Sea bass (*Dicentrarchus labrax*) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea). Replacing advice provided in June 2024

ICES advice on fishing opportunities

Please note: The present advice replaces the advice given in June 2024 for catches in 2025.

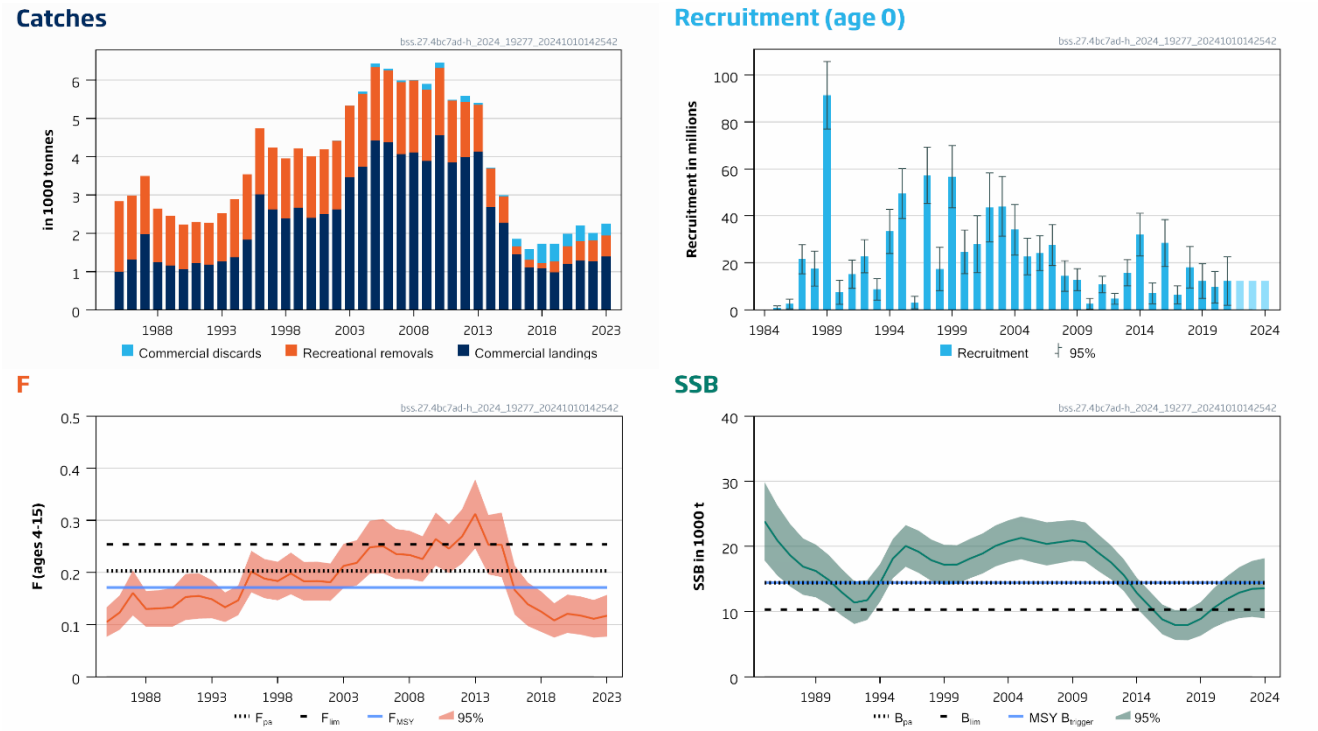
ICES advises that when the MSY approach is applied, total removals[‡] in 2025 should be no more than 2620[§] tonnes.

ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.

Non-fisheries conservation considerations

Conservation aspects and associated management measures may exist at a national or regional level but were not reviewed by ICES.

Stock development over time



Fishing pressure on the stock is below F_{MSY}, and spawning-stock size is below MSY $B_{trigger}$ and between B_{pa} and B_{lim}.

Figure 1 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Summary of the stock assessment. Recreational removals are model estimates based on a survey in 2012 and implemented management measures. Discard estimates are available since 2002. Fishing mortality (F) is shown for the combined commercial and recreational fisheries. The assumed recruitment values for 2022–2024 are shaded in a lighter colour.

[‡] Total removals include both commercial and recreational catches, taking mortality of released fish into account (estimated at approximately 5%).

[§] Advice updated due to a correction of the recruitment time series

Catch scenarios

Table 1 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Assumptions made for the interim year and in the forecast.

