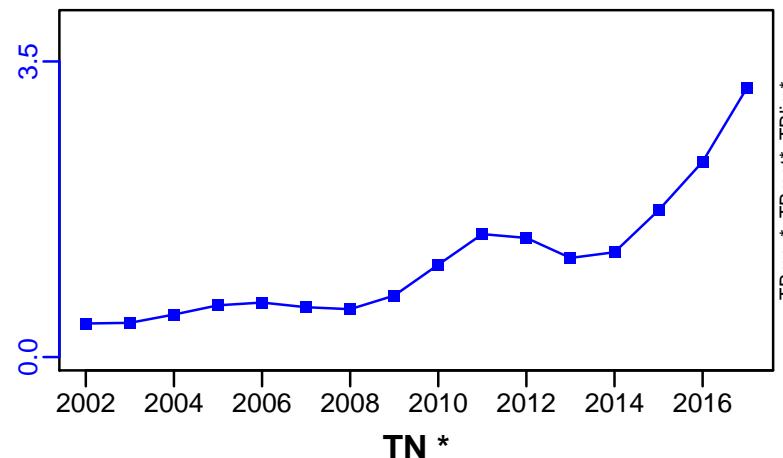
Kobe MGT*



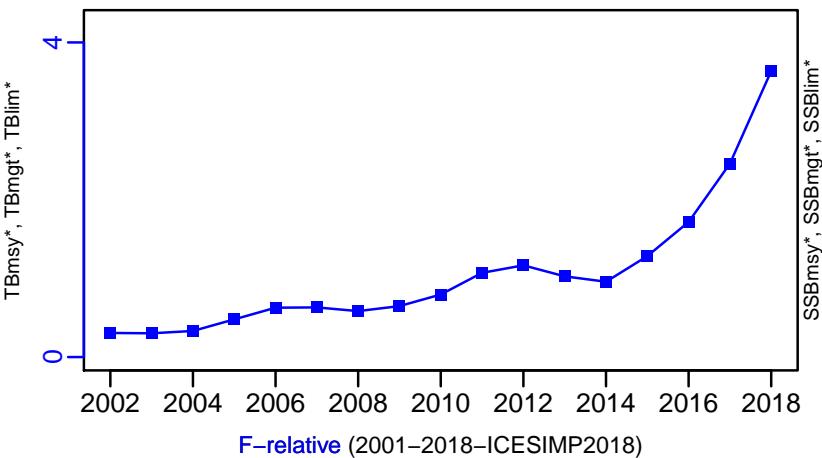
European plaice Subdivisions 24–32 [PLAIC2432]

TB-relative (2001–2018–ICESIMP2018)

SSB-relative (2001–2018–ICESIMP2018)



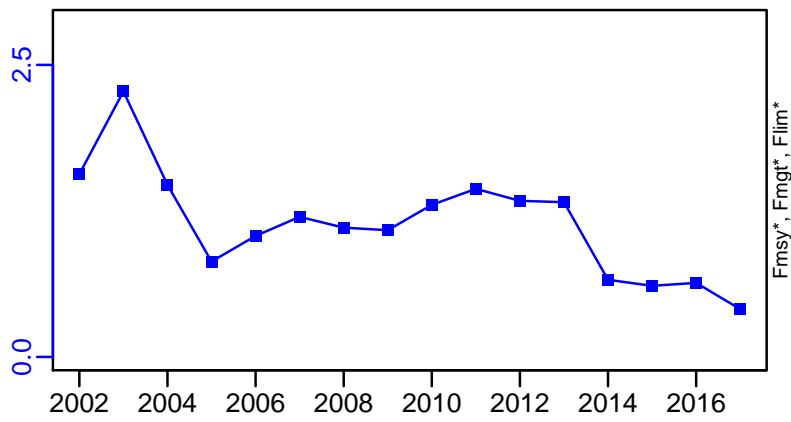
TN *



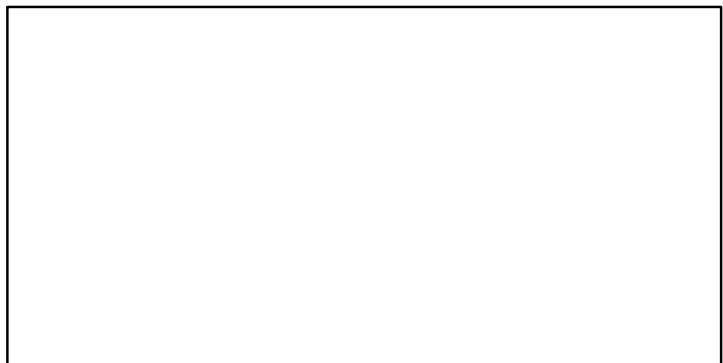
SSB_ms^{y*}, SSB_{mgt*}, SSB_{lim*}



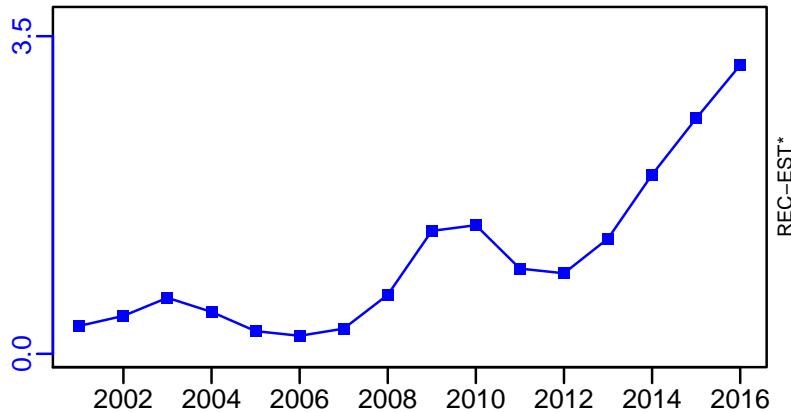
ER*



F_ms^{y*}, F_{mgt*}, F_{lim*}



R*



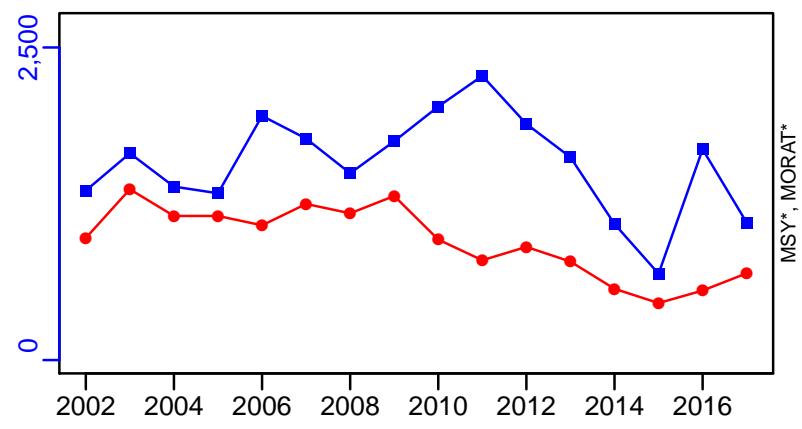
R_ms^{y*}, R_{mgt*}, R_{lim*}

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

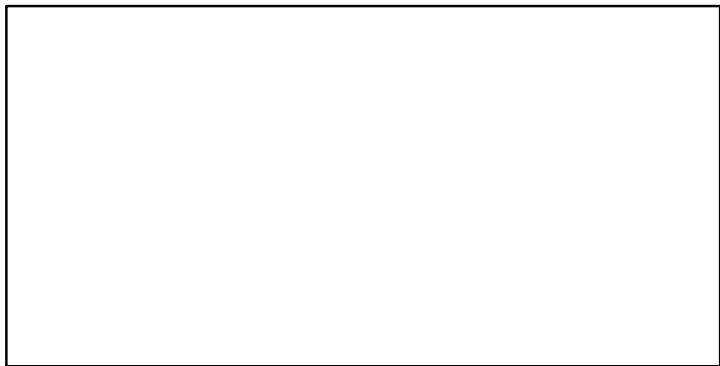
European plaice Subdivisions 24–32 [PLAIC2432]

TC-MT, TL-MT, RecC* (2001–2018–ICESIMP2018)

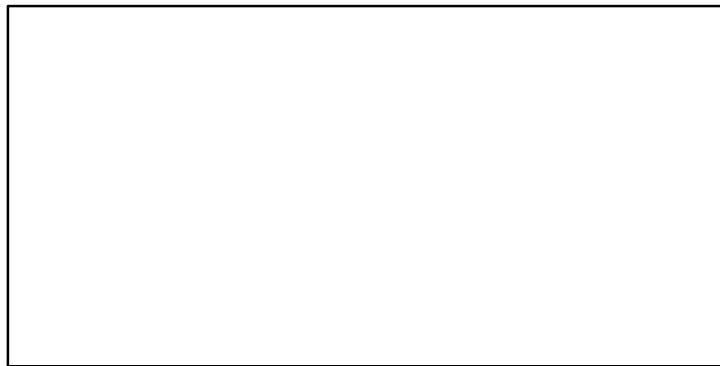
TAC*, Cpair*, Cadv*



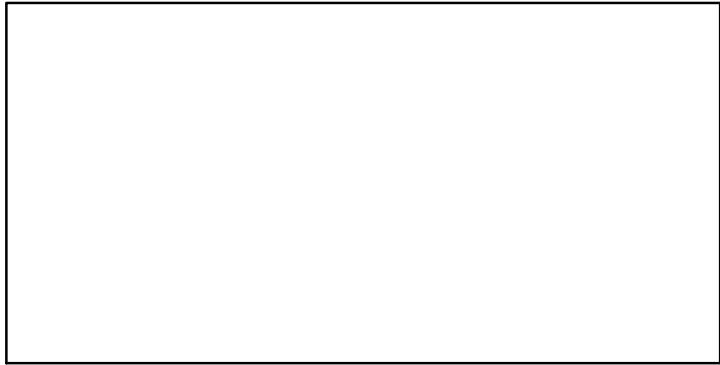
survB*



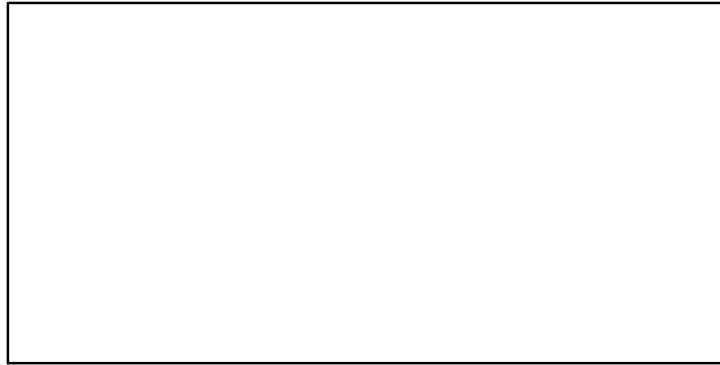
CPUE*



EFFORT*



CdivMSY*



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

European plaice Eastern English Channel [PLAIC7d]

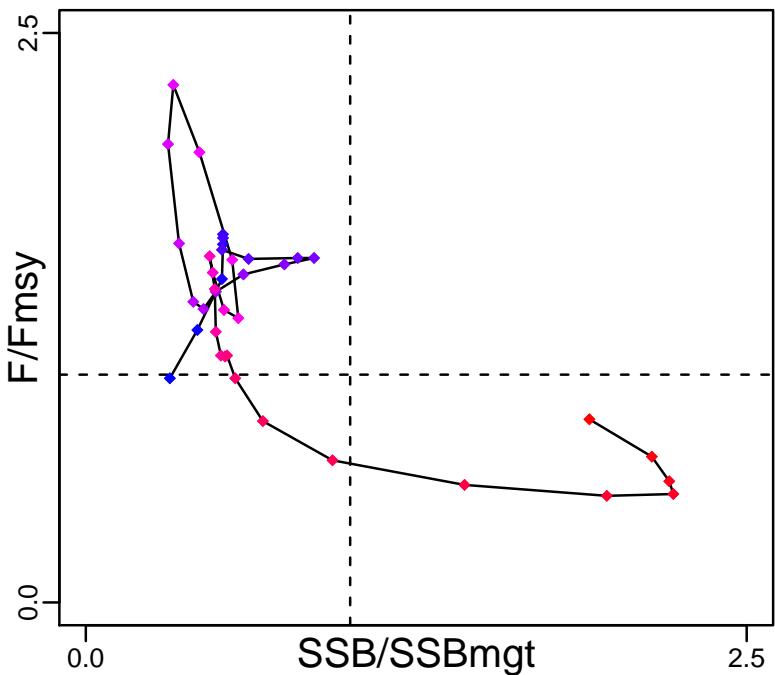
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGNSSK-PLAIC7d-1979-2018-ICESIMP2018
Area	Eastern English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	TBmsy-est-MT	2010	15,149	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2018	0.25	
ERmsy	ERmsy-est-ratio	2018	0.402	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	25,826	
Fmgt	Fmgt-1/yr	2018	0.25	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-est-MT	2010	4969	
M	M-1/yr	2010	0.1	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	18,448	
Flim	Flim-1/yr	2018	0.5	
ERlim	-	-	-	

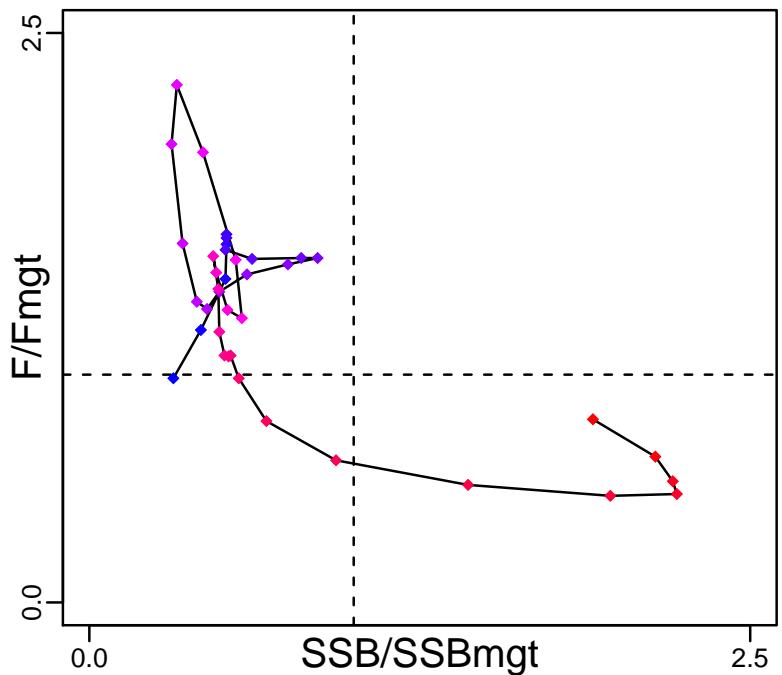
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2010	9230	Both	1+	
SSB	SSB-MT	2018	47,700	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	70,100,000	-	1	
F	F-1/yr	2018	0.201	-	3 to 6	
ER	ER-calc-ratio	2018	0.106	-	-	
TC	TC-MT	2018	7760			
TL	TL-MT	2018	3690			
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	0.609			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.804			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.264			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.847			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.804			
ER/ERmgt	-	-	-			

European plaice Eastern English Channel [PLAIC7d]

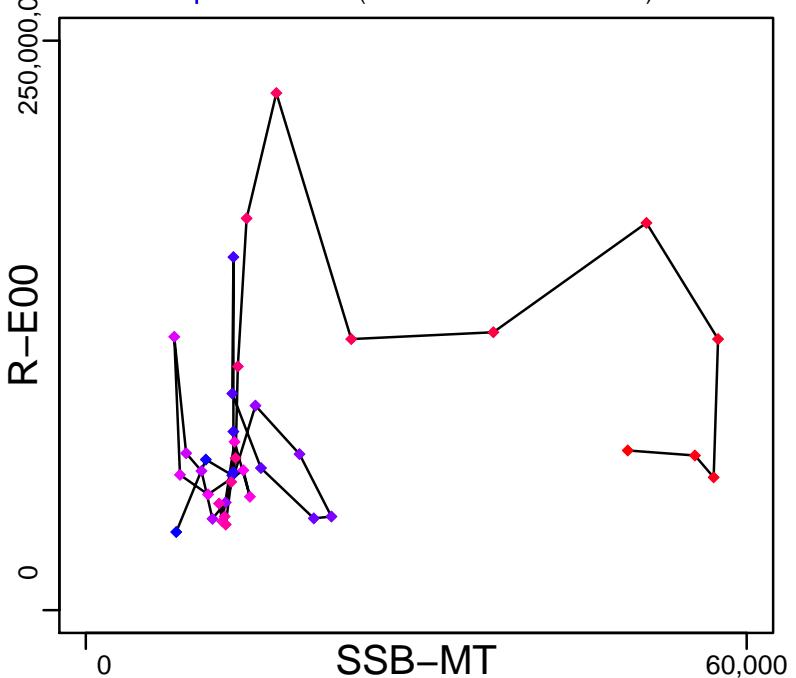
Kobe MSYpref (1979–2018–ICESIMP2018)



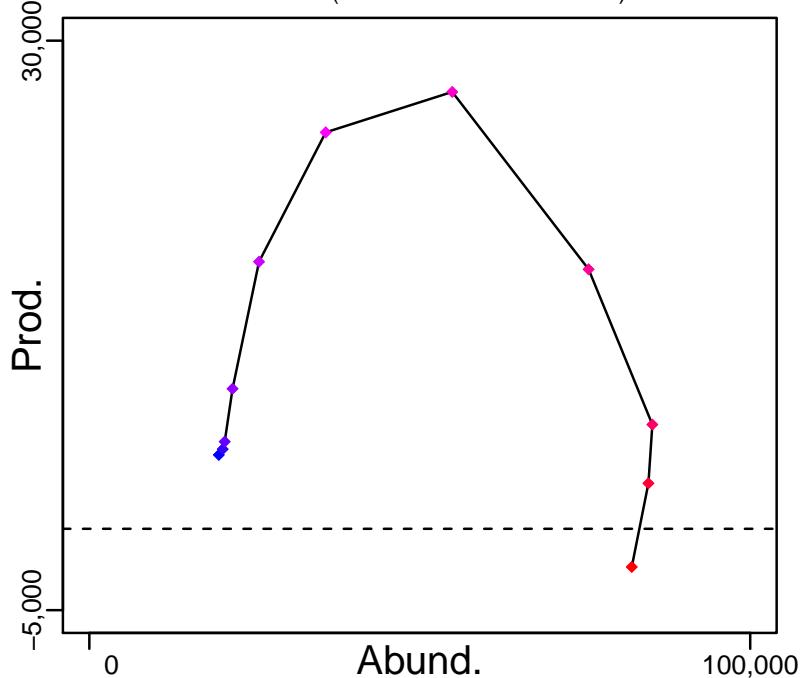
Kobe MGTpref (1979–2018–ICESIMP2018)



Spawner Recruit (1979–2018–ICESIMP2018)



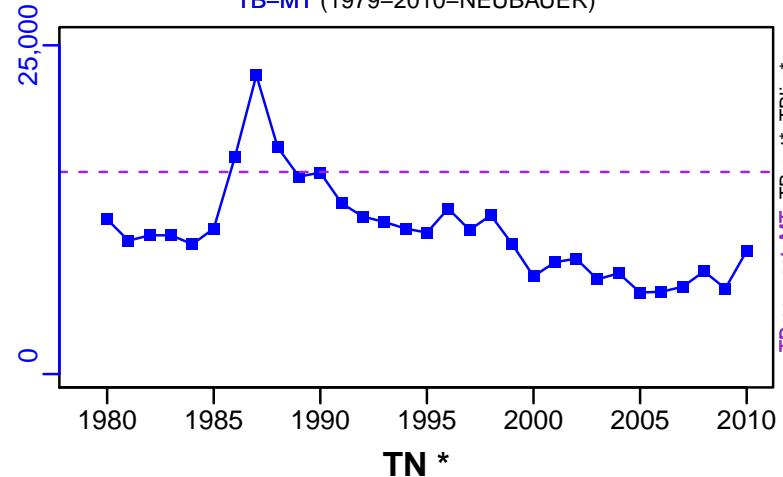
Production (1979–2018–ICESIMP2018)



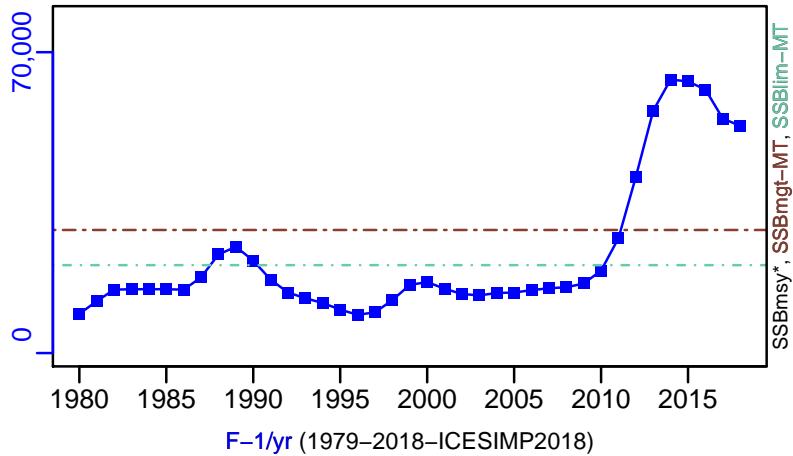
◆ Start Year ◆ End Year * No Data

European plaice Eastern English Channel [PLAIC7d]

TB-MT (1979–2010–NEUBAUER)



SSB-MT (1979–2018–ICESIMP2018)



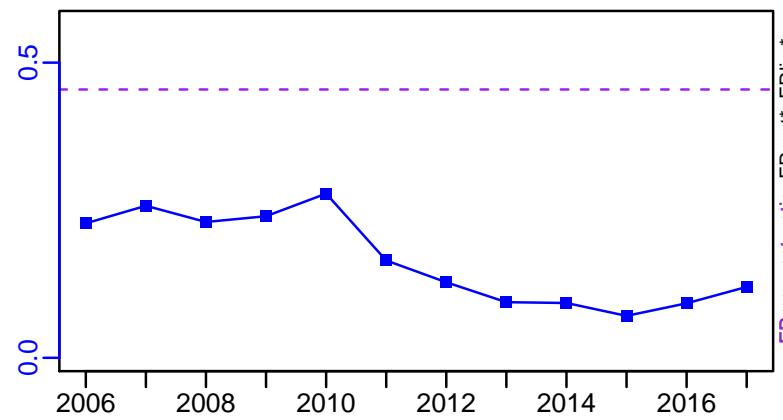
TN *

F-1/yr (1979–2018–ICESIMP2018)

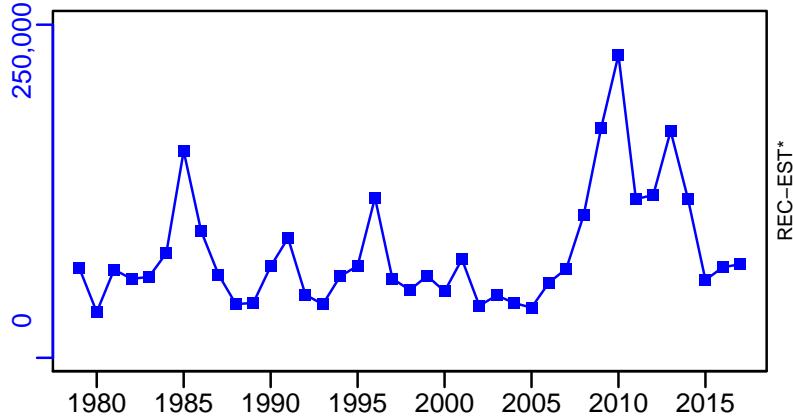
SSBmsy*, SSBmgt-MT, SSBlim-MT

Fmgt-1/yr, Flim-1/yr

ER-calc-ratio (1979–2018–ICESIMP2018)



R-E00 (1979–2018–ICESIMP2018)



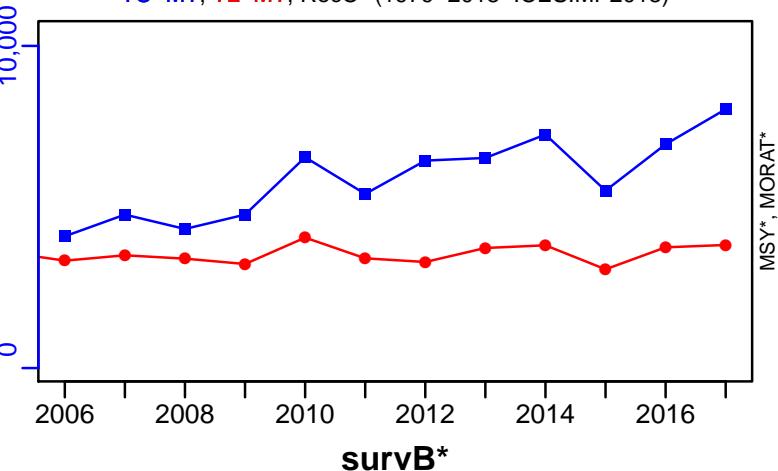
REC-EST*

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

European plaice Eastern English Channel [PLAIC7d]

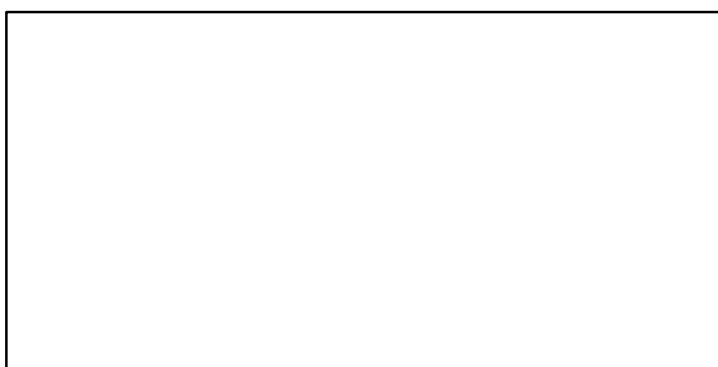
TC-MT, TL-MT, RecC* (1979–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*

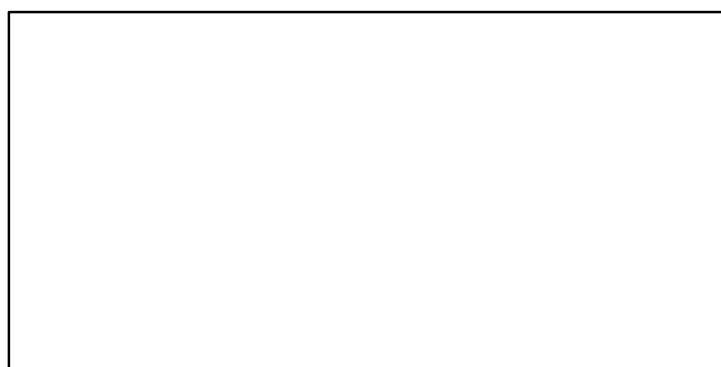


survB*

MSY*, MORAT*



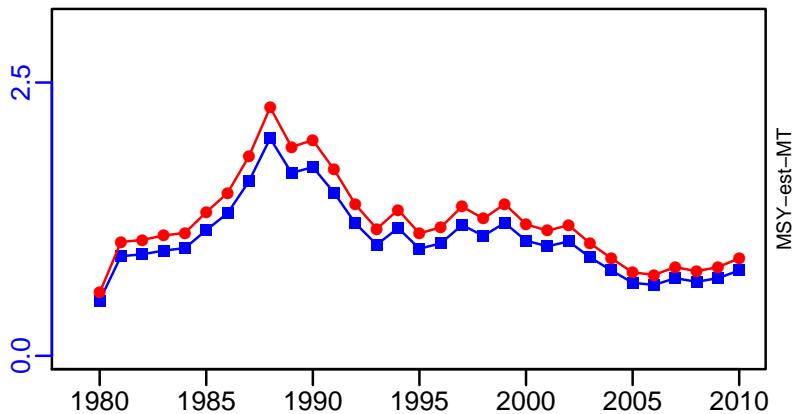
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1979–2010–NEUBAUER)



MSY-est-MT

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

European plaice Celtic Sea [PLAICCELT]

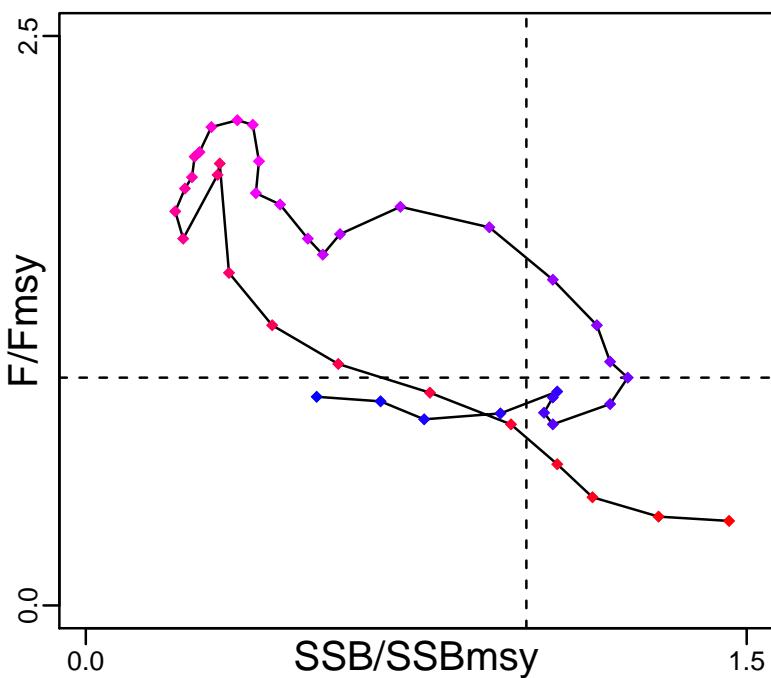
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICCELT-1977-2017-ICESIMP2018
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2017, 2016, 2014, 2016, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2017	3973
SSBmsy	SSBmsy-est-MT	2010	2253
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.296
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	1177
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

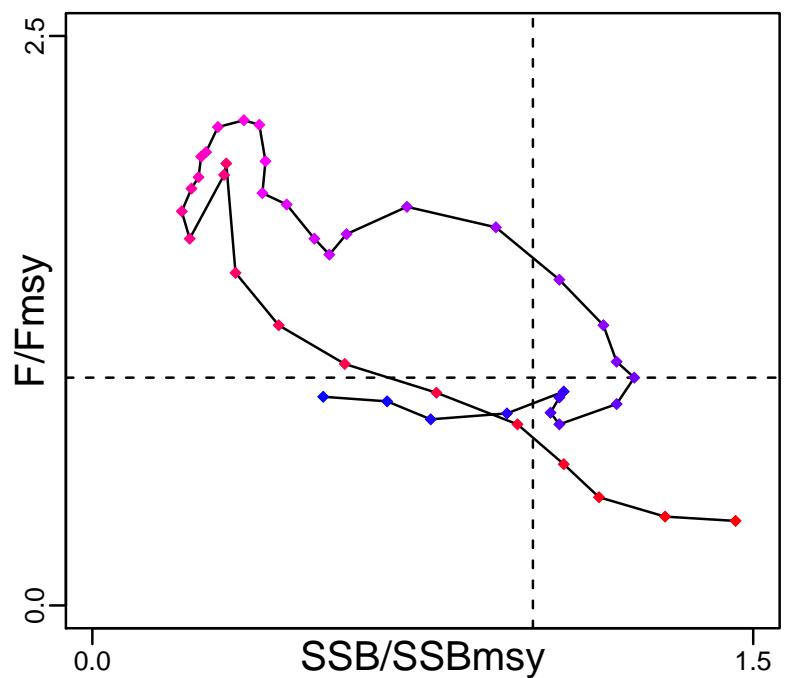
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	6520	Both	-	
SSB	SSB-relative	2014	1.33	Both	-	
TN	-	-	-	-	-	
R	R-relative	2014	0.393	-	1	
F	F-relative	2014	1.29	-	3 to 6	
ER	ER-calc-ratio	2017	0.06	-	-	
TC	TC-MT	2014	1670			
TL	TL-MT	2017	390			
TB/TBmsy	TB-MT/TBmsy-est-MT	2017	1.641			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2017	1.46			
F/Fmsy	FdivFmsy-dimensionless	2017	0.371			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.202			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

European plaice Celtic Sea [PLAICCELT]

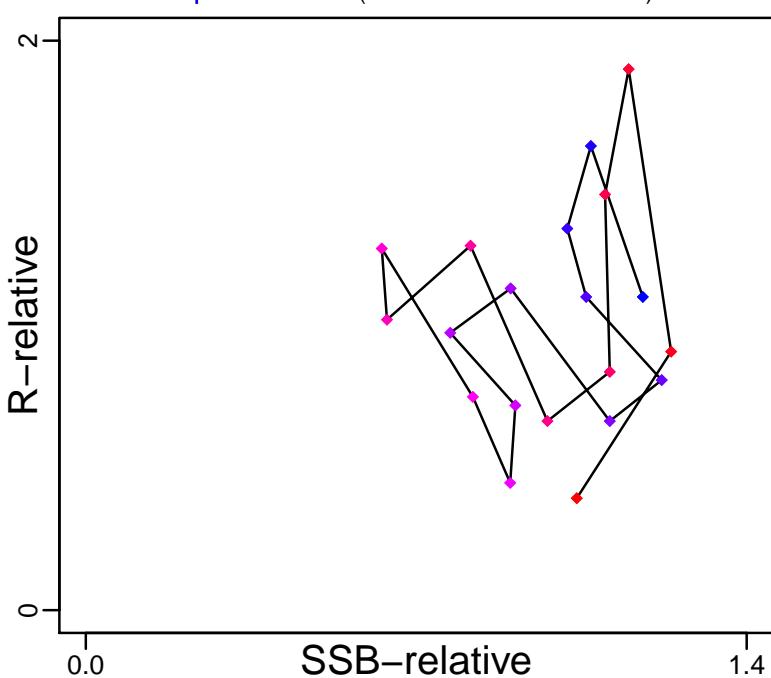
Kobe MSYpref (1977–2017–ICESIMP2018)



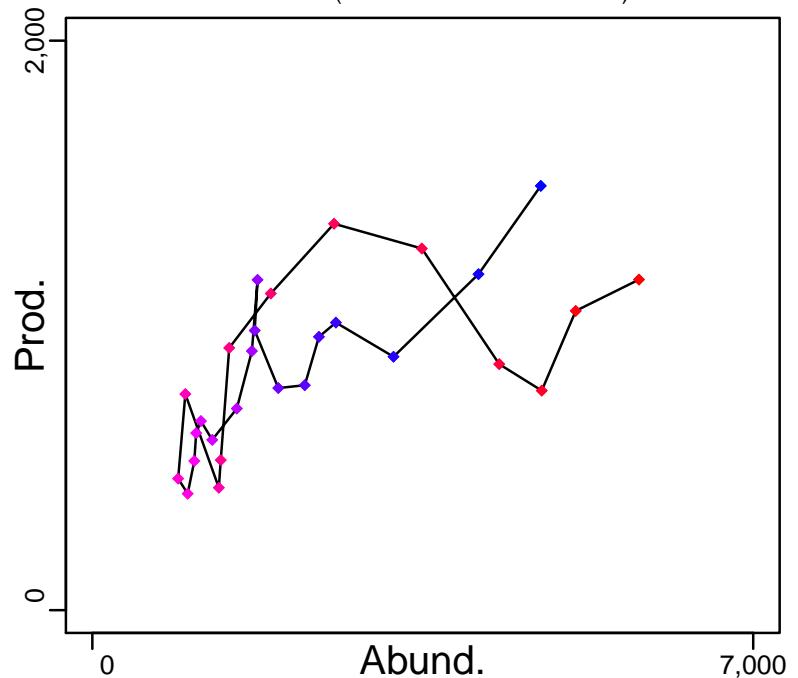
Kobe MGTpref (1977–2017–ICESIMP2018)



Spawner Recruit (1992–2014–ICESIMP2016)



Production (1977–2017–ICESIMP2018)

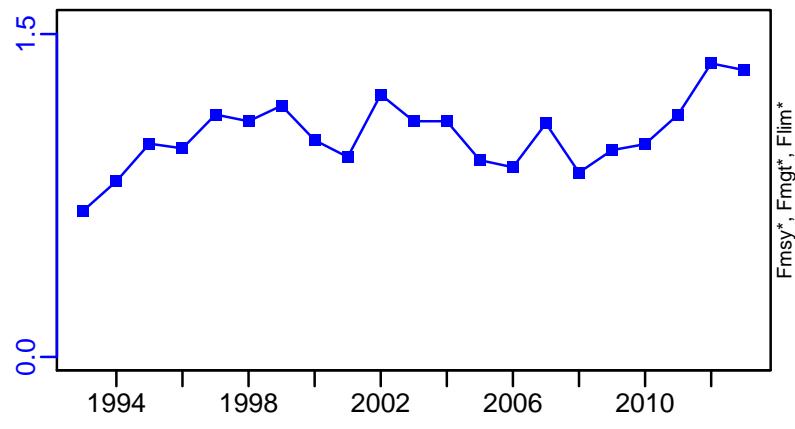
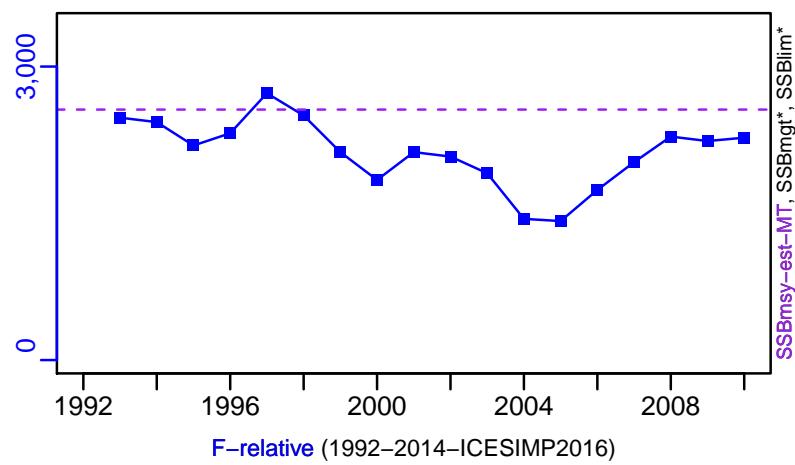
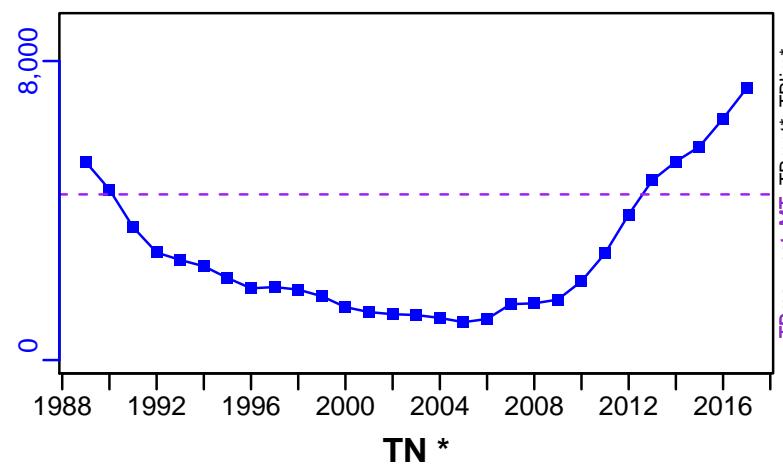


◆ Start Year ◆ End Year * No Data

European plaice Celtic Sea [PLAICCELT]

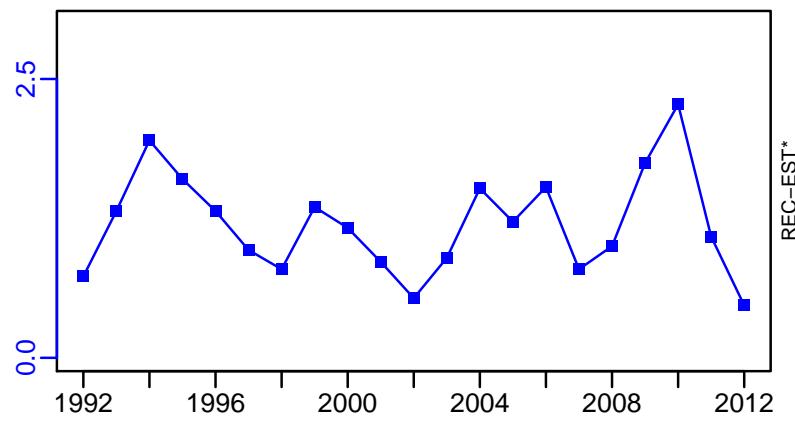
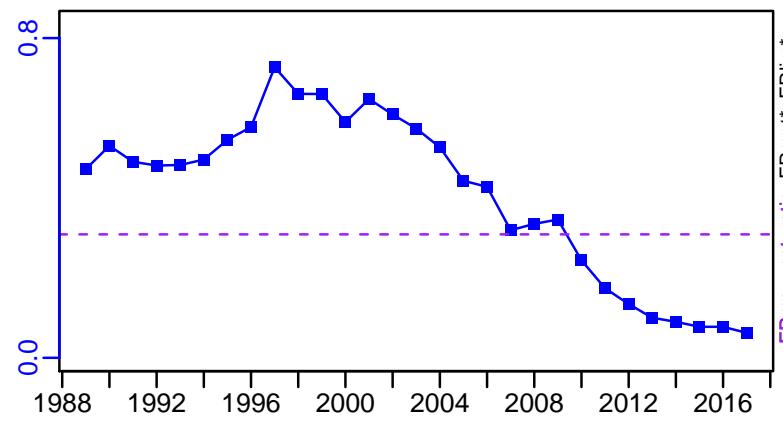
TB-MT (1977–2017–ICESIMP2018)

SSB-MT (1992–2010–NEUBAUER)



ER-calc-ratio (1977–2017–ICESIMP2018)

R-relative (1992–2014–ICESIMP2016)

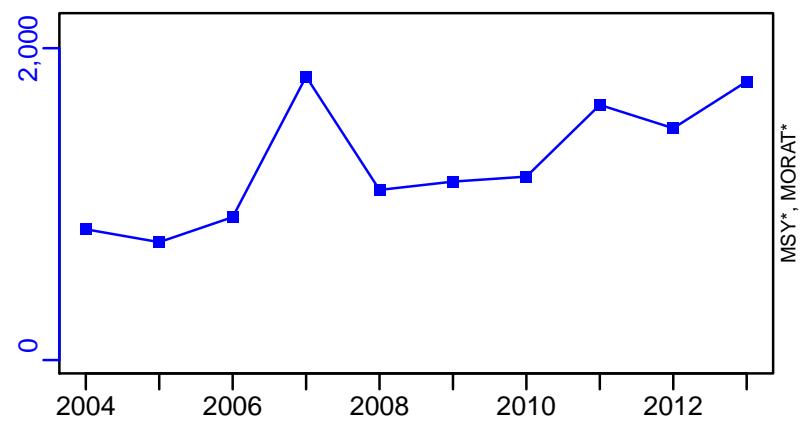


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - Lim BRP | * No Data |

European plaice Celtic Sea [PLAICCELT]

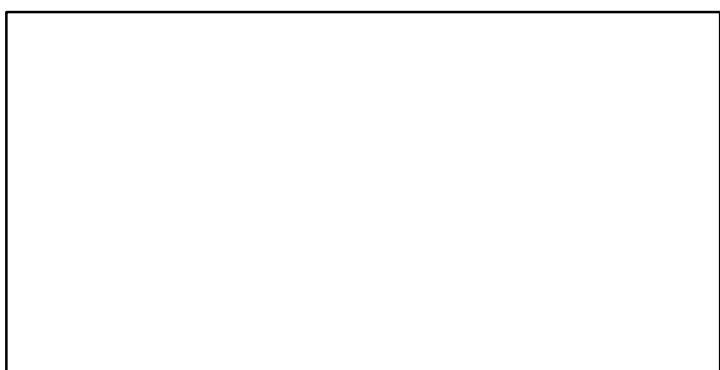
TC-MT, TL*, RecC* (1992–2014–ICESIMP2016)

TAC*, Cpair*, Cadv*

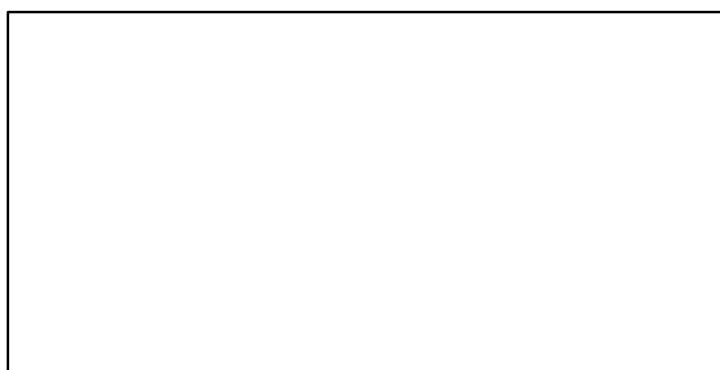


survB*

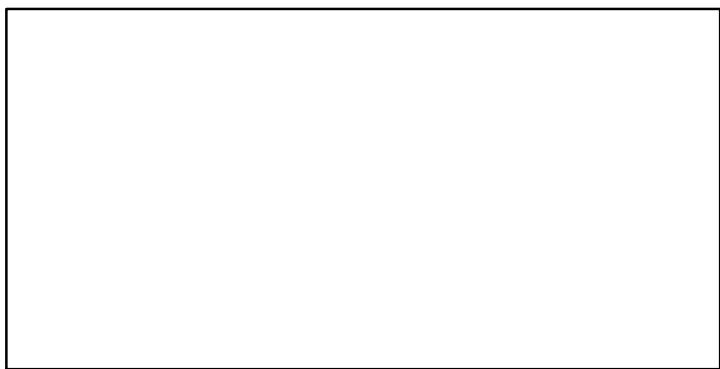
MSY*, MORAT*



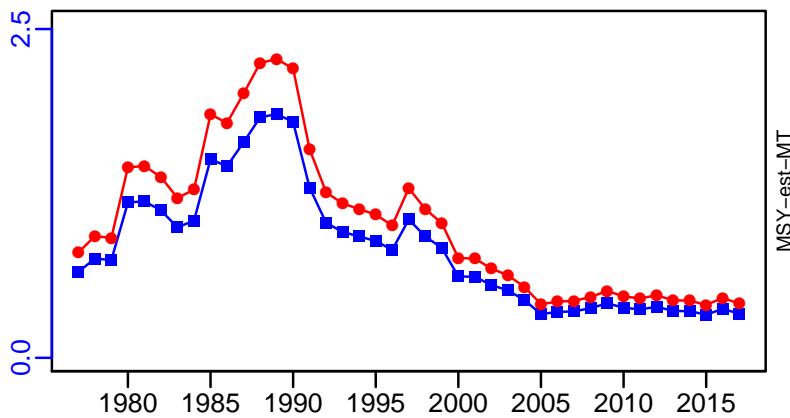
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2017–ICESIMP2018)



MSY-est-MT

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

European plaice Western English Channel [PLAICECHW]

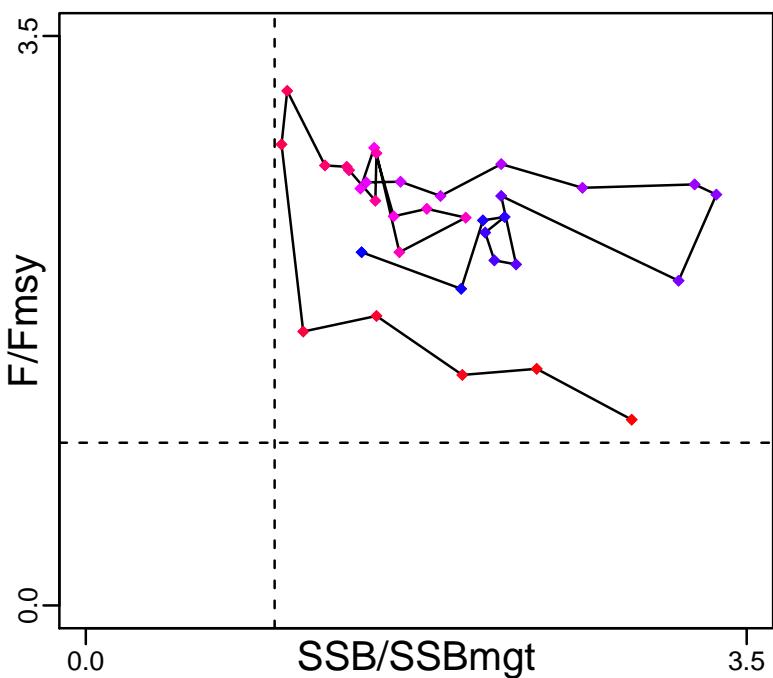
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICECHW-1978-2018-ICESIMP2018
Area	Western English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016, 2016, 2018, 2013, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	7866
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.238
ERmsy	ERmsy-est-ratio	2014	0.157
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	1650
Fmgt	Fmgt-relative	2018	0.63
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	2015
M	M-1/yr	2010	0.12
TBlim	TBlim-MT	2010	1300
SSBlim	-	-	-
Flim	Flim-relative	2018	0.88
ERlim	-	-	-

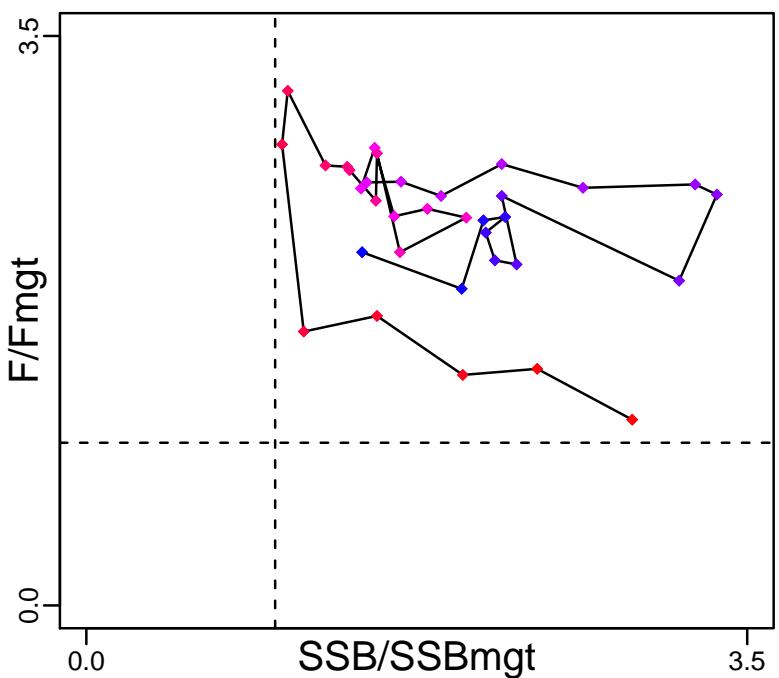
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-relative	2018	1.81	Both	-
SSB	SSB-relative	2018	2.24	Both	-
TN	-	-	-	-	-
R	R-relative	2018	0.898	-	2
F	F-relative	2018	0.545	-	3 to 6
ER	ER-calc-ratio	2014	0.227	-	-
TC	TC-MT	2016	2940		
TL	TL-MT	2018	2130		
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	0.981		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2014	1.142		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2014	1.451		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	3.352		
F/Fmgt	F-1/yr/Fmgt-1/yr	2014	1.142		
ER/ERmgt	-	-	-		

European plaice Western English Channel [PLAICECHW]

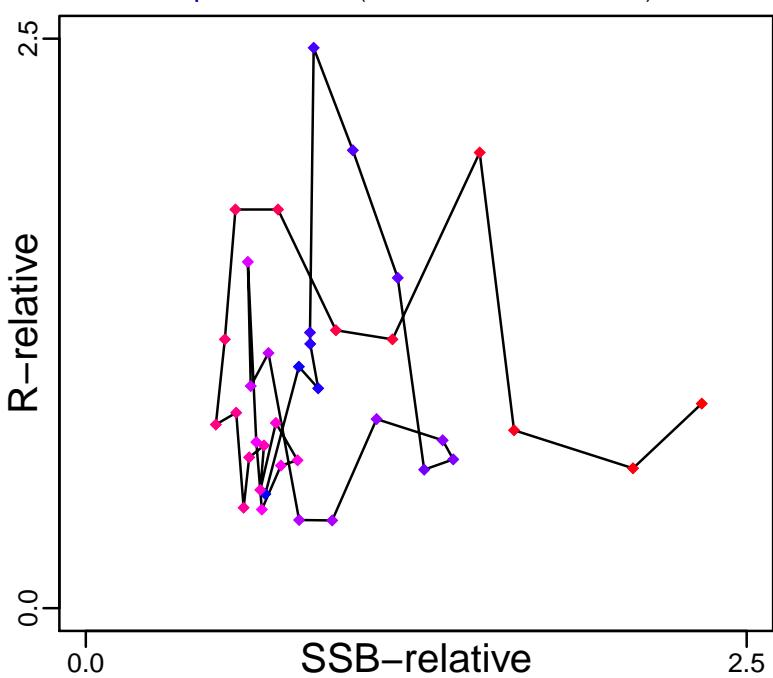
Kobe MSYpref (1979–2014–ICESIMP2016)



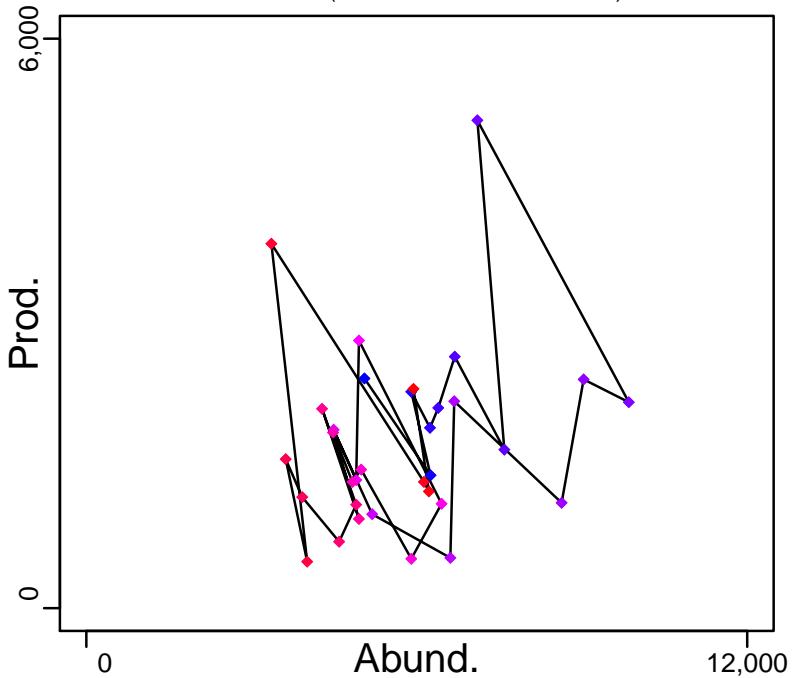
Kobe MGTpref (1979–2014–ICESIMP2016)



Spawner Recruit (1978–2018–ICESIMP2018)



Production (1979–2014–ICESIMP2016)

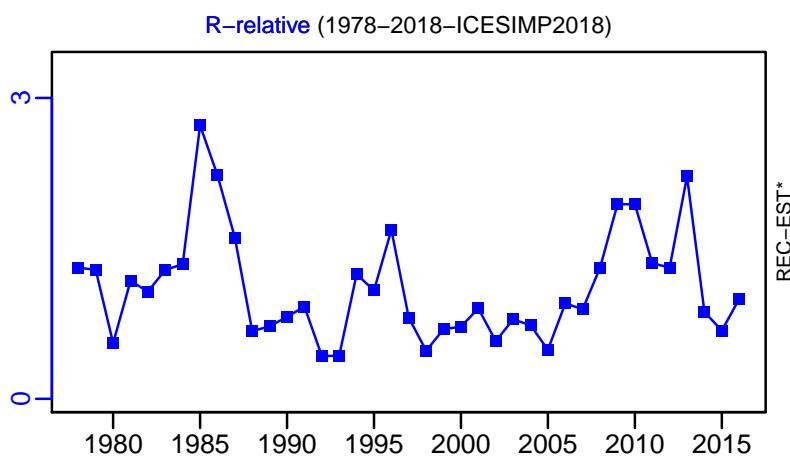
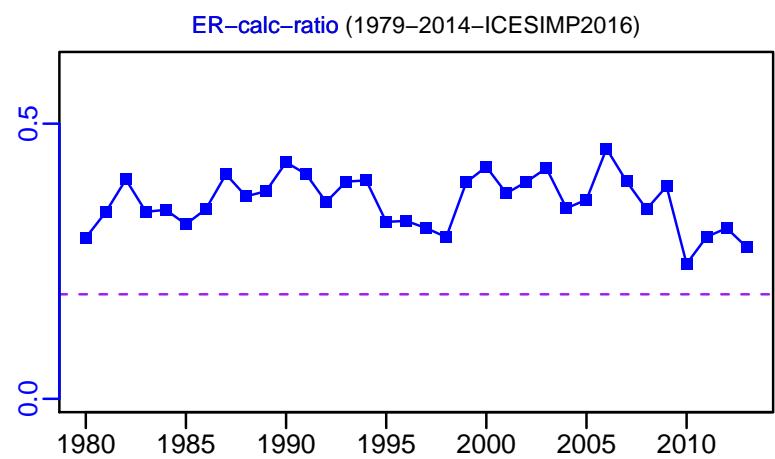
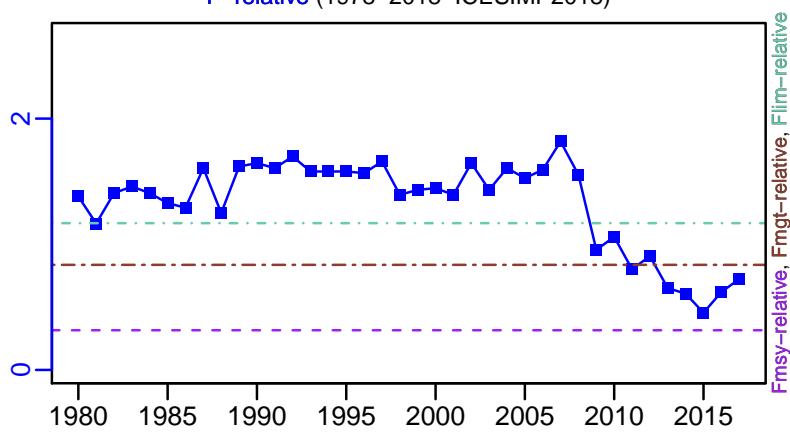
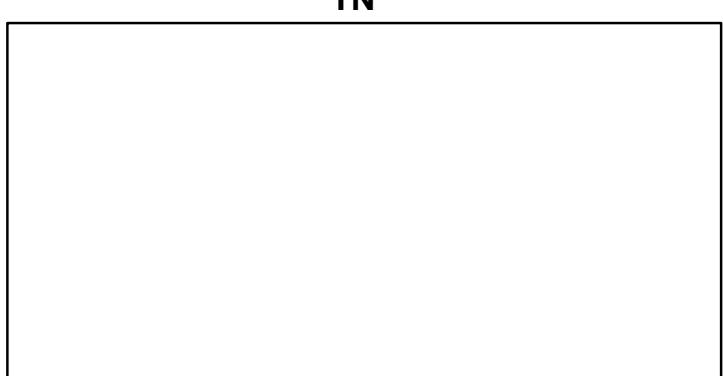
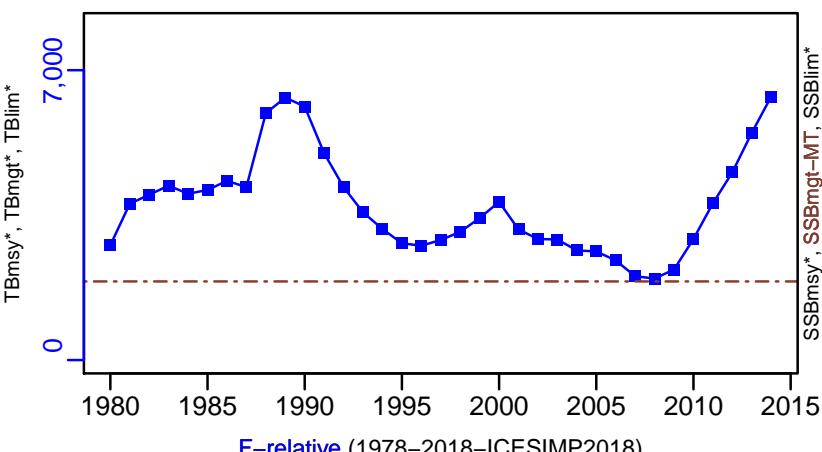
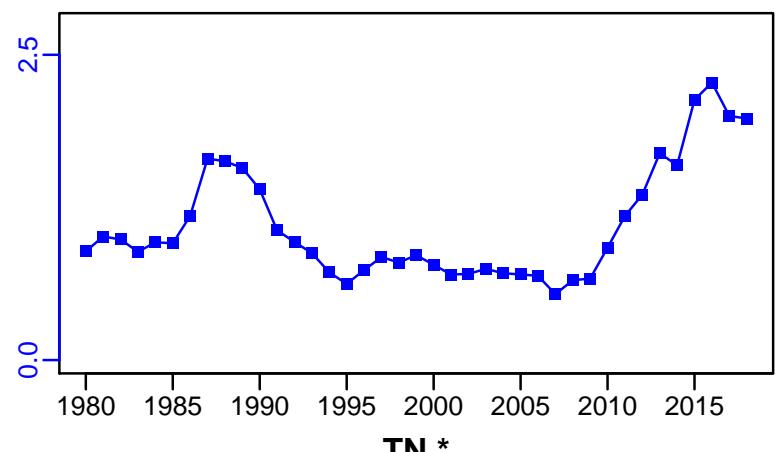


◆ Start Year ♦ End Year * No Data

European plaice Western English Channel [PLAICECHW]

TB-relative (1978–2018–ICESIMP2018)

SSB-MT (1979–2014–ICESIMP2016)

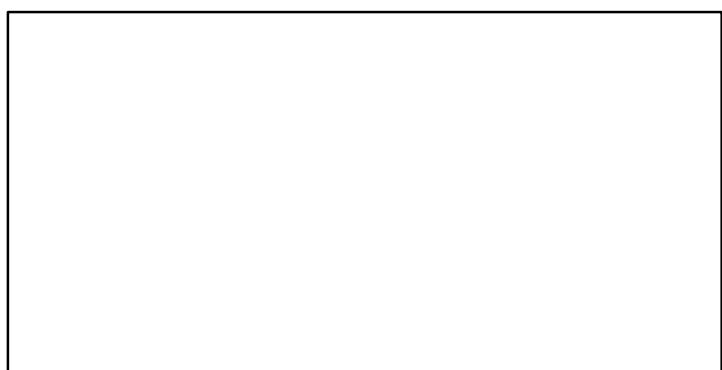
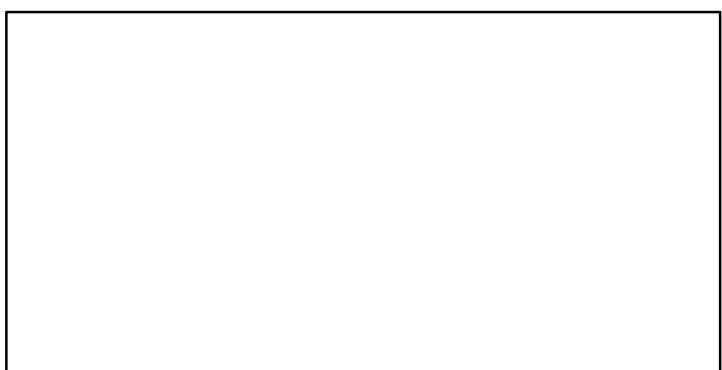
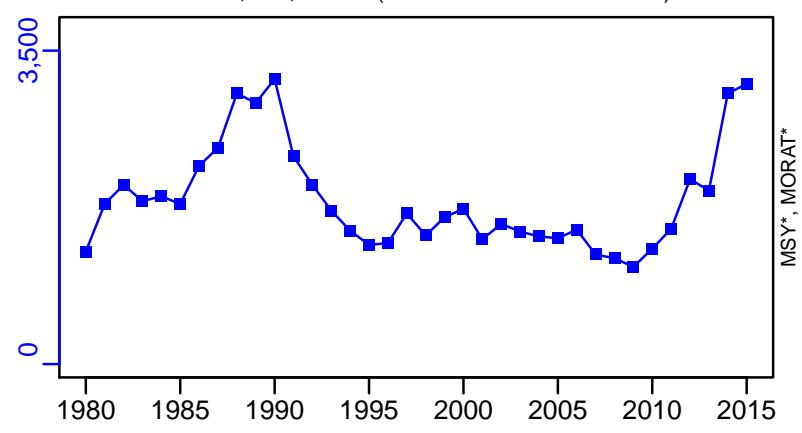


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

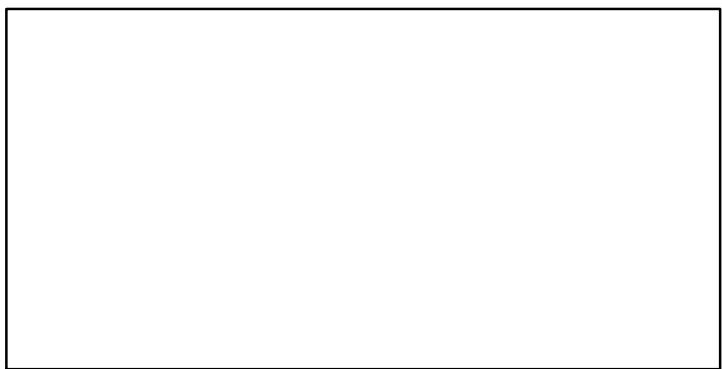
European plaice Western English Channel [PLAICECHW]

TC-MT, TL*, RecC* (1978–2016–ICESIMP2016)

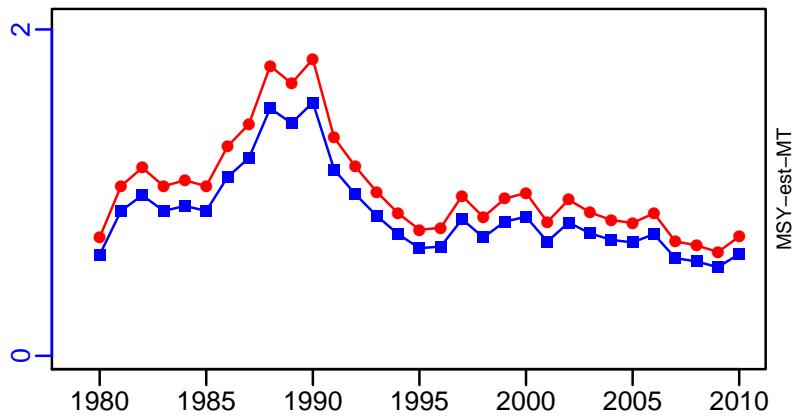
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1979–2010–NEUBAUER)



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

European plaice Irish Sea [PLAICIS]

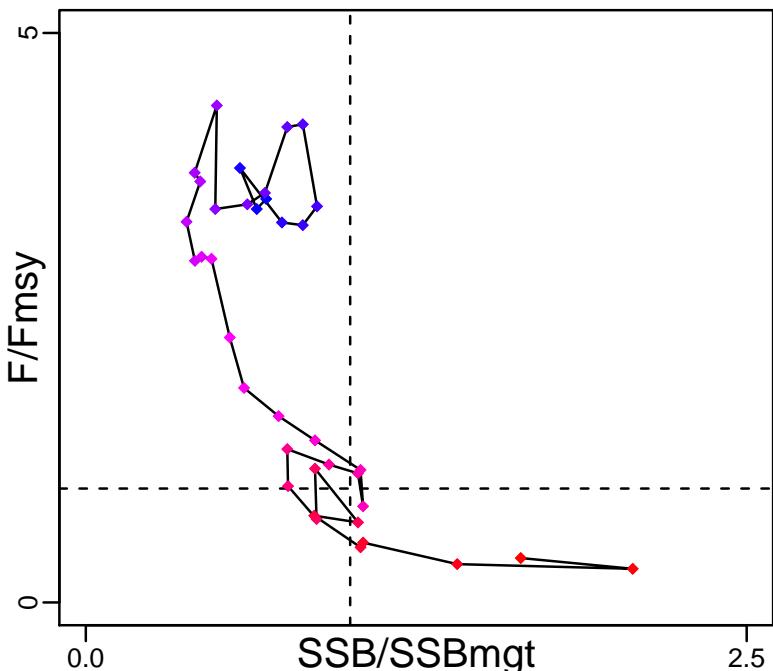
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICIS-1980-2018-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016, 2017, 2018, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2010	13,834
Fmsy	Fmsy-1/yr	2018	0.169
ERmsy	ERmsy-est-ratio	2018	0.226
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	10,392
Fmgt	Fmgt-1/yr	2018	0.169
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	4880
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	4250
Flim	Flim-1/yr	2018	0.481
ERlim	-	-	-

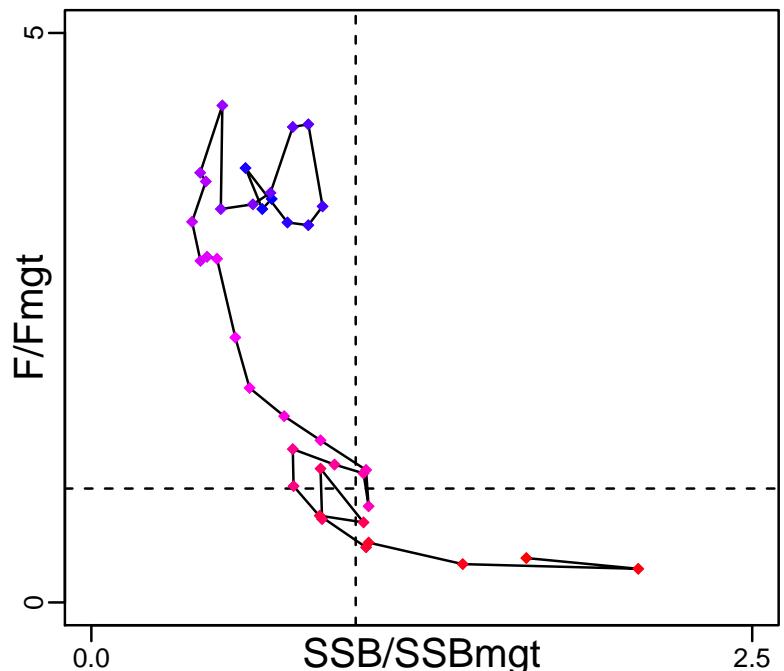
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	20,500	Both	-	
SSB	SSB-MT	2018	22,100	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	19,900,000	-	1	
F	F-1/yr	2018	0.066	-	3 to 6	
ER	ER-calc-ratio	2018	0.07	-	-	
TC	TC-MT	2018	1440			
TL	TL-MT	2018	586			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2010	1.742			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.39			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.31			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.127			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.39			
ER/ERmgt	-	-	-			

European plaice Irish Sea [PLAICIS]

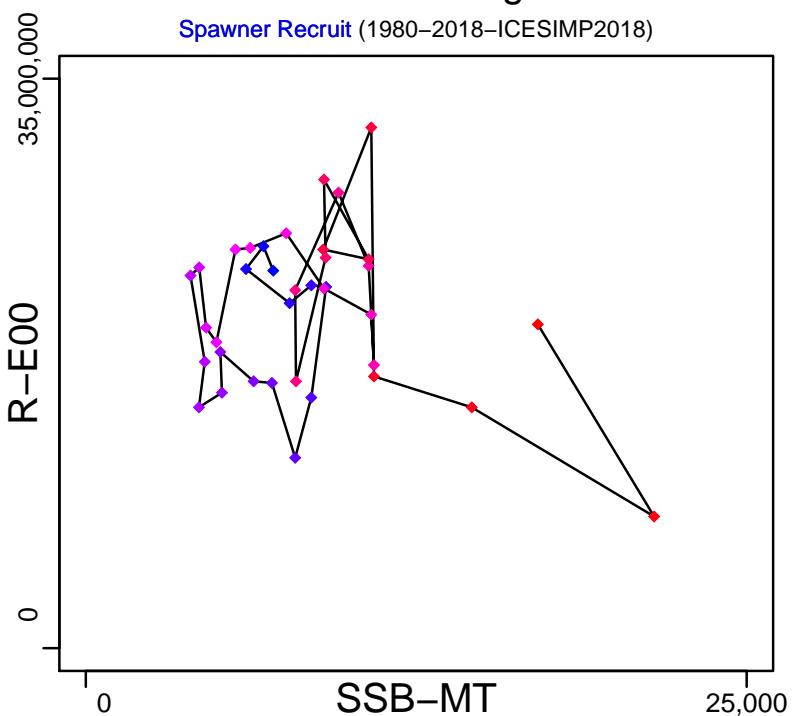
Kobe MSYpref (1980–2018–ICESIMP2018)



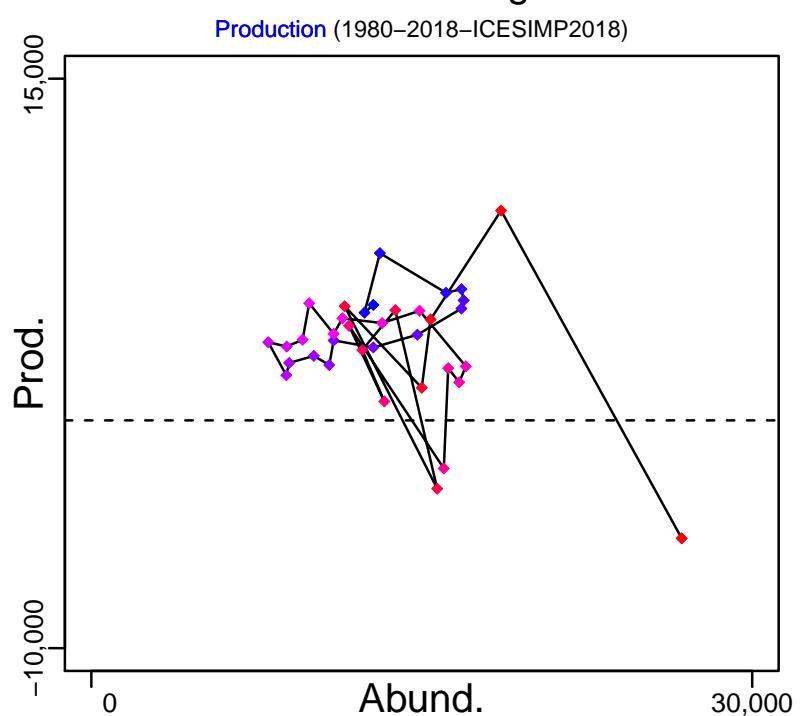
Kobe MGTpref (1980–2018–ICESIMP2018)



Spawner Recruit (1980–2018–ICESIMP2018)



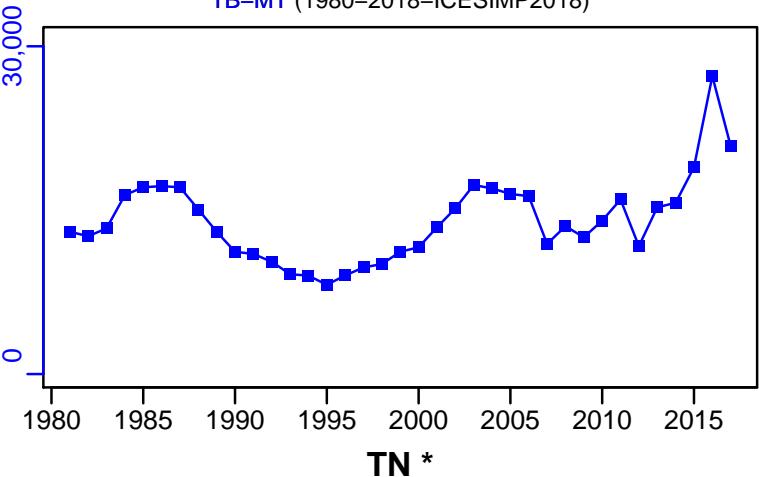
Production (1980–2018–ICESIMP2018)



◆ Start Year ◆ End Year * No Data

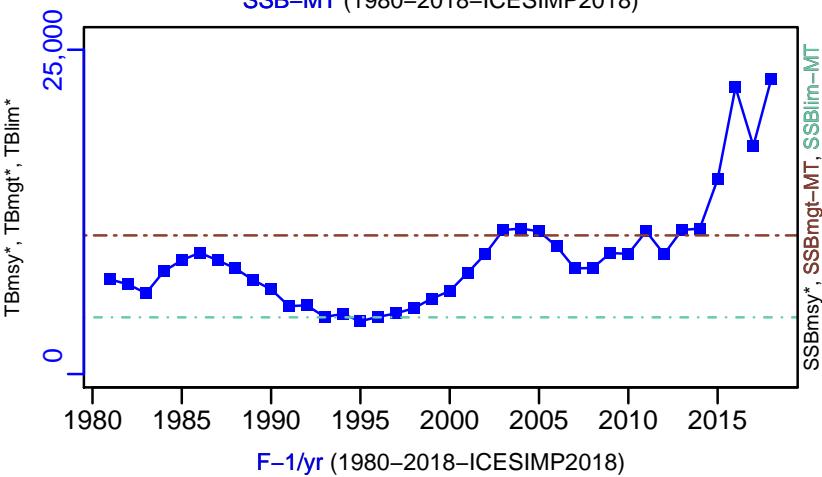
European plaice Irish Sea [PLAICIS]

TB-MT (1980–2018–ICESIMP2018)

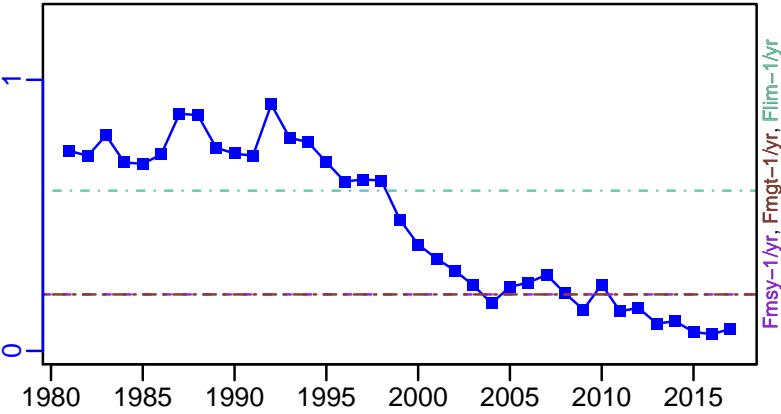


TN *

SSB-MT (1980–2018–ICESIMP2018)

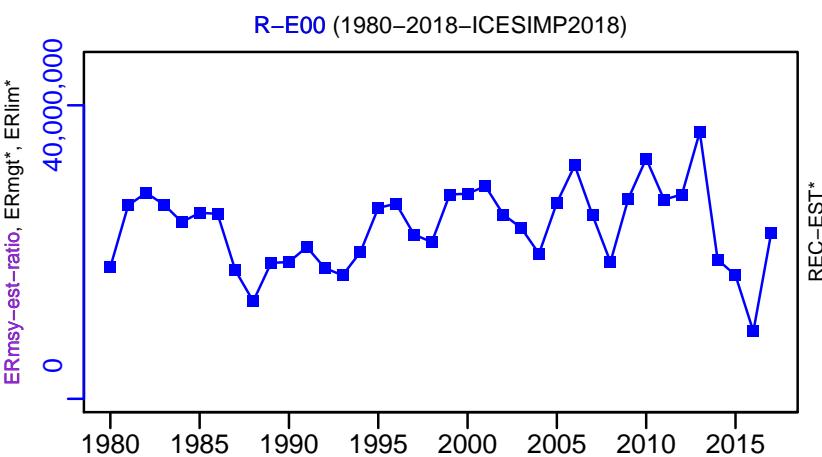


SSBmgt*, TBLim*



Fmgt-1/yr, Flim-1/yr, Lim-1/yr

ER-calc-ratio (1980–2018–ICESIMP2018)



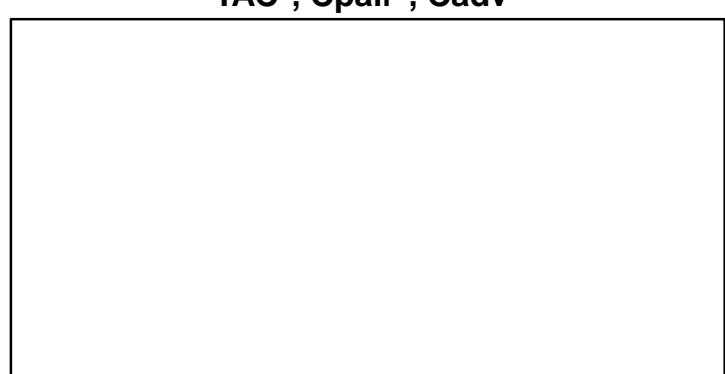
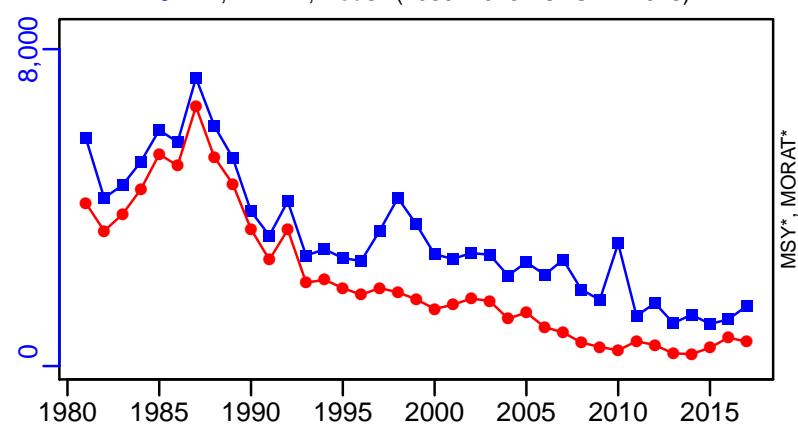
REC-EST*

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

European plaice Irish Sea [PLAICIS]

TC-MT, TL-MT, RecC* (1980–2018–ICESIMP2018)

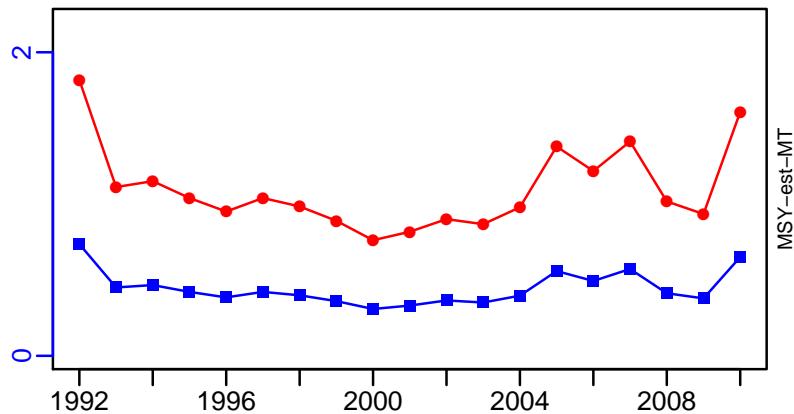
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1992–2010–NEUBAUER)



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

European plaice North Sea [PLAICNS]

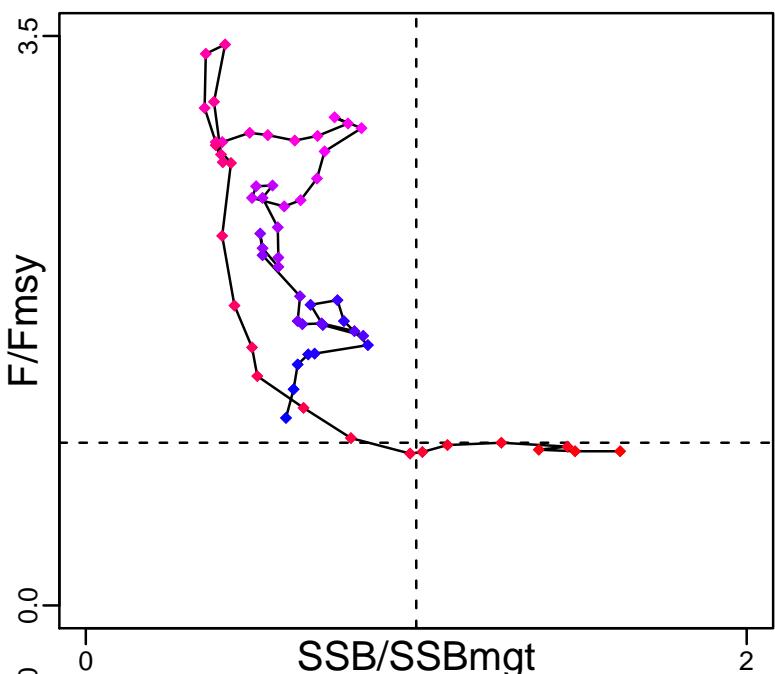
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGNSSK-PLAICNS-1956-2018-ICESIMP2018
Area	North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2010	471,557
Fmsy	Fmsy-1/yr	2018	0.21
ERmsy	ERmsy-est-ratio	2018	0.221
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	564,599
Fmgt	Fmgt-1/yr	2018	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	194,792
M	M-1/yr	2010	0.1
TBlim	TBlim-MT	2010	160,000
SSBlim	SSBlim-MT	2018	207,288
Flim	Flim-1/yr	2018	0.516
ERlim	-	-	-

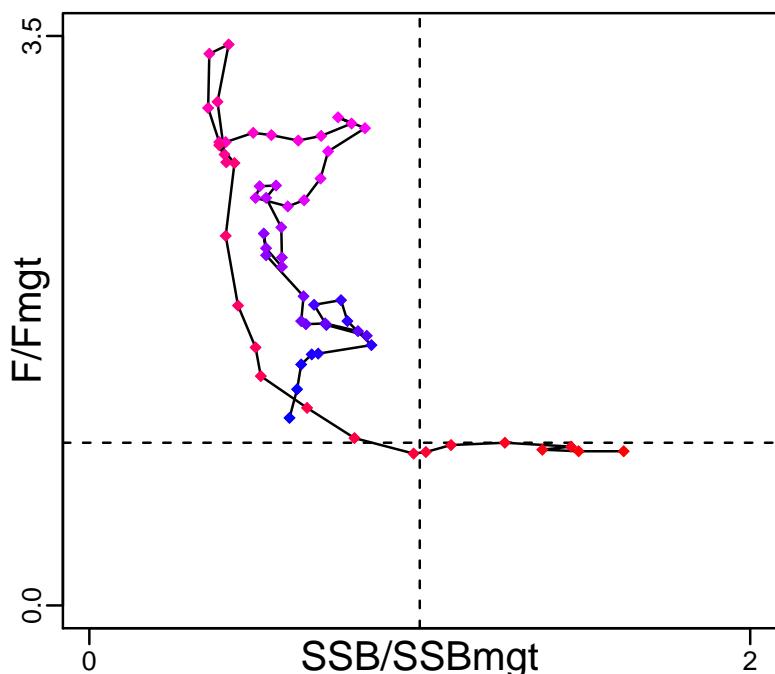
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	1,040,000	Both	-	
SSB	SSB-MT	2018	941,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	8.95×10^8	-	1	
F	F-1/yr	2018	0.199	-	2 to 6	
ER	ER-calc-ratio	2018	0.11	-	-	
TC	TC-MT	2018	114,000			
TL	TL-MT	2018	74,900			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2010	0.978			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.948			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.496			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.667			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.948			
ER/ERmgt	-	-	-			

European plaice North Sea [PLAICNS]

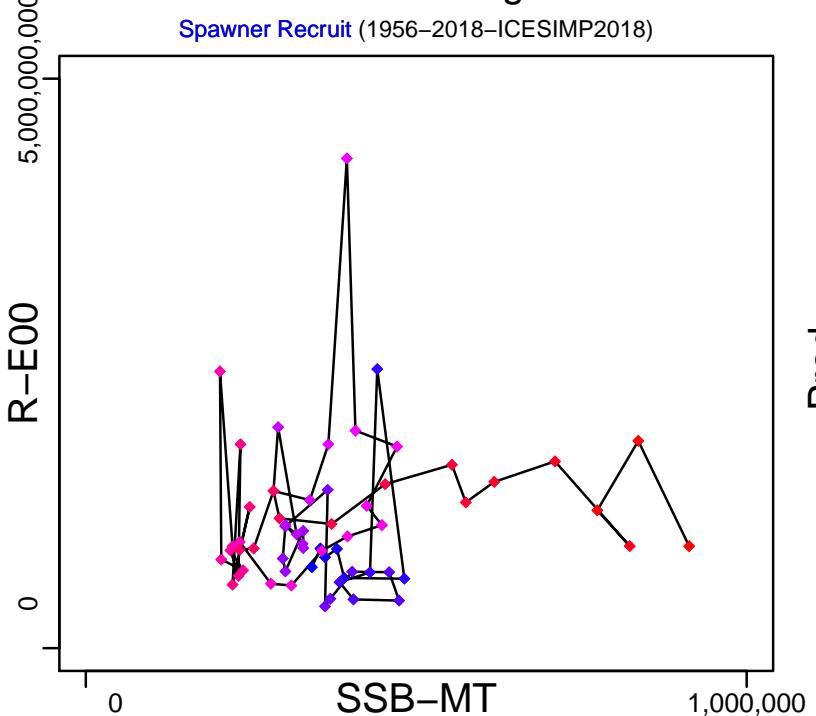
Kobe MSYpref (1956–2018–ICESIMP2018)



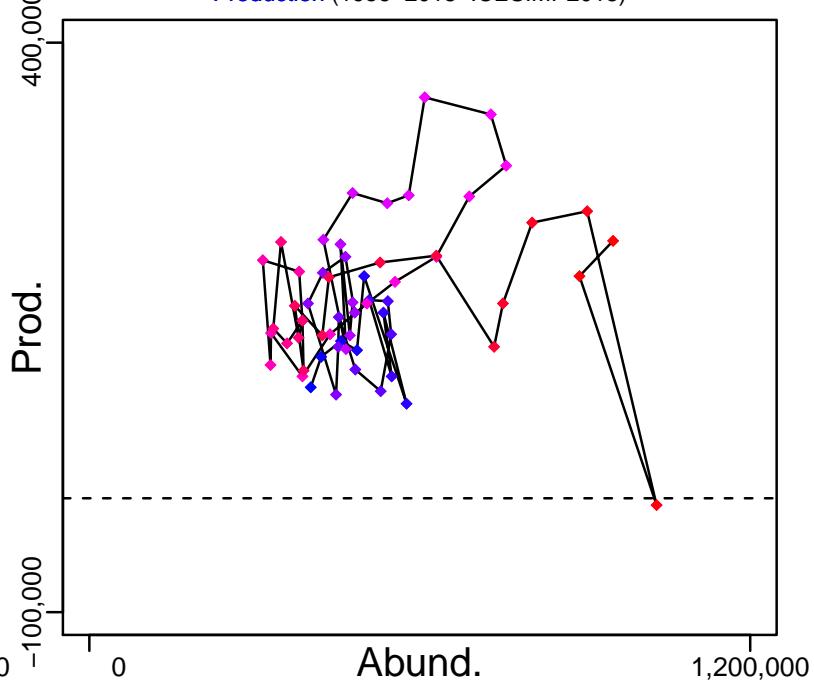
Kobe MGTpref (1956–2018–ICESIMP2018)



Spawner Recruit (1956–2018–ICESIMP2018)



Production (1956–2018–ICESIMP2018)

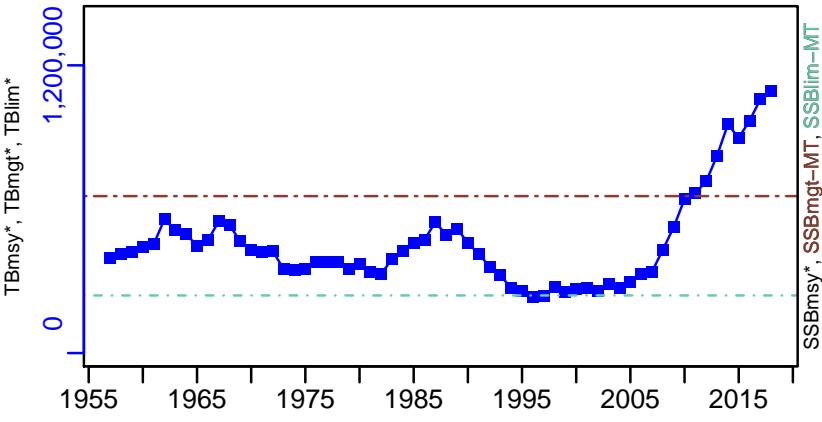
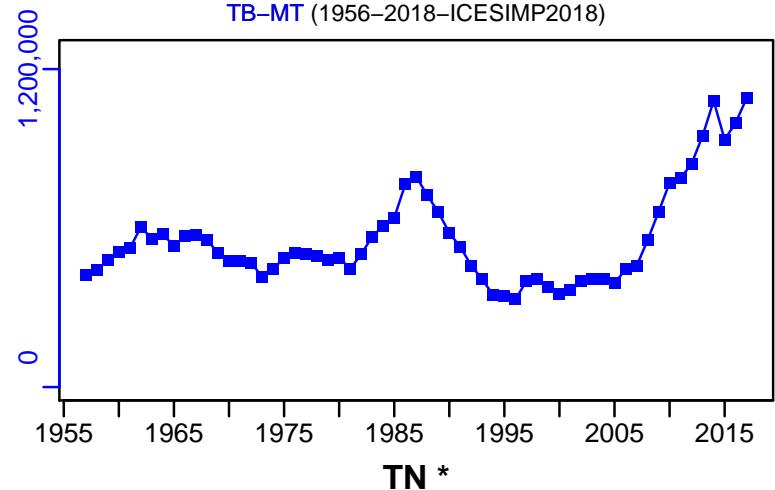


◆ Start Year ◆ End Year * No Data

European plaice North Sea [PLAICNS]

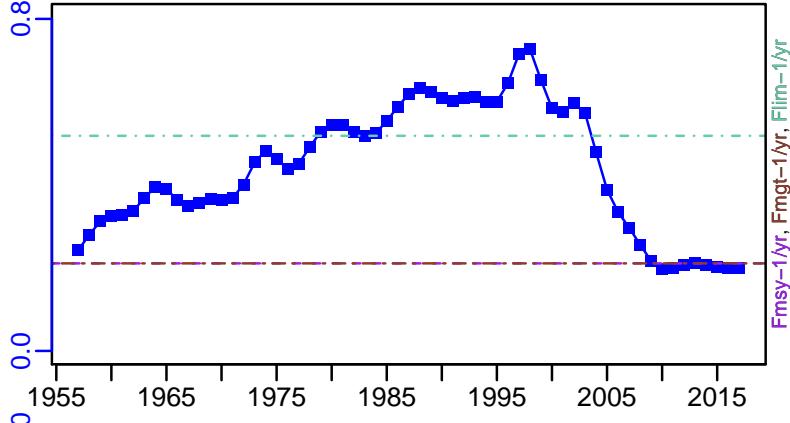
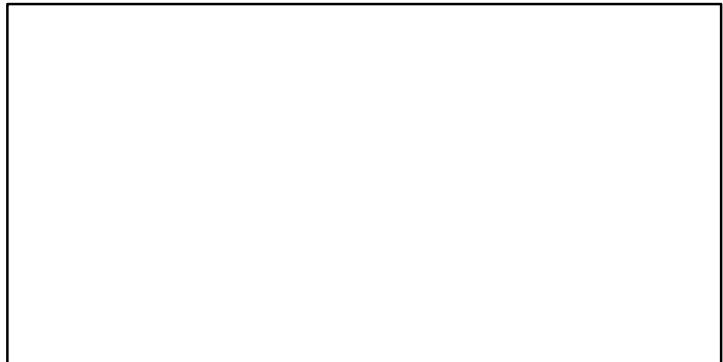
TB-MT (1956–2018–ICESIMP2018)

SSB-MT (1956–2018–ICESIMP2018)



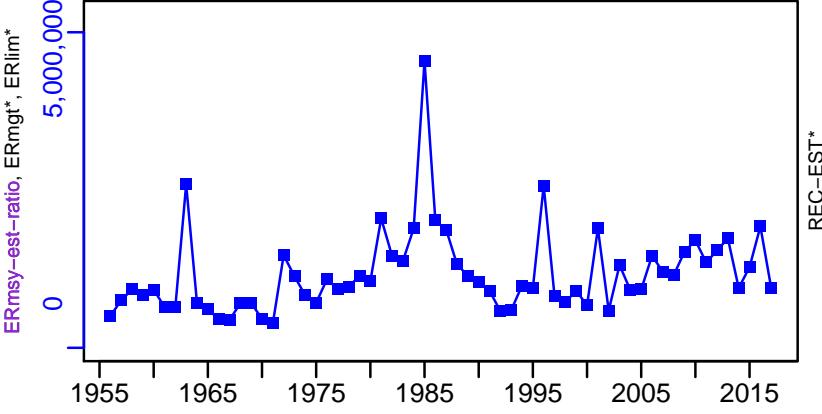
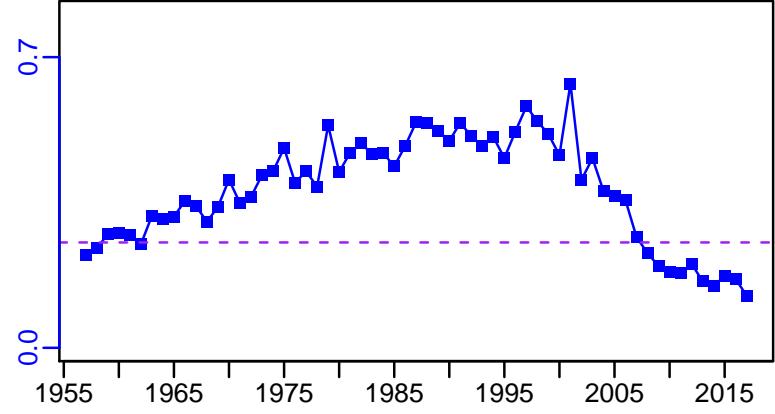
TN *

F-1/yr (1956–2018–ICESIMP2018)



ER-calc-ratio (1956–2018–ICESIMP2018)

R-E00 (1956–2018–ICESIMP2018)

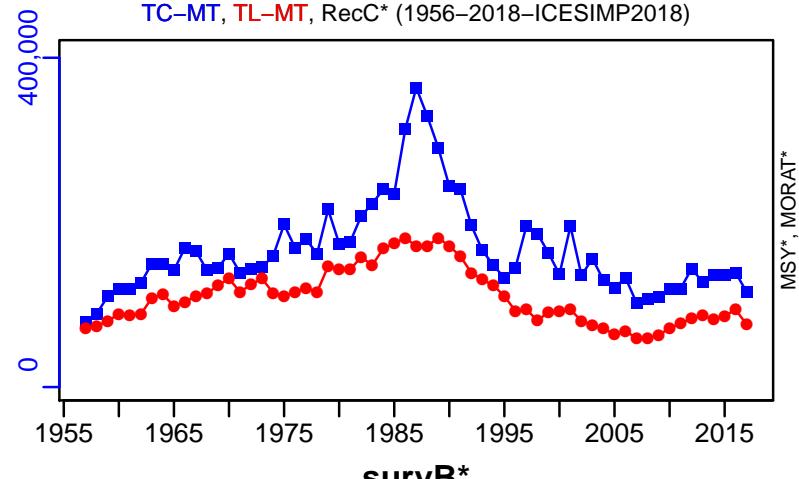


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

European plaice North Sea [PLAICNS]

TC-MT, TL-MT, RecC* (1956–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



MSY*, MORAT*

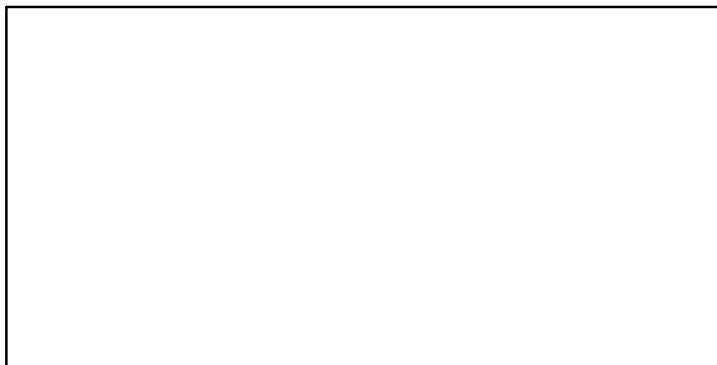
survB*



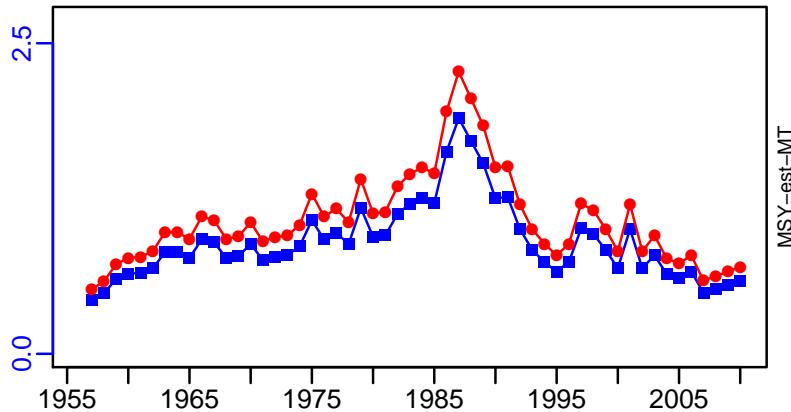
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1956–2010–NEUBAUER)



MSY-est-MT

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

European plaice ICES 7bc [PLAICVIIbc]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICVIIbc-1908-2016-ICESIMP2018
Area	ICES 7bc
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	29		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

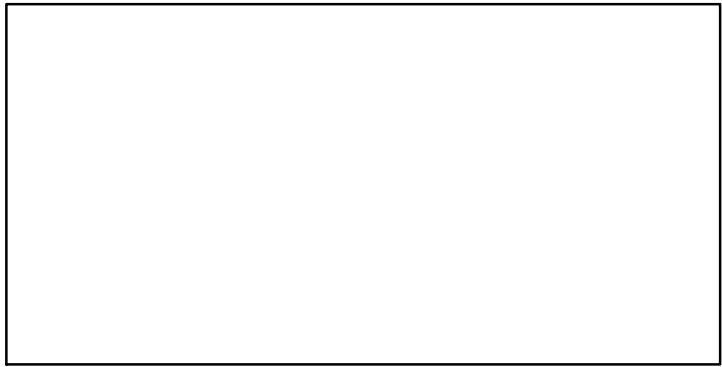
Spawner Recruit*

Production*

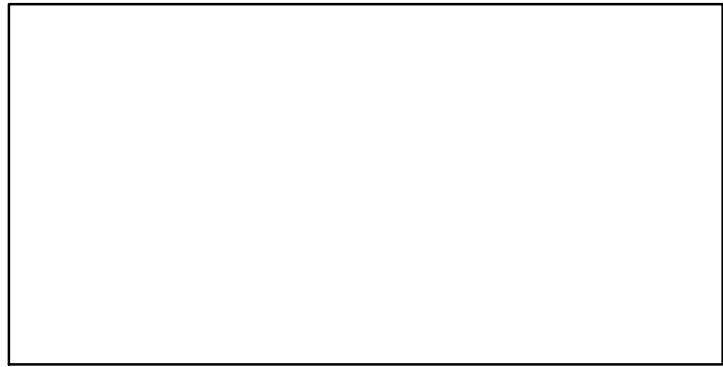
◆ Start Year ♦ End Year * No Data

European plaice ICES 7bc [PLAICVIIbc]

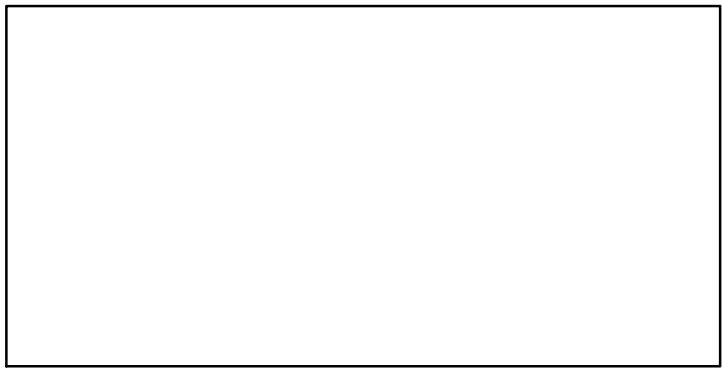
TB*



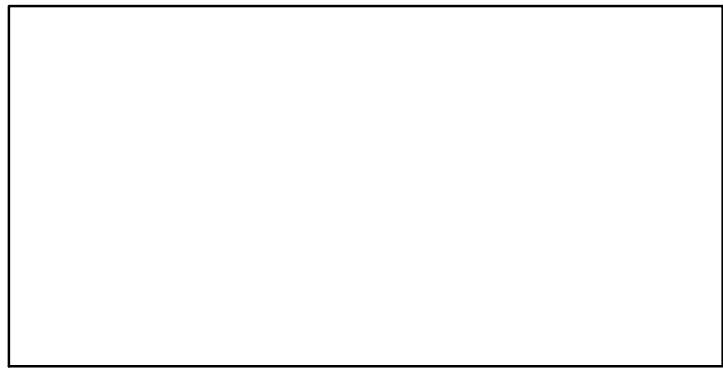
SSB*



TN *



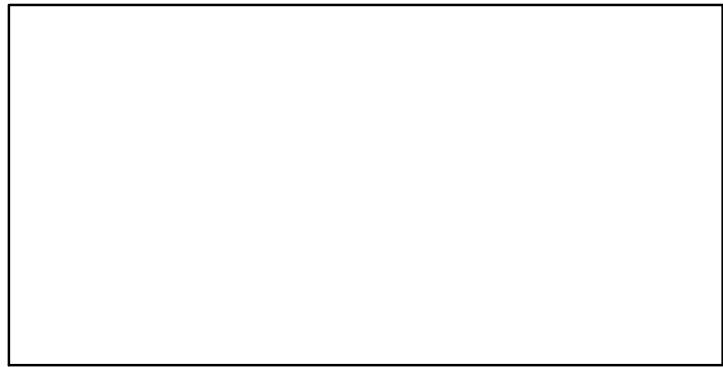
F*



ER*



Recruits*

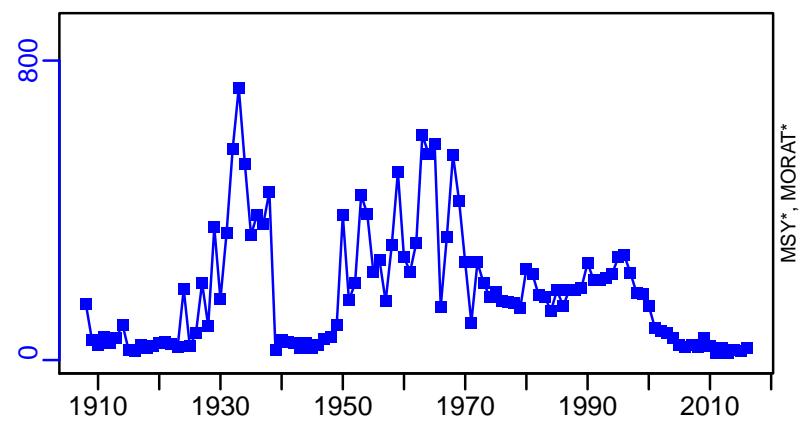


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European plaice ICES 7bc [PLAICVIIbc]

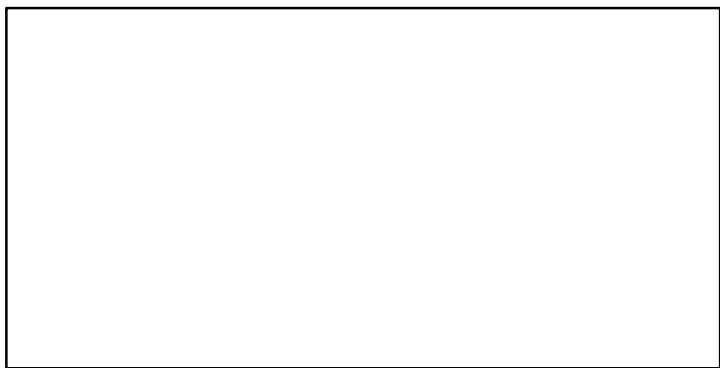
TL-MT, TC*, RecC* (1908–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*

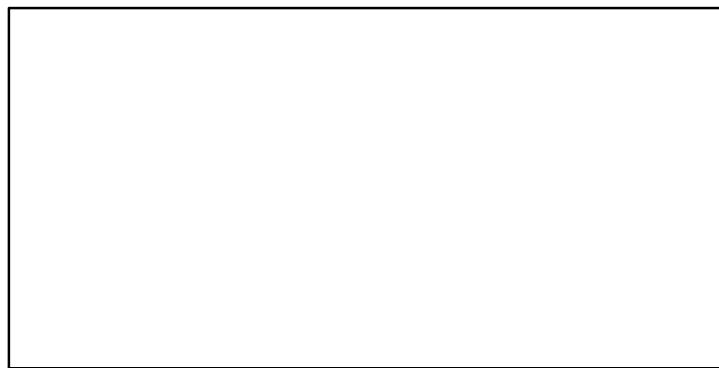


survB*

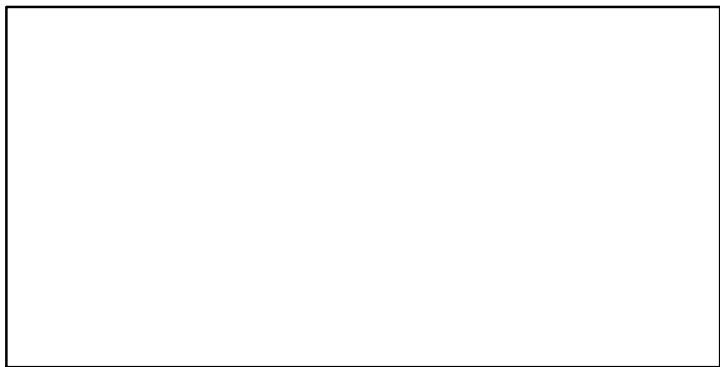
MSY*, MORAT*



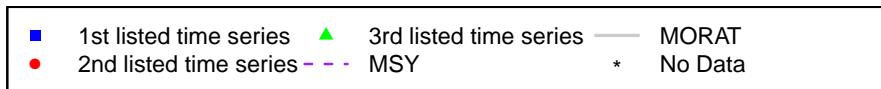
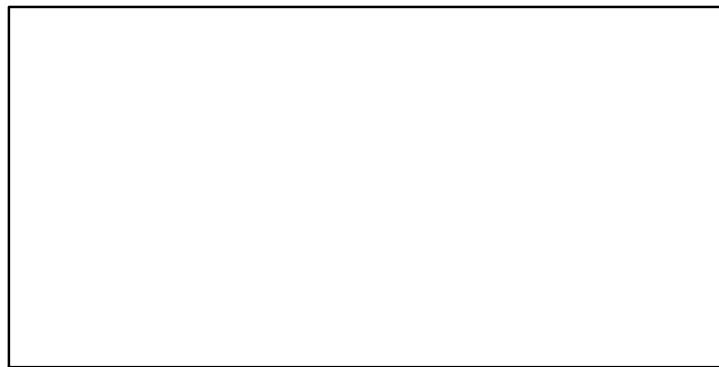
CPUE*



EFFORT*



CdivMSY*



European plaice ICES 7h-k [PLAICVIIh-k]

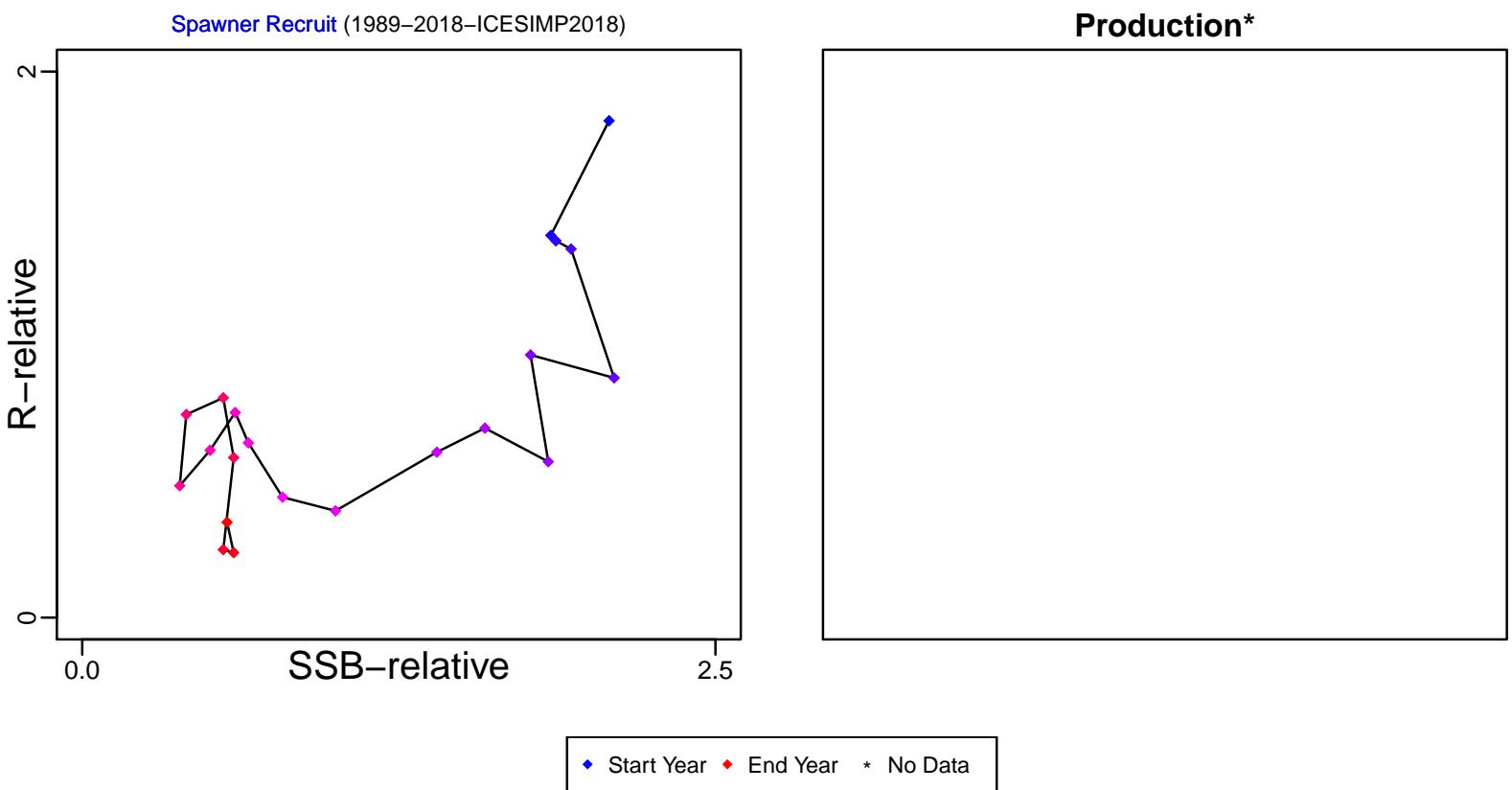
Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICVIIh-k-1989-2018-ICESIMP2018
Area	ICES 7h-k
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2015, 2016, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.261
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2018	328
Fmgt	Fmgt-relative	2018	0.31
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-relative	2018	236
Flim	Flim-relative	2018	0.436
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2018	0.63	Both	-
TN	-	-	-	-	-
R	R-relative	2018	0.349	-	4
F	F-relative	2018	1.17	-	4 to 6
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	115		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

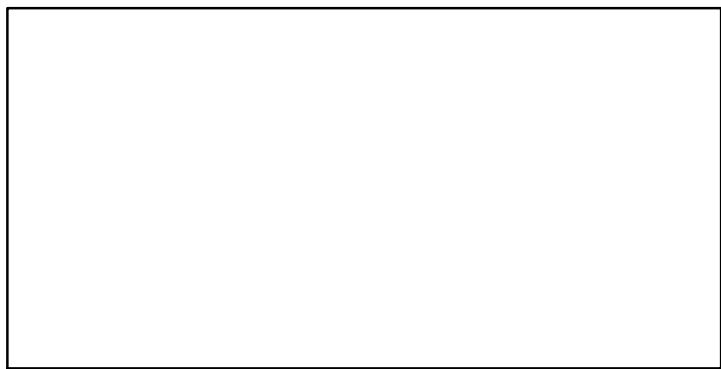
Kobe MSY*

Kobe MGT*

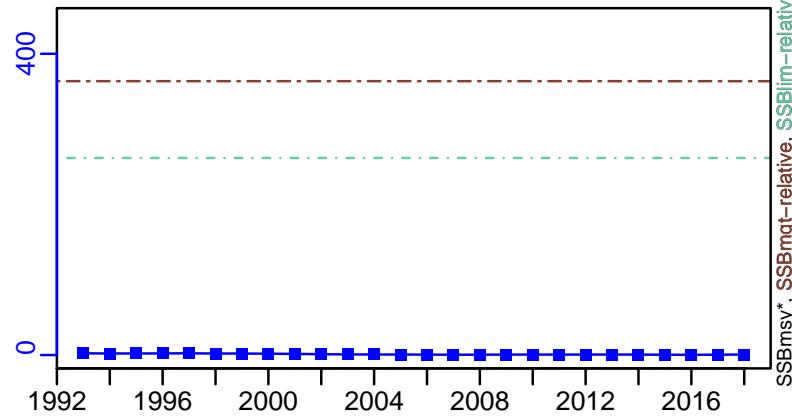


European plaice ICES 7h–k [PLAICVIIh–k]

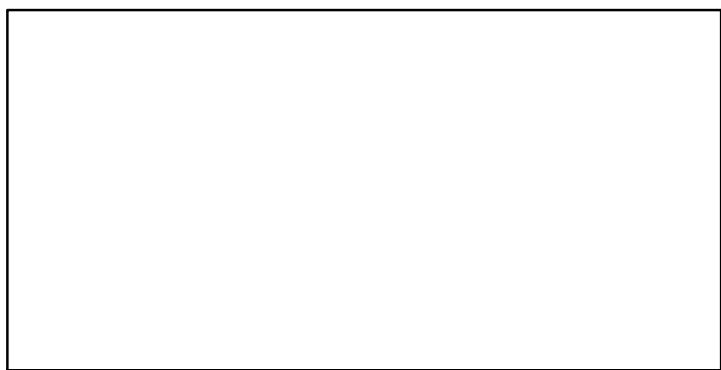
TB*



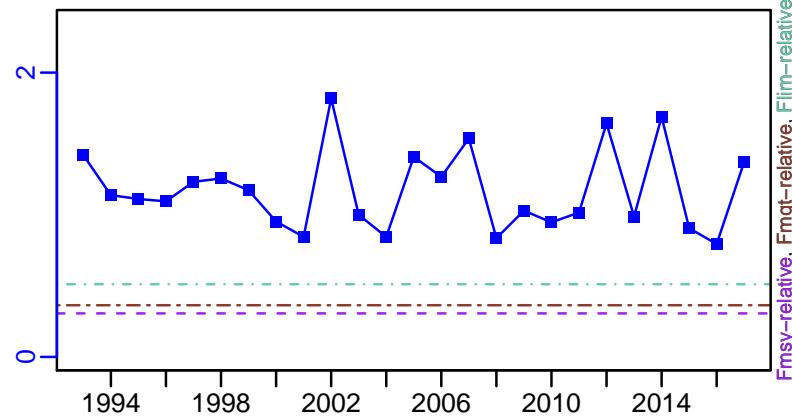
SSB-relative (1989–2018–ICESIMP2018)



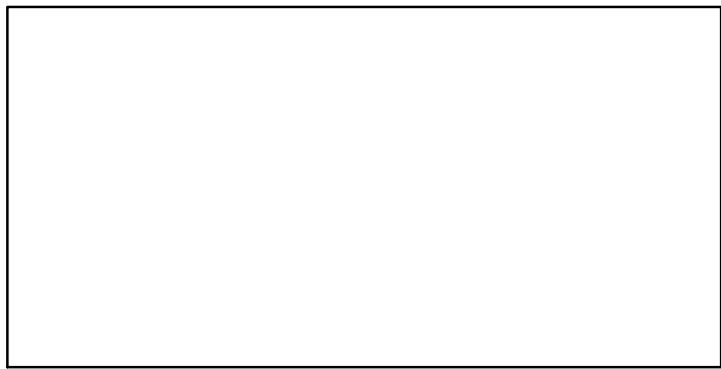
TN *



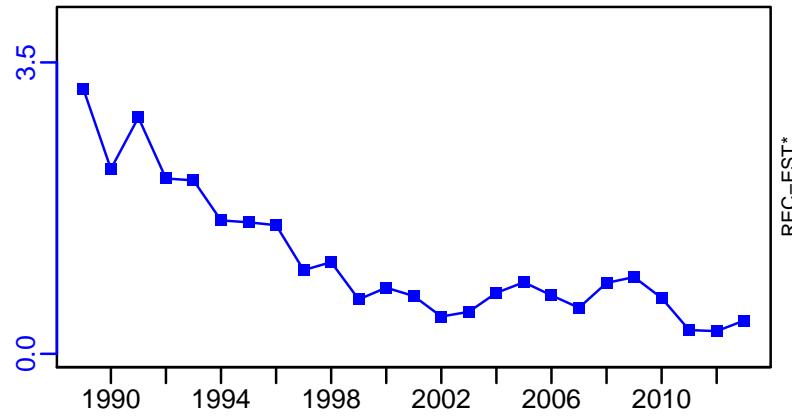
F-relative (1989–2018–ICESIMP2018)



ER*



R-relative (1989–2018–ICESIMP2018)

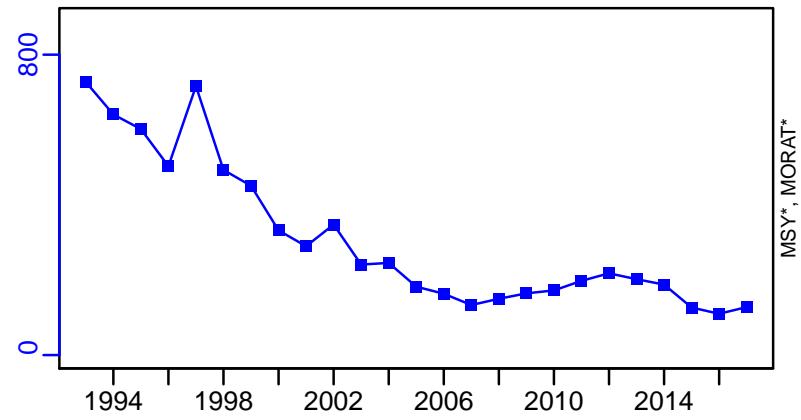


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

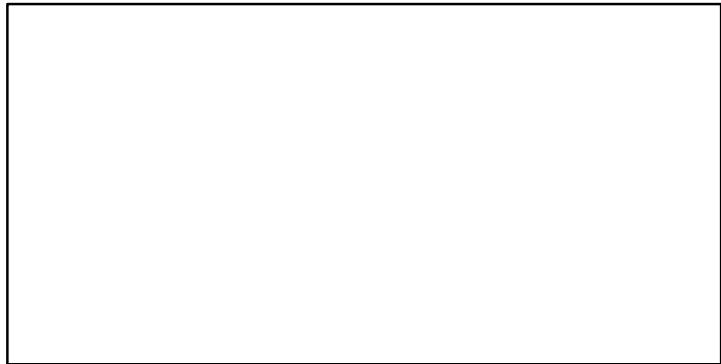
European plaice ICES 7h–k [PLAICVIIh–k]

TL–MT, TC*, RecC* (1989–2018–ICESIMP2018)

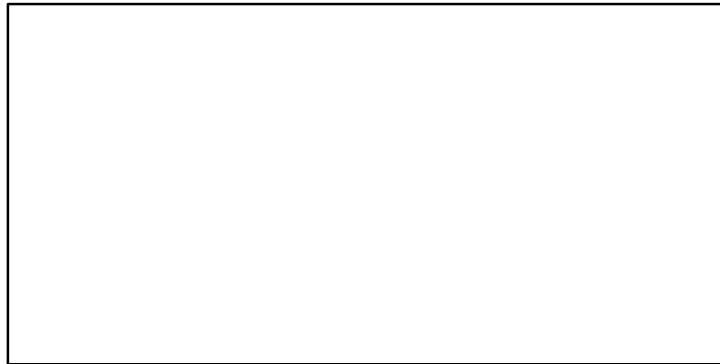
TAC*, Cpair*, Cadv*



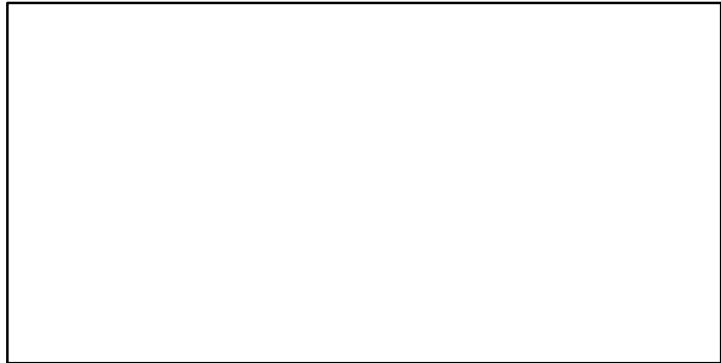
survB*



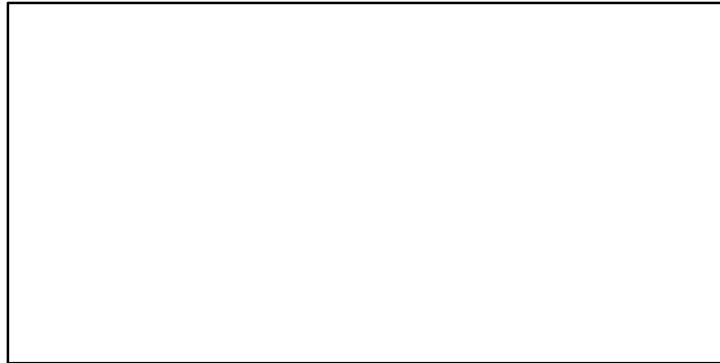
CPUE*



EFFORT*



CdivMSY*



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

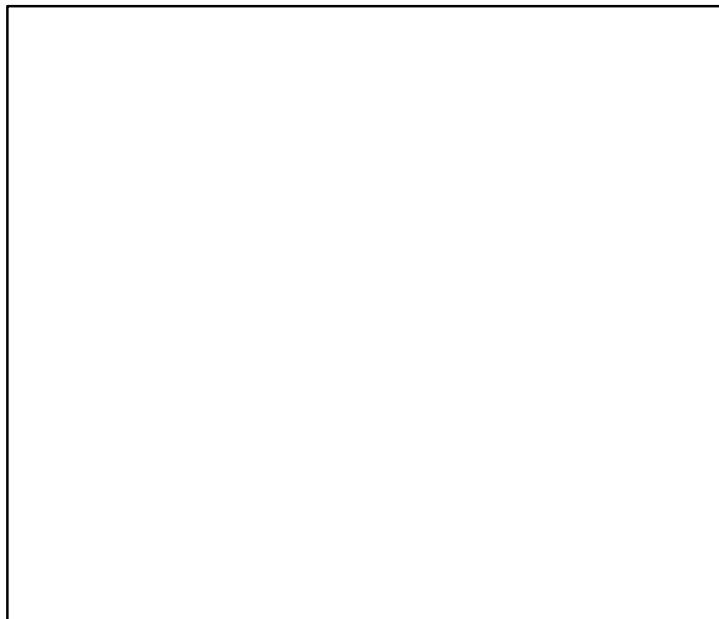
European plaice ICES 8-9a [PLAICVIII-IXa]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBIE-PLAICVIII-IXa-1994-2016-ICESIMP2018
Area	ICES 8-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2015, 2016

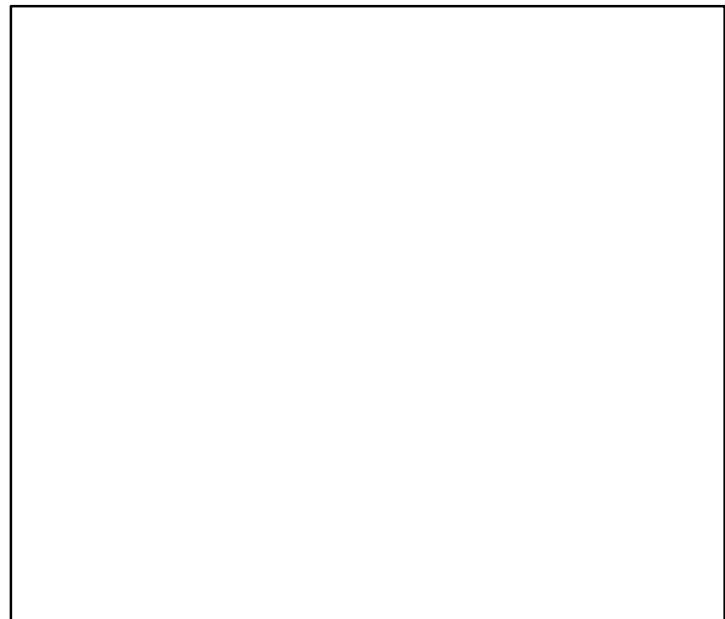
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	173		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



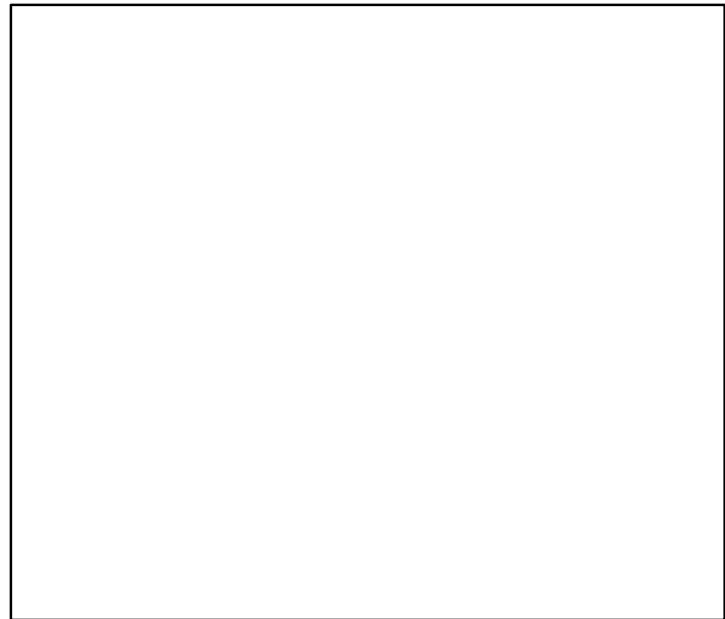
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

European plaice ICES 8–9a [PLAICVIII–IXa]

TB*



SSB*



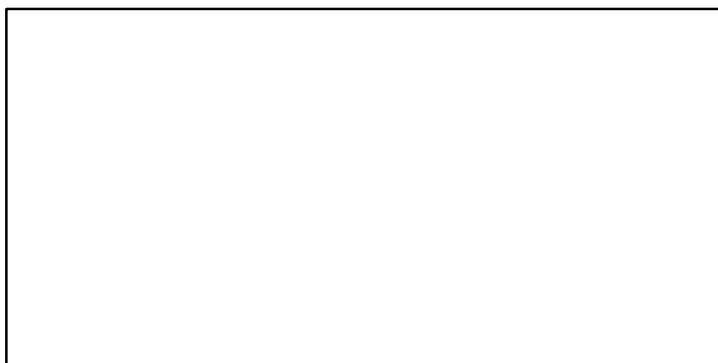
TN *



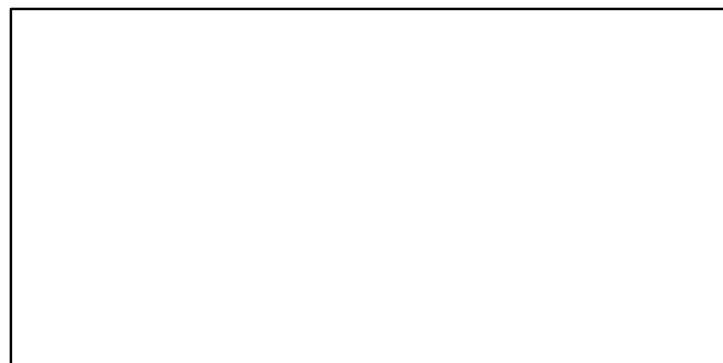
F*



ER*



Recruits*

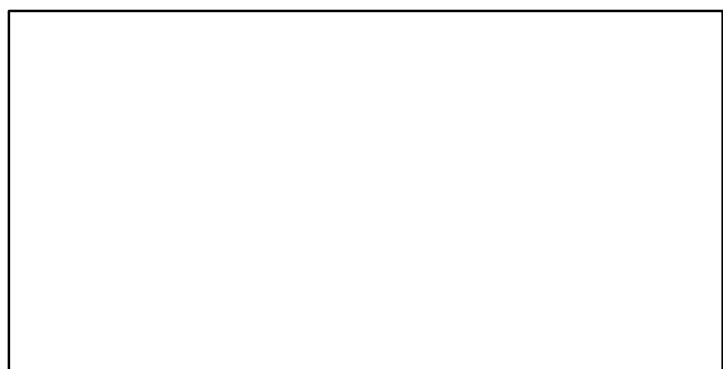
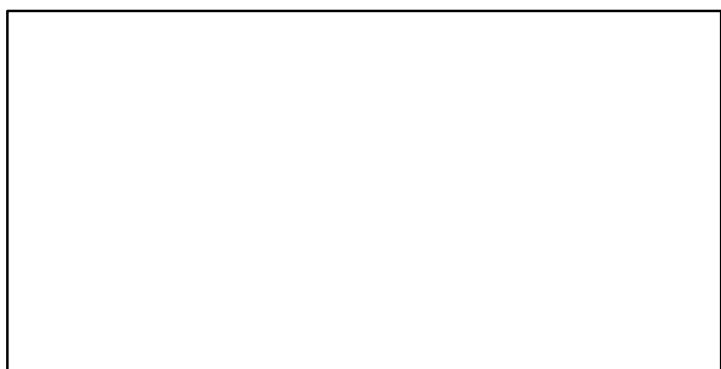
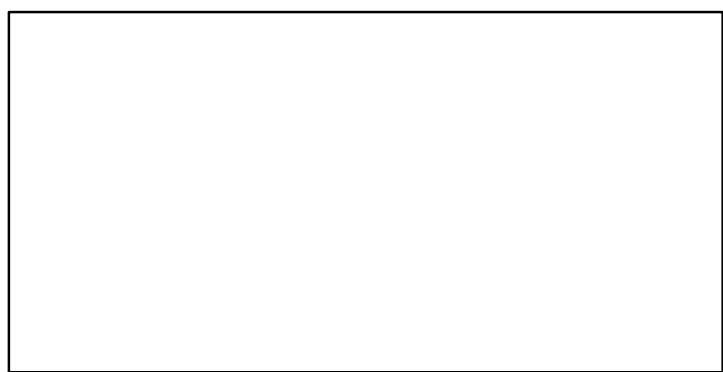
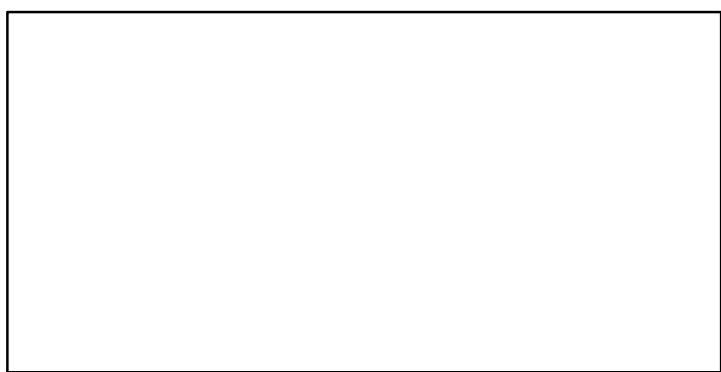
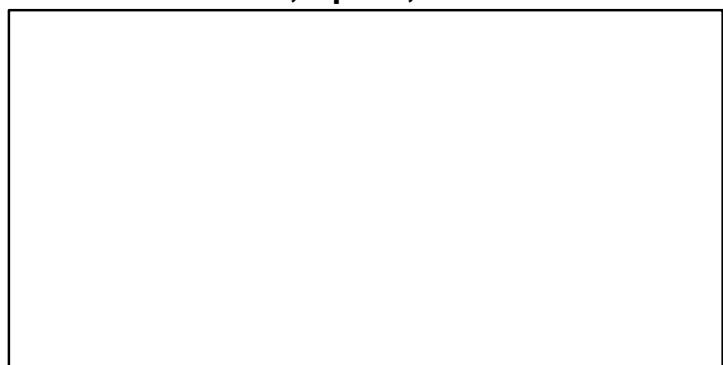
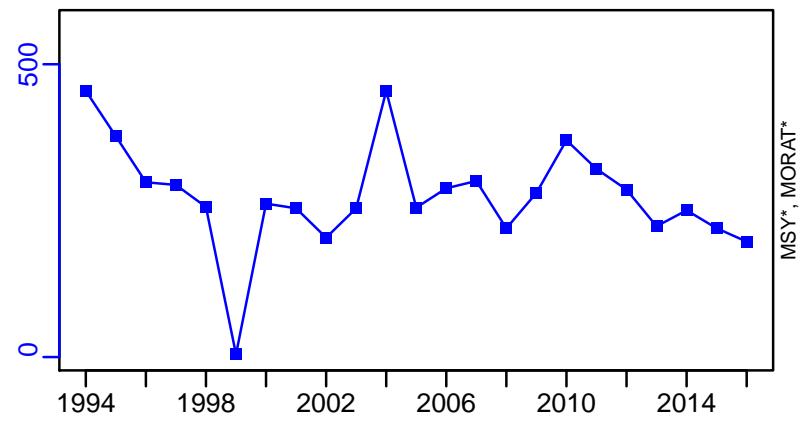


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

European plaice ICES 8–9a [PLAICVIII–IXa]

TL–MT, TC*, RecC* (1994–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Pollock ICES 3a-4-6 [POLLNS-VI-IIIA]

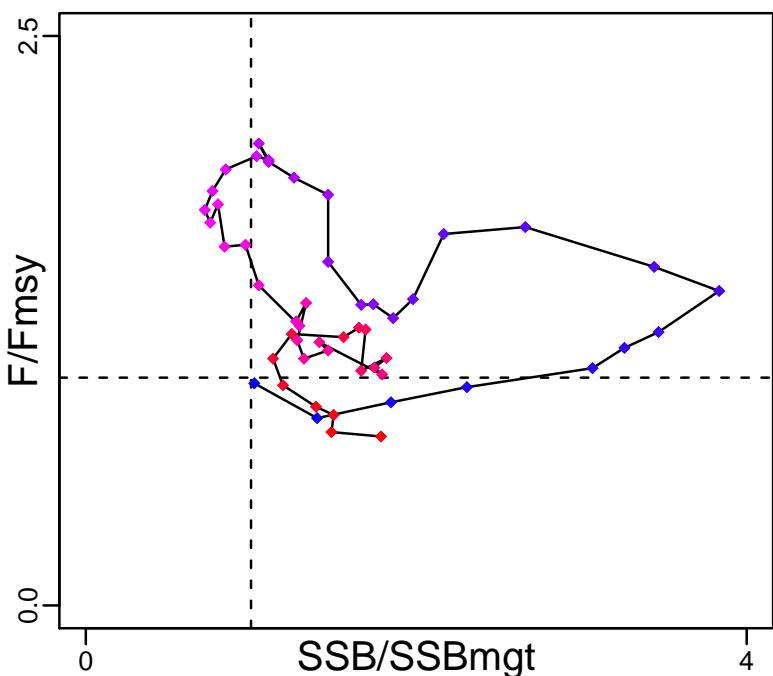
Metadata	
Scientific Name	Pollachius virens
Current Assess ID	WGNSSK-POLLNS-VI-IIIA-1964-2018-ICESIMP2018
Area	ICES 3a-4-6
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2012, 2013, 2014, 2015, 2016, 2016, 2017, 2018

Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	TBmsy-est-MT	2012	1,268,238	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2018	0.36	
ERmsy	ERmsy-est-ratio	2018	0.579	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	150,000	
Fmgt	Fmgt-1/yr	2018	0.36	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-MT	2012	2×10^5	
M	-	-	-	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	107,000	
Flim	Flim-1/yr	2018	0.56	
ERlim	-	-	-	

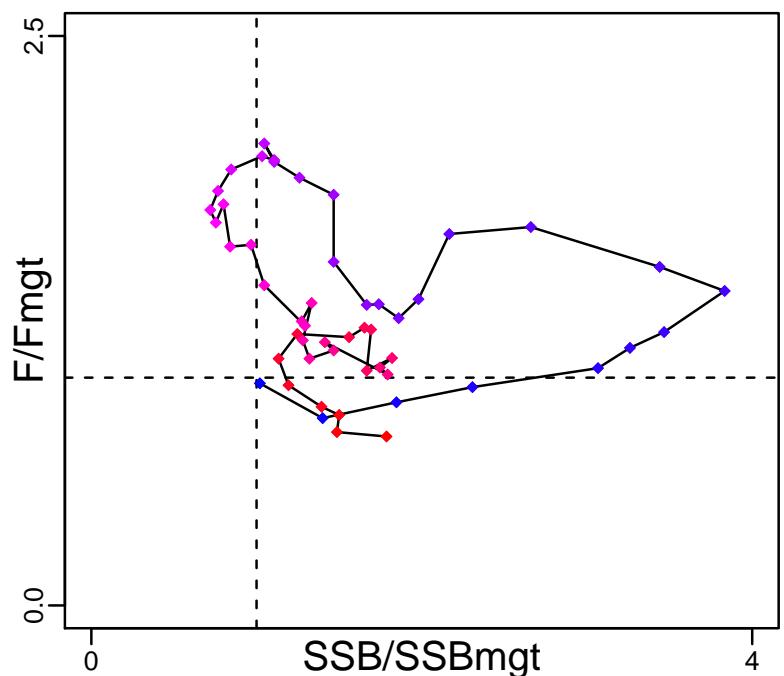
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	523,000	Both	-	
SSB	SSB-MT	2018	305,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.11×10^8	-	3	
F	F-1/yr	2018	0.267	-	4 to 7	
ER	ER-calc-ratio	2018	0.186	-	-	
TC	TC-MT	2018	97,500			
TL	TL-MT	2018	88,500			
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	0.341			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.742			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.322			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.033			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.742			
ER/ERmgt	-	-	-			

Pollock ICES 3a–4–6 [POLLNS–VI–IIIa]

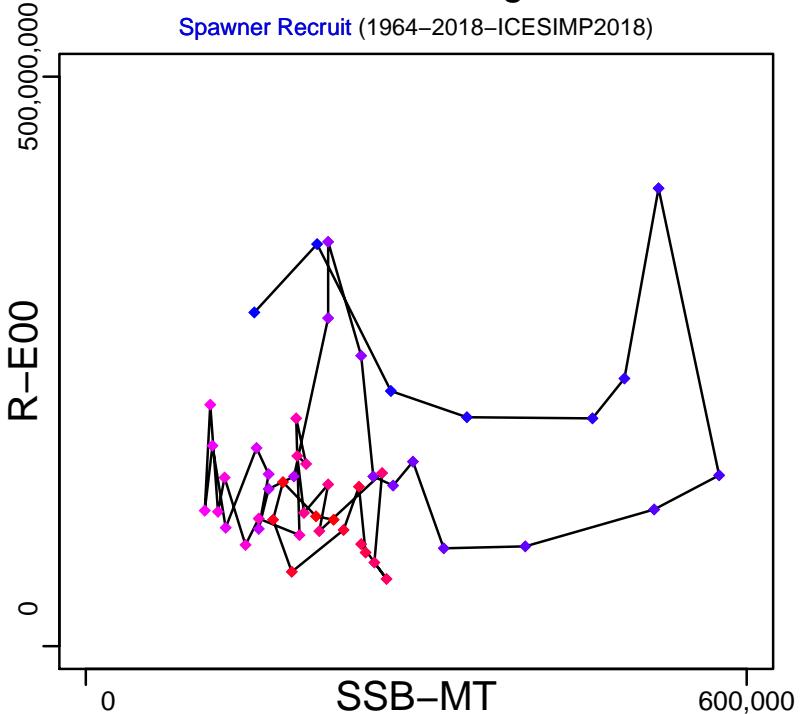
Kobe MSYpref (1964–2018–ICESIMP2018)



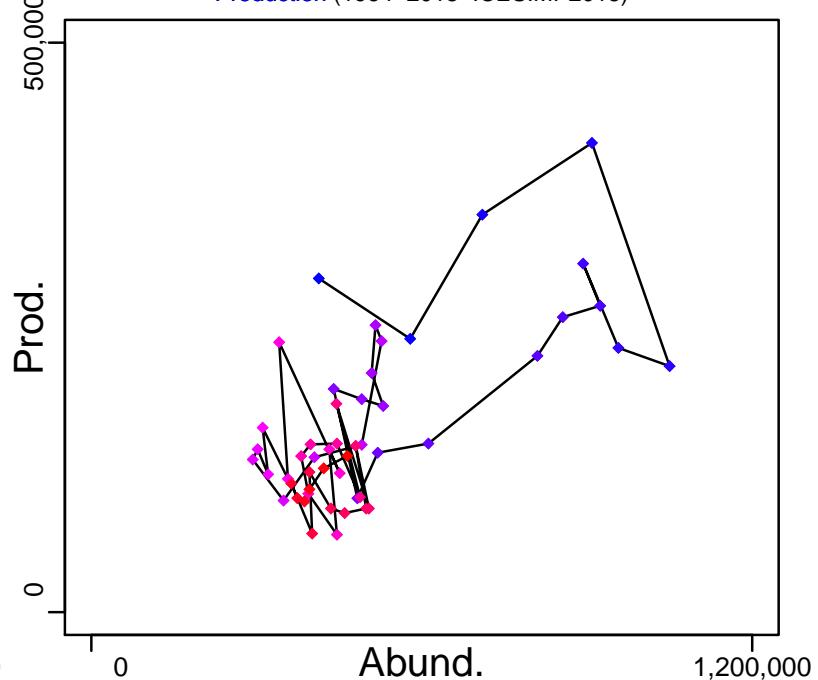
Kobe MGTpref (1964–2018–ICESIMP2018)



Spawner Recruit (1964–2018–ICESIMP2018)



Production (1964–2018–ICESIMP2018)

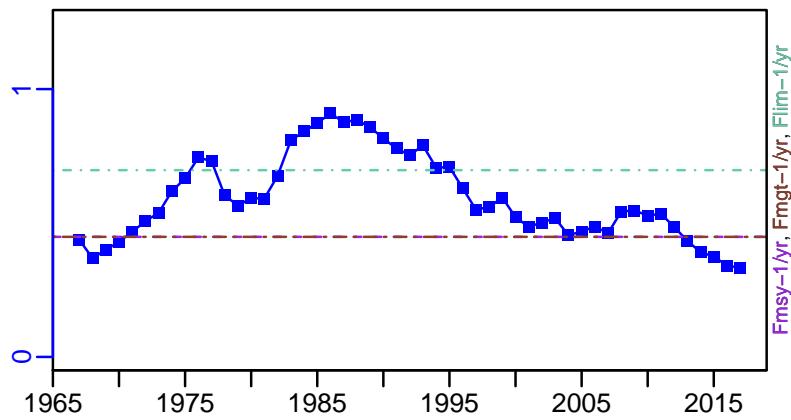
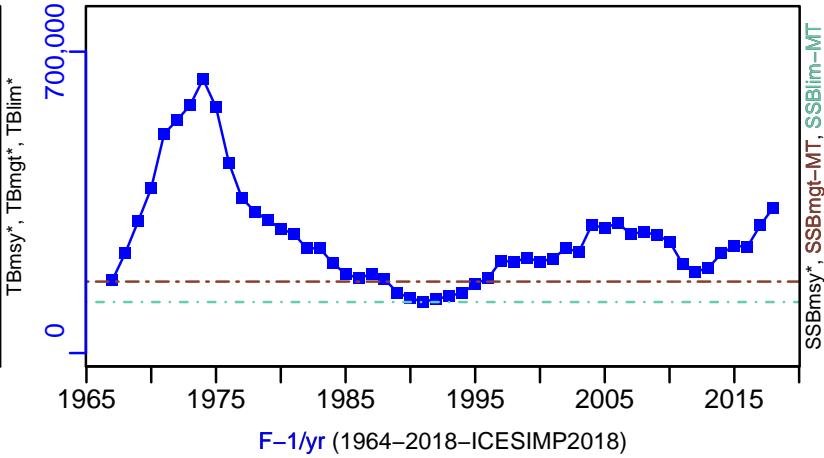
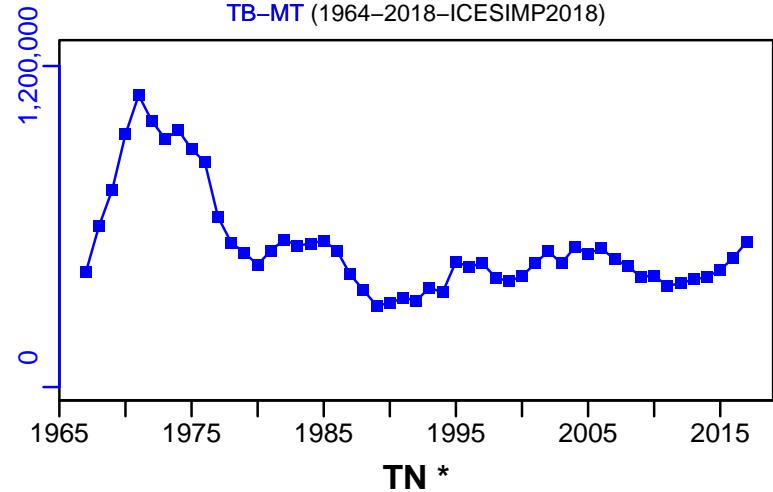


◆ Start Year ◆ End Year * No Data

Pollock ICES 3a–4–6 [POLLNS–VI–IIIa]

