

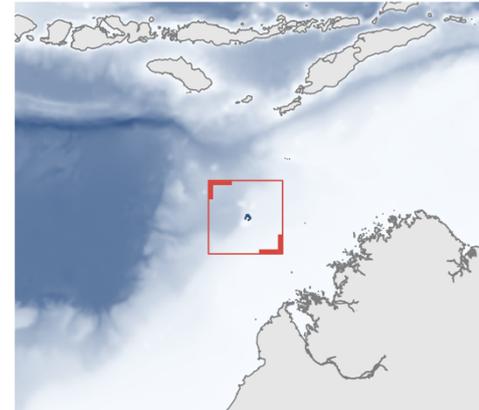
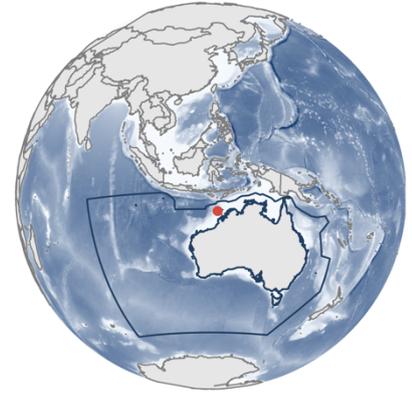
Indian Ocean

121.80°E

121.95°E

13.85°S

14.00°S



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

SCOTT REEF ISRA

Australia and Southeast Indian Ocean Region

SUMMARY

Scott Reef is located off Western Australia, Australia. This area includes the reef passage and adjacent outer reef-edge habitat along the northeastern side of North Scott Reef atoll. It is situated on the edge of the northwest continental shelf in the Timor Sea. It is influenced by strong tidal currents. Within this area there are: **threatened species** and **undefined aggregations** (Grey Reef Shark *Carcharhinus amblyrhynchos*).

CRITERIA

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

— AUSTRALIA —

— 0-100 metres —

— 10.33 km² —





DESCRIPTION OF HABITAT

Scott Reef is located off Western Australia, Australia. This area encompasses the reef passage and adjacent outer reef-edge habitat along the northeastern side of North Scott Reef. North Scott Reef is one of three atolls (alongside South Scott and Seringapatam) that comprise the broader Scott Reef system, ~480 km north of Broome. These remote oceanic atolls sit on the edge of the northwest continental shelf in the Timor Sea, characterised by warm, oligotrophic waters. Each atoll rises steeply to a narrow rim enclosing clear, shallow lagoons with patch reefs, sand mounds, and bommies; the outer flanks fall quickly into mesophotic slopes.

Water masses are largely sourced from the Indonesian Throughflow and the Eastern Indian Ocean's South Equatorial Current (Suthers & Waite 2007). Rainfall is typically restricted to the relatively short austral summer monsoonal period between December-May. Tidal exchange strongly influences the reef passage, generating fast bidirectional currents that flush water between the lagoon and the open ocean, creating dynamic water exchanges that link lagoonal and fore-reef habitats.

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 100 m based on the depth range of Qualifying Species in the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Grey Reef Shark (Simpfendorfer et al. 2020).

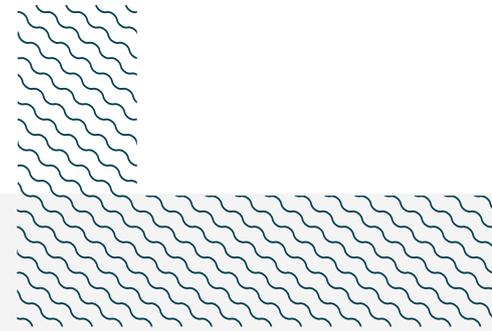
SUB-CRITERION C5 - UNDEFINED AGGREGATION

Scott Reef is important for undefined aggregations of one shark species.

In 2011, 10 Grey Reef Sharks (three males, seven females; mean \pm standard deviation: 131.1 \pm 30.7 cm total length; TL) were tagged with acoustic transmitters in the Scott Reef system, including the three atolls (Ferreira et al. 2025). Size-at-birth is 45-64 cm total length (TL), and the size-at-maturity is 130-145 cm TL for males and 120-142 cm TL for females (Ebert et al. 2021). Therefore, most tagged individuals were large juveniles or adults. An array of 17 acoustic receivers covering the three atolls, within and outside this area, were used to monitor shark movements, with a receiver range of 300 m radius, between November 2011 to April 2016. The receivers located in this area (n = 4), particularly those in the reef passage, detected the most tagged individuals indicating that this area had the highest use. Movement networks showed that the reef passage was highly linked with the northeast side of North Scott Reef along the reef edge, inside this area. A total of ~240,000 detections were recorded from the 10 sharks. Aggregations were defined as three or more tagged individuals detected on a receiver within five minutes. Aggregations in consecutive 5-minute bins were grouped into an event, and its duration was calculated. A total of 1,488 five-minute bins with aggregations of 3-5 sharks were recorded, grouped into 852 events, with a duration of 0.2-77.0 min. Aggregations were recorded on 298 of 1,023 days (29%), and were all located at the reef passage primarily between June-July, and during the day. Additionally, between July-October 2016, 59 Baited Remote Underwater Video Stations (BRUVS) were deployed in North Scott Reef. Grey Reef Sharks were

recorded in 10 (17%) deployments, with one aggregation of 21 individuals recorded along the reef edge in this area (FinPrint unpubl. data 2016).

Synthesised data from Global Archive and The Fish Collective for Baited Remote Underwater Video Station (BRUVS) surveys were extracted after quality control was undertaken using CheckEM (Gibbons et al. in press; GlobalArchive 2025; The Fish Collective 2025). In 2016, the body sizes of 24 Grey Reef Sharks were recorded by stereo-BRUVS along the reef edge, in this area, measuring between 46-69 cm TL (GlobalArchive 2025; The Fish Collective 2025). These individuals were neonates or young-of-the-year. It is therefore possible that early life-stage individuals, in addition to large juveniles and adults, aggregate in this area. Reef passages have been identified as super-habitats for Grey Reef Sharks, supporting feeding, resting, mating, and parturition (Papastamatiou et al. 2021, 2025). Further information is required to determine the nature and function of these aggregations.



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Luciana Ferreira (Australian Institute of Marine Science), Christoph A Rohner (IUCN SSC Shark Specialist Group - ISRA Project), and Adriana Gonzalez Pestana (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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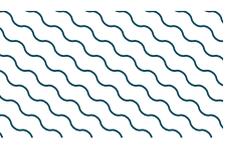
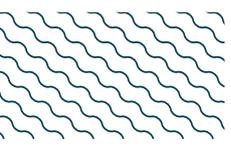
QUALIFYING SPECIES

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	
SHARKS													
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN	0-280	X							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Triaenodon obesus</i>	Whitetip Reef Shark	VU

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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