

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

## SIMUSHIR & KETOY ISLANDS ISRA

### Asia Region

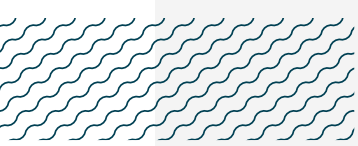
### SUMMARY

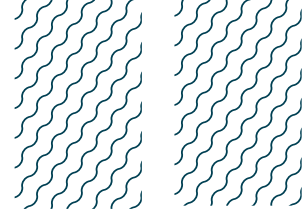
Simushir & Ketoy Islands is part of the Central Kuril Islands of the Russian Federation. The two islands are separated by the Diana Strait. The area is characterised by a pronounced continental slope with underwater canyons and is highly influenced by the Oyashio Current as well as strong north-westerly winds during the winter season. The area overlaps with the Kuril Islands Key Biodiversity Area (KBA). Within the area there are: **range restricted** species (Simushir Skate *Arctoraja sexoculata*).

### CRITERIA

#### Criterion B - Range Restricted

—	—
<b>RUSSIAN FEDERATION</b>	
—	—
<b>150-490 metres</b>	
—	—
<b>642.34 km<sup>2</sup></b>	
—	—





## DESCRIPTION OF HABITAT

Simushir & Ketoy Islands is part of the Central Kuril Islands, which are located in the Far Eastern Federal District of the Russian Federation. Simushir is the largest island of the Central Kuril Islands, while Ketoy is one of the smallest. Simushir Island stretches from northeast to southwest for 59 km and is separated from Ketoy Island by the Diana Strait. The area is highly influenced by the winds created by the cyclonic activity of the Aleutian depression, coupled with the cold Oyashio Current. Their Pacific side is warmer than the Okhotsk Sea coasts, where floating ice stagnates.

The islands, as well as the entire Central Kuril climatic province, are characterised by excessive atmospheric humidification throughout the year, as well as strong north-westerly winds during the winter season (Buslov 2013). Off the coast of the islands, the depths increase sharply to a pronounced continental slope with underwater canyons. In some sites, 200 m depths are found very close (~2 km) to the coastline as the shelf is narrow. Coastal water temperatures range from -1.7°C in winter to >15°C in summer.

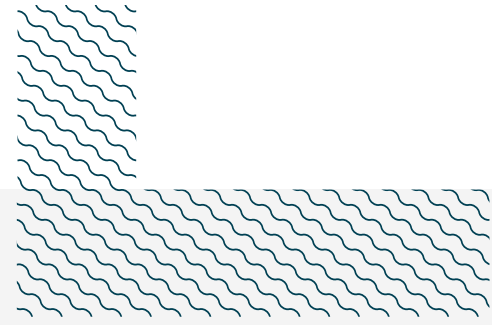
The area overlaps with the Kuril Islands Key Biodiversity Area (KBA 2024).

This Important Shark and Ray Area is benthopelagic and subsurface and is delineated from 150 m to 490 m based on the depth range of Qualifying Species in the area.

## ISRA CRITERIA

### CRITERION B - RANGE RESTRICTED

This area holds the regular presence of the Simushir Skate as a resident range-restricted species. This species was described (Misawa et al. 2020) from five specimens caught in a single haul off the eastern Simushir Island (Central Kuril Islands) at 150 m depth. A further 114 individuals (26–90 cm total length [TL]) were collected in 2022 in benthic trawls off the central eastern Simushir Island, Diana Strait, and Ketoy Island confirming their regular presence in the area (Kurbanov & Vinogradskaya 2023). Two individuals (82 cm and 90 cm TL) were gravid. Based on data collected between 2017–2021, this species has not been recorded in any other location in Russian waters of the Northwest Pacific, including the Central Kuril Islands. It only occurs in catches on the eastern side of Simushir & Ketoy Islands where it was also the most abundant skate in catches (Kurbanov & Vinogradskaya 2023). It was present in 89% of the trawl hauls in the area and was caught at depths of 150–490 m (Kurbanov & Vinogradskaya 2023). Simushir Skate only occurs in the Oyashio Current Large Marine Ecosystem.



---

### **Acknowledgments**

Alexei M Orlov (Shirshov Institute of Oceanology, Russian Academy of Sciences) and Emiliano Garcia-Rodriguez (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 9 - Asia workshop for their contributions to this process.

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

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

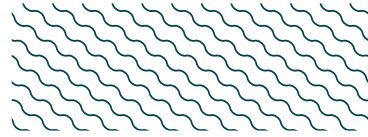
### **Suggested citation**

**IUCN SSC Shark Specialist Group. 2024.** Simushir & Ketoy Islands ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

## QUALIFYING SPECIES

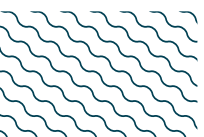
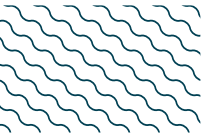
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met							
				A	B	C1	C2	C3	C4	C5	D1
RAYS											
<i>Arctoraja sexoculata</i>	Simushir Skate	DD	150-490		X						

## SUPPORTING SPECIES



Scientific Name	Common Name	IUCN Red List Category
<b>RAYS</b>		
<i>Bathyraja aleutica</i>	Aleutian Skate	LC
<i>Bathyraja maculata</i>	Whiteblotched Skate	LC
<i>Bathyraja matsubarae</i>	Dusky purple Skate	LC
<i>Bathyraja violacea</i>	Okhotsk Skate	LC

*IUCN Red List of Threatened Species Categories are available by searching species names at [www.iucnredlist.org](http://www.iucnredlist.org) Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.*





## REFERENCES

**Buslov AV, ed. 2013.** *Fishing for bioresources in the waters of the Kuril Ridge: modern structure, dynamics and basic elements.* Yuzhno-Sakhalinsk: SakhNIRO.

**Key Biodiversity Areas (KBA). 2024.** Key Biodiversity Area factsheet: Kuril Islands. Available at: <https://www.keybiodiversityareas.org/site/factsheet/16510> Accessed February 2024.

**Kurbanov YK, Vinogradskaya AV. 2023.** First data on ecology and biology of *Arctoraja sexoculata* (Arhynchobatidae) from the area off Kuril Islands. *Journal of Ichthyology* 63(4): 697-706. <https://doi.org/10.1134/S0032945223040124>

**Misawa R, Orlov AM, Orlova SY, Gordeev II, Ishihara H, Hamatsu T, Ueda Y, Fujiwara K, Endo H, Kai Y. 2020.** *Bathyraja* (*Arctoraja*) *sexoculata* sp. nov., a new softnose skate (Rajiformes: Arhynchobatidae) from Simushir Island, Kuril Islands (western North Pacific), with special reference to geographic variations in *Bathyraja* (*Arctoraja*) *smirnovi*. *Zootaxa* 4861(4): 515-543. <https://doi.org/10.11646/zootaxa.4861.4.3>