European Union Stocks
v4.61 (Apr-02-2023)

Not present Present Preferred

Stock	Time Series Types B/Bmsy	U/Umsy	B/Bmgt	U/Umgt
1. ANCHIXa [Anchovy Portugese 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. ANGLSPPIIIa-IV-VI [Anglerfish spp ICES 3a-4-6]	TB SSB	ER F	TB SSB	ER F
4. ANGLVIIIc-IXa [Black bellied angler ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
5. ANGLVII-VIIIabd [Black bellied angler ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
6. ASHARNEATL [Angel shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
7. BERYXSPPNEATL [Beryx spp Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
8. BFLOUN27-2932 [Baltic flounder Subdivisions 27 and 29-32]	TB SSB	ER F	TB SSB	ER F
9. BJMACKXa2 [Blue jack mackerel Azores]	TB SSB	ER F	TB SSB	ER F
10. BKSFNEATL [Black scabbardfish Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
11. 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
12. BLINGVb-VI-VII [Blue ling ICES 5b-6-7]	TB SSB	ER F	TB SSB	ER F
13. BLRAYIVa-VI [Blonde ray ICES 4a-6]	TB SSB	ER F	TB SSB	ER F
14. BLRAYIVc-VIId [Blonde ray ICES 4c-7d]	TB SSB	ER F	TB SSB	ER F
15. BLRAYIXa [Blonde ray Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
16. BLRAYVIIafg [Blonde ray ICES 7afg]	TB SSB	ER F	TB SSB	ER F
17. BLRAYVIIe [Blonde ray Western English Channel]	TB SSB	ER F	TB SSB	ER F
18. BMDOGVIII-IXa [Blackmouth dogfish ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
19. BMDOGVI-VII [Blackmouth dogfish ICES 6-7]	TB SSB	ER F	TB SSB	ER F
20. BOARVI-VIII [Boarfish ICES 6-8]	TB SSB	ER F	TB SSB	ER F
21. BRILL2232 [Brill Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
22. BRILLIIIa-IV-VIIde [Brill ICES 3a-4-7de]	TB SSB	ER F	TB SSB	ER F
23. BSKSHARNEATL [Basking shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
24. BWHITNEA [Blue whiting Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
25. CKRAYIIIa-IV [Cuckoo ray ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
26. CKRAYIXa [Cuckoo ray Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
27. CKRAYVIIIc [Cuckoo ray Bay of Biscay -South]	TB SSB	ER F	TB SSB	ER F
28. CKRAYVI-VII [Cuckoo ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
29. CODBA2224 [Atlantic cod Western Baltic]	TB SSB	ER F	TB SSB	ER F
30. CODBA2532 [Atlantic cod Eastern Baltic]	TB SSB	ER F	TB SSB	ER F
31. CODIIIaW-IV-VIId [Atlantic cod ICES 3a(west)-4-7d]	TB SSB	ER F	TB SSB	ER F
32. CODIS [Atlantic cod Irish Sea]	TB SSB	ER F	TB SSB	ER F
33. CODKAT [Atlantic cod Kattegat]	TB SSB	ER F	TB SSB	ER F
34. CODVIa [Atlantic cod West of Scotland]	TB SSB	ER F	TB SSB	ER F
35. CODVIb [Atlantic cod Rockall Bank]	TB SSB	ER F	TB SSB	ER F
36. CODVIIek [Atlantic cod Celtic Sea]	TB SSB	ER F	TB SSB	ER F
37. CUSKNEATL [Tusk Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
38. CUSKVa-XIV [Tusk ICES 5a-14]	TB SSB	ER F	TB SSB	ER F
39. CUSKVIb [Tusk Rockall Bank]	TB SSB	ER F	TB SSB	ER F

40. CUSKXII [Tusk North of Azores]	TB SSB	ER F	TB SSB	ER F
41. DAB2232 [Dab Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
42. DABIIIa-IV [Dab ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
43. EBASSIVbc-VII [European seabass ICES 4bc-7]	TB SSB	ER F	TB SSB	ER F
44. EBASSVIa-VIIb-j [European seabass ICES 6a-7b-j]	TB SSB	ER F	TB SSB	ER F
45. EBASSVIIIab [European seabass ICES 8ab]	TB SSB	ER F	TB SSB	ER F
46. EBASSVIIIc-IXa [European seabass ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
47. EFLOUN2223 [European flounder Subdivisions 22-23]	TB SSB	ER F	TB SSB	ER F
48. EFLOUN2425 [European flounder Subdivisions 24-25]	TB SSB	ER F	TB SSB	ER F
49. EFLOUN26-28 [European flounder Subdivisions 26-28]	TB SSB	ER F	TB SSB	ER F
50. EFLOUN27-2932 [European flounder Subdivisions 27 and 29-32]	TB SSB	ER F	TB SSB	ER F
51. EFLOUNIIIa-IV [European flounder ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
52. EPOLLIV-IIIa [European pollack ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
53. EPOLLVIII-IXa [European pollack ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
54. FMEG8c9a [Fourspotted megrim ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
55. FMEGVIIb-k_VIIIabd [Fourspotted megrim ICES 7b-k_8abd]	TB SSB	ER F	TB SSB	ER F
56. GFORKNEATL [Greater forkbeard Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
57. GGURNIIIa-IV-VIId [Grey gurnard ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
58. GHALV-VI-XII-XIV [Greenland halibut ICES 5-6-12-14]	TB SSB	ER F	TB SSB	ER F
59. GOLDREDV-VI-XII-XIV [Golden redfish ICES 5-6-12-14]	TB SSB	ER F	TB SSB	ER F
60. GSSMELTI-II-IIIa-IV [Greater silver smelt ICES 1-2-3a-4]	TB SSB	ER F	TB SSB	ER F
61. GSSMELTVIb-VII-VIII-IX-X-XII [Greater silver smelt ICES 6b-7-8-9-10-12]	TB SSB	ER F	TB SSB	ER F
62. HADIS [Haddock Irish Sea]	TB SSB	ER F	TB SSB	ER F
63. HADNS-IIIa-VIa [Haddock ICES 3a-4-6a]	TB SSB	ER F	TB SSB	ER F
64. HADROCK [Haddock Rockall Bank]	TB SSB	ER F	TB SSB	ER F
65. HADVIIb-k [Haddock ICES 7b-k]	TB SSB	ER F	TB SSB	ER F
66. HAKENRTN [Hake ICES 3a-4-6-7-8abd]	TB SSB	ER F	TB SSB	ER F
67. HAKESOTH [Hake ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
68. HERR2224IIIa [Herring ICES 22-24-3a]	TB SSB	ER F	TB SSB	ER F
69. HERR2529-32 [Herring Subdivisions 25-29 and 32]	TB SSB	ER F	TB SSB	ER F
70. HERR30-31 [Herring Subdivisions 30-31]	TB SSB	ER F	TB SSB	ER F
71. HERRNIRS [Herring Irish Sea]	TB SSB	ER F	TB SSB	ER F
72. HERRNS-IIIa-VIId [Herring ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
73. HERRRIGA [Herring Gulf of Riga East of Gotland]	TB SSB	ER F	TB SSB	ER F
74. HERRSIRS [Herring ICES 7a-g-h-j-k]	TB SSB	ER F	TB SSB	ER F
75. HERRVIaVIIbc [Herring ICES 6a7bc]	TB SSB	ER F	TB SSB	ER F
76. HMACKIIa-IVa-Vb-VIa-VII-VIII [Horse mackerel ICES 2a-4a-5b-6a-7-8]	TB SSB	ER F	TB SSB	ER F
77. HMACKIIIa-IVbc-VIId [Horse mackerel ICES 3a-4bc-7d]	TB SSB	ER F	TB SSB	ER F
78. HMACKIXa [Horse mackerel Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
79. KFSHARNEATL [Kitefin shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
80. LGSHARNEATL [Leafscale gulper shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
81. LINGNEATL [Ling Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
82. LSDOGIIIa-IV-VIId [Lesser spotted dogfish ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
83. LSDOGVIIIabd [Lesser spotted dogfish ICES 8abd]	TB SSB	ER F	TB SSB	ER F
84. LSDOGVIIIc-IXa [Lesser spotted dogfish ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
85. LSDOGVI-VIIabcefghij [Lesser spotted dogfish ICES 6-7abcefghij]	TB SSB	ER F	TB SSB	ER F
86. LSOLEIIIa-IV-VIId [Lemon sole ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F

87. MACKNEICES [Mackerel ICES Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
88. MEG8c9a [Megrim ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
89. MEGSPPIVa-VIa [Megrim spp ICES 4a-6a]	TB SSB	ER F	TB SSB	ER F
90. MEGSPPVIb [Megrim spp Rockall Bank]	TB SSB	ER F	TB SSB	ER F
91. MEGVII-VIIIabd [Megrim ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
92. NEPHFU10 [Norway lobster Noup (FU 10)]	TB SSB	ER F	TB SSB	ER F
93. NEPHFU11 [Norway lobster North Minch (FU 11)]	TB SSB	ER F	TB SSB	ER F
94. NEPHFU12 [Norway lobster South Minch (FU 12)]	TB SSB	ER F	TB SSB	ER F
95. NEPHFU13 [Norway lobster Firth of Clyde and Sound of Jura (FU 13)]	TB SSB	ER F	TB SSB	ER F
96. NEPHFU14 [Norway lobster Irish Sea East (FU 14)]	TB SSB	ER F	TB SSB	ER F
97. NEPHFU15 [Norway lobster Irish Sea West (FU 15)]	TB SSB	ER F	TB SSB	ER F
98. NEPHFU16 [Norway lobster Porcupine Bank (FU 16)]	TB SSB	ER F	TB SSB	ER F
99. NEPHFU17 [Norway lobster Aran Grounds (FU 17)]	TB SSB	ER F	TB SSB	ER F
100. NEPHFU19 [Norway lobster South East and West of IRL (FU 19)]	TB SSB	ER F	TB SSB	ER F
101. NEPHFU2021 [Norway lobster Labadie, Jones and Cockburn (FU 20-21)]	TB SSB	ER F	TB SSB	ER F
102. NEPHFU22 [Norway lobster Smalls (FU 22)]	TB SSB	ER F	TB SSB	ER F
103. NEPHFU25 [Norway lobster North Galicia (FU 25)]	TB SSB	ER F	TB SSB	ER F
104. NEPHFU2627 [Norway lobster West Galicia and North Portugal (FU 26-27)]	TB SSB	ER F	TB SSB	ER F
105. NEPHFU2829 [Norway lobster South-West and South Portugal (FU 28-29)]	TB SSB	ER F	TB SSB	ER F
106. NEPHFU30 [Norway lobster Gulf of Cadiz (FU 30)]	TB SSB	ER F	TB SSB	ER F
107. NEPHFU31 [Norway lobster Cantabrian Sea (FU 31)]	TB SSB	ER F	TB SSB	ER F
108. NEPHFU32 [Norway lobster Norwegian Deeps (FU 32)]	TB SSB	ER F	TB SSB	ER F
109. NEPHFU33 [Norway lobster Off Horn Reef (FU 33)]	TB SSB	ER F	TB SSB	ER F
110. NEPHFU34 [Norway lobster Devils Hole (FU 34)]	TB SSB	ER F	TB SSB	ER F
111. NEPHFU3-4 [Norway lobster Skagerak Kattegat (FU 3-4)]	TB SSB	ER F	TB SSB	ER F
112. NEPHFU5 [Norway lobster Botney Cut - Silver Pit (FU 5)]	TB SSB	ER F	TB SSB	ER F
113. NEPHFU6 [Norway lobster Farn Deeps (FU 6)]	TB SSB	ER F	TB SSB	ER F
114. NEPHFU7 [Norway lobster Fladen Ground (FU 7)]	TB SSB	ER F	TB SSB	ER F
115. NEPHFU8 [Norway lobster Firth of Forth (FU 8)]	TB SSB	ER F	TB SSB	ER F
116. NEPHFU9 [Norway lobster Moray Firth (FU 9)]	TB SSB	ER F	TB SSB	ER F
117. NEPHIV [Norway lobster North Sea]	TB SSB	ER F	TB SSB	ER F
118. NEPHVIa [Norway lobster West of Scotland]	TB SSB	ER F	TB SSB	ER F
119. NEPHVII [Norway lobster ICES 7]	TB SSB	ER F	TB SSB	ER F
120. NEPHVIIIab [Norway lobster ICES 8ab]	TB SSB	ER F	TB SSB	ER F
121. NPOUTIIIa-IV [Norway pout ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
122. NPOUTVIa [Norway pout West of Scotland]	TB SSB	ER F	TB SSB	ER F
123. OROUGHYNEATL [Orange roughy Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
124. PANDALIIIaW-IVaE [Northern shrimp ICES 3a(west)-4a(east)]	TB SSB	ER F	TB SSB	ER F
125. PANDALIVa [Northern shrimp Northern North Sea]	TB SSB	ER F	TB SSB	ER F
126. PLAIC2123 [European plaice Subdivisions 21-23]	TB SSB	ER F	TB SSB	ER F
127. PLAIC2432 [European plaice Subdivisions 24-32]	TB SSB	ER F	TB SSB	ER F
128. PLAIC7d [European plaice Eastern English Channel]	TB SSB	ER F	TB SSB	ER F
129. PLAICCELT [European plaice Celtic Sea]	TB SSB	ER F	TB SSB	ER F
130. PLAICECHW [European plaice Western English Channel]	TB SSB	ER F	TB SSB	ER F
131. PLAICIS [European plaice Irish Sea]	TB SSB	ER F	TB SSB	ER F

132. PLAICNS [European plaice North Sea]	TB SSB	ER F	TB SSB	ER F
133. PLAICVIIbc [European plaice ICES 7bc]	TB SSB	ER F	TB SSB	ER F
134. PLAICVIIh-k [European plaice ICES 7h-k]	TB SSB	ER F	TB SSB	ER F
135. PLAICVIII-IXa [European plaice ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
136. POLLNS-VI-IIIa [Saithe ICES 3a-4-6]	TB SSB	ER F	TB SSB	ER F
137. PORSHARNEATL [Porbeagle shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
138. RBRMIX [Red seabream ICES 9]	TB SSB	ER F	TB SSB	ER F
139. RBRMVI-VII-VIII [Red seabream ICES 6-7-8]	TB SSB	ER F	TB SSB	ER F
140. RBRMX [Red seabream Azores Grounds]	TB SSB	ER F	TB SSB	ER F
141. REDDEEPXIVb [Beaked redfish Southeast Greenland]	TB SSB	ER F	TB SSB	ER F
142. RGURNNEATL [Red gurnard Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
143. RHGRENNEATL [Roughhead grenadier Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
144. 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
145. RNGENMATLR [Roundnose grenadier Mid-Atlantic Ridge]	TB SSB	ER F	TB SSB	ER F
146. RNGENVb-VI-VII-XIIb [Roundnose grenadier ICES 5b-6-7-12b]	TB SSB	ER F	TB SSB	ER F
147. RNGRENIIIa [Roundnose grenadier Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
148. SARDPVIIIc-IXa [Sardine ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
149. SARDVII [Sardine ICES 7]	TB SSB	ER F	TB SSB	ER F
150. SARDVIIIabd [Sardine ICES 8abd]	TB SSB	ER F	TB SSB	ER F
151. SDRAYVI-VII [Sandy ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
152. SEELNSSA1 [Sand eel Sandeel Area 1]	TB SSB	ER F	TB SSB	ER F
153. SEELNSSA2 [Sand eel Sandeel Area 2]	TB SSB	ER F	TB SSB	ER F
154. SEELNSSA3 [Sand eel Sandeel Area 3]	TB SSB	ER F	TB SSB	ER F
155. SEELNSSA4 [Sand eel Sandeel Area 4]	TB SSB	ER F	TB SSB	ER F
156. SEELNSSA5 [Sand eel Sandeel Area 5]	TB SSB	ER F	TB SSB	ER F
157. SEELNSSA6 [Sand eel Sandeel Area 6]	TB SSB	ER F	TB SSB	ER F
158. SEELNSSA7 [Sand eel Sandeel Area 7]	TB SSB	ER F	TB SSB	ER F
159. SEELVIa [Sand eel West of Scotland]	TB SSB	ER F	TB SSB	ER F
160. SERAYVIIde [Smalleyed ray ICES 7de]	TB SSB	ER F	TB SSB	ER F
161. SERAYVIIf-g [Smalleyed ray Celtic Sea]	TB SSB	ER F	TB SSB	ER F
162. SGRAYVI-VII [Shagreen ray ICES 6-7]	TB SSB	ER F	TB SSB	ER F
163. SHSPPNEATL [Smooth hound Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
164. SOLECS [Common sole Celtic Sea]	TB SSB	ER F	TB SSB	ER F
165. SOLEIIIa-2224 [Common sole ICES 22-24-3a]	TB SSB	ER F	TB SSB	ER F
166. SOLEIS [Common sole Irish Sea]	TB SSB	ER F	TB SSB	ER F
167. SOLENS [Common sole North Sea]	TB SSB	ER F	TB SSB	ER F
168. SOLEVIIbc [Common sole ICES 7bc]	TB SSB	ER F	TB SSB	ER F
169. SOLEVIId [Common sole Eastern English Channel]	TB SSB	ER F	TB SSB	ER F
170. SOLEVIIe [Common sole Western English Channel]	TB SSB	ER F	TB SSB	ER F
171. SOLEVIIh-k [Common sole ICES 7h-k]	TB SSB	ER F	TB SSB	ER F
172. SOLEVIIIab [Common sole ICES 8ab]	TB SSB	ER F	TB SSB	ER F
173. SOLEVIIIc-IXa [Common sole ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
174. SPRAT22-32 [Sprat Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
175. SPRATIIIa-IV [Sprat ICES 3a-4]	TB SSB	ER F	TB SSB	ER F
176. SPRATVIIde [Sprat ICES 7de]	TB SSB	ER F	TB SSB	ER F
177. SPRATVI-VIIabcfghijk [Sprat ICES 6-7abcfghijk]	TB SSB	ER F	TB SSB	ER F
178. SPRAYIIIa-IV-VIId [Spotted ray ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
179. SPRAYIXa [Spotted ray Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F

180. SPRAYVIIaefgh [Spotted ray ICES 7aefgh]	TB SSB	ER F	TB SSB	ER F
181. SPRAYVIII [Spotted ray Bay of Biscay]	TB SSB	ER F	TB SSB	ER F
182. SPRAYVI-VIIbj [Spotted ray ICES 6-7bj]	TB SSB	ER F	TB SSB	ER F
183. SPURDNEATL [Spurdog Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
184. STRAYII-IIIa-IV [Starry ray ICES 2-3a-4]	TB SSB	ER F	TB SSB	ER F
185. STRMULLIIIa-IV-VIId [Striped red mullet ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
186. STRMULLVI-VIIabcefghijk-VIII-IXa [Striped red mullet ICES 6-7abcefghijk-8-9a]	TB SSB	ER F	TB SSB	ER F
187. STROUT22-32 [Sea trout Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
188. TBSKAIIIa-IV-VIId [Thornback skate ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F
189. TBSKAIXa [Thornback skate Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
190. TBSKAVI [Thornback skate ICES 6]	TB SSB	ER F	TB SSB	ER F
191. TBSKAVIIafg [Thornback skate ICES 7afg]	TB SSB	ER F	TB SSB	ER F
192. TBSKAVIIe [Thornback skate Western English Channel]	TB SSB	ER F	TB SSB	ER F
193. TBSKAVIII [Thornback skate Bay of Biscay]	TB SSB	ER F	TB SSB	ER F
194. TPSHARNEATL [Tope shark Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
195. TUR2232 [Turbot Baltic Areas 22-32]	TB SSB	ER F	TB SSB	ER F
196. TURIIIa [Turbot Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
197. TURIV [Turbot North Sea]	TB SSB	ER F	TB SSB	ER F
198. URAYVIIde [Undulate ray ICES 7de]	TB SSB	ER F	TB SSB	ER F
199. URAYVIIIab [Undulate ray ICES 8ab]	TB SSB	ER F	TB SSB	ER F
200. WANGLVIIIc-IXa [White anglerfish ICES 8c-9a]	TB SSB	ER F	TB SSB	ER F
201. WANGLVII-VIIIabd [White anglerfish ICES 7-8abd]	TB SSB	ER F	TB SSB	ER F
202. WHITIIIa [Whiting Kattegat and Skagerrak]	TB SSB	ER F	TB SSB	ER F
203. WHITNS-VIId [Whiting ICES 4-7d]	TB SSB	ER F	TB SSB	ER F
204. WHITVIa [Whiting West of Scotland]	TB SSB	ER F	TB SSB	ER F
205. WHITVIb [Whiting Rockall Bank]	TB SSB	ER F	TB SSB	ER F
206. WHITVIIa [Whiting Irish Sea]	TB SSB	ER F	TB SSB	ER F
207. WHITVIIbce-k [Whiting Celtic Sea]	TB SSB	ER F	TB SSB	ER F
208. WHITVIII-IXa [Whiting ICES 8-9a]	TB SSB	ER F	TB SSB	ER F
209. WITFLOUNIIIa-IV-VIId [Witch flounder ICES 3a-4-7d]	TB SSB	ER F	TB SSB	ER F

