

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

SAN ANDRÉS ISLAND ISRA

South American Atlantic Region

SUMMARY

San Andrés Island is located in the Colombian Caribbean. This oceanic island includes five small cays and is characterised by barrier reefs, mangroves, seagrass beds, and patches of soft and hard substrates. The area overlaps with the Seaflower Biosphere Reserve. Within this area there are: **reproductive areas** and **undefined aggregations** (Southern Stingray *Hypanus americanus*).

CRITERIA

Sub-criterion C1 - Reproductive Areas; Sub-criterion C5 - Undefined Aggregations

-	_				
COLOMBIA					
-	-				
0-50 metres					
-	-				
33.78 km ²					
-	-				



DESCRIPTION OF HABITAT

San Andrés Island is located in the Colombian Caribbean. It is an oceanic island found ~750 km northwest of the Colombian coast. The island is part of the San Andrés, Providencia, and Santa Catalina Archipelago. It includes five small cays and is characterised by a barrier reef sheltering a lagoon with the slope dropping gently at ~20 m depths (Zea et al. 1998). The area is also characterised by mangroves and seagrass beds with patches of soft and hard substrates (Sánchez et al. 2019; Medina-Calderón et al. 2021). Two main seasons influence the area: a dry season from January-April and a rainy season from June-November (Ballesteros-Galvis 2007).

The area overlaps with the Seaflower Biosphere Reserve (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 50 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C1 - REPRODUCTIVE AREAS

San Andrés Island is an important reproductive area for one ray species.

Between 2014-2019, Southern Stingrays were monitored in multiple locations around San Andrés Island to estimate their population size. Individuals were collected, measured, and photographed (Fundación Squalus unpubl. data 2025). Additionally, 145 Southern Stingrays (116 females and 29 males) were tagged with PIT (Passive Integrated Transponders) tags in the area, in a location within this area called El Acuario (Fundación Squalus unpubl. data 2025). Individuals measured 32-108 cm disc width (DW), with 27 individuals (18.6%) considered neonates/young-of-the-year based on their size (<35 cm DW). The reported size-at-birth for the species is 17-19 cm DW (Last et al. 2016). Overall, 80% of the individuals were smaller than the reported size at maturity (<74 cm DW for females and >44 cm DW for males; Last et al. 2016). Additionally, 12 females were classified as pregnant due to having distended abdomens; one pregnant female was observed in two consecutive years (November 2015 and December 2016). Between 2014-2019, 42 females were recorded with recent mating scars.

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

San Andrés Island is an important area for undefined aggregations of one ray species.

Aggregations of juvenile Southern Stingray were opportunistically observed by divers and scientists in the area in 2009, 2010, 2018, 2019, and 2020 (Fundación Squalus unpubl. data 2025). Aggregations comprised of 4-16 individuals regularly observed across multiple locations in this area (La Pirámide, San Luis, El Acuario, and El Cantil). Aggregations of up to four individuals are predictably observed by divers at depths of 1-15 m in La Pirámide, San Luis, and El Cantil year-round (about once per month). Larger groups were also regularly observed in Baited Remote Underwater Video Station (BRUVS) surveys conducted in a location called El Acuario (D Cardeñosa unpubl. data 2025). These aggregations were recorded daily in monitoring trips between 2014-2019. The MaxN (maximum number of individuals of a species observed in a single frame) consisted of 16 individuals. However, El Acuario is one of the two locations in San Andrés Island where bait is used to attract animals for tourist operations, which may influence their behaviour. Baiting does not occur in the other locations where smaller aggregations have been observed. San Andrés Island is located ~200 km from the continent and ~100 km from the nearest island (Providencia Island) and is the only location in the Colombian Caribbean where aggregations of this species have been regularly recorded. Additional information is needed to understand the function and nature 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							
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
RAYS												
Hypanus americanus	Southern Stingray	NT	0-100			Х				Х		



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus perezi	Caribbean Reef Shark	EN
Ginglymostoma cirratum	Atlantic Nurse Shark	VU
Sphyrna mokarran	Great Hammerhead	CR
RAYS		
Aetobatus narinari	Whitespotted Eagle Ray	EN
Torpedo andersoni	Caribbean Torpedo	LC
Urobatis jamaicensis	Yellow Round Ray	LC

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> 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 the area is important for feeding of one shark species and for resting purposes of one shark species.

Between 2019-2024, opportunistic observations by divers, swimmers, and beach goers have recorded Great Hammerheads chasing and feeding on Southern Stingrays. Great Hammerheads enter shallow waters (<5 m) to feed on stingray aggregations. As the observations have been opportunistic, the seasonality of these events has not been defined (Fundacion Squalus unpubl. data 2025). Additional information is needed to confirm the regularity of this behaviour and the importance of the area for this species.

Reports from recreational divers indicate that Caribbean Reef Sharks rest in the area. This species remains motionless in the water column whilst the water current guides its movement. Divers report Caribbean Reef Sharks nearly colliding with the coral reef and rocky formations that characterise this area. Before collision occurs, animals abruptly turn and change direction before returning to their resting behaviour. This behaviour has been recorded mostly around sunset time when the presence of divers in the area and the noise decreases (F Mancera pers. obs. 2025). Additional information is needed to confirm the regularity of this behaviour and the importance of the area for this species.

REFERENCES



Ballesteros-Galvis CA. 2007. La pesquería industrial de tiburones en el archipiélago de San Andrés, Providencia y Santa Catalina: una primera aproximación. Unpublished Bachelor Thesis, Universidad Jorge Tadeo Lozano, San Andrés Isla.

Last PR, White WT, de Carvalho MR, Séret B, Stehmann MFW, Naylor GJP. 2016. Rays of the world. Clayton South: CSIRO Publishing.

Medina-Calderón JH, Mancera-Pineda JE, Castañeda-Moya E, Rivera-Monroy VH. 2021. Hydroperiod and Salinity Interactions Control Mangrove Root Dynamics in a Karstic Oceanic Island in the Caribbean Sea (San Andres, Colombia). *Frontiers in Marine Science* 7: 598132. https://doi.org/10.3389/fmars.2020.598132

Sánchez JA, González-Zapata FL, Dueñas LF, Andrade J, Pico-Vargas AL, Vergara DC, Sarmiento A, Bolaños N. 2019. Corals in the mesophotic zone (40-115 m) at the barrier reef complex from San Andrés Island (Southwestern Caribbean). *Frontiers in Marine Science* 6: 536. https://doi.org/10.3389/fmars.2019.00536

UNEP-WCMC & IUCN. 2025. Protected Planet: The World Database on Protected Areas (WDPA) and World Database on Other Effective Area-based Conservation Measures (WD-OECM) [Online], February 2025, Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net Accessed February 2025.

Zea S, Geister J, Garzón-Ferreira J, Díaz JM. 1998. Biotic Changes in the Reef Complex of San Andrés Island (Southeastern Caribbean Sea, Columbia) occurring over nearly three decades. *Atoll Research Bulletin* 456: 5-24.