

## Anchovy (*Engraulis encrasicolus*) in Division 9.a (Atlantic Iberian waters)

### ICES advice on fishing opportunities

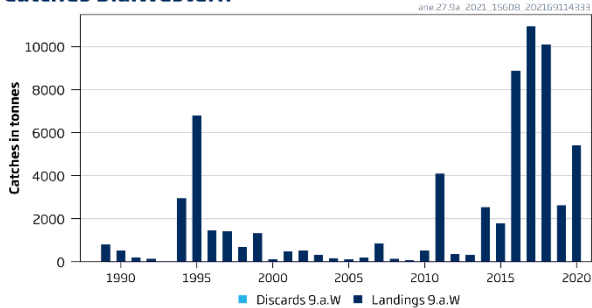
ICES advises that when the precautionary approach is applied, catches from the **western component** should be no more than 7824 tonnes and catches from the **southern component** should be no more than 7181 tonnes. The advice is for the period 1 July 2021 to 30 June 2022.

### Stock development over time

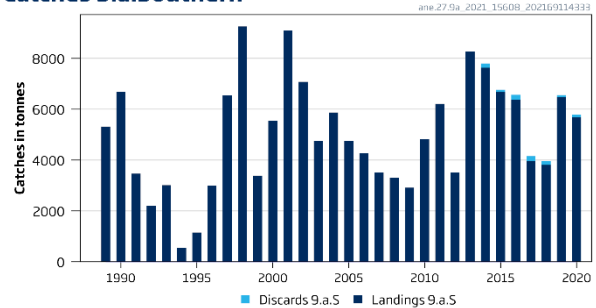
ICES cannot assess the **western component** stock and exploitation status relative to MSY and precautionary approach (PA) reference points because the reference points are undefined.

For the **southern component**, the spawning-stock size is above  $B_{pa}$  and  $B_{lim}$ . No reference points for fishing pressure have been defined for this stock component.

