

Roundnose grenadier (*Coryphaenoides rupestris*) in subareas 6 and 7 and divisions 5.b and 12.b (Celtic Seas and the English Channel, Faroes grounds, and western Hatton Bank)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches should be no more than 3177 tonnes in each of the years 2021 and 2022.

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

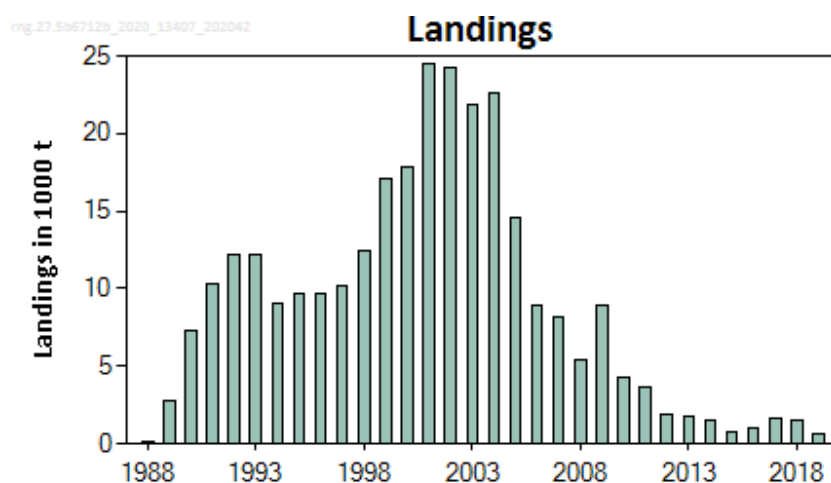


Figure 1 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. Landings over the years in thousand tonnes for all areas.

Stock and exploitation status

Table 1 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. State of the stock and the fishery relative to reference points in subareas 6 and 7 and Division 5.b.

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

Catch scenarios

The stock status relative to candidate reference points is unknown; therefore, the precautionary buffer was applied.

Table 2 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. The basis for the catch scenarios*.

Advised catches for 2019–2020, issued in 2018	3971 tonnes	
Discard rate (average 2017–2019)	3%	
Precautionary buffer	Applied	0.8
Catch advice**	3177 tonnes	
Landings corresponding to the catch advice***	3082 tonnes	
% advice change^	–20%	

* 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.

** [Advised catches for 2019–2020] × [precautionary buffer].

*** [Advised catches for 2019–2020 × [precautionary buffer] × [1 – Discard rate].

^ Advice value for 2021–2022 relative to the advice value for 2019–2020.

The advised landings for 2021–2022 are lower than the advised landings for 2019–2020 because of the application of the precautionary buffer.

Issues relevant for the advice

This stock is classified as Category 1 in the NEAFC categorization of deep-sea species/stocks, which implies that NEAFC requires stock-specific management measures, since the entire, or a significant proportion of the catch, is taken in the NEAFC Regulatory Area (NEAFC, 2016).

The average discard rate for 2017–2019 was estimated from observer programmes in Spain and France (ICES, 2020).

History of the advice, catch, and management

Table 3 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. History of ICES advice, the agreed TACs, and ICES landings. Weights are in tonnes.

Year	ICES advice	Predicted catch corresp. to advice	TAC EU in Division 5.b and subareas 6 and 7	TAC EU in subareas 7, 9, 10, 12, and 14	ICES landings in subareas 6 and 7, and divisions 5.b and 12.b
2003	Significant reduction in effort	-	5106		21904
2004	Biennial	-	5106		22668
2005	50% reduction in effort in relation to 2000–2002 levels	-	5253	7190	14559
2006	Biennial	-	5253	7190	8896
2007	Constrain catches to 50% level before the expansion period, 1990–1996	< 6000	4600	6114	8138
2008	Biennial	< 6000	4600	6114	5411
2009	Constrain catches to 50% level before the expansion period, 1990–1996	< 6000	3910	5197	9381
2010	Biennial	< 6000	3324	5197	4911
2011	Less than 6000 tonnes and a further reduction in catches from recent levels should be considered	< 6000	2924	4573	3146
2012	No new advice, same as 2011	< 6000	2546	3979	9103
2013	Based on MSY approach catches should be < 6000 tonnes	< 6000	4297	3581	3835
2014	No new advice, same as 2013	< 6000	4297	3223	2072
2015	MSY approach	< 5433	4010	3644	1015
2016	No new advice, same as 2015	< 5511	4078	3279	1366