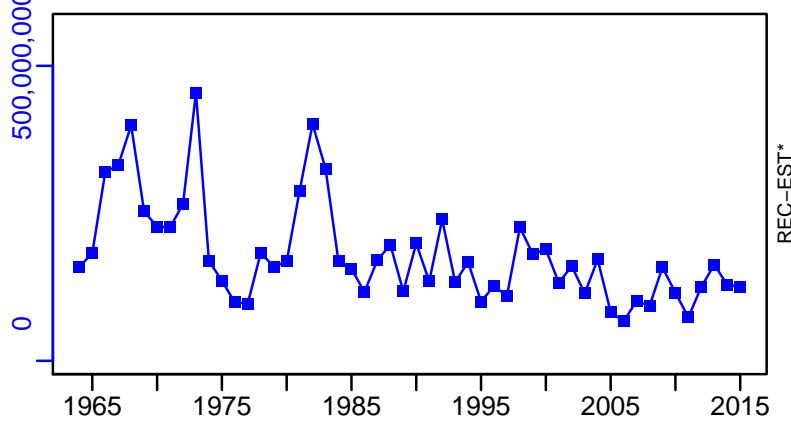
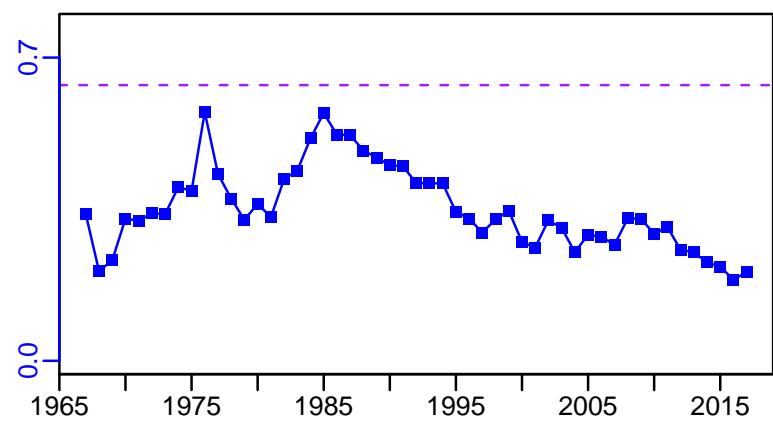
TB-MT (1964–2018–ICESIMP2018)

SSB-MT (1964–2018–ICESIMP2018)



ER-calc-ratio (1964–2018–ICESIMP2018)

R-E00 (1964–2018–ICESIMP2018)

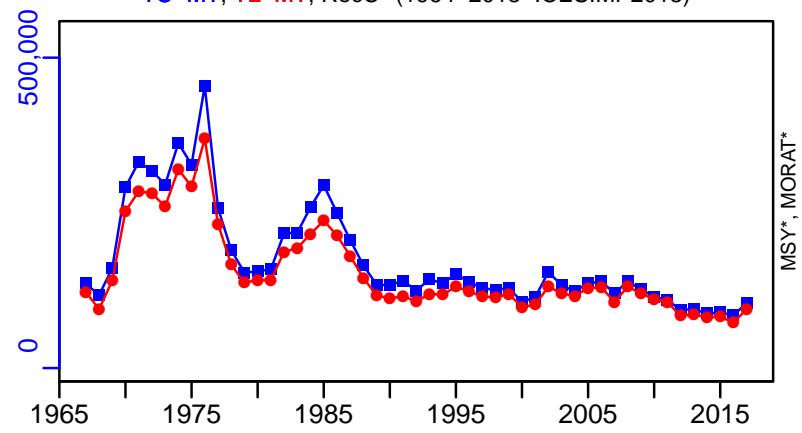


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Pollock ICES 3a–4–6 [POLLNS–VI–IIIa]

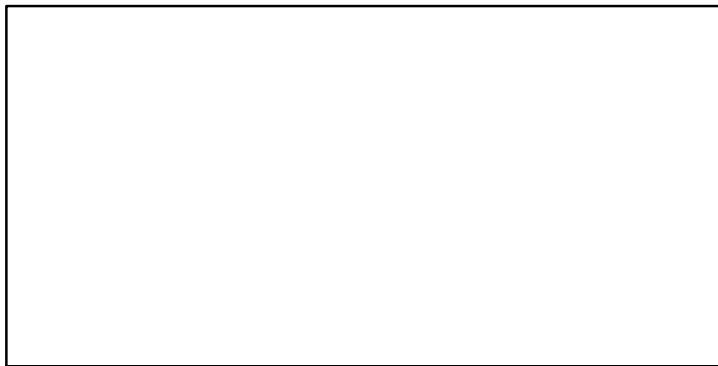
TC–MT, TL–MT, RecC* (1964–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*

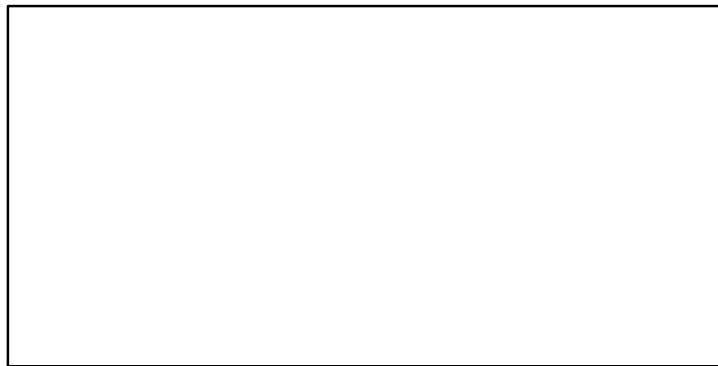


MSY*, MORAT*

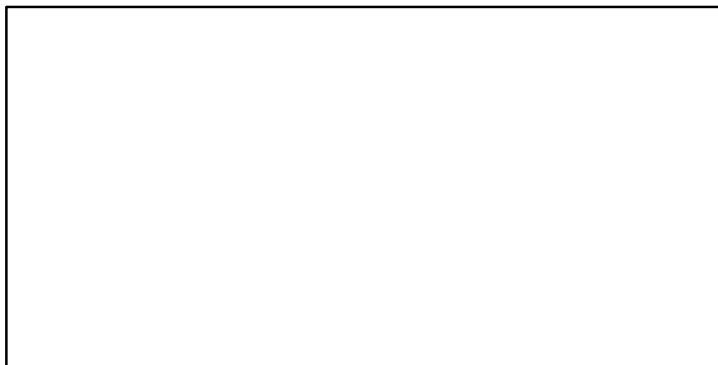
survB*



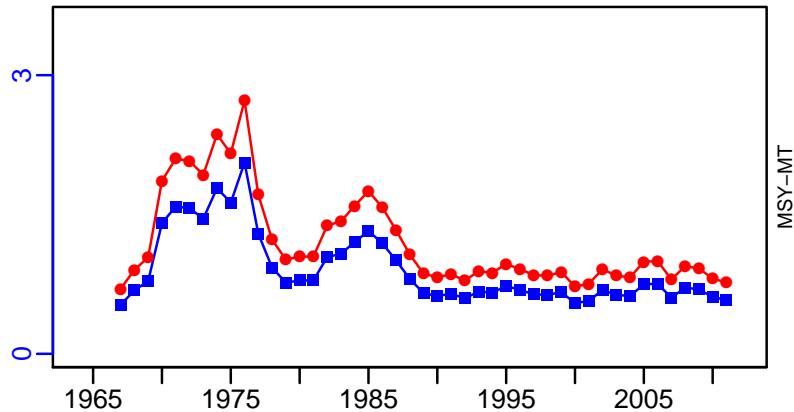
CPUE*



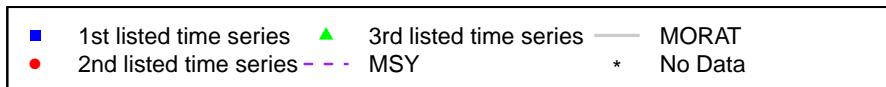
EFFORT*



TL–MT/MSY–MT, CdivMEANC–ratio, (1964–2012–CHING)



MSY-MT



Porbeagle shark Northeast Atlantic [PORSHARNEATL]

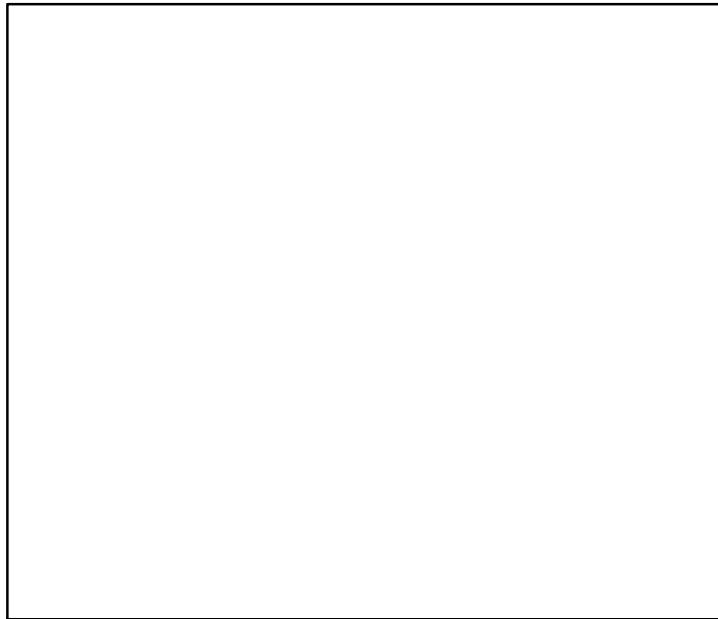
Metadata	
Scientific Name	Lamna nasus
Current Assess ID	WGEF-PORSHARNEATL-1926-2014-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014

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

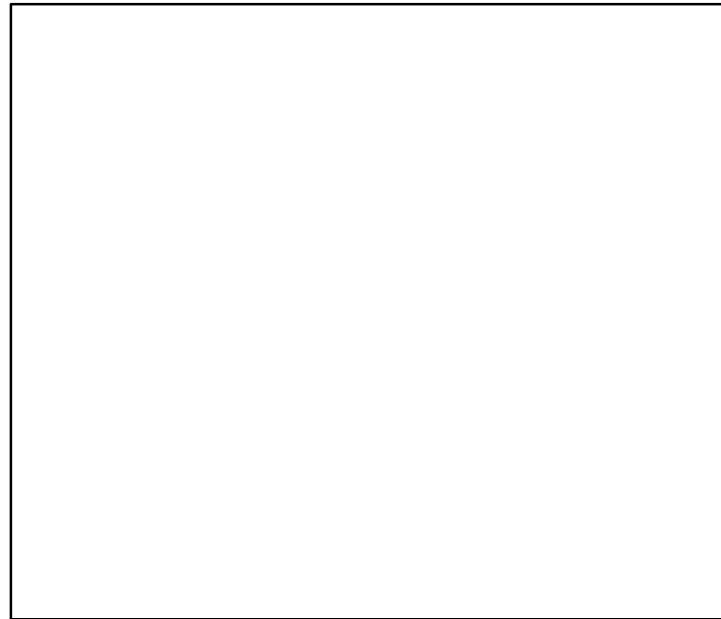
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	7		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Porbeagle shark Northeast Atlantic [PORSHARNEATL]

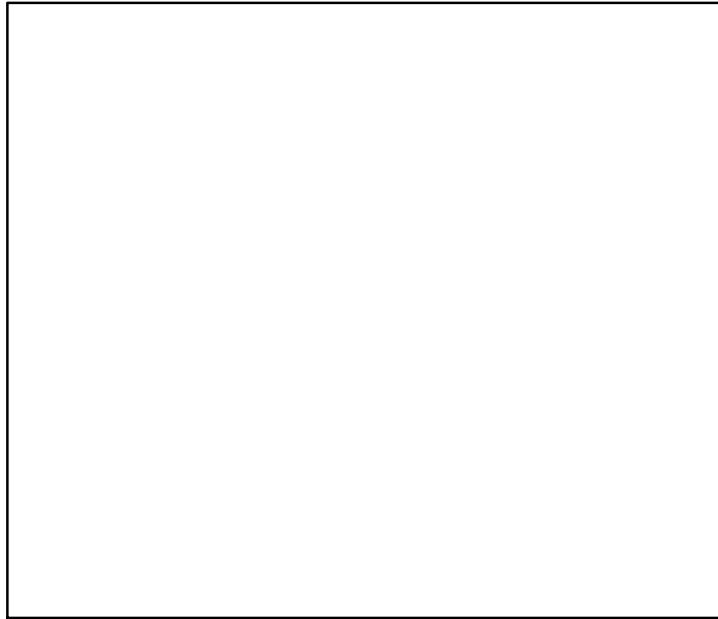
Kobe MSY*



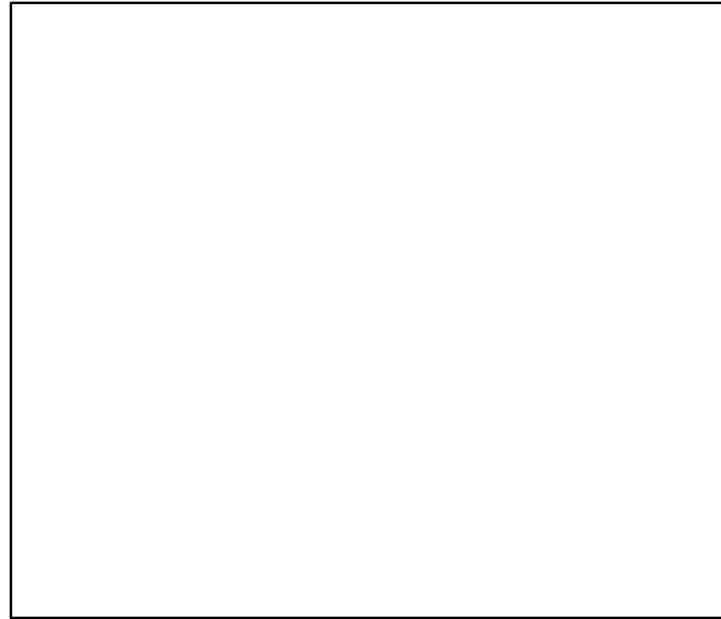
Kobe MGT*



Spawner Recruit*



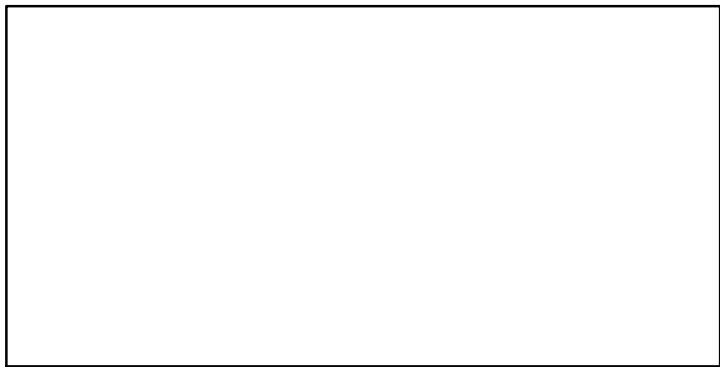
Production*



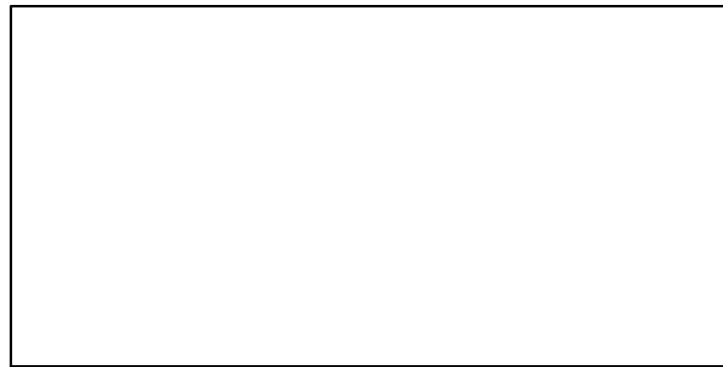
◆ Start Year ♦ End Year * No Data

Porbeagle shark Northeast Atlantic [PORSHARNEATL]

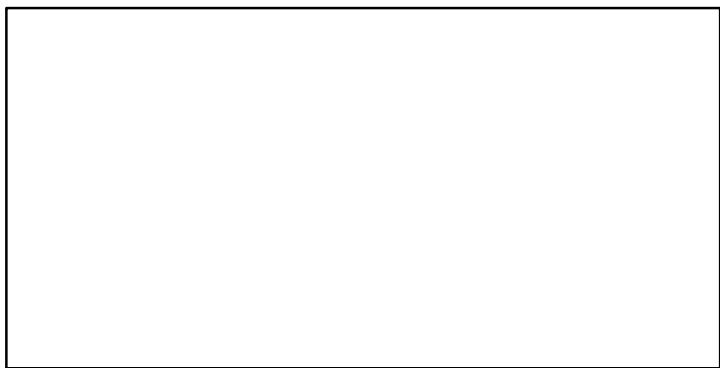
TB*



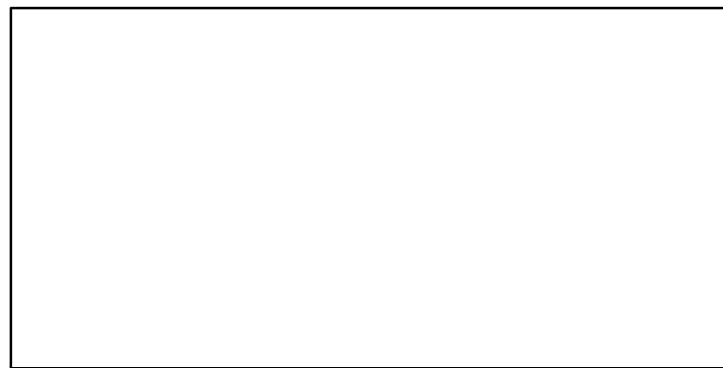
SSB*



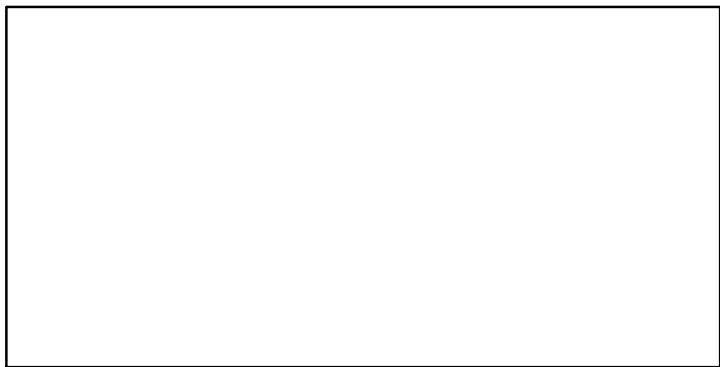
TN *



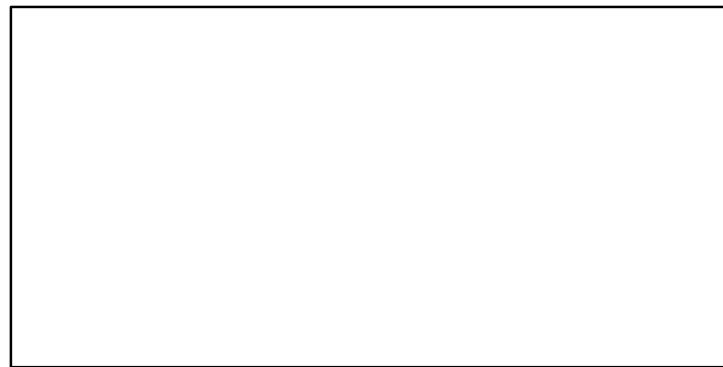
F*



ER*



Recruits*

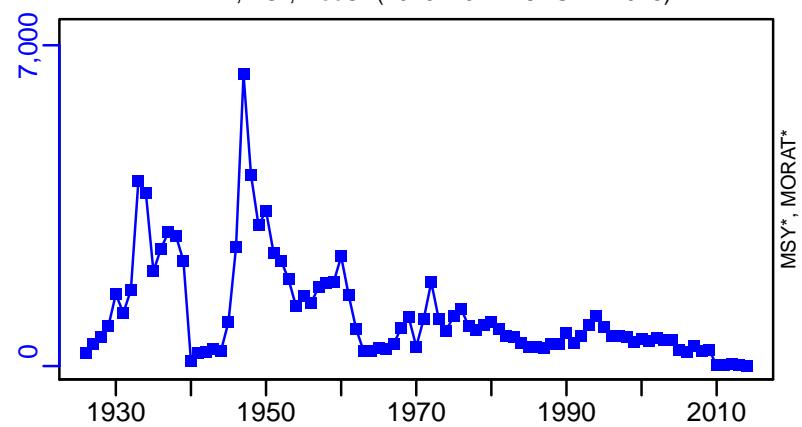


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

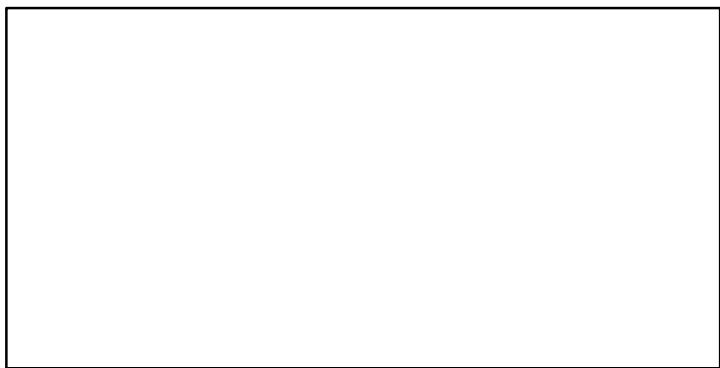
Porbeagle shark Northeast Atlantic [PORSHARNEATL]

TL-MT, TC*, RecC* (1926–2014–ICESIMP2018)

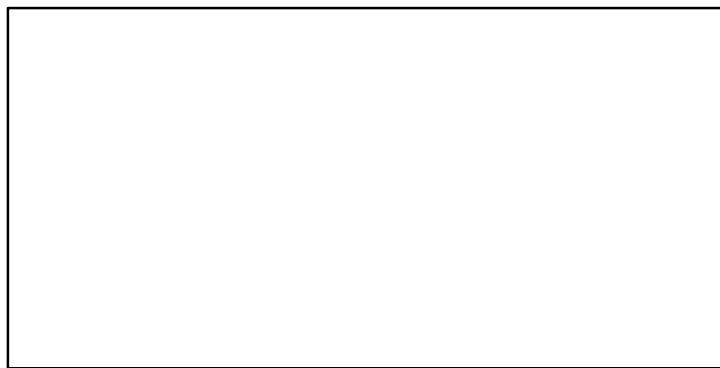
TAC*, Cpair*, Cadv*



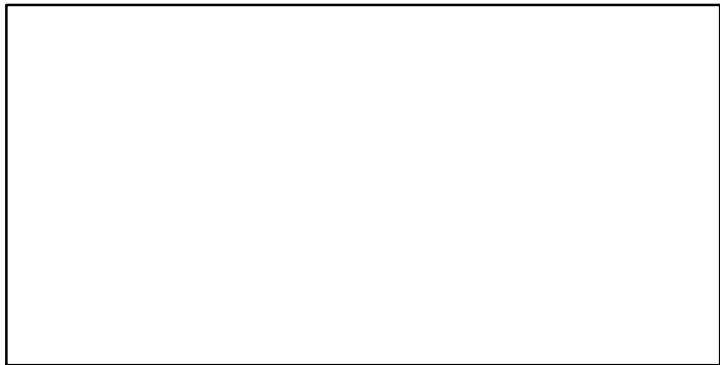
survB*



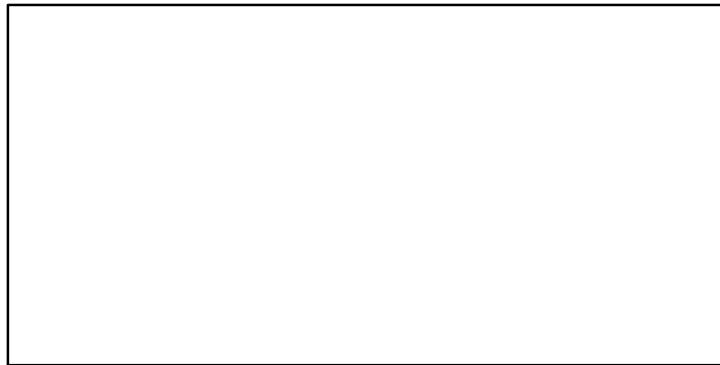
CPUE*



EFFORT*



CdivMSY*



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

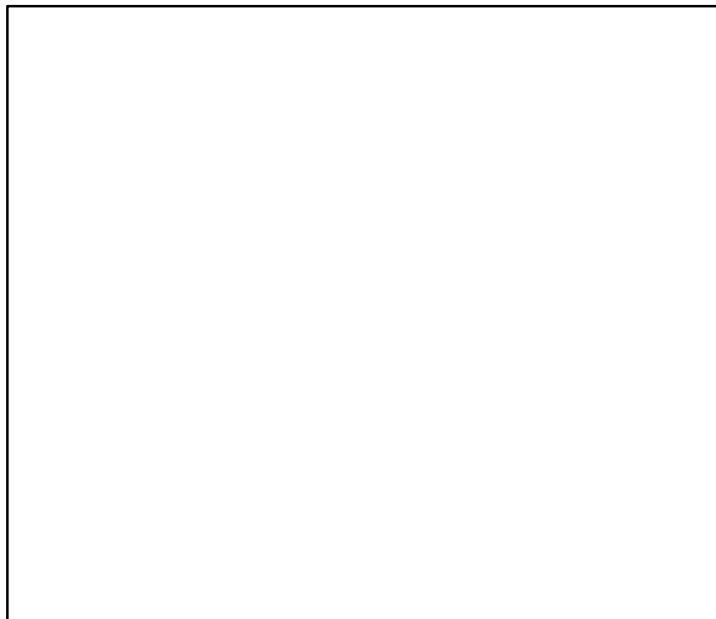
Red seabream ICES 9 [RBRMIX]

Metadata	
Scientific Name	Pagellus bogaraveo
Current Assess ID	WGDEEP-RBRMIX-1988-2017-ICESIMP2018
Area	ICES 9
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

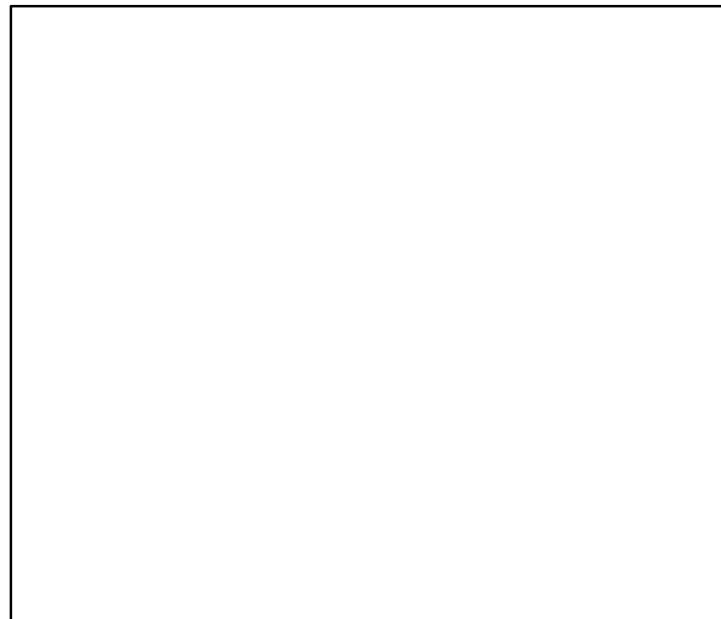
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	295		
TL	TL-MT	2017	336		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

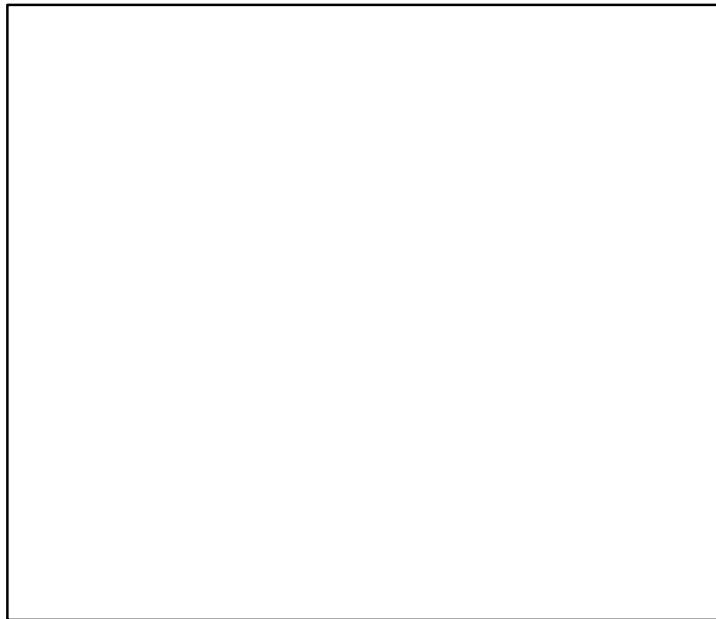
Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Red seabream ICES 9 [RBRMIX]

TB*



SSB*



TN *



F*



ER*



Recruits*

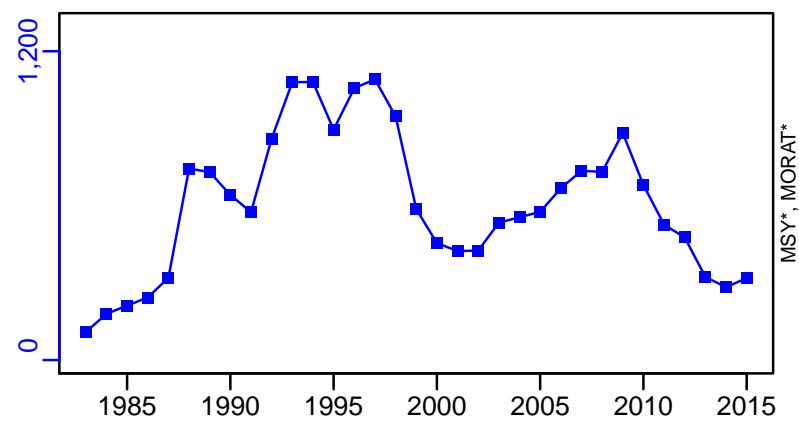


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Red seabream ICES 9 [RBRMIX]

TC-MT, TL*, RecC* (1983–2016—ICESIMP2016)

TAC*, Cpair*, Cadv*



survB*

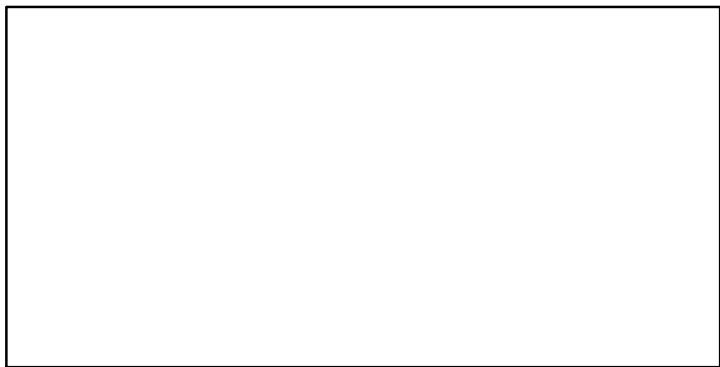
MSY*, MORAT*



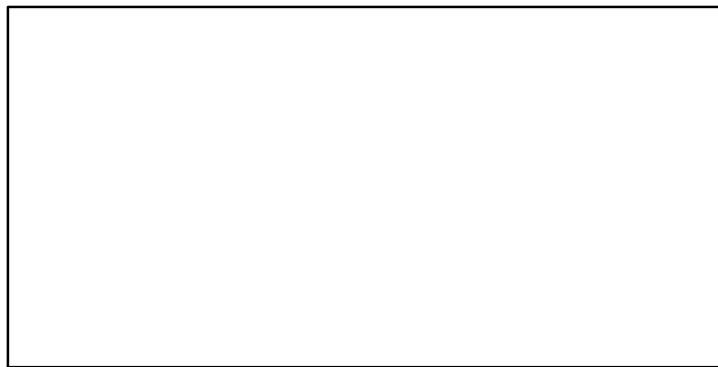
CPUE*



EFFORT*



CdivMSY*



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

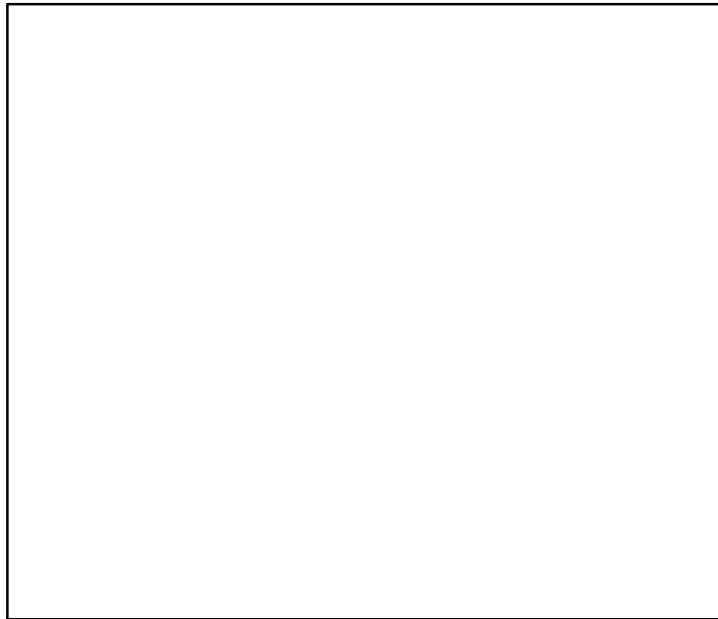
Red seabream ICES 6-7-8 [RBRMVI-VII-VIII]

Metadata	
Scientific Name	Pagellus bogaraveo
Current Assess ID	WGDEEP-RBRMVI-VII-VIII-1948-2017-ICESIMP2018
Area	ICES 6-7-8
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

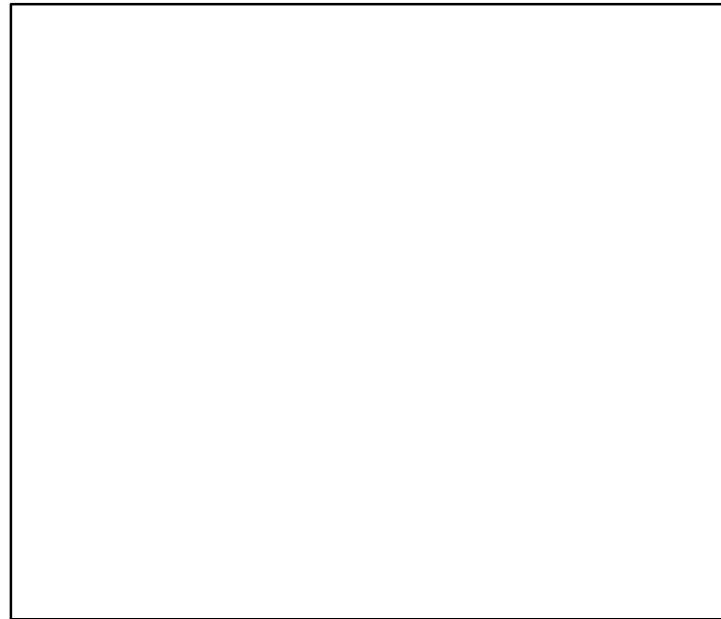
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	125		
TL	TL-MT	2017	124		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

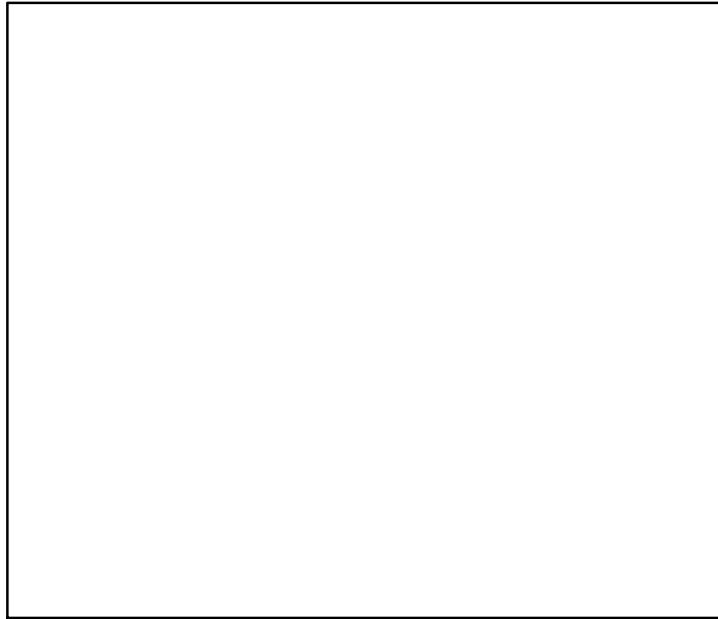
Kobe MSY*



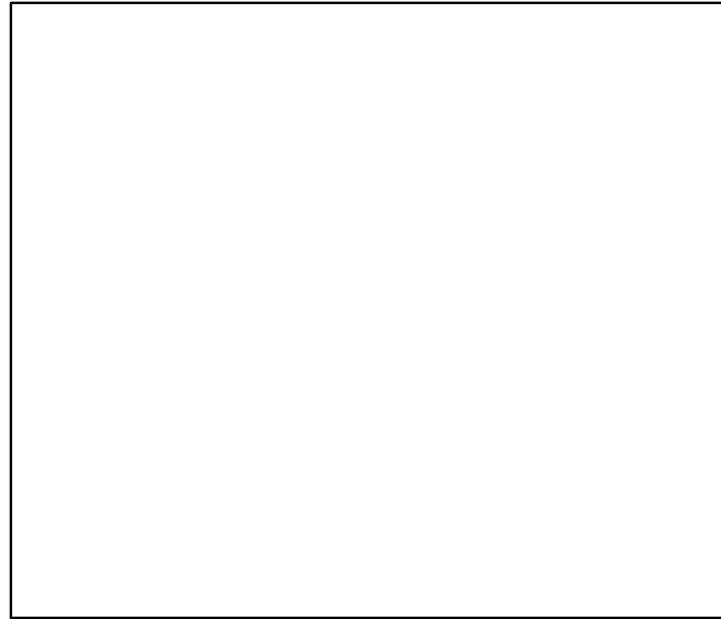
Kobe MGT*



Spawner Recruit*

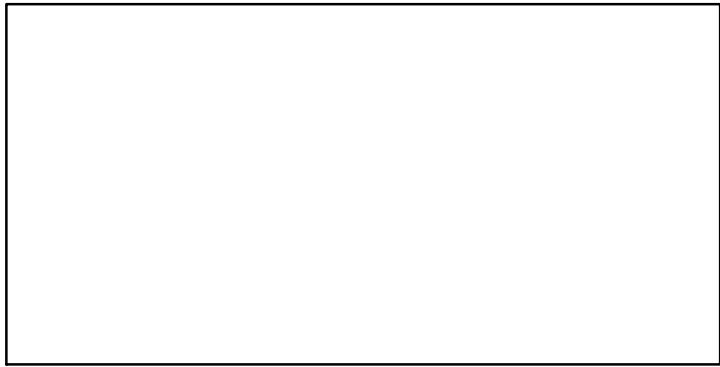


Production*

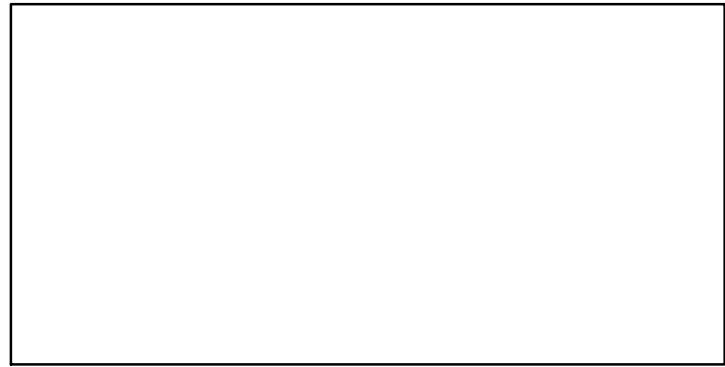


◆ Start Year ♦ End Year * No Data

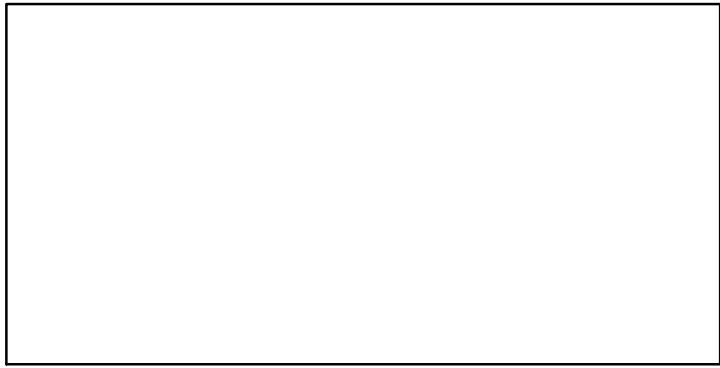
TB*



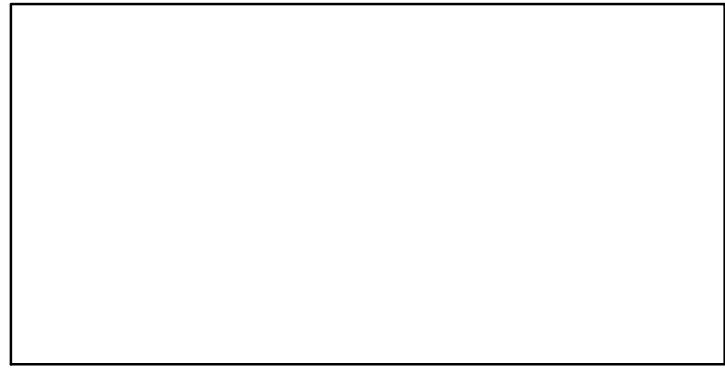
SSB*



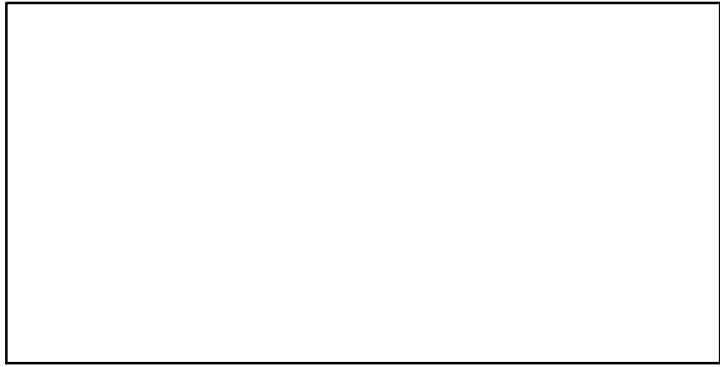
TN *



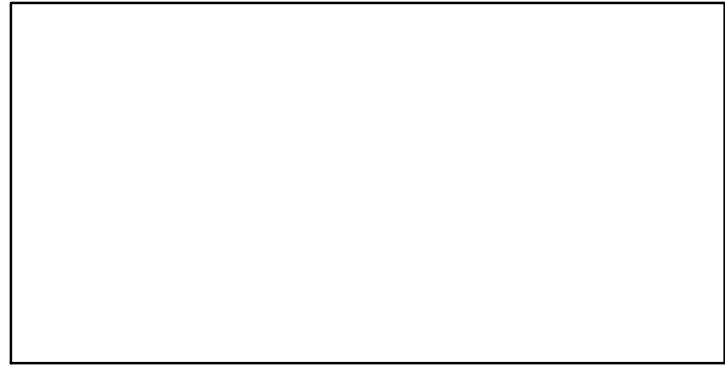
F*



ER*



Recruits*

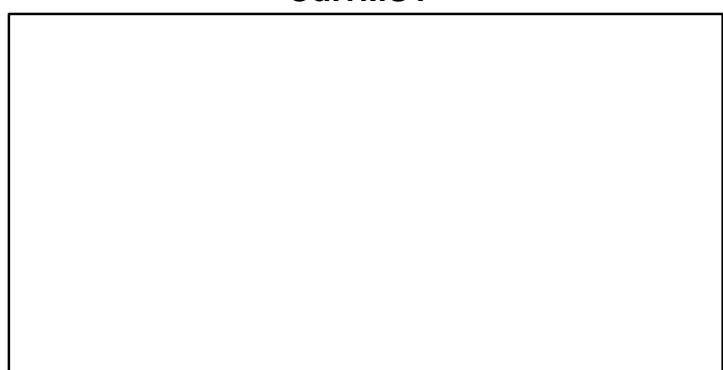
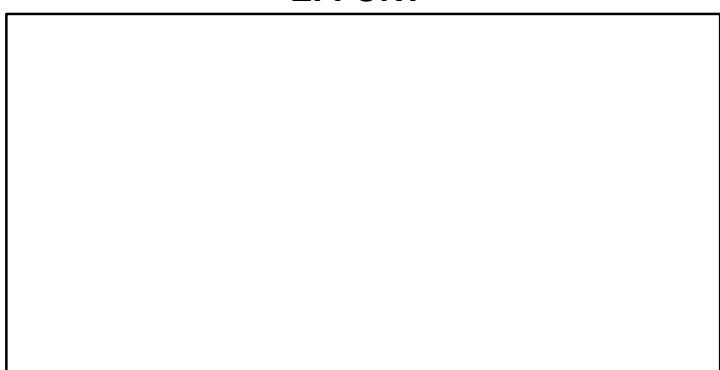
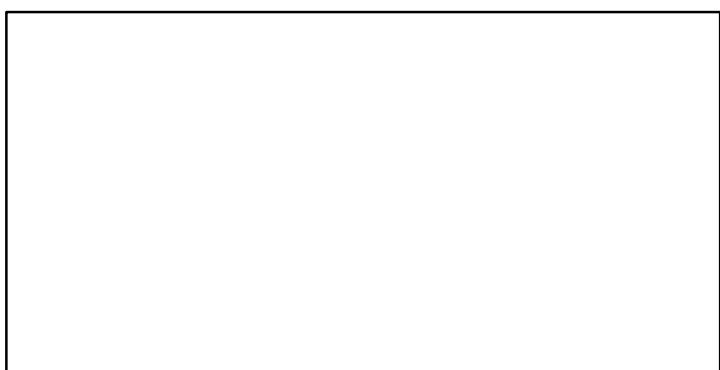
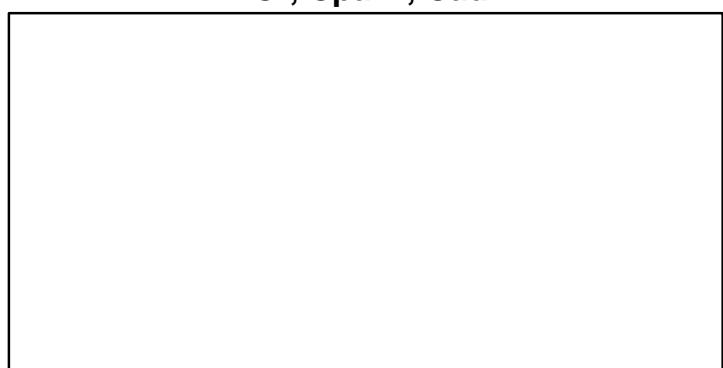
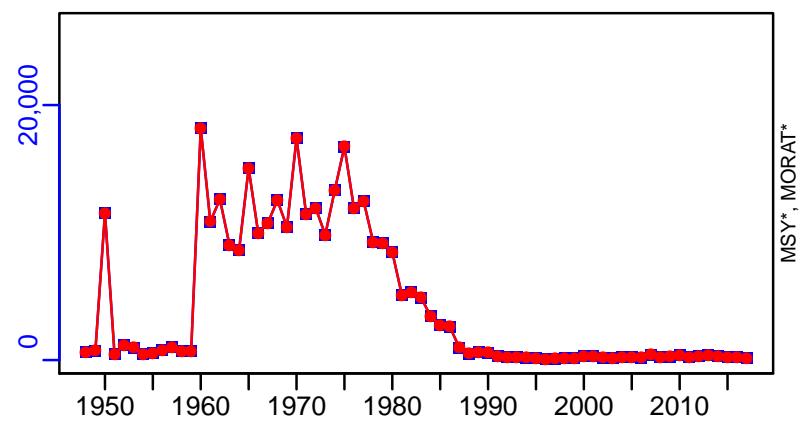


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Red seabream ICES 6–7–8 [RBRMVI–VII–VIII]

TC–MT, TL–MT, RecC* (1948–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Red seabream Azores Grounds [RBRMX]

Metadata	
Scientific Name	Pagellus bogaraveo
Current Assess ID	WGDEEP-RBRMX-1980-2017-ICESIMP2018
Area	Azores Grounds
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	499		
TL	TL-MT	2016	701		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Red seabream Azores Grounds [RBRMX]

TB*



SSB*



TN *



F*



ER*



Recruits*

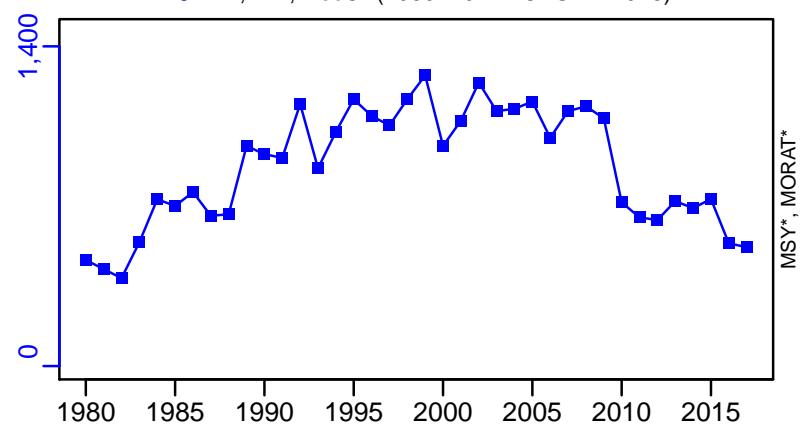


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Red seabream Azores Grounds [RBRMX]

TC-MT, TL*, RecC* (1980–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

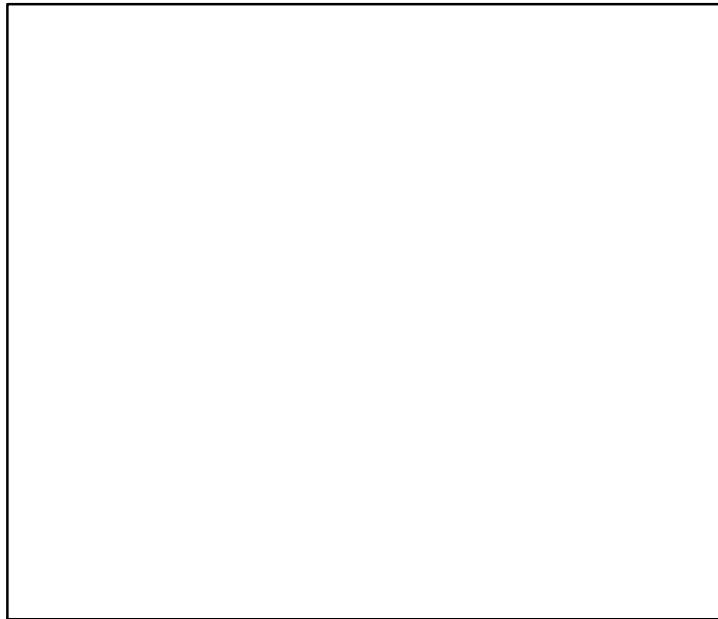
Beaked redfish Southeast Greenland [REDDEEPXIVb]

Metadata	
Scientific Name	Sebastes mentella
Current Assess ID	NWWG-REDDEEPXIVb-1974-2017-ICESIMP2018
Area	Southeast Greenland
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2016, 2016, 2017

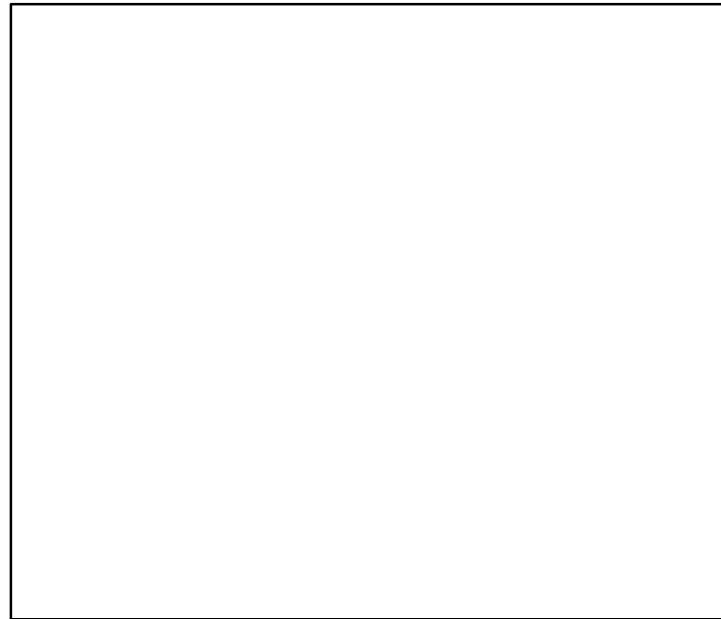
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	5980		
TL	TL-MT	2017	3030		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

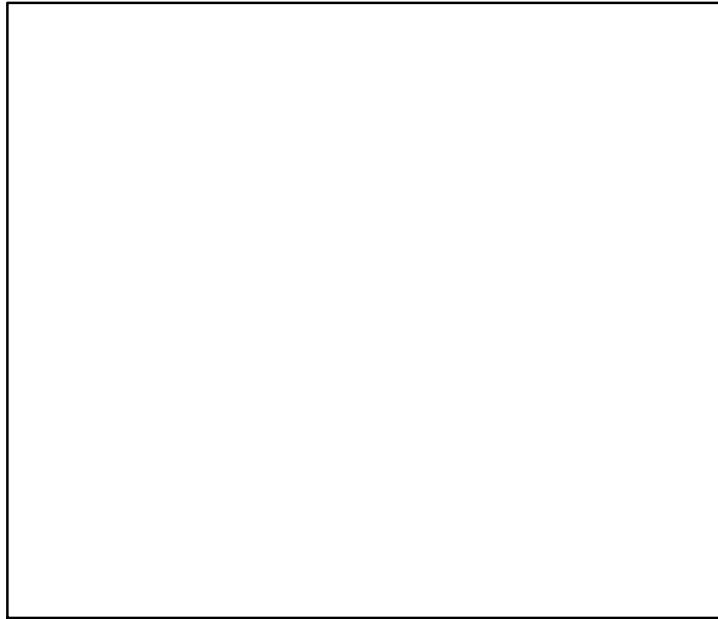
Kobe MSY*



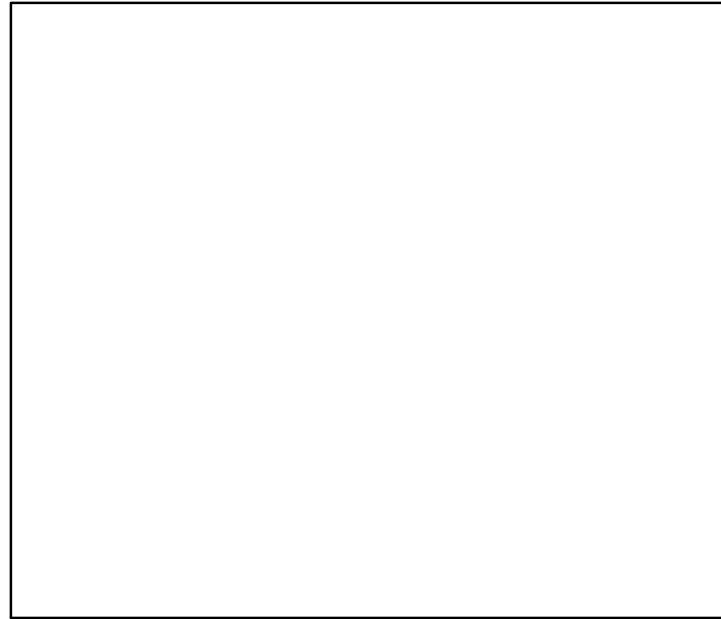
Kobe MGT*



Spawner Recruit*



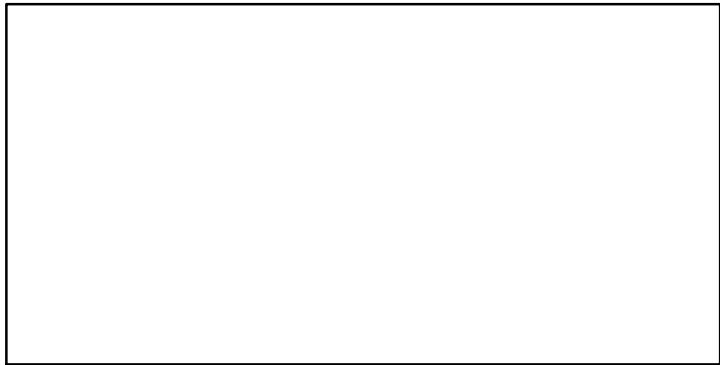
Production*



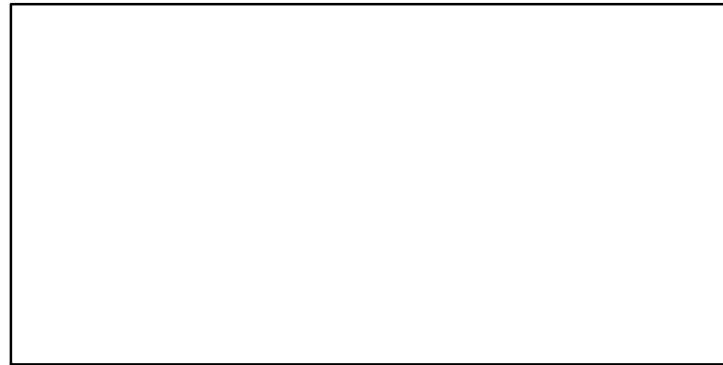
◆ Start Year ♦ End Year * No Data

Beaked redfish Southeast Greenland [REDDEEPXIVb]

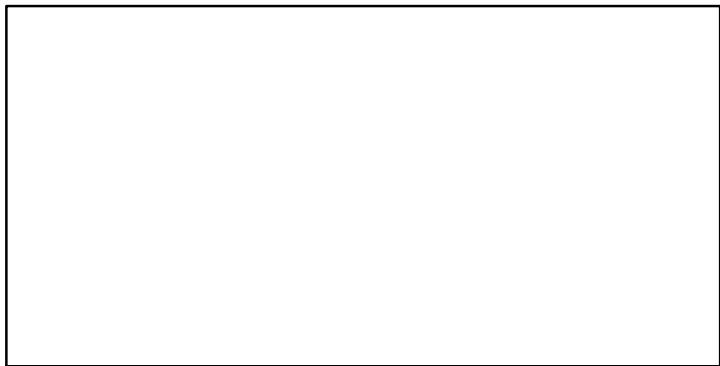
TB*



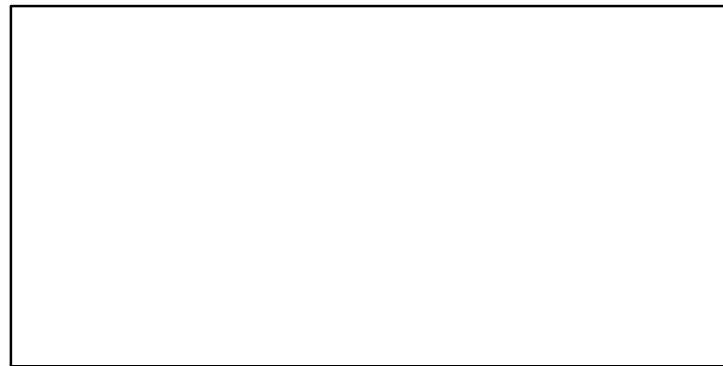
SSB*



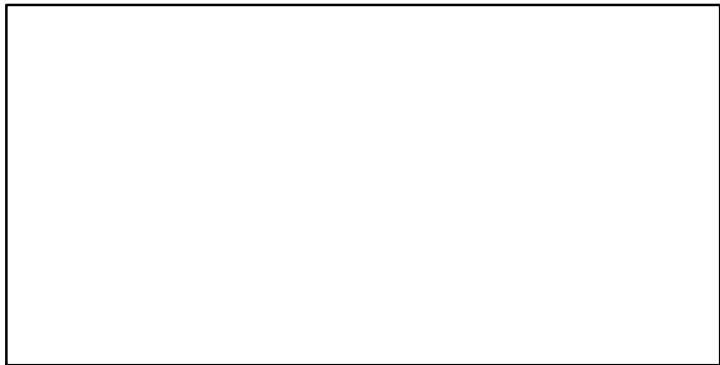
TN *



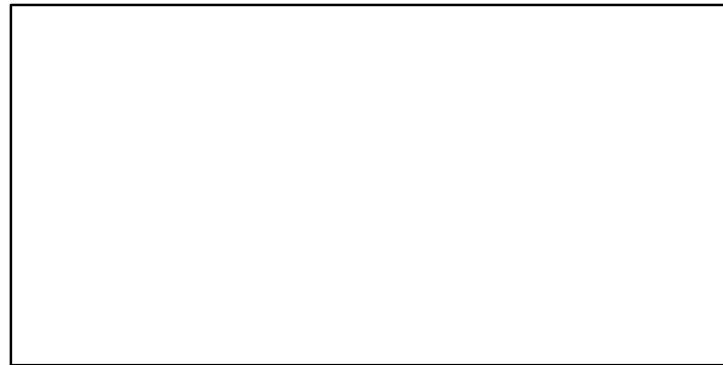
F*



ER*



Recruits*

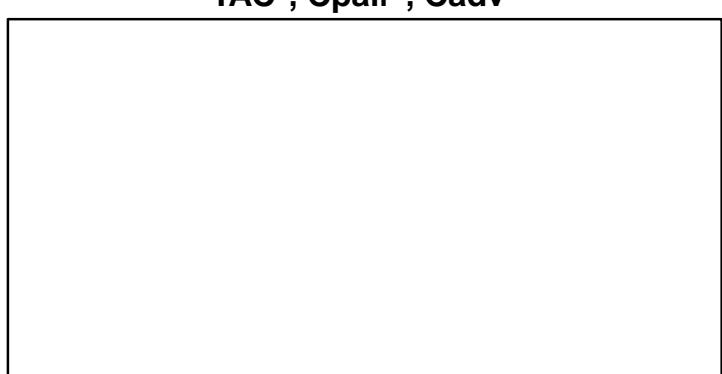
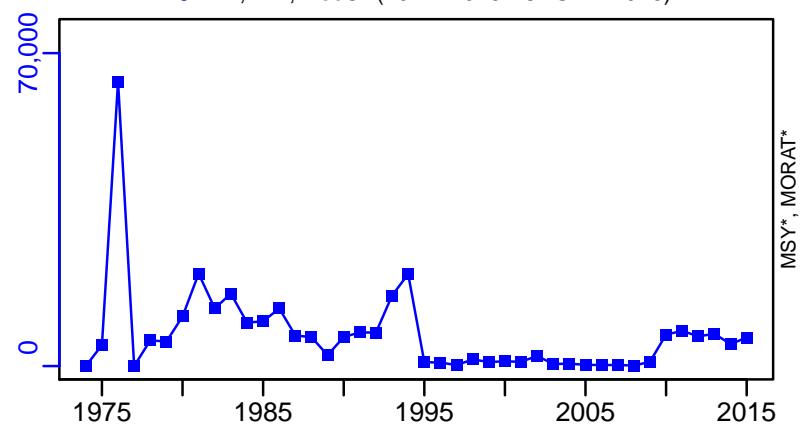


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

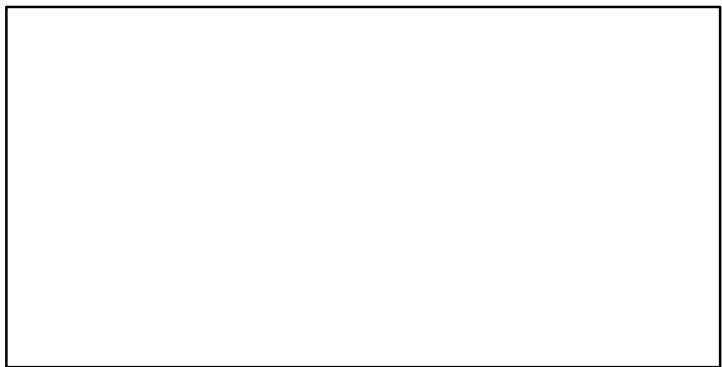
Beaked redfish Southeast Greenland [REDDEEPXIVb]

TC-MT, TL*, RecC* (1974–2016—ICESIMP2016)

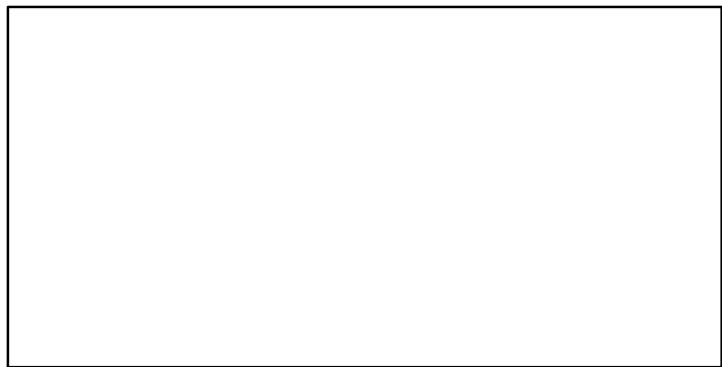
TAC*, Cpair*, Cadv*



EFFORT*



CdivMSY*



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

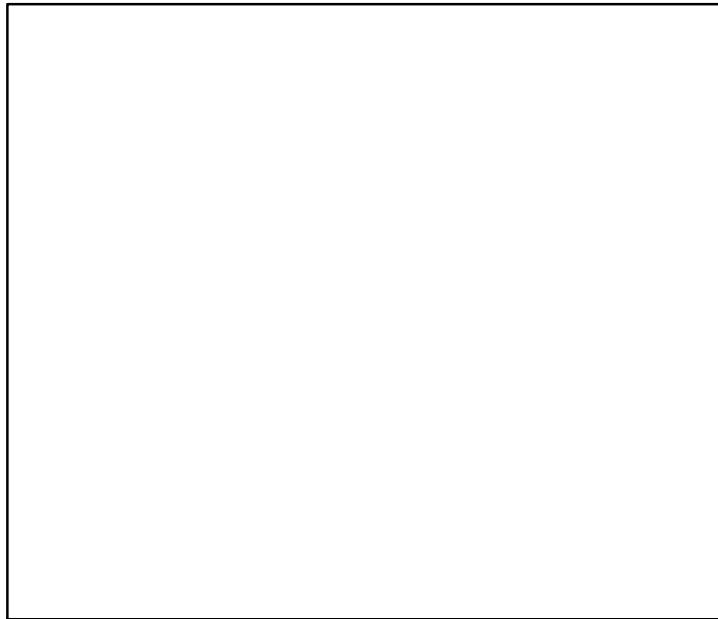
Red gurnard Northeast Atlantic [RGURNNEATL]

Metadata	
Scientific Name	Chelidonichthys cuculus
Current Assess ID	WGWISE-RGURNNEATL-2006-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2014, 2016

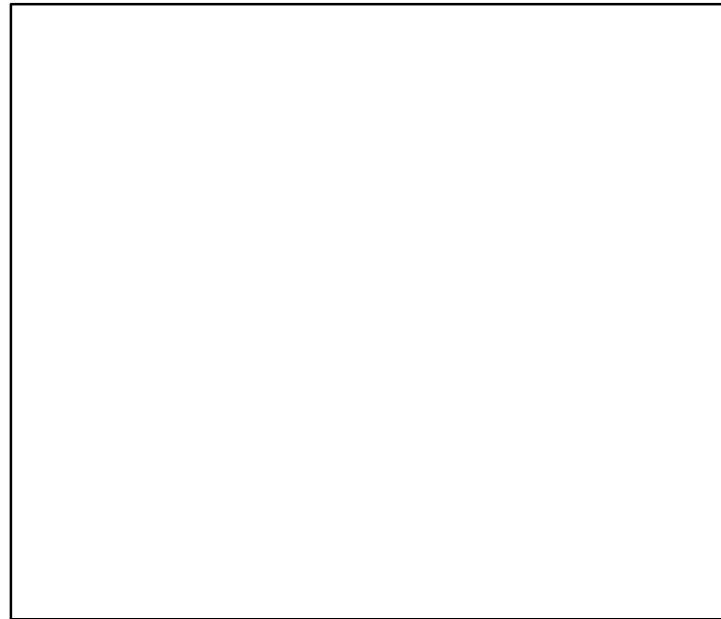
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	3650		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

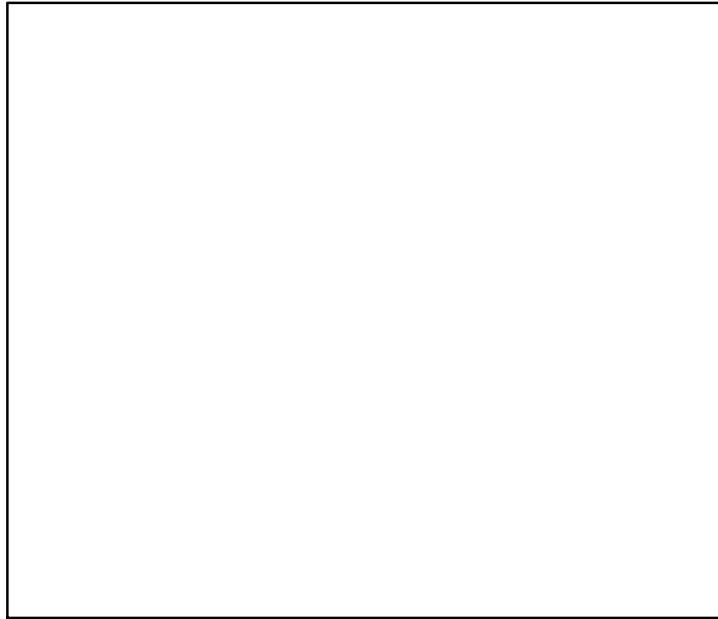
Kobe MSY*



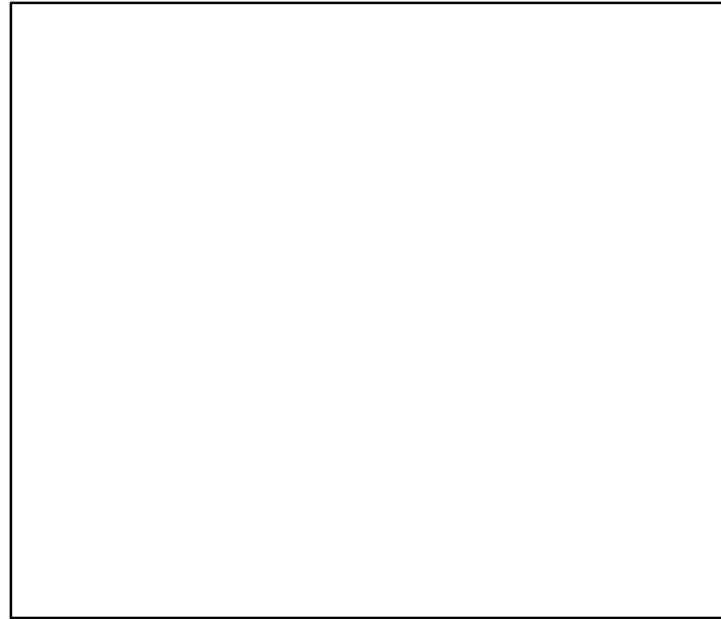
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Red gurnard Northeast Atlantic [RGURNNEATL]

TB*



SSB*



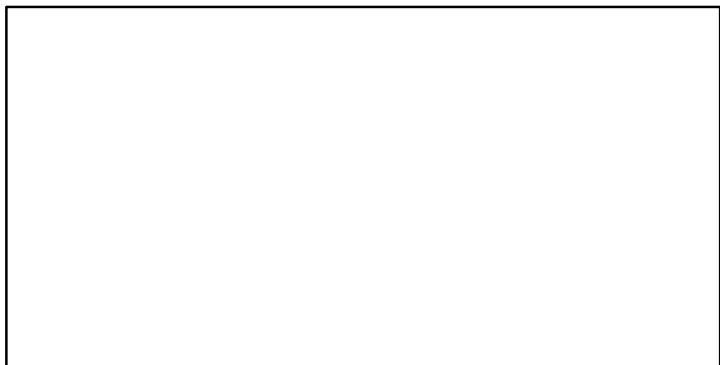
TN *



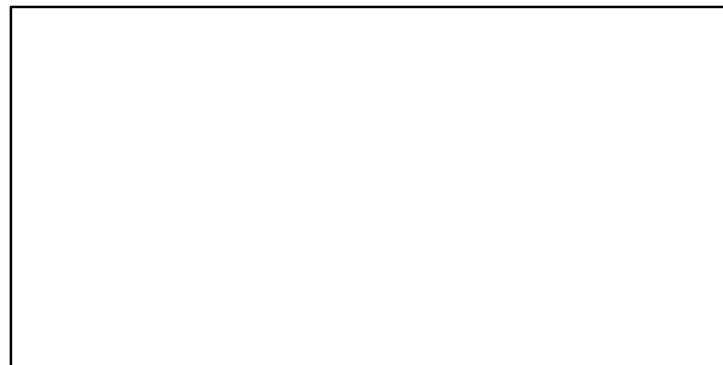
F*



ER*



Recruits*

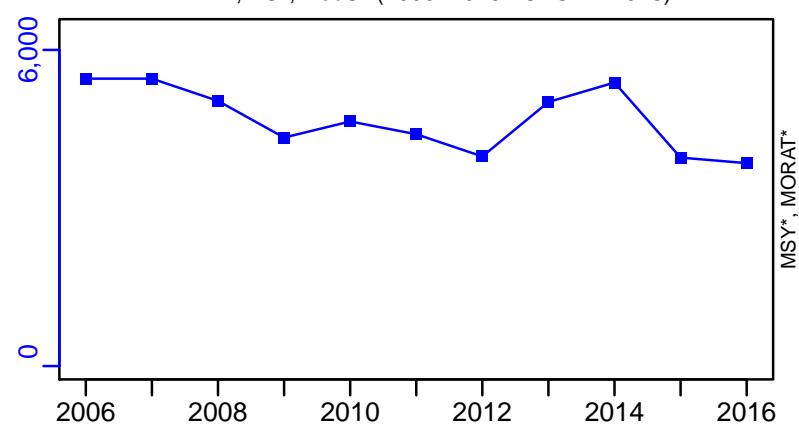


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

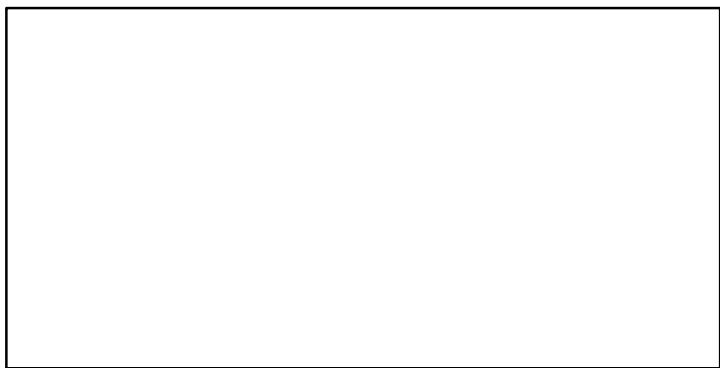
Red gurnard Northeast Atlantic [RGURNNEATL]

TL-MT, TC*, RecC* (2006–2016–ICESIMP2018)

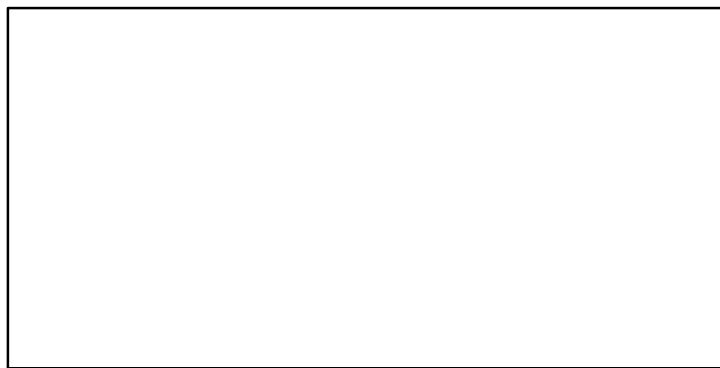
TAC*, Cpair*, Cadv*



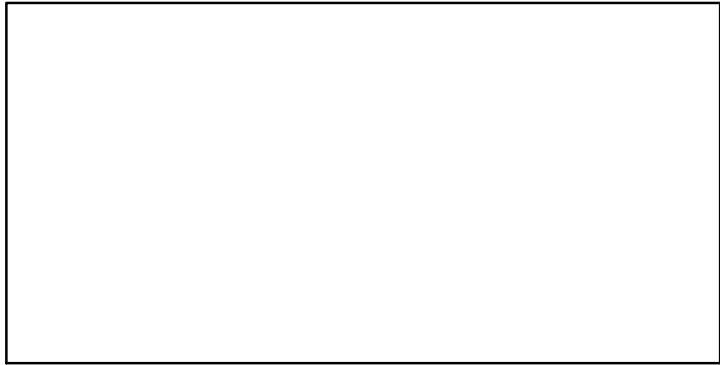
survB*



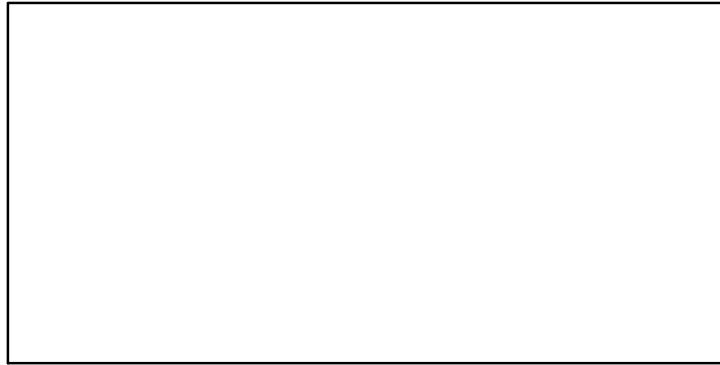
CPUE*



EFFORT*



CdivMSY*



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

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

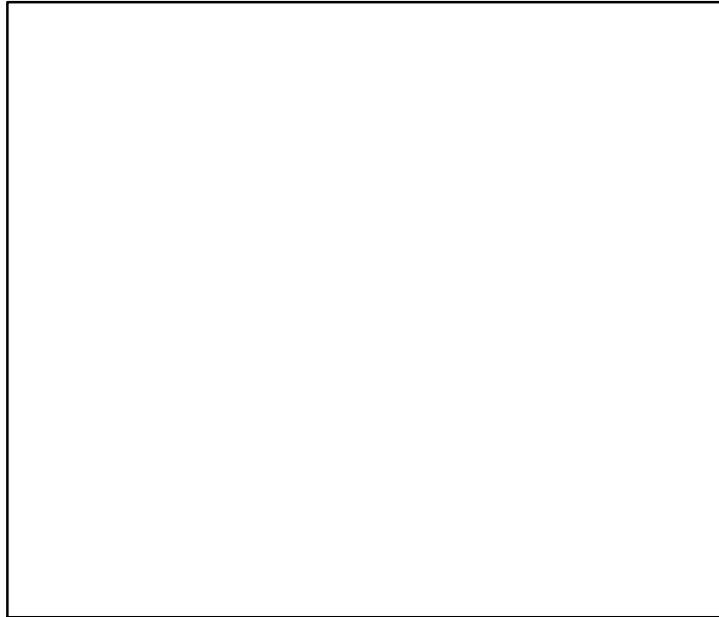
Metadata	
Scientific Name	Macrourus berglax
Current Assess ID	WGDEEP-RHGRENNEATL-1990-2015-ICESIMP2016
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2015

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

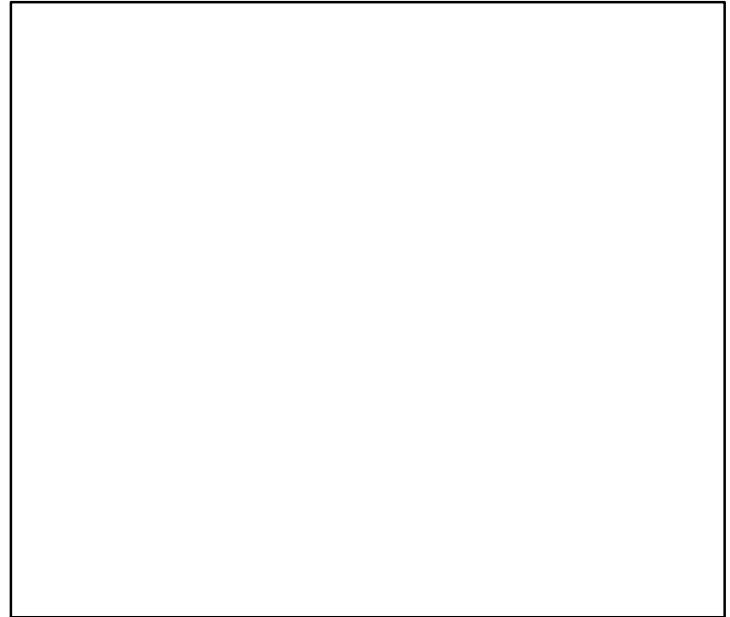
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	654		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

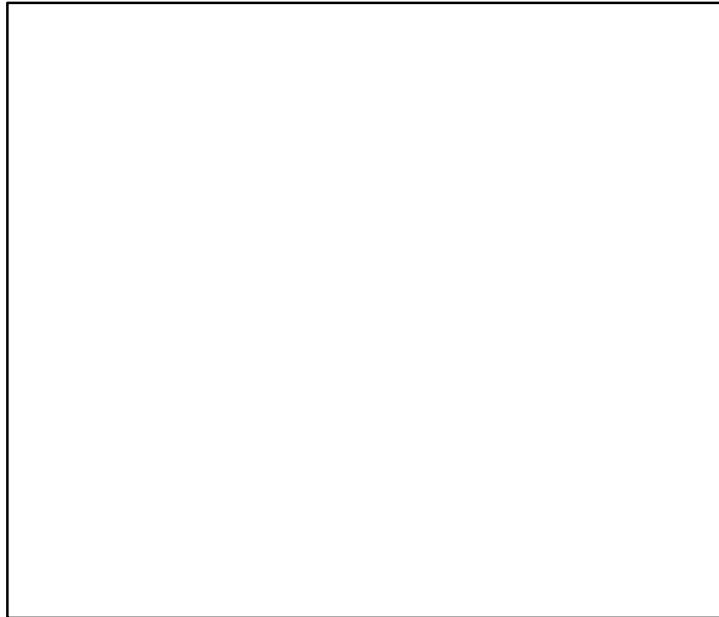
Kobe MSY*



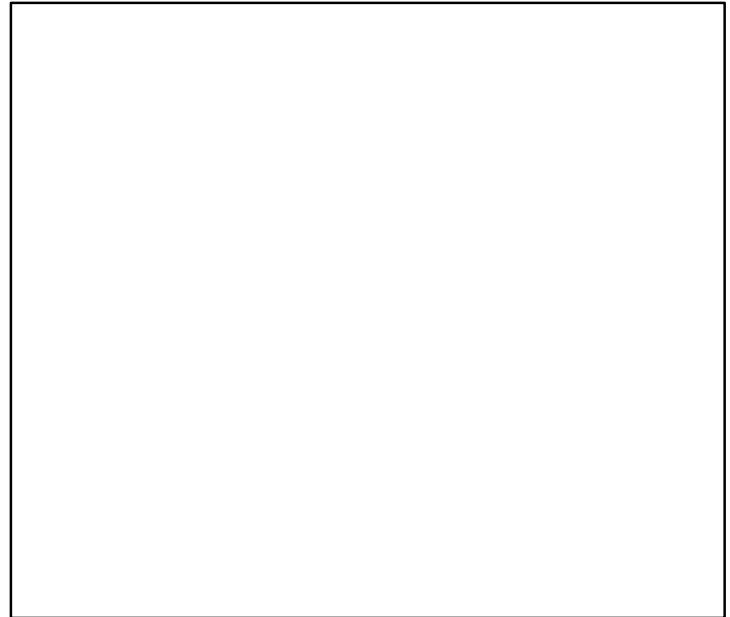
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

TB*



SSB*



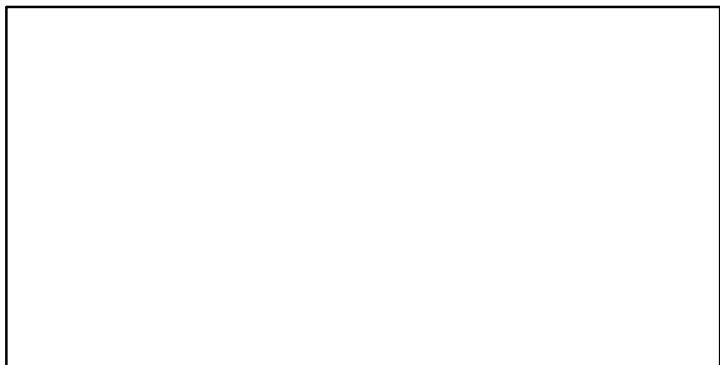
TN *



F*



ER*



Recruits*

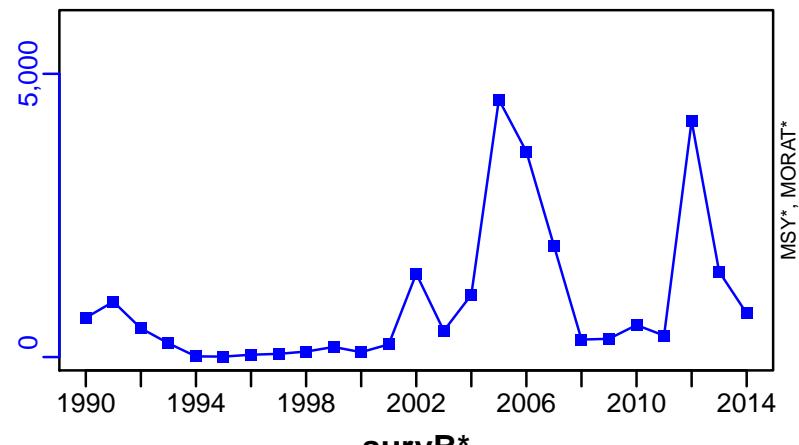


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

TL-MT, TC*, RecC* (1990–2015–ICESIMP2016)

TAC*, Cpair*, Cadv*



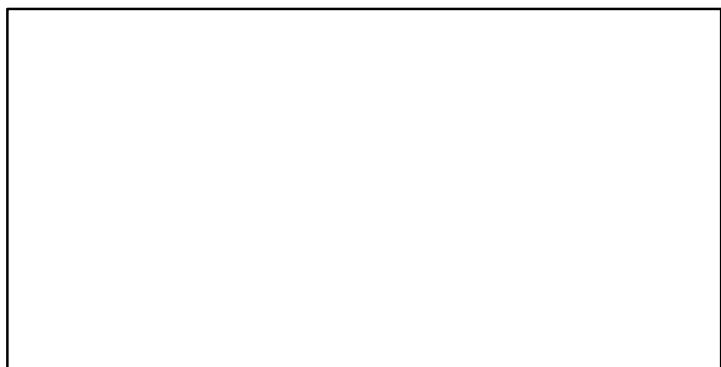
survB*



CPUE*



EFFORT*



CdivMSY*



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

Roundnose grenadier ICES 1-2-4-5a2-8-9-14ab2 [RNGENI-II-IV-Va2-VIII-IX-XIVab2]

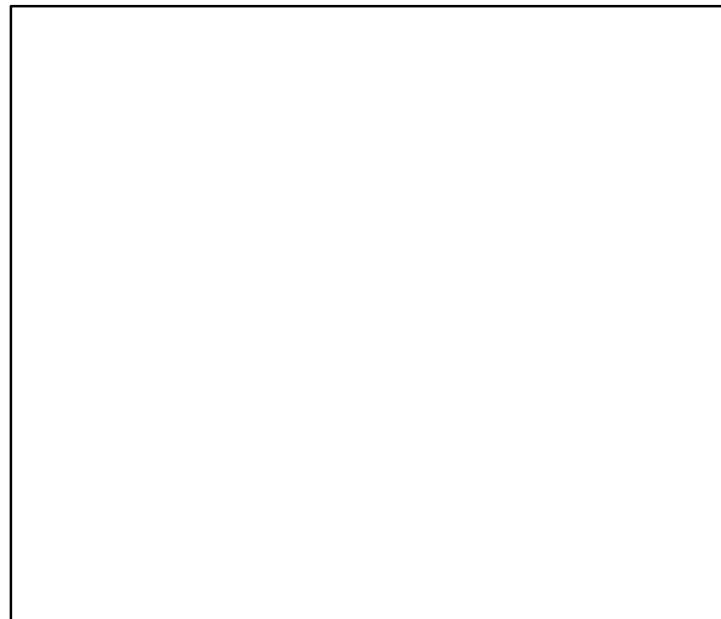
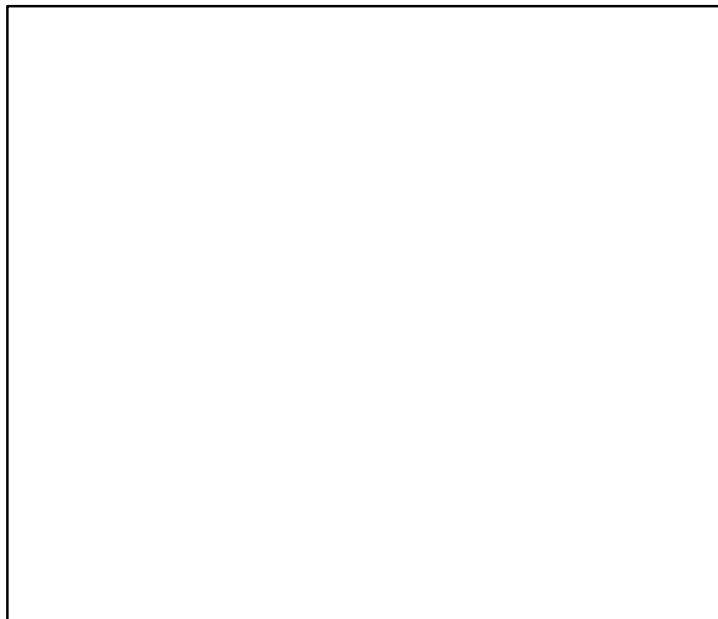
Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGENI-II-IV-Va2-VIII-IX-XIVab2-1990-2016-ICESIMP2018
Area	ICES 1-2-4-5a2-8-9-14ab2
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2015, 2016

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

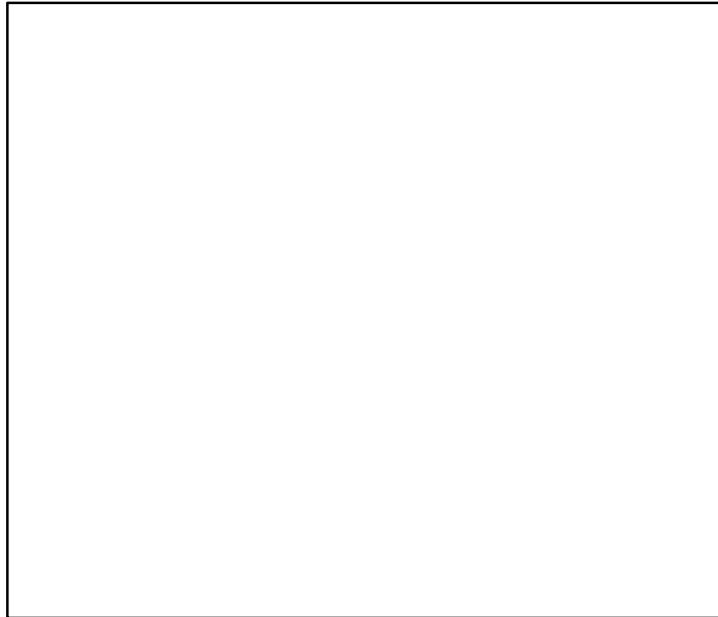
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	58		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

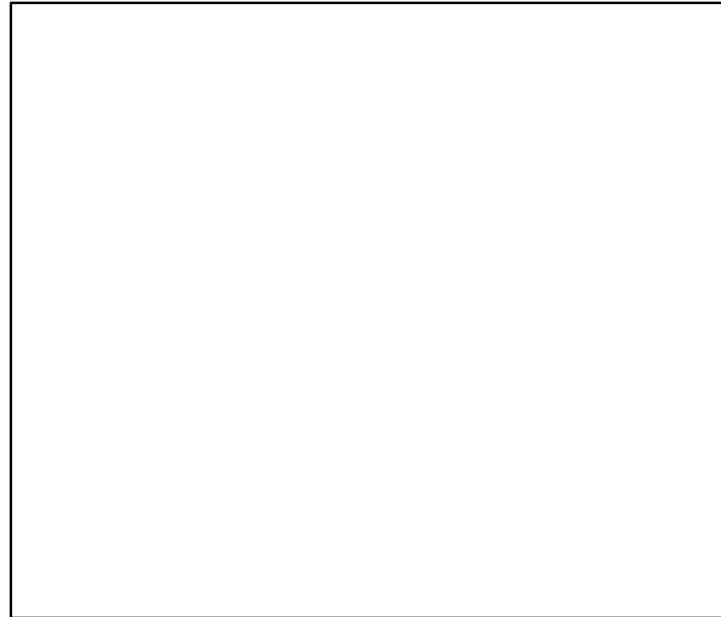
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

TB*



SSB*



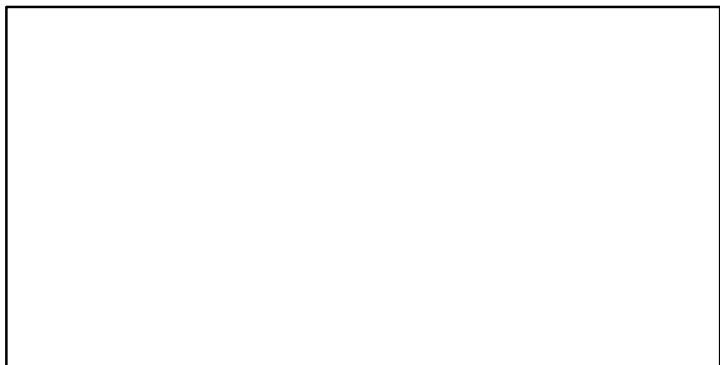
TN *



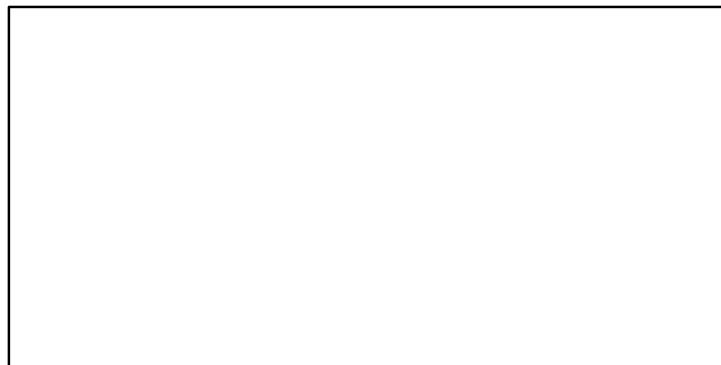
F*



ER*



Recruits*

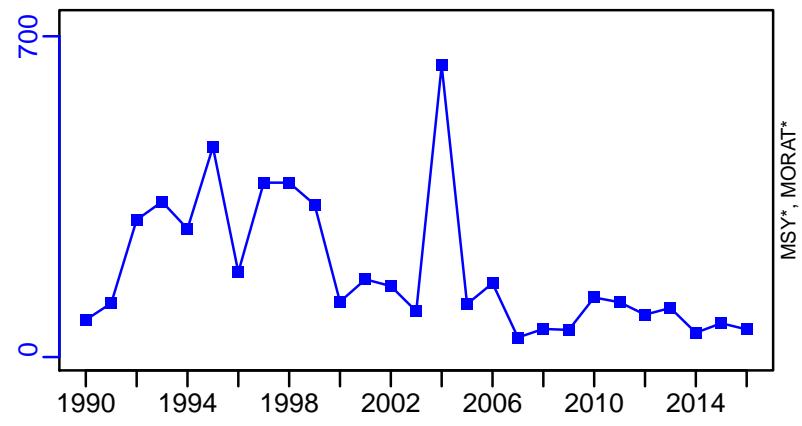


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Roundnose grenadier ICES 1–2–4–5a2–8–9–14ab2 [RNGENI–II–IV–Va2–VIII–IX–XIVab2]

TL–MT, TC*, RecC* (1990–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*



CPUE*



EFFORT*



CdivMSY*



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

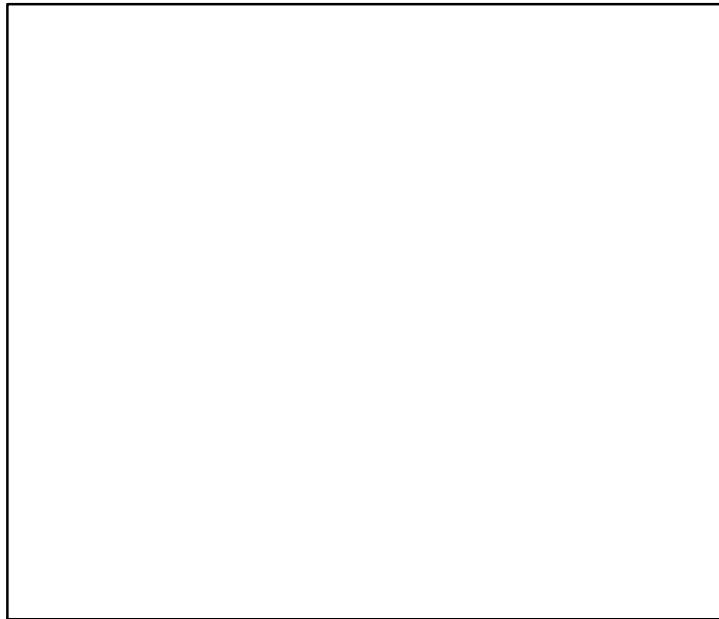
Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGENMATLR-1973-2016-ICESIMP2018
Area	Mid-Atlantic Ridge
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2015

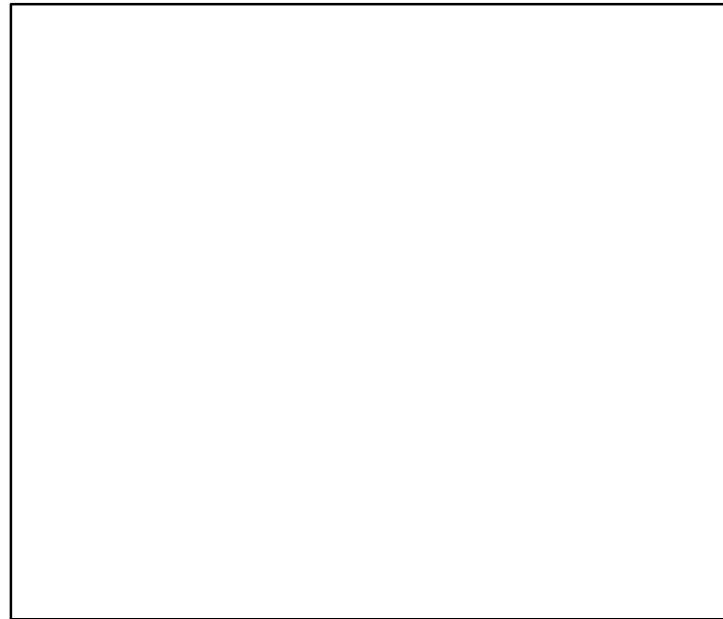
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	660		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

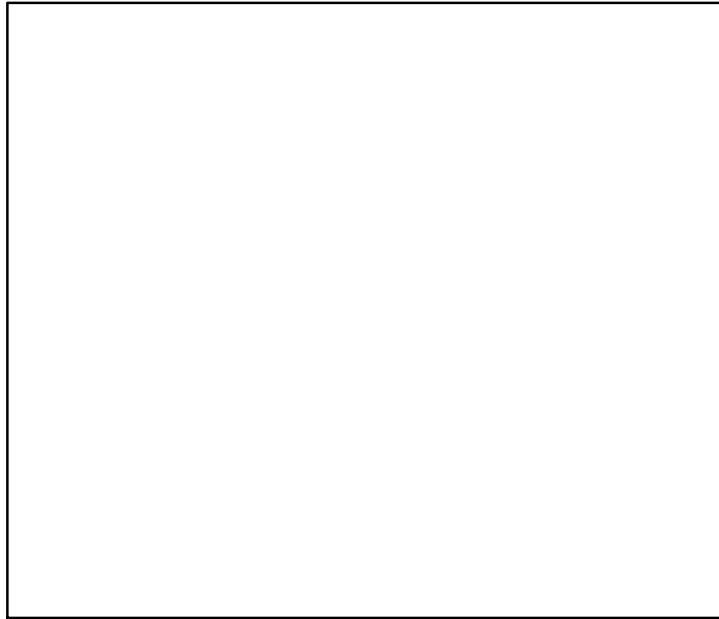
Kobe MSY*



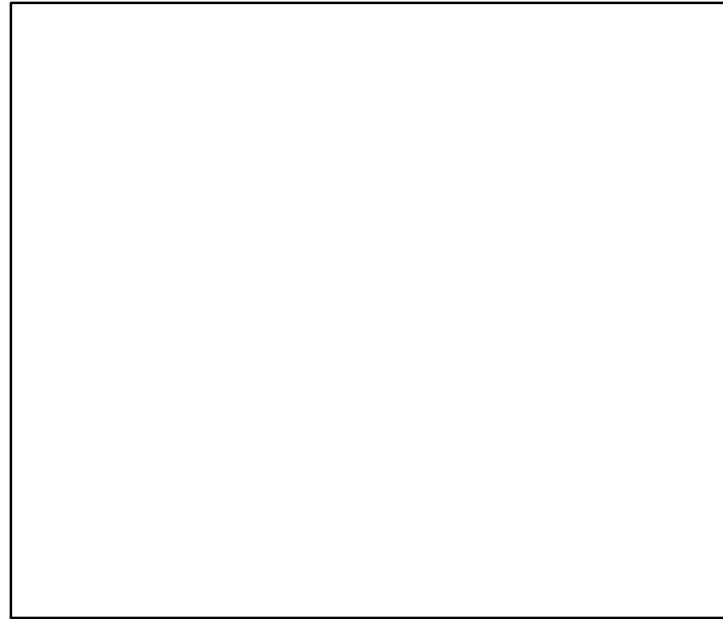
Kobe MGT*



Spawner Recruit*



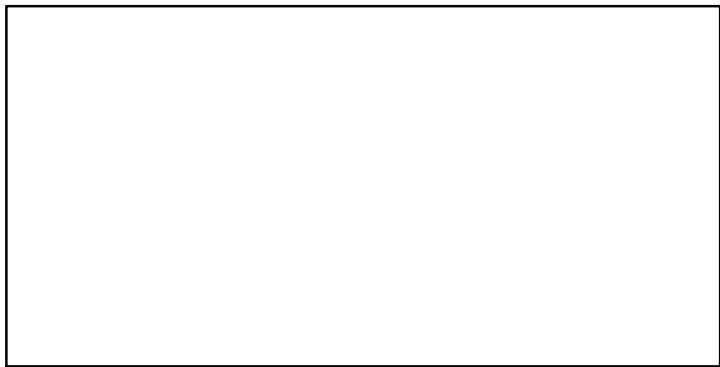
Production*



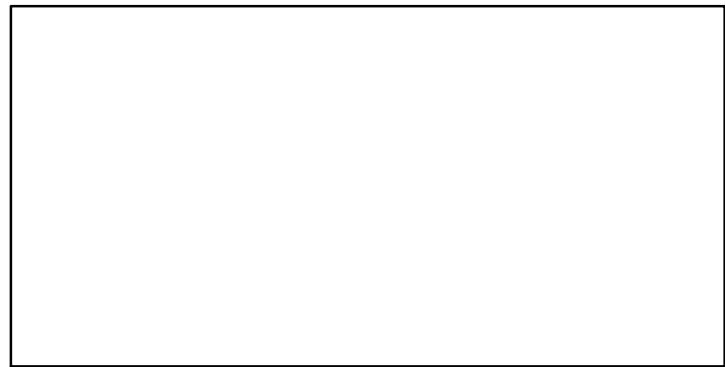
◆ Start Year ♦ End Year * No Data

Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

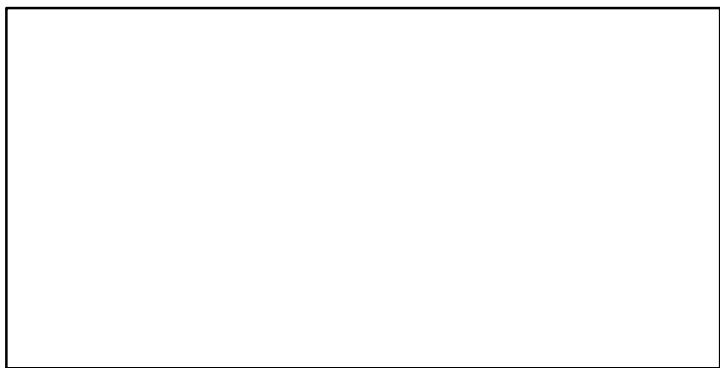
TB*



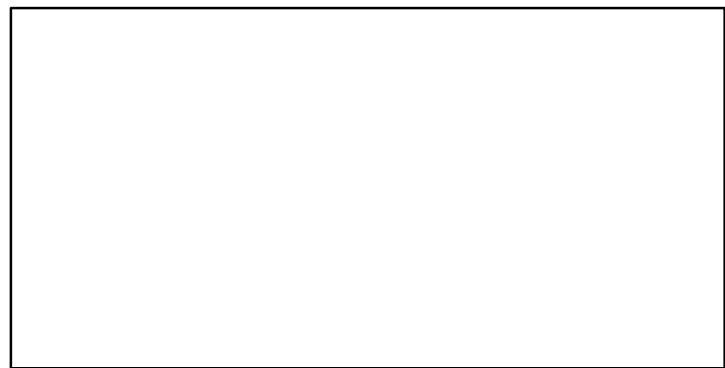
SSB*



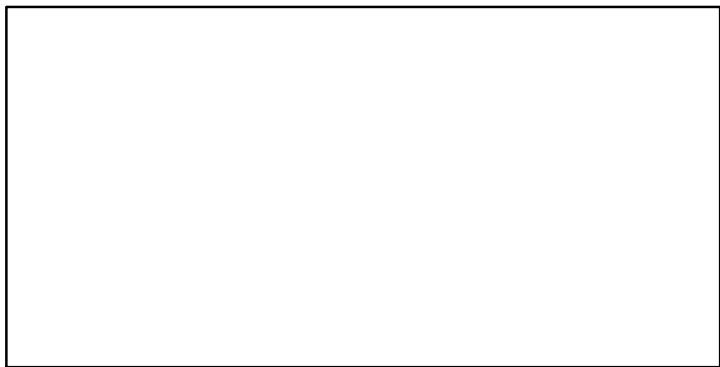
TN *



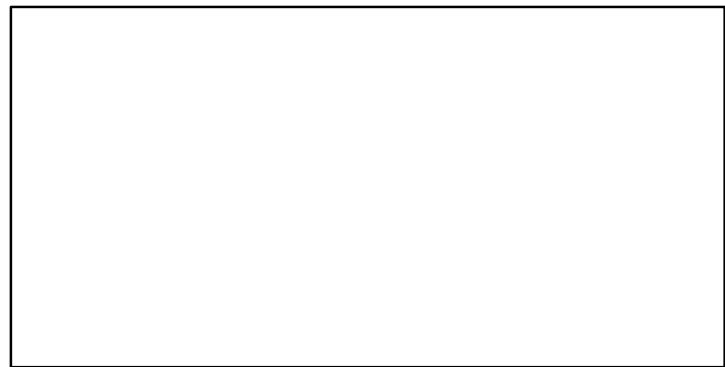
F*



ER*



Recruits*

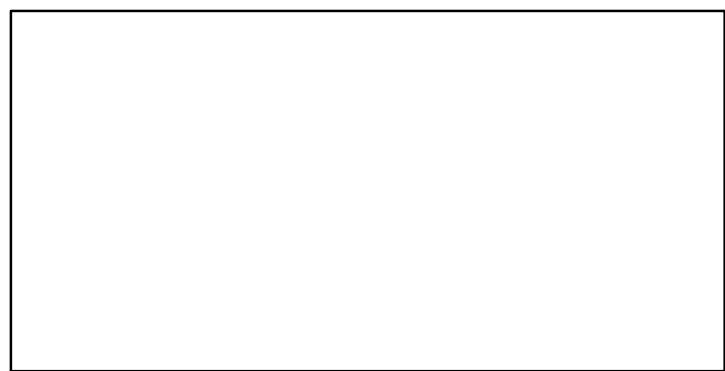
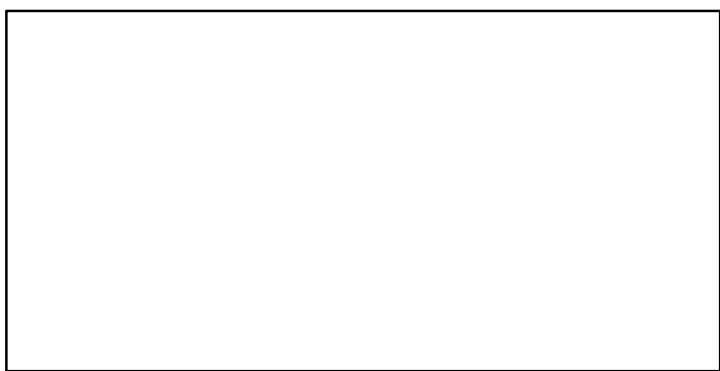
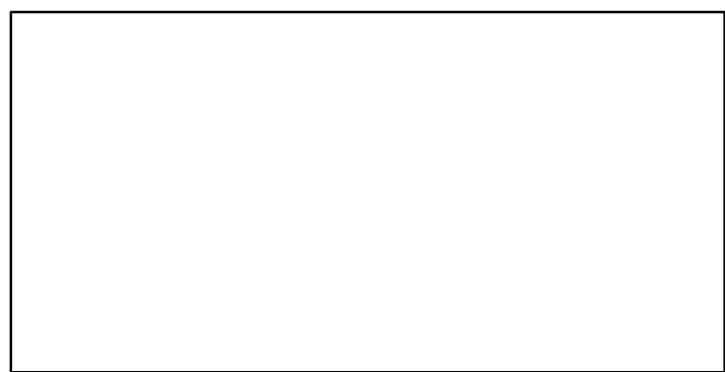
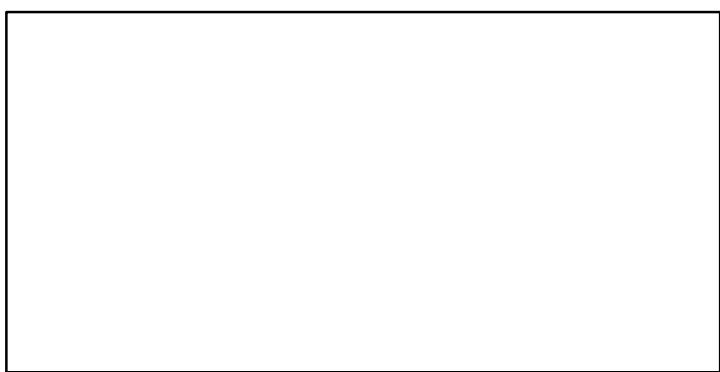
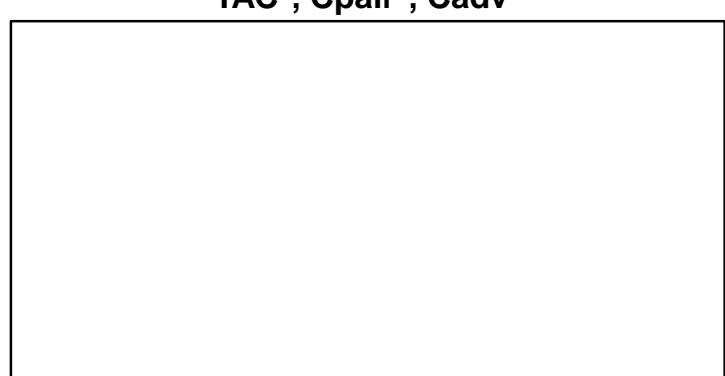
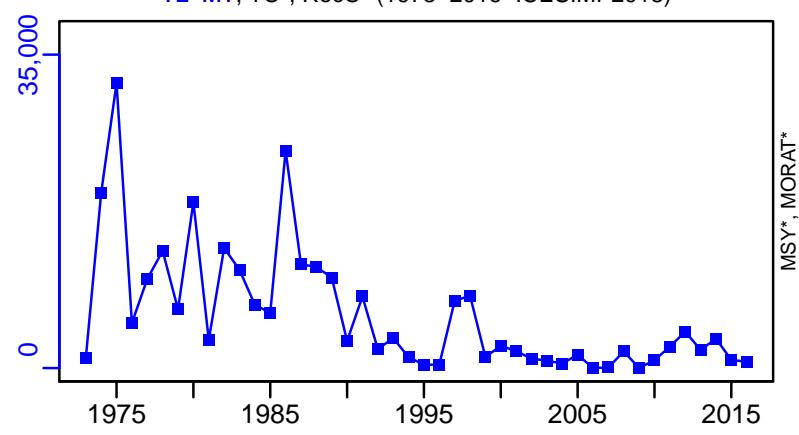


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

TL-MT, TC*, RecC* (1973–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Roundnose grenadier ICES 5b-6-7-12b [RNGENVb-VI-VII-XIIb]

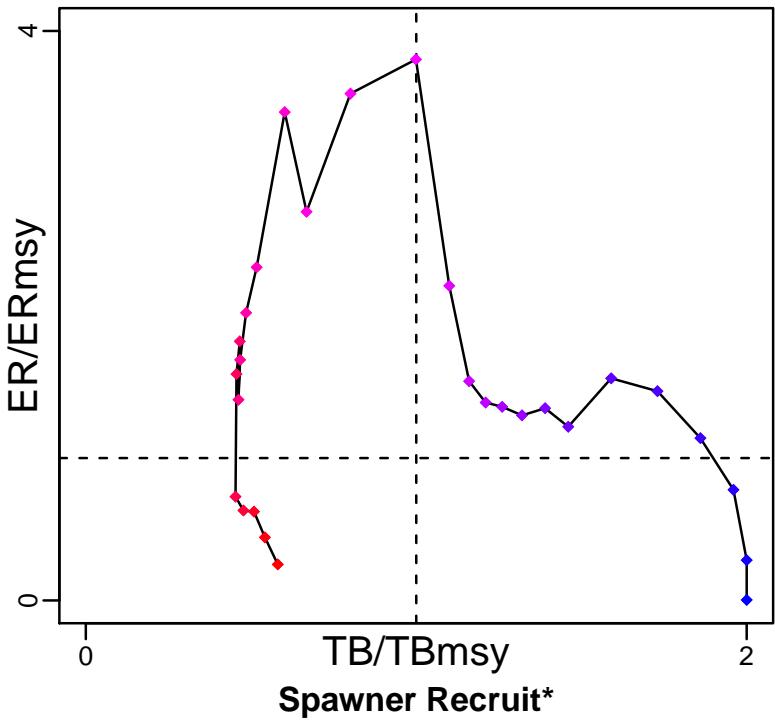
Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGENVb-VI-VII-XIIb-1988-2017-ICESIMP2018
Area	ICES 5b-6-7-12b
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

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

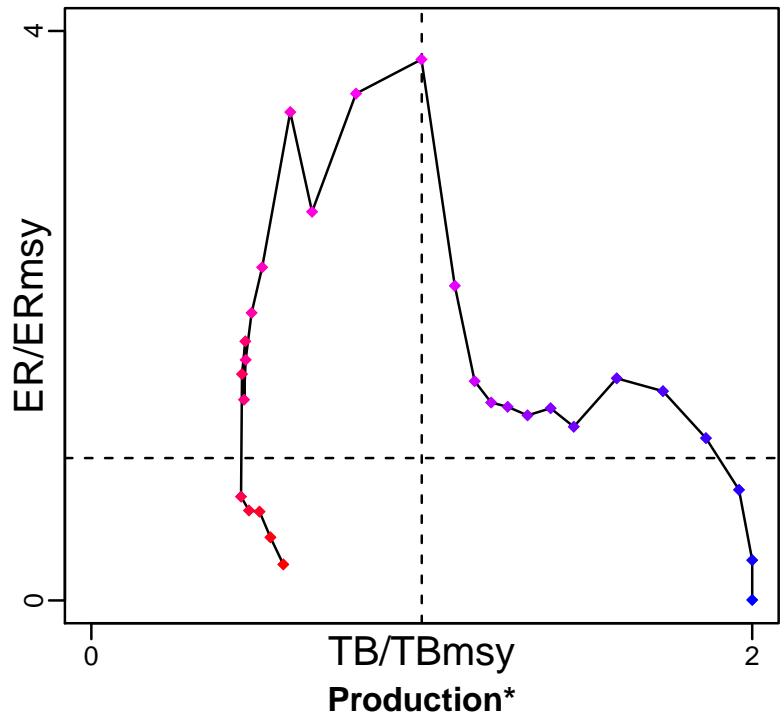
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	-	-	-	-	-	-
TN	-	-	-	-	-	-
R	-	-	-	-	-	-
F	-	-	-	-	-	-
ER	-	-	-	-	-	-
TC	-	-	-			
TL	TL-MT	2017	1660			
TB/TBmsy	TBdivTBmsy-dimensionless	2016	0.581			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ERdivERmsy-dimensionless	2016	0.253			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Roundnose grenadier ICES 5b–6–7–12b [RNGENVb–VI–VII–XIIb]

Kobe MSYpref (1988–2016–ICESIMP2016)



Kobe MGTpref (1988–2016–ICESIMP2016)



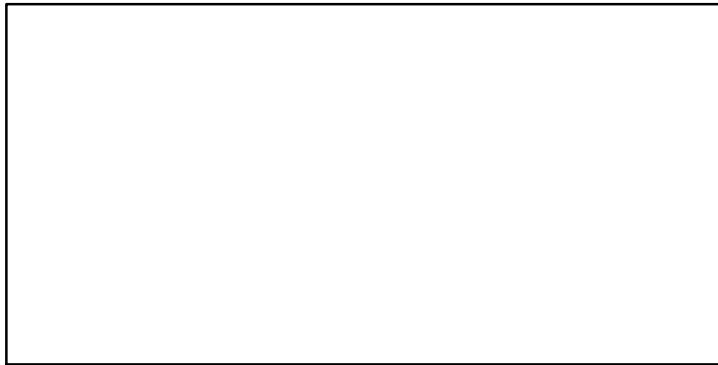
Spawner Recruit*

Production*

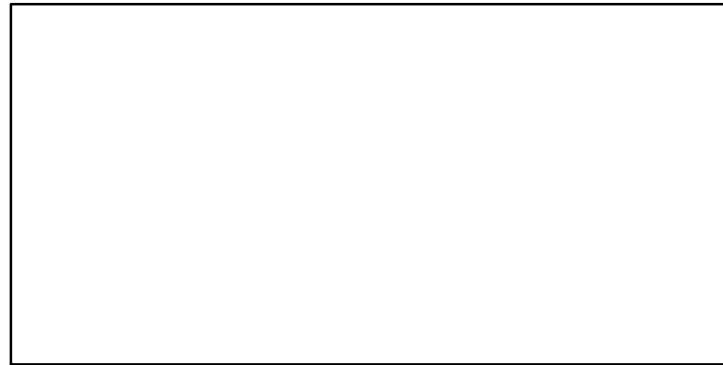
◆ Start Year ♦ End Year * No Data

Roundnose grenadier ICES 5b–6–7–12b [RNGENVb–VI–VII–XIIb]

TB*



SSB*



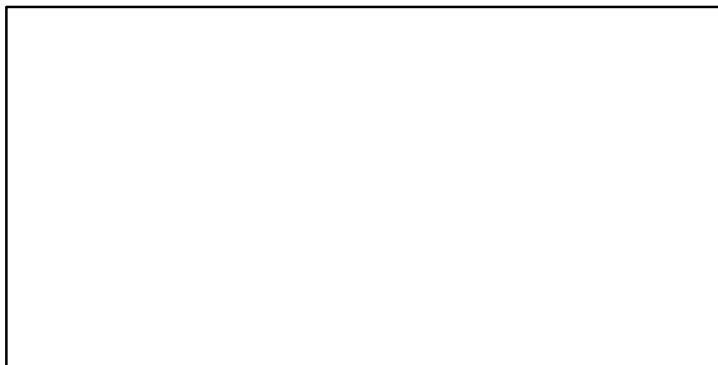
TN *



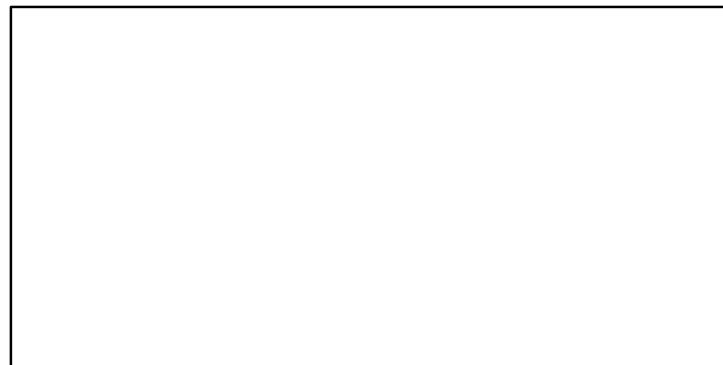
F*



ER*



Recruits*

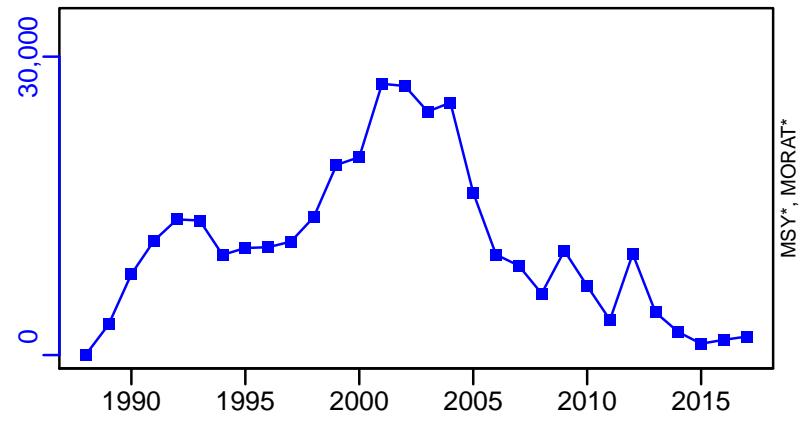


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

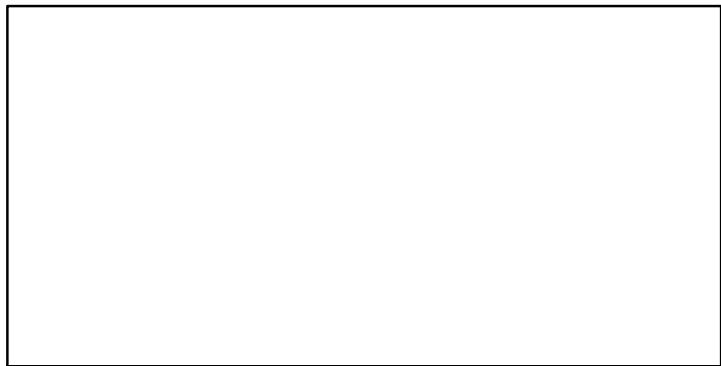
Roundnose grenadier ICES 5b–6–7–12b [RNGENVb–VI–VII–XIIb]

TL–MT, TC*, RecC* (1988–2017–ICESIMP2018)

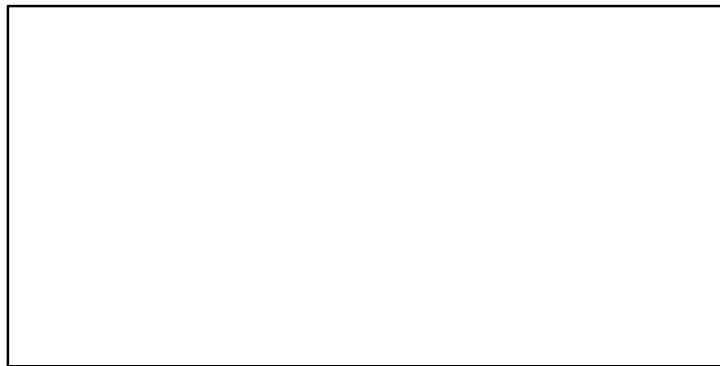
TAC*, Cpair*, Cadv*



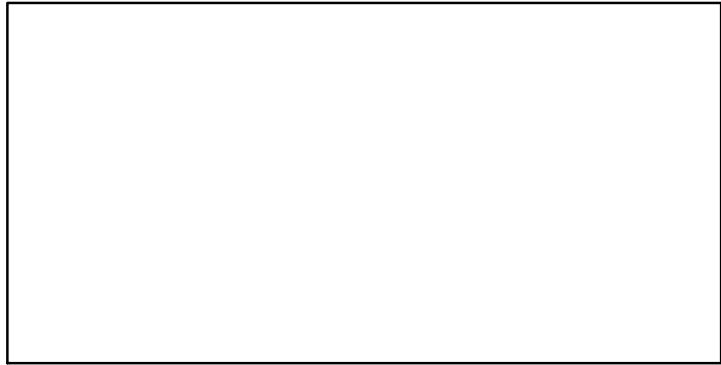
survB*



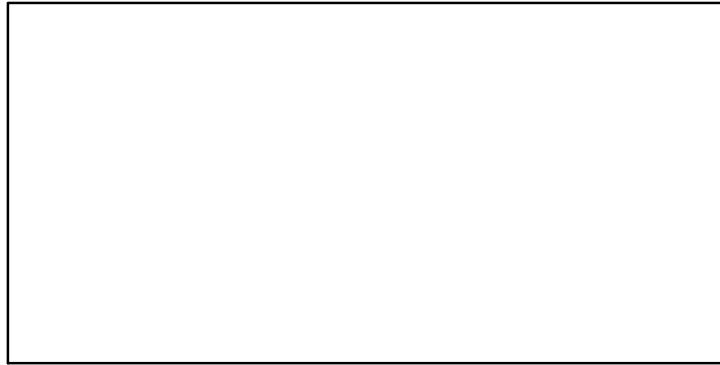
CPUE*



EFFORT*



CdivMSY*



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

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIA]

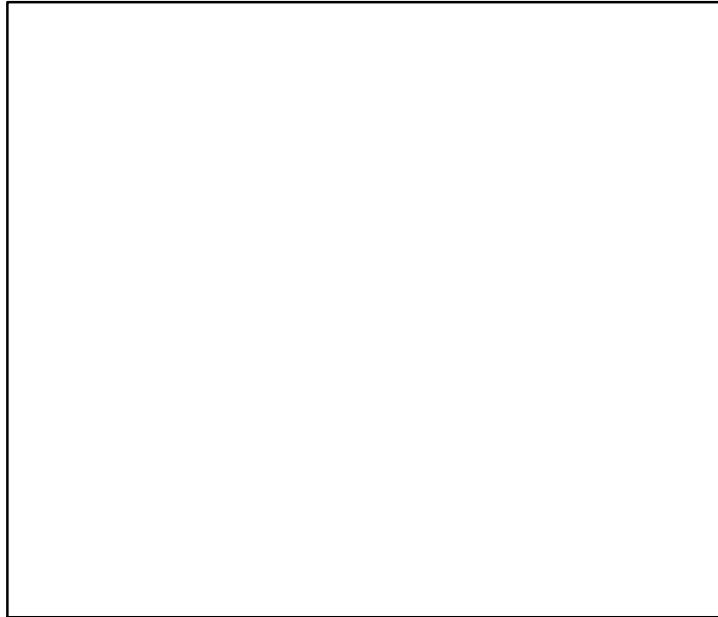
Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGRENIIIA-1988-2017-ICESIMP2018
Area	Kattegat and Skagerrak
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
Asmts in RAM	2016, 2017

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

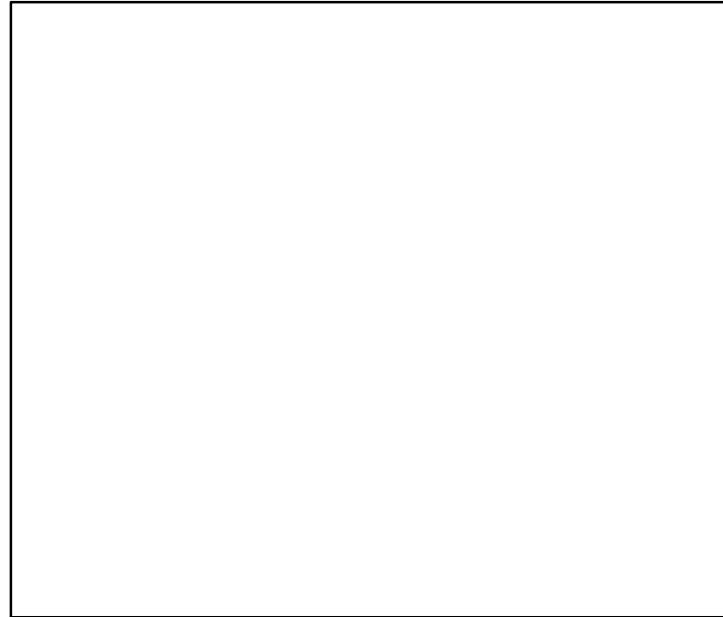
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	2		
TL	TL-MT	2017	1		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIla]

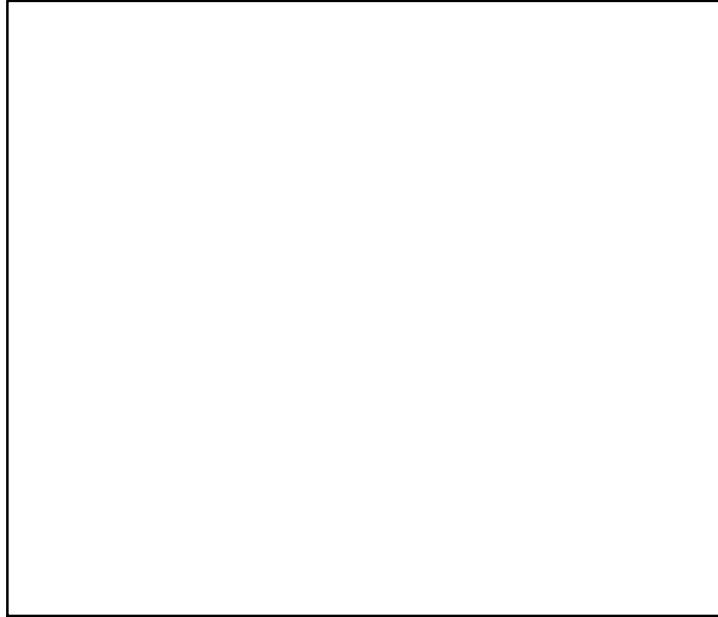
Kobe MSY*



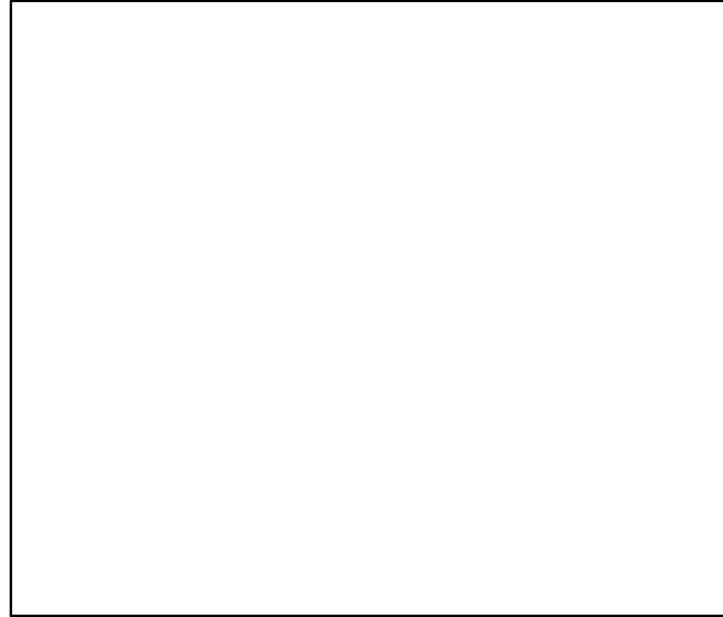
Kobe MGT*



Spawner Recruit*



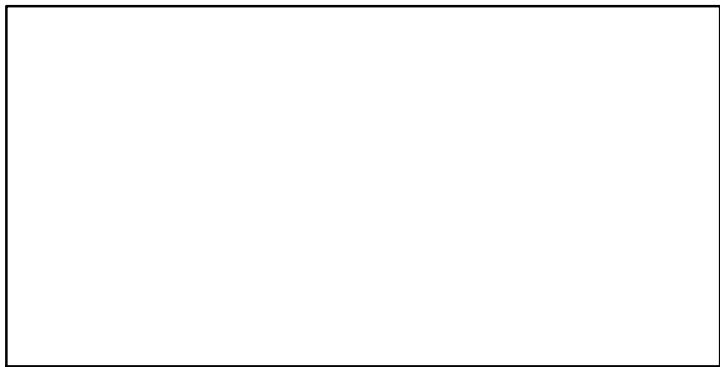
Production*



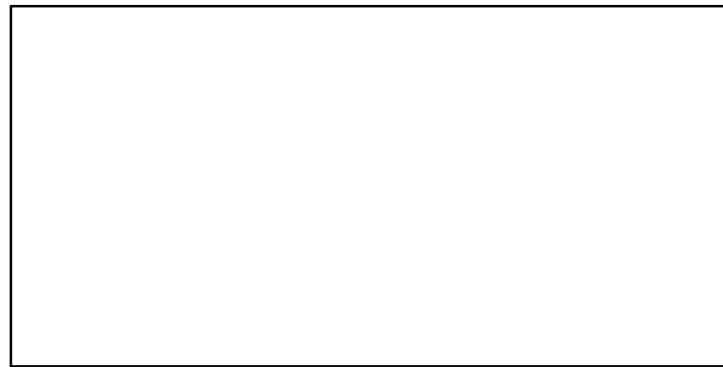
◆ Start Year ♦ End Year * No Data

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIla]

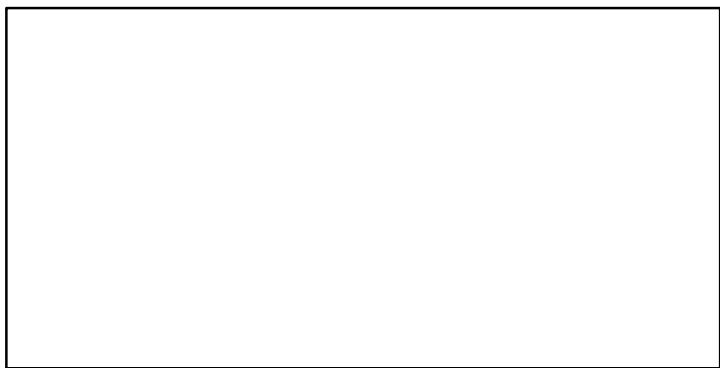
TB*



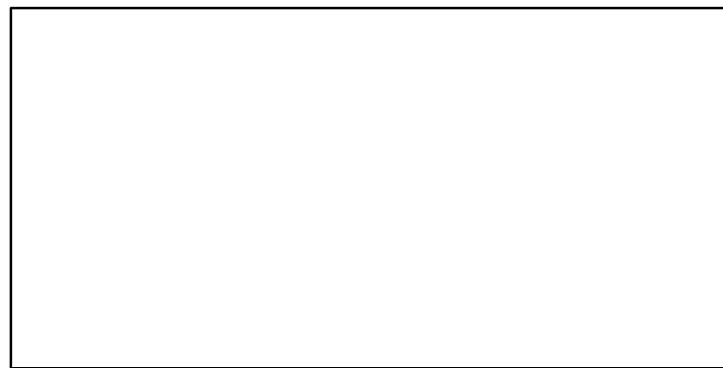
SSB*



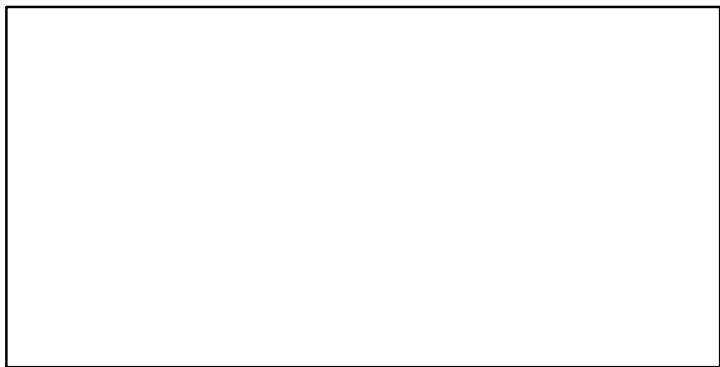
TN *



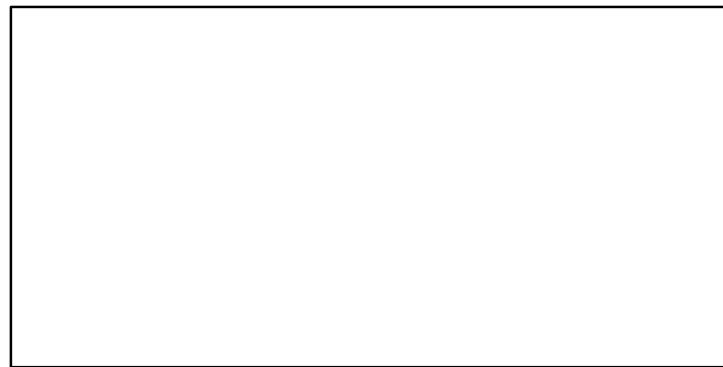
F*



ER*



Recruits*

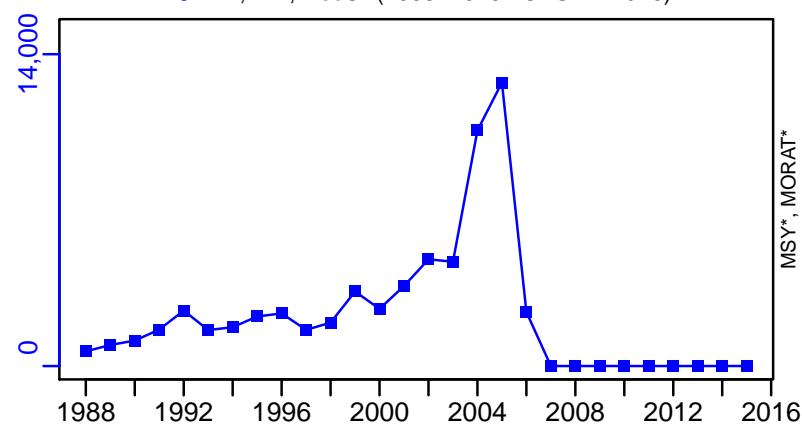


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

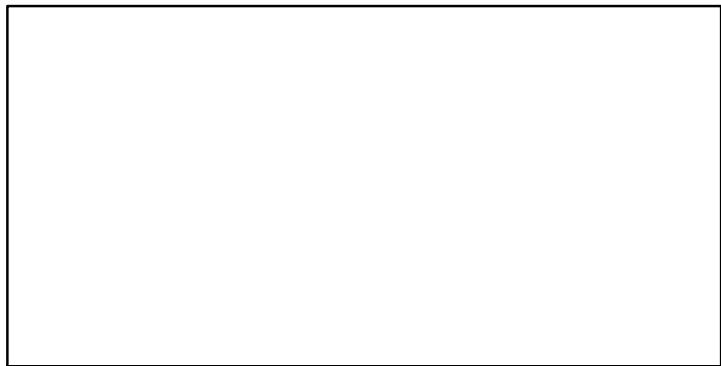
Roundnose grenadier Kattegat and Skagerrak [RNGRENIIla]

TC-MT, TL*, RecC* (1988–2016—ICESIMP2016)

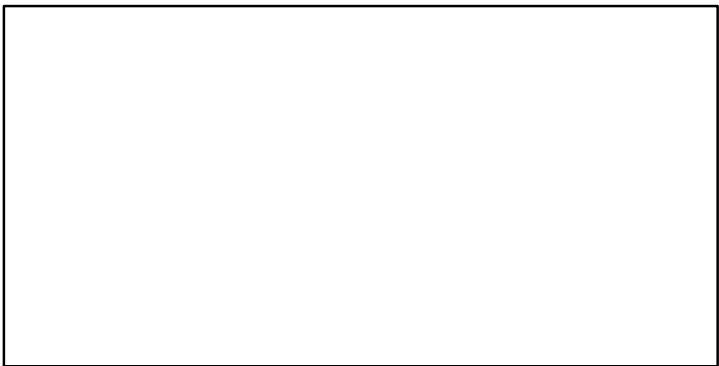
TAC*, Cpair*, Cadv*



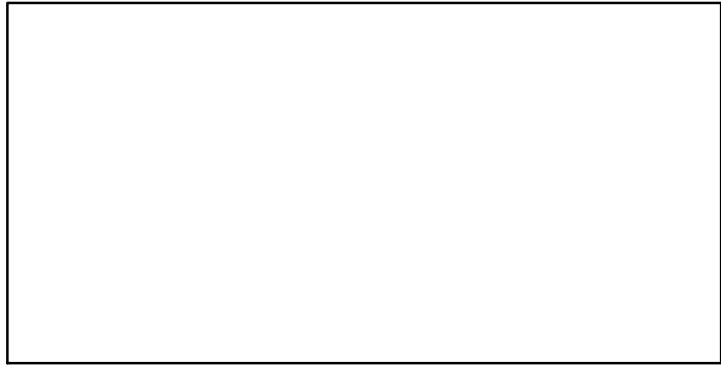
survB*



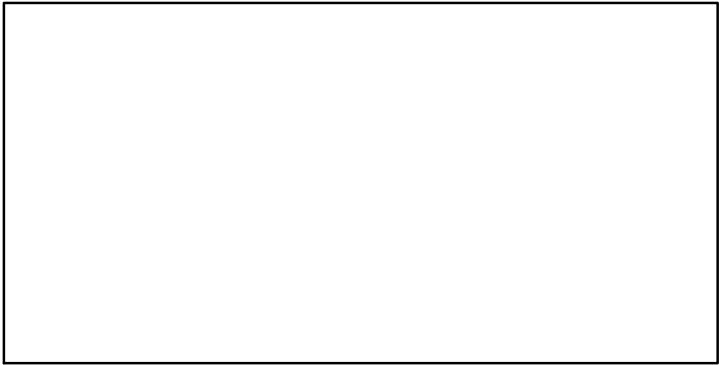
CPUE*



EFFORT*



CdivMSY*



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

Sardine ICES 8c-9a [SARDPVIIIC-IXa]

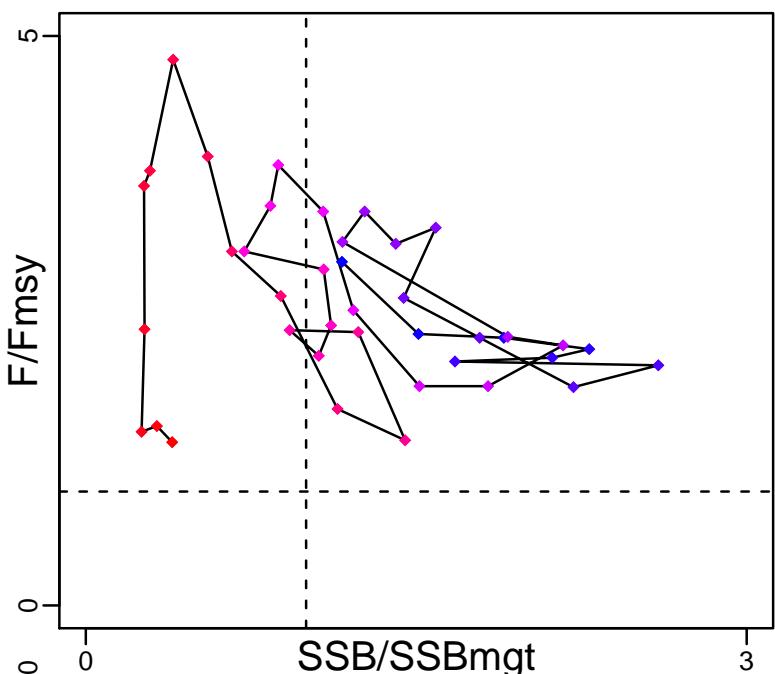
Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDPVIIIC-IXa-1978-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2014	474,018
SSBmsy	SSBmsy-est-MT	2011	525,273
Fmsy	Fmsy-1/yr	2018	0.12
ERmsy	ERmsy-est-ratio	2018	0.346
TBmgt	TBmgt-MT	2016	368,400
SSBmgt	SSBmgt-MT	2018	446,331
Fmgt	Fmgt-1/yr	2018	0.12
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2014	146,474
M	M-1/yr	2011	0.33
TBlim	TBlim-MT	2015	135,000
SSBlim	SSBlim-MT	2018	337,448
Flim	Flim-1/yr	2018	0.25
ERlim	-	-	-

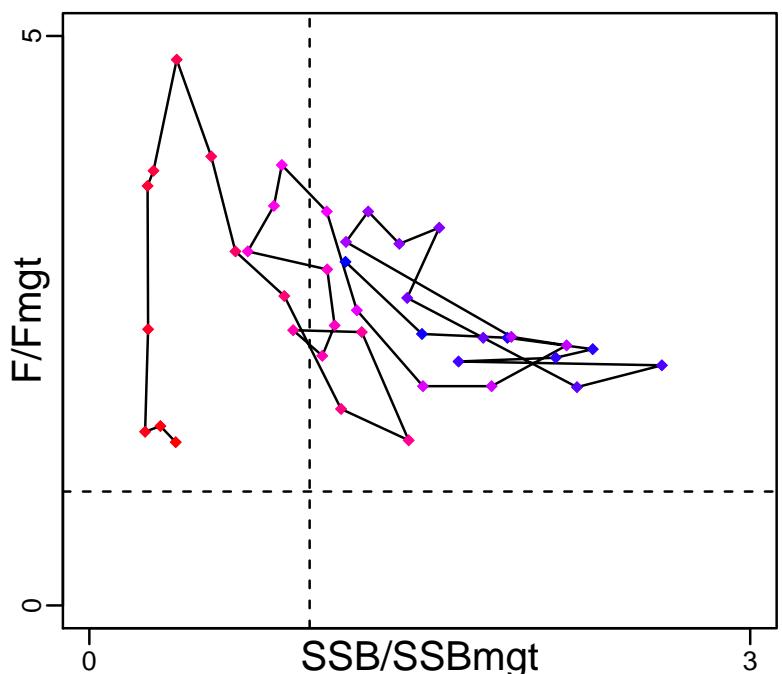
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	147,000	Both	-	
SSB	SSB-MT	2018	149,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	4.19×10^9	-	0	
F	F-1/yr	2018	0.172	-	2 to 5	
ER	ER-calc-ratio	2018	0.142	-	-	
TC	TC-MT	2018	21,900			
TL	TL-MT	2018	21,900			
TB/TBmsy	TB-MT/TBmsy-est-MT	2014	0.359			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2011	0.331			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.433			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.412			
TB/TBmgt	TB-MT/TBmgt-MT	2016	0.54			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.334			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.433			
ER/ERmgt	-	-	-			

Sardine ICES 8c–9a [SARDPVIIlc–IXa]

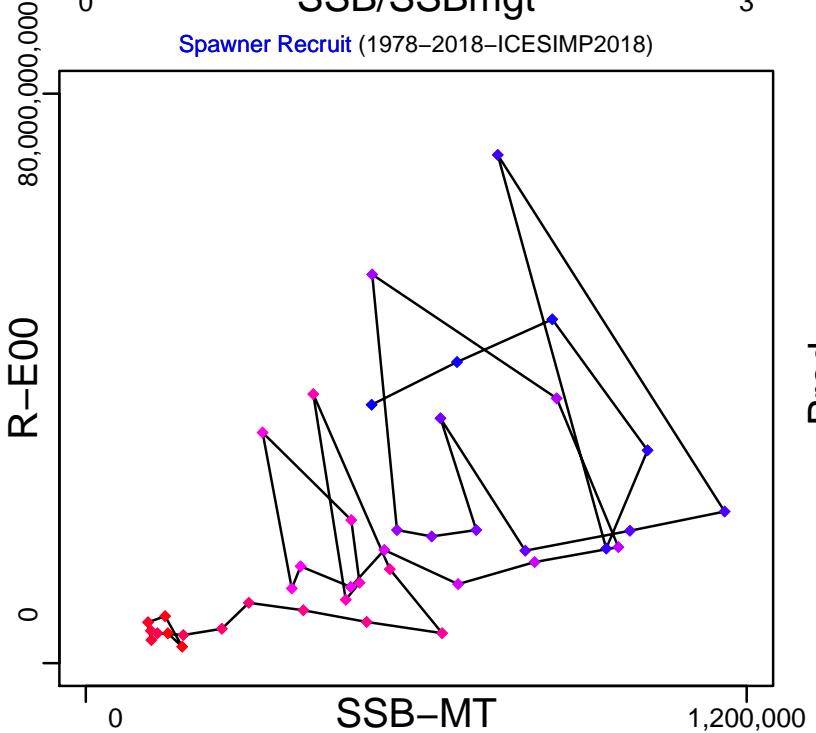
Kobe MSYpref (1978–2018–ICESIMP2018)



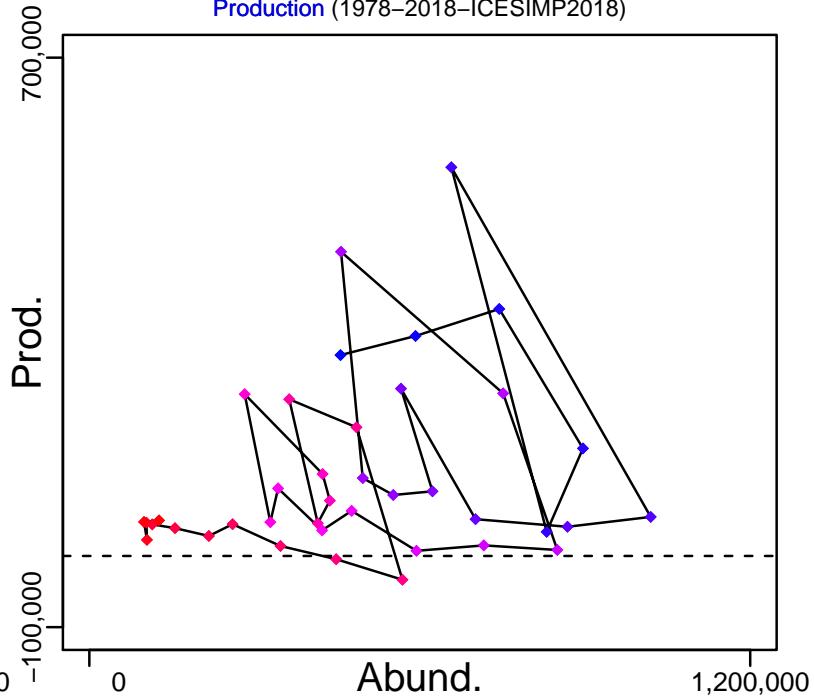
Kobe MGTpref (1978–2018–ICESIMP2018)



Spawner Recruit (1978–2018–ICESIMP2018)



Production (1978–2018–ICESIMP2018)