Anchovy Portugese Waters -East [ANCHIXa]

Metadata	
Scientific Name	Engraulis encrasicolus
Current Assess ID	WGHANSA-ANCHIXa-1989-2021-ICESIMP2021-2
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	2016, 2016, 2018, 2019, 2020, 2021, 2017

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	0.52
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	0.32
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2021	0.696	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2021	1.116	-	-
ER	ER-ratio	2016	0.253	-	-
TC	TC-MT	2019	$15{,}799$		
TL	TL-MT	2019	$15{,}770$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.338		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Anchovy Portugese Waters −East [ANCHIXa]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Anchovy Portugese Waters −East [ANCHIXa]

Anchovy Portugese Waters −East [ANCHIXa]
TC−MT, TL−MT, RecC* (1989−2019−ICESIMP2021)
20,000
0
MSY*, MORAT*
2014.0
2015.0
2016.0
2017.0
2018.0
TAC*, Cpair*, Cadv*
survB−MT (1999−2017−ICESIMP2018)
60,000
0
2000
2004
2008
2012
2016
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Anchovy Bay of Biscay [ANCHOBAYB]

Metadata	
Scientific Name	Engraulis encrasicolus
Current Assess ID	WGHANSA-ANCHOBAYB-1987-2021-ICESIMP2021-2
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, 2019, 2021, 2007

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	89,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	1.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	21,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2014	66,200	Both	-
SSB	SSB-MT	2021	174,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	53,600	-	1
F	F-relative	2021	0.149	-	-
ER	ER-ratio	2019	0.184	-	2+
TC	TC-MT	2021	25,900		
TL	TL-MT	2021	25,200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.955		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Anchovy Bay of Biscay [ANCHOBAYB]

Anchovy Bay of Biscay [ANCHOBAYB]

Anchovy Bay of Biscay [ANCHOBAYB]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Anglerfish spp ICES 3a-4-6 [ANGLSPPIIIa-IV-VI]

Metadata	
Scientific Name	Lophius spp
Current Assess ID	WGCSE-ANGLSPPIIIa-IV-VI-1991-2019-ICESIMP2021-2
Area	ICES 3a-4-6
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2019, 2019

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	2019	21,400		
TL	TL-MT	2019	21,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2019	1.216		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Anglerfish spp ICES 3a−4−6 [ANGLSPPIIIa−IV−VI]

Anglerfish spp ICES 3a−4−6 [ANGLSPPIIIa−IV−VI]
TC−MT, TL−MT, RecC* (1973−2019−ICESIMP2021−2)
40,000
0
MSY*, MORAT*
1975
1985
1995
2005
2015
TAC*, Cpair*, Cadv*
survB−MT (1973−2019−ICESIMP2021−2)
100
0
2005
2007
2009
2011
2013
2015
2017
2019
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Lophius budegassa
Current Assess ID	WGBIE-ANGLVIIIc-IXa-1980-2021-ICESIMP2021-2
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	2019, 2014, 2015, 2016, 2017, 2018, 2020, 2021, 2011, 2012, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-relative	2021	0.3
Flim	Flim-relative	2021	1.7
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-relative	2021	1.27	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2021	0.394	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2021	793		
TB/TBmsy	TBdivTBmsy-dimensionless	2017	1.2		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	1.67		
F/Fmsy	FdivFmsy-dimensionless	2020	0.219		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black bellied angler ICES 8c−9a [ANGLVIIIc−IXa]

Black bellied angler ICES 8c−9a [ANGLVIIIc−IXa]

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

Black bellied angler ICES 8c−9a [ANGLVIIIc−IXa]

■	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-1986-2020-ICESIMP2021-2
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, 2018, 2019, 2020

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	R-index	2020	7	-	-
F	F-1/yr	2018	0.729	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	9530		
TL	TL-MT	2020	8680		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2020	0.511		
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−VIIIabd]

Black bellied angler ICES 7−8abd [ANGLVII−VIIIabd]
TC−MT, TL−MT, RecC* (1986−2020−ICESIMP2021−2)
15,000
0
MSY*, MORAT*
2004
2008
2012
2016
2020
TAC*, Cpair*, Cadv*
survB−index (1986−2020−ICESIMP2021−2)
5
0
2004
2008
2012
2016
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Angel shark Northeast Atlantic [ASHARNEATL]

Metadata	
Scientific Name	Squatina squatina
Current Assess ID	WGEF-ASHARNEATL-1973-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2011, 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	-	-	-		
TL	TL-MT	2018	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Angel shark Northeast Atlantic [ASHARNEATL]

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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Beryx spp Northeast Atlantic [BERYXSPPNEATL]

Metadata	
Scientific Name	Beryx spp
Current Assess ID	WGDEEP-BERYXSPPNEATL-1988-2019-ICESIMP2021-2
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, 2019

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	2019	294		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Beryx spp Northeast Atlantic [BERYXSPPNEATL]

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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Baltic flounder Subdivisions 27 and 29-32 [BFLOUN27-2932]

Metadata	
Scientific Name	Platichthys solemdali
Current Assess ID	WGBFAS-BFLOUN27-2932-1980-2020-ICESIMP2021-2
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	2019, 2020

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	2020	149		
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

Baltic flounder Subdivisions 27 and 29−32 [BFLOUN27−2932]

Baltic flounder Subdivisions 27 and 29−32 [BFLOUN27−2932]

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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Blue jack mackerel Azores [BJMACKXa2]

Blue jack mackerel Azores [BJMACKXa2]

■	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-1988-2019-ICESIMP2021-2
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, 2019, 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	2019	0.061	-	-
TC	TC-MT	2019	4320		
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

Black scabbardfish Northeast Atlantic [BKSFNEATL]

Black scabbardfish Northeast Atlantic [BKSFNEATL]

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-1988-2018-ICESIMP2021
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, 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	2015	240		
TL	TL-MT	2018	348		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

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

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]

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

Metadata	
Scientific Name	Molva dypterygia
Current Assess ID	WGDEEP-BLINGVb-VI-VII-1966-2020-ICESIMP2021-2
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, 2020, 2014

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.12
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2020	75,000
Fmgt	Fmgt-1/yr	2020	0.12
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	54,000
Flim	Flim-1/yr	2020	0.17
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2020	99,300	-	-
TN	-	-	-	-	-
R	R-E00	2020	3,380,000	-	9
F	F-1/yr	2020	0.036	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	2670		
TL	TL-MT	2020	3220		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	0.301		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2020	1.324		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	0.301		
ER/ERmgt	-	-	-		

Blue ling ICES 5b−6−7 [BLINGVb−VI−VII]
Kobe MSYpref (1966−2020−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
1.4
0
2
Kobe MGTpref (1966−2020−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
1.4
0
2
Spawner Recruit (1966−2020−ICESIMP2021−2)
R−E00
SSB−MT
0
80,000
0
4,000,000
Production*
Start Year
End Year
No Data

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

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

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYIVa-VI-2005-2018-ICESIMP2021
Area	ICES 4a-6
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2018, 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	2018	27		
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* (2005−2018−ICESIMP2021)
30
0
MSY*, MORAT*
2009
2011
2013
2015
2017
TAC*, Cpair*, Cadv*
survB−index (2005−2018−ICESIMP2021)
6
0
2005
2007
2009
2011
2013
2015
2017
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Raja brachyura
Current Assess ID	WGEF-BLRAYIVc-VIId-1988-2018-ICESIMP2021
Area	ICES 4c-7d
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2018, 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	2018	251		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blonde ray ICES 4c−7d [BLRAYIVc−VIId]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Blonde ray ICES 4c−7d [BLRAYIVc−VIId]

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−VIId]
TL−MT, TC*, RecC* (1988−2018−ICESIMP2021)
MSY*, MORAT*
300
0
2009
2011
2013
2015
2017
TAC*, Cpair*, Cadv*
survB−index (1988−2018−ICESIMP2021)
5
0
1990
1995
2000
2005
2010
2015
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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	-	-	-		

Blonde ray Portugese Waters −East [BLRAYIXa]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Blonde ray Portugese Waters −East [BLRAYIXa]

Blonde ray Portugese Waters −East [BLRAYIXa]

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	-	-	-		

Blonde ray ICES 7afg [BLRAYVIIafg]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Blonde ray ICES 7afg [BLRAYVIIafg]

Blonde ray ICES 7afg [BLRAYVIIafg]

■	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	-	-	-		

Blonde ray Western English Channel [BLRAYVIIe]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Blonde ray Western English Channel [BLRAYVIIe]

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]

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

Metadata	
Scientific Name	Galeus melastomus
Current Assess ID	WGEF-BMDOGVIII-IXa-1997-2018-ICESIMP2021
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, 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	SSB-index	2014	1.2	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	454		
TL	TL-MT	2018	181		
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]

Blackmouth dogfish ICES 8−9a [BMDOGVIII−IXa]
TC−MT, TL−MT, RecC* (1997−2018−ICESIMP2021)
MSY*, MORAT*
2,000
0
1998
2002
2006
2010
2014
2018
TAC*, Cpair*, Cadv*
survB−MT (1997−2018−ICESIMP2021)
2.5
0.0
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Blackmouth dogfish ICES 6-7 [BMDOGVI-VII]

Metadata	
Scientific Name	Galeus melastomus
Current Assess ID	WGEF-BMDOGVI-VII-2001-2018-ICESIMP2021
Area	ICES 6-7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2018, 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	2018	61	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	0.015		
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]

Blackmouth dogfish ICES 6−7 [BMDOGVI−VII]
TL−MT, TC*, RecC* (2001−2018−ICESIMP2021)
0.5
0.0
2008
2010
2012
2014
2016
2018
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Boarfish ICES 6-8 [BOARVI-VIII]

Metadata	
Scientific Name	Capros aper
Current Assess ID	WGWIDE-BOARVI-VIII-1991-2019-ICESIMP2021
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, 2019, 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	SSB-index	2019	$270{,}900$	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2016	0.581	-	-
ER	-	-	-	-	-
TC	TC-MT	2019	$11{,}286$		
TL	TL-MT	2019	9927		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2017	0.609		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Boarfish ICES 6−8 [BOARVI−VIII]
TB−relative (1991−2016−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−index (1991−2019−ICESIMP2021)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−relative (1991−2016−ICESIMP2018)
Fmsy*, Fmgt*, Flim*
ER*
Recruits*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Boarfish ICES 6−8 [BOARVI−VIII]

Brill Baltic Areas 22-32 [BRILL2232]

Metadata	
Scientific Name	Scophthalmus rhombus
Current Assess ID	WGBFAS-BRILL2232-1970-2019-ICESIMP2021-2
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, 2019

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	2019	48		
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

Brill Baltic Areas 22−32 [BRILL2232]

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

Brill Baltic Areas 22−32 [BRILL2232]

Brill ICES 3a-4-7de [BRILLIIIa-IV-VIIde]

Metadata	
Scientific Name	Scophthalmus rhombus
Current Assess ID	WGNSSK-BRILLIIIa-IV-VIIde-1950-2020-ICESIMP2021-2
Area	ICES 3a-4-7de
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, 2018, 2019, 2020

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	2020	1870		
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

Brill ICES 3a−4−7de [BRILLIIIa−IV−VIIde]

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

Brill ICES 3a−4−7de [BRILLIIIa−IV−VIIde]

Basking shark Northeast Atlantic [BSKSHARNEATL]

Metadata	
Scientific Name	Cetorhinus maximus
Current Assess ID	WGEF-BSKSHARNEATL-1977-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 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	-	-	-		
TL	TL-MT	2018	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

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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Blue whiting Northeast Atlantic [BWHITNEA]

Metadata	
Scientific Name	Micromesistius poutassou
Current Assess ID	WGWIDE-BWHITNEA-1981-2022-ICESIMP2021-2
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, 2020, 2021, 2022

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2022	0.32
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2022	2,250,000
Fmgt	Fmgt-1/yr	2022	0.32
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2022	1,500,000
Flim	Flim-1/yr	2022	0.88
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2020	5,700,362	-	-
SSB	SSB-MT	2022	3,400,000	-	-
TN	-	-	-	-	-
R	R-E00	2022	2.98×10^{10}	-	1
F	F-1/yr	2022	0.508	-	-
ER	ER-calc-ratio	2020	0.21	-	-
TC	TC-MT	2022	1,240,000		
TL	TL-MT	2022	1,240,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2022	1.587		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2022	1.511		
F/Fmgt	F-1/yr/Fmgt-1/yr	2022	1.587		
ER/ERmgt	-	-	-		

Blue whiting Northeast Atlantic [BWHITNEA]
Kobe MSYpref (1981−2022−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
3.5
0
2
Kobe MGTpref (1981−2022−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
3.5
0
2
Spawner Recruit (1981−2022−ICESIMP2021−2)
R−E00
SSB−MT
0
7,000,000
0
70,000,000,000
Production (1980−2020−ICESIMP2021)
Prod.
Abund.
0
14,000,000
−1,000,000
4,000,000
Start Year
End Year
No Data

Blue whiting Northeast Atlantic [BWHITNEA]
TB−MT (1980−2020−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1981−2022−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1981−2022−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1980−2020−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1981−2022−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Blue whiting Northeast Atlantic [BWHITNEA]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Leucoraja naevus
Current Assess ID	WGEF-CKRAYIIIa-IV-1991-2018-ICESIMP2021
Area	ICES 3a-4
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2018, 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	2018	180		
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]

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* (1991−2018−ICESIMP2021)
200
0
2009
2011
2013
2015
2017
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−index (1991−2018−ICESIMP2021)
2.5
0.0
1990
1994
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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]

Cuckoo ray Portugese Waters −East [CKRAYIXa]

■	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]

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

Cuckoo ray Bay of Biscay −South [CKRAYVIIIc]

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]

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

Cuckoo ray ICES 6−7 [CKRAYVI−VII]
TL−MT, TC*, RecC* (2005−2015−ICESIMP2018)
5,000
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Atlantic cod Western Baltic [CODBA2224]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGBFAS-CODBA2224-1985-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2015, 2016, 2016, 2017, 2018

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.26
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	23,500
Fmgt	Fmgt-1/yr	2021	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	23,000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	15,100
Flim	Flim-1/yr	2021	1.23
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	22,710	-	-
SSB	SSB-MT	2021	7800	-	-
TN	-	-	-	-	-
R	R-E00	2021	17,400,000	-	1
F	F-1/yr	2021	0.882	-	-
ER	ER-calc-ratio	2019	0.29	-	-
TC	TC-MT	2019	5312		
TL	TL-MT	2021	2900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	3.392		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.332		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	3.392		
ER/ERmgt	-	-	-		

Atlantic cod Western Baltic [CODBA2224]
Kobe MSYpref (1985−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
2.5
5
0
Kobe MGTpref (1985−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
2.5
5
0
Spawner Recruit (1985−2021−ICESIMP2021−2)
R−E00
SSB−MT
0
60,000
250,000,000
0
Production (1984−2019−ICESIMP2021)
Prod.
Abund.
0
70,000
60,000
0
Start Year
End Year
No Data

Atlantic cod Western Baltic [CODBA2224]
TB−MT (1984−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1985−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1985−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1984−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1985−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod Western Baltic [CODBA2224]

■	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-CODBA2532-1946-2021-ICESIMP2021-2
Area	Eastern Baltic
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2019, 2020, 2021, 2013, 2016, 2016, 2017, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2012	0.3
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	116,000
Fmgt	Fmgt-1/yr	2013	0.3
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	104,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2013	233,000	Both	-
SSB	SSB-MT	2021	60,400	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.81×10^9	-	0
F	F-1/yr	2021	0.032	-	-
ER	ER-ratio	2016	0.344	-	-
TC	TC-MT	2021	2420		
TL	TL-MT	2021	2310		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2012	0.857		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.521		
F/Fmgt	F-1/yr/Fmgt-1/yr	2013	1.243		
ER/ERmgt	-	-	-		

Atlantic cod Eastern Baltic [CODBA2532]

Atlantic cod Eastern Baltic [CODBA2532]
TB−MT (1964−2013−ICESIMP2016)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1946−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1964−2013−ICESIMP2016)
Fmsy*, Fmgt−1/yr, Flim*
ER−ratio (1965−2016−ICESIMP2016)
ERmsy*, ERmgt*, ERlim*
R−E00 (1946−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod Eastern Baltic [CODBA2532]

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

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGNSSK-CODIIIaW-IV-VIId-1963-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.28
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	97,800
Fmgt	Fmgt-1/yr	2021	0.28
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	69,800
Flim	Flim-1/yr	2021	0.58
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	175,062	-	-
SSB	SSB-MT	2021	37,900	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.85×10^8	-	1
F	F-1/yr	2021	0.448	-	-
ER	ER-calc-ratio	2019	0.289	-	-
TC	TC-MT	2021	24,100		
TL	TL-MT	2021	19,400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.6		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.388		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.6		
ER/ERmgt	-	-	-		

Atlantic cod ICES 3a(west)−4−7d [CODIIIaW−IV−VIId]
Kobe MSYpref (1963−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
2.5
0
5
Kobe MGTpref (1963−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
2.5
0
5
Spawner Recruit (1963−2021−ICESIMP2021−2)
R−E00
SSB−MT
0
250,000
0
2,500,000,000
Production (1962−2019−ICESIMP2021)
Prod.
Abund.
0
1,400,000
−200,000
800,000
Start Year
End Year
No Data

Atlantic cod ICES 3a(west)−4−7d [CODIIIaW−IV−VIId]
TB−MT (1962−2019−ICESIMP2021)
1,400,000
0
TBmsy*, TBmgt*, TBlim*
SSB−MT (1963−2021−ICESIMP2021−2)
250,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1963−2021−ICESIMP2021−2)
1.4
0.0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1962−2019−ICESIMP2021)
0.7
0.0
ERmsy*, ERmgt*, ERlim*
R−E00 (1963−2021−ICESIMP2021−2)
3,000,000,000
0
REC−EST*
1965
1975
1985
1995
2005
2015
1960
1970
1980
1990
2000
2010
2020
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod ICES 3a(west)−4−7d [CODIIIaW−IV−VIId]
TC−MT, TL−MT, RecC* (1963−2021−ICESIMP2021−2)
700,000
0
1965
1975
1985
1995
2005
2015
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Atlantic cod Irish Sea [CODIS]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODIS-1968-2020-ICESIMP2021-2
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, 2018, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.309
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	8616
Fmgt	Fmgt-1/yr	2017	0.309
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.2
TBlim	-	-	-
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-relative	2020	0.427	-	-
TN	-	-	-	-	-
R	R-E00	2017	5,510,000	-	0
F	F-relative	2018	0.34	-	-
ER	ER-calc-ratio	2017	0.016	-	-
TC	TC-MT	2020	302		
TL	TL-MT	2020	295		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.092		
ER/ERmsy	-	-	-		
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)
F/Fmsy
SSB/SSBmgt
0.0
2.5
0
6
Kobe MGTpref (1968−2017−ICESIMP2018)
F/Fmgt
SSB/SSBmgt
0.0
2.5
0
6
Spawner Recruit (1968−2017−ICESIMP2018)
R−E00
SSB−MT
0
25,000
0
150,000,000
Production (1968−2017−ICESIMP2018)
Prod.
Abund.
0
50,000
0
20,000
Start Year
End Year
No Data