Year	ICES advice	Predicted catch corresp. to advice	TAC EU in Division 5.b and subareas 6 and 7	TAC EU in subareas 7, 9, 10, 12, and 14	ICES landings in subareas 6 and 7, and divisions 5.b and 12.b
2017	MSY approach for subareas 6 and 7 and Division 5.b. Precautionary approach for Division 12.b.	≤ 3897	3052	2623	1634
2018	MSY approach for subareas 6 and 7 and Division 5.b. Precautionary approach for Division 12.b.	≤ 3971	3120	2099	1519
2019	Precautionary approach	≤ 3971	2558	2281	689
2020	Precautionary approach	≤ 3971	2558	2281	
2021	Precautionary approach	≤ 3177			
2022	Precautionary approach	≤ 3177			

Table 4 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. Landings inside and outside the NEAFC Regulatory Area (RA), as estimated by ICES, as well as total landings. Weights are in tonnes.

Year	Inside the NEAFC RA	Outside the NEAFC RA	Total landings	Proportion inside the NEAFC RA (%)
2017	1497	164	1661	90
2018	1321	198	1519	86
2019	544	145	689	78

Summary of the assessment

There is no assessment for roundnose grenadier in this area.

Sources and references

ICES. 2020. Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP). ICES Scientific Reports, 2:38. <http://doi.org/10.17895/ices.pub.6015>.

NEAFC. 2016. The NEAFC approach to conservation and management of deep-sea species and categorization of deep-sea species/stocks. Adopted at the 35th Annual Meeting, November 2016. <https://www.neafc.org/basictexts>.

Recommended citation: ICES. 2020. Roundnose grenadier (*Coryphaenoides rupestris*) in subareas 6-7 and divisions 5.b and 12.b (Celtic Seas and the English Channel, Faroes grounds, and western Hatton Bank). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, rng.27.5b6712b. <https://doi.org/10.17895/ices.advice.5800>.

Roundnose grenadier (*Coryphaenoides rupestris*) in subareas 6 and 7 and divisions 5.b and 12.b (Celtic Seas and the English Channel, Faroes grounds, and western Hatton Bank)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches should be no more than 3971 tonnes in each of the years 2019 and 2020. If discard rates do not change from the average of 2015–2017, this implies landings of no more than 3693 tonnes.

Stock development over time

Landings have declined since 2004.

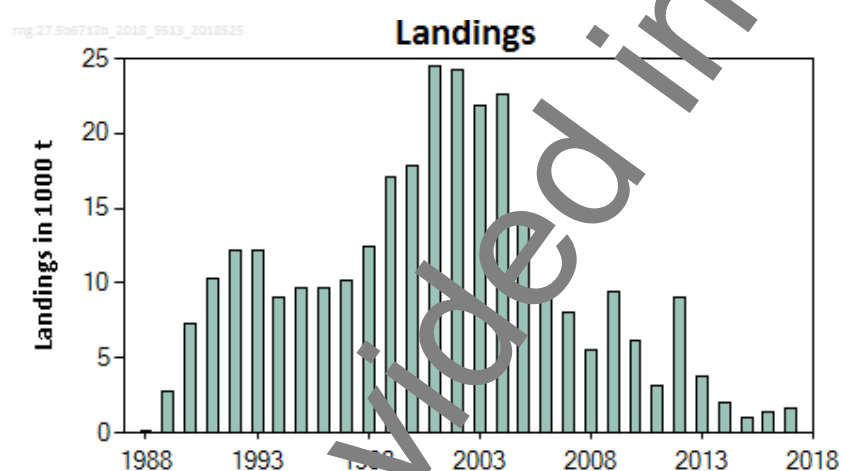


Figure 1 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. Landings over the years in thousand tonnes for all areas.