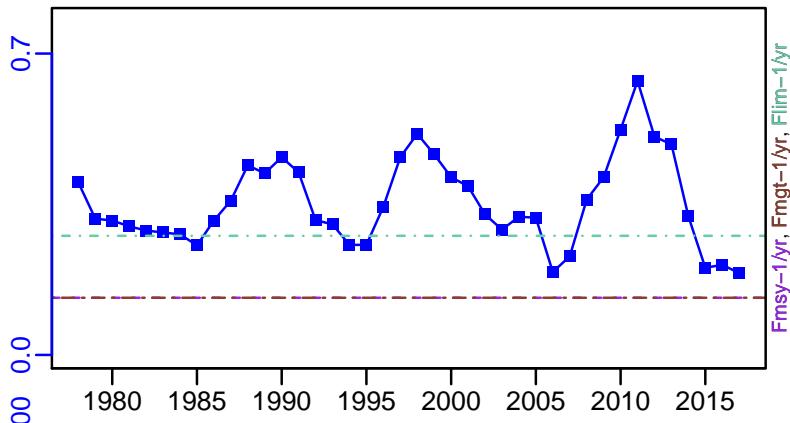
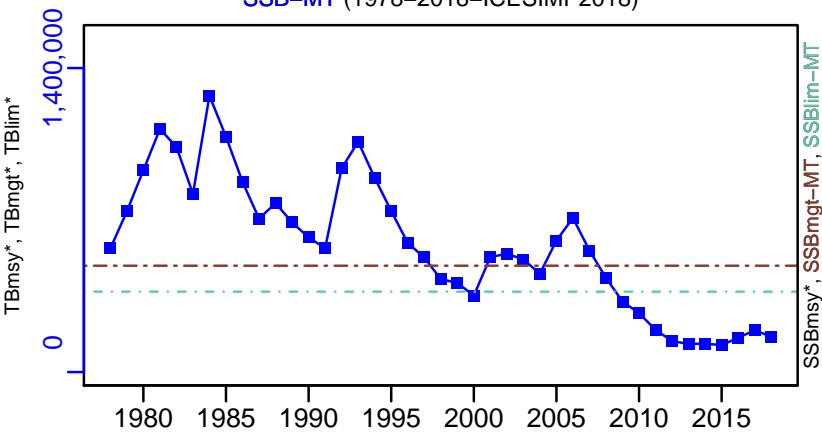
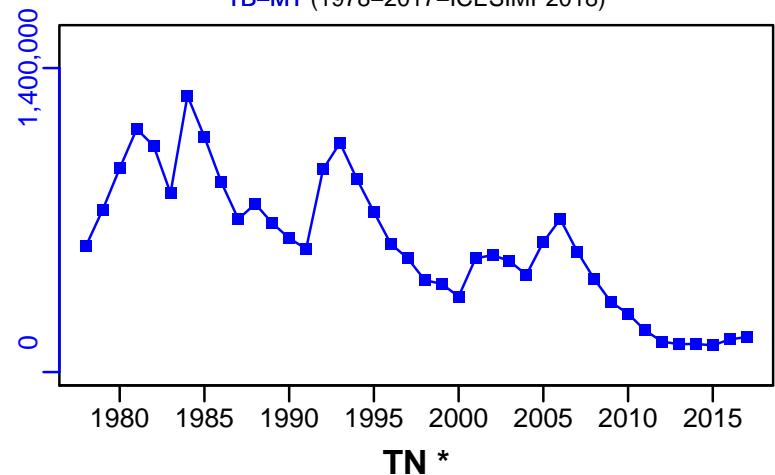


◆ Start Year	◆ End Year	*	No Data
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Sardine ICES 8c–9a [SARDPVIIc–IXa]

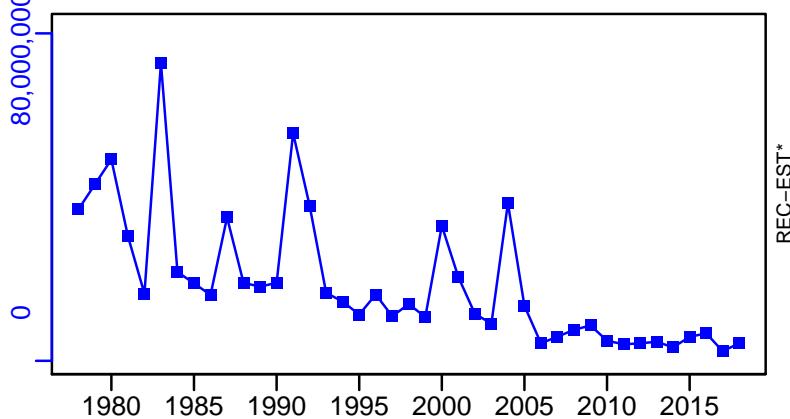
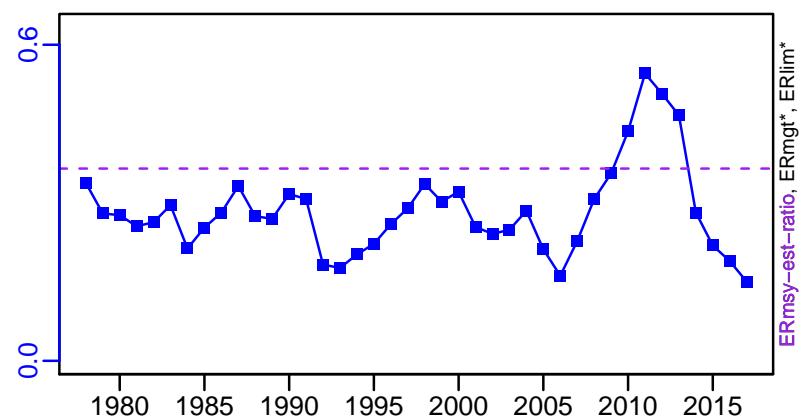
TB-MT (1978–2017–ICESIMP2018)

SSB-MT (1978–2018–ICESIMP2018)



ER-calc-ratio (1978–2018–ICESIMP2018)

R-E00 (1978–2018–ICESIMP2018)

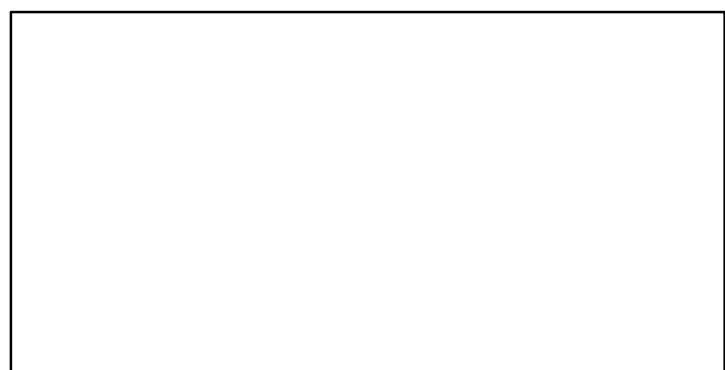
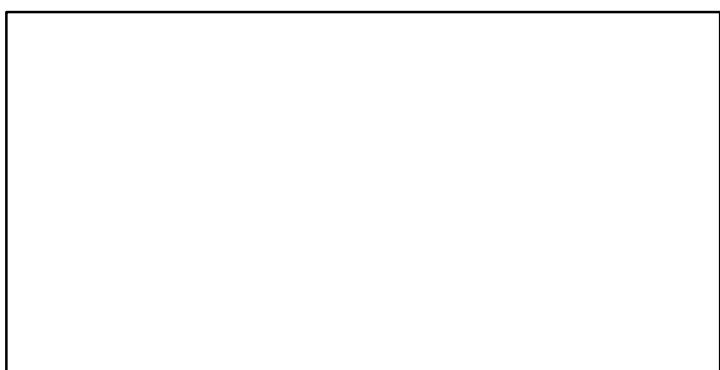
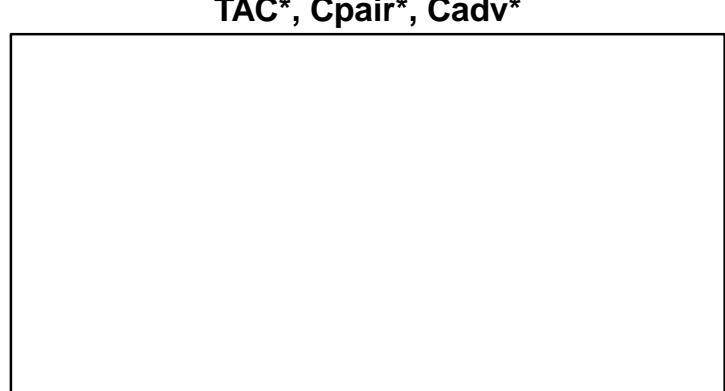
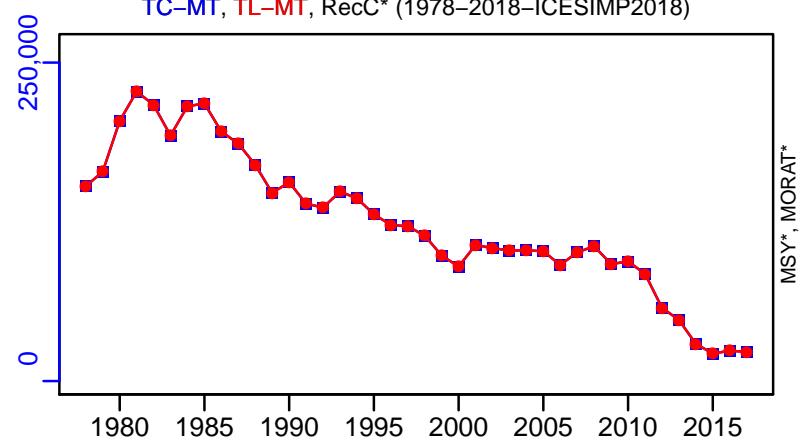


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

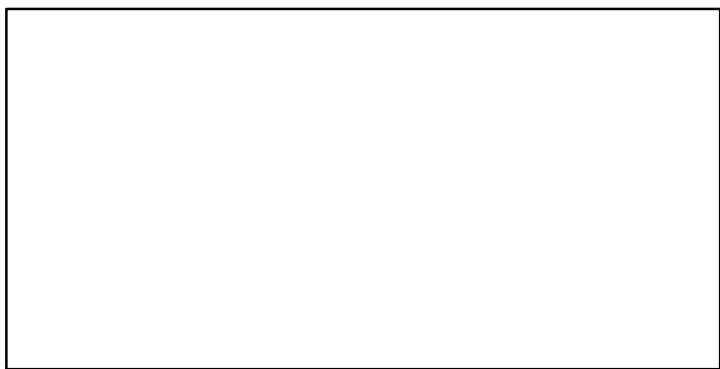
Sardine ICES 8c–9a [SARDPVIIlc–IXa]

TC–MT, TL–MT, RecC* (1978–2018–ICESIMP2018)

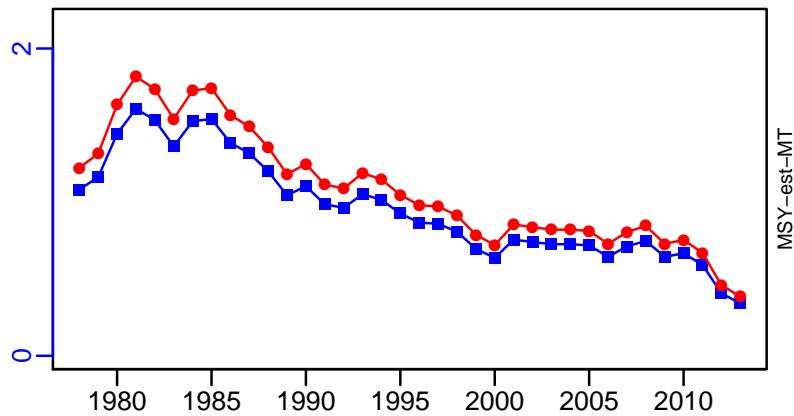
TAC*, Cpair*, Cadv*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1978–2014–ICESIMP2016)



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

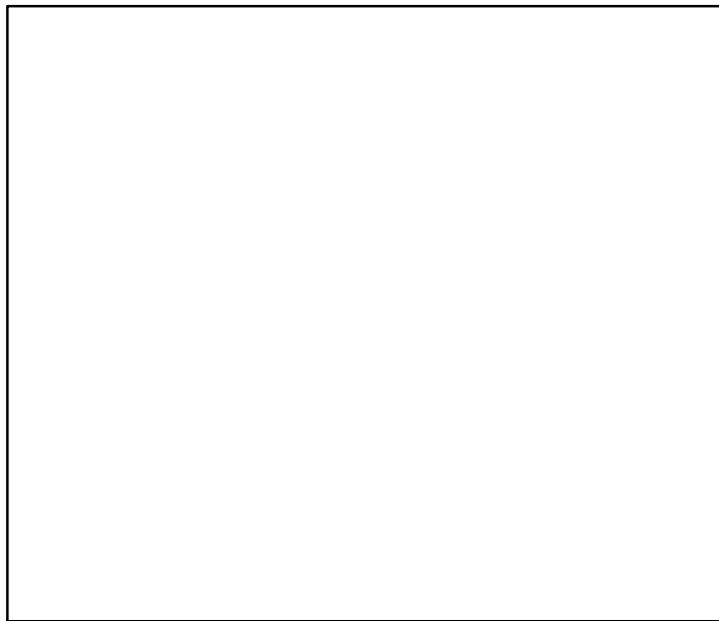
Sardine ICES 7 [SARDVII]

Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDVII-1970-2016-ICESIMP2018
Area	ICES 7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2016

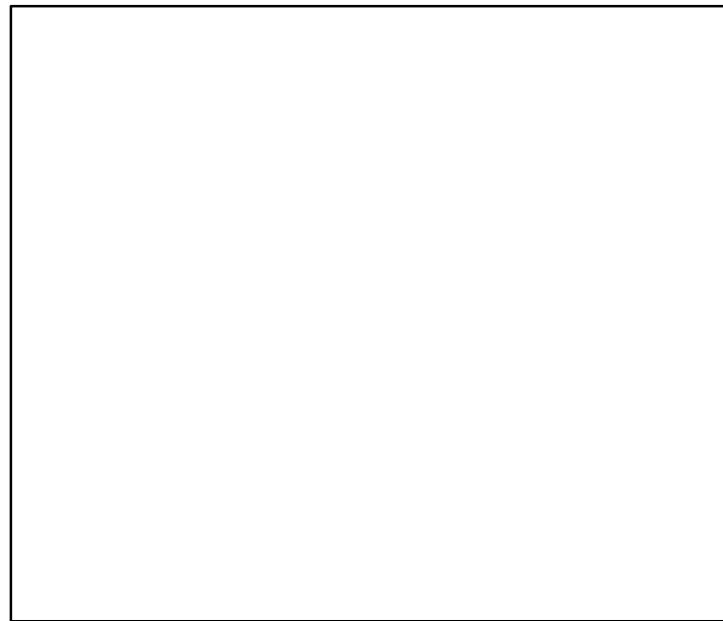
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	19,400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

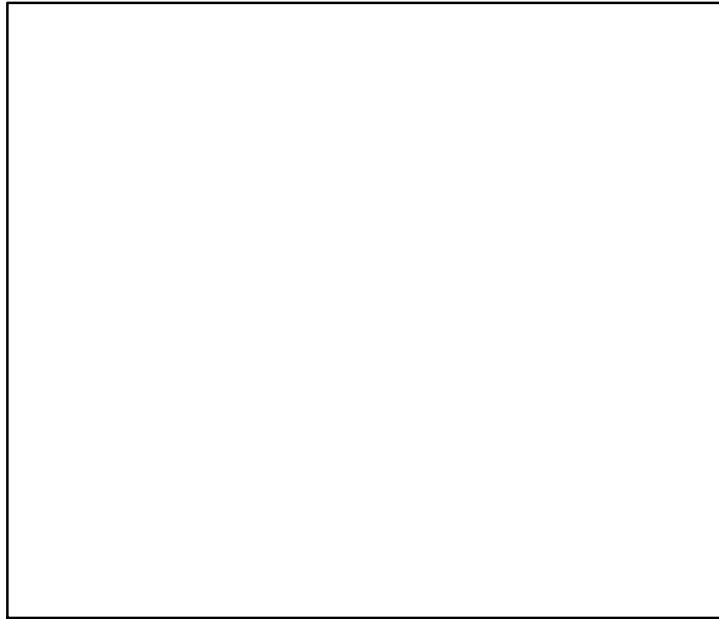
Kobe MSY*



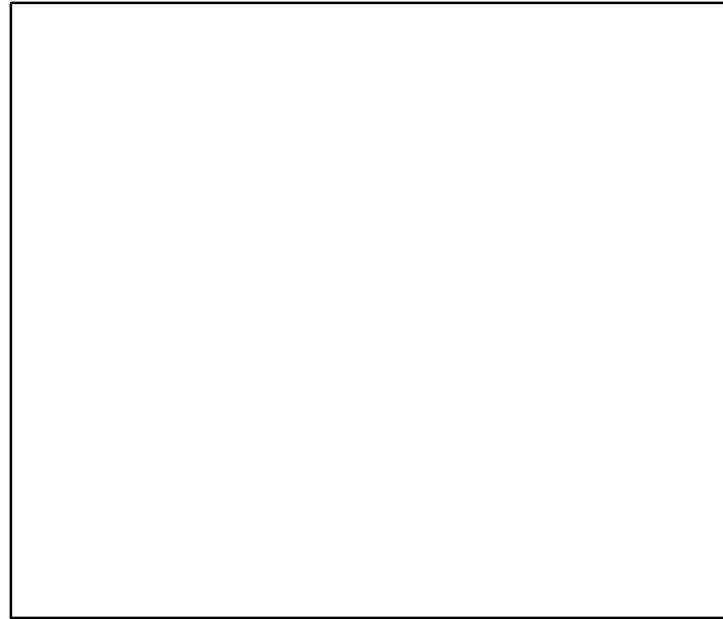
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Sardine ICES 7 [SARDVII]

TB*



SSB*



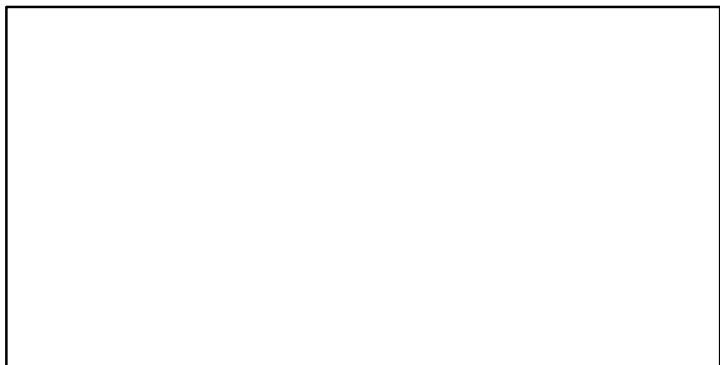
TN *



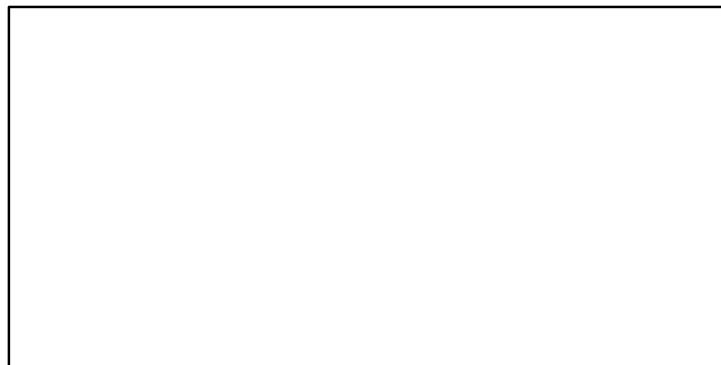
F*



ER*



Recruits*

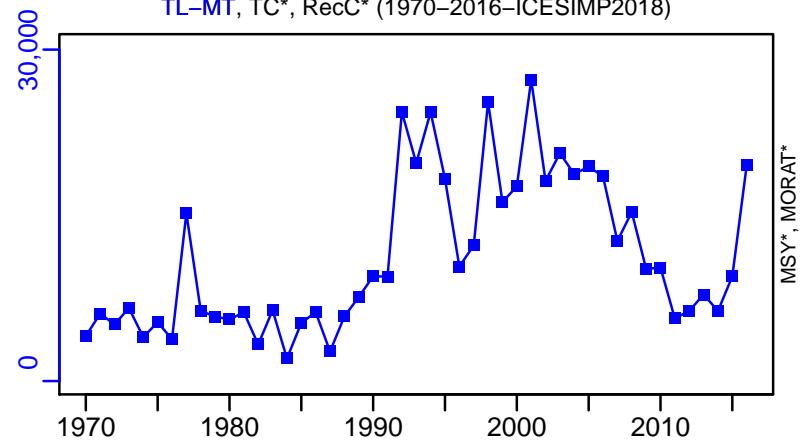


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sardine ICES 7 [SARDVII]

TL-MT, TC*, RecC* (1970–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



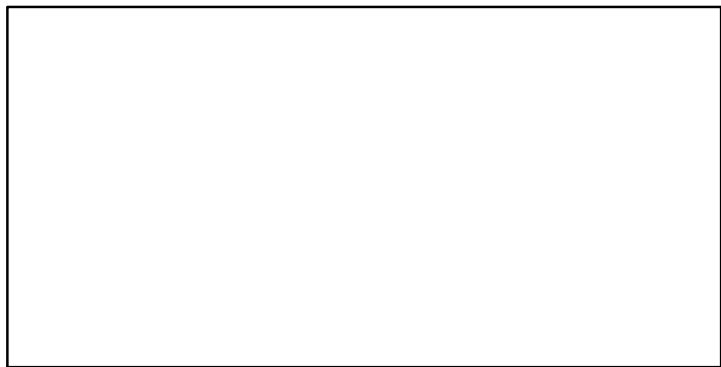
survB*



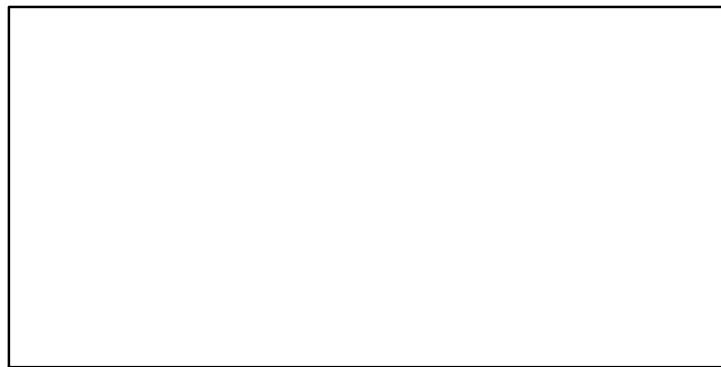
CPUE*



EFFORT*



CdivMSY*



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

Sardine ICES 8abd [SARDVIIIabd]

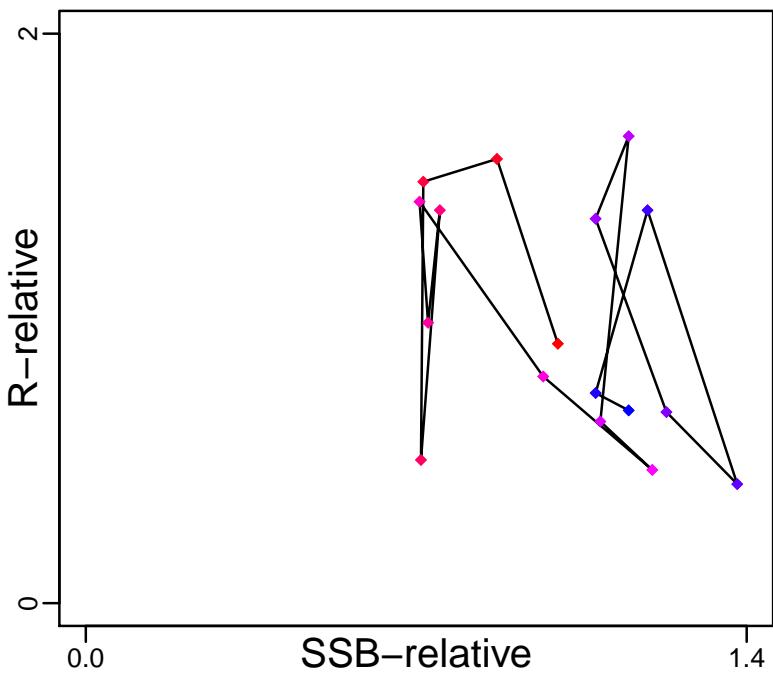
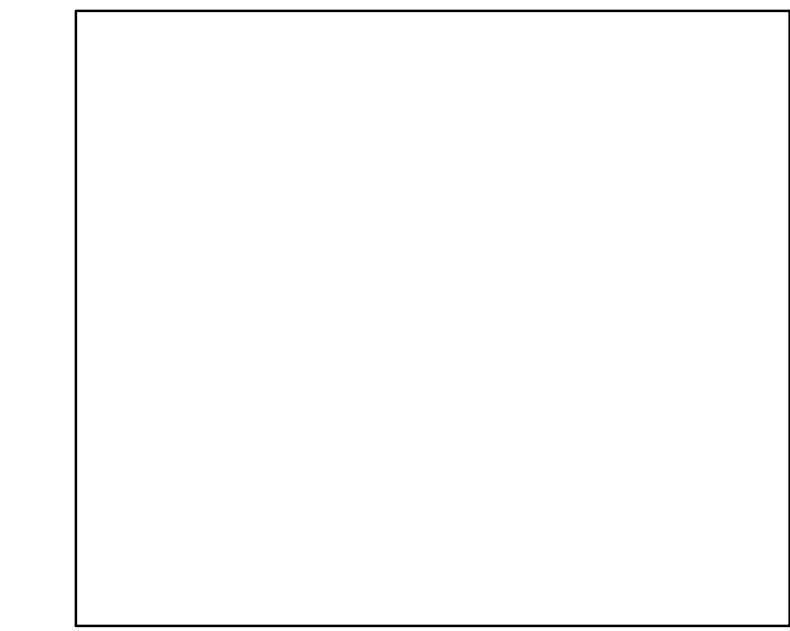
Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDVIIIabd-2002-2018-ICESIMP2018
Area	ICES 8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.27
ERrmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2018	88,000
Fmgt	Fmgt-relative	2018	0.302
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-relative	2018	63,328
Flim	Flim-relative	2018	0.478
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2018	1	Both	-
TN	-	-	-	-	-
R	R-relative	2018	0.911	-	0
F	F-relative	2018	1.65	-	2 to 5
ER	-	-	-	-	-
TC	TC-MT	2018	30,300		
TL	TL-MT	2018	30,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERrmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY***Kobe MGT***

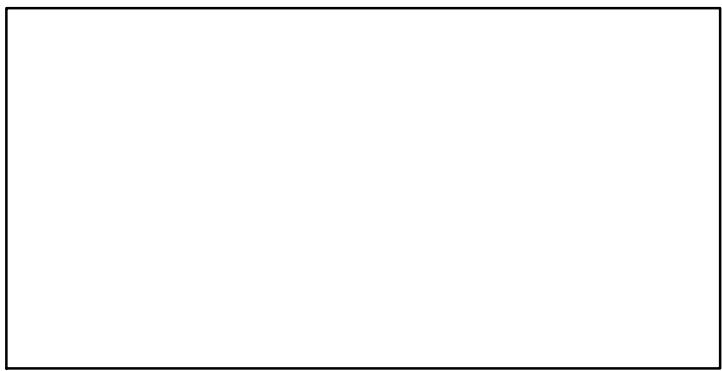
Spawner Recruit (2002–2018–ICESIMP2018)

**Production***

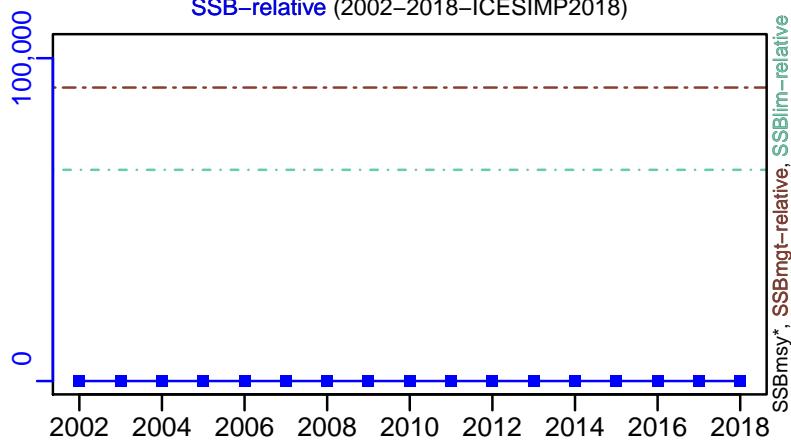
◆ Start Year ◆ End Year * No Data

Sardine ICES 8abd [SARDVIIabbd]

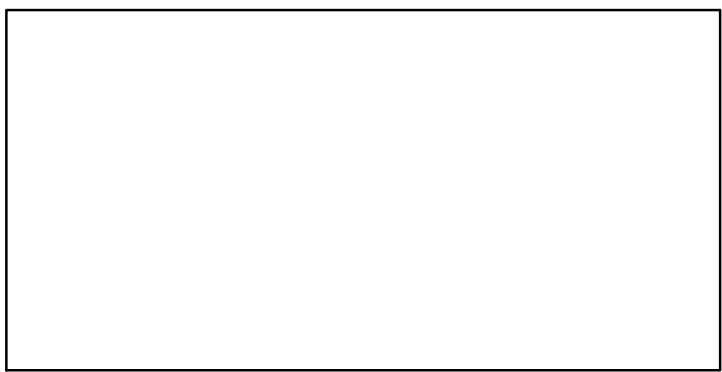
TB*



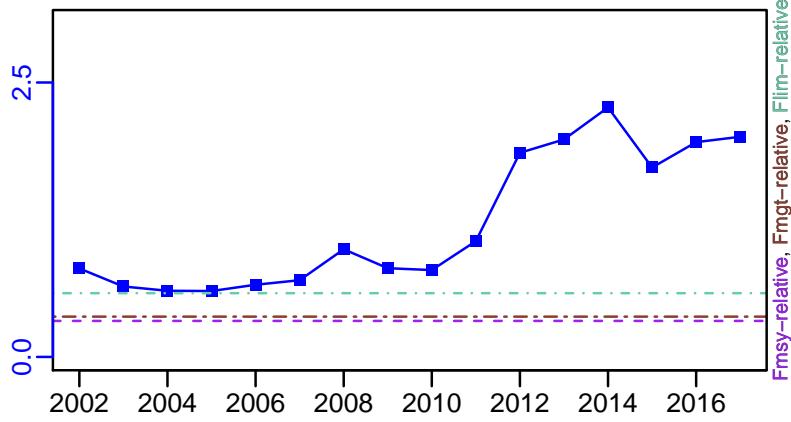
SSB-relative (2002–2018–ICESIMP2018)



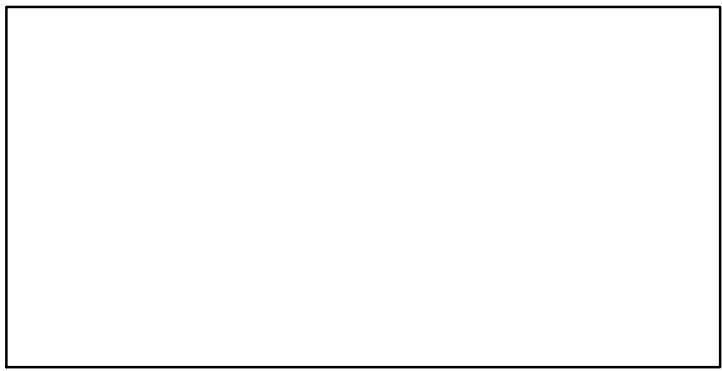
TN *



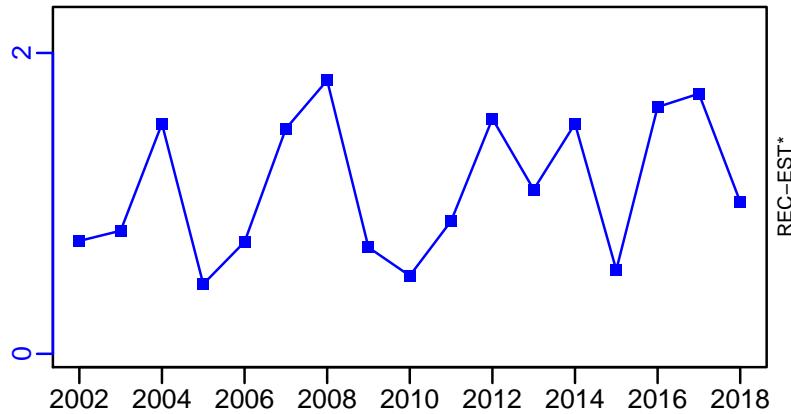
F-relative (2002–2018–ICESIMP2018)



ER*



R-relative (2002–2018–ICESIMP2018)

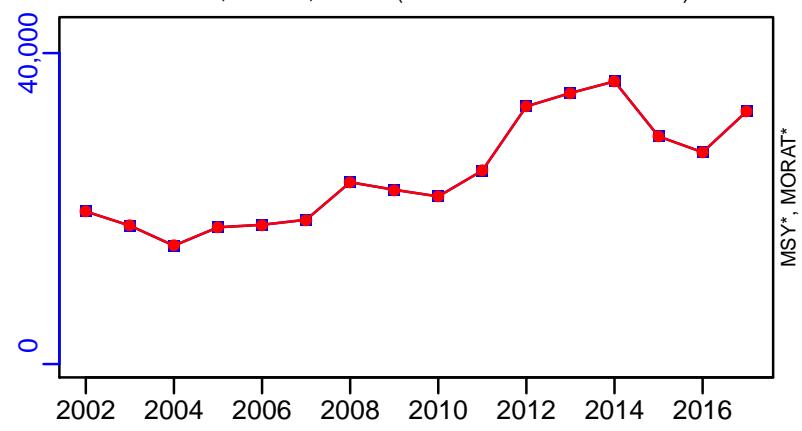


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

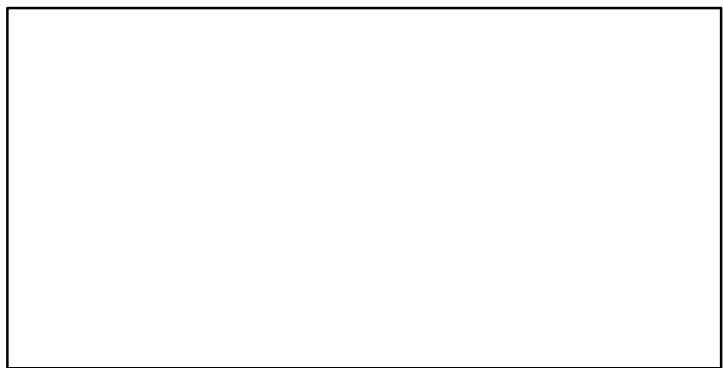
Sardine ICES 8abd [SARDVIIabbd]

TC-MT, TL-MT, RecC* (2002–2018–ICESIMP2018)

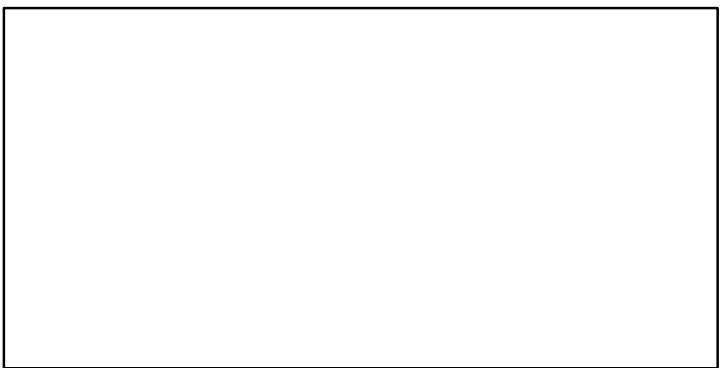
TAC*, Cpair*, Cadv*



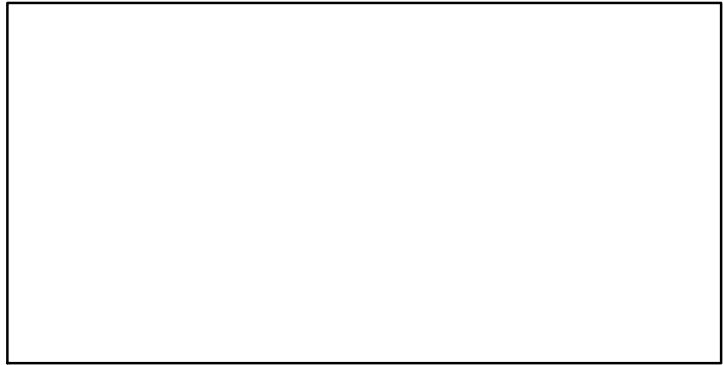
survB*



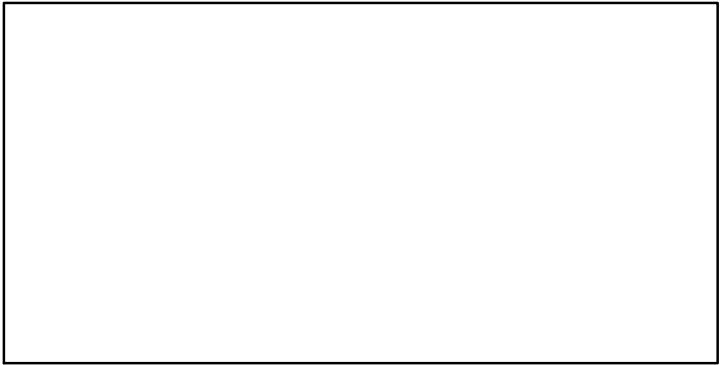
CPUE*



EFFORT*



CdivMSY*



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

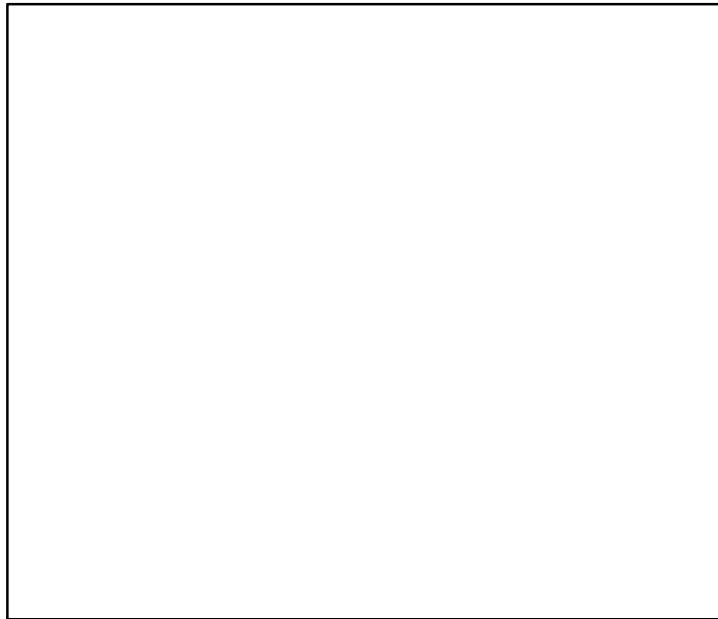
Sandy ray ICES 6-7 [SDRAYVI-VII]

Metadata	
Scientific Name	Leucoraja circularis
Current Assess ID	WGEF-SDRAYVI-VII-2009-2015-ICESIMP2018
Area	ICES 6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

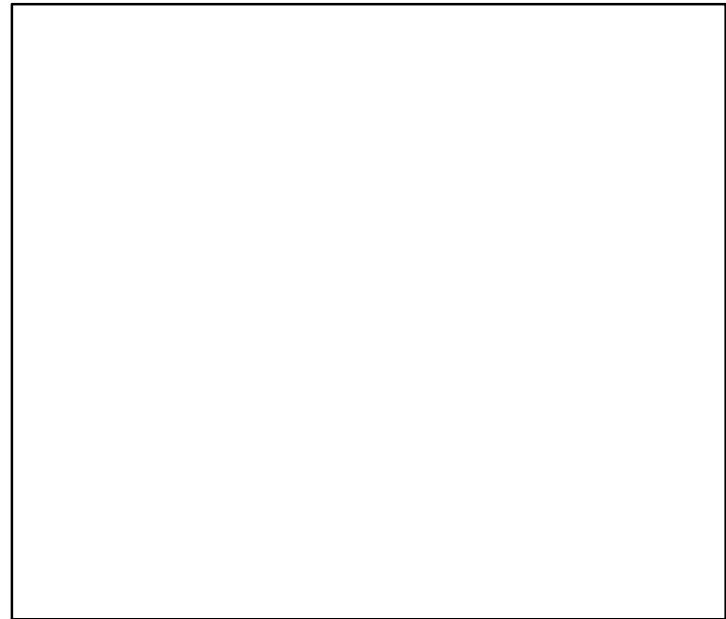
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	63		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

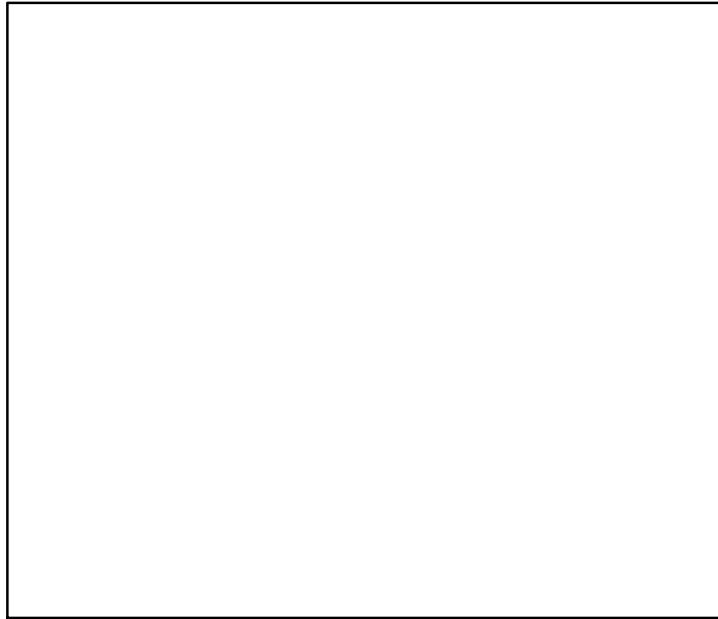
Kobe MSY*



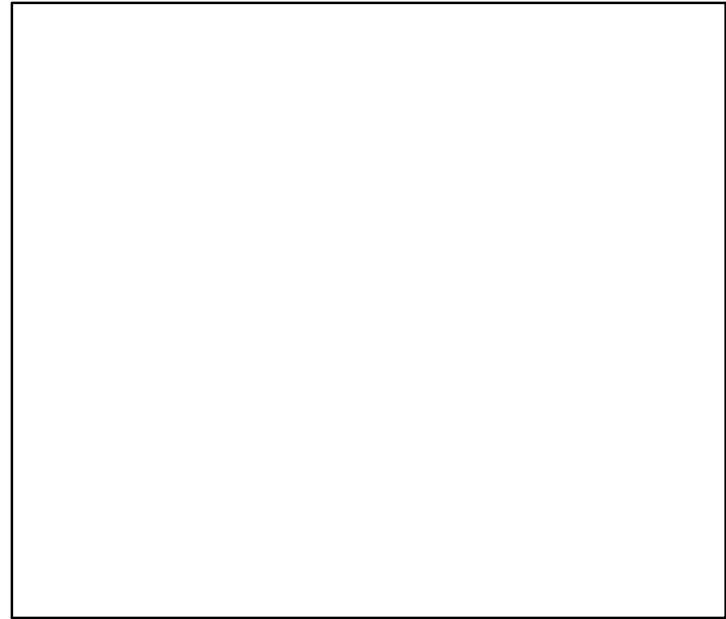
Kobe MGT*



Spawner Recruit*



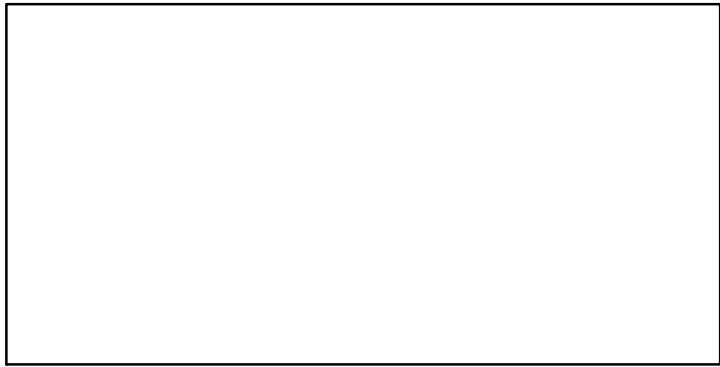
Production*



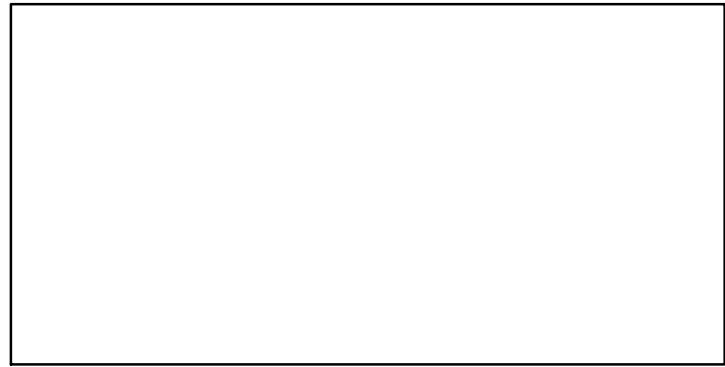
◆ Start Year ♦ End Year * No Data

Sandy ray ICES 6–7 [SDRAYVI–VII]

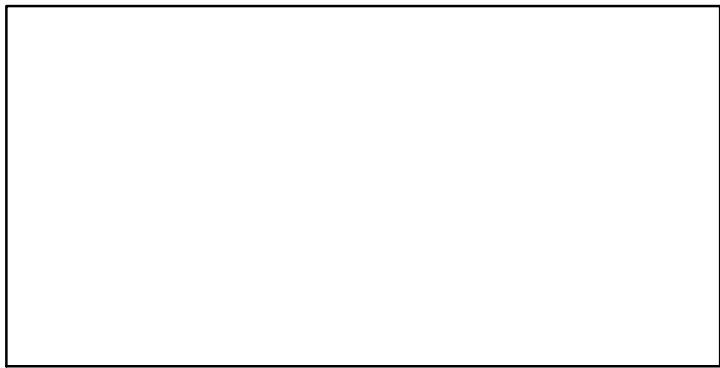
TB*



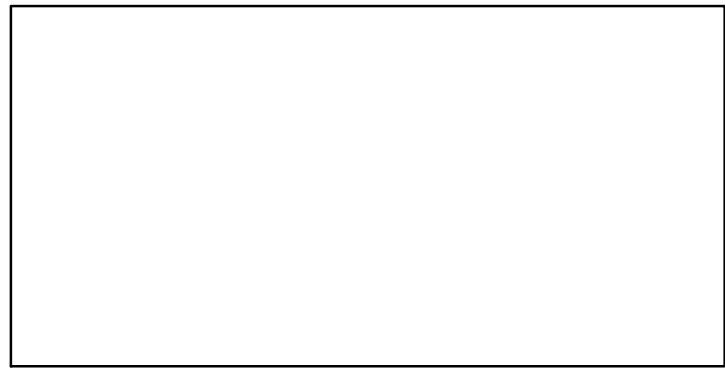
SSB*



TN *



F*



ER*



Recruits*

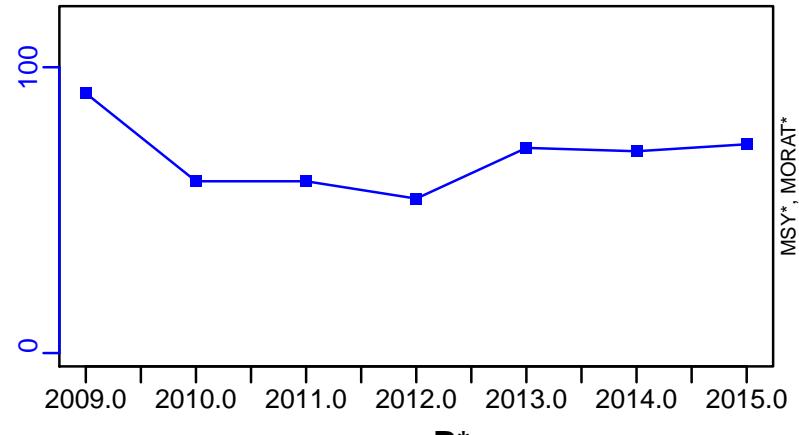


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sandy ray ICES 6–7 [SDRAYVI–VII]

TL–MT, TC*, RecC* (2009–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



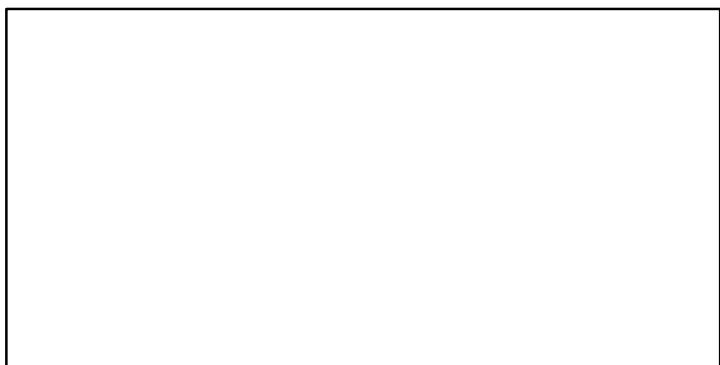
survB*



CPUE*



EFFORT*



CdivMSY*



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

Sand eel Sandeel Area 1 [SEELNSSA1]

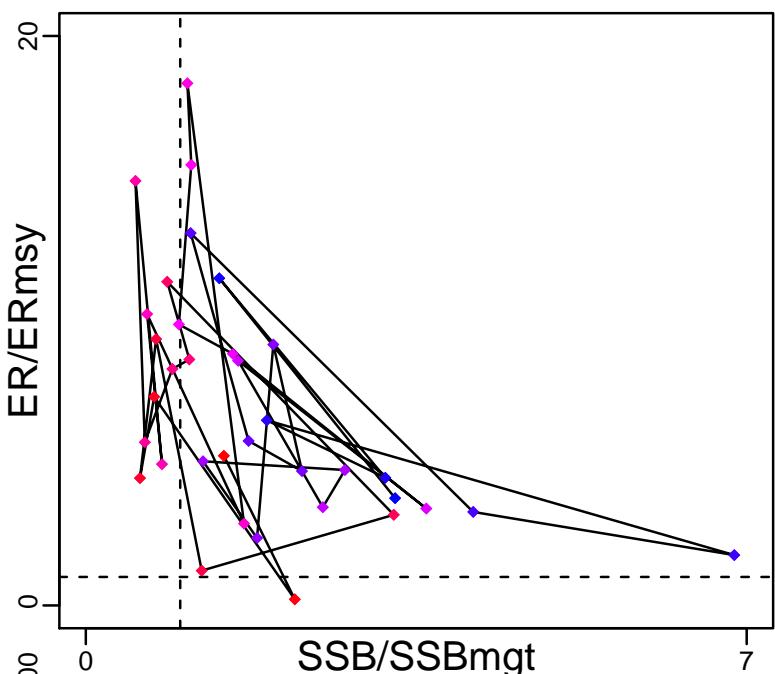
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA1-1983-2018-ICESIMP2018
Area	Sandeel Area 1
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	767,066
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2018	0.142
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	145,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	566,746
M	-	-	-
TBlim	TBlim-MT	2011	160,000
SSBlim	SSBlim-MT	2018	110,000
Flim	-	-	-
ERlim	-	-	-

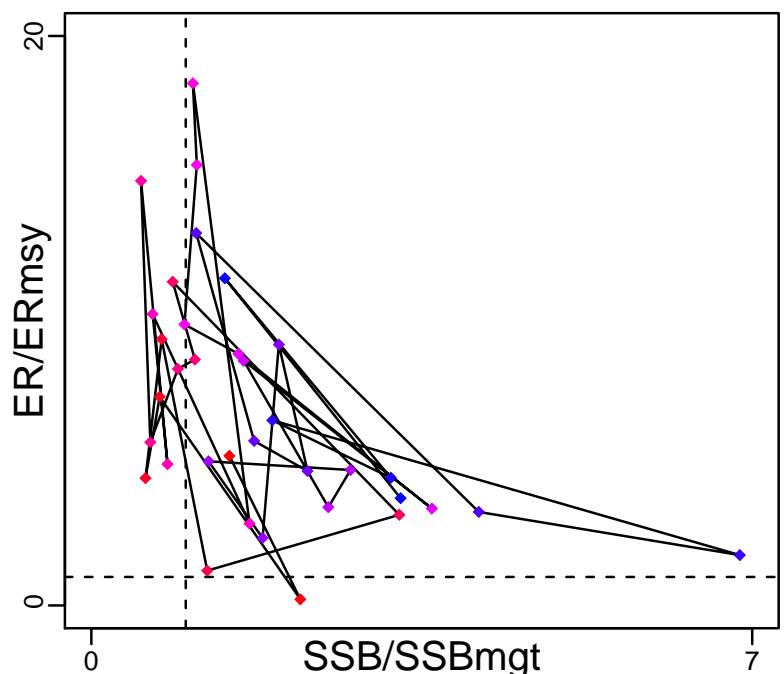
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	351,000	Both	-	
SSB	SSB-MT	2018	278,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.15×10^{11}	-	0	
F	F-1/yr	2018	0.57	-	1 to 2	
ER	ER-calc-ratio	2018	0.747	-	-	
TC	TC-MT	2018	236,000			
TL	TL-MT	2018	236,000			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	1.995			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	5.255			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.917			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Sand eel Sandeel Area 1 [SEELNSSA1]

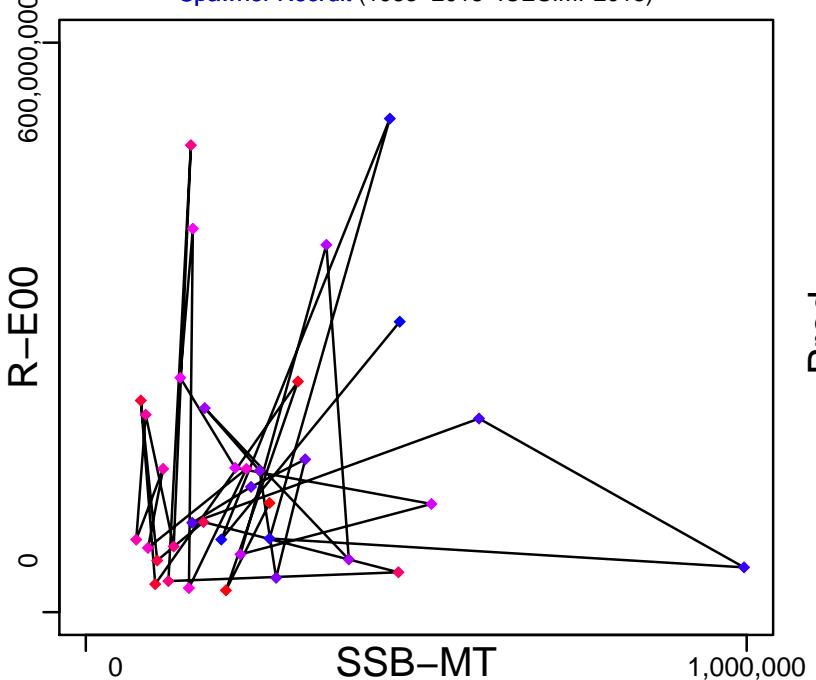
Kobe MSYpref (1983–2018–ICESIMP2018)



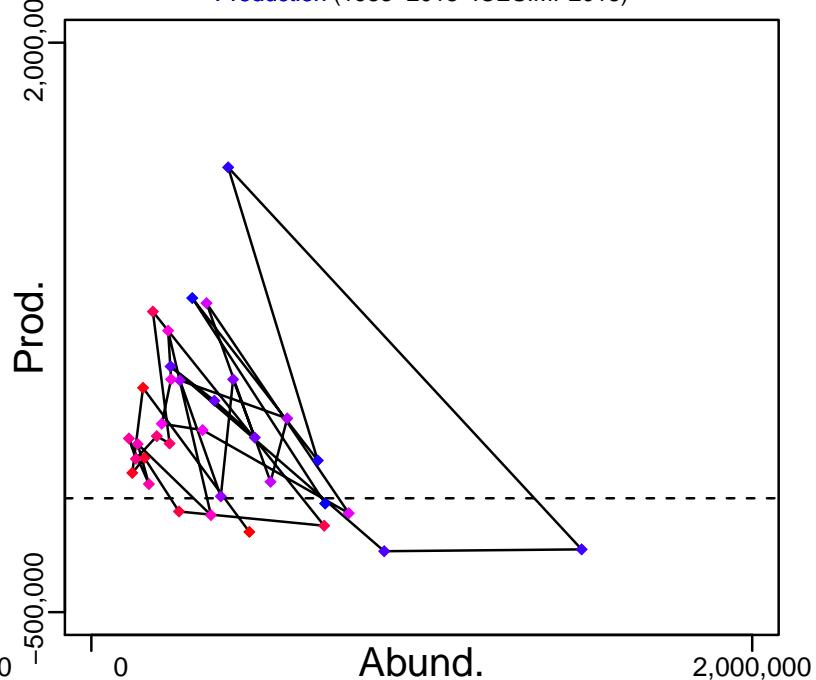
Kobe MGTpref (1983–2018–ICESIMP2018)



Spawner Recruit (1983–2018–ICESIMP2018)



Production (1983–2018–ICESIMP2018)

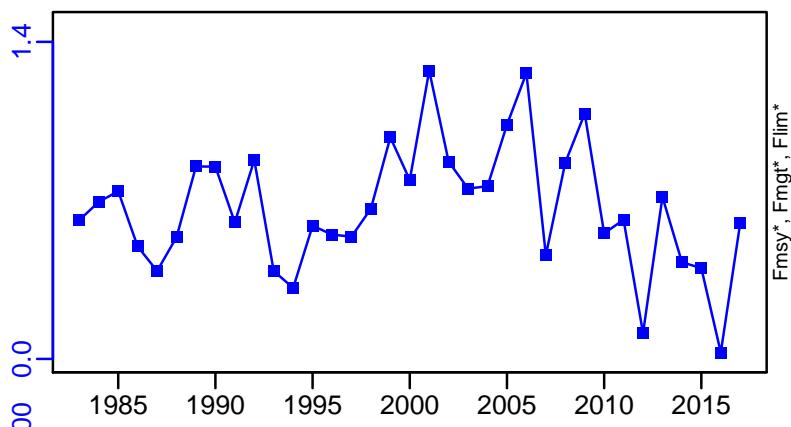
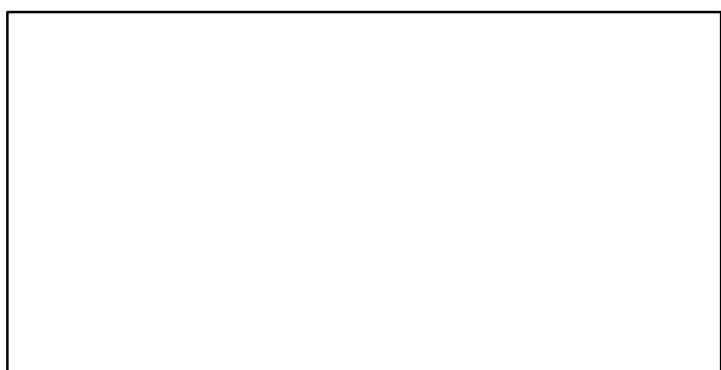
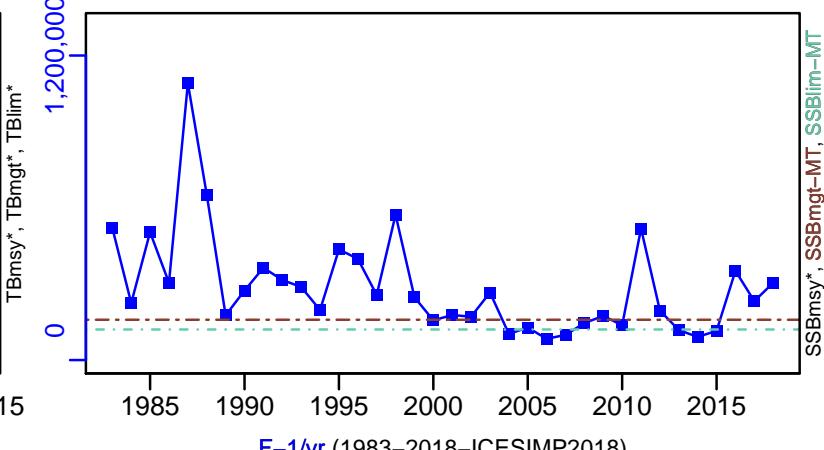
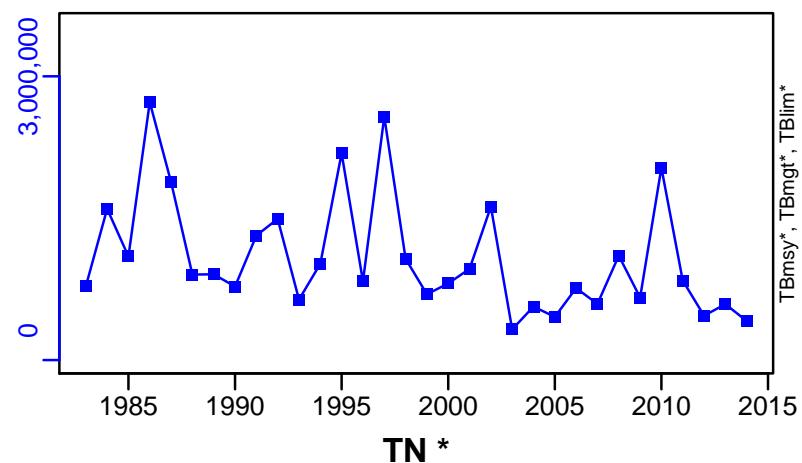


◆ Start Year ♦ End Year * No Data

Sand eel Sandeel Area 1 [SEELNSSA1]

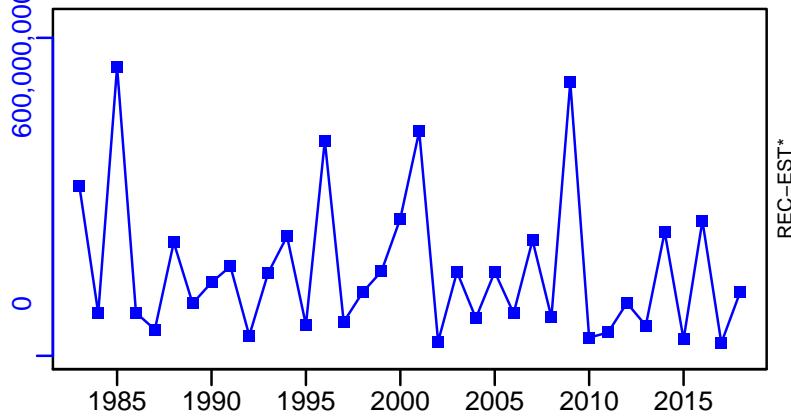
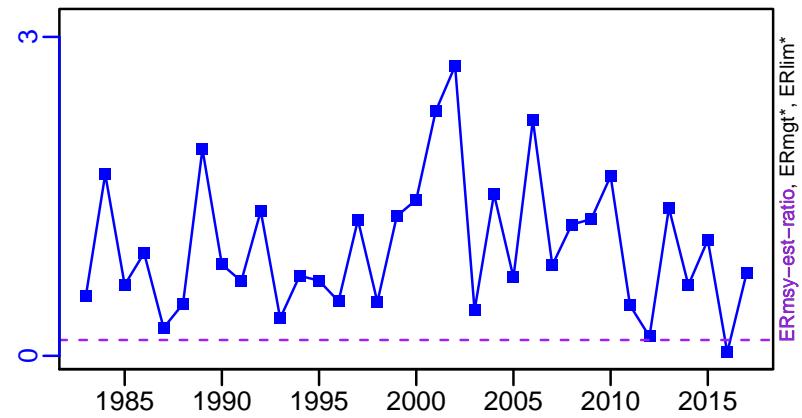
TB-MT (1983–2015–ICESIMP2016)

SSB-MT (1983–2018–ICESIMP2018)



ER-calc-ratio (1983–2018–ICESIMP2018)

R-E00 (1983–2018–ICESIMP2018)

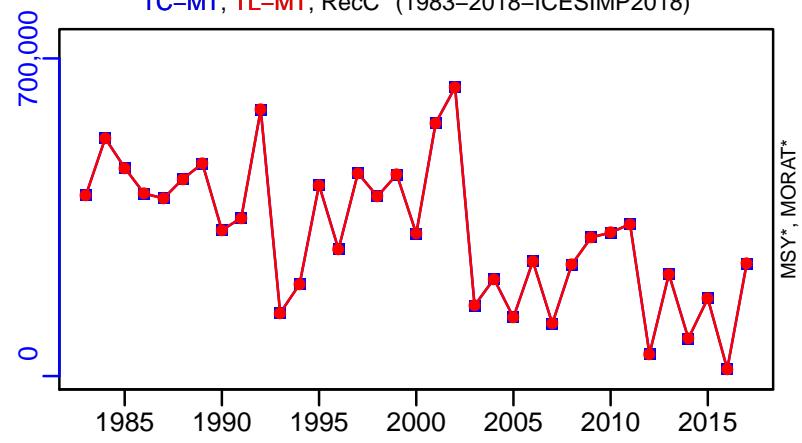


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

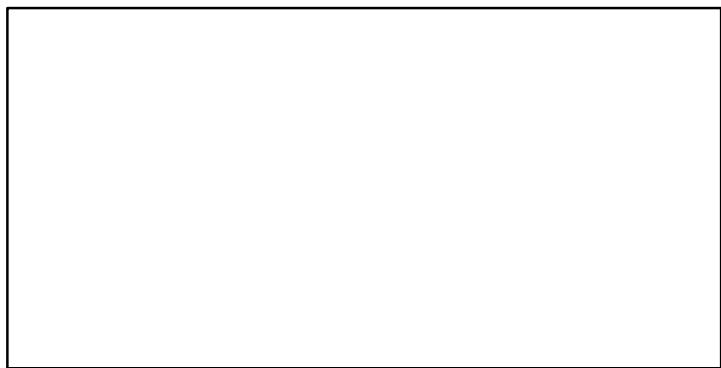
Sand eel Sandeel Area 1 [SEELNSSA1]

TC-MT, TL-MT, RecC* (1983–2018–ICESIMP2018)

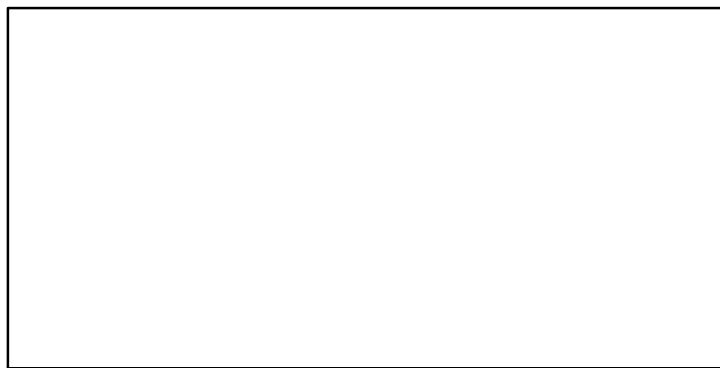
TAC*, Cpair*, Cadv*



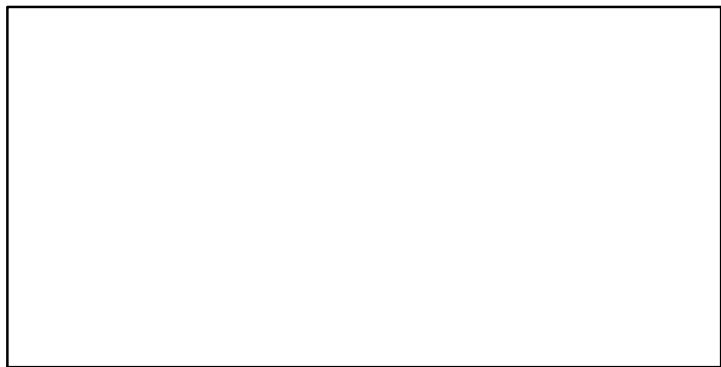
survB*



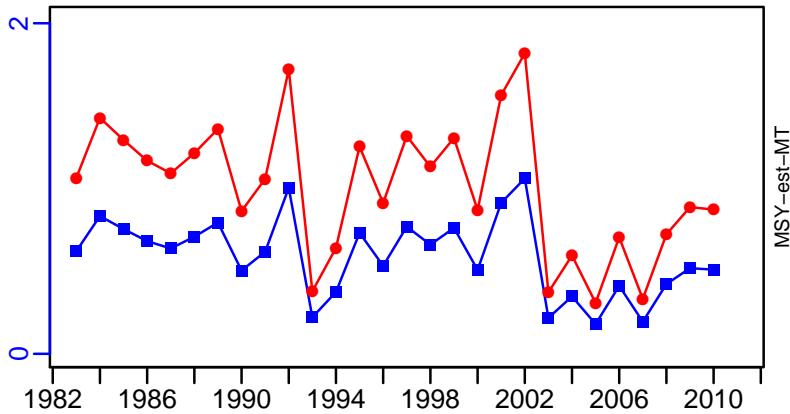
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1983–2011–NEUBAUER)



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

Sand eel Sandeel Area 2 [SEELNSSA2]

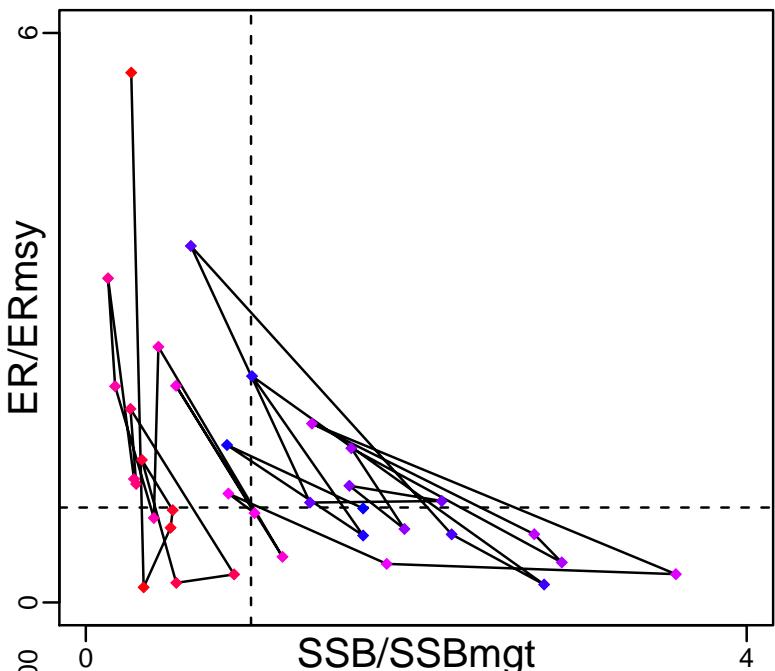
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA2-1983-2018-ICESIMP2018
Area	Sandeel Area 2
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	218,674
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2018	0.752
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	84,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	118,347
M	-	-	-
TBlim	TBlim-MT	2011	70,000
SSBlim	SSBlim-MT	2018	56,000
Flim	-	-	-
ERlim	-	-	-

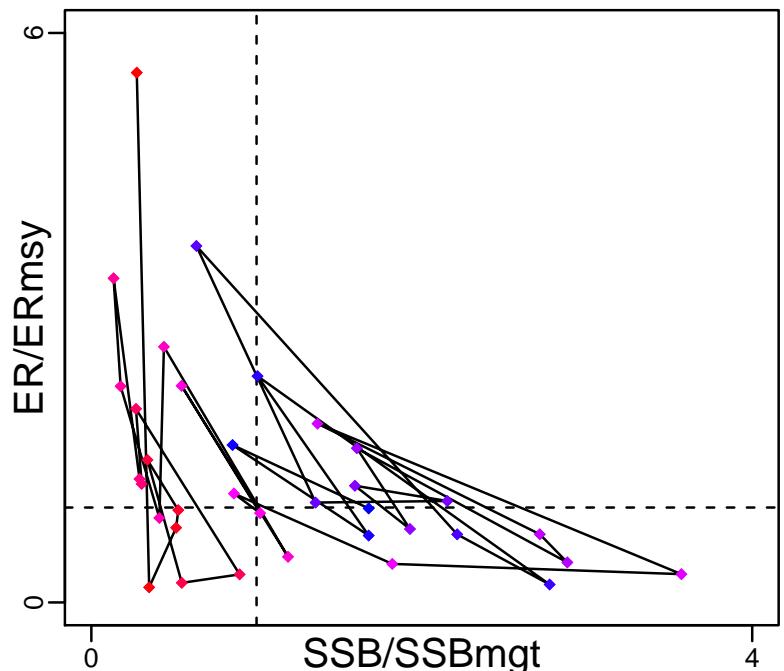
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	174,000	Both	-	
SSB	SSB-MT	2018	107,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	2.76×10^{10}	-	0	
F	F-1/yr	2018	0.907	-	1 to 2	
ER	ER-calc-ratio	2018	4.198	-	-	
TC	TC-MT	2018	144,000			
TL	TL-MT	2018	144,000			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	1.838			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	5.582			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.274			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Sand eel Sandeel Area 2 [SEELNSSA2]

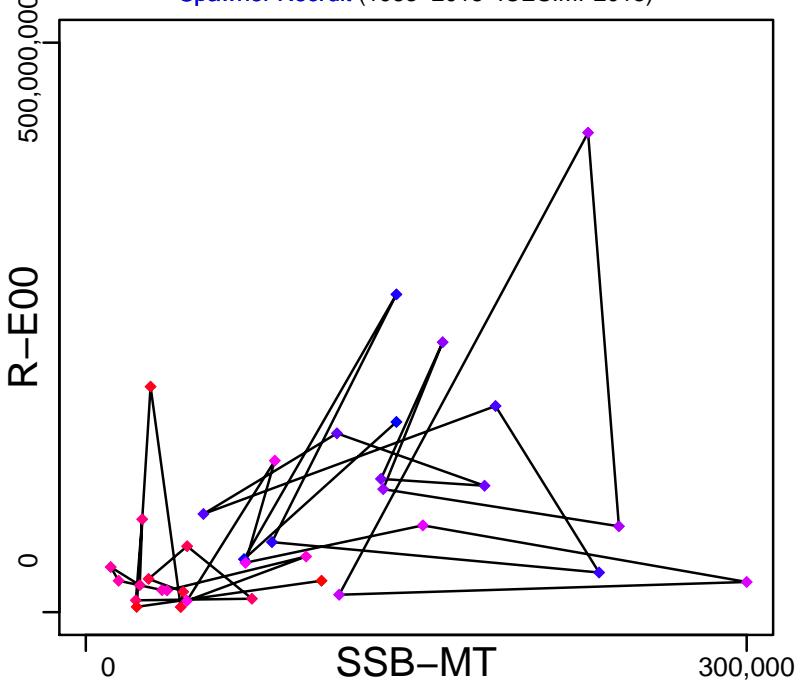
Kobe MSYpref (1983–2018–ICESIMP2018)



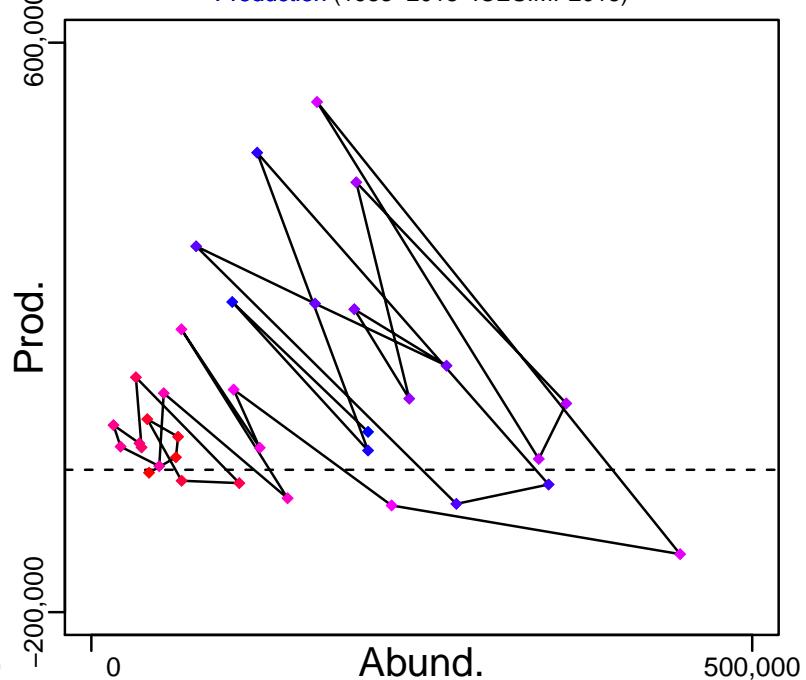
Kobe MGTpref (1983–2018–ICESIMP2018)



Spawner Recruit (1983–2018–ICESIMP2018)



Production (1983–2018–ICESIMP2018)

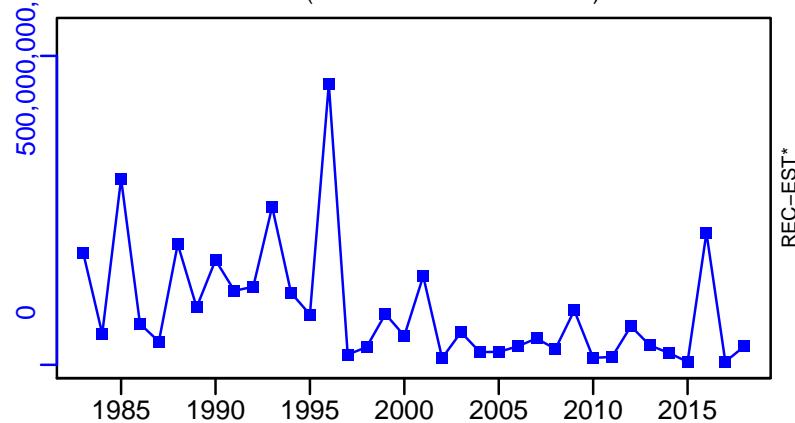
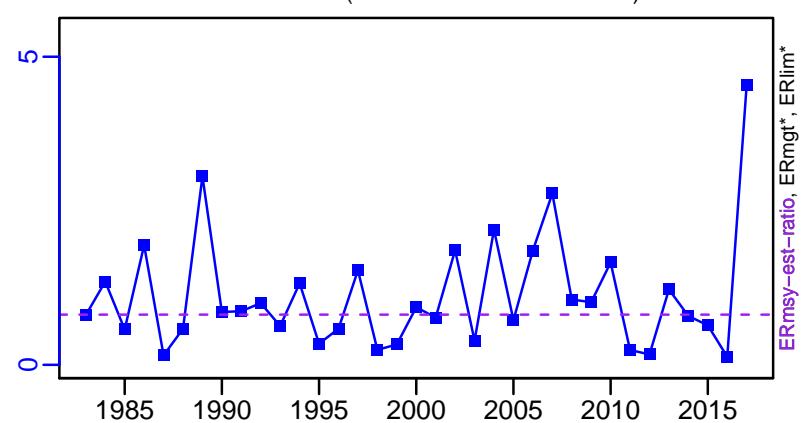
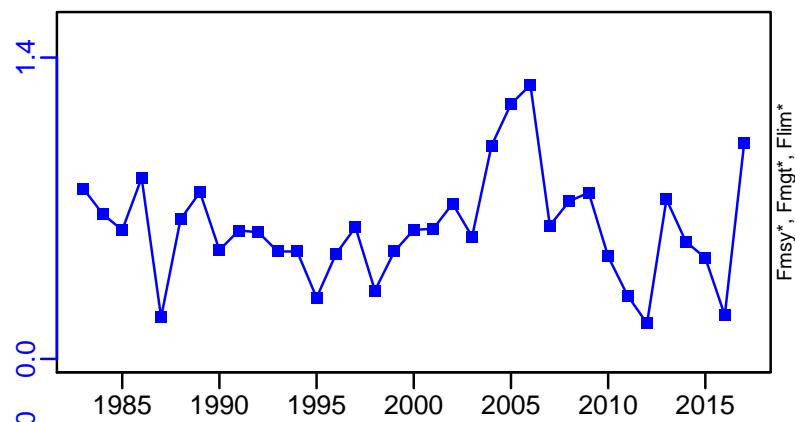
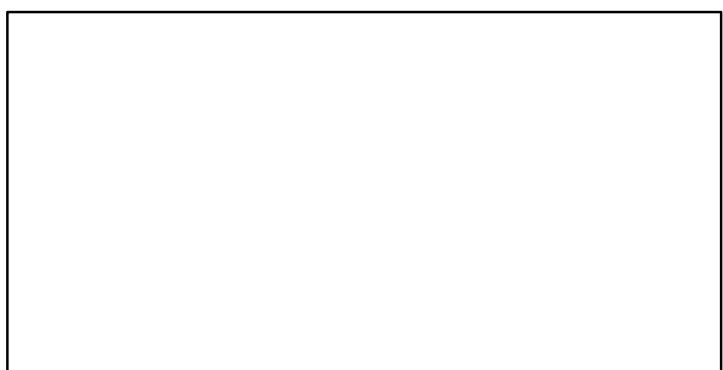
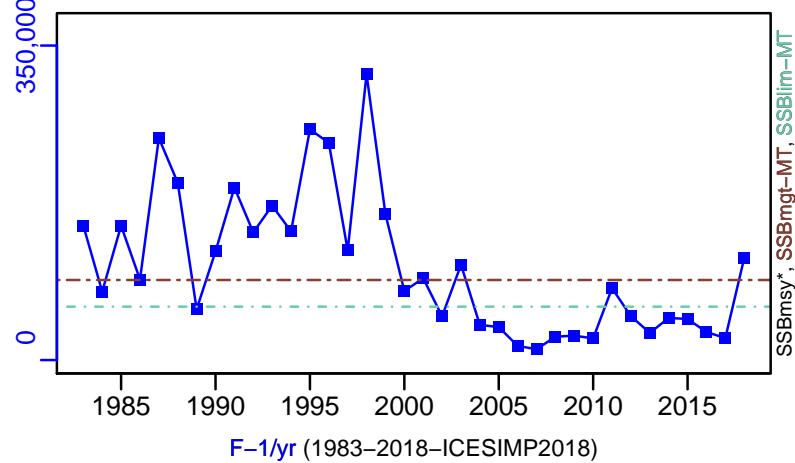
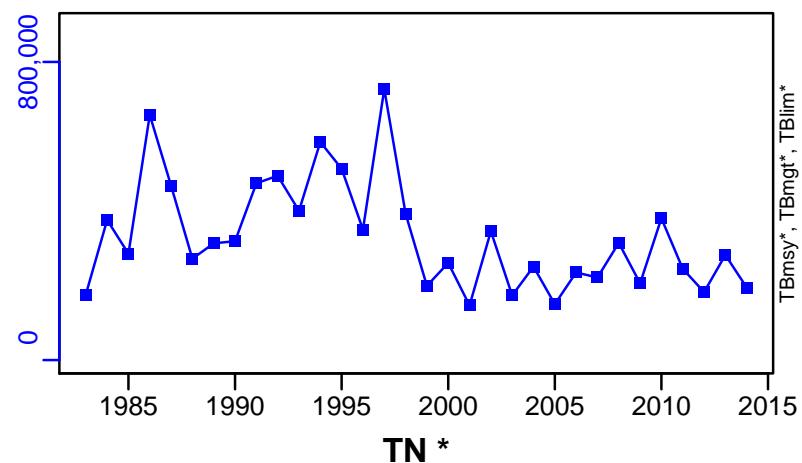


◆ Start Year ◆ End Year * No Data

Sand eel Sandeel Area 2 [SEELNSSA2]

TB-MT (1983–2015–ICESIMP2016)

SSB-MT (1983–2018–ICESIMP2018)

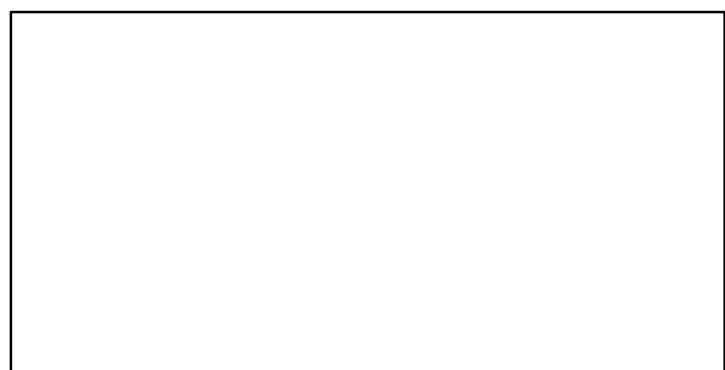
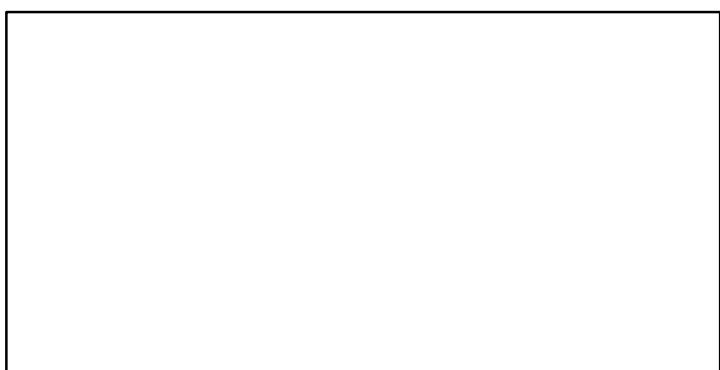
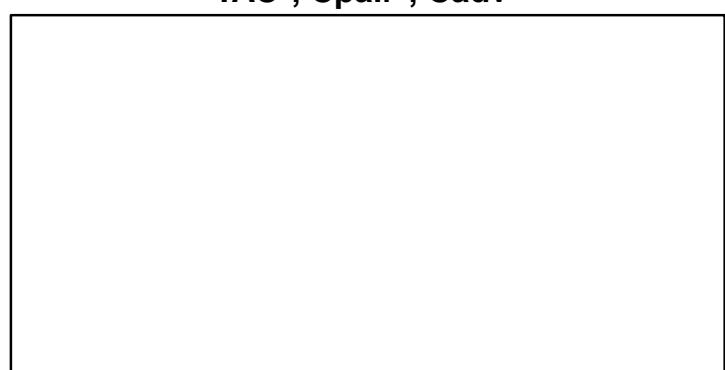
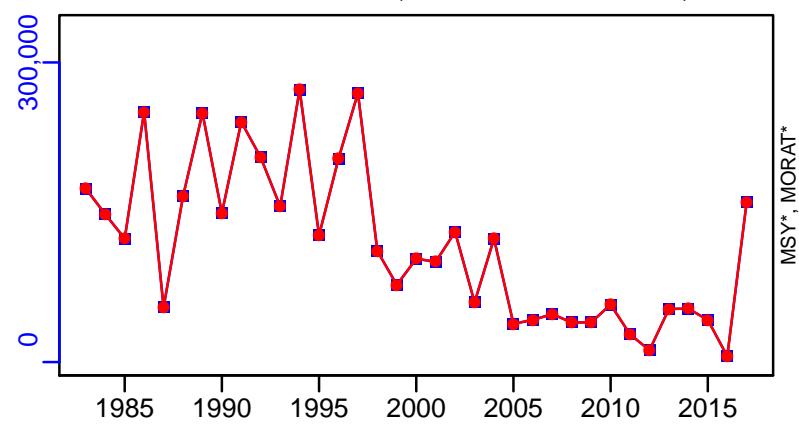


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	··· Lim BRP	* No Data

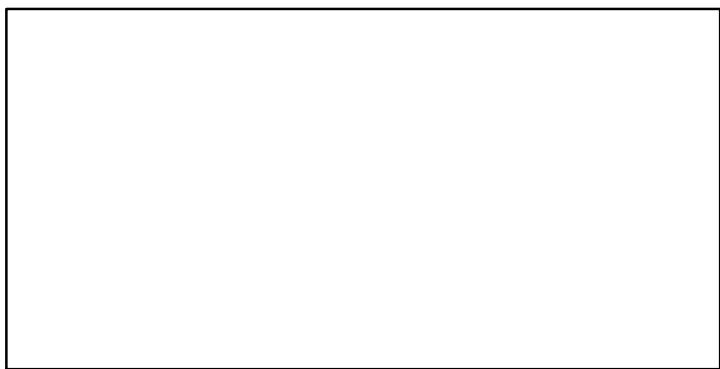
Sand eel Sandeel Area 2 [SEELNSSA2]

TC-MT, TL-MT, RecC* (1983–2018–ICESIMP2018)

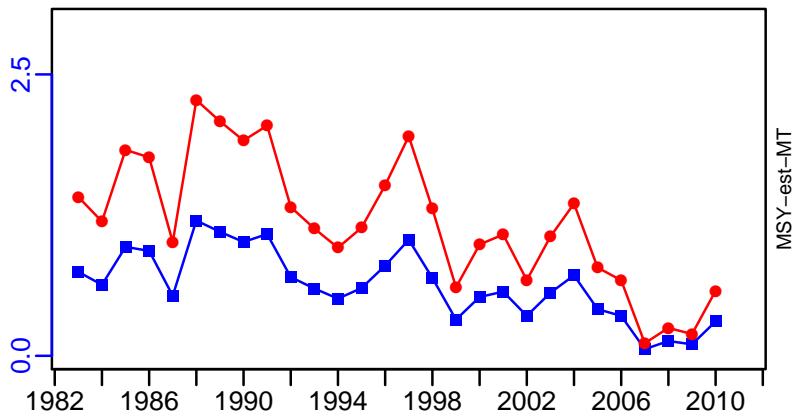
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1983–2011–NEUBAUER)



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

Sand eel Sandeel Area 3 [SEELNSSA3]

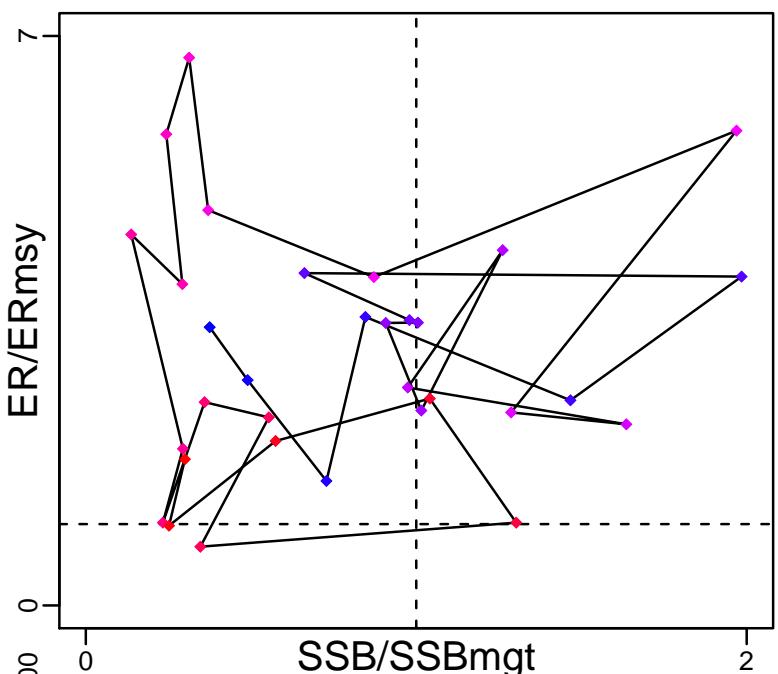
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA3-1986-2018-ICESIMP2018
Area	Sandeel Area 3
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	619,811
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2015	0.15
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	129,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	360,882
M	-	-	-
TBlim	TBlim-MT	2011	1×10^5
SSBlim	SSBlim-MT	2018	80,000
Flim	-	-	-
ERlim	-	-	-

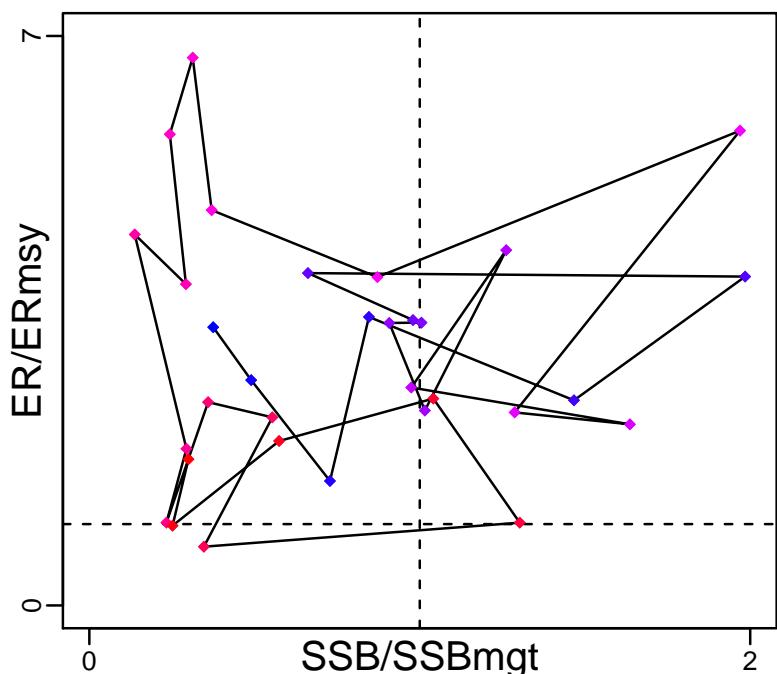
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	535,000	Both	-	
SSB	SSB-MT	2018	340,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.05×10^{11}	-	0	
F	F-1/yr	2018	0.346	-	1 to 2	
ER	ER-calc-ratio	2018	0.486	-	-	
TC	TC-MT	2018	121,000			
TL	TL-MT	2018	121,000			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.71			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	1.798			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.636			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Sand eel Sandeel Area 3 [SEELNSSA3]

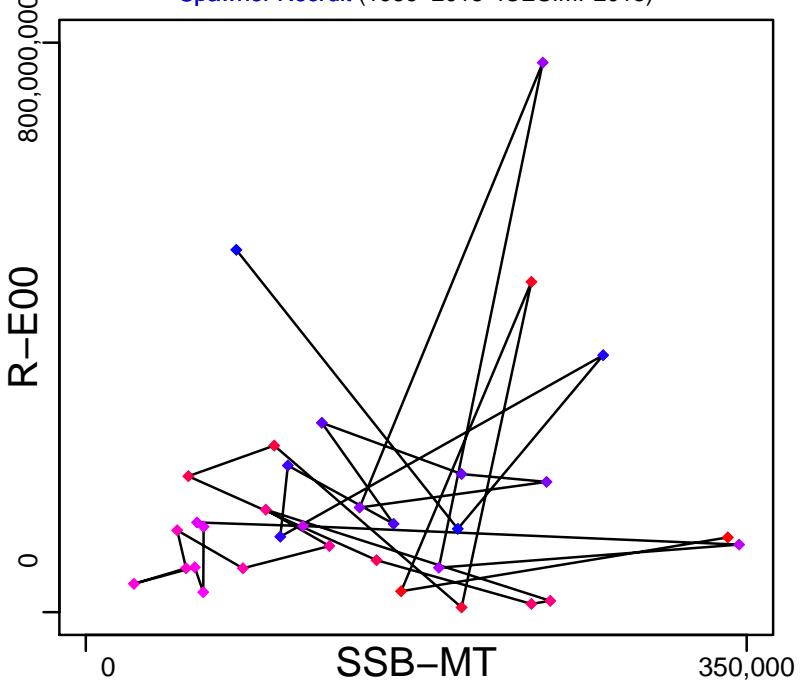
Kobe MSYpref (1983–2015–ICESIMP2016)



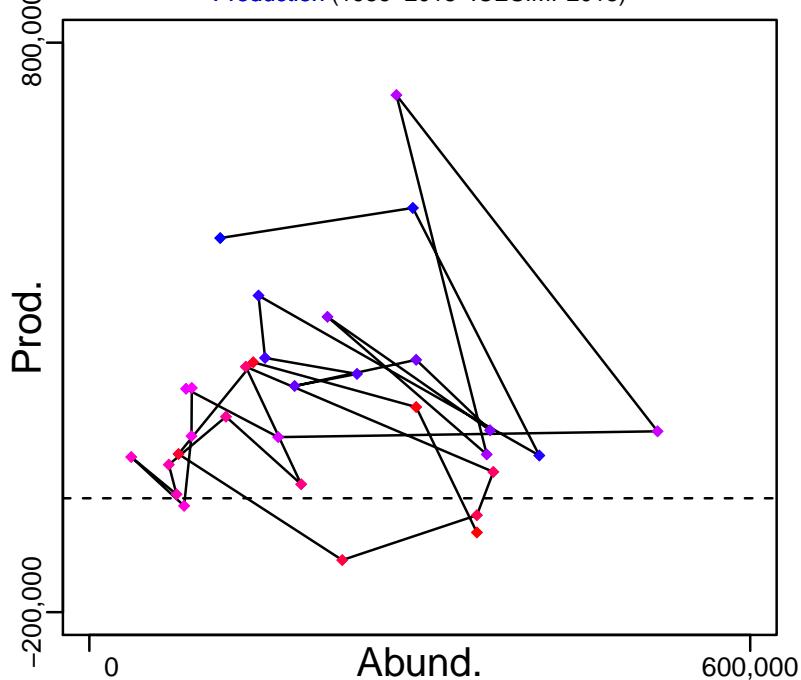
Kobe MGTpref (1983–2015–ICESIMP2016)



Spawner Recruit (1986–2018–ICESIMP2018)



Production (1986–2018–ICESIMP2018)

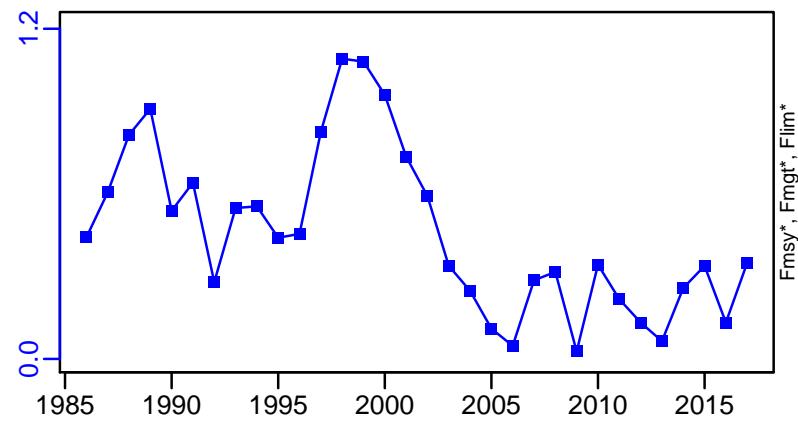
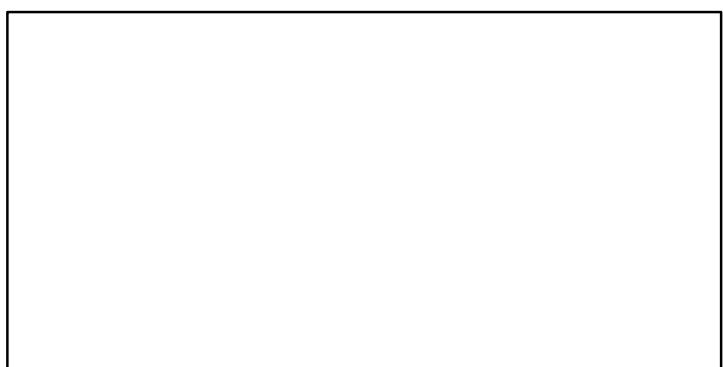
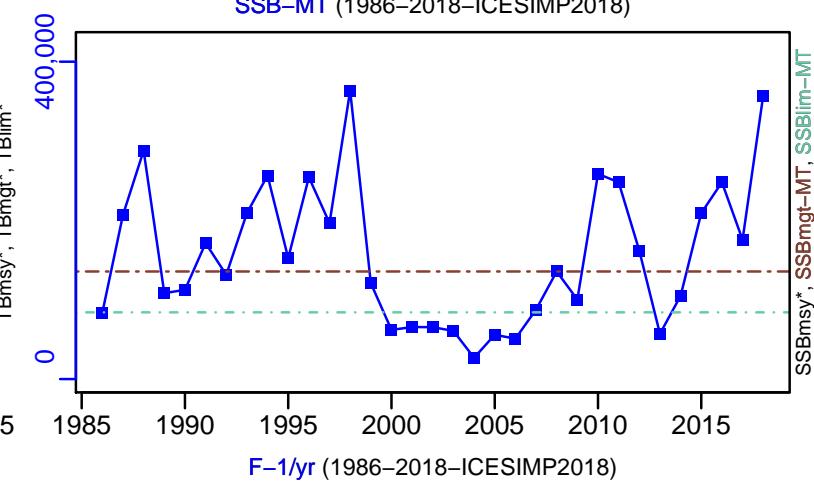
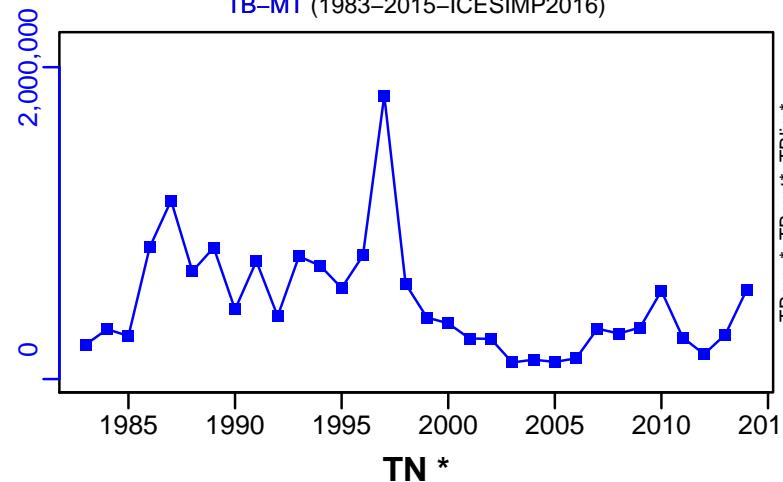


◆ Start Year ♦ End Year * No Data

Sand eel Sandeel Area 3 [SEELNSSA3]

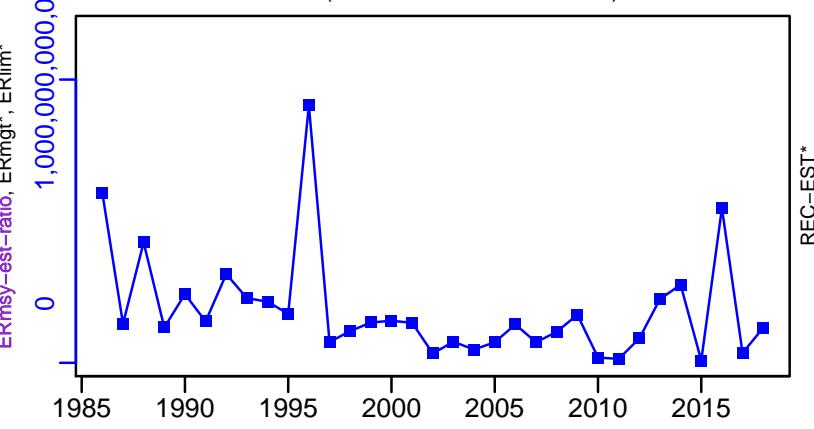
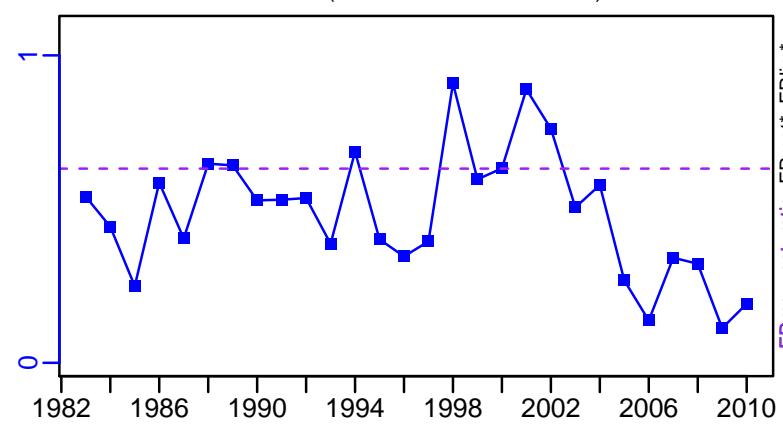
TB-MT (1983–2015–ICESIMP2016)

SSB-MT (1986–2018–ICESIMP2018)



ER-ratio (1983–2011–NEUBAUER)

R-E00 (1986–2018–ICESIMP2018)

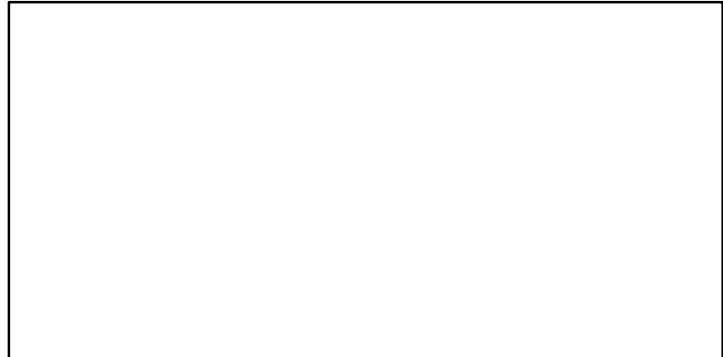
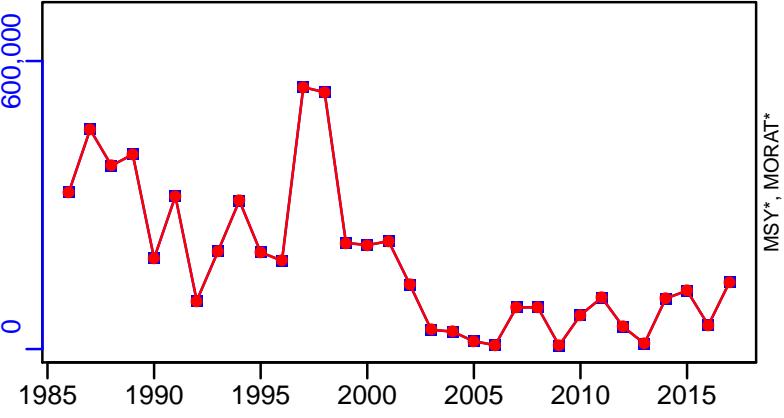


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Sand eel Sandeel Area 3 [SEELNSSA3]

TC-MT, TL-MT, RecC* (1986–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*

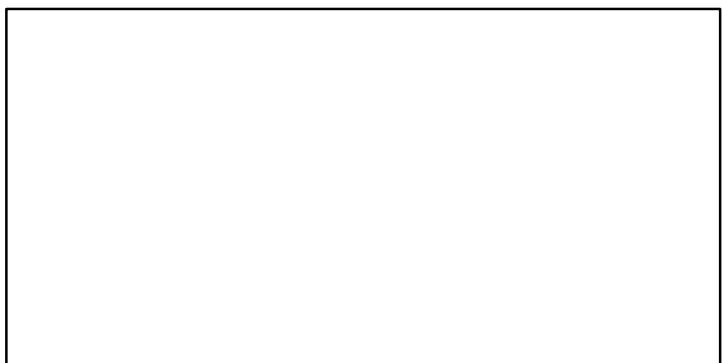


survB*

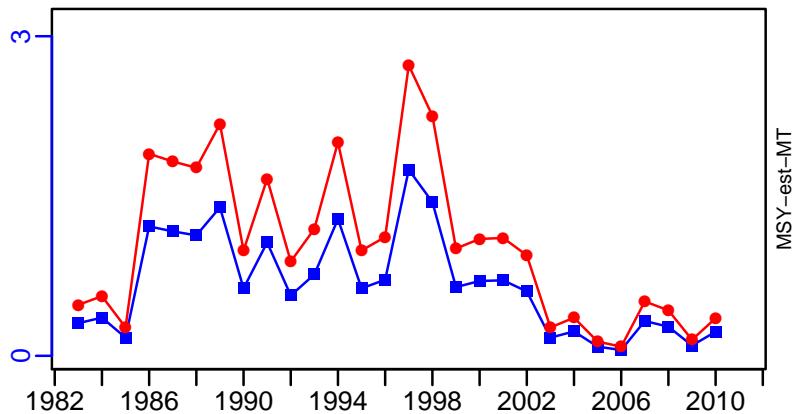
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdiveMEANC-ratio, (1983–2011–NEUBAUER)



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

Sandeel Sandeel Area 4 [SEELNSSA4]

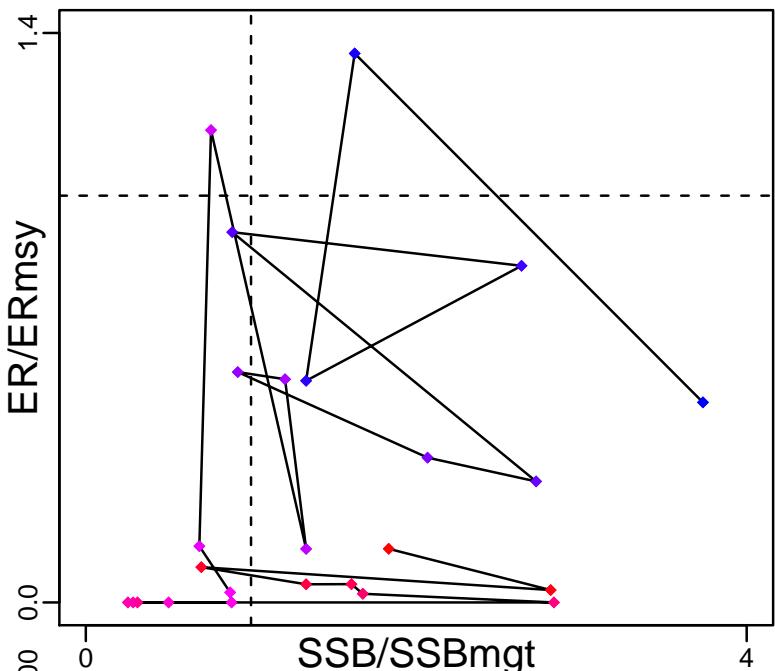
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA4-1993-2018-ICESIMP2018
Area	Sandeel Area 4
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2015, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2018	0.475
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	102,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	48,000
Flim	-	-	-
ERlim	-	-	-

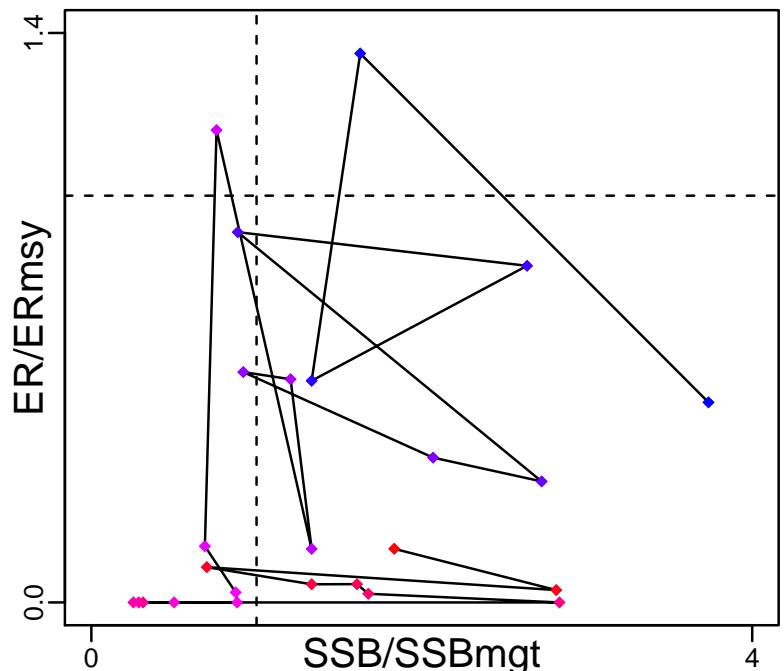
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2018	195,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	7.22×10^{10}	-	0	
F	F-1/yr	2018	0.047	-	1 to 2	
ER	ER-calc-ratio	2018	0.063	-	-	
TC	TC-MT	2018	17,500			
TL	TL-MT	2018	17,500			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.132			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.912			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Sand eel Sandeel Area 4 [SEELNSSA4]

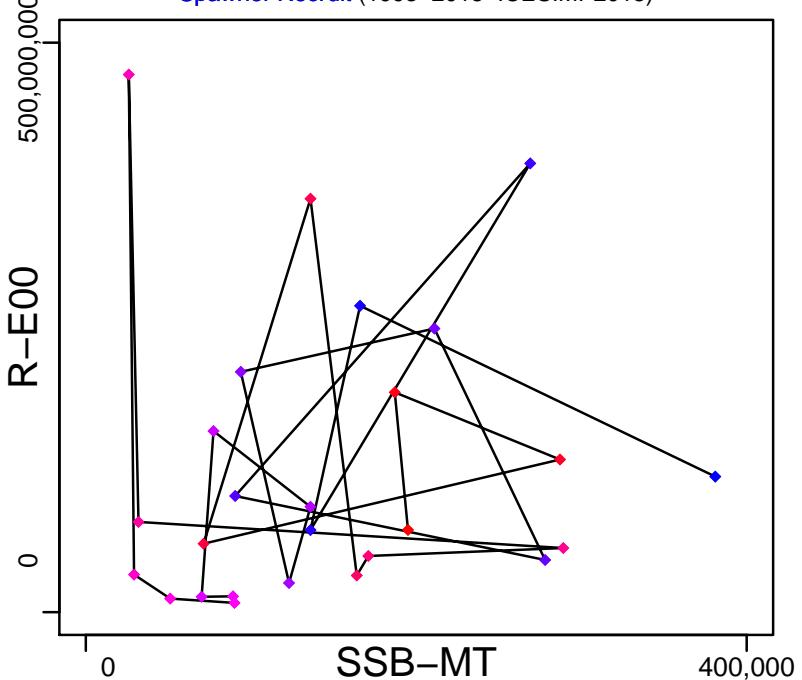
Kobe MSYpref (1993–2018–ICESIMP2018)



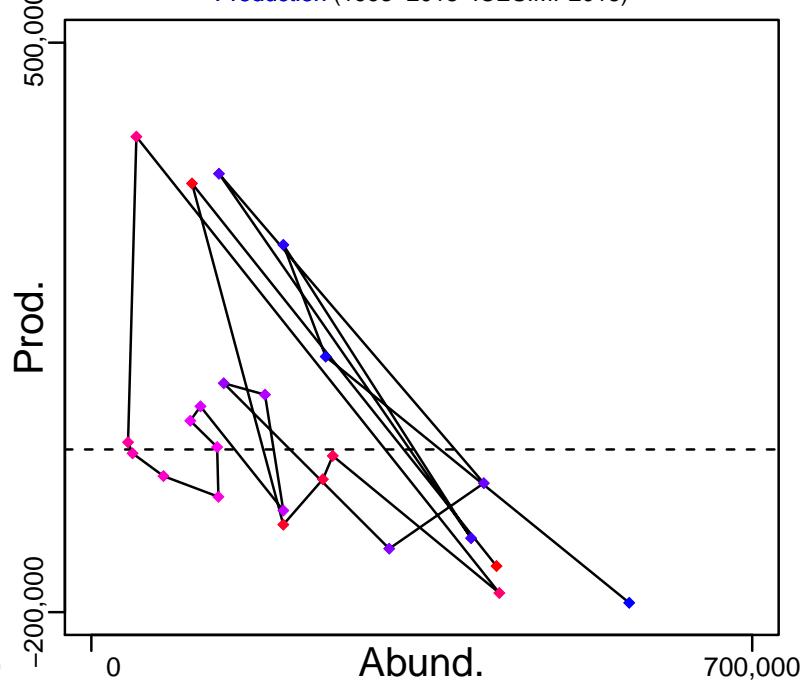
Kobe MGTpref (1993–2018–ICESIMP2018)



Spawner Recruit (1993–2018–ICESIMP2018)



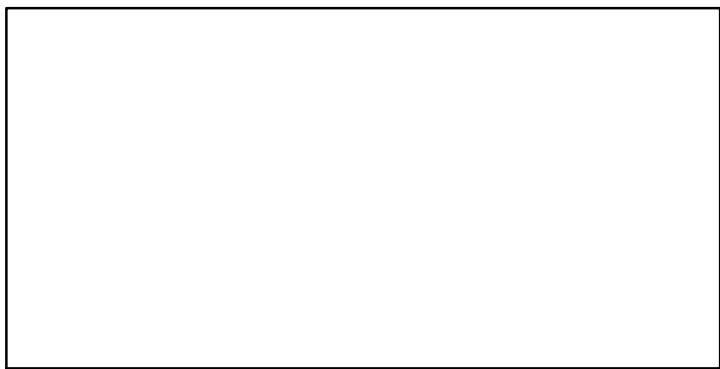
Production (1993–2018–ICESIMP2018)



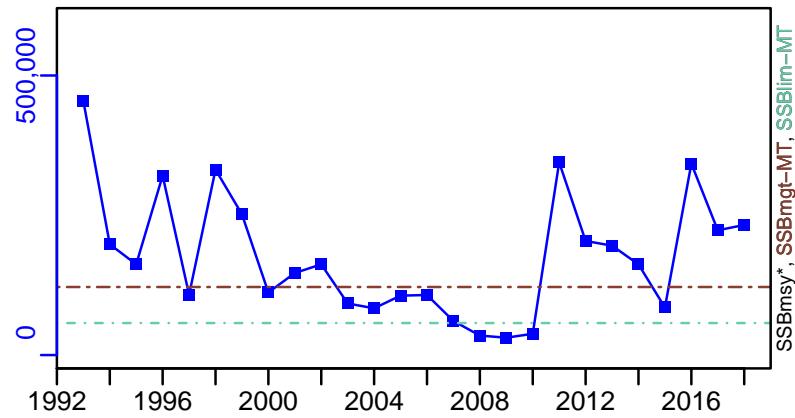
◆ Start Year ◆ End Year * No Data

Sand eel Sandeel Area 4 [SEELNSSA4]

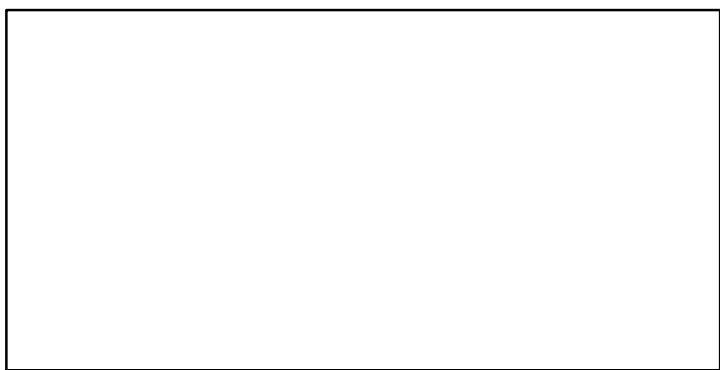
TB*



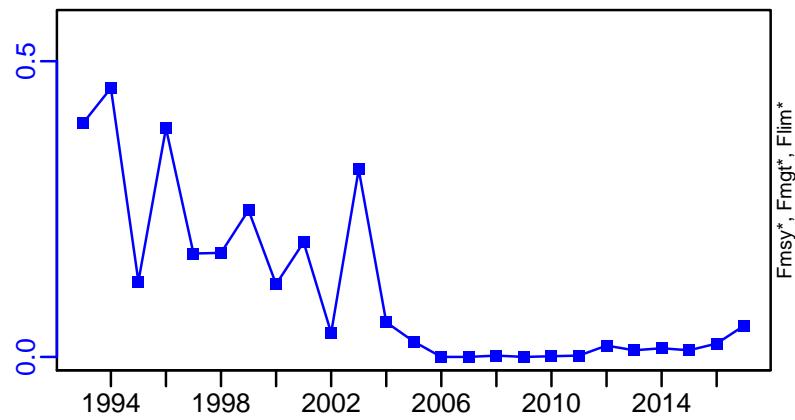
SSB-MT (1993–2018–ICESIMP2018)



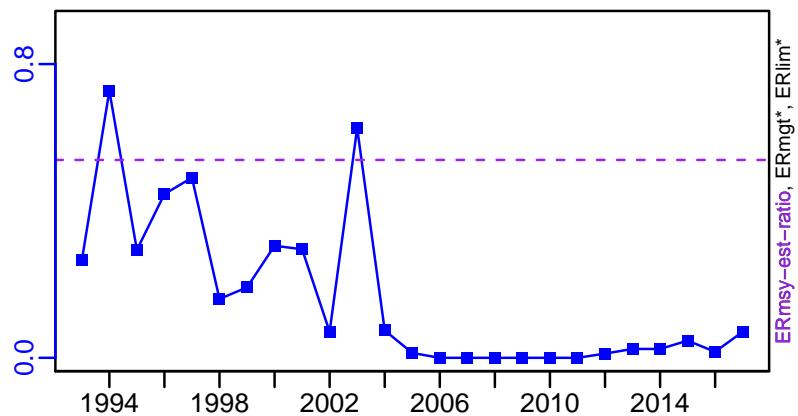
TN *



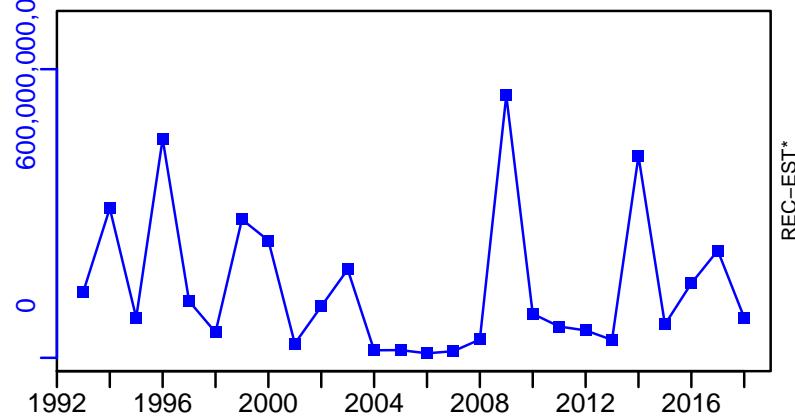
F-1/yr (1993–2018–ICESIMP2018)



ER-calc-ratio (1993–2018–ICESIMP2018)



R-E00 (1993–2018–ICESIMP2018)

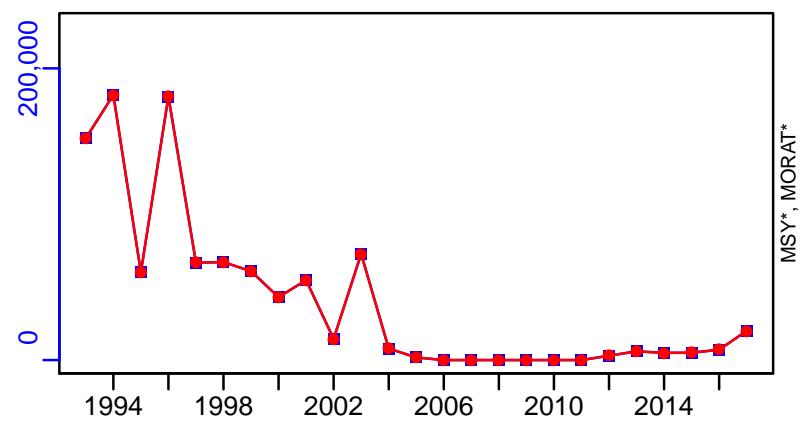


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

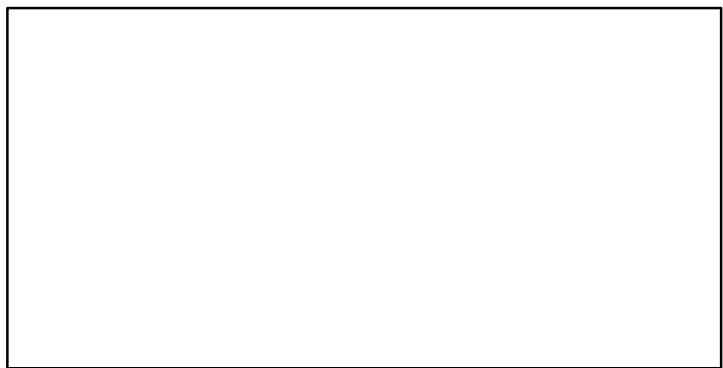
Sand eel Sandeel Area 4 [SEELNSSA4]

TC-MT, TL-MT, RecC* (1993–2018–ICESIMP2018)

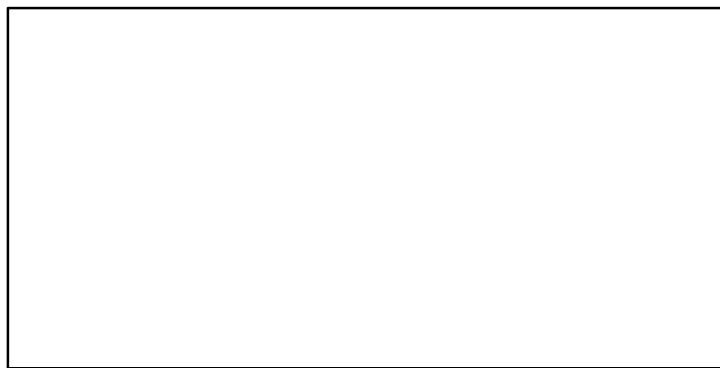
TAC*, Cpair*, Cadv*



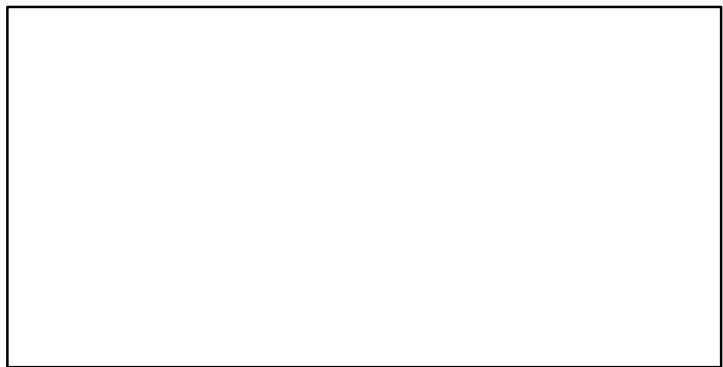
survB*



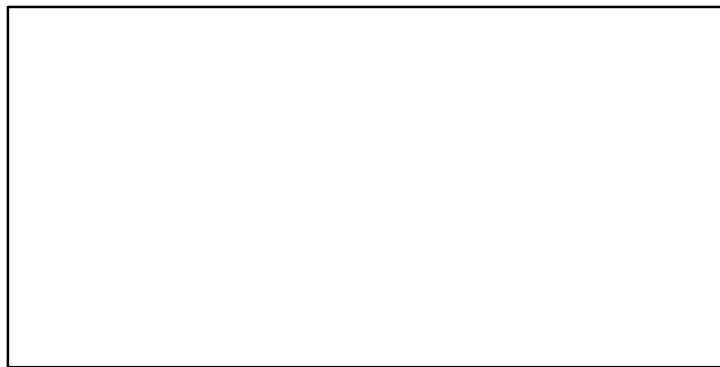
CPUE*



EFFORT*



CdivMSY*



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

Sand eel Sandeel Area 5 [SEELNSSA5]

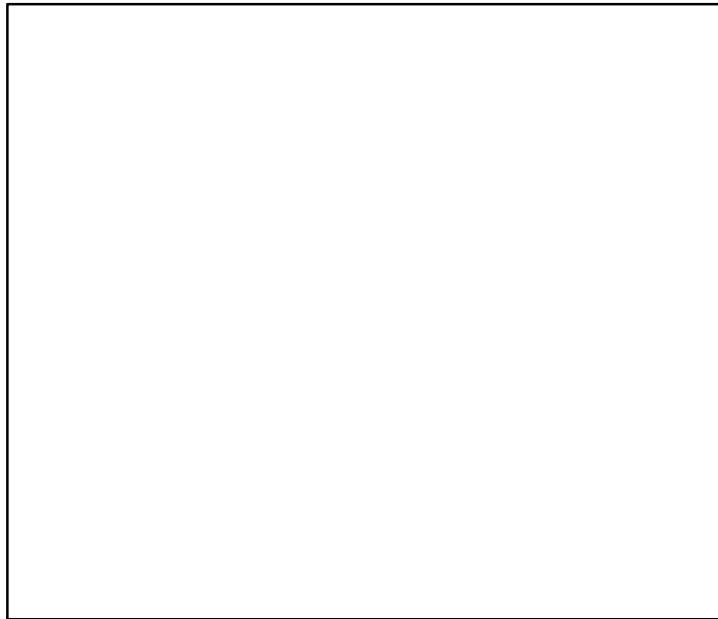
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA5-1982-2016-ICESIMP2018
Area	Sandeel Area 5
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2016, 2015, 2015

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

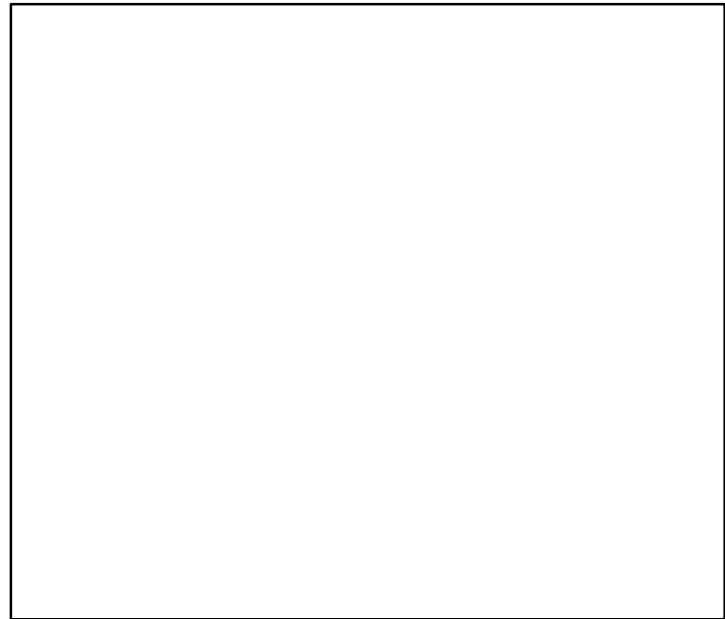
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	0		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 5 [SEELNSSA5]

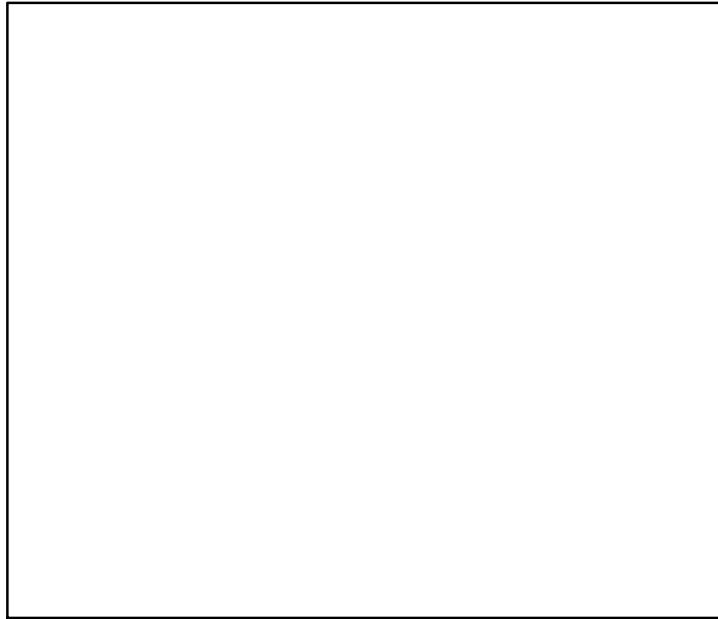
Kobe MSY*



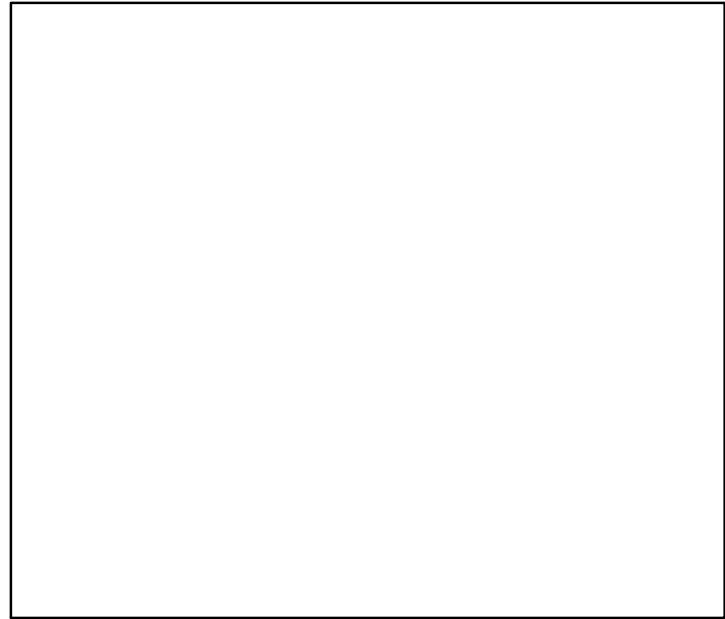
Kobe MGT*



Spawner Recruit*



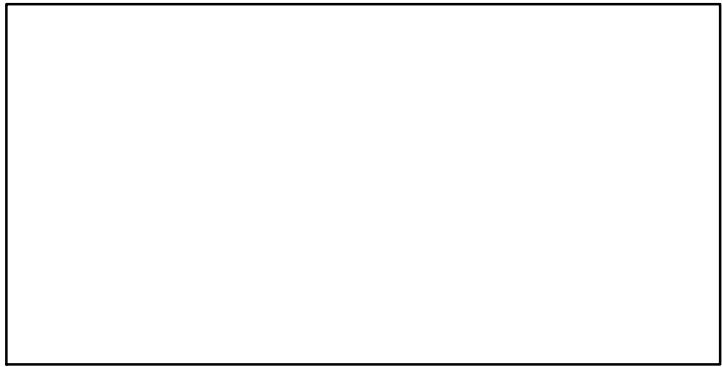
Production*



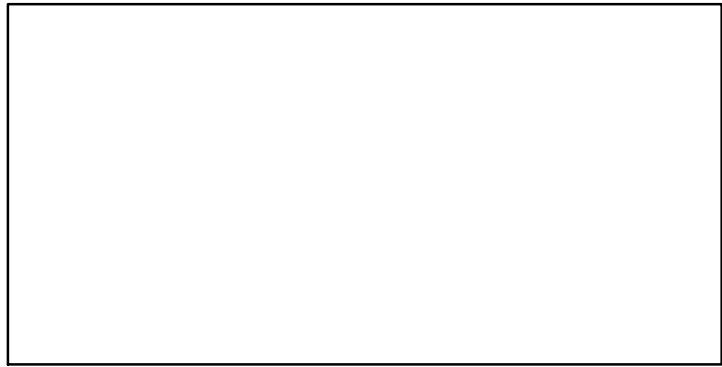
◆ Start Year ♦ End Year * No Data

Sand eel Sandeel Area 5 [SEELNSSA5]

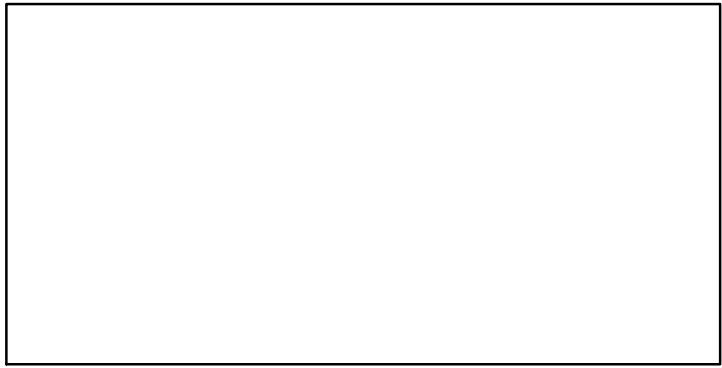
TB*



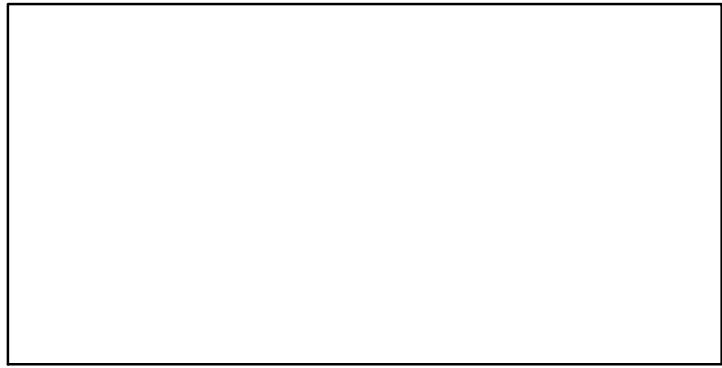
SSB*



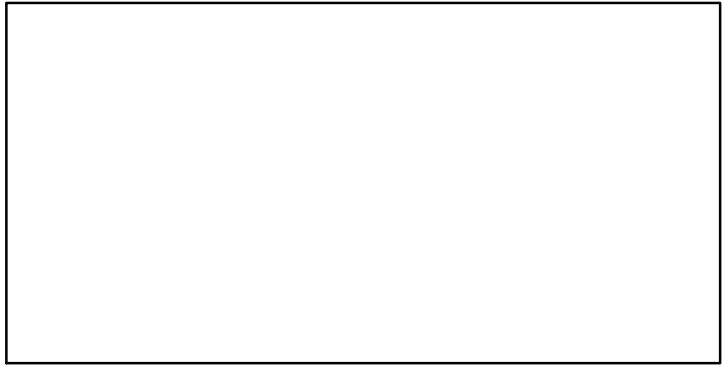
TN *



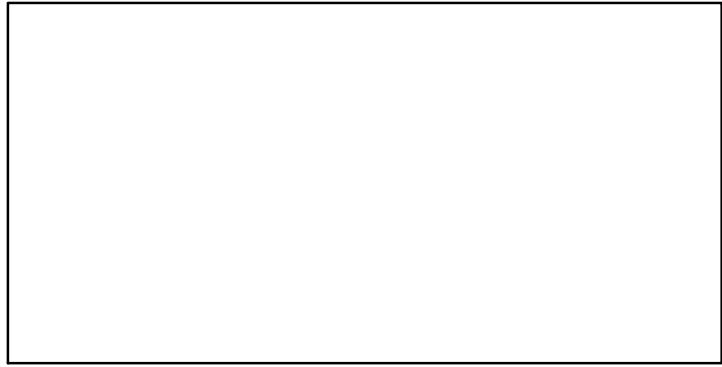
F*



ER*



Recruits*

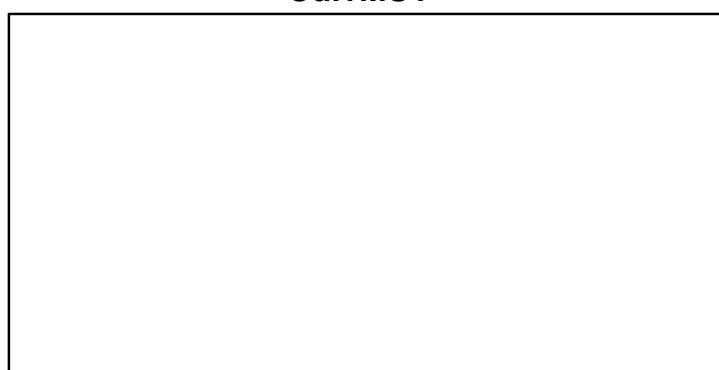
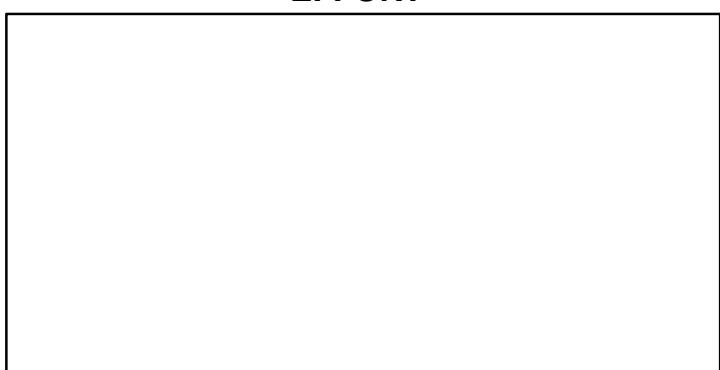
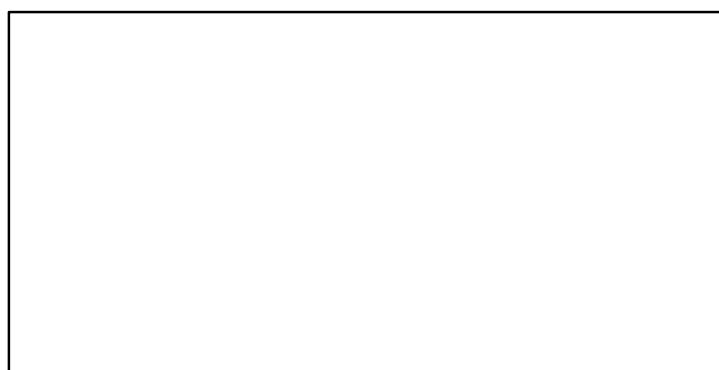
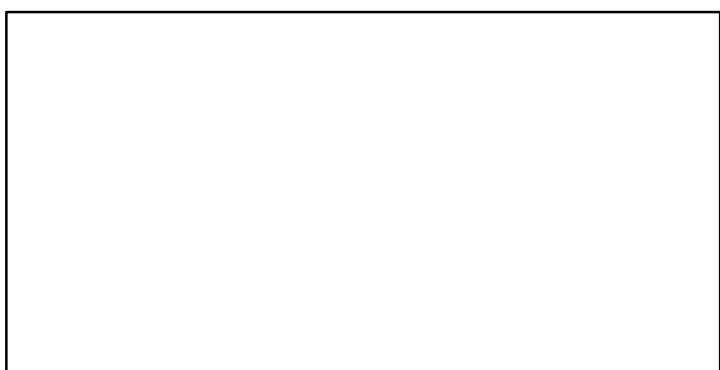
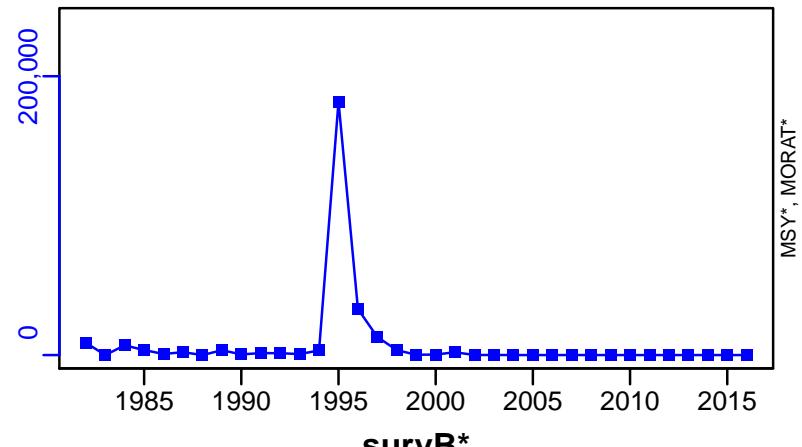


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sand eel Sandeel Area 5 [SEELNSSA5]

TC-MT, TL*, RecC* (1982–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Sand eel Sandeel Area 6 [SEELNSSA6]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA6-1983-2016-ICESIMP2018
Area	Sandeel Area 6
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2015, 2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	123		
TL	TL-MT	2016	123		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Sand eel Sandeel Area 6 [SEELNSSA6]

TB*



SSB*



TN *



F*



ER*



Recruits*

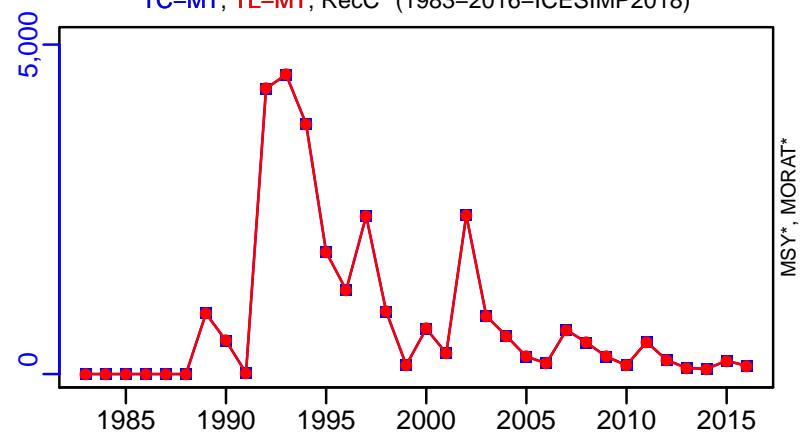


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

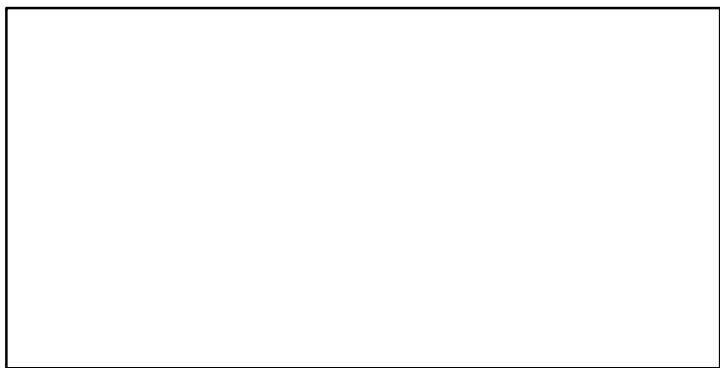
Sand eel Sandeel Area 6 [SEELNSSA6]

TC-MT, TL-MT, RecC* (1983–2016–ICESIMP2018)

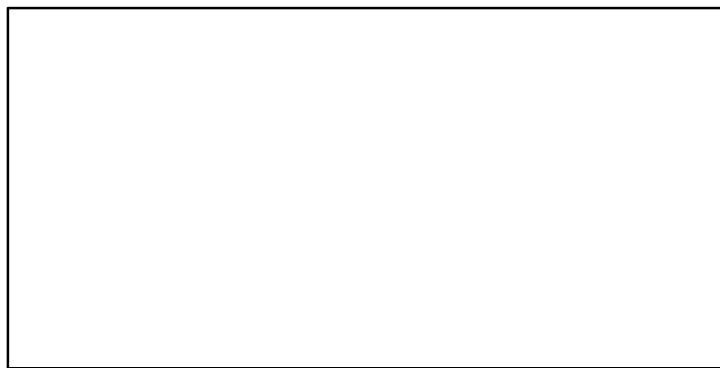
TAC*, Cpair*, Cadv*



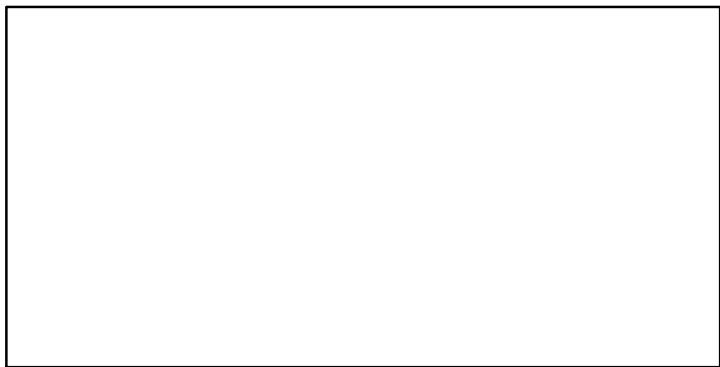
survB*



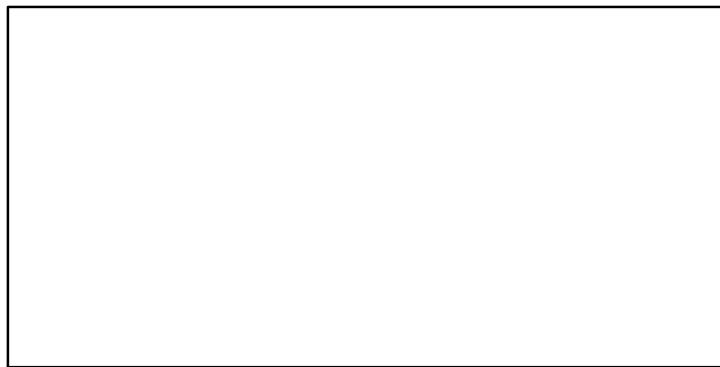
CPUE*



EFFORT*



CdivMSY*



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

Sand eel Sandeel Area 7 [SEELNSSA7]

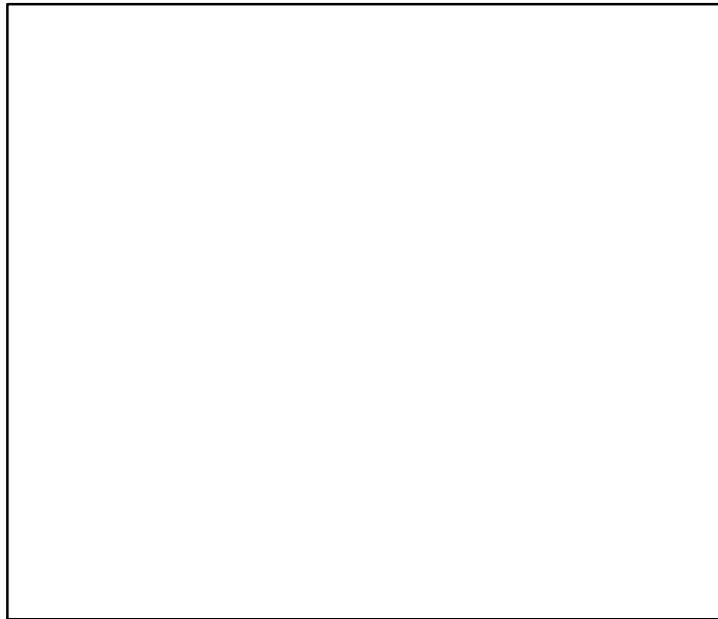
Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA7-1983-2016-ICESIMP2018
Area	Sandeel Area 7
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2015, 2015, 2016

