

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

KLOULKLUBED ISRA

New Zealand & Pacific Islands Region

SUMMARY

Klouklubed is located in the Peleliu State of Palau. This area is situated on a reef flat on the northwestern shore of Peleliu Island. The area is characterised by seagrass which covers the inner margin of the flat. The substrate is rubble and sand found parallel to the water flow on the changing tides. Most of the area is exposed during low tide. Within this area there are: **threatened species** and **reproductive areas** (Blacktip Reef Shark *Carcharhinus melanopterus*).

CRITERIA

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

—	—
PALAU	—
—	—
0-6 metres	—
—	—
7.05 km²	—
—	—





DESCRIPTION OF HABITAT

Kloulklubed is located in the Peleliu State of Palau. This area is situated on a reef flat on the northwestern shore of Peleliu Island. Seagrass, mostly composed of dense long-bladed *Enhalus acoroides* mixed with thick Turtle Grass *Thalassia hemprichii*, covers the inner margin of the flat and is part of the densest and most extensive beds of seagrass in Palau (Colin 2009). Visibility is lower at its northern end which is close to extensive mangrove swamps. Within the area, there is rubble and sand parallel to the water flow on the changing tides. The rugged rocky shelf is 3–6 m deep and heavily grazed by herbivorous fishes (Colin 2009). Most of the area is exposed during low tide. In Palau, tide amplitude ranges ~1–2 m, with twice daily tides (Colin 2009).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 6 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A – VULNERABILITY

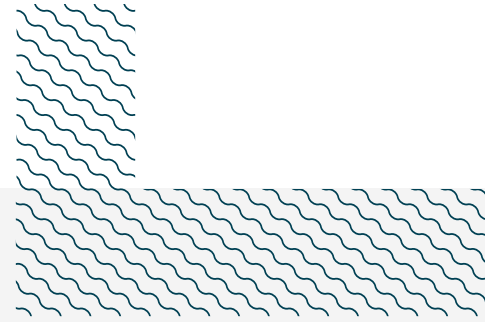
One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Vulnerable Blacktip Reef Shark (Simpfendorfer et al. 2020).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Kloulklubed is an important reproductive area for one shark species.

Between 2014–2024, small Blacktip Reef Sharks (estimated visually <50 cm total length [TL]) were seen regularly and predictably during high tide year-round by resort staff within the area (T Harel-Bornovski pers. comm. 2024). Blacktip Reef Shark size-at-birth is 30–52 cm TL (Ebert et al. 2021), indicating those are neonates or young-of-the-year (YOY). Additionally, records from social media channels show aggregations of up to 15 small Blacktip Reef Sharks (visually estimated ~25–40 cm TL) (e.g., February 2019; November 2020; December 2021). This is the southernmost area in Palau where the early life stages of Blacktip Reef Sharks are regularly seen (T Harel-Bornovski pers. obs. 2024), with the other two areas located in the northeast of Palau.

The habitat in this area is consistent with the ecological preference of young Blacktip Reef Sharks which inhabit turbid shallow nearshore environments encompassing mangroves, seagrass beds, and mudflats (George et al. 2019).



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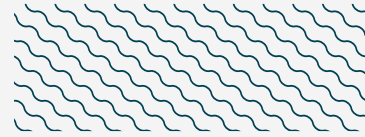
Suggested citation

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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							

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

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

Ebert DA, Dando M, Fowler S. 2021. *Sharks of the world: A complete guide.* Princeton: Princeton University Press.

George LW, Martins AP, Heupel MR, Simpfendorfer CA. 2019. Fine-scale movements of juvenile blacktip reef sharks *Carcharhinus melanopterus* in a shallow nearshore nursery. *Marine Ecology Progress Series* 623: 85–97. <https://doi.org/10.3354/meps13010>

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>