Stock and exploitation status

ICES cannot assess the stock and exploitation status relative to MSY and PA reference points because the reference points are undefined.

Table 1 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. State of the stock and fishery relative to reference points in subareas 6 and 7 and Division 5.b.

		Fishing pressure				Stock size			
		2015	2016	2017		2015	2016	2017	
Maximum sustainable yield	F_{MSY}	?	?	?	Unknown	$MSY B_{trigger}$?	?	?
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—
Qualitative evaluation	—	?	?	?	Unknown	—	?	?	?

Catch scenarios

ICES framework for category 5 stocks was applied (ICES, 2012). For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented where there is no auxiliary information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was applied in 2016 to the portion of the stock caught in Division 12.b. In 2016, the harvest rate in subareas 6 and 7 and Division 5.b was estimated to be well below F_{MSY} . Given the ban on fishing with bottom trawls in waters deeper than 800 m (Regulation (EU) 2016/2336; EU, 2016), it is unlikely that the harvest rate has increased above F_{MSY} ; consequently, the precautionary buffer was not applied.

Table 2 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. The basis for the catch scenarios*.

Advised catches for 2018, issued in 2016		3971 t
Discard rate (average 2015–2017)		7%
Precautionary buffer	Not applied	-
Catch advice**		3971 t
Landings corresponding to the catch advice***		3693 t
% Advice change^		0%

* 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.

** = Advised catches for 2018.

*** [Advised catches for 2018]/[1 – Discard rate].

^ Advice value for 2019 and 2020 relative to advice value for 2018.

There is no change in the catch advice relative to that advised for 2018.

Basis of the advice

Table 3 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. The basis of the advice.

Advice basis	MSY approach.
Management plan	ICES is not aware of any agreed precautionary management plan for roundnose grenadier in this area.

Quality of the assessment

The assessment method for this stock has changed in 2018. In 2016, an assessment was possible to provide category 1 advice for the part of the stock in subareas 6 and 7 and Division 5.b, while the advice for the part of the stock occurring in Division 12.b was a catch-only assessment (category 5). PUE data from haul-by-haul data provided by French trawlers were used in previous assessments for subareas 6 and 7 and Division 5.b. The decrease in activity and number of boats now prevents the use of those indices in the assessment. An exploratory model using a new index (Marine Scotland Deepwater Survey) that was available up to 2017 was examined. However, this model formulation and the use of this survey as a biomass indicator have not been benchmarked, and the perception of stock status differs from that in the previous model. The advice this year is therefore based on the framework for advice for ICES category 5 stocks for the entire stock.

Discard data are available back to 1996. Discards have not been included in the assessment as it was considered that sorting patterns of discards and landings in earlier years may have been different.

Issues relevant for the advice

Regulation (EU) 2016/2336 of the European Parliament and of the Council of 14 December 2016 (EU, 2016) permits fishing with bottom trawls only at, or above, a depth of 800 m. Along with this ban on fishing with bottom trawls in EU waters deeper than 800 m, the proportion of the landings taken in Division 12.b increased to 60% of the total for the stock in 2017. Information on the stock is particularly lacking in this area.

Over the last five years, discard rates have been lower than the period before for the French fishery in Division 5.b and subareas 6 and 7, mostly because the fishery has moved to shallower waters in recent years.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. The basis of the assessment.

ICES stock data category	5 (ICES, 2016).
Assessment type	No assessment (ICES, 2018).
Input data	Landings.
Discards and bycatch	7% in weight, average 2015–2017. Used to provide advice.
Indicators	None.
Other information	Last benchmarked in 2010 (ICES, 2010).
Working group	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP)

Information from stakeholders

There is no additional available information.

History of the advice, catch, and management

Table 5 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. Weights are in tonnes.