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

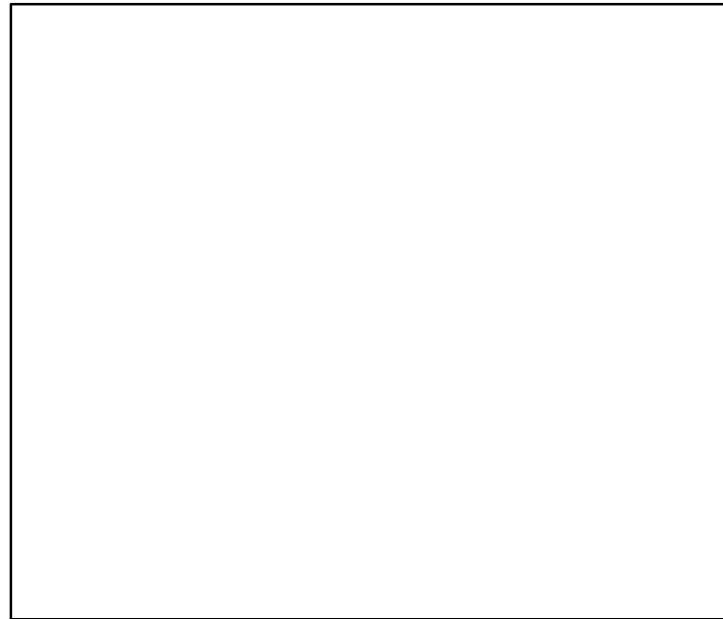
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	0		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 7 [SEELNSSA7]

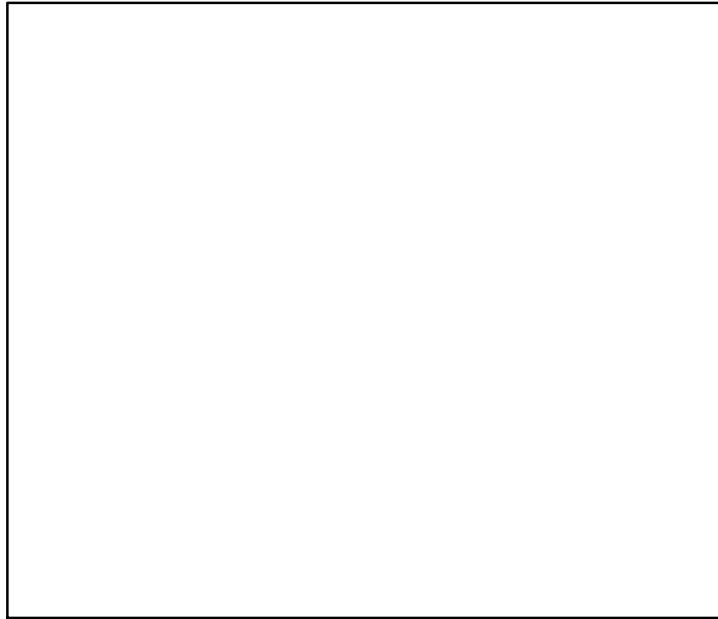
Kobe MSY*



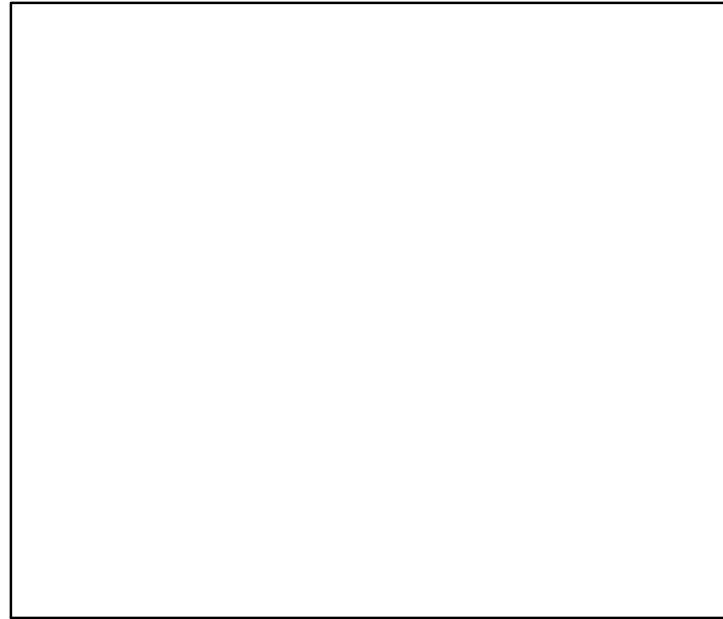
Kobe MGT*



Spawner Recruit*



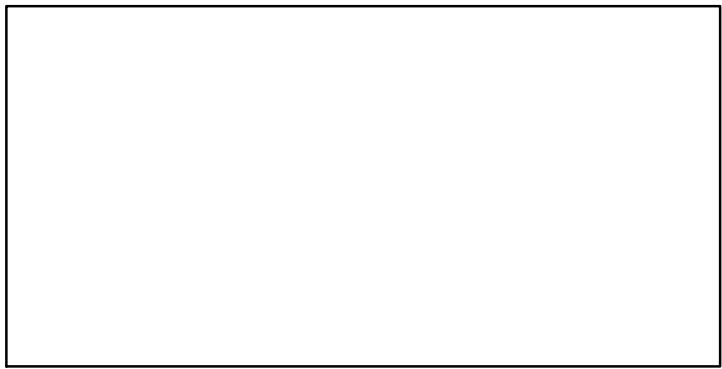
Production*



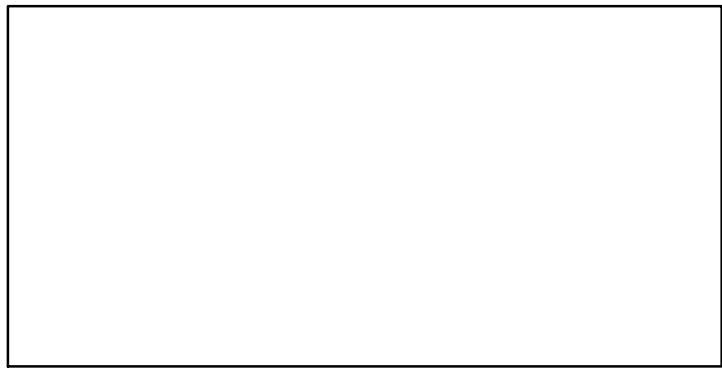
◆ Start Year ♦ End Year * No Data

Sand eel Sandeel Area 7 [SEELNSSA7]

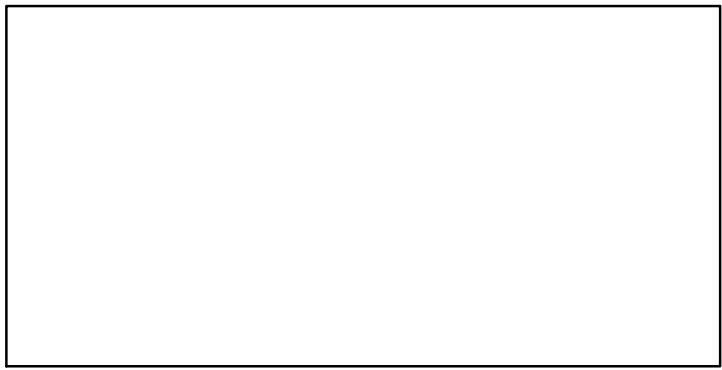
TB*



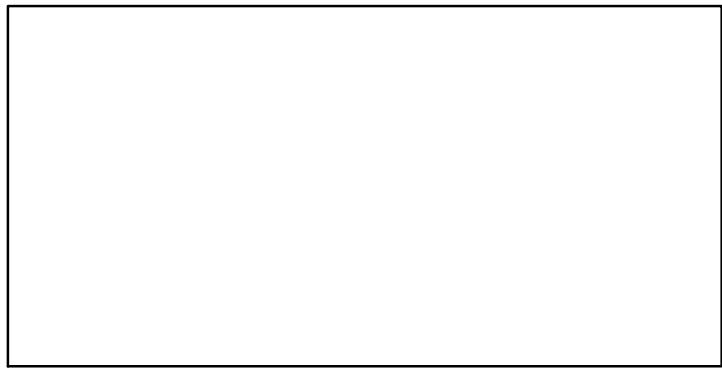
SSB*



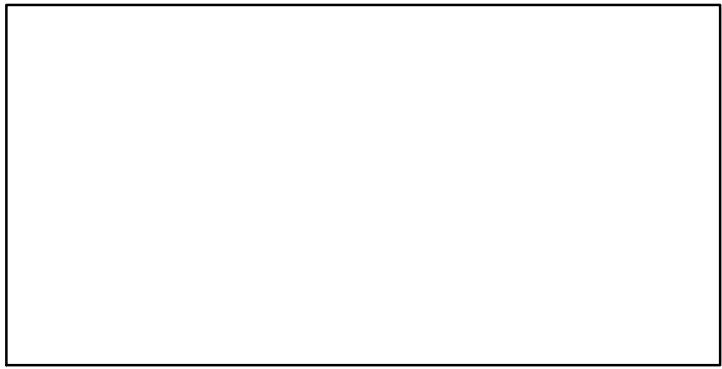
TN *



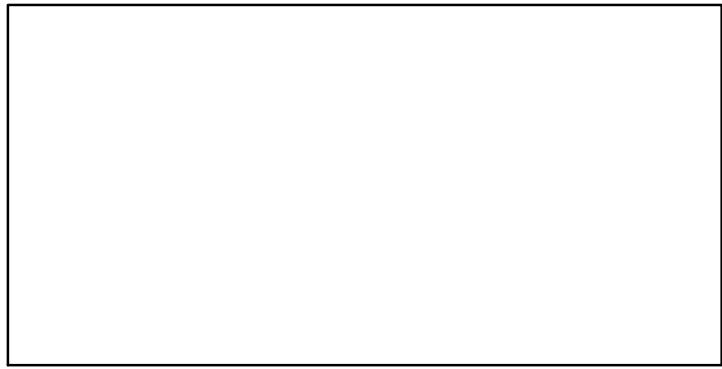
F*



ER*



Recruits*

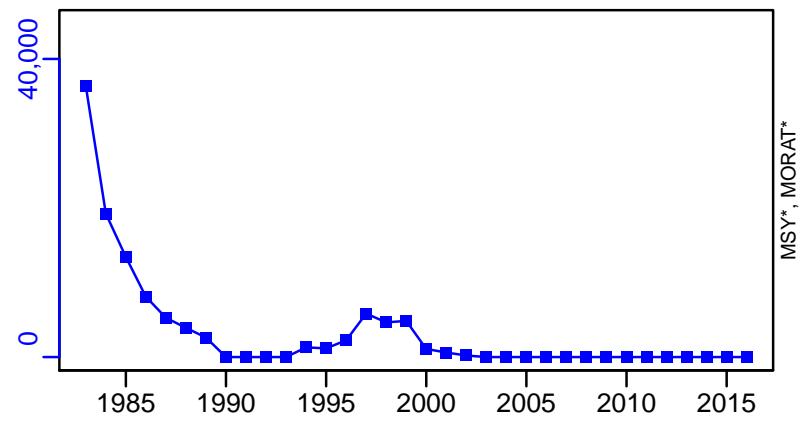


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sand eel Sandeel Area 7 [SEELNSSA7]

TC-MT, TL*, RecC* (1983–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

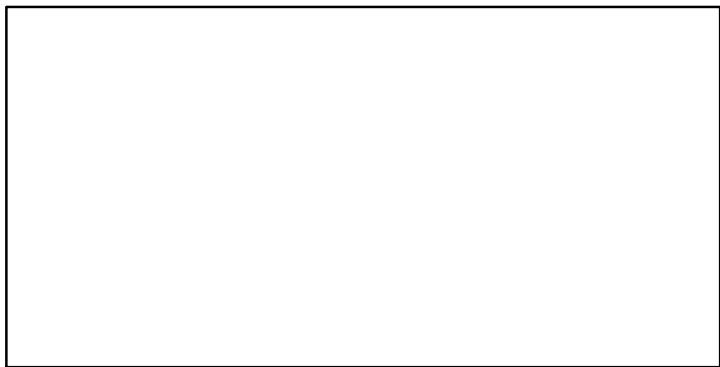
MSY*, MORAT*



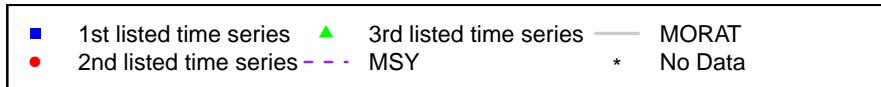
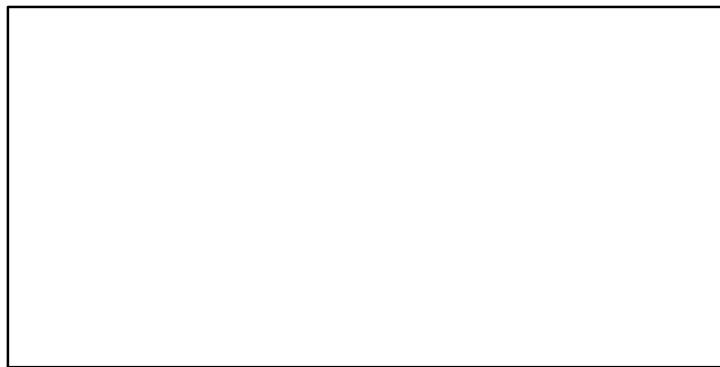
CPUE*



EFFORT*



CdivMSY*



Sand eel West of Scotland [SEELVla]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELVla-1970-2015-ICESIMP2018
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Sand eel West of Scotland [SEELVla]

TB*



SSB*



TN *



F*



ER*



Recruits*

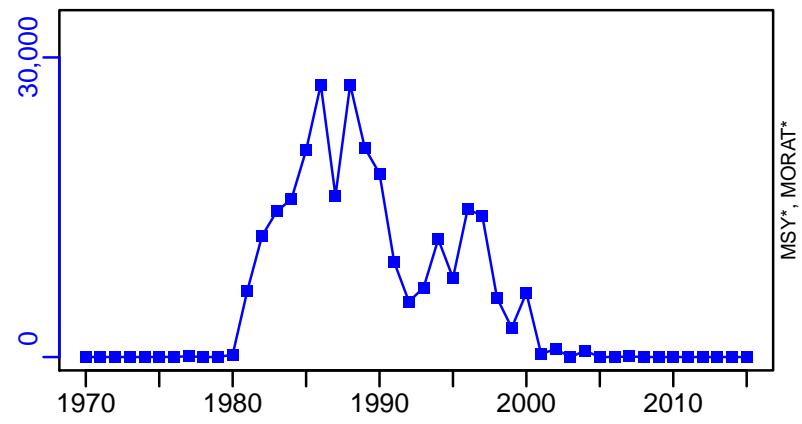


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sand eel West of Scotland [SEELVla]

TL-MT, TC*, RecC* (1970–2015–ICESIMP2018)

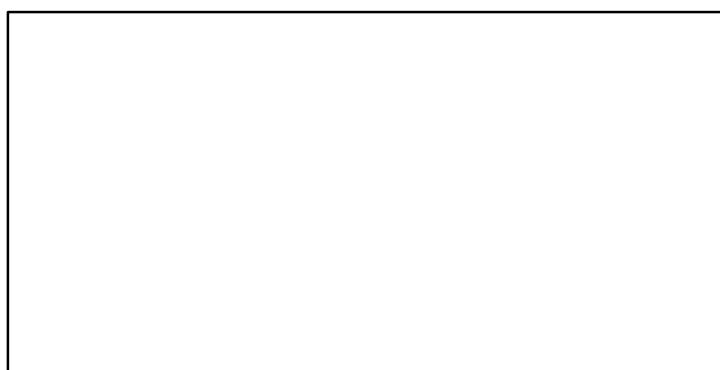
TAC*, Cpair*, Cadv*



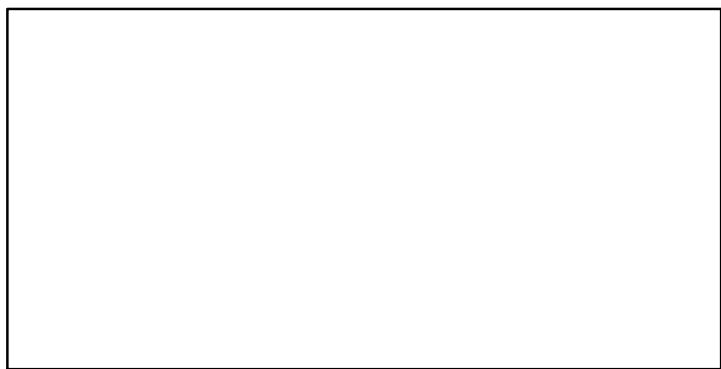
survB*



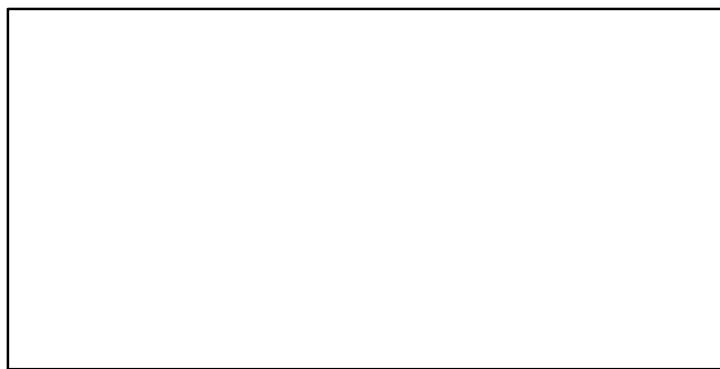
CPUE*



EFFORT*



CdivMSY*



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

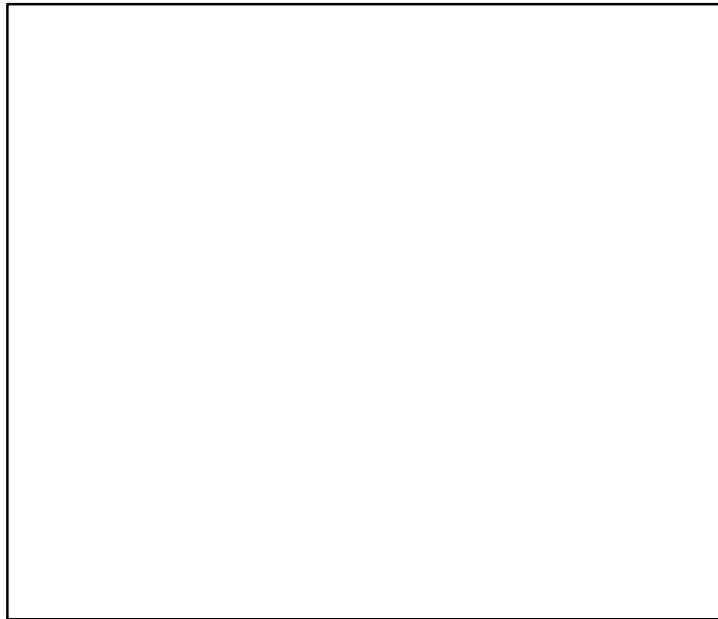
Smalleyed ray ICES 7de [SERAYVIIde]

Metadata	
Scientific Name	Raja microcellata
Current Assess ID	WGEF-SERAYVIIde-2009-2015-ICESIMP2018
Area	ICES 7de
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

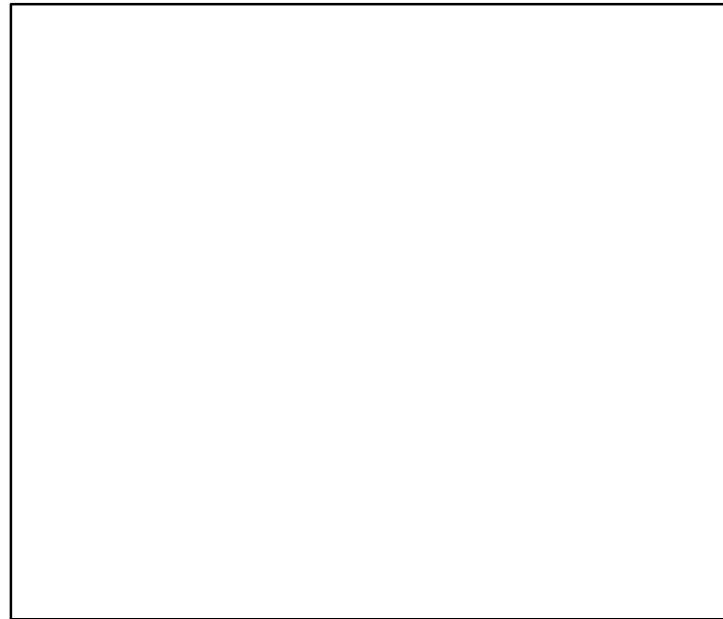
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	56		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

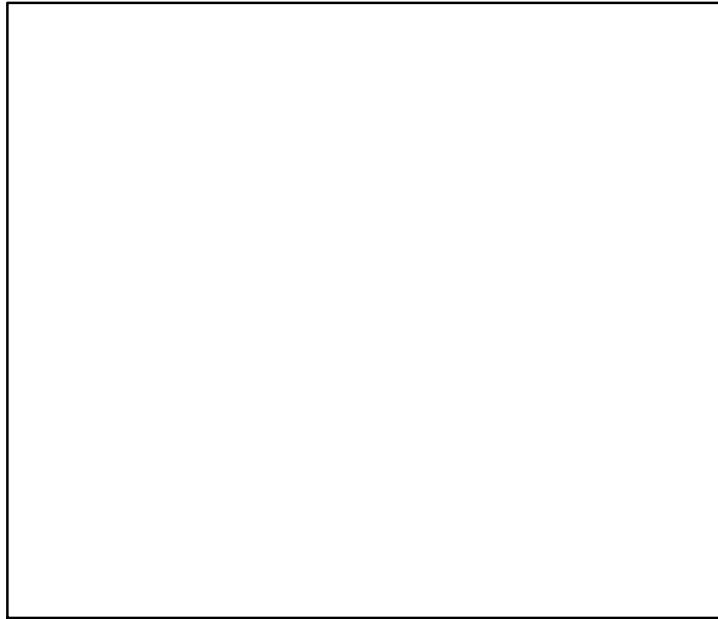
Kobe MSY*



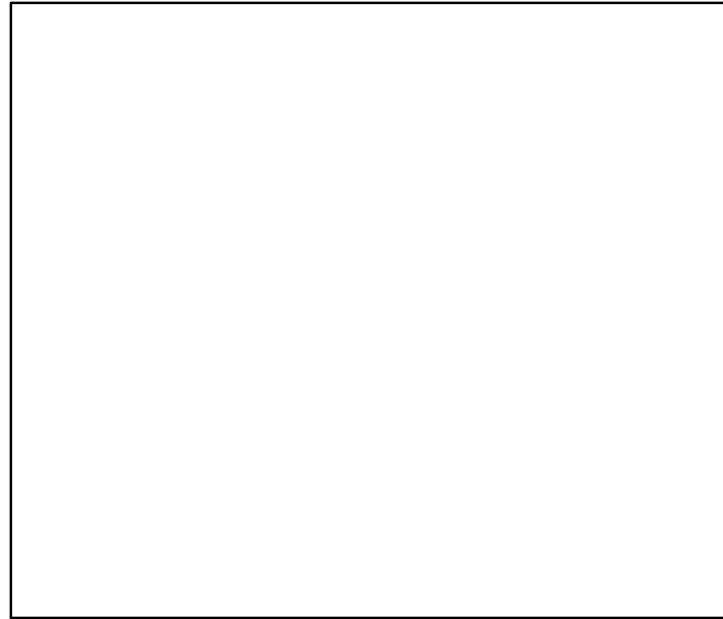
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

TB*



SSB*



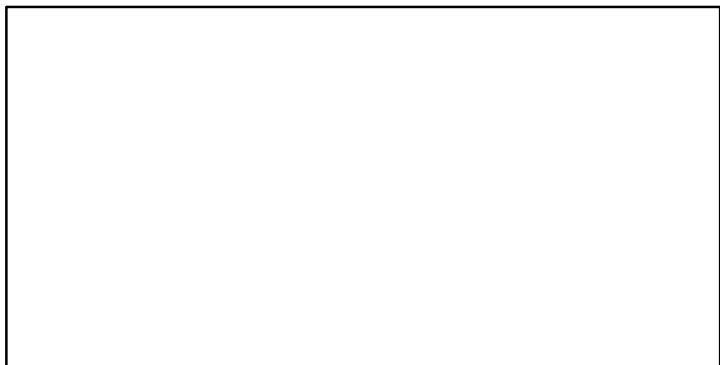
TN *



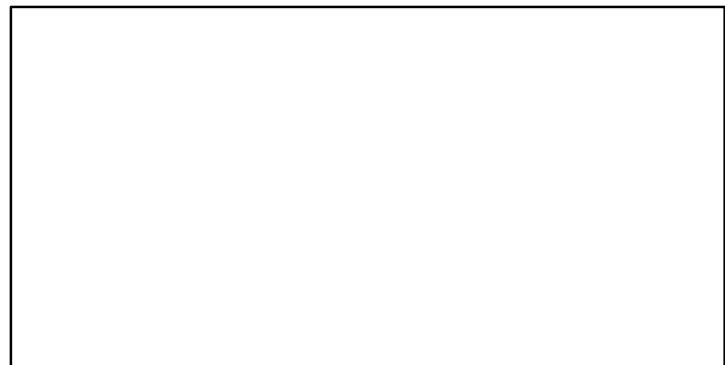
F*



ER*



Recruits*

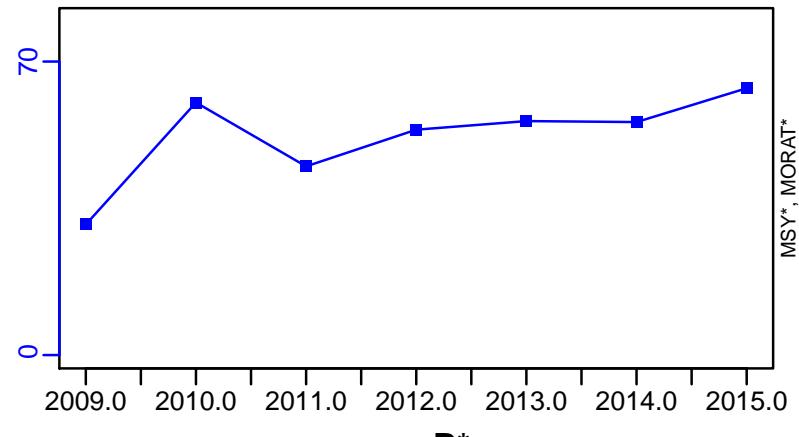


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Smalleyed ray ICES 7de [SERAYVIIde]

TL-MT, TC*, RecC* (2009–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*

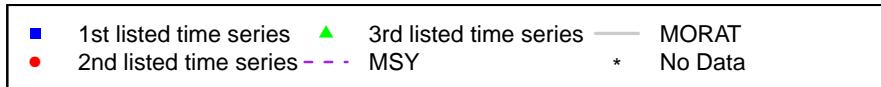


survB*

CPUE*

EFFORT*

CdivMSY*



Smalleyed ray Celtic Sea [SERAYVIIIf-g]

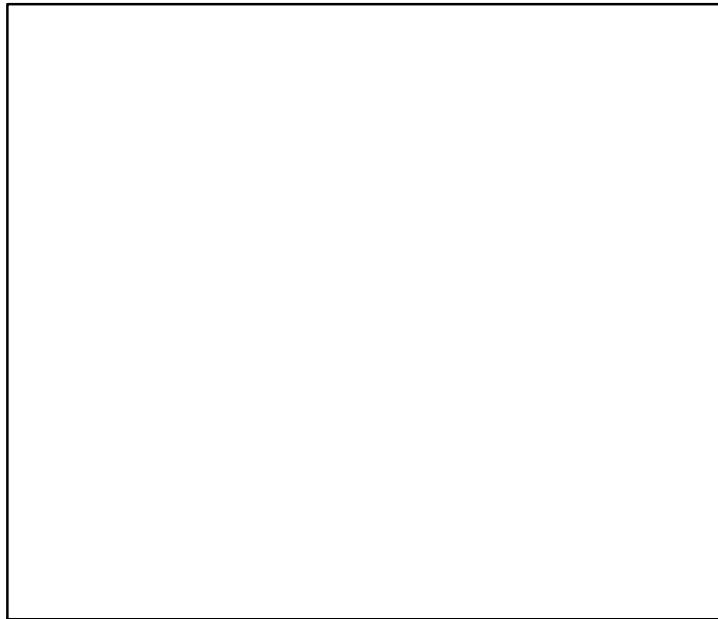
Metadata	
Scientific Name	Raja microcellata
Current Assess ID	WGEF-SERAYVIIIf-g-1993-2015-ICESIMP2018
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

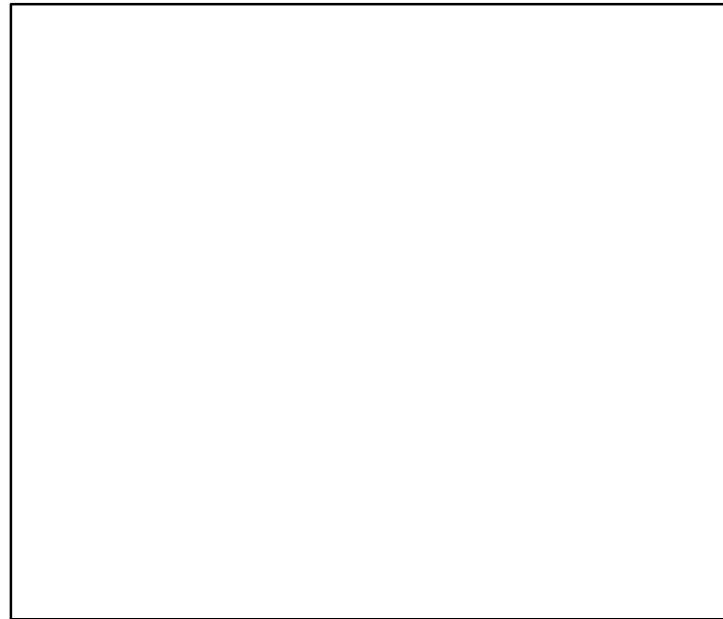
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	2.03	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	208		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Smalleyed ray Celtic Sea [SERAYVIIIf-g]

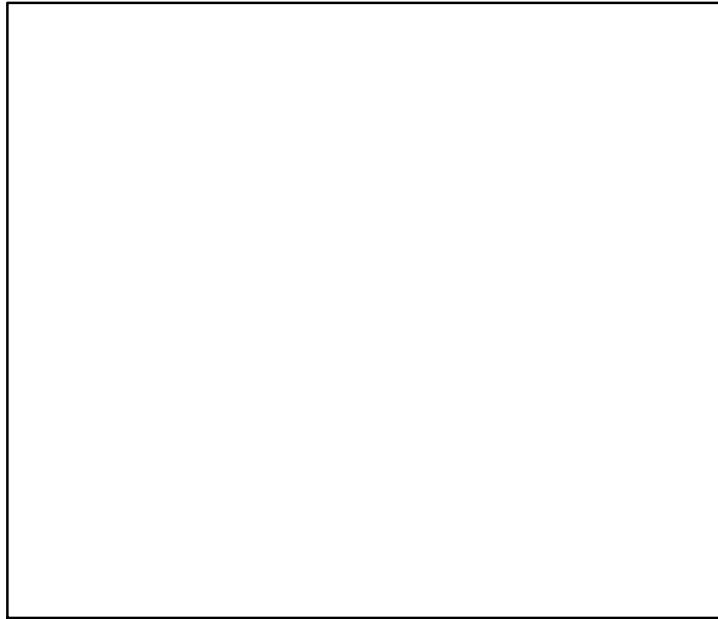
Kobe MSY*



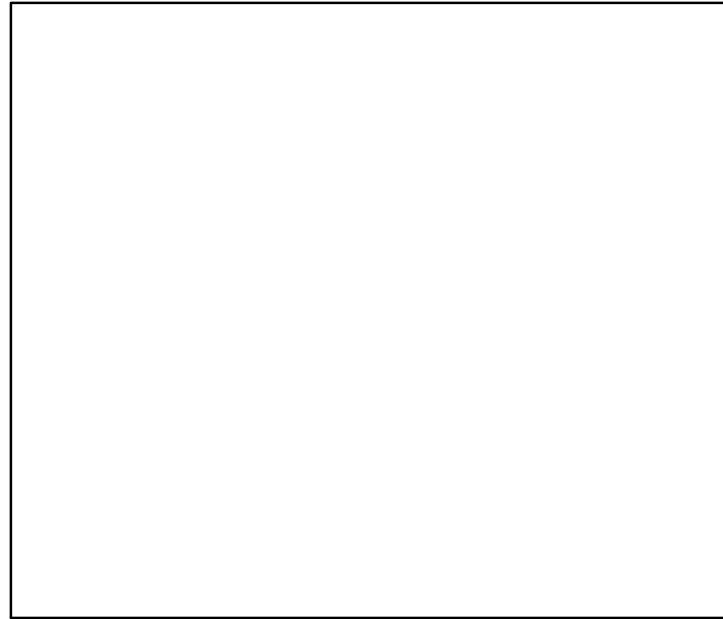
Kobe MGT*



Spawner Recruit*



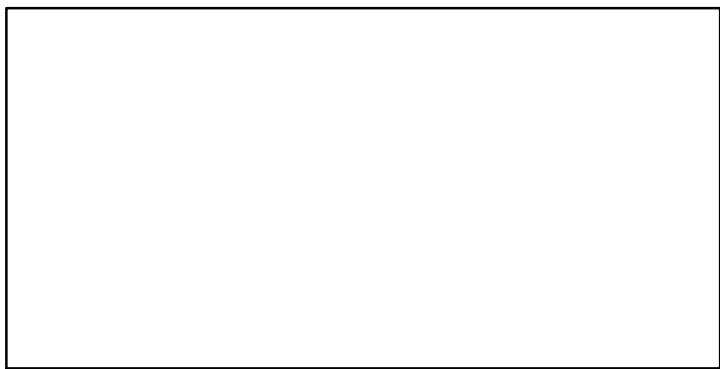
Production*



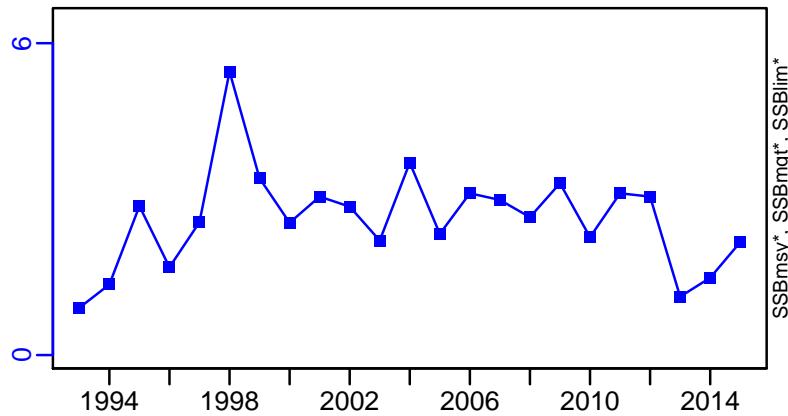
◆ Start Year ♦ End Year * No Data

Smalleyed ray Celtic Sea [SERAYVIIIf-g]

TB*

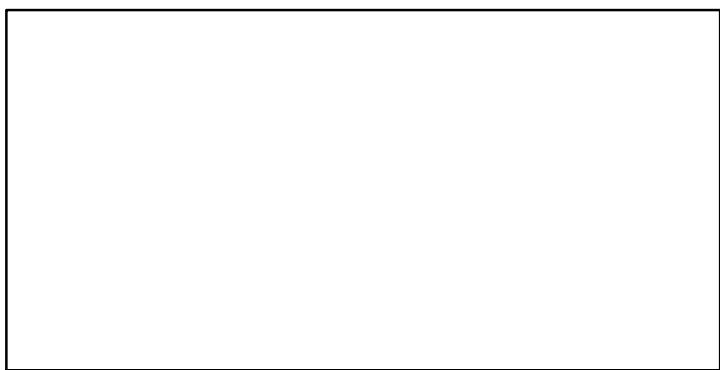


SSB-index (1993–2015–ICESIMP2018)

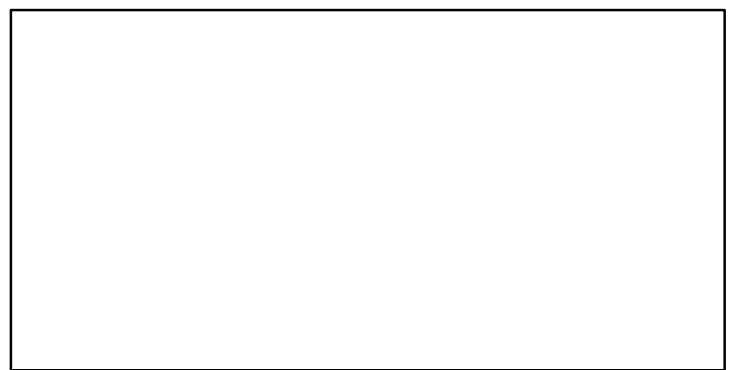


SSBmsy*, SSBmgt*, SSBLim*

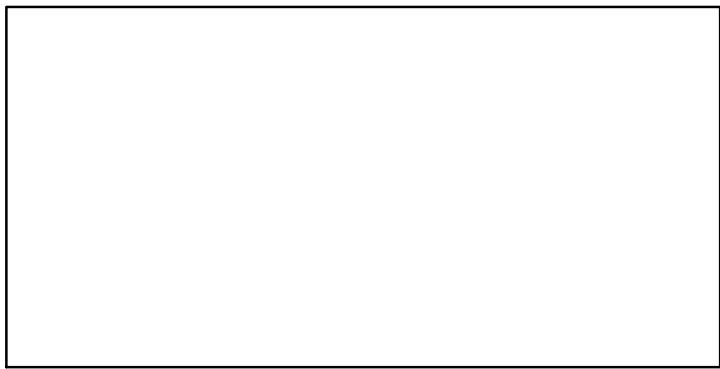
TN *



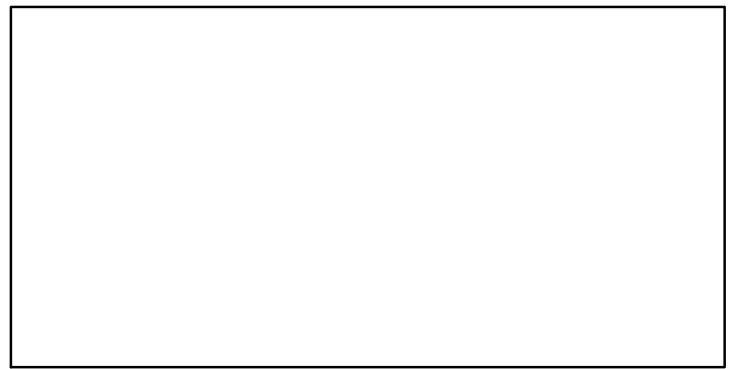
F*



ER*



Recruits*

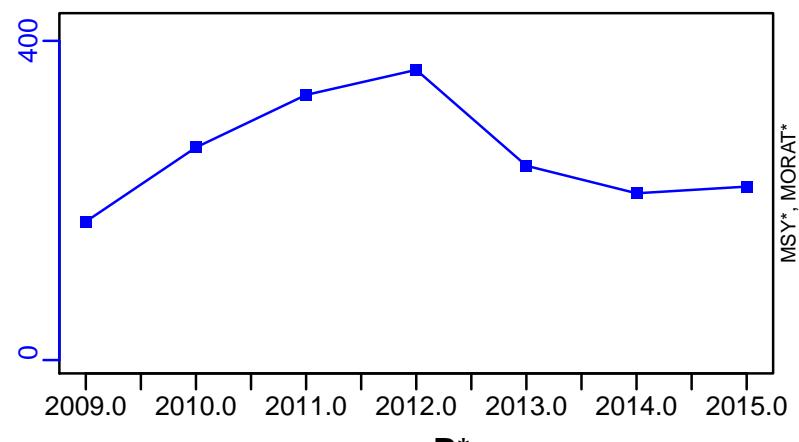


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Smalleyed ray Celtic Sea [SERAYVIIIf-g]

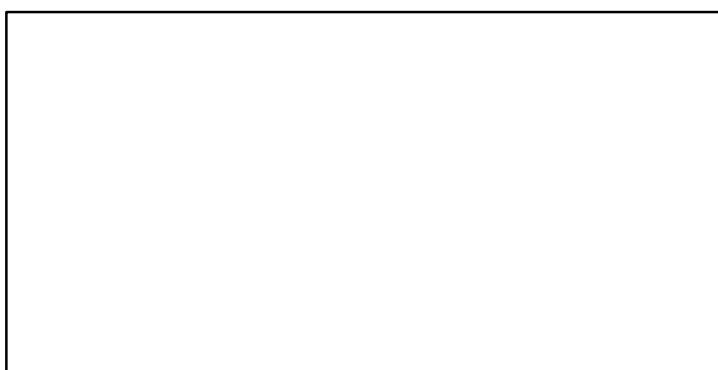
TL-MT, TC*, RecC* (1993–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*

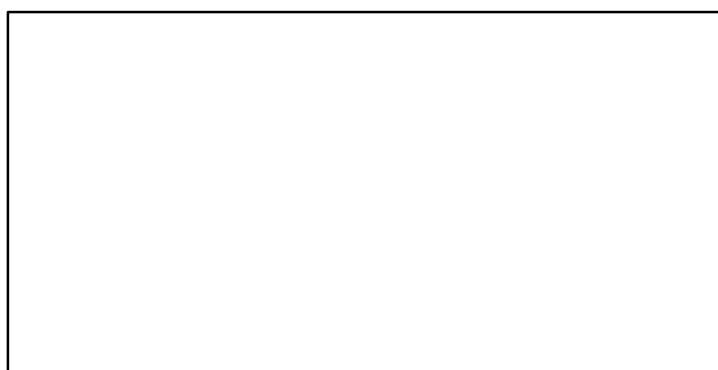


survB*

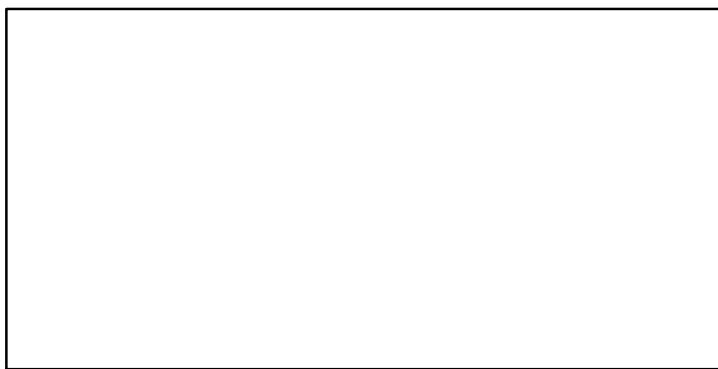
MSY*, MORAT*



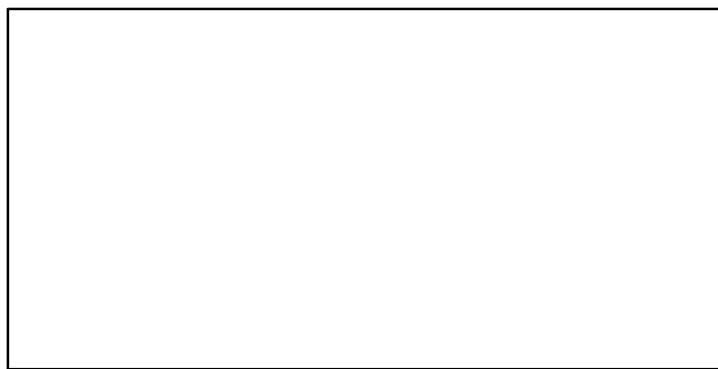
CPUE*



EFFORT*



CdivMSY*



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

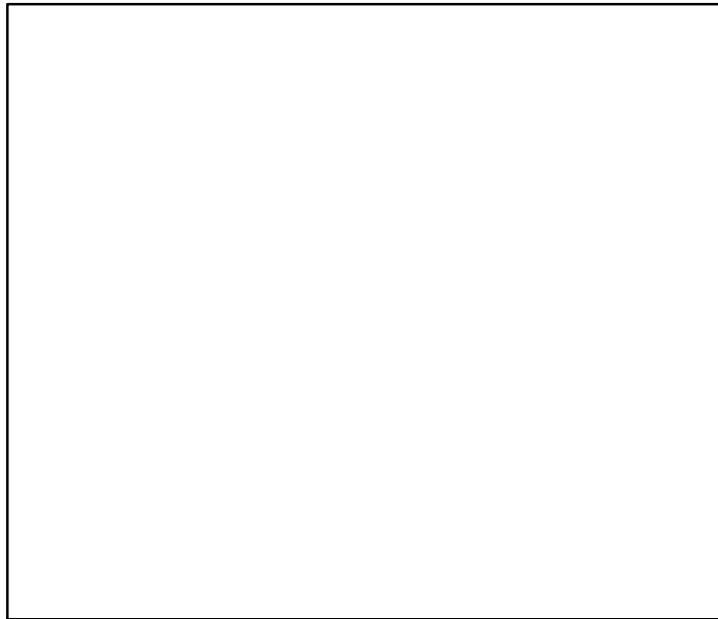
Shagreen ray ICES 6-7 [SGRAYVI-VII]

Metadata	
Scientific Name	Leucoraja fullonica
Current Assess ID	WGEF-SGRAYVI-VII-2009-2015-ICESIMP2018
Area	ICES 6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

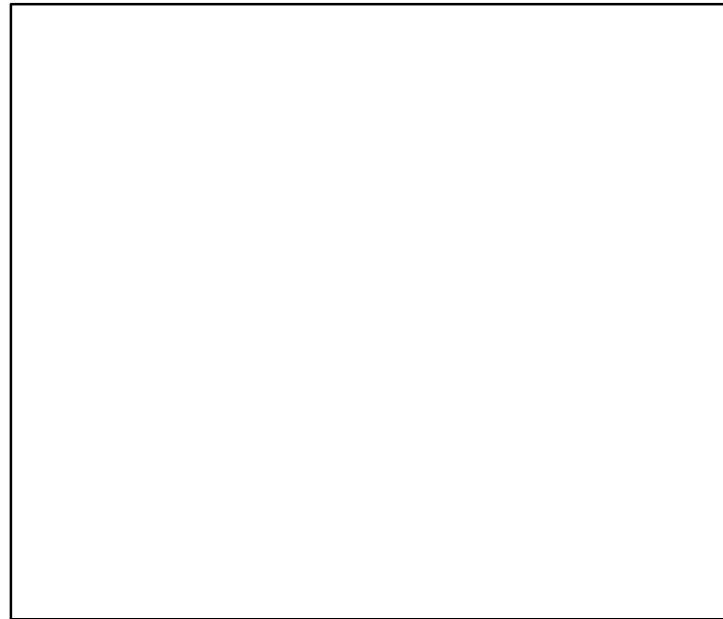
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	196		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

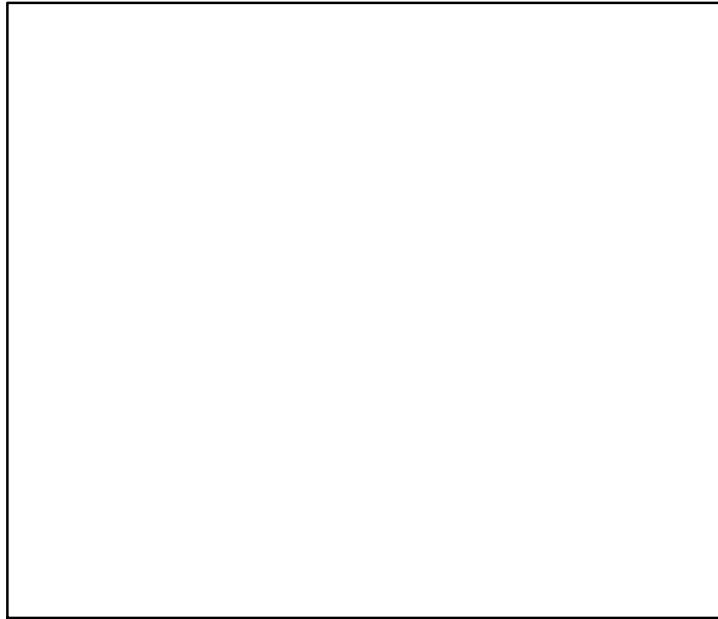
Kobe MSY*



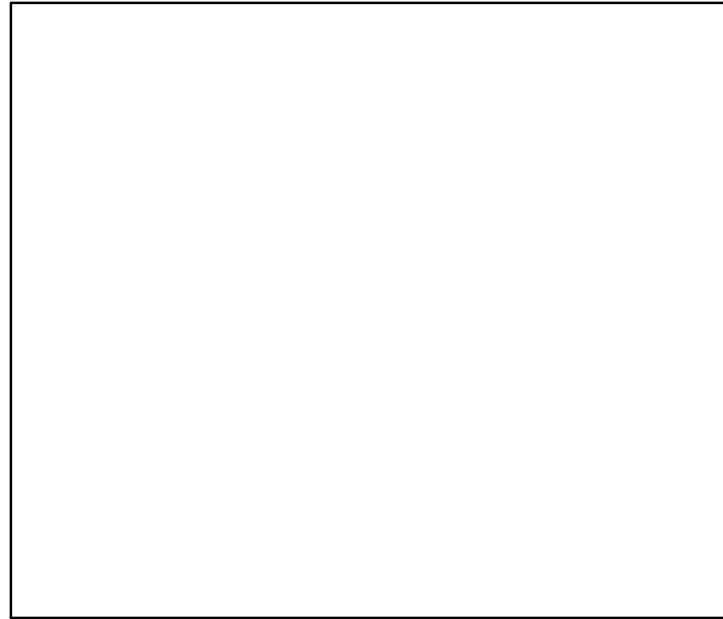
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Shagreen ray ICES 6–7 [SGRAYVI–VII]

TB*



SSB*



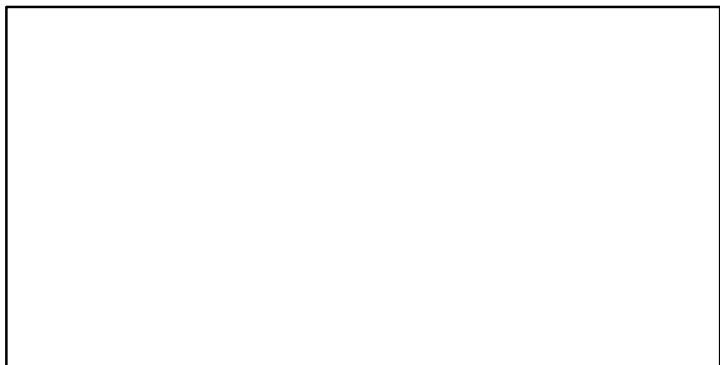
TN *



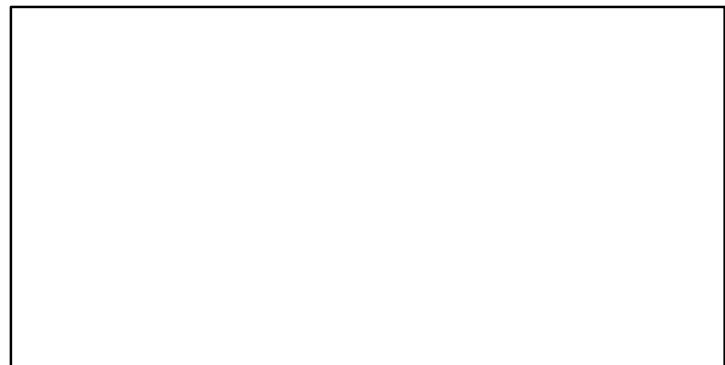
F*



ER*



Recruits*

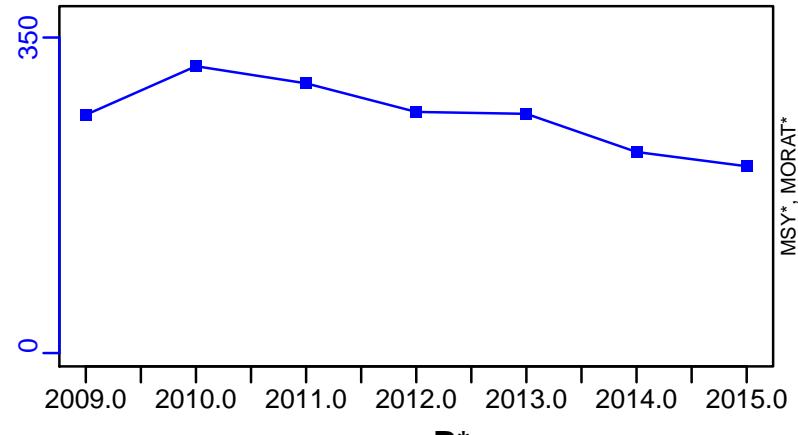


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Shagreen ray ICES 6–7 [SGRAYVI–VII]

TL–MT, TC*, RecC* (2009–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



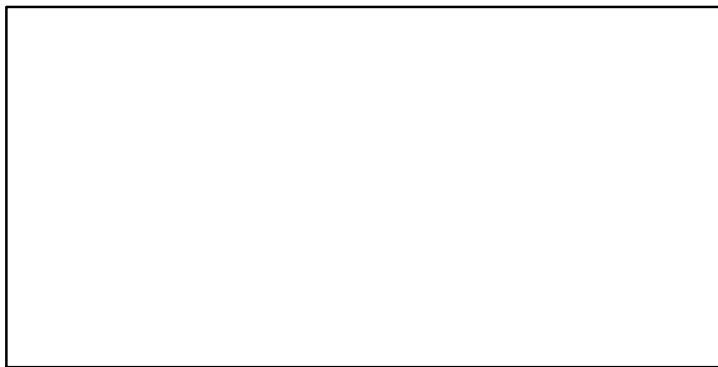
survB*



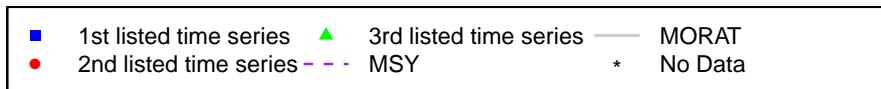
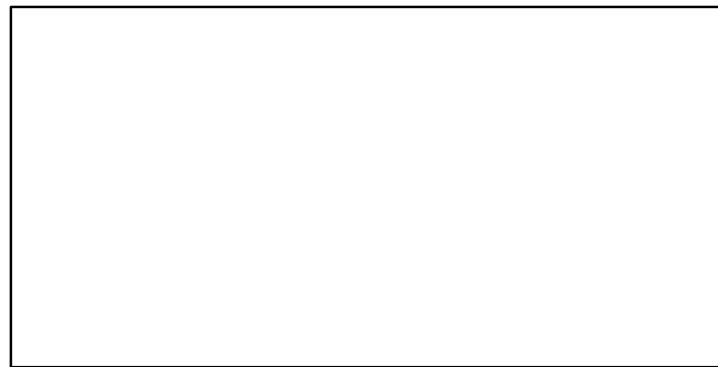
CPUE*



EFFORT*



CdivMSY*



Smooth hound Northeast Atlantic [SHSPPNEATL]

Metadata	
Scientific Name	Mustelus spp
Current Assess ID	WGEF-SHSPPNEATL-2005-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	2.33	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	3410		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

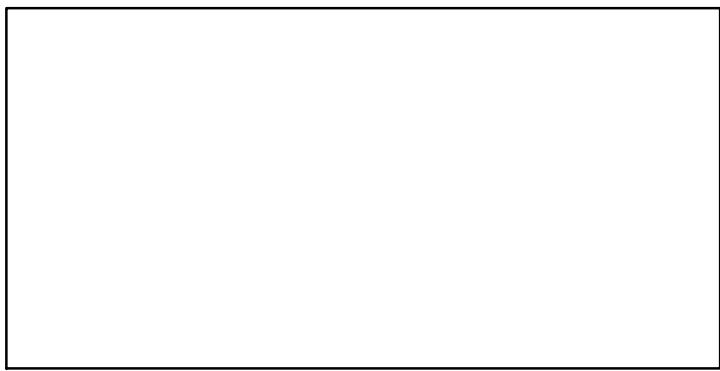
Spawner Recruit*

Production*

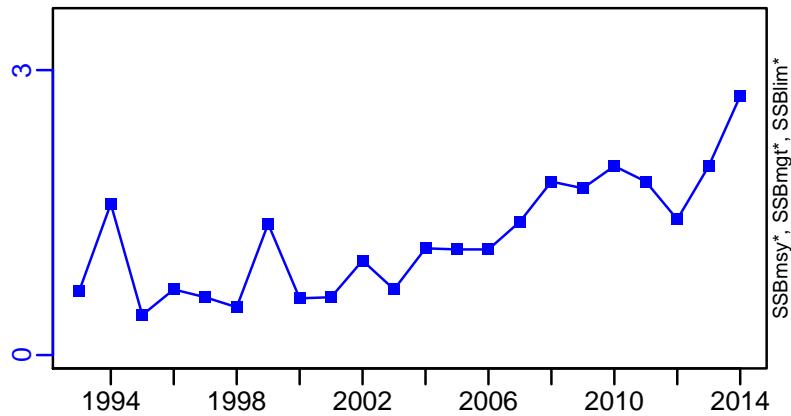
◆ Start Year ◆ End Year * No Data

Smooth hound Northeast Atlantic [SHSPPNEATL]

TB*



SSB-index (1993–2014–ICESIMP2018)



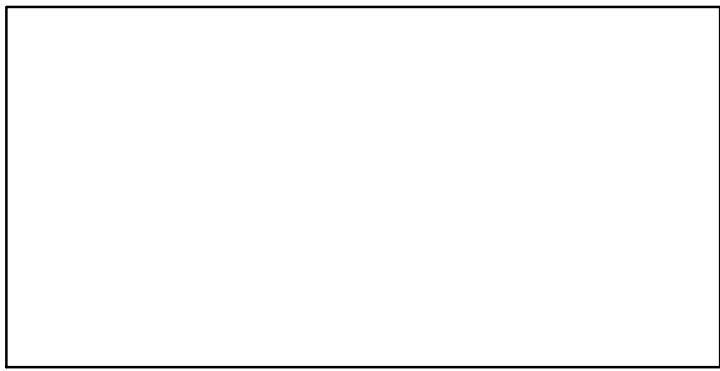
TN *



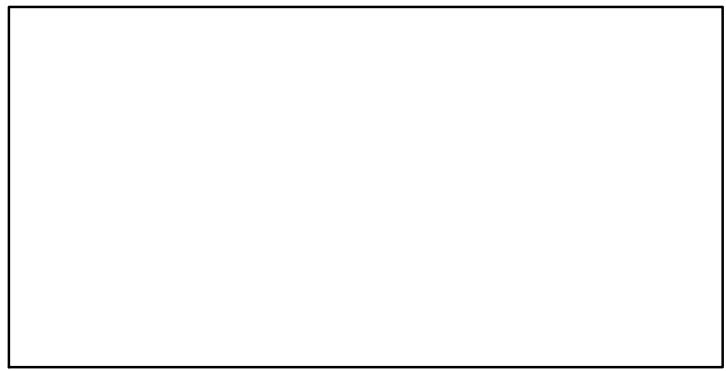
F*



ER*



Recruits*

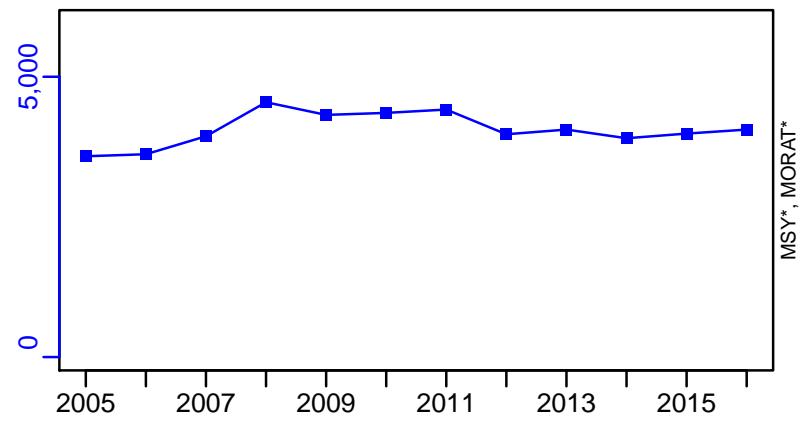


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Smooth hound Northeast Atlantic [SHSPPNEATL]

TL-MT, TC*, RecC* (2005–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



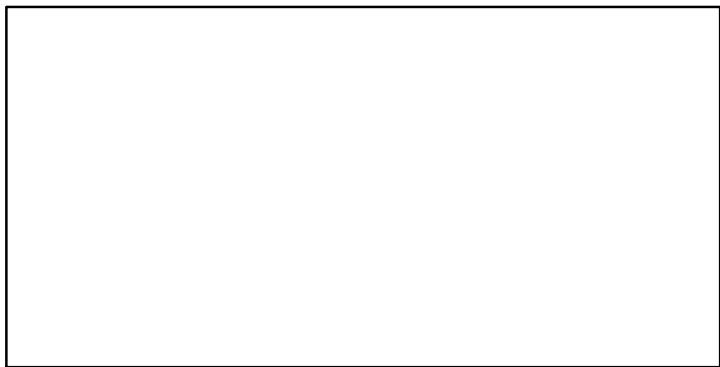
survB*



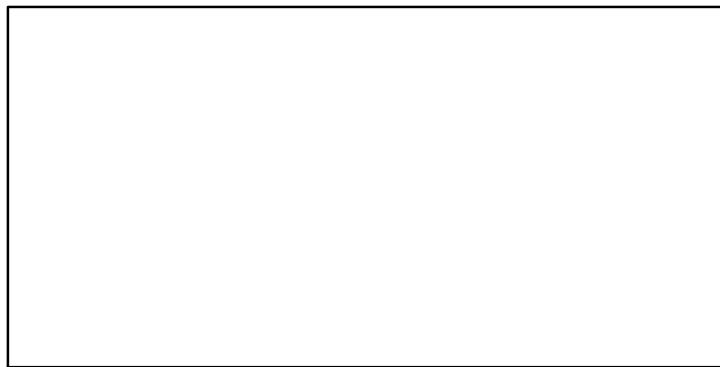
CPUE*



EFFORT*



CdivMSY*



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

Common sole Celtic Sea [SOLECS]

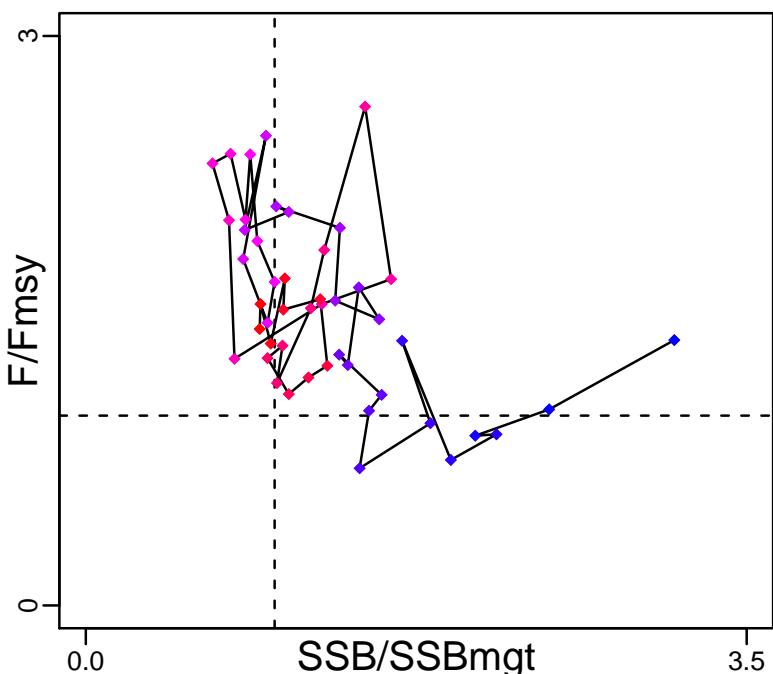
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLECS-1970-2018-ICESIMP2018
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	4199
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.274
ERmsy	ERmsy-est-ratio	2018	0.392
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	2400
Fmgt	Fmgt-1/yr	2018	0.274
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	1133
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	1700
Flim	Flim-1/yr	2018	0.488
ERlim	-	-	-

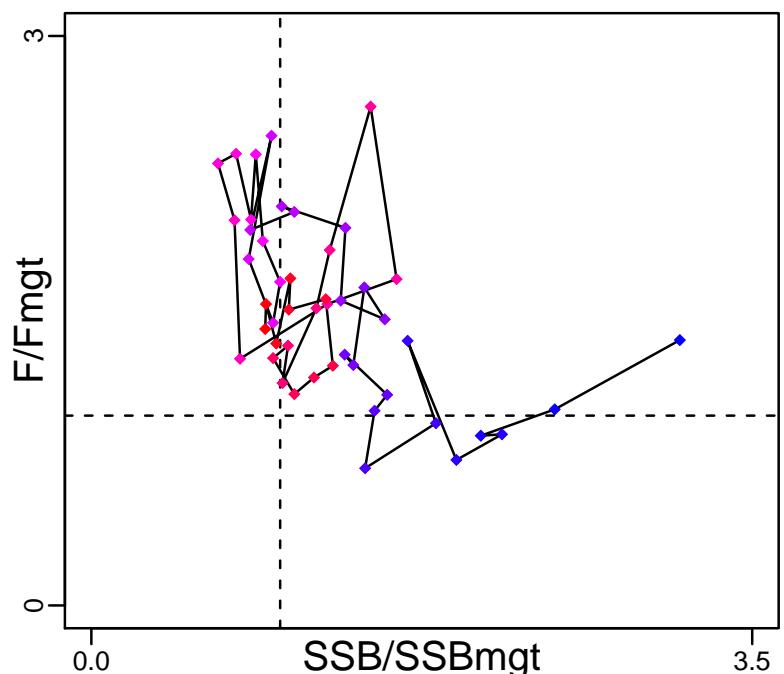
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	4690	Both	-	
SSB	SSB-MT	2018	2570	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	4,820,000	-	1	
F	F-1/yr	2018	0.399	-	4 to 8	
ER	ER-calc-ratio	2018	0.182	-	-	
TC	TC-MT	2018	818			
TL	TL-MT	2018	776			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	1.293			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.456			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.464			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.071			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.456			
ER/ERmgt	-	-	-			

Common sole Celtic Sea [SOLECS]

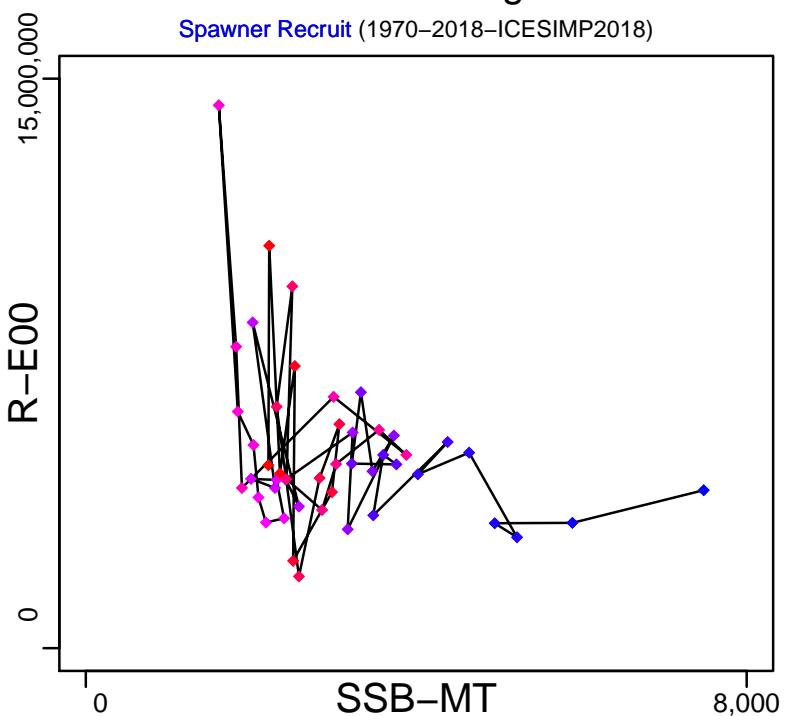
Kobe MSYpref (1970–2018–ICESIMP2018)



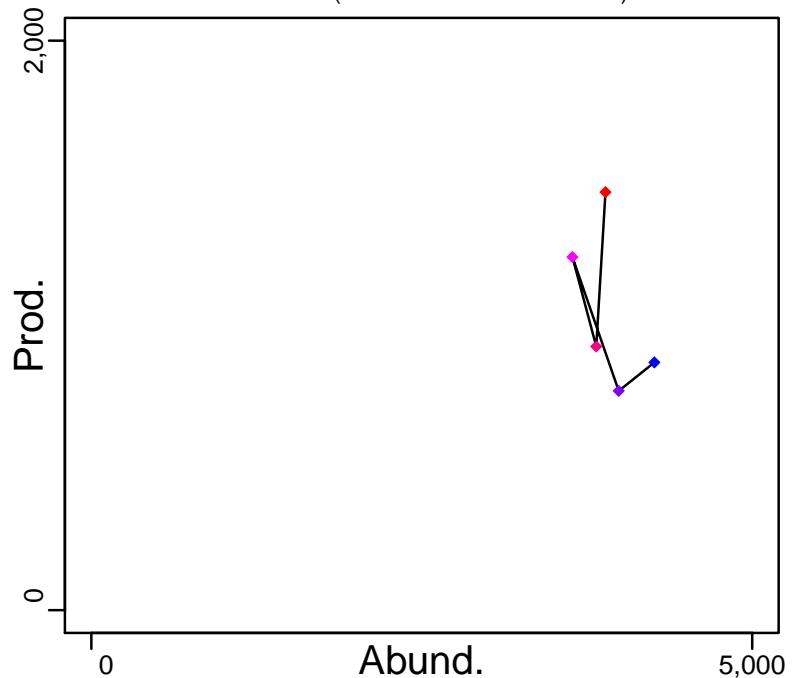
Kobe MGTpref (1970–2018–ICESIMP2018)



Spawner Recruit (1970–2018–ICESIMP2018)



Production (1970–2018–ICESIMP2018)

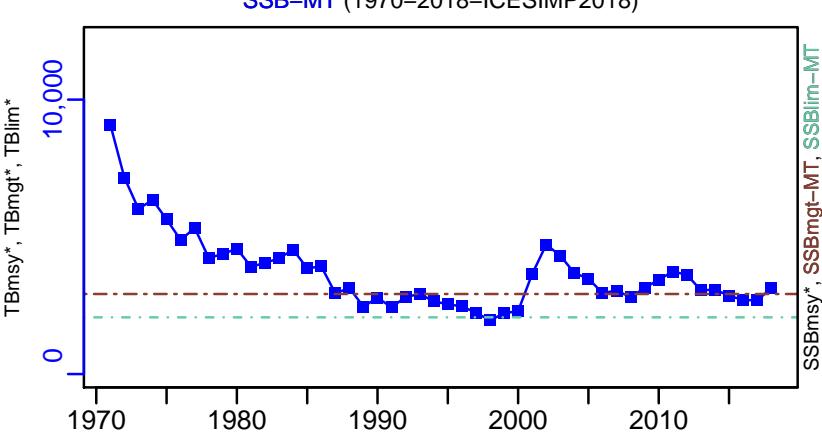
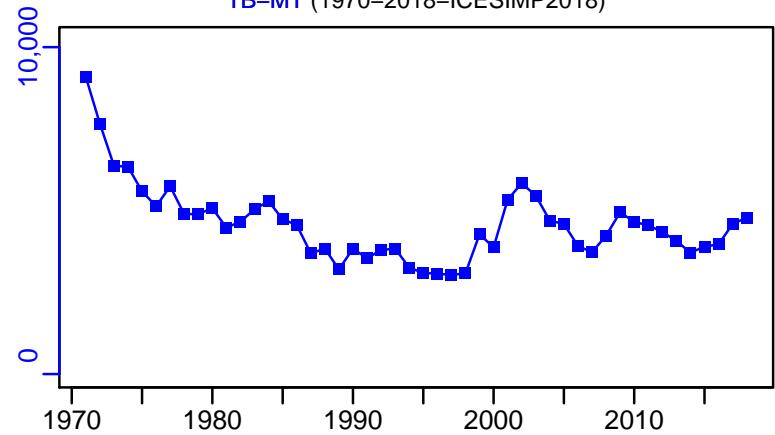


◆ Start Year	◆ End Year	*	No Data
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Common sole Celtic Sea [SOLECS]

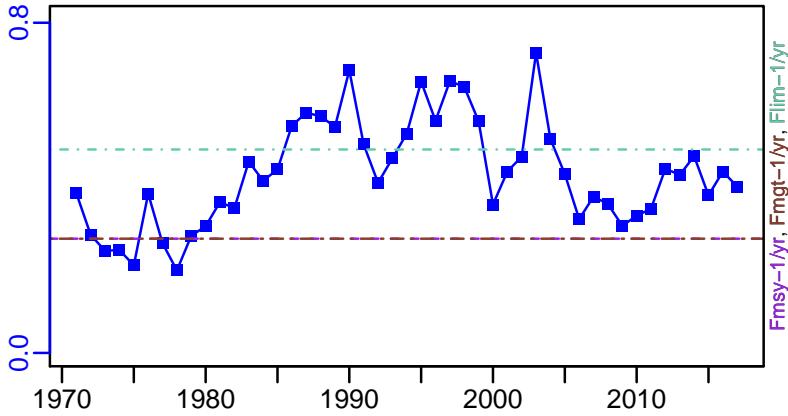
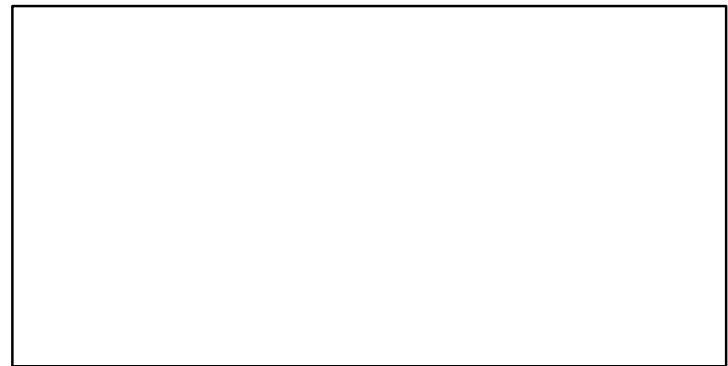
TB-MT (1970–2018–ICESIMP2018)

SSB-MT (1970–2018–ICESIMP2018)



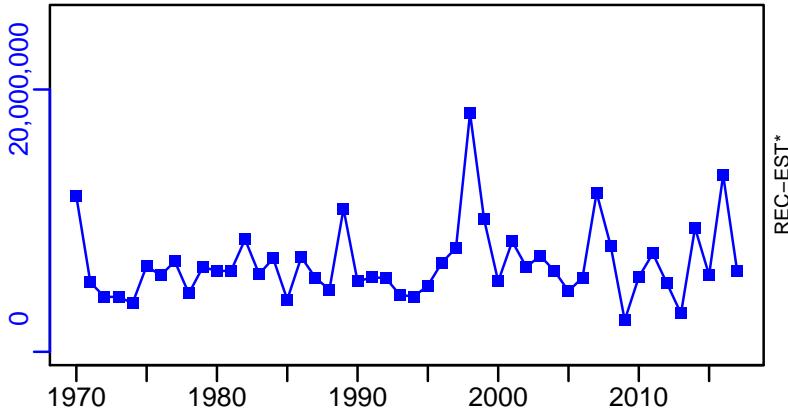
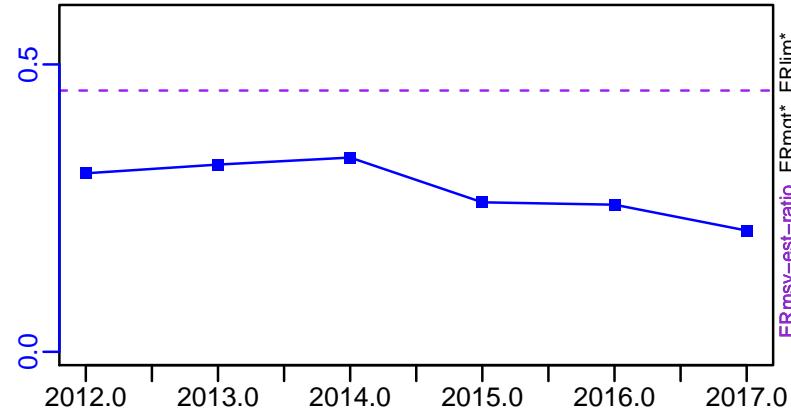
TN *

F-1/yr (1970–2018–ICESIMP2018)



ER-calc-ratio (1970–2018–ICESIMP2018)

R-E00 (1970–2018–ICESIMP2018)

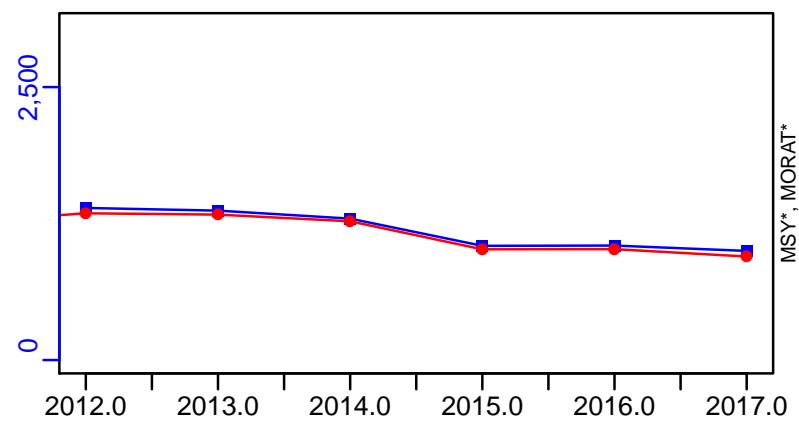


█ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

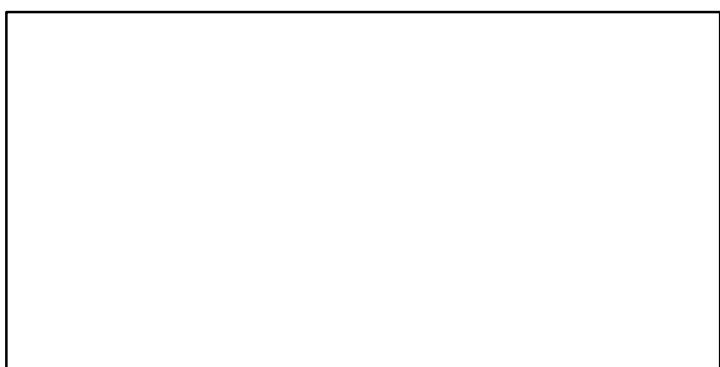
Common sole Celtic Sea [SOLECS]

TC-MT, TL-MT, RecC* (1970–2018–ICESIMP2018)

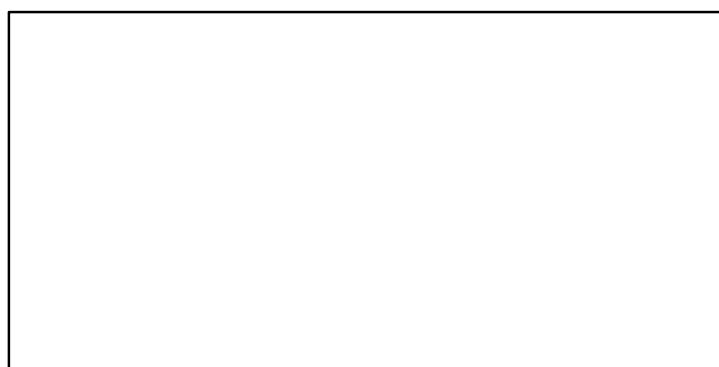
TAC*, Cpair*, Cadv*



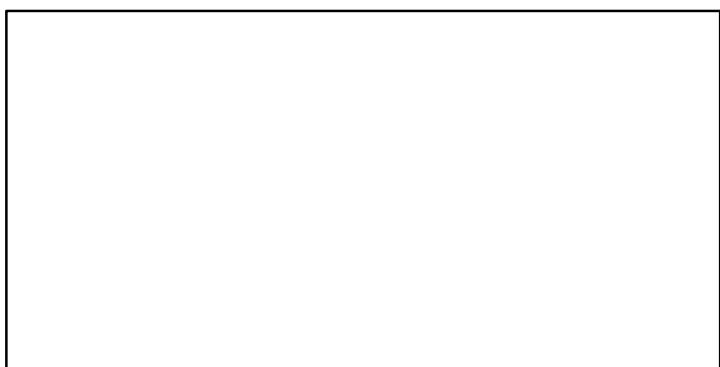
survB*



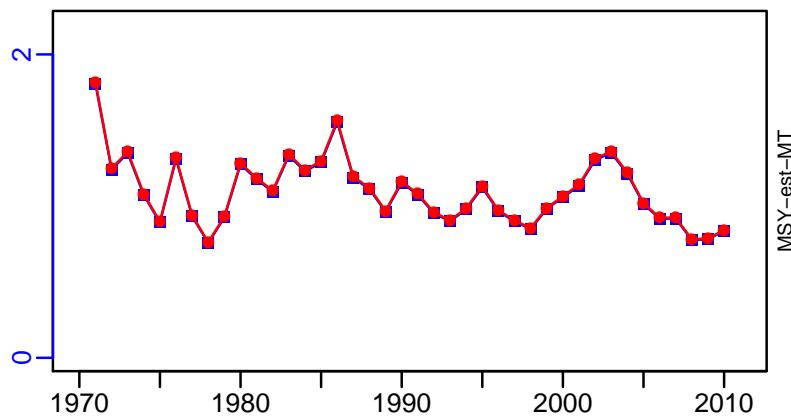
CPUE*



EFFORT*



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



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

Common sole ICES 22-24-3a [SOLEIIIa-2224]

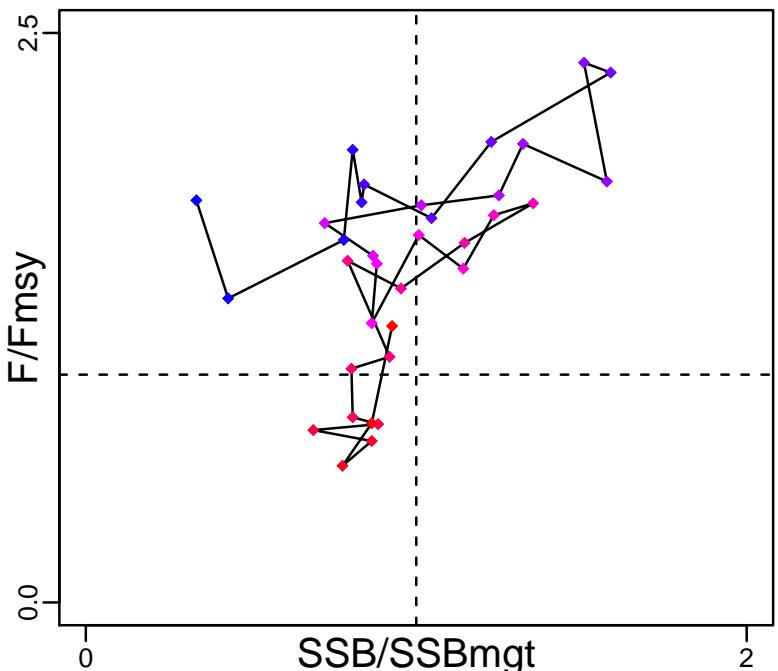
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGBFAS-SOLEIIIa-2224-1983-2018-ICESIMP2018
Area	ICES 22-24-3a
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	3213
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.23
ERmsy	ERmsy-est-ratio	2018	0.252
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	2600
Fmgt	Fmgt-1/yr	2018	0.23
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	930
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	1850
Flim	Flim-1/yr	2018	0.315
ERlim	-	-	-

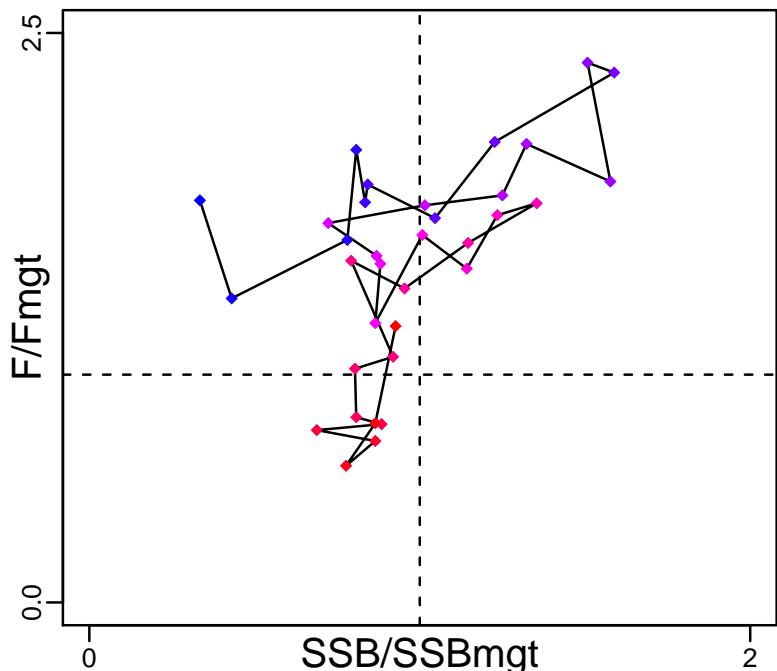
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	3460	Both	-
SSB	SSB-MT	2018	2690	Both	-
TN	-	-	-	-	-
R	R-E00	2018	2,310,000	-	1
F	F-1/yr	2018	0.279	-	4 to 8
ER	ER-calc-ratio	2018	0.15	-	-
TC	TC-MT	2011	538		
TL	TL-MT	2018	520		
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.787		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.213		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.596		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.035		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.213		
ER/ERmgt	-	-	-		

Common sole ICES 22–24–3a [SOLEIIIa-2224]

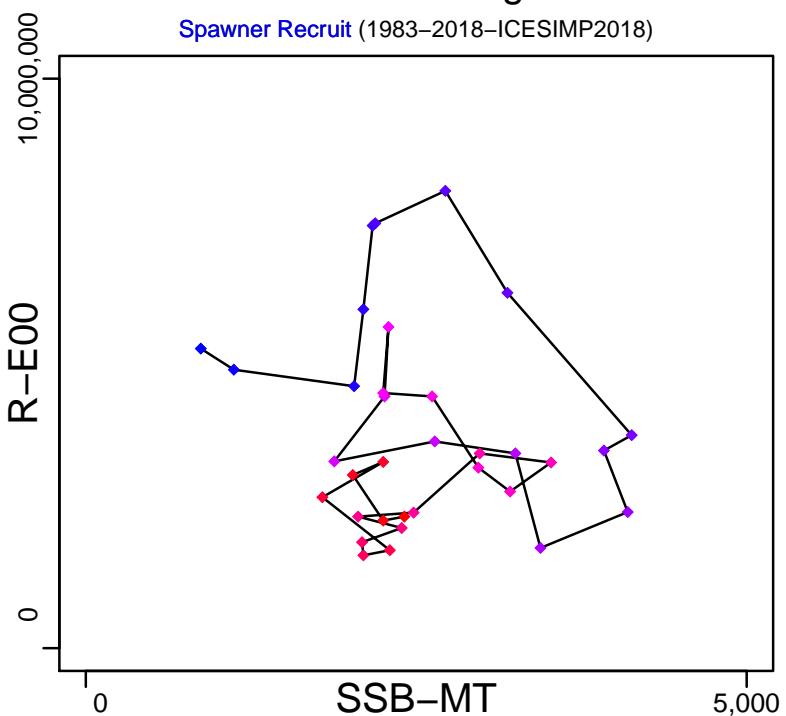
Kobe MSYpref (1983–2018–ICESIMP2018)



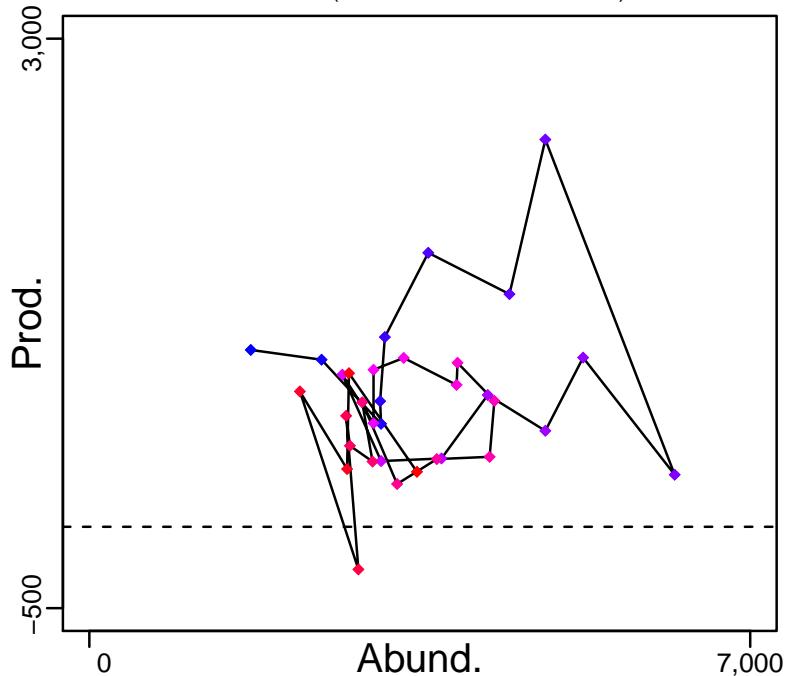
Kobe MGTpref (1983–2018–ICESIMP2018)



Spawner Recruit (1983–2018–ICESIMP2018)



Production (1983–2018–ICESIMP2018)

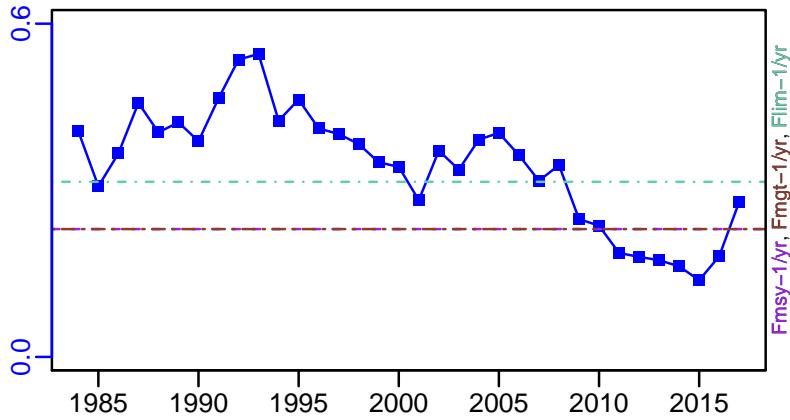
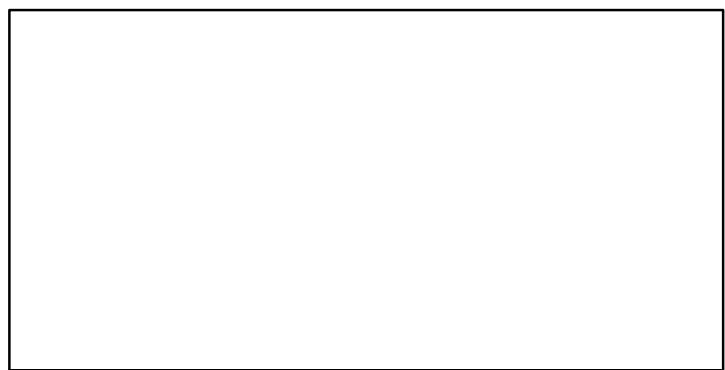
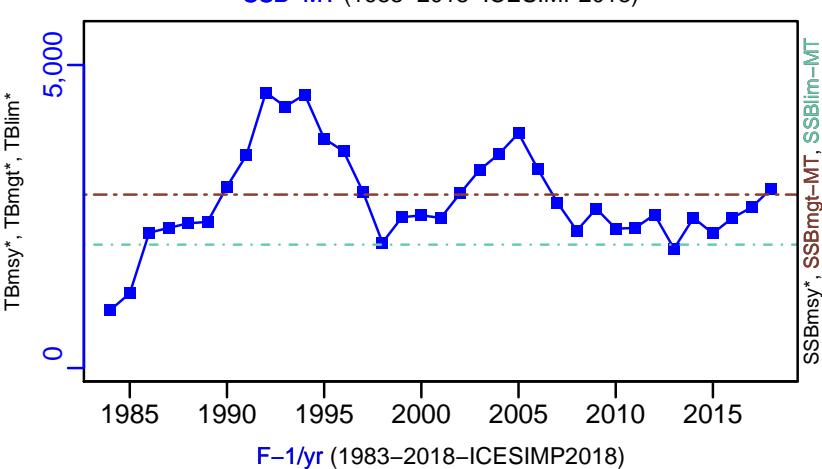
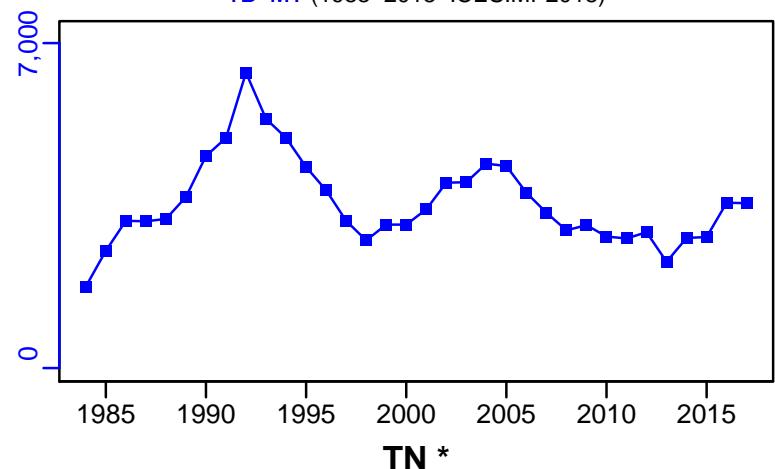


◆ Start Year ◆ End Year * No Data

Common sole ICES 22–24–3a [SOLEIIIa-2224]

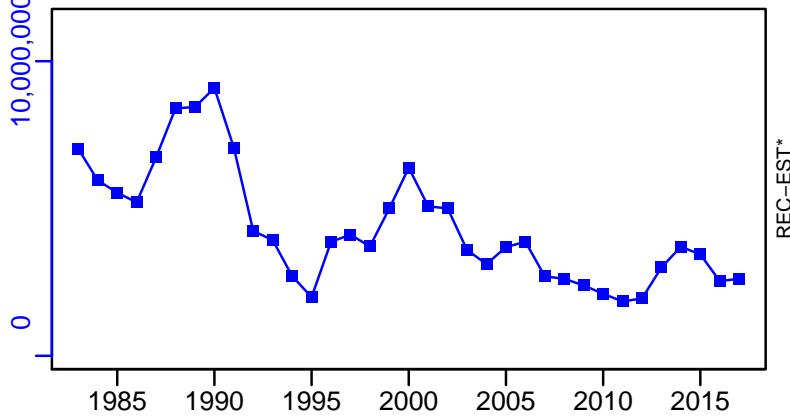
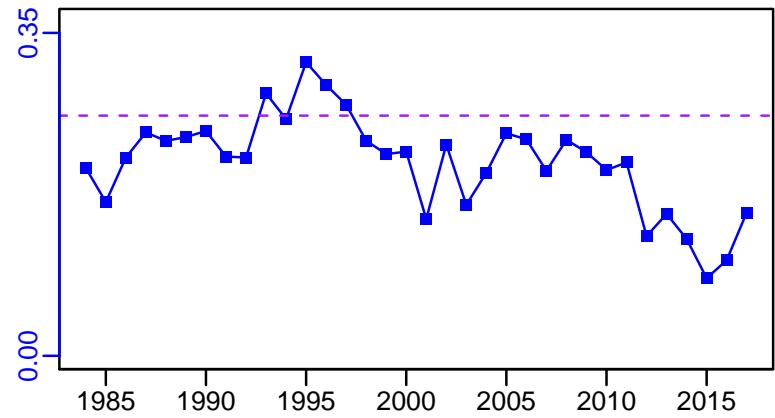
TB-MT (1983–2018–ICESIMP2018)

SSB-MT (1983–2018–ICESIMP2018)



ER-calc-ratio (1983–2018–ICESIMP2018)

R-E00 (1983–2018–ICESIMP2018)

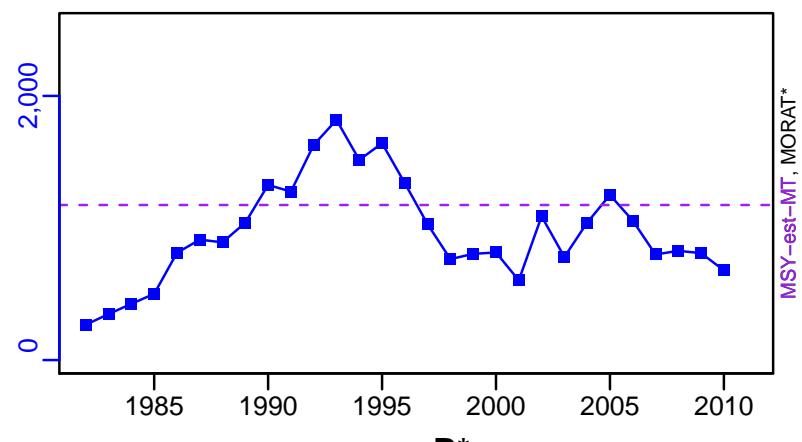


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

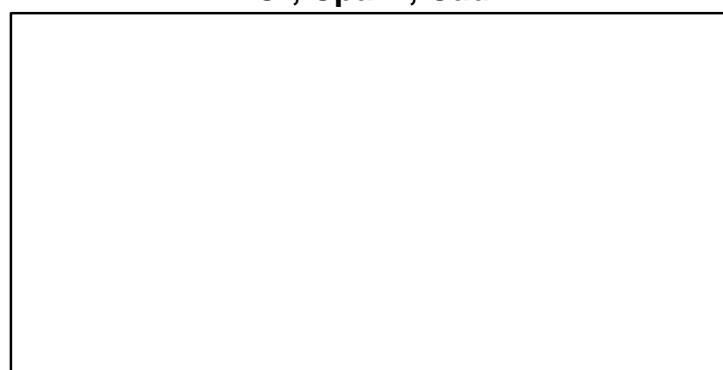
Common sole ICES 22–24–3a [SOLEIIIa-2224]

TC-MT, TL*, RecC* (1982–2011–NEUBAUER)

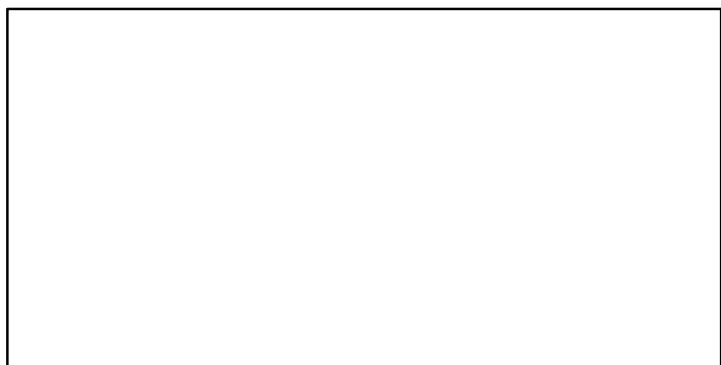
TAC*, Cpair*, Cadv*



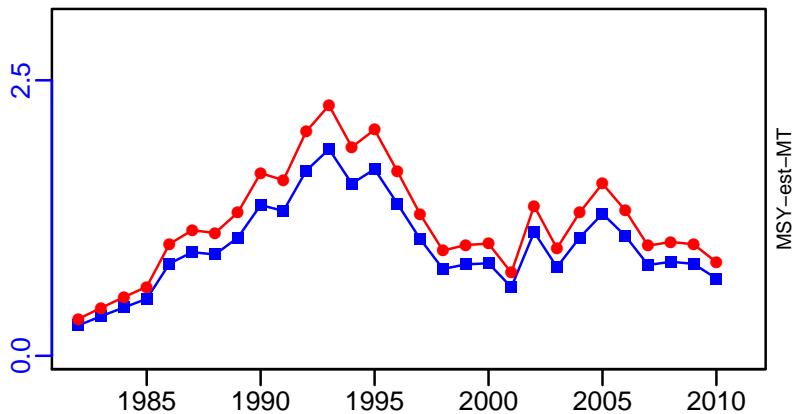
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1982–2011–NEUBAUER)



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

Common sole Irish Sea [SOLEIS]

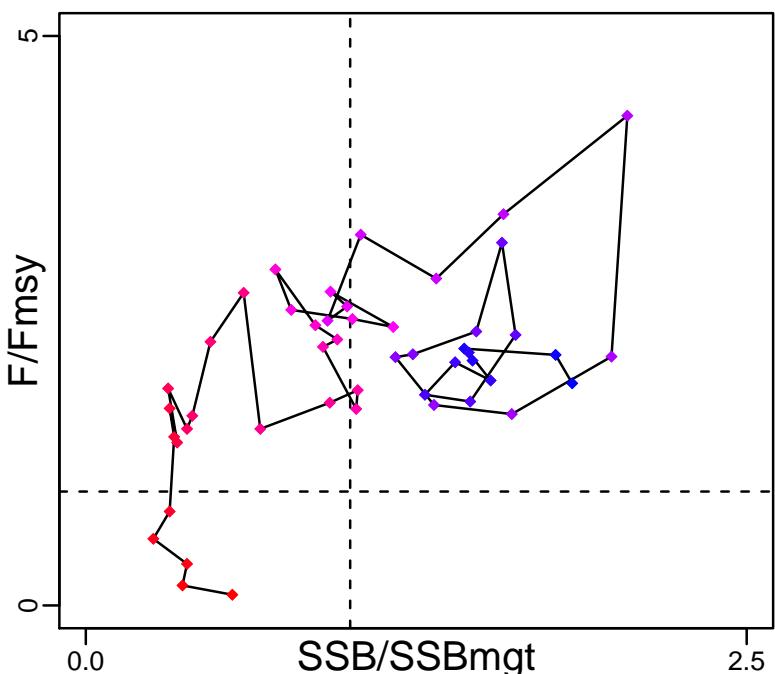
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEIS-1968-2018-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	7686
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.2
ERmsy	ERmsy-est-ratio	2018	0.131
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	3500
Fmgt	Fmgt-1/yr	2018	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	1355
M	M-1/yr	2011	0.1
TBlim	TBlim-MT	2011	2200
SSBlim	SSBlim-MT	2018	2500
Flim	Flim-1/yr	2018	0.29
ERlim	-	-	-

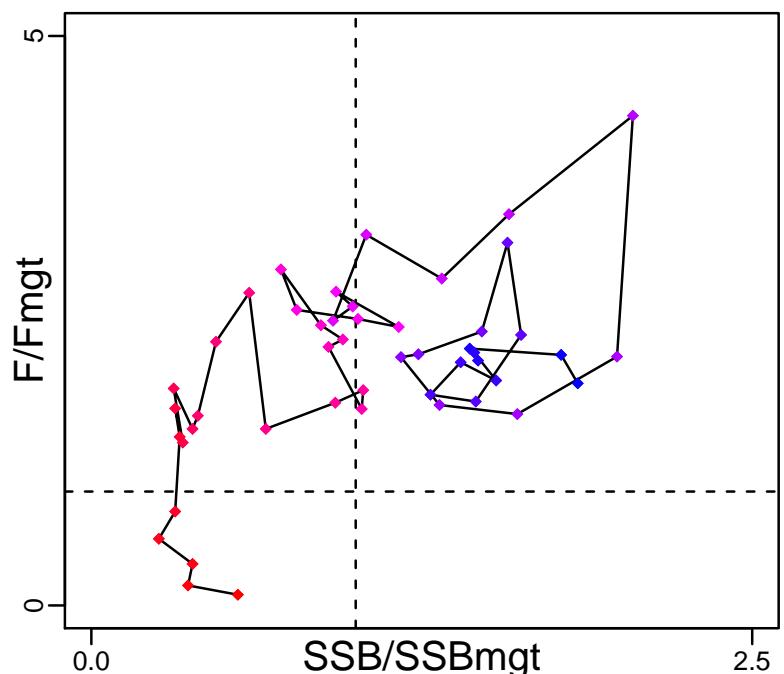
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	2570	Both	-	
SSB	SSB-MT	2018	2340	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1,400,000	-	2	
F	F-1/yr	2018	0.019	-	4 to 7	
ER	ER-calc-ratio	2018	0.015	-	-	
TC	TC-MT	2018	36			
TL	TL-MT	2018	34			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.191			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.094			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.117			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.669			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.094			
ER/ERmgt	-	-	-			

Common sole Irish Sea [SOLEIS]

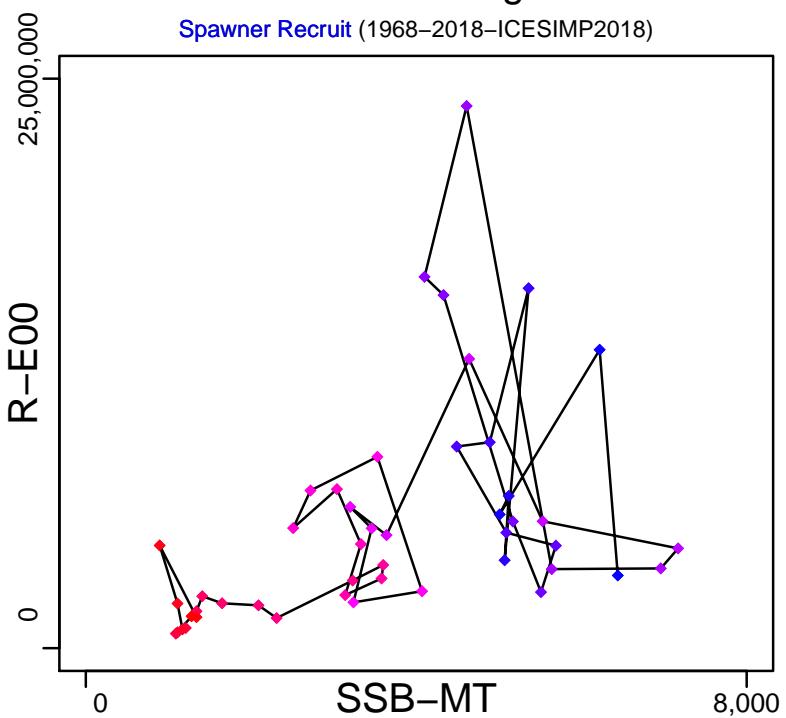
Kobe MSYpref (1968–2018–ICESIMP2018)



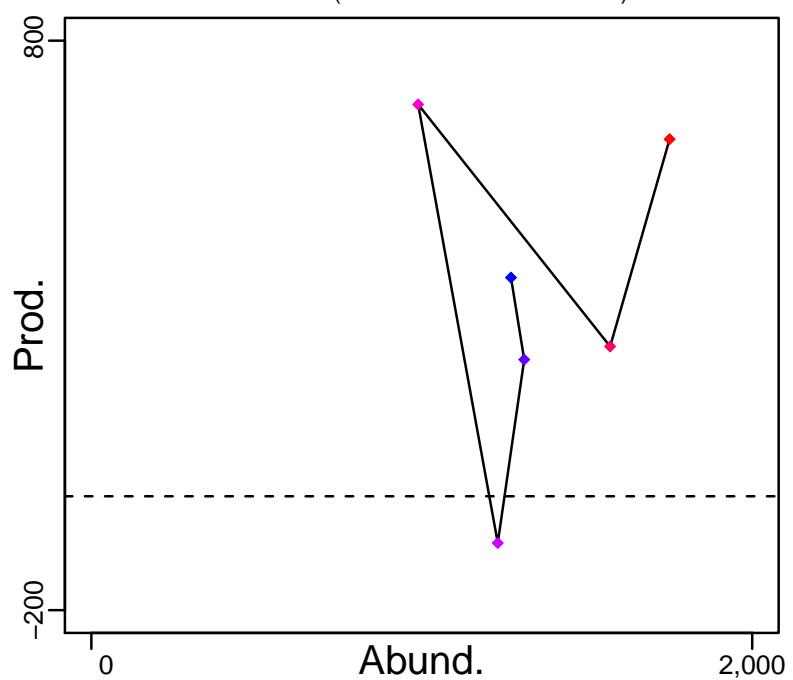
Kobe MGTpref (1968–2018–ICESIMP2018)



Spawner Recruit (1968–2018–ICESIMP2018)



Production (1968–2018–ICESIMP2018)

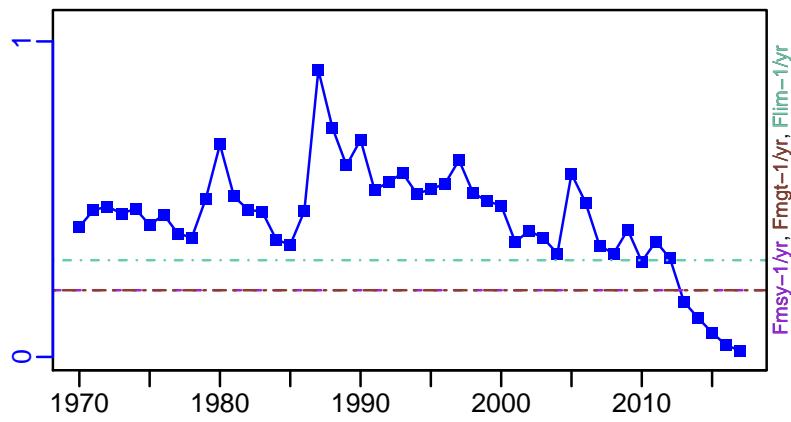
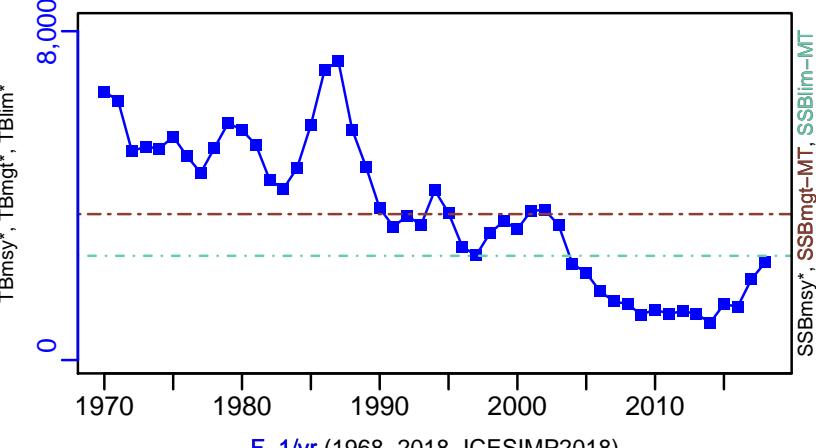
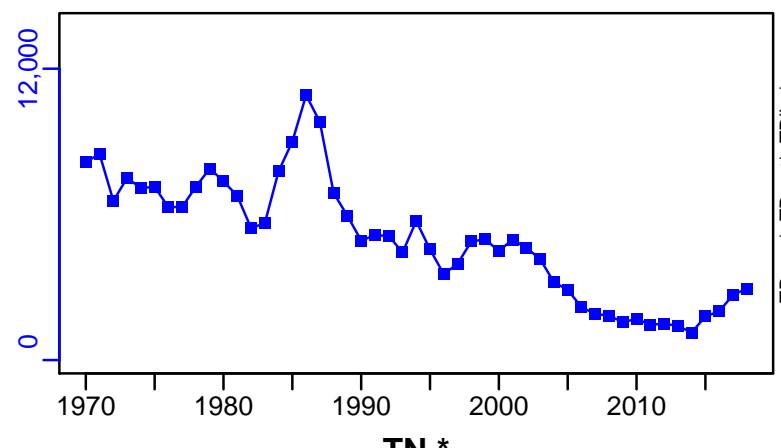


◆ Start Year ◆ End Year * No Data

Common sole Irish Sea [SOLEIS]

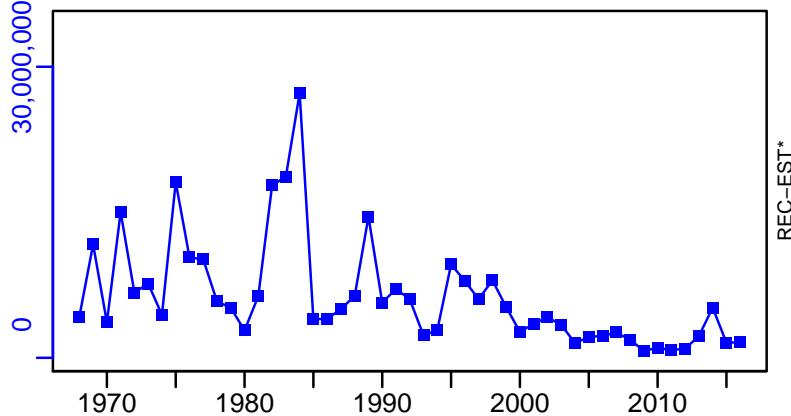
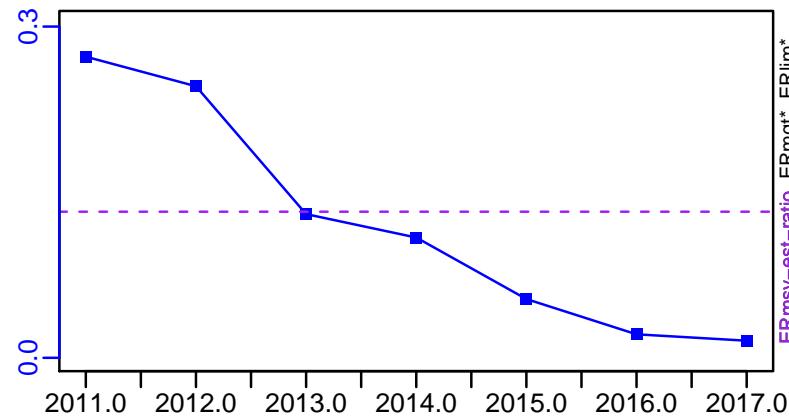
TB-MT (1968–2018–ICESIMP2018)

SSB-MT (1968–2018–ICESIMP2018)



ER-calc-ratio (1968–2018–ICESIMP2018)

R-E00 (1968–2018–ICESIMP2018)

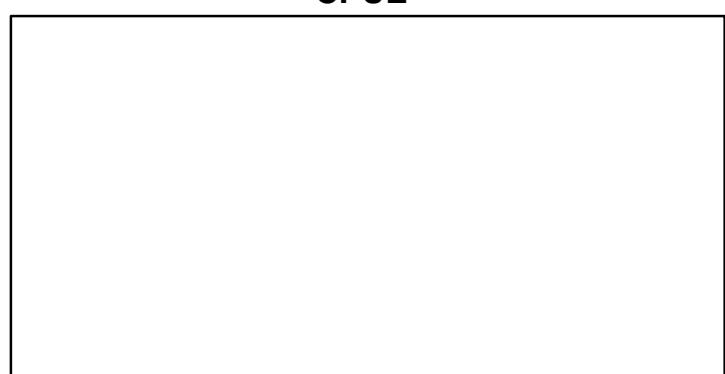
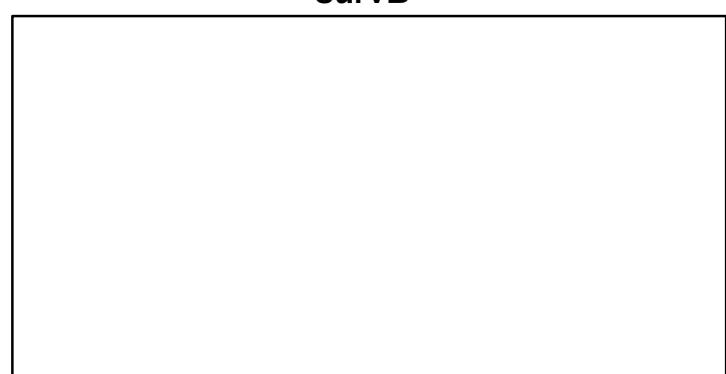
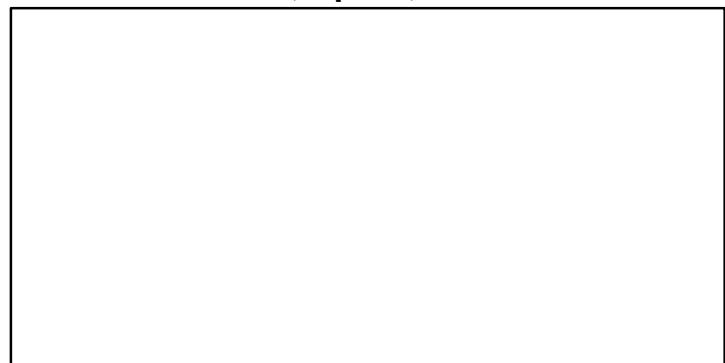
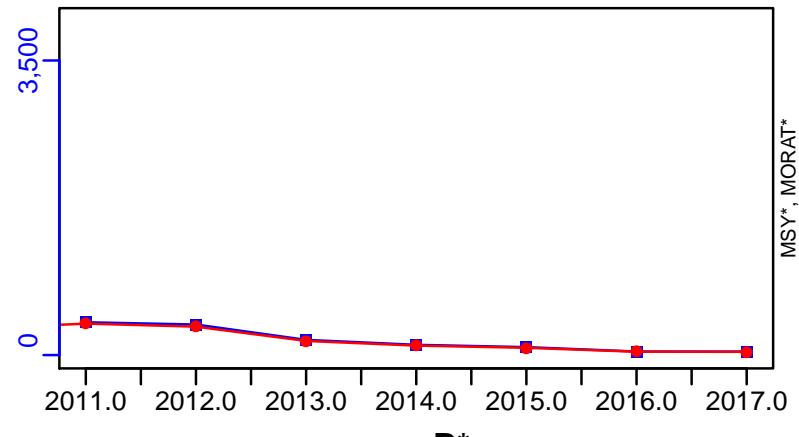


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

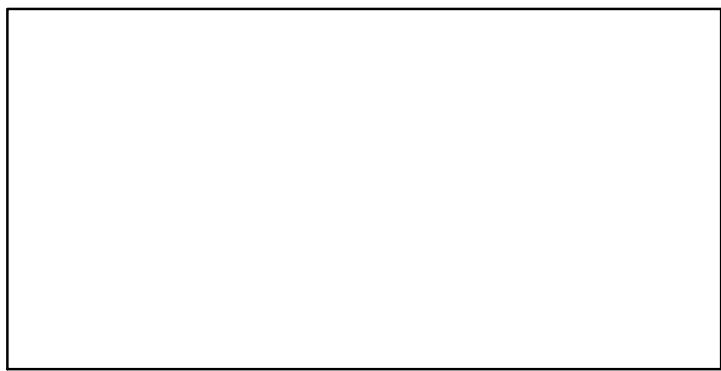
Common sole Irish Sea [SOLEIS]

TC-MT, TL-MT, RecC* (1968–2018–ICESIMP2018)

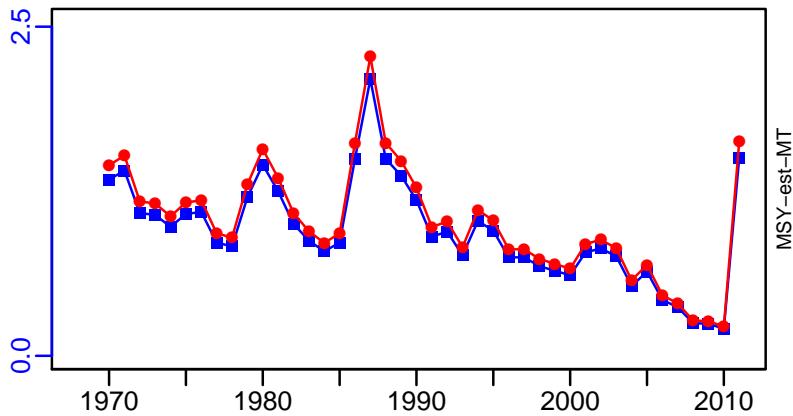
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1968–2011–NEUBAUER)



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

Common sole North Sea [SOLENS]

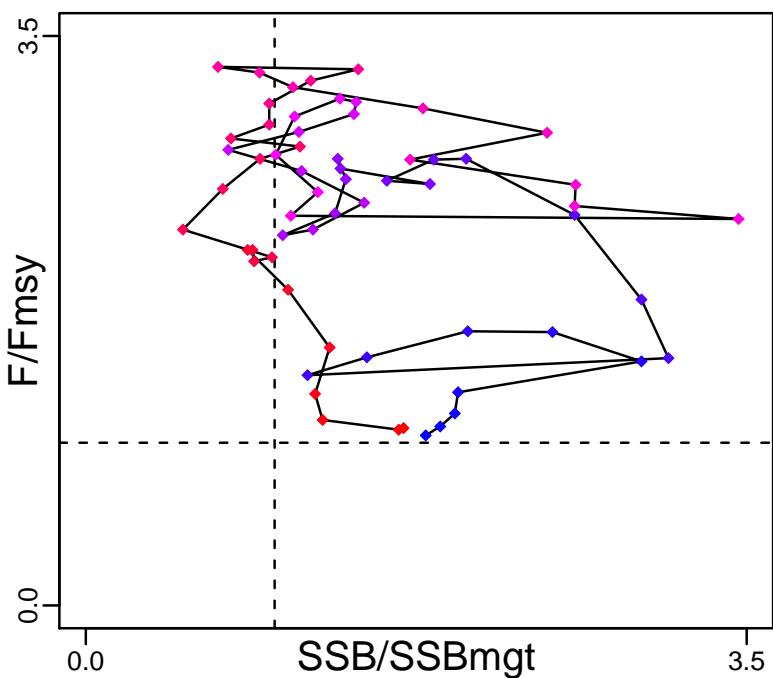
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGNSSK-SOLENS-1956-2018-ICESIMP2018
Area	North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2010, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	SSBmsy-est-MT	2010	53,338	
Fmsy	Fmsy-1/yr	2018	0.2	
ERmsy	ERmsy-est-ratio	2018	0.411	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	35,000	
Fmgt	Fmgt-1/yr	2018	0.2	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-est-MT	2010	25,032	
M	M-1/yr	2010	0.1	
TBlim	TBlim-MT	2010	25,000	
SSBlim	SSBlim-MT	2018	26,300	
Flim	Flim-1/yr	2018	0.62	
ERlim	-	-	-	

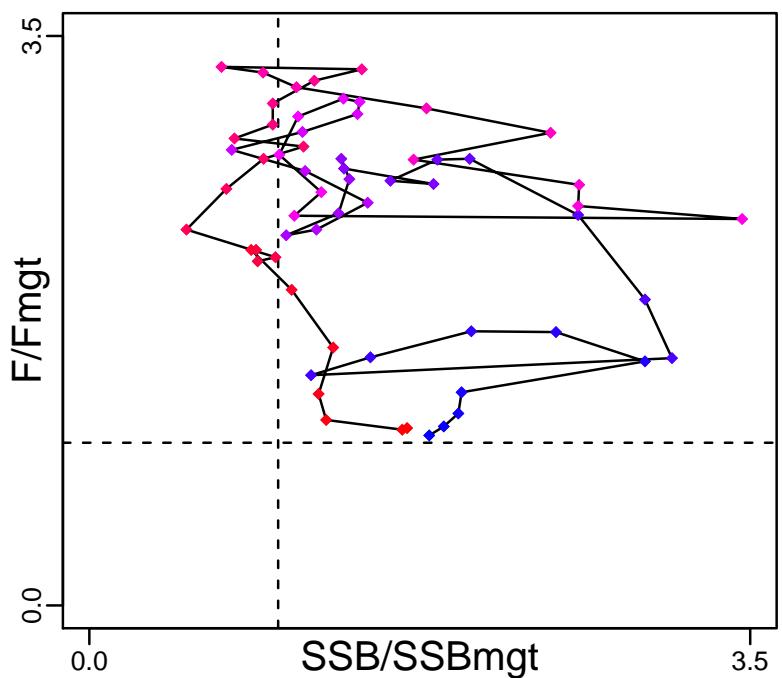
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	64,800	Both	-	
SSB	SSB-MT	2018	58,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.09×10^8	-	1	
F	F-1/yr	2018	0.218	-	2 to 6	
ER	ER-calc-ratio	2018	0.191	-	-	
TC	TC-MT	2017	15,400			
TL	TL-MT	2018	12,400			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2010	0.66			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.09			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.466			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.657			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.09			
ER/ERmgt	-	-	-			

Common sole North Sea [SOLENS]

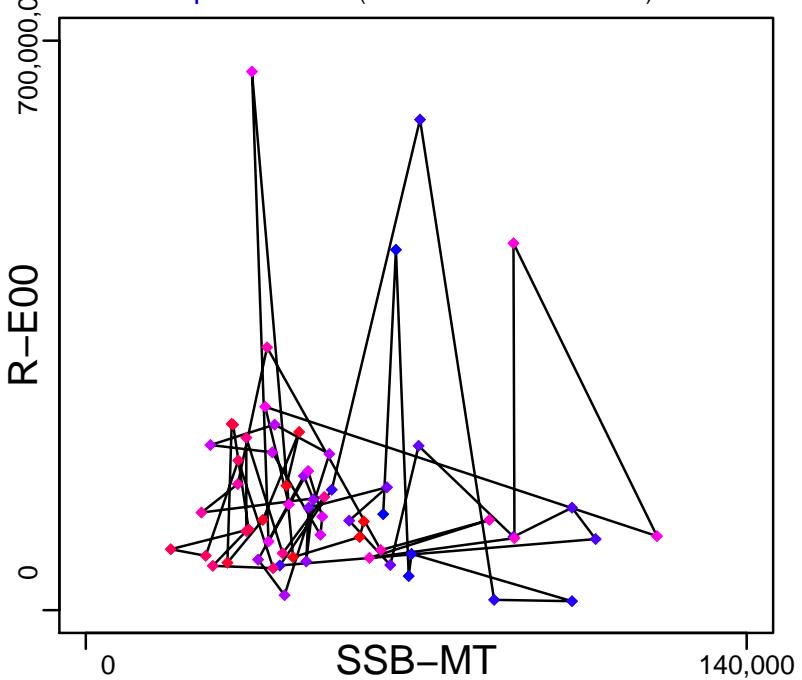
Kobe MSYpref (1956–2018–ICESIMP2018)



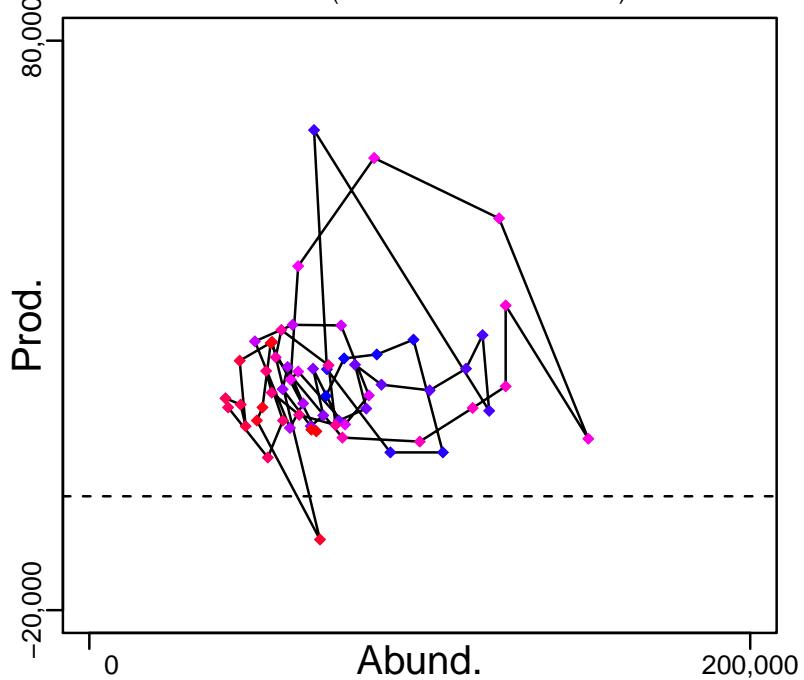
Kobe MGTpref (1956–2018–ICESIMP2018)



Spawner Recruit (1956–2018–ICESIMP2018)



Production (1956–2018–ICESIMP2018)

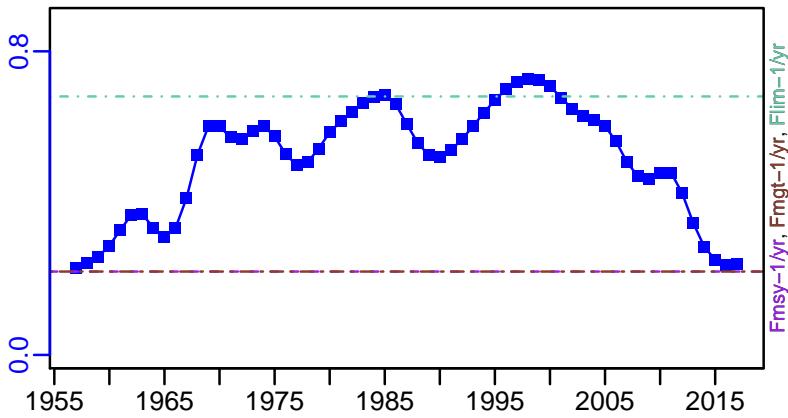
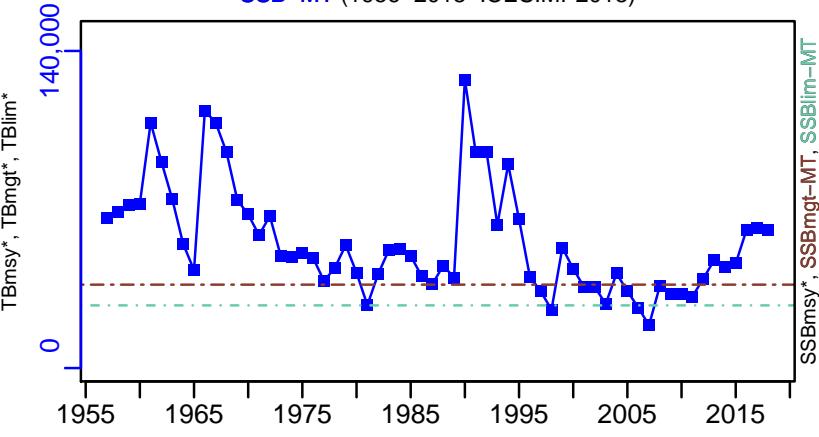
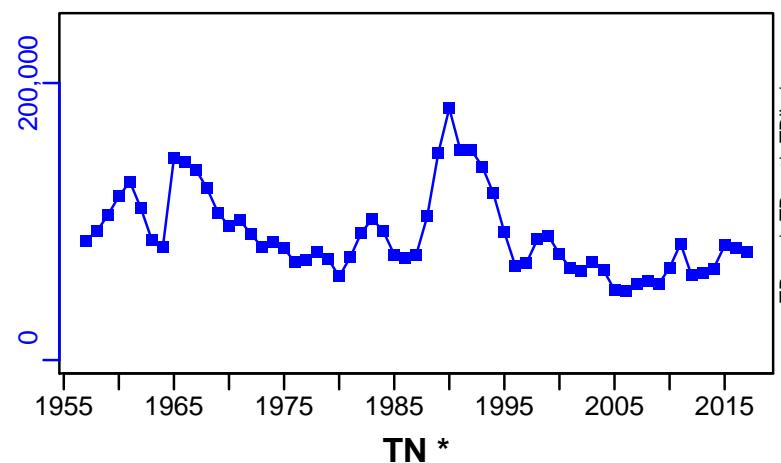


◆ Start Year ◆ End Year * No Data

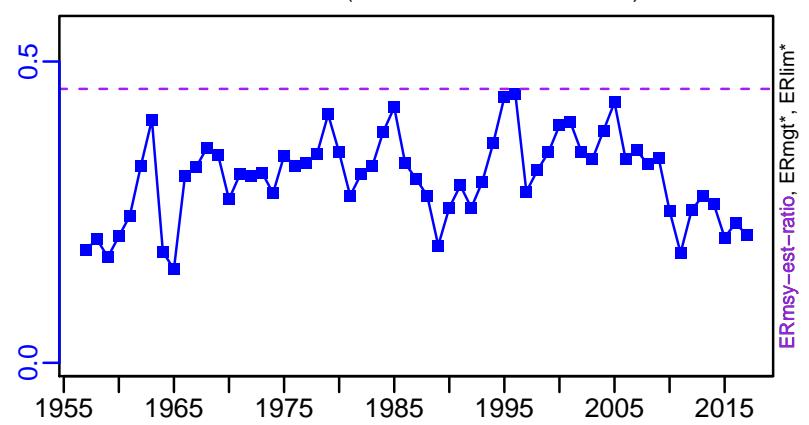
Common sole North Sea [SOLENS]

TB-MT (1956–2018–ICESIMP2018)

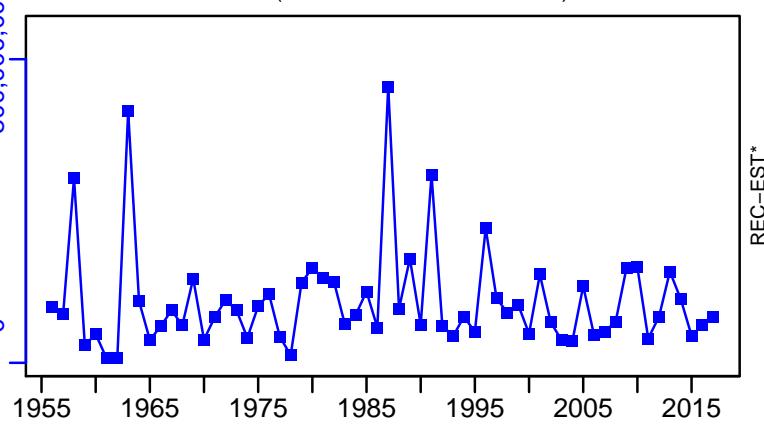
SSB-MT (1956–2018–ICESIMP2018)



ER-calc-ratio (1956–2018–ICESIMP2018)



R-E00 (1956–2018–ICESIMP2018)

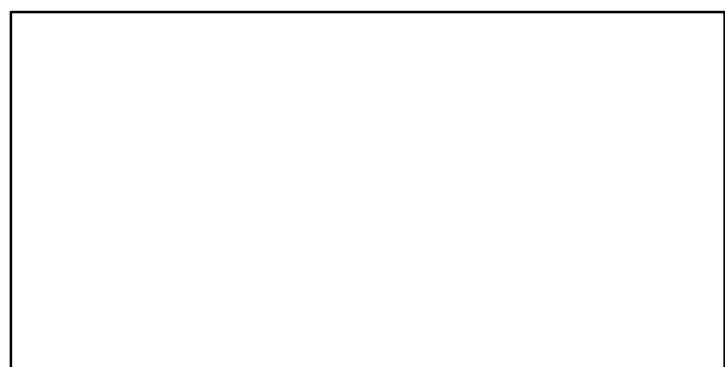
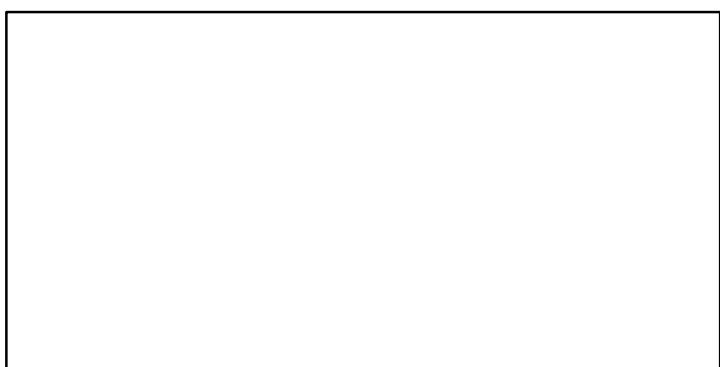
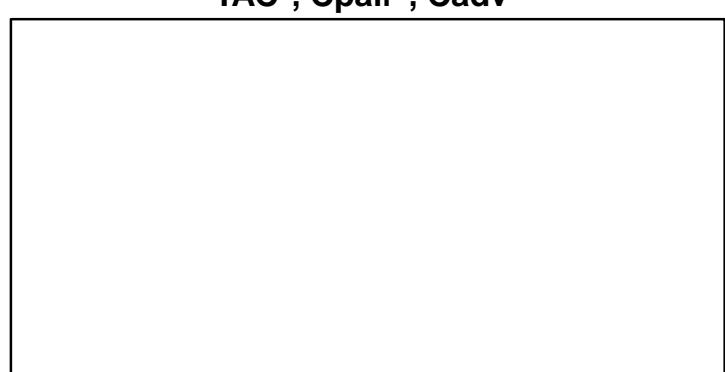
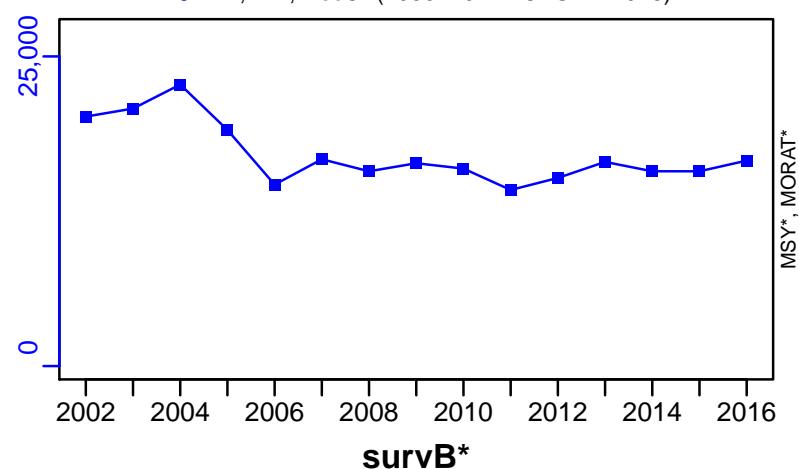


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

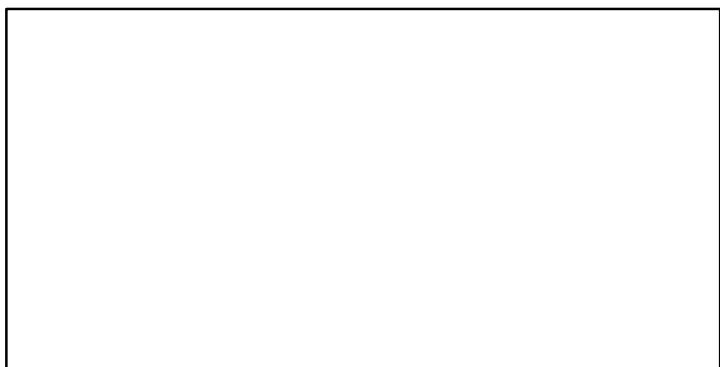
Common sole North Sea [SOLENS]

TC-MT, TL*, RecC* (1956–2017–ICESIMP2018)

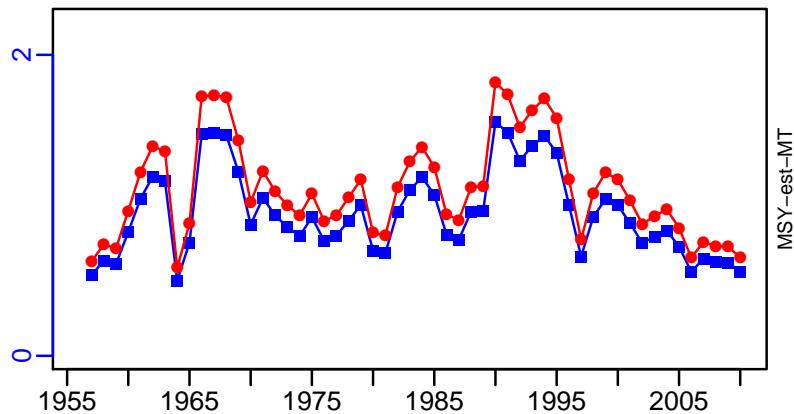
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1956–2010–NEUBAUER)



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

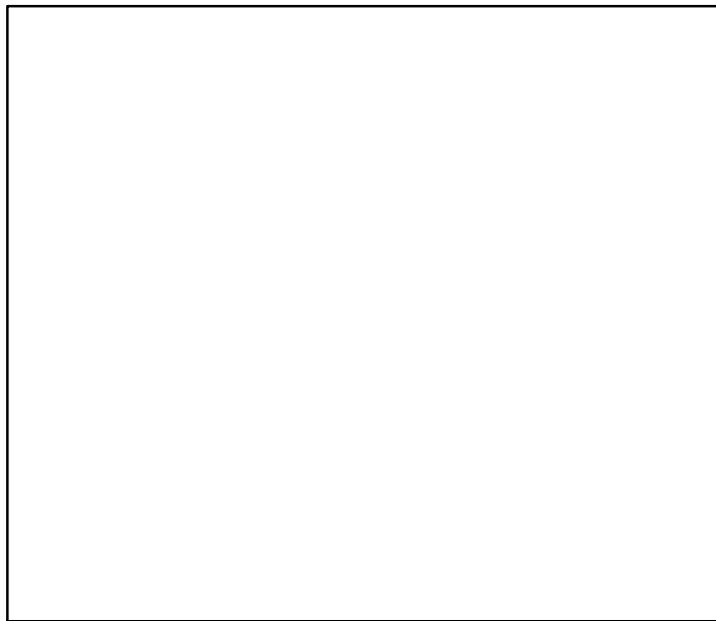
Common sole ICES 7bc [SOLEVIIbc]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSSE-SOLEVIIbc-1908-2016-ICESIMP2018
Area	ICES 7bc
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2015

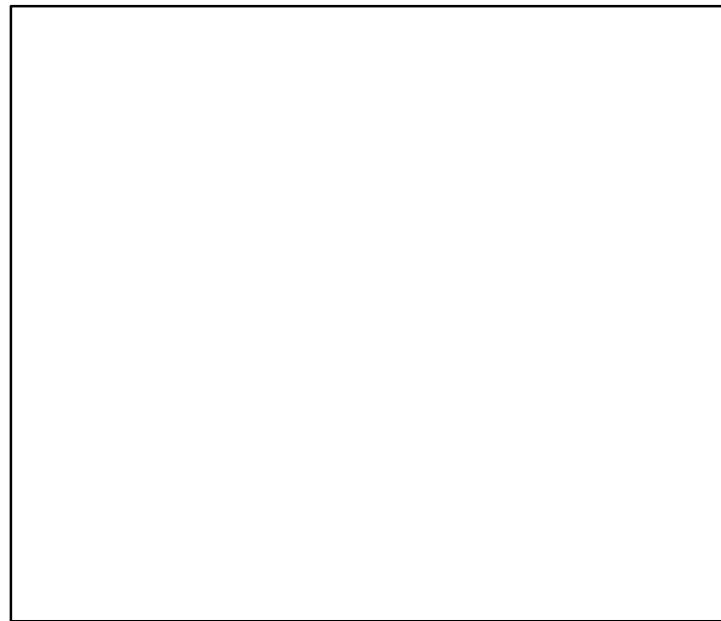
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	43		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

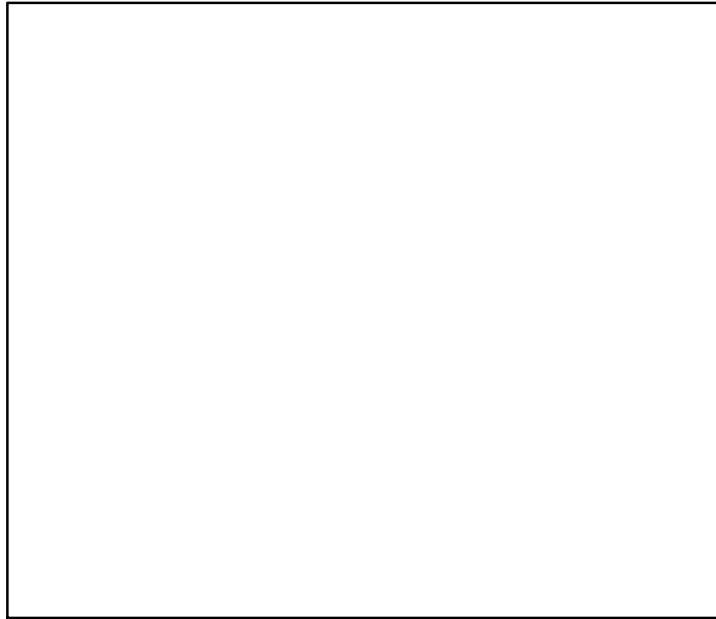
Kobe MSY*



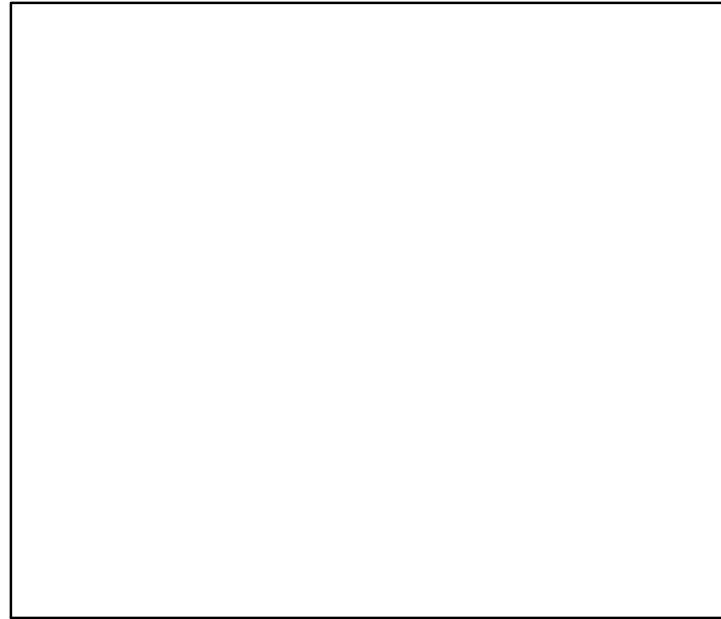
Kobe MGT*



Spawner Recruit*



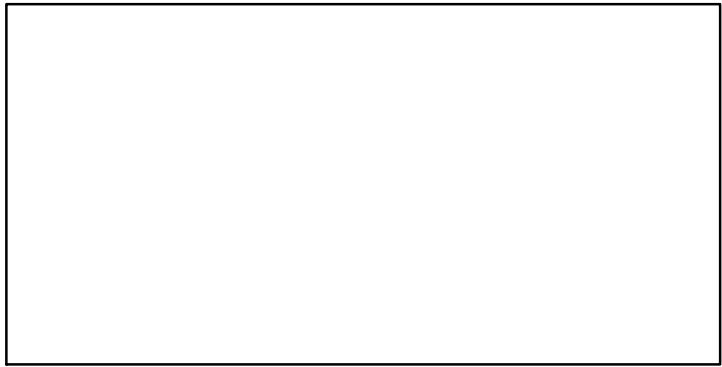
Production*



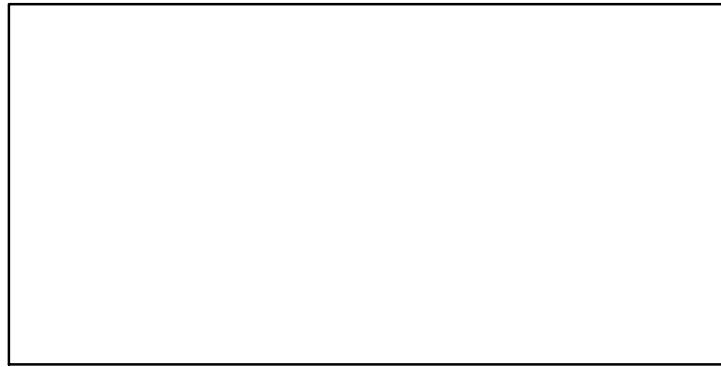
◆ Start Year ♦ End Year * No Data

Common sole ICES 7bc [SOLEVIIbc]

