

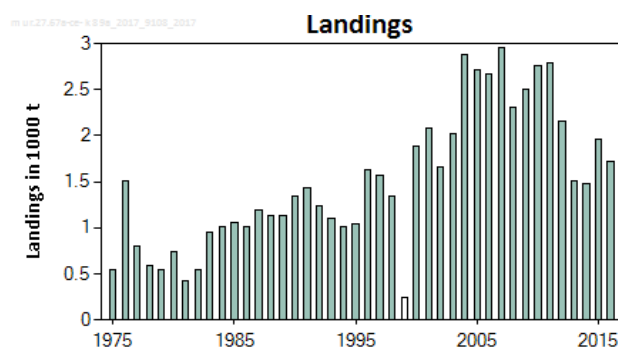
## Striped red mullet (*Mullus surmuletus*) in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a (North Sea, Bay of Biscay, southern Celtic Seas, and Atlantic Iberian waters)

### ICES stock advice

ICES advises that when the precautionary approach is applied, landings should be no more than 1600 tonnes in each of the years 2018, 2019, and 2020. ICES cannot quantify the corresponding catches.

### Stock development over time

There is limited information to evaluate stock trends. The landings have shown an increase between the mid-1990s and 2007; they have declined since then and are presently above the historical average.



**Figure 1** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. Summary of the stock assessment. No French data are available for 1999.

### Stock and exploitation status

**Table 1** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size				
		2014	2015	2016		2014	2015	2016		
Maximum sustainable yield	$F_{MSY}$	?	?	?	Undefined	$MSY B_{trigger}$	?	?	?	Undefined
Precautionary approach	$F_{pa}, F_{lim}$	?	?	?	Undefined	$B_{pa}, B_{lim}$	?	?	?	Undefined
Management plan	$F_{MGT}$	–	–	–	Not applicable	$B_{MGT}$	–	–	–	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

### Catch options

The ICES framework for category 5 stocks was applied (ICES, 2012). For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented unless there is supporting information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was last applied in 2012. Currently there is no information on stock biomass or exploitation levels; therefore, the precautionary buffer is applied again this year.

Discarding is known to take place, but could not be fully quantified.

**Table 2** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. The basis for the catch options.

Recent advised landings (for 2016 and 2017)	2000 tonnes	
Discard rate	Unknown	
Precautionary buffer	Applied	0.8
Landings advice*	1600 tonnes	

\* [advice for 2016–2017] × [precautionary buffer].

### Basis of the advice

**Table 3** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	ICES is not aware of any management plan for striped red mullet in this area.

### Quality of the assessment

Regular biological sampling of striped red mullet catches is expected to continue under the EU Data Collection Framework; however, the frequency is currently insufficient to calculate catch-at-age outside the Bay of Biscay (divisions 8.a–b) and divisions 7.e–h.

### Issues relevant for the advice

Discarding is estimated to be non-negligible for this stock. For 2016 the (incomplete) estimate of discards is 392 t, whereas the landings were 1726 t.

### Reference points

No reference points are defined for this stock.

### Basis of the assessment

**Table 4** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. Basis of the assessment and advice.

ICES stock data category	5 ( <a href="#">ICES, 2016</a> ).
Assessment type	No assessment (ICES, 2017).
Input data	Commercial landings.
Discards and bycatch	Discarding is known to take place, but discards cannot be fully quantified.
Indicators	-
Other information	None.
Working group	Working Group on Widely Distributed Stocks ( <a href="#">WGWIDE</a> ).

### Information from stakeholders

The French ROMELIGO project is undertaken within the framework of a fishermen–scientists partnership. It will provide information that is currently missing, in particular on biological parameters and on CPUE for the French fisheries and their possible use as indicators of stock abundance.

### History of the advice, catch, and management

**Table 5** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. ICES advice and official landings. All weights are in tonnes.

Year	ICES advice	Predicted landings corresp. to advice	Agreed TAC	Official landings
2009		-	none	2506
2010		-	none	2753
2011		-	none	2781
2012	No increase in catch	-	none	2149
2013	20% reduction in catches (average of the last 3 years)	< 2000	none	1514
2014	No new advice, same as for 2013	< 2000	none	1474
2015	No new advice, same as for 2013	< 2000	none	1966
2016	No new advice, same as for 2013	≤ 2000	none	1727
2017	No new advice, same as for 2013	≤ 2000	none	
2018	Precautionary approach	≤ 1600		
2019	Precautionary approach (same advised catch value as given for 2018)	≤ 1600		
2020	Precautionary approach (same advised catch value as given for 2018)	≤ 1600		

### History of the catch and landings

**Table 6** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. Landings distribution by fleet in 2016 as estimated by ICES.

Catch (2016)	Landings	Discards
Unknown	Information by gear is not available	Unknown
	1727 tonnes	

**Table 7** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. History of commercial landings; official values are presented by area. All weights are in tonnes.