Year	ICES advice	Predicted catch corresp. to advice	TAC EU Division 5.b and subareas 6 and 7	TAC EU Subareas 7, 9, 10, 12, and 14	ICES landings Subareas 6 and 7 and divisions 5.b and 12.b
2003	Significant reduction in effort	-	5106		21904
2004	Biennial	-	5106		22668
2005	50% reduction in effort in relation to 2000–2002 levels	-	5253	7190	14559
2006	Biennial	-	5253	7190	8896
2007	Constrain catches to 50% level before the expansion period, 1990–1996	< 6000	4600	6114	8138
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2011	Less than 6000 t and a further reduction in catches from recent levels should be considered	< 6000	2924	4573	3146
2012	No new advice, same as 2011	< 6000	2546	3979	9103
2013	Based on MSY approach catches should be < 6000 t	< 6000	4297	3581	3835
2014	No new advice, same as 2013	< 6000	4297	3223	2072
2015	MSY approach	5433	4010	3644	1015
2016	No new advice, same as 2015	< 5433	4078	3279	1366
2017	MSY approach for subareas 6 and 7 and Division 5.b. Precautionary approach for Division 12.b.	≤ 3897	3052	2623	1662
2018	MSY approach for subareas 6 and 7 and Division 5.b. Precautionary approach for Division 12.b.	≤ 3971	3120	2099	
2019	Precautionary approach	≤ 3971			
2020	Precautionary approach	≤ 3971			

History of catch and landings

Table 6 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. Catch distribution by fleet in 2017 as estimated by ICES (in tonnes).

Total catch (2017)	Landings	Discards
1787*	99% trawl fisheries	125
	1662*	

*Preliminary.

Table 7a Roundnose grenadier in Division 5.b and Subarea 6. History of commercial landings as estimated by ICES. Values are presented by area for each country participating in the fishery. All weights are in tonnes.

Year	Division 5.b								Subarea 6												
	Faroes	France	Norway	Germany	Russia/USSR	UK (E+W)	UK (Scot)	TOTAL	Estonia	Faroes	France**	Germany	Ireland	Lithuania	Norway	Poland	Russia	Spain	UK (E+W)	UK (Scot)	TOTAL
1988				1				1		27		4							1		32
1989	20	181		5	52			258		2	2211	3								2	2218
1990	75	1470		4				1549		29	5484	2									5515
1991	22	2281	7	1				2311			7297	7									7304
1992	551	3259	1	6				3817		99	6422	142			5				2	112	6782
1993	339	1328		14				1681		263	7940	1								1	8205
1994	286	381		1				668			5898	5	14							11	5938
1995	405	818						1223			6329	1	59							82	6472
1996	93	983		2				1078			5885									156	6044
1997	53	1059						1112		15	5735		4							218	6032
1998	50	1617						1667		13	5140				21			3			5207
1999	104	1861	2			29		1996			5637	3	1					1			5642
2000	48	1699		1		43		1791			7478		41		1			1002	1	433	8956
2001	84	1932						2016	680	11	5897	6	31	137	32	58	3	6942	21	955	14773
2002	176	774				81		1031	821		7209		12	1817		932			6	741	11538
2003	490	1032				10		1532	52	32	4924		11	939		452	3			185	6598
2004	508	985	0	0	6	0	76	1575	16	12	4574	0	8	961	0	13	72	1991	0	72	7729
2005	903	884	1	0	1	0	48	1837	80	24	2897	0	17	92	1	0	71	468	0	44	3694
2006	900	875	0	0	0	0	0	1775	34	25	1931	0	5	112	0	0	0	252	0	15	2374
2007	838	862	0	0	0	0	0	1700	0	10	1552	0	2	31	0	0	0	354	0	4	1953
2008	665	447	0	0	0	0	0	1112	0	6	1433	0	0	23	0	0	16	336	0	27	1841
2009	322	122	0	0	0	0	2	446	0	6	1090	0	0	0	0	0	0	279	0	15	1391
2010	229	381	0	0	0	0	1	611	0	13	1271	0	0	0	2	0	0	189	1	23	1500
2011	63	11	0	0	0	0	0	74	0	4	1112	0	0	0	0	0	0	336	0	8	1460
2012	16	28	0	0	0	0	0	44	0	0	1088	0	0	0	0	0	0	258	2	0	1348
2013	24	36	0	0	0	0	0	60	0	0	934	0	0	0	0	0	0	476	6	0	1416
2014	33	44	0	0	0	0	0	77	0	0	630	0	0	0	0	0	0	429	0	0	1060
2015	24	28	0	0	0	0	0	52	0	0	364	0	0	0	0	0	0	275	0	0	638
2016	30	7	0	0	0	0	0	38	0	0	422	0	0	0	0	0	0	298	0	5	725
2017*	9	21	0	0	0	0	0	30	0	0	98	0	0	0	0	0	0	523	0	8	631

