

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

NORTHERN KOLGUEV ISRA

Polar Waters Region

SUMMARY

Northern Kolguev is located in the southeastern Barents Sea in the Russian Federation. The area includes an extended shelf with shallow banks off the northern side of Kolguev Island. This area overlaps with the South-eastern Barents Sea (the Pechora Sea) Ecologically or Biologically Significant Marine Area. Within the area there are: **threatened species** and **undefined aggregations** (Thorny Skate *Amblyraja radiata*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C5 - Undefined Aggregations

RUSSIAN
 FEDERATION

50-150 metres

7,924.4 km²





DESCRIPTION OF HABITAT

Northern Kolguev is located in the Pechora Sea within the southeastern Barents Sea and sits adjacent to the Nenets Autonomous Okrug in the Russian Federation. The area includes an extended shelf with shallow banks off the northern side of Kolguev Island.

Northern Kolguev is influenced by discharges of the Pechora River that contributes nutrients into the area leading to high benthic productivity (Sukhotin et al. 2019). The oceanography of the area is mostly moderated by the input of cold, nutrient-rich Arctic waters with a higher ice coverage than in the western Barents Sea (Eriksen et al. 2018; Sukhotin et al. 2019).

This area overlaps with the South-eastern Barents Sea (the Pechora Sea) Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024). In addition, the area overlaps with areas closed to trawl fishing (Ministry of Agriculture of the Russian Federation 2023).

This Important Shark and Ray Area is benthic and subsurface and is delineated from 50 m to 150 m based on the depth range of Qualifying Species in the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

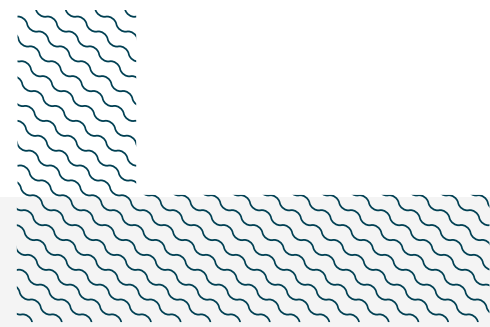
One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Vulnerable Thorny Skate (Kulka et al. 2020).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Northern Kolguev is an important area for undefined aggregations of one ray species.

Skates are known to aggregate, with temporal changes related to sex and life-stage segregations (Swain & Benoît 2006; Frisk 2010; Hoff 2016). The presence of these aggregations is usually related to high density areas where large catch quantities of these species occur (Bizzarro et al. 2014). Scientific surveys in the Barents Sea during the boreal summer-autumn using benthic trawls between 2004-2021 showed that aggregations of Thorny Skate regularly occur in Northern Kolguev (Dolgov & Prozorkevich 2022). Relative abundance (individuals/nautical mile² [NM²]) was calculated as the area of a trawl haul by multiplying the trawl horizontal opening and hauling distance (Dolgov & Prozorkevich 2022). Average trawls had a vertical opening of 4-5 m and a horizontal opening of 15-16 m with a tow duration of 15-30 minutes (Dolgov & Prozorkevich 2022).

This area held the second largest abundance of Thorny Skate (mean: 29-74 individuals/NM², max: ~76 individuals/NM²) in all the Barents Sea (Dolgov & Prozorkevich 2022). Individuals of this species were also caught in other areas of the region but in lower numbers compared to Northern Kolguev where they are mostly found during summer-autumn at depths between 50-150 m, with multiple individuals caught in a single haul (Dolgov 2016; Eriksen et al. 2021; Dolgov & Prozorkevich 2022). This was also one of the areas with historical higher abundances of Thorny Skates during autumn-winter between 1996-2001 (Dolgov et al. 2005).



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This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

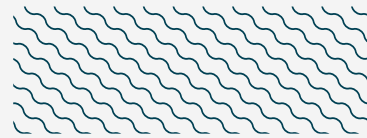
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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
RAYS												
<i>Amblyraja radiata</i>	Thorny Skate	VU	0-1,400	X						X		



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