

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

## SI AMIL ISRA

### Asia Region

## SUMMARY

Si Amil is located ~30 km off the town of Semporna in southeast Sabah, Malaysia. This small reef is close to the shelf edge and is influenced by monsoonal climate. The habitats in this area are characterised by shallow coral reef tops, sloping reef walls, pinnacles, and pelagic waters. Si Amil overlaps with the Sipadan Islands Key Biodiversity Area and lies within the Sulu-Sulawesi Marine Ecoregion Ecologically or Biologically Significant Marine Area. Within this area, there are: **threatened species** (e.g., Spotted Eagle Ray *Aetobatus ocellatus*) and **undefined aggregations** (e.g., Shorthorned Pygmy Devil Ray *Mobula kuhlii*).

**MALAYSIA**

**0-50 metres**

**2.5 km<sup>2</sup>**

## CRITERIA

**Criterion A - Vulnerability; Sub-criterion C5 - Undefined Aggregations**





## DESCRIPTION OF HABITAT

Si Amil lies ~30 km from Semporna in the southeast corner of Sabah, Malaysia. This small area comprises a single reef that surrounds Si Amil Island and is characterised by shallow reef tops, sloping reef walls, pinnacles, and pelagic waters. It is situated <1 km from the shelf edge and is exposed towards the east. On that exposed eastern side of the area lies the 'Pinnacle' dive site, which are two pinnacles that rise from a gently sloping plateau at ~50 m depth to 30 m (McCann et al. 2021). The area is influenced by the monsoon seasons, with the southwest monsoon in May-September and the northeast monsoon in November-March (Abdul-Hadi et al. 2013).

Si Amil is part of the Semporna Priority Conservation Area (PCA), overlaps with the Sipadan Islands Key Biodiversity Area (KBA 2024), and lies within the Sulu-Sulawesi Marine Ecoregion Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024).

This Important Shark and Ray Area is benthopelagic and extends from inshore and surface waters (0 m) to 50 m based on the bathymetry of the area and the global depth range of the Qualifying Species.

## ISRA CRITERIA

### CRITERION A - VULNERABILITY

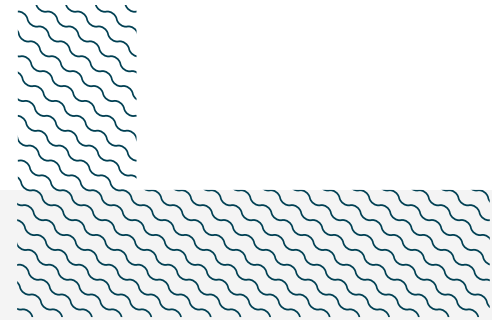
Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Endangered Shorthorned Pygmy Devil Ray (Rigby et al. 2022) and Spotted Eagle Ray (Finucci et al. Submitted).

### SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Si Amil is an important area for undefined aggregations of two ray species.

Shorthorned Pygmy Devil Rays are seen in schools of up to 100 individuals in this area (McCann et al. 2021). In a study undertaken from May 2014 to July 2015 with 332 dives in the area, Shorthorned Pygmy Devil Rays were seen 122 times and 48 aggregations of 10 or more individuals were recorded (mean school size = 34.3 individuals) (McCann et al. 2021). Aggregations were seen in all surveyed months except in October, with a seasonal peak from June to September. Since that study, dive guides have continued to report schools of Shorthorned Pygmy Devil Rays in Si Amil (A Fatta pers. obs. 2023). The species is seen across the area, but most are observed at the 'Pinnacle' dive site. Additionally, fishers on nearby Denawan Island reported catching several hundred individuals of Shorthorned Pygmy Devil Rays on occasion (A Fatta pers. obs. 2023). It is possible that the area is important for their reproduction, with courtship sometimes reported and a female with mating scars recorded (C & D McCann pers. obs. 2023), but further surveys are needed to understand the nature and function of these aggregations.

The same 2014-2015 surveys recorded 24 aggregations of Spotted Eagle Rays in Si Amil (C & D McCann unpubl. data 2024). Aggregations were recorded in all months except in March. Between 3-32 individuals were seen in aggregations, with a mean of 7.6 individuals. Dive guides continue to report aggregations of eagle rays (A Fatta pers. obs. 2023). The reason for these aggregations is not yet understood.



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### **Suggested citation**

**IUCN SSC Shark Specialist Group. 2024.** Si Amil ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

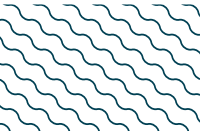
## QUALIFYING SPECIES

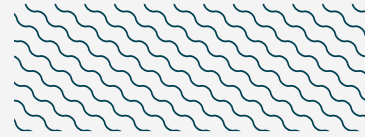
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
RAYS												
<i>Aetobatus ocellatus</i>	Spotted Eagle Ray	EN	0-40	X						X		
<i>Mobula kuhlii</i>	Shorthorned Pygmy Devil Ray	EN	0-50	X						X		

## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Taeniura lymma</i>	Bluespotted Lagoon Ray	LC

*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.*





## REFERENCES

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**Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Jabado RW, Liu KM, Marshall A, Romanov E. 2022.** *Mobula kuhlii* (amended version of 2020 assessment). *The IUCN Red List of Threatened Species* 2022: e.T161439A214405747. <https://dx.doi.org/10.2305/IUCN.UK.2022-1.RLTS.T161439A214405747.en>