Variable	Value	Notes
$F_{ages\ 4–15}$ (2024)	0.115	Total F, average $F_{commercial}$ (2021–2023; 0.083), plus F_{rec} = 0.032*, assuming full compliance of recreational fisheries in 2024
SSB (2025)	13414	Short-term forecast; in tonnes
$R_{age\ 0}$ (2022–2025)	12266	Geometric mean (2012–2021); in thousands
Total removals (2024)	1990	Short-term forecast fishing at F = 0.115; in tonnes
Total landings (2024)	1330**	Short-term forecast; in tonnes
Discards (2024)	114**	Short-term forecast; in tonnes
Recreational removals (2024)	546	Short-term forecast assuming an F_{rec} = 0.032* ; in tonnes

* Recreational F as estimated in 2012 (0.068, reduced [by 54%]) to account for management measures since 2012.
** The split of total commercial F into commercial landings and commercial discards in the interim year is estimated by the model.

Table 2 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Annual catch scenarios. Weights are in tonnes.

Basis	Total removals* (2025)	F_{total} (2025)	SSB (2026)	% SSB change**	% advice change***
ICES advice basis					
MSY approach: $F = F_{MSY} \times SSB_{2025}/MSY\ B_{trigger}$	2620	0.159	12450	–7.2	7.7
EU MAP^: $F_{MSY} \times SSB_{2025}/MSY\ B_{trigger}$	2620	0.159	12450	–7.2	7.7
EU MAP^: $F_{MSY\ lower} \times SSB_{2025}/MSY\ B_{trigger}$	2200	0.132	12801	–4.6	–9.5
EU MAP^: $F_{MSY\ upper} \times SSB_{2025}/MSY\ B_{trigger}$	2620	0.159	12450	–8.3	7.7
$F = F_{MSY\ lower}$	2357	0.142	12670	–5.5	–3.1
$F = F_{MSY}$	2804	0.1713	12297	–8.3	15.3
$F = F_{MSY\ upper}$	2804	0.1713	12297	–8.3	15.3
F = 0	0	0	14653	9.2	–100
F_{pa}	3273	0.203	11906	–11.2	35
F_{lim}	3998	0.254	11306	–15.7	64
$SSB_{2026} = B_{lim}$	5205	0.345	10313	–23	114
$SSB_{2026} = B_{pa}$	253	0.0143	14439	7.6	–90
$SSB_{2026} = MSY\ B_{trigger}$	253	0.0143	14439	7.6	–90
$F = F_{2024}$	1936	0.115	13022	–2.9	–20
$SSB_{2026} = SSB_{2025}$	1469	0.086	13418	0	–40

* Includes commercial catch and recreational removals (taking mortality of released fish into account, estimated at approximately 5%).
** SSB 2026 relative to SSB 2025.
*** Advice value for 2025 relative to the advice value for 2024 (2432 tonnes).
^ MAP multiannual plan (EU, 2019).

Basis of the advice

Table 3 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. The basis of the advice.

Advice basis	MSY approach
Management plan	ICES is aware of the multiannual management plan (MAP) that has been adopted by the EU for this stock (EU, 2019) and that ICES considers to be precautionary. There is no agreed shared management plan between the EU and UK for this stock, and ICES provides advice according to ICES MSY approach. Catch scenarios consistent with the MAP F_{MSY} ranges are provided.

Quality of the assessment

Fishery sampling rates have been variable over time for all countries. Limited sampling of the discards and recreational removals leads to uncertainty in catch data and increases the uncertainty in the assessment. The discard values are estimated from sampling programmes and more recently from a combination of sampling programmes and logbooks, where sampling is variable across fleets and years. Estimates of discards are available only from the early 2000s, but these do not cover all fisheries, are imprecise, and are only included for some fleets in the assessment.

The modelled estimated discards are much lower than the observed discards.

In 2024, landings from the Netherlands were updated for the years 2015–2022. A sensitivity analysis showed that this had a negligible effect on the stock assessment.

Recreational removals in 2012 were estimated from surveys by several nations. The fishing pressure from recreational removals in 2012 (including post-release mortality estimated at 5%) was estimated at Frec=0.068. This estimate underpins the calculations of Frec in the assessment. For the period 1985-2014 (excluding 2012), Frec is assumed to be the same as estimated for 2012. For the period 2015–2023, Frec is scaled based on Frec in 2012 and implementation of management measures e.g. bag limit, in these years, assuming full compliance.

