

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

HA'APAI ISRA

New Zealand & Pacific Islands Region

SUMMARY

Ha'apai is situated in the Kingdom of Tonga. The area encompasses extensive shallow waters, numerous fringing reefs, and isolated reef patches. It overlaps with the Tongan Archipelago Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** (e.g., Indo-Pacific Leopard Shark *Stegostoma tigrinum*); **resting areas** (Indo-Pacific Leopard Shark); and **undefined aggregations** (Blacktip Reef Sharks *Carcharhinus melanopterus*).

CRITERIA

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

TONGA
 0-100 metres
 251.4 km²





DESCRIPTION OF HABITAT

Ha'apai is situated in the Kingdom of Tonga. The area encompasses extensive shallow waters, numerous fringing reefs, and isolated reef patches. It is bordered on the eastern edge by a fringing reef with numerous passages characterised by strong currents (Ceccarelli et al. 2017).

The entire Ha'apai archipelago has high productivity due to localised upwelling from the Tonga Trench and nutrient runoff from land (Ceccarelli et al. 2017). Tonga has a tropical climate characterised by a wet season during austral summer (November–April) and a dry season during winter (May–October) (Tonga Meteorological Service 2020).

This site overlaps the Tongan Archipelago Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024).

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 depth range of the qualifying species.

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 Indo-Pacific Leopard Shark (Rigby et al 2024) and the Vulnerable Blacktip Reef Shark (Simpfendorfer et al 2020).

SUB-CRITERION C₃ – RESTING AREAS

Ha'apai is an important resting area for one shark species.

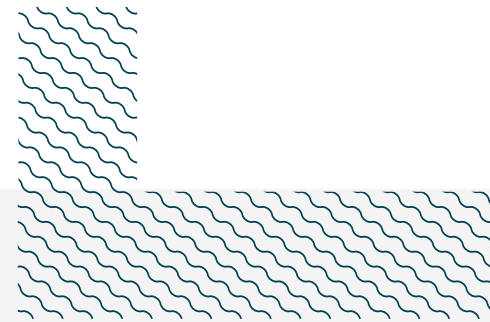
Based on reports from divers between 2015–2019 and 2023–2024, Indo-Pacific Leopard Sharks are regularly and predictably observed resting in the area on the sandy substrate between patches of reef year-round (A Wessels pers. obs. 2024). The area is a well-known dive location by recreational divers and snorkelers for guaranteed encounters with Indo-Pacific Leopard Sharks. Animals can be observed resting at depths of 10–14 m alone or in pairs. An evaluation of the spot-patterns on the animals (Sharkbook.ai) indicates that records found online are generally new animals appearing in the area during each dive rather than resident animals. The animals observed have an estimated size range of 150–250 cm total length (TL), and the size-at-maturity for this species is 147–183cm TL (Ebert et al. 2021), suggesting observations are of mature individuals. There are no other locations in Tonga where this species has been regularly reported (A Wessels pers. obs. 2024).

SUB-CRITERION C₅ – UNDEFINED AGGREGATIONS

Ha'apai is an important area for undefined aggregations of one shark species.

According to local ecological knowledge, Blacktip Reef Sharks regularly aggregate in this area. Aggregations of 4–8 animals are seasonally observed during the summer (December–March) from shore by beach visitors and snorkelers (A Wessels pers. obs. 2015–2019 & 2023–2024). Aggregations can be generally observed in shallow waters (<0.5 m depth) of the northwest lagoons of Lofotoa and Uoleva Islands, within the area. Animals have an estimated size of 60–80 cm TL. The size-at-birth of this species is 30–52 cm TL and size at maturity ranges between 90–112 cm TL (Ebert et al. 2021),

indicating these observations are of juvenile individuals. However, more information is required to determine the nature and function of Blacktip Reef Shark aggregations in this area.



Acknowledgments

Amy Wessels (Matafonua Beach Resort) and Amanda Batlle-Morera (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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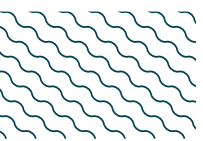
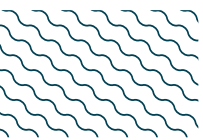
QUALIFYING SPECIES

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>Carcharhinus melanopterus</i>	Blacktip Reef Shark	VU	0-100	X							X		
<i>Stegostoma tigrinum</i>	Indo-Pacific Leopard Shark	EN	0-90	X				X					

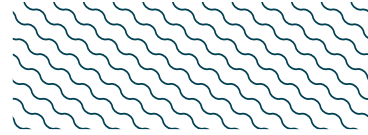
SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR
RAYS		
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	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.

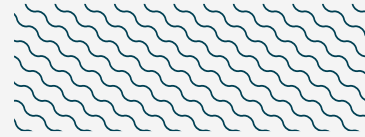


SUPPORTING INFORMATION



There are additional indications that this area is important for undefined aggregations of one ray species.

Based on reports from divers between 2015–2019 and 2023–2024, Reef Manta Rays aggregate in the channel between Ouleva and Tatafa Islands (A Wessels pers. obs. 2024). The channel is a known recreational diving location where groups of 2–3 Reef Manta Rays can be observed regularly and predictably during summer (November–March). Reef Manta Rays can be observed cruising towards the inside of the atoll and swimming in circles around a large coral bommie at 8–14 m depth located in the center of the channel. This location could be a cleaning station for the species. However, the area is subject to strong currents and observations have only been made during drift dives. Despite the small size of these aggregations, this area is the only location where Reef Manta Rays can be observed regularly and predictably in Tonga. Further information is required to understand regularity and function of vital life- history activities, and the importance of the area for Reef Manta Rays.



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