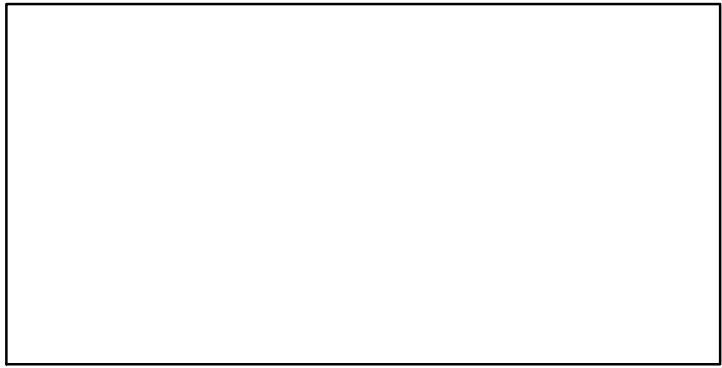
TB*



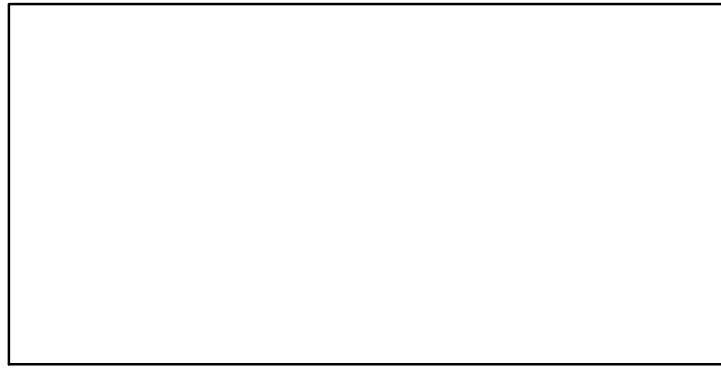
SSB*



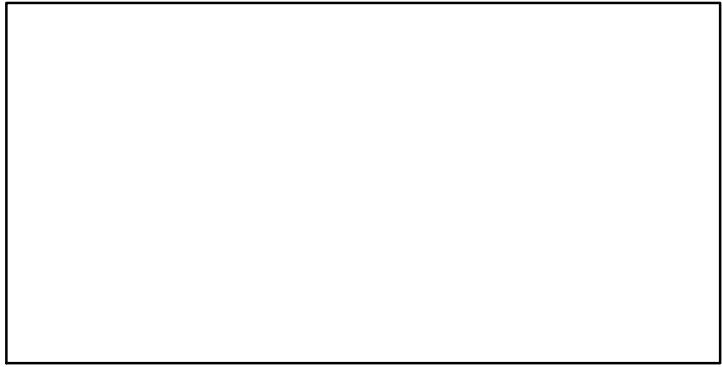
TN *



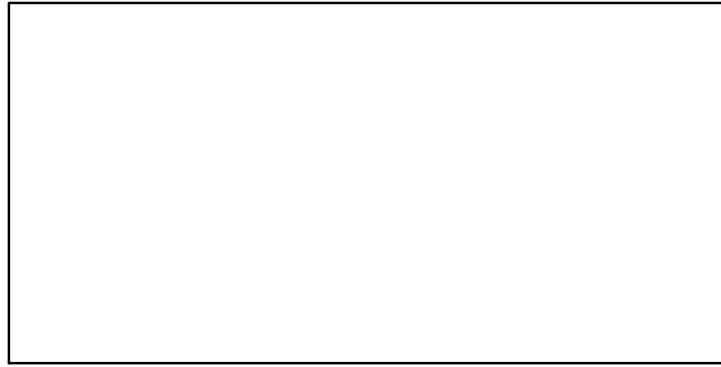
F*



ER*



Recruits*

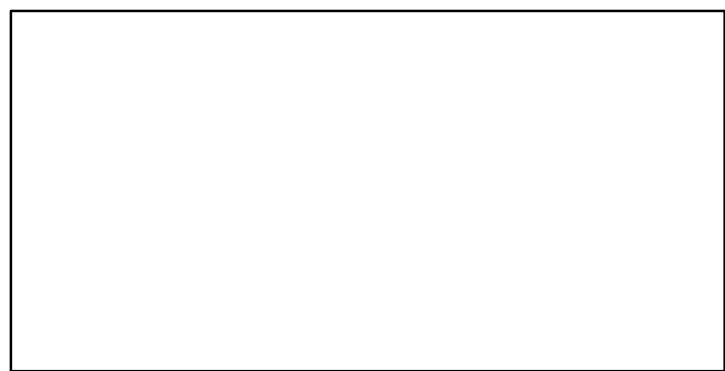
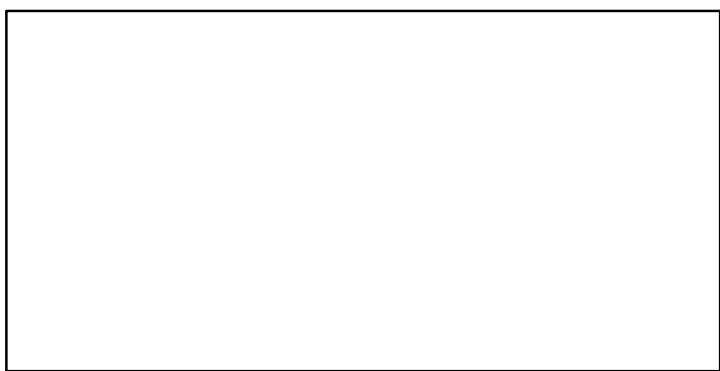
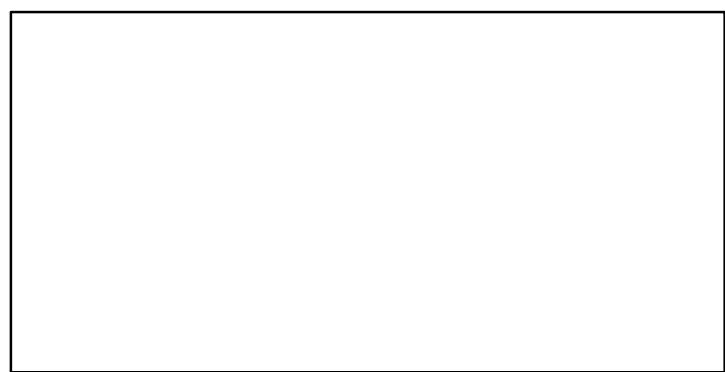
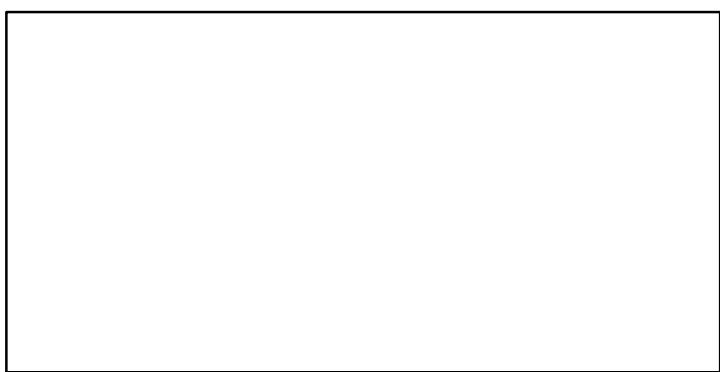
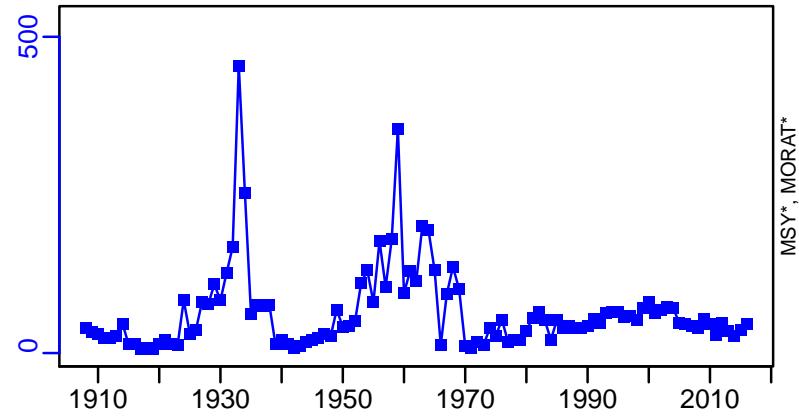


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Common sole ICES 7bc [SOLEVIIbc]

TL-MT, TC*, RecC* (1908–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Common sole Eastern English Channel [SOLEVIIId]

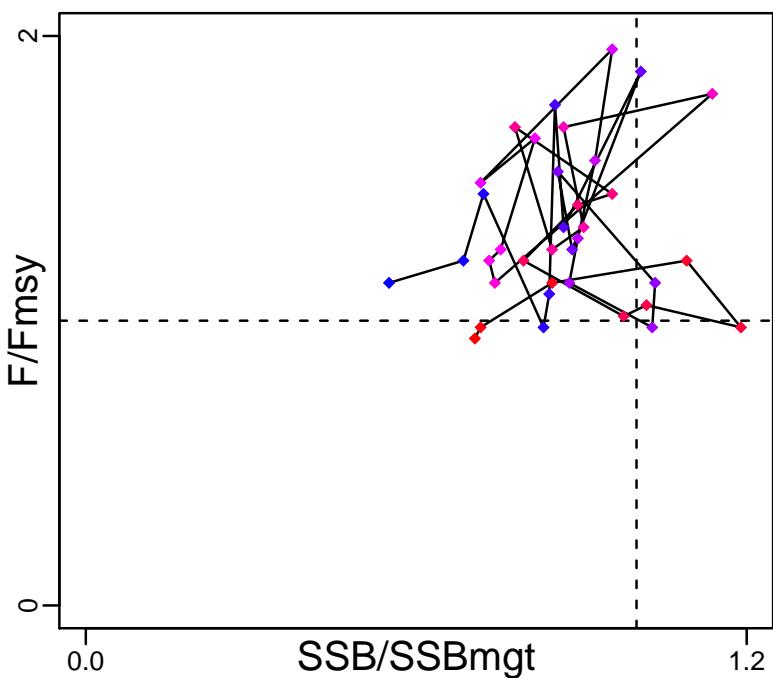
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGNSSK-SOLEVIIId-1981-2018-ICESIMP2018
Area	Eastern English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2011, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	TBmsy-est-MT	2011	16,106	
SSBmsy	-	-	-	
Fmsy	Fmsy-1/yr	2018	0.256	
ERmsy	ERmsy-est-ratio	2018	0.194	
TBmgt	-	-	-	
SSBmgt	SSBmgt-MT	2018	19,251	
Fmgt	Fmgt-1/yr	2018	0.256	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-est-MT	2011	4828	
M	M-1/yr	2011	0.1	
TBlim	-	-	-	
SSBlim	SSBlim-MT	2018	13,751	
Flim	Flim-1/yr	2018	0.359	
ERlim	-	-	-	

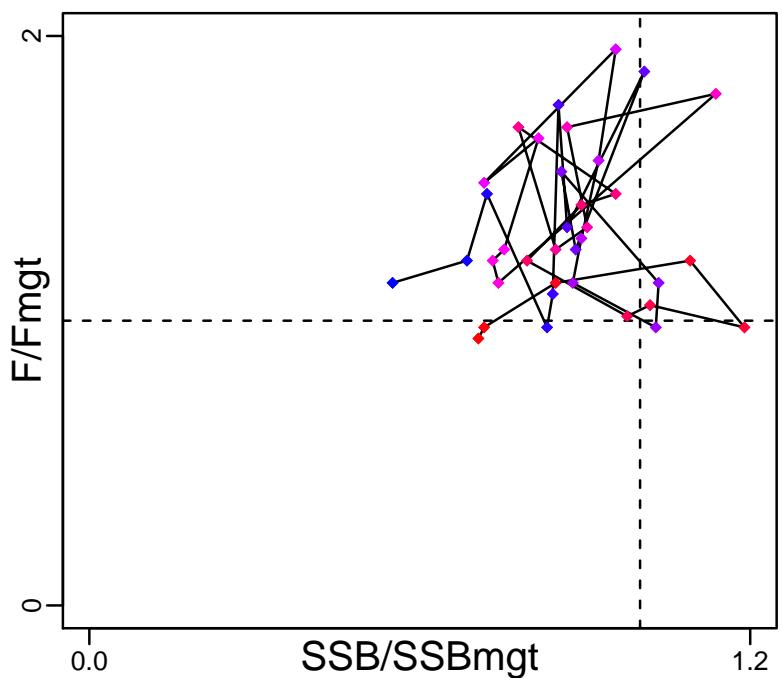
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	17,300	Both	-	
SSB	SSB-MT	2018	14,300	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	24,900,000	-	1	
F	F-1/yr	2018	0.24	-	3 to 7	
ER	ER-calc-ratio	2018	0.14	-	-	
TC	TC-MT	2018	2430			
TL	TL-MT	2018	2230			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	1.366			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.938			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.723			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	0.743			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.938			
ER/ERmgt	-	-	-			

Common sole Eastern English Channel [SOLEVId]

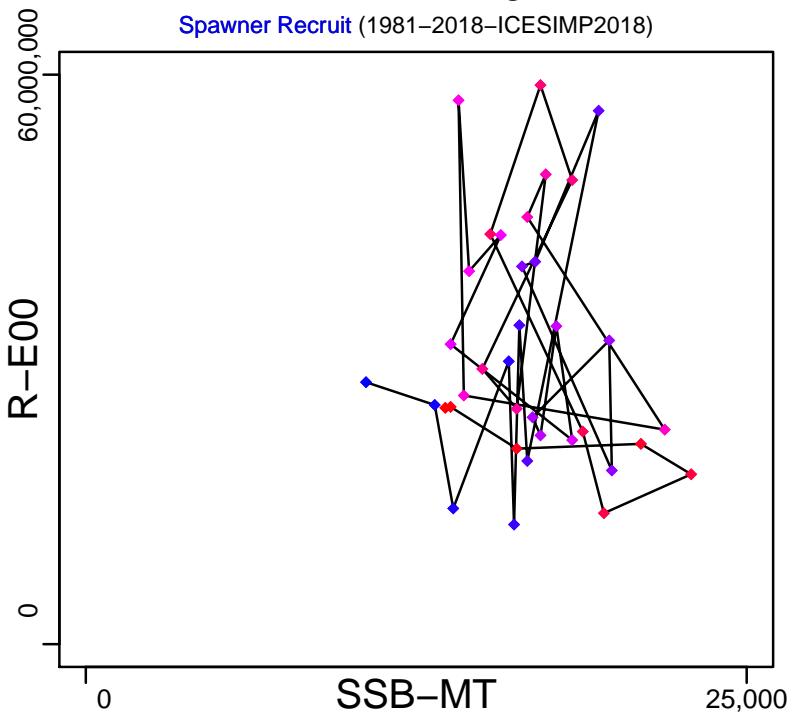
Kobe MSYpref (1981–2018–ICESIMP2018)



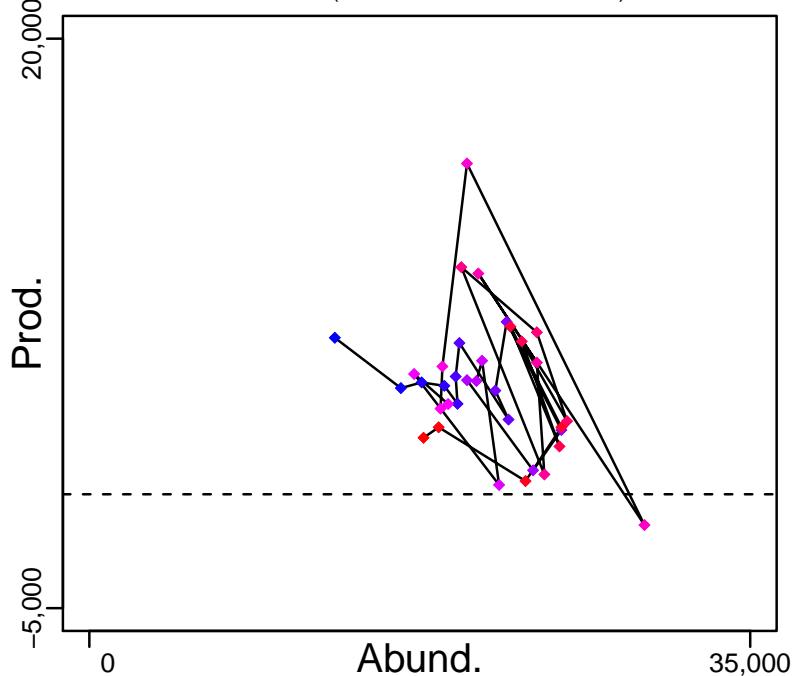
Kobe MGTpref (1981–2018–ICESIMP2018)



Spawner Recruit (1981–2018–ICESIMP2018)



Production (1981–2018–ICESIMP2018)

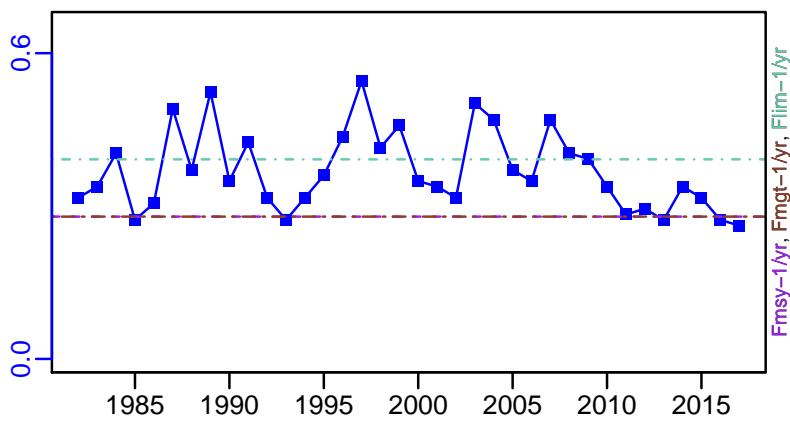
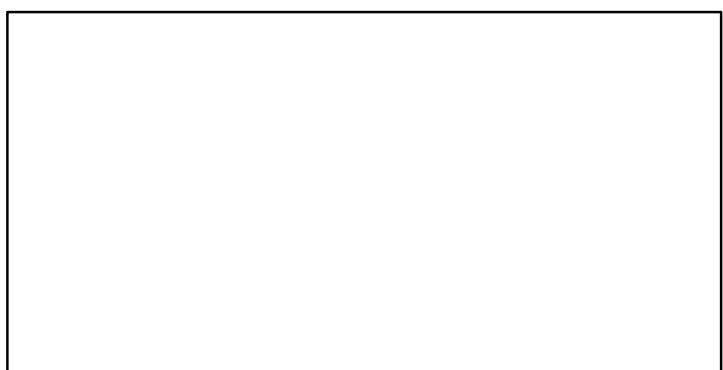
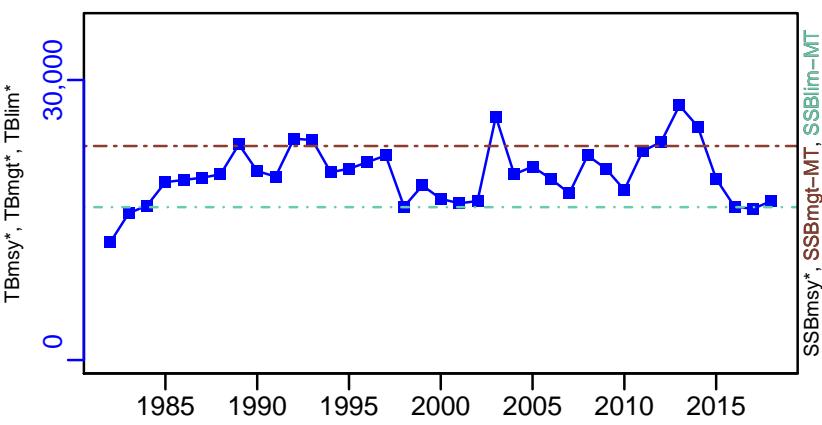
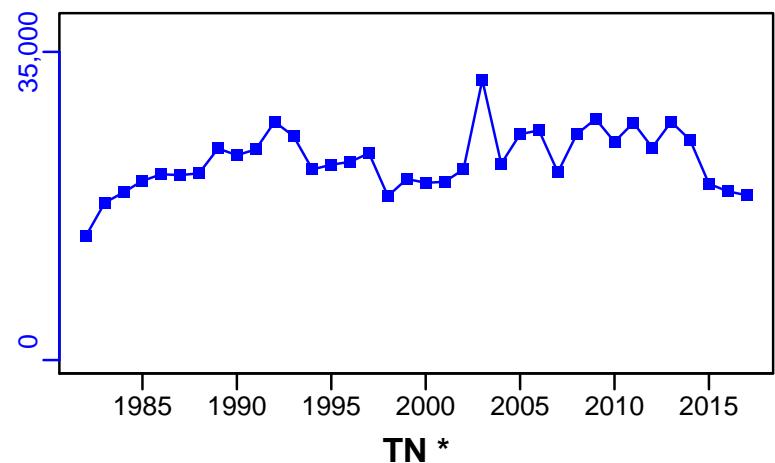


◆ Start Year ◆ End Year * No Data

Common sole Eastern English Channel [SOLEVId]

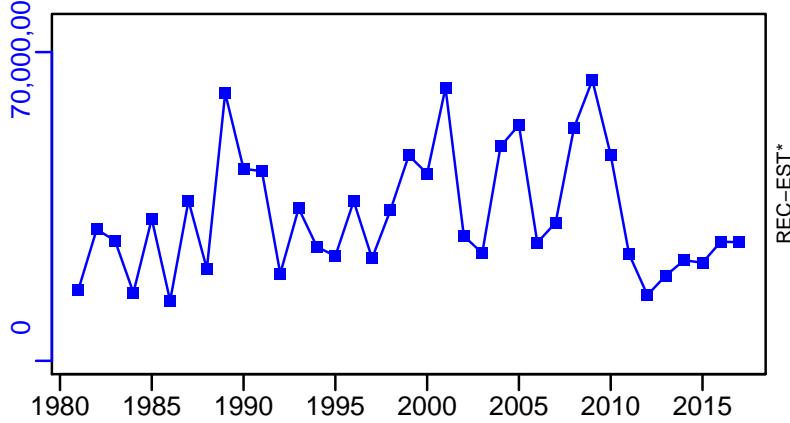
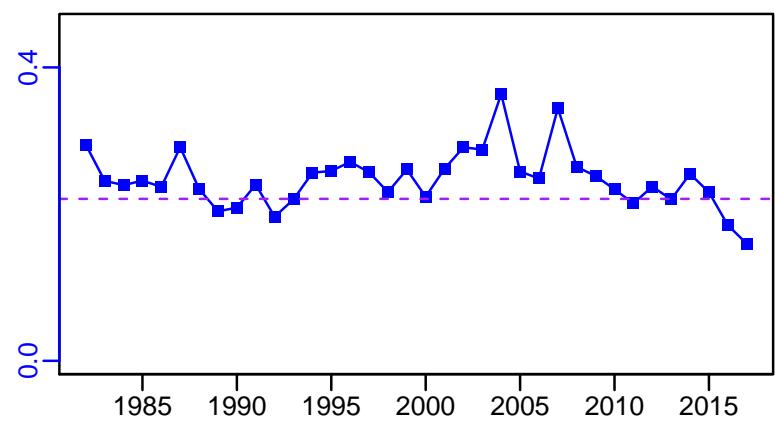
TB-MT (1981–2018–ICESIMP2018)

SSB-MT (1981–2018–ICESIMP2018)



ER-calc-ratio (1981–2018–ICESIMP2018)

R-E00 (1981–2018–ICESIMP2018)

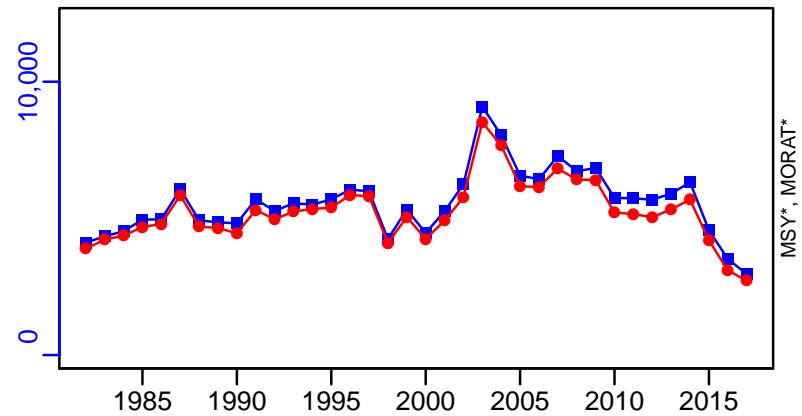


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Common sole Eastern English Channel [SOLEVId]

TC-MT, TL-MT, RecC* (1981–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



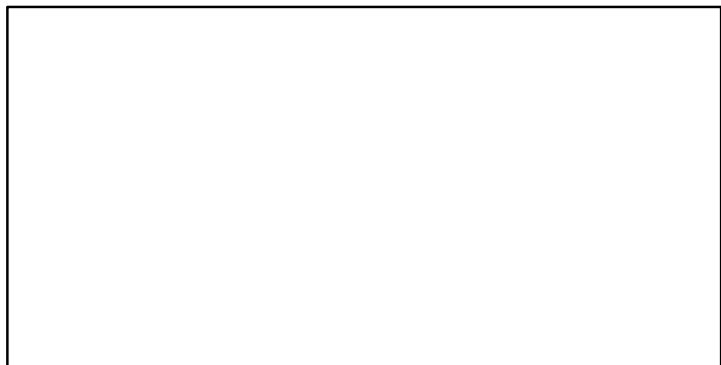
survB*



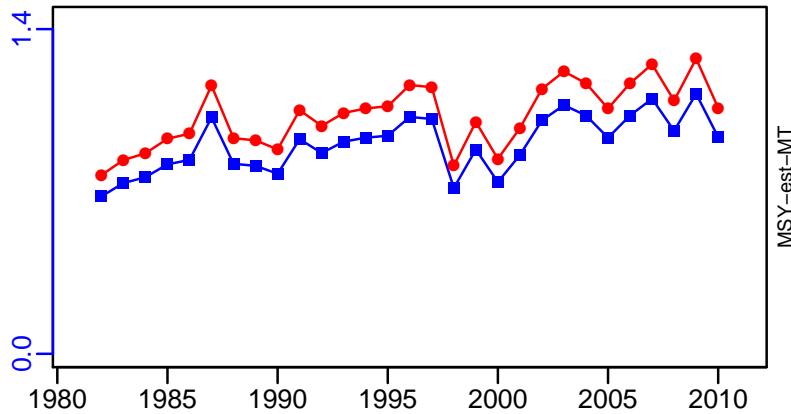
CPUE*



EFFORT*



TL-MT/MSY-est-MT, CdiveMEANC-ratio, (1981–2011–NEUBAUER)



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

Common sole Western English Channel [SOLEVIIe]

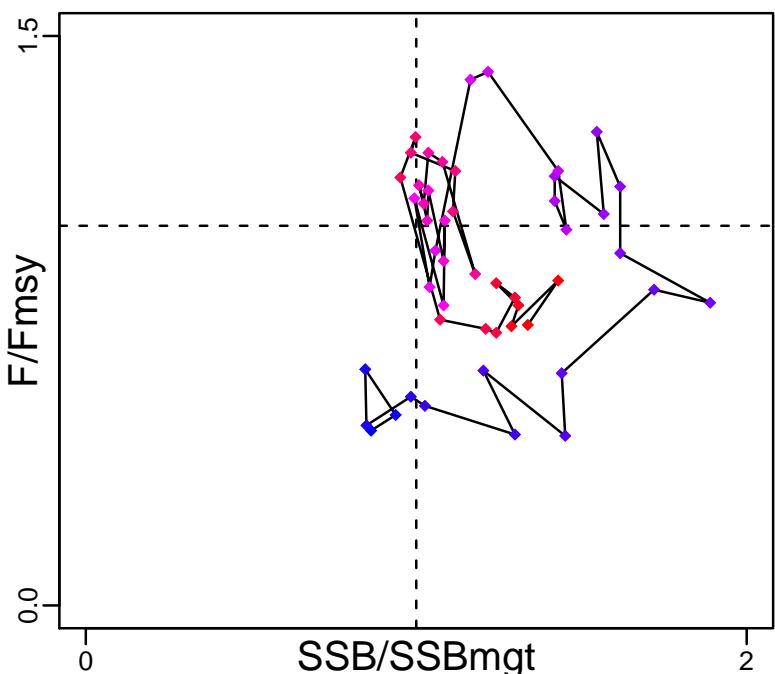
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEVIIe-1967-2018-ICESIMP2018
Area	Western English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016, 2017, 2018, 2013, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	7740
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.291
ERmsy	ERmsy-est-ratio	2018	0.28
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	2826
Fmgt	Fmgt-1/yr	2018	0.291
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	1123
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	2039
Flim	Flim-1/yr	2018	0.44
ERlim	-	-	-

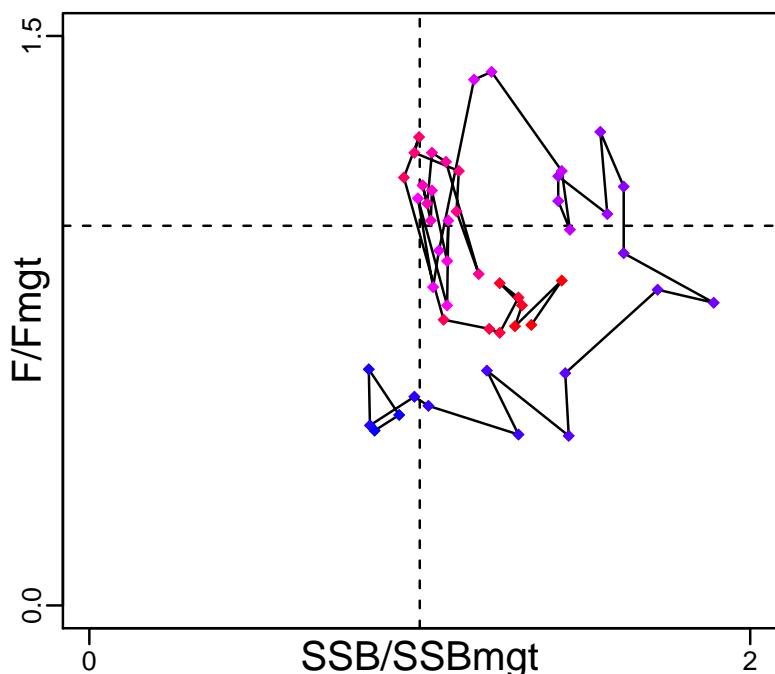
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	5270	Both	-	
SSB	SSB-MT	2018	3970	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	3,880,000	-	2	
F	F-1/yr	2018	0.215	-	3 to 9	
ER	ER-calc-ratio	2018	0.192	-	-	
TC	TC-MT	2017	924			
TL	TL-MT	2018	1010			
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	0.429			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.739			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.684			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.405			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.739			
ER/ERmgt	-	-	-			

Common sole Western English Channel [SOLEVII]

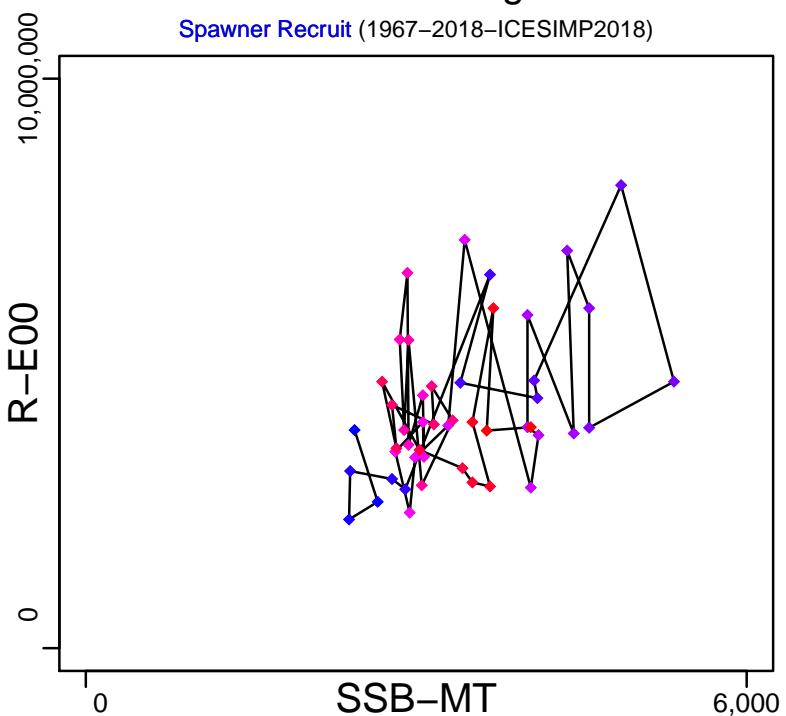
Kobe MSYpref (1967–2018–ICESIMP2018)



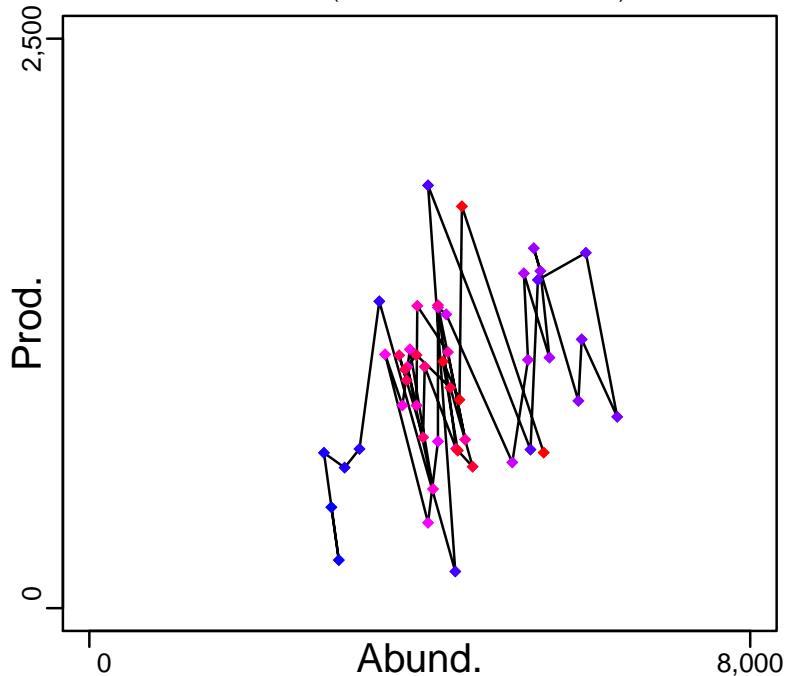
Kobe MGTpref (1967–2018–ICESIMP2018)



Spawner Recruit (1967–2018–ICESIMP2018)



Production (1967–2018–ICESIMP2018)

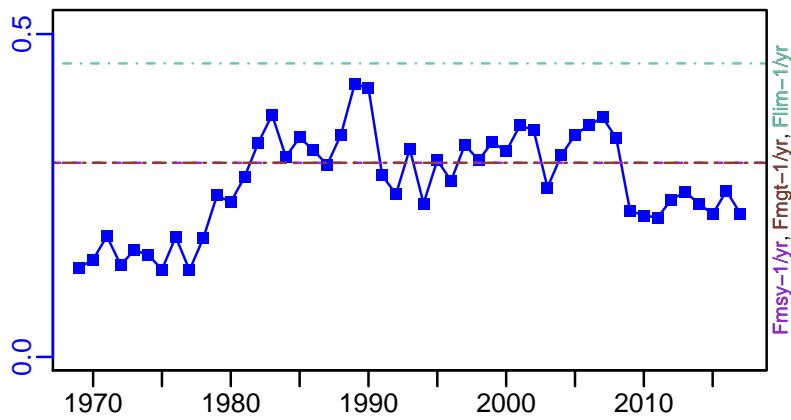
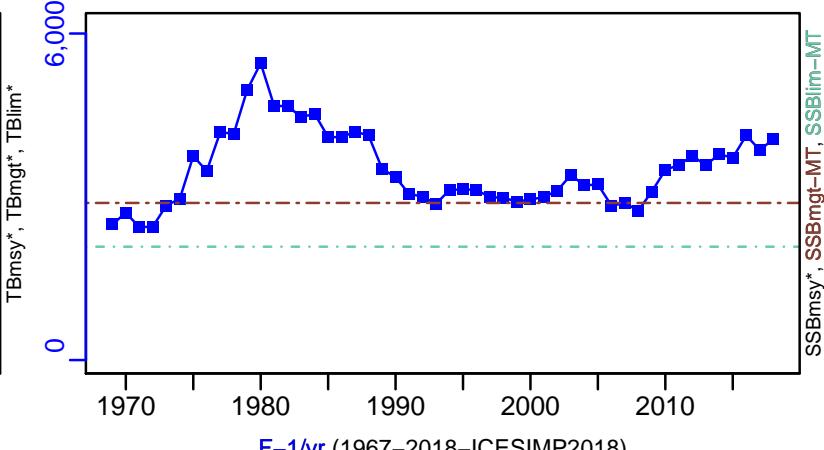
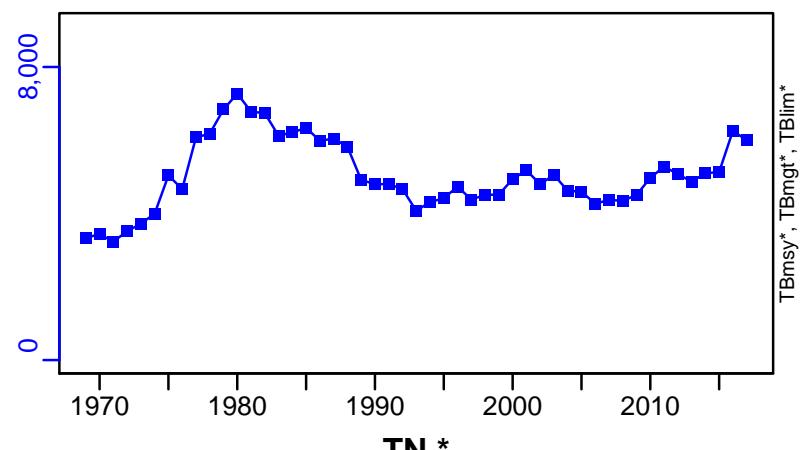


◆ Start Year ◆ End Year * No Data

Common sole Western English Channel [SOLEVille]

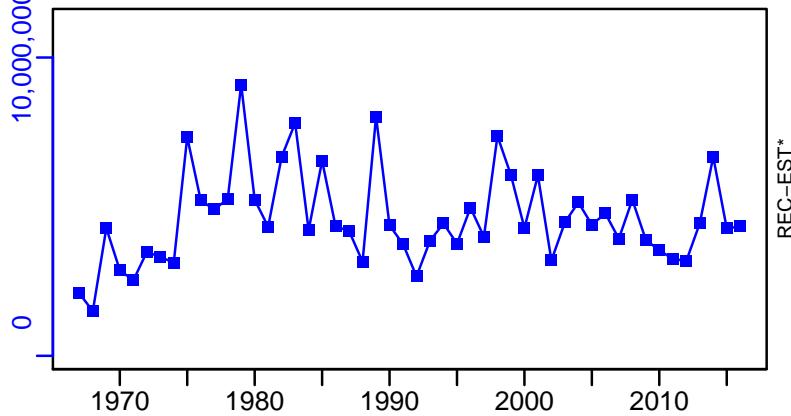
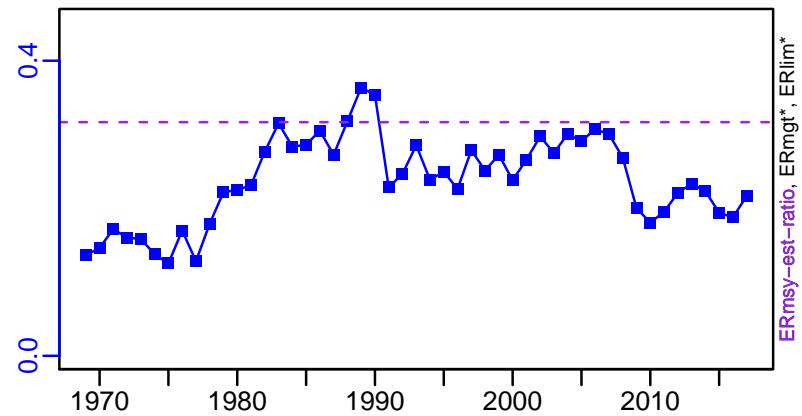
TB-MT (1967–2018–ICESIMP2018)

SSB-MT (1967–2018–ICESIMP2018)



ER-calc-ratio (1967–2018–ICESIMP2018)

R-E00 (1967–2018–ICESIMP2018)

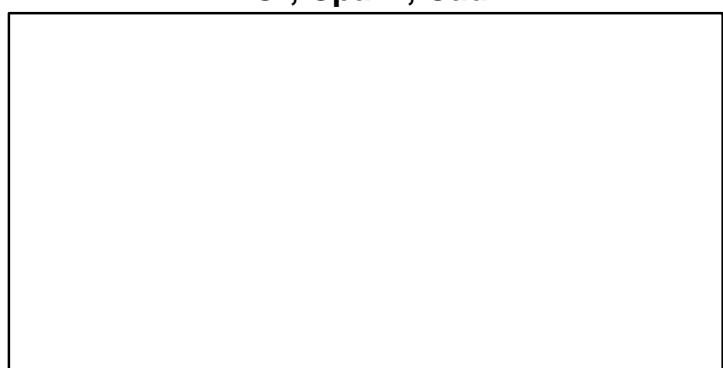
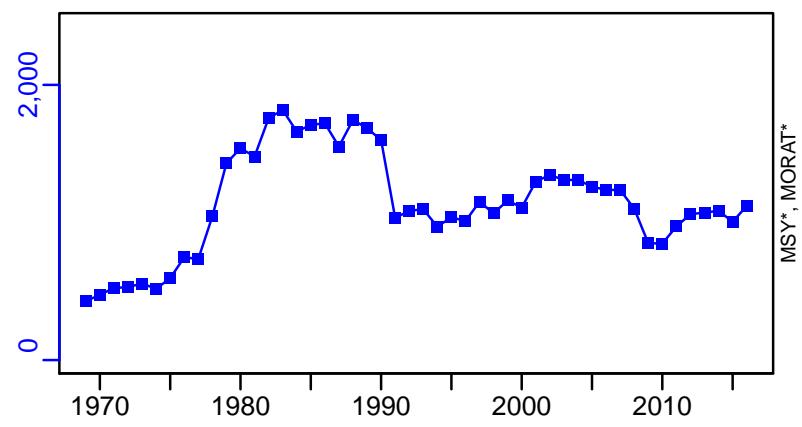


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

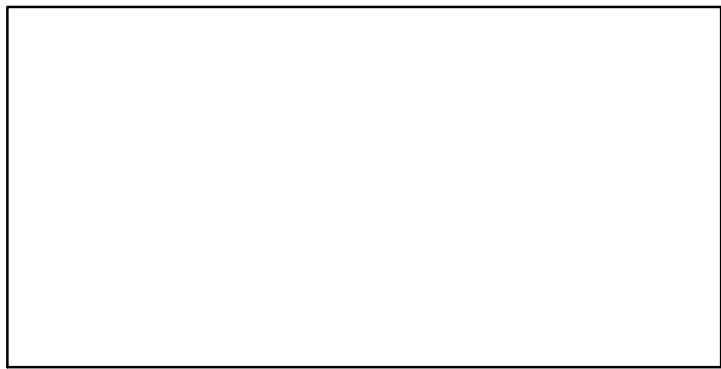
Common sole Western English Channel [SOLEVille]

TC-MT, TL*, RecC* (1967–2017–ICESIMP2018)

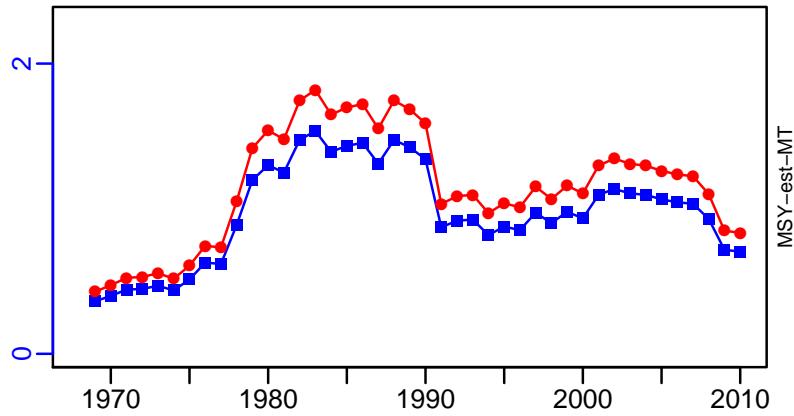
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdiveMEANC-ratio, (1968–2010–NEUBAUER)



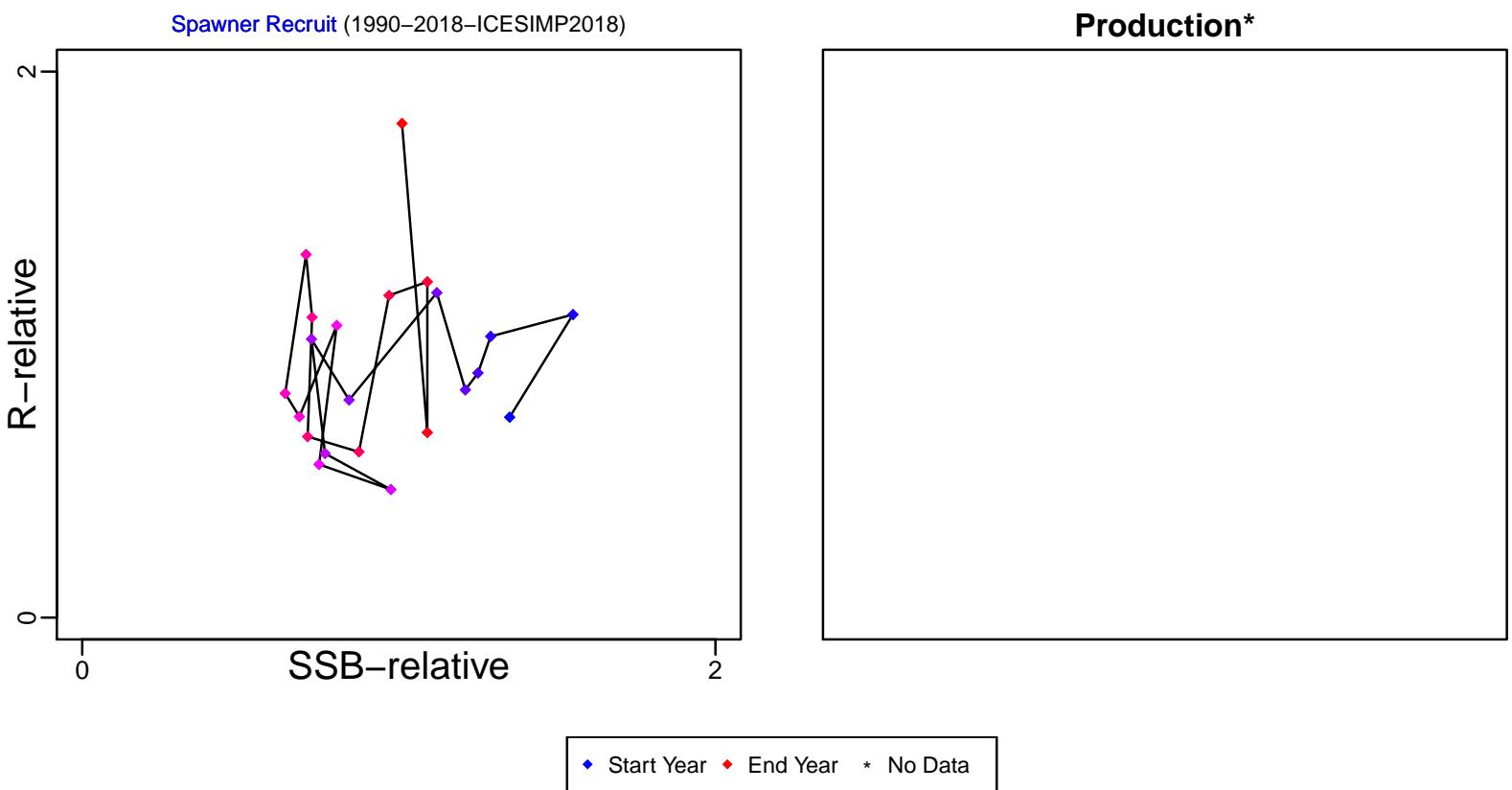
■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Common sole ICES 7h-k [SOLEVIIh-k]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEVIIh-k-1990-2018-ICESIMP2018
Area	ICES 7h-k
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2015, 2016, 2018

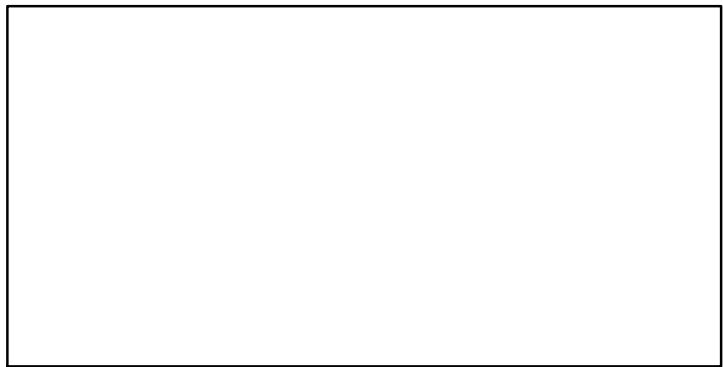
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.161
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2018	590
Fmgt	Fmgt-relative	2018	0.161
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-relative	2018	425
Flim	Flim-relative	2018	0.222
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2018	1.3	Both	-
TN	-	-	-	-	-
R	R-relative	2018	1.81	-	3
F	F-relative	2018	0.614	-	3 to 6
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	92		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

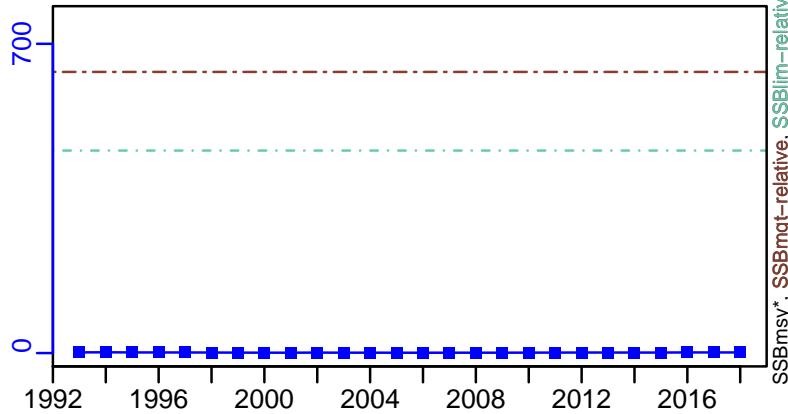
Kobe MSY***Kobe MGT***

Common sole ICES 7h–k [SOLEVIIh–k]

TB*



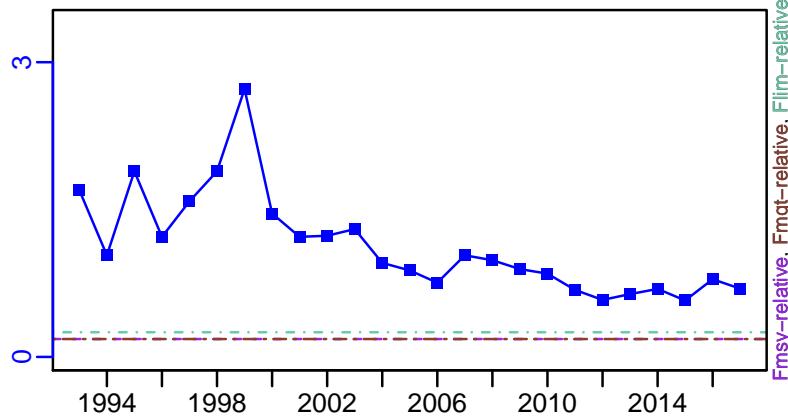
SSB-relative (1990–2018–ICESIMP2018)



TN *



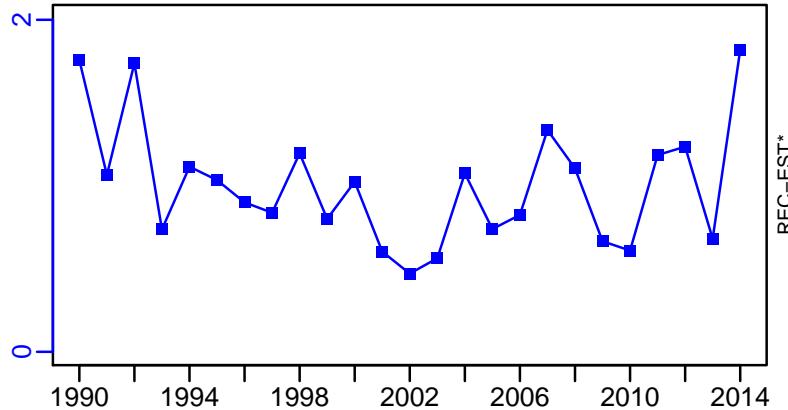
F-relative (1990–2018–ICESIMP2018)



ER*



R-relative (1990–2018–ICESIMP2018)

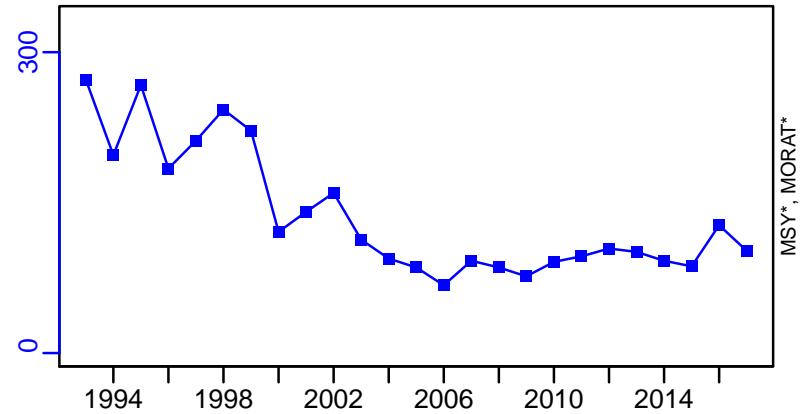


- Listed time series - - - Target BRP — Rec-Est
- - - MSY-based BRP - - - Lim BRP * No Data

Common sole ICES 7h–k [SOLEVIIh–k]

TL–MT, TC*, RecC* (1990–2018–ICESIMP2018)

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 |

Common sole ICES 8ab [SOLEVIIIab]

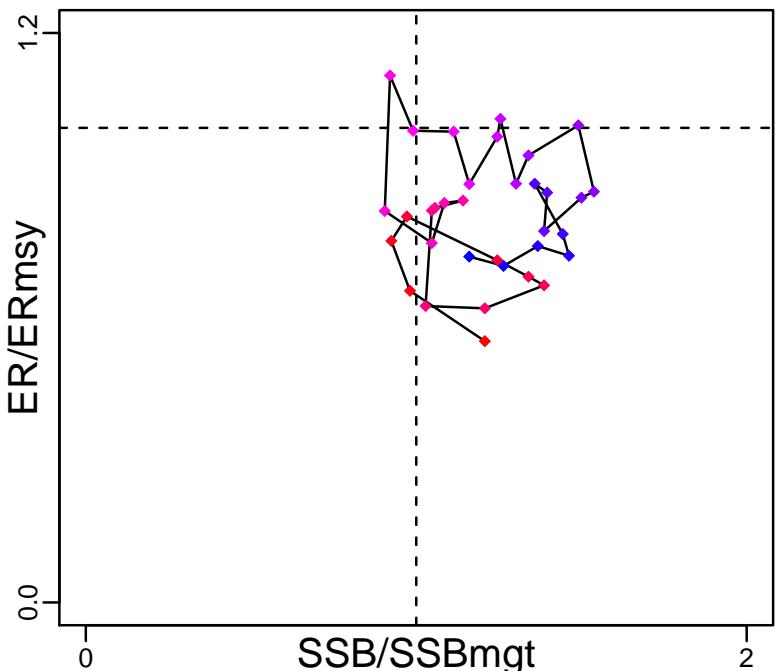
Metadata	
Scientific Name	Solea solea
Current Assess ID	WGBIE-SOLEVIIIab-1982-2018-ICESIMP2018
Area	ICES 8ab
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2017, 2018, 2014, 2015, 2011, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	40,458
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.33
ERmsy	ERmsy-est-ratio	2018	0.375
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	10,600
Fmgt	Fmgt-1/yr	2017	0.33
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	7983
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	7600
Flim	Flim-1/yr	2017	0.6
ERlim	-	-	-

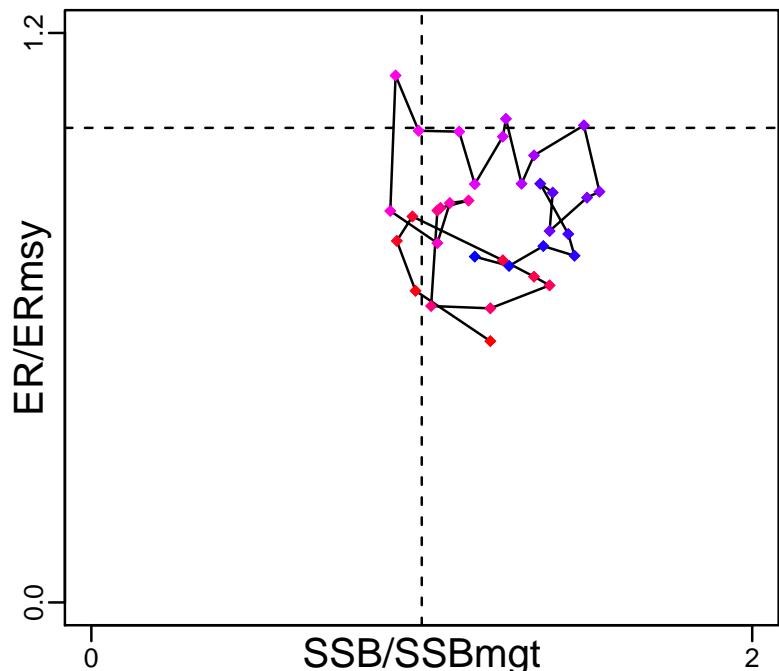
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	16,000	Both	-	
SSB	SSB-MT	2018	13,200	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	2.1×10^7	-	2	
F	F-1/yr	2017	0.364	-	-	
ER	ER-calc-ratio	2018	0.206	-	-	
TC	TC-MT	2018	3300			
TL	TL-MT	2018	3250			
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	0.329			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.103			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.551			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.245			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	1.103			
ER/ERmgt	-	-	-			

Common sole ICES 8ab [SOLEVIIlab]

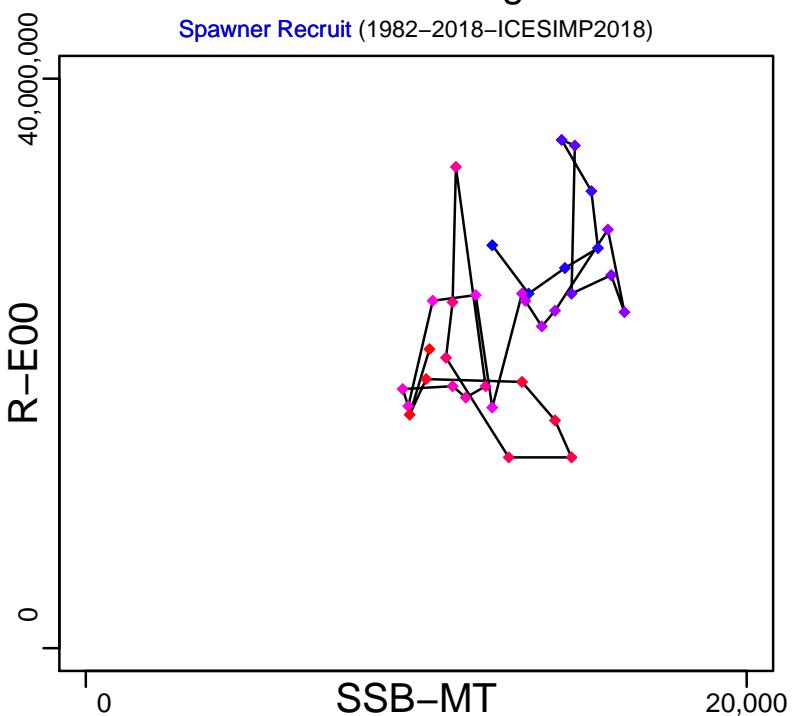
Kobe MSYpref (1982–2018–ICESIMP2018)



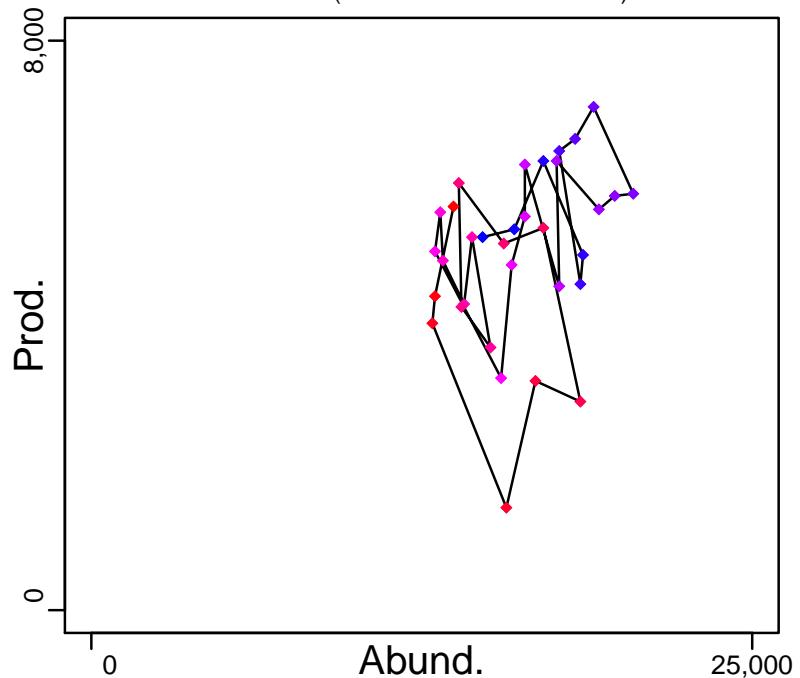
Kobe MGTpref (1982–2018–ICESIMP2018)



Spawner Recruit (1982–2018–ICESIMP2018)



Production (1982–2018–ICESIMP2018)

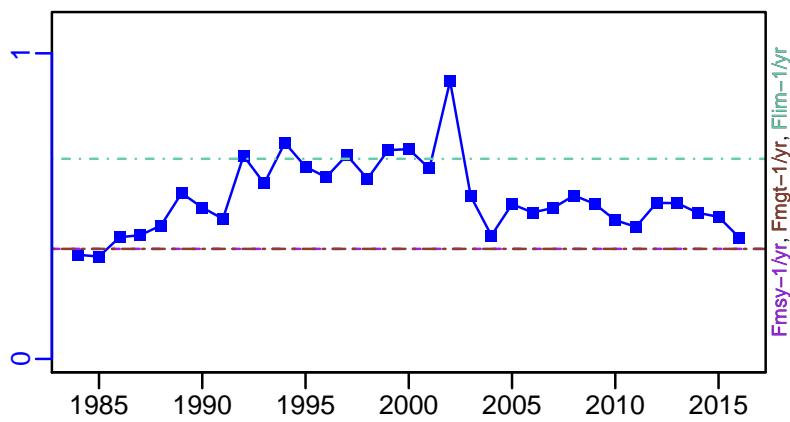
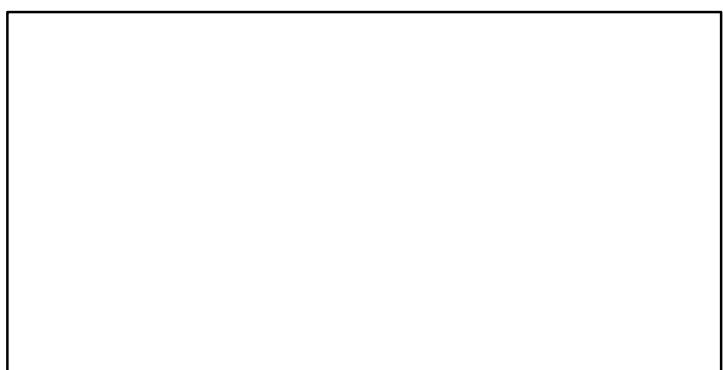
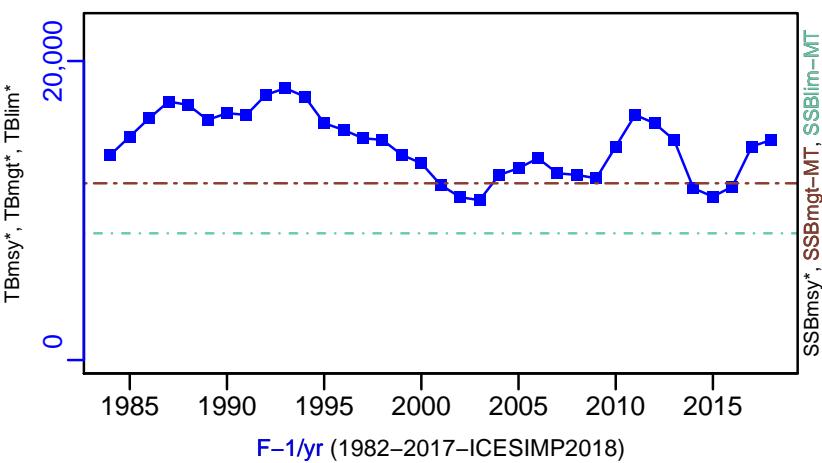
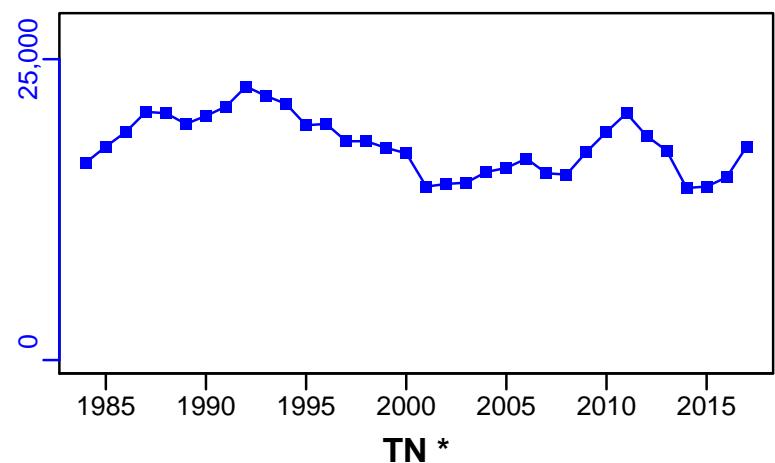


◆ Start Year ♦ End Year * No Data

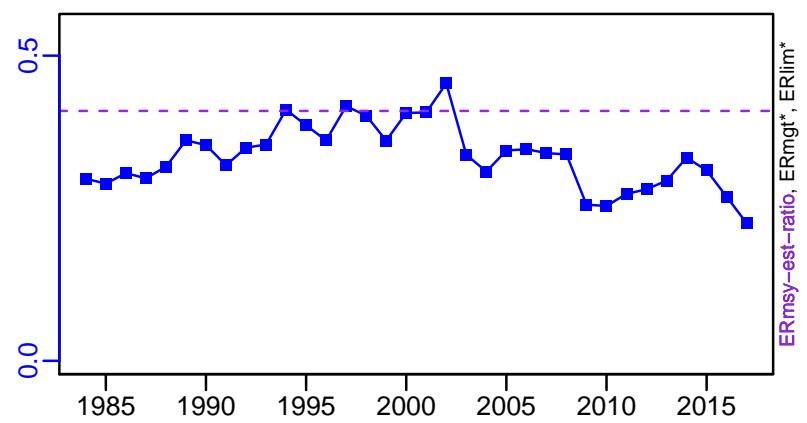
Common sole ICES 8ab [SOLEVIIlab]

TB-MT (1982–2018–ICESIMP2018)

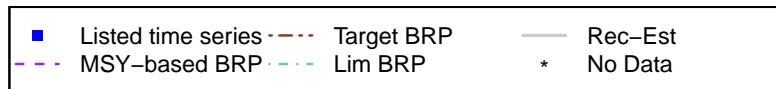
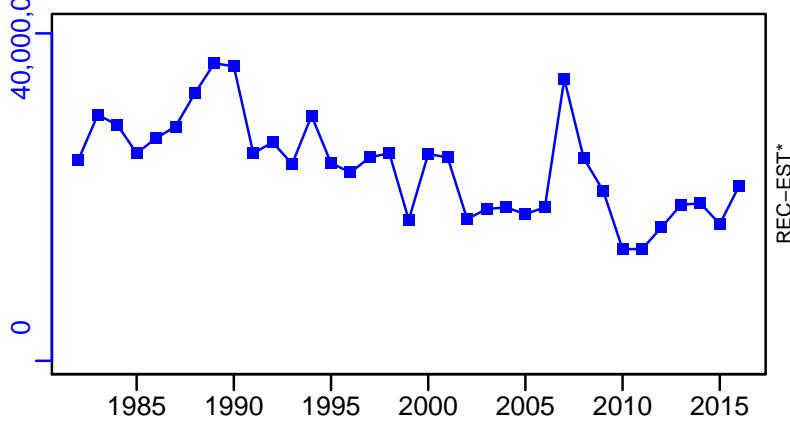
SSB-MT (1982–2018–ICESIMP2018)



ER-calc-ratio (1982–2018–ICESIMP2018)



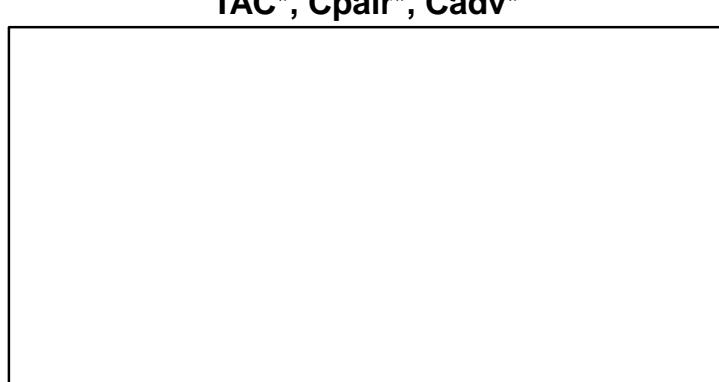
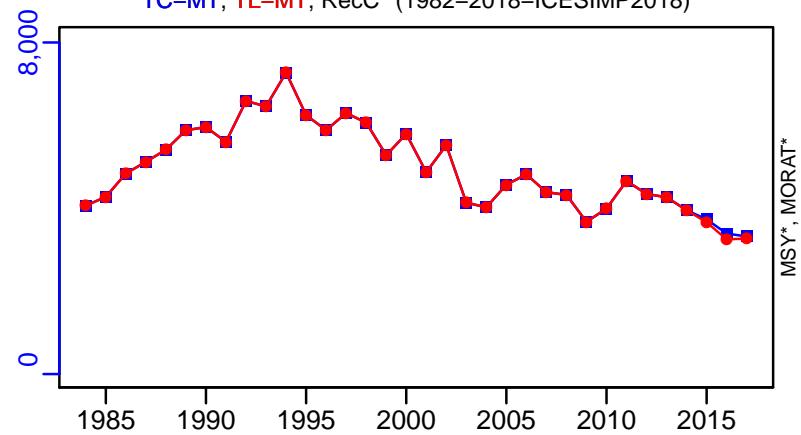
R-E00 (1982–2018–ICESIMP2018)



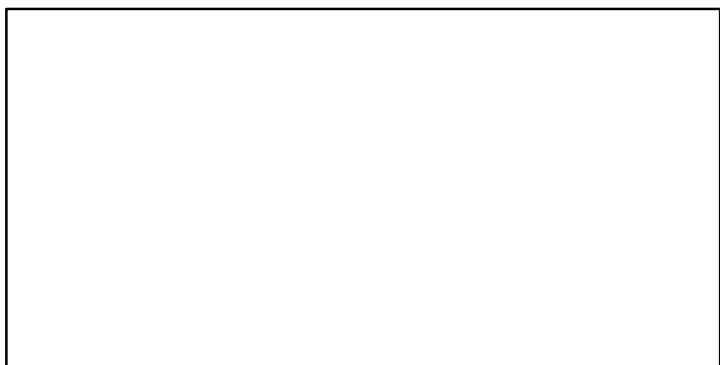
Common sole ICES 8ab [SOLEVIIlab]

TC-MT, TL-MT, RecC* (1982–2018–ICESIMP2018)

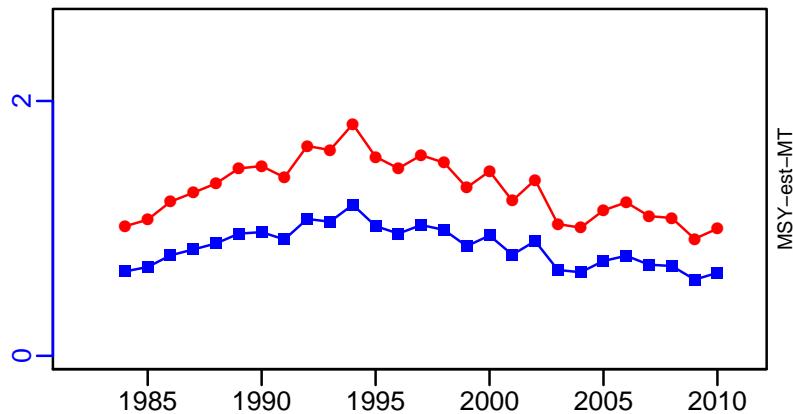
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1982–2011–NEUBAUER)



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

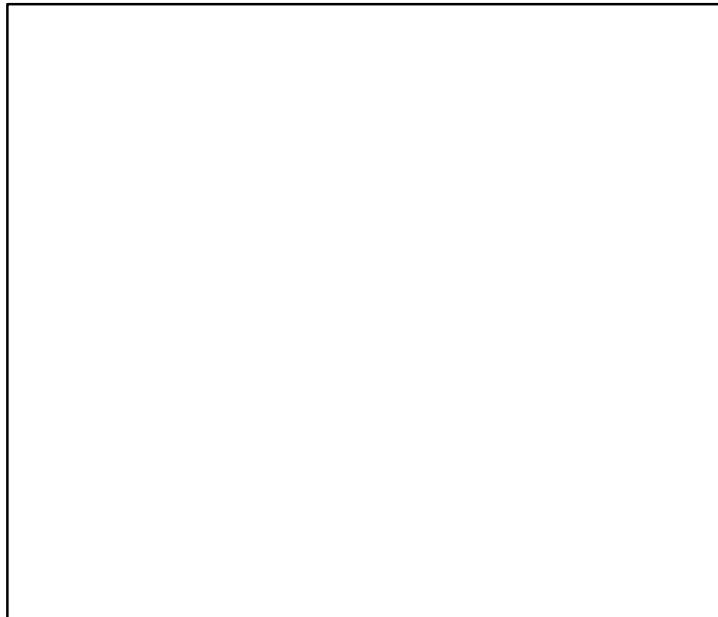
Common sole ICES 8c-9a [SOLEVIIIC-IXa]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGBIE-SOLEVIIIC-IXa-2000-2011-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2011

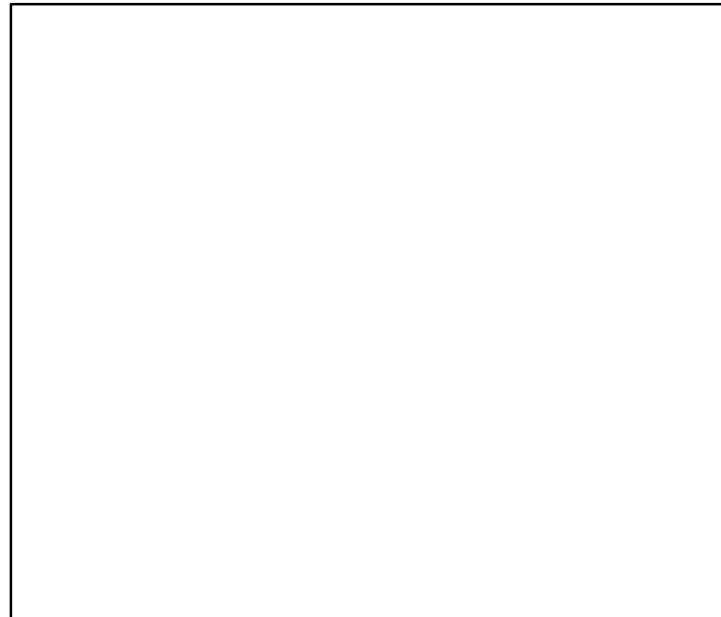
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2011	730		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



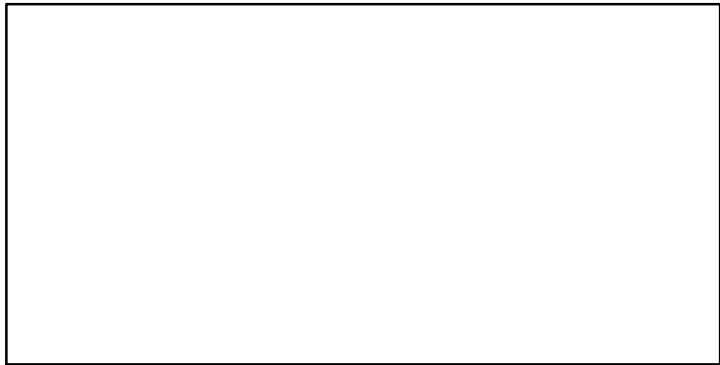
Production*



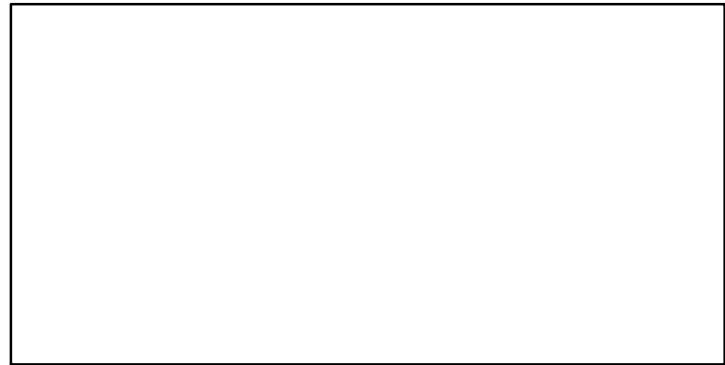
◆ Start Year ♦ End Year * No Data

Common sole ICES 8c–9a [SOLEVIIIC–IXa]

TB*



SSB*



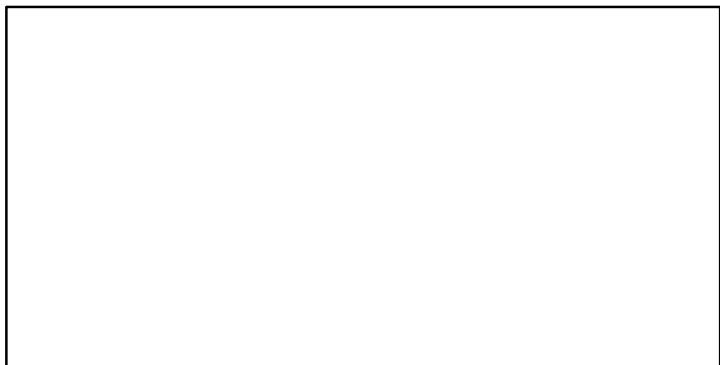
TN *



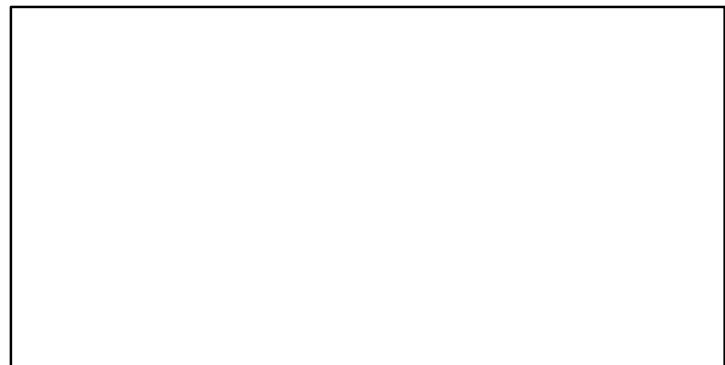
F*



ER*



Recruits*

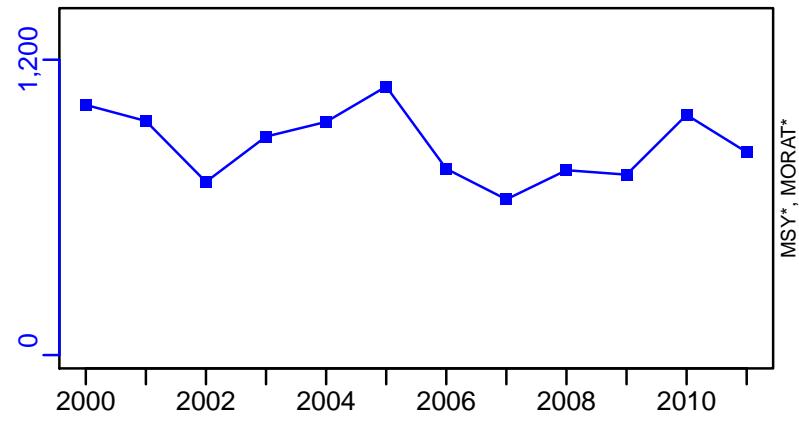


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Common sole ICES 8c–9a [SOLEVIIIC–IXa]

TL–MT, TC*, RecC* (2000–2011–ICESIMP2018)

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 |

Sprat Baltic Areas 22-32 [SPRAT22-32]

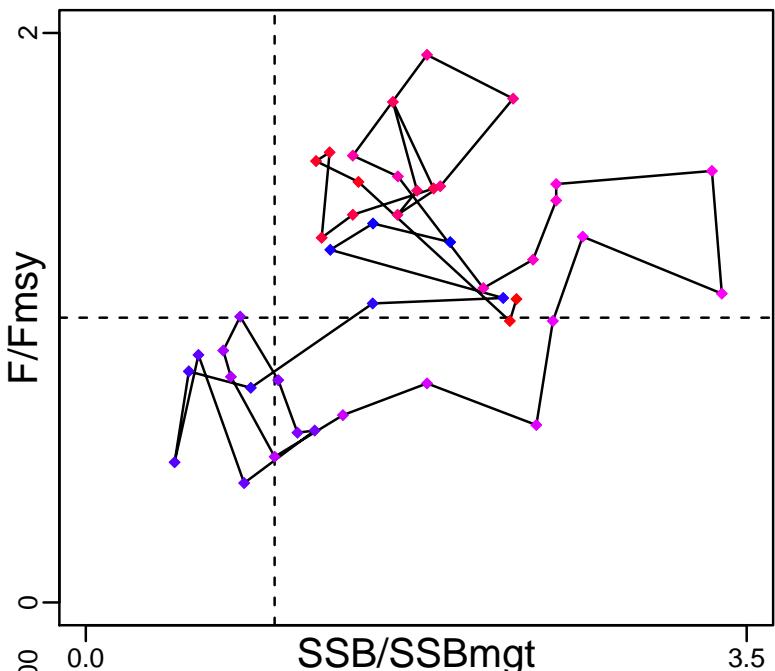
Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	WGBFAS-SPRAT22-32-1973-2018-ICESIMP2018
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2011, 2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2011	1,478,431
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.26
ERmsy	ERmsy-est-ratio	2018	0.17
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	570,000
Fmgt	Fmgt-1/yr	2018	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2011	252,295
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	410,000
Flim	Flim-1/yr	2018	0.39
ERlim	-	-	-

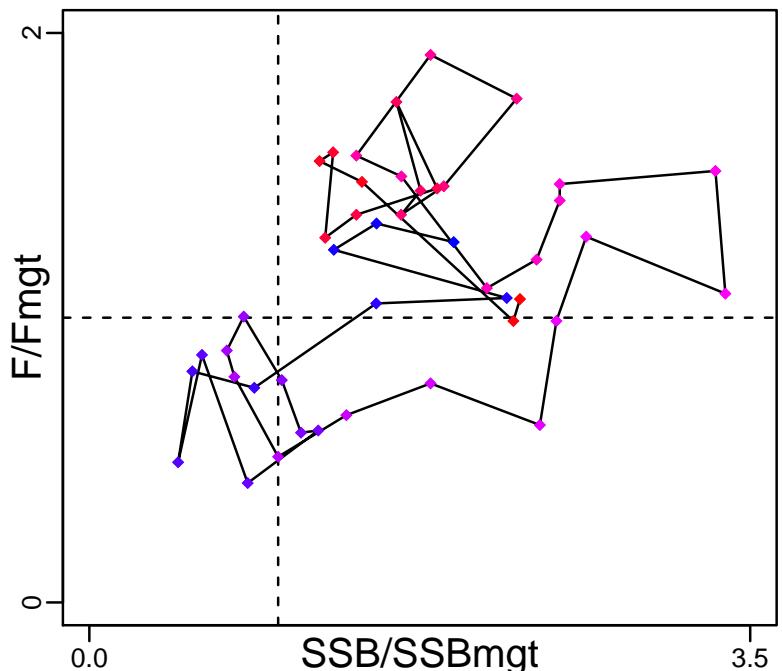
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	1,980,000	Both	-
SSB	SSB-MT	2018	1,370,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	1.13×10^{11}	-	1
F	F-1/yr	2018	0.277	-	3 to 5
ER	ER-calc-ratio	2018	0.144	-	-
TC	TC-MT	2017	247,000		
TL	TL-MT	2018	286,000		
TB/TBmsy	TB-MT/TBmsy-est-MT	2011	1.015		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.065		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.847		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.404		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.065		
ER/ERmgt	-	-	-		

Sprat Baltic Areas 22–32 [SPRAT22–32]

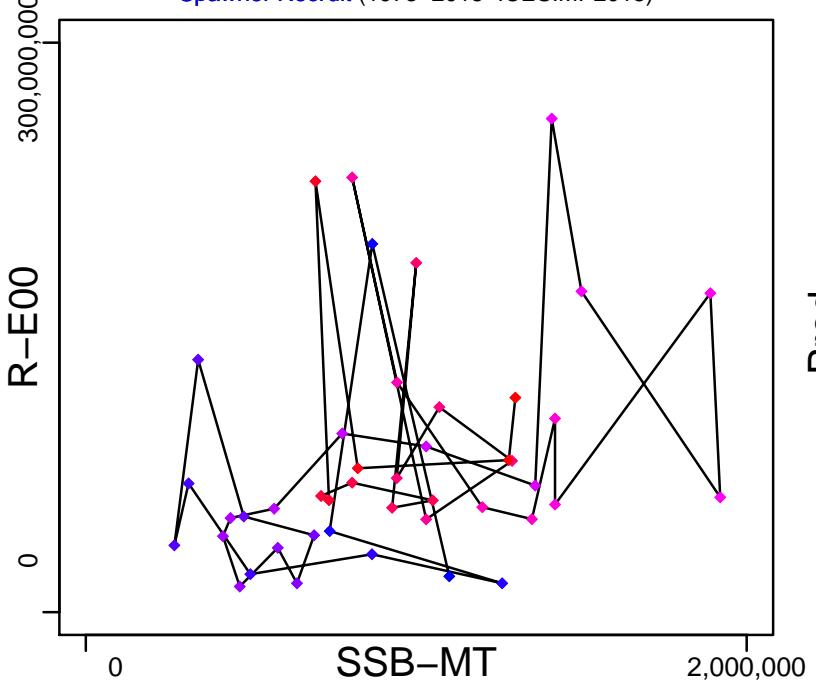
Kobe MSYpref (1973–2018–ICESIMP2018)



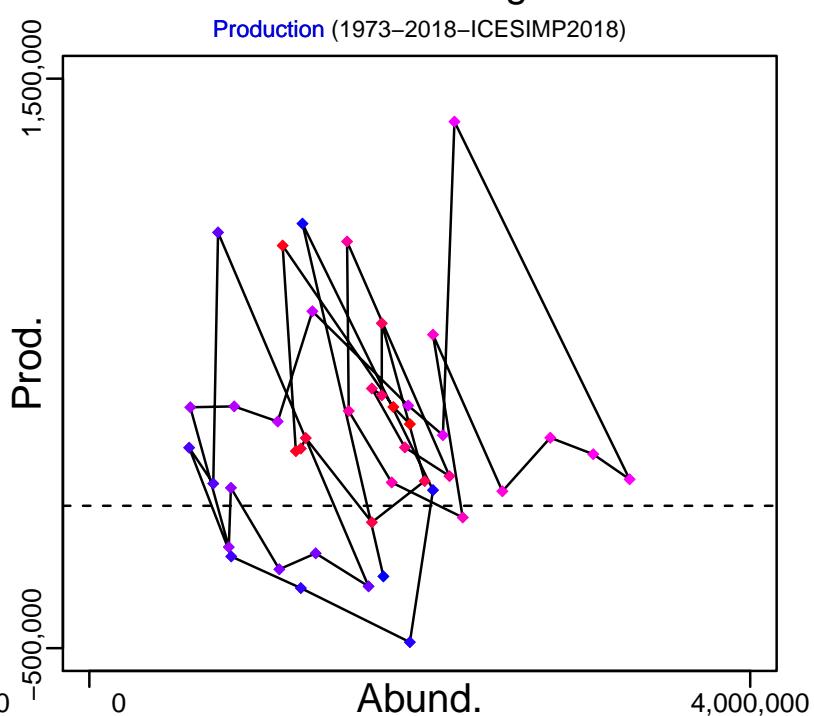
Kobe MGTpref (1973–2018–ICESIMP2018)



Spawner Recruit (1973–2018–ICESIMP2018)



Production (1973–2018–ICESIMP2018)

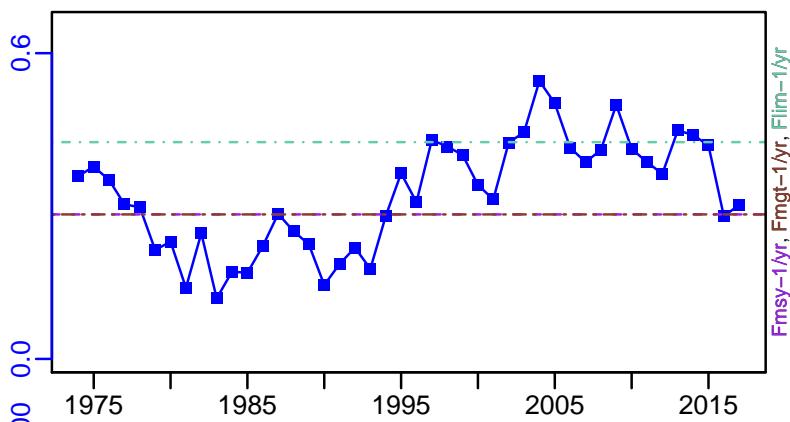
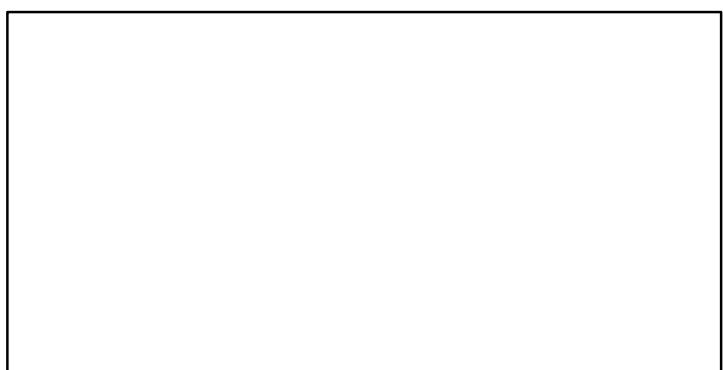
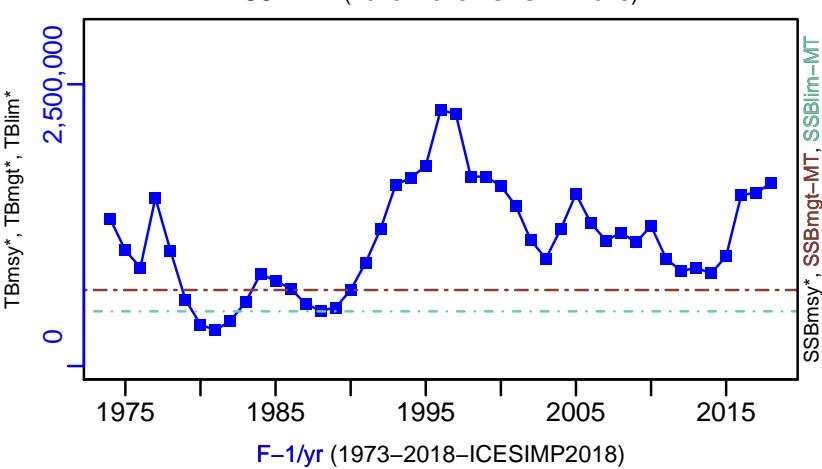
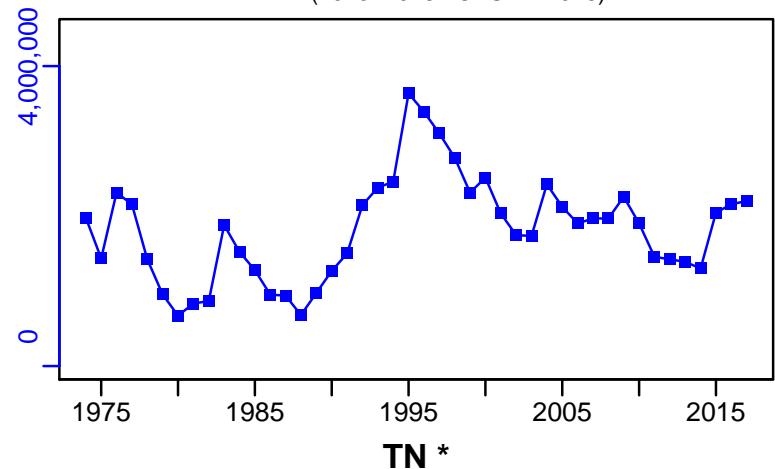


◆ Start Year ◆ End Year * No Data

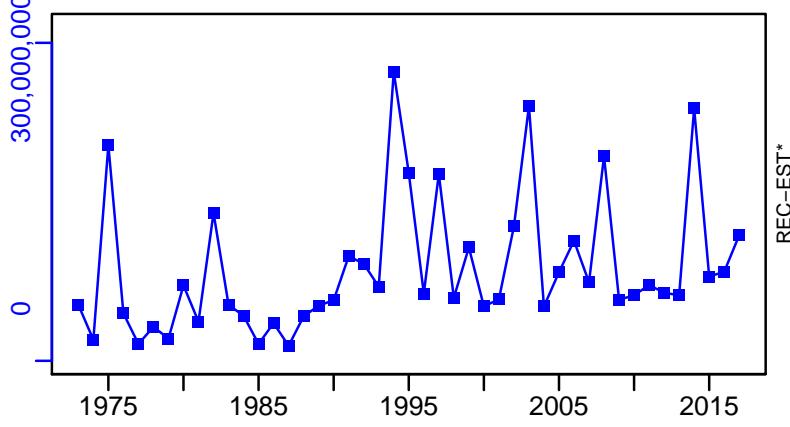
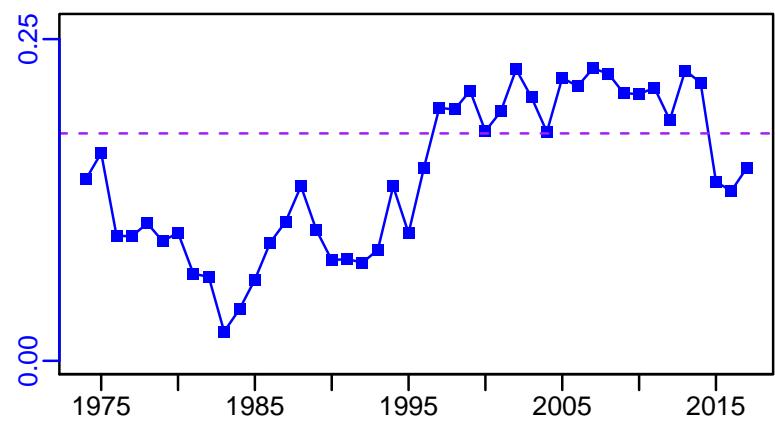
Sprat Baltic Areas 22–32 [SPRAT22–32]

TB-MT (1973–2018–ICESIMP2018)

SSB-MT (1973–2018–ICESIMP2018)



ER-calc-ratio (1973–2018–ICESIMP2018)

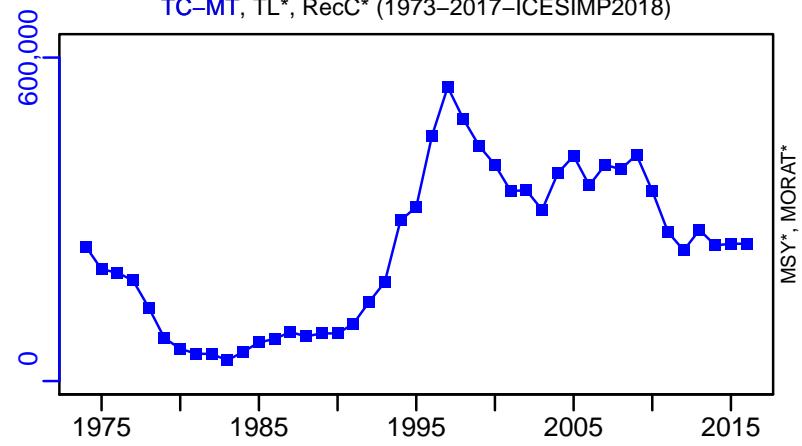


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

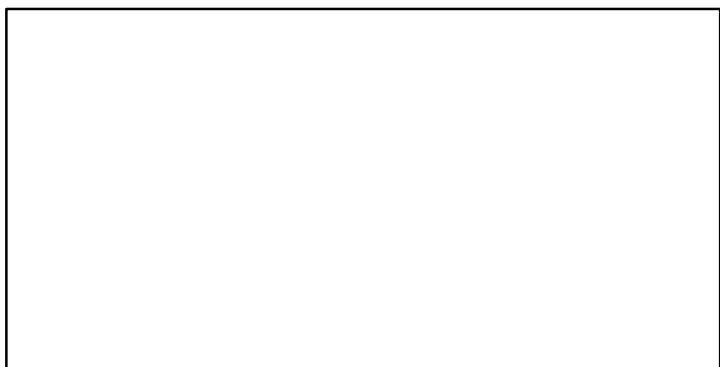
Sprat Baltic Areas 22–32 [SPRAT22–32]

TC-MT, TL*, RecC* (1973–2017–ICESIMP2018)

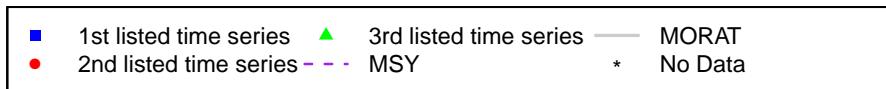
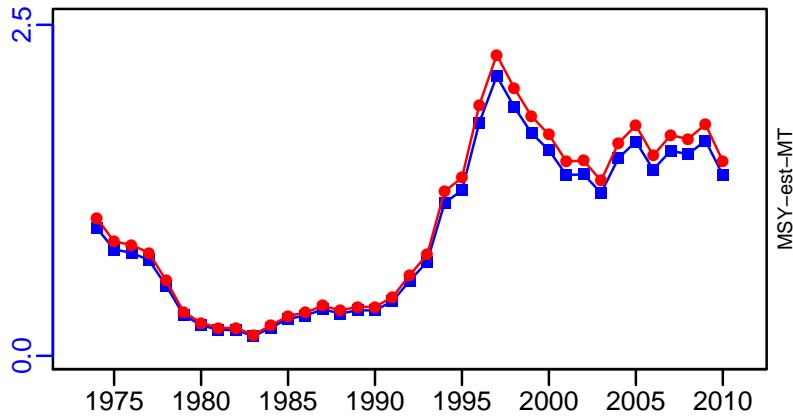
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1973–2011–NEUBAUER)



Sprat Kattegat and Skagerrak [SPRATIIIa]

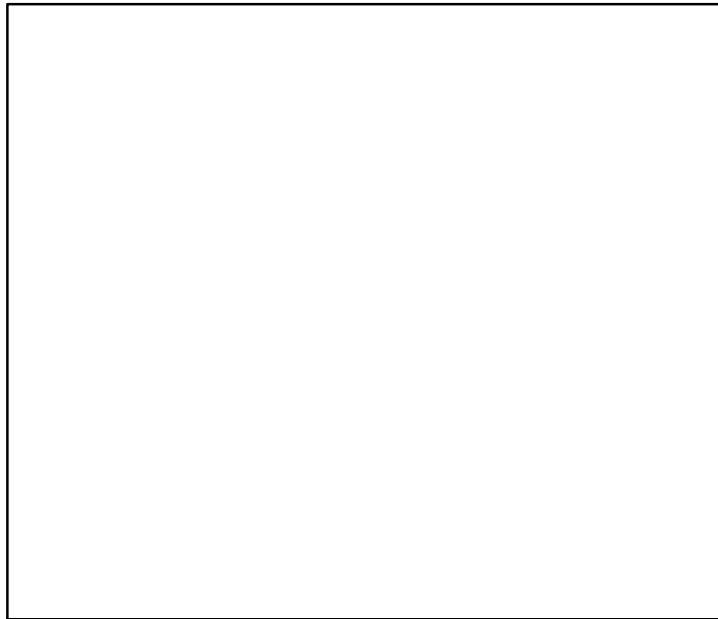
Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATIIIa-1974-2017-ICESIMP2018
Area	Kattegat and Skagerrak
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2016, 2016, 2017

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

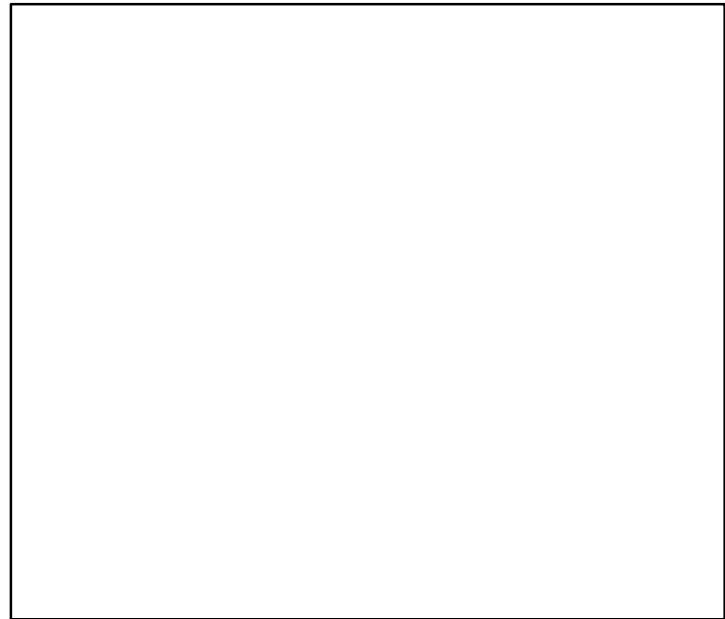
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2017	1410		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sprat Kattegat and Skagerrak [SPRATIIIA]

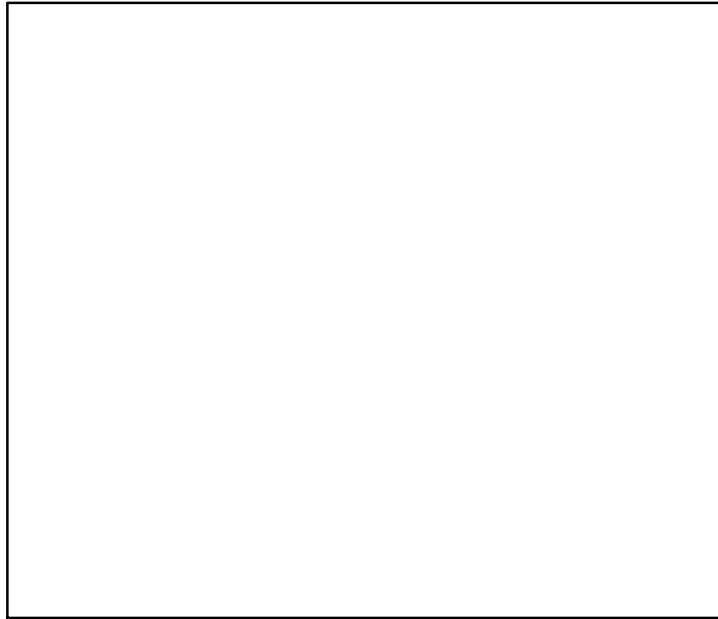
Kobe MSY*



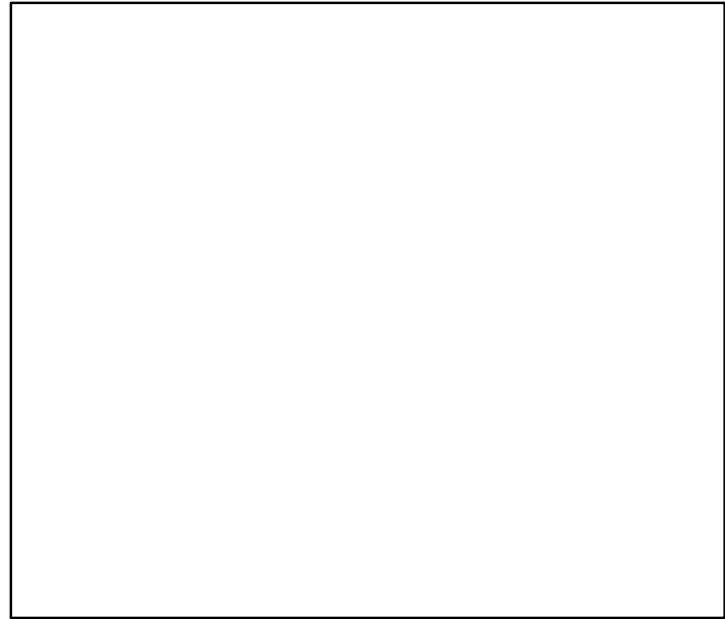
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Sprat Kattegat and Skagerrak [SPRATIIIa]

TB*



SSB*



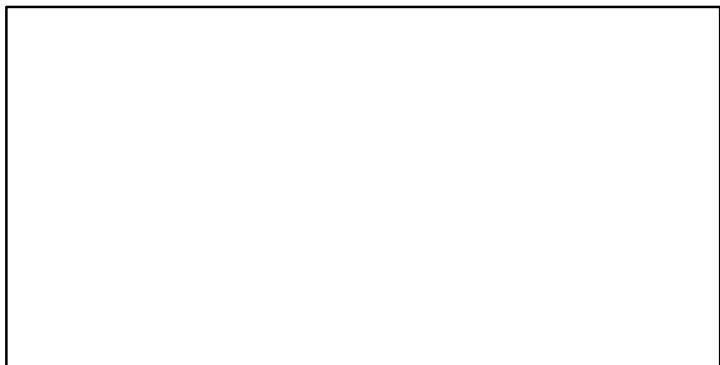
TN *



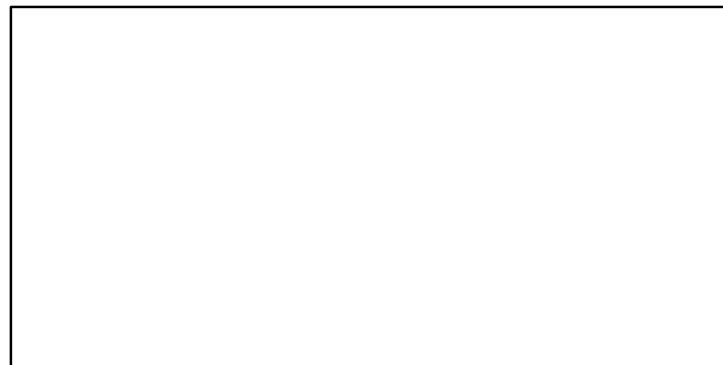
F*



ER*



Recruits*

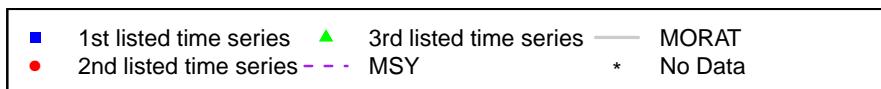
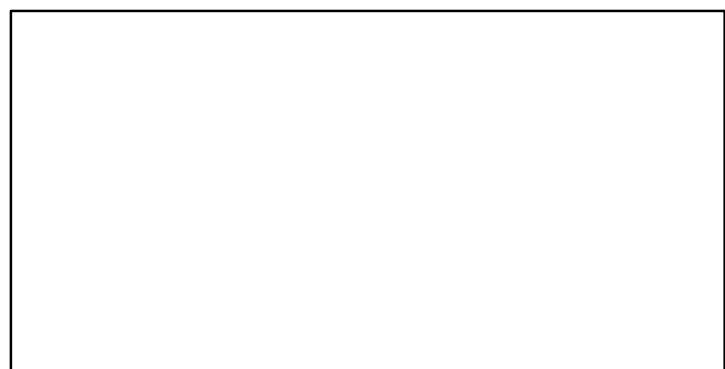
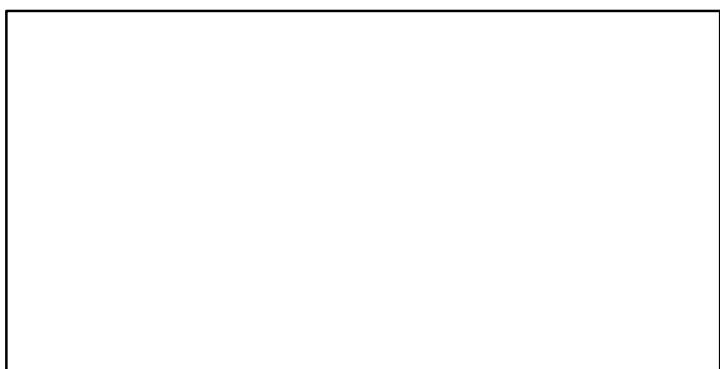
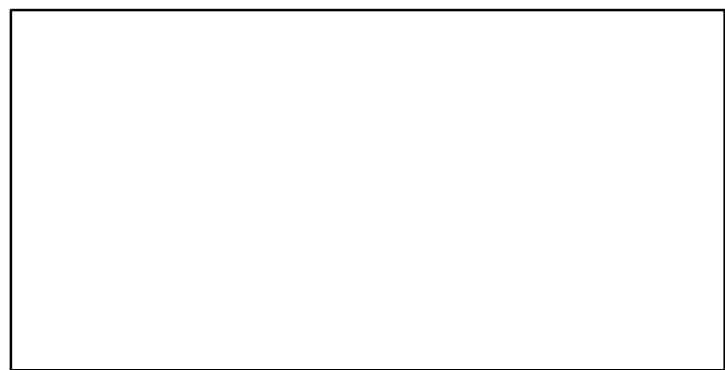
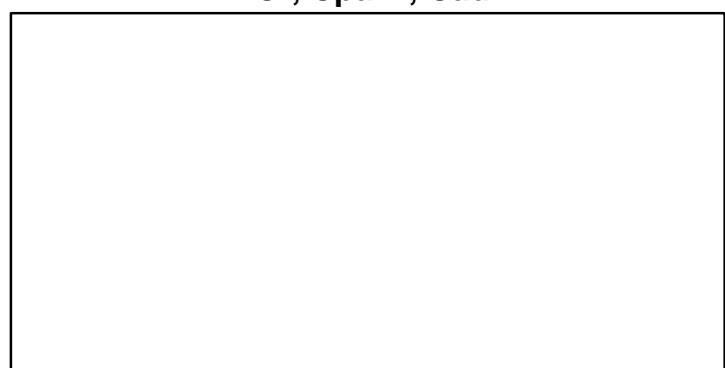
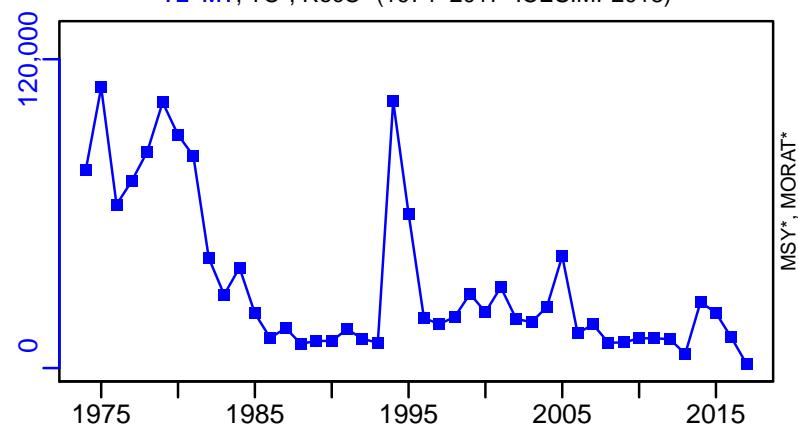


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sprat Kattegat and Skagerrak [SPRATIIIa]

TL-MT, TC*, RecC* (1974–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



Sprat North Sea [SPRATNS]

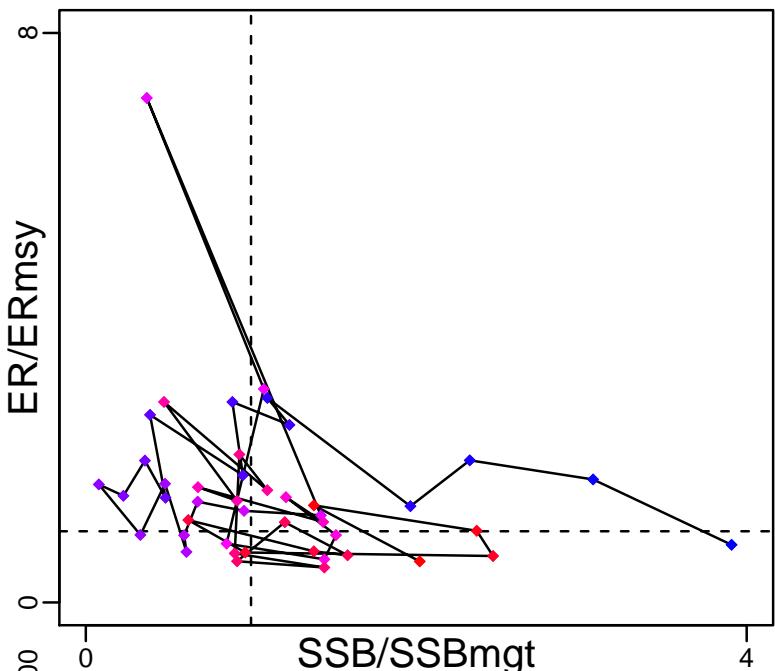
Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATNS-1974-2018-ICESIMP2018
Area	North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018, 2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2015	0.7
ERmsy	ERmsy-est-ratio	2018	0.201
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	142,000
Fmgt	Fmgt-1/yr	2015	0.7
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.75
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	90,000
Flim	-	-	-
ERlim	-	-	-

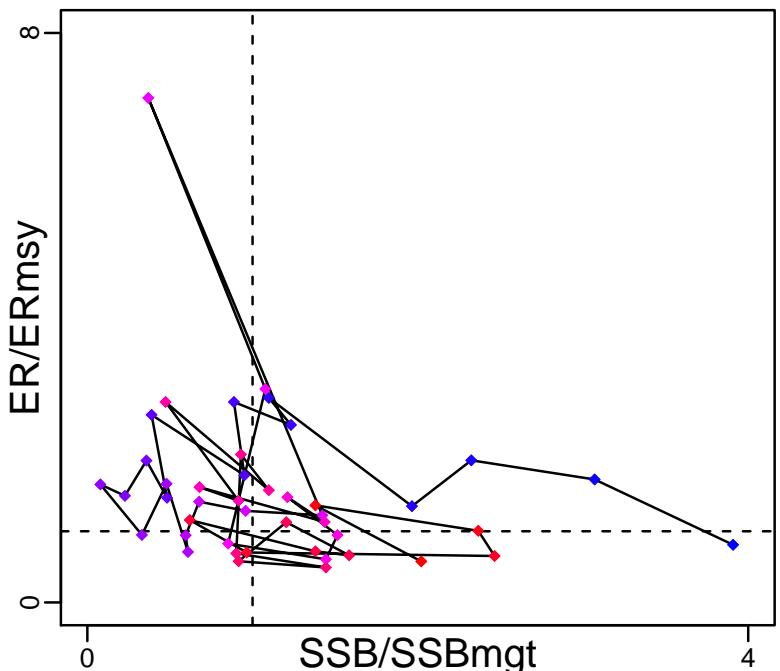
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	2,560,000	Both	-
SSB	SSB-MT	2018	409,000	Both	-
TN	TN-relative	2007	72,900	-	-
R	R-E00	2018	1.04×10^{11}	-	0
F	F-1/yr	2018	1.72	-	1 to 2
ER	ER-calc-ratio	2018	0.116	-	-
TC	TC-MT	2018	140,000		
TL	TL-MT	2018	140,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.923		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.577		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.88		
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.923		
ER/ERmgt	-	-	-		

Sprat North Sea [SPRATNS]

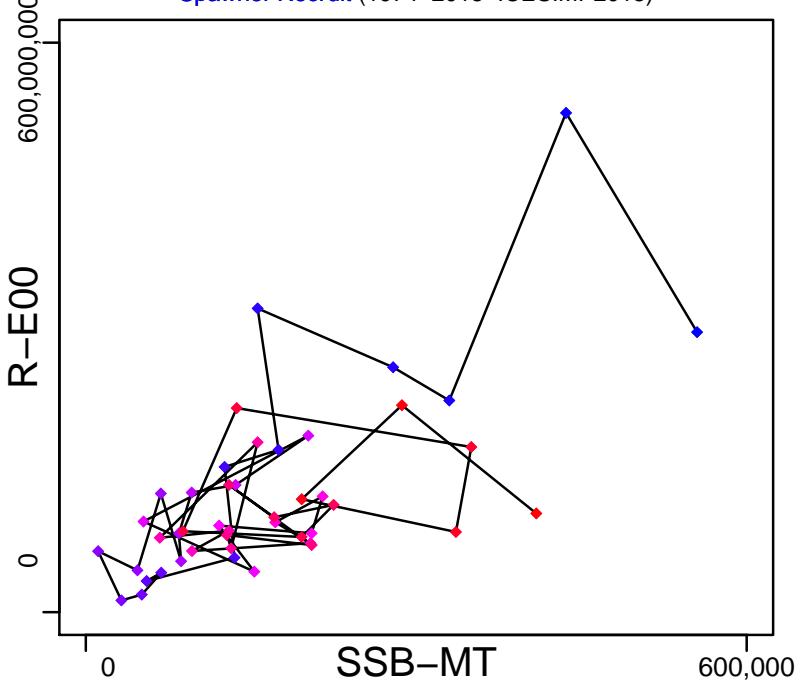
Kobe MSYpref (1974–2018–ICESIMP2018)



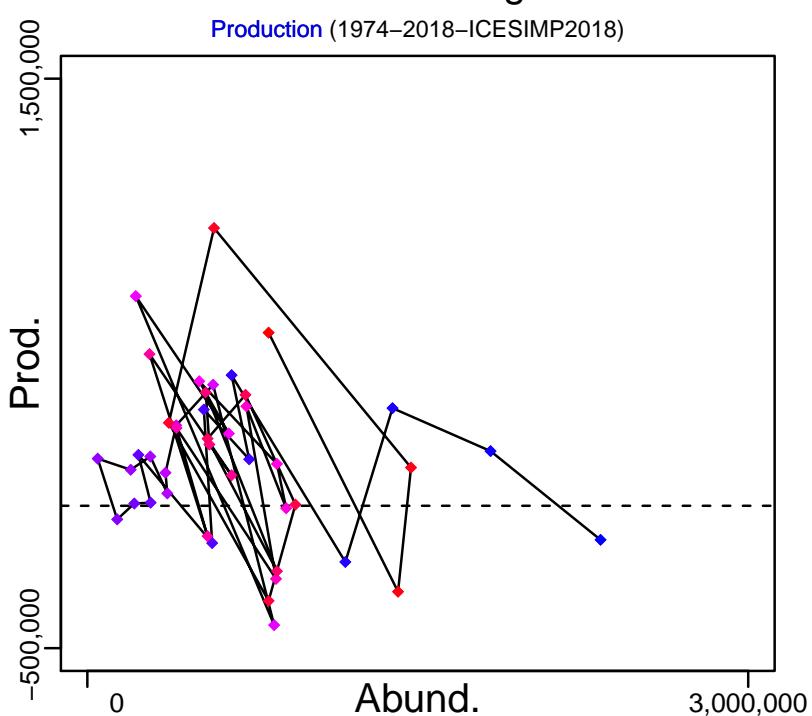
Kobe MGTpref (1974–2018–ICESIMP2018)



Spawner Recruit (1974–2018–ICESIMP2018)



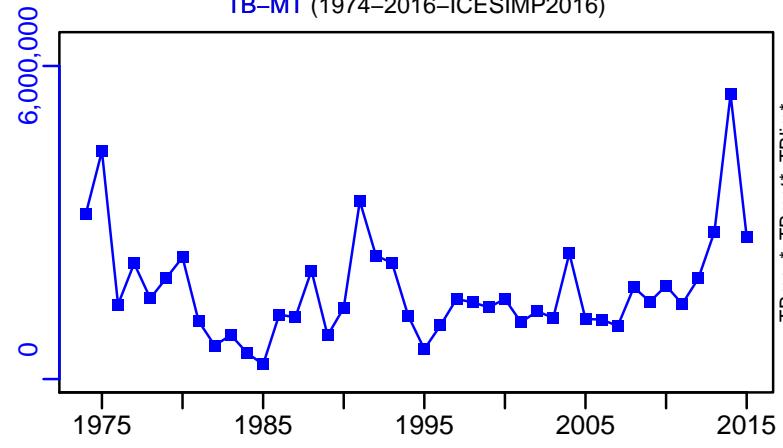
Production (1974–2018–ICESIMP2018)



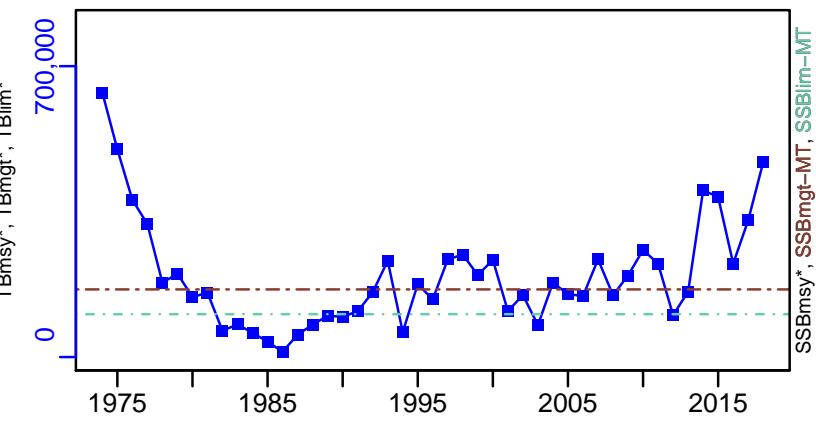
◆ Start Year	◆ End Year	*	No Data
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Sprat North Sea [SPRATNS]

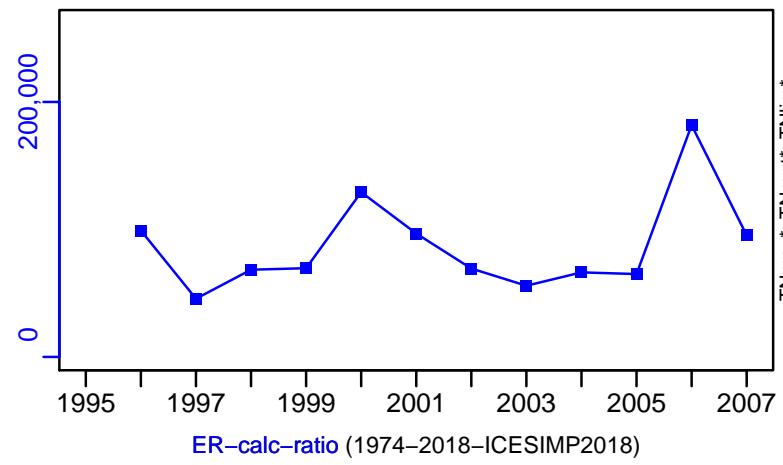
TB-MT (1974–2016–ICESIMP2016)



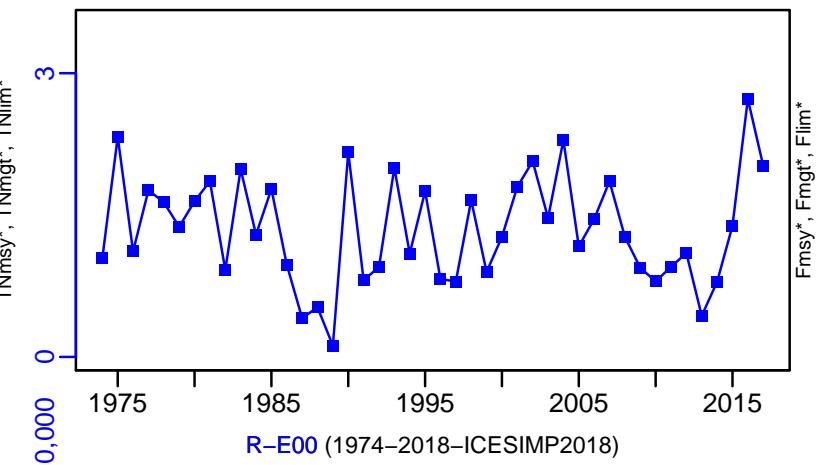
SSB-MT (1974–2018–ICESIMP2018)



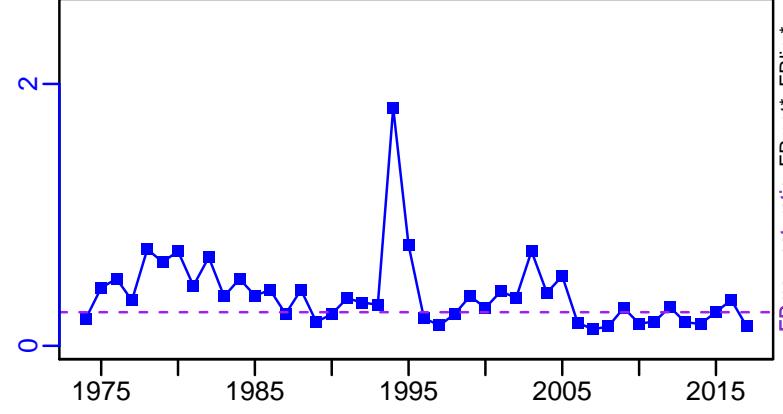
TN-relative (1995–2007–MINTO)



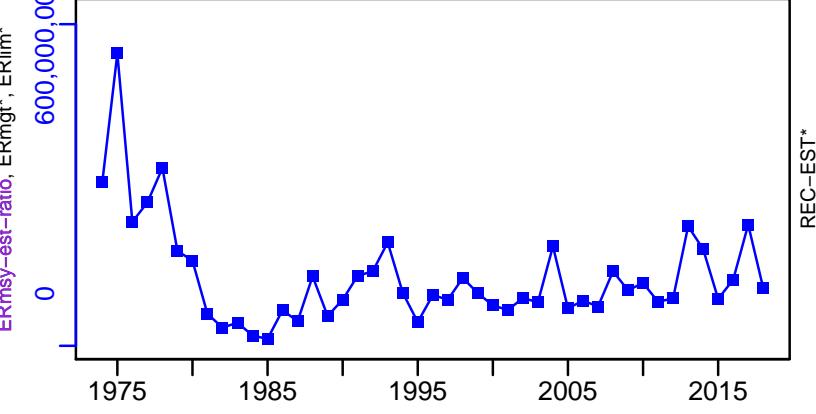
F-1/yr (1974–2018–ICESIMP2018)



ER-calc-ratio (1974–2018–ICESIMP2018)



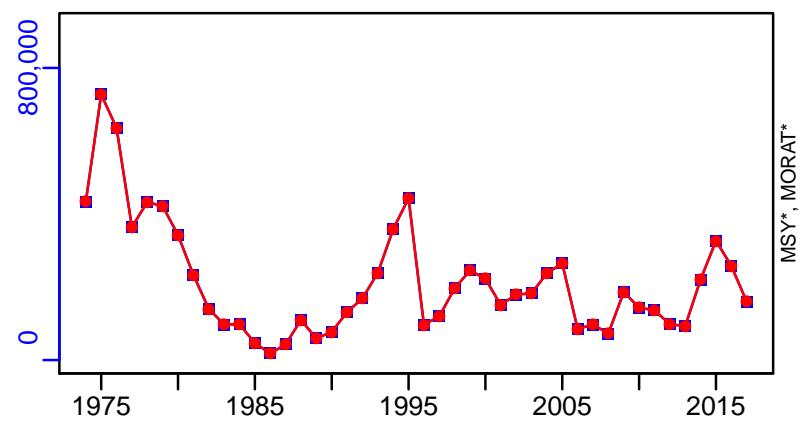
R-E00 (1974–2018–ICESIMP2018)



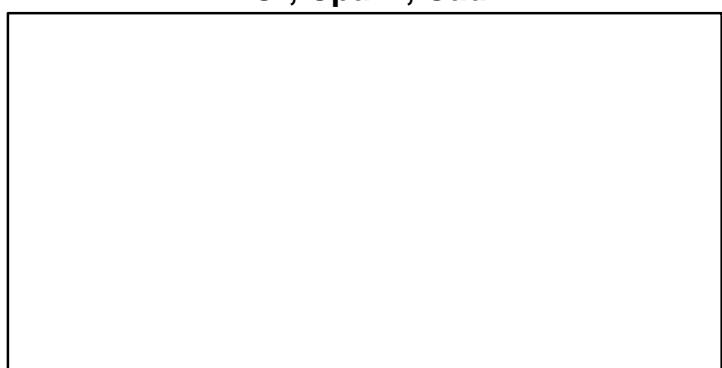
■ Listed time series	— Target BRP	— Rec-Est
- MSY-based BRP	- Lim BRP	* No Data

Sprat North Sea [SPRATNS]

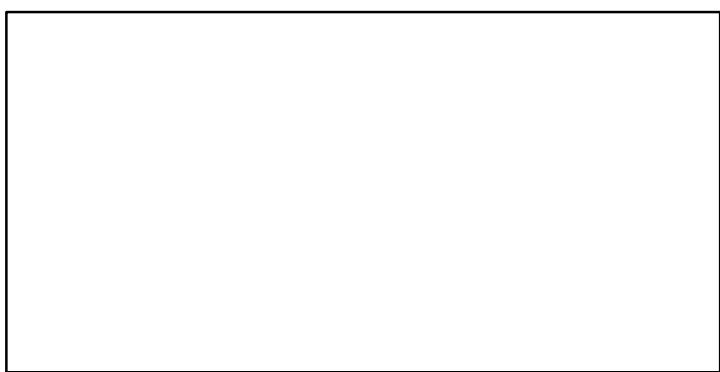
TC-MT, TL-MT, RecC* (1974–2018–ICESIMP2018)



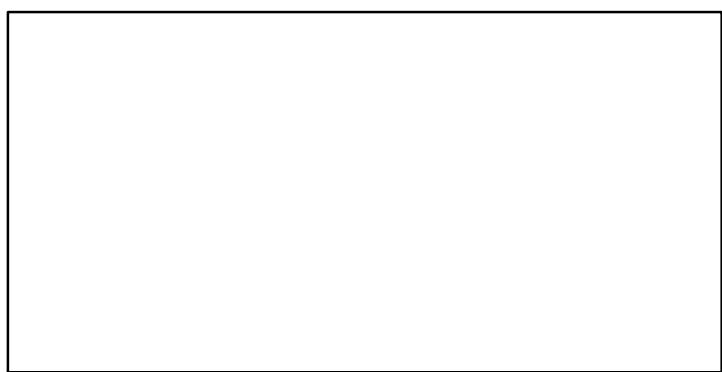
TAC*, Cpair*, Cadv*



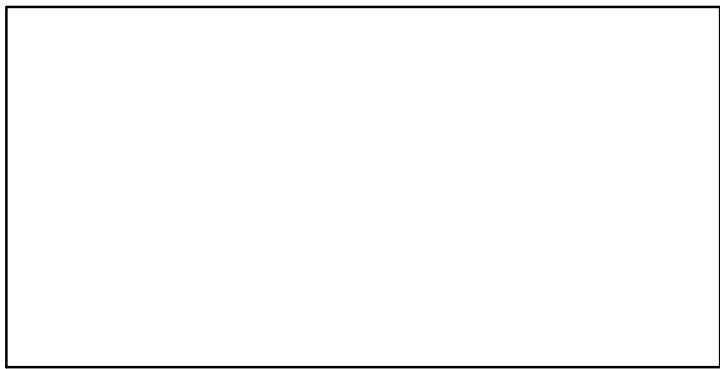
survB*



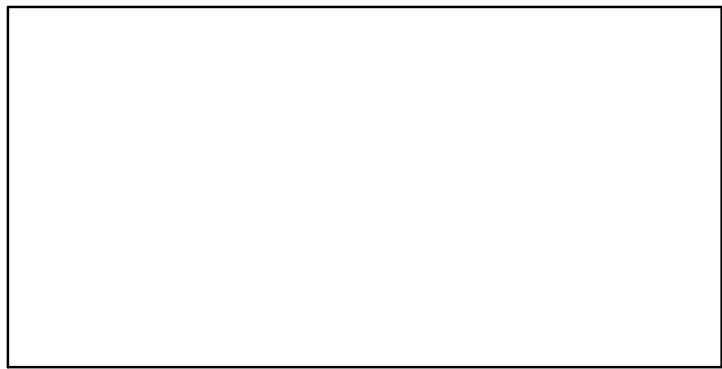
CPUE*



EFFORT*



CdivMSY*



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

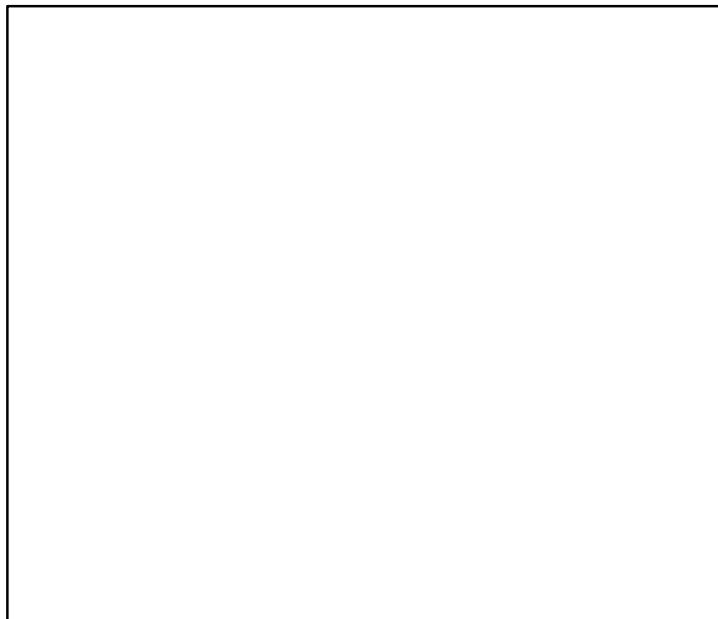
Sprat ICES 7de [SPRATVIIde]

Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATVIIde-1985-2017-ICESIMP2018
Area	ICES 7de
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2016, 2016, 2017

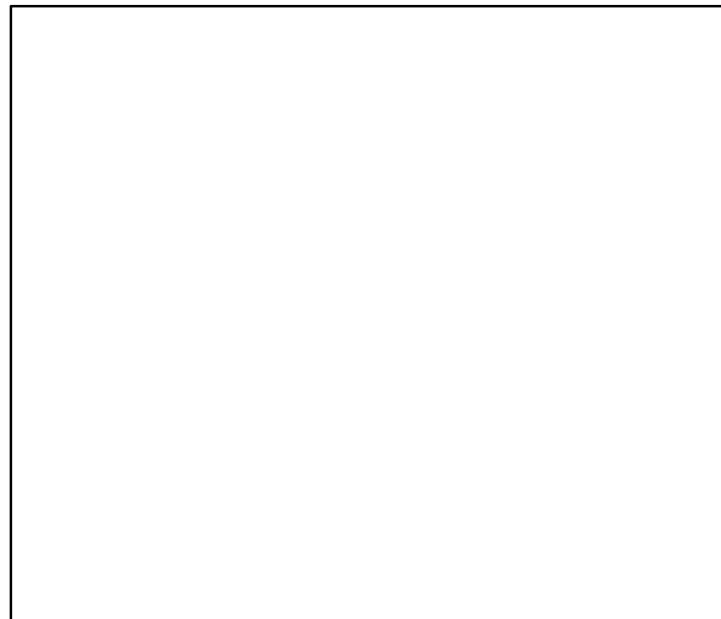
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-relative	2016	0.168	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-relative	2016	2.83	-	-	
ER	ER-ratio	2017	0.001	-	-	
TC	-	-	-			
TL	TL-MT	2017	2730			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*



Kobe MGT*



Spawner Recruit*



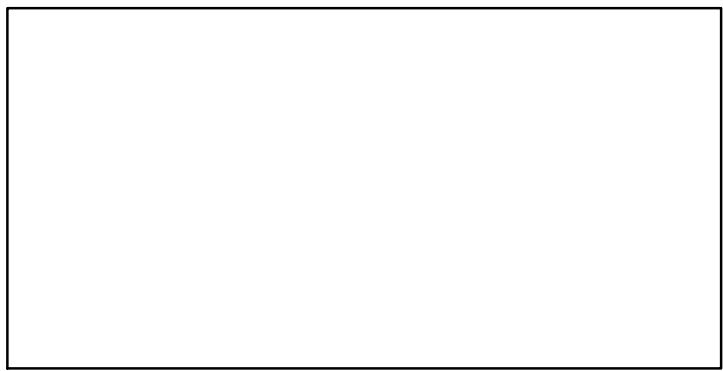
Production*



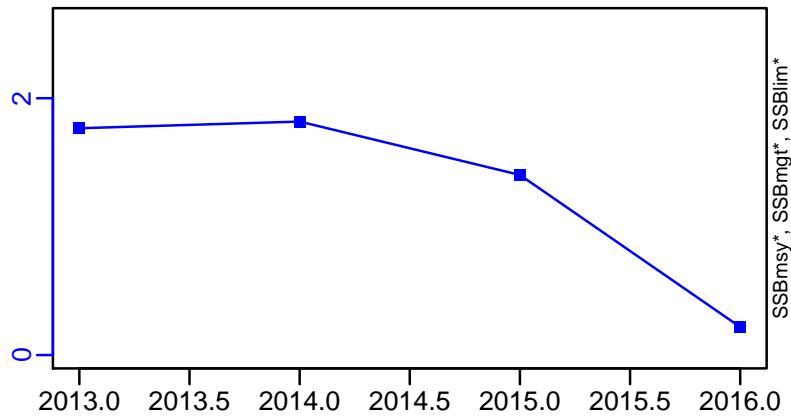
◆ Start Year ♦ End Year * No Data

Sprat ICES 7de [SPRATVIIde]

TB*



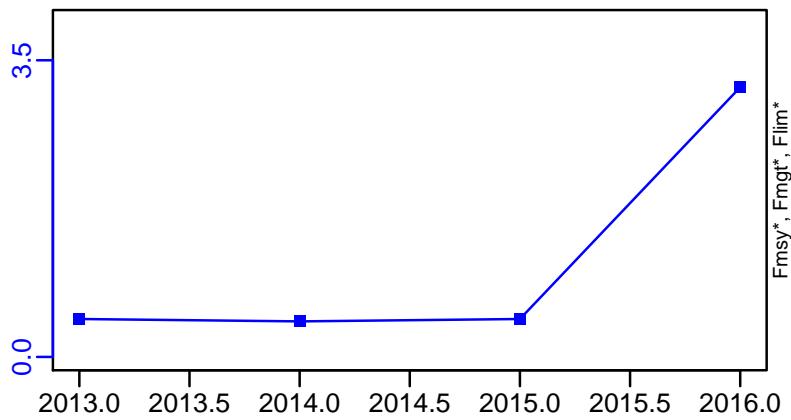
SSB-relative (1985–2016–ICESIMP2018)



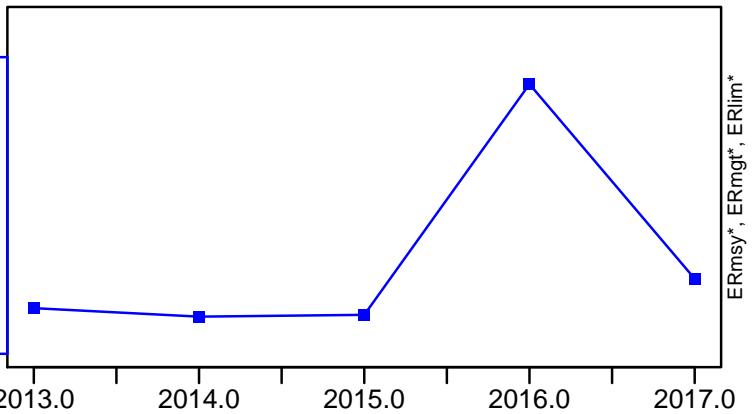
TN *



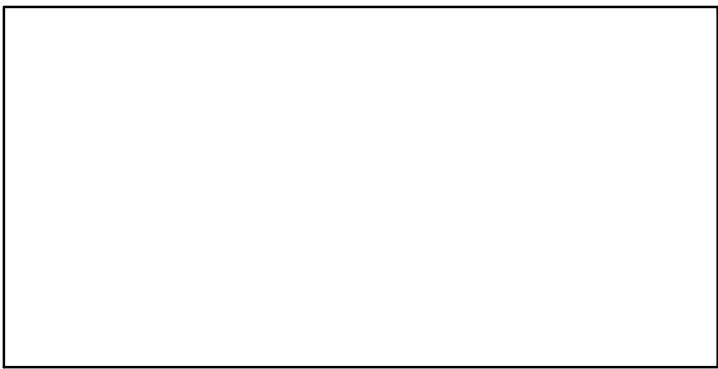
F-relative (1985–2016–ICESIMP2018)



ER-ratio (1985–2017–ICESIMP2018)



Recruits*

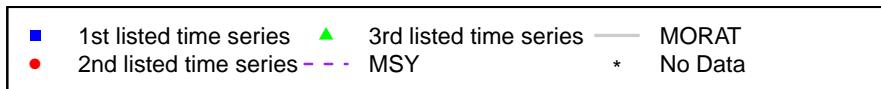
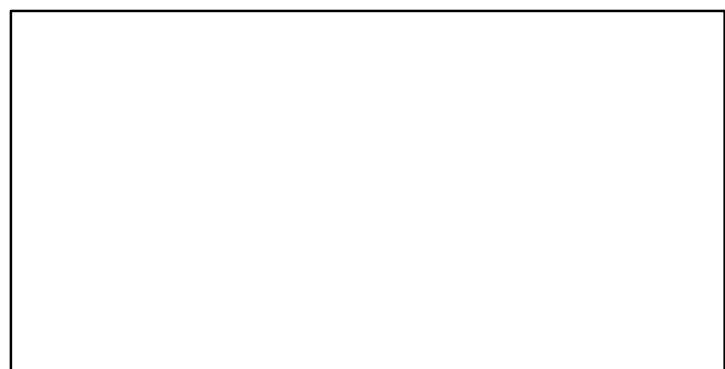
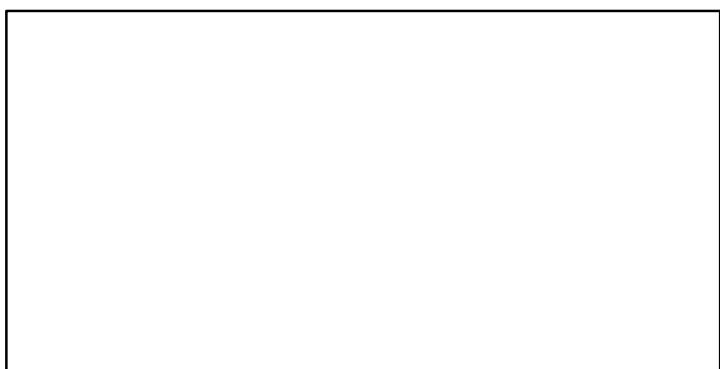
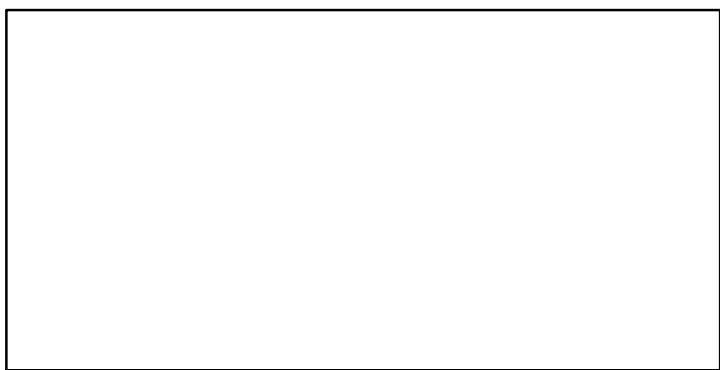
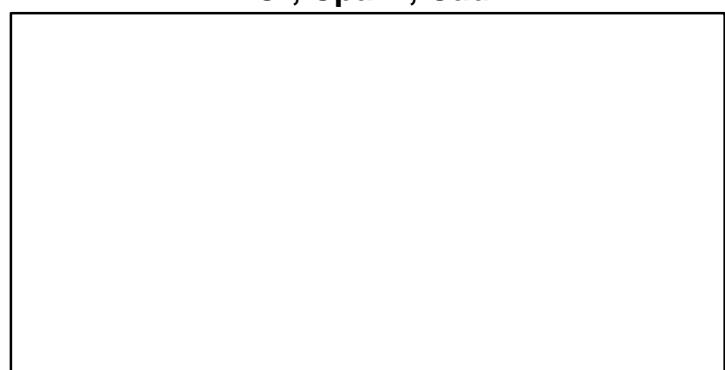
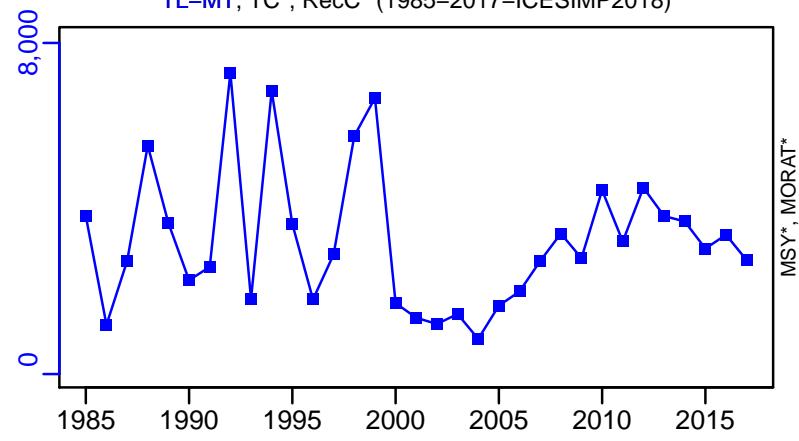


- Listed time series - - - Target BRP — Rec-Est
- - MSY-based BRP - - Lim BRP * No Data

Sprat ICES 7de [SPRATVIIde]

TL-MT, TC*, RecC* (1985–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



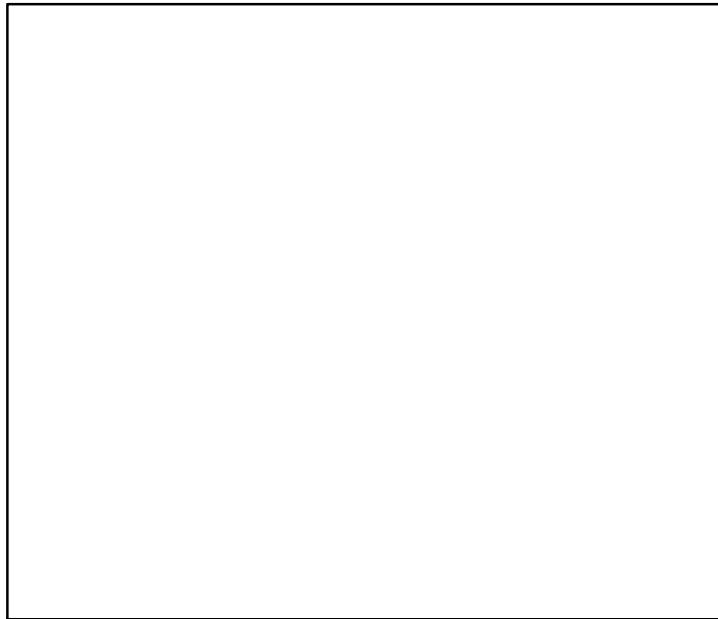
Sprat ICES 6-7abcfghijk [SPRATVI-VIIabcfghijk]

Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATVI-VIIabcfghijk-1960-2016-ICESIMP2018
Area	ICES 6-7abcfghijk
Management Authority	International Council for the Exploration of the Sea
Assessor	Herring Assessment Working Group for the Area South of 62N
Asmts in RAM	2016, 2015

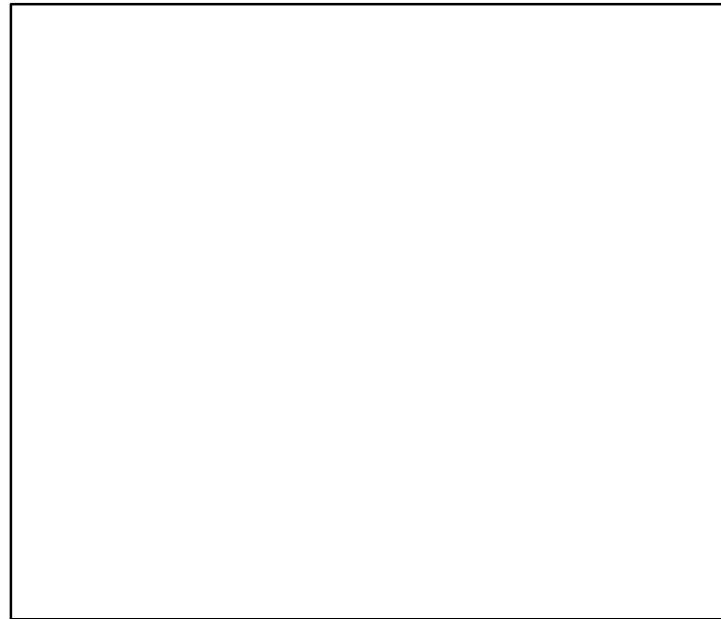
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	6880		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

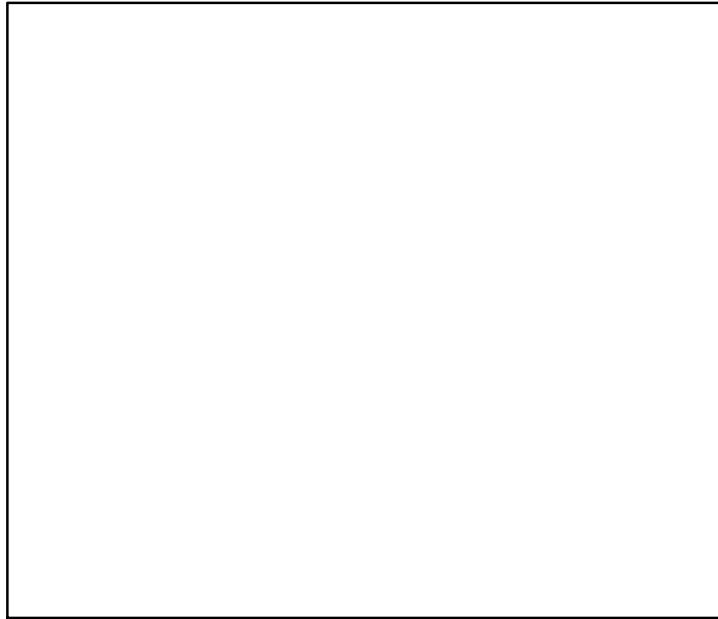
Kobe MSY*



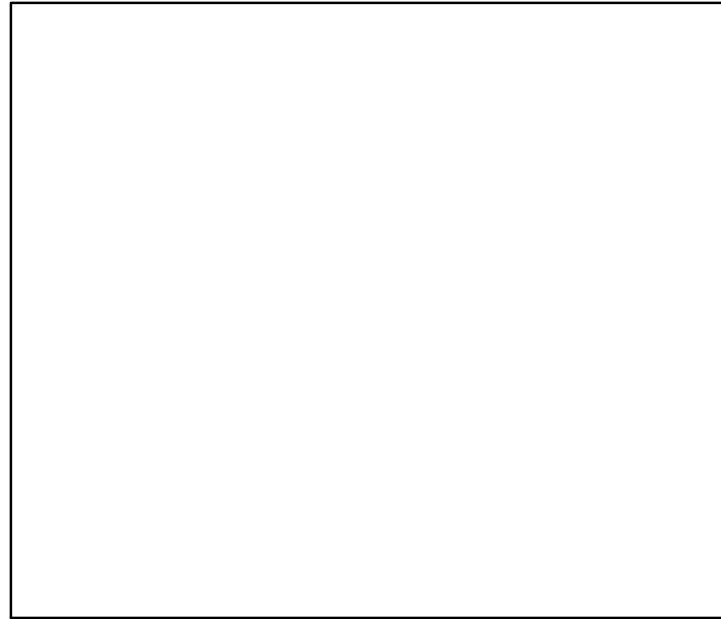
Kobe MGT*



Spawner Recruit*



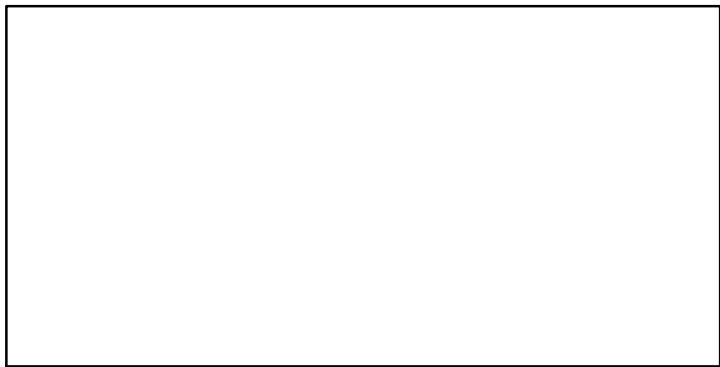
Production*



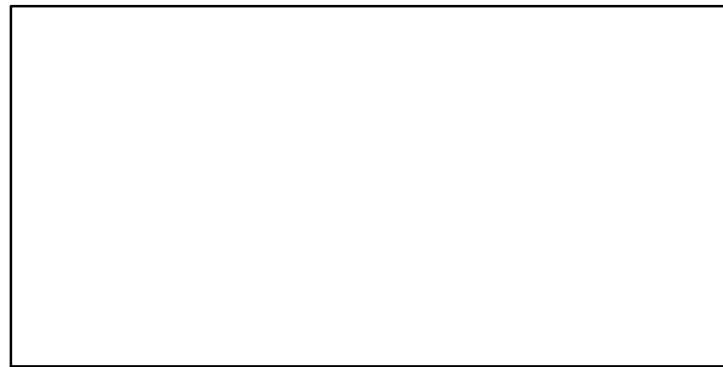
◆ Start Year ♦ End Year * No Data

Sprat ICES 6–7abcfghijk [SPRATVI–VIIabcfghijk]

