

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

SOUTH SANDWICH ISLANDS ISRA

Polar Waters Region

SUMMARY

South Sandwich Islands is located in the South Georgia and the South Sandwich Islands of the Southern Ocean. The area is within an archipelago of volcanic islands and the benthic environment consists of steep slopes and submarine seamounts. The area is a biological transition region between the sub-Antarctic and maritime Antarctic and is characterised by extensive sea ice coverage in the austral winter. The area lies within the South Georgia and South Sandwich Islands Marine Protected Area. Within this area there are **undefined aggregations** (Antarctic Starry Skate *Amblyraja georgiana*).

CRITERIA

Sub-criterion C5 - Undefined Aggregations

SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS

500-1,900 metres

5,251.8 km²



DESCRIPTION OF HABITAT

South Sandwich Islands is located in the South Georgia and the South Sandwich Islands of the Southern Ocean. The area is within a chain of 11 volcanic islands in the southwest Atlantic section of the Southern Ocean (Belchier et al. 2022). This archipelago forms part of the Scotia Arc, a submarine ridge extending from South America to the Antarctic Peninsula (Hogg et al. 2021). The area has extensive sea ice coverage in the austral winter and lacks a broad continental shelf (Belchier et al. 2022). The benthic environment consists of steep slopes and submarine seamounts (Hogg et al. 2021).

South Sandwich Islands lies south of the oceanic Antarctic Polar Front, the Southern Antarctic Circumpolar Current Boundary Front, and the Southern Antarctic Circumpolar Front at the biological transition region between the sub-Antarctic and maritime Antarctic (Belchier et al. 2022).

The area lies within the South Georgia and South Sandwich Islands Marine Protected Area.

This Important Shark and Ray Area is benthic and subsurface and is delineated from 500-1,900 m based on the depth range of Qualifying Species in the area.

ISRA CRITERIA

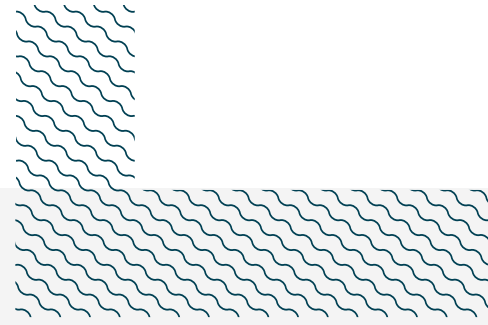
SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

South Sandwich Islands is an important area for undefined aggregations of one ray species.

Between 2006 and 2020, scientific observers collected fisheries derived data from a commercial longline fishery for two species of deepwater fish, Patagonian Toothfish *Dissostichus eleginoides* and Antarctic Toothfish *D. mawsoni* (Hollyman et al. 2022). In the South Sandwich Islands, the Antarctic Starry Skate was one of the main bycatch species in this fishery, representing 21.4% (± 8.5) of the total number of fish caught (Hollyman et al. 2022). Although the Antarctic Starry Skate is found throughout the latitudinal range of the broader South Sandwich Islands complex, the area was selected based on the highest standardised abundance index (SAI: n/1,000 hooks) of Antarctic Starry Skate over the sloping topography to the northeast of Zavodovski Island (Hollyman et al. 2022). The highest SAI for the Antarctic Starry Skate ($\sim 25/1,000$ hooks) was within this area at depths between 500 and 1,900 m.

Fisheries data collected between 2018 and 2022 confirmed the Antarctic Starry Skate remains one of the most common bycatch species in the area (up to 20% of total catch; CCAMLR Secretariat 2023).

Skates are known to aggregate, with temporal changes in aggregations related to sex and life-stage segregations (Swain & Benoît 2006; Frisk 2010; Hoff 2010). Skate aggregations are usually related to high density areas where large catch quantities occur (Bizzarro et al. 2014). Further information is required to understand the nature and function of these aggregations.



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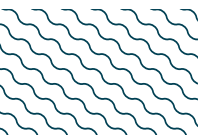
QUALIFYING SPECIES

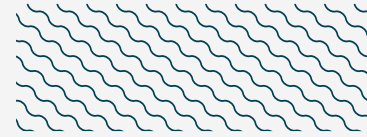
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
RAYS												
<i>Amblyraja georgiana</i>	Antarctic Starry Skate	DD	20-2,100							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Bathyraja maccaini</i>	McCain's Skate	LC

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





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