Additional information on recreational removals from all countries is needed to provide more robust estimates and in turn the stock assessment model.

Stock structure remains an issue, and connectivity with adjacent stocks is a source of uncertainty (ICES, 2023a).

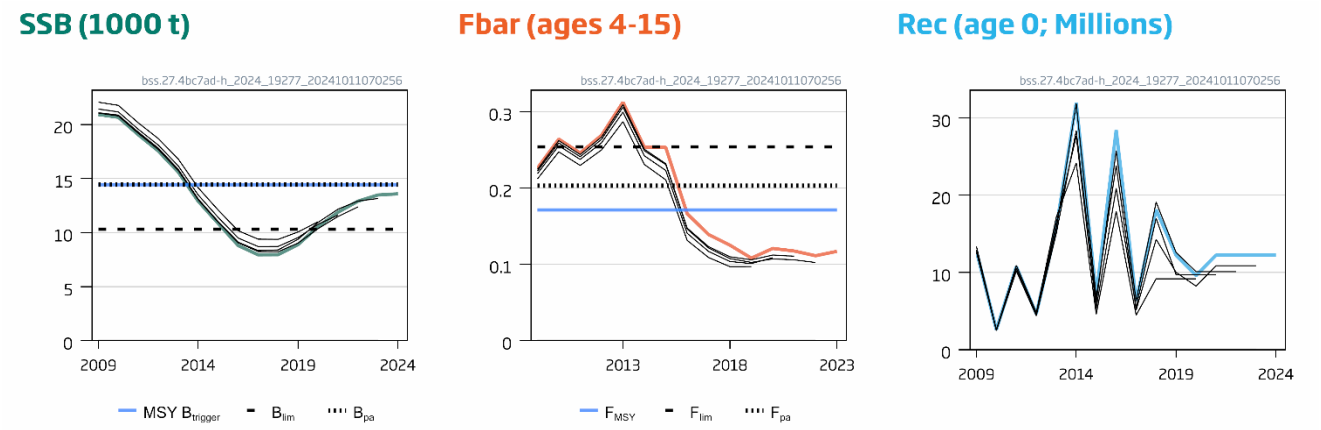


Figure 2 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Historical assessment results (final-year SSB estimates and final three years of recruitment assumptions are included).

Issues relevant to the advice

Coinciding with the prohibition of the directed sea bass fishery since 2015, observed discards have increased.

ICES notes that under the ICES MSY approach scenario, the SSB in 2026 is expected to decrease slightly, remaining below MSY Btrigger

ICES does not provide any split in the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absence of known management measures in 2025 (e.g. bag limit) and given the limited data on recreational removals.

Reference points

Table 4 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	14439	B_{pa}; in tonnes	ICES (2019)
	F_{MSY}	0.1713	Stochastic simulations (EqSim)	ICES (2019)
Precautionary approach	B_{lim}	10313	B_{loss} (lowest value in the time-series, SSB in 2018 as estimated by the WGCSE 2019 assessment); in tonnes	ICES (2019)
	B_{pa}	14439	B_{lim} × 1.4; in tonnes	ICES (2019)
	F_{lim}	0.254	Stochastic simulations (EqSim)	ICES (2019)
	F_{pa}	0.203	F_{P05}; the F that leads to SSB ≥ B_{lim} with 95% probability	ICES (2019, 2021)
Management plan*	MAP MSY $B_{trigger}$	14439	MSY $B_{trigger}$; in tonnes	EU (2019)
	MAP B_{lim}	10313	B_{lim}; in tonnes	EU (2019)
	MAP F_{MSY}	0.1713	F_{MSY}	EU (2019)
	MAP range F_{lower}	0.142	Consistent with ranges provided by ICES (2019), resulting in no more than 5% reduction in long-term yield compared with MSY	ICES (2019) and EU (2019)
	MAP range F_{upper}	0.1713	Consistent with ranges provided by ICES (2019), resulting in no more than 5% reduction in long-term yield compared with MSY	ICES (2019) and EU (2019)

* EU multiannual plan (MAP) for the Western Waters and adjacent waters (EU, 2019).

Basis of the assessment

Table 5 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Basis of the assessment and advice.

