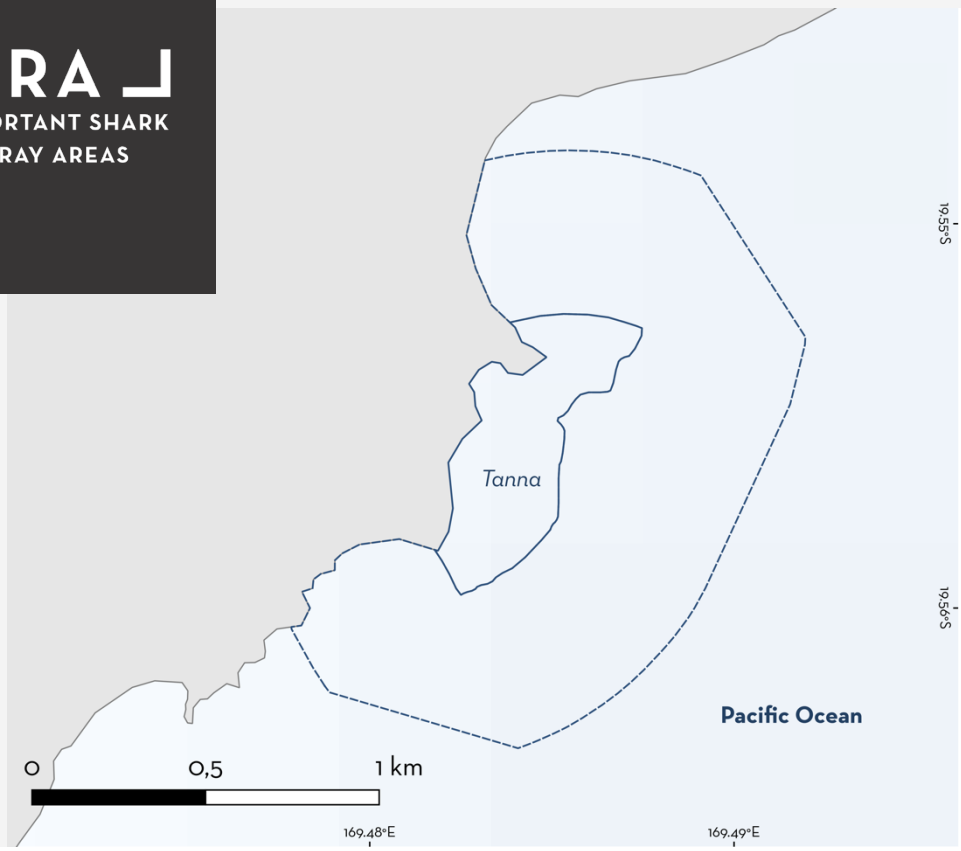
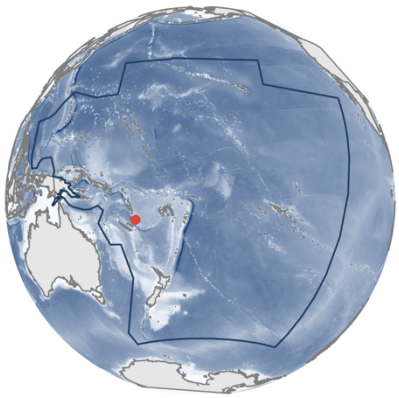
ISRA
IMPORTANT SHARK AND RAY AREAS





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

TANNA ISRA

New Zealand & Pacific Islands Region

VANUATU

0–20 metres

0.23 km²

SUMMARY

Tanna is located on the southeast of the island of Tanna in Vanuatu. The area, known locally as 'Shark Bay', is characterised by an enclosed tidal bay surrounded by high cliffs. The substrate is comprised of warm dark sand and underwater hot waterspouts owing to the volcanic activity on the island. Within the area there are: **threatened species** and **reproductive areas** (Blacktip Reef Shark *Carcharhinus melanopterus*).

CRITERIA

Criterion A – Vulnerability; Sub-criterion C1 – Reproductive Areas

DESCRIPTION OF HABITAT

Tanna is located on the southeast of the island of Tanna in Vanuatu. The area, known locally as 'Shark Bay', is characterised by an enclosed tidal bay, surrounded by high cliffs. The substrate is comprised of warm dark sand and underwater hot waterspouts owing to the volcanic activity on the island (Tanna Adventures 2024). The climate in Vanuatu is characterised by high rainfall and high temperatures throughout the year, and experiences severe tropical cyclones during the austral summer months of December to February (Walshe et al. 2017).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 20 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 Blacktip Reef Shark (Simpfendorfer et al. 2020).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Tanna is an important reproductive area for one shark species.

Neonate and young-of-the-year (YOY) Blacktip Reef Sharks have been reported to aggregate in the area. Blacktip Reef Sharks come into the bay in large numbers, particularly in the cooler months of the year (June–August), for the warmth caused by underwater hot waterspouts located in the bay (Tanna Adventures 2024). Citizen science reports reveal footage of small (visually estimated >60 cm total length [TL]) Blacktip Reef Sharks from 2019–2021, with up to six individuals observed in a single frame (Trip Advisor 2024a, You Tube 2024). Animals are best viewed on the low tide in the area (Trip Advisor 2024a). Size-at-birth for this species is 30–52 cm TL (Ebert et al. 2021), indicating the observed sharks were neonates and/or YOY. Despite a lack of dedicated survey data from the area, the habitat is consistent with the ecological preference of young Blacktip Reef Sharks which are known to prefer shallow, sheltered waters (George et al. 2019), and maintain small home ranges at early life stages (Bouyoucos et al. 2021).

An online search revealed only two records of Blacktip Reef Sharks from elsewhere in Vanuatu, around the main island of Efate (Flickr 2024, Trip Advisor 2024). There are no records on iNaturalist of Blacktip Reef Sharks from Vanuatu waters and only one record of a shark or ray species from the western side of the island of Tanna (an Oceanic Fantail Ray in 2011). The paucity of online records of this species in Vanuatu highlights the relative importance of the area for reproduction in Blacktip Reef Sharks.

Acknowledgments

Asia O Armstrong (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.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

Suggested citation

IUCN SSC Shark Specialist Group. 2024. Tanna ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

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												
Carcharhinus melanopterus	Blacktip Reef Shark	VU	0–330	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.

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