

5.3.21 Spotted ray (*Raja montagui*) in divisions 7.a and 7.e–h (southern Celtic Seas and western English Channel)

ICES stock advice

ICES advises that when the precautionary approach is applied, landings should be no more than 1197 tonnes in each of the years 2017 and 2018. ICES cannot quantify the corresponding catches.

Stock development over time

Landings ranged (2009–2015) from 837 to 1343 tonnes. The abundance stock size indicator shows an increasing trend since 1993, which has been stable in recent years.

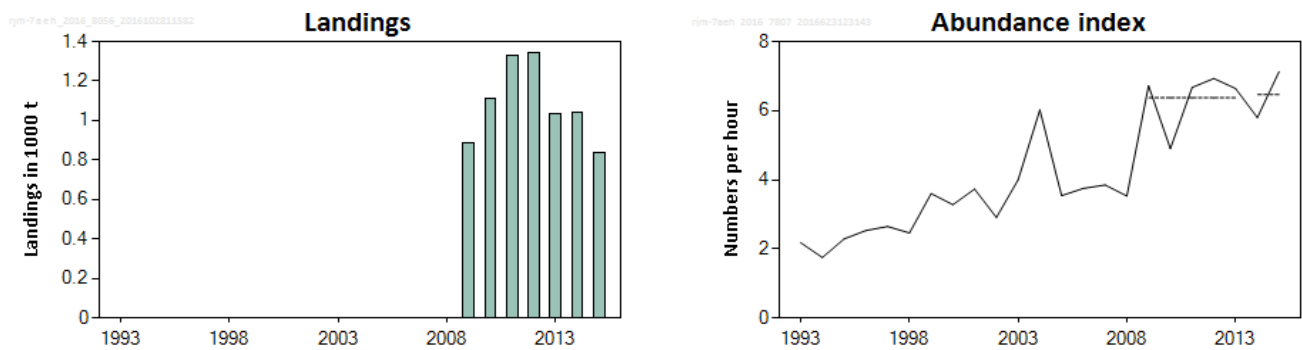


Figure 5.3.21.1 Spotted ray (*Raja montagui*) in divisions 7.a and 7.e–h. Left: ICES estimated landings (in tonnes). Right: UK (E&W)-BTS-Q3 survey index (numbers per hour). The dotted horizontal lines show the mean stock indicators for 2014–2015 and 2009–2013.*

Stock and exploitation status

Table 5.3.21.1 Spotted ray in divisions 7.a and 7.e–h. State of the stock and fishery relative to reference points.

		Fishing pressure			Stock size					
		2013	2014	2015	2013	2014	2015			
Maximum sustainable yield	F_{MSY}	?	?	?	Undefined	MSY	?	?	?	Undefined
Precautionary approach	F_{pa} , F_{lim}	?	?	?	Undefined	B_{pa} , B_{lim}	?	?	?	Undefined
Management plan	F_{MGT}	-	-	-	Not applicable	SSB_{MGT}	-	-	-	Not applicable
Qualitative evaluation	-	✘	?	?	Unknown	-	↘	↘	↗	Increasing

* Version 2: landings graph updated to include landings form 2009 and 2010.

Catch options

The ICES framework for category 3 stocks was applied (ICES, 2012). The UK (E&W)-BTS-Q3 was used as the index of stock size. The advice is based on a comparison of the two latest index values (index A) with the five preceding values (index B), multiplied by the recent landings advice.

The recent advised landings for 2015 and 2016 were originally derived using landings statistics from 2011-2013. In 2016, a review of the landing statistics of elasmobranchs (ICES 2016a) was conducted. As a result, the basis which was used to provide advice in 2014 for 2015 and 2016 has been adjusted to account for the update in the landing statistics in the period 2011-2013.

The index is estimated to have increased by less than 20% and thus the uncertainty cap was not applied. The precautionary buffer applied previously (ICES, 2014) and has not been applied again.

Discarding is known to take place, but ICES cannot quantify the corresponding catch. In addition, discard survival, which might occur, has not been estimated.

Table 5.3.21.2 Spotted ray in divisions 7.a and 7.e–h. For stocks in ICES data categories 3–6, one catch option is provided.

Index A (2014-2015)		6.46
Index B (2009-2013)		6.37
Index ratio (A/B)		1.01
Uncertainty cap	Not applied	-
Recent advised landings (2015–2016)		1118 t
Recent advised landings adjusted (2015–2016)* [1118 t x 1.06]		1185 t
Discard rate		Unknown
Precautionary buffer	Not applied	-
Landings advice**		1197 t

*Recent advised landings adjusted for the revision of the landings statistics in 2011-2013.

** (Recent advised landings adjusted × index ratio).

Basis of the advice

Table 5.3.21.3 Spotted ray in divisions 7.a and 7.e–h. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	There is no management plan for this stock.