ICES stock data category	1 (ICES, 2023b)
Assessment type	Age- and length-based analytical assessment (Stock Synthesis 3; NOAA Toolbox; ICES, 2024)
Input data	Commercial landings (international landings, ages, and length frequencies from catch sampling); commercial discards (UK bottom otter trawl and nets and combined French fleet, length frequencies from catch sampling); one recruit survey (UK Solent autumn survey [G9863], 1986–present, excluding 2010 and 2012); one bottom trawl survey (Channel Groundfish Survey [G3425], 1988–2014); one commercial tuning fleet (2001–present); growth and maturity data from sampling of commercial catches and surveys; natural mortality (inferred from life-history parameters and maximum observed ages)
Discards and bycatch	Discards included in the model and forecast for some of the fleets
Recreational	Used in the model and in the forecast
Indicators	None
Other information	Benchmarked in 2018 (ICES, 2018)
Working group	Working Group for the Celtic Seas Ecoregion (WGCSE)

History of the advice, catch, and management

Table 6 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. ICES advice, official landings and ICES estimates of commercial landings, discards and recreational removals. Weights are in tonnes.

Year	ICES advice	Catch corresponding to advice*	Official commercial landings	ICES commercial landings	ICES commercial discards^	ICES recreational removals
2000	-	-	2100	2407		
2001	-	-	2200	2500		
2002	No increase in effort or F	-	2400	2622	17	
2003	No increase in effort or F	-	2900	3459	16	
2004	No increase in effort or F	-	3000	3731	59	
2005	-	-	3200	4430	96	
2006	-	-	3396	4377	53	
2007	-	-	3521	4064	50	
2008	-	-	3027	4107	8	
2009	-	-	4288	3889	151	
2010	-	-	4952	4562	148	
2011	-	-	4183	3858	22	
2012	No increase in catch	-	3982	3987	157	1440
2013	20% reduction in catches (average of the last three years)	< 6000**	4243	4137	53	
2014	36% reduction in commercial landings (20% reduction, followed by 20% precautionary reduction)	< 2707**	2816	2682	25	
2015	MSY approach	< 115***	2081	2273	40	
2016	MSY approach	≤ 541***	1300	1446	199	
2017	Precautionary approach	0	1027	1106	271	
2018	MSY approach	≤ 880^^^	931	1084	482	
2019	MSY approach	≤ 1806^^^	970	978	464	
2020	Management plan	1634–1946^^^	1175	1195	325	
2021	Management plan	2000 (range 1680–2000) ^^^	1275	1281	412	
2022	MSY approach	≤ 2216^^^	1273^^	1276	196	
2023	MSY approach	≤ 2542^^^	1379^^	1397	316	
2024	MSY approach	≤ 2432^^^				
2025	MSY approach	≤ 2620^^^				

* Advice prior to 2014 was provided for sea bass in the Northeast Atlantic.
** Commercial landings.
*** Total landings (commercial and recreational landings).
^ Incomplete for some fleets 2002–2008.
^^ Preliminary.
^^^ Includes commercial catch and recreational removals (taking mortality of released fish into account, estimated at approximately 5%).

History of the catch and landings

Table 7 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Commercial catch distribution by fleet in 2023 as estimated by ICES and estimated recreational removals.

Total catch	Commercial landings						Commercial discards	Recreational removals*
2258 tonnes	Lines 31%	Bottom trawlers 31%	Other gears 3%	Fixed/drift nets 23%	Danish seine 11%	Pelagic trawlers < 1%	316 tonnes	545 tonnes
	1397 tonnes							

* Derived from the 2012 survey estimate (1440 tonnes).

Table 8 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. History of commercial landings by country and ICES estimates of landings. Weights are in tonnes.

