

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

CINQUE-RUTLAND ISRA

Asia Region

SUMMARY

Cinque-Rutland is situated south of Rutland Island in the Andaman and Nicobar Islands of India. The area is bound by Rutland Island to the north and Cinque Island to the east. The area encompasses primarily shallow habitat with diverse substrates, including sand and areas of rocky substrate, rubble, and coral reef. Within this area there are: **threatened species** (e.g., Whitespotted Whipray *Maculabatis gerrardi*); and the area sustains a **high diversity** of sharks (33 species).

CRITERIA

Criterion A - Vulnerability; Sub-criterion D2 - Diversity

— —
INDIA — —
 — —
0-300 metres
 — —
210.04 km²
 — —





DESCRIPTION OF HABITAT

Cinque-Rutland sits in the Andaman Sea south of Rutland Island in the Andaman and Nicobar Islands of India. Rutland Island sits off southern South Andaman Island. The area is bound by Rutland Island to the north and Cinque Island to the east. It encompasses primarily shallow habitat with substrates that are diverse and include sand, and areas of rocky substrate, rubble, and coral reef.

The coastal circulation within the Andaman Sea and around the islands is primarily driven by equatorial forcing, with local winds forcing a weak sea-level signal (Chatterjee et al. 2017). The Andaman Sea has a complex oceanographic environment characterised by strong monsoonal patterns, currents, and upwelling. The climate is tropical, with two distinct seasons, the southwest monsoon and the northeast monsoon.

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 300 m based on the bathymetry of the area.

ISRA CRITERIA

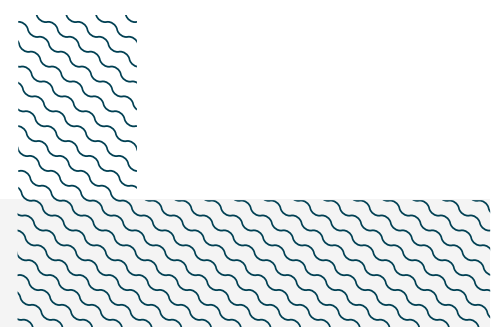
CRITERION A – VULNERABILITY

Thirty-three Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. Threatened sharks comprise one Critically Endangered species, two Endangered species, and 10 Vulnerable species; threatened rays comprise two Critically Endangered species, 14 Endangered species, and four Vulnerable species (IUCN 2024).

SUB-CRITERION D₂ – DIVERSITY

Cinque-Rutland sustains a high diversity of Qualifying Species (33 species). This exceeds the regional diversity threshold for Asia (31 species).

Cinque-Rutland is one of the most important fishing grounds for benthic trawlers, gillnets, and demersal longliners operating from Junglighat, South Andaman Islands (Bineesh et al. 2020; Tyabji et al. 2020, 2022; Nashad unpubl. data 2023). Sharks and rays are a regular incidental catch of these fisheries operating in Cinque-Rutland and landed at Junglighat or Wandoor. The Qualifying Species represent the most regularly encountered species (Bineesh et al. 2020; Tyabji et al. 2020, 2022; Nashad unpubl. data 2023). This includes, for example, dedicated fish landing surveys between January 2017 and May 2018 for sharks, and October 2017 and May 2018 for rays (Tyabji et al. 2020, 2022).



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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 |
| SHARKS | | | | | | | | | | | | |
| <i>Carcharhinus albimarginatus</i> | Silvertip Shark | VU | 1-800 | X | | | | | | | | X |
| <i>Carcharhinus amblyrhynchos</i> | Grey Reef Shark | EN | 0-280 | X | | | | | | | | |
| <i>Carcharhinus amboinensis</i> | Pigeye Shark | VU | 0-60 | X | | | | | | | | |
| <i>Carcharhinus brevipinna</i> | Spinner Shark | VU | 0-200 | X | | | | | | | | |
| <i>Carcharhinus dussumieri</i> | Whitecheek Shark | EN | 0-100 | X | | | | | | | | |
| <i>Carcharhinus leucas</i> | Bull Shark | VU | 0-256 | X | | | | | | | | |
| <i>Carcharhinus limbatus</i> | Blacktip Shark | VU | 0-140 | X | | | | | | | | |
| <i>Hemigaleus microstoma</i> | Sicklefin Weasel Shark | VU | 1-170 | X | | | | | | | | |
| <i>Nebrius ferrugineus</i> | Tawny Nurse Shark | VU | 0-70 | X | | | | | | | | |
| <i>Paragaleus longicaudatus</i> | Slender Weasel Shark | VU | 1-18 | X | | | | | | | | |
| <i>Rhizoprionodon acutus</i> | Milk Shark | VU | 1-200 | X | | | | | | | | |
| <i>Triagenodon obesus</i> | Whitetip Reef Shark | VU | 0-330 | X | | | | | | | | |
| <i>Sphyrna lewini</i> | Scalloped Hammerhead | CR | 0-1,043 | X | | | | | | | | |

