

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

## LANGANN & LAMPI ISRA

### Asia Region

### SUMMARY

Langann & Lampi is located on the west coast of the Malay Peninsula in southern Myanmar. The area consists of numerous islands within the Myeik Archipelago, characterised by coral reefs, seagrasses, and mangrove forests. The area overlaps the Lampi Marine National Park Area, the Langann Locally Managed Marine Area, two Key Biodiversity Areas, and the Lampi Marine National Park Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** (e.g., Blacktip Reef Shark *Carcharhinus melanopterus*); **reproductive areas** (e.g., Scalloped Hammerhead *Sphyrna lewini*); and **undefined aggregations** (Bentfin Devil Ray *Mobula thurstoni*).

### CRITERIA

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

## MYANMAR

0-40 metres

4,564.02 km<sup>2</sup>





## DESCRIPTION OF HABITAT

Langann & Lampi is located along the west coast of the Malay Peninsula in the Tanintharyi state of southern Myanmar. The area encompasses numerous islands, including Langann and Lampi islands. It is characterised by extensive coral reefs, mangrove forests, and seagrass beds (Howard 2018).

Located in the Bay of Bengal, this area is influenced by the boreal summer monsoon (May–October), which sees higher precipitation levels throughout the region (Xing et al. 2016).

This area overlaps with the Lampi Marine National Park Area, the Langann Locally Managed Marine Area, the Lampi Island Key Biodiversity Area (KBA) and Myeik Archipelago KBA (KBA 2024a, 2024b), and the Lampi Marine National Park Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 40 m based on the bathymetry of the area.

## ISRA CRITERIA

### CRITERION A – VULNERABILITY

Three 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. 2019), the Endangered Bentfin Devil Ray (Marshall et al. 2022), and the Vulnerable Blacktip Reef Shark (Simpfendorfer et al. 2020).

### SUB-CRITERION C<sub>1</sub> – REPRODUCTIVE AREAS

Langann & Lampi is an important reproductive area for two shark species.

Between May 2022 and January 2023, young-of-the-year (YOY) Blacktip Reef Sharks measuring <60 cm total length (TL; Arunrugstichai et al. 2018), including some with open umbilical scars, were recorded as incidental catch during gillnet surveys within the area (T Ko Gyi pers. obs. 2023). The size-at-birth for this species is 30–52 cm TL (Ebert et al. 2021). Local Ecological Knowledge (LEK) from the communities in the Lampi Marine Park indicates that YOY Blacktip Reef Sharks are present year-round on the reefs in the marine park, particularly around Kanza Gyi Island in groups of up to ~20 individuals (H Aung pers. comms 2024). Between 2004–2015, landings of Blacktip Reef Sharks were also recorded from inshore fishing boats at sites across Langann & Lampi indicating the importance of this area for this species (Khine et al. 2020).

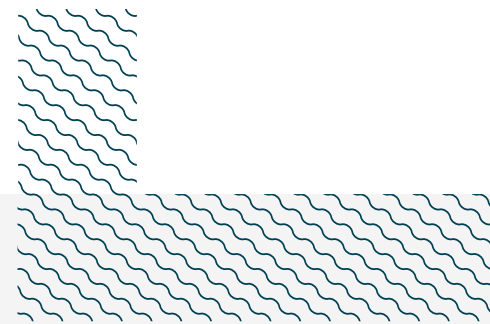
Between May 2022 and January 2023, neonate and YOY Scalloped Hammerheads were recorded during dedicated landing site surveys conducted within the area (T Ko Gyi pers. obs. 2023). During the surveys, 31 neonate (35–50 cm TL, with freshly healed umbilical scars; Arunrugstichai et al. 2018) were caught by five fishers around Wa Ale island, Kanza Gyi island, and Lampi main island (T Ko Gyi pers. obs. 2023). Additionally, >20 Scalloped Hammerhead pups were recorded each month on an annual basis during the monsoon season (May–July) as incidental catch in drift gillnet by inshore commercial fishers. Size-at-birth for this species is 31–57 cm TL (Ebert et al. 2021). LEK indicates that this area has regular incidental catch of hammerhead sharks year-round by gillnet fishers within and around the Lampi Marine Park (T Ko Gyi pers. obs. 2023). Monthly landing site surveys conducted between December 2018 and December 2019 in markets in the area also recorded Scalloped

Hammerheads (Khine et al. 2020). Neonates and aborted embryos represented 88% of landings and measured 20–60 cm TL.

## SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Langann & Lampi is an important area for undefined aggregations of one ray species.

Bentfin Devil Rays have been the subject of a targeted fishery and incidental capture in the Langann & Lampi area for at least 15 years (T Ko Gyi pers. obs. 2024). Since 2021, targeted devil ray fisheries have increased in the area, with an average of 50 Bentfin Devil Rays per day observed at one of the major processing suburbs in the area (T Ko Gyi pers. obs. 2024). Bentfin Devil Rays comprise the majority of devil rays recorded in the area, at roughly 80% of records. LEK from the Moken and island fishing communities report that devil rays aggregate to feed on the surface in the area between Pearl Island, Langann Island group, and Lampi Island every year in December and January (T Ko Gyi pers. obs. 2024), suggesting a seasonal cycle in this aggregation. Targeted devil ray fisheries have been operating around the islands in the area since 2007 (Howard et al. 2015), supporting the regular and predictable nature of these aggregations. Further information is required to determine the nature and function of these aggregations.



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### Suggested citation

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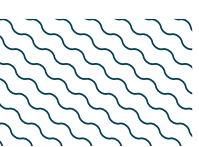
## QUALIFYING SPECIES

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>Carcharhinus melanopterus</i>	Blacktip Reef Shark	VU	0-75	X		X							
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR	0-1,043	X		X							
<b>RAYS</b>													
<i>Mobula thurstoni</i>	Bentfin Devil Ray	EN	0-100	X							X		

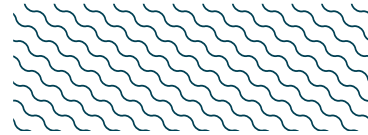
## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
<b>SHARKS</b>		
<i>Carcharhinus amblyrhynchoides</i>	Graceful Shark	VU
<i>Carcharhinus brevipinna</i>	Spinner Shark	NT
<i>Carcharhinus sorrah</i>	Spottail Shark	NT
<i>Chiloscyllium hasselti</i>	Indonesian Bambooshark	EN
<i>Chiloscyllium punctatum</i>	Grey Carpetshark	NT
<i>Galeocerdo cuvier</i>	Tiger Shark	NT
<i>Rhincodon typus</i>	Whale Shark	EN
<i>Scoliodon laticaudus</i>	Spadenose Shark	NT
<i>Stegostoma tigrinum</i>	Indo-Pacific Leopard Shark	EN
<i>Triacnodon obesus</i>	Whitetip Reef Shark	VU
<b>RAYS</b>		
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN
<i>Himantura leoparda</i>	Leopard Whipray	EN
<i>Himantura uarnak</i>	Coach Whipray	EN
<i>Mobula mobular</i>	Spinetail Devil Ray	EN
<i>Pateobatis jenkinsii</i>	Jenkins' Whipray	VU
<i>Rhina ancylostomus</i>	Bowmouth Guitarfish	CR
<i>Taeniura lymma</i>	Bluespotted Lagoon Ray	VU
<i>Taeniurops meyeri</i>	Blotched Fantail Ray	VU
<i>Urogymnus granulatus</i>	Mangrove Whipray	EN

*IUCN Red List of Threatened Species Categories are available by searching species names at [www.iucnredlist.org](http://www.iucnredlist.org). Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.*



## SUPPORTING INFORMATION



There are additional indications that Langann & Lampi is an important area for aggregations of Spinetail Devil Rays. This species has been the subject of a targeted fishery and captured incidentally in the Langann & Lampi area for at least 15 years (T Ko Gyi pers. obs. 2024). For example, the opportunistic catch of five Spinetail Devil Rays by purse seine fishers was observed near Aung Myanmar village in July 2023 (T Ko Gyi pers. obs. 2023). Spinetail Devil Rays comprise 20% of devil rays landed in the area, however more information is required to confirm the importance of this area for this species.

Furthermore, Moken fishers have reported sightings of sawfishes *Pristis* spp. while fishing around Pearl Island, in the area near Paines Reef and Ngar Kyunn during the monsoon season (June-September) in 2023. These were identified using identification cards, however additional information is needed to understand how this area might be important for this highly threatened species.



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