Atlantic cod Irish Sea [CODIS]
TB−MT (1968−2017−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−relative (1968−2020−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−relative (1968−2018−ICESIMP2021)
Fmsy*, Fmgt*, Flim*
ER−calc−ratio (1968−2017−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1968−2017−ICESIMP2018)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod Irish Sea [CODIS]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Atlantic cod Kattegat [CODKAT]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGBFAS-CODKAT-1997-2020-ICESIMP2021-2
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, 2019, 2020

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

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-relative	2018	0.535	Both	-
SSB	SSB-relative	2020	0.129	-	-
TN	-	-	-	-	-
R	R-relative	2020	0.49	-	-
F	F-relative	2019	1.079	-	-
ER	ER-ratio	2012	0.101	-	-
TC	TC-MT	2020	123		
TL	TL-MT	2020	83		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atlantic cod Kattegat [CODKAT]
Kobe MSY*
Kobe MGT*
Spawner Recruit (1997−2020−ICESIMP2021−2)
Production*
R−relative
SSB−relative
0
3
0.0
3.5
Start Year
End Year
No Data

Atlantic cod Kattegat [CODKAT]
TB−relative (1996−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−relative (1997−2020−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−relative (1996−2019−ICESIMP2021)
Fmsy*, Fmgt*, Flim*
ER−ratio (1971−2012−CHING)
ERmsy*, ERmgt*, ERlim*
R−relative (1997−2020−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod Kattegat [CODKAT]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Atlantic cod West of Scotland [CODVIa]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVIa-1981-2021-ICESIMP2021-2
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, 2019, 2012, 2016, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.3
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	20,100
Fmgt	Fmgt-1/yr	2021	0.3
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	14,400
Flim	Flim-1/yr	2021	0.73
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2017	4250	Both	-
SSB	SSB-MT	2021	2890	-	-
TN	-	-	-	-	-
R	R-E00	2021	1,610,000	-	1
F	F-1/yr	2021	0.749	-	-
ER	ER-calc-ratio	2017	0.419	-	-
TC	TC-MT	2020	2260		
TL	TL-MT	2021	1180		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	2.497		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.144		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	2.497		
ER/ERmgt	-	-	-		

Atlantic cod West of Scotland [CODVIa]
Kobe MSYpref (1981−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
2.5
0
4
Kobe MGTpref (1981−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
2.5
0
4
Spawner Recruit (1981−2021−ICESIMP2021−2)
R−E00
SSB−MT
0
50,000
0
50,000,000
Production (1980−2017−ICESIMP2018)
Prod.
Abund.
0
70,000
−5,000
30,000
Start Year
End Year
No Data

Atlantic cod West of Scotland [CODVIa]
TB−MT (1980−2017−ICESIMP2018)
70,000
0
TBmsy*, TBmgt*, TBlim*
SSB−MT (1981−2021−ICESIMP2021−2)
50,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1981−2021−ICESIMP2021−2)
1.2
0.0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1980−2017−ICESIMP2018)
0.7
0.0
ERmsy*, ERmgt*, ERlim*
R−E00 (1981−2021−ICESIMP2021−2)
50,000,000
0
REC−EST*
1980 1985 1990 1995 2000 2005 2010 2015 2020
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod West of Scotland [CODVIa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Atlantic cod Rockall Bank [CODVIb]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVIb-1984-2019-ICESIMP2021-2
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, 2019

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	2019	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

Atlantic cod Rockall Bank [CODVIb]

Atlantic cod Rockall Bank [CODVIb]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Atlantic cod Celtic Sea [CODVIIek]

Metadata	
Scientific Name	Gadus morhua
Current Assess ID	WGCSE-CODVIIek-1980-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.29
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	5800
Fmgt	Fmgt-1/yr	2021	0.29
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	10,300
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	4200
Flim	Flim-1/yr	2021	1.13
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	2678	-	-
SSB	SSB-MT	2021	1710	-	-
TN	-	-	-	-	-
R	R-E00	2021	1,530,000	-	1
F	F-1/yr	2021	1.15	-	-
ER	ER-calc-ratio	2019	0.584	-	-
TC	TC-MT	2021	1150		
TL	TL-MT	2021	922		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	3.966		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.295		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	3.966		
ER/ERmgt	-	-	-		

Atlantic cod Celtic Sea [CODVIIek]
Kobe MSYpref (1980−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1980−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1980−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1970−2019−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

Atlantic cod Celtic Sea [CODVIIek]
TB−MT (1970−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1980−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1970−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1980−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Atlantic cod Celtic Sea [CODVIIek]
TC−MT, TL−MT, RecC* (1980−2021−ICESIMP2021−2)
25,000
0
1980
1985
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
TL−MT/MSY−MT, CdivMEANC−ratio, (1971−2012−CHING)
3
0
1970
1980
1990
2000
2010
MSY−MT
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Tusk Northeast Atlantic [CUSKNEATL]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKNEATL-1988-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	4070		
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]

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

Tusk Northeast Atlantic [CUSKNEATL]

Tusk ICES 5a-14 [CUSKVa-XIV]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKVa-XIV-1982-2021-ICESIMP2021-2
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	2019, 2014, 2017, 2018, 2015, 2016, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	0.2
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	6240
Fmgt	Fmgt-1/yr	2016	0.2
ERmgt	ERmgt-ratio	2019	0.13
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	4460
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	37,093	-	-
SSB	SSB-MT	2021	6500	-	-
TN	-	-	-	-	-
R	R-E00	2021	10,900	-	3
F	F-1/yr	2016	0.22	-	-
ER	ER-ratio	2021	0.215	-	-
TC	TC-MT	2021	3420		
TL	TL-MT	2021	3420		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	1.1		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.042		
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	1.1		
ER/ERmgt	-	-	-		

Tusk ICES 5a−14 [CUSKVa−XIV]

Tusk ICES 5a−14 [CUSKVa−XIV]
TB−MT (1973−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1982−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1981−2016−ICESIMP2016)
Fmsy−1/yr, Fmgt−1/yr, Flim*
ER−ratio (1982−2021−ICESIMP2021−2)
ERmsy*, ERmgt*, ERlim*
R−E00 (1982−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Tusk ICES 5a−14 [CUSKVa−XIV]
TC−MT, TL−MT, RecC* (1982−2021−ICESIMP2021−2)
10,000
0
MSY*, MORAT*
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Tusk Rockall Bank [CUSKVIb]

Metadata	
Scientific Name	Brosme brosme
Current Assess ID	WGDEEP-CUSKVIb-1988-2019-ICESIMP2021-2
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, 2019

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	2019	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

Tusk Rockall Bank [CUSKVIb]

Tusk Rockall Bank [CUSKVIb]

■	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-1988-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	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]

Tusk North of Azores [CUSKXII]

■	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-DAB2232-1970-2019-ICESIMP2021-2
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, 2019

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	2019	1900		
TL	TL-MT	2019	1100		
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

Dab Baltic Areas 22−32 [DAB2232]

Dab Baltic Areas 22−32 [DAB2232]

■	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-1965-2018-ICESIMP2021
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, 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	TB-relative	2018	1.166	-	-
SSB	SSB-relative	2018	1.212	-	-
TN	-	-	-	-	-
R	R-relative	2018	0.545	-	-
F	F-relative	2018	1.145	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	44,792		
TL	TL-MT	2018	4233		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Dab ICES 3a−4 [DABIIIa−IV]

Dab ICES 3a−4 [DABIIIa−IV]

Dab ICES 3a−4 [DABIIIa−IV]
TC−MT, TL−MT, RecC* (1965−2018−ICESIMP2021)
70,000
0
MSY*, MORAT*
2002
2004
2006
2008
2010
2012
2014
2016
2018
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGCSE-EBASSIVbc-VII-1985-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.171
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	14,400
Fmgt	Fmgt-1/yr	2021	0.171
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	10,300
Flim	Flim-1/yr	2021	0.254
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2017	10,800	Both	-
SSB	SSB-MT	2021	11,600	-	-
TN	-	-	-	-	-
R	R-E00	2021	9,700,000	-	0
F	F-1/yr	2021	0.109	-	-
ER	ER-calc-ratio	2017	0.106	-	-
TC	TC-MT	2018	1150		
TL	TL-MT	2021	1040		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.634		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.806		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.634		
ER/ERmgt	-	-	-		

European seabass ICES 4bc−7 [EBASSIVbc−VII]
Kobe MSYpref (1985−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1985−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1985−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1985−2017−ICESIMP2018)
Prod.
Abund.
Start Year
End Year
No Data

European seabass ICES 4bc−7 [EBASSIVbc−VII]
TB−MT (1985−2017−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1985−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1985−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1985−2017−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1985−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European seabass ICES 4bc−7 [EBASSIVbc−VII]
TC−MT, TL*, RecC* (1985−2018−ICESIMP2018)
6,000
0
MSY*, MORAT*
2009
2010
2011
2012
2013
2014
2015
2016
2017
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

European seabass ICES 6a-7b-j [EBASSVIa-VIIb-j]

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGCSE-EBASSVIa-VIIb-j-2000-2019-ICESIMP2021-2
Area	ICES 6a-7b-j
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015, 2016, 2019

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	2019	0.04		
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 6a−7b−j [EBASSVIa−VIIb−j]

European seabass ICES 6a−7b−j [EBASSVIa−VIIb−j]

European seabass ICES 8ab [EBASSVIIIab]

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGBIE-EBASSVIIIab-1985-2021-ICESIMP2021-2
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	2019, 2020, 2021, 2014, 2016

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.138
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	16,700
Fmgt	Fmgt-1/yr	2021	0.138
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	11,900
Flim	Flim-1/yr	2020	0.172
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2021	18,600	-	-
TN	-	-	-	-	-
R	R-E00	2021	17,900,000	-	0
F	F-1/yr	2021	0.111	-	-
ER	-	-	-	-	-
TC	TC-MT	2021	2130		
TL	TL-MT	2021	2090		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.803		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.114		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.803		
ER/ERmgt	-	-	-		

European seabass ICES 8ab [EBASSVIIIab]
Kobe MSYpref (1985−2021−ICESIMP2021−2)
Kobe MGTpref (1985−2021−ICESIMP2021−2)
F/Fmsy
F/Fmgt
1.2
0.0
SSB/SSBmgt
1.5
Spawner Recruit (1985−2021−ICESIMP2021−2)
Production*
R−E00
50,000,000
0
SSB−MT
25,000
Start Year
End Year
No Data

European seabass ICES 8ab [EBASSVIIIab]

European seabass ICES 8ab [EBASSVIIIab]
TC−MT, TL−MT, RecC* (1985−2021−ICESIMP2021−2)
4,000
0
MSY*, MORAT*
2015.0
2016.0
2017.0
2018.0
2019.0
2020.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Dicentrarchus labrax
Current Assess ID	WGBIE-EBASSVIIIc-IXa-1978-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	896		
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 8c−9a [EBASSVIIIc−IXa]

European seabass ICES 8c−9a [EBASSVIIIc−IXa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

European flounder Subdivisions 22-23 [EFLOUN2223]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN2223-1973-2018-ICESIMP2021
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, 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	SSB-index	2014	385	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	982		
TL	TL-MT	2018	809		
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]

European flounder Subdivisions 22−23 [EFLOUN2223]

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

European flounder Subdivisions 24-25 [EFLOUN2425]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN2425-1973-2018-ICESIMP2021-2
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, 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	19,100		
TL	TL-MT	2018	12,800		
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

European flounder Subdivisions 24−25 [EFLOUN2425]

European flounder Subdivisions 24−25 [EFLOUN2425]
TC−MT, TL−MT, RecC* (1973−2018−ICESIMP2021−2)
25,000
0
MSY*, MORAT*
2014.0
2015.0
2016.0
2017.0
2018.0
TAC*, Cpair*, Cadv*
survB−index (1973−2018−ICESIMP2021−2)
250
0
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

European flounder Subdivisions 26−28 [EFLOUN26−28]

European flounder Subdivisions 26−28 [EFLOUN26−28]

■	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]

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

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGNSSK-EFLOUNIIIa-IV-1950-2021-ICESIMP2021-2
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, 2019, 2021, 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	2019	0.65	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2021	2390		
TL	TL-MT	2021	1720		
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 [EFLOUNIIIa−IV]

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

European flounder ICES 3a−4 [EFLOUNIIIa−IV]
TC−MT, TL−MT, RecC* (1950−2021−ICESIMP2021−2)
7,000
0
2002
2006
2010
2014
2018
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−MT (1950−2021−ICESIMP2021−2)
2
0
1985
1990
1995
2000
2005
2010
2015
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Pollachius pollachius
Current Assess ID	WGNSSK-EPOLLIV-IIIa-1977-2020-ICESIMP2021-2
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, 2020

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	2020	2620		
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]

European pollack ICES 3a−4 [EPOLLIV−IIIa]
TC−MT, TL*, RecC* (1977−2017−ICESIMP2018)
2,500
0
2013.0
2014.0
2015.0
2016.0
2017.0
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Pollachius pollachius
Current Assess ID	WGBIE-EPOLLVIII-IXa-1979-2020-ICESIMP2021-2
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	2020, 2015, 2016, 2016, 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	-	-	-		
TL	TL-MT	2020	1540		
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]

European pollack ICES 8−9a [EPOLLVIII−IXa]
TL−MT, TC*, RecC* (1979−2020−ICESIMP2021−2)
7,000
0
1980
1990
2000
2010
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Fourspotted megrim ICES 8c-9a [FMEG8c9a]

Metadata	
Scientific Name	Lepidorhombus boscii
Current Assess ID	WGBIE-FMEG8c9a-1986-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2010, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.193
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	4600
Fmgt	Fmgt-1/yr	2021	0.193
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	3300
Flim	Flim-1/yr	2020	0.57
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	7878	-	-
SSB	SSB-MT	2021	8490	-	-
TN	-	-	-	-	-
R	R-E00	2021	43,200,000	-	0
F	F-1/yr	2021	0.108	-	-
ER	ER-calc-ratio	2019	0.115	-	-
TC	TC-MT	2021	792		
TL	TL-MT	2021	711		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.56		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.846		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.56		
ER/ERmgt	-	-	-		

Fourspotted megrim ICES 8c−9a [FMEG8c9a]

Fourspotted megrim ICES 8c−9a [FMEG8c9a]
TB−MT (1986−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1986−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1986−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim*
ER−calc−ratio (1986−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1986−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Fourspotted megrim ICES 8c−9a [FMEG8c9a]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Fourspotted megrim ICES 7b-k_8abd [FMEGVIIb-k_VIIIabd]

Metadata	
Scientific Name	Lepidorhombus boscii
Current Assess ID	WGBIE-FMEGVIIb-k_VIIIabd-2017-2020-ICESIMP2021-2
Area	ICES 7b-k_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	2018, 2019, 2020

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	2020	611		
TL	TL-MT	2020	488		
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

Fourspotted megrim ICES 7b−k_8abd [FMEGVIIb−k_VIIIabd]

Fourspotted megrim ICES 7b−k_8abd [FMEGVIIb−k_VIIIabd]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Greater forkbeard Northeast Atlantic [GFORKNEATL]

Metadata	
Scientific Name	Phycis blennoides
Current Assess ID	WGDEEP-GFORKNEATL-2005-2019-ICESIMP2021-2
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, 2019

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	2019	2220		
TL	TL-MT	2019	1850		
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]

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

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

Metadata	
Scientific Name	Eutrigla gurnardus
Current Assess ID	WGNSSK-GGURNIIIa-IV-VIId-1983-2020-ICESIMP2021-2
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, 2020

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	2020	9280		
TL	TL-MT	2020	1710		
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

Grey gurnard ICES 3a−4−7d [GGURNIIIa−IV−VIId]

Grey gurnard ICES 3a−4−7d [GGURNIIIa−IV−VIId]
TC−MT, TL−MT, RecC* (1983−2020−ICESIMP2021−2)
50,000
0
MSY*, MORAT*
2012.0
2013.5
2015.0
2016.5
2018.0
TAC*, Cpair*, Cadv*
survB−index (1983−2020−ICESIMP2021−2)
50
0
1985
1990
1995
2000
2005
2010
2015
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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-1960-2021-ICESIMP2021-2
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, 2019, 2020, 2021

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	2021	22,700		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	0.803		
F/Fmsy	FdivFmsy-dimensionless	2021	0.901		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

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

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)
70,000
0
MSY*, MORAT*
1960
1970
1980
1990
2000
2010
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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-1971-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.097
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	220,000
Fmgt	Fmgt-1/yr	2021	0.097
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	160,000
Flim	Flim-1/yr	2021	0.226
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	434,000	Both	-
SSB	SSB-MT	2021	260,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	33,200	-	5
F	F-1/yr	2021	0.118	-	-
ER	ER-calc-ratio	2018	0.122	-	-
TC	TC-MT	2021	46,100		
TL	TL-MT	2021	46,100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.216		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.182		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.216		
ER/ERmgt	-	-	-		

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

Golden redfish ICES 5−6−12−14 [GOLDREDV−VI−XII−XIV]
TB−MT (1966−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1971−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1971−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1966−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1971−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

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

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Argentina silus
Current Assess ID	WGDEEP-GSSMELTI-II-IIIa-IV-1988-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	15,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	1.16		
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]

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

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-1966-2020-ICESIMP2021-2
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, 2020, 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	2020	172		
TL	TL-MT	2020	76		
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]

Greater silver smelt ICES 6b−7−8−9−10−12 [GSSMELTVIb−VII−VIII−IX−X−XII]
TC−MT, TL−MT, RecC* (1966−2020−ICESIMP2021−2)
6,000
0
1965
1975
1985
1995
2005
2015
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−index (1966−2020−ICESIMP2021−2)
200
0
2009
2011
2013
2015
2017
2019
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Haddock Irish Sea [HADIS]

Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGCSE-HADIS-1993-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.28
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	4280
Fmgt	Fmgt-1/yr	2021	0.28
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2990
Flim	Flim-1/yr	2021	0.53
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	28,668	-	-
SSB	SSB-MT	2021	17,400	-	-
TN	-	-	-	-	-
R	R-E00	2021	372,000	-	0
F	F-1/yr	2021	0.066	-	-
ER	ER-calc-ratio	2019	0.089	-	-
TC	TC-MT	2021	975		
TL	TL-MT	2021	742		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.235		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	4.065		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.235		
ER/ERmgt	-	-	-		

Haddock Irish Sea [HADIS]

Haddock Irish Sea [HADIS]
TB−MT (1993−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1993−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1993−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1993−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1993−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Haddock Irish Sea [HADIS]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Haddock ICES 3a-4-6a [HADNS-IIIa-VIa]

Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGNSSK-HADNS-IIIa-VIa-1972-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.19
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$132{,}000$
Fmgt	Fmgt-1/yr	2021	0.19
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$94{,}000$
Flim	Flim-1/yr	2021	0.39
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$509{,}663$	-	-
SSB	SSB-MT	2021	$257{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	6.64×10^9	-	0
F	F-1/yr	2021	0.19	-	-
ER	ER-calc-ratio	2019	0.095	-	-
TC	TC-MT	2021	$39{,}500$		
TL	TL-MT	2021	$30{,}200$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.002		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.947		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.002		
ER/ERmgt	-	-	-		

Haddock ICES 3a−4−6a [HADNS−IIIa−VIa]

Haddock ICES 3a−4−6a [HADNS−IIIa−VIa]
TB−MT (1972−2019−ICESIMP2021)
3,000,000
0
TBmsy*, TBmgt*, TBlim*
SSB−MT (1972−2021−ICESIMP2021−2)
700,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
1975
1985
1995
2005
2015
TN *
F−1/yr (1972−2021−ICESIMP2021−2)
1.2
0.0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1972−2019−ICESIMP2021)
0.5
0.0
ERmsy*, ERmgt*, ERlim*
R−E00 (1972−2021−ICESIMP2021−2)
60,000,000,000
0
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Haddock ICES 3a−4−6a [HADNS−IIIa−VIa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Haddock Rockall Bank [HADROCK]

