

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)

## ICES advice on fishing opportunities

Please note: This advice was updated in October 2024 (ICES, 2024b)

ICES advises that when the MSY approach is applied, total removals in 2025 should be no mo an an 2 776 to a second second

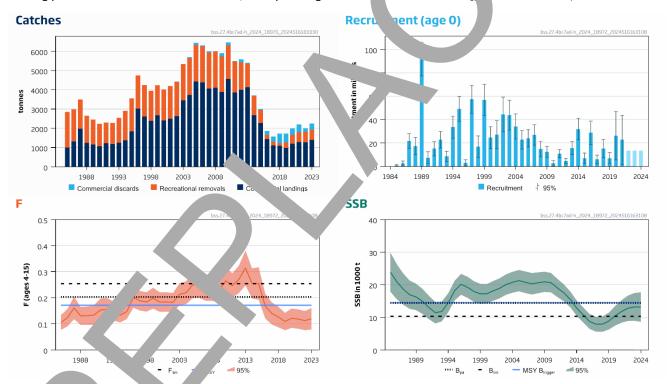
ICES notes the existence of a precautionary management plan, developed and adopted by one he relevant man authorities for this stock.

#### Non-fisheries conservation considerations

Conservation aspects and associated management measures may exist at tional regional regional

#### Stock development over time

Fishing pressure on the stock is below FMSY, and spawning-stock sizes below MSY Btrig. and between Bpa and Blim.



Figur . Dea bass in c. Discardes in a survey in 2012 and implemented management measures. Discard estimates are available since mortality (F) is shown for the combined commercial and recreational fisheries. The assumed recruitment values for 2022–2024 are shaded in a lighter colour.

<sup>&</sup>lt;sup>‡</sup> Total removals include both commercial and recreational catches, taking mortality of released fish into account (estimated at approximately 5%).

#### **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 <sub>ages 4–15</sub> (2024)	0.117	Total F, average $F_{commercial}$ (2021–2023; 0.086), plus $F_{rec}$ = 0.031*, assuming full compliance of recreational fisheries in 2024							
SSB (2025)	13 358	Short-term forecast; in tonnes							
R <sub>age 0</sub> (2022–2025)	13 308	Geometric mean (2012–2021); in thousands							
Total removals (2024)	2011	Short-term forecast fishing at F = 0.117; in tonnes							
Total landings (2024)	1253**	Short-term forecast; in tonnes							
Discards (2024)	134**	Short-term forecast; in tonnes							
Recreational removals (2024)	624	Short-term forecast assuming an F <sub>rec</sub> = 0.031* : .onnes							

<sup>\*</sup> Recreational F as estimated in 2012 (0.067, reduced [by 54%]) to account for management asures since 2011

**Table 2** Sea bass in divisions 4.b–c, 7.a, and 7.d–h. Annual catch scenarios. We sare in lines.

Jea bass in divisions 4.b-c, 7.a, and	a 7.0 II. Allilual cat	cii scciiarios.	WC alei	ii iiies.	
Basis	Total removals* (2025)	F <sub>total</sub> (2025)	S. (2026)	% SSB change*	% advice change***
ICES advice basis					
MSY approach: $F = F_{MSY} \times SSB_{2025}/MSY B_{trigger}$	2776	0.159	134	0.89	14.1
Other scenarios				1	
EU MAP^: F <sub>MSY</sub> × SSB <sub>2025</sub> /MSY B <sub>trigger</sub>	2776	159	1347	0.89	14.1
EU MAP^: F <sub>MSY lower</sub> × SSB <sub>2025</sub> /MSY B <sub>trigger</sub>	2330	3	12/	3.5	-4.2
EU MAP^: F <sub>MSY upper</sub> × SSB <sub>2025</sub> /MSY B <sub>trigger</sub>	2776	0.159	477د۔	0.89	14.1
F = F <sub>MSY lower</sub>	کار	0.142	13689	2.5	3.0
F = F <sub>MSY</sub>	7984	7	13315	-0.32	23
F = F <sub>MSY upper</sub>	\84	0.1713	13315	-0.32	23
F = 0	•	0	15672	17.3	-100
F <sub>pa</sub>	34.	0.203	12923	-3.3	43
F <sub>lim</sub>	4265	0.254	12319	-7.8	75
SSB <sub>2026</sub> = B <sub>lim</sub>	6893	0.45	10313	-23	183
$SSB_{2026} = B_{pa}$	15.5	0.086	14439	8.1	-36
SSB <sub>2026</sub> = MSY B <sub>trigger</sub>	1 3	0.086	14439	8.1	-36
F = F <sub>2024</sub>	J82	0.117	14022	5.0	-14.4
SSB <sub>2026</sub> = SSB <sub>2025</sub>	2928	0.168	13358	0	20
*	1 /1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

