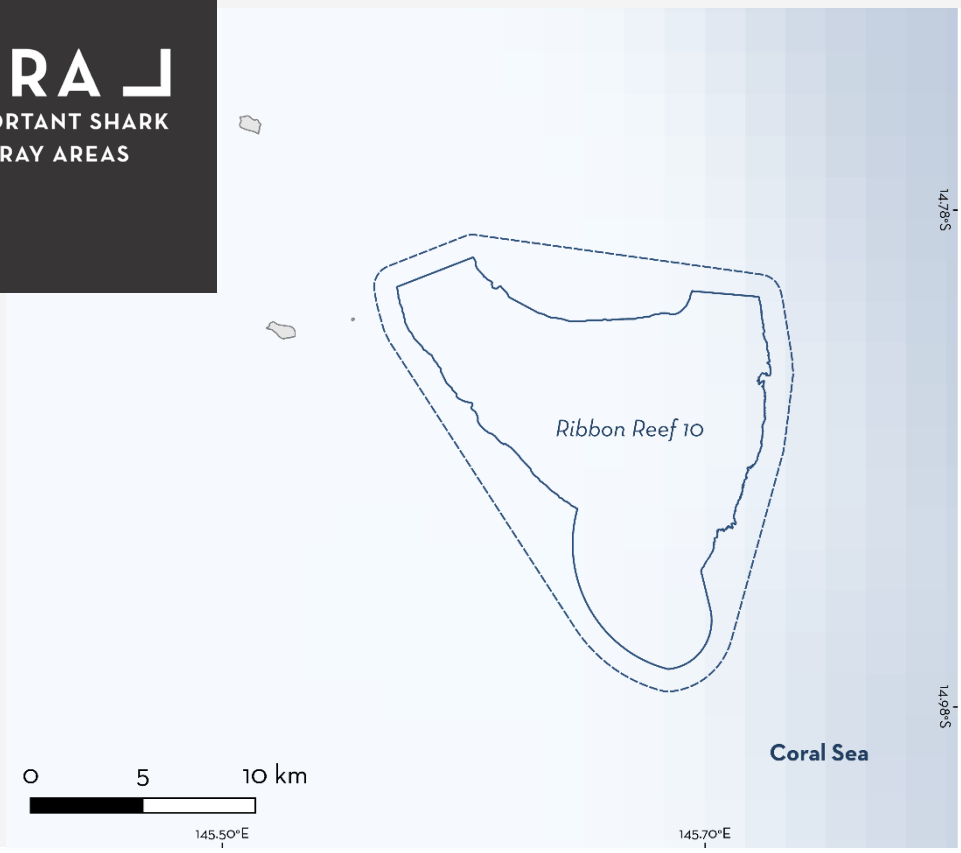
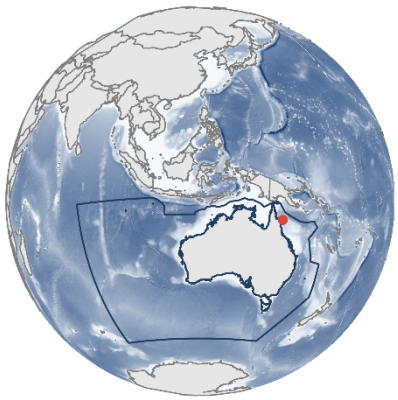
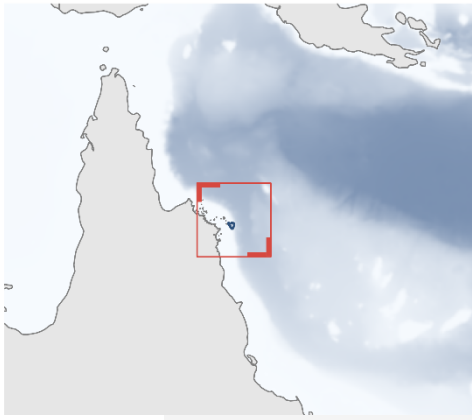
ISRA
IMPORTANT SHARK AND RAY AREAS







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

RIBBON REEF 10 ISRA

Australia and Southeast Indian Ocean Region

AUSTRALIA

0–40 metres

157.8 km²

SUMMARY

Ribbon Reef 10 is located on the northern Great Barrier Reef, Queensland, Australia. The area encompasses Ribbon No 10 Reef and No 10 Patches. It is characterised by coral reefs, pinnacles with vertical walls, coral bommies, and part of the reef lagoon. The area is influenced by prevailing southeasterly trade winds. It overlaps with the Great Barrier Reef Marine Park. Within this area there are: **threatened species** (e.g., Reef Manta Ray *Mobula alfredi*); and **undefined aggregations** (e.g., Longhorned Pygmy Devil Ray *Mobula eregoodoo*).

