

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

KEPIDAUEN PALIKIR ISRA

New Zealand & Pacific Islands Region

SUMMARY

Kepidauen Palikir is located in Pohnpei in the Federates States of Micronesia. Pohnpei is surrounded by a lagoon, enclosed by a discontinuous barrier reef, and the area encompasses a deep channel from the outer reef to the lagoon, with coral reef habitat features. The area is subject to strong currents during the incoming tide. Within this area there are: **threatened species** (e.g., Grey Reef Shark Carcharhinus amblyrhynchos), **resting areas** (Whitetip Reef Shark *Triaenodon obesus*), and **undefined aggregations** (Grey Reef Shark).

FEDERATED STATES OF MICRONESIA

- – 0-50 metres – – 1.43 km²

CRITERIA

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



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DESCRIPTION OF HABITAT

Kepidauen Palikir is located in Pohnpei in the Federates States of Micronesia. Pohnpei is surrounded by a lagoon, enclosed by a discontinuous barrier reef (Rowley et al. 2019), and Kepidauen Palikir provides a passage through the reef to the lagoon. The area includes a deep channel from the outer reef to the lagoon, with coral reef habitat features. The channel is subject to strong currents on the incoming tide (J Hartup pers. obs. 2024). Pohnpei is a volcanic island with high elevation and dense vegetation, resulting in high annual precipitation levels (Rowley et al. 2019), with runoff influencing the surrounding reefs and lagoon.

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 50 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 Grey Reef Shark (Simpfendorfer et al. 2020a) and the Vulnerable Whitetip Reef Shark (Simpfendorfer et al. 2020b).

SUB-CRITERION C3 - RESTING AREAS

Kepidauen Palikir is an important resting area for one shark species.

Between 2008-2024, the area was dived regularly (2-4 times per month or 30-50 times per year) by Club Pareo (J Hartup pers. obs. 2024). Whitetip Reef Sharks were regularly observed year-round resting on the sandy substrate of the channel towards the lagoon (J Hartup pers. obs. 2024). An average of 10-15 individuals were observed on 75% of dives. Occasional observations of courtship behaviour have been reported, yet the majority of sightings in the area are of resting sharks. Whitetip Reef Sharks are observed at reefs throughout Pohnpei, however, this area is the only place where regular aggregations of resting behaviour are observed.

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Kepidauen Palikir is an important area for undefined aggregations of one shark species.

Between 2008-2024, the area was dived regularly (2-4 times per month or 30-50 times per year) by Club Pareo (J Hartup pers. obs. 2024). Aggregations of Grey Reef Sharks were observed year-round on almost every dive in the area coinciding with an incoming tide. Group sizes ranged between 20-50 individuals, generally schooling in the current at depths between 30-40 m (J Hartup pers. obs. 2024). Grey Reef Sharks also form tight groups during incoming tides in French Polynesia (Papastamatiou et al. 2021), where the sharks reduce swimming activity and save energy using predicted updraft zones in channels and 'surf the slope'. Given the currents in Kepidauen Palikir and the association of Grey Reef Sharks with the incoming tide, the area likely comprises an important resting area for this species, however, more information is needed to confirm the function of this aggregation.



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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
SHARKS												
Carcharhinus amblyrhynchos	Grey Reef Shark	EN	0-280	Х						Х		
Triaenodon obesus	Whitetip Reef Shark	VU	0-330	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

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