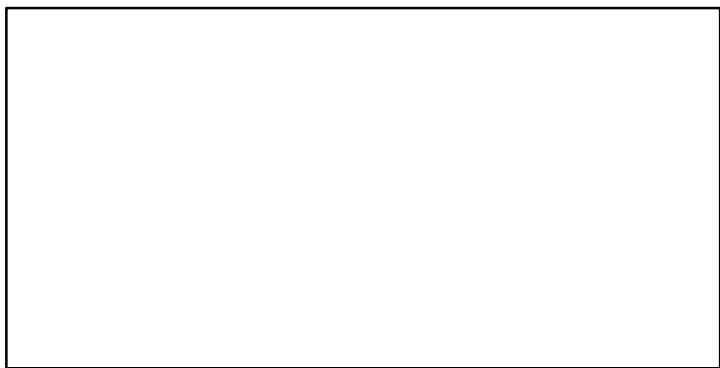
TB*



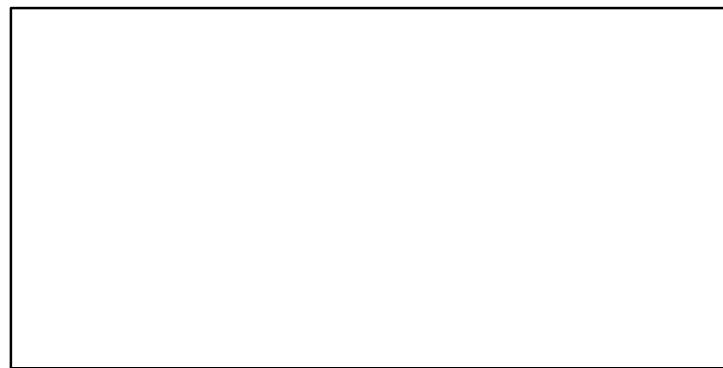
SSB*



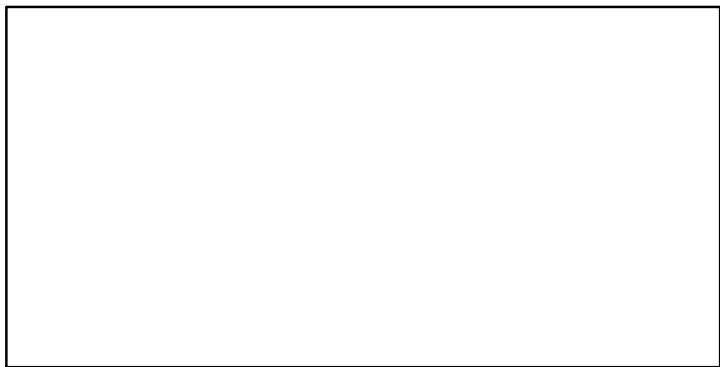
TN *



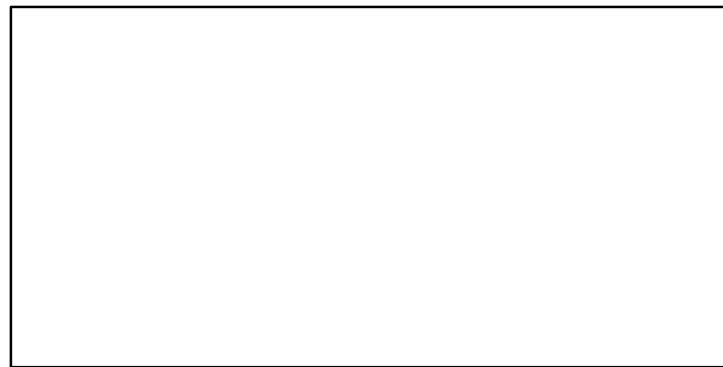
F*



ER*



Recruits*

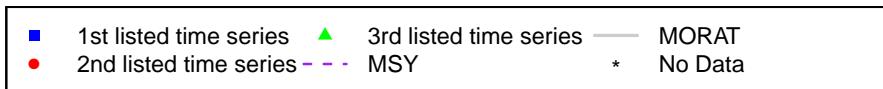
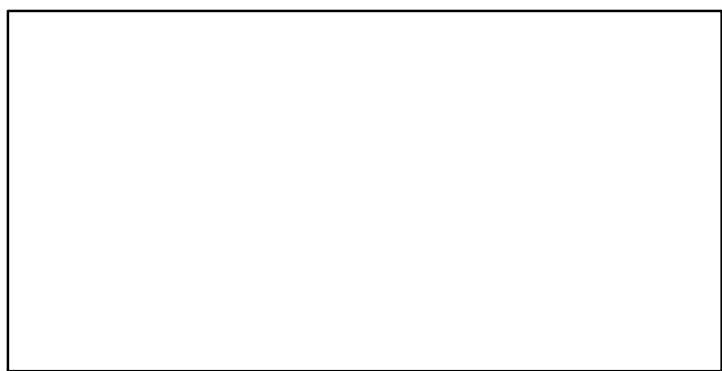
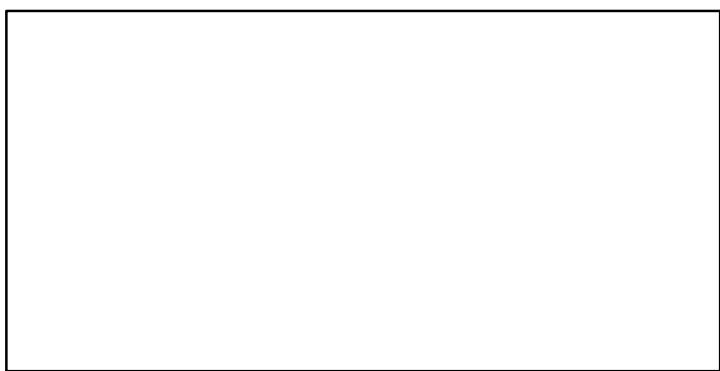
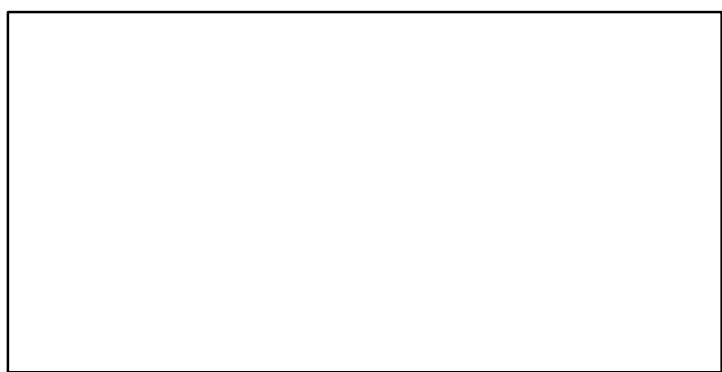
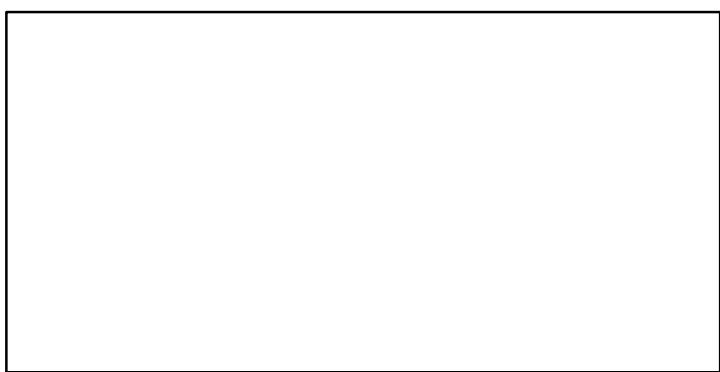
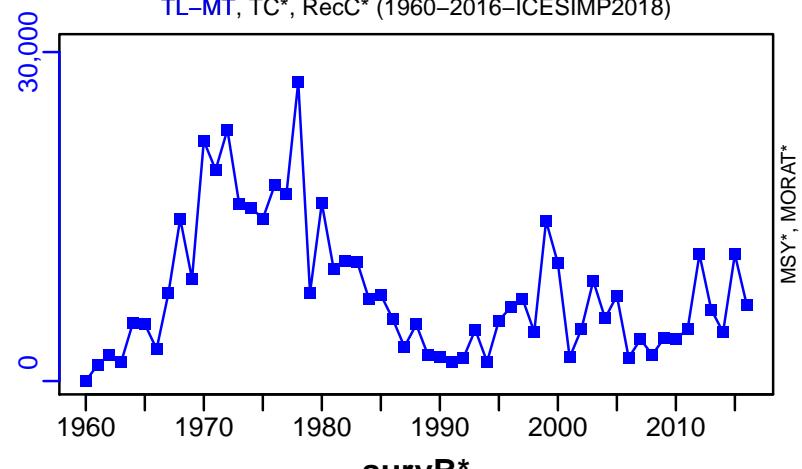


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sprat ICES 6–7abcfghijk [SPRATVI–VIIabcfghijk]

TL–MT, TC*, RecC* (1960–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



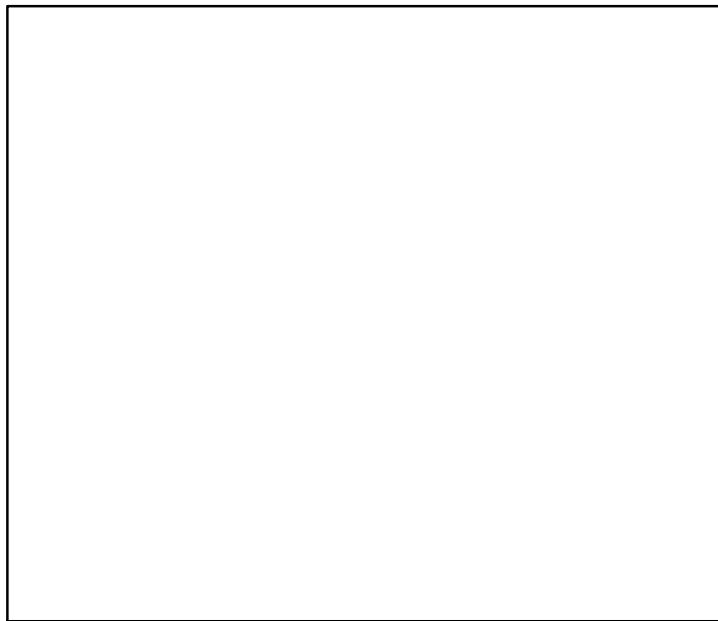
Spotted ray ICES 3a-4-7d [SPRAYIIla-IV-VIId]

Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYIIla-IV-VIId-2009-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

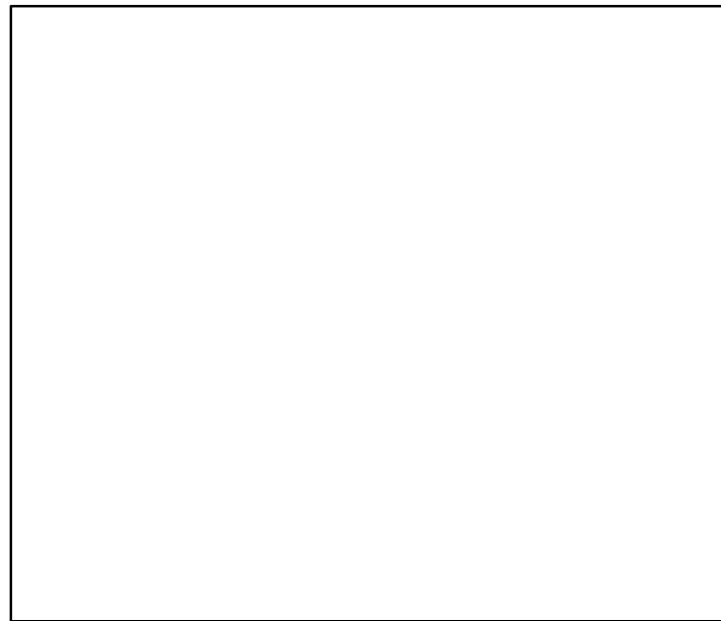
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	2.05	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	223		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

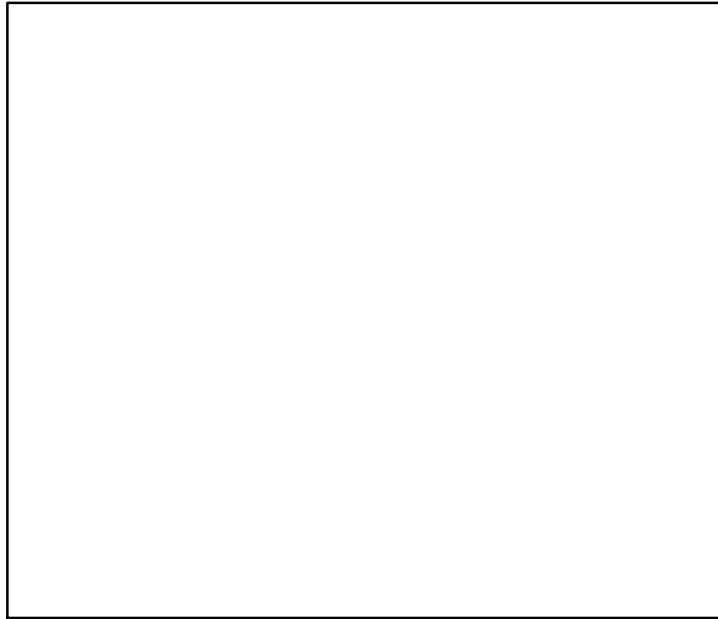
Kobe MSY*



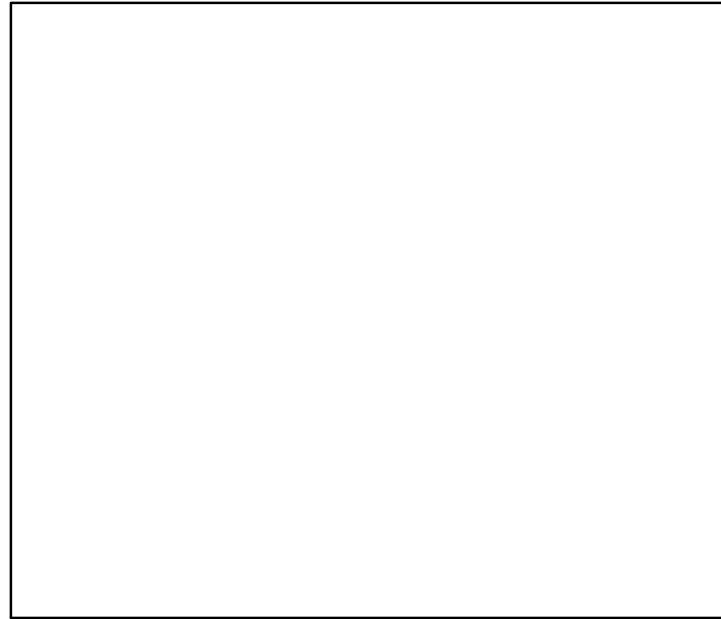
Kobe MGT*



Spawner Recruit*



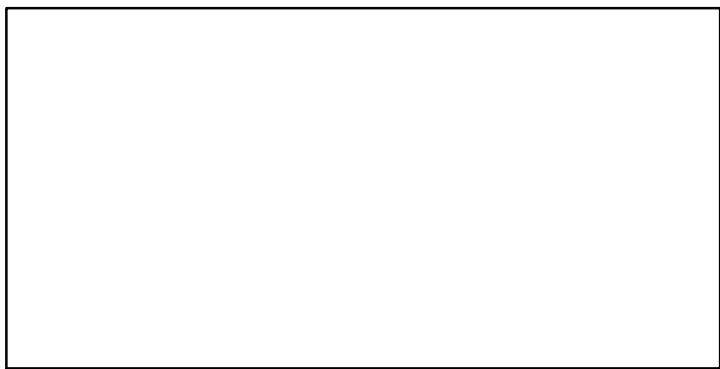
Production*



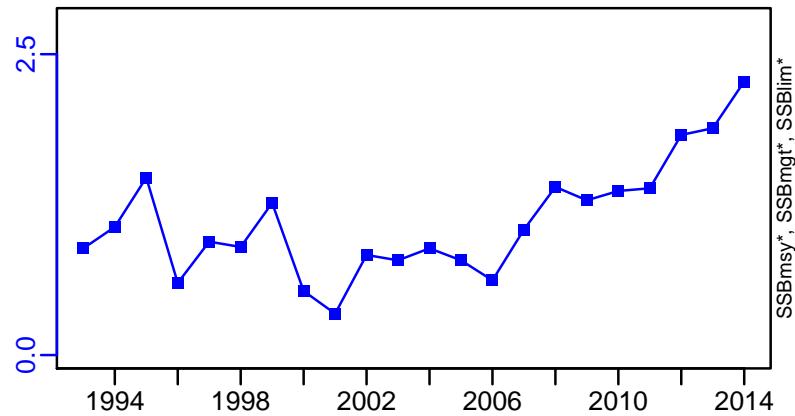
◆ Start Year ♦ End Year * No Data

Spotted ray ICES 3a–4–7d [SPRAYIIIa–IV–VIId]

TB*



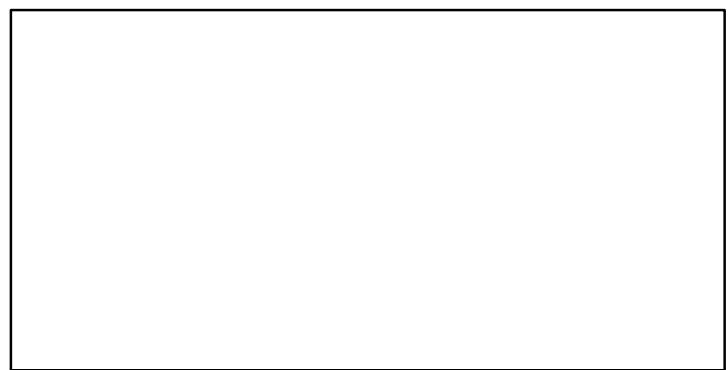
SSB-index (1993–2014–ICESIMP2018)



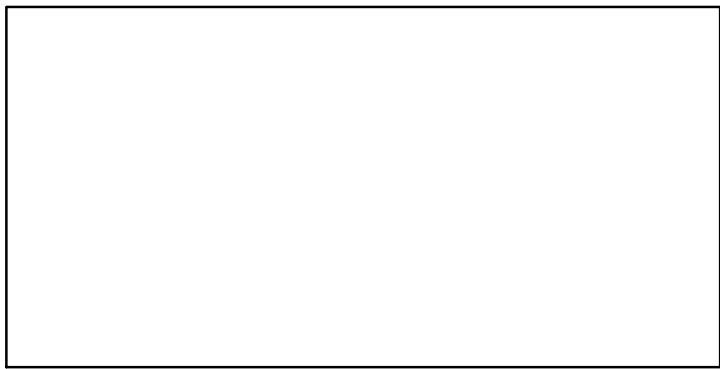
TN *



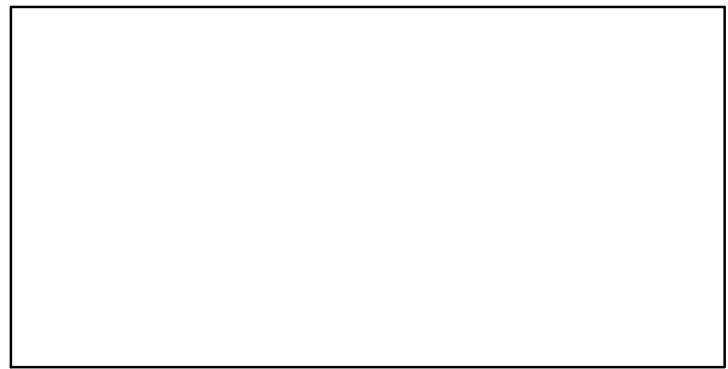
F*



ER*



Recruits*

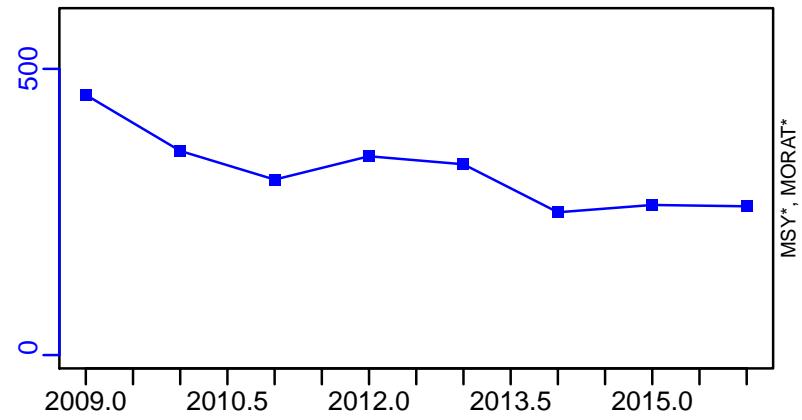


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Spotted ray ICES 3a–4–7d [SPRAYIIla–IV–VIId]

TL-MT, TC*, RecC* (2009–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

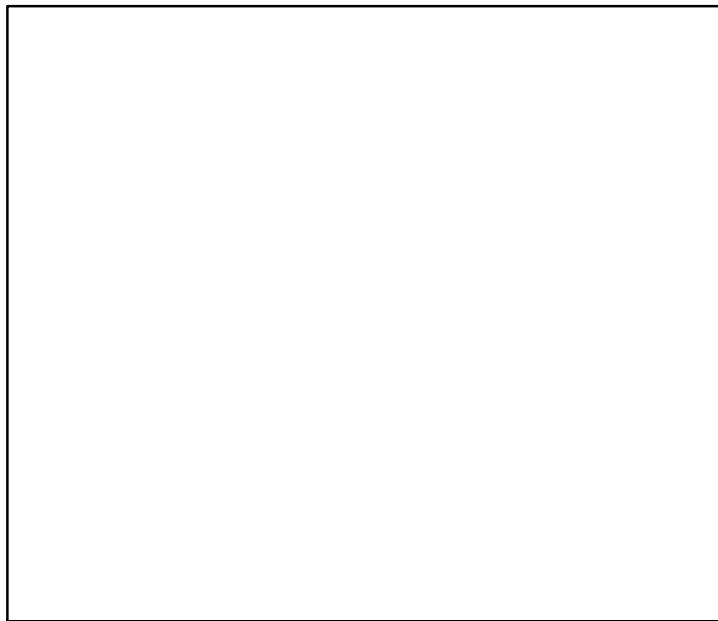
Spotted ray Portugese Waters -East [SPRAYIXa]

Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYIXa-2003-2015-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

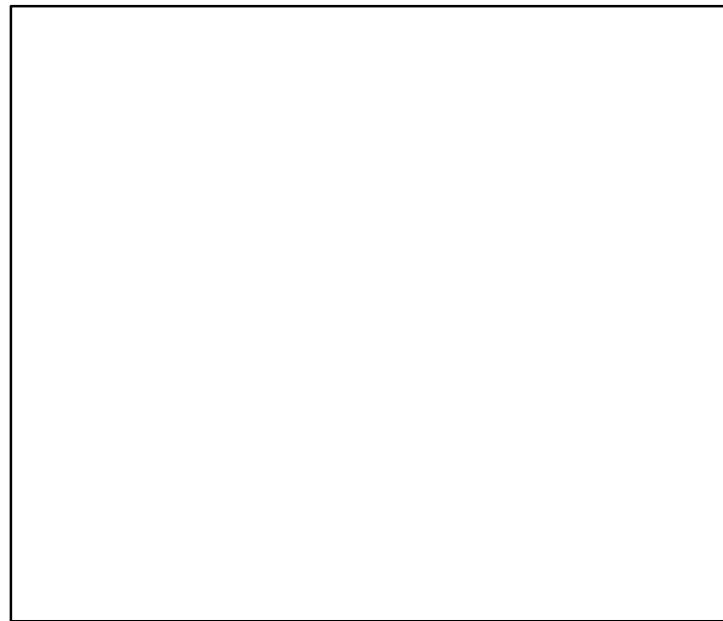
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	2.35	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	68		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

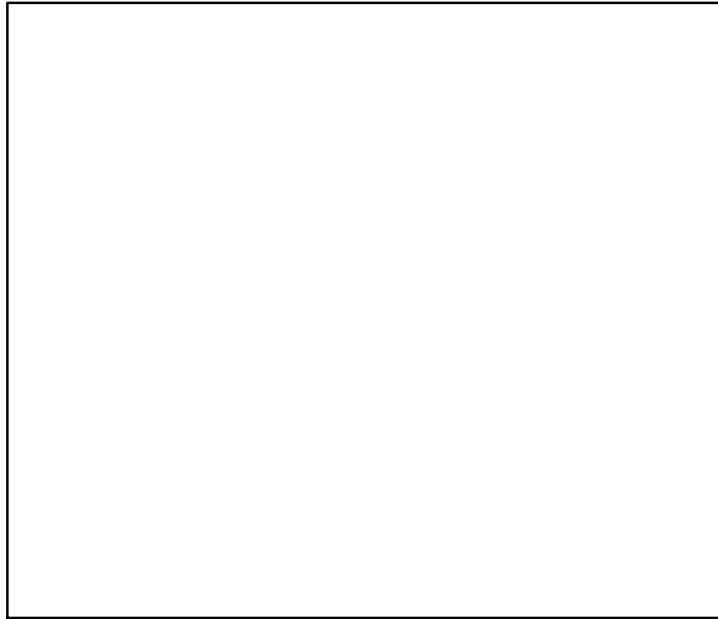
Kobe MSY*



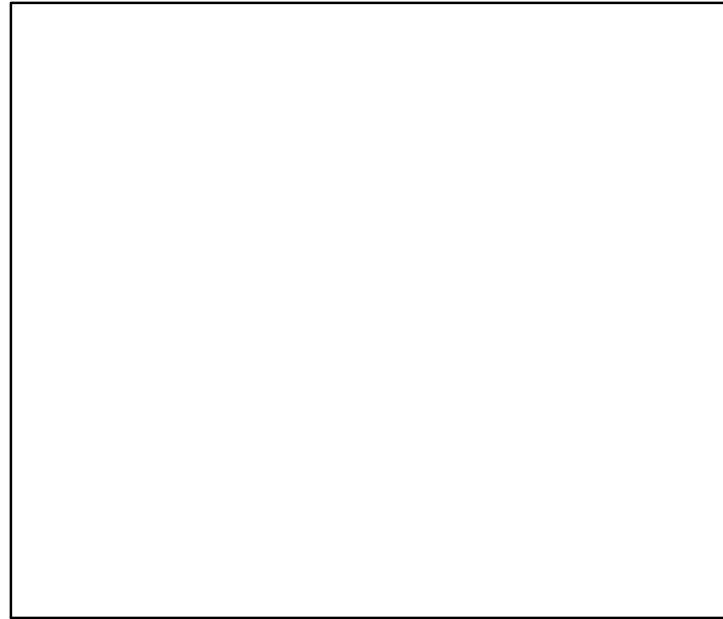
Kobe MGT*



Spawner Recruit*



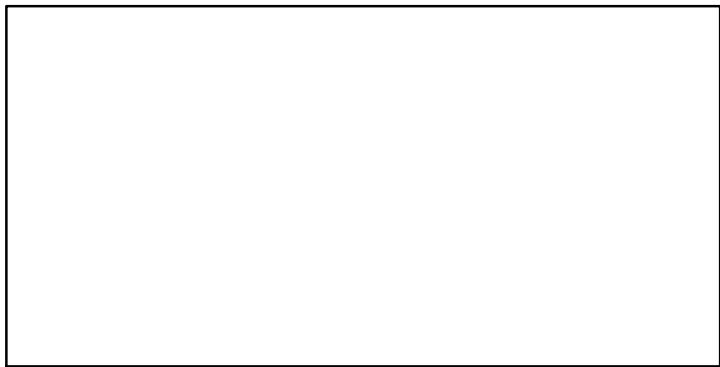
Production*



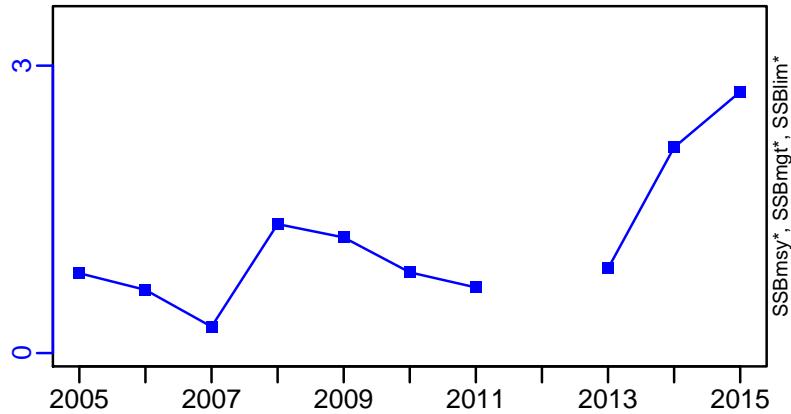
◆ Start Year ♦ End Year * No Data

Spotted ray Portuguese Waters –East [SPRAYIXa]

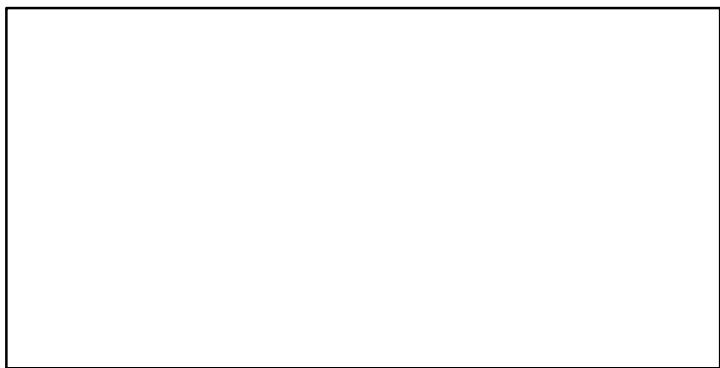
TB*



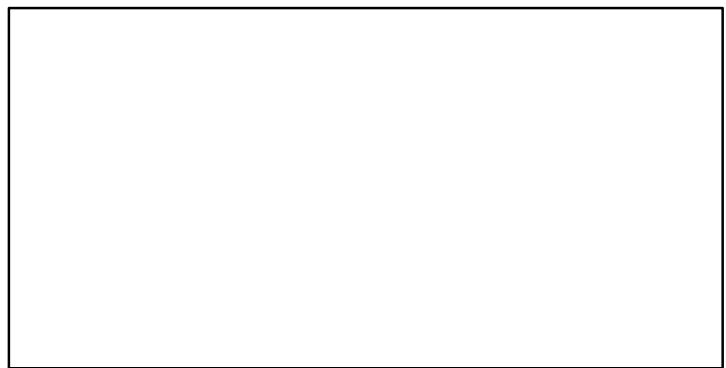
SSB–index (2003–2015–ICESIMP2018)



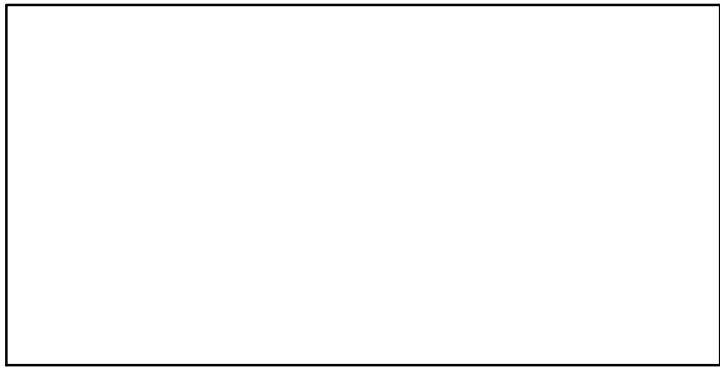
TN *



F*



ER*



Recruits*

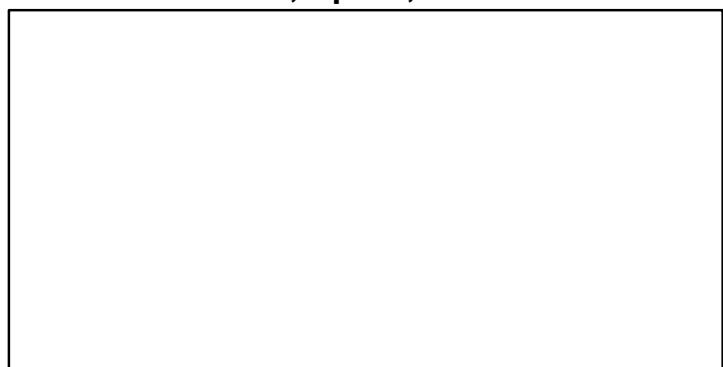
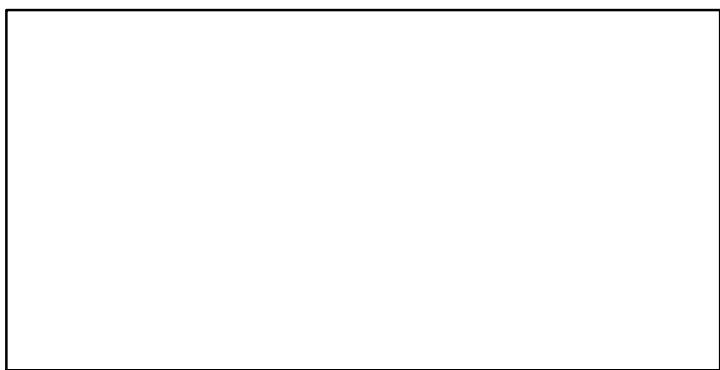
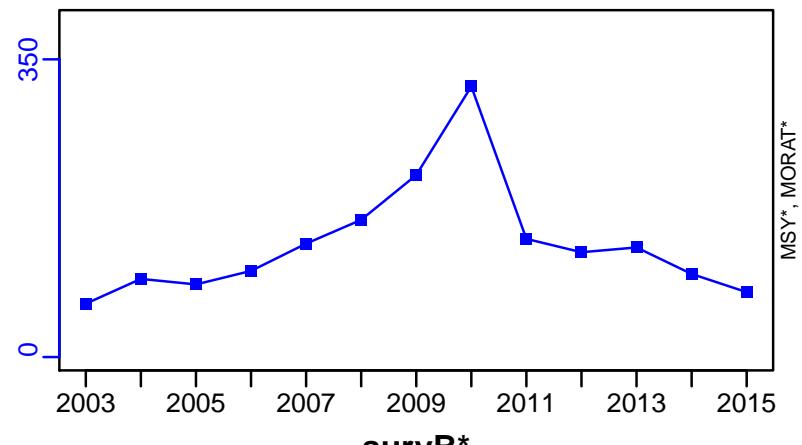


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

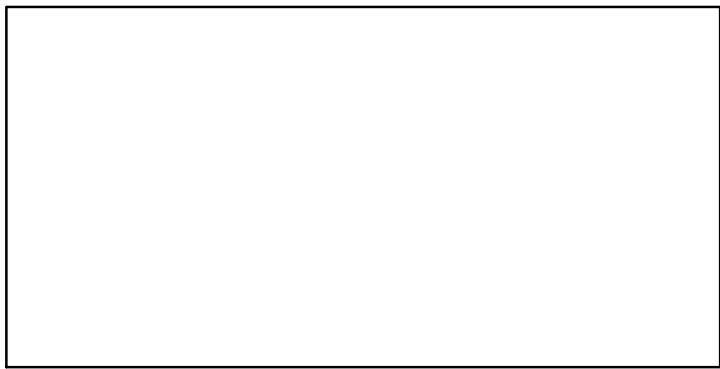
Spotted ray Portuguese Waters –East [SPRAYIXa]

TL-MT, TC*, RecC* (2003–2015–ICESIMP2018)

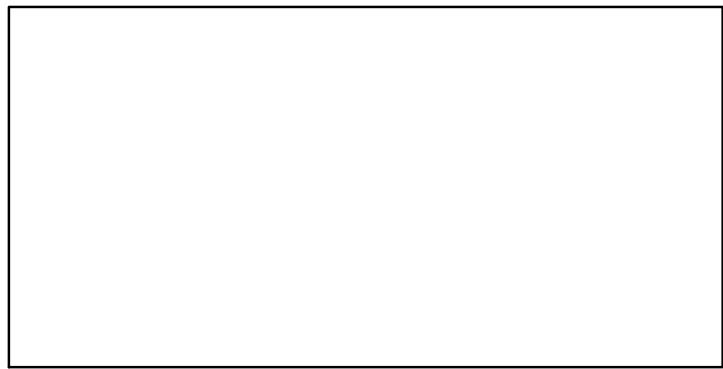
TAC*, Cpair*, Cadv*



EFFORT*



CdivMSY*



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

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

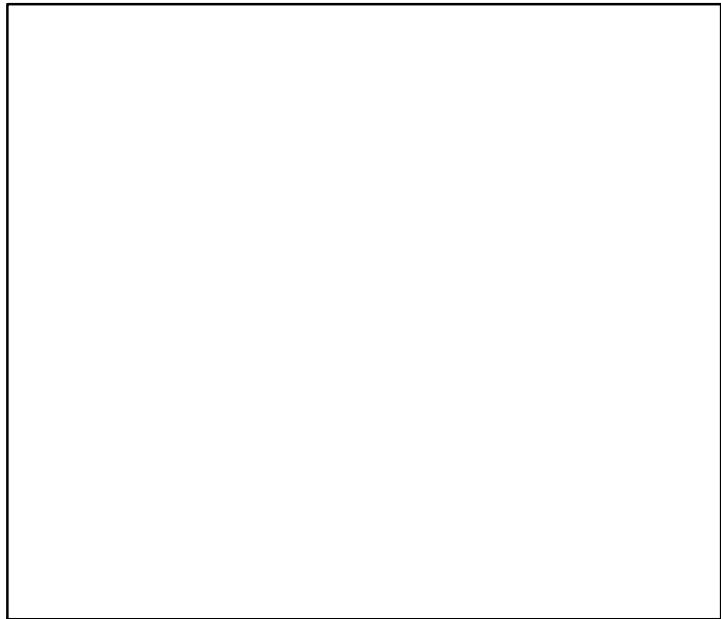
Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYVIIaefgh-1993-2015-ICESIMP2018
Area	ICES 7aefgh
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

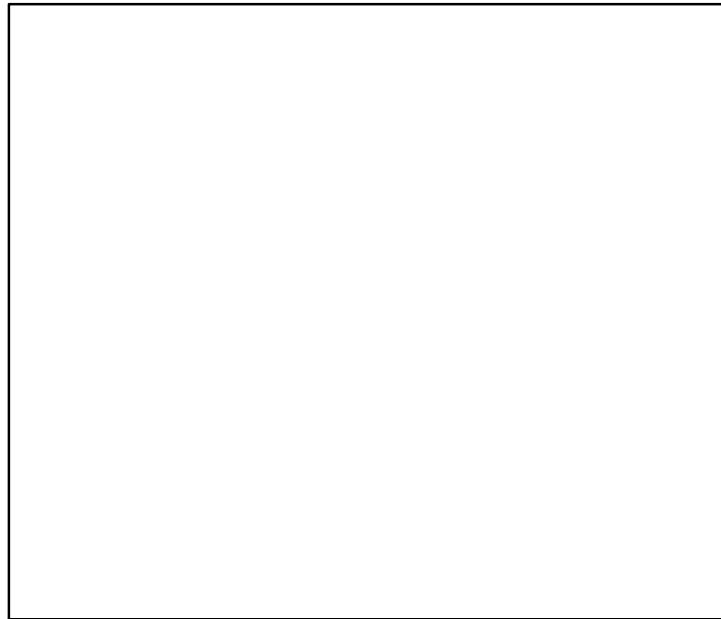
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	7	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	837		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

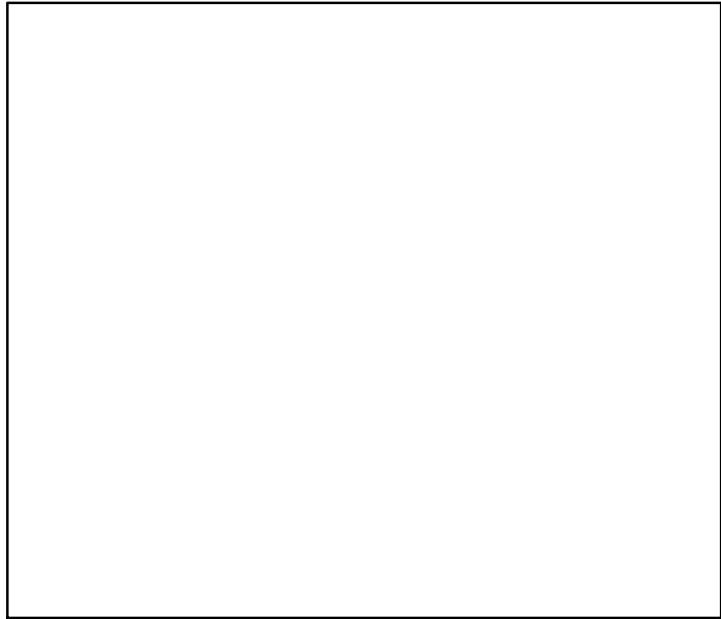
Kobe MSY*



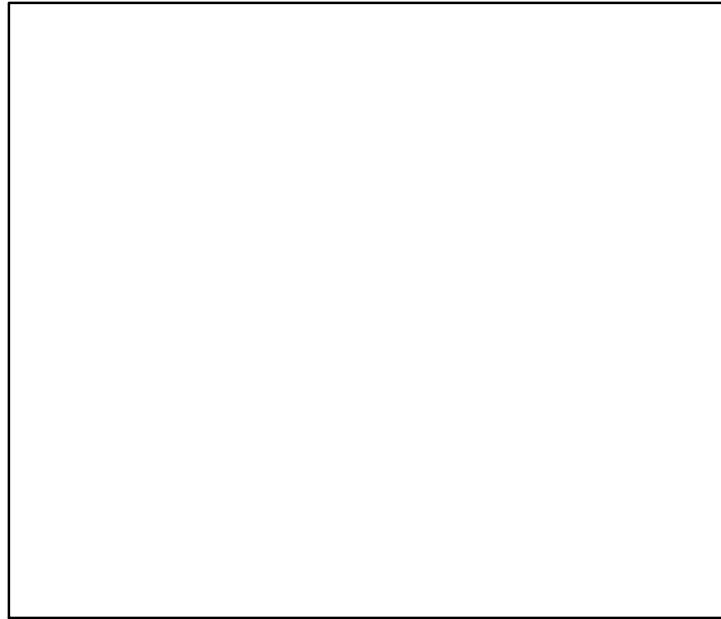
Kobe MGT*



Spawner Recruit*



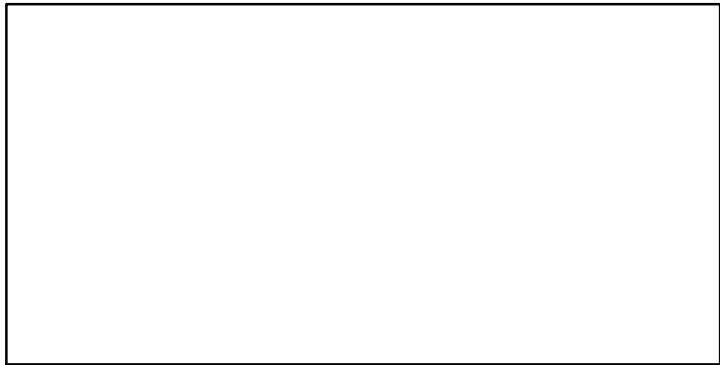
Production*



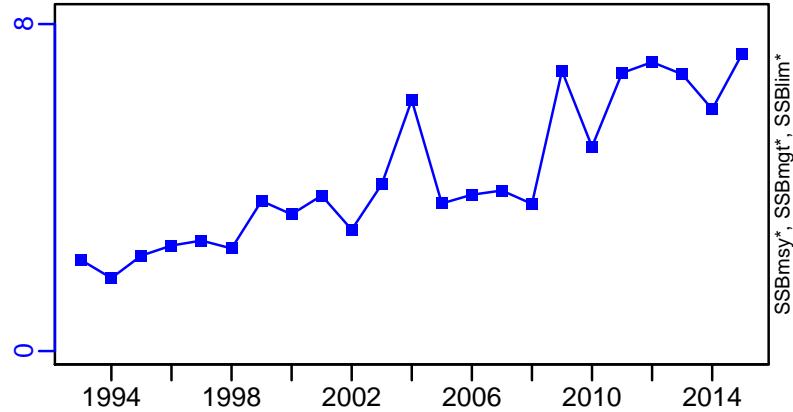
◆ Start Year ♦ End Year * No Data

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

TB*



SSB-index (1993–2015–ICESIMP2018)



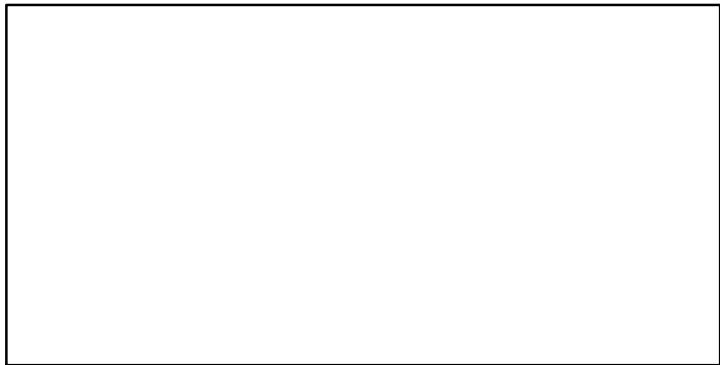
TN *



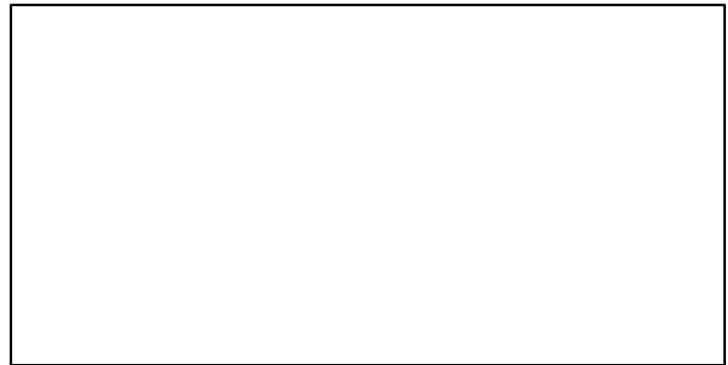
F*



ER*



Recruits*

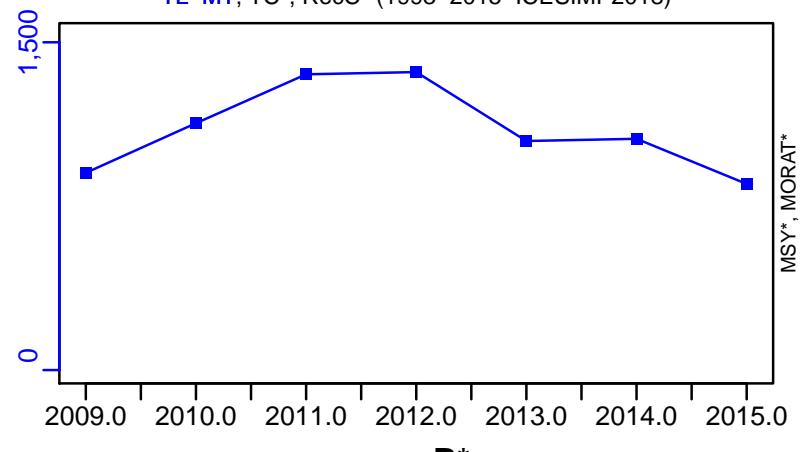


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

TL-MT, TC*, RecC* (1993–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



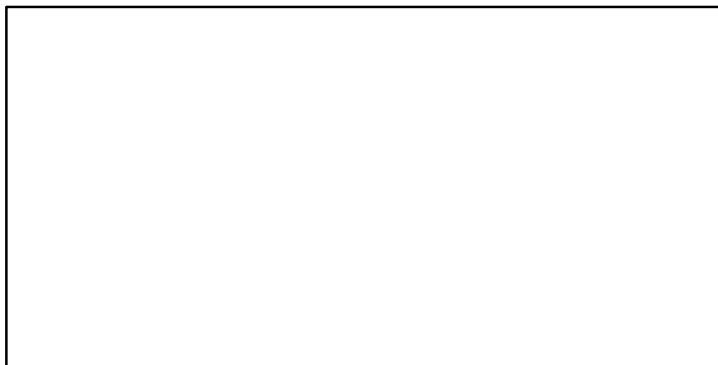
survB*



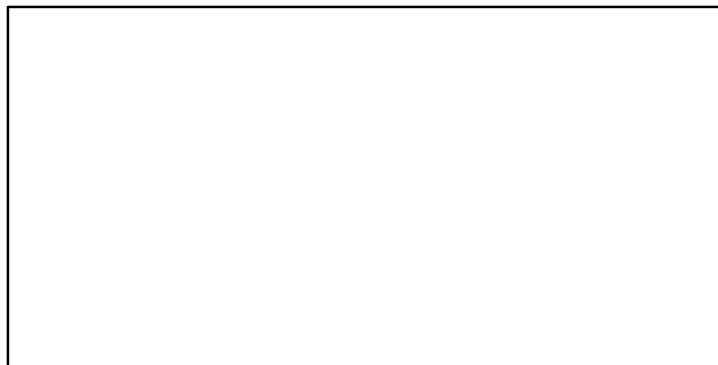
CPUE*



EFFORT*



CdivMSY*



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

Spotted ray Bay of Biscay [SPRAYVIII]

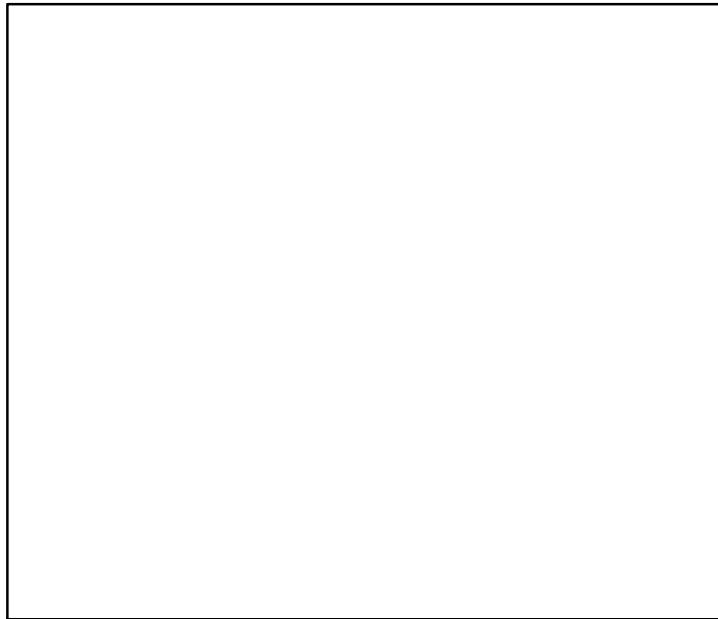
Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYVIII-1999-2015-ICESIMP2018
Area	Bay of Biscay
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

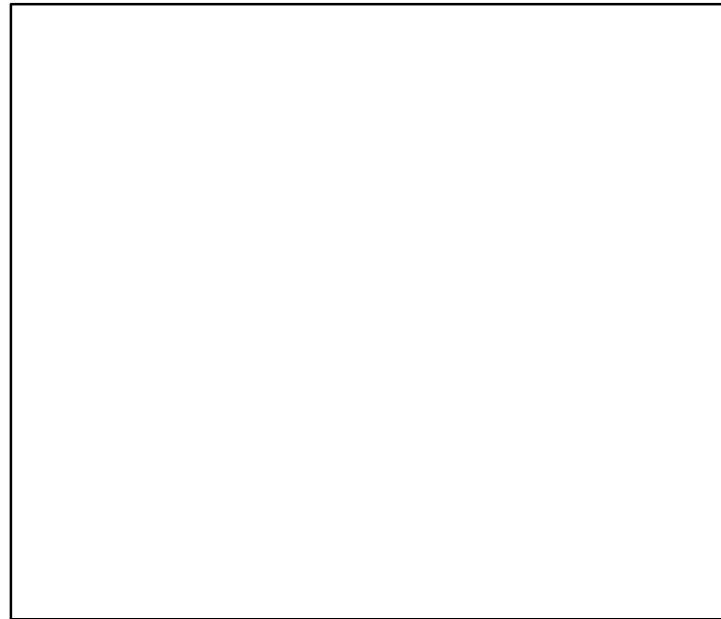
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.29	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	176		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted ray Bay of Biscay [SPRAYVIII]

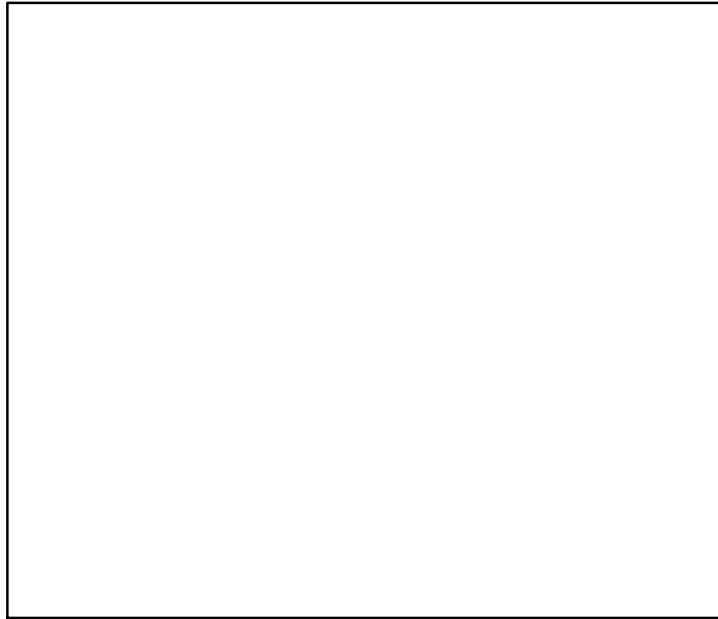
Kobe MSY*



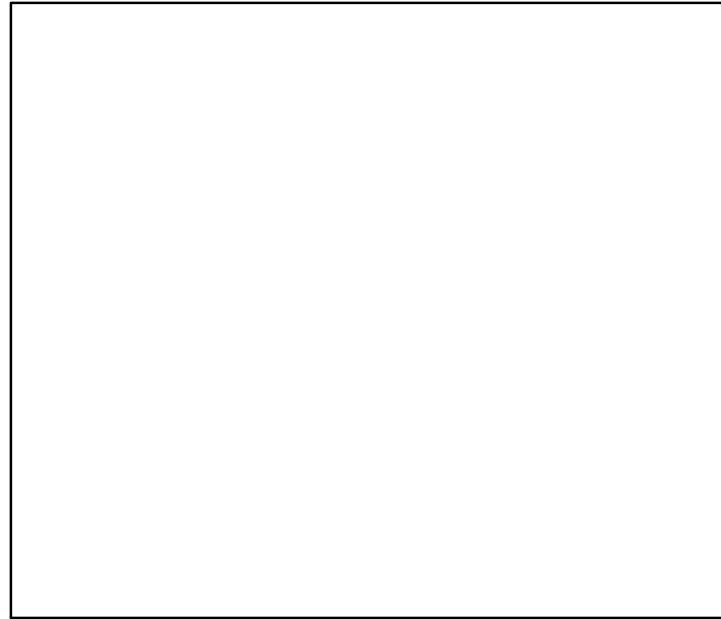
Kobe MGT*



Spawner Recruit*



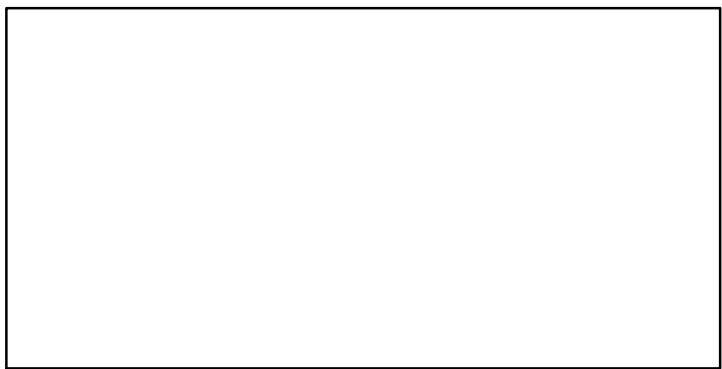
Production*



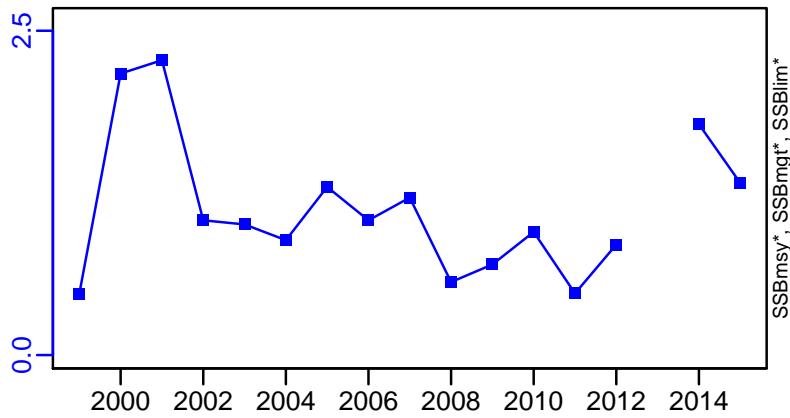
◆ Start Year ♦ End Year * No Data

Spotted ray Bay of Biscay [SPRAYVIII]

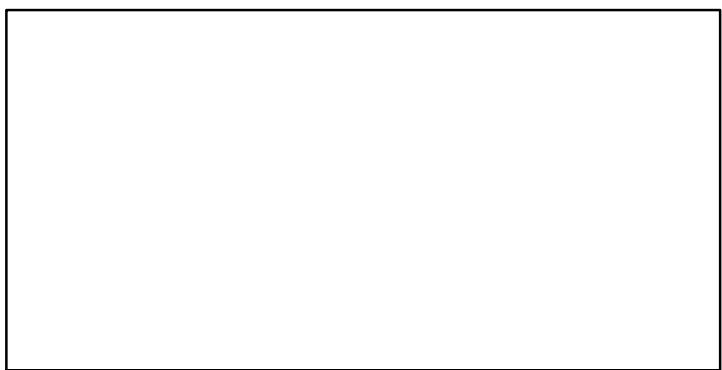
TB*



SSB-index (1999–2015–ICESIMP2018)



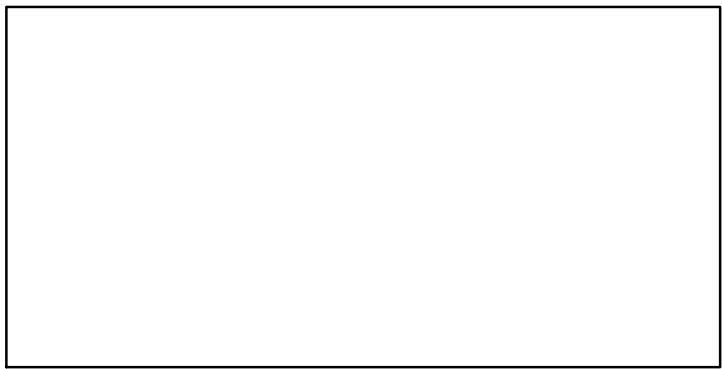
TN *



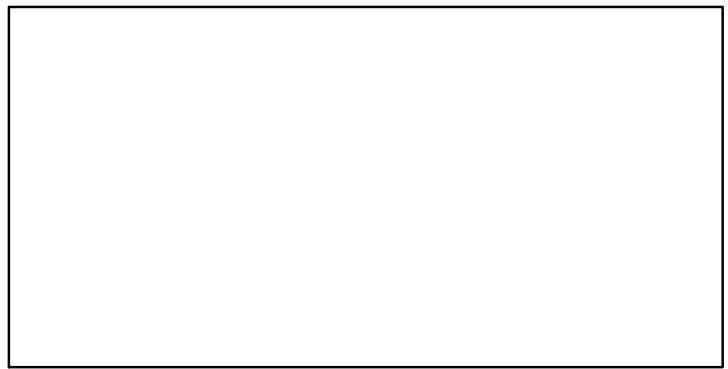
F*



ER*



Recruits*

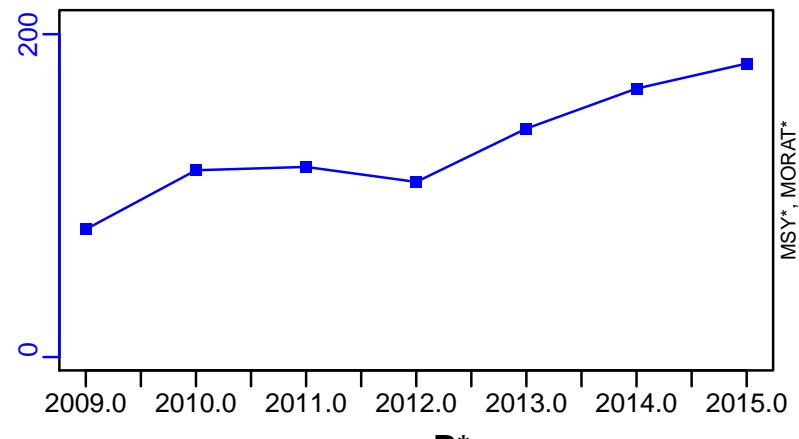


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Spotted ray Bay of Biscay [SPRAYVIII]

TL-MT, TC*, RecC* (1999–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



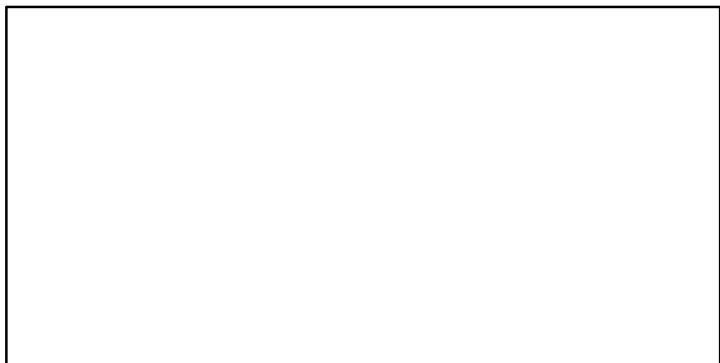
survB*



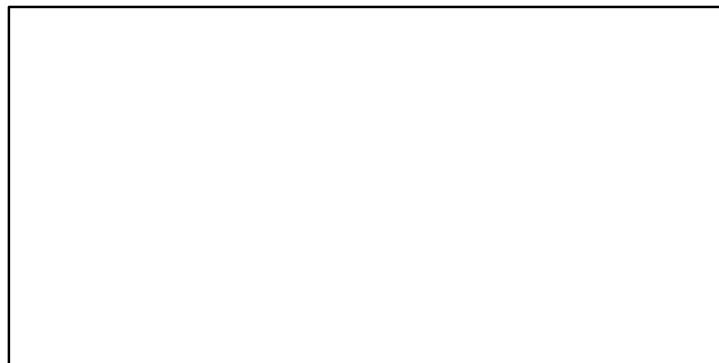
CPUE*



EFFORT*



CdivMSY*



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

Spotted ray ICES 6-7bj [SPRAYVI-VIIbj]

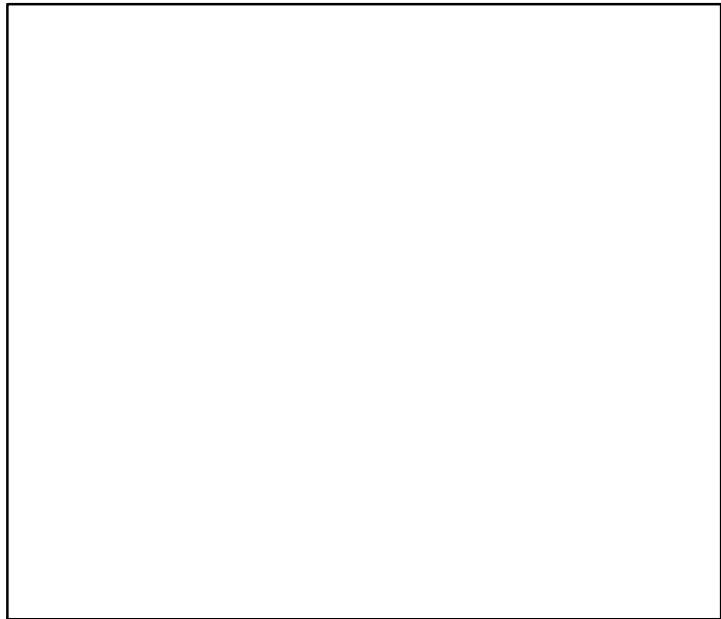
Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYVI-VIIbj-2005-2015-ICESIMP2018
Area	ICES 6-7bj
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

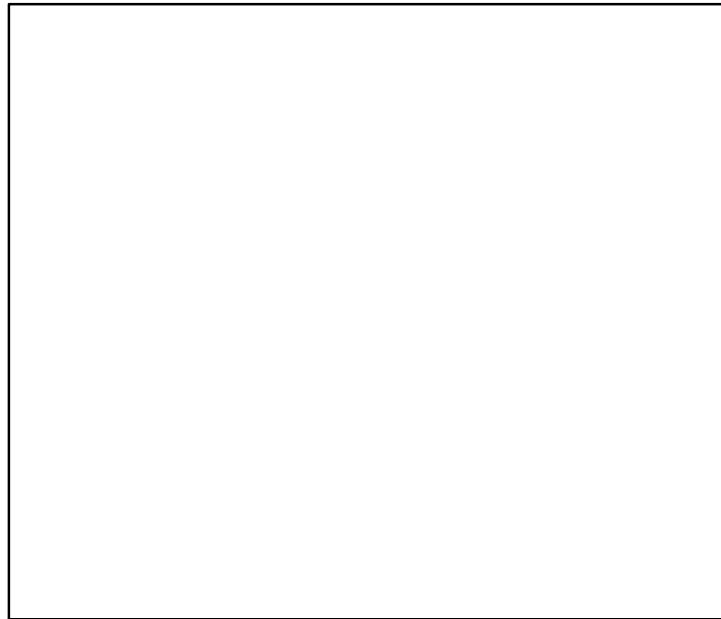
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	9	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	119		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted ray ICES 6–7bj [SPRAYVI–VIIbj]

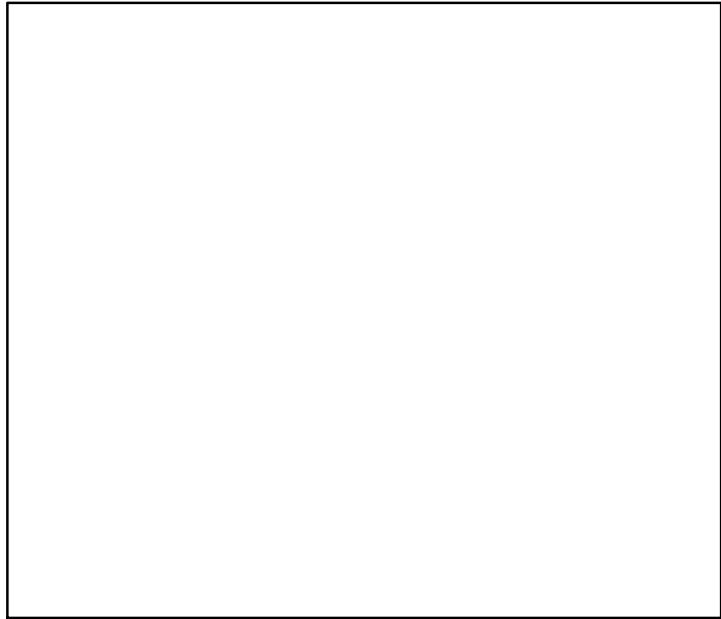
Kobe MSY*



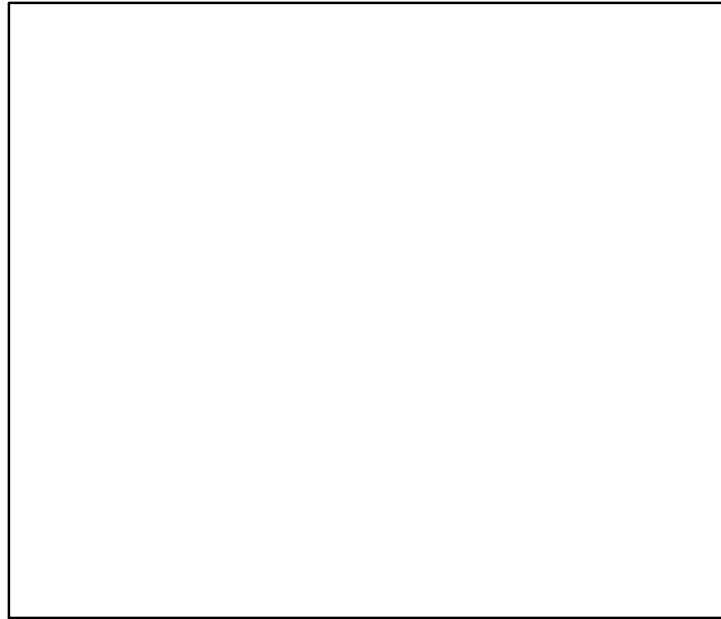
Kobe MGT*



Spawner Recruit*



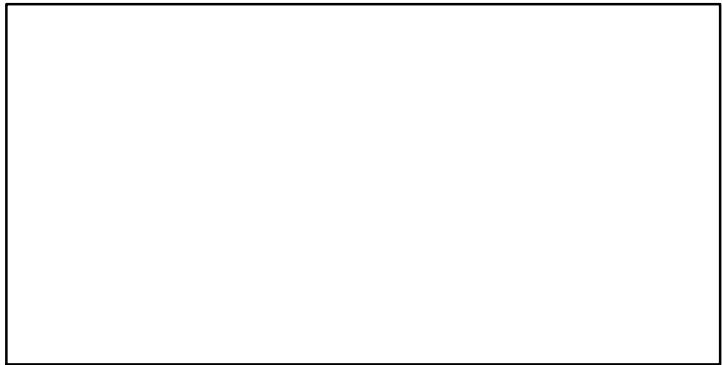
Production*



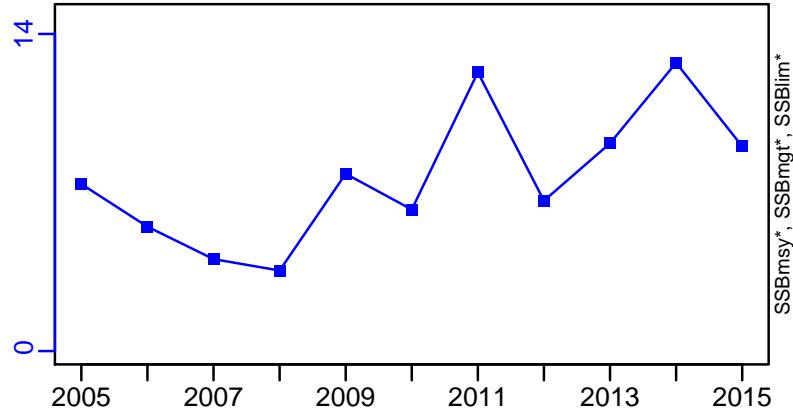
◆ Start Year ♦ End Year * No Data

Spotted ray ICES 6–7bj [SPRAYVI–VIIbj]

TB*



SSB–index (2005–2015–ICESIMP2018)



SSB_msy*, SSB_{mgt}*, SSB_{lim}*

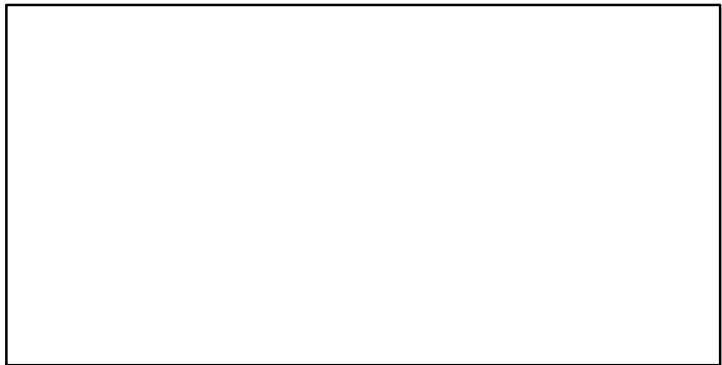
TN *



F*



ER*



Recruits*

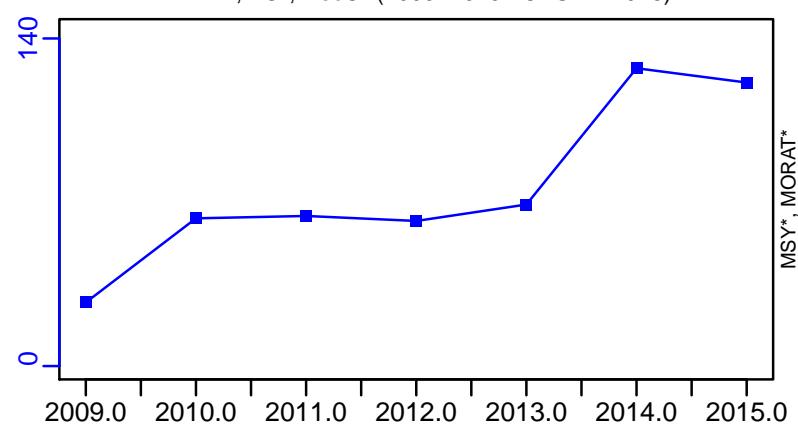


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Spotted ray ICES 6–7bj [SPRAYVI–VIIbj]

TL–MT, TC*, RecC* (2005–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

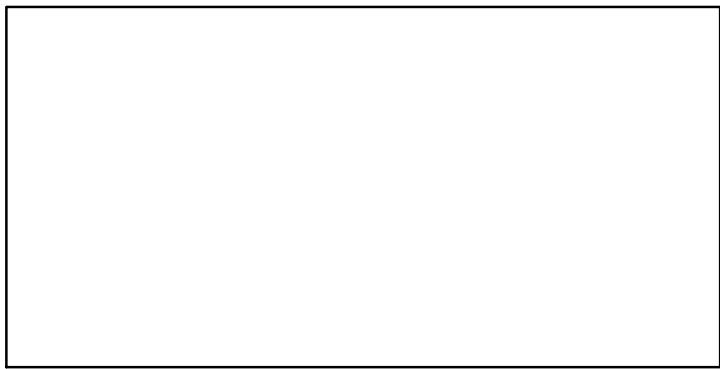
MSY*, MORAT*



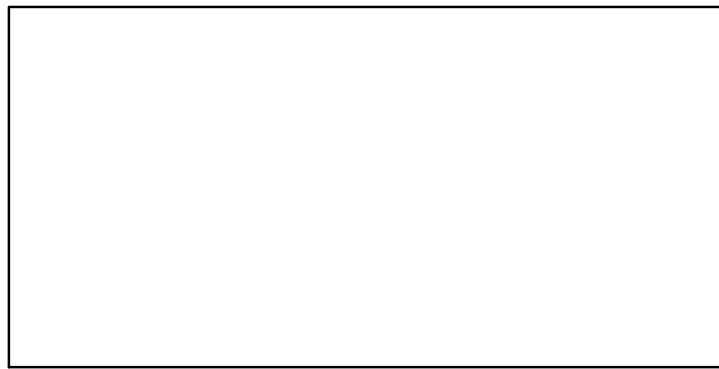
CPUE*



EFFORT*



CdivMSY*



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

Spurdog Northeast Atlantic [SPURDNEATL]

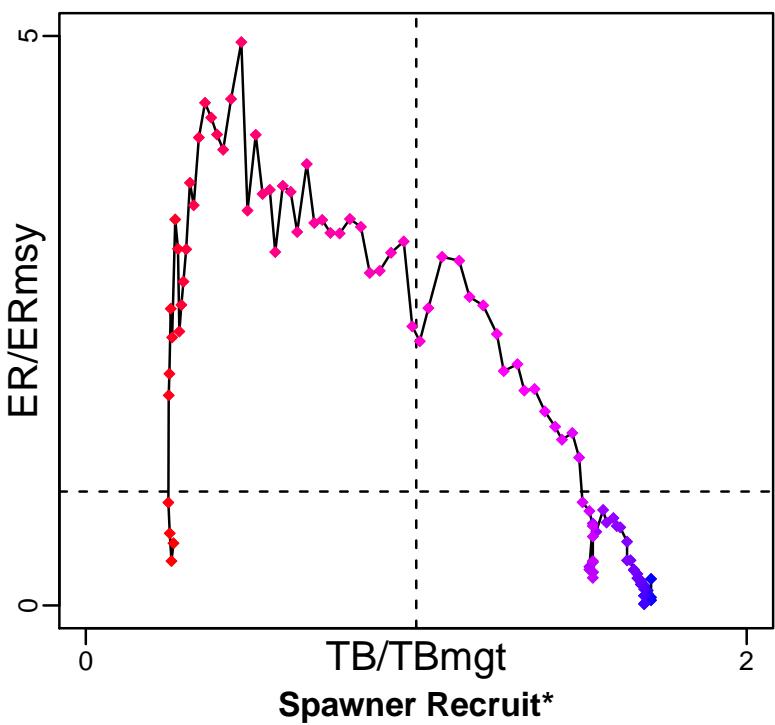
Metadata	
Scientific Name	Squalus acanthias
Current Assess ID	WGEF-SPURDNEATL-1905-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2014	0.029
TBmgt	TBmgt-MT	2016	964,563
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2014	0.029
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

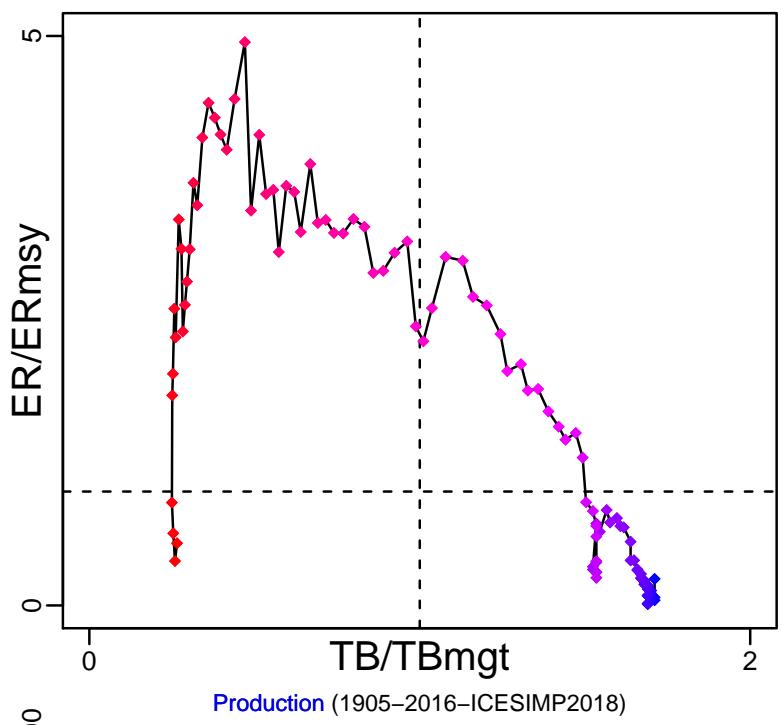
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2016	296,000	Both	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	R-E00	2016	121,000	-	0	
F	F-1/yr	2016	0.012	-	-	
ER	ER-calc-ratio	2016	0.01	-	-	
TC	TC-MT	2014	2380			
TL	TL-MT	2016	2640			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2014	0.466			
TB/TBmgt	TB-MT/TBmgt-MT	2016	0.307			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Spurdog Northeast Atlantic [SPURDNEATL]

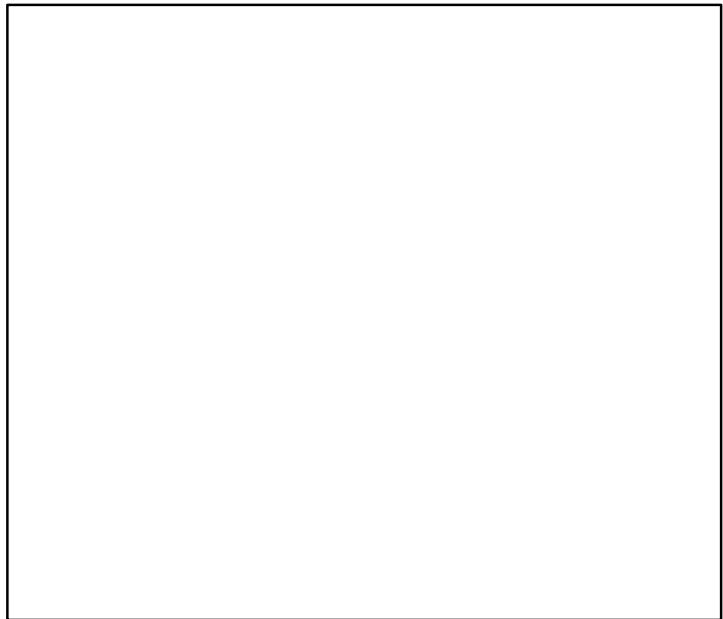
Kobe MSYpref (1905–2016–ICESIMP2018)



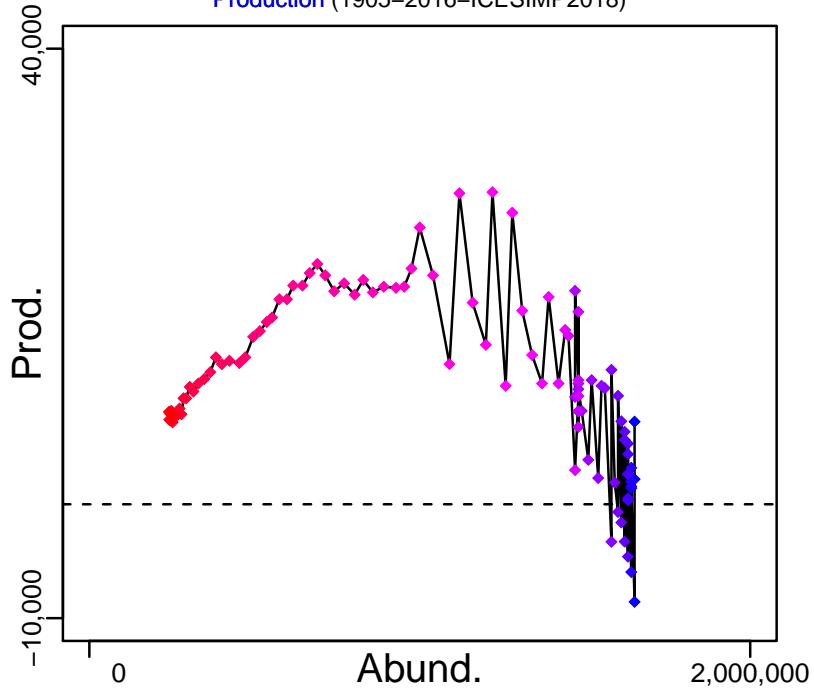
Kobe MGTpref (1905–2016–ICESIMP2018)



Spawner Recruit*



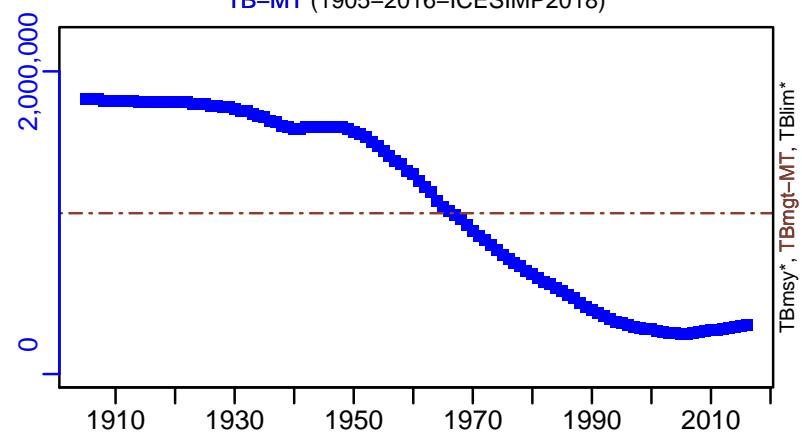
Production (1905–2016–ICESIMP2018)



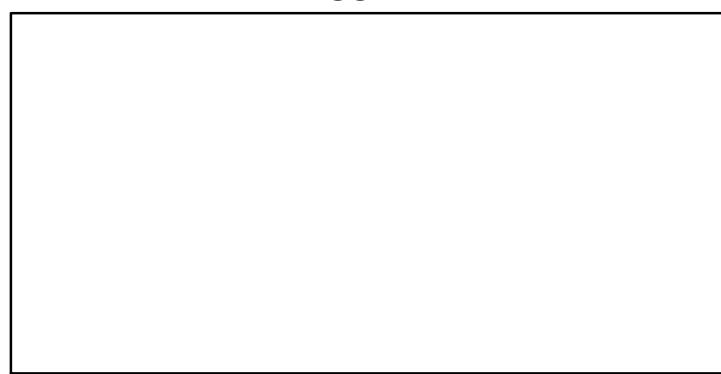
◆ Start Year ◆ End Year * No Data

Spurdog Northeast Atlantic [SPURDNEATL]

TB-MT (1905–2016–ICESIMP2018)



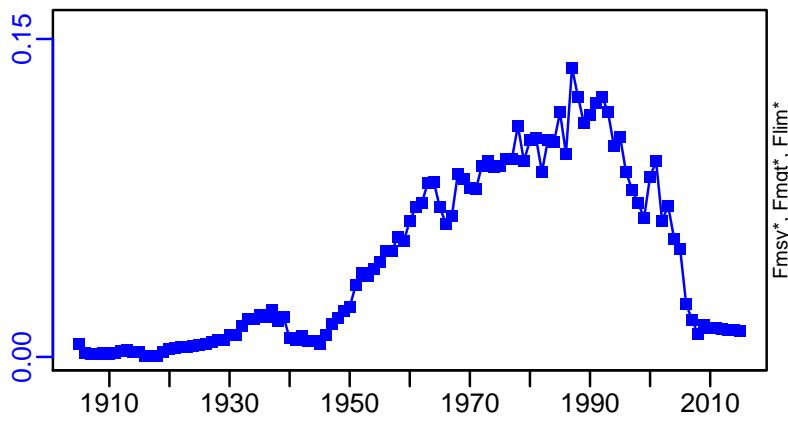
SSB*



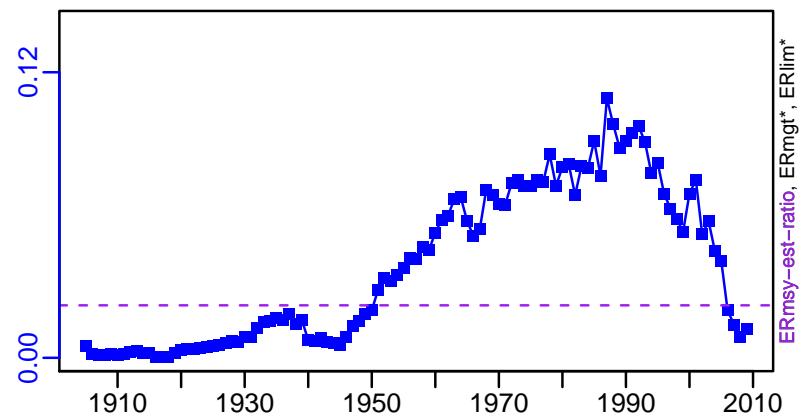
TN *



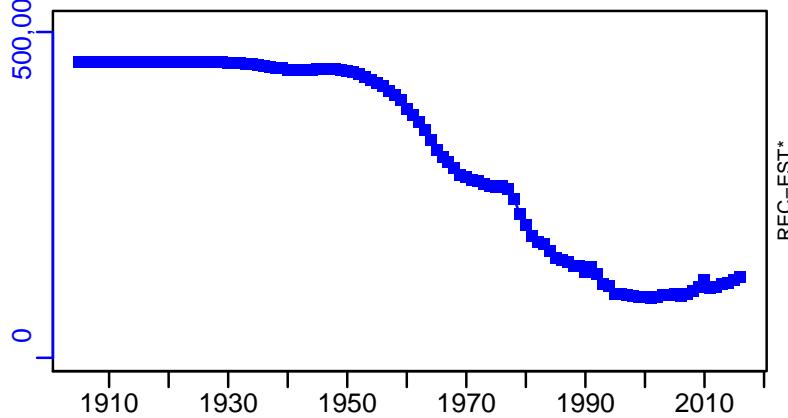
F-1/yr (1905–2016–ICESIMP2018)



ER-calc-ratio (1905–2016–ICESIMP2018)



R-E00 (1905–2016–ICESIMP2018)

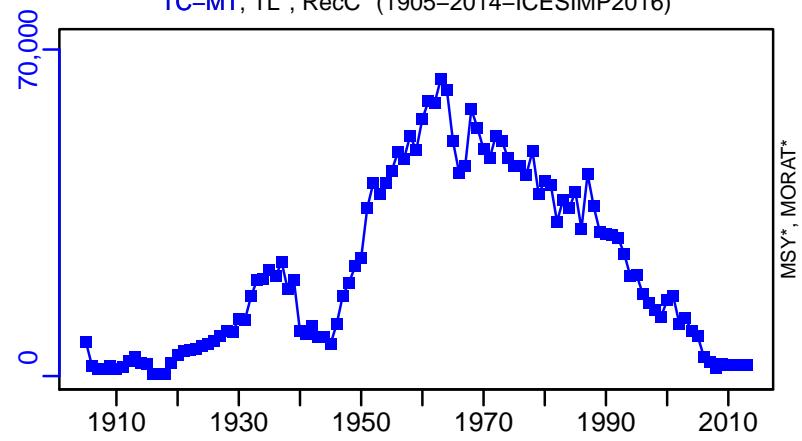


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Spurdog Northeast Atlantic [SPURDNEATL]

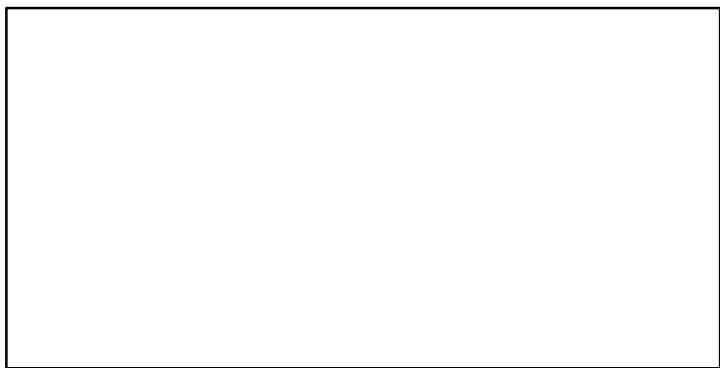
TC-MT, TL*, RecC* (1905–2014–ICESIMP2016)

TAC*, Cpair*, Cadv*

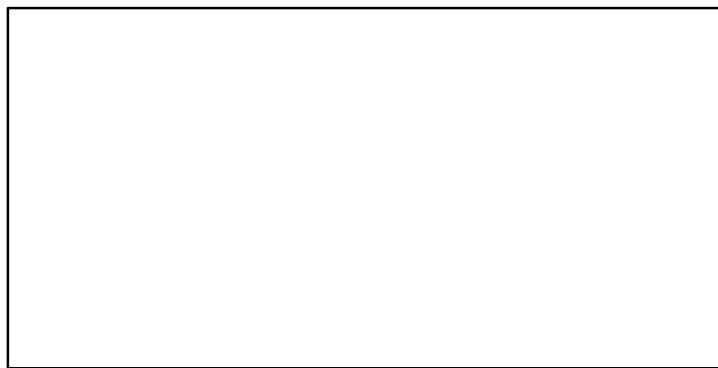


survB*

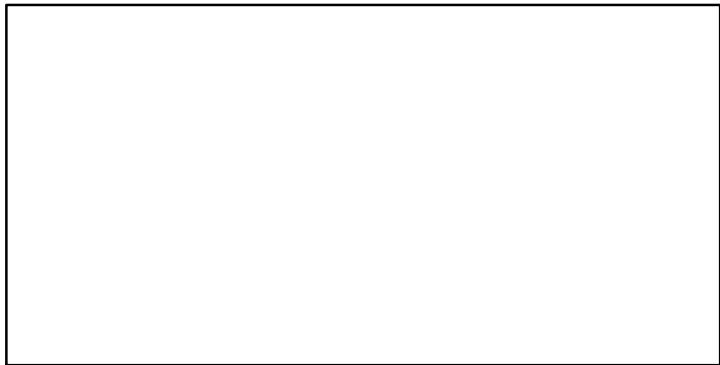
MSY*, MORAT*



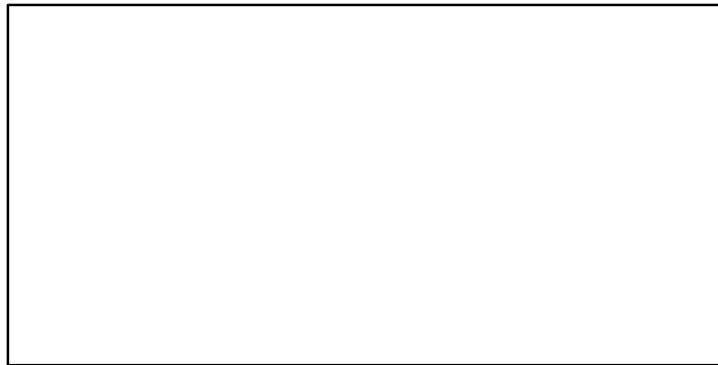
CPUE*



EFFORT*



CdivMSY*



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

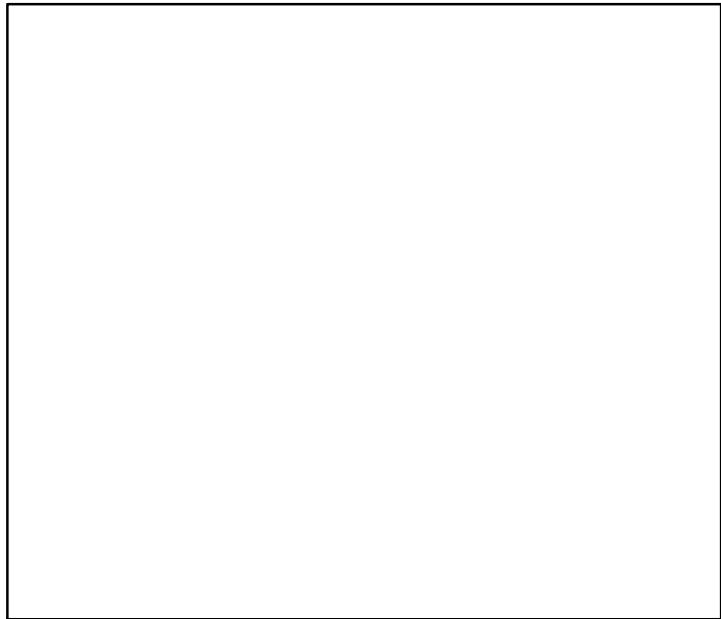
Starry ray ICES 2-3a-4 [STRAYII-IIIA-IV]

Metadata	
Scientific Name	Amblyraja radiata
Current Assess ID	WGEF-STRAYII-IIIA-IV-1991-2014-ICESIMP2018
Area	ICES 2-3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014

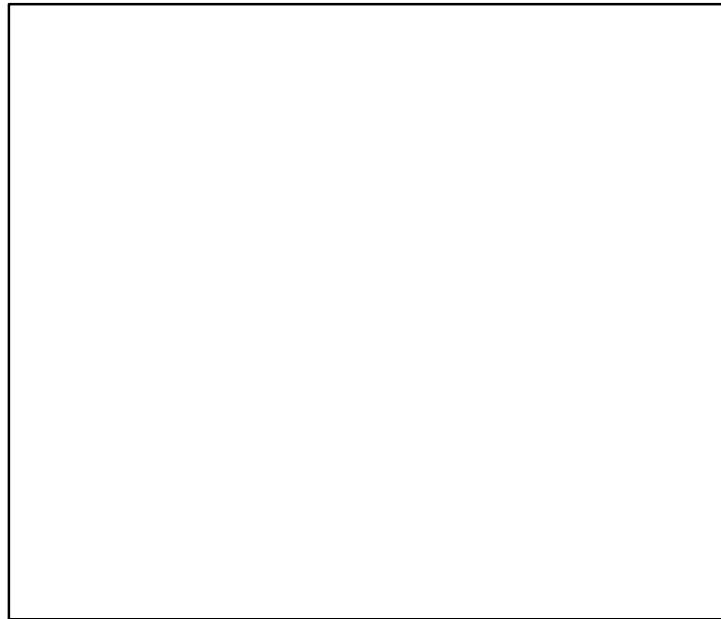
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	0.41	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

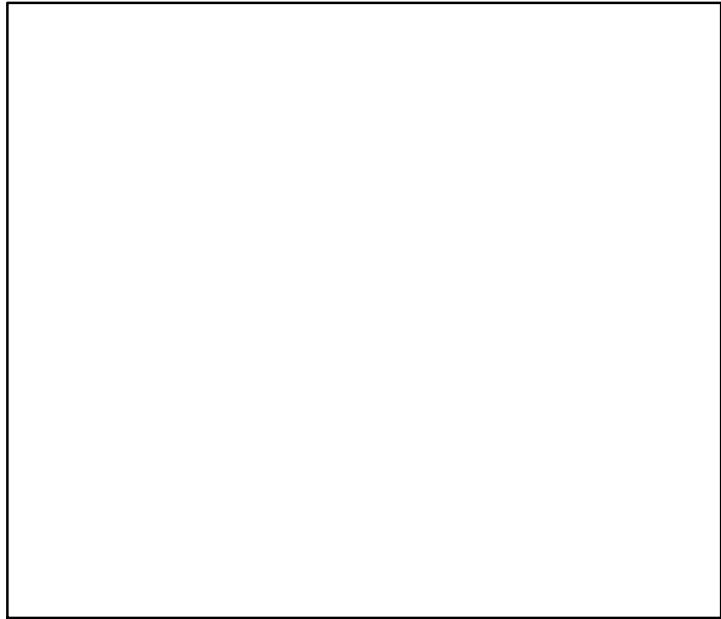
Kobe MSY*



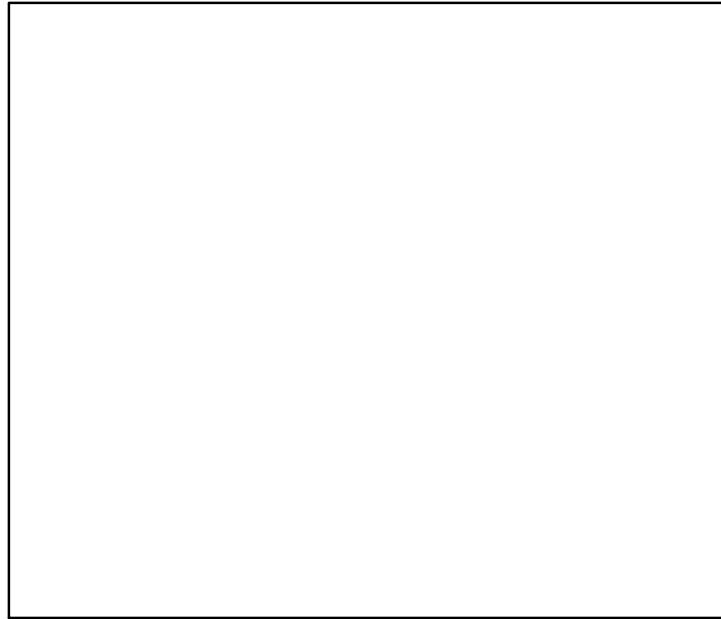
Kobe MGT*



Spawner Recruit*



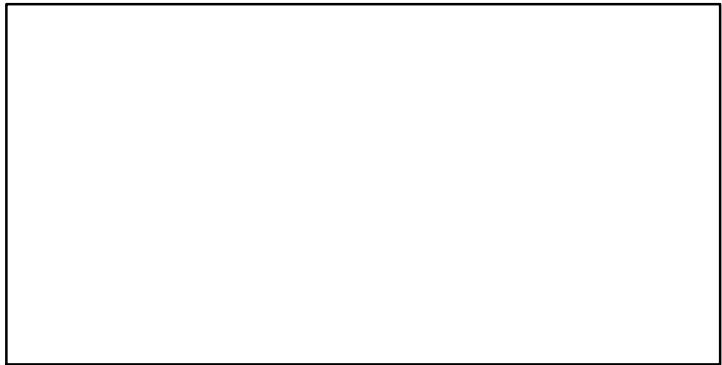
Production*



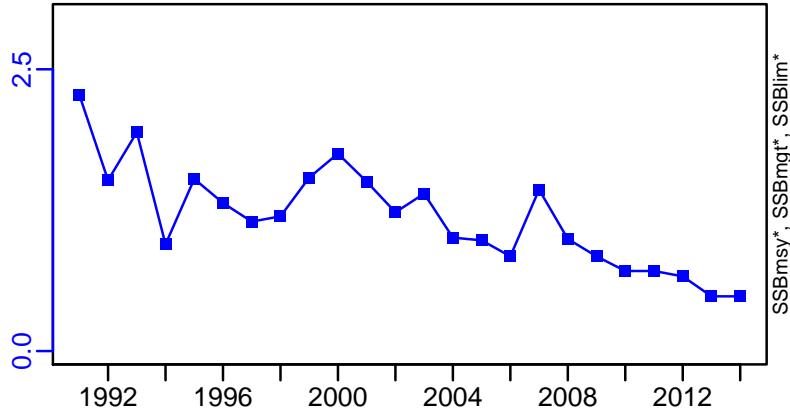
◆ Start Year ♦ End Year * No Data

Starry ray ICES 2–3a–4 [STRAYII–IIIa–IV]

TB*

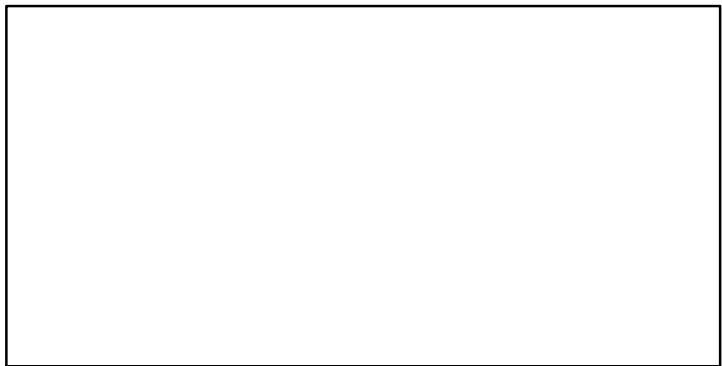


SSB–index (1991–2014–ICESIMP2018)

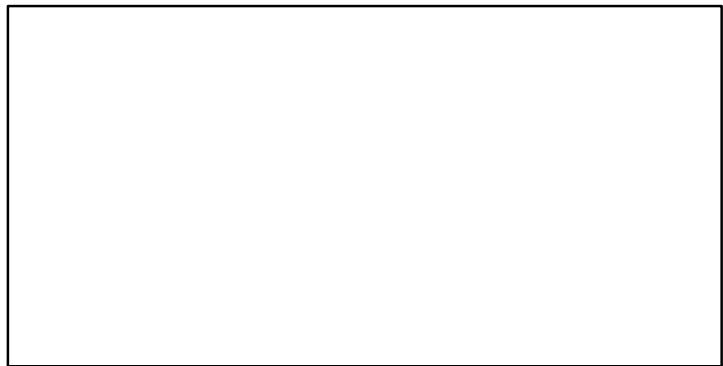


SSB_{mgt*}, SSB_{lim*}

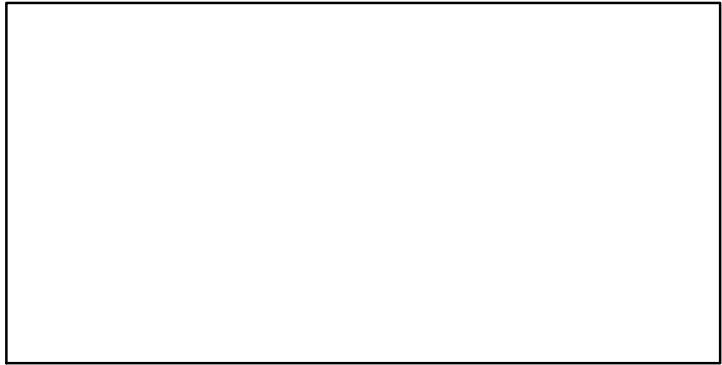
TN *



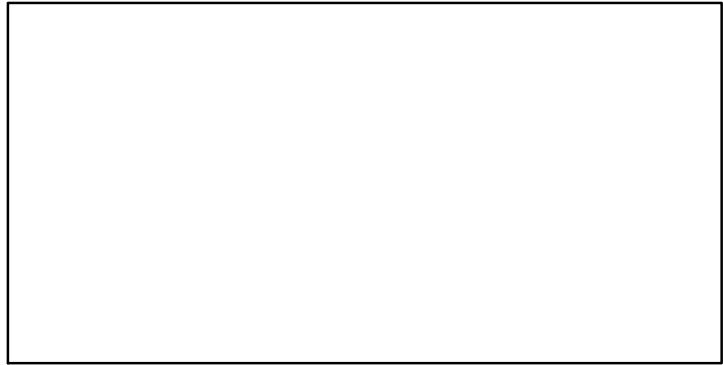
F*



ER*



Recruits*



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

TC*, TL*, RecC*

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Striped red mullet ICES 3a-4-7d [STRMULLIIla-IV-VIId]

Metadata	
Scientific Name	Mullus surmuletus
Current Assess ID	WGNSSK-STRMULLIIla-IV-VIId-2004-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2014, 2016

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

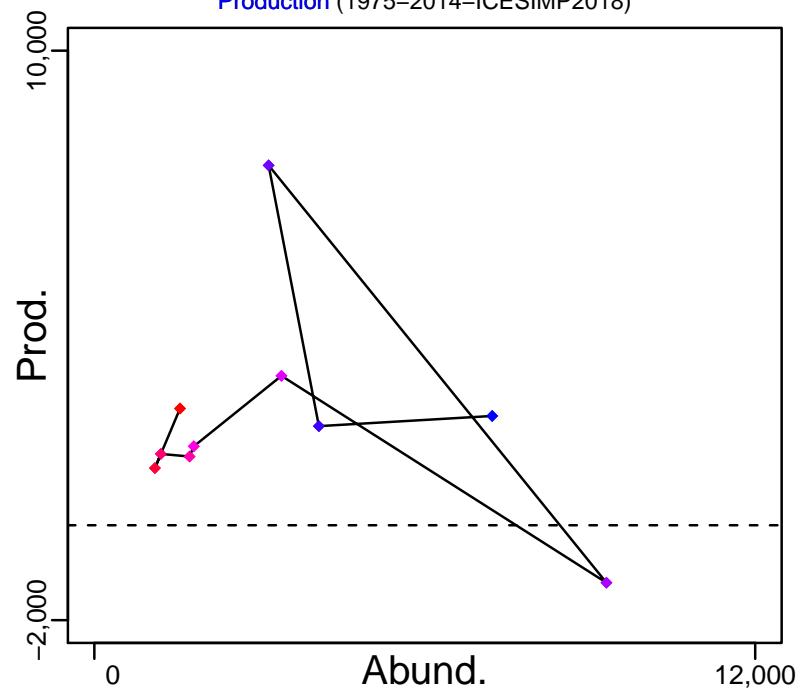
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2014	2040	Both	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2014	0.472	-	-	
TC	-	-	-			
TL	TL-MT	2016	2580			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kobe MSY*

Kobe MGT*

Spawner Recruit*

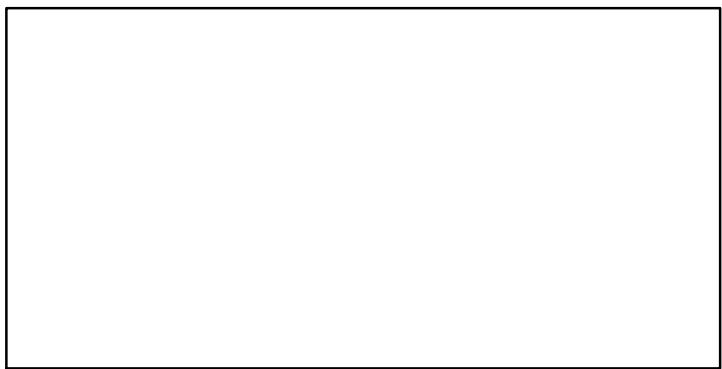
Production (1975–2014–ICESIMP2018)



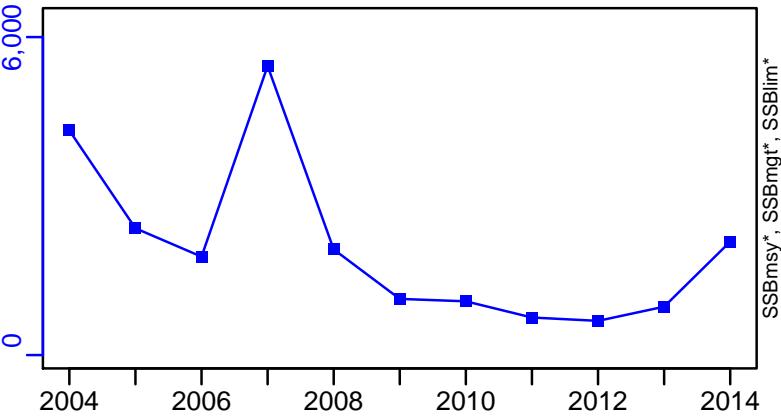
◆ Start Year ♦ End Year * No Data

Striped red mullet ICES 3a-4-7d [STRMULLIla-IV-VIId]

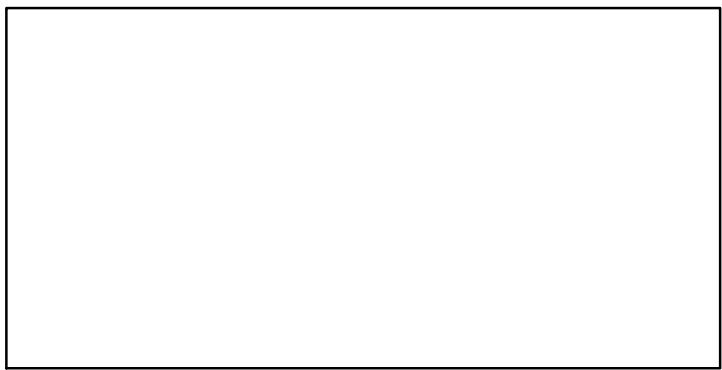
TB*



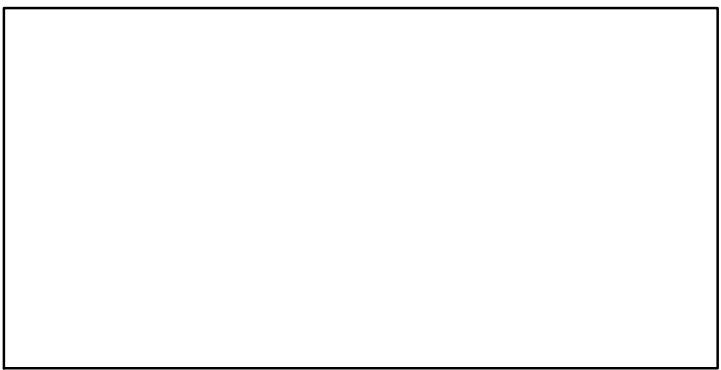
SSB-MT (1975–2014–ICESIMP2018)



TN *

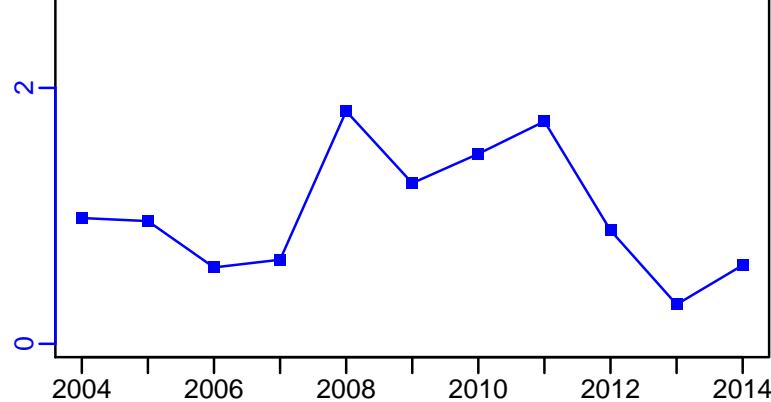


F*

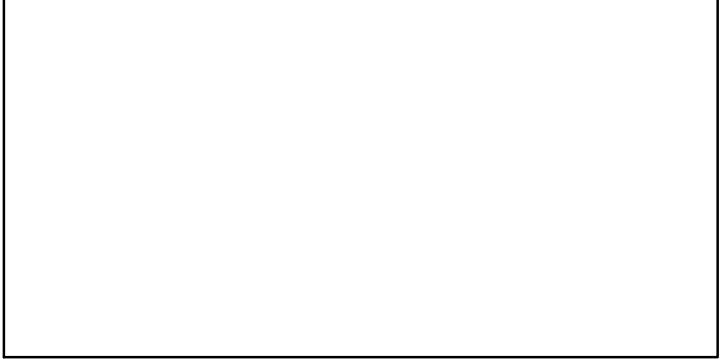


ER-calc-ratio (1975–2014–ICESIMP2018)

ER_{msy}* , ER_{mgt}* , ER_{lim}*



Recruits*

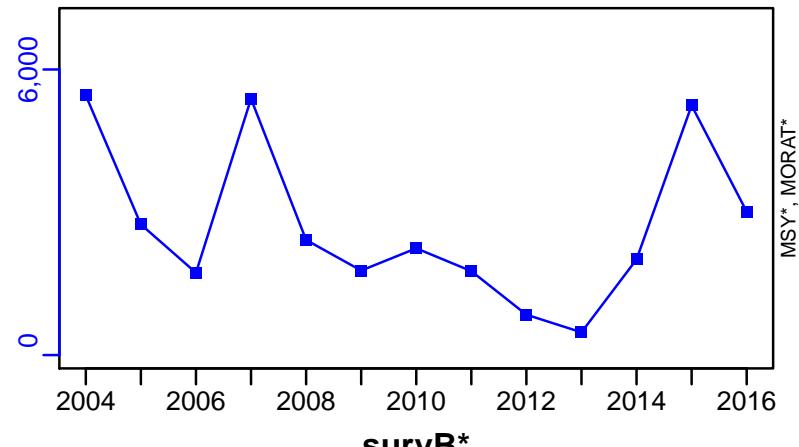


- Listed time series - - - Target BRP — Rec-Est
- - MSY-based BRP - - Lim BRP * No Data

Striped red mullet ICES 3a-4-7d [STRMULLIlla-IV-VIId]

TL-MT, TC*, RecC* (2004–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



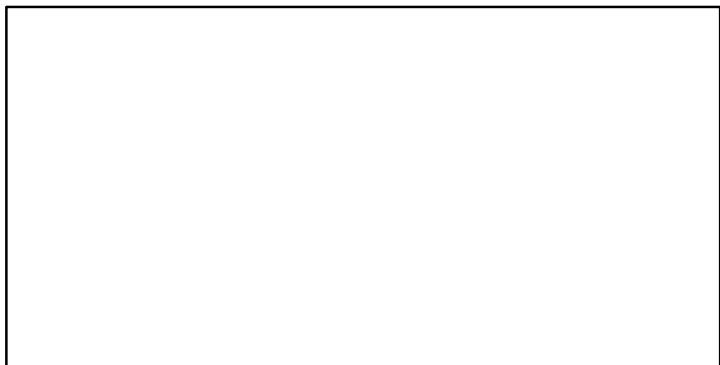
survB*



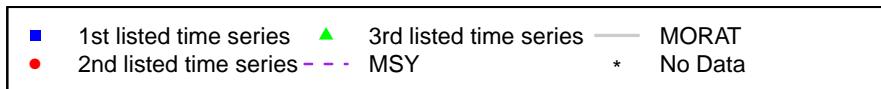
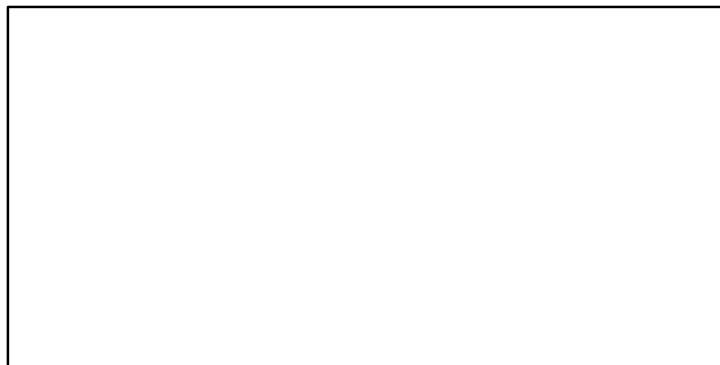
CPUE*



EFFORT*



CdivMSY*



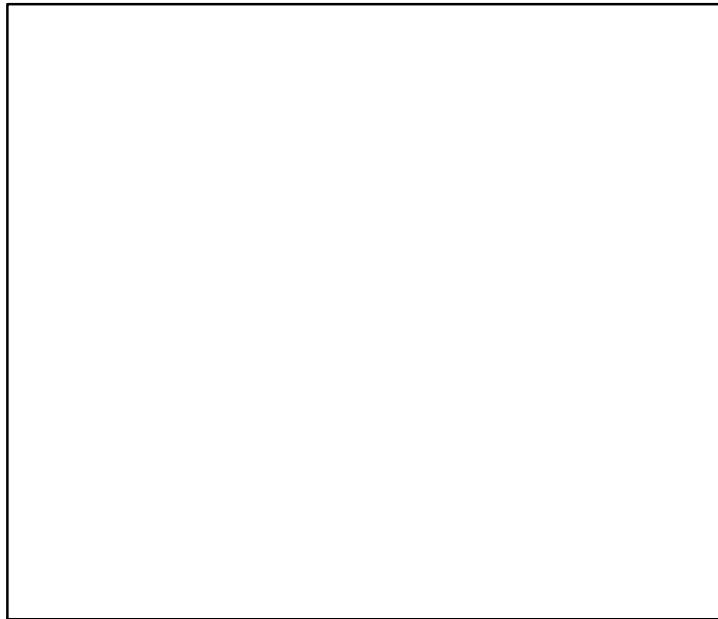
Striped red mullet ICES 6-7abcefghijk-8-9a [STRMULLVI-VIIabcefghijk-VIII-IXa]

Metadata	
Scientific Name	Mullus surmuletus
Current Assess ID	WGWISE-STRMULLVI-VIIabcefghijk-VIII-IXa-1975-2016-ICESIMP2018
Area	ICES 6-7abcefghijk-8-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2014, 2016

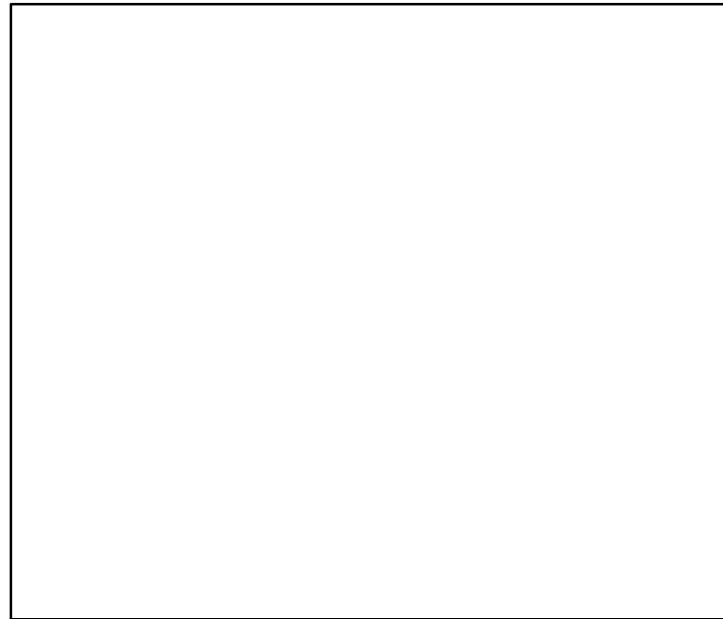
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1730		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

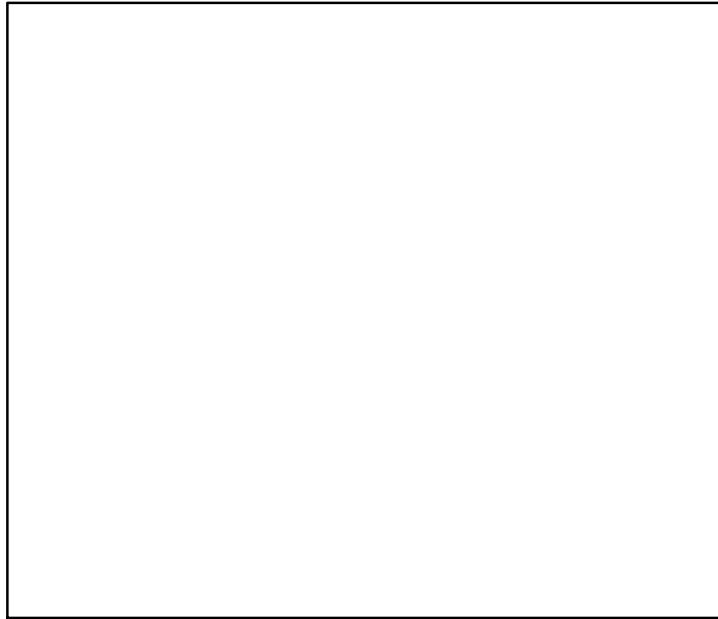
Kobe MSY*



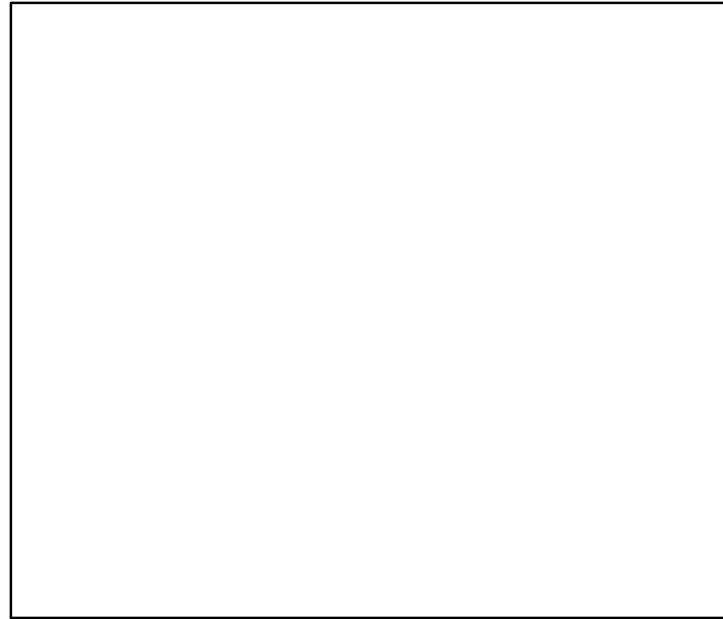
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Striped red mullet ICES 6–7abcefghijk–8–9a [STRMULLVI–VIIabcefghijk–VIII–IXa]

TB*



SSB*



TN *



F*



ER*



Recruits*

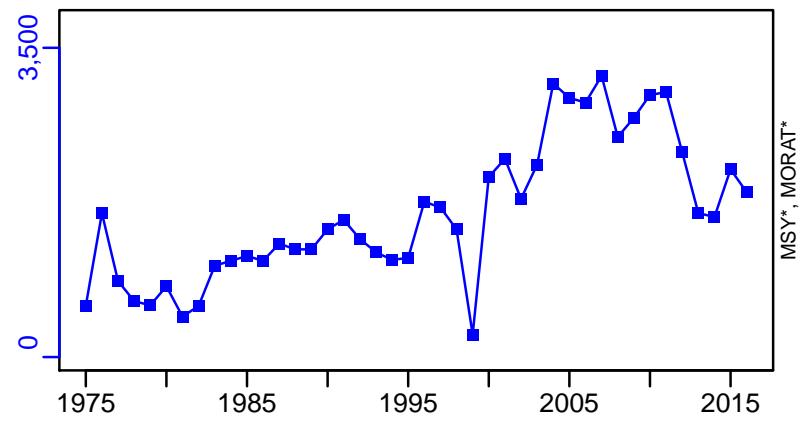


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Striped red mullet ICES 6–7abcefghijk–8–9a [STRMULLVI–VIIabcefghijk–VIII–IXa]

TL–MT, TC*, RecC* (1975–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

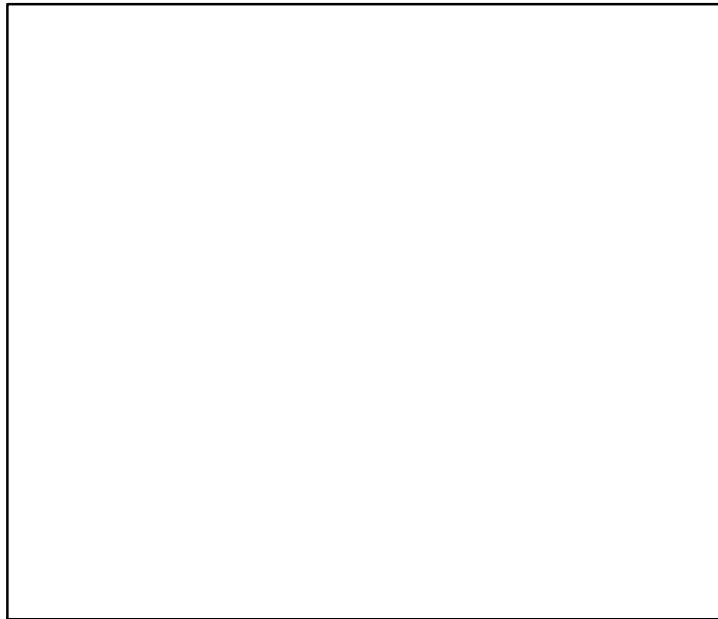
Sea trout Baltic Areas 22-32 [STROUT22-32]

Metadata	
Scientific Name	Salmo trutta
Current Assess ID	WGBAST-STROUT22-32-2001-2016-ICESIMP2018
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Assessment Working Group on Baltic Salmon and Trout
Asmts in RAM	2016

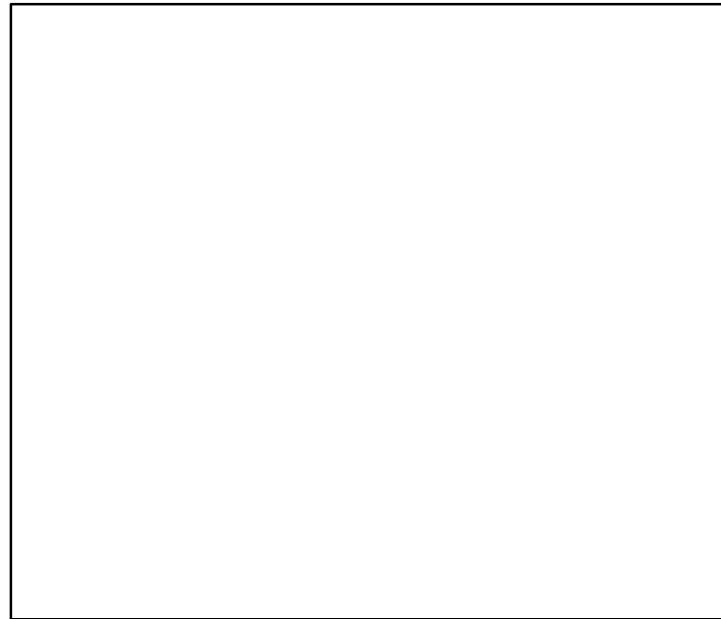
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	232		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

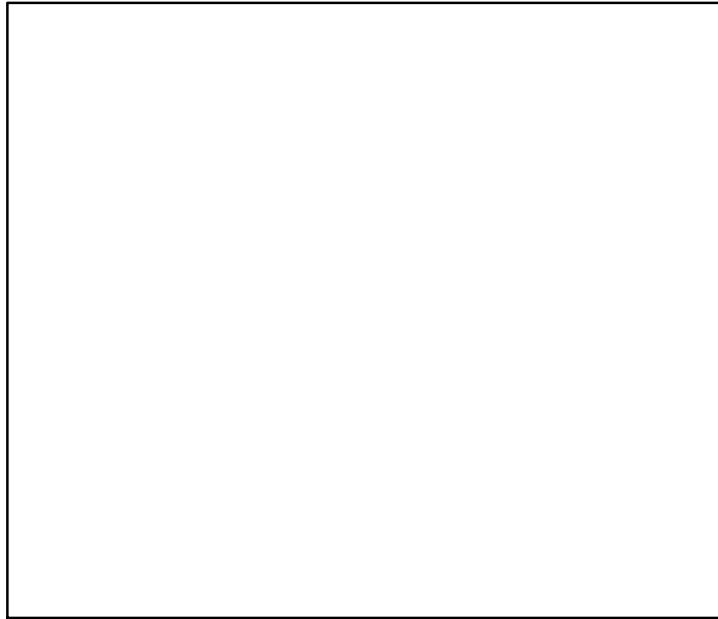
Kobe MSY*



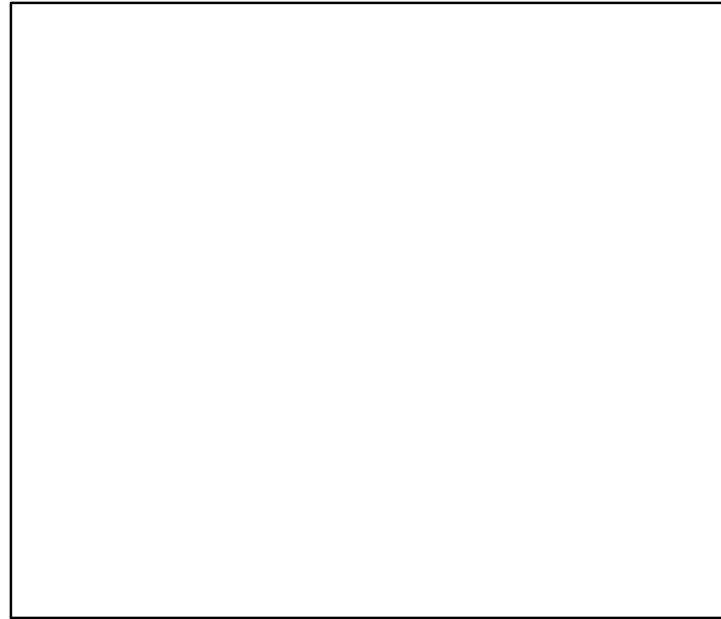
Kobe MGT*



Spawner Recruit*



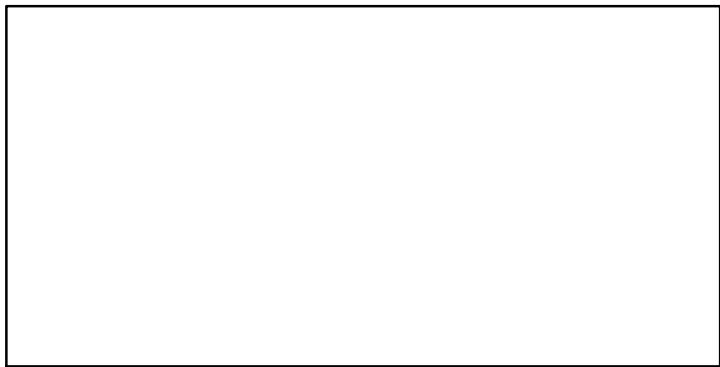
Production*



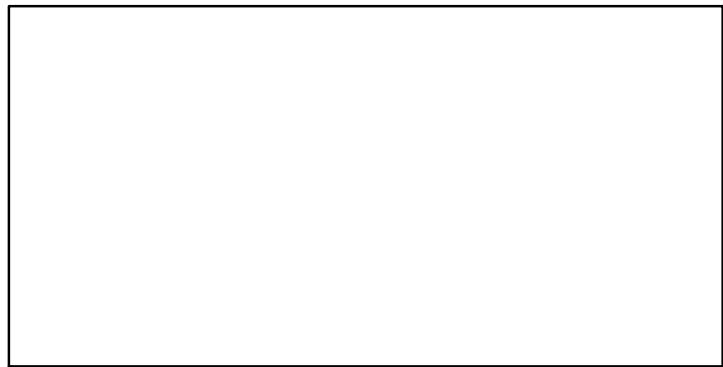
◆ Start Year ♦ End Year * No Data

Sea trout Baltic Areas 22–32 [STROUT22–32]

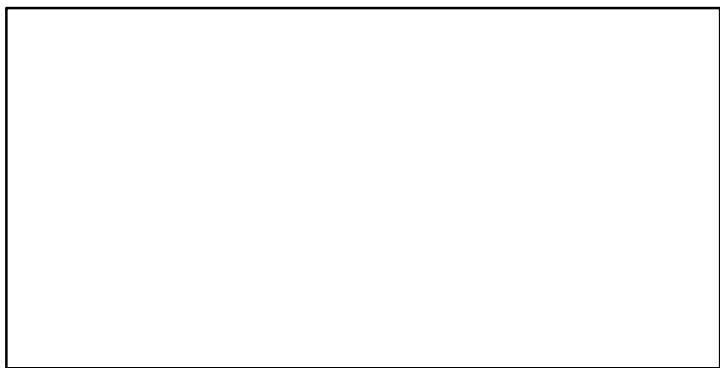
TB*



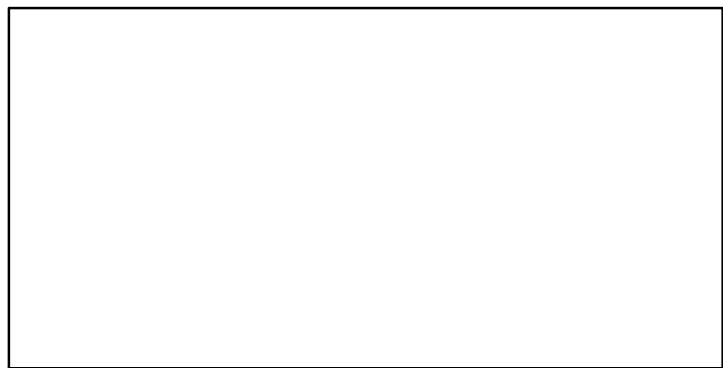
SSB*



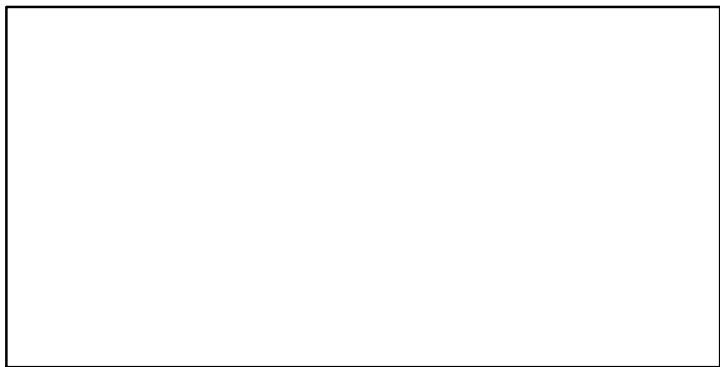
TN *



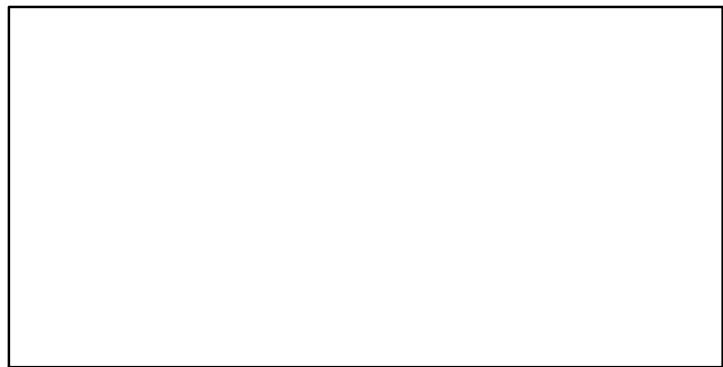
F*



ER*



Recruits*

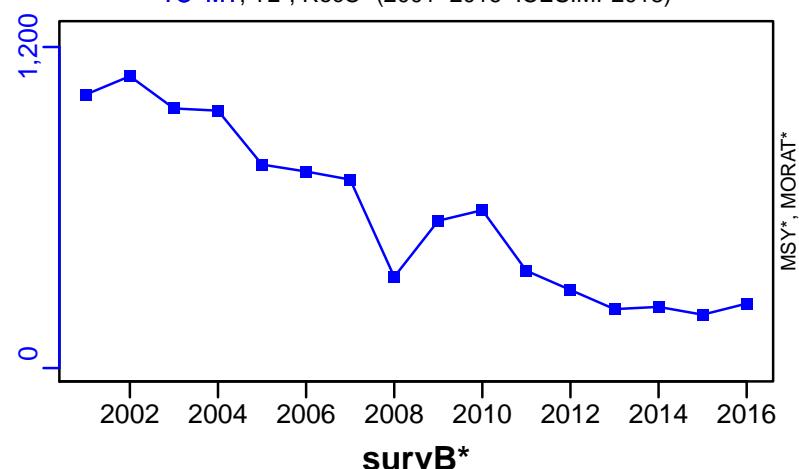


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Sea trout Baltic Areas 22–32 [STROUT22–32]

TC-MT, TL*, RecC* (2001–2016—ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

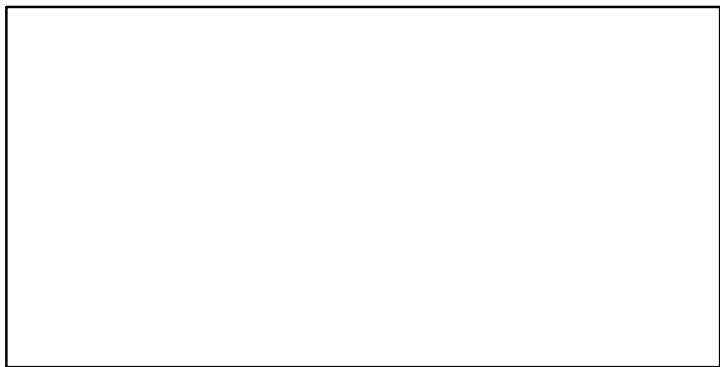
MSY*, MORAT*



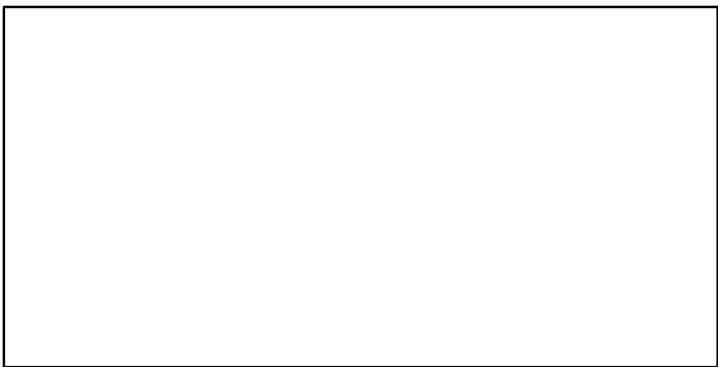
CPUE*



EFFORT*



CdivMSY*



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

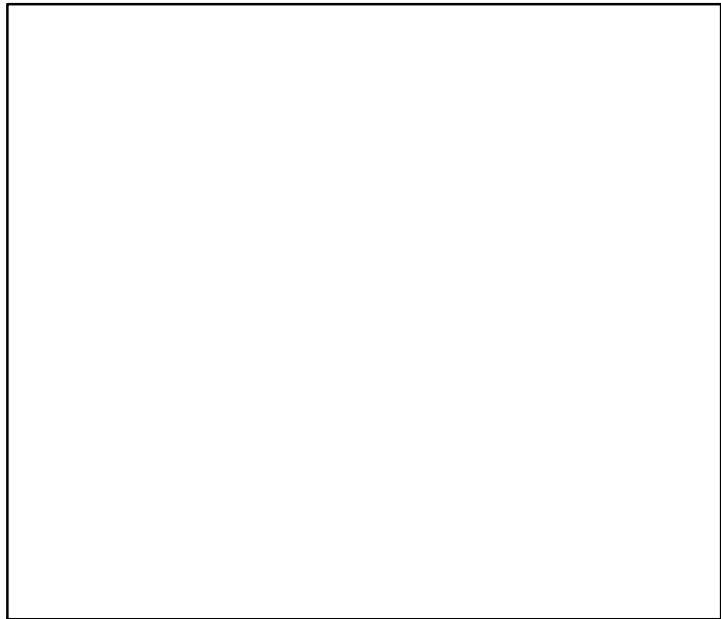
Thornback skate ICES 3a-4-7d [TBSKAIIla-IV-VIId]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAIIla-IV-VIId-2009-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

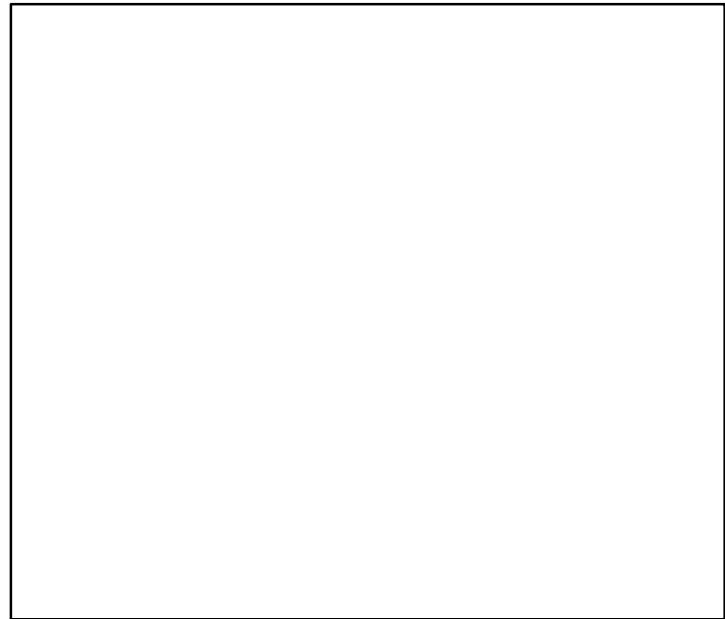
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2014	2.84	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1820		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

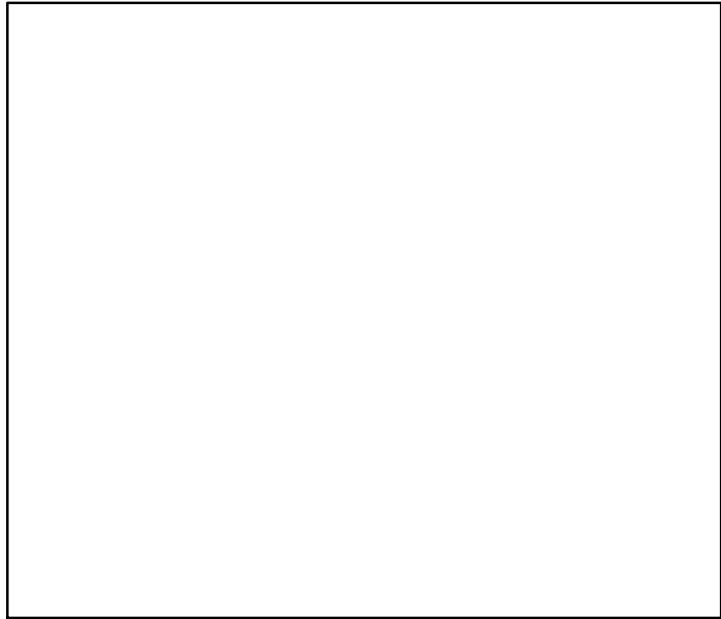
Kobe MSY*



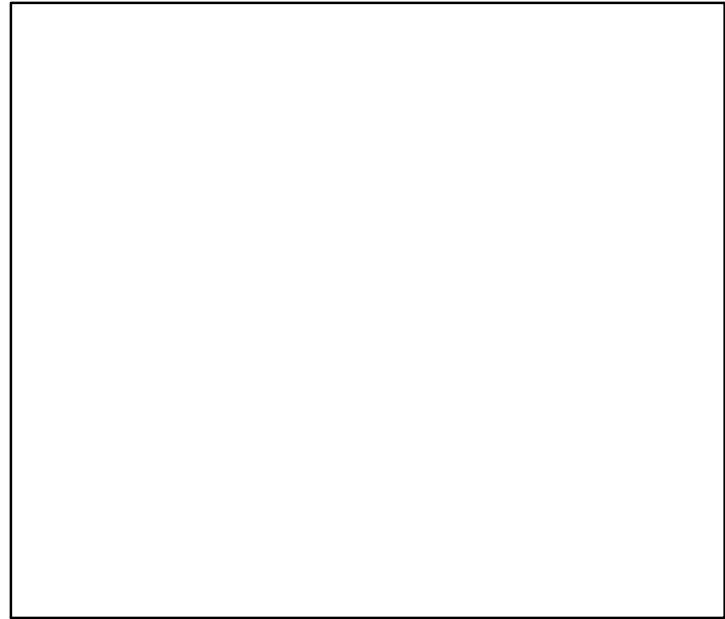
Kobe MGT*



Spawner Recruit*



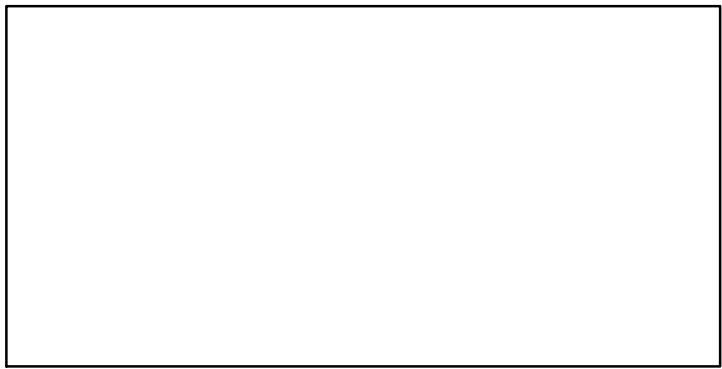
Production*



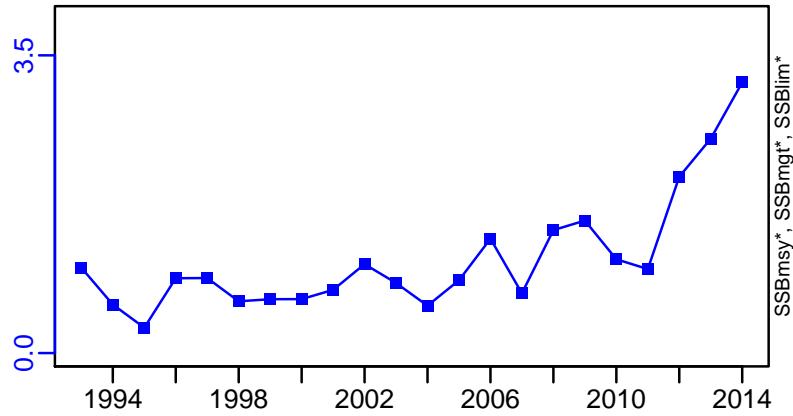
◆ Start Year ♦ End Year * No Data

Thornback skate ICES 3a–4–7d [TBSKAIIla–IV–VIIId]

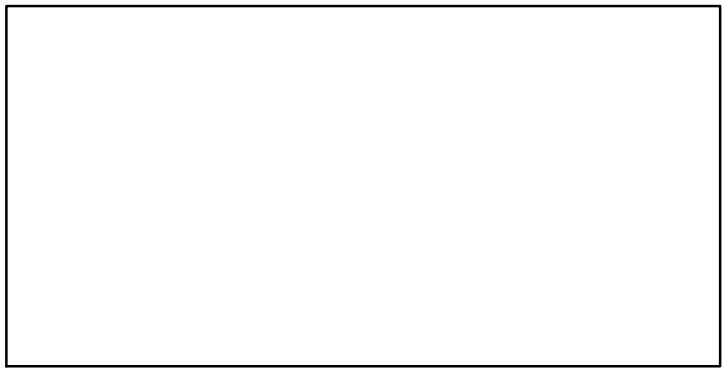
TB*



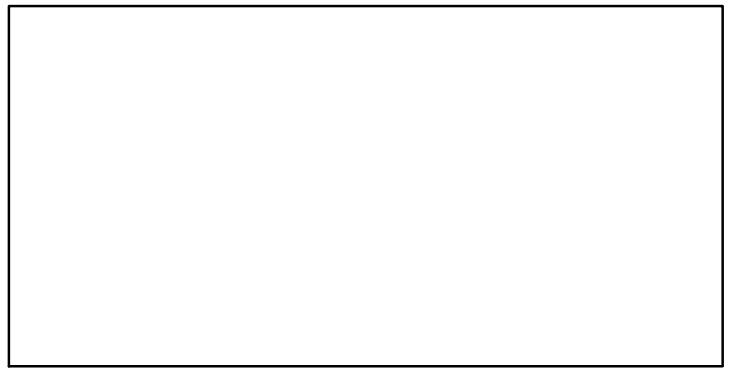
SSB-index (1993–2014–ICESIMP2018)



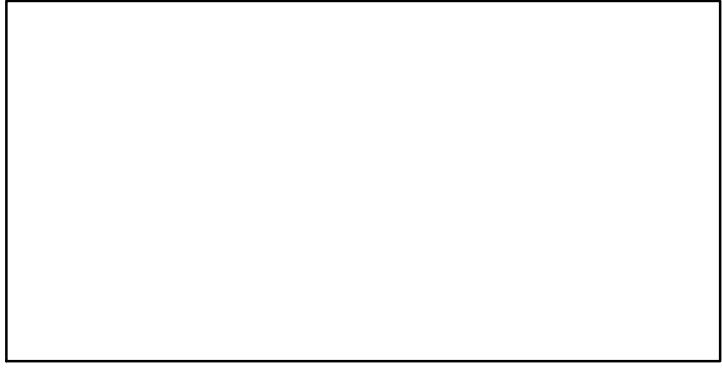
TN *



F*



ER*



Recruits*

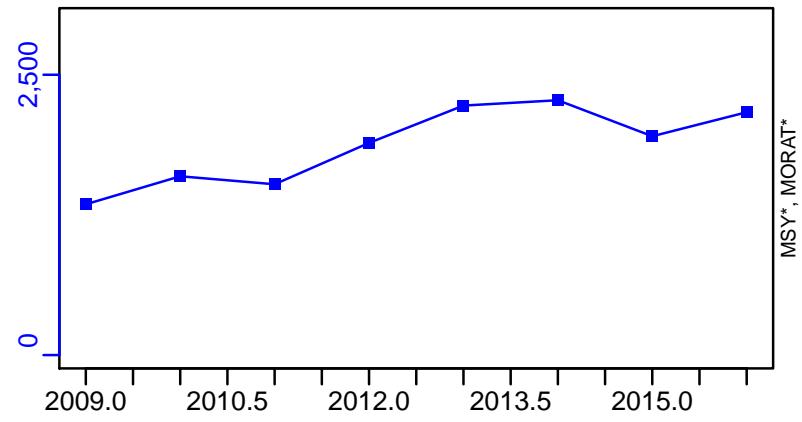


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Thornback skate ICES 3a–4–7d [TBSKAIIa–IV–VIIId]

