

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

EILAT NORTH BEACH ISRA

Western Indian Ocean Region

SUMMARY

Eilat North Beach is located in Israel, at the northern tip of the Gulf of Aqaba, Red Sea. It is characterised by a large coverage of seagrass meadows of *Halophila stipulacea* separated by patches of sand. Within this area there are: **threatened species** (e.g., Coach Whipray *Himantura uarnak*); **reproductive areas** (Spotted Eagle Ray Aetobatus ocellatus); and **undefined aggregations** (e.g., Cowtail Ray *Pastinachus sephen*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas; Sub-criterion C5 - Undefined Aggregations **ISRAEL**

0-30 metres

2.43 km²

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DESCRIPTION OF HABITAT

Eilat North Beach is located at the northern tip of the Gulf of Aqaba next to the city of Eilat, Israel. The Gulf of Aqaba is surrounded by an arid desert area, thus there is no continuous flow of nutrients to the gulf. These conditions contribute to the bay becoming an oligotrophic zone. The area has a moderate slope of 2.5 degrees with a fine grain size (Winters et al. 2017). Eilat North Beach is characterised by a large coverage of seagrass meadows of *Halophila stipulacea*, separated by patches of sand (Winters et al. 2017). It is does not have corals as are found in other parts of the Israeli Gulf of Aqaba (A Barash pers. obs.).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 30 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 Coach Whipray (Sherman et al. 2021) and Spotted Eagle Ray (Finucci et al. submitted).

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Eilat North Beach is an important reproductive area for one ray species.

For Spotted Eagle Ray, 322 individuals were identified from 178 citizen scientist reports between 2017 and 2023 (RedECO project unpubl. data 2023). From 44 observations, 85 individuals measured <55 cm disc-width (DW) and can be categorised as neonates/young-of-the-year (YOY) based on a size-at-birth of 33–36 cm DW (Last et al. 2016) and a reported size of 57 cm DW for YOY (Schluessel et al. 2010). The smallest individuals (25–30 DW) are regularly reported during September. From 126 observations, 235 individuals were categorised as juveniles (<120 cm DW) and 21 as subadults (up to 150 cm DW, n = 12 observations). Juveniles are seen from September to December in groups of up to six individuals, and between October and August in smaller groups (1–3 individuals). Adults were not frequently reported (n = 13 observations) and mostly in June and July. In five of those instances, the adults were observed swimming in pairs (RedECO project unpubl. data 2023).

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Eilat North Beach is important for undefined aggregations of two ray species.

For Coach Whipray, 166 individuals were identified from 199 citizen science reports between 2018 and 2023. Since 2015, 24 groups of adult Coach Whipray (3–20 individuals) have been documented at the western part of the area in the boreal summer months (July to October), feeding on large schools of bait fish. These aggregations have been seen in 2015, 2018, 2020, 2021, and 2022 and have become a tourist attraction. Gravid females were identified based on the observation of an extended abdomen and observed on five occasions during July and August. There were 10 observations of Coach Whiprays (n = 13) measuring between 30–80 cm DW which can be classed as immature, including YOY, based on a size-at-birth of 21–28 cm DW and a size-at-maturity of ~82 cm DW (Last et al. 2016). These observations were only during the boreal winter (October to April). Further

information is required to define the nature and function of these aggregations.

For Cowtail Ray, 106 individuals were identified from 75 citizen science reports made year-round between 2018 to 2023. Cowtail Rays were observed on 19 instances in groups of 2-6 individuals, between June to October. Both male and females are documented and observed together in July and August (Barash et al. 2018; MECO Project 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								
				A	В	C1	C2	C3	C4	C ₅	Dı	D2
RAYS			1									
Aetobatus ocellatus	Spotted Eagle Ray	EN	0-40	Х		Х						
Himantura uarnak	Coach Whipray	EN	0-50	Х						Х		
Pastinachus sephen	Cowtail Ray	NT	0-60							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category			
SHARKS					
Rhincodon typus	Whale Shark	EN			
RAYS					
Himantura leoparda	Leopard Whipray	EN			
Mobula birostris	Oceanic Manta Ray	EN			
Pateobatis fai	Pink Whipray	VU			
Rhinobatos punctifer	Spotted Guitarfish	NT			
Rhynchobatus australiae	Bottlenose Wedgefish	CR			
Rhynchobatus djiddensis	Whitespotted Wedgefish	CR			
Taeniura lymma	Bluespotted Lagoon Ray	LC			
Taeniurops meyeni	Blotched Fantail Ray	VU			
Urogymnus granulatus	Mangrove Whipray	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.



SUPPORTING INFORMATION

There are additional indications that Eilat North Beach is an important are for reproductive and aggregating purposes for two ray species.

The Whitespotted Wedgefish has been observed 10 times at Eilat North Beach since 2021. Half of these individuals measured up to 150 cm total length and were mostly observed during the boreal summer (July and August), suggesting they are juveniles (Kyne et al. 2019). This includes a young-of-the-year individual. Further information is required to determine the regularity and predictability of these observations in association with the importance of Eilat North Beach as a reproductive area for Whitespotted Wedgefish.

Eilat North Beach may be an important area for undefined aggregations of Pink Whipray. Pink Whiprays were reported from citizen scientists 14 times between 2018 and 2023, in groups of up to six individuals, between June to January (n = 24 individuals). Pink Whiprays were seen resting on the substrate in a heap and traveling as a shiver (Barash et al. 2018; MECO Project unpubl. data 2023). Further information is required to define the regularity and predictability of these aggregations.



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