

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

LOS HERMANOS ARCHIPELAGO ISRA

South American Atlantic Region

SUMMARY

Los Hermanos Archipelago is located ~90 km north of Margarita Island in eastern Venezuela. The area comprises several small islands and pelagic, shelf, and shelf slope waters. It is separated from northern Margarita Island by a deep canyon. It is influenced by the trade winds and by regional upwellings. Within this area there are: **threatened species** and **reproductive areas** (Bentfin Devil Ray *Mobula thurstoni*).

CRITERIA

Criterion A – Vulnerability; Sub-criterion C1 – Reproductive Areas

-	_			
VENEZUEI	LA			
-	-			
0-100 metres				
-	-			
349.5 km ²				
-	_			



DESCRIPTION OF HABITAT

Los Hermanos Archipelago is located ~80 km north of Margarita Island in eastern Venezuela. This area encompasses several smaller rocky islands and the pelagic waters surrounding them. The shelf slope drops steeply to >1,000 m in the north and southwest of the area, and it is separated from the northern shelf waters around Margarita Island by a ~500 m deep canyon. Surface currents are influenced by the trade winds and flow westward (Jury 2018). Coastal upwelling events impact this area, resulting in a high primary production during the second quarter of the year (Rueda-Roa 2012). The habitat includes pelagic waters, coral reefs, and rocky substrates.

This Important Shark and Ray Area is benthic and pelagic and is delineated from surface waters (O m) to 100 m based on the global depth range of the Qualifying Species.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Bentfin Devil Ray (Marshall et al. 2022).

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Los Hermanos Archipelago is an important reproductive area for one ray species.

Landing surveys conducted in 2006, 2007, 2014, 2015, 2022, and 2024 in La Pared and Robledal on Margarita Island revealed the presence of pregnant Bentfin Devil Rays and pups captured in drifting gillnets by artisanal fishers. Soak time was ~15-16h on average and fishers indicated capture location by distance from the coast. Most of the 35 landing site visits were made in 2015 and 2017 (42%) and mobulids were observed on 69% of visits (LA Zambrano unpubl. data 2025). The presence of Bentfin Devil Rays in this area has been recorded since 1999 (Cervigón & Alcalá 1999), although it was misidentified as the Atlantic Pygmy Devil Ray *Mobula hypostoma* until a revision of photographic material corrected the identification (Ehemann et al. 2022).

A total of 50 Bentfin Devil Rays were observed ranging in size between 32.6 cm (foetus) to 188 cm disc width (DW) (Ehemann et al. 2022; LA Zambrano unpubl. data 2025). Two-thirds of individuals (66%) were females and a third of females (33%) were pregnant. Eight individuals were neonates or young-of-the-year (16%) based on sizes <100 cm DW. The size-at-birth for the species is ~90 cm DW (Rambahiniarison et al. 2018). Most Bentfin Devil Rays were landed in the first half of the year, and multiple individuals or assemblages including other mobulid species were frequently captured in the same net (LA Zambrano unpubl. data 2025). While this species has historically been landed in the wider region (Cervigón & Alcalá 1999; Tagliafico et al. 2014; Ehemann et al. 2022), local ecological knowledge from fishers shows that this is the most reliable area to capture mobulids (LA Zambrano pers. obs. 2025). Additionally, within the wider Margarita Island region, pregnant females and pups have only been recorded from this area (LA Zambrano unpubl. data 2025).

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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												
Mobula thurstoni	Bentfin Devil Ray	EN	0-100	Х		Х						



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus obscurus	Dusky Shark	EN
Sphyrna lewini	Scalloped Hammerhead	CR
Sphyrna mokarran	Great Hammerhead	CR
RAYS		
Mobula mobular	Spinetail Devil Ray	EN
Pteroplatytrygon violacea	Pelagic Stingray	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.





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