TL-MT, TC*, RecC* (2009–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*



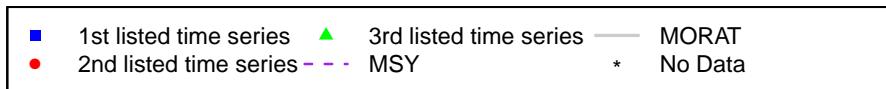
CPUE*



EFFORT*



CdivMSY*



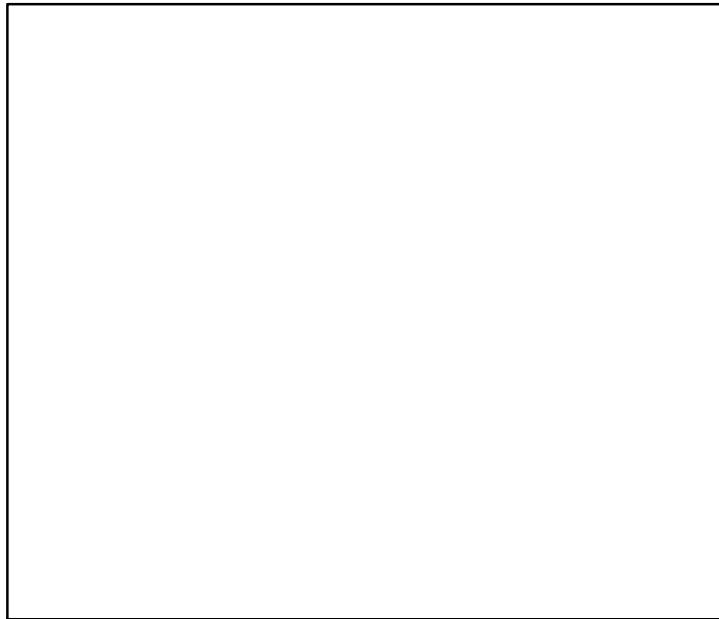
Thornback skate Portugese Waters -East [TBSKAIxa]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAIxa-1997-2015-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

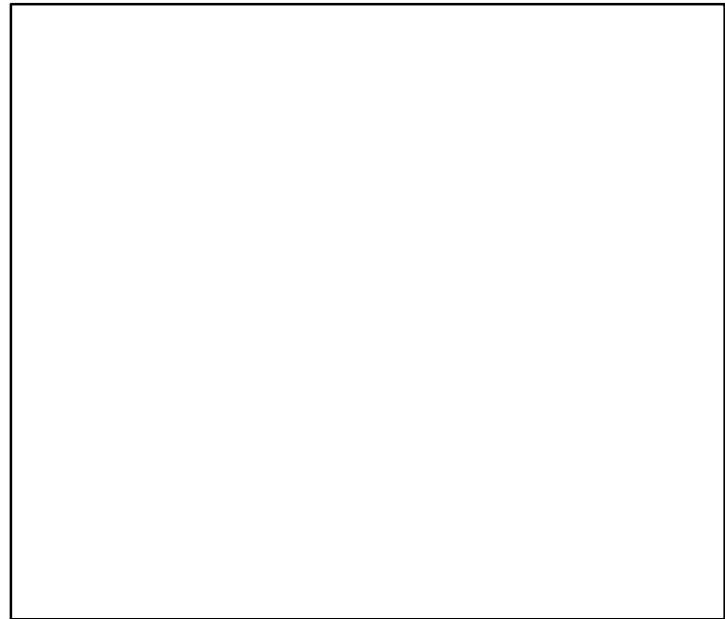
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.93	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	724		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

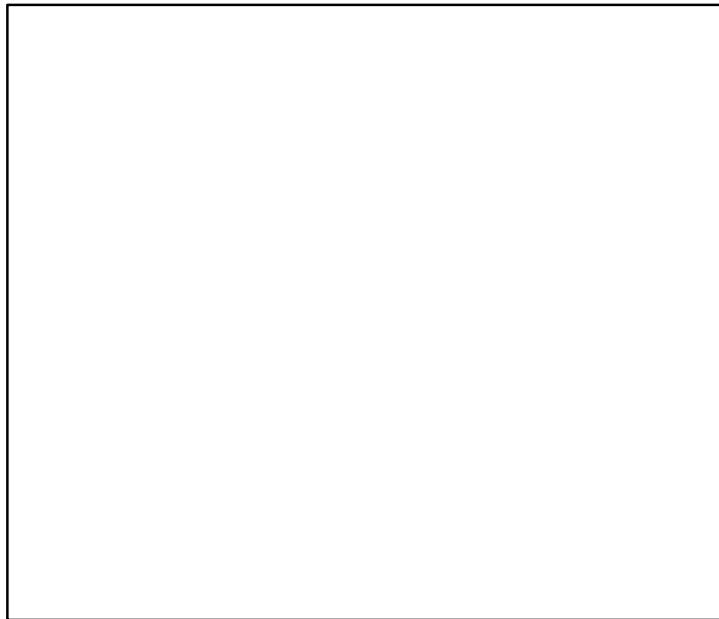
Kobe MSY*



Kobe MGT*



Spawner Recruit*



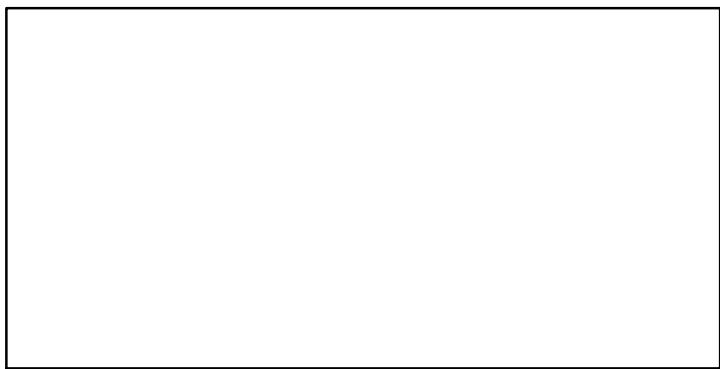
Production*



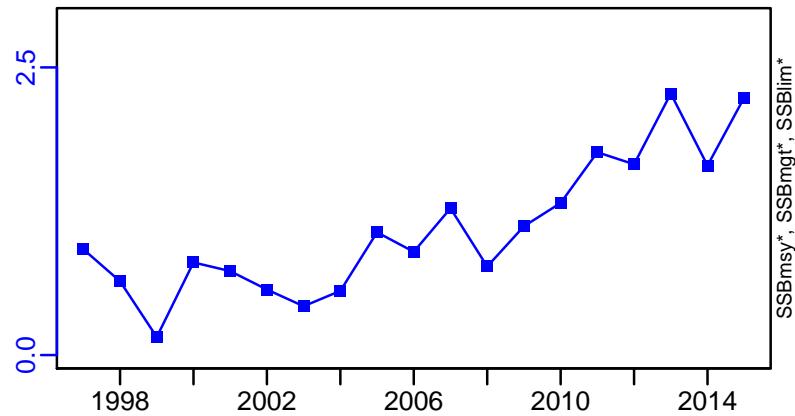
◆ Start Year ♦ End Year * No Data

Thornback skate Portuguese Waters –East [TBSKAIxa]

TB*



SSB–index (1997–2015–ICESIMP2018)



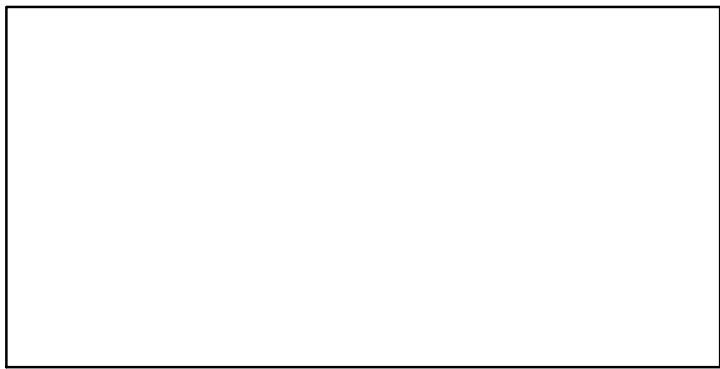
TN *



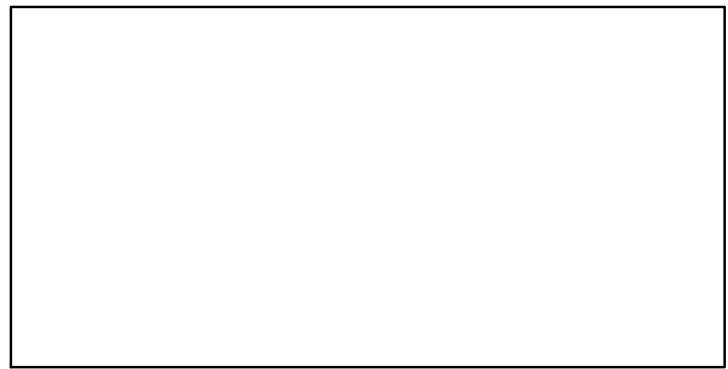
F*



ER*



Recruits*

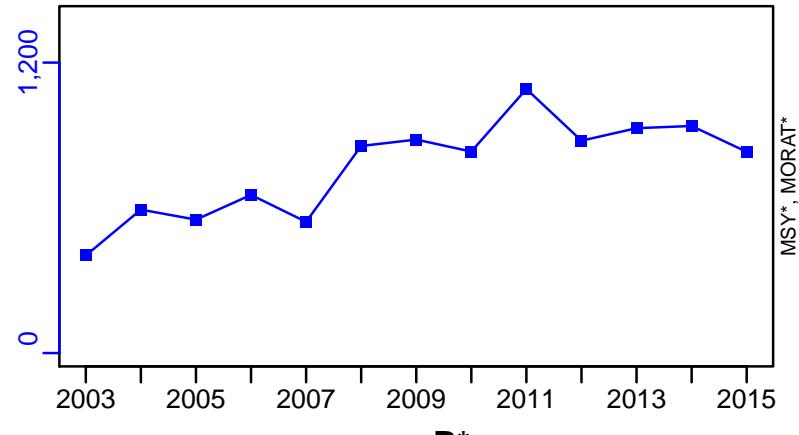


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

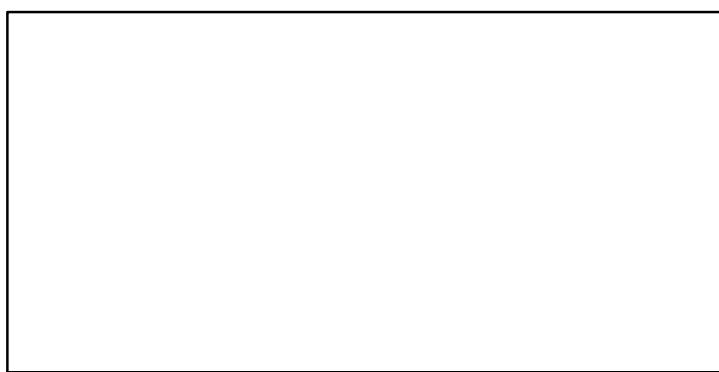
Thornback skate Portuguese Waters –East [TBSKAIxa]

TL-MT, TC*, RecC* (1997–2015–ICESIMP2018)

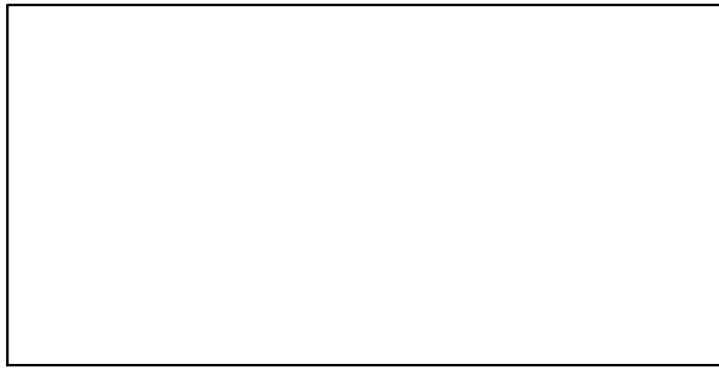
TAC*, Cpair*, Cadv*



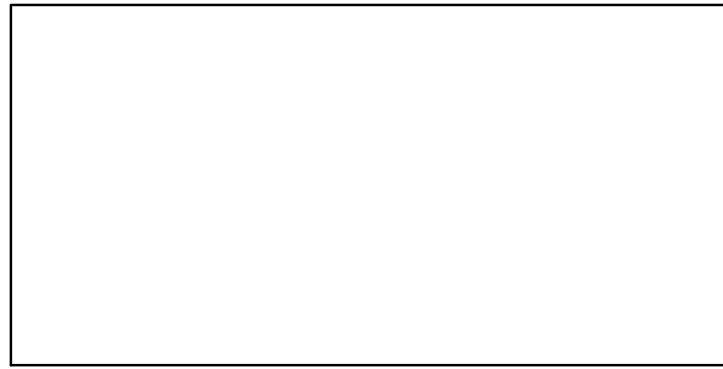
MSY*, MORAT*



EFFORT*



CdivMSY*



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

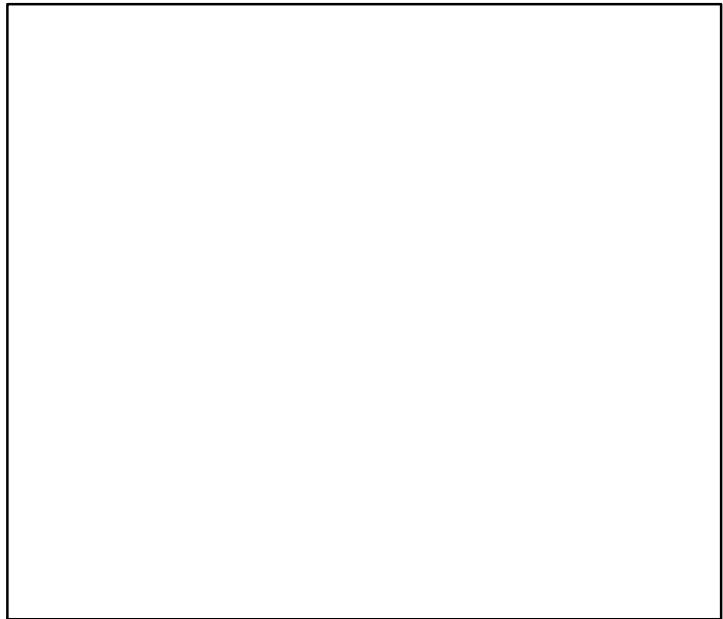
Thornback skate ICES 6 [TBSKAVI]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAVI-2005-2015-ICESIMP2018
Area	ICES 6
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

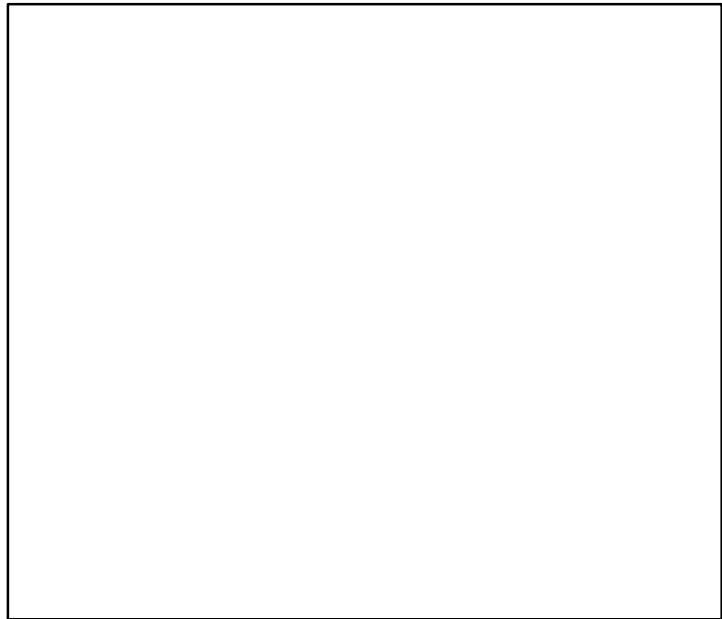
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	8	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	241		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

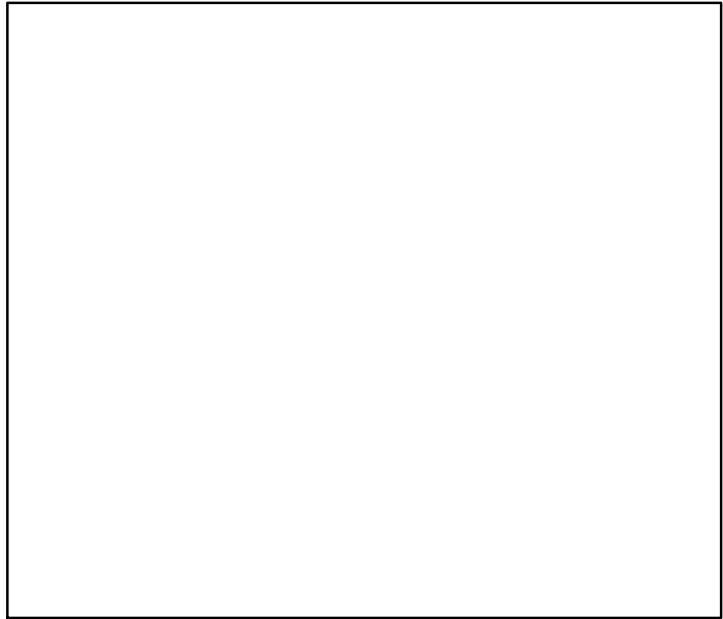
Kobe MSY*



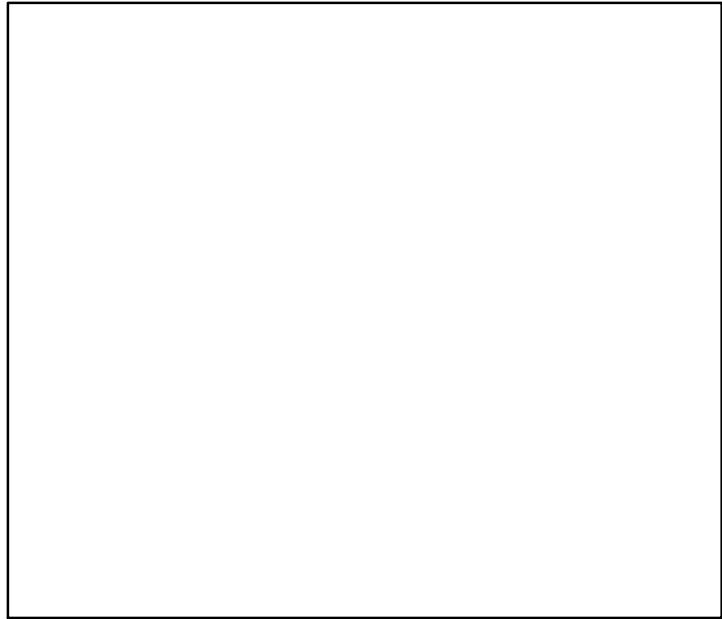
Kobe MGT*



Spawner Recruit*



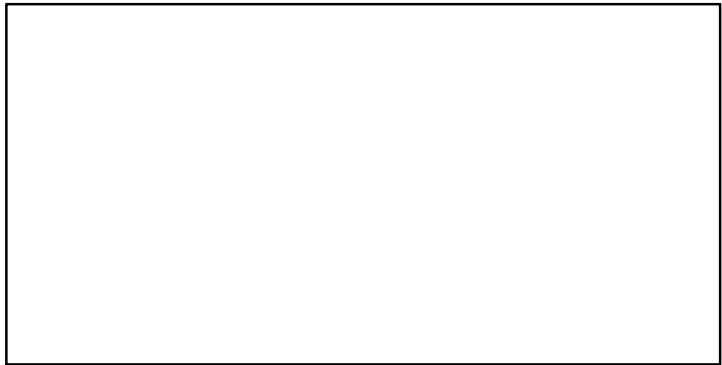
Production*



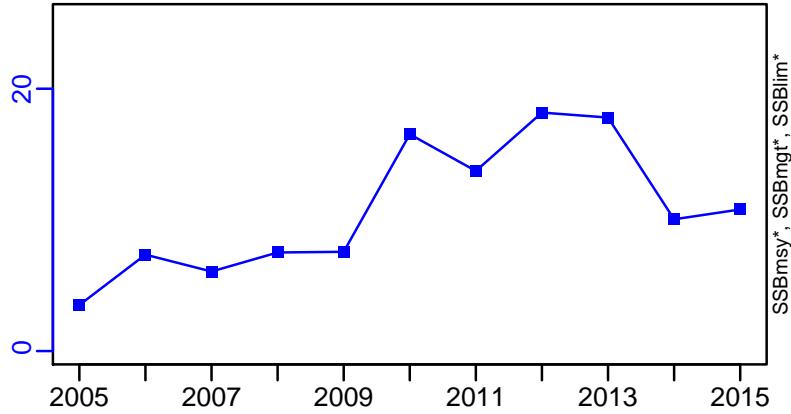
◆ Start Year ♦ End Year * No Data

Thornback skate ICES 6 [TBSKAVI]

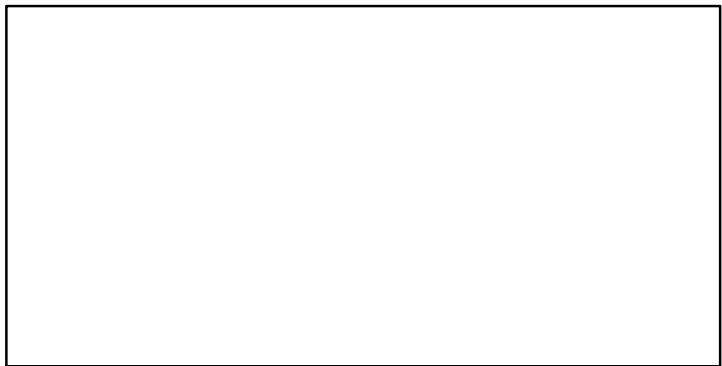
TB*



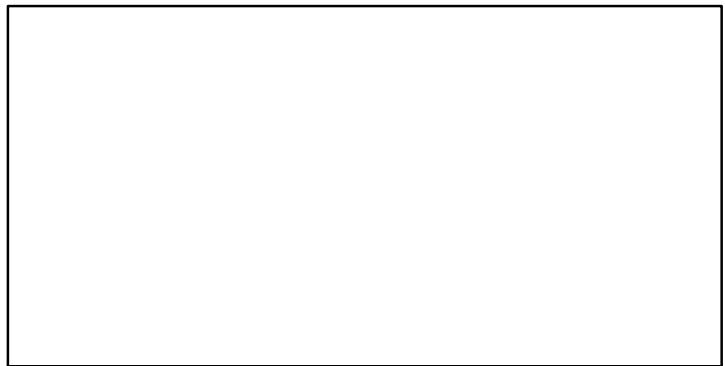
SSB-index (2005–2015–ICESIMP2018)



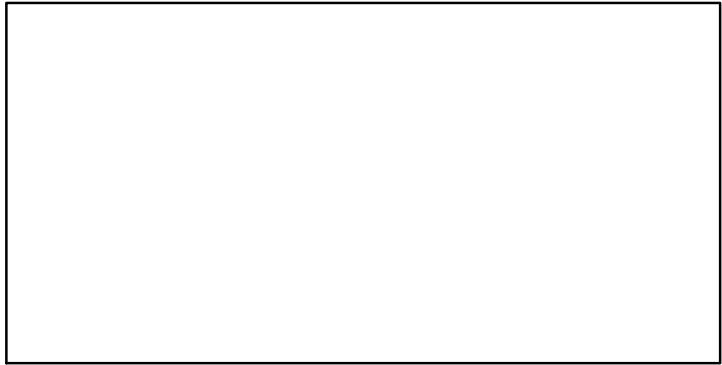
TN *



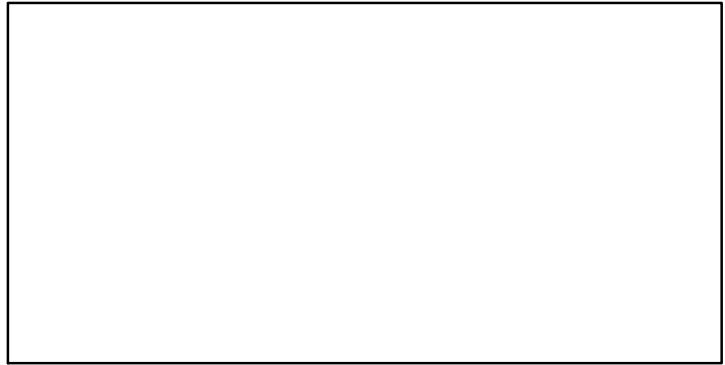
F*



ER*



Recruits*

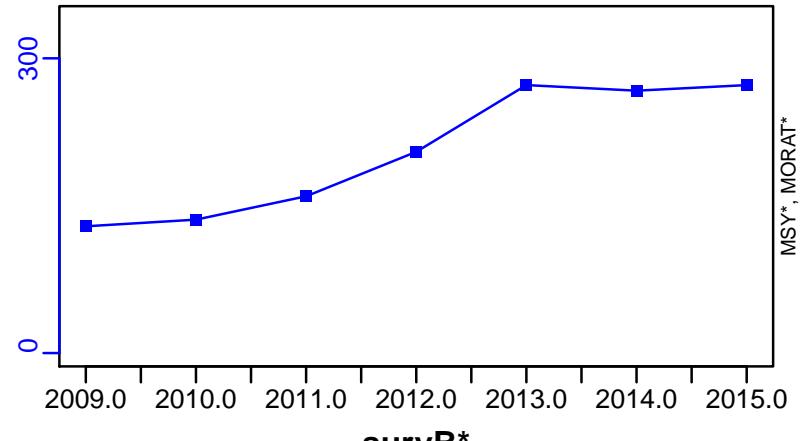


- | | | |
|---|--|---|
| ■ Listed time series
— MSY-based BRP | — Target BRP
— Lim BRP | — Rec-Est
* No Data |
|---|--|---|

Thornback skate ICES 6 [TBSKAVI]

TL-MT, TC*, RecC* (2005–2015–ICESIMP2018)

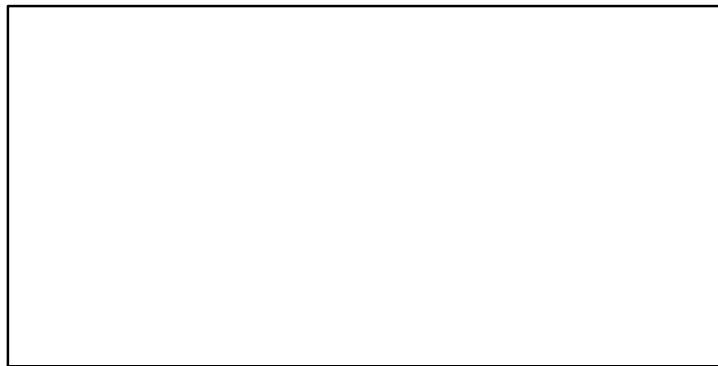
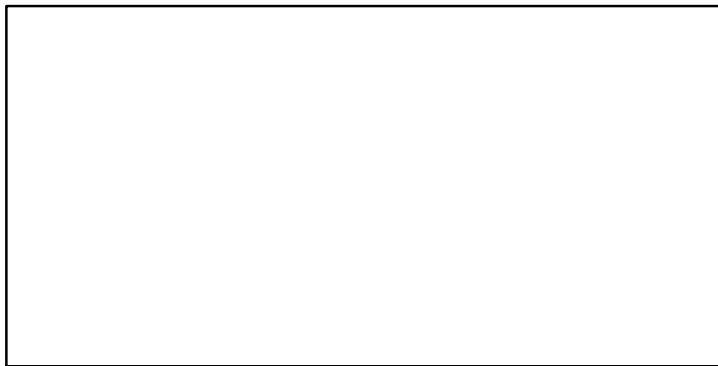
TAC*, Cpair*, Cadv*



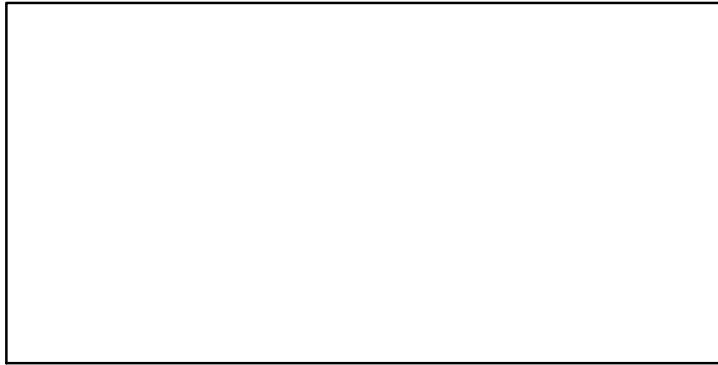
survB*

MSY*, MORAT*

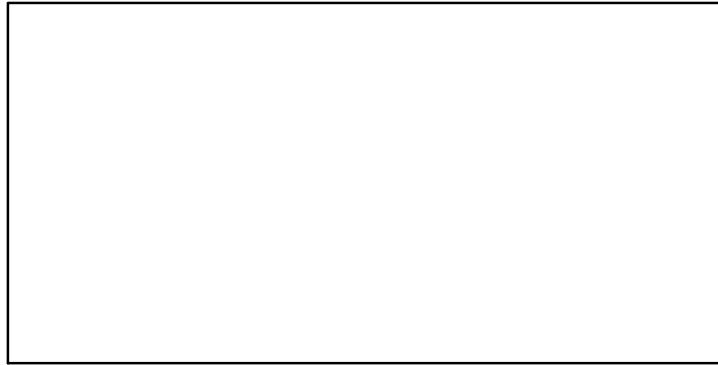
CPUE*



EFFORT*



CdivMSY*



Thornback skate ICES 7afg [TBSKAVIIafg]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAVIIafg-1993-2015-ICESIMP2018
Area	ICES 7afg
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	9	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	893		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

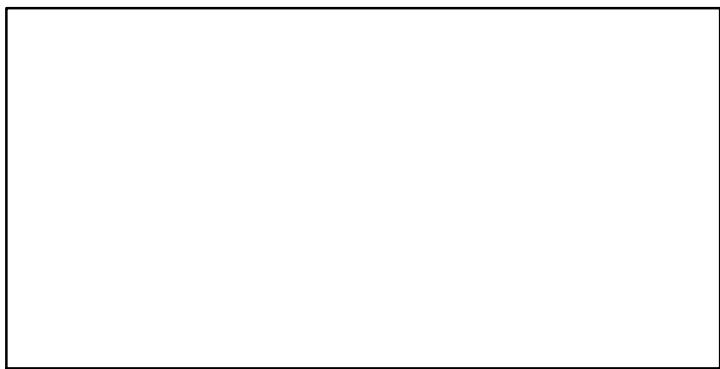
Spawner Recruit*

Production*

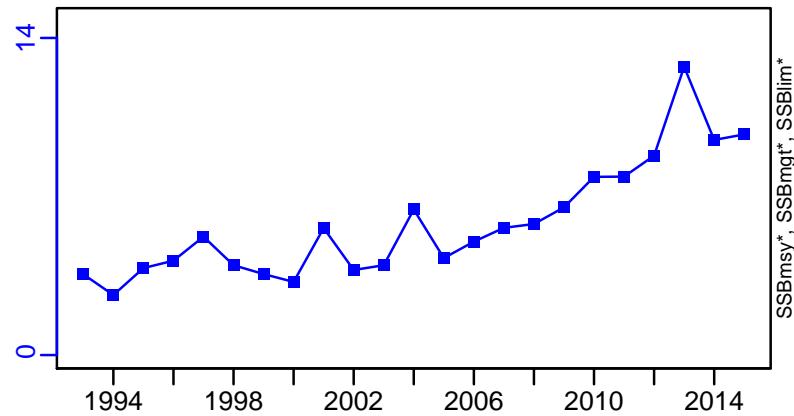
◆ Start Year ♦ End Year * No Data

Thornback skate ICES 7afg [TBSKAVIIafg]

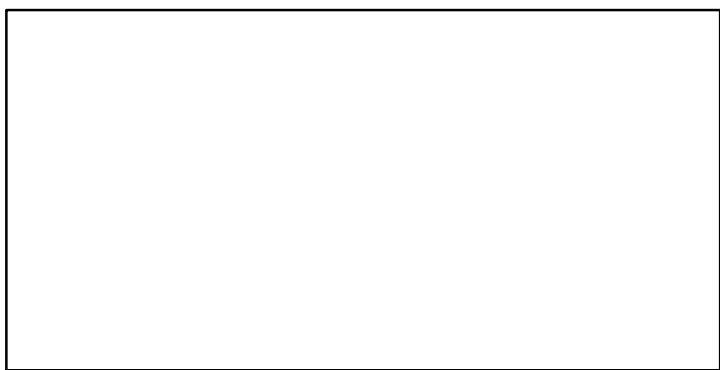
TB*



SSB-index (1993–2015–ICESIMP2018)



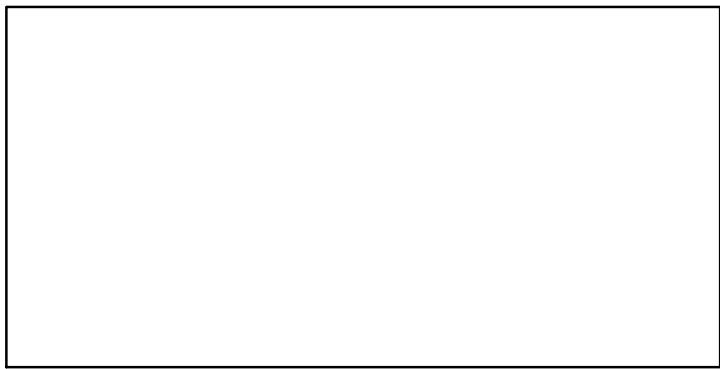
TN *



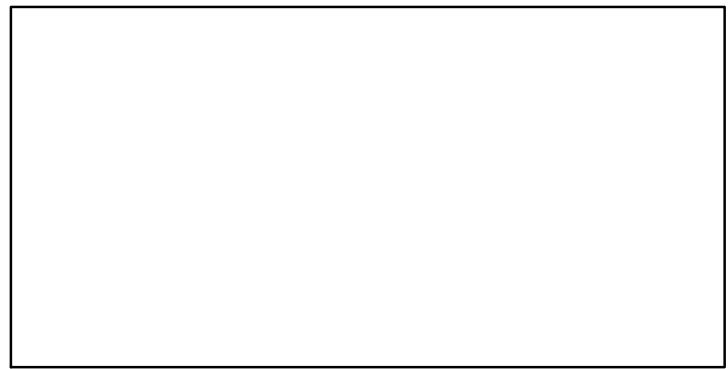
F*



ER*



Recruits*

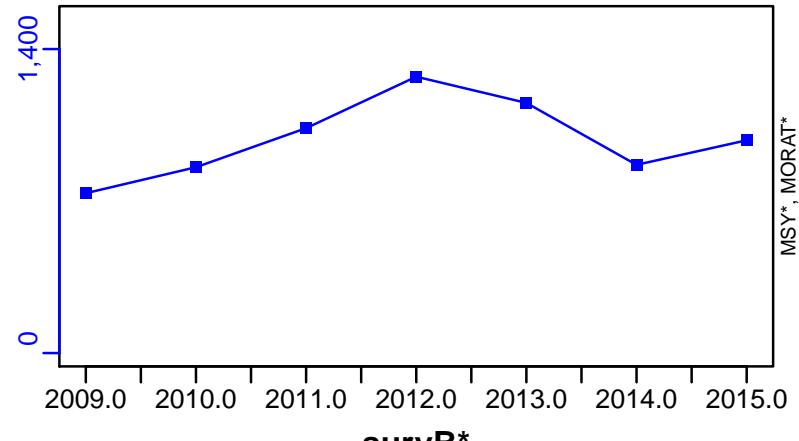


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

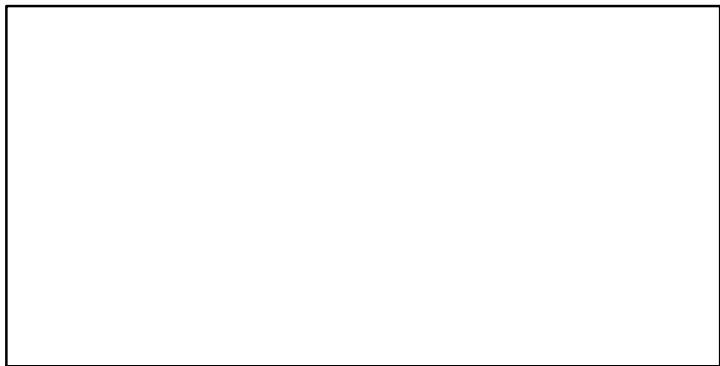
Thornback skate ICES 7afg [TBSKAVIIafg]

TL-MT, TC*, RecC* (1993–2015–ICESIMP2018)

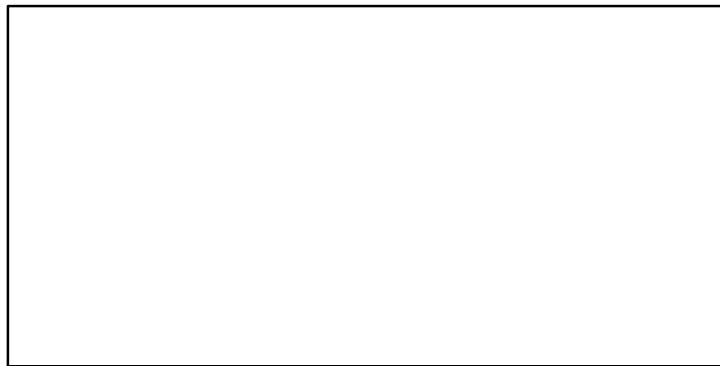
TAC*, Cpair*, Cadv*



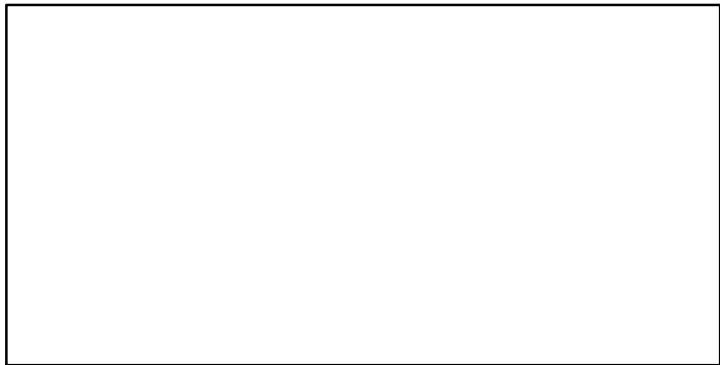
survB*



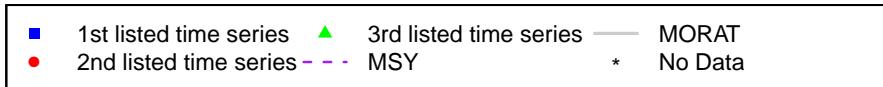
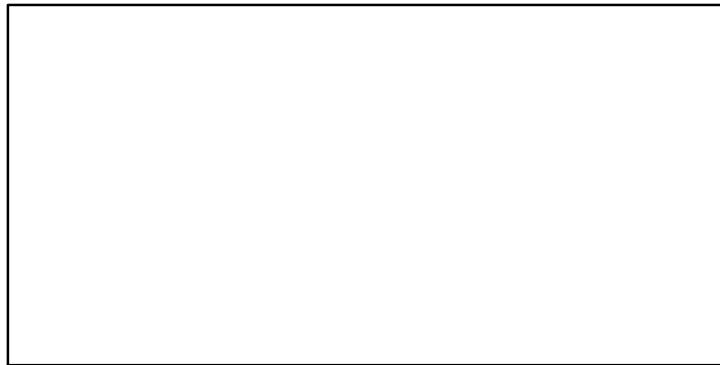
CPUE*



EFFORT*



CdivMSY*



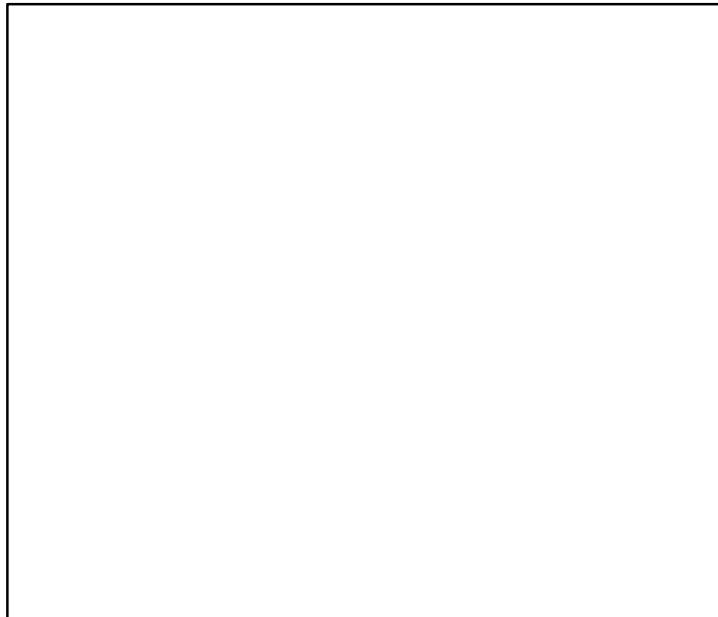
Thornback skate Western English Channel [TBSKAVIle]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAVIle-2009-2015-ICESIMP2018
Area	Western English Channel
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

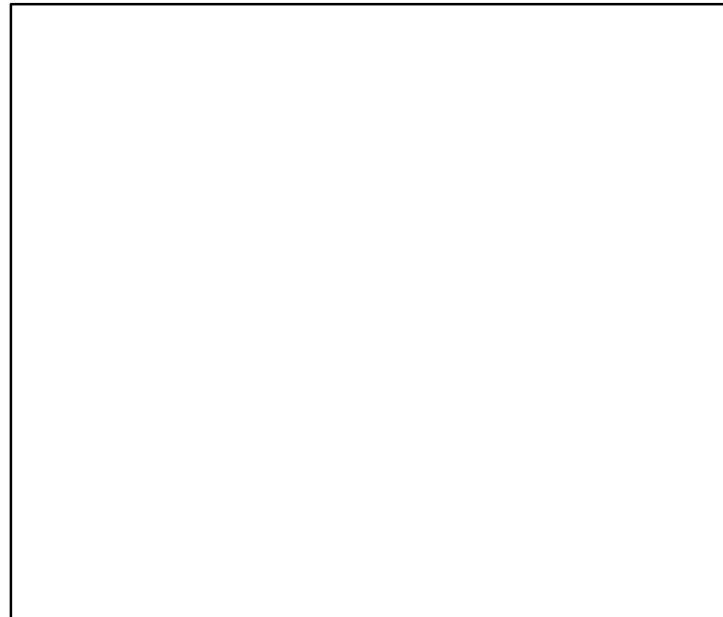
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	391		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



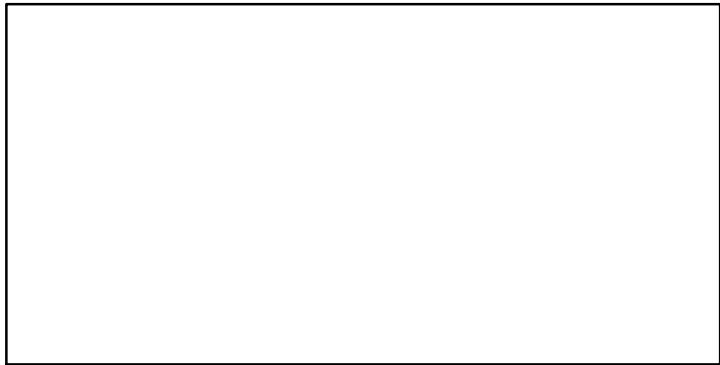
Production*



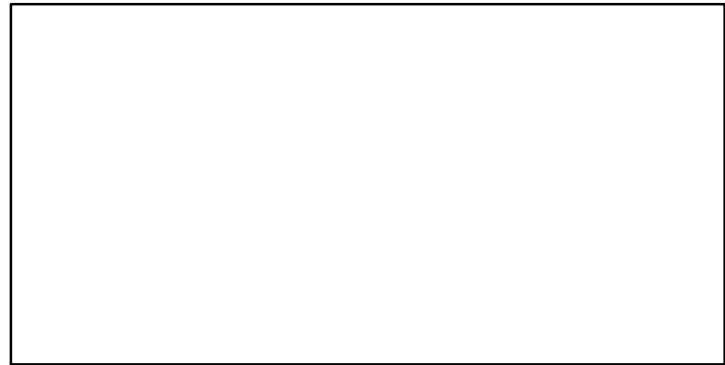
◆ Start Year ♦ End Year * No Data

Thornback skate Western English Channel [TBSKAVIle]

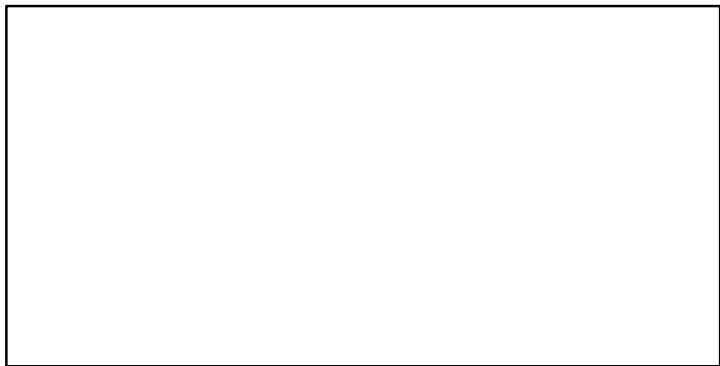
TB*



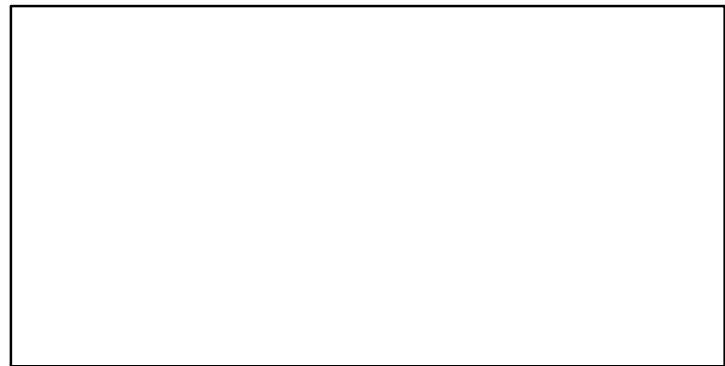
SSB*



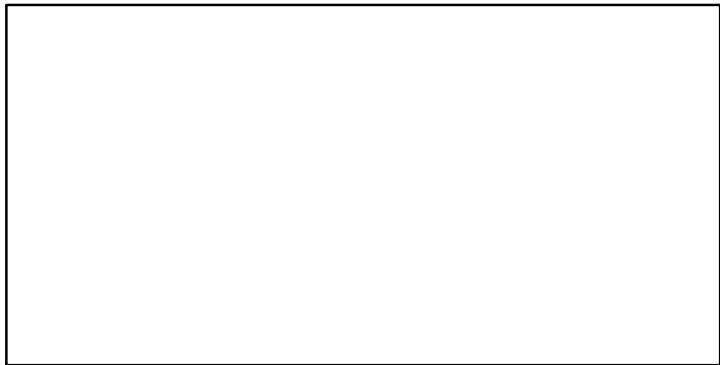
TN *



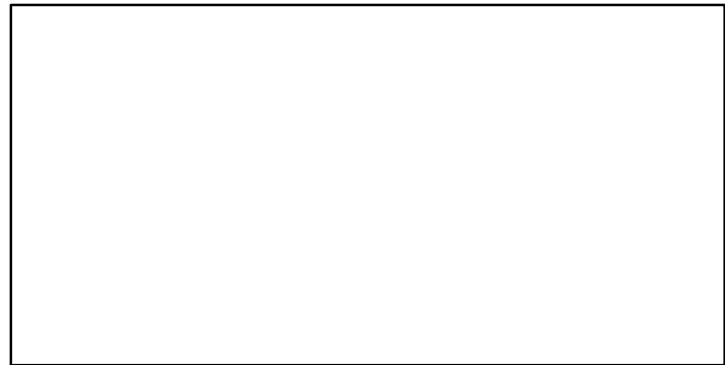
F*



ER*



Recruits*

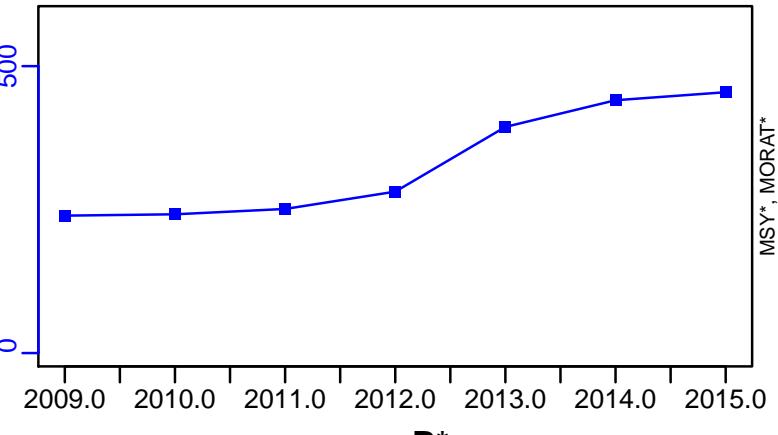


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Thornback skate Western English Channel [TBSKAVIle]

TL-MT, TC*, RecC* (2009–2015–ICESIMP2018)

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 |

Thornback skate Bay of Biscay [TBSKAVIII]

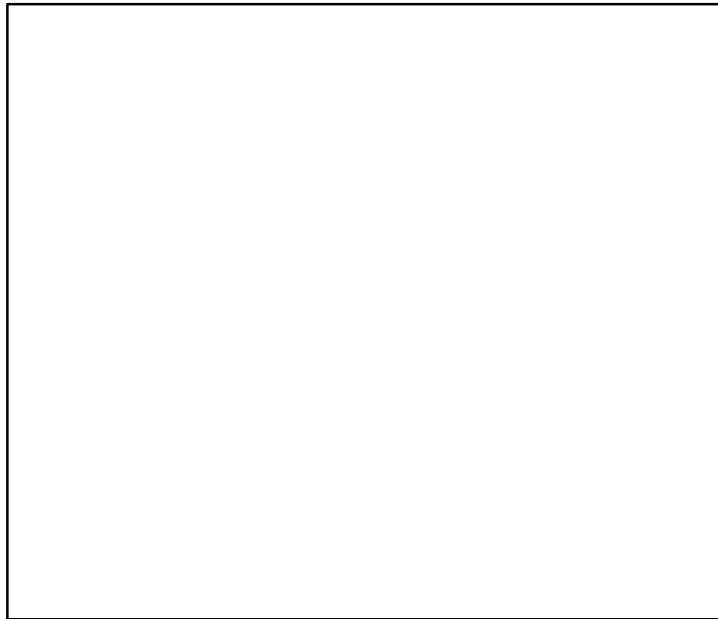
Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAVIII-1999-2015-ICESIMP2018
Area	Bay of Biscay
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015

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

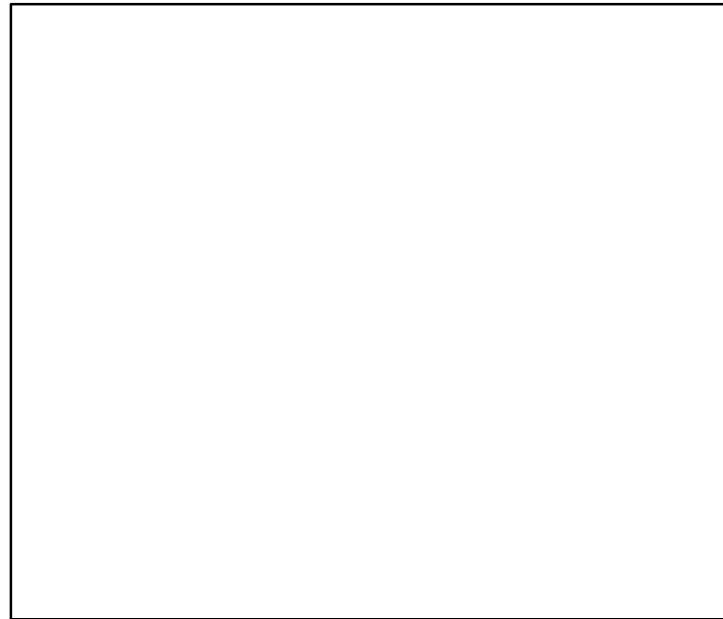
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	1.04	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	400		
TL	TL-MT	2015	395		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Thornback skate Bay of Biscay [TBSKAVIII]

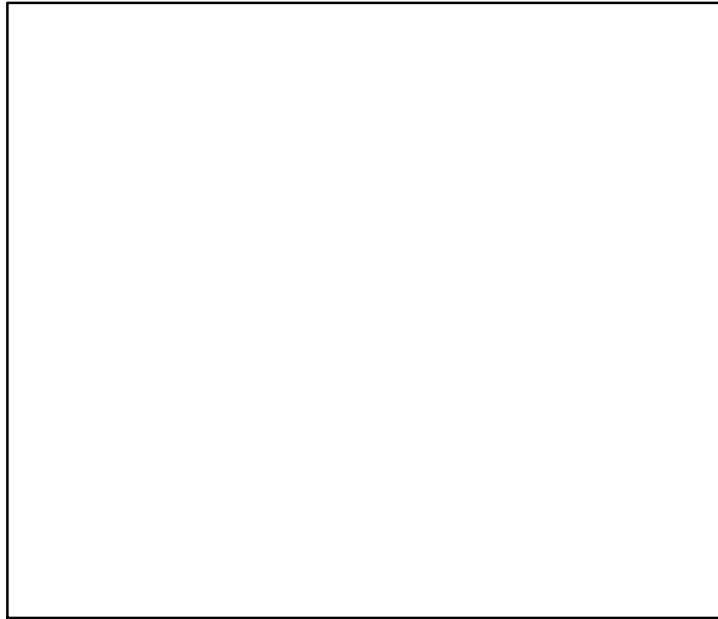
Kobe MSY*



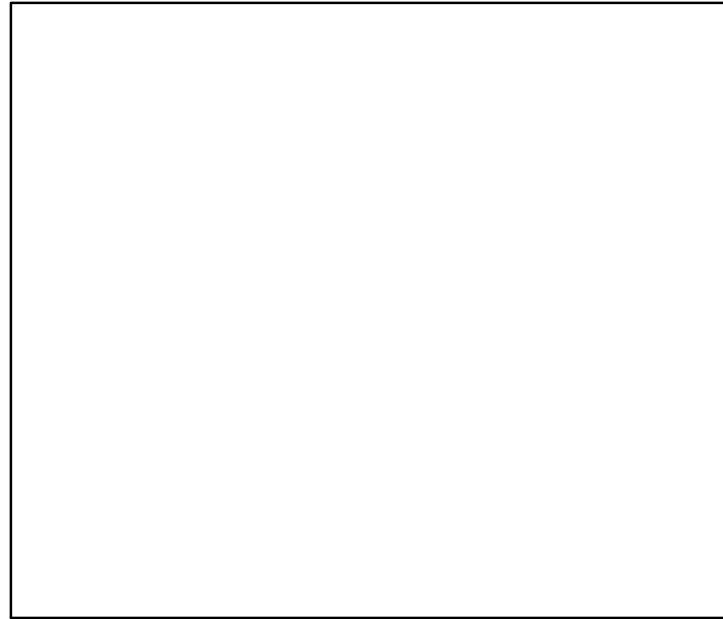
Kobe MGT*



Spawner Recruit*



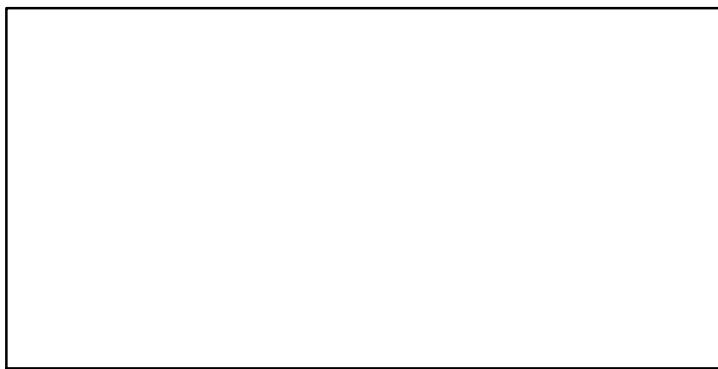
Production*



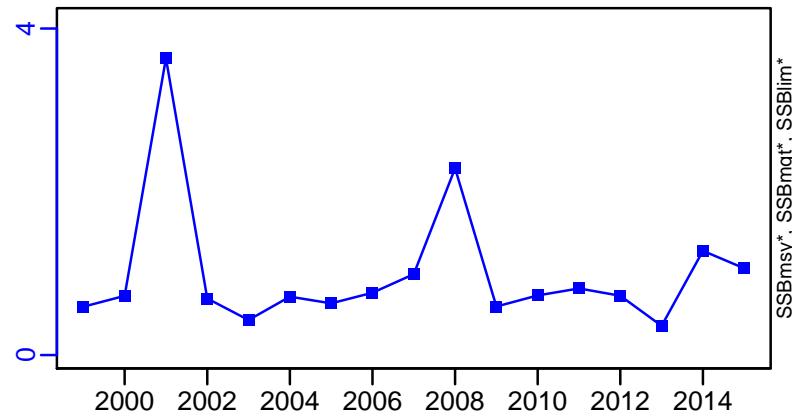
◆ Start Year ♦ End Year * No Data

Thornback skate Bay of Biscay [TBSKAVIII]

TB*



SSB-index (1999–2015–ICESIMP2018)



SSB_{mgt*}, SSB_{lim*}

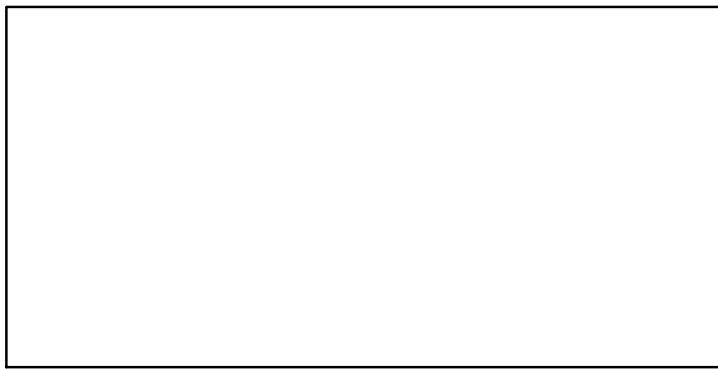
TN *



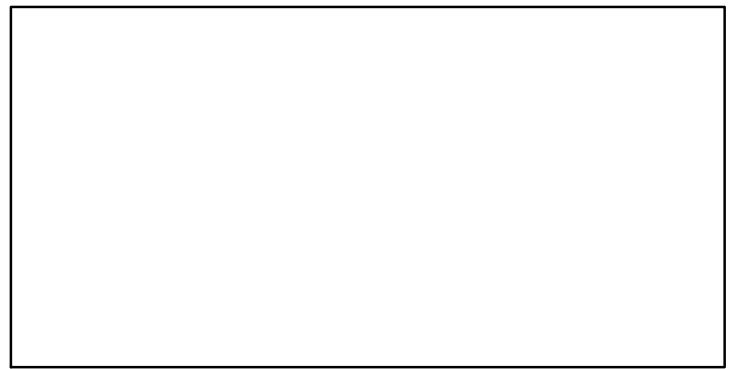
F*



ER*



Recruits*

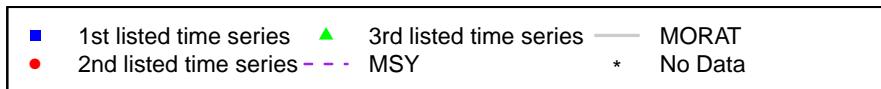
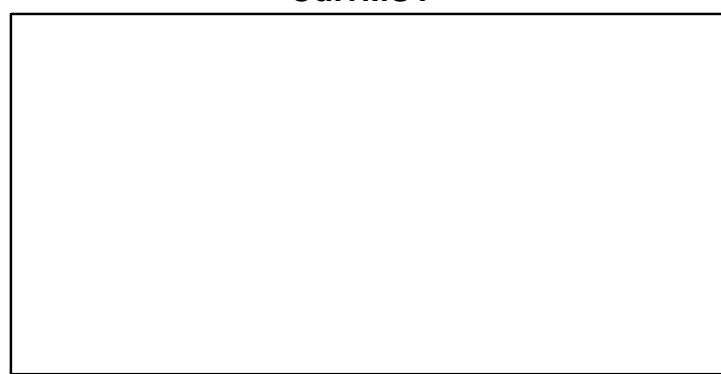
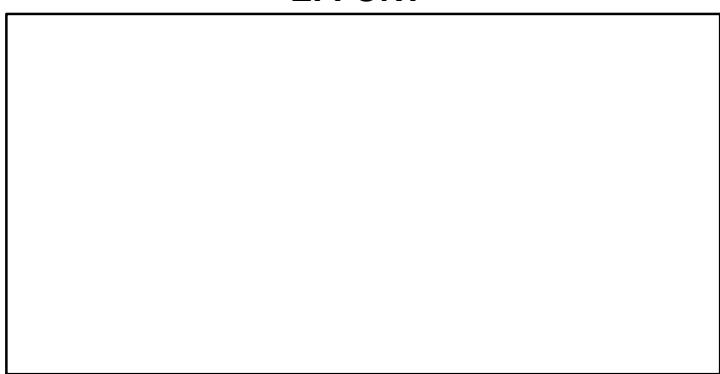
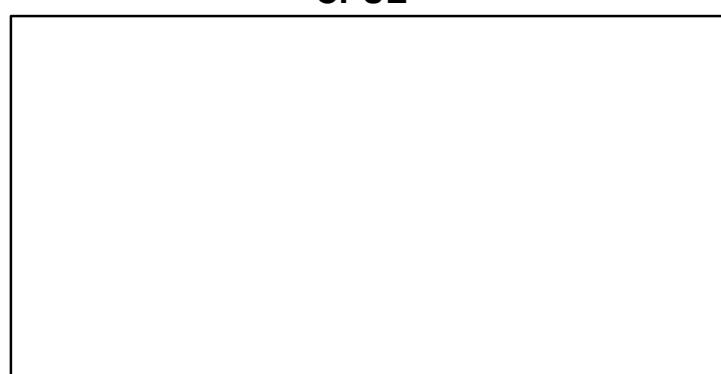
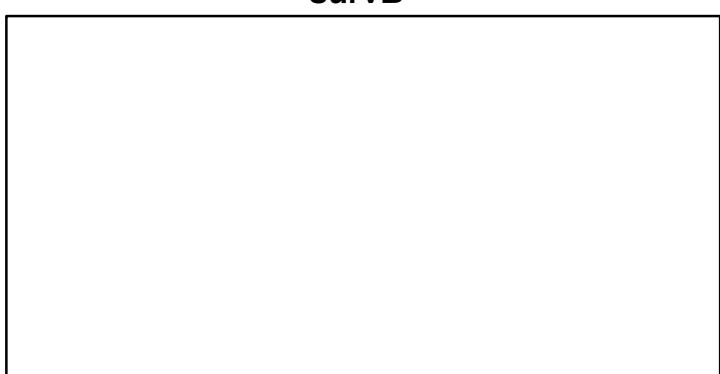
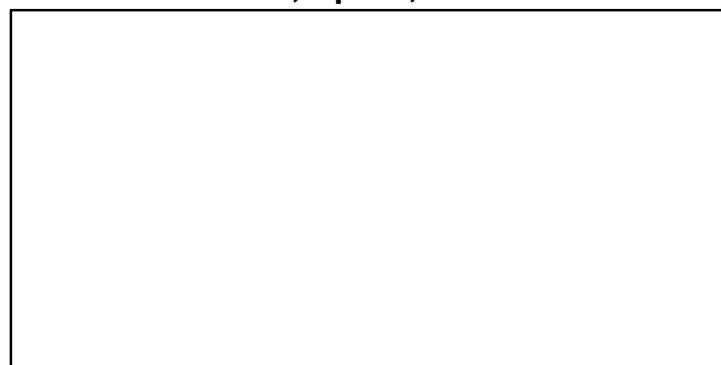
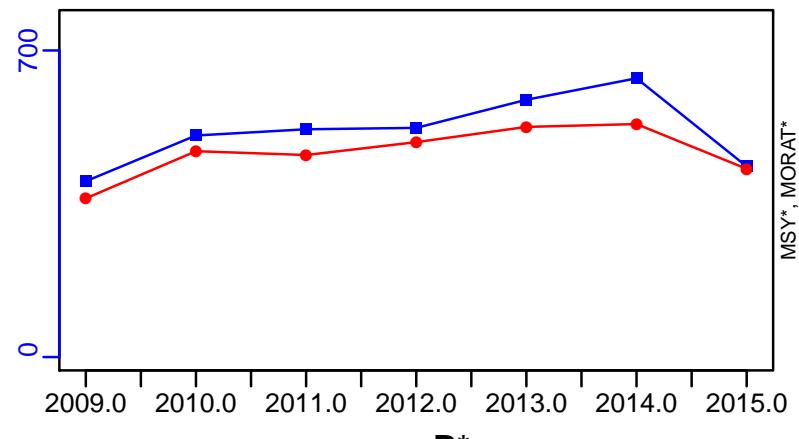


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Thornback skate Bay of Biscay [TBSKAVIII]

TC-MT, TL-MT, RecC* (1999–2015–ICESIMP2018)

TAC*, Cpair*, Cadv*



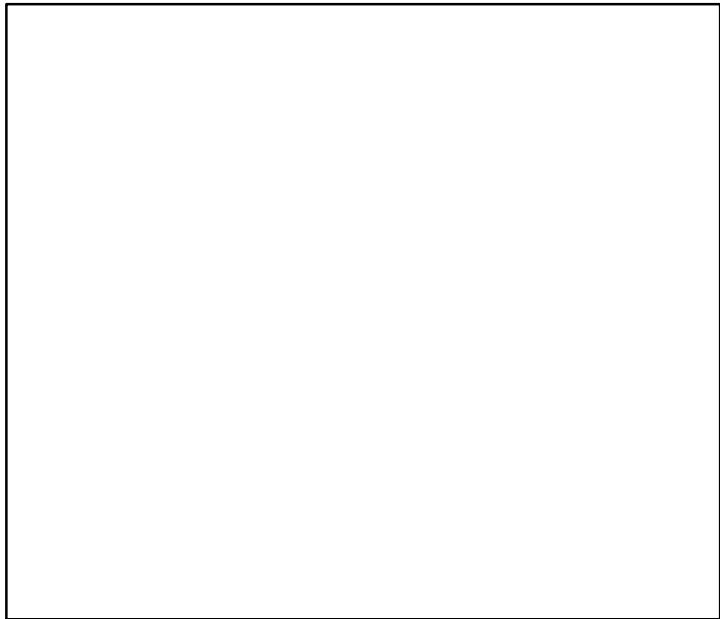
Tope shark Northeast Atlantic [TPSHARNEATL]

Metadata	
Scientific Name	Galeorhinus galeus
Current Assess ID	WGEF-TPSHARNEATL-2005-2016-ICESIMP2018
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016

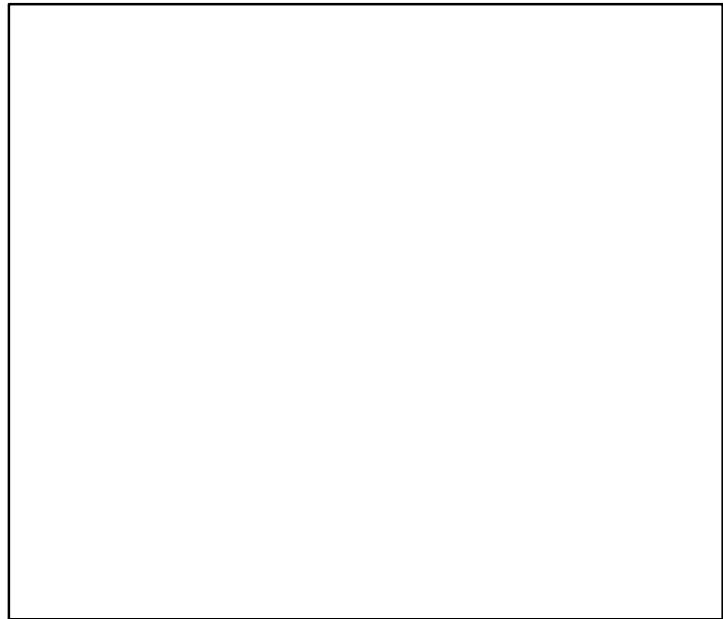
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	454		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

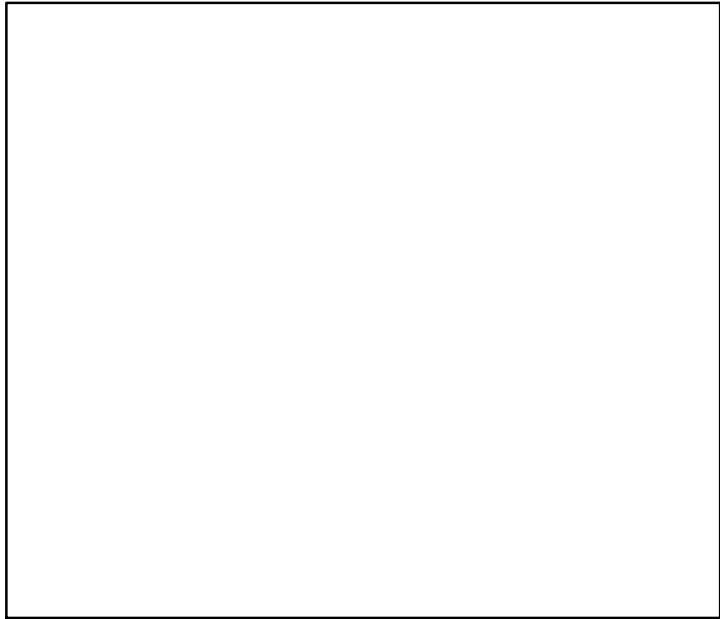
Kobe MSY*



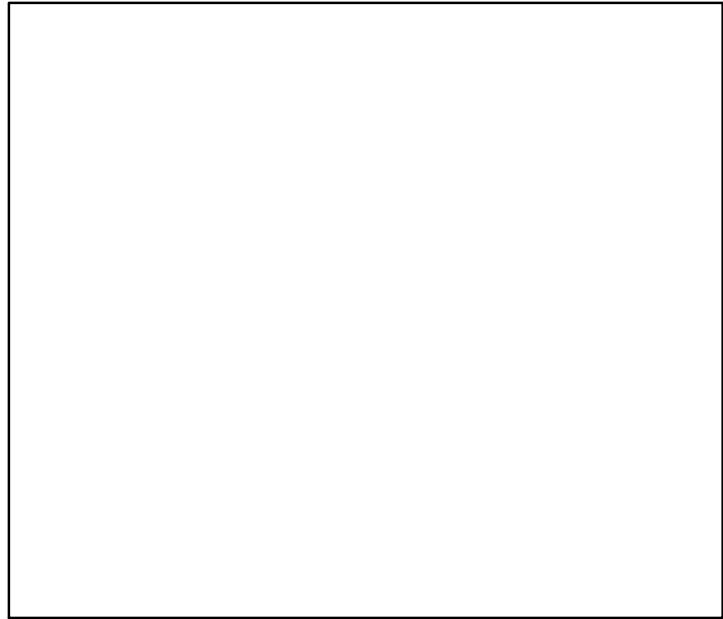
Kobe MGT*



Spawner Recruit*



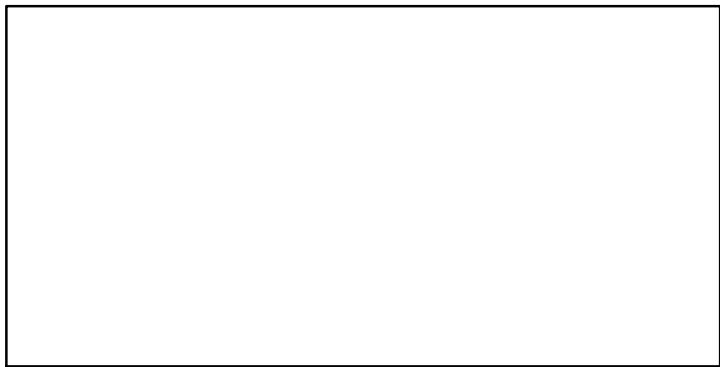
Production*



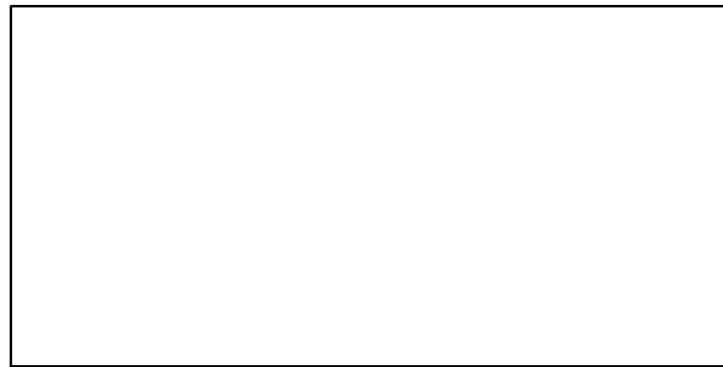
◆ Start Year ◆ End Year * No Data

Tope shark Northeast Atlantic [TPSHARNEATL]

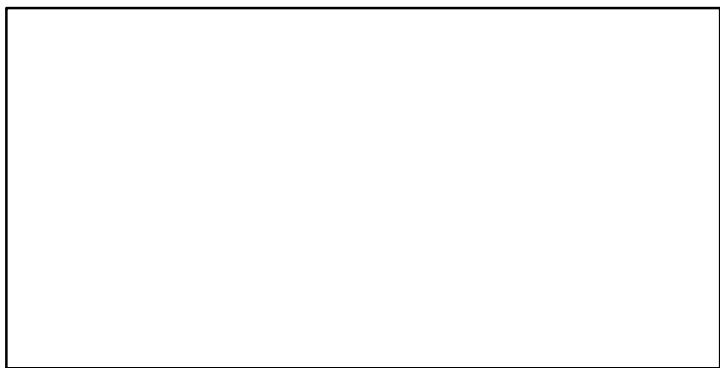
TB*



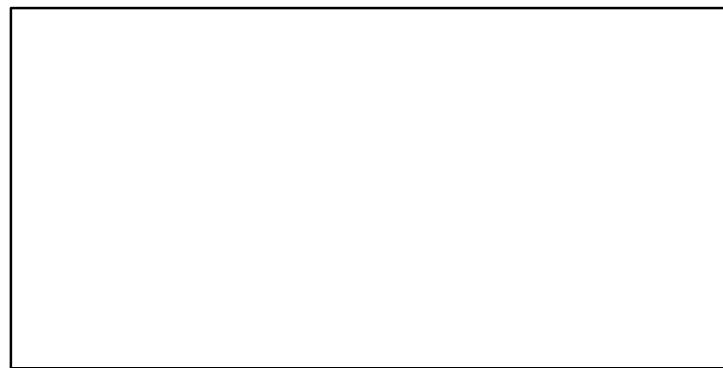
SSB*



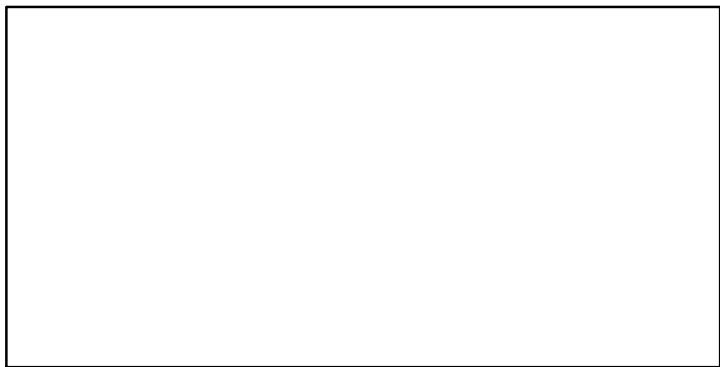
TN *



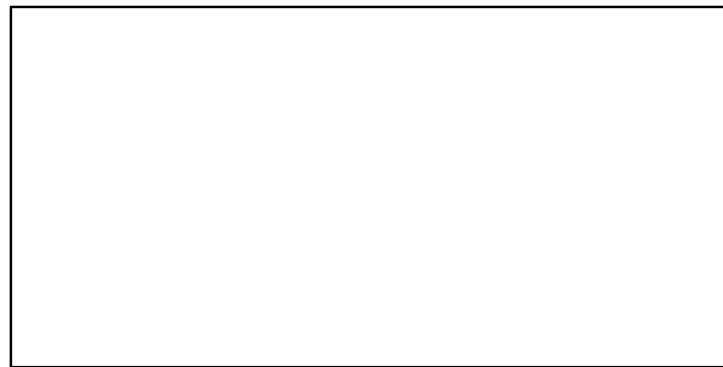
F*



ER*



Recruits*

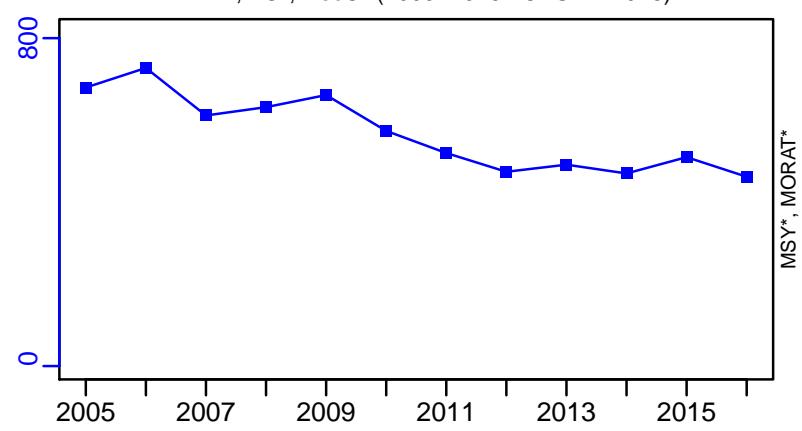


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

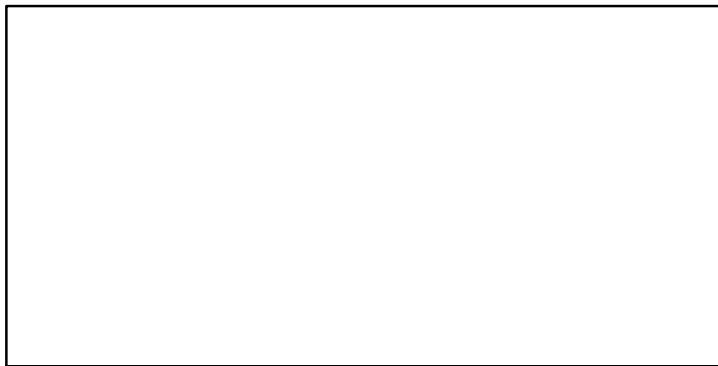
Tope shark Northeast Atlantic [TPSHARNEATL]

TL-MT, TC*, RecC* (2005–2016–ICESIMP2018)

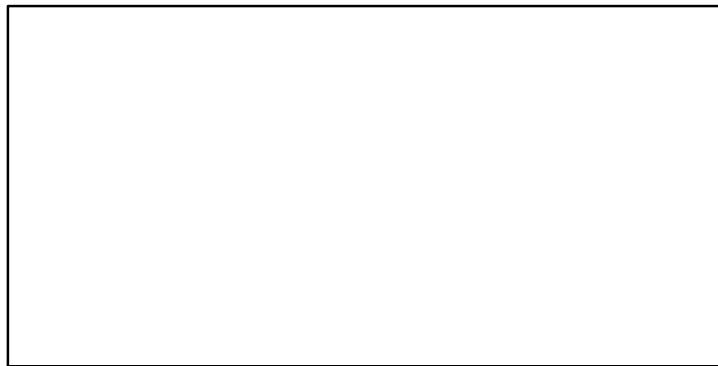
TAC*, Cpair*, Cadv*



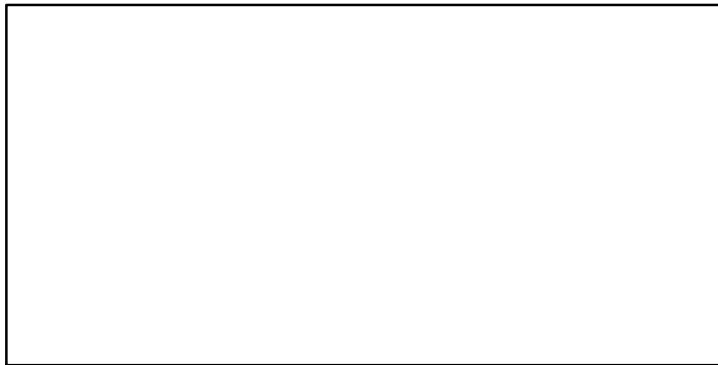
survB*



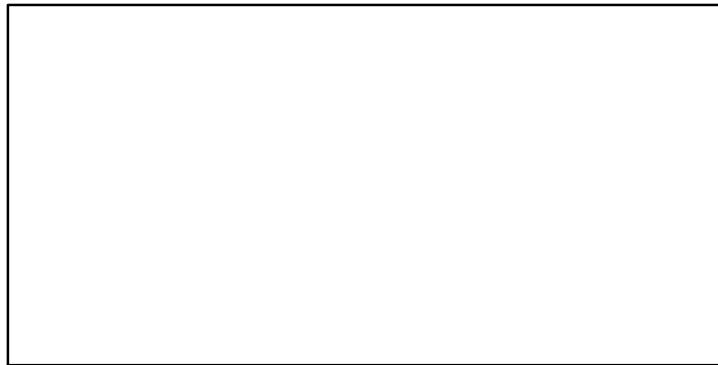
CPUE*



EFFORT*



CdivMSY*



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

Turbot Baltic Areas 22-32 [TUR2232]

Metadata	
Scientific Name	Scophthalmus maximus
Current Assess ID	WGBFAS-TUR2232-1970-2017-ICESIMP2018
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016, 2016, 2017

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	322		
TL	TL-MT	2017	264		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

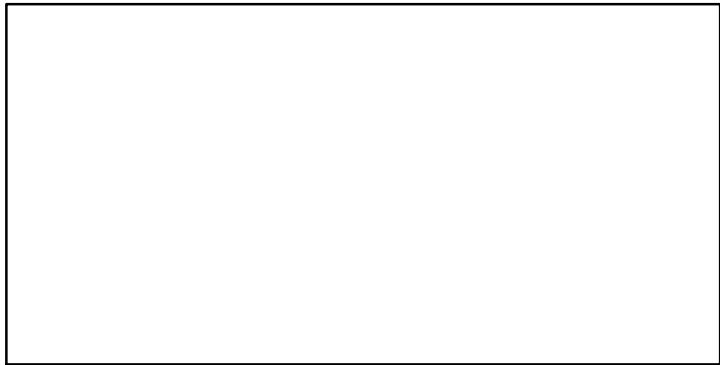
Kobe MGT*

Spawner Recruit*

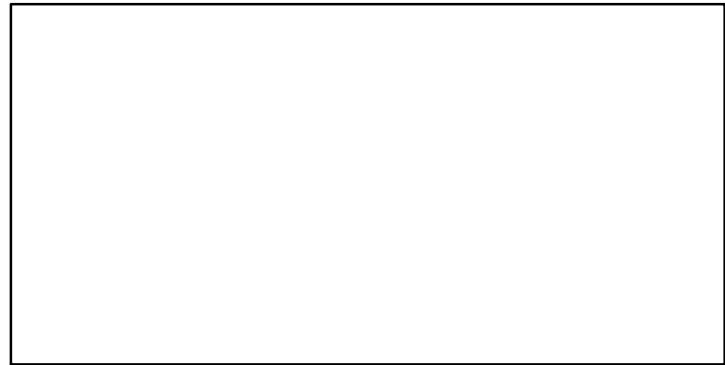
Production*

◆ Start Year ♦ End Year * No Data

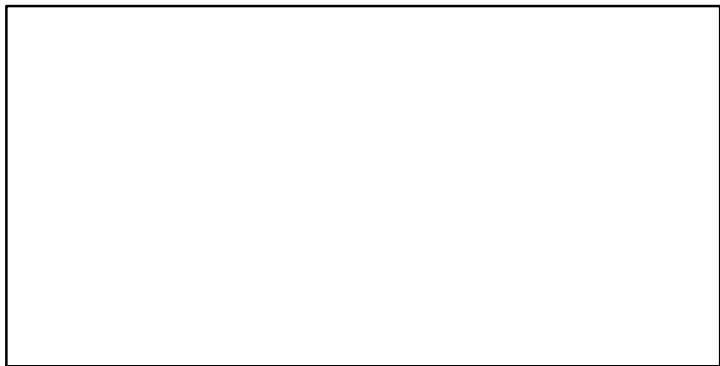
TB*



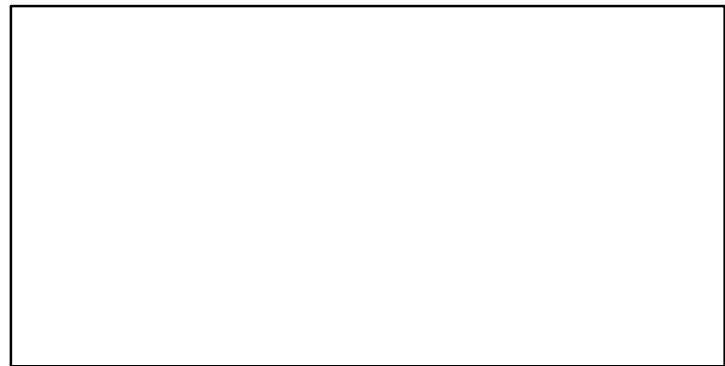
SSB*



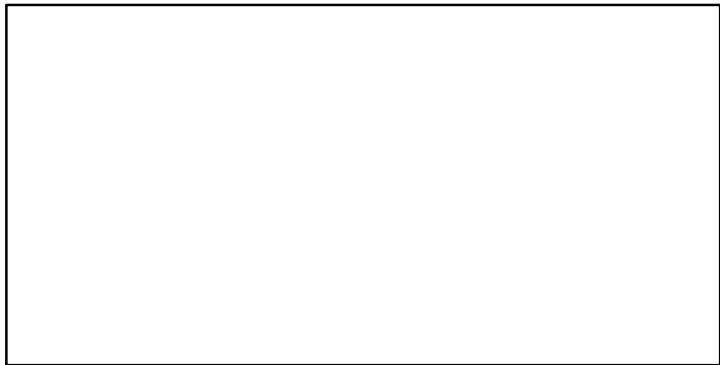
TN *



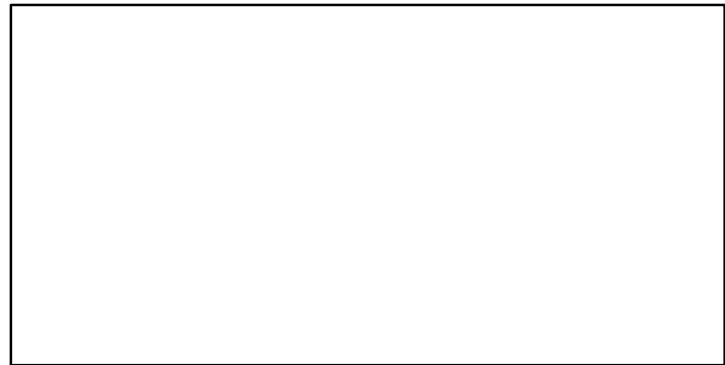
F*



ER*



Recruits*

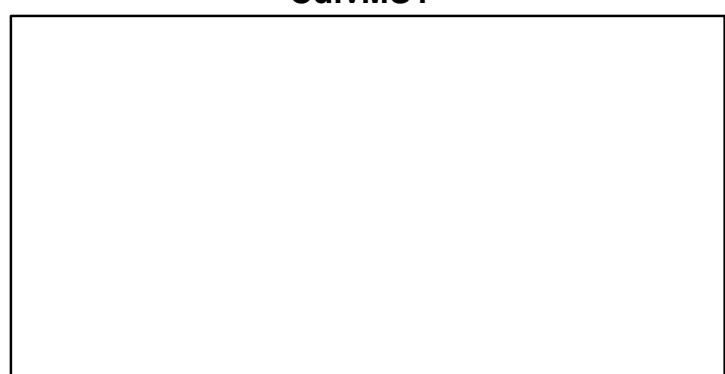
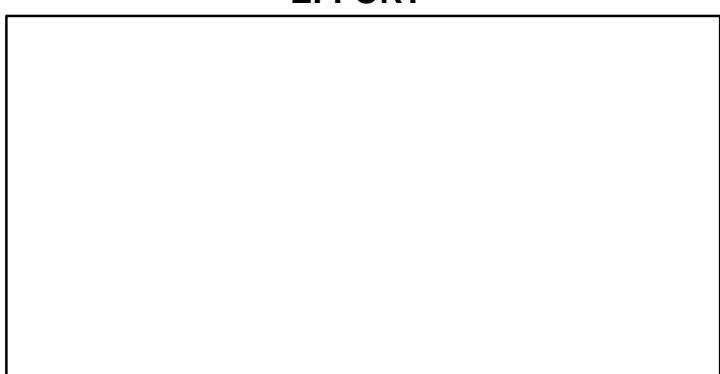
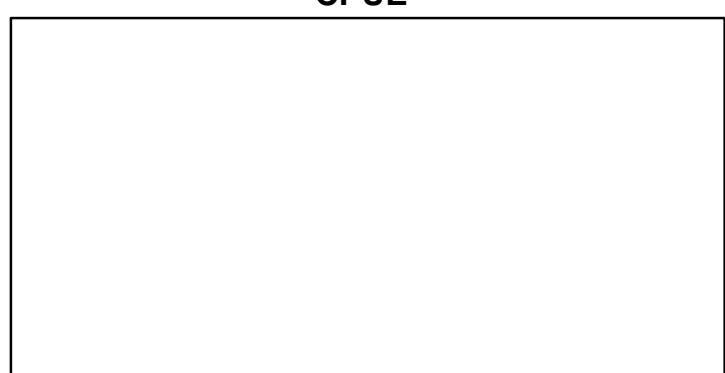
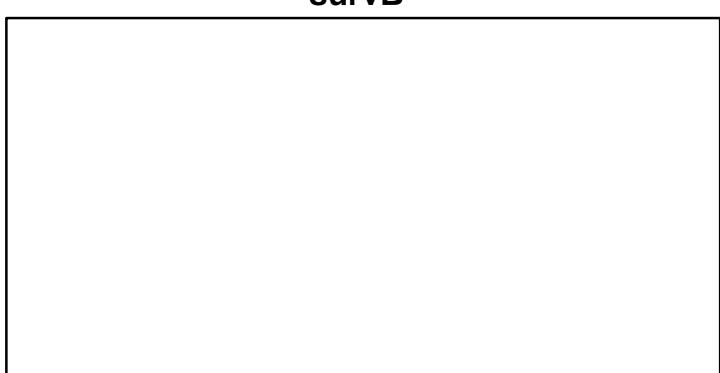
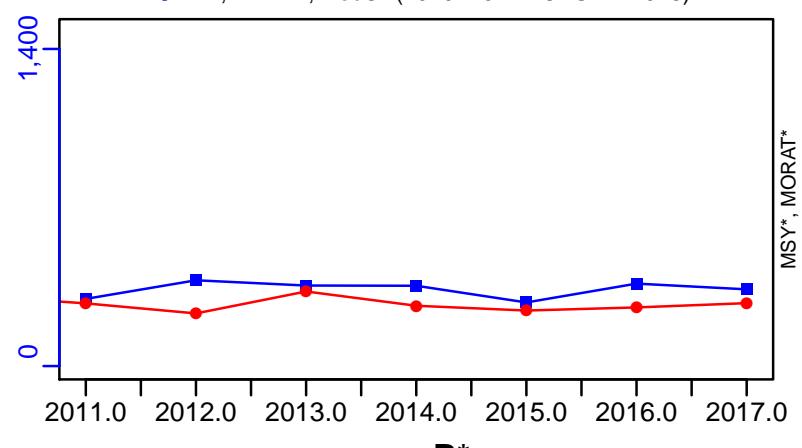


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Turbot Baltic Areas 22–32 [TUR2232]

TC-MT, TL-MT, RecC* (1970–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Turbot Kattegat and Skagerrak [TURIIIa]

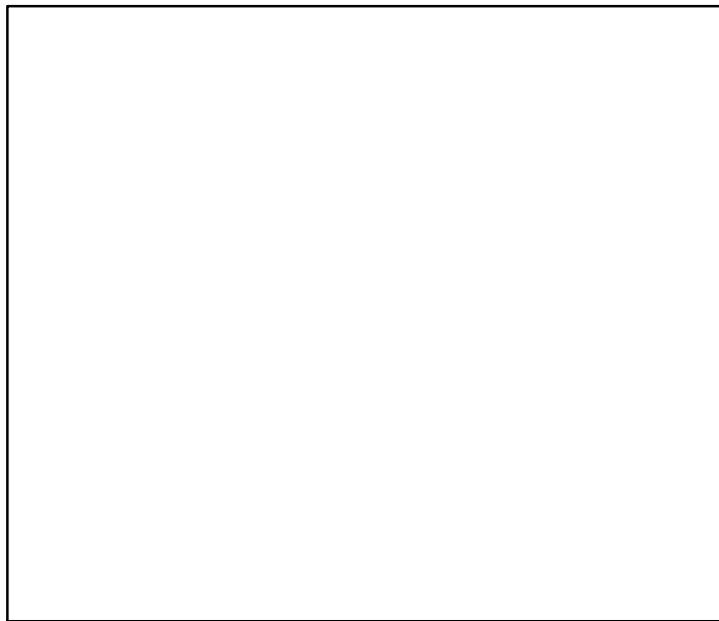
Metadata	
Scientific Name	Scophthalmus maximus
Current Assess ID	WGNSSK-TURIIIa-1960-2016-ICESIMP2018
Area	Kattegat and Skagerrak
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2016, 2015

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

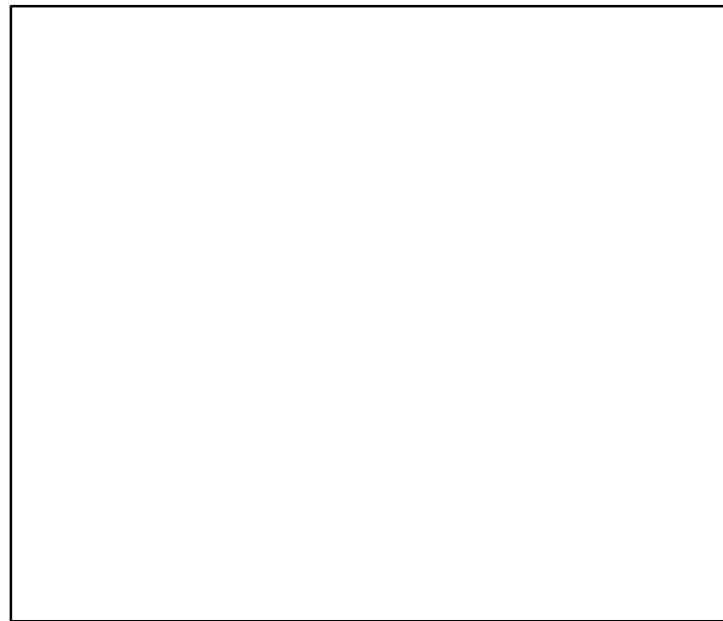
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	0.652	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	204		
TL	TL-MT	2016	188		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Turbot Kattegat and Skagerrak [TURIlla]

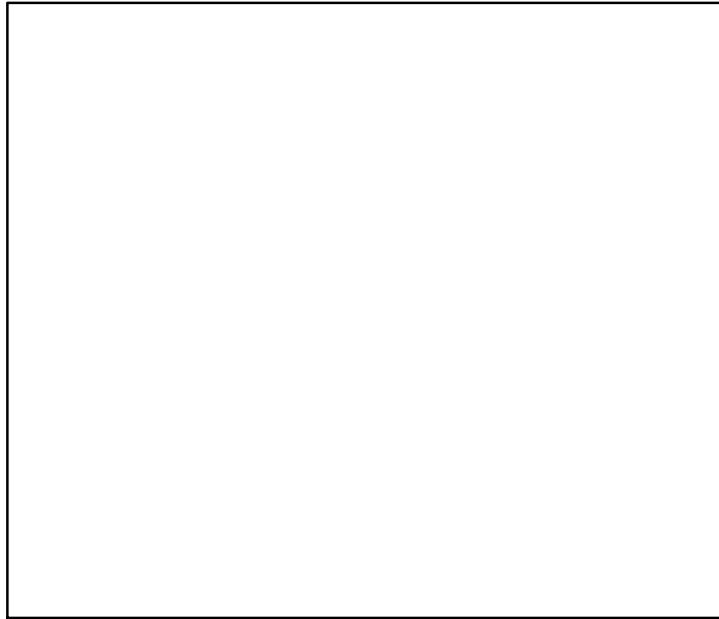
Kobe MSY*



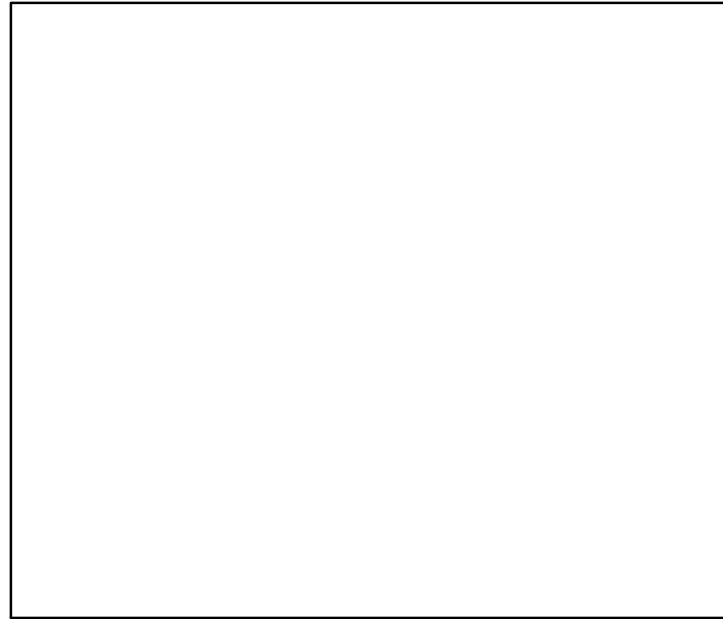
Kobe MGT*



Spawner Recruit*



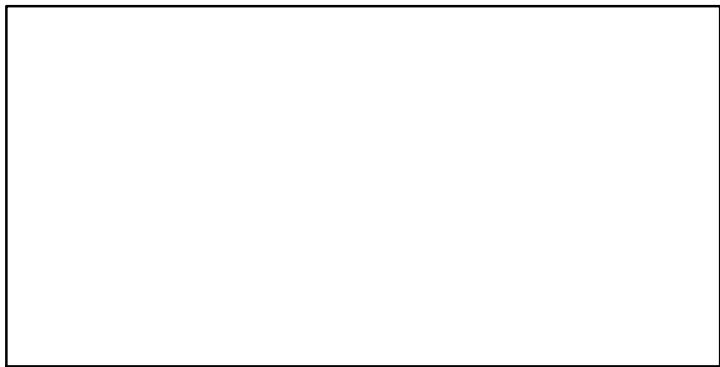
Production*



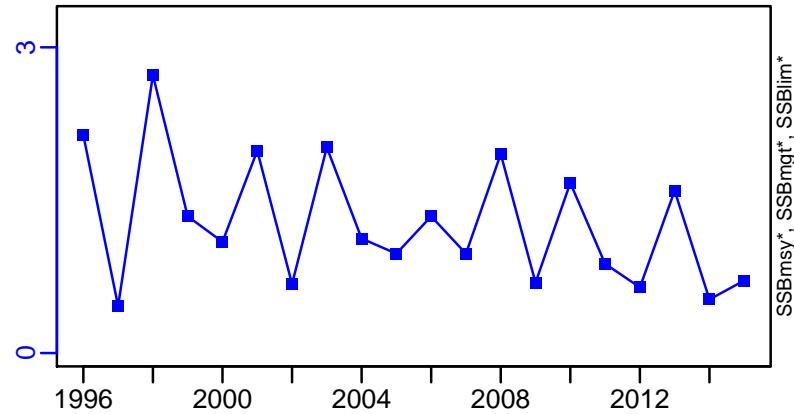
◆ Start Year ♦ End Year * No Data

Turbot Kattegat and Skagerrak [TURIIla]

TB*

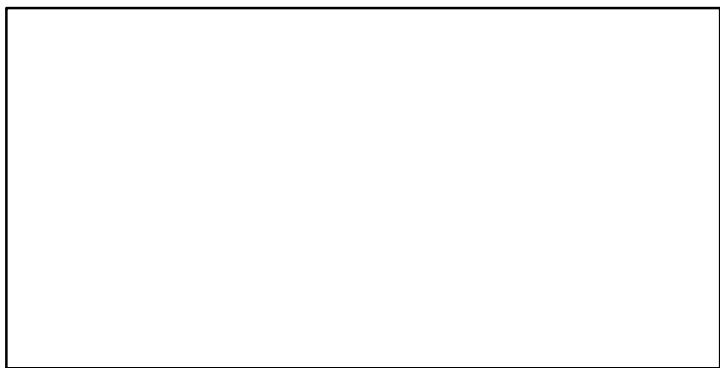


SSB-index (1964–2015–ICESIMP2018)

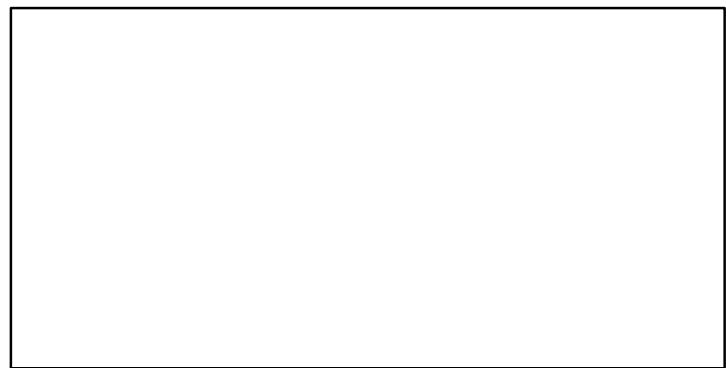


SSBm^{*}, SSBmg^{*}, SSBlm^{*}

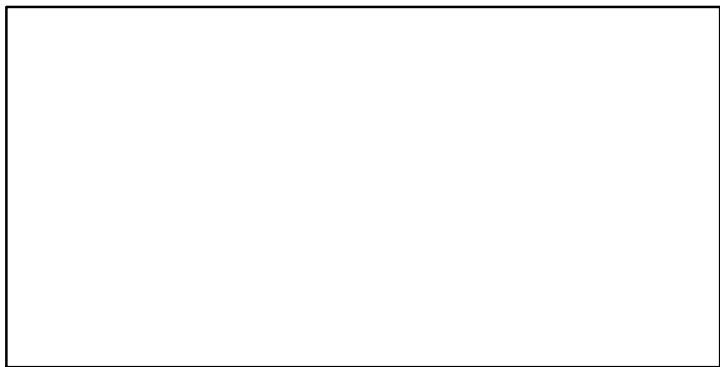
TN *



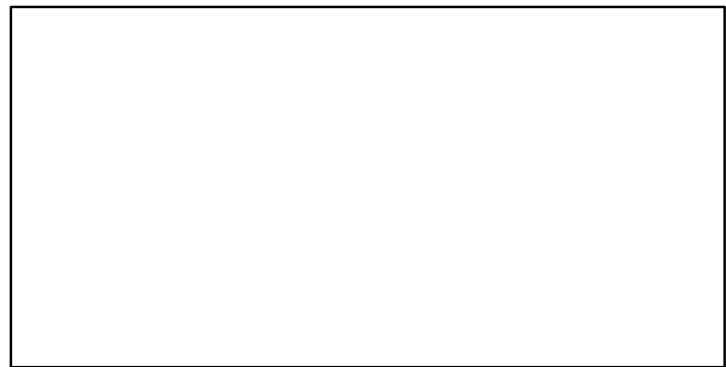
F*



ER*



Recruits*

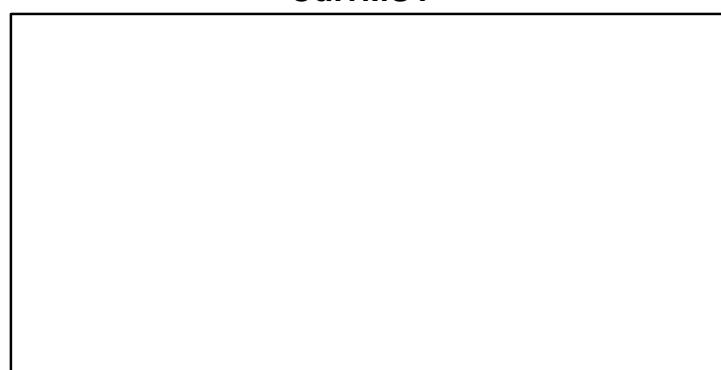
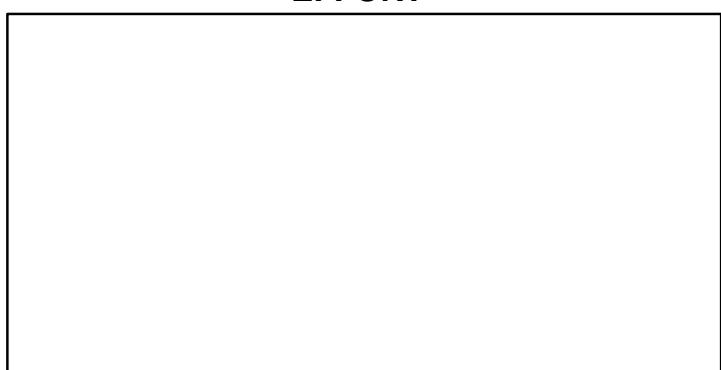
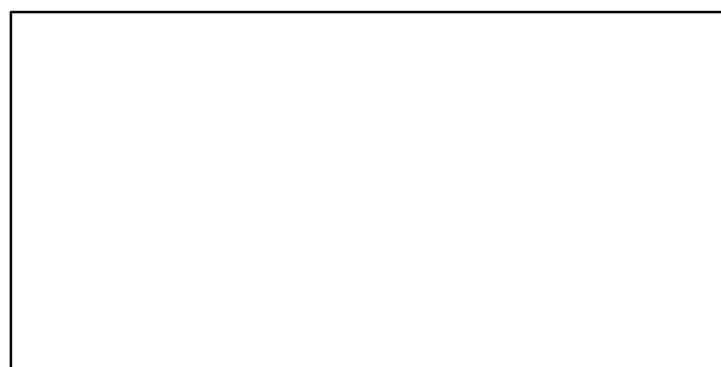
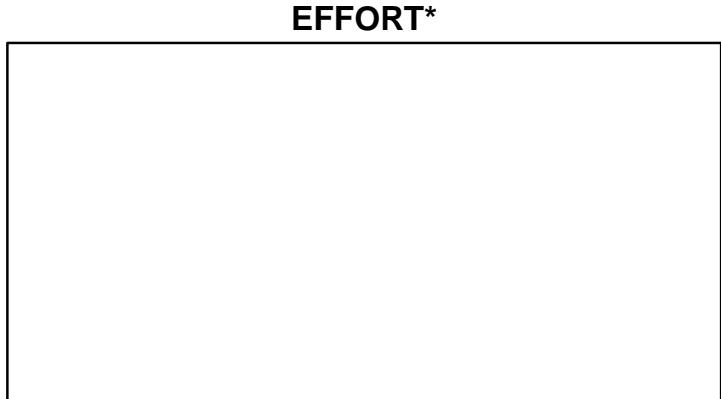
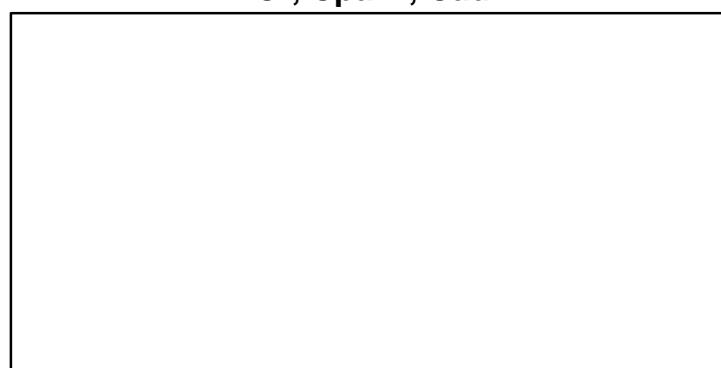
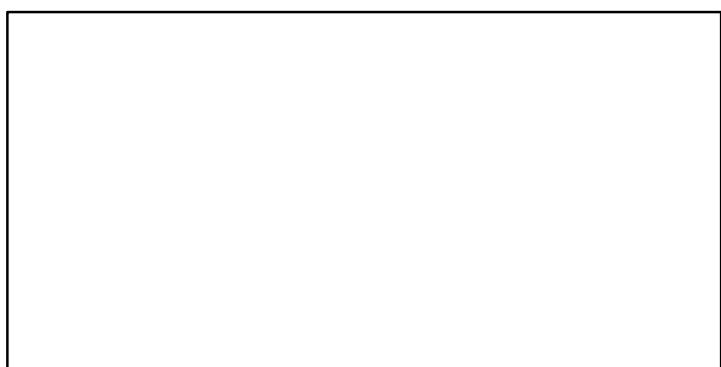
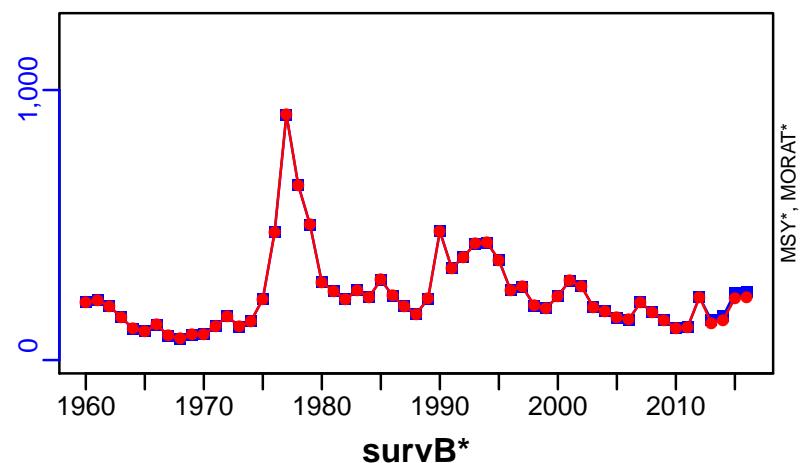


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Turbot Kattegat and Skagerrak [TURIIla]

TC-MT, TL-MT, RecC* (1960–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



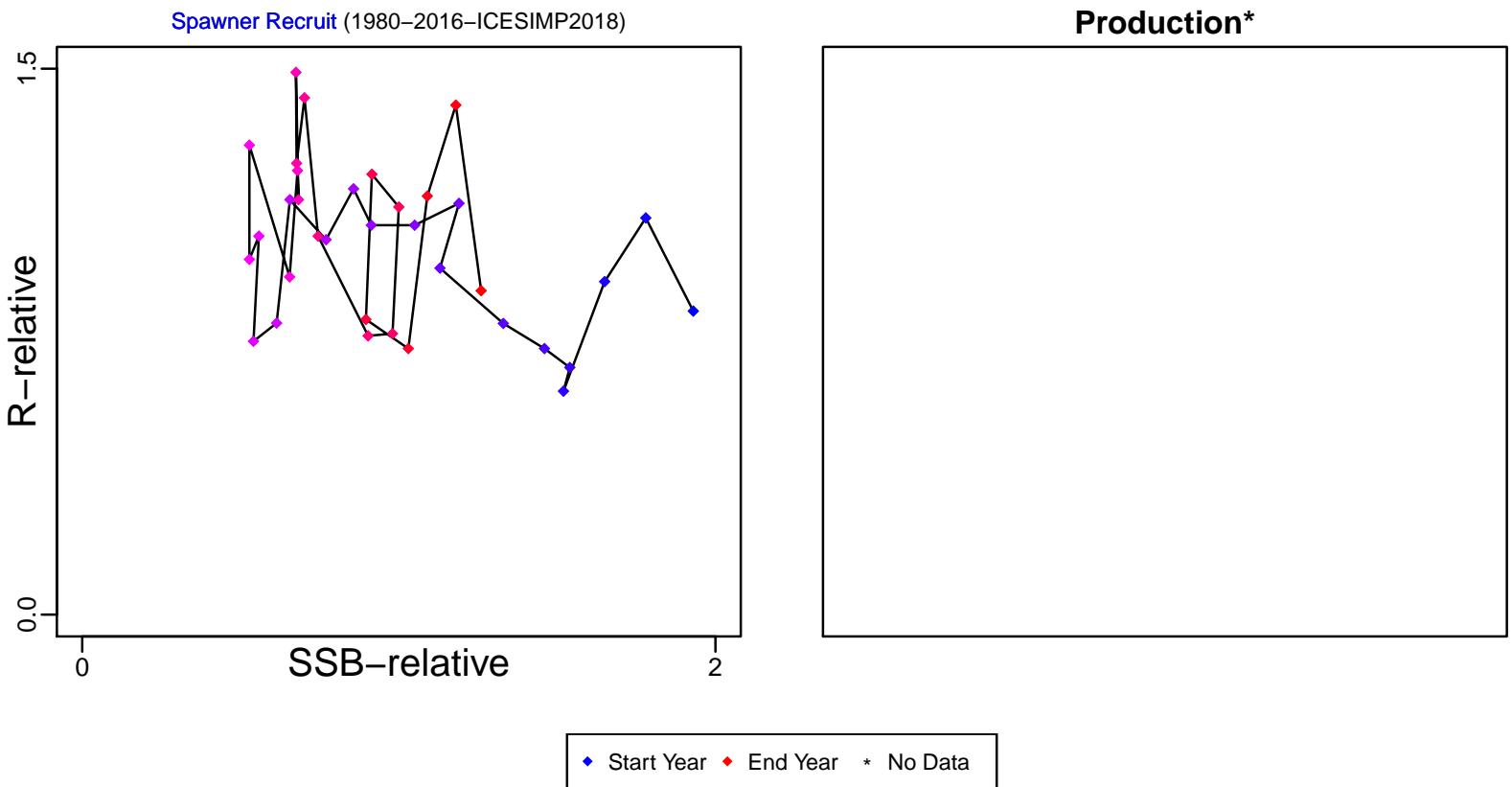
- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Turbot North Sea [TURIV]

Metadata	
Scientific Name	Scophthalmus maximus
Current Assess ID	WGNSSK-TURIV-1980-2016-ICESIMP2018
Area	North Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2014	0.22
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2014	0.22
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-relative	2016	1.37	Both	-	
TN	-	-	-	-	-	
R	R-relative	2016	0.89	-	1	
F	F-relative	2016	0.763	-	2 to 6	
ER	-	-	-	-	-	
TC	TC-MT	2016	4160			
TL	TL-MT	2016	3490			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

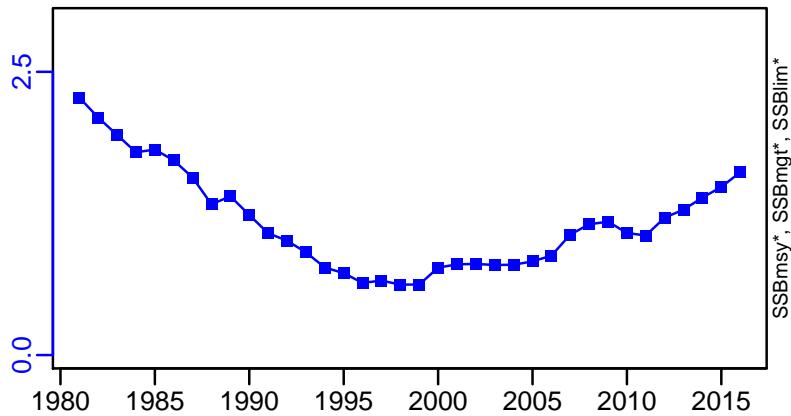
Kobe MSY***Kobe MGT***

Turbot North Sea [TURIV]

TB*



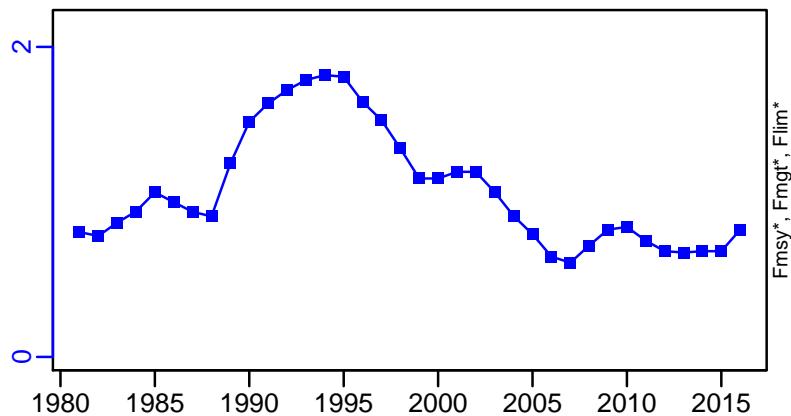
SSB-relative (1980–2016–ICESIMP2018)



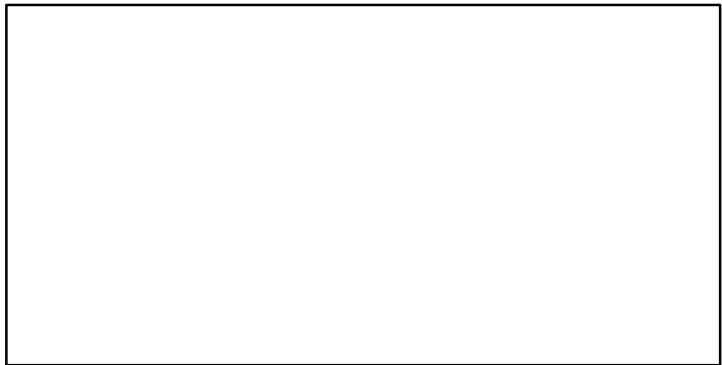
TN *



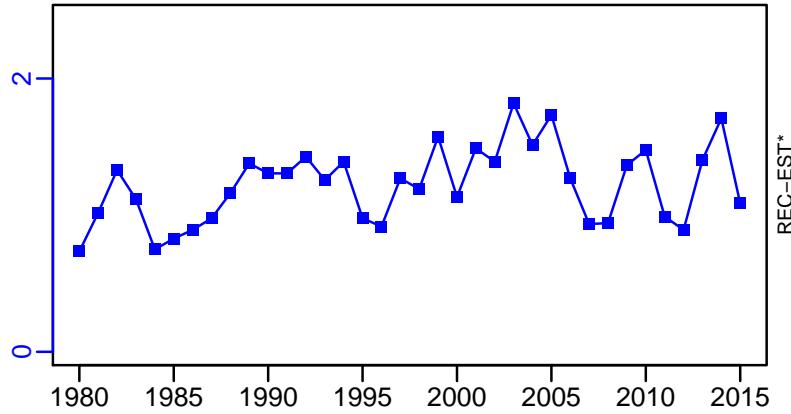
F-relative (1980–2016–ICESIMP2018)



ER*



R-relative (1980–2016–ICESIMP2018)

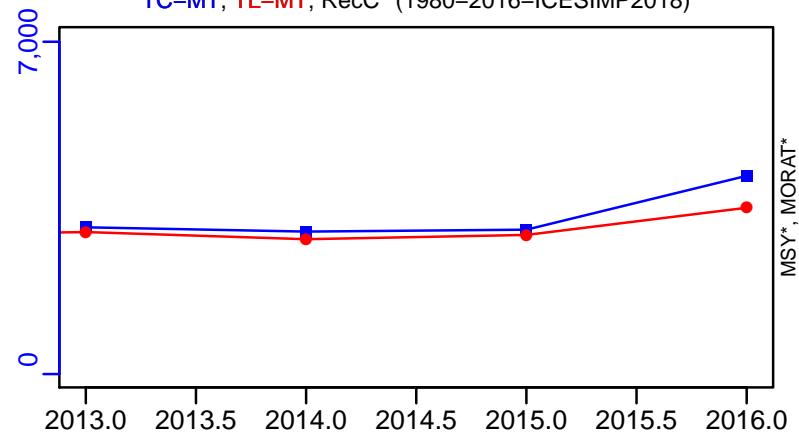


- Listed time series - - - Target BRP — Rec-Est
- - MSY-based BRP - - Lim BRP * No Data

Turbot North Sea [TURIV]

TC-MT, TL-MT, RecC* (1980–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



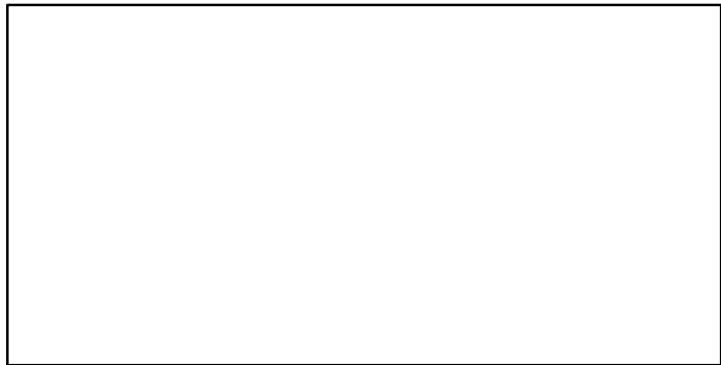
survB*



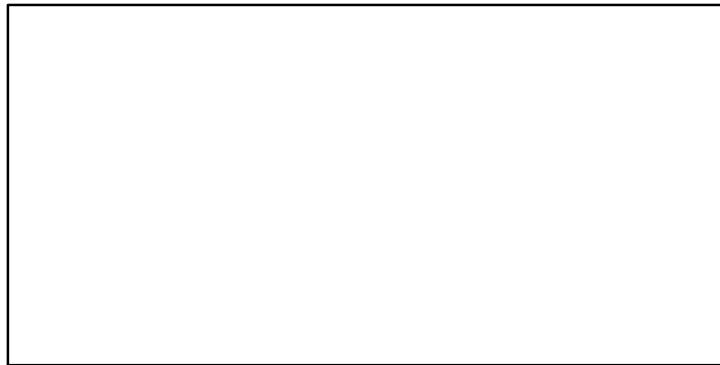
CPUE*



EFFORT*



CdivMSY*



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

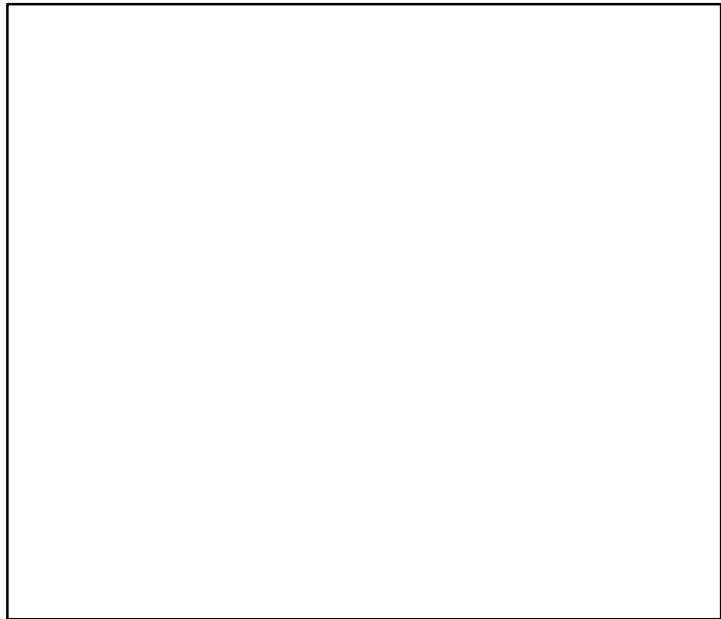
Undulate ray ICES 7de [URAYVIIde]

Metadata	
Scientific Name	Raja undulata
Current Assess ID	WGEF-URAYVIIde-2008-2017-ICESIMP2018
Area	ICES 7de
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2015, 2017

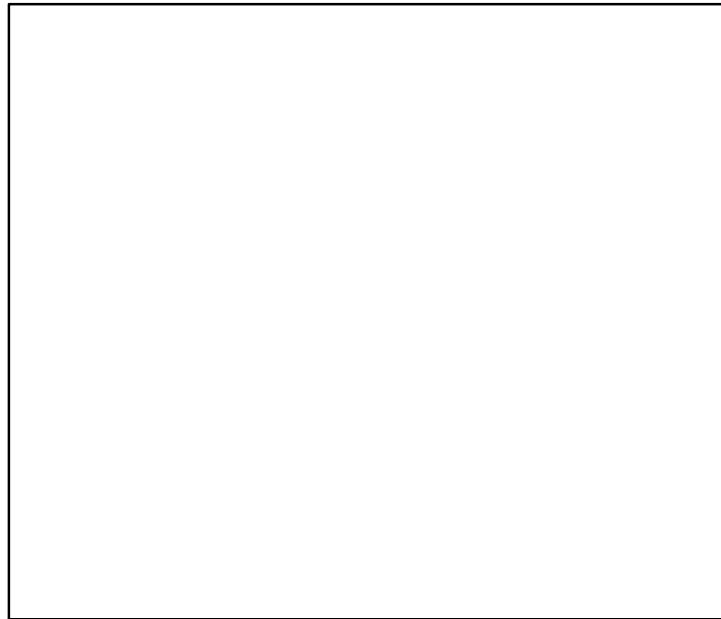
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	912	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	1380		
TL	TL-MT	2017	139		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

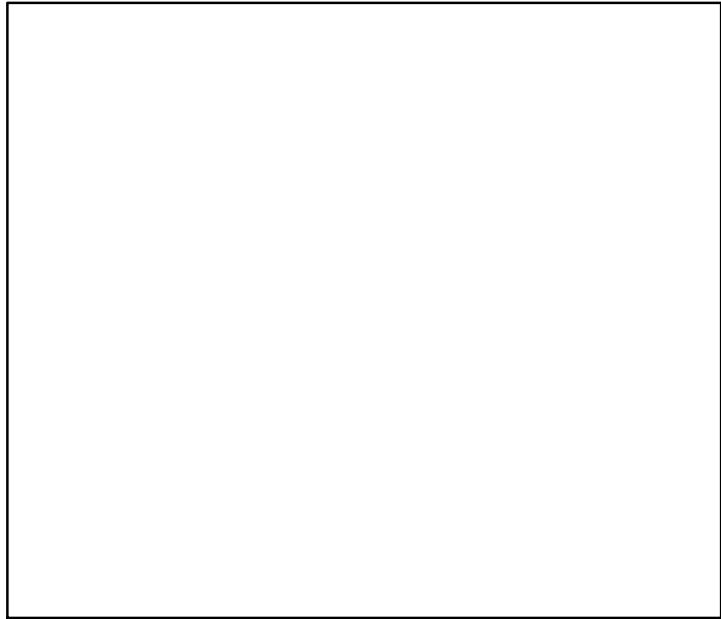
Kobe MSY*



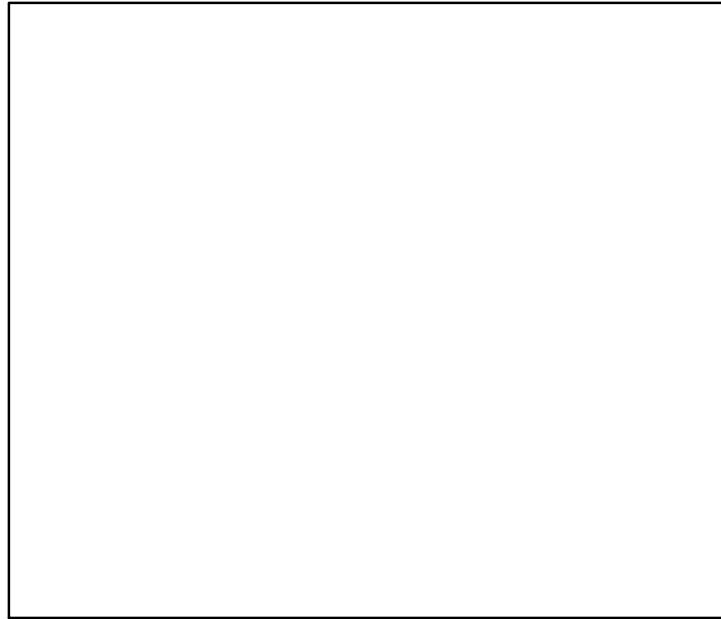
Kobe MGT*



Spawner Recruit*



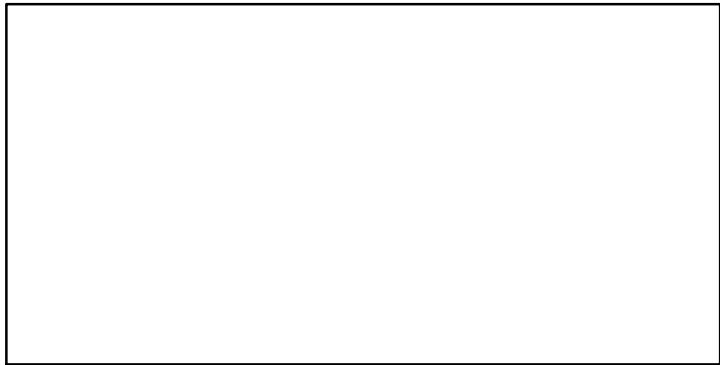
Production*



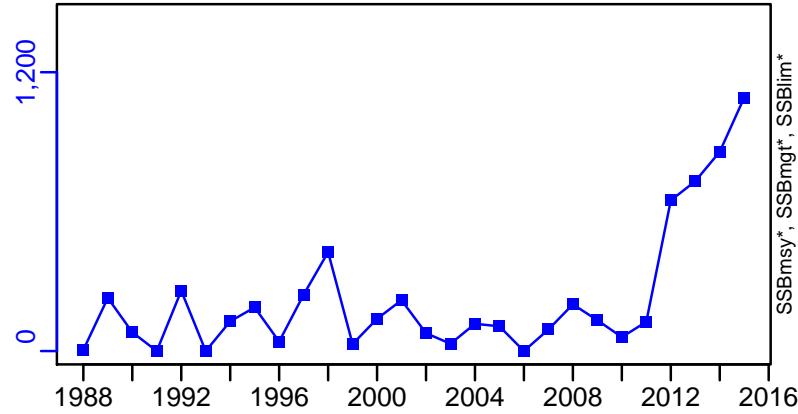
◆ Start Year ♦ End Year * No Data

Undulate ray ICES 7de [URAYVIIde]

TB*



SSB-index (1988–2015–ICESIMP2018)



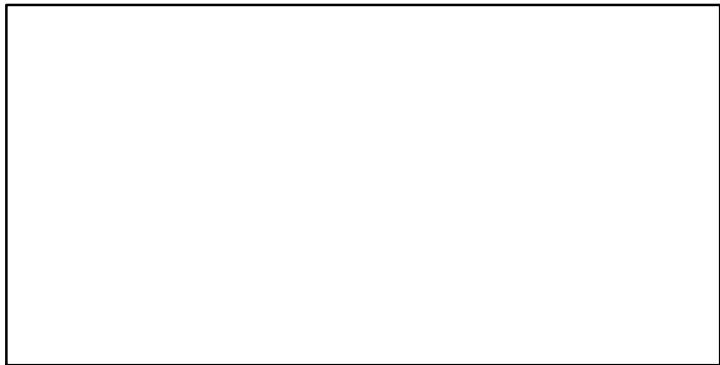
TN *



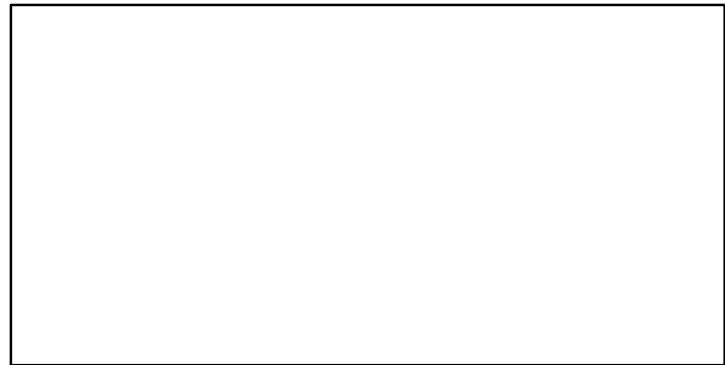
F*



ER*



Recruits*

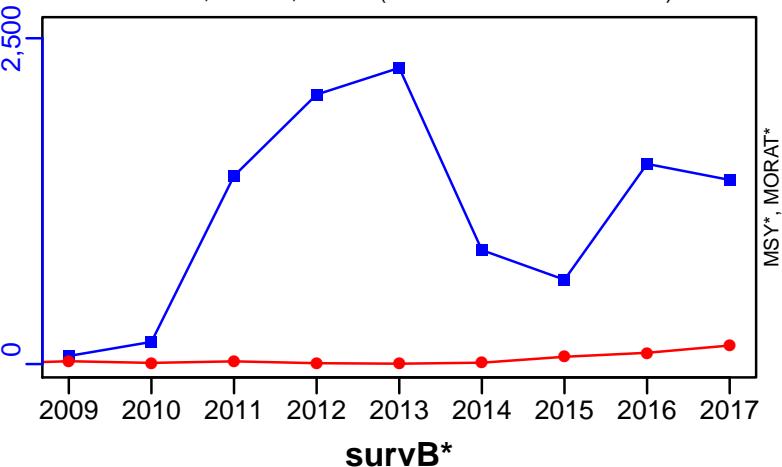


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Undulate ray ICES 7de [URAYVIIde]

TC-MT, TL-MT, RecC* (2008–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



survB*

CPUE*

EFFORT*

CdivMSY*

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

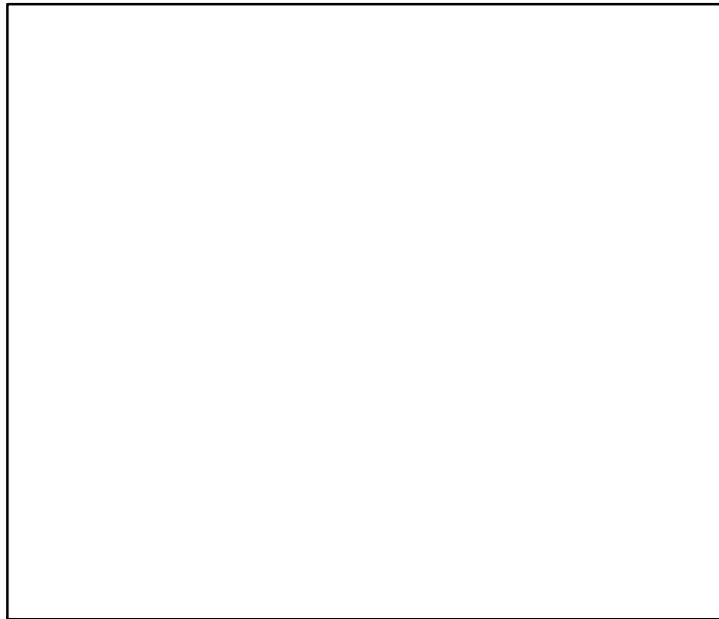
Undulate ray ICES 8ab [URAYVIIlab]

Metadata	
Scientific Name	Raja undulata
Current Assess ID	WGEF-URAYVIIlab-2009-2017-ICESIMP2018
Area	ICES 8ab
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2017

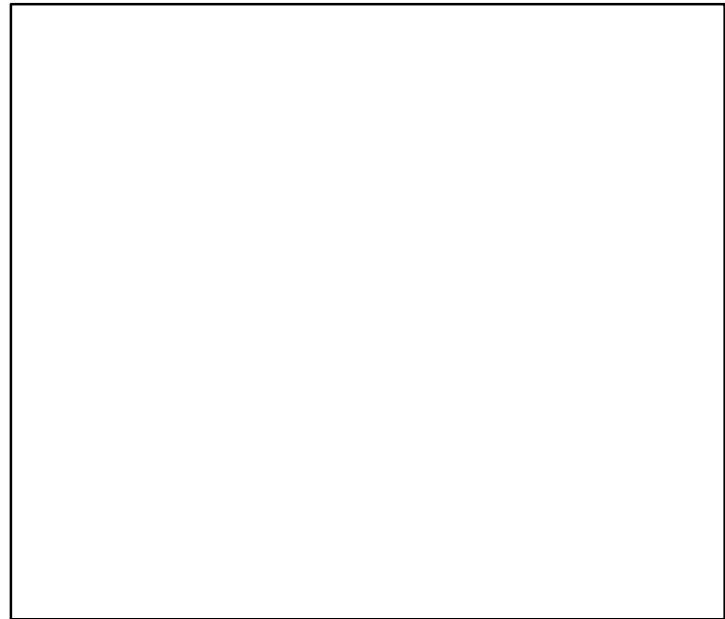
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	336		
TL	TL-MT	2017	22		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

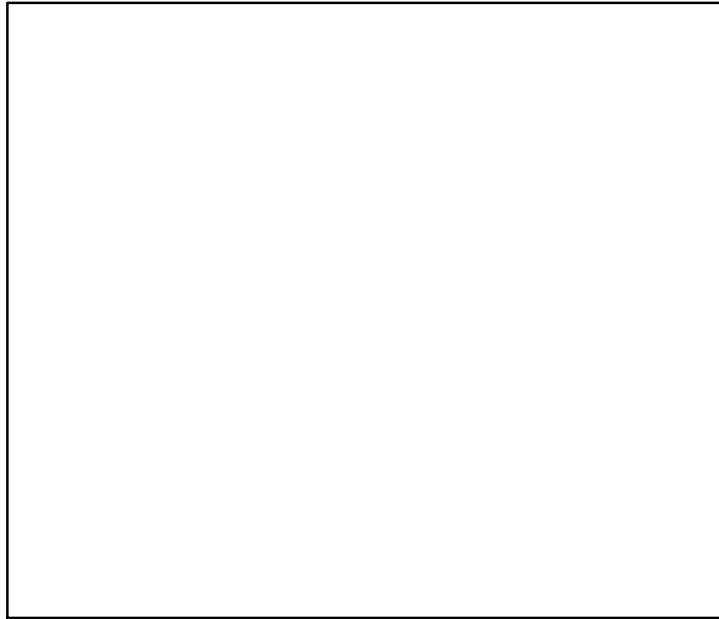
Kobe MSY*



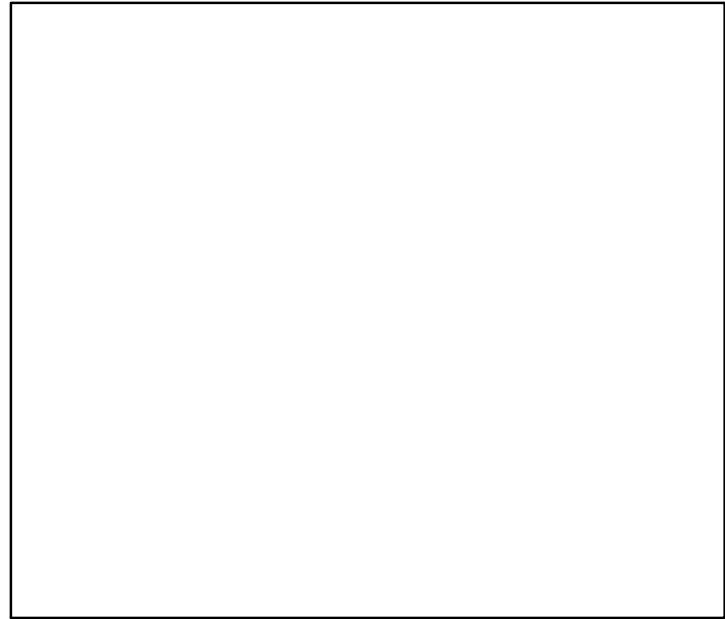
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Undulate ray ICES 8ab [URAYVIIlab]

TB*



SSB*



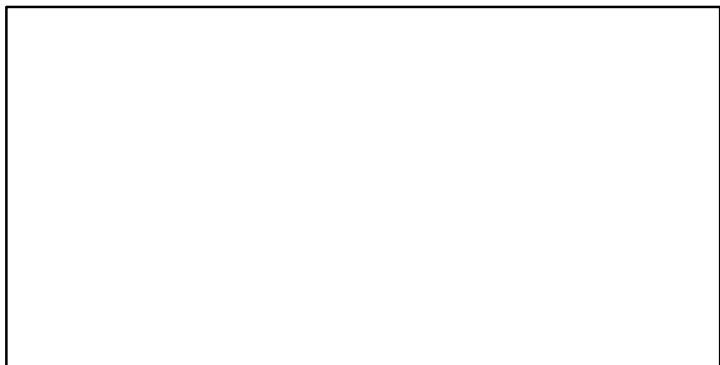
TN *



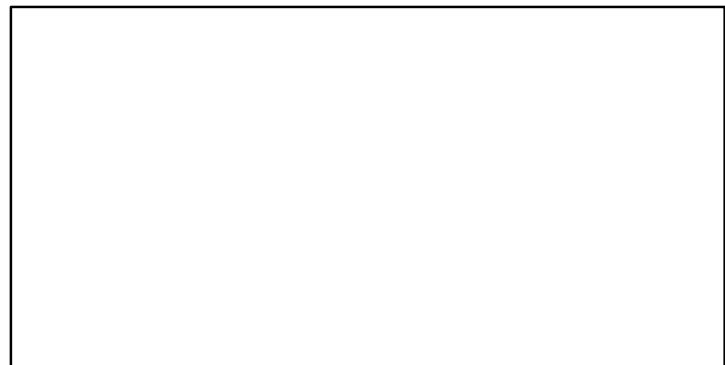
F*



ER*



Recruits*

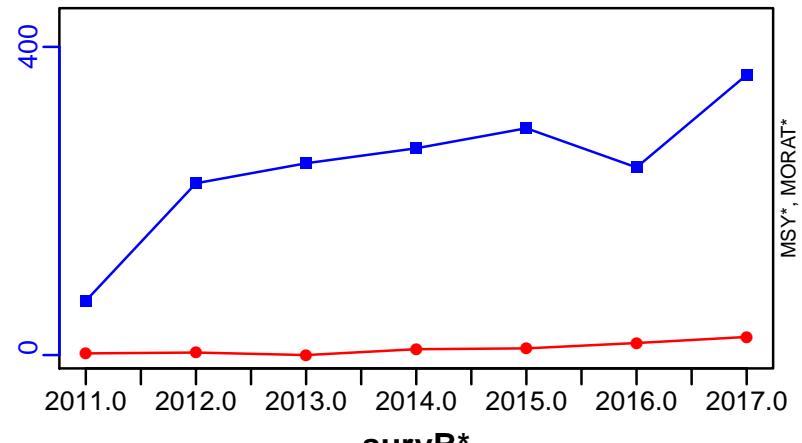


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Undulate ray ICES 8ab [URAYVIIlab]

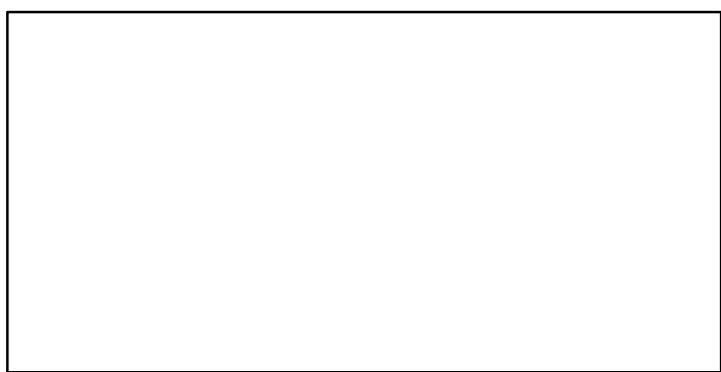
TC-MT, TL-MT, RecC* (2009–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*

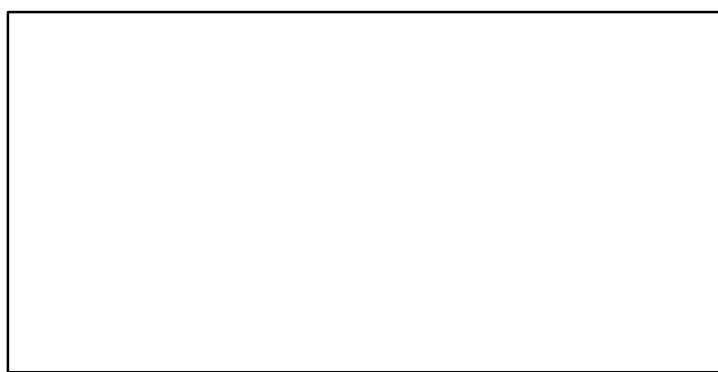


survB*

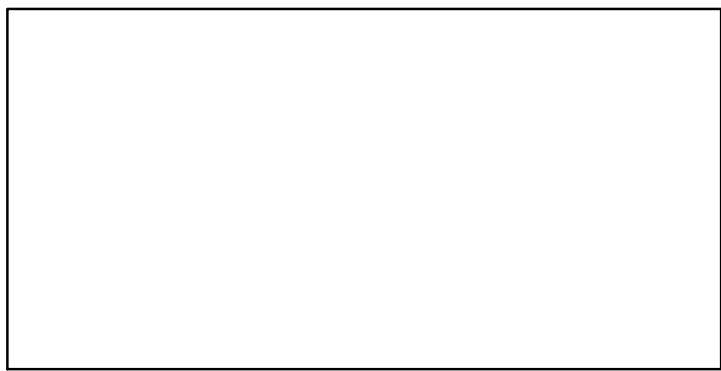
MSY*, MORAT*



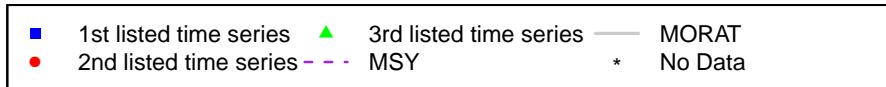
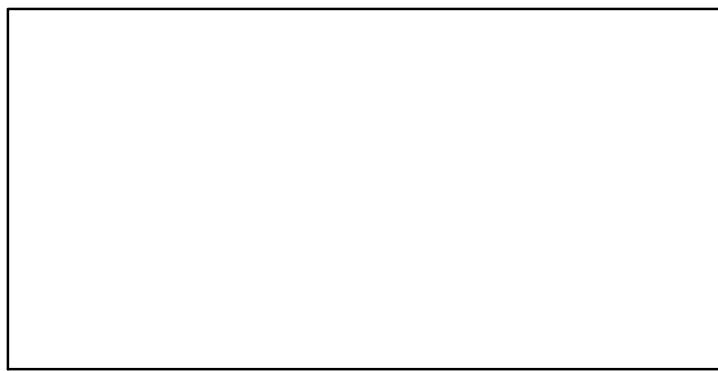
CPUE*



EFFORT*



CdivMSY*



White anglerfish ICES 8c-9a [WANGLVIIIC-IXa]

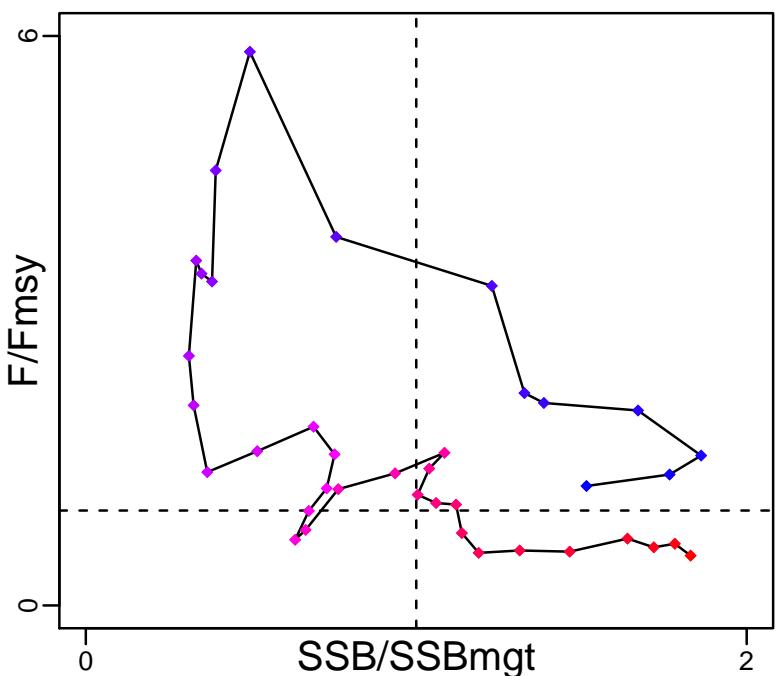
Metadata	
Scientific Name	Lophius piscatorius
Current Assess ID	WGBIE-WANGLVIIIC-IXa-1980-2018-ICESIMP2018
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2014, 2015, 2016, 2017, 2018, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	27,703
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.24
ERmsy	ERmsy-est-ratio	2018	0.517
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	6283
Fmgt	Fmgt-1/yr	2018	0.24
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	6271
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	1993
Flim	Flim-1/yr	2018	0.56
ERlim	-	-	-