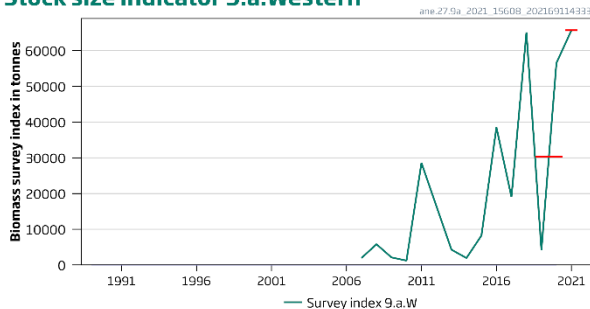
#### Catches 9.a.Western



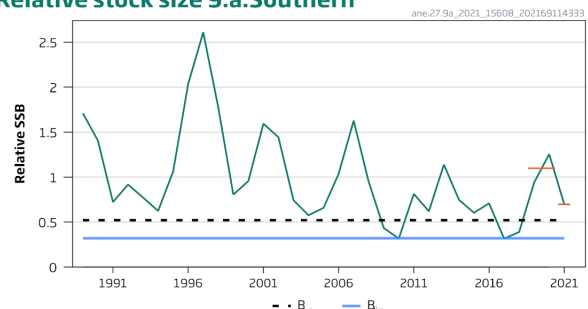
#### Catches 9.a.Southern



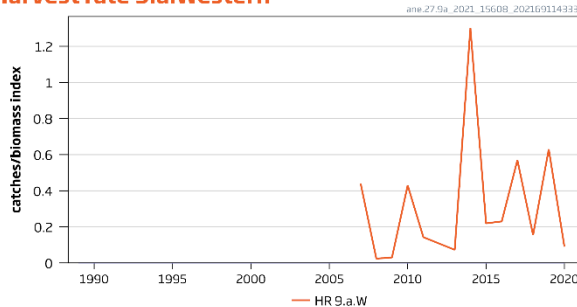
#### Stock size indicator 9.a.Western



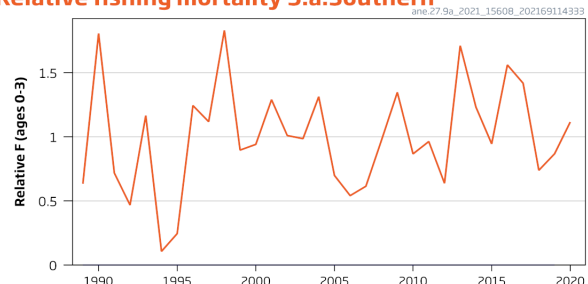
#### Relative stock size 9.a.Southern



#### Harvest rate 9.a.Western



#### Relative fishing mortality 9.a.Southern



**Figure 1**

Anchovy in Division 9.a. Summary of the stock assessments (left panels: **western component**; right panels: **southern component**). Discard estimates are included from 2014 onwards. The stock-size indicator and harvest rates, the ratio of catches/stock-size indicator, are presented for the **western component**. For the **southern component**, spawning-stock biomass (SSB) and fishing mortality (F) are expressed as relative to the average of the time-series (years correspond to the beginning of the management period, e.g. 1989 corresponds to the beginning of the period 1 July 1989 to 30 June 1990). The horizontal orange lines in the stock-size indicator and SSB plots indicate the average values of the respective years.

## Catch scenarios

Since 2018, ICES has provided catch options separately for the two stock components of anchovy in Division 9.a: the **western component** (distributed in areas 9.a North, Central-North, and Central-South) and the **southern component** (distributed in area 9.a South).

### Western component

ICES framework for category 3 short-lived stocks was applied (ICES, 2012). The combined PELACUS and PELAGO (A2548) acoustic biomass estimate was used as the index of stock development. The advice is based on the ratio between the last index value (index A) and the average of the two preceding values (index B), multiplied by the recent advised catches (1 July 2020 to 30 June 2021). The index is estimated to have increased by more than 80% and thus the uncertainty cap was applied. This advice rule with an uncertainty cap of 80% is considered precautionary and as such a PA buffer was not considered (ICES, 2012, 2020).

**Table 1a** Anchovy in Division 9.a. **Western component**. The basis for the catch scenarios.\*

Index A (2021)		65683 tonnes
Index B (2019–2020)		30327 tonnes
Index ratio (A/B)		2.17
Uncertainty cap (80%)	Applied	1.8
Advised catch for 1 July 2020 to 30 June 2021		4347 tonnes
Discard rate (from 1 July 2020 to 31 December 2020)**		0
Catch advice 1 July 2021 to 30 June 2022***		7824 tonnes
% advice change^		80

\* The figures in the table are rounded. Calculations were carried out with unrounded inputs, and computed values may not match precisely when calculated using the rounded figures in the table.

\*\* Discards not available for the Spanish fleet during the last two quarters of 2020, estimated to be zero. Not estimated for the Portuguese fleet during 2020 because of disruptions to sampling related to the COVID-19 pandemic.

\*\*\* [Advice for 1 July 2020 to 30 June 2021] × [uncertainty cap].

^ Advised catches for 1 July 2021 to 30 June 2022 relative to the advised catches for 1 July 2020 to 30 June 2021.

The increase in advised catches results from a 117% increase of the survey biomass in 2021 compared to the mean of the two previous years.

### Southern component

ICES framework for category 3 short lived stocks was applied (ICES, 2012). The relative SSB estimated by the assessment model was used as the index of stock-size development. The advice is based on the ratio between the last index value (index A) and the average of the two preceding values (index B), multiplied by the recent advised catches (1 July 2020 to 30 June 2021). The index is estimated to have decreased by 37% and thus the uncertainty cap was not applied. This advice rule for short-lived species with an uncertainty cap of 80% is considered precautionary and as such, a PA buffer was not considered.

**Table 1b** Anchovy in Division 9.a. **Southern component**. The basis for the catch scenarios.\*

Index A (2021)		0.70
Index B (2019–2020)		1.098
Index ratio (A/B)		0.63
Uncertainty cap (80%)	Not applied	-
Advised catch for 1 July 2020 to 30 June 2021		11322 tonnes
Discard rate (from 1 July 2020 to 31 December 2021)**		0.03
Catch advice 1 July 2021 to 30 June 2022***		7181 tonnes
% advice change^		-37%

\* The figures in the table are rounded. Calculations were carried out with unrounded inputs, and computed values may not match precisely when calculated using the rounded figures in the table.

\*\* Corresponds to the last two quarters of 2020.

