

Sole (*Solea solea*) in divisions 7.b and 7.c (West of Ireland)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches should be no more than 24 tonnes in each of the years 2018, 2019 and 2020.

Stock development over time

The state of the stock is unknown. Landings have been at a low level for several decades.

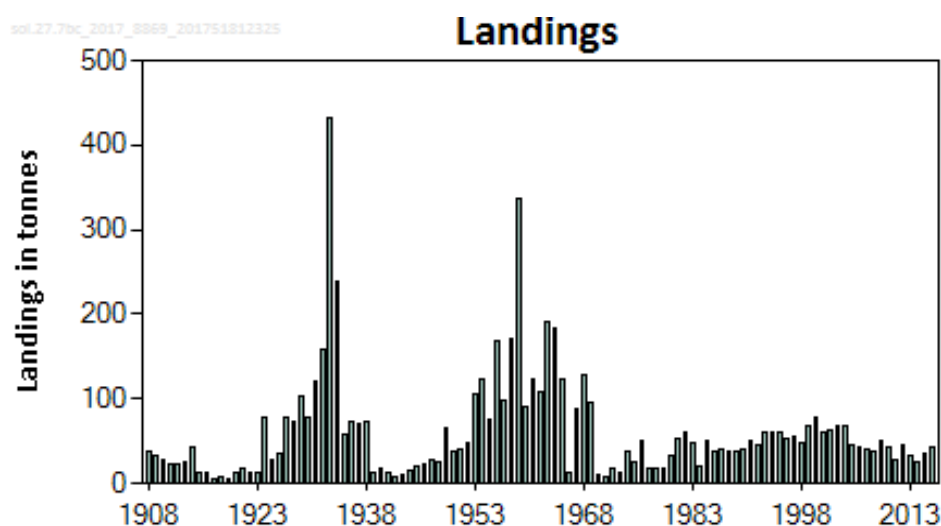


Figure 1 Sole in divisions 7.b and 7.c. Official landings.

Stock and exploitation status

Table 1 Sole in divisions 7.b and 7.c. State of the stock and fishery relative to reference points.

Table 1 Data in divisions VII and VIII state of the stock and fishery relative to reference points.										
		Fishing pressure				Stock size				
		2014	2015	2016		2015	2016	2017		
Maximum sustainable yield	F_{MSY}	?	?	?	Unknown	$MSY B_{trigger}$?	?	?	Unknown
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?	Unknown
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

Catch options

The ICES framework for category 6 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 ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was last applied in 2012 (for the 2013 advice) and with no new information available to support the current level of catches the precautionary buffer is applied for the 2018 advice.

Table 2 Sole in divisions 7.b and 7.c. The basis for the catch options.

Recent advised catches		30 tonnes
Discard rate		Negligible
Precautionary buffer	Applied	0.8
Catch advice*		24 tonnes

* Recent advised catch × precautionary buffer.

Basis of the advice

Table 3 Sole in divisions 7.b and 7.c. The basis of the advice.

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

Quality of the assessment

Catches in this area are too low to support the collection of the necessary information for an assessment of the stock status.

Issues relevant for the advice

There are no issues relevant for the advice.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Sole in divisions 7.b and 7.c. Basis of assessment and advice.

ICES stock data category	6 (ICES, 2016)
Assessment type	No assessment
Input data	Official landings
Discards and bycatch	Considered negligible
Indicators	None
Other information	None
Working group	Working Group for the Celtic Seas Ecoregion (WGCSE)

Information from stakeholders

There is no additional available information for this stock.

History of the advice, catch, and management

Table 5 Sole in divisions 7.b and 7.c. ICES advice and official landings. All weights are in tonnes.

Year	ICES advice	Predicted catch corresp. to advice	Agreed TAC	Official landings
1993	-	-	-	60
1994	-	-	-	61
1995	-	-	-	61
1996	-	-	-	54
1997	-	-	-	55
1998	-	-	-	49
1999	-	-	-	68
2000	-	-	-	77
2001	-	-	80	60
2002	No advice	-	80	64
2003	Reduce TAC to recent landings	65	80	69
2004	Reduce TAC to recent landings (1998–2002)	65	65	67
2005	Reduce TAC to recent landings (1999–2003)	62	65	45
2006	No increase in catches	64	65	43
2007	No increase in catches	64	65	41
2008	No increase in catches	50	59	37
2009	Same advice as last year	50	50	51
2010	No advice	-	45	43
2011	No advice	-	44	27
2012	No increase in catch	-	44	45
2013	20% reduction in catches (last 3 years' average)	<30	42	33
2014	Same catch advice as for 2013	<30	42	27
2015	Same catch advice as for 2013	<30	42	34
2016	Precautionary approach (same advised catch value as given for 2015)	≤30	42	43
2017	Precautionary approach (same advised catch value as provided for	≤30	42	
2018	Precautionary approach	≤24		
2019	Precautionary approach (same advised catch value as provided for	≤24		
2020	Precautionary approach (same advised catch value as provided for	≤24		

History of the catch and landings

Table 6 Sole in divisions 7.b and 7.c. Catch distribution in 2016 as estimated by ICES.

