

ECOREGION STOCK **Widely distributed and migratory stocks**
Roundnose grenadier (*Coryphaenoides rupestris*) in Mid-Atlantic Ridge
(Xb, XIIc, Va₁, XIIa₁, XIVb₁)

Advice for 2011

The fishery should not be allowed to expand and a reduction in catches should be considered in order to be consistent with the MSY (see section [1.2.4 of ICES Advisory Report](#)).

Stock status

Fishing mortality	2007	2008	2009
F_{MSY}	Unknown	Unknown	Unknown
F_{PA}/F_{lim}	Unknown	Unknown	Unknown
Spawning Stock Biomass (SSB)	2008	2009	2010
MSY $B_{trigger}$	Unknown	Unknown	Unknown
B_{PA}/B_{lim}	Unknown	Unknown	Unknown

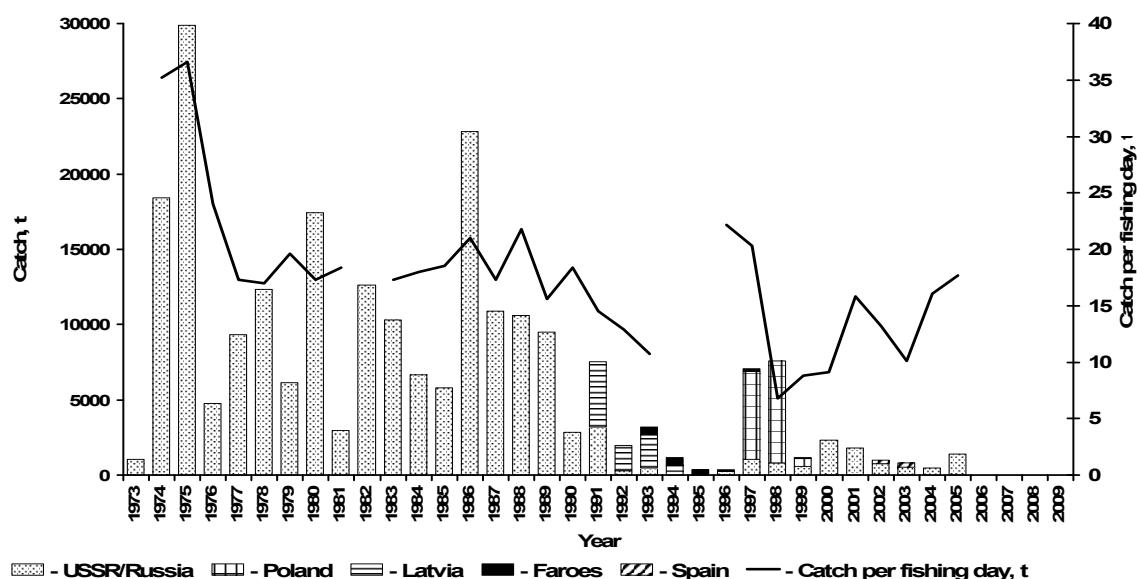


Figure 9.4.15.3.1 Roundnose grenadier in Mid-Atlantic Ridge. International catch and Soviet/Russian cpue of roundnose grenadier on the Mid-Atlantic Ridge in 1973–2009.

Management plans

No specific management objectives are known to ICES.

In the light of the EU policy paper on fisheries management (17 May 2010, [COM \(2010\) 241](#)) this assessment unit is classified under category 11.

Biology

Age analyses suggest that roundnose grenadier may have a longevity of around 70 years and a slow growth. This species shows low productivity, which can only sustain low rates of exploitation. In addition to their low productivity, roundnose grenadier on the Mid-Atlantic Ridge exhibit spatial distributions associated with seamounts and aggregating behaviour. These grenadiers are therefore easily overexploited.

The fisheries

The greatest annual catch (almost 30 000 t) in that area was taken by the Soviet Union in 1975 and in subsequent years the Soviet catch varied from 2800 to 22 800 t. In the last 15 years, there has been a sporadic fishery by vessels from Russia (annual catch estimated at 200–3200 t), Poland (500–6700 t), Latvia (700–4300 t) and Lithuania (data on catch are not available). Grenadier has also been taken as bycatch in the Faroese orange roughy fishery and Spanish blue ling fishery.

There is a TAC management of the roundnose grenadier fisheries in areas Xb, XIIc, Va₁, XIIa₁, and XIVb₁ for European Community vessels. In international waters there are NEAFC regulations of efforts in the fisheries for deepwater species.