\*\*\* [Advice for 1 July 2020 to 30 June 2021] × [index ratio].

^ Advised catches for 1 July 2021 to 30 June 2022 relative to the advised catches for 1 July 2020 to 30 June 2021.

The decrease in advised catches results from the relative SSB in 2021 being 37% lower than the mean of the two previous years.

### Basis of the advice

**Table 2a** Anchovy in Division 9.a. **Western component**. The basis of the advice.

Advice basis	Precautionary approach
Management plan	ICES is not aware of any agreed precautionary management plan for anchovy in this area

**Table 2b** Anchovy in Division 9.a. **Southern component**. The basis of the advice.

Advice basis	Precautionary approach
Management plan	ICES is not aware of any agreed precautionary management plan for anchovy in this area

### Quality of the assessment

The collection of data from the commercial fishery and research surveys during 2020 has been impacted by COVID-19 restrictions. This has had an impact on the catch-at-age and catch-at-length data used in the southern component assessment (ICES, 2021a). It was not possible to estimate a total discard rate for the period 1 March 2020 to 31 December 2020 because of COVID-19 disrupting sampling for Portuguese fleets. It was not possible to estimate Spanish fleet discards in the first two quarters of 2020, however, discards are generally negligible in this area.

The index of stock development for the **western component** is based on the combined PELACUS and PELAGO acoustic survey biomass estimates. The PELACUS survey could not be conducted in 2020 because of the disruptions caused by COVID-19. The PELACUS and PELAGO surveys tend to follow similar trends with the PELAGO survey representing on average 88% of the stock component biomass. The PELAGO survey was thus used to inform an estimate of the PELACUS survey for 2020. Both surveys were conducted in 2021.

The assessment for the **southern component** results in an update of recent biomass estimates and trends, which partially affect the ratios used in the advice rule.

### Issues relevant for the advice

Advised catches were calculated according to rules for category 3 short-lived stocks (ICES, 2018a), recommending that the one-over-two rule is constrained by an uncertainty cap of ±80% of the former catch advice.

In order to ensure that anchovy in Division 9.a is exploited sustainably, management should be implemented at the stock component level.



**Figure 2** Anchovy in Division 9.a and areas in the west and south of the Iberian Peninsula. “9.a West” refers to the western component in the geographical region including areas 9.a North, Central-North, and Central-South; “9.a South” refers to the southern component in areas 9.a South-Portugal and South-Spain.

### Reference points

No reference points are defined for the **western component** of the stock.

The reference points for the **southern component** are relative to the average of the time-series and are updated every year.

**Table 3** Anchovy in Division 9.a. **Southern component**. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	Not defined		
	$F_{MSY}$	Not defined		
Precautionary approach	$B_{lim}$	0.32	$B_{loss}$ in 2010 relative to the average of the SSB time-series	(ICES, 2021a)
	$B_{pa}$	0.52	$B_{lim} * e^{1.645 * \sigma}$ where $\sigma = 0.3$	(ICES, 2021a)
	$F_{lim}$	Not defined		
	$F_{pa}$	Not defined		
Management plan	$SSB_{mgt}$	Not defined		
	$F_{mgt}$	Not defined		

### Basis of the assessment

**Table 4a** Anchovy in the Division 9.a. **Western component**. Basis of the assessment and advice.

ICES stock data category	3 (ICES, 2021b)
Assessment type	Survey trends-based assessment (ICES, 2021a)
Input data	Combined index from the PELACUS (area 9.a North) and PELAGO (areas 9.a Central-North, Central-South) acoustic spring survey indices (A2548).
Discards and bycatch	Discard estimates are available for some fisheries since 2014 and are considered negligible
Indicators	None
Other information	A recruitment index from an autumn survey (JUVESAR/IBERAS – A2281) is under development. The stock was benchmarked in 2018 (ICES, 2018b).
Working group	Working Group on Southern Horse mackerel, Anchovy and Sardine (WGHANSA)