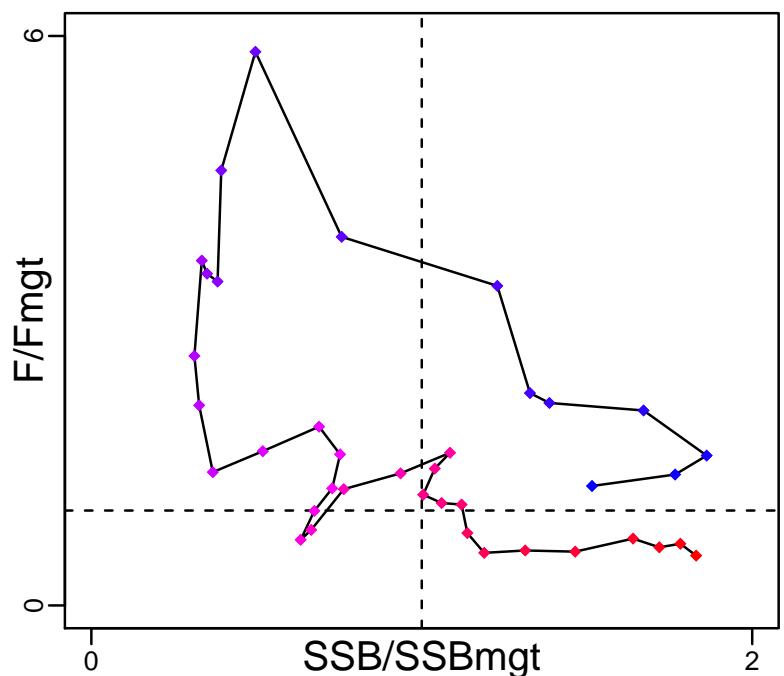
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	13,300	Both	-	
SSB	SSB-MT	2018	11,800	Both	-	
TN	-	-	-	-	-	
R	R-E00	2018	760,000	-	0	
F	F-1/yr	2018	0.126	-	-	
ER	ER-calc-ratio	2018	0.108	-	-	
TC	-	-	-			
TL	TL-MT	2018	1450			
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	0.339			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.525			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.209			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.878			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.525			
ER/ERmgt	-	-	-			

White anglerfish ICES 8c–9a [WANGLVIIIC–IXa]

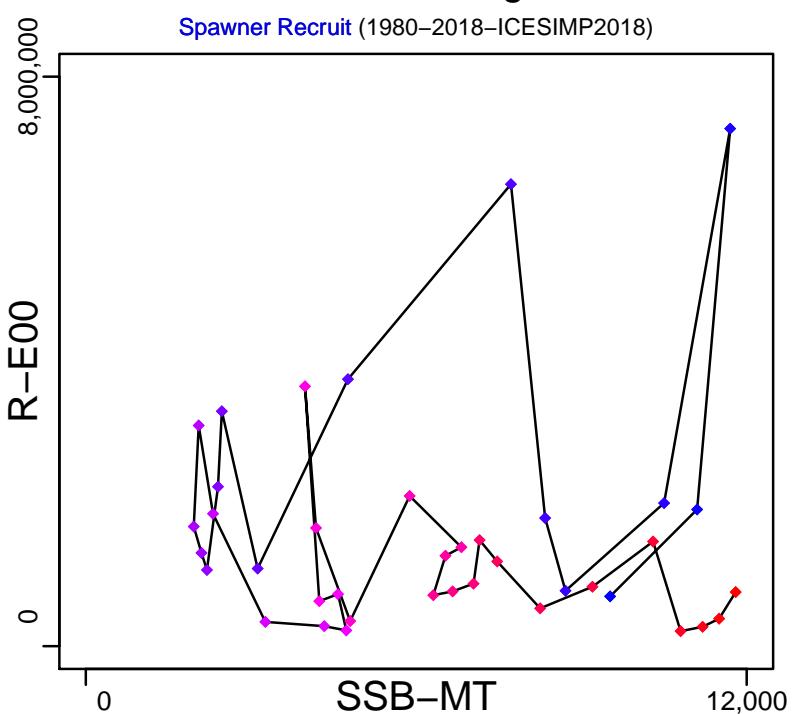
Kobe MSYpref (1980–2018–ICESIMP2018)



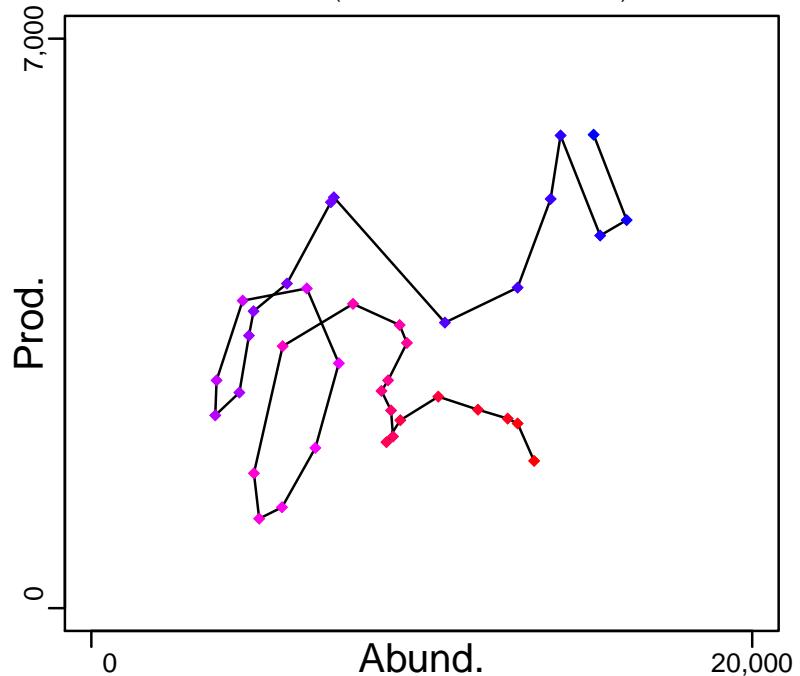
Kobe MGTpref (1980–2018–ICESIMP2018)



Spawner Recruit (1980–2018–ICESIMP2018)



Production (1980–2018–ICESIMP2018)

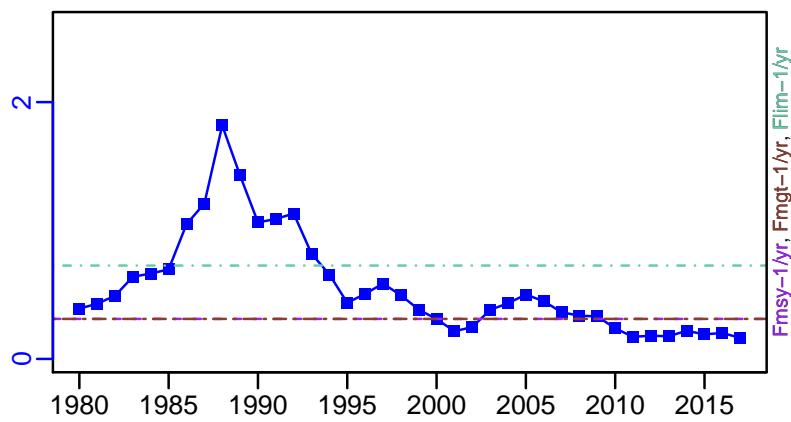
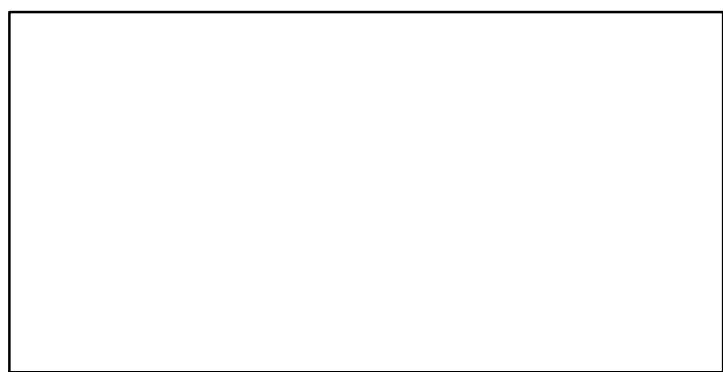
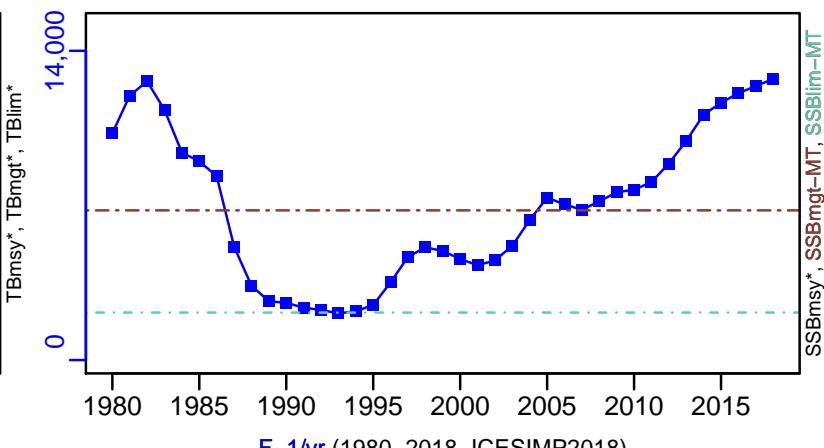
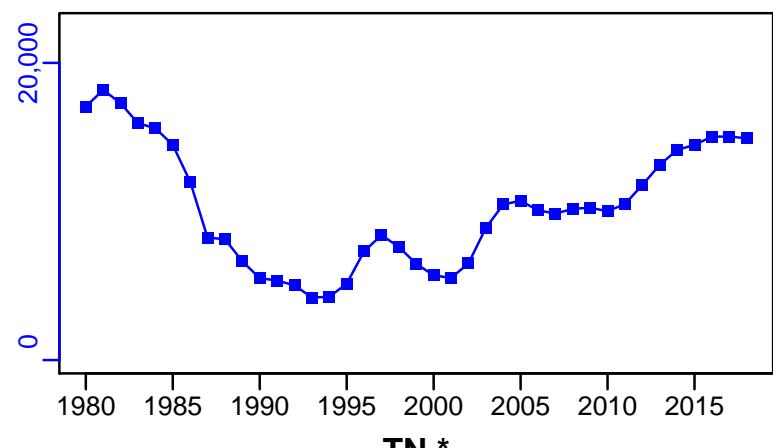


◆ Start Year ◆ End Year * No Data

White anglerfish ICES 8c–9a [WANGLVIIIC–IXa]

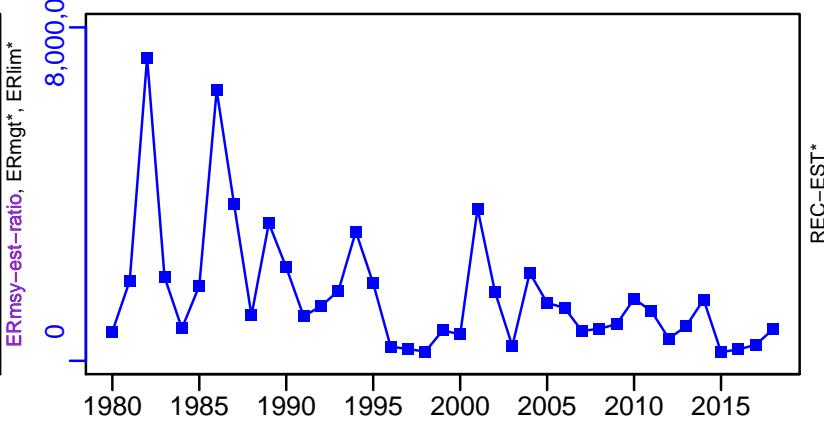
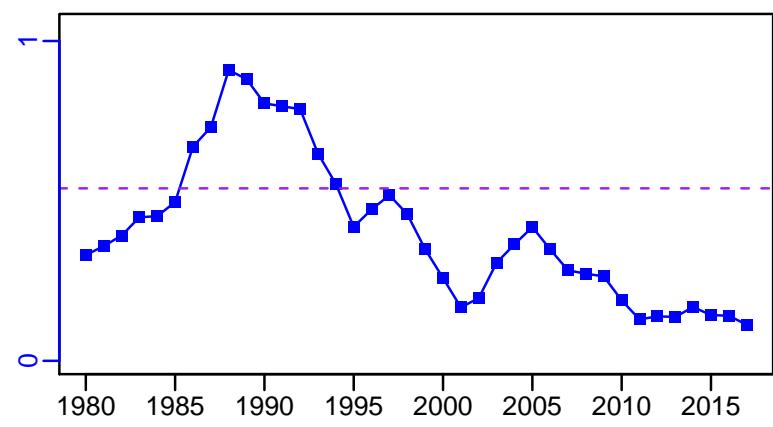
TB-MT (1980–2018–ICESIMP2018)

SSB-MT (1980–2018–ICESIMP2018)



ER-calc-ratio (1980–2018–ICESIMP2018)

R-E00 (1980–2018–ICESIMP2018)

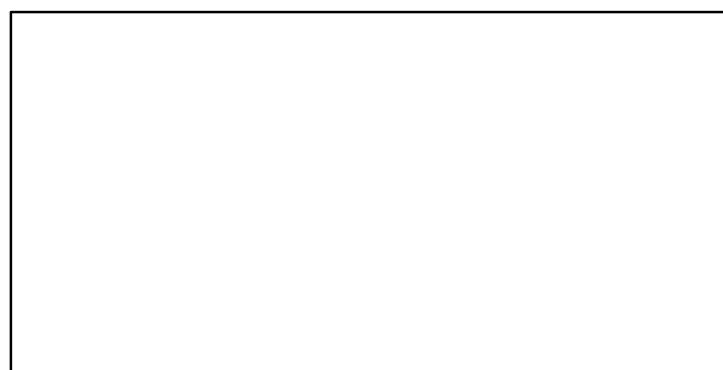
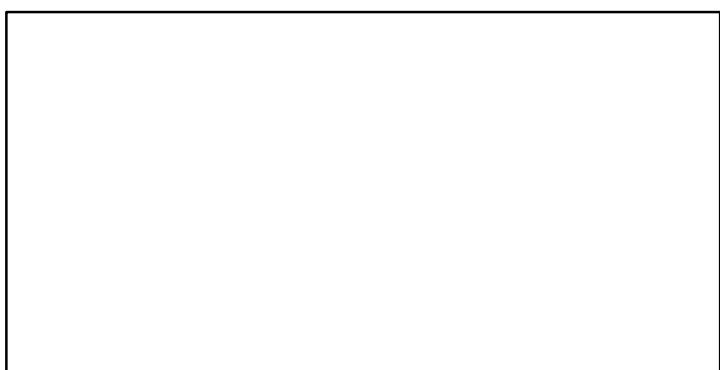
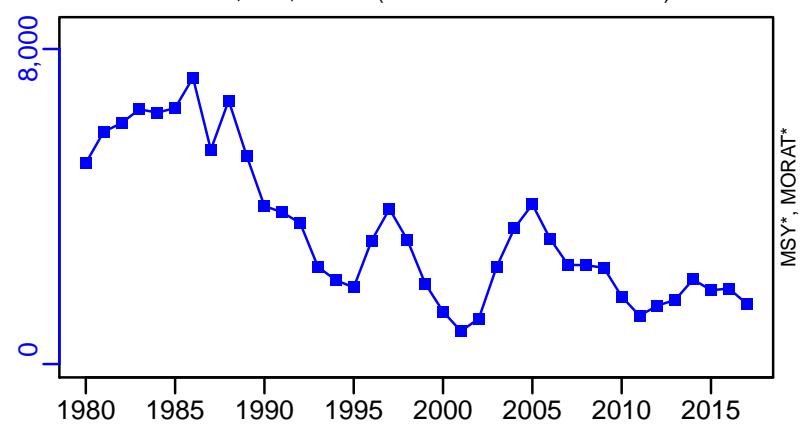


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

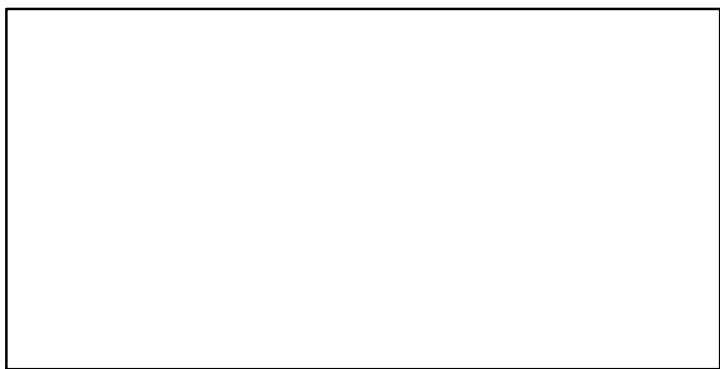
White anglerfish ICES 8c–9a [WANGLVIIIC–IXa]

TL–MT, TC*, RecC* (1980–2018–ICESIMP2018)

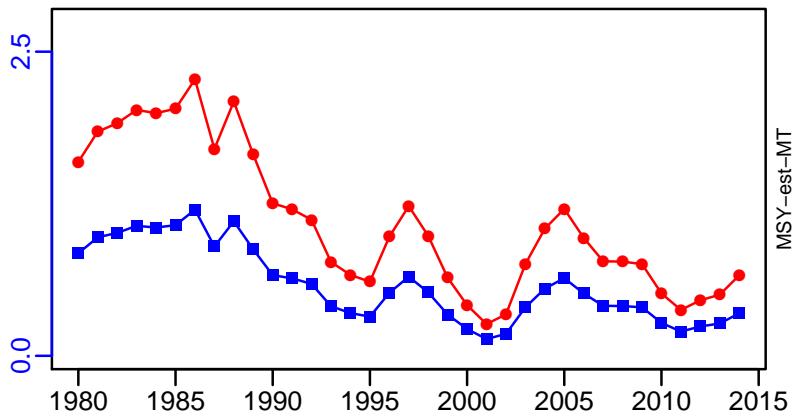
TAC*, Cpair*, Cadv*



EFFORT*



TL–MT/MSY–est–MT, CdivMEANC–ratio, (1980–2015–ICESIMP2016)



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

White anglerfish ICES 7-8abd [WANGLVII-VIIIabd]

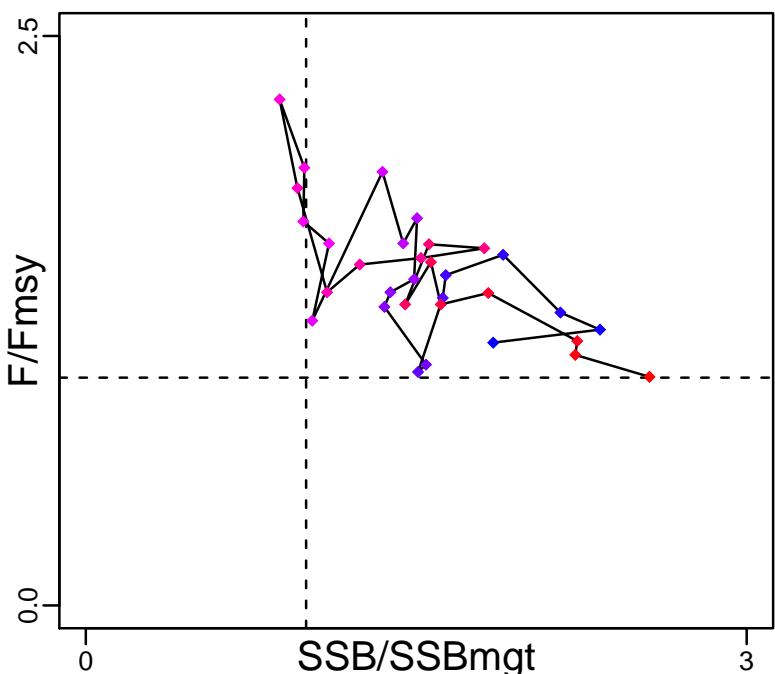
Metadata	
Scientific Name	Lophius piscatorius
Current Assess ID	WGBIE-WANGLVII-VIIIabd-1986-2018-ICESIMP2018
Area	ICES 7-8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2016, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.28
ERmsy	ERmsy-est-ratio	2018	0.696
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	22,278
Fmgt	Fmgt-1/yr	2018	0.36
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	16,032
Flim	Flim-1/yr	2018	0.53
ERlim	-	-	-

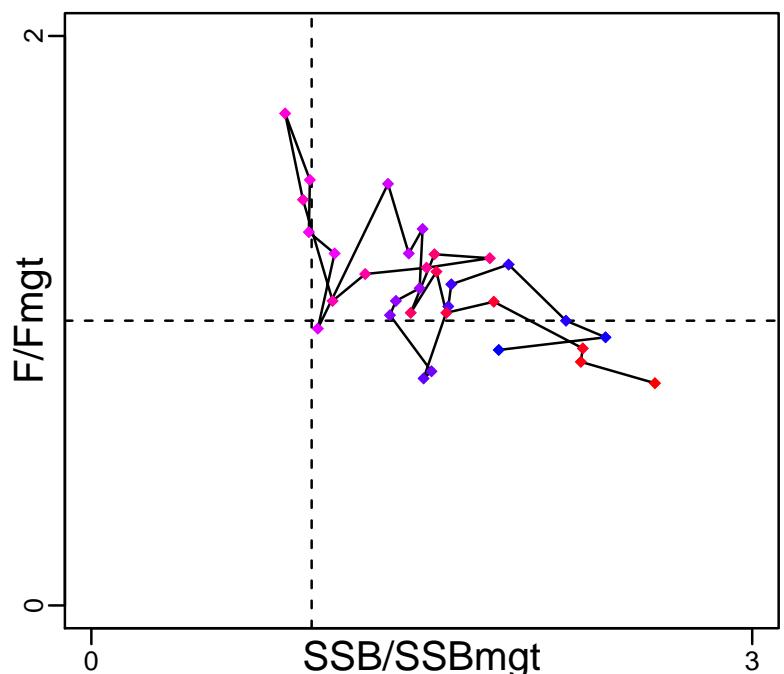
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	124,000	Both	-
SSB	SSB-MT	2018	59,800	Both	-
TN	-	-	-	-	-
R	R-E00	2018	32,300,000	-	0
F	F-1/yr	2018	0.281	-	3 to 6
ER	ER-calc-ratio	2018	0.224	-	-
TC	TC-MT	2018	27,800		
TL	TL-MT	2018	25,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.004		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.322		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.684		
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	0.781		
ER/ERmgt	-	-	-		

White anglerfish ICES 7–8abd [WANGLVII–VIIIabd]

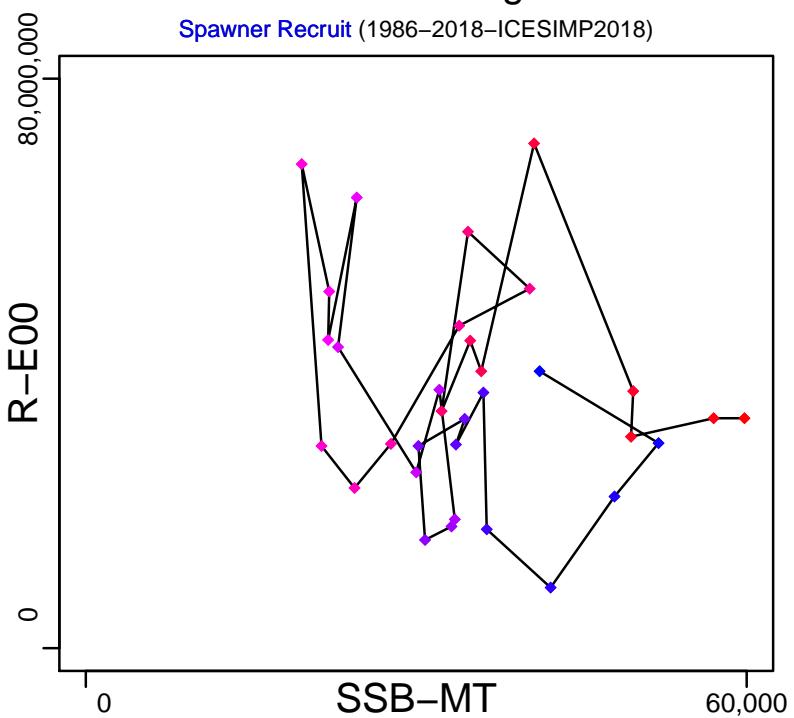
Kobe MSYpref (1986–2018–ICESIMP2018)



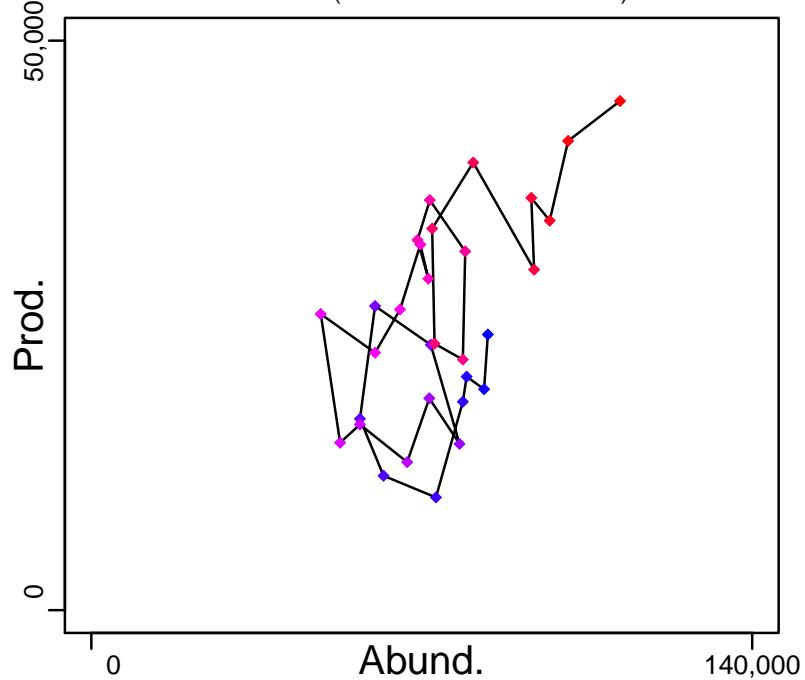
Kobe MGTpref (1986–2018–ICESIMP2018)



Spawner Recruit (1986–2018–ICESIMP2018)



Production (1986–2018–ICESIMP2018)

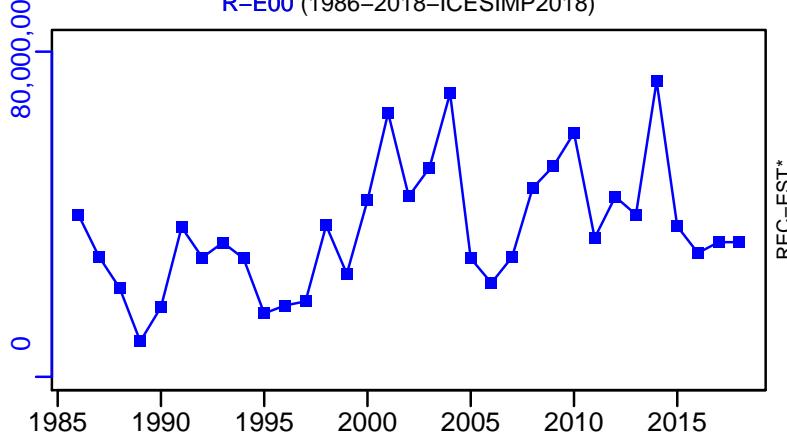
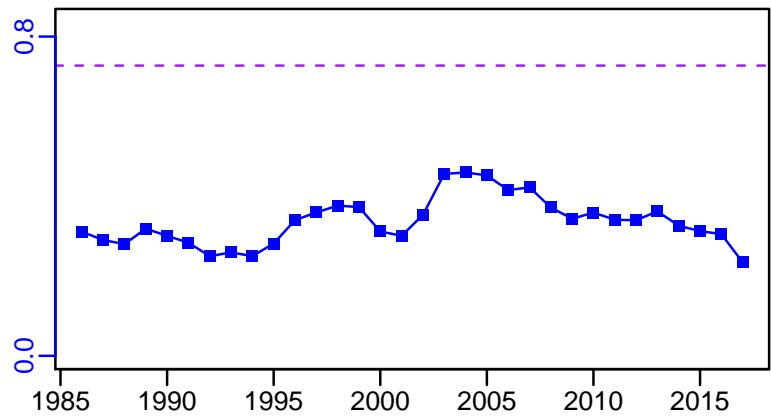
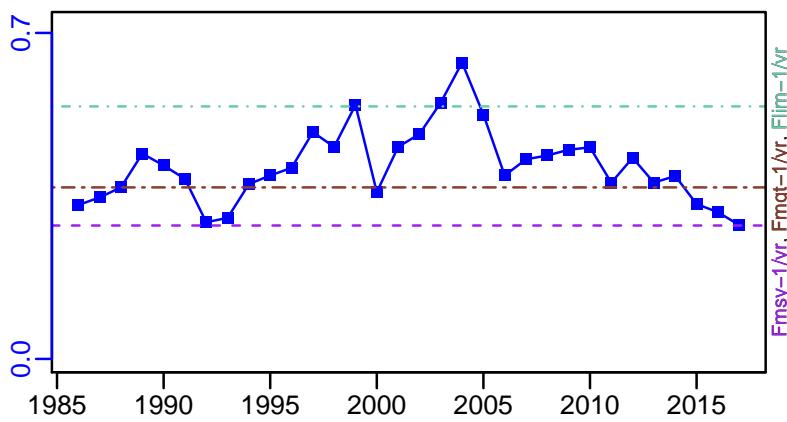
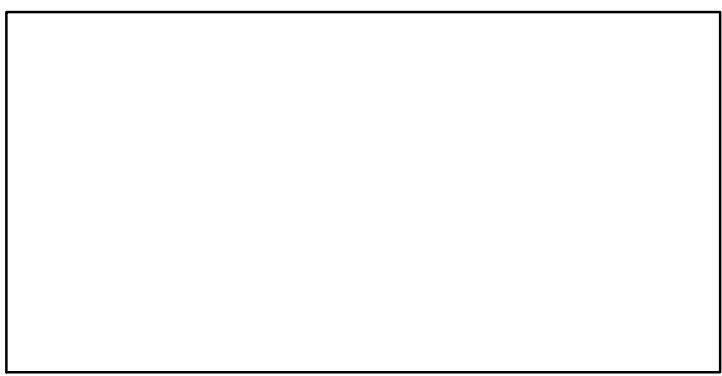
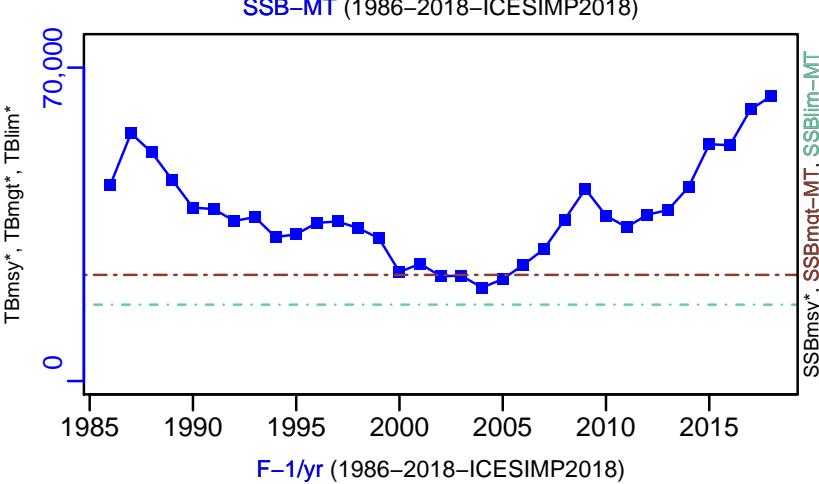
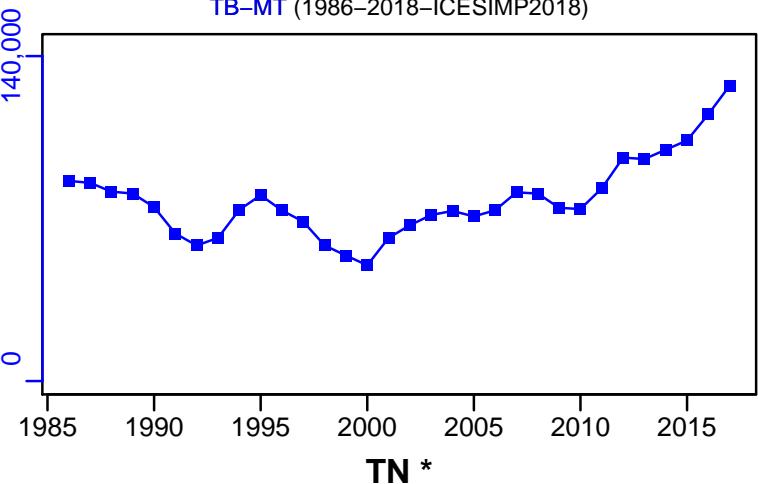


◆ Start Year	◆ End Year	*	No Data
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White anglerfish ICES 7–8abd [WANGLVII–VIIIabd]

TB-MT (1986–2018–ICESIMP2018)

SSB-MT (1986–2018–ICESIMP2018)

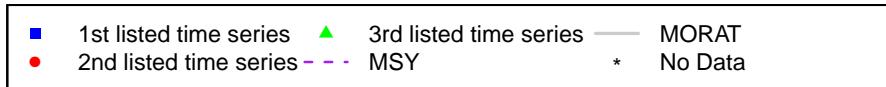
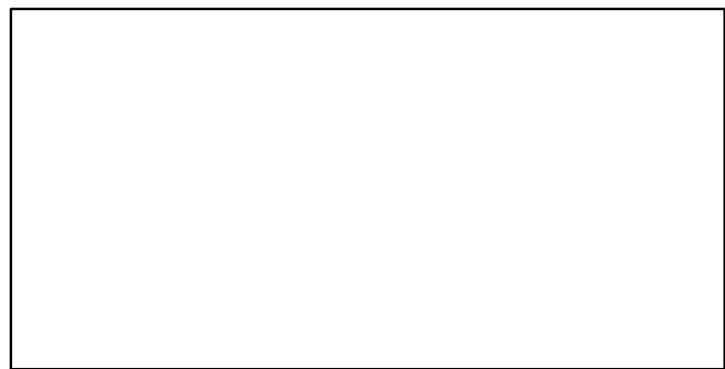
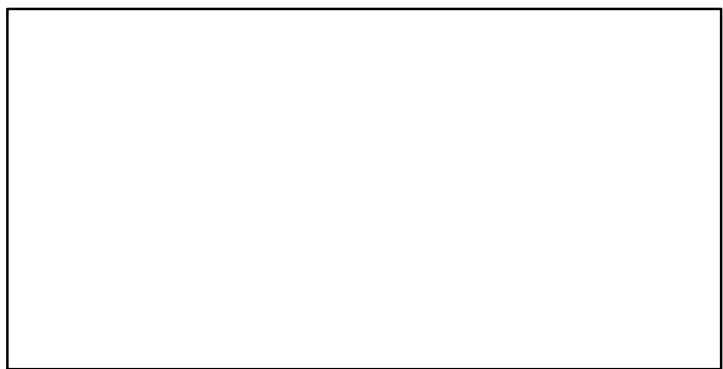
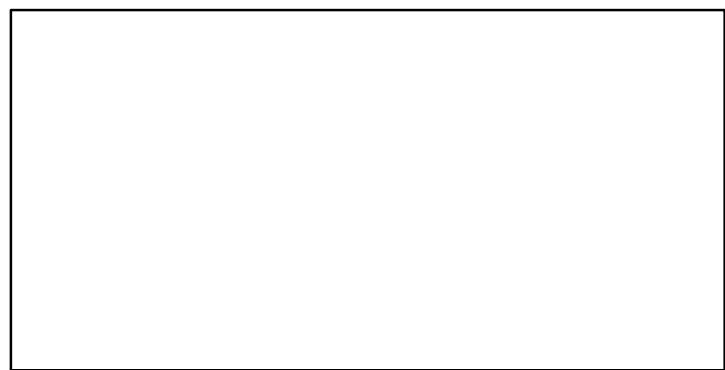
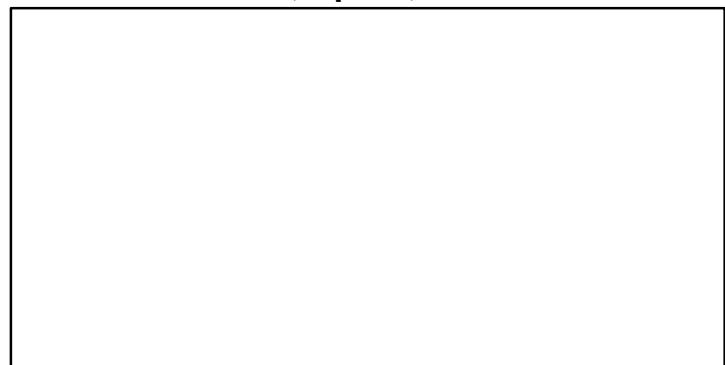
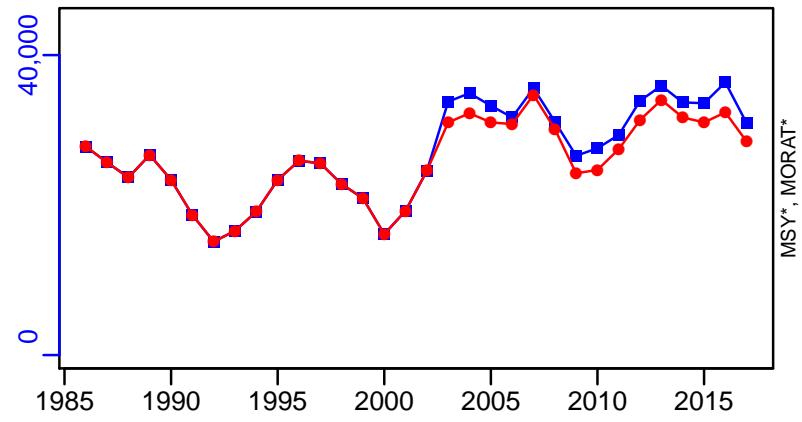


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

White anglerfish ICES 7–8abd [WANGLVII–VIIIabd]

TC–MT, TL–MT, RecC* (1986–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



Whiting Kattegat and Skagerrak [WHITIIIA]

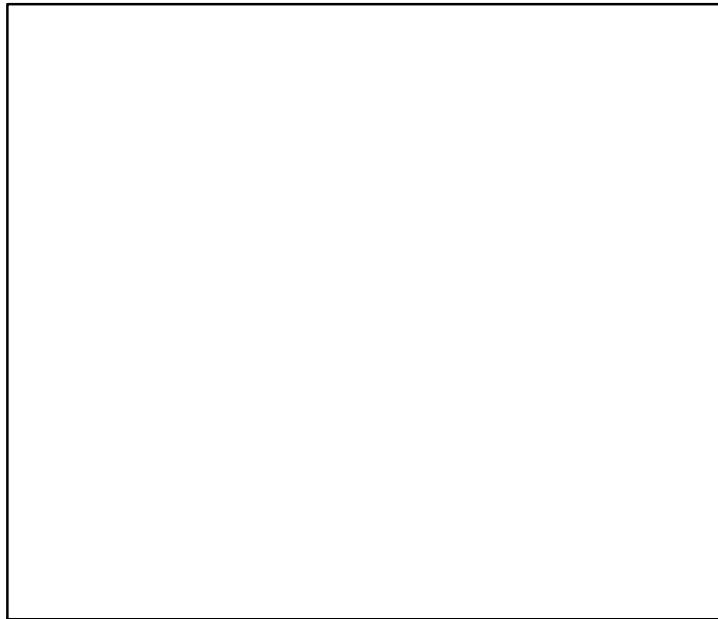
Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGNSSK-WHITIIIA-1975-2016-ICESIMP2018
Area	Kattegat and Skagerrak
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2014, 2016

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

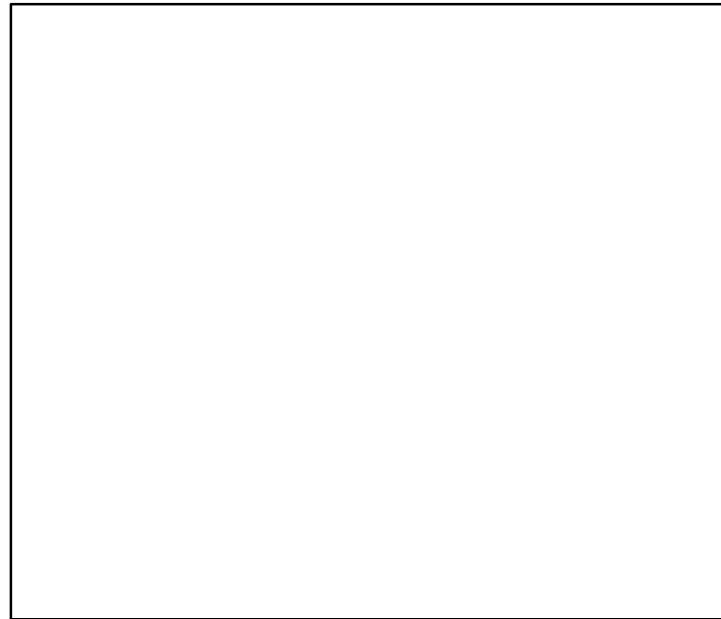
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1660		
TL	TL-MT	2016	546		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Whiting Kattegat and Skagerrak [WHITIIa]

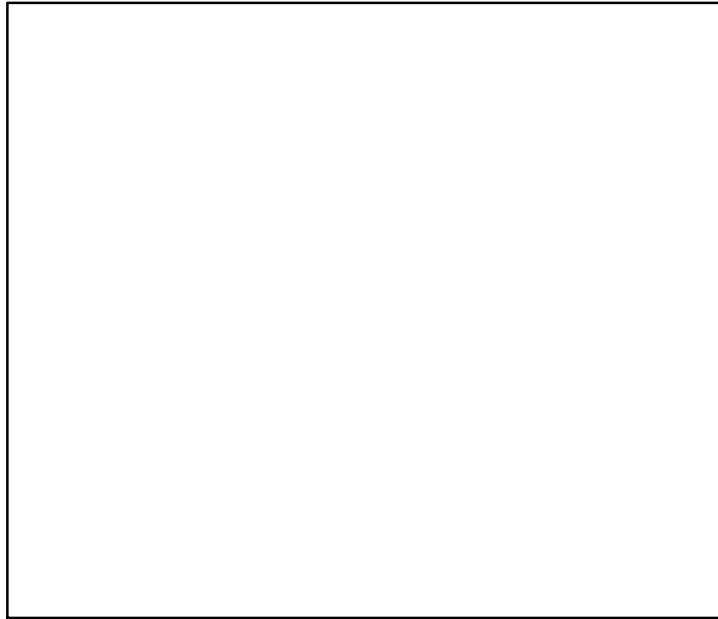
Kobe MSY*



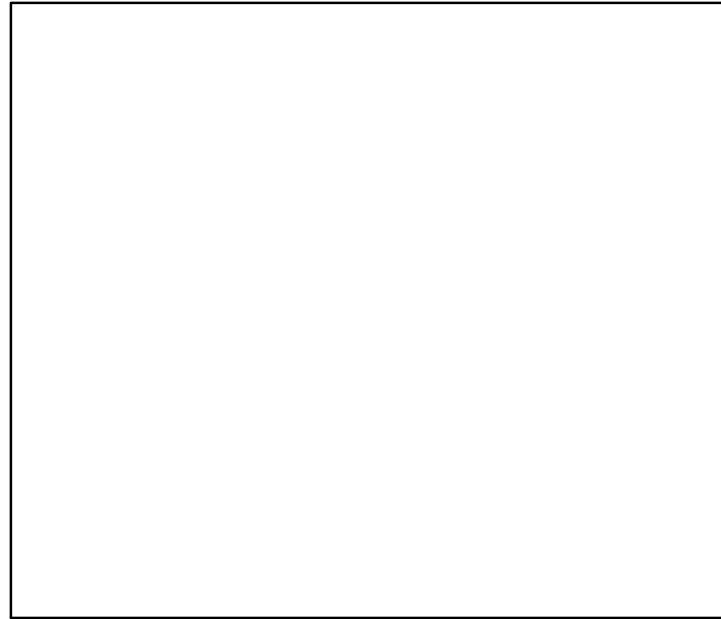
Kobe MGT*



Spawner Recruit*



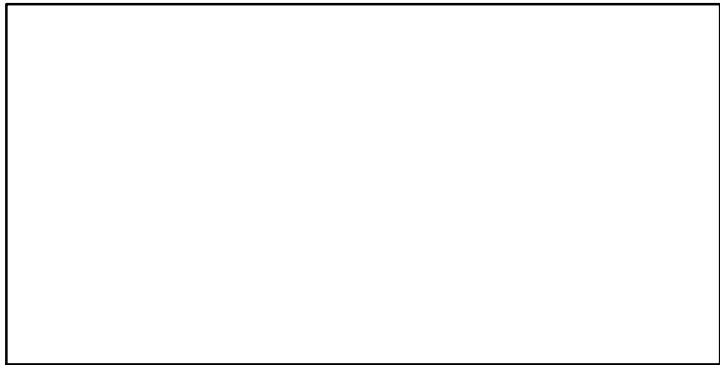
Production*



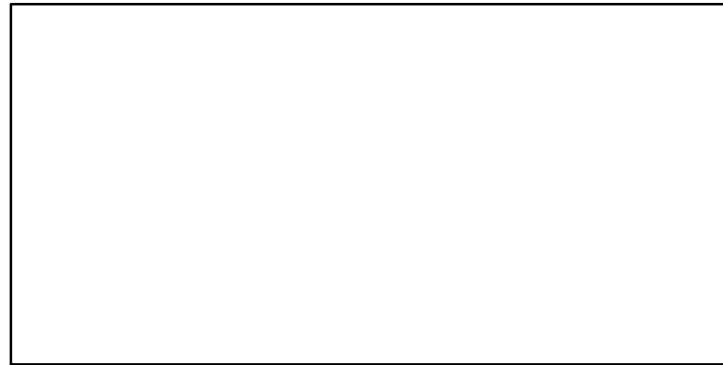
◆ Start Year ♦ End Year * No Data

Whiting Kattegat and Skagerrak [WHITIIa]

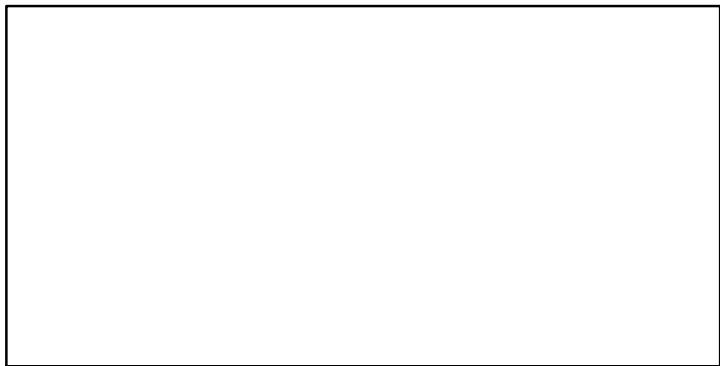
TB*



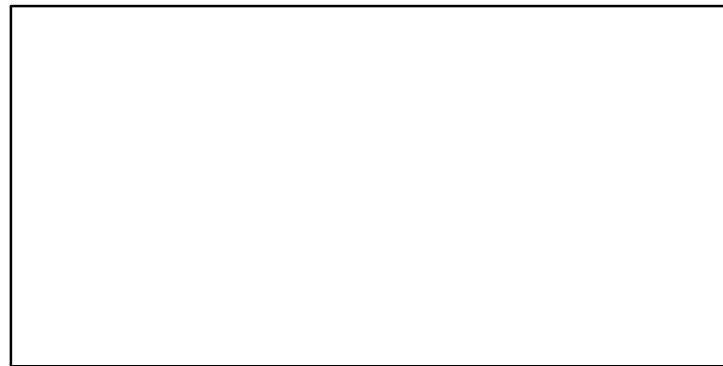
SSB*



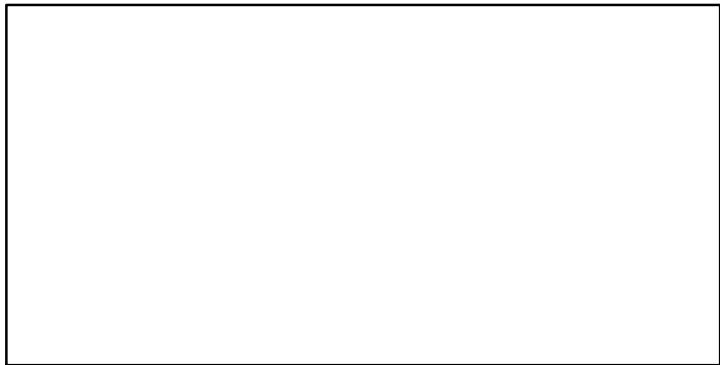
TN *



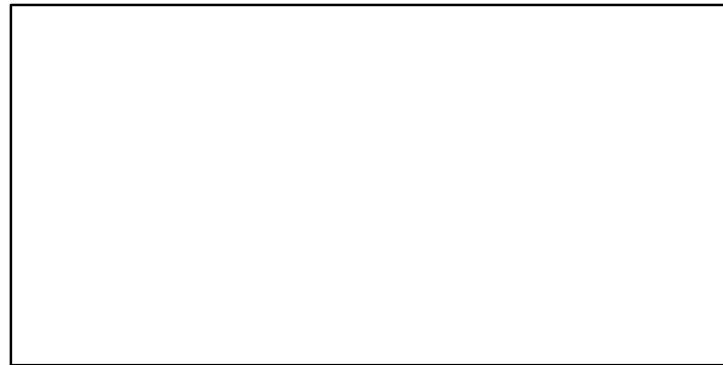
F*



ER*



Recruits*

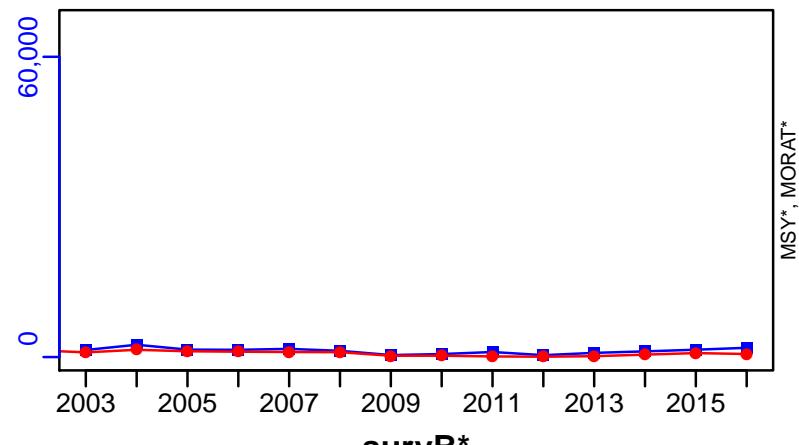


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

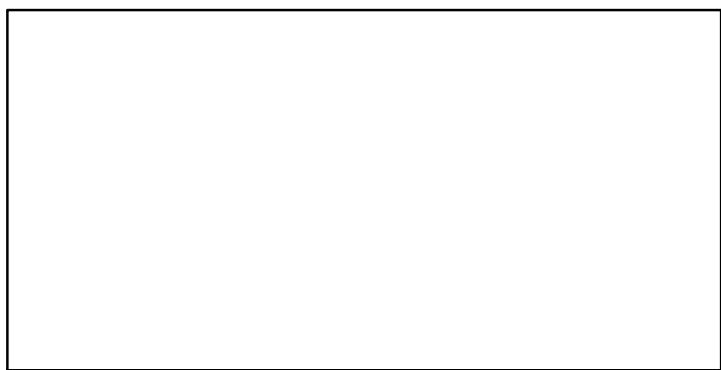
Whiting Kattegat and Skagerrak [WHITIIa]

TC-MT, TL-MT, RecC* (1975–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



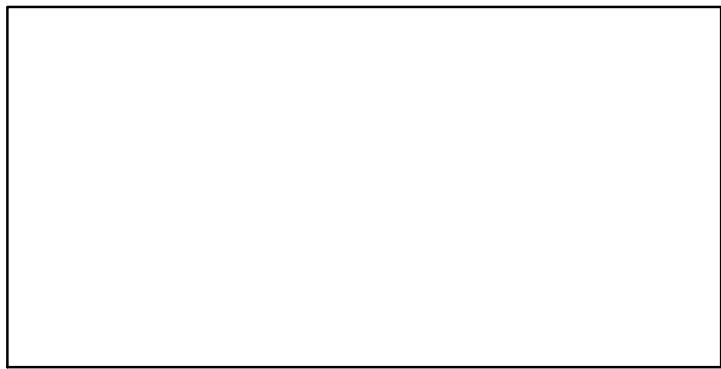
survB*



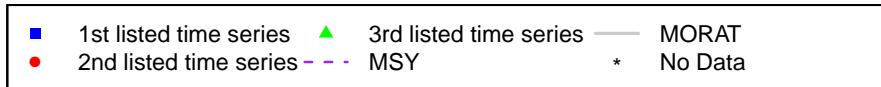
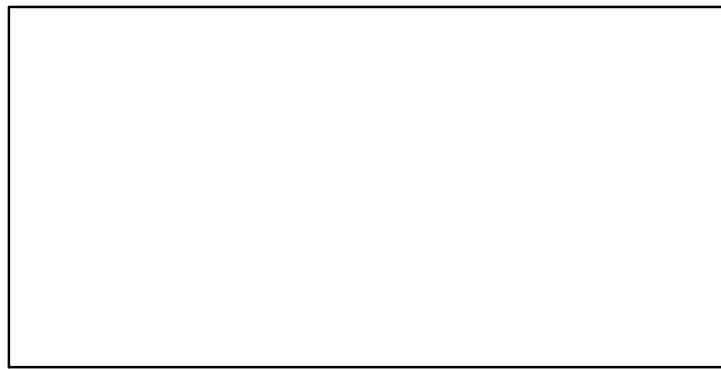
CPUE*



EFFORT*



CdivMSY*



Whiting ICES 4-7d [WHITNS-VIId]

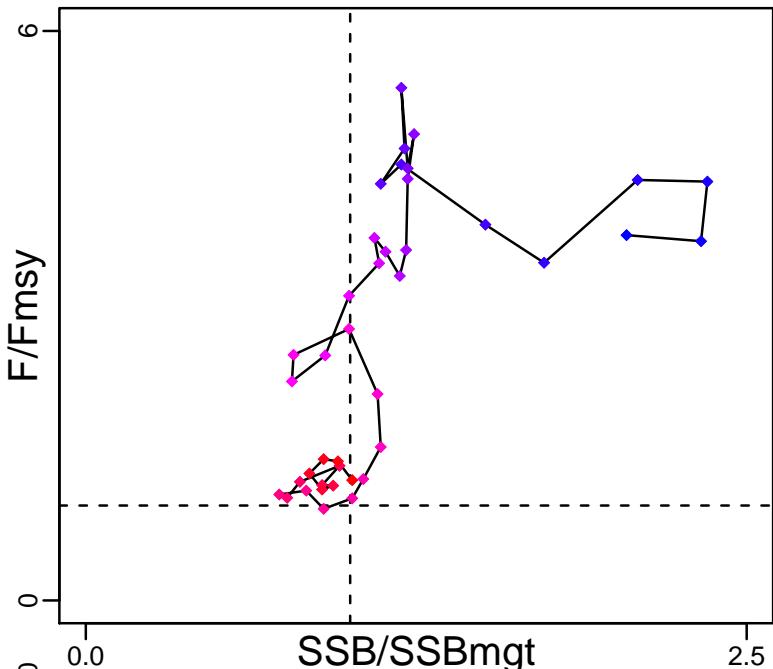
Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGNSSK-WHITNS-VIId-1978-2018-ICESIMP2018
Area	ICES 4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2018, 2012, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	445,591
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.172
ERmsy	ERmsy-est-ratio	2018	0.38
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	166,708
Fmgt	Fmgt-1/yr	2018	0.172
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	78,441
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	119,970
Flim	Flim-1/yr	2018	0.458
ERlim	-	-	-

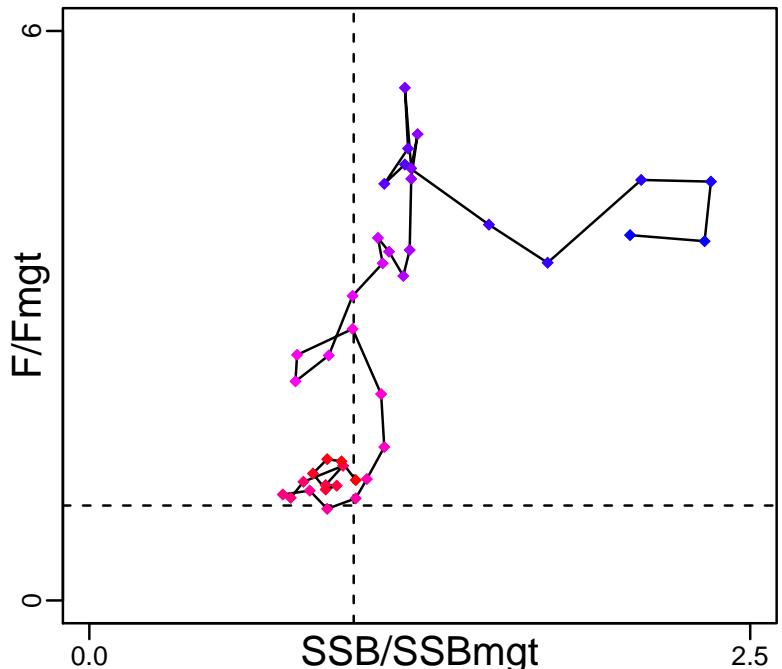
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	279,000	Both	-	
SSB	SSB-MT	2018	181,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	3.82×10^9	-	1	
F	F-1/yr	2018	0.218	-	-	
ER	ER-calc-ratio	2018	0.104	-	-	
TC	TC-MT	2018	29,300			
TL	TL-MT	2018	15,400			
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	1.573			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.267			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.273			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.086			
F/Fmgt	F-1/yr/Fmgt-1/yr	2018	1.267			
ER/ERmgt	-	-	-			

Whiting ICES 4-7d [WHITNS-VIId]

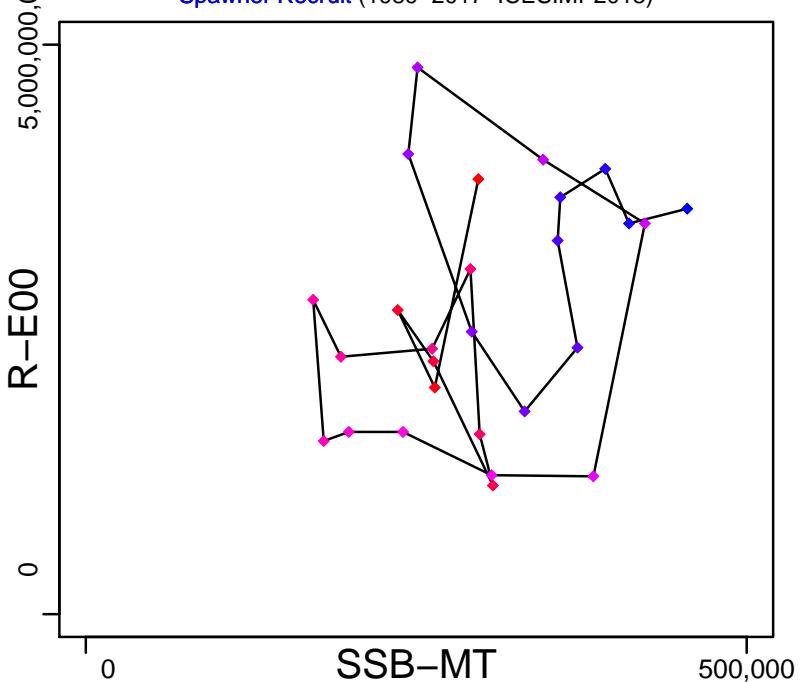
Kobe MSYpref (1978–2018–ICESIMP2018)



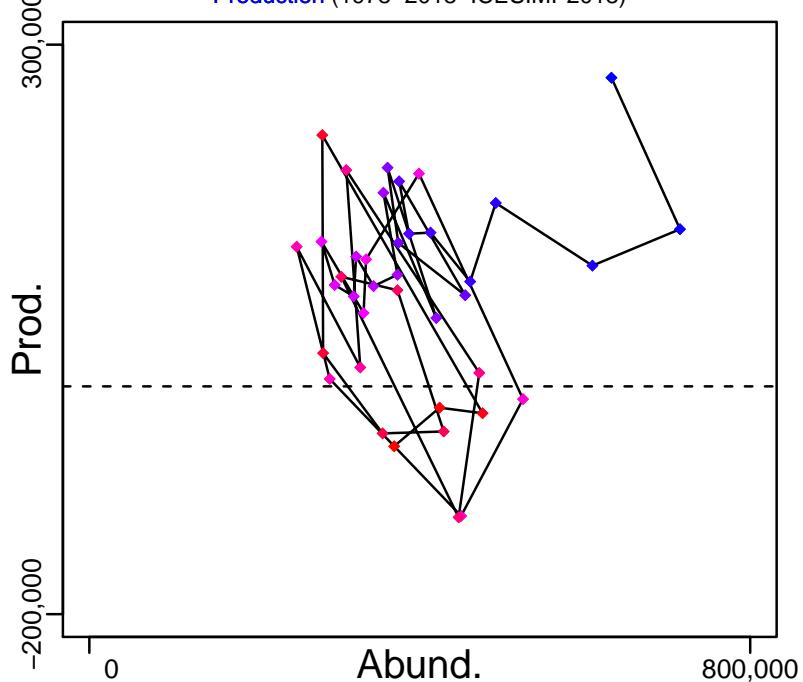
Kobe MGTpref (1978–2018–ICESIMP2018)



Spawner Recruit (1989–2017–ICESIMP2018)



Production (1978–2018–ICESIMP2018)

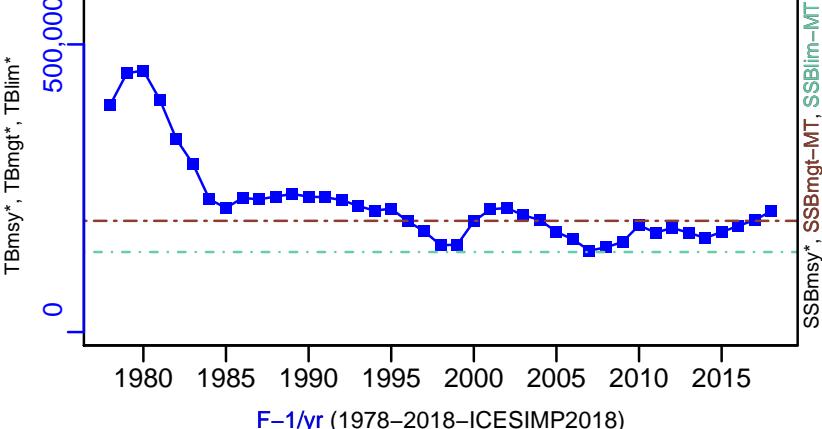
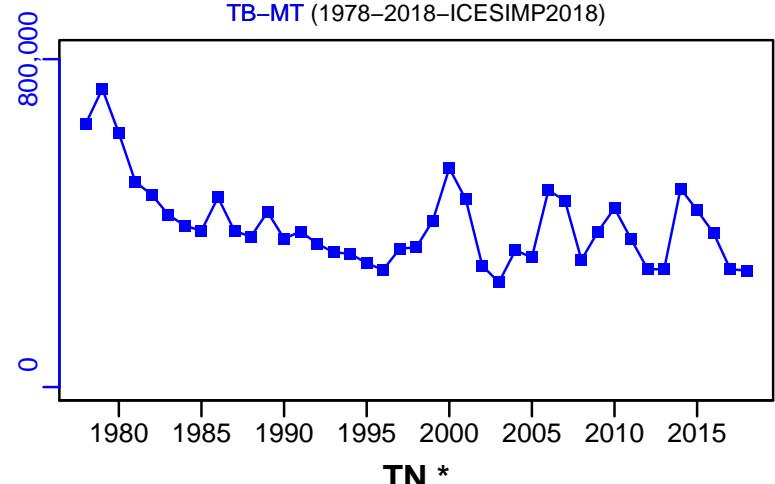


◆ Start Year ◆ End Year * No Data

Whiting ICES 4-7d [WHITNS-VII^d]

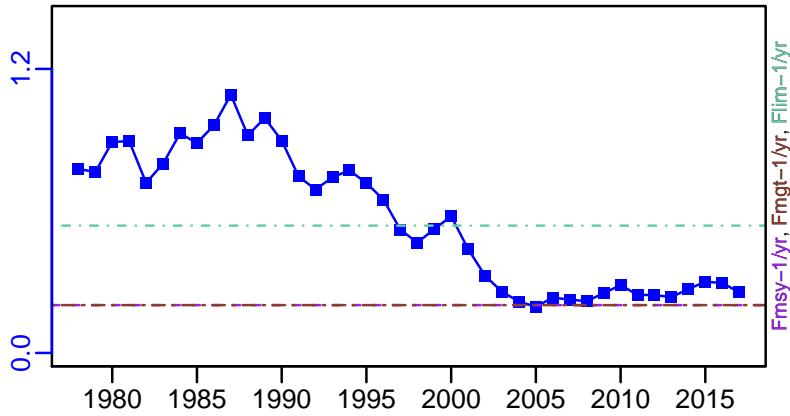
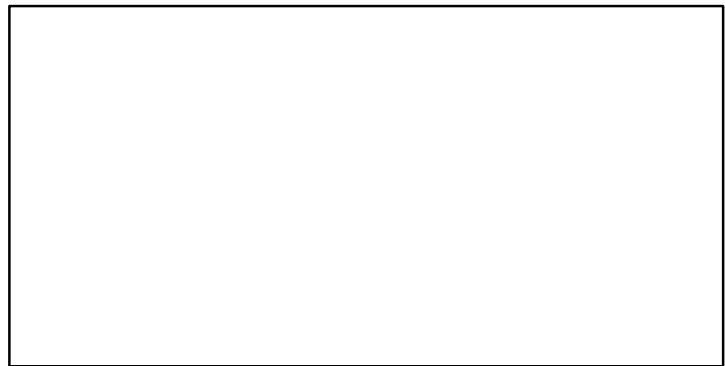
TB-MT (1978–2018–ICESIMP2018)

SSB-MT (1978–2018–ICESIMP2018)



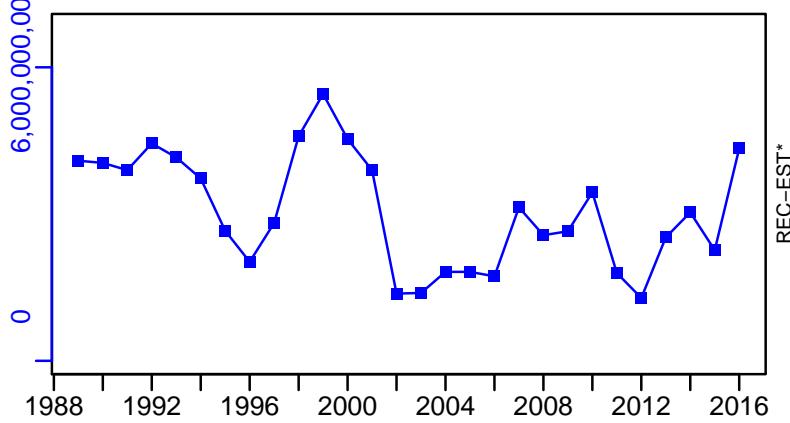
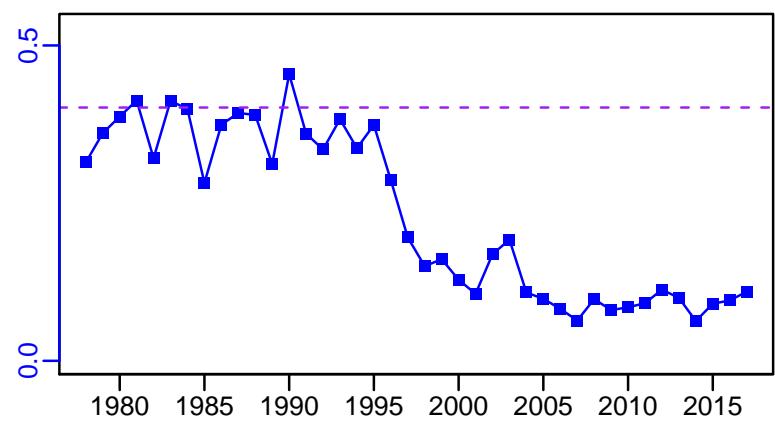
TN *

F-1/yr (1978–2018–ICESIMP2018)



ER-calc-ratio (1978–2018–ICESIMP2018)

R-E00 (1989–2017–ICESIMP2018)

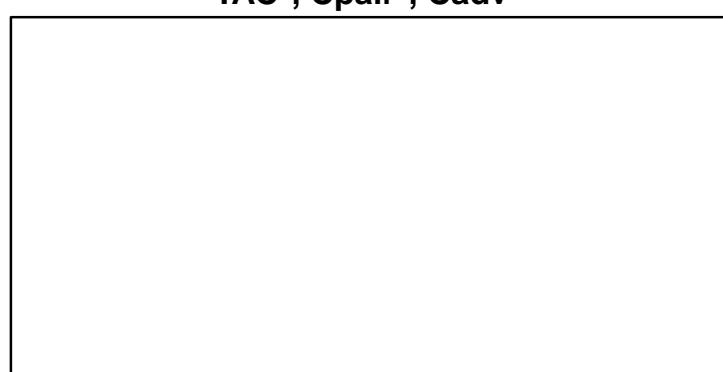
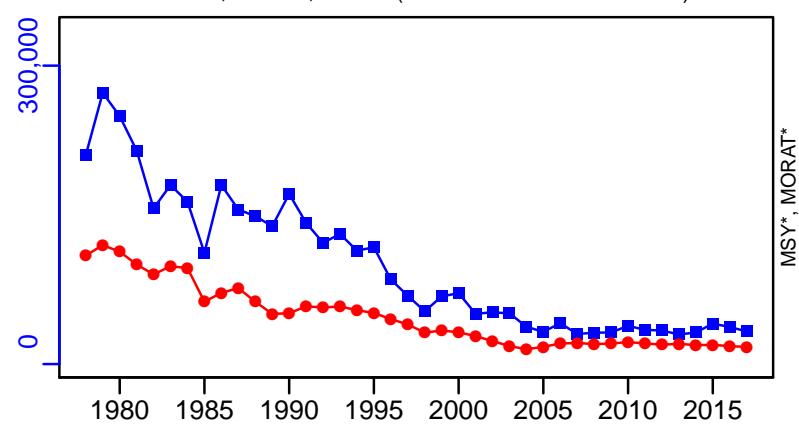


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Whiting ICES 4–7d [WHITNS–VII^d]

TC–MT, TL–MT, RecC* (1978–2018–ICESIMP2018)

TAC*, Cpair*, Cadv*



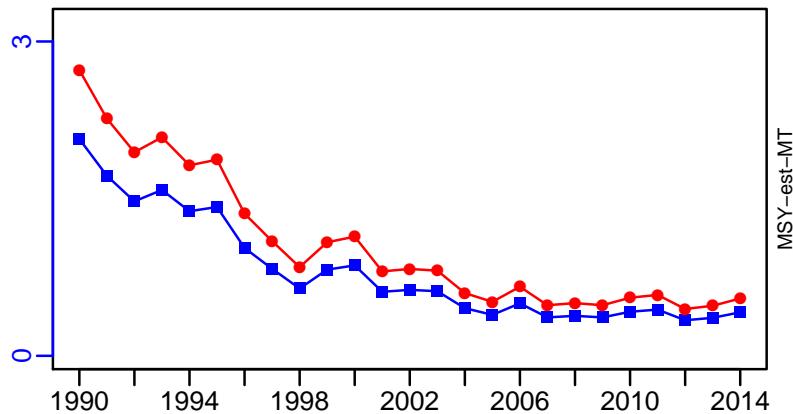
CPUE*



EFFORT*



TC–MT/MSY–est–MT, CdivMEANC–ratio, (1989–2015–ICESIMP2016)



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

Whiting West of Scotland [WHITVla]

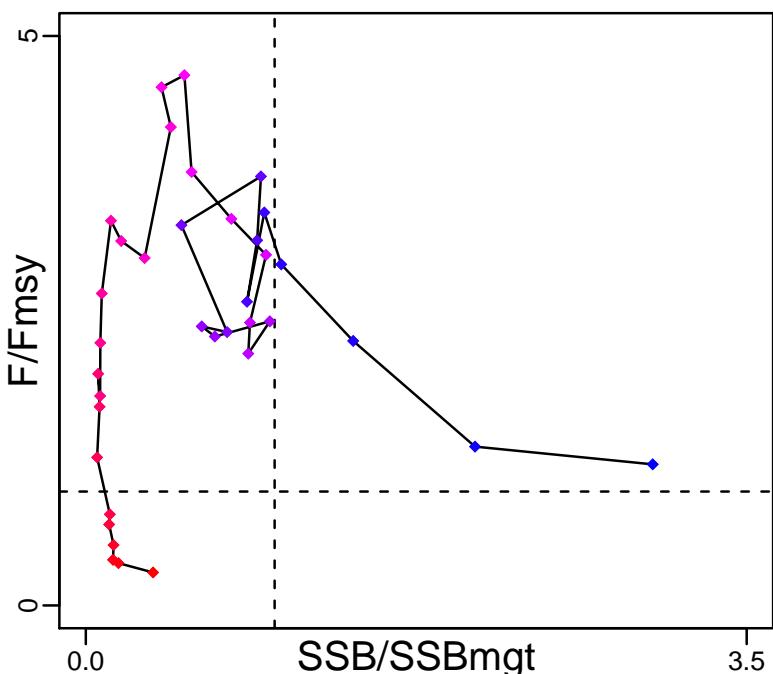
Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVla-1980-2017-ICESIMP2018
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	49,397
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.18
ERmsy	ERmsy-est-ratio	2016	0.099
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	44,632
Fmgt	Fmgt-1/yr	2017	0.18
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	11,828
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	31,880
Flim	Flim-1/yr	2017	0.27
ERlim	-	-	-

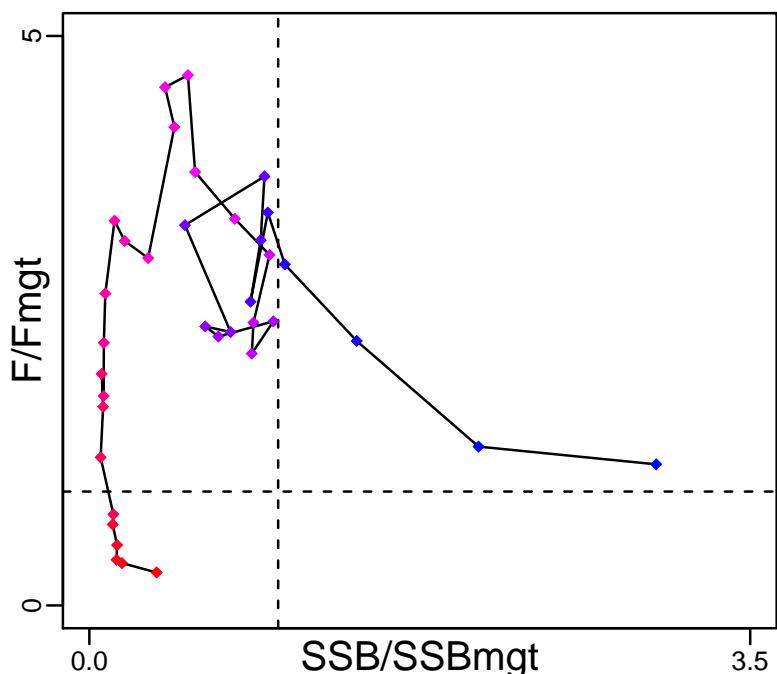
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2016	21,100	Both	-	
SSB	SSB-MT	2017	17,000	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	1.39×10^8	-	1	
F	F-1/yr	2017	0.052	-	2 to 4	
ER	ER-calc-ratio	2016	0.059	-	-	
TC	TC-MT	2016	1060			
TL	TL-MT	2016	227			
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	0.609			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.289			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.6			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.381			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.289			
ER/ERmgt	-	-	-			

Whiting West of Scotland [WHITVla]

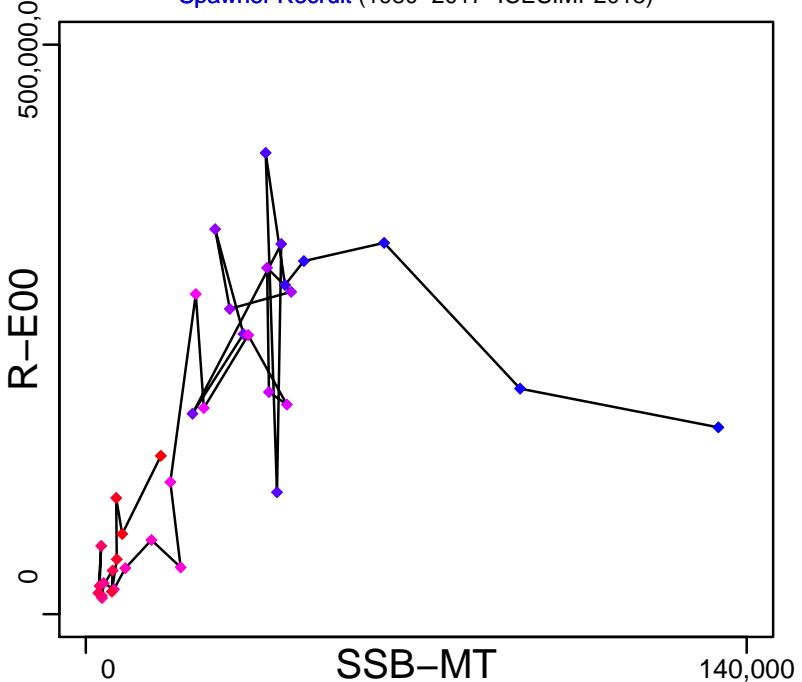
Kobe MSYpref (1980–2017–ICESIMP2018)



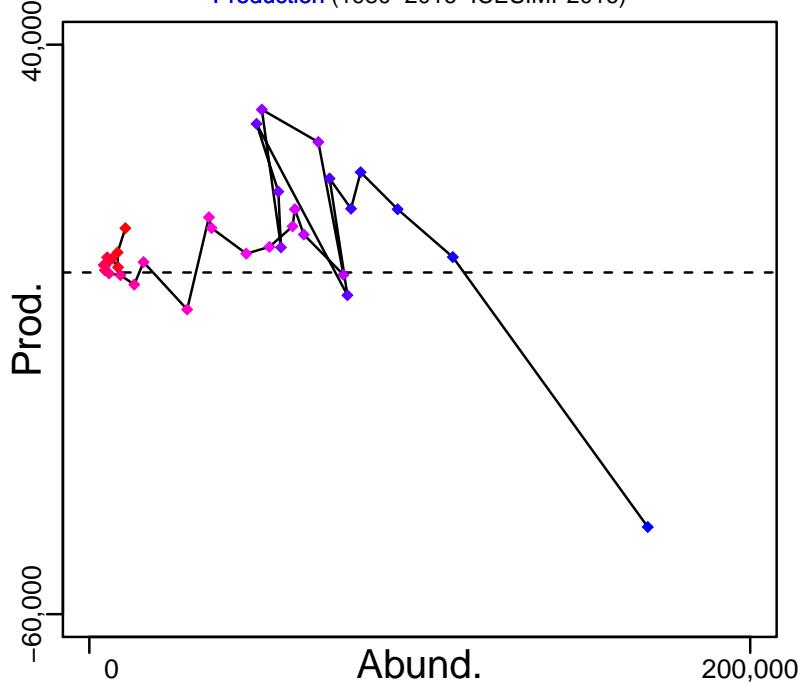
Kobe MGTpref (1980–2017–ICESIMP2018)



Spawner Recruit (1980–2017–ICESIMP2018)



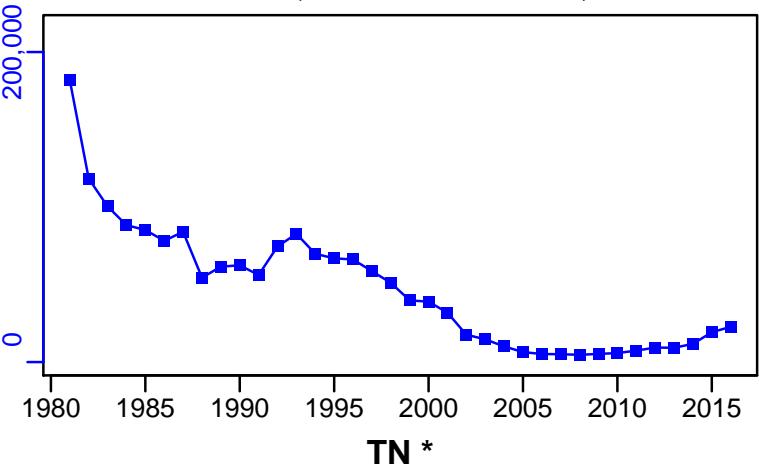
Production (1980–2016–ICESIMP2016)



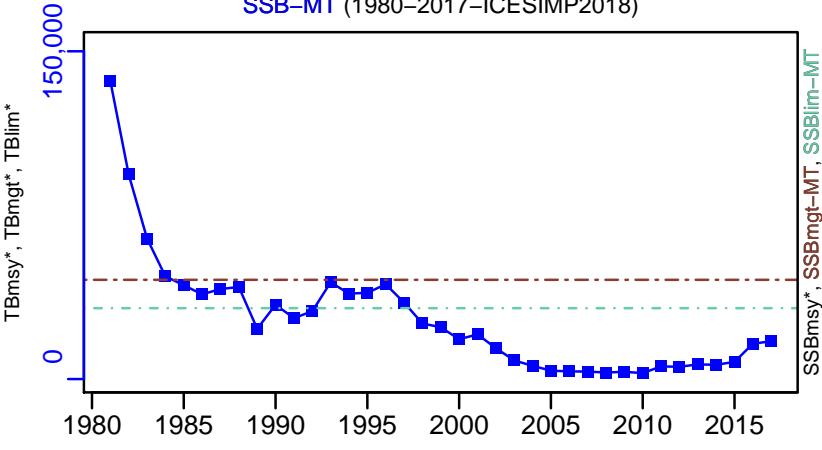
◆ Start Year ◆ End Year * No Data

Whiting West of Scotland [WHITVla]

TB-MT (1980–2016–ICESIMP2016)

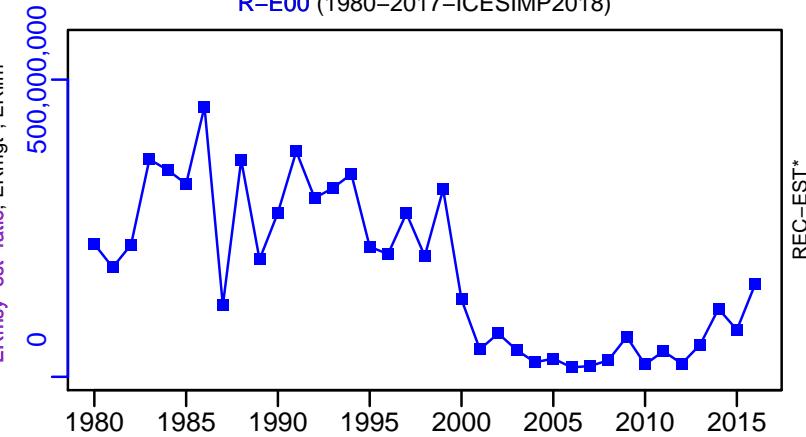
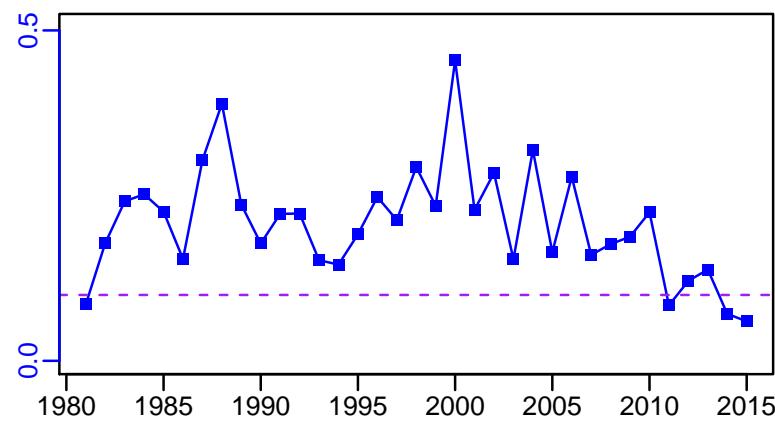


SSB-MT (1980–2017–ICESIMP2018)



ER-calc-ratio (1980–2016–ICESIMP2016)

R-E00 (1980–2017–ICESIMP2018)

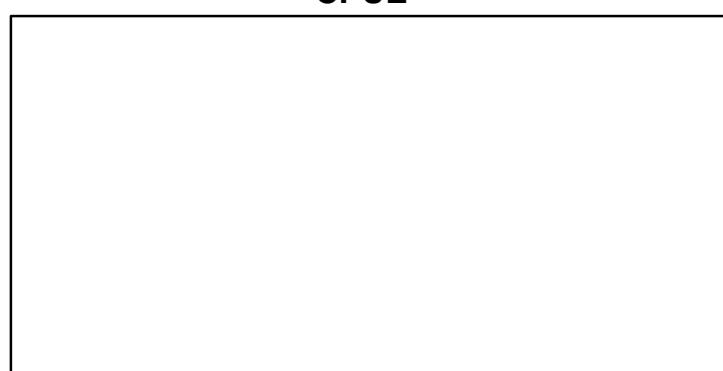
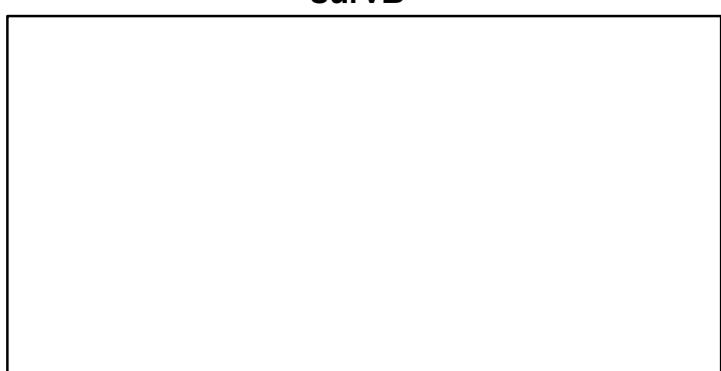
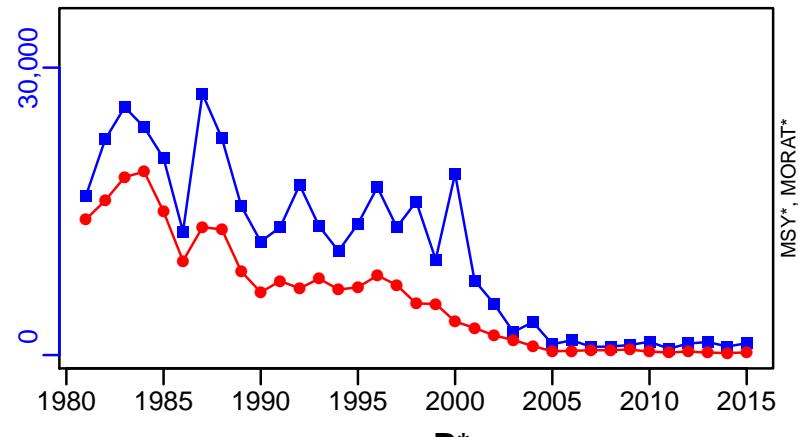


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

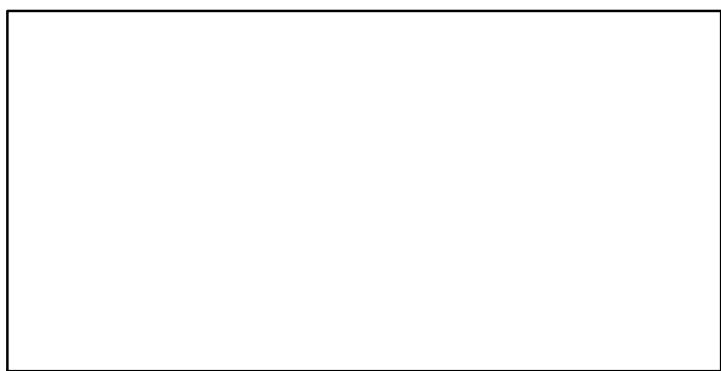
Whiting West of Scotland [WHITVla]

TC-MT, TL-MT, RecC* (1980–2016–ICESIMP2016)

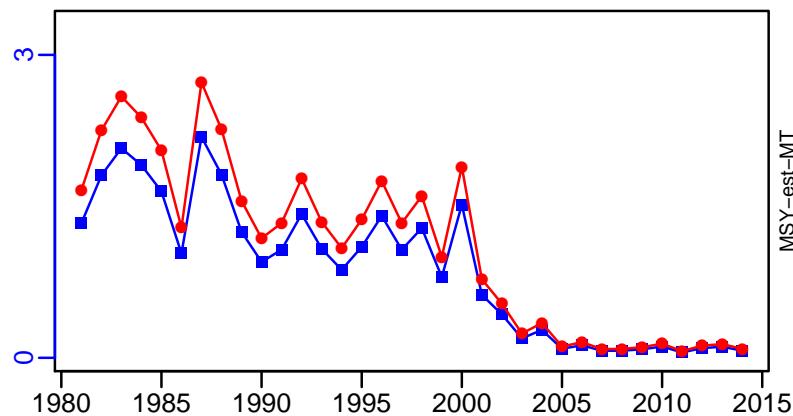
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1980–2015–ICESIMP2016)



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

Whiting Rockall Bank [WHITVIb]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIb-1961-2014-ICESIMP2018
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2014	28		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

Whiting Rockall Bank [WHITVlb]

TB*



SSB*



TN *



F*



ER*



Recruits*

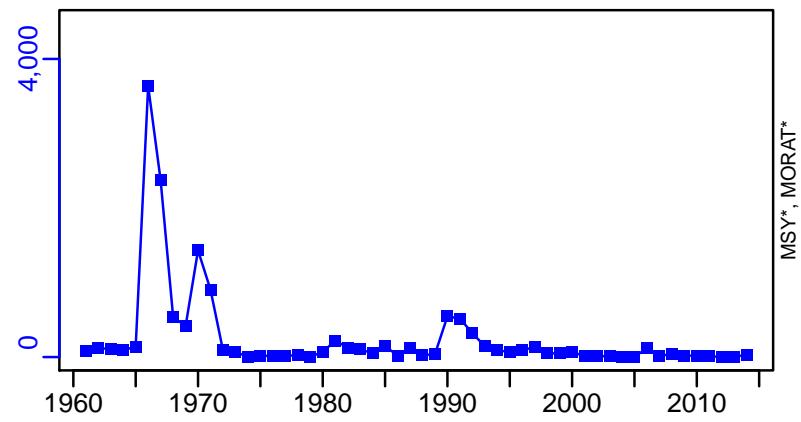


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

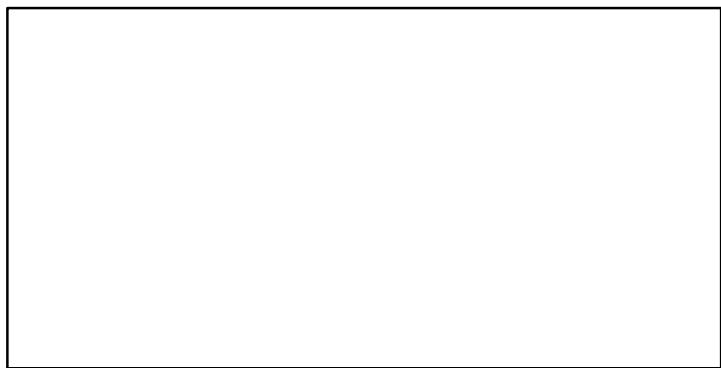
Whiting Rockall Bank [WHITVlb]

TL-MT, TC*, RecC* (1961–2014–ICESIMP2018)

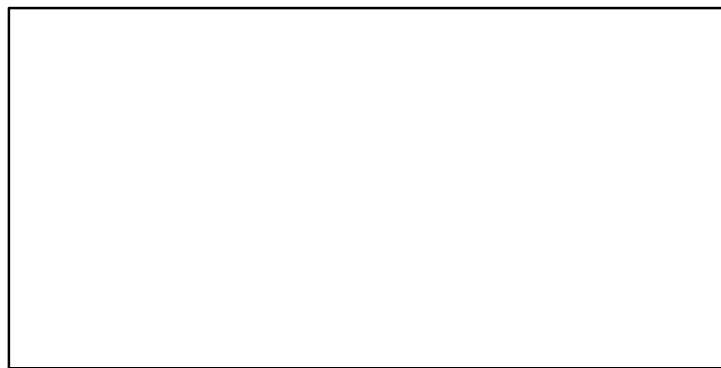
TAC*, Cpair*, Cadv*



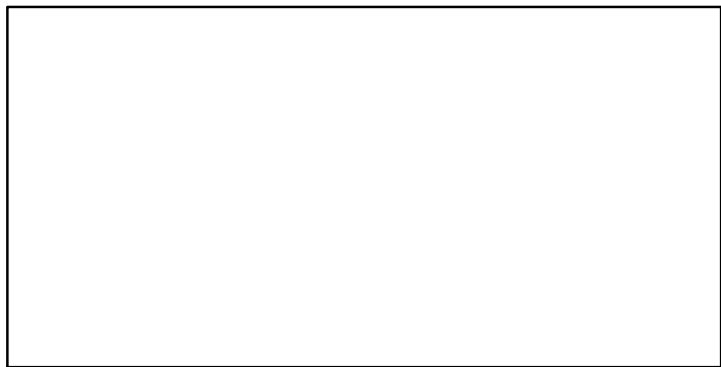
survB*



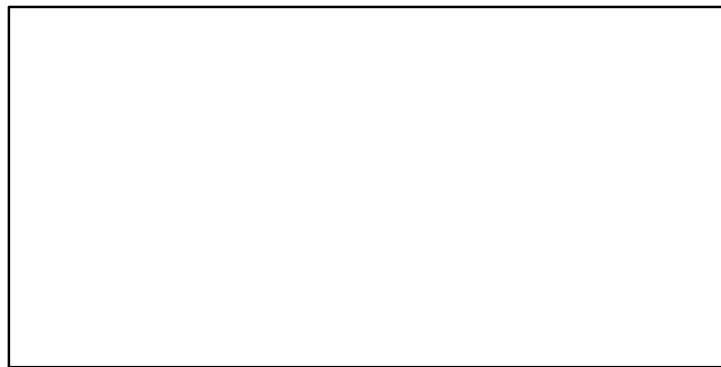
CPUE*



EFFORT*



CdivMSY*



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

Whiting Irish Sea [WHITVIIa]

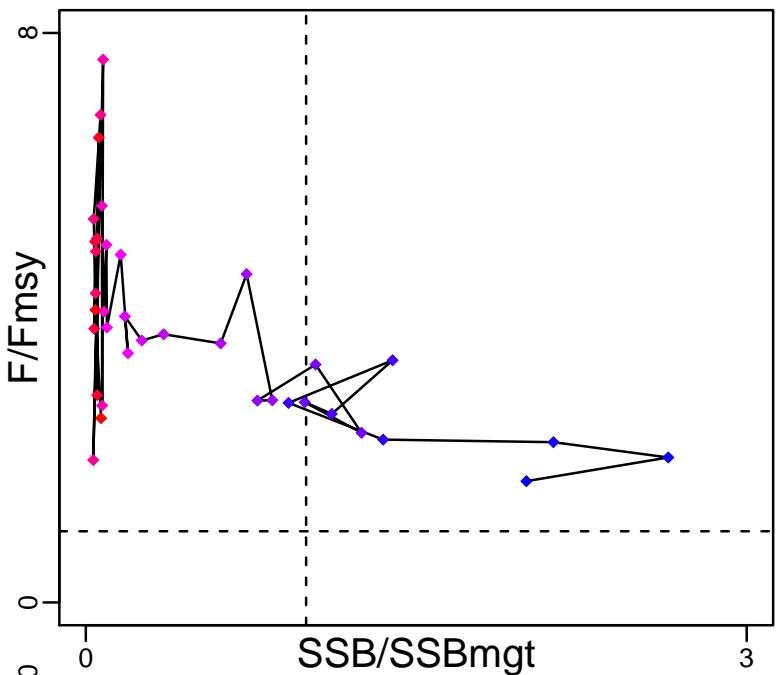
Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIIa-1980-2017-ICESIMP2018
Area	Irish Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-est-MT	2016	590
Fmsy	Fmsy-1/yr	2017	0.219
ERmsy	ERmsy-est-ratio	2017	0.391
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	16,300
Fmgt	Fmgt-1/yr	2017	0.219
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	139
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	10,000
Flim	Flim-1/yr	2017	0.371
ERlim	-	-	-

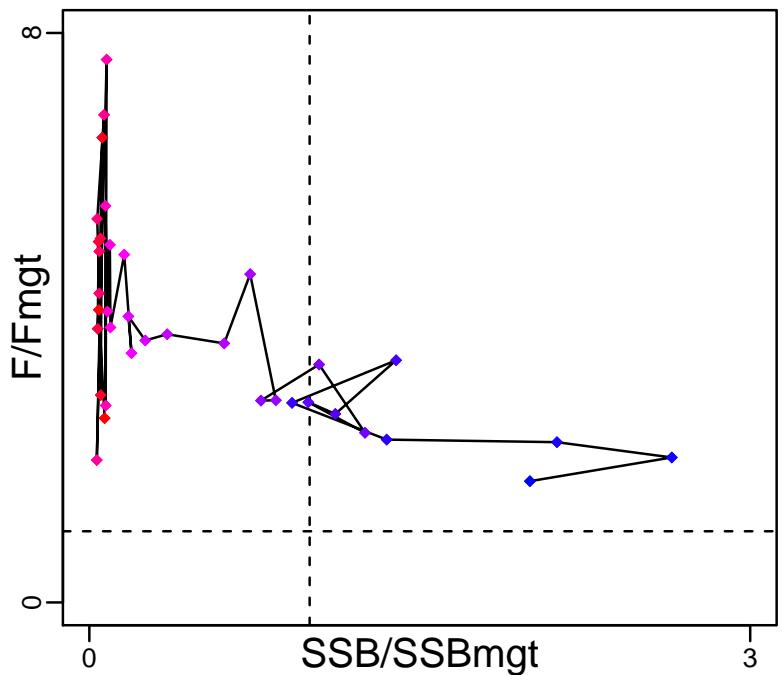
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	2240	Both	-	
SSB	SSB-MT	2017	1430	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	1.17×10^8	-	0	
F	F-1/yr	2017	0.567	-	1 to 3	
ER	ER-calc-ratio	2017	0.348	-	-	
TC	TC-MT	2017	780			
TL	TL-MT	2017	15			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-est-MT	2016	0.405			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	2.589			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.891			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.088			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	2.589			
ER/ERmgt	-	-	-			

Whiting Irish Sea [WHITVIIa]

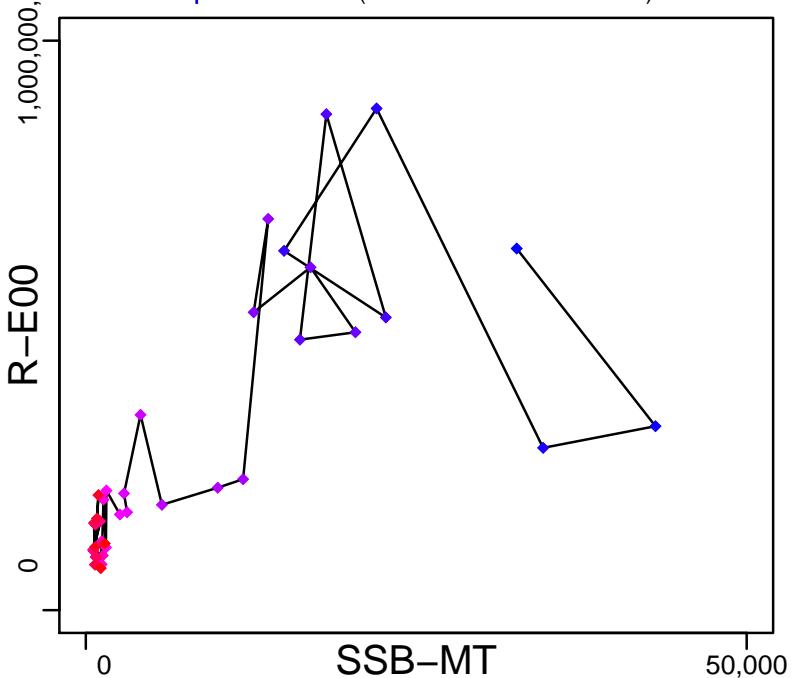
Kobe MSYpref (1980–2017–ICESIMP2018)



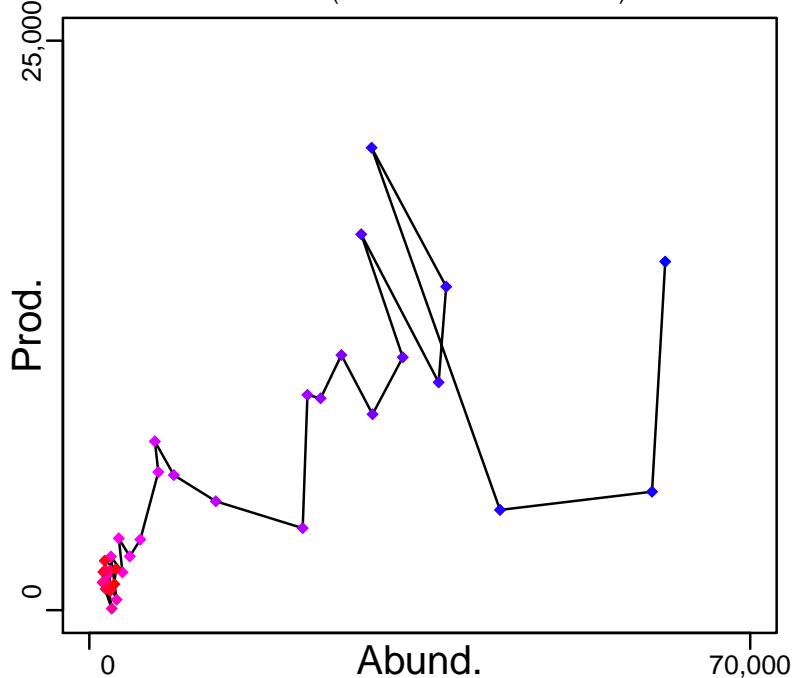
Kobe MGTpref (1980–2017–ICESIMP2018)



Spawner Recruit (1980–2017–ICESIMP2018)



Production (1980–2017–ICESIMP2018)

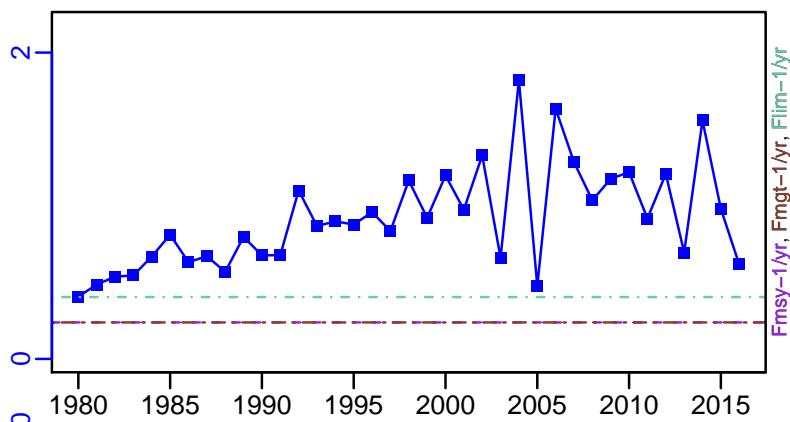
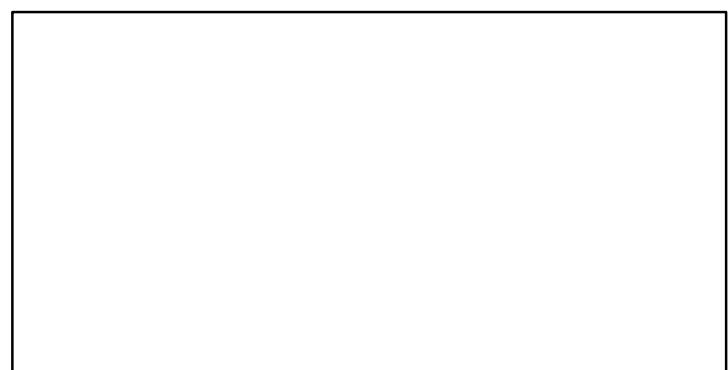
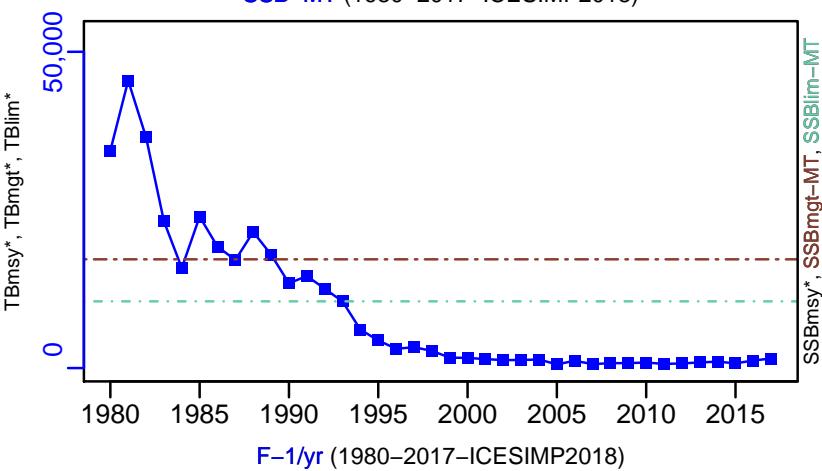
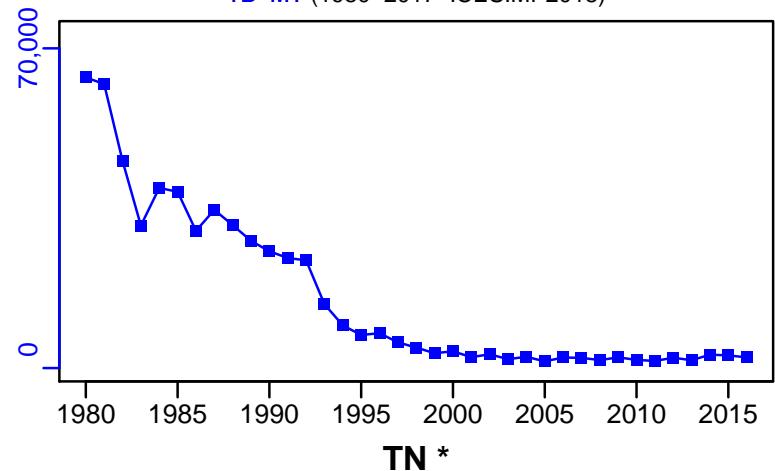


◆ Start Year ◆ End Year * No Data

Whiting Irish Sea [WHITVIIa]

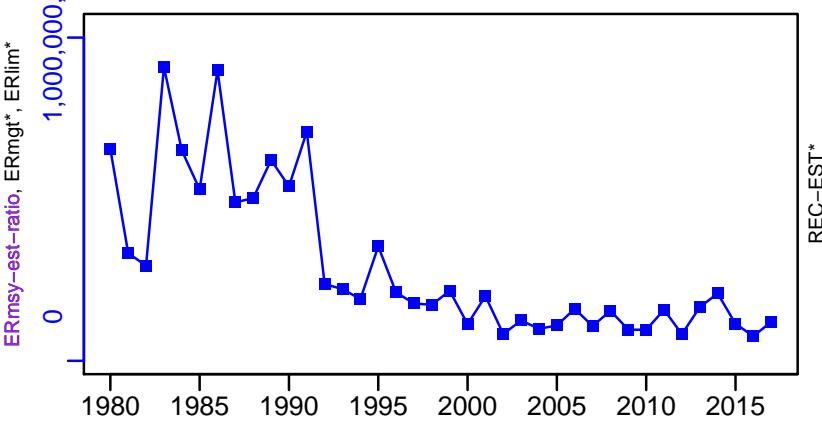
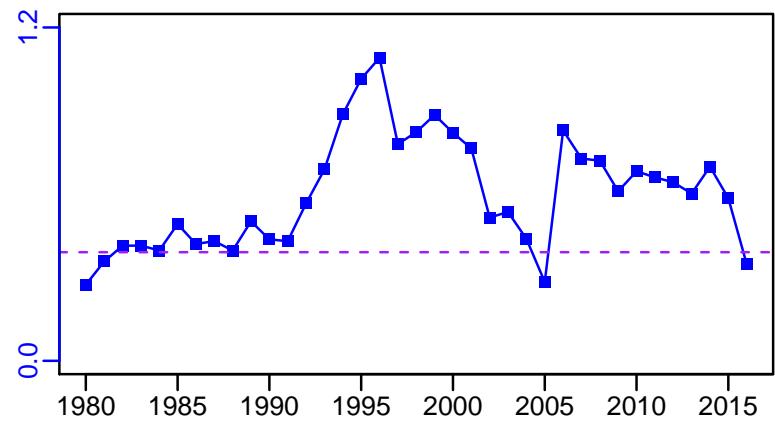
TB-MT (1980–2017–ICESIMP2018)

SSB-MT (1980–2017–ICESIMP2018)



ER-calc-ratio (1980–2017–ICESIMP2018)

R-E00 (1980–2017–ICESIMP2018)

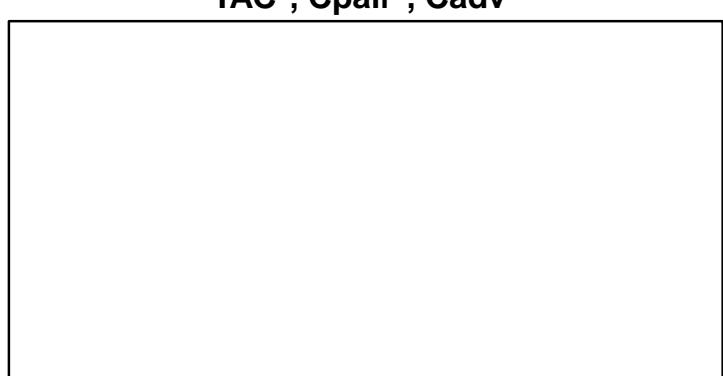
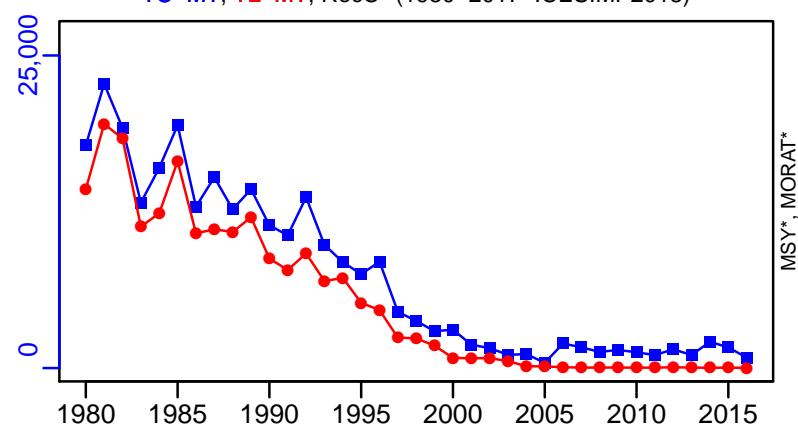


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Whiting Irish Sea [WHITVIIa]

TC-MT, TL-MT, RecC* (1980–2017–ICESIMP2018)

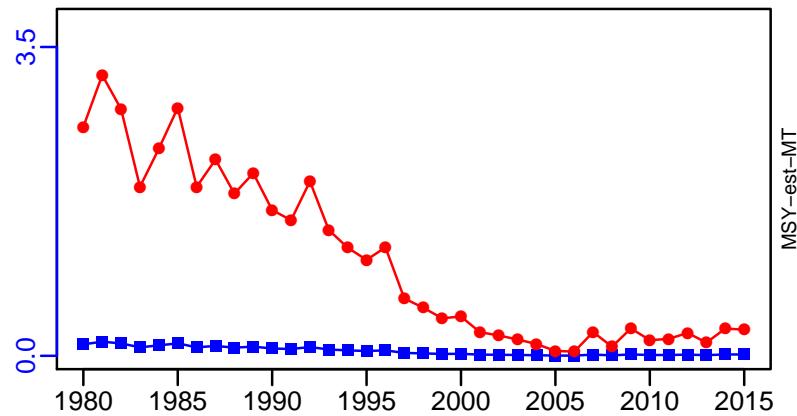
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1980–2016–ICESIMP2018)



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

Whiting Celtic Sea [WHITVIlek]

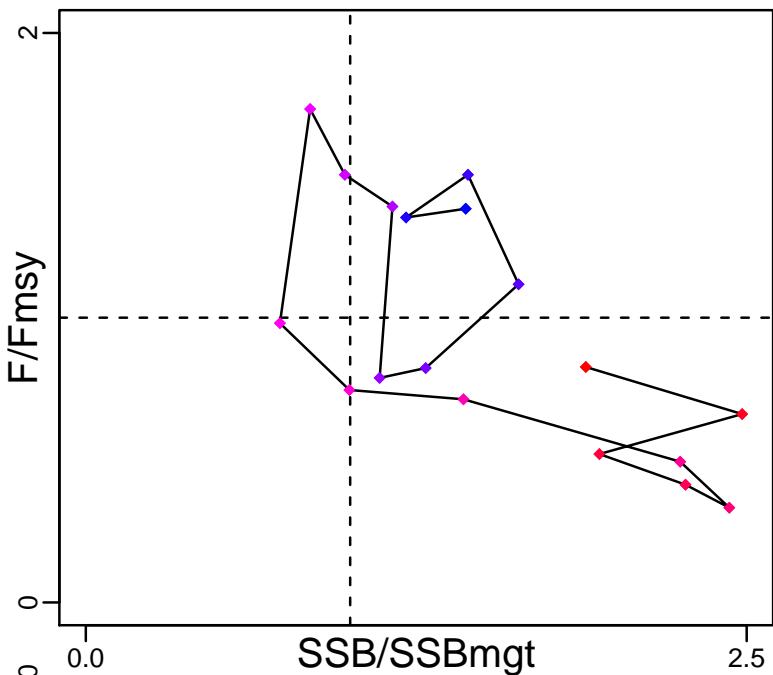
Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIlek-1999-2017-ICESIMP2018
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	56,736
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.52
ERmsy	ERmsy-est-ratio	2017	0.43
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	35,000
Fmgt	Fmgt-1/yr	2017	0.52
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	21,000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	25,000
Flim	Flim-1/yr	2017	1.12
ERlim	-	-	-

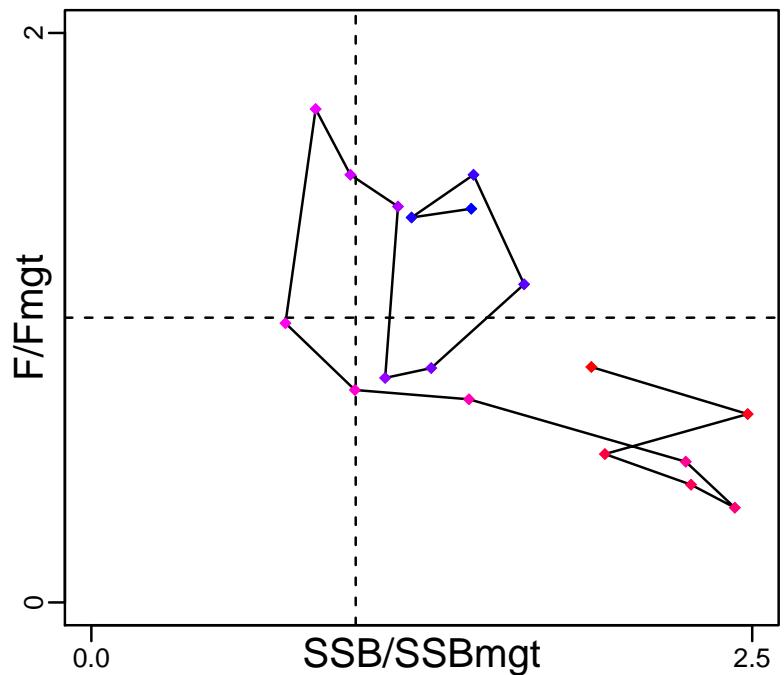
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2016	95,300	Both	-	
SSB	SSB-MT	2017	58,300	Both	-	
TN	-	-	-	-	-	
R	R-E00	2017	1.01×10^9	-	0	
F	F-1/yr	2017	0.43	-	2 to 5	
ER	ER-calc-ratio	2017	0.239	-	-	
TC	TC-MT	2017	22,500			
TL	TL-MT	2017	15,200			
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	1.29			
SSB/SSBmsy	-	-	-			
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.827			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.556			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.666			
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.827			
ER/ERmgt	-	-	-			

Whiting Celtic Sea [WHITVilek]

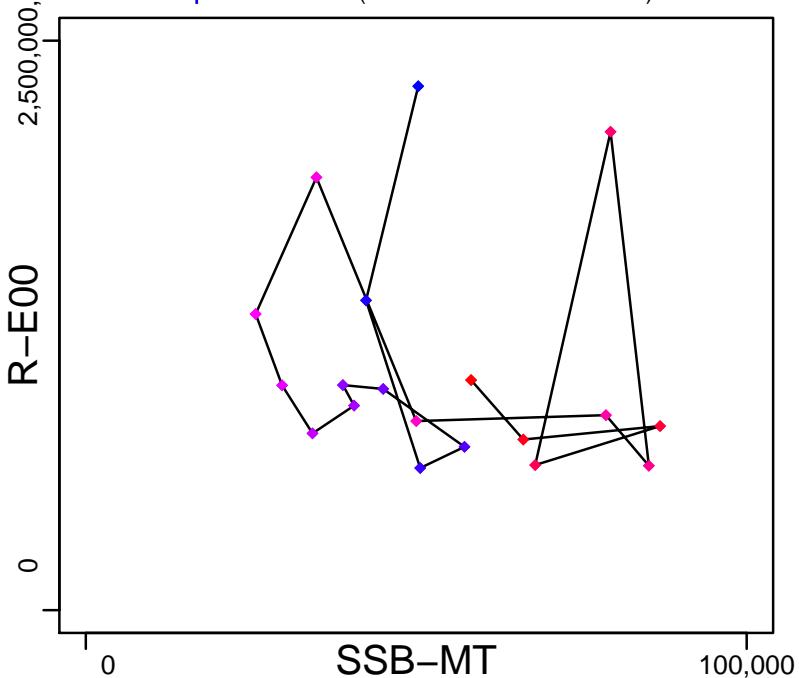
Kobe MSYpref (1999–2017–ICESIMP2018)



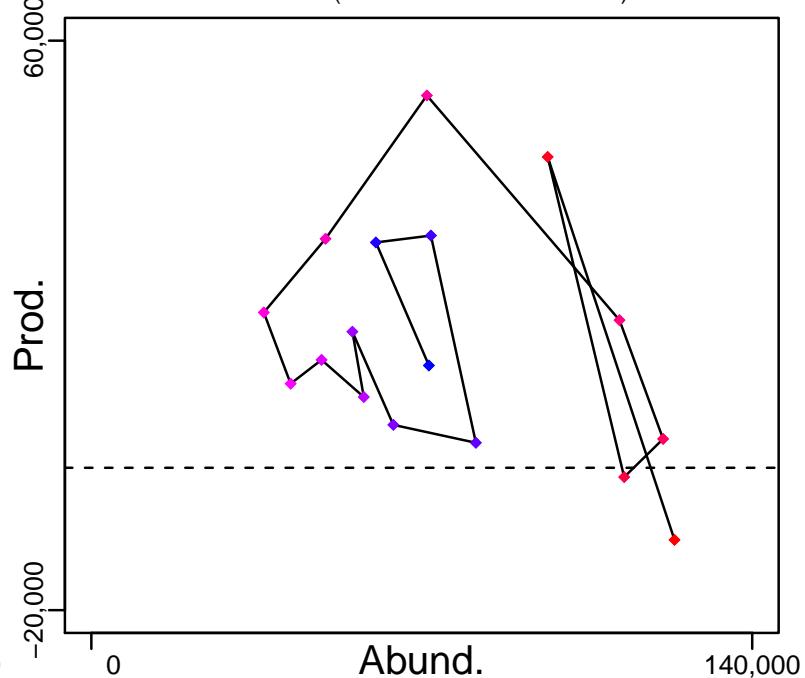
Kobe MGTpref (1999–2017–ICESIMP2018)



Spawner Recruit (1999–2017–ICESIMP2018)



Production (1999–2017–ICESIMP2018)

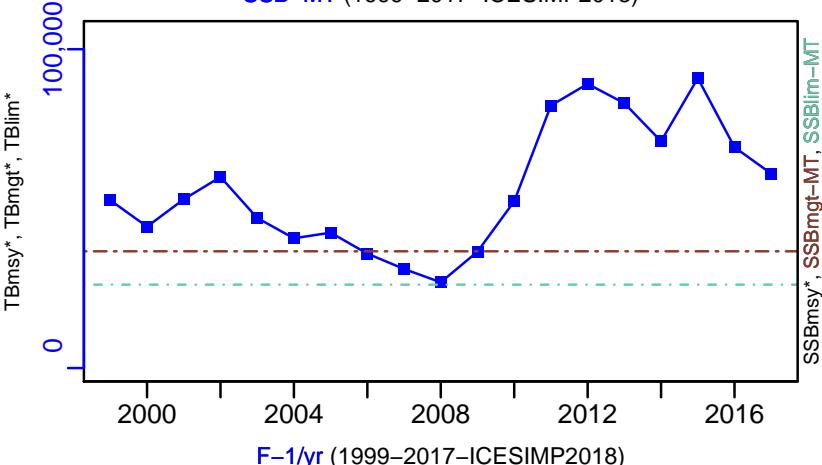
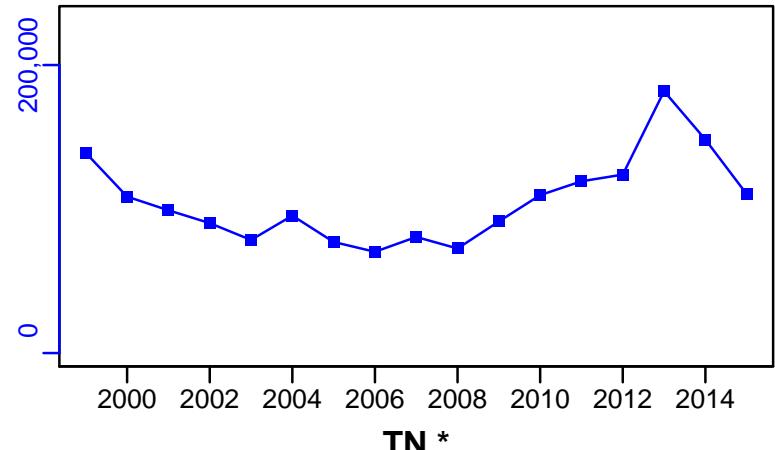


◆ Start Year ◆ End Year * No Data

Whiting Celtic Sea [WHITVilek]

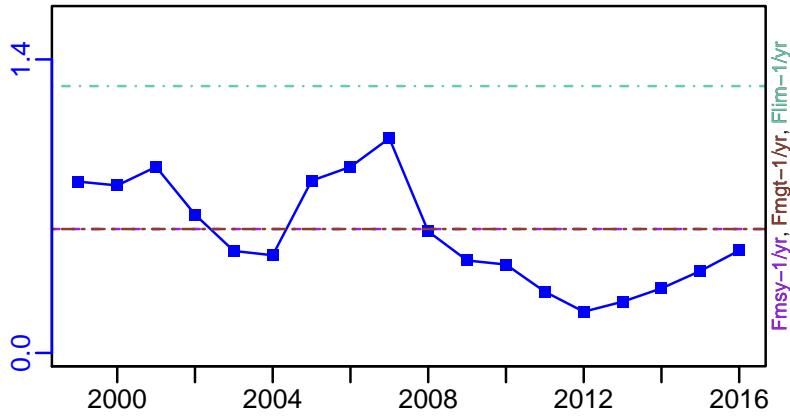
TB-MT (1999–2016–ICESIMP2016)

SSB-MT (1999–2017–ICESIMP2018)



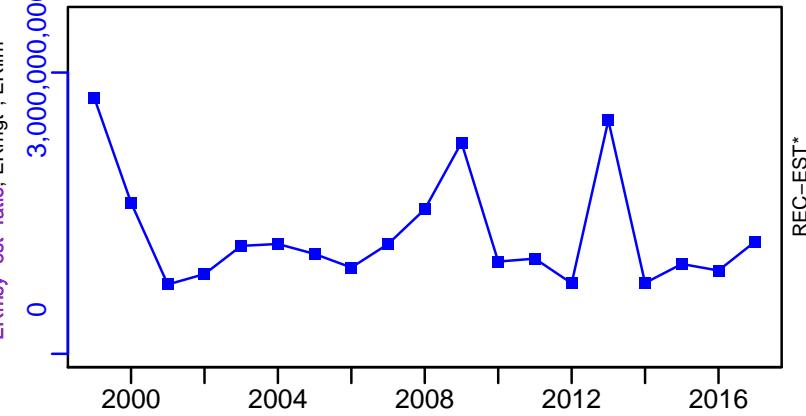
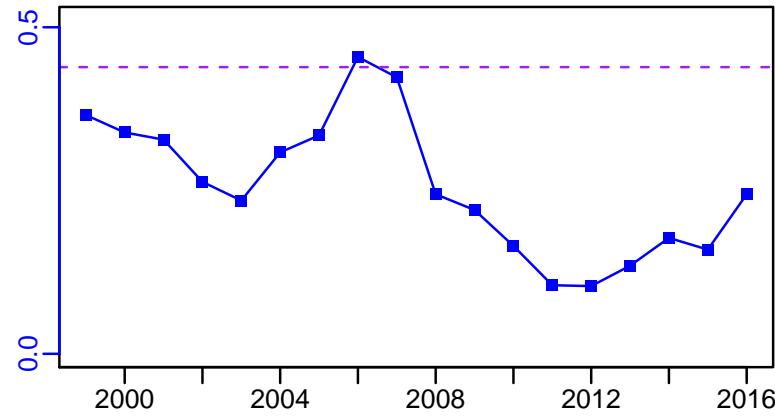
TN *

F-1/yr (1999–2017–ICESIMP2018)



ER-calc-ratio (1999–2017–ICESIMP2018)

R-E00 (1999–2017–ICESIMP2018)

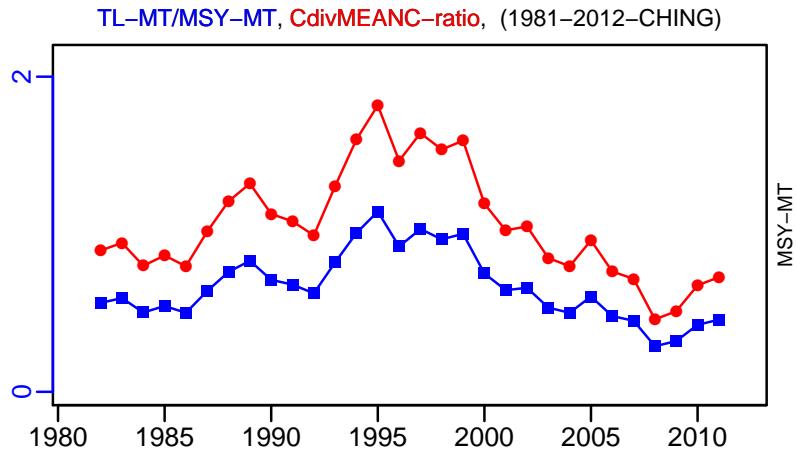
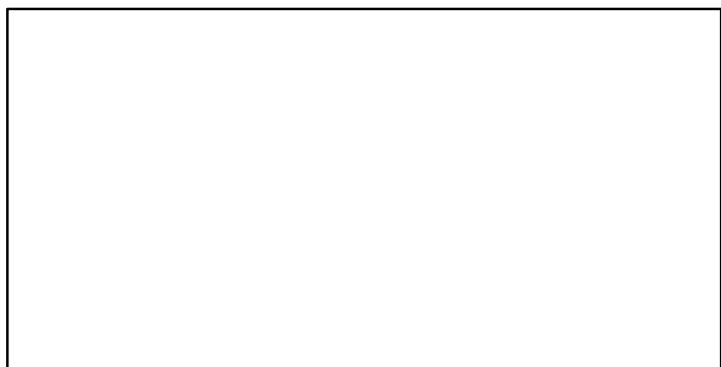
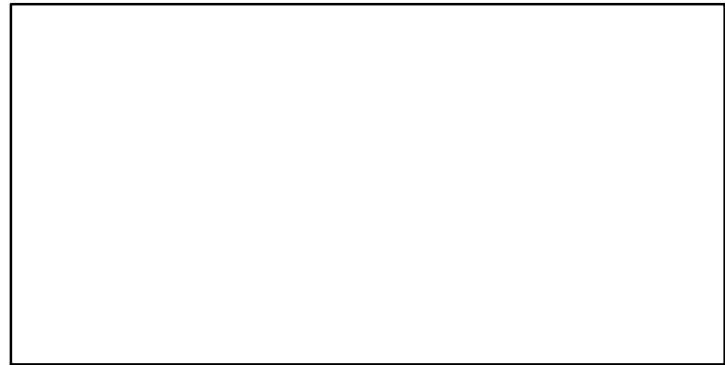
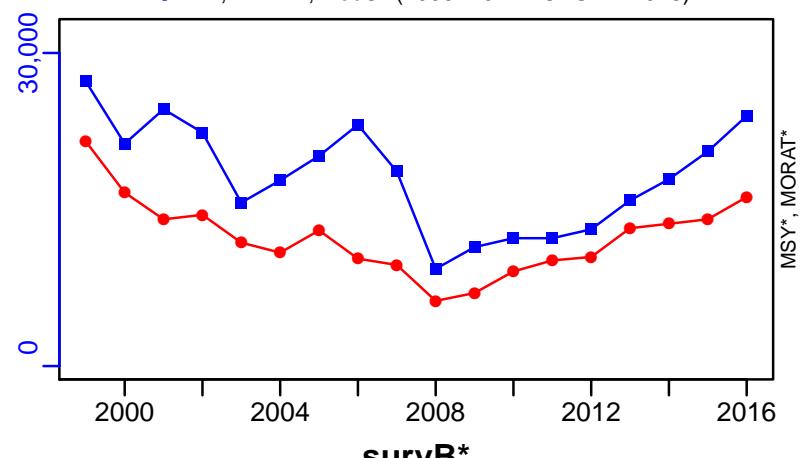


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Whiting Celtic Sea [WHITVilek]

TC-MT, TL-MT, RecC* (1999–2017–ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Whiting ICES 8-9a [WHITVIII-IXa]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGBIE-WHITVIII-IXa-1994-2016-ICESIMP2018
Area	ICES 8-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
Asmts in RAM	2015, 2016, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ♦ End Year * No Data

TB*



SSB*



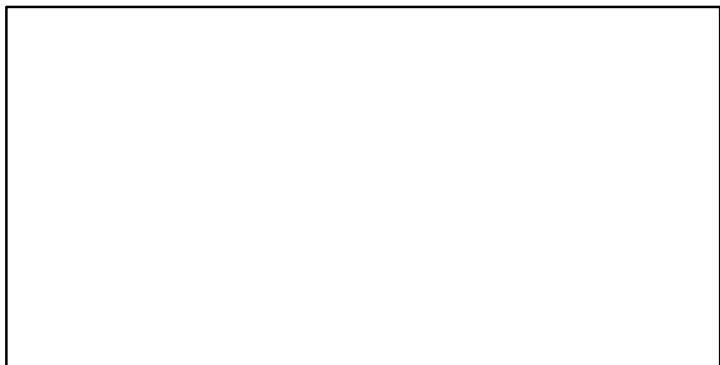
TN *



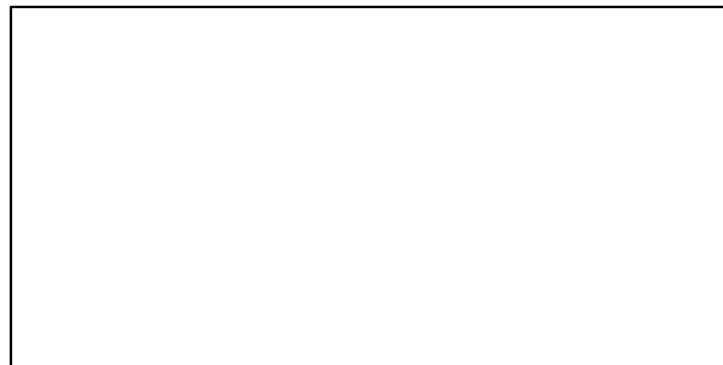
F*



ER*



Recruits*

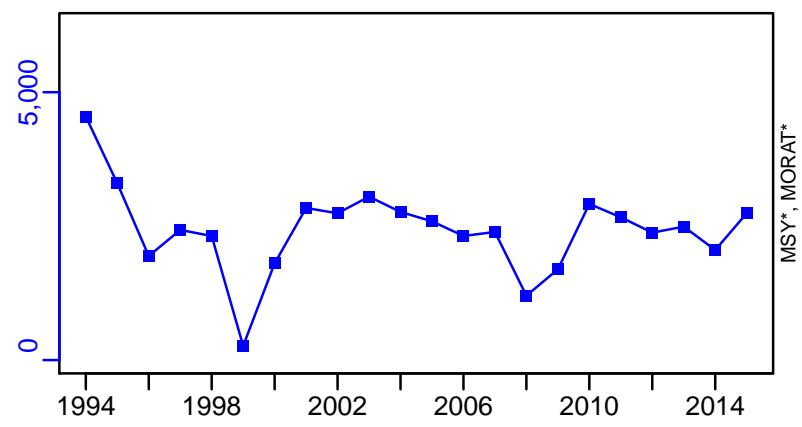


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Whiting ICES 8–9a [WHITVIII–IXa]

TL–MT, TC*, RecC* (1994–2016–ICESIMP2016)

TAC*, Cpair*, Cadv*



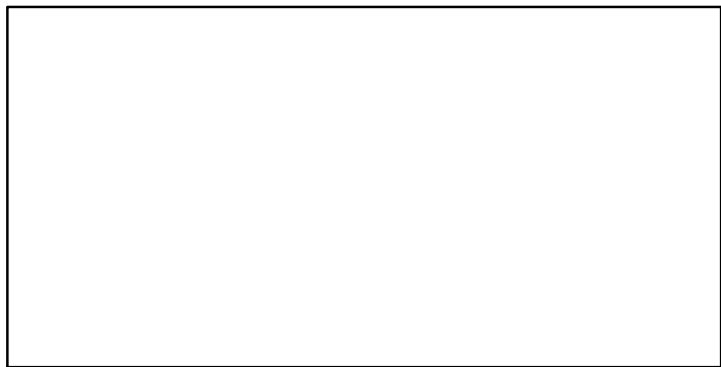
survB*



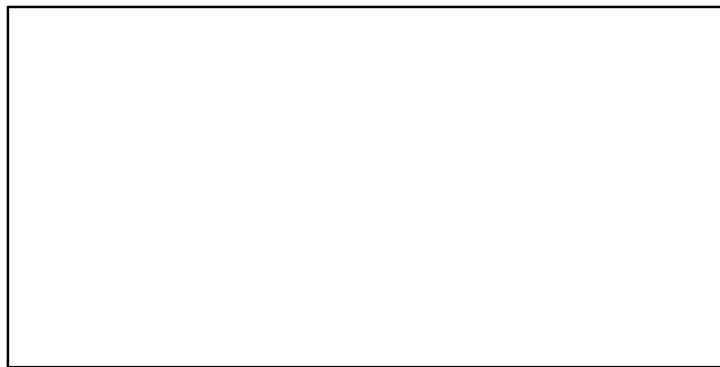
CPUE*



EFFORT*



CdivMSY*



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

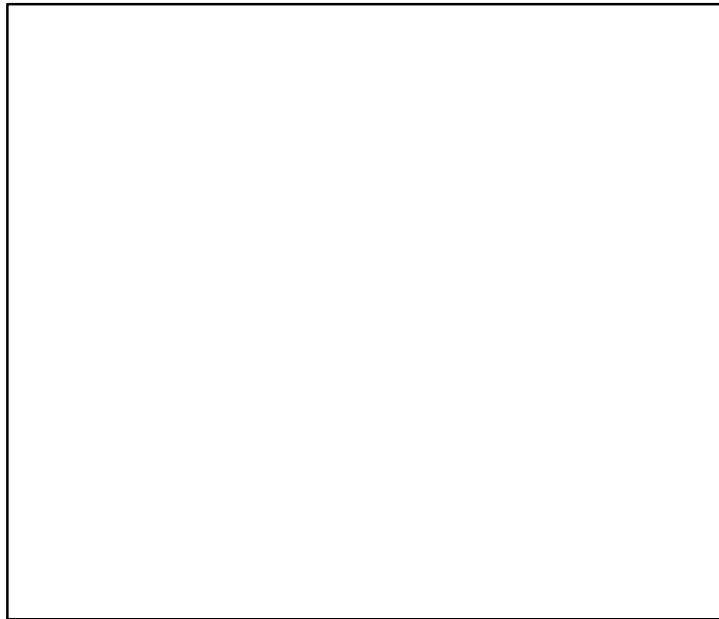
Witch flounder ICES 3a-4-7d [WITFLOUNIIIa-IV-VIId]

Metadata	
Scientific Name	Glyptocephalus cynoglossus
Current Assess ID	WGNSSK-WITFLOUNIIIa-IV-VIId-1975-2016-ICESIMP2018
Area	ICES 3a-4-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
Asmts in RAM	2015, 2016

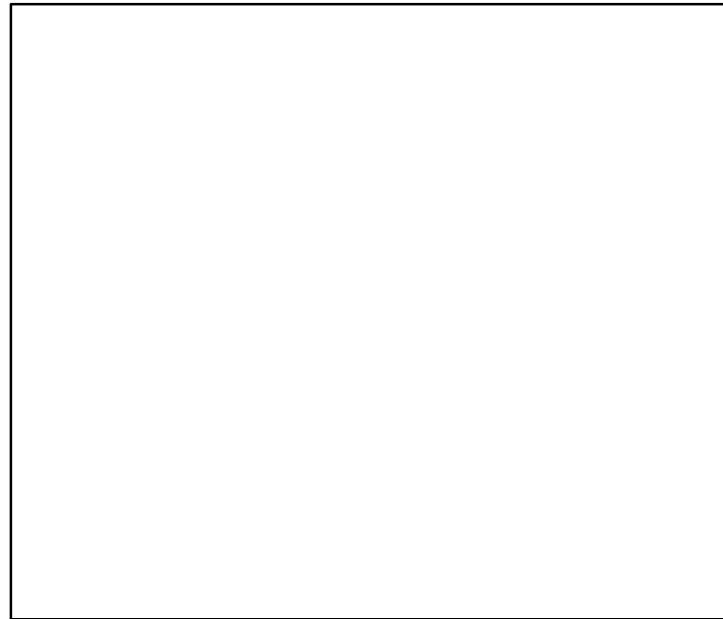
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-index	2015	0.189	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2740		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

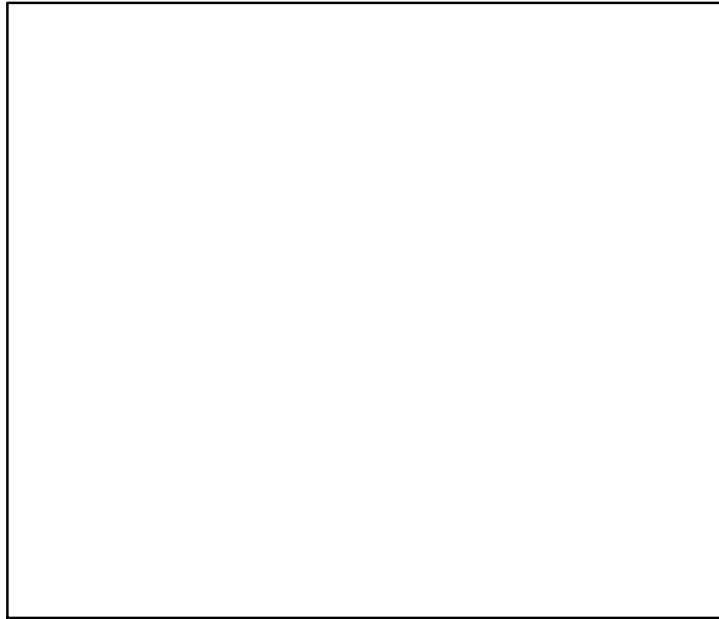
Kobe MSY*



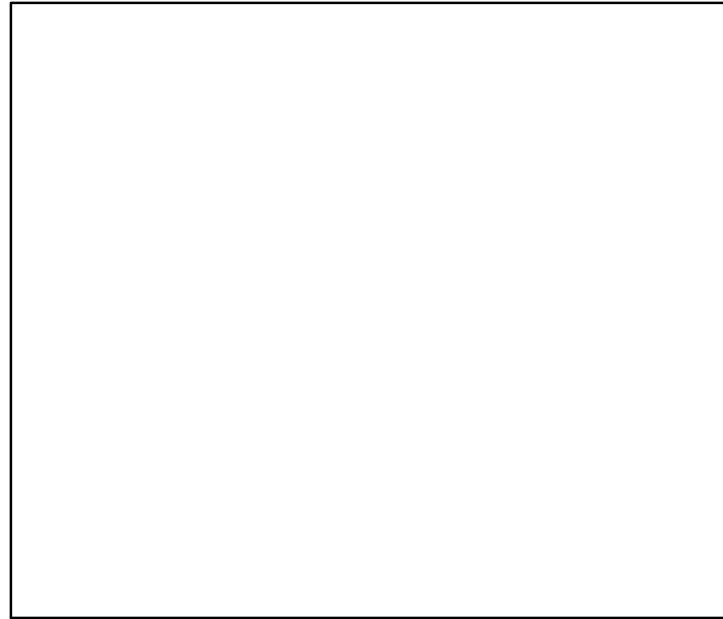
Kobe MGT*



Spawner Recruit*



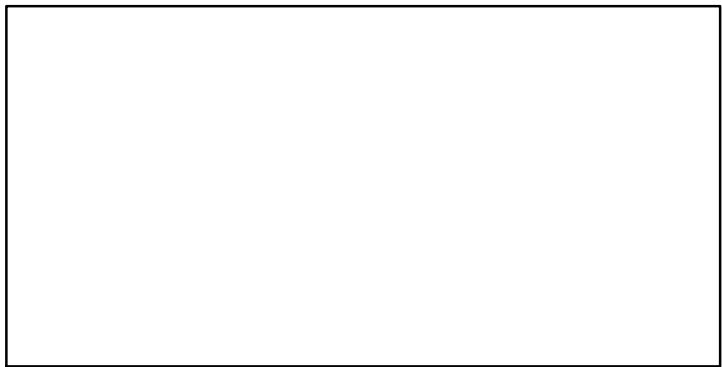
Production*



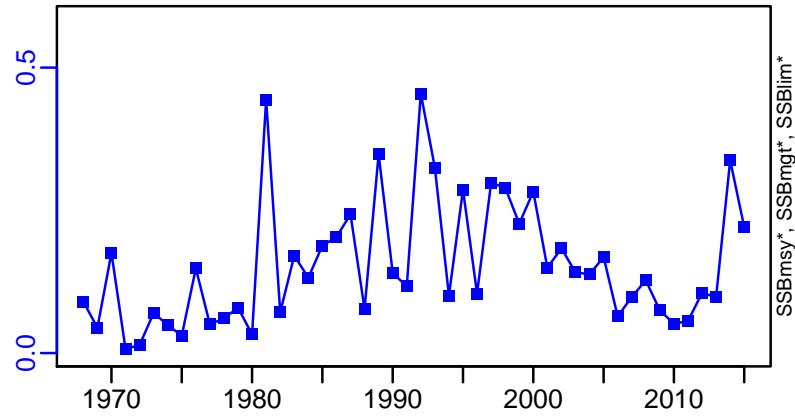
◆ Start Year ♦ End Year * No Data

Witch flounder ICES 3a–4–7d [WITFLOUNIIla–IV–VIIId]

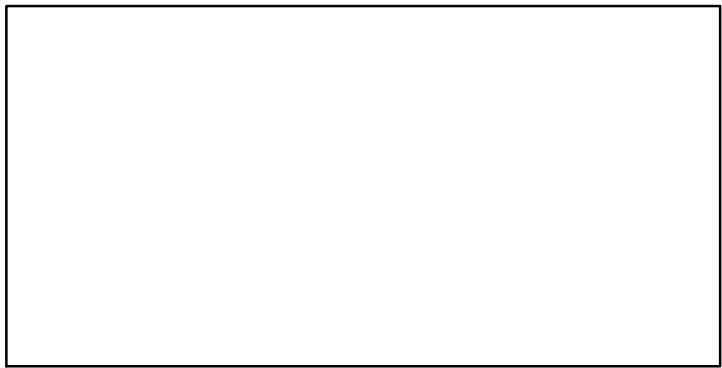
TB*



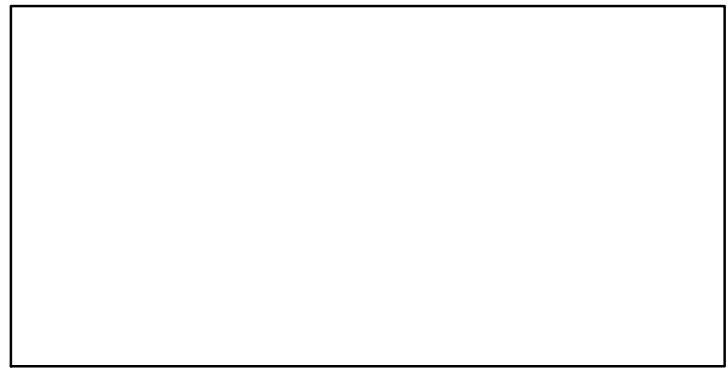
SSB-index (1968–2015–ICESIMP2018)



TN *



F*



ER*



Recruits*

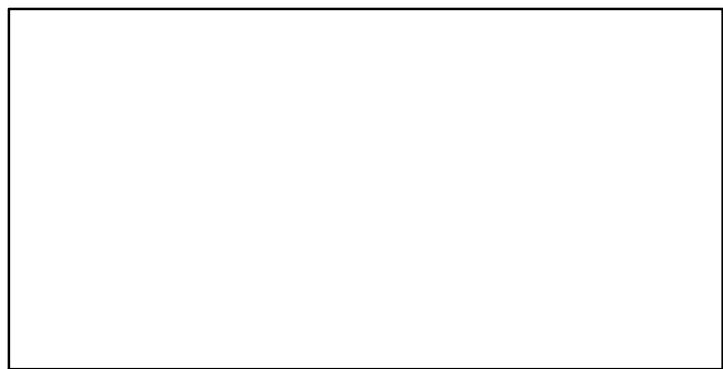
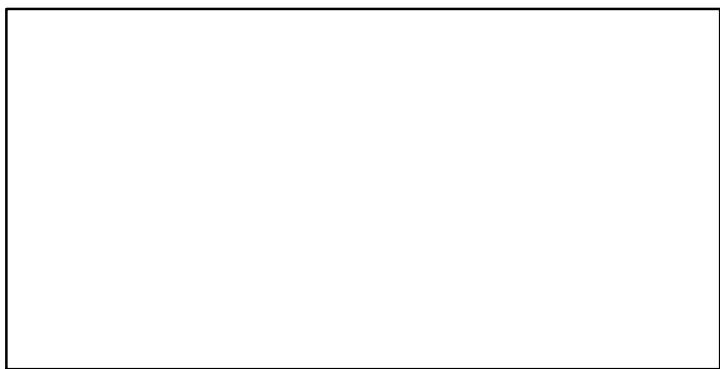
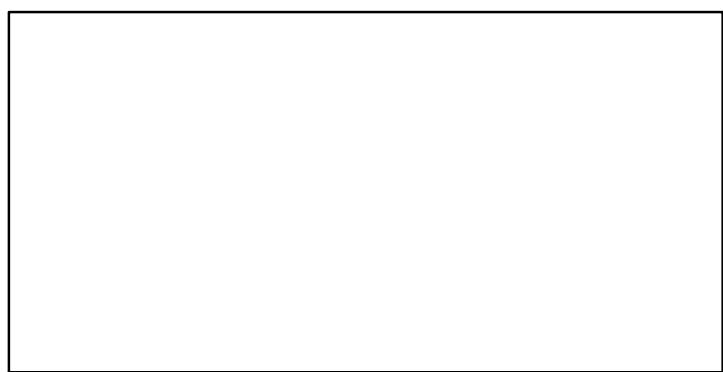
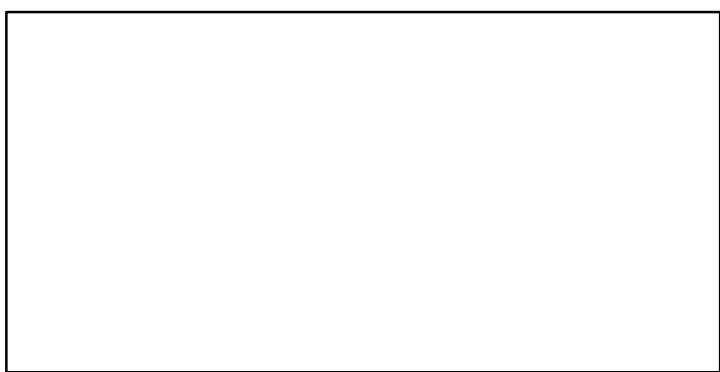
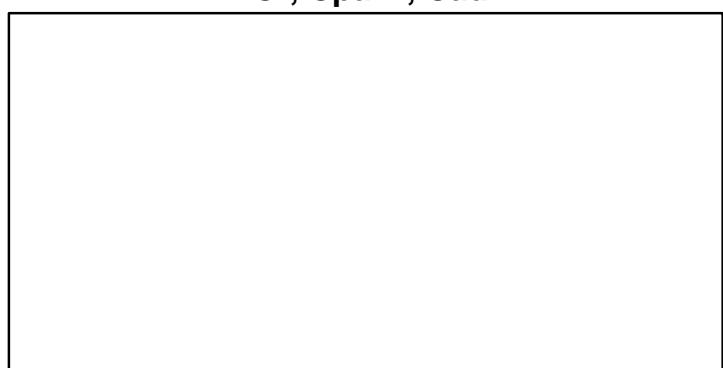
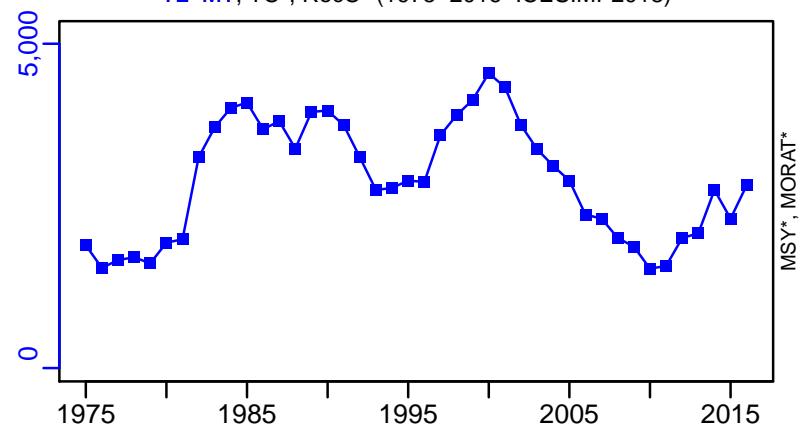


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Witch flounder ICES 3a–4–7d [WITFLOUNIIla–IV–VIIId]

TL–MT, TC*, RecC* (1975–2016–ICESIMP2018)

TAC*, Cpair*, Cadv*



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