Year	ICES division															Total*	
	6.a	6.b	7.a	7.b	7.c	7.e	7.f	7.g	7.h	7.j	7.k	8.a	8.b	8.c	8.d		9.a
2006	0	0	0	1	0	868	50	24	103	6	0	1022	468	71	14	39	2666
2007	1	0	1	1	0	1046	53	22	104	12	0	860	474	90	17	267	2948
2008	0	0	0	1	0	879	46	15	72	13	0	639	246	87	18	296	2312
2009	2	0	0	2	1	592	26	8	73	19	0	879	460	156	45	243	2506
2010	2	0	1	3	0	638	25	11	59	16	1	1033	468	146	18	331	2752
2011	1	1	0	0	0	665	19	10	56	5	0	970	513	214	18	309	2781
2012	0	0	0	0	0	494	24	6	34	4	0	696	387	199	26	280	2150
2013	0	0	0	1	0	232	23	7	37	2	0	472	328	165	6	241	1514
2014	1	0	0	0	0	192	15	2	40	0	0	524	240	151	11	298	1474
2015	0	0	0	1	0	595	10	2	35	1	0	506	327	127	7	369	1980
2016	0	0	0	2	0	432	21	7	35	3	0	549	311	95	10	263	1728

\* Minor differences in totals between table 7 and 8 to be clarified

**Table 8** Striped red mullet in subareas 6 and 8, and in divisions 7.a–c, 7.e–k, and 9.a. History of commercial landings; official values are presented by country participating in the fishery. All weights are in tonnes.

Year	France	Portugal	Spain	UK	Netherlands	Belgium	Guernsey	Ireland	Denmark	Isle of Man	Jersey	Total
1975	252	0	269	17	0	0	1	0	0	0	0	539
1976	747	0	722	37	0	0	2	0	0	0	0	1508
1977	454	0	294	45	0	0	4	1	0	0	0	798
1978	523	0	0	63	0	0	1	0	0	0	0	587
1979	411	0	97	33	0	0	2	0	0	0	0	543
1980	547	0	160	22	0	0	3	11	0	0	0	743
1981	402	0	0	19	0	0	3	0	0	0	0	424
1982	370	0	149	15	0	0	3	0	0	0	0	537
1983	733	0	168	52	0	0	5	0	0	0	0	958
1984	696	0	240	67	0	0	3	0	0	0	1	1007
1985	862	0	135	56	0	0	5	0	0	0	0	1058
1986	779	0	171	53	0	0	3	0	0	0	0	1006
1987	977	0	175	33	0	0	2	0	0	0	0	1187
1988	932	0	141	57	0	0	1	0	0	0	0	1131
1989	820	0	252	52	0	0	6	0	0	0	0	1130
1990	980	0	262	100	0	0	2	0	0	0	0	1344
1991	1022	0	298	114	0	0	1	0	0	0	0	1435
1992	1136	1	0	96	0	0	2	0	0	0	0	1235
1993	892	1	0	200	0	0	2	0	0	0	0	1095
1994	857	0	0	158	0	0	0	0	0	0	0	1015
1995	870	0	0	165	0	0	4	0	0	0	1	1040
1996	1151	0	292	148	0	0	0	40	0	0	0	1631
1997	1130	0	300	124	0	0	9	0	0	0	2	1565
1998	1068	0	132	83	0	0	12	38	0	0	6	1339
1999	NA*	0	136	77	0	0	16	0	0	0	7	236*
2000	1462	0	278	127	0	0	17	0	0	0	6	1890
2001	1536	0	334	168	17	0	13	0	0	4	6	2078
2002	1298	0	198	136	11	0	11	0	0	0	4	1658
2003	1514	0	317	145	25	3	11	4	0	0	0	2019
2004	2123	39	408	216	59	21	0	5	0	0	2	2873
2005	2117	2	284	167	103	31	0	12	0	0	0	2716
2006	1943	11	379	170	115	32	8	15	0	0	0	2673
2007	1926	222	391	194	148	42	9	16	0	0	0	2948
2008	1385	169	379	164	165	26	8	16	0	0	0	2312
2009	1541	199	491	132	110	19	5	9	0	0	0	2506
2010	1726	276	466	133	128	20	0	4	0	0	0	2753
2011	1722	244	505	154	130	21	0	5	0	0	0	2781
2012	1317	217	327	122	125	37	0	4	0	0	0	2149
2013	925	187	245	70	50	29	5	3	0	0	0	1514
2014	914	222	265	53	1	13	5	1	0	0	0	1474
2015	1201	281	245	99	109	22	5	3	0	0	0	1965
2016	1166	209	153	82	69	28	15	4	0	0	0	1726

\* No French data are available for 1999.

\*\* Minor differences in totals between table 7 and 8 to be clarified

### Summary of the assessment

There is no assessment for striped red mullet in this area.

## Sources and references

- ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM:68. 42 pp.
- ICES. 2016. Advice basis. *In* Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.
- ICES. 2017. Report of the Working Group on Widely Distributed Stocks (WGWIDE), 30 August–5 September 2017, ICES HQ, Copenhagen, Denmark. ICES CM 2017/ACOM:23. In prep.