Metadata	
Scientific Name	Melanogrammus aeglefinus
Current Assess ID	WGCSE-HADROCK-1991-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.168
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	3710
Fmgt	Fmgt-1/yr	2021	0.168
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	9000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2470
Flim	Flim-1/yr	2021	1.06
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	58,034	-	-
SSB	SSB-MT	2021	32,400	-	-
TN	-	-	-	-	-
R	R-E00	2021	50,700	-	1
F	F-1/yr	2021	0.189	-	-
ER	ER-calc-ratio	2019	0.072	-	-
TC	TC-MT	2021	5640		
TL	TL-MT	2021	5510		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.125		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	8.733		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.125		
ER/ERmgt	-	-	-		

Haddock Rockall Bank [HADROCK]

Haddock Rockall Bank [HADROCK]
TB−MT (1990−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1991−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1991−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1990−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1991−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Haddock Rockall Bank [HADROCK]

■	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-1993-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.353
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$12{,}800$
Fmgt	Fmgt-1/yr	2021	0.353
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	9230
Flim	Flim-1/yr	2021	1.4
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$74{,}659$	-	-
SSB	SSB-MT	2021	$71{,}400$	-	-
TN	-	-	-	-	-
R	R-E00	2021	3.13×10^8	-	0
F	F-1/yr	2021	0.315	-	-
ER	ER-calc-ratio	2019	0.168	-	-
TC	TC-MT	2021	$12{,}200$		
TL	TL-MT	2021	7860		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.892		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	5.578		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.892		
ER/ERmgt	-	-	-		

Haddock ICES 7b−k [HADVIIb−k]

Haddock ICES 7b−k [HADVIIb−k]
TB−MT (1993−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1993−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1993−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1993−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1993−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Haddock ICES 7b−k [HADVIIb−k]
TC−MT, TL−MT, RecC* (1993−2021−ICESIMP2021−2)
35,000
0
MSY*, MORAT*
1992
1996
2000
2004
2008
2012
2016
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Merluccius merluccius
Current Assess ID	WGBIE-HAKENRTN-1978-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.26
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$56{,}000$
Fmgt	Fmgt-1/yr	2021	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$40{,}000$
Flim	Flim-1/yr	2020	0.84
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$339{,}643$	-	-
SSB	SSB-MT	2021	$239{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	3.09×10^8	-	0
F	F-1/yr	2021	0.262	-	-
ER	ER-calc-ratio	2019	0.283	-	-
TC	TC-MT	2021	$75{,}800$		
TL	TL-MT	2021	$72{,}600$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.006		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	4.268		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.006		
ER/ERmgt	-	-	-		

Hake ICES 3a−4−6−7−8abd [HAKENRTN]

Hake ICES 3a−4−6−7−8abd [HAKENRTN]
TB−MT (1978−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1978−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1978−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim*
ER−calc−ratio (1978−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1978−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Hake ICES 3a−4−6−7−8abd [HAKENRTN]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Hake ICES 8c-9a [HAKESOTH]

Metadata	
Scientific Name	Merluccius merluccius
Current Assess ID	WGBIE-HAKESOTH-1989-2020-ICESIMP2021-2
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, 2019, 2019, 2020, 2011, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.25
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2019	11,100
Fmgt	Fmgt-1/yr	2019	0.25
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
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	2019	20,988	-	-
SSB	SSB-MT	2019	17,430	-	-
TN	-	-	-	-	-
R	R-E00	2019	78,619,505	-	0
F	F-1/yr	2019	0.596	-	1 to 3
ER	ER-calc-ratio	2019	0.575	-	-
TC	TC-MT	2020	9170		
TL	TL-MT	2020	8730		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.76		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2019	1.57		
F/Fmgt	F-1/yr/Fmgt-1/yr	2019	2.384		
ER/ERmgt	-	-	-		

Hake ICES 8c−9a [HAKESOTH]
Kobe MSYpref (1982−2019−ICESIMP2021)
Kobe MGTpref (1982−2019−ICESIMP2021)
F/Fmgt
SSB/SSBmgt
0
5
Spawner Recruit (1982−2019−ICESIMP2021)
Production (1982−2019−ICESIMP2021)
R−E00
200,000,000
SSB−MT
50,000
Prod.
25,000
Abund.
70,000
Start Year
End Year
No Data

Hake ICES 8c−9a [HAKESOTH]
TB−MT (1982−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1982−2019−ICESIMP2021)
SSBmsy*, SSBmgt−MT, SSBlim*
TN *
F−1/yr (1982−2019−ICESIMP2021)
Fmsy*, Fmgt−1/yr, Flim*
ER−calc−ratio (1982−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1982−2019−ICESIMP2021)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Hake ICES 8c−9a [HAKESOTH]
TC−MT, TL−MT, RecC* (1989−2020−ICESIMP2021−2)
25,000
0
MSY*, MORAT*
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB−index (1989−2020−ICESIMP2021−2)
2
0
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Herring ICES 22-24-3a [HERR2224IIIa]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERR2224IIIa-1991-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2011	110,000
Fmsy	Fmsy-1/yr	2021	0.31
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	150,000
Fmgt	Fmgt-1/yr	2021	0.31
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	120,000
Flim	Flim-1/yr	2021	0.45
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	114,957	-	-
SSB	SSB-MT	2021	65,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	8.6×10^8	-	0
F	F-1/yr	2021	0.193	-	-
ER	ER-calc-ratio	2019	0.357	-	-
TC	TC-MT	2021	22,100		
TL	TL-MT	2021	22,100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	0.886		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.623		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.433		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.623		
ER/ERmgt	-	-	-		

Herring ICES 22−24−3a [HERR2224IIIa]

Herring ICES 22−24−3a [HERR2224IIIa]
TB−MT (1991−2019−ICESIMP2021)
700,000
0
1990
1994
1998
2002
2006
2010
2014
2018
TBmsy*, TBmgt*, TBlim*
SSB−MT (1991−2021−ICESIMP2021−2)
350,000
0
1990
1995
2000
2005
2010
2015
2020
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1991−2021−ICESIMP2021−2)
0.8
0.0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1991−2019−ICESIMP2021)
0.6
0.0
ERmsy*, ERmgt*, ERlim*
R−E00 (1991−2021−ICESIMP2021−2)
6,000,000,000
REC−EST*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Herring ICES 22−24−3a [HERR2224IIIa]
TC−MT, TL−MT, RecC* (1991−2021−ICESIMP2021−2)
250,000
0
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERR2529-32-1974-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.22
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$460{,}000$
Fmgt	Fmgt-1/yr	2021	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$330{,}000$
Flim	Flim-1/yr	2021	0.59
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$1{,}379{,}633$	-	-
SSB	SSB-MT	2021	$365{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.21×10^{10}	-	1
F	F-1/yr	2021	0.46	-	-
ER	ER-calc-ratio	2019	0.177	-	-
TC	TC-MT	2021	$177{,}000$		
TL	TL-MT	2021	$177{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.255		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.793		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	2.19		
ER/ERmgt	-	-	-		

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

Herring Subdivisions 25−29 and 32 [HERR2529−32]
TB−MT (1973−2019−ICESIMP2021)
3,000,000
0
TBmsy*, TBmgt*, TBlim*
1975
1985
1995
2005
2015
SSB−MT (1974−2021−ICESIMP2021−2)
2,500,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1974−2021−ICESIMP2021−2)
0.7
0.0
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1973−2019−ICESIMP2021)
0.25
0.00
ERmsy*, ERmgt*, ERlim*
R−E00 (1974−2021−ICESIMP2021−2)
60,000,000,000
0
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

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

Herring Subdivisions 30-31 [HERR30-31]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERR30-31-1963-2021-ICESIMP2021-2
Area	Subdivisions 30-31
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2021, 2017, 2018, 2018, 2019

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.21
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$534{,}000$
Fmgt	Fmgt-1/yr	2021	0.272
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$377{,}000$
Flim	Flim-1/yr	2021	0.496
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-relative	2018	0.892	-	-
SSB	SSB-MT	2021	$663{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	2.97×10^{10}	-	0
F	F-1/yr	2021	0.16	-	-
ER	ER-calc-ratio	2017	0.185	-	-
TC	TC-MT	2021	$73{,}000$		
TL	TL-MT	2018	$104{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.19		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.242		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.59		
ER/ERmgt	-	-	-		

Herring Subdivisions 30−31 [HERR30−31]
Kobe MSYpref (1963−2021−ICESIMP2021−2)
Kobe MGTpref (1963−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0
1
3
Spawner Recruit (1963−2021−ICESIMP2021−2)
Production (1979−2017−ICESIMP2018)
R−E00
SSB−MT
0
100,000,000,000
1,400,000
Prod.
Abund.
200,000
1,000,000
Start Year
End Year
No Data

Herring Subdivisions 30−31 [HERR30−31]
TB−relative (1979−2018−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1963−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1963−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1979−2017−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1963−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring Subdivisions 30−31 [HERR30−31]
TC−MT, TL*, RecC* (1963−2021−ICESIMP2021−2)
150,000
0
MSY*, MORAT*
1965
1975
1985
1995
2005
2015
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Herring Irish Sea [HERRNIRS]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRNIRS-1980-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.266
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$11{,}800$
Fmgt	Fmgt-1/yr	2021	0.266
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	8500
Flim	Flim-1/yr	2021	0.397
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$54{,}885$	-	-
SSB	SSB-MT	2021	$27{,}500$	-	-
TN	-	-	-	-	-
R	R-E00	2021	2.85×10^8	-	1
F	F-1/yr	2021	0.203	-	-
ER	ER-calc-ratio	2019	0.124	-	-
TC	TC-MT	2021	7930		
TL	TL-MT	2021	7930		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.762		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.331		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.762		
ER/ERmgt	-	-	-		

Herring Irish Sea [HERRNIRS]

Herring Irish Sea [HERRNIRS]
TB−MT (1979−2019−ICESIMP2021)
80,000
0
TBmsy*, TBmgt*, TBlim*
1980 1985 1990 1995 2000 2005 2010 2015
SSB−MT (1980−2021−ICESIMP2021−2)
35,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
1980 1990 2000 2010 2020
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
0.5
0.0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
1980 1985 1990 1995 2000 2005 2010 2015 2020
ER−calc−ratio (1979−2019−ICESIMP2021)
0.35
0.00
ERmsy*, ERmgt*, ERlim*
1980 1985 1990 1995 2000 2005 2010 2015
R−E00 (1980−2021−ICESIMP2021−2)
700,000,000
0
REC−EST*
1980 1990 2000 2010 2020
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring Irish Sea [HERRNIRS]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRNS-IIIa-VIId-1947-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.31
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	1,230,000
Fmgt	Fmgt-1/yr	2021	0.31
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	874,000
Flim	Flim-1/yr	2021	0.4
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	3,243,613	-	-
SSB	SSB-MT	2021	1,380,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	3.04×10^{10}	-	0
F	F-1/yr	2021	0.197	-	-
ER	ER-calc-ratio	2019	0.158	-	-
TC	TC-MT	2021	427,000		
TL	TL-MT	2017	564,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.635		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.122		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.635		
ER/ERmgt	-	-	-		

Herring ICES 3a−4−7d [HERRNS−IIIa−VIId]
Kobe MSYpref (1947−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1947−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1947−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1947−2019−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

Herring ICES 3a−4−7d [HERRNS−IIIa−VIId]
TB−MT (1947−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1947−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1947−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1947−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1947−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring ICES 3a−4−7d [HERRNS−IIIa−VIId]
TC−MT, TL*, RecC* (1947−2021−ICESIMP2021−2)
1,400,000
0
MSY*, MORAT*
1950
1960
1970
1980
1990
2000
2010
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Herring Gulf of Riga East of Gotland [HERRRIGA]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	WGBFAS-HERRRIGA-1977-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.32
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$60{,}000$
Fmgt	Fmgt-1/yr	2021	0.32
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$40{,}800$
Flim	Flim-1/yr	2021	0.88
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$177{,}796$	-	-
SSB	SSB-MT	2021	$177{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	3.24×10^9	-	1
F	F-1/yr	2021	0.243	-	-
ER	ER-calc-ratio	2019	0.145	-	-
TC	TC-MT	2017	$30{,}900$		
TL	TL-MT	2021	$33{,}200$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	0.889		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.95		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.76		
ER/ERmgt	-	-	-		

Herring Gulf of Riga East of Gotland [HERRRIGA]

Herring Gulf of Riga East of Gotland [HERRRIGA]
TB−MT (1976−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1977−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1977−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1976−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1977−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring Gulf of Riga East of Gotland [HERRRIGA]

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

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

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRSIRS-1958-2021-ICESIMP2021-2
Area	ICES 7a-g-h-j-k
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.26
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	54,000
Fmgt	Fmgt-1/yr	2021	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	34,000
Flim	Flim-1/yr	2021	0.45
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	61,300	Both	-
SSB	SSB-MT	2021	19,300	-	-
TN	-	-	-	-	-
R	R-E00	2021	165,000	-	1
F	F-1/yr	2021	0.023	-	-
ER	ER-calc-ratio	2018	0.176	-	-
TC	TC-MT	2021	132		
TL	TL-MT	2019	4420		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.087		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.357		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.087		
ER/ERmgt	-	-	-		

Herring ICES 7a−g−h−j−k [HERRSIRS]

Herring ICES 7a−g−h−j−k [HERRSIRS]
TB−MT (1957−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1958−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1958−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1957−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1958−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring ICES 7a−g−h−j−k [HERRSIRS]
TC−MT, TL*, RecC* (1958−2021−ICESIMP2021−2)
50,000
0
MSY*, MORAT*
1960
1970
1980
1990
2000
2010
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Herring ICES 6a7bc [HERRVIaVIIbc]

Metadata	
Scientific Name	Clupea harengus
Current Assess ID	HAWG-HERRVIaVIIbc-1957-2019-ICESIMP2021-2
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, 2018, 2019

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.16
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	410,000
Fmgt	Fmgt-1/yr	2018	0.16
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
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-relative	2019	0.14	-	-
TN	-	-	-	-	-
R	R-relative	2019	0.325	-	-
F	F-1/yr	2018	0.061	-	3 to 6
ER	ER-calc-ratio	2018	0.04	-	-
TC	TC-MT	2019	3430		
TL	TL-MT	2019	3430		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.381		
ER/ERmsy	-	-	-		
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 6a7bc [HERRVIaVIIbc]
Kobe MSYpref (1956−2018−ICESIMP2018)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1956−2018−ICESIMP2018)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1957−2019−ICESIMP2021−2)
R−relative
SSB−relative
Production (1956−2018−ICESIMP2018)
Prod.
Abund.
Start Year
End Year
No Data

Herring ICES 6a7bc [HERRVIaVIIbc]
TB−MT (1956−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−relative (1957−2019−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−1/yr (1956−2018−ICESIMP2018)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1956−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−relative (1957−2019−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Herring ICES 6a7bc [HERRVIaVIIbc]
TC−MT, TL−MT, RecC* (1957−2019−ICESIMP2021−2)
300,000
0
1955
1965
1975
1985
1995
2005
2015
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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	WGWIDE-HMACKIIa-IVa-Vb-VIa-VII-VIII-1982-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.074
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2020	1,170,000
Fmgt	Fmgt-1/yr	2020	0.074
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	834,000
Flim	Flim-1/yr	2020	0.103
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2017	1,070,000	Both	-
SSB	SSB-MT	2020	853,000	-	-
TN	-	-	-	-	-
R	R-E00	2020	2.58×10^9	-	0
F	F-1/yr	2020	0.109	-	-
ER	ER-calc-ratio	2017	0.098	-	-
TC	TC-MT	2020	125,000		
TL	TL-MT	2019	99,072		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	1.473		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2020	0.729		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	1.473		
ER/ERmgt	-	-	-		

Horse mackerel ICES 2a−4a−5b−6a−7−8 [HMACKIIa−IVa−Vb−VIa−VII−VIII]
Kobe MSYpref (1982−2020−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1982−2020−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1982−2020−ICESIMP2021−2)
R−E00
SSB−MT
Production (1982−2017−ICESIMP2018)
Prod.
Abund.
Start Year
End Year
No Data

Horse mackerel ICES 2a−4a−5b−6a−7−8 [HMACKIIa−IVa−Vb−VIa−VII−VIII]
TB−MT (1982−2017−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1982−2020−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1982−2020−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1982−2017−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1982−2020−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

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

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGWIDE-HMACKIIIa-IVbc-VIId-1982-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	12,600		
TL	TL-MT	2020	12,400		
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

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

Horse mackerel ICES 3a−4bc−7d [HMACKIIIa−IVbc−VIId]
TC−MT, TL−MT, RecC* (1982−2020−ICESIMP2021−2)
60,000
0
MSY*, MORAT*
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB−E00 (1982−2020−ICESIMP2021−2)
2,000
0
1992
1996
2000
2004
2008
2012
2016
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Horse mackerel Portugese Waters -East [HMACKIXa]

Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGHANSA-HMACKIXa-1992-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.15
ERmsy	ERmsy-ratio	2019	0.11
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$181{,}000$
Fmgt	Fmgt-1/yr	2021	0.15
ERmgt	ERmgt-ratio	2019	0.11
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$103{,}000$
Flim	Flim-1/yr	2021	0.19
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2021	$982{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	4.81×10^9	-	0
F	F-1/yr	2021	0.024	-	-
ER	ER-ratio	2019	0.029	-	2 to 10
TC	TC-MT	2021	$30{,}200$		
TL	TL-MT	2021	$30{,}200$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.162		
ER/ERmsy	ER-ratio/ERmsy-ratio	2019	0.264		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	5.425		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.162		
ER/ERmgt	-	-	-		

Horse mackerel Portugese Waters −East [HMACKIXa]
Kobe MSYpref (1992−2021−ICESIMP2021−2)
Kobe MGTpref (1992−2021−ICESIMP2021−2)
F/Fmsy
F/Fmgt
SSB/SSBmgt
SSB/SSBmgt
Spawner Recruit (1992−2021−ICESIMP2021−2)
Production*
R−E00
SSB−MT
Start Year
End Year
No Data

Horse mackerel Portugese Waters −East [HMACKIXa]

Horse mackerel Portugese Waters −East [HMACKIXa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Kitefin shark Northeast Atlantic [KFSHARNEATL]

Metadata	
Scientific Name	Dalatias licha
Current Assess ID	WGEF-KFSHARNEATL-1972-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2018, 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	2018	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kitefin shark Northeast Atlantic [KFSHARNEATL]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Kitefin shark Northeast Atlantic [KFSHARNEATL]

Kitefin shark Northeast Atlantic [KFSHARNEATL]

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

Leafscale gulper shark Northeast Atlantic [LGSHARNEATL]

Metadata	
Scientific Name	Centrophorus squamosus
Current Assess ID	WGEF-LGSHARNEATL-1988-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 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	-	-	-		
TL	TL-MT	2018	2		
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 [LGSHARNEATL]

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]

■	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-1988-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	15,300		
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]

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

Ling Northeast Atlantic [LINGNEATL]
TL−MT, TC*, RecC* (1988−2020−ICESIMP2021−2)
50,000
0
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−index (1988−2020−ICESIMP2021−2)
200
0
2000
2004
2008
2012
2016
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGIIIa-IV-VIId-1993-2018-ICESIMP2021
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, 2018, 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	2018	2340		
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 [LSDOGIIIa−IV−VIId]

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

Lesser spotted dogfish ICES 8abd [LSDOGVIIIabd]

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVIIIabd-1997-2018-ICESIMP2021
Area	ICES 8abd
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016, 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	SSB-index	2014	1.02	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2018	8148		
TL	TL-MT	2018	1092		
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 [LSDOGVIIIabd]

Lesser spotted dogfish ICES 8abd [LSDOGVIIIabd]

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

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVIIIc-IXa-1993-2018-ICESIMP2021
Area	ICES 8c-9a
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2018, 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	2018	1035		
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]

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

Lesser spotted dogfish ICES 8c−9a [LSDOGVIIIc−IXa]