**Table 4b** Anchovy in the Division 9.a. **Southern component.** Basis of the assessment and advice.

ICES stock data category	3 ( <a href="#">ICES, 2021b</a> )
Assessment type	Model trend-based assessment, Gadget ( <a href="#">ICES, 2021a</a> ) that uses catches in the model and in the forecast
Input data	Commercial landings, ages and length frequencies from landing and survey sampling. Survey indices for 9.a South: PELAGO (A2548) and ECOCADIZ (A3933).
Discards and bycatch	Discard estimates are available for some fisheries since 2014. Discards from purse-seiners are negligible, most discards are reported for Spanish bottom trawlers.
Indicators	None
Other information	A recruitment index from an autumn acoustic survey (ECOCADIZ-RECLUTAS A3219) and a SSB index from a Daily Egg Production Method survey (BOCADEVA I8942). The stock was benchmarked in 2018 ( <a href="#">ICES, 2018</a> ).
Working group	Working Group on Southern Horse mackerel, Anchovy and Sardine ( <a href="#">WGHANSA</a> )

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

**Table 5** Anchovy in Division 9.a. ICES advice, the agreed TAC, and official landings. All weights are in tonnes.

Year	ICES advice	Catch/landings corresponding to advice	Agreed TAC*	Official landings	ICES catches**
1987	Not assessed	-	4600	5516	n/a
1988	Not assessed	-	6000	4173	4721
1989	Not assessed	-	6000	5259	5944
1990	Not assessed	-	9000	2889	6487
1991	Not assessed	-	9000	3753	5922
1992	Not assessed	-	12000	2351	3166
1993	If required, precautionary TAC	-	12000	1130	1984
1994	If required, precautionary TAC	-	12000	1619	3388
1995	If required, precautionary TAC	-	12000	10106	12956
1996	If required, precautionary TAC	-	12000	6256	4595
1997	If required, TAC at pre-1995 catch level	-	12000	4614	5295
1998	No advice	-	12000	8717	10962
1999	If required, TAC at pre-1995 catch level	4600	13000	7486	7409
2000	Fishery less than pre-1995 level and develop and implement management plan	4600	10000	2717	2502
2001	Average catch excl. 1995 and 98	4900	10000	5907	9098
2002	Average catch excl. 1995 and 98	4900	8000	5636	8806
2003	Average catch excl. 1995, 98, and 2001	4700	8000	6146	5269
2004	Average catch excl. 1995, 98, 2001, and 02	4700	8000	6644	5844
2005	Average catch excl. 1995, 98, 2001, and 02	4700	8000	4596	4515
2006	Average catch excl. 1995, 98, 2001, and 02	4700	8000	4131	4491
2007	Average catch 1988–2005 excl. 95, 98, 01, 02	4800	8000	6282	6454
2008	Average catch 1988–2006 excl. 95, 98, 01, 02	4800	8000	3244	3508
2009	Same advice as last year	4800	8000	2349	3013
2010	Same advice as last year	4800	8000	3291	3210
2011	See scenarios	-	7600	10134	10076
2012	Reduce catches	-	8600	5589	5589
2013	Historical fishery appears sustainable	-	8800	5632	5632
2014	Historical fishery appears sustainable	-	8800	7739	10332
2015	No catch advice	-	9700	9420	9597
2016	In-year-advice	≤ 15000	15000	13583	13740
2017	No catch advice	-	12500	13277	14705
2018	No catch advice	-	12500	13640	13732

Year	ICES advice	Catch/landings corresponding to advice	Agreed TAC*	Official landings	ICES catches**
2018–2019 ***	Precautionary approach	≤ 13308, western component ≤ 3760, southern component	17068	13755	13907
2019–2020 ***	Precautionary approach	≤ 2662, western component ≤ 6290, southern component	10240	9008	9095
2020–2021 ***	Precautionary approach	≤ 4347, western component ≤ 11322, southern component	15669	10541	11204
2021–2022 ***	Precautionary approach	≤ 7824, western component ≤ 7181, southern component			

\* TAC for ICES subareas 9 and 10 as well as Division 34.1.1 of the Fishery Committee for the Eastern Central Atlantic (CECAF).

\*\* Catches are estimated for Division 9.a and include very minor discard numbers since 2014.

\*\*\* Catch advice provided for the **western** and **southern** components from 1 July in the year *y* to 30 June in the year *y+1*.

### History of the catch and landings

**Table 6a** Anchovy in the Division 9.a. **Western component.** Catch distribution by fleet 1 January to 31 December 2020 as estimated by ICES.