Effects of the fisheries on the ecosystem

Deepwater bottom trawls impact ocean floor which includes potential damage to deepwater coral communities. As this bottom fishery at the Mid-Atlantic Ridge is part of mixed fisheries, any effort on roundnose grenadier also impacts other commercial and non commercial deepwater species. The several NEAFC closures protect vulnerable ecosystems in some areas of the Mid-Atlantic Ridge during recent years.

Quality considerations

The most recent trawl acoustic survey was carried out by Russia in 2003 in the area between 47°N and 58°N. According to the results of this survey the biomass of the pelagic component of the grenadier only amounted to about 130 000 t. It was concluded that the distribution of grenadier aggregations on Mid-Atlantic Ridge have changed considerably as compared to 1970-1980s.

Scientific basis

Assessment type	Catch and cpue trends based assessment
Input data	Catch statistics and a cpue series from the Soviet/Russian official data
Discards and bycatch	Not included in the assessment
Indicators	-
Other information	-
Working group report	WGDEEP

ECOREGION STOCK Widely distributed and migratory stocks
Roundnose grenadier (*Coryphaenoides rupestris*) in Mid-Atlantic Ridge (Xb, XIIc, Va1, XIIa1, XIVb1)

Reference points

No reference points have been defined for this assessment unit.

Outlook for 2011

No reliable assessment can be presented for this assessment unit and fishing possibilities cannot be projected.

The 2008-2009 data (landings) for this stock give no reason to change the advice from that given in 2008: “*The fishery should not be allowed to expand*” and a reduction in catches should be considered in order to be consistent with the MSY (see section [1.2.4 of ICES Advisory Report](#)).

Additional considerations

Roundnose grenadier aggregations may have occurred on 70 seamount peaks between 46-62°N but only 30 of them were commercially important. The fishery is mainly conducted using pelagic trawls although on some seamounts it is possible to use bottom gear.