Catch	Landings	Discards
43 tonnes	43 tonnes	Negligible

Table 7 Sole in divisions 7.b and 7.c. History of official landings presented by country; ICES unallocated and estimated values. All weights are in tonnes.

Year	Landings					Unallocated	ICES estimates
	France	UK	Ireland	Other Countries	Total		
1908	0	1	37	0	38		
1909	0	0	32	0	32		
1910	0	0	28	0	28		
1911	0	1	22	0	23		
1912	0	1	22	0	23		
1913	0	1	25	0	26		
1914	0	1	43	0	44		
1915	0	1	12	0	13		
1916	0	0	14	0	14		
1917	0	0	6	0	6		
1918	0	0	7	0	7		
1919	0	0	6	0	6		
1920	0	9	5	0	14		
1921	0	10	9	0	19		
1922	0	4	9	0	13		
1923	0	2	10	0	12		
1924	0	15	64	0	79		
1925	0	11	18	0	29		
1926	7	10	18	0	35		
1927	47	11	19	0	77		
1928	49	8	16	0	73		
1929	74	11	18	0	103		
1930	52	5	22	0	79		
1931	82	9	29	0	120		
1932	122	10	27	0	159		
1933	411	10	10	0	431		
1934	217	10	13	0	240		
1935	40	7	11	0	58		
1936	43	20	9	0	72		
1937	32	25	14	0	71		
1938	44	21	7	0	72		
1939	0	0	13	0	13		
1940	0	0	19	0	19		
1941	0	0	14	0	14		
1942	0	0	8	0	8		
1943	0	0	11	0	11		
1944	0	0	16	0	16		
1945	0	0	20	0	20		
1946	0	12	10	0	22		
1947	0	6	8	15	29		
1948	0	11	14	0	25		
1949	41	12	12	0	65		
1950	24	9	6	0	39		
1951	27	7	6	0	40		
1952	40	2	6	0	48		
1953	99	2	4	0	105		
1954	116	1	7	0	124		
1955	66	1	9	0	76		
1956	161	1	6	0	168		
1957	94	1	4	0	99		
1958	163	2	6	0	171		
1959	327	1	8	0	336		
1960	80	1	9	0	90		
1961	110	1	12	0	123		
1962	100	0	8	0	108		

Year	Landings					Unallocated	ICES estimates
	France	UK	Ireland	Other Countries	Total		
1963	172	0	19	0	191		
1964	159	1	24	0	184		
1965	95	5	24	0	124		
1966	0	1	11	0	12		
1967	78	0	11	0	89		
1968	121	0	8	0	129		
1969	86	1	9	0	96		
1970	3	0	8	0	11		
1971	0	2	5	0	7		
1972	4	0	13	0	17		
1973	0	0	12	0	12		
1974	25	0	12	0	37		
1975	7	0	19	0	26		
1976	6	0	44	0	50		
1977	3	0	14	0	17		
1978	3	0	16	0	19		
1979	6	0	13	0	19		
1980	9	0	24	0	33		
1981	6	0	47	0	53		
1982	5	1	55	0	61		
1983	9	0	40	0	49		
1984	3	0	17	0	20		
1985	6	0	44	0	50		
1986	8	0	29	0	37		
1987	2	0	39	0	41		
1988	2	1	34	0	37		
1989	0	0	38	0	38		
1990	0	0	41	0	41		
1991	5	0	46	0	51		
1992	2	0	43	0	45		
1993	1	0	59	0	60	0	60
1994	1	0	60	0	61	9	70
1995	2	0	59	0	61	-2	59
1996	2	0	52	0	54	3	57
1997	3	1	51	0	55	0	55
1998	0	0	49	0	49	17	66
1999	0	0	68	0	68	4	72
2000	12	0	65	0	77	-9	68
2001	7	0	53	0	60	0	60
2002	14	0	50	0	64	-3	61
2003	19	0	50	0	69	-5	64
2004	18	0	49	0	67	2	69
2005	7	0	38	0	45	-1	44
2006	12	0	31	0	43	0	43
2007	7	0	34	0	41	1	42
2008	6	0	31	0	37	3	40
2009	5	0	46	0	51	0	51
2010	8	0	35	0	43	0	43
2011	5	0	22	0	27	-5	22
2012	7	0	38	0	45	-2	43
2013	3	0	30	0	33	0	33
2014	3	0	23	0	26	1	27
2015*	3	0	31	0	34	0	34
2016*	6	0	36	0	43	0	43

* Preliminary.

Summary of the assessment

There is no assessment for sole 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 for the Celtic Seas Ecoregion (WGCSE), 9–18 May 2017, ICES Headquarters, Copenhagen, Denmark. ICES CM 2017/ACOM:13.