

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

PEROS BANHOS CHANNEL ISRA

Western Indian Ocean Region

SUMMARY

Peros Banhos Channel is located in the northern Chagos Archipelago. The habitat is characterised by fringing coral reefs, a lagoon, patch reef, and seagrass beds as well as oceanic areas on the southern side. This area sits within the British Indian Ocean Territory Marine Protected Area. Within this area there are: **threatened species** and **undefined aggregations** (Grey Reef Shark *Carcharhinus amblyrhynchos*).

CRITERIA

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

CHAGOS ARCHIPELAGO

0-280 metres

36.4 km²





DESCRIPTION OF HABITAT

Peros Banhos Channel is located in the northern Chagos Archipelago, central Indian Ocean. It lies ~30 km north of the Great Chagos Bank. This area encompasses the southern channel of Peros Banhos, between the islands of Ile Fouquet, Ile Vache Marine, and Coin du Mire. It includes sections of inner and outer reef surrounding the channel including the drop off to the deeper Indian Ocean. The habitat in the area consists of fringing coral reefs, a lagoon, patch reef, and seagrass habitats as well as oceanic habitats on the southern side.

The climate in the area is tropical and moderated by trade winds (Eisenhauer et al. 1999). The area is exposed to strong persistent distant-source swells originating in the southern Indian Ocean during the southeast monsoon (April to September). The northwest monsoon (November to March) is dominated by light north-westerly winds, higher rainfall, and warmer temperatures (Schott & McCreary 2001). Combined tidal and wind driven currents are strong in the area, especially through the channel between the islands. Deep water channels exert significant control over local hydrodynamic conditions, which are important drivers of planktonic distributions (Sheehan et al. 2019).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 280 m based on the global depth range of the Qualifying Species.

ISRA CRITERIA

CRITERION A - VULNERABILITY

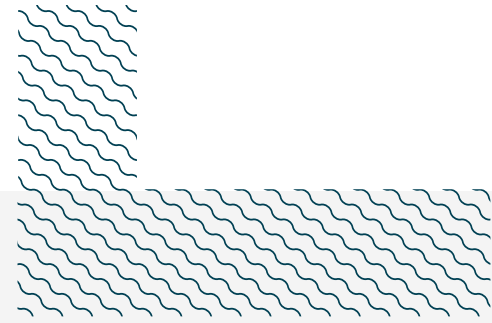
The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species™. The Grey Reef Shark is assessed as Endangered (Simpfendorfer et al. 2020).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Peros Banhos Channel is an important area for undefined aggregations of one shark species.

Acoustic tags were surgically implanted in 160 Grey Reef Sharks (70-171 cm total length [TL]; n = 105 females, n = 51 males, and n = 4 unknown sex) between February–April from 2013 to 2021. Sharks were tracked for a maximum of eight years across five isolated atoll systems in the north of the Chagos Archipelago. The study array consisted of a total of 52 acoustic receivers (Jacoby et al. 2020). Tagged animals were detected whenever they came within ~500 m range of an acoustic receiver.

Aggregations of Grey Reef Sharks were identified from the co-occurrence of shark detections at the receivers (D Jacoby unpubl. data 2023). Considering the co-occurrence of three or more individuals at the same time (max = 10 individuals), two receivers, both located within the Peros Banhos Channel had 619 and 107 detections, respectively. These aggregations occurred from March to December. Results (based only on tagged animals) suggest larger aggregations of Grey Reef Sharks occur in the area, but the size and nature of these aggregations is unknown. It is possible that environmental conditions within the channel provide optimal conditions for sharks to feed, swim, or rest as was shown for Grey Reef Sharks in other similar environments (e.g., Papastamatiou et al. 2021).



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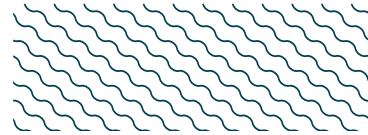
Suggested citation

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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													
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN	0-280	X							X		

SUPPORTING SPECIES



Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Carcharhinus albimarginatus</i>	Silvertip Shark	VU
<i>Carcharhinus melanopterus</i>	Blacktip Reef Shark	VU
<i>Galeocerdo cuvier</i>	Tiger Shark	NT
<i>Nebrius ferrugineus</i>	Tawny Nurse Shark	VU
<i>Negaprion acutidens</i>	Sharptooth Lemon Shark	EN
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR
<i>Sphyrna mokarran</i>	Great Hammerhead	CR
<i>Triaenodon obesus</i>	Whitetip Reef Shark	VU
RAYS		
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN
<i>Mobula alfredi</i>	Reef Manta Ray	VU
<i>Pastinachus sephen</i>	Cowtail Ray	NT

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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