<sup>\*</sup> Includes commercial catch ar ecreational novals (taking mortality of released fish into account, estimated at approximately 5%).

The change in art lie (+14.1) due to the 20 and 2021 recruitments being higher than the recent average.

# Basis of the adv.

**Table 3** Sea bass 'ivisio 1.b-c, 7.a, and 7.d-h. The basis of the advice.

Adv <sup>i</sup> pasis		approach
ageme	idil	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.

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<sup>\*\*</sup> The split of total commercial F into commercial landings and commercial discards in the \_\_erim year \_\_estimateo \_\_\_\_e model.

<sup>\*\*</sup> SSB 2026 relative to SSB 202

<sup>\*\*\*</sup> Advice value for 2025 relative . • ce value for 2024 (2432 tonnes).

<sup>^</sup> MAP multiannual plar J, 2019).

## 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 analyshowed that his had a negligible effect on the stock assessment.

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

Stock structure remains an issue, and connectivity with adjacent stock. source of incertainty (ICES, 2023a).

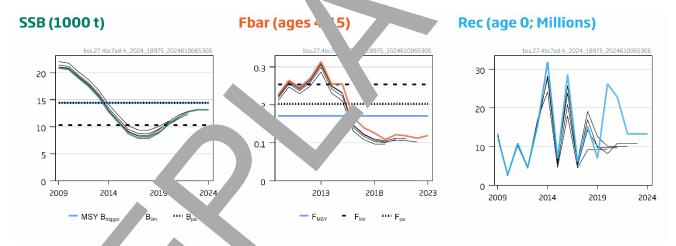


Figure 2 bass in discons 4.b—c, 7.a, and 7.d—h. Historical assessment results (final-year SSB estimates and final three years frecruitment, assumptions are included).

## Issues relevant to the 'vice

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

does no provide an applit in the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table, as the recreational fishing pressure cannot be allocated in the absenue of the catch scenarios table.

## **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 <sub>trigger</sub>	14439	B <sub>pa</sub> ; in tonnes	ICES (2019)
M31 approach	F <sub>MSY</sub>	0.1713	Stochastic simulations (EqSim)	ICES (2019)
Duccoutions	B <sub>lim</sub>	10313	B <sub>loss</sub> (lowest value in the time-series, SSB in 2018 as estimated by the WGCSE 2019 assessment); in tonnes	ICE 19)
Precautionary approach	B <sub>pa</sub>	14439	B <sub>lim</sub> × 1.4; in tonnes	ICES (20.
арргоасп	F <sub>lim</sub>	0.254	Stochastic simulations (EqSim)	ICES (2019
	F <sub>pa</sub>	0.203	F <sub>PO5</sub> ; the F that leads to SSB ≥ B <sub>lim</sub> with 95% probability	ICES (2019, 2 1)
	MAP MSY B <sub>trigger</sub>	14439	MSY B <sub>trigger</sub> ; in tonnes	EU (201
	MAP B <sub>lim</sub>	10313	B <sub>lim</sub> ; in tonnes	*U(2 <u>3</u> )
	MAP F <sub>MSY</sub>	0.1713	F <sub>MSY</sub>	<u>√</u> √19)
Management plan*	MAP range F <sub>lower</sub>	0.142	Consistent with ranges provided ICES (2° ), resulting in no more than 5% reduction in longerm yield compared with MSY	ICES / 19) and EU (2019)
	MAP range F <sub>upper</sub>	0.1713	Consistent with ranges provided by ICL 2019), resulting in no more than reduction in lone myield compared with MSY	£S (2019) and EU (2019)

<sup>\*</sup> EU multiannual plan (MAP) for the Western Waters and adjacent waters J, 2019).