Catch (2020)	Landings		Discards*
5639 tonnes	97.5% purse-seiners	2.5% other gear types	0 tonnes
	5639 tonnes		

**Table 6b** Anchovy in the Division 9.a. **Southern component.** Catch distribution by fleet 1 January to 31 December 2020 as estimated by ICES.

Catch (2020)	Landings		Discards*
7317 tonnes	99.9% purse-seiners	< 1% other gear types	105 tonnes
	7212 tonnes		

\* Discards from purse-seiners are negligible; most of the discards are generally reported for Spanish bottom trawlers. Incomplete data this year is because of the COVID-19 disruption to sampling.

**Table 7** Anchovy in Division 9.a. History of commercial catch and landings; both the official and ICES estimated values are presented by area for each country participating in the fishery. All weights are in tonnes.

Year	Official landings			ICES catch									
	Portugal total 9.a	Spain total 9.a	Total 9.a	Portugal*				Spain**			Total West	Total South	Total 9.a
				9.a C-N	9.a C-S	9.a S	Total	9.a N	9.a S	Total			
1943	-	-	-	7121	355	2499	9975	-	-	-	-	-	-
1944	-	-	-	1220	55	5376	6651	-	-	-	-	-	-
1945	-	-	-	781	15	7983	8779	-	-	-	-	-	-
1946	-	-	-	0	335	5515	5850	-	-	-	-	-	-
1947	-	-	-	0	79	3313	3392	-	-	-	-	-	-
1948	-	-	-	0	75	4863	4938	-	-	-	-	-	-
1949	-	-	-	0	34	2684	2718	-	-	-	-	-	-
1950	4145	11645	15790	31	30	3316	3377	-	-	-	-	-	-
1951	4145	13784	17929	21	6	3567	3594	-	-	-	-	-	-
1952	3619	13243	16862	1537	1	2877	4415	-	-	-	-	-	-
1953	4656	17103	21759	1627	15	2710	4352	-	-	-	-	-	-
1954	1550	16959	18509	328	18	3573	3919	-	-	-	-	-	-
1955	5031	27290	32321	83	53	4387	4523	-	-	-	-	-	-
1956	5574	23699	29273	12	164	7722	7898	-	-	-	-	-	-
1957	7810	23921	31731	96	13	12501	12610	-	-	-	-	-	-
1958	13562	28807	42369	1858	63	1109	3030	-	-	-	-	-	-
1959	3132	22808	25940	12	1	3775	3788	-	-	-	-	-	-
1960	6815	32992	39807	990	129	8384	9503	-	-	-	-	-	-
1961	9890	30098	39988	1351	81	1060	2492	-	-	-	-	-	-

