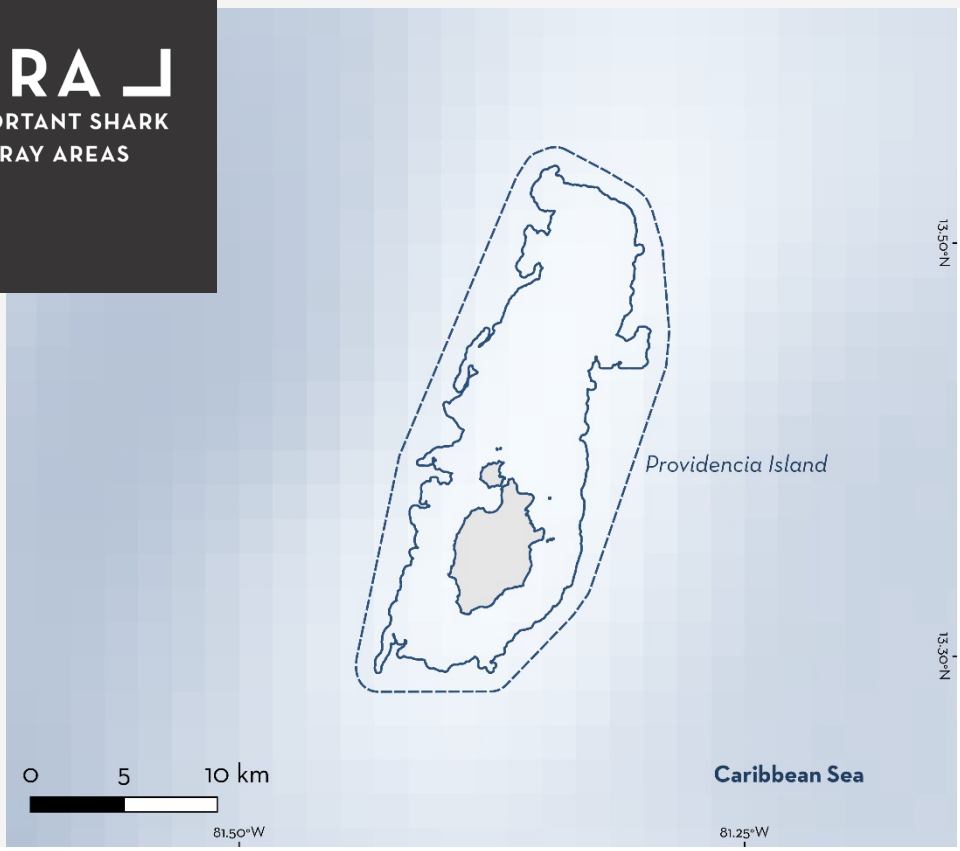
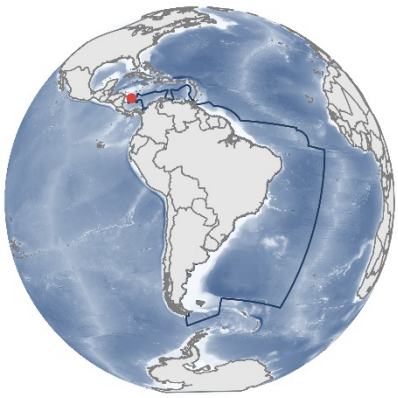
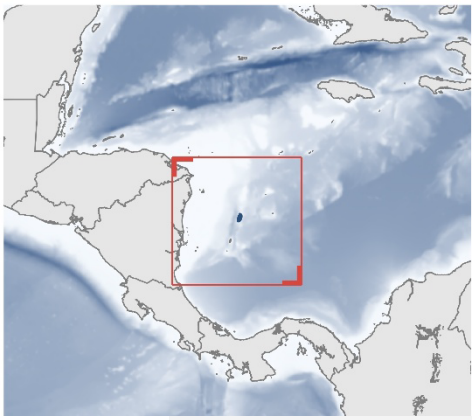
ISRA
IMPORTANT SHARK AND RAY AREAS







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

PROVIDENCIA ISLAND ISRA

South American Atlantic Region

COLOMBIA

0–30 metres

169.1 km²

SUMMARY

Providencia Island is located in the northwest side of the Colombian Caribbean Sea. It is characterised by the presence of coral reefs, seagrass beds, mangroves, and sandy and rocky substrates. The area overlaps with the Seaflower Biosphere Reserve Key Biodiversity Area and the Seaflower Biosphere Reserve marine protected area. Within this area there are: **threatened species** and **undefined aggregations** (Caribbean Reef Shark *Carcharhinus perezi*).

