

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

LIGHTHOUSE BEACH ISRA

Asia Region

SUMMARY

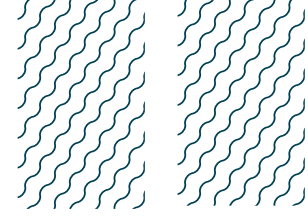
Lighthouse Beach is a shallow coastal area at the southern tip of Little Andaman Island in the Andaman and Nicobar Islands, India. The area has a gentle slope, providing shallow, primarily sandy, habitat extending over 300 m (in some areas) from shore which is sheltered by a fringing reef. The area also contains dense seagrass meadows. Lighthouse Beach overlaps with Little Andaman Key Biodiversity Area. Within the area there are: **threatened species** and **reproductive areas** (Giant Guitarfish *Glaucostegus typus*).

CRITERIA

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

—	—
INDIA	—
—	—
0-5 metres	—
—	—
2.43 km²	—
—	—





DESCRIPTION OF HABITAT

Lighthouse Beach is situated at the southern tip of Little Andaman Island in the Andaman and Nicobar Islands of India. This archipelago is located ~1,360 km east of mainland India, situated between the Bay of Bengal and the Andaman Sea (Nazareth et al. 2022). It is part of an undersea mountain range that extends from the west coast of Myanmar to the northwest coast of Indonesia. The Andaman Islands comprise over 325 islands, of which 21 are inhabited (Census of India 2011).

These oceanic islands have a limited continental shelf covering ~16,000 km², and almost no continental slope. They are also part of the Indo-Myanmar and Sundaland biodiversity hotspot (Roberts et al. 2002). They are not only diverse in the biodiversity they support, but also the types of ecosystems and habitats that exist along the coast, with mangroves, coral reefs, seagrass meadows, algal beds, and habitats like creeks, inlets, bays, estuaries, and lagoons. This diversity has led to the islands being highly productive (Ramachandran 2000).

Lighthouse Beach is situated at the southern tip of Little Andaman Island and consists of a ~6 km long, primarily sandy, beach with a gentle slope, providing a large shallow area which extends out by 300 m at some points, and is sheltered within a fringing reef. The area also contains dense seagrass meadows.

The island receives seven months of rain a year due to the southwest and northeast monsoons which together last from May to December (Patankar 2019).

Lighthouse Beach overlaps with Little Andaman Key Biodiversity Area (KBA 2024).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 5 m based on the depth range of Qualifying Species in the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species. The Giant Guitarfish is assessed as Critically Endangered (Kyne et al. 2019).

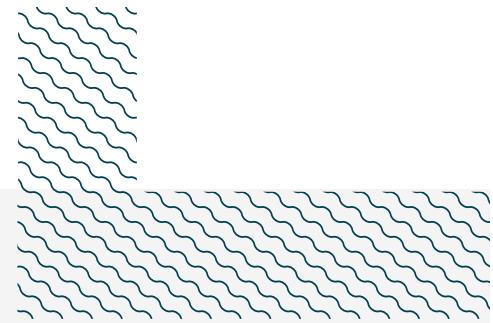
SUB-CRITERION C1 - REPRODUCTIVE AREAS

Lighthouse Beach is an important reproductive area for one ray species.

Local ecological knowledge (LEK) collected between September 2019 and June 2020 from coastal stakeholders (including fishers, coastal residents, dive operators, forest department staff) of the Andaman Islands revealed that early life-stage Giant Guitarfish are utilising shallow coastal waters in this area (Nazareth et al. 2022). Five respondents had observed early life-stage Giant Guitarfish swimming in shallow water along the coast at Lighthouse Beach. They report sightings dating back to 2010 with two of the respondents reporting to have observed Giant Guitarfish daily.

In addition to the LEK, multiple visits to the area between 2016 and 2019 recorded early life-stage Giant Guitarfish each time swimming in shallow waters. During a pilot survey, 45 individuals were recorded along a 4,000 m stretch of coastline (E Nazareth et al. unpubl. data 2016-2019). The individuals observed were estimated to be 30-45 cm total length (TL) and were classified as

neonates and young-of-the-year based on size-at-birth reported in the literature (35–40 cm TL; Last et al. 2016; Freeman 2019; Gaskins et al. 2020). Lighthouse Beach provides shallow inshore habitat consistent with habitat reported for early life-stage Giant Guitarfish elsewhere (e.g., Freeman 2019; Gaskins et al. 2020).



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Evan Nazareth (Nature Conservation Foundation), Rohan Arthur (Nature Conservation Foundation), Elrika D'Souza (Nature Conservation Foundation), and Peter M Kyne (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 9 - Asia workshop for their contributions to this process.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

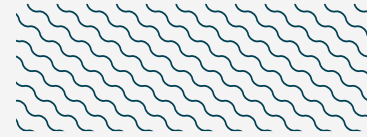
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Suggested citation

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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
RAYS												
<i>Glaucostegus typus</i>	Giant Guitarfish	CR	0-100	X		X						



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