

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

SIRIK-LENGEH ISRA

Western Indian Ocean Region

SUMMARY

Sirik-Lengeh comprises continental shelf waters of the Strait of Hormuz in the Iranian Persian Gulf. The area is characterised by various benthic habitats, including coral reefs (surrounding several islands in the area), and rocky and sandy substrates. The area includes Farur Island Protected Area and overlaps with the Qeshm Island and Adjacent Marine and Coastal Areas Ecologically or Biologically Significant Marine Area. Within the area there are **threatened species**; **range-restricted species**; and **reproductive areas** (Tentacled Butterfly Ray *Gymnura tentaculata*).

CRITERIA

Criterion A - Vulnerability; Criterion B - Range Restricted; Sub-criterion C1 - Reproductive Areas

—	—
IRAN	—
—	—
0-105 metres	—
—	—
6,442.11 km²	—
—	—





DESCRIPTION OF HABITAT

Sirik-Lengeh comprises continental shelf waters of the Strait of Hormuz in Iranian waters of the Persian Gulf. The area is situated from Bandar-e-Hasineh village in the west to Sirik City in the east. It includes mainland coastal zones at the eastern and western ends of the area boundaries, insular habitats of southern Qeshm Island (the Persian Gulf's largest island with an area of ~1,480 km²), and surrounding smaller islands (e.g., Hengam, Farur).

The area is relatively shallow and is influenced by the high variations in environmental conditions that are characteristic of the Persian Gulf including high salinity (45 ppt) and variable sea surface temperatures, ranging ~11°C in winter to ~36°C in summer (Sheppard et al. 2010; Bargahi et al. 2020). The area includes various benthic habitats such as coral reefs (surrounding several islands in the area), and rocky and sandy substrates. Hard sandy and rocky substrates are distributed mainly in the western part of the area (i.e., from western Qeshm Island to the western border), the southern coastline of Qeshm Island, and surrounding smaller islands in the area.

There is low water exchange between the Persian Gulf and Gulf of Oman. The salinity in the Persian Gulf is higher than in the Indian Ocean due to high levels of evaporation, with currents supplying lower salinity waters across the Strait of Hormuz (Sheppard et al. 2010; Pous et al. 2015). The less saline and nutrient-rich incoming currents that enter the Persian Gulf via the Strait of Hormuz influence the coral reefs (Shokri et al. 2005).

The area includes Farur Island Protected Area (~28 km²) (DOE 2023) and overlaps with the Qeshm Island and Adjacent Marine and Coastal Areas Ecologically or Biologically Significant Marine Area (CBD 2023).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 105 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 Tentacled Butterfly Ray is assessed as Critically Endangered (Jabado et al. 2021).

CRITERION B – RANGE RESTRICTED

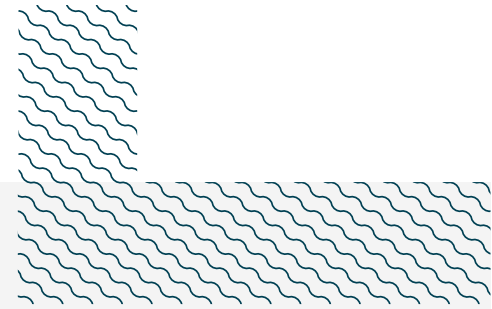
The area holds the regular presence of Tentacled Butterfly Ray as a resident range-restricted species.

Data from research and demersal shrimp trawl surveys were used to calculate Catch-Per-Unit-Area (CPUA; number of individuals/km²; Pauly 1980) for Tentacled Butterfly Ray. Mean CPUA for the species was 60 individuals/km² (range = 5–201). The species had a higher abundance inside the area than outside the area (mean CPUA = 16 individuals/km²; range = 2–36). Beyond its Iranian Persian Gulf range, there are no contemporary records of the species from any other location (Rezaie-Atagholipour et al. 2023). Tentacled Butterfly Ray is restricted to the Arabian Sea Large Marine Ecosystem (LME).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Sirik-Lengeh is important for the reproduction of one ray species. Data on reproductive activities are derived from research and demersal shrimp trawl surveys undertaken during 2019–2020 which incidentally captured Tentacled Butterfly Ray (M Rezaie-Atagholipour unpubl. data 2019–2020).