# Basis of the assessment

Table 5Sea bass in divisions 4.b-c, 7.a, and 7.d-h. Basis of the assessme.ce.

ICES stock data category	1 ( <u>ICES, 2023b)</u>
Assessment type	Age- and length-based analytica sessmen. Synthesis 3; NOAA Toolbox; ICES, 2024)
Input data	Commercial landings (internation landing), ages, and length frequencies from catch sampling); commercial discards (UK bottom on the video and combined French fleet, length frequencies from catch sampling); one recruit subject (UK Solent autumn survey [G9863], 1986—present, excluding 2010 and 2012); one bottom trawlise ey (Channel Groundfish Survey [G3425], 1988–2014); one commercial turing fleet (2001—present); with and maturity data from sampling of commercial catches and surveys; nature mortality (inferred from 1 life-history parameters and maximum observed ages)
Discards and bycatch	Discards included in model and for last for some of the fleets
Recreational	Used in 'el and 'e forec'
Indicators	Non
Other information	Br Imarked in 18 (ICES, 20.1)
Working group	rking Grouver the Celtic Seas Ecoregion (WGCSE)

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# History of the advice, catch, and management

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

	discards and recreational removals. Weight	gnts are in tonnes.				
		Catch	Official	ICES	ICES	ICES
Year	ICES advice	corresponding to	commercial	commercial	commercial	recreational
		advice*	landings	landings		removals
2000	-	-	2100	2407		
2001	-	-	2200	25′		
2002	No increase in effort or F	-	2400	2	17	
2003	No increase in effort or F	-	2900	34.	16	
2004	No increase in effort or F	-	3000	3731	59	
2005	-	-	3200	4430	96	
2006	-	-	339r	4377		
2007	-	-	3r .	<u>, 4</u>	50	
2008	-	-	7	107	8	
2009	-	-	428	3889	151	
2010	-	-	4952	4562	148	
2011	-	-	ļ183	958	22	
2012	No increase in catch	-	3982	5	157	1440
2013	20% reduction in catches (average of the last	< 6000*	4243	4137	53	
2013	three years)	< 6000	4243	4157	55	
	36% reduction in commercial landings (20%					
2014	reduction, followed by 20% precautionary	< 2707**	2816	2682	25	
	reduction)					
2015	MSY approach	115***	2001	2273	40	
2016	MSY approach	≦5	1300	1446	199	
2017	Precautionary approach		1027	1106	271	
2018	MSY approach	380′	931	1084	482	
2019	MSY approach	≤. ^^	970	978	464	
2020	Management plan	1634-15 ^^^	1175	1195	325	
		2000 (r     e				
2021	Management plan	1680–20	1275	1281	412	
		100				
2022	MSY approach	<u>₹</u> 16^^^	1273^^	1276	196	
2023	MSY approach	<u> </u>	1379^^	1397	316	
2024	MSY approach	≤ 2432^^^				
2025	MSY approach	≤ 2776^^^				

<sup>\*</sup> Advice prior to 2014 was prov for sea ss in the Northeast Atlantic.

#### History catch ai. nding

ea bass in divisions 4.b-c, 7.a, and 7.d-h. Commercial catch distribution by fleet in 2023 as estimated by ICES and Tah ted recreational removals.

. 'ca+			C	Commercial discards	Recreational removals*			
2251 tonnes	Lines	Bottom trawlers 31%	Other gears 3%	Fixed/drift nets 23%	Danish seine 11%	Pelagic trawlers < 1%	316 tonnes	538 tonnes
	>			1397 tonnes	5			

<sup>\*</sup> Derived from the 2012 survey estimate (1440 tonnes).

<sup>\*\*</sup> Commercial landings.

<sup>\*\*\*</sup> Total landings (cor ercial and rec. ^ Incomplete for sor leets 2002–2008. ional landings).