* Preliminary. ** French landings that were formerly reported in ICES Subarea 12 are now allocated to Division 12.b.

rnf.27.5b6712b

Table 7b Roundnose grenadier in Division 12.b and Subarea 7. History of commercial landings as estimated by ICES. Values are presented by area for each country participating in the fishery. All weights are in tonnes.

Year	Subarea 7						Division 12.b												
	Faroes	France	Ireland	Spain	UK (Scot)	TOTAL	Estonia	Faroes	France	Germany	Iceland	Ireland	Lithuania	Spain	USSR/Russia	UK (E+W)	UK (Scot)	Norway	TOTAL
1988						0													0
1989		222				222			0						52				52
1990		215				215			0										0
1991		489				489			14						158				172
1992		1556				1556			13										13
1993		1916				1916		263	26	39									328
1994		1922				1922		457	20	9									486
1995		1295				1295		359	285										644
1996		1051				1051		136	279		77			1136					1528
1997		1033		5		1038		138	41					1800					2049
1998		1146		11		1157		19	116					4262					4397
1999		892		4		896		29	287					8251	6				8573
2000		859				859		6	374	9				5791		9	6		6195
2001		938	416			1354		2	159			3		5922			7	1	6094
2002	1	449	605		3	1058			14				18	10045		1	2		10080
2003		373	213		1	587			539			1	31	11663			1		12235
2004	0	248	320	0	0	568		8	1693				120	10880	91		4		12796
2005	0	191	55	0	0	245	20	5	508				13	7804	81		350		8782
2006		248	138	0	0	386	27	1	85				6	10334					10453
2007		207	20	0	0	227	140	2	0				8	11464					11614
2008		27				27		0	0				3	5896	13				5912
2009		59				59								2520					2520
2010		41				41			1					6442					6443
2011		34				34		3						2268					2271
2012		48		0.18		48		9						1521					1530
2013		40				40								914					914
2014		11				11		4						829					833
2015		10				10								314					314
2016		4				4								599					599
2017*		0				0								1001					1001

* Preliminary.

Table 8 Roundnose grenadier in subareas 6 and 7 and divisions 5.b and 12.b. History of commercial landings as estimated by ICES. Values are presented by regulatory area. All weights are in tonnes.

Year	NEAFC regulatory area				EEZ regulatory area					Unallocated landings
	5.b.1.a	6.b.1	12.b	Total	5.b	6.a	6.b.2	7	Total	
2004	5	2116	12796	14917	1570	3003	871	568	6012	0
2005	4	948	8782	9734	1833	2392	354	246	4825	0
2006	16	483	10453	10952	1759	1701	190	386	4036	0
2007	0	456	11614	12070	1700	1405	92	227	3424	0
2008	0	376	5912	6288	1112	1459	6	27	2603	0
2009	0	279	2520	2799	446	1108	4	59	1617	0
2010	24	189	6443	6656	587	1307	4	41	1939	0
2011	12	336	2271	2619	62	1124	0	34	1220	0
2012	3	259	1530	1792	41	1088	2	48	1178	6997
2013	4	479	914	1397	56	937	1	40	1034	1522
2014	26	429	833	1288	51	630	0	11	692	92
2015	13	275	314	602	39	364	1	10	413	0
2016	26	298	599	923	12	477	0	4	443	0
2017*	0	496	1001	1497	30	107	27	0	164	0

Summary of the assessment

There is no assessment for roundnose grenadier in this area.

Sources and references

EU. 2016. REGULATION (EU) 2016/2336 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2016 establishing specific conditions for fishing for deep-sea stocks in the north-east Atlantic and provisions for fishing in international waters of the north-east Atlantic and repealing Council Regulation (EC) No 2347/2002. Official Journal of the European Union, L 354. 19 pp. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R2336>.

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