The CPUA of Tentacled Butterfly Ray from the trawl surveys was examined across Iranian waters to identify the area representing core occurrence and evidence of reproductive activities. Based on the size of near-term embryos and free-swimming individuals (Rezaie-Atagholipour et al. 2023), Tentacled Butterfly Rays of <25 cm DW were assumed to be in early life stages (i.e., neonates and young-of-the-year). Individuals of this size class comprised 34% of all 327 Tentacled Butterfly Rays examined from the area.



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QUALIFYING SPECIES

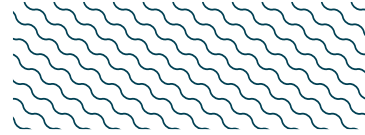
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
RAYS													
<i>Gymnura tentaculata</i>	Tentacled Butterfly Ray	CR	0-87	X	X	X							

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Carcharhinus brevipinna</i>	Spinner Shark	VU
<i>Carcharhinus dussumieri</i>	Whitecheek Shark	EN
<i>Carcharhinus leucas</i>	Bull Shark	VU
<i>Carcharhinus macloti</i>	Hardnose Shark	NT
<i>Carcharhinus melanopterus</i>	Blacktip Reef Shark	VU
<i>Carcharhinus sorrah</i>	Spottail Shark	NT
<i>Chaenogaleus macrostoma</i>	Hooktooth Shark	VU
<i>Chiloscyllium arabicum</i>	Arabian Carpetshark	NT
<i>Mustelus mosis</i>	Arabian Smoothhound	NT
<i>Paragaleus longicaudatus</i>	Slender Weasel Shark	NE
<i>Rhincodon typus</i>	Whale Shark	EN
<i>Rhizoprionodon acutus</i>	Milk Shark	VU
<i>Rhizoprionodon oligolinx</i>	Grey Sharpnose Shark	NT
<i>Stegostoma tigrinum</i>	Indo-Pacific Leopard Shark	EN
<i>Sphyrna lewini</i>	Scalloped Hammerhead	CR
RAYS		
<i>Aetobatus flagellum</i>	Longhead Eagle Ray	EN
<i>Aetomylaeus milvus</i>	Ocellate Eagle Ray	EN
<i>Aetomylaeus wafickii</i>	Wafic's Eagle Ray	NE
<i>Brevitrygon walga</i>	Scaly Whipray	NT
<i>Gymnura poecilura</i>	Longtail Butterfly Ray	VU
<i>Himantura leoparda</i>	Leopard Whipray	EN
<i>Maculabatis randalli</i>	Arabian Banded Whipray	LC
<i>Pastinachus ater</i>	Broad Cowtail Ray	VU
<i>Pastinachus sephen</i>	Cowtail Ray	NT
<i>Pateobatis fai</i>	Pink Whipray	VU
<i>Rhina ancylostomus</i>	Bowmouth Guitarfish	CR
<i>Rhinobatos punctifer</i>	Spotted Guitarfish	NT
<i>Rhinoptera jayakari</i>	Oman Cownose Ray	EN
<i>Torpedo sinuspersici</i>	Gulf Torpedo	DD

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient; NE, Not Evaluated.

SUPPORTING INFORMATION



There are additional indications that the area may be important for undefined aggregations of one shark species. Each year from March to April, Blacktip Reef Sharks have been reported aggregating in groups of up to >30 individuals in depths as shallow as <1 m depth around some of the small islands in the area (HR Bargahi & M Mohammadi pers. obs. 2013-2023). These aggregations have been documented and photographed at Kish Island just to the east of the area, but further supporting documentation is required of these aggregations.



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