

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

NGERMEAUS ISLAND ISRA

New Zealand & Pacific Islands Region

SUMMARY

Ngermeaus Island is located in the Southern Lagoon of Palau. It is characterised by a gradual sandy slope with small coral heads in the shallow water, which get larger and denser in deeper water. Within this area there are: **threatened species** and **undefined aggregations** (Blacktip Reef Shark Carcharhinus melanopterus).

CRITERIA

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

- O-30 metres

PALAU

0.2 km²

sharkrayareas.org

DESCRIPTION OF HABITAT

Ngermeaus Island is located in the Southern Lagoon of Palau. The habitat encompasses a gradual sandy slope with some small coral heads in the shallow water, which get larger and denser at greater depths (T Harel-Bornovski pers. obs. 2024). In Palau, tidal amplitude ranges between ~1–2 m, twice a day, and this causes currents to flow in and out of the deep channels and across the shallow reefs. Surface water temperatures in this region of Palau generally range between 27.5–30°C across the year (Colin 2009). There are variations within the reef tract, with the mean temperature of lagoon waters being ~0.3–0.5°C warmer than on the outside of the barrier reef. The highest water temperatures usually occur in late May or early June, then peak again in November (Colin 2009).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 30 m based on the bathymetry of the area.

ISRA CRITERIA

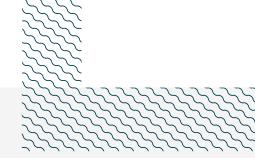
CRITERION A - VULNERABILITY

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 C5 - UNDEFINED AGGREGATIONS

Ngermeaus Island is an important area for undefined aggregations of one shark species.

Between 2009-2024, recreational divers observed regular aggregations of 10-50 Blacktip Reef Sharks at 1.5-30 metres depth (T Harel-Bornovski pers. obs. 2024). Recreational divers visited the area four times a week and aggregations of Blacktip Reef Sharks were observed on all occasions. Blacktip Reef Sharks were visually estimated to measure 80-160 cm total length and were observed year-round (T Harel-Bornovski pers. obs. 2024). This area is known locally as 'Shark City' or 'Shark Island' due to the regularity and predictability of Blacktip Reef Shark aggregations, attracting international tourists for recreational dives. Blacktip Reef Sharks may be aggregating in this area for feeding purposes, as feeding behaviour has been observed on several occasions. Blacktip Reef Sharks feed on Yellowstripe Scad Selaroides leptolepis that form large schools within the area (T Harel-Bornovski pers. obs. 2024). Although some provisioning occurs in the area, the aforementioned information demonstrates the regular and predictable observations of undefined aggregations of Blacktip Reef Sharks outside of provisioning events (T Harel-Bornovski pers. obs. 2024). Further, aggregations were recorded between 2020-2022 when no provisioning occurred in the area (T Harel-Bornovski pers. obs. 2024). Further information is required to determine the nature and function of these aggregations.



Acknowledgments

Tova Harel-Bornovski (Micronesian Shark Foundation), Vanessa Bettcher Brito (IUCN SSC Shark Specialist Group - ISRA Project), 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.

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. Ngermeaus Island 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								
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
SHARKS												
Carcharhinus melanopterus	Blacktip Reef Shark	VU	0-100	Х						Х		

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.



REFERENCES

Colin PL. 2009. Marine Environments of Palau, First Edition. San Diego: Indo-Pacific Press.

Simpfendorfer C, Yuneni RR, Tanay D, Seyha L, Haque AB, Fahmi, Bin Ali A, Dharmadi, Bineesh KK, Gautama DA, et al. 2020. Carcharhinus melanopterus. The IUCN Red List of Threatened Species 2020: e.T39375A58303674. https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T39375A58303674.en