CRITERIA

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

DESCRIPTION OF HABITAT

Ribbon Reef 10 is located on the northern Great Barrier Reef, Queensland, Australia. The area encompasses the reefs Ribbon No 10 Reef and No 10 Patches (No 1, 2, and 3) that are ~35 km offshore, along the outer edge of the Great Barrier Reef on the edge of the continental shelf. The area is characterised by coral reefs, pinnacles with vertical walls, coral bommies, and part of the reef lagoon. The most abundant corals are *Pocillopora* spp., *Montipora* spp., branching *Acropora* spp., and massive *Porites* spp. colonies (P Cogollos pers. obs. 2025).

The area is influenced by prevailing southeasterly trade winds, which drive a north-westward longshore current and it functions as a semi-enclosed sea, with limited hydrodynamic connectivity to the broader Great Barrier Reef further south (Wolanski & Lambrechts 2020). During the austral summer monsoon (November–February), productivity is enhanced in the area due to upwelling events in the outer shelf (Wolanski & Hammer 1988).

Ribbon Reef 10 overlaps with the Great Barrier Reef Marine Park - Marine National Park Zone (UNEP-WCMC & IUCN 2025).

This Important Shark and Ray Area is pelagic and is delineated from inshore and surface waters (0 m) to 40 m based on the bathymetry of the area.

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 Longhorned Pygmy Devil Ray (Rigby et al. 2022) and the Vulnerable Reef Manta Ray (Marshall et al. 2022).

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Ribbon Reef 10 is an important area for undefined aggregations of two ray species.

The area encompasses several cleaning stations for Reef Manta Rays around coral reef formations. Cleaning behaviour occurs at coral bommies, where Klein's Butterfly Fish *Chaetodon kleinii* and Moon Wrasse *Thalassoma lunare* are commonly observed interacting with Reef Manta Rays (P Cogollos unpubl. data 2025). Between 2021–2025, Reef Manta Rays were observed on 33% of the dives in this area between November and February (in at least eight dives during these months) by dive guides collecting opportunistic data using snorkel and SCUBA throughout the year (an average of six dives per month in the area; P Cogollos unpubl. data 2025). Cleaning behaviour was observed in ~80% of the sightings with a maximum of seven individuals recorded at the same time (P Cogollos unpubl. data 2025). These aggregations were observed in ~50% of observations with groups of between 3–7 individuals during the years of 2021, 2022, 2023, 2024, and 2025 (P Cogollos unpubl. data 2025). Between 2004–2025, 56 sighting records were collected, comprising 52 individuals identified via photo-identification (Project Manta unpubl. data 2025). Aggregations confirmed using photo-identification were recorded on five occasions, ranging in size between 3–7 individuals (in 2004 [n=1], 2016 [n=1], 2023 [n=2], and 2024 [n=1]) (Project Manta unpubl. data 2025). This area encompasses the largest number of Reef Manta Rays recorded in the Far North Queensland region.

Between 2021–2025, Longhorned Pygmy Devil Rays were observed year-round on 100% (~36 dives per year) of the dives at the Lighthouse dive site within the area by dive guides collecting opportunistic data during snorkel and SCUBA dives throughout the year (an average of 1–2 dives per month in the area, except June–July when up to eight dives are conducted; P Cogollos unpubl. data 2025). All sighting records were of aggregations with groups ranging between 3–15 individuals, with more frequent aggregations of 4–5 individuals, comprised mainly of females (P Cogollos unpubl. data 2025). Unlike other pygmy devil ray species, Longhorned Pygmy Devil Rays typically form small groups, with the largest recorded aggregation worldwide consisting of 30 individuals (Palacios et al. 2023). Further information is required to confirm the nature and function of these aggregations.

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Pablo Cogollos (Mike Ball Dive Expeditions), Asia O Armstrong (Project Manta; IUCN SSC Shark Specialist Group – ISRA Project), and Marta D Palacios (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region 08 – Australia and Southeast Indian Ocean workshop for their contributions to this process.

We acknowledge the Traditional Owners of Country throughout Australia and recognise the continuing connection to land, waters, and culture. We pay our respects to Elders past, present, and emerging.

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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												
Mobula alfredi	Reef Manta Ray	VU	0–711	X						X		
Mobula eregoodoo	Longhorned Pygmy Devil Ray	EN	0–50	X						X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus amblyrhynchos	Grey Reef Shark	EN
Triaenodon obesus	Whitetip Reef Shark	VU
RAYS		
Aetobatus ocellatus	Spotted Eagle Ray	EN

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.

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