







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

DAEDALUS REEF ISRA

Western Indian Ocean Region

SUMMARY

Daedalus Reef is an offshore reef platform and seamount found ~90 km off the Red Sea coast of Egypt. The area is characterised by flats and reef walls beside deep and open waters. This area is a marine protectorate. Within this area there are: **threatened species** (e.g., Scalloped Hammerhead *Sphyrna lewini*) and **undefined aggregations** (e.g., Oceanic Whitetip Shark Carcharhinus longimanus).

CRITERIA

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

EGYPT

0-500 metres

45.40 km²

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sharkrayareas.org

DESCRIPTION OF HABITAT

Daedalus Reef is an isolated reef platform surrounded by deep water, located in the Egyptian Red Sea, ~90 km from the coast. It is characterised by habitats that include shallow flats, reef walls, and open waters (E Bojanowski pers. obs. 2023). The reef walls drop to a depth of 20 m before sloping gently to 40 m. These are dominated by hard and soft corals whereas the slope is sandier with soft corals (Dive Zone 2023). The area is surrounded by open waters to a depth of 500 m. Daedalus Reef is exposed to strong currents, particularly on the western side of the reef (Red Sea Diving 2023a).

Daedalus Reef is a marine protectorate - a preserve of the Egyptian Environmental Affairs Agency.

This Important Shark and Ray Area is pelagic and extends from surface waters (0 m) to 500 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

Two Qualifying Species within the area are considered threatened with extinction according to the IUCN Red List of Threatened SpeciesTM. The Oceanic Whitetip Shark and Scalloped Hammerhead are assessed as Critically Endangered (Rigby et al. 2019a, 2019b).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Daedalus Reef is an important area for undefined aggregations of two shark species.

Oceanic Whitetip Shark aggregations of up to 23 individuals have been reported around Daedalus Reef based on visual census by divers (E Bojanowski unpubl. data 2023). The mean aggregation size consisted of 3.62 individuals. The high abundance of Oceanic Whitetip Sharks in this area has been documented for more than 15 years (2003–2019) with 330 individuals (185 males, 116 females, and 29 where sex was not determined) identified at Daedalus Reef (E Bojanowski unpubl. data 2023). Oceanic Whitetip Sharks are mainly observed between October and November however, they can be seen in the area as early as May. This is based on 1,080 dives with seasonal differences in effort: high monthly effort from April to November, and low effort from December to March. Further information is required to determine the nature and function of these aggregations.

Scalloped Hammerheads are regularly observed in aggregations of up to 10 individuals around Daedalus Reef. Scalloped Hammerheads have been opportunistically observed by tourists and local tour operators at maximum depths of ~65 metres (E Bojanowski pers. obs. 2023). Scalloped Hammerheads predictably aggregate in this area during the boreal summer (Red Sea Diving 2023b). They are thought to move to deeper waters at night to feed. The predictability of these observations is demonstrated by the regularity and popularity of this dive site; it can be considered one of the few remaining locations in the Red Sea where aggregations of these species can be found (E Bojanowski unpubl data. 2023). Further information is required to define the nature and function of these aggregations.



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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	C ₁	C2	C ₃	C4	C5	Dı	D2
SHARKS												
Carcharhinus longimanus	Oceanic Whitetip Shark	CR	0-1,082	Х						Х		
Sphyrna lewini	Scalloped Hammerhead	CR	0-1,043	Χ						Χ		



Scientific Name	Common Name	IUCN Red List Category		
SHARKS				
Alopias pelagicus	Pelagic Thresher	VU		
Carcharhinus amblyrhynchos	Grey Reef Shark	EN		
Carcharhinus falciformis	Silky Shark	VU		
Rhincodon typus	Whale Shark	EN		
RAYS	1	<u> </u>		
Mobula birostris	Oceanic Manta 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.







Red Sea Diving. 2023a. Daedalus and Fury Shoals liveaboard trip. Available at https://www.redsea-diving.com/daedalus-and-fury-shoals-2 Accessed October 2023.

Red Sea Diving. 2023b. Marine Park dive sites: Daedalus Reef. Available at https://www.redsea-diving.com/daedalus-reef/ Accessed October 2023.

Rigby CL, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, Marshall A, et al. 2019a. Carcharhinus longimanus. The IUCN Red List of Threatened Species 2019: e.T39374A2911619. https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39374A2911619.en

Rigby CL, Dulvy NK, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM et al. 2019b. Sphyrna lewini. The IUCN Red List of Threatened Species 2019: e.T39385A2918526.