

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

PUNNAKUDA ISRA

Asia Region

SUMMARY

Punnakuda encompasses a deepsea canyon off Punnakuda Bay on the east coast of Sri Lanka. The canyon is relatively close to the coast with the area reaching 100 m depth ~5 km offshore of Punnakuda Point. The canyon is surrounded by the typically narrow continental shelf that surrounds Sri Lanka. Within this area there are: **threatened species** and **range-restricted species** (Indian Swellshark Cephaloscyllium silasi).



CRITERIA

Criterion A - Vulnerability; Criterion B - Range Restricted



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DESCRIPTION OF HABITAT

Punnakuda encompasses a deepsea canyon off Punnakuda Bay on the east coast of Sri Lanka. The canyon is relatively close to the coast with the area reaching 100 m depth ~5 km offshore of Punnakuda Point. This allows access to deepwater habitats closer to shore than occurs elsewhere in the region. The canyon is surrounded by the typically narrow continental shelf that surrounds Sri Lanka (Katupotha 2016).

The area receives most of its rainfall in the northeast monsoon season (October-February), and otherwise it is hot and dry with temperatures rarely falling below 29°C.

This Important Shark and Ray Area is benthopelagic and subsurface and is delineated from 100-500 m based on the global depth range of the Qualifying Species and 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 occur in the area. The Indian Swellshark is assessed as Critically Endangered (Dulvy et al. 2020).

CRITERION B - RANGE RESTRICTED

The area holds the regular presence of Indian Swellshark as a resident range-restricted species. During surveys commencing in 2018 of the deepsea fishery operating in the area, fishers were asked to opportunistically retain incidentally caught species that would otherwise have been discarded so that an understanding of the shark and ray fauna of the canyon could be obtained (Blue Resources Trust unpubl. data 2024). Indian Swellsharks were brought to shore on several occasions, with up to five individuals in a single day from one boat (Blue Resources Trust unpubl. data 2024). Fishers reported that they occasionally catch this species, but that it is always discarded due to its low value. This is the only location in Sri Lanka where the species has been recorded with any regularity with the deep canyon representing suitable habitat for the species. Outside of Sri Lanka, it is only regularly reported off southern continental India (Akhilesh et al. 2014). It has also more recently been recorded from the Andaman Islands (Kumar et al. 2016). The Indian Swellshark occurs in the Arabian Sea Large Ecosystem (LME) and the Bay of Bengal LME.



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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	C1	C2	C3	C4	C5	Dı	D2
SHARKS												
Cephaloscyllium silasi	Indian Swellshark	CR	100-500	Х	Х							



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category						
SHARKS								
Centrophorus granulosus	Gulper Shark	EN						
Echinorhinus brucus	Bramble Shark	EN						
lago omanensis	Bigeye Houndshark	LC						
Mustelus mosis	Arabian Smoothhound	NT						
Planonasus indicus	Eastern Dwarf False Catshark	DD						
Pseudocarcharias kamoharai	Crocodile Shark	LC						

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 Punnakuda may be an important area for undefined aggregations of Gulper Sharks. The area has unusually high numbers of Gulper Sharks which are not seen elsewhere in Sri Lanka, suggesting the canyon is an aggregation site. This species is targeted by a small-scale fishery (usually 1-2 boats) for their livers and are landed at the landing site associated with the area. These boats operate during the calm season (March-May) and monitoring of daily landings have recorded 3-136 (median = 46) Gulper Sharks per day (Blue Resources Trust unpubl. data 2024). Such landings are not recorded at any other landing site across the country (Blue Resources Trust unpubl. data 2024). Further information is required to understand the importance of the area of the species.

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