Year	Official landings			ICES catch									
	Portugal total 9.a	Spain total 9.a	Total 9.a	Portugal*				Spain**			Total West	Total South	Total 9.a
				9.a C-N	9.a C-S	9.a S	Total	9.a N	9.a S	Total			
1962	3557	37718	41275	542	137	3767	4446	-	-	-	-	-	-
1963	4638	22493	27131	140	9	5565	5714	-	-	-	-	-	-
1964	5714	27337	33051	0^	0	4118	4118	-	-	-	-	-	-
1965	7610	44581	52191	7	0	4452	4460	-	-	-	-	-	-
1966	4461	41226	45687	23	35	4402	4460	-	-	-	-	-	-
1967	3824	36754	40578	153	34	3631	3818	-	-	-	-	-	-
1968	1161	14078	15239	518	5	447	970	-	-	-	-	-	-
1969	1364	12636	14000	782	10	582	1375	-	-	-	-	-	-
1970	1193	23127	24320	323	0	839	1162	-	-	-	-	-	-
1971	0	91	91	257	2	67	326	-	-	-	-	-	-
1972	0	1563	1563	-	-	-	-	-	-	-	-	-	-
1973	126	2458	2584	6	0	120	126	-	-	-	-	-	-
1974	437	2845	3282	113	1	124	238	-	-	-	-	-	-
1975	372	3114	3486	8	24	340	372	-	-	-	-	-	-
1976	88	8703	8791	32	38	18	88	-	-	-	-	-	-
1977	3261	11306	14567	3027	1	233	3261	-	-	-	-	-	-
1978	1022	9023	10045	640	17	354	1011	-	-	-	-	-	-
1979	790	20879	21669	194	8	453	655	-	-	-	-	-	-
1980	994	994	1988	21	24	935	980	-	-	-	-	-	-
1981	1370	1370	2740	426	117	435	978	-	-	-	-	-	-
1982	699	715	1414	48	96	512	656	-	-	-	-	-	-
1983	1015	1115	2130	283	58	332	673	-	-	-	-	-	-
1984	461	463	924	214	94	84	392	-	-	-	-	-	-
1985	2435	2487	4922	1893	146	83	2122	-	-	-	-	-	-
1986	2152	3223	5375	1828	229	96	2153	-	-	-	-	-	-
1987	1621	3895	5516	1126	81	414	1621	-	-	-	-	-	-
1988	892	3281	4173	383	139	222	744	-	4263	4263	-	4306	4721
1989	824	4435	5259	646	141	36	823	118	5330	5448	905	5352	5944
1990	644	2245	2889	431	4	110	545	220	5726	5946	655	5750	6487
1991	222	3531	3753	187	3	22	212	15	5697	5712	205	5717	5922
1992	138	2213	2351	136	1	2	139	33	2995	3028	170	2995	3166
1993	28	1102	1130	22	1	0	23	1	1960	1961	24	1960	1984
1994	236	1383	1619	236	8	0	244	117	3035	3152	361	3035	3388
1995	2530	7576	10106	2521	9	0	2530	5329	571	5900	7859	571	12956
1996	2775	3481	6256	2711	13	51	2775	44	1780	1824	2768	1831	4595
1997	632	3982	4614	610	8	14	632	63	4600	4664	681	4613	5295
1998	1613	7104	8717	894	153	610	1657	371	8977	9349	1418	9587	11005
1999	1374	6112	7486	957	96	355	1408	413	5587	6000	1466	5942	7409
2000	265	2452	2717	71	61	178	310	10	2182	2191	142	2360	2502
2001	748	5159	5907	397	19	439	855	27	8216	8244	443	8655	9098
2002	916	4720	5636	433	90	393	915	21	7870	7891	544	8262	8806
2003	519	5627	6146	211	67	200	478	23	4768	4791	301	4968	5269
2004	663	5981	6644	83	139	434	657	4	5183	5187	226	5617	5844
2005	129	4467	4596	82	6	38	126	4	4385	4389	92	4423	4515
2006	111	4020	4131	79	15	14	108	15	4368	4383	109	4381	4491
2007	871	5411	6282	833	7	34	874	4	5576	5580	844	5610	6454
2008	335	2909	3244	211	87	37	335	5	3168	3173	303	3204	3508
2009	72	2277	2349	35	5	32	72	19	2922	2941	59	2954	3013
2010	130	3161	3291	100	2	28	130	179	2901	3080	281	2929	3210
2011	3318	6816	10134	3239	1	78	3318	541	6216	6758	378	6294	10076
2012	796	4793	5589	521	220	56	796	39	4754	4793	780	4810	5589
2013	391	5241	5632	192	131	67	391	69	5172	5241	392	5240	5632
2014	818	6921	7739	678	21	118	818	581	8933	9515	1280	9051	10332
2015	2546	6874	9420	2533	10	2	2546	173	6878	7051	2716	6880	9597
2016	6937	6647	13583	6908	10	19	6937	222	6581	6803	7140	6599	13740
2017	9051	4226	13277	8854	170	26	9051	1069	4585	5654	10094	4611	14705

Year	Official landings			ICES catch									
	Portugal total 9.a	Spain total 9.a	Total 9.a	Portugal*				Spain**			Total West	Total South	Total 9.a
				9.a C-N	9.a C-S	9.a S	Total	9.a N	9.a S	Total			
2017–2018***	10171	4363	14534	9738	406	27	10171	947	3703	4649	11090	3730	14820
2018–2019***	19269	2762	22030	9017	104	52	9174	971	3763	4734	10093	3815	13907
2019–2020***	2136	6872	9008	1954	0	182	2136	670	6290	6959	2624	6472	9095
2020–2021***	5166	5375	10541	5077	3	87	5166	341	5696	6038	5421	5784	11204

\* Discards considered negligible.

\*\* Catch estimates available since 2014. In previous years discards are considered negligible and landings are assumed equal to catch.