CRITERIA

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

DESCRIPTION OF HABITAT

Providencia Island is located in the northwest side of the Colombian Caribbean Sea. It is part of the San Andres, Providencia, and Santa Catalina Archipelago, situated ~220 km east of Nicaragua and ~700 km northwest of the Colombian mainland. It is characterised by a coral reef bordering the island, seagrass beds, and mangroves. Sandy and rocky substrates are commonly found in the area. Two main seasons dominate the area, a dry season from February–April and a rainy season from June–December (Ballesteros-Galvis 2007). Sea surface temperatures range from 26–30°C (Monroy-Silvera & Zambrano 2017).

The area overlaps with the Seaflower Biosphere Reserve Key Biodiversity Area (KBA 2025). It also overlaps with the Seaflower Biosphere Reserve marine protected area (UNEP-WCMC & IUCN 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 30 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. This is the Endangered Caribbean Reef Shark (Carlson et al. 2021).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Providencia Island is an important area for undefined aggregations of one shark species.

Aggregations of Caribbean Reef Sharks have been regularly observed by divers operating in the area (D Cardeñosa unpubl. data 2024; Fundación Squalus unpubl. data 2024). Aggregations between 3–10 individuals were opportunistically observed by divers and on 11% of Baited Remote Underwater Video Station (BRUVS) survey deployments (n = 170) in 2016, 2017, 2019, 2021, and 2024 (MacNeil et al. 2020; D. Cardeñosa unpubl. data 2024; Fundación Squalus unpubl. data 2024). Aggregations are composed of individuals measuring between 100–250 cm total length (TL) and are found on the east and west sides of the island (D Cardeñosa unpubl. data 2024, Fundación Squalus unpubl. data 2024). Additionally, videos recorded opportunistically by scientists in 2020 show aggregations of 5–6 Caribbean Reef Sharks. BRUVS surveys conducted between 2019–2024 have shown a MaxN (maximum number of individuals of a species observed in a single frame) value between 1.2–1.8 individuals (D Cardeñosa unpubl. data 2024). These values revealed that Providencia Island holds the largest abundances of Caribbean Reef Sharks across the San Andrés, Providencia, and Santa Catalina Archipelago (D Cardeñosa unpubl. data 2024). Additional information is needed to confirm 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
SHARKS												
Carcharhinus perezi	Caribbean Reef Shark	EN	0-697	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Ginglymostoma cirratum	Atlantic Nurse Shark	VU
Negaprion brevirostris	Lemon Shark	VU
Sphyrna lewini	Scalloped Hammerhead	CR
Sphyrna mokarran	Great Hammerhead	CR
RAYS		
Aetobatus narinari	Whitespotted Eagle Ray	EN
Hypanus americanus	Southern Stingray	NT
Urobatis jamaicensis	Yellow Round Ray	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.

SUPPORTING INFORMATION

There are additional indications that this area is important for reproductive purposes of one shark species and for undefined aggregations of one ray species.

Neonate/young-of-the-year (YOY) Atlantic Nurse Shark have been observed by recreational divers in the area and in BRUVS (MacNeil et al. 2020; D Cardeñosa unpubl. data 2024; Fundación Squalus unpubl. data 2024). In 2017, one individual measuring 30–40 cm TL was observed in seagrass beds in the area by divers (Fundación Squalus unpubl. data 2024). Size-at-birth for the species is 27-30 cm TL (Ebert et al. 2021), confirming it was a neonate/YOY. Further, in June 2021, three individuals measuring ~50 cm TL were recorded hidden below coral reefs at depths of 17 m and identified from their distinct colouration as young animals (Fundación Squalus unpubl. data 2024). It has been reported that YOY measure up to 50 cm TL (Fadool et al. 2024) suggesting these were YOY or two-year-old individuals. Neonate Atlantic Nurse Shark were recorded on 40% of BRUVS (n = 170) surveys conducted in June–October 2016, 2017, 2019, 2021, and 2024 (MacNeil et al. 2020; D Cardeñosa unpubl. data 2024). Providencia Island is the only location where these life stages have been observed in all the San Andrés, Providencia, and Santa Catalina Archipelago and in the whole Colombian Atlantic. Additional information is needed to confirm the reproductive importance of the area for this species.

Aggregations of up to five individuals of the Whitespotted Eagle Ray have been occasionally seen by divers in 2001 and between 2007–2010 in the northern part of the area, in the channel that separates it from Santa Catalina Island. Aggregations are composed of small individuals (Fundación Squalus unpubl. data 2024). Additional information is needed to confirm the regularity of these aggregations and the importance of the area for this species.

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