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

Metadata	
Scientific Name	Scyliorhinus canicula
Current Assess ID	WGEF-LSDOGVI-VIIabcefghij-2005-2018-ICESIMP2021
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, 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	SSB-index	2014	1.14	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	3763		
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]

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

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

Metadata	
Scientific Name	Microstomus kitt
Current Assess ID	WGNSSK-LSOLEIIIa-IV-VIId-1968-2020-ICESIMP2021-2
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, 2018, 2019, 2020, 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	2019	1.01	-	-
TN	-	-	-	-	-
R	R-index	2020	2.26	-	1
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	3040		
TL	TL-MT	2020	2650		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2018	0.193		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Lemon sole ICES 3a−4−7d [LSOLEIIIa−IV−VIId]

Lemon sole ICES 3a−4−7d [LSOLEIIIa−IV−VIId]

Lemon sole ICES 3a−4−7d [LSOLEIIIa−IV−VIId]
TC−MT, TL−MT, RecC* (1968−2020−ICESIMP2021−2)
12,000
0
MSY*, MORAT*
2006
2008
2010
2012
2014
2016
2018
2020
TAC*, Cpair*, Cadv*
survB−index (1968−2020−ICESIMP2021−2)
1.4
0.0
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Mackerel ICES Northeast Atlantic [MACKNEICES]

Metadata	
Scientific Name	Scomber scombrus
Current Assess ID	WGWIDE-MACKNEICES-1980-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.26
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$2{,}580{,}000$
Fmgt	Fmgt-1/yr	2021	0.26
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2×10^6
Flim	Flim-1/yr	2021	0.46
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$5{,}684{,}879$	-	-
SSB	SSB-MT	2021	$3{,}510{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	4.37×10^9	-	0
F	F-1/yr	2021	0.249	-	-
ER	ER-calc-ratio	2019	0.181	-	-
TC	TC-MT	2021	$1{,}040{,}000$		
TL	TL-MT	2016	$1{,}200{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.956		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.36		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.956		
ER/ERmgt	-	-	-		

Mackerel ICES Northeast Atlantic [MACKNEICES]

Mackerel ICES Northeast Atlantic [MACKNEICES]
TB−MT (1980−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1980−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1980−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1980−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Mackerel ICES Northeast Atlantic [MACKNEICES]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Megrim ICES 8c-9a [MEG8c9a]

Metadata	
Scientific Name	Lepidorhombus whiffiagonis
Current Assess ID	WGBIE-MEG8c9a-1986-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2010, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.191
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	980
Fmgt	Fmgt-1/yr	2021	0.191
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	700
Flim	Flim-1/yr	2021	0.45
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	2290	-	-
SSB	SSB-MT	2021	2780	-	-
TN	-	-	-	-	-
R	R-E00	2021	3,630,000	-	1
F	F-1/yr	2021	0.116	-	-
ER	ER-calc-ratio	2019	0.154	-	-
TC	TC-MT	2020	289		
TL	TL-MT	2021	320		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.607		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.837		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.607		
ER/ERmgt	-	-	-		

Megrim ICES 8c−9a [MEG8c9a]

Megrim ICES 8c−9a [MEG8c9a]
TB−MT (1985−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1986−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1986−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1985−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1986−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Megrim ICES 8c−9a [MEG8c9a]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

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

Metadata	
Scientific Name	Lepidorhombus spp
Current Assess ID	WGCSE-MEGSPPIVa-VIa-1985-2021-ICESIMP2021-2
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, 2018, 2020, 2021

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	2021	3530		
TL	TL-MT	2021	3320		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	1.47		
F/Fmsy	FdivFmsy-dimensionless	2021	0.475		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Megrim spp ICES 4a−6a [MEGSPPIVa−VIa]

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* (1985−2021−ICESIMP2021−2)
8,000
0
MSY*, MORAT*
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Megrim spp Rockall Bank [MEGSPPVIb]

Metadata	
Scientific Name	Lepidorhombus spp
Current Assess ID	WGCSE-MEGSPPVIb-1991-2019-ICESIMP2021-2
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, 2019, 2019

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	2016	4510	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2019	763		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2019	0.932		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Megrim spp Rockall Bank [MEGSPPVIb]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Megrim spp Rockall Bank [MEGSPPVIb]

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

Megrim spp Rockall Bank [MEGSPPVIb]
TL−MT, TC*, RecC* (1991−2019−ICESIMP2021)
1,400
0
1990
1994
1998
2002
2006
2010
2014
2018
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−MT (1991−2019−ICESIMP2021)
5,000
0
2005
2007
2009
2011
2013
2015
2017
2019
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Megrim ICES 7-8abd [MEGVII-VIIIabd]

Metadata	
Scientific Name	Lepidorhombus whiffiagonis
Current Assess ID	WGBIE-MEGVII-VIIIabd-1984-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.191
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	41,800
Fmgt	Fmgt-1/yr	2021	0.191
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	37,100
Flim	Flim-1/yr	2021	0.53
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	150,653	-	-
SSB	SSB-MT	2021	126,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	222,000	-	1
F	F-1/yr	2021	0.137	-	-
ER	ER-calc-ratio	2019	0.094	-	-
TC	TC-MT	2020	13,200		
TL	TL-MT	2021	11,100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.717		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	3.014		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.717		
ER/ERmgt	-	-	-		

Megrim ICES 7−8abd [MEGVII−VIIIabd]
Kobe MSYpref (1984−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
0.0
2.5
3
0
Kobe MGTpref (1984−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
0.0
2.5
3
0
Spawner Recruit (1984−2021−ICESIMP2021−2)
R−E00
SSB−MT
0
100,000
400,000
0
Production (1983−2019−ICESIMP2021)
Prod.
Abund.
0
120,000
70,000
0
Start Year
End Year
No Data

Megrim ICES 7−8abd [MEGVII−VIIIabd]
TB−MT (1983−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1984−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1984−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1983−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1984−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Megrim ICES 7−8abd [MEGVII−VIIIabd]
TC−MT, TL*, RecC* (1984−2020−ICESIMP2021−2)
25,000
0
MSY*, MORAT*
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster Noup (FU 10) [NEPHFU10]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU10-1994-2019-ICESIMP2021-2
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, 2019

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	2019	21		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway lobster Noup (FU 10) [NEPHFU10]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster Noup (FU 10) [NEPHFU10]

Norway lobster Noup (FU 10) [NEPHFU10]
TL−MT, TC*, RecC* (1994−2019−ICESIMP2021−2)
600
0
MSY*, MORAT*
1994
1998
2002
2006
2010
2014
2018
TAC*, Cpair*, Cadv*
survB−index (1994−2019−ICESIMP2021−2)
250
0
1994
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster North Minch (FU 11) [NEPHFU11]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU11-1981-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.108
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.108
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.071	-	-
ER	ER-ratio	2019	0.064	-	-
TC	TC-MT	2020	2270		
TL	TL-MT	2020	2220		
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]

Norway lobster North Minch (FU 11) [NEPHFU11]
TC−MT, TL−MT, RecC* (1981−2020−ICESIMP2021−2)
6,000
0
MSY*, MORAT*
1980
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB−E00 (1981−2020−ICESIMP2021−2)
2,000
0
1994
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster South Minch (FU 12) [NEPHFU12]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU12-1979-2020-ICESIMP2021-2
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	2019, 2020, 2015, 2016

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.117
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.117
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.035	-	-
ER	ER-ratio	2019	0.048	-	-
TC	TC-MT	2020	2350		
TL	TL-MT	2020	2300		
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−relative (1979−2020−ICESIMP2021−2)
0.35
0.00
1996
2000
2004
2008
2012
2016
Fmsy*, Fmgt−relative, Flim*
ER−ratio (1979−2019−ICESIMP2021)
0.35
0.00
1996
2000
2004
2008
2012
2016
ERmsy*, ERmgt−ratio, ERlim*
Recruits*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Norway lobster South Minch (FU 12) [NEPHFU12]
TC−MT, TL−MT, RecC* (1979−2020−ICESIMP2021−2)
8,000
0
MSY*, MORAT*
1980 1985 1990 1995 2000 2005 2010 2015 2020
TAC*, Cpair*, Cadv*
survB−E00 (1979−2020−ICESIMP2021−2)
3,000
0
1994 1998 2002 2006 2010 2014 2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU13-1981-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.151
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.151
ERmgt	ERmgt-ratio	2019	0.12
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2020	0.142	-	-
ER	ER-ratio	2019	0.111	-	-
TC	TC-MT	2020	5430		
TL	TL-MT	2020	4970		
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]

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

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU14-2000-2020-ICESIMP2021-2
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, 2019, 2020

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-relative	2020	0.11
ERmgt	ERmgt-ratio	2019	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-relative	2020	0.036	-	-
ER	ER-ratio	2019	0.026	-	-
TC	-	-	-		
TL	TL-MT	2020	0.27		
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]

Norway lobster Irish Sea East (FU 14) [NEPHFU14]
TB*
SSB−MT (2000−2015−ICESIMP2016)
800
0
2008.0
2009.5
2011.0
2012.5
2014.0
SSBmsy*, SSBmgt−MT, SSBlim*
TN *
F−relative (2000−2020−ICESIMP2021−2)
0.14
0.00
2008
2010
2012
2014
2016
2018
Fmsy*, Fmgt−relative, Flim*
ER−ratio (2000−2019−ICESIMP2021)
0.14
0.00
2008
2010
2012
2014
2016
2018
ERmsy*, ERmgt−ratio, ERlim*
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

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

■	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-NEPHFU15-1960-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	18.2
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.182
ERmgt	ERmgt-ratio	2019	0.182
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2020	0.153	-	-
ER	ER-ratio	2019	0.1	-	-
TC	-	-	-		
TL	TL-MT	2020	7590		
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]

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

■	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-NEPHFU16-1979-2020-ICESIMP2021-2
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, 2019, 2020, 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-relative	2020	0.062
ERmgt	ERmgt-ratio	2019	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-relative	2020	0.042	-	-
ER	ER-ratio	2019	0.059	-	-
TC	-	-	-		
TL	TL-MT	2020	2250		
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]

Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

■	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-NEPHFU17-1974-2020-ICESIMP2021-2
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, 2019, 2020, 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-relative	2020	0.085
ERmgt	ERmgt-ratio	2019	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-relative	2020	0.019	-	-
ER	ER-ratio	2019	0.054	-	-
TC	-	-	-		
TL	TL-MT	2020	167		
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]

Norway lobster Aran Grounds (FU 17) [NEPHFU17]
TB*
SSB−MT (1974−2016−ICESIMP2018)
SSBmsy*, SSBmgt−MT, SSBlim*
2,000
0
2002
2004
2006
2008
2010
2012
2014
2016
TN *
F−relative (1974−2020−ICESIMP2021−2)
Fmsy*, Fmgt−relative, Flim*
0.2
0.0
2002
2006
2010
2014
2018
ER−ratio (1974−2019−ICESIMP2021)
ERmsy*, ERmgt−ratio, ERlim*
0.2
0.0
2002
2004
2006
2008
2010
2012
2014
2016
2018
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* (1974−2020−ICESIMP2021−2)
MSY*, MORAT*
2,000
0
1975
1985
1995
2005
2015
TAC*, Cpair*, Cadv*
survB−E00 (1974−2020−ICESIMP2021−2)
2,000
0
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU19-1989-2020-ICESIMP2021-2
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	2019, 2020, 2015, 2016

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.093
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.069
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.033	-	-
ER	ER-ratio	2019	0.062	-	-
TC	-	-	-		
TL	TL-MT	2020	249		
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]

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

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU2021-1995-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.06
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.06
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.212	-	-
ER	ER-ratio	2019	0.03	-	-
TC	-	-	-		
TL	TL-MT	2020	3000		
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

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

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

Norway lobster Smalls (FU 22) [NEPHFU22]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU22-1999-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.128
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.128
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.085	-	-
ER	ER-ratio	2019	0.138	-	-
TC	-	-	-		
TL	TL-MT	2020	2080		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	1.781		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway lobster Smalls (FU 22) [NEPHFU22]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster Smalls (FU 22) [NEPHFU22]
TB*
SSB*
TN *
F−relative (1999−2020−ICESIMP2021−2)
0.3
0.0
2006
2008
2010
2012
2014
2016
2018
Fmsy*, Fmgt−relative, Flim*
ER−ratio (1999−2019−ICESIMP2021)
ERmsy*, ERmgt−ratio, ERlim*
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Norway lobster Smalls (FU 22) [NEPHFU22]
TL−MT, TC*, RecC* (1999−2020−ICESIMP2021−2)
4,000
0
2000
2004
2008
2012
2016
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−E00 (1999−2020−ICESIMP2021−2)
2,000
0
2006
2008
2010
2012
2014
2016
2018
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster North Galicia (FU 25) [NEPHFU25]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU25-1975-2021-ICESIMP2021-2
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, 2018, 2021

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	2021	2.97		
TL	TL-MT	2021	2		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	0.097		
F/Fmsy	FdivFmsy-dimensionless	2021	0.171		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway lobster North Galicia (FU 25) [NEPHFU25]

Norway lobster North Galicia (FU 25) [NEPHFU25]

Norway lobster North Galicia (FU 25) [NEPHFU25]

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU2627-1975-2021-ICESIMP2021-2
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, 2018, 2021

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	2018	0.051	-	-
ER	-	-	-	-	-
TC	TC-MT	2021	4.89		
TL	TL-MT	2018	2.01		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	0.021		
F/Fmsy	FdivFmsy-dimensionless	2021	0.426		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

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

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

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

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

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU2829-1984-2018-ICESIMP2021
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, 2018

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	2018	0.461	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	299		
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]

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

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU30-1994-2019-ICESIMP2021-2
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, 2019, 2019

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-E00	2017	370	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2019	0.01	-	-
TC	TC-MT	2019	76		
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

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

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

Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHFU31-1983-2018-ICESIMP2021
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, 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	3		
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]

Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

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

Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU32-1987-2019-ICESIMP2021-2
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, 2019

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	2019	191		
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 Deeps (FU 32) [NEPHFU32]

Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

■	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-NEPHFU33-1993-2019-ICESIMP2021-2
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, 2018, 2019

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	2019	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

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

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

■	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-NEPHFU34-2003-2019-ICESIMP2021-2
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, 2019

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	2019	1190		
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]

Norway lobster Devils Hole (FU 34) [NEPHFU34]
TL−MT, TC*, RecC* (2003−2019−ICESIMP2021−2)
1,500
0
MSY*, MORAT*
2004 2006 2008 2010 2012 2014 2016 2018
TAC*, Cpair*, Cadv*
survB−index (2003−2019−ICESIMP2021−2)
600
0
2004 2006 2008 2010 2012 2014 2016 2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU3-4-1960-2020-ICESIMP2021-2
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, 2018, 2019, 2020, 2015

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2020	7.9
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2020	7.9
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	2020	3.856	-	-
TC	TC-MT	2020	7130		
TL	TL-MT	2020	5910		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2020	0.488		
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]

Norway lobster Skagerak Kattegat (FU 3−4) [NEPHFU3−4]
TC−MT, TL−MT, RecC* (1960−2020−ICESIMP2021−2)
14,000
0
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−E00 (1960−2020−ICESIMP2021−2)
6,000,000,000
0
2011
2013
2015
2017
2019
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU5-1991-2019-ICESIMP2021-2
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, 2019

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	2019	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

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

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

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

Norway lobster Farn Deeps (FU 6) [NEPHFU6]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU6-1981-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2019	8.12
ERmsy	ERmsy-ratio	2020	8.12
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2019	8.12
ERmgt	ERmgt-ratio	2020	8.12
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2019	8.347	-	-
ER	ER-ratio	2020	16.099	-	-
TC	TC-MT	2020	4810		
TL	TL-MT	2020	4360		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2020	1.983		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Norway lobster Farn Deeps (FU 6) [NEPHFU6]
TB*
SSB*
TN *
F−relative (1981−2019−ICESIMP2021−2)
30
0
2002
2006
2010
2014
2018
Fmsy−relative, Fmgt−relative, Flim*
ER−ratio (1981−2020−ICESIMP2021−2)
ERmsy−ratio, ERmgt−ratio, ERlim*
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Norway lobster Farn Deeps (FU 6) [NEPHFU6]
TC−MT, TL−MT, RecC* (1981−2020−ICESIMP2021−2)
7,000
0
2000
2004
2008
2012
2016
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−E00 (1981−2020−ICESIMP2021−2)
2,000
0
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster Fladen Ground (FU 7) [NEPHFU7]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU7-1992-2020-ICESIMP2021-2
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, 2019, 2020

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-relative	2020	0.075
ERmgt	ERmgt-ratio	2019	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-relative	2020	0.056	-	-
ER	ER-ratio	2019	0.028	-	-
TC	-	-	-		
TL	TL-MT	2020	9030		
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]

Norway lobster Fladen Ground (FU 7) [NEPHFU7]
TB*
SSB−E00 (1992−2017−ICESIMP2018)
10,000,000,000
0
SSBmsy*, SSBmgt−E00, SSBlim*
1992
1996
2000
2004
2008
2012
2016
TN *
F−relative (1992−2020−ICESIMP2021−2)
0.12
0.00
Fmsy*, Fmgt−relative, Flim*
1992
1996
2000
2004
2008
2012
2016
2020
ER−ratio (1992−2019−ICESIMP2021)
0.12
0.00
ERmsy*, ERmgt−ratio, ERlim*
1992
1996
2000
2004
2008
2012
2016
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Norway lobster Fladen Ground (FU 7) [NEPHFU7]

Norway lobster Firth of Forth (FU 8) [NEPHFU8]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU8-1993-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.163
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2020	0.163
ERmgt	ERmgt-ratio	2019	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	F-relative	2020	0.183	-	-
ER	ER-ratio	2019	0.129	-	-
TC	-	-	-		
TL	TL-MT	2020	2680		
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]

Norway lobster Firth of Forth (FU 8) [NEPHFU8]

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

Norway lobster Moray Firth (FU 9) [NEPHFU9]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHFU9-1993-2019-ICESIMP2021-2
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, 2018, 2019

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2017	0.118
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2019	0.118
ERmgt	ERmgt-ratio	2018	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	F-relative	2019	0.148	-	-
ER	ER-ratio	2018	0.117	-	-
TC	-	-	-		
TL	TL-MT	2019	1400		
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]

Norway lobster Moray Firth (FU 9) [NEPHFU9]

Norway lobster North Sea [NEPHIV]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGNSSK-NEPHIV-2010-2019-ICESIMP2021-2
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, 2019

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	2019	724		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway lobster North Sea [NEPHIV]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Norway lobster North Sea [NEPHIV]

Norway lobster North Sea [NEPHIV]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Norway lobster West of Scotland [NEPHVIa]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHVIa-1981-2019-ICESIMP2021-2
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, 2019

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	2019	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

Norway lobster West of Scotland [NEPHVIa]

Norway lobster West of Scotland [NEPHVIa]
TL−MT, TC*, RecC* (1981−2019−ICESIMP2021−2)
700
0
MSY*, MORAT*
1980
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway lobster ICES 7 [NEPHVII]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHVII-1978-2019-ICESIMP2021-2
Area	ICES 7
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2019, 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	2019	242		
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 ICES 7 [NEPHVII]

Norway lobster ICES 7 [NEPHVII]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Norway lobster ICES 8ab [NEPHVIIIab]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGBIE-NEPHVIIIab-1987-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	7.7
ERmsy	ERmsy-ratio	2020	7.7
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2016	7.7
ERmgt	ERmgt-ratio	2020	7.7
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	2020	3.07	-	-
TC	TC-MT	2020	2790		
TL	TL-MT	2020	2150		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.779		
ER/ERmsy	ER-ratio/ERmsy-ratio	2020	0.399		
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 [NEPHVIIIab]
TB*
SSB−E00 (1987−2017−ICESIMP2018)
5,000
0
SSBmsy*, SSBmgt*, SSBlim*
2016.0
2016.2
2016.4
2016.6
2016.8
2017.0
TN *
F−1/yr (1987−2016−ICESIMP2018)
10
0
Fmsy−1/yr, Fmgt−1/yr, Flim*
2013.0
2013.4
2013.8
2014.2
2014.6
2015.0
ER−ratio (1987−2020−ICESIMP2021−2)
10
0
ERmsy−ratio, ERmgt−ratio, ERlim*
2016.0
2016.5
2017.0
2017.5
2018.0
2018.5
2019.0
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Norway lobster ICES 8ab [NEPHVIIIab]
TC−MT, TL−MT, RecC* (1987−2020−ICESIMP2021−2)
12,000
0
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−E00 (1987−2020−ICESIMP2021−2)
5,000,000,000
0
2016.0
2017.0
2018.0
2019.0
2020.0
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway pout ICES 3a-4 [NPOUTIIIa-IV]