Year	Belgium	Denmark	Germany	France	UK	Netherlands	Channel Is.	Total official	ICES landings
1985	0	0	0	620	105	0	18	743	994
1986	0	0	0	841	124	0	15	980	1319
1987	0	0	0	1226	123	0	14	1363	1980
1988	0	18	0	714	173	8	12	925	1239
1989	0	2	0	675	192	2	48	919	1161
1990	0	0	0	609	189	0	25	824	1063
1991	0	0	0	726	239	0	16	982	1227
1992	0	0	0	721	148	0	36	906	1186
1993	0	1	0	718	230	0	45	994	1255
1994	0	1	0	593	535	0	49	1178	1371
1995	0	1	0	801	708	0	69	1579	1835
1996	0	1	0	1703	563	8	56	2331	3022
1997	0	1	0	1429	561	1	74	2066	2620
1998	0	2	0	1363	488	48	79	1980	2390
1999	0	1	0	-	685	32	108	826	2670
2000	0	5	0	1522	407	60	130	2124	2407
2001	0	2	0	1619	458	77	80	2236	2500
2002	0	1	0	1580	627	96	73	2377	2622
2003	154	1	0	1903	586	163	84	2891	3459
2004	159	1	0	1883	617	191	159	3010	3731
2005	206	1	0	1937	512	327	220	3203	4430
2006	211	2	0	2116	736	308	23	3396	4377
2007	178	1	0	2075	873	376	18	3521	4064
2008	187	0	0	1506	934	380	20	3027	4107
2009	174	0	0	2904	801	395	15	4288	3889
2010	216	4	0	3441	879	399	14	4952	4562
2011	152	2	0	2688	928	395	17	4183	3858
2012	154	3	0	2492	946	376	12	3982	3987
2013	146	4	2	2868	841	370	12	4243	4137
2014	148	1	1	1322	1080	253	11	2816	2682
2015	40	0	0	1113	701	218	9	2081	2273
2016	23	0	1	545	551	156	24	1300	1446
2017	22	0	0	423	438	132	12	1027	1106
2018	18	0	0	297	432	172	11	931	1084
2019	19	0	0	309	411	209	22	970	978
2020	24	0	0	387	526	223	15	1175	1195
2021	45	0	0	385	613	231	1	1275	1281
2022*	24	1	1	404	617	225	1	1273	1276
2023*	32	2	2	437	675	231	<1	1379	1397

* Preliminary official landings.

Summary of the assessment

Table 9 Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Assessment summary. Weights are in tonnes and recruitment in thousands. "High" and "Low" refer to 95% confidence intervals.

Year	Recruitment age 0			SSB			Total $F_{ages\ 4–15}$			F_{bar} commercial catch	F_{bar} recreational removals	Commercial landings	Commercial discards*	Recreational removals**
	Low	Value	High	Low	Value	High	Low	Value	High					
1985	74	846	1619	17843	23856	29870	0.077	0.105	0.133	0.037	0.068	994		1849
1986	449	2481	4513	15533	20912	26291	0.090	0.123	0.156	0.055	0.068	1318		1663
1987	15292	21514	27736	13834	18632	23429	0.118	0.161	0.20	0.092	0.069	1979		1514
1988	10110	17519	24928	12576	16905	21233	0.096	0.130	0.164	0.062	0.068	1239		1403
1989	77036	91407	105779	12190	16234	20277	0.096	0.131	0.166	0.063	0.068	1161		1296
1990	2301	7451	12601	11024	14860	18696	0.096	0.133	0.170	0.065	0.068	1064		1164
1991	9134	15183	21232	9411	12995	16579	0.109	0.153	0.197	0.085	0.068	1226		1067
1992	15769	22813	29857	8097	11384	14671	0.112	0.155	0.199	0.087	0.068	1186		1091
1993	4105	8693	13282	8726	11761	14797	0.112	0.149	0.185	0.080	0.068	1256		1272
1994	23938	33381	42824	11504	14405	17306	0.105	0.133	0.162	0.066	0.068	1370		1528
1995	38878	49537	60197	15124	18136	21148	0.118	0.147	0.175	0.079	0.068	1835		1710
1996	446	3097	5747	16875	20079	23283	0.162	0.20	0.24	0.133	0.069	3022		1716
1997	45293	57263	69233	15947	19187	22428	0.151	0.188	0.23	0.120	0.068	2620		1621
1998	8114	17373	26632	14712	17886	21060	0.147	0.184	0.22	0.115	0.069	2390		1560
1999	43422	56694	69967	14135	17195	20256	0.158	0.198	0.24	0.129	0.069	2670		1559
2000	15364	24645	33925	14236	17215	20193	0.146	0.183	0.22	0.114	0.069	2407		1609
2001	15819	27931	40043	15112	18132	21152	0.147	0.184	0.22	0.115	0.069	2500		1692
2002	28896	43613	58331	15846	18923	21999	0.146	0.181	0.22	0.113	0.068	2622	17	1787
2003	31348	44062	56776	16933	20081	23229	0.170	0.21	0.25	0.144	0.069	3459	16	1869
2004	23325	34085	44846	17589	20800	24011	0.175	0.22	0.26	0.150	0.069	3731	59	1913
2005	14879	22698	30516	18037	21313	24589	0.198	0.25	0.30	0.179	0.069	4430	96	1909
2006	16694	24143	31591	17515	20847	24178	0.199	0.25	0.30	0.182	0.069	4377	53	1878
2007	18813	27534	36256	17078	20386	23693	0.187	0.23	0.28	0.167	0.069	4064	50	1877
2008	7878	14390	20902	17443	20663	23883	0.187	0.23	0.28	0.165	0.069	4107	8	1884
2009	8106	12796	17486	17817	20937	24058	0.182	0.23	0.27	0.157	0.069	3889	151	1857
2010	371	2589	4807	17672	20675	23678	0.21	0.26	0.31	0.195	0.069	4562	148	1755
2011	7261	10764	14267	16241	19060	21879	0.199	0.25	0.29	0.177	0.069	3858	22	1607