Quality of the assessment

The UK (E&W)-BTS-Q3 covers a representative portion of the stock area and the survey gear samples the full size range of the species.

Issues relevant for the advice

The quality of landings data has improved in recent years, especially following the WKSHARKS workshop in which ICES consolidated elasmobranch landings data for the period 2009-2015 (ICES, 2016a,b). Commercial data for *Raja montagui* are confounded with the larger-bodied but morphologically similar *Raja brachyura*.

Raja montagui is a shelf species that is a bycatch in trawl and gillnet fisheries, including in mixed demersal fisheries for groundfish and fisheries targeting the overall skate complex. As one of the smaller and less valuable species in the skate complex, it is not targeted, and a relatively high proportion of the catch may be discarded.

The Irish groundfish survey (IGFS-IBTS-Q4) covers a part of the stock area and indicates an increasing abundance (ICES 2016 WGEF).

Reference points

No reference points are defined for this stock

Basis of the assessment

Table 5.3.21.4 Spotted ray in divisions 7.a and 7.e–h. The basis of the assessment.

ICES stock data category	3 (ICES, 2016c)
Assessment type	Survey-based trends (ICES, 2016b)
Input data	UK (E&W)-BTS-Q3
Discards and bycatch	Discarding is known to take place but cannot be quantified.
Indicators	None
Other information	IGFS-IBTS-Q4
Working group	Working Group on Elasmobranch Fishes (WGEF)

Information from stakeholders

No information has been provided.

History of advice, catch, and management

Table 5.3.21.5 Spotted ray in divisions 7.a and 7.e–h. History of ICES advice and ICES estimates of landings**. All weights are in tonnes.

Year	ICES advice	Predicted landings corresp. to advice	ICES species-specific landings: minimum estimate based on reported landings*
2011	No specific advice		1332
2012	No specific advice		1344
2013	No TAC, species-specific measures needed, catch could increase by up to 20%	-	1032
2014	No new advice, same as 2013	-	1042
2015	4% decrease from last 3 years' average	1118	837
2016	No new advice, same as 2015	1118	
2017	Precautionary approach	≤ 1197	
2018	Precautionary approach (same value as advised catches for 2017)	≤ 1197	

* Data revised in 2016 (ICES, 2016a).

** There is no a specific TAC for this stock. Fishing opportunities are managed through an overall TAC by management unit, which includes all species of skates and rays.

History of catch and landings

This stock is distributed primarily in EU waters, and whilst catches from the NEAFC area are not quantified, they are assumed negligible.

Table 5.3.21.6 Spotted ray in divisions 7.a and 7.e–h. Catch distribution by fleet in 2015 as estimated by ICES.

Catch (2015)	Landings				Discards
	% beam trawl	% bottom trawl	% hooks	% other	
Unknown	2%	84%	2%	13%	Discarding is known to take place but cannot be quantified.
837 tonnes					

Table 5.3.21.7 Spotted ray in divisions 7.a and 7.e–h. ICES estimates of landings by country (in tonnes). Data revised in 2016 (ICES, 2016a).

Year	Belgium	Spain	UK	Ireland	Netherlands	France	Total
2009	63.2		38.3	0.4	0	784.8	886.8
2010	54.5	0.4	102.3	19.1		933.7	1109.9
2011	119.6		88	62.9	0.2	1061.7	1332.4
2012	69.7		85.5	53.1		1135.5	1343.7
2013	2.6		90.2	40.2	0.1	899.2	1032.3
2014	0.3	0.1	80.2	49.2		911.9	1041.6
2015	0.7		69.8	48.4		718.3	837.2

Summary of the assessment

Table 5.3.21.8 Spotted ray in divisions 7.a and 7.e–h. Time-series of the UK (E&W)-BTS-Q3 survey (numbers per hour) used for the advice.

Year	Stock size indicator
1993	2.18
1994	1.75
1995	2.29
1996	2.53
1997	2.65
1998	2.46
1999	3.6
2000	3.28
2001	3.73
2002	2.91
2003	4
2004	6.02
2005	3.54
2006	3.75
2007	3.85
2008	3.53
2009	6.72
2010	4.9
2011	6.67
2012	6.93
2013	6.64
2014	5.8
2015	7.13

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.

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ICES. 2016a. Report of the Workshop to compile and refine catch and landings of elasmobranchs (WKSHARKS), 19–22 January 2016, Lisbon, Portugal. ICES CM 2016/ACOM:40. 69 pp.

ICES. 2016b. Report of the Working Group on Elasmobranch Fishes (WGEF), 15–24 June 2016, Lisbon, Portugal. ICES CM 2016/ACOM:20.

ICES 2016c. General context of ICES advice. In Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.