

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

AVAAVAROA PASSAGE ISRA

New Zealand & Pacific Islands Region

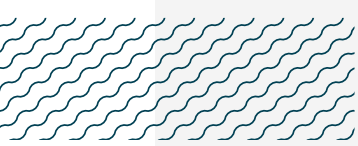
SUMMARY

Avaavaroa Passage is located ~300 m off the southern coast of Rarotonga - the largest island of the Cook Islands. The area connects the reef to the inner lagoon system. It is characterised by relatively steep canyons including various caves. This area is influenced by strong currents and swells, as well as cyclone and storm activity. Within this area there are: **threatened species** (e.g., Spotted Eagle Ray *Aetobatus ocellatus*); **resting areas** (Whitetip Reef Shark *Triaenodon obesus*); and **undefined aggregations** (Spotted Eagle Ray).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C3 - Resting Areas; Sub-criterion C5 - Undefined Aggregations

— —
COOK ISLANDS
 — —
0-40 metres
 — —
0.10 km²
 — —





DESCRIPTION OF HABITAT

Avaavaroa Passage is located ~300 m off the southern coast of Rarotonga – the largest island of the Cook Islands. This passage connects the reef area to the inner lagoon system. It is characterised by relatively steep canyons including various caves. This area is influenced by strong currents with significant wave heights and swells from the south (SSI 2024). The area is also influenced by cyclones, tropical storms, and trade winds (WACOP 2024).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 40 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Endangered Spotted Eagle Ray (Finucci et al. 2024) and the Vulnerable Whitetip Reef Shark (Simpfendorfer et al. 2020).

SUB-CRITERION C₃ – RESTING AREAS

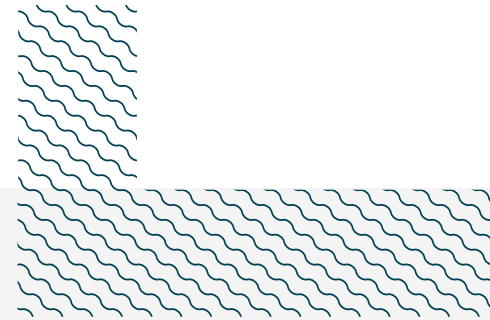
Avaavaroa Passage is an important resting area for one shark species.

Whitetip Reef Sharks regularly and predictably rest inside a cave within the passage. Resting individuals are usually solitary but have been observed in groups of up to three individuals. During recreational dives undertaken daily between 2022-2024, they were predictably observed resting during daylight hours up to twice per month (~48 times) (M Robinson unpubl. data. 2024; GoLocal Cook Islands unpubl. data 2024).

SUB-CRITERION C₅ – UNDEFINED AGGREGATIONS

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

Spotted Eagle Rays are present year-round in this area. Recreational dives are undertaken daily and aggregations of Spotted Eagle Rays are routinely observed on almost every dive. They are usually observed in groups of 40-80 individuals (M Robinson unpubl. data 2024; GoLocal Cook Islands unpubl. data 2024), however, recreational dive surveys from August 2024 recorded an aggregation of >87 individuals. Recreational divers have recorded these aggregations for >35 years, with dives being undertaken numerous times a week (M Robinson unpubl. data 2024; GoLocal Cook Islands unpubl. data 2024). For example, ~35 individuals were reported aggregating in early July 2024 with up to 32 individuals together at 12 m depth (M Robinson unpubl. data 2024; GoLocal Cook Islands unpubl. data 2024), and 16 individuals aggregating at 24 metres in January 2020. Further information is required to determine the nature and function of these aggregations.



Acknowledgments

Matt Robinson (GoLocal Cook Islands), John Young (GoLocal Cook Islands), and Ryan Charles (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 10 - New Zealand and Pacific Islands workshop for their contributions to this process.

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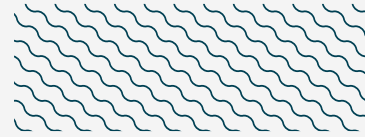
Suggested citation

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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>Triaenodon obesus</i>	Whitetip Reef Shark	VU	0-330	X				X					
RAYs													
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN	0-40	X							X		

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.



REFERENCES

Finucci B, Rigby CL, Armstrong AO, Rezaie-Atagholipour M. 2024. *Aetobatus ocellatus*. *The IUCN Red List of Threatened Species 2024*: e.T42566169A124549514.

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Simpfendorfer C, Yuneni RR, Tanay D, Seyha L, Haque AB, Bineesh KK, Bin Ali A, Gautama DA, Maung A, Sianipar A, et al. 2020. *Triacnodon obesus*. *The IUCN Red List of Threatened Species 2020*: e.T39384A173436715. <https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T39384A173436715.en>.

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