

Spotted ray (*Raja montagui*) in Subarea 8 (Bay of Biscay)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, landings should be no more than 129 tonnes in each of the years 2021 and 2022. ICES cannot quantify the corresponding catches.

Note: This advice sheet is abbreviated due to the COVID-19 disruption. The previous advice issued for 2019 and 2020 is attached as Annex 1.

Stock development over time

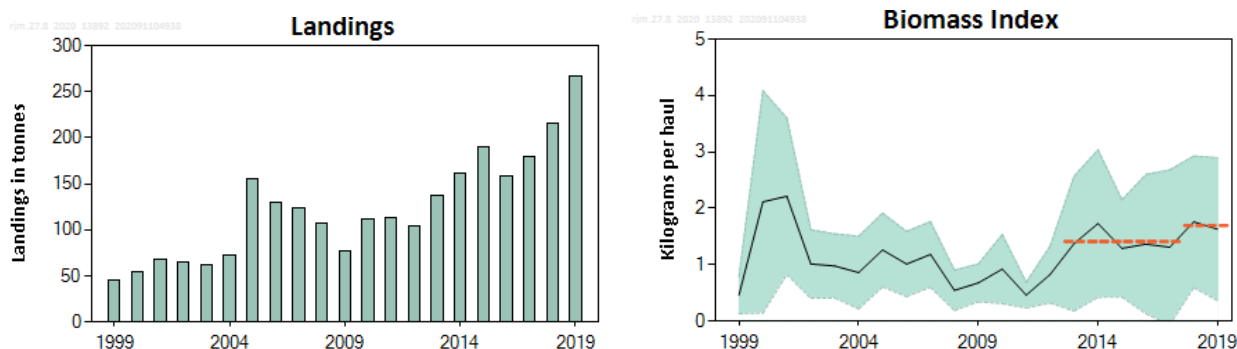


Figure 1 Spotted ray in Subarea 8. Left: ICES estimated landings (in tonnes); discard data are incomplete and have not been used in the advice. Right: biomass index (solid line); total biomass in kg haul⁻¹ from the SpGFS-WIBTS-Q4 survey and associated 95% confidence interval (the shaded area). The dotted horizontal lines show the mean stock-size indicator for 2013–2017 and 2018–2019.

Stock and exploitation status

Table 1 Spotted ray in Subarea 8. State of the stock and the fishery relative to reference points.

		Fishing pressure			Stock size				
		2017	2018	2019	2017	2018	2019		
Maximum sustainable yield	F_{MSY}	?	?	?	MSY $B_{trigger}$?	?	?	Undefined
Precautionary approach	F_{pa}, F_{lim}	?	?	?	B_{pa}, B_{lim}	?	?	?	Undefined
Management plan	F_{MGT}	—	—	—	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	-	→	↗	↘	Decreasing

Catch scenarios

The stock size and fishing pressure status relative to reference points is unknown. The precautionary buffer was last applied in 2018 and thus not applied in 2020.

Some estimates of discards are available since 2015, but data are considered to be incomplete and the discard rate is unknown. ICES cannot quantify the corresponding dead catch.

Table 2 Spotted ray in Subarea 8. The basis for the catch scenarios *.

Index A (2018–2019)		1.70
Index B (2013–2017)		1.41
Index ratio (A/B)		1.20
Uncertainty cap	Not applied	-
Advised landings for 2019–2020, issued in 2018		108
Discard rate	Unknown	-
Precautionary buffer	Not applied	-
Landings advice **		129
% advice change ***		20%

* The figures in the table are rounded. Calculations were done with unrounded inputs and computed values may not match exactly when calculated using the rounded figures in the table.

** [Recent advised landings] × [index ratio].

*** Advice value for 2021 and 2022 relative to the advice value for 2019 and 2020.

The advised landings have increased by 20% compared to last year's advice because of the increasing biomass index.

History of the advice, catch, and management

Table 3 Spotted ray in Subarea 8. History of ICES advice and ICES estimates of landings *. All weights are in tonnes.

Year	ICES advice	Landings corresp. to the advice	ICES species-specific landings
2011	No specific advice		114
2012	No specific advice		105
2013	No TAC, species-specific measures needed, catch to decrease by at least 20%	-	137
2014	No new advice, same as 2013	-	161
2015	20% decrease from last 3 years' average	94	190
2016	No new advice, same as 2015	94	159
2017	Precautionary approach	≤ 115	180
2018	Precautionary approach (same value as advised catches for 2017)	≤ 115	215
2019	Precautionary approach	≤ 108	267
2020	Precautionary approach	≤ 108	
2021	Precautionary approach	≤ 129	
2022	Precautionary approach	≤ 129	

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

Summary of the assessment

Table 4 Spotted ray in Subarea 8. Assessment summary. Time-series of survey index (SpGFS-WIBTS-Q4 [\pm standard error] in kg haul⁻¹).

Year	Biomass index (kg haul ⁻¹)	Upper 95% CI	Lower 95% CI	Landings (tonnes)
1999	0.46	0.79	0.13	46
2000	2.1	4.09	0.14	55
2001	2.2	3.60	0.83	67
2002	1.01	1.62	0.41	64
2003	0.98	1.55	0.41	62
2004	0.86	1.51	0.22	73
2005	1.26	1.92	0.61	155
2006	1.01	1.59	0.43	130
2007	1.18	1.76	0.60	124
2008	0.55	0.90	0.19	107
2009	0.68	1.01	0.34	77
2010	0.92	1.54	0.31	112
2011	0.46	0.69	0.23	114
2012	0.83	1.33	0.32	105
2013	1.37	2.57	0.18	137
2014	1.73	3.04	0.42	161
2015	1.29	2.15	0.43	190
2016	1.37	2.60	0.13	159
2017	1.31	2.68	0	180
2018	1.76	2.93	0.59	215
2019	1.63	2.90	0.36	267

Sources and references

ICES. 2020. Working Group on Elasmobranch Fishes (WGEF). ICES Scientific Reports, 2:77. <http://doi.org/10.17895/ices.pub.7470>.

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