Metadata	
Scientific Name	Trisopterus esmarkii
Current Assess ID	WGNSSK-NPOUTIIIa-IV-1984-2021-ICESIMP2022
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	$65{,}000$
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	$42{,}600$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2021	$477{,}772$	-	-
SSB	SSB-MT	2021	$236{,}634$	-	-
TN	-	-	-	-	-
R	R-E00	2021	2.4117×10^{10}	-	0
F	F-1/yr	2021	0.249	-	1 to 2
ER	ER-calc-ratio	2021	0.077	-	-
TC	TC-MT	2017	$30{,}100$		
TL	TL-MT	2021	$37{,}021$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	2.338		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Norway pout ICES 3a−4 [NPOUTIIIa−IV]

Norway pout ICES 3a−4 [NPOUTIIIa−IV]
TB−MT (1984−2021−ICESIMP2022)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1984−2021−ICESIMP2022)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−1/yr (1984−2021−ICESIMP2022)
Fmsy*, Fmgt*, Flim*
ER−calc−ratio (1984−2021−ICESIMP2022)
ERmsy*, ERmgt*, ERlim*
R−E00 (1984−2021−ICESIMP2022)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Norway pout ICES 3a−4 [NPOUTIIIa−IV]
TC−MT, TL*, RecC* (1984−2017−ICESIMP2018)
500,000
0
MSY*, MORAT*
1985
1990
1995
2000
2005
2010
2015
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Norway pout West of Scotland [NPOUTVIa]

Metadata	
Scientific Name	Trisopterus esmarkii
Current Assess ID	WGNSSK-NPOUTVIa-1970-2017-ICESIMP2021
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, 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	13		
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 [NPOUTVIa]

Norway pout West of Scotland [NPOUTVIa]

■	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-1988-2019-ICESIMP2021-2
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, 2019

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	2019	60		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Orange roughy Northeast Atlantic [OROUGHYNEATL]

Orange roughy Northeast Atlantic [OROUGHYNEATL]

■	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-1988-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.6
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	9900
Fmgt	Fmgt-1/yr	2021	0.59
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	6300
Flim	Flim-1/yr	2021	1
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2015	$29{,}400$	Both	-
SSB	SSB-MT	2021	7580	-	-
TN	-	-	-	-	-
R	R-E00	2021	7.8×10^9	-	0
F	F-1/yr	2021	0.587	-	-
ER	ER-calc-ratio	2015	0.412	-	-
TC	TC-MT	2021	9230		
TL	TL-MT	2021	8940		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2014	1.1		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	0.88		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.766		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.995		
ER/ERmgt	-	-	-		

Northern shrimp ICES 3a(west)−4a(east) [PANDALIIIaW−IVaE]
Kobe MSYpref (1988−2021−ICESIMP2021−2)
Kobe MGTpref (1988−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
1.4
0.0
2.5
Spawner Recruit (1988−2021−ICESIMP2021−2)
Production (1988−2015−ICESIMP2016)
R−E00
SSB−MT
20,000,000,000
25,000
Prod.
Abund.
60,000
Start Year
End Year
No Data

Northern shrimp ICES 3a(west)−4a(east) [PANDALIIIaW−IVaE]
TB−MT (1988−2015−ICESIMP2016)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1988−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1988−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1988−2015−ICESIMP2016)
ERmsy*, ERmgt*, ERlim*
R−E00 (1988−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Northern shrimp ICES 3a(west)−4a(east) [PANDALIIIaW−IVaE]
TC−MT, TL−MT, RecC* (1988−2021−ICESIMP2021−2)
20,000
0
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Northern shrimp Northern North Sea [PANDALIVa]

Metadata	
Scientific Name	Pandalus borealis
Current Assess ID	NIPAG-PANDALIVa-1970-2019-ICESIMP2021
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, 2019

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	2019	1.4		
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]

Northern shrimp Northern North Sea [PANDALIVa]

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

European plaice Subdivisions 21-23 [PLAIC2123]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBFAS-PLAIC2123-1999-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.31
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	4730
Fmgt	Fmgt-1/yr	2021	0.81
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	3640
Flim	Flim-1/yr	2021	1
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	14,245	-	-
SSB	SSB-MT	2021	18,900	-	-
TN	-	-	-	-	-
R	R-E00	2021	29,400	-	1
F	F-1/yr	2021	0.291	-	-
ER	ER-calc-ratio	2019	0.243	-	-
TC	TC-MT	2021	4470		
TL	TL-MT	2021	3410		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	1.219		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	3.996		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.359		
ER/ERmgt	-	-	-		

European plaice Subdivisions 21−23 [PLAIC2123]

European plaice Subdivisions 21−23 [PLAIC2123]
TB−MT (1998−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1999−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1999−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1998−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1999−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European plaice Subdivisions 21−23 [PLAIC2123]

European plaice Subdivisions 24-32 [PLAIC2432]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBFAS-PLAIC2432-2002-2020-ICESIMP2021-2
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, 2019, 2020

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	2019	3.224	-	-
SSB	SSB-relative	2020	2.39	-	-
TN	-	-	-	-	-
R	R-relative	2020	1.34	-	-
F	F-relative	2019	0.541	-	2 to 5
ER	-	-	-	-	-
TC	TC-MT	2020	2360		
TL	TL-MT	2020	1740		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

European plaice Subdivisions 24−32 [PLAIC2432]

European plaice Subdivisions 24−32 [PLAIC2432]
TB−relative (2001−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−relative (2002−2020−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−relative (2001−2019−ICESIMP2021)
Fmsy*, Fmgt*, Flim*
ER*
R−relative (2002−2020−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European plaice Subdivisions 24−32 [PLAIC2432]
TC−MT, TL−MT, RecC* (2002−2020−ICESIMP2021−2)
3,000
0
2002
2006
2010
2014
2018
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

European plaice Eastern English Channel [PLAIC7d]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGNSSK-PLAIC7d-1980-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.25
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	25,800
Fmgt	Fmgt-1/yr	2021	0.25
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	18,400
Flim	Flim-1/yr	2021	0.5
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2010	9230	Both	1+
SSB	SSB-MT	2021	39,900	-	-
TN	-	-	-	-	-
R	R-E00	2021	74,200	-	1
F	F-1/yr	2021	0.217	-	-
ER	ER-ratio	2010	0.344	-	-
TC	TC-MT	2021	3630		
TL	TL-MT	2021	1730		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.867		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.547		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.867		
ER/ERmgt	-	-	-		

European plaice Eastern English Channel [PLAIC7d]
Kobe MSYpref (1980−2021−ICESIMP2021−2)
Kobe MGTpref (1980−2021−ICESIMP2021−2)
F/Fmsy
F/Fmgt
SSB/SSBmgt
0.0
2.5
Spawner Recruit (1980−2021−ICESIMP2021−2)
Production (1979−2010−NEUBAUER)
R−E00
SSB−MT
Prod.
Abund.
0
60,000
250,000
14,000
25,000
Start Year
End Year
No Data

European plaice Eastern English Channel [PLAIC7d]
TB−MT (1979−2010−NEUBAUER)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1980−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−ratio (1979−2010−NEUBAUER)
ERmsy*, ERmgt*, ERlim*
R−E00 (1980−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European plaice Eastern English Channel [PLAIC7d]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

European plaice Celtic Sea [PLAICCELT]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICCELT-1977-2021-ICESIMP2021-2
Area	Celtic Sea
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2017, 2019, 2020, 2021, 2016, 2014, 2016, 2010

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	7515	-	-
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	2019	0.117	-	-
TC	TC-MT	2021	893		
TL	TL-MT	2021	536		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	1.52		
F/Fmsy	FdivFmsy-dimensionless	2021	0.287		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

European plaice Celtic Sea [PLAICCELT]

European plaice Celtic Sea [PLAICCELT]
TB−MT (1977−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−relative (1992−2014−ICESIMP2016)
SSBmsy*, SSBmgt*, SSBlim*
TN *
F−relative (1992−2014−ICESIMP2016)
Fmsy*, Fmgt*, Flim*
ER−calc−ratio (1977−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−relative (1992−2014−ICESIMP2016)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European plaice Celtic Sea [PLAICCELT]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

European plaice Western English Channel [PLAICECHW]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICECHW-1980-2020-ICESIMP2021-2
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, 2019, 2013, 2014, 2020, 2010

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.238
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2020	0.669
Fmgt	Fmgt-relative	2019	1.268
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	SSBlim-relative	2020	0.478
Flim	Flim-relative	2018	0.88
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-relative	2019	1.545	-	-
SSB	SSB-relative	2020	1.49	-	-
TN	-	-	-	-	-
R	R-relative	2020	0.9	-	2
F	F-relative	2019	0.613	-	3 to 6
ER	ER-calc-ratio	2014	0.227	-	-
TC	TC-MT	2016	2940		
TL	TL-MT	2020	1730		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2014	1.142		
ER/ERmsy	-	-	-		
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]

European plaice Western English Channel [PLAICECHW]

European plaice Western English Channel [PLAICECHW]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

European plaice Irish Sea [PLAICIS]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICIS-1981-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2014, 2010

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.196
ERmsy	ERmsy-ratio	2019	0.196
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	5290
Fmgt	Fmgt-1/yr	2021	0.403
ERmgt	ERmgt-ratio	2019	0.196
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	3960
Flim	Flim-1/yr	2021	0.5
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$19{,}350$	-	-
SSB	SSB-MT	2021	$15{,}800$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.3×10^7	-	1
F	F-1/yr	2021	0.044	-	-
ER	ER-ratio	2019	0.064	-	3 to 6
TC	TC-MT	2019	830		
TL	TL-MT	2021	330		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	0.372		
ER/ERmsy	ER-ratio/ERmsy-ratio	2019	0.327		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.987		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.109		
ER/ERmgt	-	-	-		

European plaice Irish Sea [PLAICIS]

European plaice Irish Sea [PLAICIS]

European plaice Irish Sea [PLAICIS]

■	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-1957-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.21
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$565{,}000$
Fmgt	Fmgt-1/yr	2021	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$207{,}000$
Flim	Flim-1/yr	2020	0.516
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$1{,}087{,}280$	-	-
SSB	SSB-MT	2021	1×10^6	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.26×10^9	-	1
F	F-1/yr	2021	0.149	-	-
ER	ER-calc-ratio	2019	0.097	-	-
TC	TC-MT	2021	$79{,}000$		
TL	TL-MT	2021	$40{,}900$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.709		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.77		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.709		
ER/ERmgt	-	-	-		

European plaice North Sea [PLAICNS]

European plaice North Sea [PLAICNS]
TB−MT (1956−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1957−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1957−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim*
ER−calc−ratio (1956−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1957−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

European plaice North Sea [PLAICNS]
TC−MT, TL−MT, RecC* (1957−2021−ICESIMP2021−2)
400,000
0
1955
1965
1975
1985
1995
2005
2015
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

European plaice ICES 7bc [PLAICVIIbc]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICVIIbc-1908-2019-ICESIMP2021-2
Area	ICES 7bc
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2019, 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	2019	9		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

European plaice ICES 7bc [PLAICVIIbc]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

European plaice ICES 7bc [PLAICVIIbc]

European plaice ICES 7bc [PLAICVIIbc]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

European plaice ICES 7h-k [PLAICVIIh-k]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGCSE-PLAICVIIh-k-1995-2020-ICESIMP2021-2
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, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.261
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2019	1.743
Fmgt	Fmgt-relative	2019	0.415
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	2019	0.579	-	-
TN	-	-	-	-	-
R	R-relative	2019	0.86	-	4
F	F-relative	2019	0.91	-	4 to 6
ER	-	-	-	-	-
TC	TC-MT	2020	70		
TL	TL-MT	2020	39		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

European plaice ICES 7h−k [PLAICVIIh−k]

European plaice ICES 7h−k [PLAICVIIh−k]

European plaice ICES 7h−k [PLAICVIIh−k]
TC−MT, TL−MT, RecC* (1995−2020−ICESIMP2021−2)
800
0
MSY*, MORAT*
1994
1998
2002
2006
2010
2014
2018
TAC*, Cpair*, Cadv*
survB−MT (1995−2020−ICESIMP2021−2)
2,000
0
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

European plaice ICES 8-9a [PLAICVIII-IXa]

Metadata	
Scientific Name	Pleuronectes platessa
Current Assess ID	WGBIE-PLAICVIII-IXa-1994-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	133		
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]

European plaice ICES 8−9a [PLAICVIII−IXa]
TL−MT, TC*, RecC* (1994−2018−ICESIMP2021)
500
0
1994
1998
2002
2006
2010
2014
2018
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Saithe ICES 3a-4-6 [POLLNS-VI-IIIa]

Metadata	
Scientific Name	Pollachius virens
Current Assess ID	WGNSSK-POLLNS-VI-IIIa-1967-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.363
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$149{,}000$
Fmgt	Fmgt-1/yr	2021	0.363
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	2×10^5
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$107{,}000$
Flim	Flim-1/yr	2021	0.668
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$383{,}325$	-	-
SSB	SSB-MT	2021	$138{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	$71{,}500{,}000$	-	3
F	F-1/yr	2021	0.453	-	-
ER	ER-calc-ratio	2019	0.246	-	-
TC	TC-MT	2021	$76{,}800$		
TL	TL-MT	2021	$73{,}800$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.248		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.926		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.248		
ER/ERmgt	-	-	-		

Saithe ICES 3a−4−6 [POLLNS−VI−IIIa]
Kobe MSYpref (1967−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
2.5
0.0
0
4
Kobe MGTpref (1967−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1967−2021−ICESIMP2021−2)
R−E00
SSB−MT
500,000,000
600,000
Production (1964−2019−ICESIMP2021)
Prod.
Abund.
500,000
1,200,000
Start Year
End Year
No Data

Saithe ICES 3a−4−6 [POLLNS−VI−IIIa]
TB−MT (1964−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1967−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1967−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1964−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1967−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Saithe ICES 3a−4−6 [POLLNS−VI−IIIa]
TC−MT, TL−MT, RecC* (1967−2021−ICESIMP2021−2)
500,000
0
MSY*, MORAT*
1965
1975
1985
1995
2005
2015
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
TL−MT/MSY−MT, CdivMEANC−ratio, (1964−2012−CHING)
3
0
MSY−MT
1965
1975
1985
1995
2005
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Porbeagle shark Northeast Atlantic [PORSHARNEATL]

Metadata	
Scientific Name	Lamna nasus
Current Assess ID	WGEF-PORSHARNEATL-1926-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 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	-	-	-		
TL	TL-MT	2018	7		
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

Porbeagle shark Northeast Atlantic [PORSHARNEATL]

Porbeagle shark Northeast Atlantic [PORSHARNEATL]

■	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-1988-2019-ICESIMP2021-2
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, 2019

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	2019	60		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Red seabream ICES 9 [RBRMIX]

Red seabream ICES 9 [RBRMIX]

Red seabream ICES 6-7-8 [RBRMVI-VII-VIII]

Metadata	
Scientific Name	Pagellus bogaraveo
Current Assess ID	WGDEEP-RBRMVI-VII-VIII-1948-2019-ICESIMP2021-2
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, 2019

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	2019	98		
TL	TL-MT	2019	98		
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 6−7−8 [RBRMVI−VII−VIII]

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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Red seabream Azores Grounds [RBRMX]

Metadata	
Scientific Name	Pagellus bogaraveo
Current Assess ID	WGDEEP-RBRMX-1980-2020-ICESIMP2021-2
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, 2018, 2019, 2020

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	445		
TL	TL-MT	2020	491		
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]

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]

Beaked redfish Southeast Greenland [REDDEEPXIVb]

■	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	WGWIDE-RGURNNEATL-2006-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	4018		
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]

Red gurnard Northeast Atlantic [RGURNNEATL]

■	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-1990-2019-ICESIMP2021-2
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, 2019

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	2019	259		
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

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

■	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-XIVab2-1990-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	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

Roundnose grenadier ICES 1−2−4−5a2−8−9−14ab2 [RNGENI−II−IV−Va2−VIII−IX−XIVab2]

Roundnose grenadier ICES 1−2−4−5a2−8−9−14ab2 [RNGENI−II−IV−Va2−VIII−IX−XIVab2]

Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGENMATLR-1973-2018-ICESIMP2021
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, 2018, 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	2018	27		
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]

Roundnose grenadier Mid−Atlantic Ridge [RNGENMATLR]

Roundnose grenadier ICES 5b-6-7-12b [RNGENVb-VI-VII-XIIb]

Metadata	
Scientific Name	Coryphaenoides rupestris
Current Assess ID	WGDEEP-RNGENVb-VI-VII-XIIb-1988-2019-ICESIMP2021-2
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, 2019

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	2019	689		
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]

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]

■	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-1985-2019-ICESIMP2021-2
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	2019, 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	2019	0.99		
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 Kattegat and Skagerrak [RNGRENIIIa]

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIa]

Sardine ICES 8c-9a [SARDPVIIIc-IXa]

Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDPVIIIc-IXa-1978-2021-ICESIMP2021-2
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, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.092
ERmsy	-	-	-
TBmgt	TBmgt-MT	2016	368,400
SSBmgt	SSBmgt-MT	2021	253,000
Fmgt	Fmgt-1/yr	2021	0.092
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.33
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	196,000
Flim	Flim-1/yr	2021	0.26
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2016	199,000	Both	-
SSB	SSB-MT	2021	451,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	9,520,000	-	0
F	F-1/yr	2021	0.061	-	-
ER	ER-calc-ratio	2016	0.125	-	-
TC	TC-MT	2021	22,100		
TL	TL-MT	2018	21,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.658		
ER/ERmsy	-	-	-		
TB/TBmgt	TB-MT/TBmgt-MT	2016	0.54		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.783		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.658		
ER/ERmgt	-	-	-		

Sardine ICES 8c−9a [SARDPVIIIc−IXa]
Kobe MSYpref (1978−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1978−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1978−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1978−2016−ICESIMP2016)
Prod.
Abund.
Start Year
End Year
No Data

Sardine ICES 8c−9a [SARDPVIIIc−IXa]
TB−MT (1978−2016−ICESIMP2016)
TBmsy*, TBmgt−MT, TBlim*
SSB−MT (1978−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1978−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1978−2016−ICESIMP2016)
ERmsy*, ERmgt*, ERlim*
R−E00 (1978−2021−ICESIMP2021−2)
REC−EST*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Sardine ICES 8c−9a [SARDPVIIIc−IXa]
TC−MT, TL*, RecC* (1978−2021−ICESIMP2021−2)
250,000
0
MSY*, MORAT*
1980
1990
2000
2010
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Sardine ICES 7 [SARDVII]

Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDVII-1970-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	10,412		
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]

Sardine ICES 7 [SARDVII]
TL−MT, TC*, RecC* (1970−2018−ICESIMP2021)
30,000
0
1970
1980
1990
2000
2010
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Sardine ICES 8abd [SARDVIIIabd]

Metadata	
Scientific Name	Sardina pilchardus
Current Assess ID	WGHANSA-SARDVIIIabd-2000-2020-ICESIMP2021-2
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	2019, 2020, 2017, 2018

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.453
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2020	78,700
Fmgt	Fmgt-1/yr	2020	0.453
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	56,300
Flim	Flim-1/yr	2020	0.757
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2020	104,000	-	-
TN	-	-	-	-	-
R	R-E00	2020	4,840,000	-	0
F	F-1/yr	2020	0.379	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	24,600		
TL	TL-MT	2018	30,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	0.837		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2020	1.321		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	0.837		
ER/ERmgt	-	-	-		

