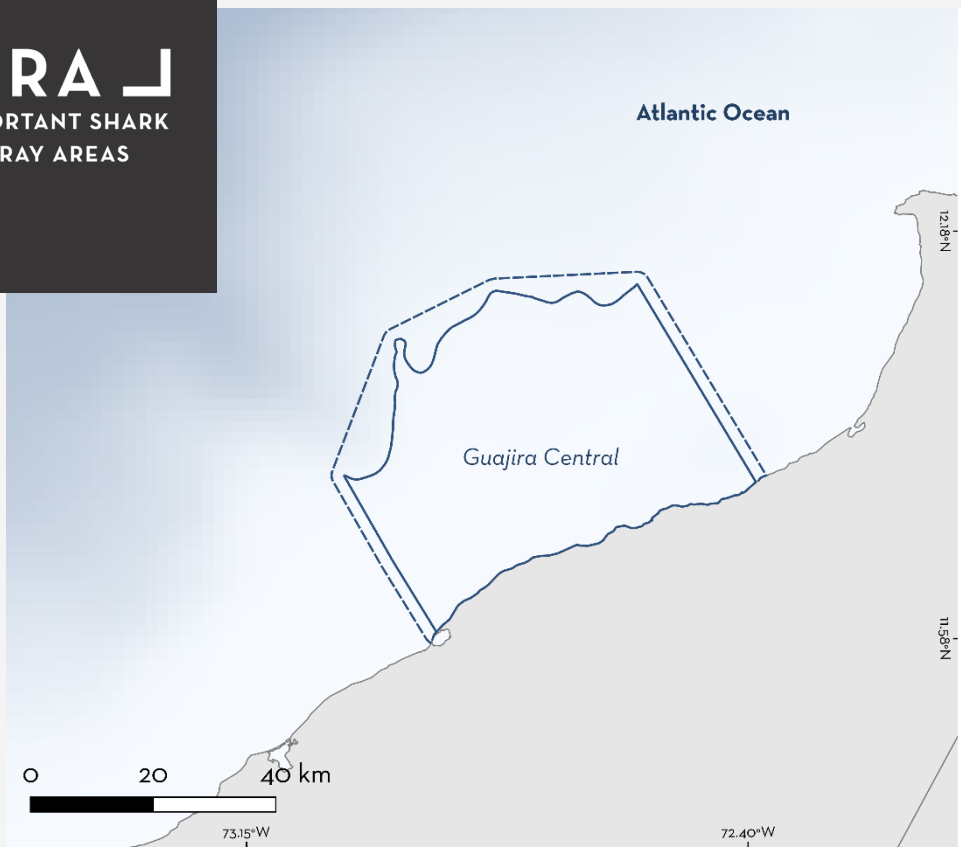
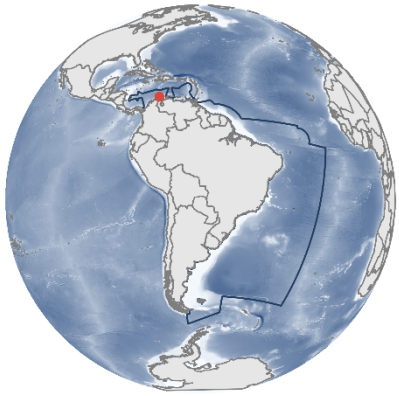
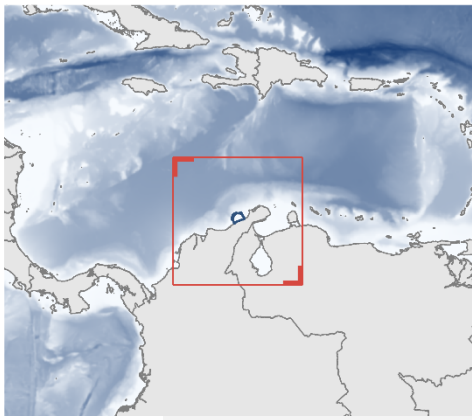
ISRA
IMPORTANT SHARK AND RAY AREAS







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

GUAJIRA CENTRAL ISRA

South American Atlantic Region

COLOMBIA

0–100 metres

2,115.9 km²

SUMMARY

Guajira Central is located on the northeast side of Colombia, in the Atlantic Ocean. The area is characterised by an extended shelf and the presence of seagrass beds and sandy substrates. Upwelling in the area produces an increase in productivity especially between January and April. The area overlaps with the La Guajira Coastal Wetlands Complex Key Biodiversity Area. Within this area there are: **threatened species** and **undefined aggregations** (American Cownose Ray *Rhinoptera bonasus*).