Assessment and management area

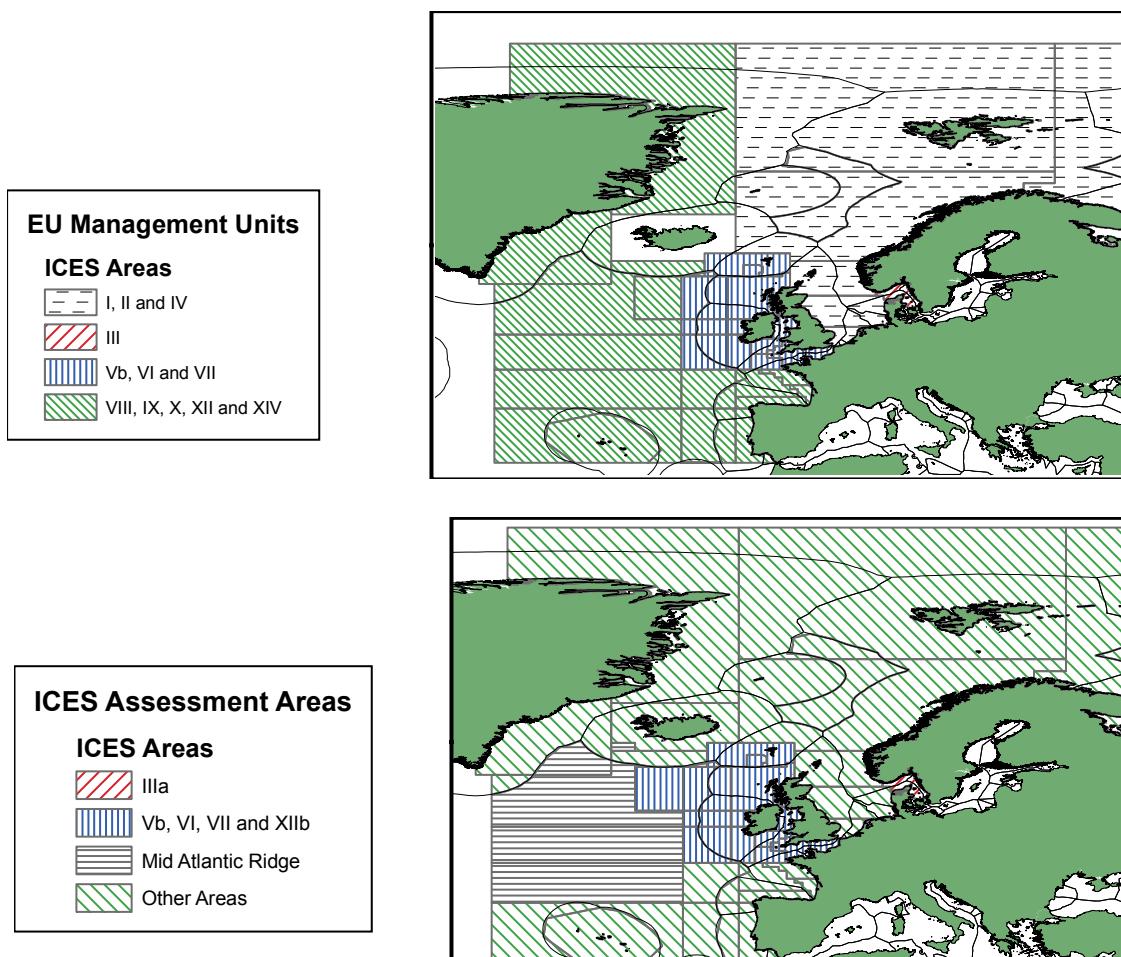


Figure 9.4.15.3.2 Roundnose grenadier in Mid-Atlantic Ridge. EU TAC Regulation areas (top) and ICES assessment areas (bottom).

Sources

ICES. 2010. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources, 7–13 April 2010, ICES Headquarters, Copenhagen. ICES CM 2010/ACOM:17.

Table 9.4.15.3.1 Roundnose grenadier in Mid-Atlantic Ridge (Xb, XIIc, Va₁, XIIa₁, XIVb₁). ICES advice, management, landings.

Year	ICES Advice	Predicted catch corresp. to advice	TAC EU Subareas VIII, IX, X, XII and XIV	ICES catch Xb, XIIc, Va ₁ , XIIa ₁ , XIVb ₁
2003	Fishery not allowed to expand, unless proven to be sustainable	-	-	0.782
2004	Biennial	-	-	0.465
2005	Fishery not allowed to expand, unless proven to be sustainable	-	7.19	1.399
2006	Biennial	-	7.19	0.001
2007	Fishery not allowed to expand, unless proven to be sustainable	-	6.114	0.002
2008	Biennial	-	6.114	0.013
2009	Fishery not allowed to expand, unless proven to be sustainable	-	5.197	0.005
2010	Biennial	-	5.197	
2011	Fishery should not be allowed to expand and a reduction in catches should be considered	-		

Weights in 000'tones.

Table 9.4.15.3.2 Roundnose grenadier in Mid-Atlantic Ridge (Xb, XIIc, Va₁, XIIa₁, XIVb₁). Catches (tonnes) by area and country on the Mid-Atlantic Ridge.

Year	Va1		Xb		XIIa1 and XIIc				XIVb1		TOTAL	
	USSR/ Russia	Total	USSR/ Russia	Faroës ¹	Total	USSR/ Russia	Poland ¹	Latvia ¹	Faroës ¹	Spain ¹	Total	
1973	820	820			226					226		1046
1974	12561	12561			5874					5874		18435
1975					29894					29894		29894
1976			170		4545					4545	11	4726
1977					9347					9347		9347
1978					12310					12310		12310
1979					6145					6145		6145
1980					17419					17419		17419
1981					2954					2954	153	3107
1982					12472					12472		12472
1983					10300					10300		10300
1984					6637					6637		6637
1985					5793					5793		5793
1986					22842					22842		22842
1987					10893					10893		10893
1988					10606					10606		10606
1989					9495					9495		9495
1990					2838					2838		2838
1991					32141		4296			75101		75101
1992					295		1684			1979		1979
1993			249	249	473		2176	263		2912		3161
1994							675	457		1132		1132
1995								359		359		359
1996			3	3	208			136		344		347
1997			1	1	705	5867		138		6710	3361	10072
1998			1	1	812	6769		19		7600		7601
1999			3	3	576	546		29		1151		1154
2000					2325					2325	5	2330
2001					1714			2		1716	69	1785
2002					737					737	4	976
2003					510					510	272	782
2004			1	1	436			8		444	201	646
2005			799	799	600					600		1399
2006								1		1		1
2007								2		2		2
2008					13					13		13
2009*					5					5		5

1 Official ICES data; * preliminary