Sardine ICES 8abd [SARDVIIIabd]
Kobe MSYpref (2000−2020−ICESIMP2021−2)
Kobe MGTpref (2000−2020−ICESIMP2021−2)
F/Fmsy
F/Fmgt
SSB/SSBmgt
1.4
0.0
2.5
Spawner Recruit (2000−2020−ICESIMP2021−2)
Production*
R−E00
SSB−MT
10,000,000
0
200,000
Start Year
End Year
No Data

Sardine ICES 8abd [SARDVIIIabd]

Sardine ICES 8abd [SARDVIIIabd]
TC−MT, TL*, RecC* (2000−2020−ICESIMP2021−2)
40,000
0
MSY*, MORAT*
2000
2004
2008
2012
2016
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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]

Sandy ray ICES 6−7 [SDRAYVI−VII]
TL−MT, TC*, RecC* (2009−2015−ICESIMP2018)
100
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Sand eel Sandeel Area 1 [SEELNSSA1]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA1-1983-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	145,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	110,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2015	351,000	Both	-
SSB	SSB-MT	2021	128,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.11×10^{11}	-	0
F	F-1/yr	2020	0.55	-	-
ER	ER-ratio	2021	0.493	-	-
TC	TC-MT	2021	103,000		
TL	TL-MT	2020	59,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.917		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 1 [SEELNSSA1]

Sand eel Sandeel Area 1 [SEELNSSA1]
TB−MT (1983−2015−ICESIMP2016)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1983−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim−MT
TN *
F−1/yr (1983−2020−ICESIMP2021−2)
Fmsy*, Fmgt*, Flim*
ER−ratio (1983−2021−ICESIMP2021−2)
ERmsy*, ERmgt*, ERlim*
R−E00 (1983−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Sand eel Sandeel Area 1 [SEELNSSA1]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sand eel Sandeel Area 2 [SEELNSSA2]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA2-1983-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	$84{,}000$
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$56{,}000$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2015	$174{,}000$	Both	-
SSB	SSB-MT	2021	$61{,}300$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.96×10^{10}	-	0
F	F-1/yr	2020	0.056	-	-
ER	ER-ratio	2021	0.581	-	-
TC	TC-MT	2021	$72{,}600$		
TL	TL-MT	2020	5220		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.274		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 2 [SEELNSSA2]

Sand eel Sandeel Area 2 [SEELNSSA2]

Sand eel Sandeel Area 2 [SEELNSSA2]

■	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-SEELNSSA3-1986-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	$129{,}000$
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$80{,}000$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2015	$535{,}000$	Both	-
SSB	SSB-MT	2021	$320{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.12×10^{11}	-	0
F	F-1/yr	2020	0.408	-	-
ER	ER-ratio	2021	0.664	-	-
TC	TC-MT	2021	$247{,}000$		
TL	TL-MT	2020	$136{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	2.636		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 3 [SEELNSSA3]

Sand eel Sandeel Area 3 [SEELNSSA3]
TB−MT (1983−2015−ICESIMP2016)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1986−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt*, SSBlim−MT
TN *
F−1/yr (1986−2020−ICESIMP2021−2)
Fmsy*, Fmgt*, Flim*
ER−ratio (1986−2021−ICESIMP2021−2)
ERmsy*, ERmgt*, ERlim*
R−E00 (1986−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Sand eel Sandeel Area 3 [SEELNSSA3]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sand eel Sandeel Area 4 [SEELNSSA4]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA4-1993-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	$102{,}000$
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$48{,}000$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2021	$202{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	7.38×10^{10}	-	0
F	F-1/yr	2020	0.053	-	-
ER	ER-ratio	2021	0.046	-	-
TC	TC-MT	2021	$19{,}600$		
TL	TL-MT	2020	6600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	1.912		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sand eel Sandeel Area 4 [SEELNSSA4]

Sand eel Sandeel Area 4 [SEELNSSA4]

Sand eel Sandeel Area 4 [SEELNSSA4]

Sand eel Sandeel Area 5 [SEELNSSA5]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA5-1982-2020-ICESIMP2021-2
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, 2018, 2020, 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	2020	0		
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 Sandeel Area 5 [SEELNSSA5]

Sand eel Sandeel Area 5 [SEELNSSA5]

Sand eel Sandeel Area 6 [SEELNSSA6]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA6-1982-2020-ICESIMP2021-2
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	2020, 2015, 2015, 2016, 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	2020	177		
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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sand eel Sandeel Area 7 [SEELNSSA7]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELNSSA7-1982-2020-ICESIMP2021-2
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	2020, 2015, 2015, 2016, 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	2020	0		
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 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]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sand eel West of Scotland [SEELVIa]

Metadata	
Scientific Name	Ammodytes spp
Current Assess ID	HAWG-SEELVIa-1970-2020-ICESIMP2021-2
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, 2017, 2020

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	2020	2.69		
TL	TL-MT	2017	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 [SEELVIa]

Sand eel West of Scotland [SEELVIa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Smalleyed ray ICES 7de [SERAYVIIde]

Metadata	
Scientific Name	Raja microocellata
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

Smalleyed ray ICES 7de [SERAYVIIde]

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)
70
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Smalleyed ray Celtic Sea [SERAYVIIf-g]

Metadata	
Scientific Name	Raja microocellata
Current Assess ID	WGEF-SERAYVIIf-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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Smalleyed ray Celtic Sea [SERAYVIIf−g]

Smalleyed ray Celtic Sea [SERAYVIIf−g]
TL−MT, TC*, RecC* (1993−2015−ICESIMP2018)
400
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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]

Shagreen ray ICES 6−7 [SGRAYVI−VII]

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

Smooth hound Northeast Atlantic [SHSPPNEATL]

Metadata	
Scientific Name	Mustelus spp
Current Assess ID	WGEF-SHSPPNEATL-1997-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2018, 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	2018	3684		
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]

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

Smooth hound Northeast Atlantic [SHSPPNEATL]
TL−MT, TC*, RecC* (1997−2018−ICESIMP2021)
5,000
0
MSY*, MORAT*
2005
2007
2009
2011
2013
2015
2017
TAC*, Cpair*, Cadv*
survB−index (1997−2018−ICESIMP2021)
2.5
0.0
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Common sole Celtic Sea [SOLECS]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLECS-1971-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.251
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	3060
Fmgt	Fmgt-1/yr	2021	0.251
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2180
Flim	Flim-1/yr	2021	0.543
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	6924	-	-
SSB	SSB-MT	2021	6140	-	-
TN	-	-	-	-	-
R	R-E00	2021	5,060,000	-	1
F	F-1/yr	2021	0.269	-	-
ER	ER-calc-ratio	2019	0.156	-	-
TC	TC-MT	2019	997		
TL	TL-MT	2021	1520		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.071		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.007		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.071		
ER/ERmgt	-	-	-		

Common sole Celtic Sea [SOLECS]

Common sole Celtic Sea [SOLECS]
TB−MT (1970−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1971−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1971−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1970−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1971−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole Celtic Sea [SOLECS]

■	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-2224-1984-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.23
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	2600
Fmgt	Fmgt-1/yr	2020	0.23
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	1850
Flim	Flim-1/yr	2020	0.315
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	3460	Both	-
SSB	SSB-MT	2021	3370	-	-
TN	-	-	-	-	-
R	R-E00	2021	2,850,000	-	1
F	F-1/yr	2020	0.203	-	-
ER	ER-calc-ratio	2018	0.15	-	-
TC	TC-MT	2011	538		
TL	TL-MT	2021	424		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.213		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.296		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	0.883		
ER/ERmgt	-	-	-		

Common sole ICES 22−24−3a [SOLEIIIa−2224]

Common sole ICES 22−24−3a [SOLEIIIa−2224]
TB−MT (1983−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1984−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1984−2020−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1983−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1984−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole ICES 22−24−3a [SOLEIIIa−2224]

Common sole Irish Sea [SOLEIS]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEIS-1970-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2011

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.2
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	3500
Fmgt	Fmgt-1/yr	2021	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2500
Flim	Flim-1/yr	2021	0.29
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	3427	-	-
SSB	SSB-MT	2021	4070	-	-
TN	-	-	-	-	-
R	R-E00	2021	2930	-	2
F	F-1/yr	2021	0.13	-	-
ER	ER-calc-ratio	2019	0.012	-	-
TC	TC-MT	2019	38		
TL	TL-MT	2021	404		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.65		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.163		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.65		
ER/ERmgt	-	-	-		

Common sole Irish Sea [SOLEIS]

Common sole Irish Sea [SOLEIS]
TB−MT (1968−2019−ICESIMP2021)
12,000
0
TBmsy*, TBmgt*, TBlim*
1970
1980
1990
2000
2010
2020
SSB−MT (1970−2021−ICESIMP2021−2)
8,000
0
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1970−2021−ICESIMP2021−2)
1
0
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1968−2019−ICESIMP2021)
0.3
0.0
ERmsy*, ERmgt*, ERlim*
2011.0
2012.5
2014.0
2015.5
2017.0
R−E00 (1970−2021−ICESIMP2021−2)
30,000
REC−EST*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Common sole Irish Sea [SOLEIS]

■	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-1957-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.207
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$42{,}800$
Fmgt	Fmgt-1/yr	2021	0.207
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$30{,}800$
Flim	Flim-1/yr	2021	0.42
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	$64{,}800$	Both	-
SSB	SSB-MT	2021	$64{,}800$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.14×10^8	-	1
F	F-1/yr	2021	0.233	-	-
ER	ER-calc-ratio	2018	0.191	-	-
TC	TC-MT	2021	$10{,}500$		
TL	TL-MT	2021	8840		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.124		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.514		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.124		
ER/ERmgt	-	-	-		

Common sole North Sea [SOLENS]
Kobe MSYpref (1957−2021−ICESIMP2021−2)
Kobe MGTpref (1957−2021−ICESIMP2021−2)
F/Fmsy
F/Fmgt
SSB/SSBmgt
3.5
0.0
0
3
Spawner Recruit (1957−2021−ICESIMP2021−2)
Production (1956−2018−ICESIMP2018)
R−E00
Prod.
SSB−MT
Abund.
600,000,000
0
120,000
80,000
−20,000
200,000
Start Year
End Year
No Data

Common sole North Sea [SOLENS]
TB−MT (1956−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1957−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1957−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1956−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1957−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole North Sea [SOLENS]
TC−MT, TL−MT, RecC* (1957−2021−ICESIMP2021−2)
40,000
0
1955
1965
1975
1985
1995
2005
2015
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Common sole ICES 7bc [SOLEVIIbc]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEVIIbc-1908-2019-ICESIMP2021-2
Area	ICES 7bc
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2016, 2019, 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	2019	18		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Common sole ICES 7bc [SOLEVIIbc]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Common sole ICES 7bc [SOLEVIIbc]

Common sole ICES 7bc [SOLEVIIbc]
TL−MT, TC*, RecC* (1908−2019−ICESIMP2021−2)
500
0
1910
1930
1950
1970
1990
2010
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Common sole Eastern English Channel [SOLEVIId]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGNSSK-SOLEVIId-1982-2021-ICESIMP2021-2
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, 2018, 2019, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2018	0.256
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	15,100
Fmgt	Fmgt-1/yr	2021	0.379
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	10,800
Flim	Flim-1/yr	2021	0.422
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	17,300	Both	-
SSB	SSB-MT	2021	14,500	-	-
TN	-	-	-	-	-
R	R-E00	2021	23,500,000	-	1
F	F-1/yr	2021	0.336	-	-
ER	ER-calc-ratio	2018	0.14	-	-
TC	TC-MT	2019	2200		
TL	TL-MT	2021	1560		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	0.938		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.96		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.886		
ER/ERmgt	-	-	-		

Common sole Eastern English Channel [SOLEVIId]

Common sole Eastern English Channel [SOLEVIId]
TB−MT (1981−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1982−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1982−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1981−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1982−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole Eastern English Channel [SOLEVIId]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Common sole Western English Channel [SOLEVIIe]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEVIIe-1969-2021-ICESIMP2021-2
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, 2019, 2013, 2014, 2020, 2021, 2010

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.29
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	2900
Fmgt	Fmgt-1/yr	2021	0.29
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2000
Flim	Flim-1/yr	2021	0.44
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	5934	-	-
SSB	SSB-MT	2021	6080	-	-
TN	-	-	-	-	-
R	R-E00	2021	4,970,000	-	2
F	F-1/yr	2021	0.258	-	-
ER	ER-calc-ratio	2019	0.181	-	-
TC	TC-MT	2017	924		
TL	TL-MT	2021	1220		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.889		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.097		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.889		
ER/ERmgt	-	-	-		

Common sole Western English Channel [SOLEVIIe]

Common sole Western English Channel [SOLEVIIe]
TB−MT (1967−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1969−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1969−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1967−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1969−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole Western English Channel [SOLEVIIe]

Common sole ICES 7h-k [SOLEVIIh-k]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGCSE-SOLEVIIh-k-1996-2020-ICESIMP2021-2
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, 2019, 2019, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-relative	2018	0.161
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2019	1.109
Fmgt	Fmgt-relative	2019	0.675
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	2019	0.865	-	-
TN	-	-	-	-	-
R	R-relative	2019	1.001	-	3
F	F-relative	2019	0.468	-	3 to 6
ER	-	-	-	-	-
TC	TC-MT	2020	299		
TL	TL-MT	2020	299		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Common sole ICES 7h−k [SOLEVIIh−k]

Common sole ICES 7h−k [SOLEVIIh−k]

Common sole ICES 7h−k [SOLEVIIh−k]
TC−MT, TL−MT, RecC* (1996−2020−ICESIMP2021−2)
700
0
1996
2000
2004
2008
2012
2016
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Common sole ICES 8ab [SOLEVIIIab]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGBIE-SOLEVIIIab-1984-2020-ICESIMP2021-2
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, 2019, 2014, 2015, 2020, 2011, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.33
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2020	10,600
Fmgt	Fmgt-1/yr	2020	0.33
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.1
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	7600
Flim	Flim-1/yr	2020	0.6
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	16,000	Both	-
SSB	SSB-MT	2020	11,800	-	-
TN	-	-	-	-	-
R	R-E00	2020	18,500,000	-	2
F	F-1/yr	2020	0.364	-	-
ER	ER-calc-ratio	2018	0.206	-	-
TC	TC-MT	2018	3300		
TL	TL-MT	2020	3400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.103		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2020	1.113		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	1.103		
ER/ERmgt	-	-	-		

Common sole ICES 8ab [SOLEVIIIab]

Common sole ICES 8ab [SOLEVIIIab]
TB−MT (1982−2018−ICESIMP2018)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1984−2020−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1984−2020−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1982−2018−ICESIMP2018)
ERmsy*, ERmgt*, ERlim*
R−E00 (1984−2020−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Common sole ICES 8ab [SOLEVIIIab]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Common sole ICES 8c-9a [SOLEVIIIc-IXa]

Metadata	
Scientific Name	Solea solea
Current Assess ID	WGBIE-SOLEVIIIc-IXa-2000-2018-ICESIMP2021
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, 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	-	-	-		
TL	TL-MT	2018	579		
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]

Common sole ICES 8c−9a [SOLEVIIIc−IXa]

■	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-SPRAT22-32-1974-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.31
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$570{,}000$
Fmgt	Fmgt-1/yr	2021	0.31
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$410{,}000$
Flim	Flim-1/yr	2021	0.63
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	$1{,}664{,}000$	-	-
SSB	SSB-MT	2021	$977{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.12×10^{11}	-	1
F	F-1/yr	2021	0.368	-	-
ER	ER-calc-ratio	2019	0.176	-	-
TC	TC-MT	2021	$272{,}000$		
TL	TL-MT	2021	$272{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	1.187		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.714		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	1.187		
ER/ERmgt	-	-	-		

Sprat Baltic Areas 22−32 [SPRAT22−32]

Sprat Baltic Areas 22−32 [SPRAT22−32]
TB−MT (1973−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1974−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1974−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1973−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1974−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Sprat Baltic Areas 22−32 [SPRAT22−32]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sprat ICES 3a-4 [SPRATIIIa-IV]

Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATIIIa-IV-1974-2021-ICESIMP2021-2
Area	ICES 3a-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	2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$94{,}000$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2021	$162{,}000$	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.27×10^8	-	0
F	F-1/yr	2021	1.671	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	$137{,}000$		
TL	TL-MT	2021	$179{,}000$		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sprat ICES 3a−4 [SPRATIIIa−IV]

Sprat ICES 3a−4 [SPRATIIIa−IV]

Sprat ICES 3a−4 [SPRATIIIa−IV]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Sprat ICES 7de [SPRATVIIde]

Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATVIIde-1977-2020-ICESIMP2021-2
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	2018, 2019, 2020, 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-MT	2018	17,091	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2020	0.025	-	-
ER	ER-ratio	2017	0.001	-	-
TC	TC-MT	2020	873		
TL	TL-MT	2018	2252		
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−MT (1977−2018−ICESIMP2021)
100,000
0
SSBmsy*, SSBmgt*, SSBlim*
2013.0
2014.0
2015.0
2016.0
2017.0
2018.0
TN *
F−relative (1977−2020−ICESIMP2021−2)
0.4
0.0
Fmsy*, Fmgt*, Flim*
2013.0
2014.5
2016.0
2017.5
2019.0
ER−ratio (1985−2017−ICESIMP2018)
0.0035
0.0000
ERmsy*, ERmgt*, ERlim*
2013.0
2014.0
2015.0
2016.0
2017.0
Recruits*
Listed time series
Target BRP
Rec−Est
MSY−based BRP
Lim BRP
No Data

Sprat ICES 7de [SPRATVIIde]
TC−MT, TL*, RecC* (1977−2020−ICESIMP2021−2)
20,000
0
1980
1990
2000
2010
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−MT (1977−2020−ICESIMP2021−2)
100,000
0
2013.0
2014.5
2016.0
2017.5
2019.0
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Sprat ICES 6-7abcfghijk [SPRATVI-VIIabcfghijk]

Metadata	
Scientific Name	Sprattus sprattus
Current Assess ID	HAWG-SPRATVI-VIIabcfghijk-1986-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	15,200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sprat ICES 6−7abcfghijk [SPRATVI−VIIabcfghijk]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Sprat ICES 6−7abcfghijk [SPRATVI−VIIabcfghijk]

Sprat ICES 6−7abcfghijk [SPRATVI−VIIabcfghijk]
TL−MT, TC*, RecC* (1986−2020−ICESIMP2021−2)
20,000
0
1985
1990
1995
2000
2005
2010
2015
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Spotted ray ICES 3a-4-7d [SPRAYIIIa-IV-VIId]

Metadata	
Scientific Name	Raja montagui
Current Assess ID	WGEF-SPRAYIIIa-IV-VIId-1993-2018-ICESIMP2021
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, 2018, 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	2018	355		
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]

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

Spotted ray ICES 3a−4−7d [SPRAYIIIa−IV−VIId]
TL−MT, TC*, RecC* (1993−2018−ICESIMP2021)
500
0
2009
2011
2013
2015
2017
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB−index (1993−2018−ICESIMP2021)
3
0
1992
1996
2000
2004
2008
2012
2016
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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 Portugese Waters −East [SPRAYIXa]

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

Spotted ray Portugese Waters −East [SPRAYIXa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

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

Spotted ray ICES 7aefgh [SPRAYVIIaefgh]

■	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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Spotted ray Bay of Biscay [SPRAYVIII]

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

Spotted ray Bay of Biscay [SPRAYVIII]

■	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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Spotted ray ICES 6−7bj [SPRAYVI−VIIbj]

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

Spotted ray ICES 6−7bj [SPRAYVI−VIIbj]

■	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-1905-2020-ICESIMP2021-2
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016, 2020

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2014	0.029
TBmgt	TBmgt-MT	2020	$677{,}000$
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	2020	$436{,}999$	-	-
SSB	SSB-MT	2020	$74{,}100$	-	-
TN	-	-	-	-	-
R	R-E00	2020	1.72×10^8	-	0
F	F-relative	2020	0.008	-	-
ER	ER-calc-ratio	2020	0.006	-	-
TC	TC-MT	2020	2470		
TL	TL-MT	2020	454		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2014	0.466		
TB/TBmgt	TB-MT/TBmgt-MT	2020	0.645		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spurdog Northeast Atlantic [SPURDNEATL]