CRITERIA

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

DESCRIPTION OF HABITAT

Guajira Central is located on the northeast side of Colombia, in the Atlantic Ocean. It extends from Mataure in the east to Mayapo in the west. The area is characterised by an extended shelf and the presence of seagrass beds and sandy substrates (Puentes-Cañon et al. 2012). Upwelling is present year-round with a higher intensity between January and April that produces a decrease in temperatures and an increase in productivity (Puentes-Cañon et al. 2012). During the dry season (December–April) sea surface temperatures range from 9–25°C, whereas during the rainy season (July–November) sea surface temperatures range from 27–29.5°C (Andrade 2001). While the area receives freshwater input, particularly between June–December, it is not as large a quantity as in other regions of the Colombian Atlantic (Mojica et al. 2006).

The area overlaps with the La Guajira Coastal Wetlands Complex Key Biodiversity Area (KBA 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 100 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 occurs in the area. This is the Vulnerable American Cownose Ray (Carlson et al. 2020).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Guajira Central is an important area for undefined aggregations of one ray species.

Monitoring of landings in fishing camps operating within the area have revealed the catch of American Cownose Ray aggregations in gillnets ('chucheras') designed to target them (Palacios-Barreto & Ramirez-Hernández 2010; AF Navia-López et al. unpubl. data 2025). These gillnets are ~75 m long and are deployed for up to 24 hours (Puentes-Cañon et al. 2012). In 2009 and 2010, catches of up to 200 American Cownose Rays were recorded from a single fishing trip in two occasions in February and May (Palacios-Barreto & Ramirez-Hernández 2010). The catches of such aggregations were also confirmed in 2015 during an opportunistic sampling in the area (AF Navia-López et al. unpubl. data. 2025). The Colombian fisheries statistical system reported regular catches of American Cownose Rays inside the area between 2018–2021 with a peak in March, June, and September suggesting that aggregations occur regularly in the area (Duarte et al. 2018, 2019, 2020, 2021).

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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												
Rhinoptera bonasus	American Cownose Ray	VU	0–60	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus falciformis	Silky Shark	VU
Carcharhinus leucas	Bull Shark	VU
Carcharhinus limbatus	Blacktip Shark	VU
Carcharhinus porosus	Smalltail Shark	CR
Galeocerdo cuvier	Tiger Shark	NT
Mustelus canis	Dusky Smoothhound	NT
Sphyrna lewini	Scalloped Hammerhead	CR
RAYS		
Aetobatus narinari	Whitespotted Eagle Ray	EN
Hypanus americanus	Southern Stingray	NT
Hypanus guttatus	Longnose Stingray	NT
Pseudobatos percellens	Chola Guitarfish	EN

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 the area may be important for reproduction for seven shark and three ray species.

Between February 2006 and January 2008, landings from artisanal fisheries (gillnets and longlines) operating in the area were monitored monthly (Mendoza-Vargas & Gaitán-Espitia 2008). Neonates (determined by the presence of umbilical scars) of Scalloped Hammerhead were recorded between March–August in 2006 and 2007. These represented up to 40% of all Scalloped Hammerheads recorded in some months (April and May; Mendoza-Vargas & Gaitán-Espitia 2008). Further, eight young-of-the-year (YOY) animals measuring between 41–63 cm total length (TL) were recorded in opportunistic samplings during 2021 in the area (Navia et al. 2021). These individuals were classified as YOY as the reported size-at-birth for the species is 31–57 cm TL (Ebert et al. 2021). Additional information is needed to confirm the regular and contemporary presence of these life stages and the importance of the area for these species.

Between May 2009 and January 2010, 78 Longnose Stingrays were recorded in landings from artisanal fisheries (gillnets, longlines, and handlines) operating in the area. Landings were monitored between six and ten days per month (Palacios-Barreto & Ramirez-Hernández 2010). Of these, 15 individuals (19%) measured <25 cm disc width (DW) and were classified as YOY as the reported size-at-birth for the species is ~15 cm DW (Last et al. 2016). Additionally, two pregnant females were recorded, and mature females dominated the catches between May and October (Palacios-Barreto & Ramirez-Hernández 2010). No further monitoring has been done in the area since. However, according to the Colombian fisheries statistical system, Longnose Stingray was the most caught shark and ray in fishing camps nearby the area between 2012–2021 (De La Hoz et al. 2014, 2015, 2017; Duarte et al. 2018, 2019, 2020, 2021). Additional information is needed to confirm the regular and contemporary presence of these life stages and the importance of the area for these species.

Between 2006–2008 neonates of Blacktip Sharks and Dusky Smoothhounds were recorded in the area (Mendoza-Vargas & Gaitán-Espitia 2008). Neonates and pregnant females of Southern Stingray and American Cownose Rays in advanced stages were also recorded (Palacios-Barreto & Ramirez-Hernández 2010). Finally, in 2021 neonates/YOY of Silky Shark, Bull Shark, and Tiger Shark were recorded in landings monitoring (Fundación Squalus unpubl. data 2025). Additional information is needed to confirm the regular and contemporary presence of these life stages and the importance of the area for these species.

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