<sup>^^</sup> Preliminary.

<sup>^^^</sup> Includes co recial cate and recreational removals (taking mortality of released fish into account, estimated at approximately 5%).

**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.

	VV CIGITES	are in tornica	,						
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		1239
1989	0	2	0	675	192	2	48	915	1161
1990	0	0	0	609	189	0		824	1063
1991	0	0	0	726	239	0	ৰ	982	1227
1992	0	0	0	721	148	0	3	906	1186
1993	0	1	0	718	230	0	45	994	1255
1994	0	1	0	593	535	0	49	178	1371
1995	0	1	0	801	708			1.	1835
1996	0	1	0	1703	563	8	6	2331	3022
1997	0	1	0	1429	561		74	7966	2620
1998	0	2	0	1363	488	4.	79	1980	2390
1999	0	1	0	ı	685	32	108	826	2670
2000	0	5	0	1522	407	60	30	2124	2407
2001	0	2	0	1619	4.5	77		2236	2500
2002	0	1	0	1580	6	96	73	2377	2622
2003	154	1	0	1903	5	163	84	2891	3459
2004	159	1	0	1883	61	191	159	3010	3731
2005	206	1	0	1937	512	327	220	3203	4430
2006	211	2	0	2116	736		23	3396	4377
2007	178	1	0	4	873	376	18	3521	4064
2008	187	0	0	15		380	20	3027	4107
2009	174	0	0	290	<u> </u>	395	15	4288	3889
2010	216	4	0	3441	79ر	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	41	370	12	4243	4137
2014	148	1		1322	1,180	253	11	2816	2682
2015	40	0		1113	701	218	9	2081	2273
2016	23	c	1	545	551	156	24	1300	1446
2017	22		0		438	132	12	1027	1106
2018	18	0	0	7رے	432	172	11	931	1084
2019	19	0	0	309	411	209	22	970	978
2020	24		0	387	526	223	15	1175	1195
2021	45	L	0	385	613	231	1	1275	1281
2022*		1	1	404	617	225	1	1273	1276
2023*	,2	2	2	437	675	231	<1	1379	1397

<sup>\*</sup> Preliminary off landings

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# 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 thous. 's, "High" and "Lc ' refer to 95% confidence intervals.