Spurdog Northeast Atlantic [SPURDNEATL]
TB−MT (1905−2020−ICESIMP2021−2)
2,000,000
0
TBmsy*, TBmgt−MT, TBlim*
SSB−MT (1905−2020−ICESIMP2021−2)
400,000
0
SSBmsy*, SSBmgt*, SSBlim*
1910
1930
1950
1970
1990
2010
TN *
F−relative (1905−2020−ICESIMP2021−2)
0.14
0.00
Fmsy*, Fmgt*, Flim*
ER−calc−ratio (1905−2020−ICESIMP2021−2)
0.1
0.0
ERmsy*, ERmgt*, ERlim*
R−E00 (1905−2020−ICESIMP2021−2)
500,000,000
0
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Spurdog Northeast Atlantic [SPURDNEATL]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Starry ray ICES 2-3a-4 [STRAYII-IIIa-IV]

Metadata	
Scientific Name	Amblyraja radiata
Current Assess ID	WGEF-STRAYII-IIIa-IV-1991-2018-ICESIMP2021
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, 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	SSB-index	2014	0.41	Both	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2018	1.341		
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]

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

Starry ray ICES 2−3a−4 [STRAYII−IIIa−IV]
TL−MT, TC*, RecC* (1991−2018−ICESIMP2021)
MSY*, MORAT*
1.5
0.0
2012.0
2013.0
2014.0
2015.0
2016.0
2017.0
2018.0
TAC*, Cpair*, Cadv*
survB−index (1991−2018−ICESIMP2021)
2.5
0.0
1990
1994
1998
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Striped red mullet ICES 3a-4-7d [STRMULLIIIa-IV-VIId]

Metadata	
Scientific Name	Mullus surmuletus
Current Assess ID	WGNSSK-STRMULLIIIa-IV-VIId-2004-2020-ICESIMP2021-2
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, 2018, 2020

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	0.591	-	-
TN	-	-	-	-	-
R	R-relative	2018	7	-	-
F	F-relative	2018	2.077	-	1 to 2
ER	-	-	-	-	-
TC	TC-MT	2018	1648		
TL	TL-MT	2020	3500		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Striped red mullet ICES 3a−4−7d [STRMULLIIIa−IV−VIId]

Striped red mullet ICES 3a−4−7d [STRMULLIIIa−IV−VIId]

Striped red mullet ICES 3a−4−7d [STRMULLIIIa−IV−VIId]

Striped red mullet ICES 6-7abcefghijk-8-9a [STRMULLVI-VIIabcefghijk-VIII-IXa]

Metadata	
Scientific Name	Mullus surmuletus
Current Assess ID	WGWIDE-STRMULLVI-VIIabcefghijk-VIII-IXa-1979-2019-ICESIMP2021-2
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, 2019

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	2019	1850		
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]

Striped red mullet ICES 6−7abcefghijk−8−9a [STRMULLVI−VIIabcefghijk−VIII−IXa]

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]

Sea trout Baltic Areas 22−32 [STROUT22−32]

Thornback skate ICES 3a-4-7d [TBSKAIIIa-IV-VIId]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAIIIa-IV-VIId-1993-2018-ICESIMP2021
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, 2018, 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	2018	2219		
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 [TBSKAIIIa−IV−VIId]

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

Thornback skate ICES 3a−4−7d [TBSKAIIIa−IV−VIId]

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

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 Portugese Waters −East [TBSKAIXa]

Thornback skate Portugese Waters −East [TBSKAIXa]

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]

Thornback skate ICES 6 [TBSKAVI]
TL−MT, TC*, RecC* (2005−2015−ICESIMP2018)
300
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

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]

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

Thornback skate ICES 7afg [TBSKAVIIafg]

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

Thornback skate Western English Channel [TBSKAVIIe]

Metadata	
Scientific Name	Raja clavata
Current Assess ID	WGEF-TBSKAVIIe-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 [TBSKAVIIe]

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 [TBSKAVIIe]
TL−MT, TC*, RecC* (2009−2015−ICESIMP2018)
500
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Thornback skate Bay of Biscay [TBSKAVIII]

■	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)
700
0
MSY*, MORAT*
2009.0
2010.0
2011.0
2012.0
2013.0
2014.0
2015.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Tope shark Northeast Atlantic [TPSHARNEATL]

Metadata	
Scientific Name	Galeorhinus galeus
Current Assess ID	WGEF-TPSHARNEATL-2005-2018-ICESIMP2021
Area	Northeast Atlantic
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Elasmobranch Fishes
Asmts in RAM	2014, 2016, 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	-	-	-		
TL	TL-MT	2018	452		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Tope shark Northeast Atlantic [TPSHARNEATL]

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

Start Year End Year * No Data

Tope shark Northeast Atlantic [TPSHARNEATL]

Tope shark Northeast Atlantic [TPSHARNEATL]

■	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-TUR2232-1970-2020-ICESIMP2021-2
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, 2019, 2020

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	2020	572		
TL	TL-MT	2020	197		
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

Turbot Baltic Areas 22−32 [TUR2232]

Turbot Baltic Areas 22−32 [TUR2232]
TC−MT, TL−MT, RecC* (1970−2020−ICESIMP2021−2)
1,400
0
MSY*, MORAT*
2011
2013
2015
2017
2019
TAC*, Cpair*, Cadv*
survB−index (1970−2020−ICESIMP2021−2)
7
0
2002
2006
2010
2014
2018
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Turbot Kattegat and Skagerrak [TURIIIa]

Metadata	
Scientific Name	Scophthalmus maximus
Current Assess ID	WGNSSK-TURIIIa-1975-2021-ICESIMP2021-2
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	2019, 2019, 2016, 2015, 2021

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	2021	215		
TL	TL-MT	2021	202		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2021	1.11		
F/Fmsy	FdivFmsy-dimensionless	2021	0.88		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Turbot Kattegat and Skagerrak [TURIIIa]

Turbot Kattegat and Skagerrak [TURIIIa]

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

Turbot Kattegat and Skagerrak [TURIIIa]

Turbot North Sea [TURIV]

Metadata	
Scientific Name	Scophthalmus maximus
Current Assess ID	WGNSSK-TURIV-1981-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2020	0.36
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	4160
Fmgt	Fmgt-1/yr	2021	0.86
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	2970
Flim	Flim-1/yr	2020	0.61
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	13,630	-	-
SSB	SSB-MT	2021	8880	-	-
TN	-	-	-	-	-
R	R-E00	2021	4,570,000	-	1
F	F-1/yr	2021	0.35	-	-
ER	ER-calc-ratio	2019	0.266	-	-
TC	TC-MT	2021	3300		
TL	TL-MT	2021	3100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2020	1.02		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.135		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.407		
ER/ERmgt	-	-	-		

Turbot North Sea [TURIV]

Turbot North Sea [TURIV]
TB−MT (1980−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1981−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1981−2021−ICESIMP2021−2)
Fmsy*, Fmgt−1/yr, Flim*
ER−calc−ratio (1980−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1981−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Turbot North Sea [TURIV]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
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]

Undulate ray ICES 7de [URAYVIIde]

Undulate ray ICES 8ab [URAYVIIIab]

Metadata	
Scientific Name	Raja undulata
Current Assess ID	WGEF-URAYVIIIab-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 [URAYVIIIab]

Undulate ray ICES 8ab [URAYVIIIab]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

White anglerfish ICES 8c-9a [WANGLVIIIc-IXa]

Metadata	
Scientific Name	Lophius piscatorius
Current Assess ID	WGBIE-WANGLVIIIc-IXa-1980-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2013

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.24
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	6280
Fmgt	Fmgt-1/yr	2021	0.24
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	1990
Flim	Flim-1/yr	2020	0.56
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	14,645	-	-
SSB	SSB-MT	2021	11,600	-	-
TN	-	-	-	-	-
R	R-E00	2021	706,000	-	0
F	F-1/yr	2021	0.083	-	-
ER	ER-calc-ratio	2019	0.078	-	-
TC	-	-	-		
TL	TL-MT	2021	722		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.346		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.847		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.346		
ER/ERmgt	-	-	-		

White anglerfish ICES 8c−9a [WANGLVIIIc−IXa]
Kobe MSYpref (1980−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1980−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1980−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1980−2019−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

White anglerfish ICES 8c−9a [WANGLVIIIc−IXa]
TB−MT (1980−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1980−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim*
ER−calc−ratio (1980−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1980−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

White anglerfish ICES 8c−9a [WANGLVIIIc−IXa]
TL−MT, TC*, RecC* (1980−2021−ICESIMP2021−2)
8,000
0
MSY*, MORAT*
1980
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

White anglerfish ICES 7-8abd [WANGLVII-VIIIabd]

Metadata	
Scientific Name	Lophius piscatorius
Current Assess ID	WGBIE-WANGLVII-VIIIabd-1986-2021-ICESIMP2021-2
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, 2019, 2020, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.28
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	22,300
Fmgt	Fmgt-1/yr	2021	0.28
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	16,000
Flim	Flim-1/yr	2021	0.53
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	115,872	-	-
SSB	SSB-MT	2021	64,200	-	-
TN	-	-	-	-	-
R	R-E00	2021	32,700	-	0
F	F-1/yr	2021	0.233	-	-
ER	ER-calc-ratio	2019	0.205	-	-
TC	TC-MT	2021	21,500		
TL	TL-MT	2021	20,200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.833		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	2.879		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.833		
ER/ERmgt	-	-	-		

White anglerfish ICES 7−8abd [WANGLVII−VIIIabd]
Kobe MSYpref (1986−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1986−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1986−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1986−2019−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

White anglerfish ICES 7−8abd [WANGLVII−VIIIabd]
TB−MT (1986−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1986−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1986−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1986−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1986−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

White anglerfish ICES 7−8abd [WANGLVII−VIIIabd]

Whiting Kattegat and Skagerrak [WHITIIIa]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGNSSK-WHITIIIa-1975-2019-ICESIMP2021-2
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, 2018, 2019

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	2019	806		
TL	TL-MT	2019	179		
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 Kattegat and Skagerrak [WHITIIIa]
TC−MT, TL−MT, RecC* (1975−2019−ICESIMP2021−2)
60,000
0
MSY*, MORAT*
2002
2006
2010
2014
2018
TAC*, Cpair*, Cadv*
survB−index (1975−2019−ICESIMP2021−2)
2
0
1985
1990
1995
2000
2005
2010
2015
2020
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Whiting ICES 4-7d [WHITNS-VIId]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGNSSK-WHITNS-VIId-1978-2021-ICESIMP2021-2
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, 2019, 2020, 2021, 2012, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.371
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	144,000
Fmgt	Fmgt-1/yr	2021	0.371
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	104,000
Flim	Flim-1/yr	2021	0.718
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	293,190	-	-
SSB	SSB-MT	2021	225,000	-	-
TN	-	-	-	-	-
R	R-E00	2021	14,100,000	-	0
F	F-1/yr	2021	0.185	-	-
ER	ER-calc-ratio	2019	0.096	-	-
TC	TC-MT	2021	35,100		
TL	TL-MT	2021	17,800		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.499		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.562		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.499		
ER/ERmgt	-	-	-		

Whiting ICES 4−7d [WHITNS−VIId]
Kobe MSYpref (1978−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1978−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1978−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1978−2019−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

Whiting ICES 4−7d [WHITNS−VIId]
TB−MT (1978−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1978−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1978−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1978−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1978−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Whiting ICES 4−7d [WHITNS−VIId]
TC−MT, TL−MT, RecC* (1978−2021−ICESIMP2021−2)
300,000
0
1980
1990
2000
2010
2020
MSY*, MORAT*
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Whiting West of Scotland [WHITVIa]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIa-1981-2021-ICESIMP2021-2
Area	West of Scotland
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2020, 2013, 2014, 2015, 2016, 2017, 2018, 2021, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.21
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$25{,}600$
Fmgt	Fmgt-1/yr	2021	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$17{,}300$
Flim	Flim-1/yr	2021	0.31
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2018	$31{,}460$	-	-
SSB	SSB-MT	2021	$32{,}700$	-	-
TN	-	-	-	-	-
R	R-E00	2021	2.02×10^8	-	0
F	F-1/yr	2021	0.065	-	-
ER	ER-calc-ratio	2018	0.054	-	-
TC	TC-MT	2021	1360		
TL	TL-MT	2021	544		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	0.31		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	1.277		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	0.31		
ER/ERmgt	-	-	-		

Whiting West of Scotland [WHITVIa]
Kobe MSYpref (1981−2021−ICESIMP2021−2)
F/Fmsy
SSB/SSBmgt
Kobe MGTpref (1981−2021−ICESIMP2021−2)
F/Fmgt
SSB/SSBmgt
Spawner Recruit (1981−2021−ICESIMP2021−2)
R−E00
SSB−MT
Production (1980−2018−ICESIMP2021)
Prod.
Abund.
Start Year
End Year
No Data

Whiting West of Scotland [WHITVIa]
TB−MT (1980−2018−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1981−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1981−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1980−2018−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1981−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Whiting West of Scotland [WHITVIa]
TC−MT, TL−MT, RecC* (1981−2021−ICESIMP2021−2)
30,000
0
MSY*, MORAT*
1980
1985
1990
1995
2000
2005
2010
2015
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Whiting Rockall Bank [WHITVIb]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIb-1961-2020-ICESIMP2021-2
Area	Rockall Bank
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2014, 2017, 2020

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	2020	38		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*

Kobe MGT*

Spawner Recruit*

Production*

◆ Start Year ◆ End Year * No Data

Whiting Rockall Bank [WHITVIb]

Whiting Rockall Bank [WHITVIb]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Whiting Irish Sea [WHITVIIa]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIIa-1980-2021-ICESIMP2021-2
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, 2019, 2021

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2021	0.219
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2021	$16{,}300$
Fmgt	Fmgt-1/yr	2021	0.219
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2021	$10{,}000$
Flim	Flim-1/yr	2021	0.371
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2019	2175	-	-
SSB	SSB-MT	2021	1390	-	-
TN	-	-	-	-	-
R	R-E00	2021	1.2×10^8	-	0
F	F-1/yr	2021	0.759	-	-
ER	ER-calc-ratio	2019	0.413	-	-
TC	TC-MT	2021	1120		
TL	TL-MT	2021	88		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2021	3.468		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2021	0.085		
F/Fmgt	F-1/yr/Fmgt-1/yr	2021	3.468		
ER/ERmgt	-	-	-		

Whiting Irish Sea [WHITVIIa]

Whiting Irish Sea [WHITVIIa]
TB−MT (1980−2019−ICESIMP2021)
TBmsy*, TBmgt*, TBlim*
SSB−MT (1980−2021−ICESIMP2021−2)
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1980−2021−ICESIMP2021−2)
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−calc−ratio (1980−2019−ICESIMP2021)
ERmsy*, ERmgt*, ERlim*
R−E00 (1980−2021−ICESIMP2021−2)
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Whiting Irish Sea [WHITVIIa]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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

Whiting Celtic Sea [WHITVIIbce-k]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGCSE-WHITVIIbce-k-1999-2022-ICESIMP2022
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, 2019, 2020, 2022, 2012

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2022	0.375
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2022	50,818
Fmgt	Fmgt-1/yr	2022	0.375
ERmgt	ERmgt-ratio	2020	0.4
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	21,000
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2022	36,571
Flim	Flim-1/yr	2022	0.64
ERlim	ERlim-ratio	2020	0.89

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	TB-MT	2016	95,300	Both	-
SSB	SSB-MT	2022	32,346	-	-
TN	-	-	-	-	-
R	R-E00	2022	400,108,000	-	0
F	F-1/yr	2022	0.561	-	2 to 5
ER	ER-ratio	2020	0.356	-	-
TC	TC-MT	2022	7376		
TL	TL-MT	2022	6153		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2022	1.496		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2022	0.637		
F/Fmgt	F-1/yr/Fmgt-1/yr	2022	1.496		
ER/ERmgt	-	-	-		

Whiting Celtic Sea [WHITVIIbce−k]

Whiting Celtic Sea [WHITVIIbce−k]
TB−MT (1999−2016−ICESIMP2016)
200,000
0
2000 2002 2004 2006 2008 2010 2012 2014
TBmsy*, TBmgt*, TBlim*
SSB−MT (1999−2022−ICESIMP2022)
80,000
0
2000 2004 2008 2012 2016 2020
SSBmsy*, SSBmgt−MT, SSBlim−MT
TN *
F−1/yr (1999−2022−ICESIMP2022)
1.4
0.0
2000 2004 2008 2012 2016 2020
Fmsy−1/yr, Fmgt−1/yr, Flim−1/yr
ER−ratio (1999−2020−ICESIMP2021−2)
1.4
0.0
2000 2004 2008 2012 2016
ERmsy*, ERmgt−ratio, ERlim−ratio
R−E00 (1999−2022−ICESIMP2022)
2,500,000,000
0
2000 2004 2008 2012 2016 2020
REC−EST*
Listed time series
MSY−based BRP
Target BRP
Lim BRP
Rec−Est
No Data

Whiting Celtic Sea [WHITVIIbce−k]
TC−MT, TL−MT, RecC* (1999−2022−ICESIMP2022)
35,000
0
MSY*, MORAT*
2000
2004
2008
2012
2016
2020
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
TL−MT/MSY−MT, CdivMEANC−ratio, (1981−2012−CHING)
2
0
MSY−MT
1980
1985
1990
1995
2000
2005
2010
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Whiting ICES 8-9a [WHITVIII-IXa]

Metadata	
Scientific Name	Merlangius merlangus
Current Assess ID	WGBIE-WHITVIII-IXa-1994-2020-ICESIMP2021-2
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, 2018, 2020

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	2020	1420		
TL	TL-MT	2020	1120		
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]
TC−MT, TL−MT, RecC* (1994−2020−ICESIMP2021−2)
5,000
0
MSY*, MORAT*
2016.0
2017.0
2018.0
2019.0
2020.0
TAC*, Cpair*, Cadv*
survB*
CPUE*
EFFORT*
CdivMSY*
1st listed time series
2nd listed time series
3rd listed time series
MSY
MORAT
No Data

Witch flounder ICES 3a-4-7d [WITFLOUNIIIa-IV-VIId]

Metadata	
Scientific Name	Glyptocephalus cynoglossus
Current Assess ID	WGNSSK-WITFLOUNIIIa-IV-VIId-1950-2020-ICESIMP2021-2
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	2019, 2020, 2015, 2016

Reference Points			
Type	**ID**	**Asmt Year**	**Value**
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2020	4750
Fmgt	Fmgt-1/yr	2020	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2020	3070
Flim	Flim-1/yr	2020	0.3
ERlim	-	-	-

Time Series					
Type	**ID**	**Asmt Year**	**Curr Value**	**Sex**	**Age**
TB	-	-	-	-	-
SSB	SSB-MT	2020	5600	-	-
TN	-	-	-	-	-
R	R-E00	2020	24,700,000	-	1
F	F-1/yr	2020	0.202	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	2800		
TL	TL-MT	2020	2580		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2020	1.179		
F/Fmgt	F-1/yr/Fmgt-1/yr	2020	1.01		
ER/ERmgt	-	-	-		

Witch flounder ICES 3a−4−7d [WITFLOUNIIIa−IV−VIId]
Kobe MSYpref (1950−2020−ICESIMP2021−2)
Kobe MGTpref (1950−2020−ICESIMP2021−2)
Spawner Recruit (1950−2020−ICESIMP2021−2)
Production*
F/Fmgt
SSB/SSBmgt
R−E00
SSB−MT
2.5
0.0
1.4
100,000,000
0
7,000
Start Year
End Year
No Data

Witch flounder ICES 3a−4−7d [WITFLOUNIIIa−IV−VIId]

Witch flounder ICES 3a−4−7d [WITFLOUNIIIa−IV−VIId]

TAC*, Cpair*, Cadv*

survB*

CPUE*

EFFORT*

CdivMSY*

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