

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

ANCHORAGE PASSAGE ISRA

New Zealand & Pacific Islands Region

SUMMARY

Anchorage Passage is located in Suwarrow Atoll, in the northern group of the Cook Islands in the South Pacific Ocean. The area encompasses Anchorage Island, one of the largest islands within the Suwarrow Atoll which borders the inner lagoon. It includes the passage on the eastern side of the island, close to the only entrance to the lagoon. It is influenced by strong currents and large surges from cyclone activity. Within this area there are: **threatened species** and **undefined aggregations** (Reef Manta Ray *Mobula alfredi*).

COOK ISLANDS

0-20 metres

1 km²

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CRITERIA

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



sharkrayareas.org



DESCRIPTION OF HABITAT

Anchorage Passage is located in Suwarrow Atoll, in the northern group of the Cook Islands in the South Pacific Ocean. It encompasses Anchorage Island, one of the largest islands within the Suwarrow Atoll. The atoll is characterised by many islets surrounding a central lagoon (18 km west to east and 14 km north to south; Woodroffe & Stoddart 1992). Easterly to southeasterly winds prevail between May and November, when it is calmer and easier to access the island. The area is influenced by strong currents and large surges generated by cyclonic activity (Woodroffe & Stoddart 1992).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 20 m depth 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 Reef Manta Ray (Marshall et al. 2022).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Anchorage Passage is an important area for undefined aggregations of one ray species.

Reef Manta Rays aggregate in this area to use a cleaning station. Based on online citizen science observations from recreational snorkelers and divers, Reef Manta Rays are regularly and predictably observed cleaning in this area around Anchorage Island. This is one of the few known cleaning stations for this species in the Cook Islands with regular and predictable observations. Most observations are of single individuals, but there are reports of aggregations of up to five individuals. A compilation of data extracted from online blogs provides photographic evidence of at least 14 sightings of Reef Manta Rays cleaning: in 2013 (n = 8 individuals from four dives with aggregations of four individuals); 2014 (n = 1); 2017 (n = 1); 2020 (n = 2); 2021 (n = 1); and 2023 (n = 1). In addition, there are contemporary reports of Reef Manta Rays cleaning in 2014 (Teleport-blog 2014) and 2023 (Athenareaching 2023). Reports of Reef Manta Rays using this cleaning station have been made in May (n = at least 1), July (n = 1), August (n = 9), and September (n = 4). However, additional temporal information data are required to determine if there is a seasonality to this behaviour. Anecdotal reports of Reef Manta Ray utilising cleaning station in this area have also been made by Te Ipukarea Society and other scientists undertaking unrelated surveys of seabirds, invertebrates, and rats as well as dive exploration expeditions (J Cramp pers. obs. 2024). Reef Manta Rays have also been reported to clean around Anchorage Island, on the side facing the inner lagoon, every morning (Sailing Sarita 2016).

Anchorage Passage is remote and infrequently accessed (Ceccarelli et al. 2021): strong storms influence this area (Woodroffe & Stoddart 1992) which reduces accessibility to the island. Only a small number of tourists are permitted to visit the area between 1st June and 1st November each year. Despite these difficulties, and there being fewer recorded observations available, the regularity and predictability of observations made by citizen scientists demonstrate the importance of this area for cleaning purposes over multiple years.



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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 alfredi	Reef Manta Ray	VU	0-711	Х						Х		



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category		
SHARKS				
Carcharhinus amblyrhynchos	Grey Reef Shark	EN		
Triaenodon obesus	Whitetip Reef Shark	VU		

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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