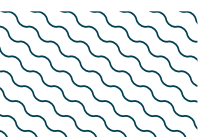
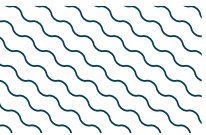
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|-----------------------------|-----------------------------|------------------------|------------------------|--------------------------------|---|----|----|----|----|----|----|----|--|
| | | | | A | B | C1 | C2 | C3 | C4 | C5 | D1 | D2 | |
| RAYS | | | | | | | | | | | | | |
| <i>Aetobatus ocellatus</i> | Spotted Eagle Ray | EN | 0-40 | X | | | | | | | | | |
| <i>Glaucostegus typus</i> | Giant Guitarfish | CR | 0-100 | X | | | | | | | | | |
| <i>Gymnura zonura</i> | Zonetail Butterfly Ray | EN | 0-40 | X | | | | | | | | | |
| <i>Himantura leoparda</i> | Leopard Whipray | EN | 1-70 | X | | | | | | | | | |
| <i>Himantura uarnak</i> | Coach Whipray | EN | 0-50 | X | | | | | | | | | |
| <i>Himantura undulata</i> | Honeycomb Whipray | EN | 0-70 | X | | | | | | | | | |
| <i>Maculabatis gerrardi</i> | Whitespotted Whipray | EN | 0-60 | X | | | | | | | | | |
| <i>Mobula alfredi</i> | Reef Manta Ray | VU | 0-711 | X | | | | | | | | | |
| <i>Mobula kuhlii</i> | Shorthorned Pygmy Devil Ray | EN | 0-50 | X | | | | | | | | | |
| <i>Mobula mobular</i> | Spinetail Devil Ray | EN | 0-1,112 | X | | | | | | | | | |
| <i>Mobula tarapacana</i> | Sicklefin Devil Ray | EN | 0-1,896 | X | | | | | | | | | |
| <i>Mobula thurstoni</i> | Bentfin Devil Ray | EN | 0-100 | X | | | | | | | | | |
| <i>Pastinachus ater</i> | Broad Cowtail Ray | VU | 0-60 | X | | | | | | | | | |
| <i>Pateobatis fai</i> | Pink Whipray | VU | 0-200 | X | | | | | | | | | |
| <i>Pateobatis jenkinsii</i> | Jenkins' Whipray | EN | 0-90 | X | | | | | | | | | |
| <i>Rhinoptera jayakari</i> | Oman Cownose Ray | EN | 0-50 | X | | | | | | | | | |

| 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 |
| RAYS | | | | | | | | | | | |
| <i>Rhynchobatus australiae</i> | Bottlenose Wedgefish | CR | 0-60 | X | | | | | | | |
| <i>Taeniurops meyeri</i> | Blotched Fantail Ray | VU | 0-439 | X | | | | | | | |
| <i>Urogymnus asperrimus</i> | Porcupine Ray | EN | 1-30 | X | | | | | | | |
| <i>Urogymnus granulatus</i> | Mangrove Whipray | EN | 0-85 | X | | | | | | | |

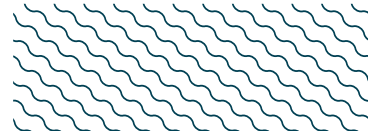
SUPPORTING SPECIES

| Scientific Name | Common Name | IUCN Red List Category |
|-----------------------------------|------------------------|------------------------|
| SHARKS | | |
| <i>Hemipristis elongata</i> | Snaggletooth Shark | EN |
| <i>Loxodon macrorhinus</i> | Sliteye Shark | NT |
| RAYS | | |
| <i>Aetobatus flagellum</i> | Longhead Eagle Ray | EN |
| <i>Aetomylaeus vespertilio</i> | Ornate Eagle Ray | CR |
| <i>Gymnura poecilura</i> | Longtail Butterfly Ray | VU |
| <i>Neotrygon caeruleopunctata</i> | Bluespotted Maskray | LC |
| <i>Rhinoptera javanica</i> | Javan Cownose Ray | EN |
| <i>Rhina ancylostomus</i> | Bowmouth Guitarfish | CR |

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.

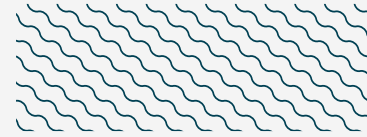


SUPPORTING INFORMATION



There are indications that Cinque-Rutland may be an important area for reproduction of one ray species.

Whitespotted Whipray are caught incidentally by shrimp trawlers and the target ray fishery that operates off the South Andaman Islands (Kumar 2019; Bineesh KK unpubl. data 2023). Landing site monitoring at Junglighat between February 2014 and December 2017 recorded 582 individuals with a size range of 16–110 cm disc width (DW). A total of 22 individuals were pregnant females (size range: 76–110 cm DW) with fully developed embryos (Bineesh KK unpubl. data 2023), suggesting Cinque-Rutland may be an important pupping area for this species.



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