rable 9	366	Sea bass in divisions 4.b–c, 7.a, and 7.d–n. Assessme		iit Suiiiiiai y	7. Weights	are in toilii	es and reci	ruitinent in thous	c. High and LC	refer to 95% confidence intervals.				
.,	Recruitment age 0		cruitment age 0		SSB		To	otal F <sub>ages 4-1</sub>	15	F <sub>bar</sub>	F <sub>bar</sub> reational	Commercial	Commercial	Recreational
Year	Low	Value	High	Low	Value	High	Low	Value	High	commer cat	ren. \ls	landings	discards*	removals**
1985	71	823	1575	17845	23880	29914	0.077	0.105	0.133	0.037	J.068	994		1857
1986	457	2512	4567	15538	20935	26332	0.090	0.123	0.157	0.055	0.069	1318		1671
1987	15374	21647	27920	13846	18658	23471	0.117	0.161	0.20		0.069	1979		1522
1988	9947	17376	24805	12592	16934	21275	0.096	0.130	0.165	0.00	0.069	1239		1411
1989	77450	91834	106217	12203	16258	20314	0.096	0.131	0 0	0.063	0.068	1161		1303
1990	2253	7362	12470	11032	14879	18726	0.096	0.133		0.65	0.068	1064		1170
1991	9040	15129	21218	9418	13012	16606	0.109	0.153	.97	0.0	0.068	1226		1072
1992	15728	22798	29869	8106	11404	14701	0.111	0.155	0 9	0.0	0.069	1186		1097
1993	3968	8514	13060	8747	11792	14838	0.112	0.149	0.1c	r <u>3</u> 0	0.069	1256		1280
1994	24006	33516	43026	11538	14449	17359	0.105	124	0.162	0.066	0.068	1370		1538
1995	38602	49250	59898	15167	18186	21205	0.118	147	175	0.079	0.068	1835		1721
1996	467	3073	5680	16917	20127	23337	0.162	ιo	,Z4-	0.133	0.069	3022		1725
1997	45446	57414	69382	15978	19225	22471	0.151	0.1	0.23	0.120	0.069	2620		1629
1998	7770	16916	26062	14731	17910	21089	0.147	0.184	0.22	0.115	0.069	2390		1566
1999	43581	56900	70219	14144	17208	20271	0.158	0.198	0.24	0.129	0.069	2670		1564
2000	15270	24541	33811	14233	17212	20192	0.146	0.183	0.22	0.115	0.069	2407		1614
2001	15079	27098	39118	15096	18115	21134	17_	0.184	0.22	0.115	0.069	2500		1696
2002	29682	44493	59305	15820	18893	_2′`	0.14	0.1′	0.22	0.113	0.069	2622	17	1790
2003	31105	43854	56603	16899	20043	.3187	0.171	∠1	0.26	0.144	0.069	3459	16	1871
2004	23323	34125	44926	17546	20751	23956	0.176	0.22	0.26	0.150	0.069	3731	59	1914
2005	14872	22727	30582	17980	21248	24516	0.198	0.25	0.30	0.180	0.069	4430	96	1909
2006	16585	24059	31534	17441	20764	~4	0.199	0.25	0.30	0.183	0.069	4377	53	1878
2007	18217	26947	35677	16999	/296	235.	0.188	0.24	0.28	0.168	0.069	4064	50	1877
2008	8229	14837	21445	17384	20591	23797	9.188	0.23	0.28	0.166	0.069	4107	8	1886
2009	7800	12467	17134	1777F	2088?	23990	0.183	0.23	0.27	0.158	0.069	3889	151	1860
2010	404	2703	5001	17642	20F _	2361	0.21	0.26	0.32	0.196	0.069	4562	148	1757
2011	7309	10834	14359	16209	14	21 .9	0.20	0.25	0.29	0.178	0.069	3858	22	1608

	Re	ecruitment ag	ge 0		SSB		To	otal F <sub>ages 4-1</sub>	15	F <sub>bar</sub>	<sub>ar</sub> recreationa.	Commercial	Commercial	Recreational
Year	Low	Value	High	Low	Value	High	Low	Value	High	commercial catch	removals	landings	discards*	removals**
2012	2282	4582	6882	14907	17503	20100	0.22	0.27	0.32	0.202	0.069	3987	157	1440
2013	10034	15615	21195	13096	15528	17960	0.25	0.31	0.38	0 5	0.0	4137	53	1220
2014	22828	31938	41048	10472	12818	15164	0.197	0.25	0.31	.187	68	2682	25	1005
2015	2453	6903	11354	8454	10769	13084	0.192	0.25	0.32	0.199	J.056	2273	40	682
2016	18635	28721	38807	6446	8735	11023	0.120	0.168	0.22	ባ.148	0.019	1446	199	205
2017	2355	6054	9752	5601	7881	10162	0.098	0.140	0.182		0.019	1106	271	202
2018	7414	15254	23093	5543	7899	10256	0.087	0.126	0.16	0.11	0.013	1084	482	150
2019	2259	6994	11729	6239	8824	11409	0.075	0.109	0 ,2	0.087	0.022	978	464	281
2020	5536	26244	46953	7468	10473	13477	0.084	0.122	.59	0. )	0.032	1195	325	472
2021	1736	22694	43653	8350	11812	15274	0.081	0.118	55	0.0	0.032	1281	412	510
2022		13308^		8887	12794	16700	0.076	0.112	0. 7	0.0	0.032	1276	196	530
2023		13308^		8930	13190	17451	0.078	0.119	0.16.	.87	0.032	1397	316	538
2024		13308^		8610	13158	17706								

<sup>\*</sup> Incomplete for some fleets 2002–2008.

<sup>\*\*</sup> All values were derived from the 2012 survey estimate (1 440 tonnes).

<sup>^</sup> Geometric mean recruitment (2012–2021).

#### **Sources and references**

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