

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

DAWEI ISRA

Asia Region

SUMMARY

Dawei is in the northern part of Tanintharyi State, off the south coast of Myanmar. It consists of two island groups: MaungMaGan Islands and Moscos Islands. The waters around the islands are characterised by mangrove forests and coral reefs. The area overlaps with the Moscos Kyun Key Biodiversity Area. Within this area there are: **threatened species** and **reproductive areas** (Bull Shark Carcharhinus leucas).

- – MYANMAR – – 0-25 metres – – 670.66 km²

CRITERIA

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





DESCRIPTION OF HABITAT

Dawei is located off the northern coast of Tanintharyi State in southern Myanmar. The area consists of two chains of island groups known as MaungMaGan Islands and Moscos Islands. The islands are surrounded by coral reefs and mangrove forests (Beffasti & Galanti 2011). The area is located in the Bay of Bengal and is influenced by the boreal summer monsoon (May-October), which sees higher precipitation levels throughout the region (Xing et al. 2016).

The area overlaps with the Moscos Kyun Key Biodiversity Area (KBA 2024).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (O m) to 25 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species. The Bull Shark is assessed as Vulnerable (Rigby et al. 2021).

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Dawei is an important reproductive area for one shark species.

Fisheries monitoring surveys were conducted at two landing sites (Thabawseik and MaungMaGan) in Dawei during December 2018, May 2019, and December 2019 (Khine et al. 2020). Fishers indicated several locations within the area where Bull Sharks were caught (Laung Lon Islands, Bok Island, MaungMaGan Islands, and Nghet-Theik Island). Bull Shark landings were higher at the start of the summer monsoon season (May-October). A total of 45 individuals were recorded during the study measuring 45-120 cm total length (TL). Thirty-one of these individuals fell within the size range of 45-95 cm TL, indicating neonate or young-of-the-year (YOY). Size-at-birth for this species is 56-81 cm TL (Ebert et al. 2021), with YOY are considered between 69-98 cm TL (Heupel & Simpfendorfer 2011).

Local ecological knowledge (LEK) of fishers indicates the landings of this shark species in Dawei have been recorded over at least ten years, with neonates and YOY being regularly incidentally captured (Howard et al. 2015). Training workshops conducted for shark landing surveys in February and May of 2015 also recorded neonate and YOY Bull Sharks (Howard et al. 2015).

The importance of this area for reproduction in Bull Sharks is supported by the relatively low number of observations of neonates and YOY at landings sites in other parts of Tanintharyi and southern Rakhine (T Ko Gyi pers. obs. 2024). Larger individuals (>100 cm TL) are also observed in northern Rakhine (T Ko Gyi pers. obs. 2024), but Dawei is the only area in Myanmar with regular sightings of neonates/YOY.



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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 leucas | Bull Shark | VU | 0-256 | Х | | Х | | | | | | |



SUPPORTING SPECIES

| Scientific Name | Common Name | IUCN Red List Category | | | | | | |
|---------------------------|-------------------------|---------------------------|--|--|--|--|--|--|
| SHARKS | | | | | | | | |
| Carcharhinus melanopterus | Blacktip Reef Shark | VU | | | | | | |
| Carcharhinus sorrah | Spottail Shark | NT | | | | | | |
| Chiloscyllium hasselti | Indonesian Bambooshark | EN | | | | | | |
| Chiloscyllium punctatum | Grey Carpetshark | NT | | | | | | |
| Galeocerdo cuvier | Tiger Shark | NT | | | | | | |
| Rhincodon typus | Whale Shark | EN | | | | | | |
| Scoliodon macrorhynchos | Pacific Spadenose Shark | NT | | | | | | |
| Sphyrna lewini | Scalloped Hammerhead | CR | | | | | | |
| RAYS | | | | | | | | |
| Aetobatus ocellatus | Spotted Eagle Ray | EN | | | | | | |
| Mobula birostris | Oceanic Manta Ray | EN | | | | | | |
| Mobula mobular | Spinetail Devil Ray | EN | | | | | | |
| Mobula thurstoni | Bentfin Devil Ray | EN | | | | | | |

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.



SUPPORTING INFORMATION



There are additional indications that this area is important for the reproductive purposes of the Scalloped Hammerhead. Thirty-six individuals were recorded during December 2018, May 2019, and December 2019 surveys (size classes between 45–165 cm TL; Kline et al. 2020). Of these individuals, four were considered neonates (11%; 45–55 cm TL), and six were considered YOY (17%; 55–85 cm TL). Size-at-birth for this species is 31–57 cm TL (Ebert et al. 2021). In addition, LEK of fishers indicates landings of this shark species in Dawei have been recorded over at least ten years, with neonates and YOY being regularly incidentally captured (Howard et al. 2015). More information is required to confirm the importance of this area for this species reproduction.

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