\*\*\* Catches from 1 July to 30 June in the following year to match the advised period. Catch estimates of the first two quarters of 2021 are provisional.

^ 0 = less than 1 tonne.

## Summary of the assessment

**Table 8a** Anchovy in Division 9.a. **Western component.** Summary of the stock assessment. Weights are in tonnes. Years correspond to the management period (1 July to 30 June in the following year).

Year	Combined survey index 9.a W	PELACUS survey index 9.a W	PELAGO survey index 9.a W	Harvest rate 9.a W	Landings 9.a W	Discards 9.a W
1989/1990					803	
1990/1991					531	
1991/1992					208	
1992/1993					143	
1993/1994					14	
1994/1995					2956	
1995/1996					6803	
1996/1997					1456	
1997/1998					1420	
1998/1999					696	
1999/2000			596		1331	
2000/2001					111	
2001/2002			368		474	
2002/2003			1542		523	
2003/2004			112		333	
2004/2005					173	
2005/2006			1062		113	
2006/2007			0		198	
2007/2008	1945	0	1945	0.44	862	
2008/2009	5811	306	5505	0.024	142	
2009/2010	2115	26	2089	0.031	66	
2010/2011	1230	42	1188	0.43	529	
2011/2012	28558	1508	27050	0.143	4097	
2012/2013		45			356	
2013/2014	4284	0	4284	0.073	311	
2014/2015	1947	0	1947	1.30	2538	0
2015/2016	8237	0	8237	0.22	1774	0.152
2016/2015	38507	205	38302	0.23	8874	6.5
2017/2018	19047	3566	15481	0.57	10934	0
2018/2019	65097	10660	54437	0.155	10093	0
2019/2020	4129	192	3937	0.63	2624	0***
2020/2021	56526	6235*	50291	0.09	5421**	0
2021/2022	65683	6075	59608			

\* Value extrapolated from the regression between PELAGO and PELACUS biomass for the period 2007–2019.

\*\* Preliminary data as landings for the first two quarters of 2021 are not complete.

\*\*\* No discards estimated during the first two quarters of 2020 because of COVID-19 disruption to sampling.



**Table 8b** Anchovy in Division 9.a. **Southern component.** Summary of the stock assessment. Weights are in tonnes. Years correspond to the management period (1 July to 30 June in the following year).

Year	Relative stock size 9.a S	Relative fishing mortality 9.a S (ages 0–3)	Landings 9.a S	Discards 9.a S
1989/1990	1.71	0.63	5319	
1990/1991	1.41	1.81	6690	
1991/1992	0.72	0.72	3469	
1992/1993	0.92	0.47	2191	
1993/1994	0.77	1.17	3017	
1994/1995	0.62	0.106	556	
1995/1996	1.06	0.25	1154	
1996/1997	2.0	1.24	3001	
1997/1998	2.6	1.12	6552	
1998/1999	1.78	1.83	9259	
1999/2000	0.81	0.90	3387	
2000/2001	0.96	0.94	5546	
2001/2002	1.59	1.29	9094	
2002/2003	1.44	1.01	7081	
2003/2004	0.74	0.99	4742	
2004/2005	0.58	1.31	5871	
2005/2006	0.66	0.70	4744	
2006/2007	1.04	0.54	4268	
2007/2008	1.63	0.61	3517	
2008/2009	0.95	0.98	3300	
2009/2010	0.43	1.35	2917	
2010/2011	0.32	0.87	4821	
2011/2012	0.81	0.96	6215	
2012/2013	0.62	0.64	3518	
2013/2014	1.14	1.71	8267	
2014/2015	0.75	1.23	7634	167.023
2015/2016	0.60	0.94	6674	93.231
2016/2015	0.71	1.56	6387	181.573
2017/2018	0.32	1.42	3974	186
2018/2019	0.39	0.74	3815	151
2019/2020	0.94	0.87	6472	87**
2020/2021	1.25	1.12	5679*	105
2021/2022	0.70			

\* Preliminary; 37% of the official landings in January–May (mean 2009–2020) were added to account for catches in June 2021 not yet reported.

\*\* No discards estimated during the first two quarters of 2020 because of COVID-19 disruption to sampling. These are assumed to be zero given that they are generally negligible.

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