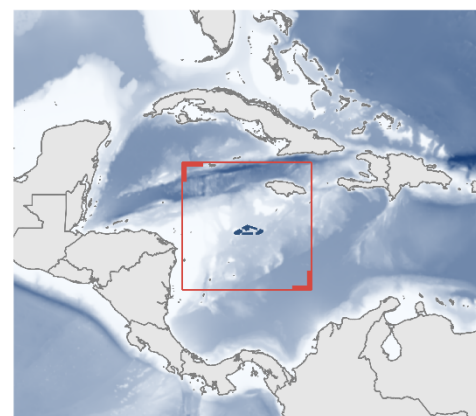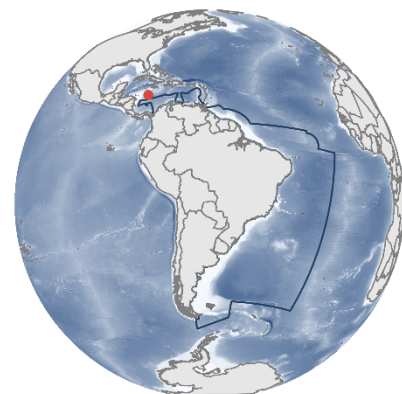*Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures*

SERRANILLA-BAJO NUEVO-ALICIA BANK ISRA

South American Atlantic Region

SUMMARY

Serranilla-Bajo Nuevo-Alicia Bank is located in Colombian and Jamaican waters. The area is situated in the western Caribbean Sea and comprises three small atolls with barrier reefs, cays, and shoals. It overlaps with the Seaflower Biosphere Reserve marine protected area. Within this area there are: **threatened species** (e.g., Caribbean Reef Shark *Carcharhinus perezi*) and **undefined aggregations** (e.g., Atlantic Nurse Shark *Ginglymostoma cirratum*).

CRITERIA

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

**COLOMBIA
JAMAICA**

0–60 metres

706.5 km²

sharkrayareas.org

DESCRIPTION OF HABITAT

Serranilla-Bajo Nuevo-Alicia Bank is located in Colombian and Jamaican waters. The area is situated in the western Caribbean Sea. It is found ~220 km southwest of Jamaica and ~800 km from the Colombian mainland. It comprises three banks: Serranilla, Bajo Nuevo, and Alicia Bank Serranilla is a round semi atoll with a discontinuous barrier reef in the southeast. It has multiple cays and emerging rocks. Bajo Nuevo is a small atoll with a barrier reef divided by a deep channel (~60 m). Alicia Bank is a submerged atoll with a small barrier reef in the east side (Abril-Howard et al. 2012; Vega-Sequeda et al. 2016). Two main seasons dominate the area: a dry season from February to April and a rainy season from June to December (Ballesteros-Galvis 2007). Sea surface temperatures range between 26–30 °C (Monroy-Silvera & Zambrano 2017).

The area 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 60 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Endangered Caribbean Reef Shark (Carlson et al. 2021b) and the Vulnerable Atlantic Nurse Shark (Carlson et al. 2021a).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Serranilla-Bajo Nuevo-Alicia Bank is an important area for undefined aggregations of two shark species.

Aggregations of Caribbean Reef Sharks have been regularly observed in Baited Remote Underwater Video Station (BRUVS) surveys and in fisheries operating in the area (MacNeil et al. 2020; D Cardeñosa unpubl. data 2024). In 2017, 41 BRUVS were deployed in the area. Caribbean Reef Sharks were observed in 16 deployments, and aggregations of 3–5 individuals (MaxN [maximum number of individuals of a species observed in a single frame]) were recorded in four deployments at 8–16 m depth. This area had the highest MaxN recorded across all the islands, keys, and banks in the Colombian Caribbean, including islands found ~400 km south (MacNeil et al. 2020; D Cardeñosa unpubl. data 2024). In 2022, 30 BRUVS were deployed in the area and aggregations of 3–5 individuals were also recorded (D Cardeñosa unpubl. data 2024). Historically, this area has sustained a large abundance of the species. Between January and December 2005, five fishing trips using longlines (500–1,000 hooks) were conducted across the islands of the Colombian Caribbean (Ballesteros-Galvis 2007). In 92 days of fishing across the whole region, Caribbean Reef Shark was the species with the highest number of individuals caught (n = 1,358). Of these individuals, 689 (50.7%) were caught in the area during 16 days of fishing and represented the largest relative abundance for the species recorded across the islands of the Colombian Caribbean (Ballesteros-Galvis 2007). Additional information is needed to confirm the nature and function of these aggregations.

Aggregations of Atlantic Nurse Sharks have been regularly observed in BRUVS and in fisheries operating in the area (MacNeil et al. 2020; D Cardeñosa unpubl. data 2024). During 2017 and 2022,

71 BRUVS were deployed in the area. Atlantic Nurse Sharks were observed in 33 deployments and aggregations (MaxN = 3–5) were recorded in seven deployments at 9–16 m depth. During underwater visual surveys conducted in 2011 (n = 53), Atlantic Nurse Sharks were regularly recorded in the area (Vega-Sequeda et al. 2016). Historically, this area has sustained a large abundance of the species. Between January and December 2005, five fishing trips using longlines (500–1,000 hooks) were conducted across the islands of the Colombian Caribbean (Ballesteros-Galvis 2007). In 92 days of fishing across the whole region, 143 Atlantic Nurse Sharks were caught. Of these individuals, 66 (46.1%) were caught in the area during 16 days of fishing and represented the largest relative abundance for the species recorded across the islands of the Colombian Caribbean (Ballesteros-Galvis 2007). Additional information is needed to confirm the nature and function of these aggregations.

Suggested citation

IUCN SSC Shark Specialist Group. 2025. Serranilla-Bajo Nuevo-Alicia Bank 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	D2
SHARKS												
Carcharhinus perezi	Caribbean Reef Shark	EN	0–697	X						X		
Ginglymostoma cirratum	Atlantic Nurse Shark	VU	0–130	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Negaprion brevirostris	Lemon Shark	VU
Sphyrna lewini	Scalloped Hammerhead	CR
Sphyrna mokarran	Great Hammerhead	CR
RAYS		
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.
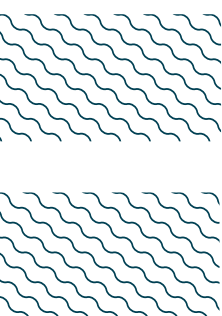
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