Year	Recruitment age 0			SSB			Total $F_{ages\ 4–15}$			F_{bar} commercial catch	F_{bar} recreational removals	Commercial landings	Commercial discards*	Recreational removals**
	Low	Value	High	Low	Value	High	Low	Value	High					
2012	2331	4647	6962	14955	17563	20170	0.22	0.27	0.32	0.20	0.068	3987	157	1440
2013	10188	15753	21317	13165	15605	18044	0.25	0.31	0.38	0.24	0.069	4137	53	1221
2014	22889	32000	41110	10549	12899	15249	0.196	0.25	0.31	0.186	0.067	2682	25	1007
2015	2529	7028	11526	8530	10848	13165	0.191	0.25	0.31	0.198	0.055	2273	40	684
2016	18433	28433	38432	6516	8806	11095	0.119	0.166	0.21	0.147	0.019	1446	199	205
2017	2472	6329	10185	5666	7946	10227	0.097	0.139	0.181	0.120	0.019	1106	271	203
2018	9304	18135	26967	5607	7962	10317	0.086	0.125	0.164	0.112	0.013	1084	482	150
2019	4836	12210	19583	6309	8893	11478	0.075	0.108	0.141	0.087	0.021	978	464	281
2020	2888	9600	16312	7546	10550	13553	0.084	0.121	0.158	0.089	0.032	1195	325	473
2021	1908	12241	22574	8430	11892	15354	0.081	0.117	0.154	0.086	0.032	1281	412	513
2022		12266^		8998	12910	16821	0.075	0.111	0.147	0.079	0.032	1276	196	537
2023		12266^		9190	13484	17779	0.077	0.117	0.157	0.085	0.032	1397	316	545
2024		12266^		8966	13589	18212								

* Incomplete for some fleets 2002–2008.

** All values were derived from the 2012 survey estimate (1 440 tonnes).

^ Geometric mean recruitment (2012–2021).

Sources and references

EU. 2019. Regulation (EU) 2019/472 of the European Parliament and of the Council of 19 March 2019 establishing a multiannual plan for stocks fished in the Western Waters and adjacent waters, and for fisheries exploiting those stocks, amending Regulations (EU) 2016/1139 and (EU) 2018/973, and repealing Council Regulations (EC) No 811/2004, (EC) No 2166/2005, (EC) No 388/2006, (EC) No 509/2007 and (EC) No 1300/2008. Official Journal of the European Union, L 83. 17 pp. http://data.europa.eu/eli/reg/2019/472/oj

ICES. 2018. Report of the Benchmark Workshop on Sea Bass (WKBASS), 20–24 February 2017 and 21–23 February 2018, Copenhagen, Denmark. ICES CM 2018/ACOM:44. 283 pp. https://doi.org/10.17895/ices.pub.5344

ICES. 2019. Working Group for the Celtic Seas Ecoregion (WGCSE). ICES Scientific Reports. 1:29. 1604 pp. http://doi.org/10.17895/ices.pub.4982

ICES. 2021. Working Group for the Celtic Seas Ecoregion (WGCSE). ICES Scientific Reports. 3:56. 1082 pp. http://doi.org/10.17895/ices.pub.8139

ICES. 2022. Working Group for the Celtic Seas Ecoregion (WGCSE). ICES Scientific Reports. 4:45. 1413 pp. http://doi.org/10.17895/ices.pub.19863796

ICES. 2023a. Benchmark on selected sea bass stocks, stock ID workshop (WKBSEABASS-STOCKID). ICES Scientific Reports. 5:52. 30 pp. https://doi.org/10.17895/ices.pub.22794737

ICES. 2023b. Advice on fishing opportunities. *In* Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1.1. https://doi.org/10.17895/ices.advice.22240624

ICES. 2024. Working Group for the Celtic Seas Ecoregion (WGCSE). ICES Scientific Reports. 6:44. Draft report. https://doi.org/10.17895/ices.pub.25866667

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