

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

## PANTAR STRAIT ISRA

### Asia Region

### SUMMARY

Pantar Strait is located in the eastern Lesser Sunda Islands, between Alor and Pantar islands, Indonesia. The area includes five small islands and is characterised by the presence of coral reefs, an extended continental shelf, and a small part of the slope. Pantar Strait overlaps with one marine protected area and with Perairan Gunung Muna Key Biodiversity Area. Within this area there are: **threatened species** (e.g., Scalloped Hammerhead *Sphyrna lewini*); **reproductive areas** (Pelagic Thresher *Alopias pelagicus*); and **undefined aggregations** (Scalloped Hammerhead).

### CRITERIA

**Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas; Sub-criterion C5 - Undefined Aggregations**

— INDONESIA —

— 0-40 metres —

— 543 km<sup>2</sup> —





## DESCRIPTION OF HABITAT

Pantar Strait is located in the eastern Lesser Sunda Islands, in the East Nusa Tenggara province of Indonesia. The Flores Sea lies to the north and the Savu Sea to the South (Wirasatriya et al. 2023). The strait is located between Alor and Pantar islands, the two largest islands of the Alor Archipelago, and includes five small islands: Buaya, Ternate, Pura, Kepa, and Tereweng. The area is characterised by the presence of coral reefs near the coasts of the islands, by an extended continental shelf, and by a small part of the slope in the southern and northern borders.

The area is influenced by the Indonesian Throughflow Current. This current flows through tight island clusters creating a strong and intricate current pattern with eddies and counter-eddies that concentrate nutrients. During the southeast (June–August) and northwest (December–February) monsoon seasons, coastal upwellings are common in the area (Wirasatriya et al. 2020) which interact with strong tidal dynamics and the bathymetry of the area to produce high tidal mixing (Wirasatriya et al. 2023).

The area overlaps with the Perairan Gunung Muna Key Biodiversity Area (KBA 2024) and with the Suaka Alam Perairan Selat Pantar Dan Perairan Sekitarnya Marine Nature Reserve.

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 40 m based on the depth range of the Qualifying Species in 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 Critically Endangered Scalloped Hammerhead (Rigby et al. 2019a) and the Endangered Pelagic Thresher (Rigby et al. 2019b).

### SUB-CRITERION C1 – REPRODUCTIVE AREAS

Pantar Strait is an important reproductive area for one shark species.

Local ecological knowledge indicates that fishers from Kalabahi Bay who operate in Pantar Strait, have been catching Pelagic Threshers for local consumption for >50 years (Shidqi et al. 2019). Currently, there are 20 active fishers, and according to them, Pelagic Threshers are caught from February to September, with a peak between March–May. Fisheries landings monitoring since 2018 showed that of 330 Pelagic Threshers sampled, 80% were pregnant females measuring between 270–330 cm total length (TL) with a large proportion containing near-term embryos (Shidqi et al. 2019). Neonates were not recorded in the area which is likely due to fishing gear selectivity. Areas with a high density of pregnant females with near-term embryos are little known for this species, highlighting the reproductive importance of the area.

### SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Pantar Strait is an important area for undefined aggregations of one shark species.

Pantar Strait is an up-and-coming dive destination in Indonesia. Since the early 2000s, dive operators in the area have reported the presence of Scalloped Hammerhead aggregations in March–May and

in October–December at depths of 30–40 m. Since 2016, reports of these aggregations on social media have become increasingly common, and since 2019, observation efforts by multiple dive operators in the area have improved (AB Sianipar et al. unpubl. data 2023). The increase in diving operations around these aggregations has allowed them to confirm the regular presence of Scalloped Hammerheads in the area and their seasonality. Aggregations are usually composed of 3–50 individuals (AB Sianipar et al. unpubl. data 2023), and there are indications of the presence of a cleaning station for Scalloped Hammerheads in the area. More information is needed to confirm the nature and function of these aggregations.

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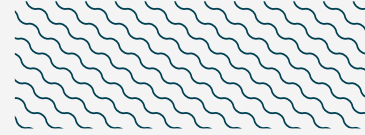
### **Suggested citation**

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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
<b>SHARKS</b>												
<i>Alopias pelagicus</i>	Pelagic Thresher	EN	0-584	X		X						
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR	0-1,043	X						X		

## REFERENCES



**Key Biodiversity Areas (KBA). 2024.** Key Biodiversity Areas factsheet: Perairan Gunung Muna. Available at: <https://www.keybiodiversityareas.org/site/factsheet/44973> Accessed February 2024.

**Rigby CL, Dulvy NK, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, et al. 2019a.** *Sphyrna lewini*. *The IUCN Red List of Threatened Species* 2019: e.T39385A2918526.

**Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, Marshall A, et al. 2019b.** *Alopias pelagicus*. *The IUCN Red List of Threatened Species* 2019: e.T161597A68607857. <https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T161597A68607857.en>

**Shidqi R, Sari DR, Capriati A, Kurniasih EM. 2019.** Population risk and alternative fisheries management of thresher sharks in Indonesia. Alor: Thresher Shark Project Indonesia-Conservation Leadership Programme. Available at: <https://doi.org/10.13140/RG.2.2.24744.39689/1> Accessed February 2024.

**Wirasatriya A, Setiawan JD, Sugianto DN, Rosyadi IA, Haryadi H, Winarso G, Setiawan RY, Susanto RD. 2020.** Ekman dynamics variability along the southern coast of Java revealed by satellite data. *International Journal of Remote Sensing* 41: 8475-8496. <https://doi.org/10.1080/01431161.2020.1797215>

**Wirasatriya A, Susanto RD, Setiawan JD, Agustiadi T, Iskandar I, Ismanto A, Nugraha AL, Puryajati AD, Kunarso, Purwandana A, et al. 2023.** Extreme upwelling events in the areas of the Alor Kecil, Alor Island, Indonesia. *Oceanography* 36: 28-37. <https://doi.org/10.5670/oceanog.2023.107>