

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

STRAIT OF HORMUZ CORRIDOR ISRA

Western Indian Ocean Region

SUMMARY

Strait of Hormuz Corridor spans part of the Arabian/Persian Gulf, across the Strait of Hormuz, and into the Gulf of Oman. The area is relatively shallow, characterised by high variations in environmental conditions. The area overlaps the with several Key Biodiversity Areas and three Ecologically or Biologically Significant Marine Areas. Within this area there are: **threatened species** and areas important for **movement** (Whale Shark *Rhincodon typus*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C4 - Movement

BAHRAIN
IRAN
OMAN
QATAR
SAUDI ARABIA
UNITED ARAB
EMIRATES

0-100 metres

91,217.43 km²

DESCRIPTION OF HABITAT

Strait of Hormuz Corridor spans part of the Arabian/Persian Gulf (hereafter referred to as 'The Gulf'), extending across the Strait of Hormuz and into the Gulf of Oman. The area is relatively shallow, characterised by high variations in environmental conditions (Sheppard et al. 2010). The maximum depth of the Gulf is 120 m near the Strait of Hormuz, with an average depth of 40 m (Pous et al. 2015). There is low water exchange between the Gulf and Gulf of Oman. The salinity in the Gulf is higher than in the Indian Ocean due to high levels of evaporation, with currents supplying lower salinity waters across the Strait of Hormuz (Pous et al. 2015). The area is home to numerous islands.

The area overlaps with three Key Biodiversity Areas (KBAs): Daymaniyat Islands (KBA 2023a), Faror Islands (KBA 2023b), and Musandam Islands (KBA 2023c). The area also overlaps with three Ecologically or Biologically Significant Marine Areas (EBSAs): Arabian Sea Oxygen Minimum Zone (CBD 2023a), Daymaniyat Islands (CBD 2023b), and Qeshm Island and Adjacent Marine and Coastal Areas (CBD 2023c).

This Important Shark and Ray Area is pelagic and is delineated from inshore and surface waters (O m) to 100 m based on the bathymetry of the area and the depth use of the Qualifying Species.

ISRA CRITERIA

CRITERION A - VULNERABILITY

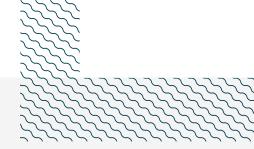
The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened SpeciesTM. The Whale Shark is assessed as Endangered (Pierce & Norman 2016).

SUB-CRITERION C4 - MOVEMENT AREAS

Strait of Hormuz Corridor is an important area for the movement of one shark species.

Whale Sharks use the Strait of Hormuz to move between the Gulf and the Gulf of Oman. This movement has been recorded regularly and predictably since 2011, beginning in the boreal summer months when annual feeding aggregations of up to 100 Whale Shark per km² occur in the Qatari waters of Al Shaheen (Robinson et al. 2013, 2016). In the winter months, Whale Sharks disperse into the Gulf of Oman via the Strait of Hormuz (Robinson et al. 2017).

Between 2011-2014, 59 Whale Sharks were satellite tagged in the Al Shaheen area, and nine individuals subsequently dispersed through the Strait of Hormuz into the Gulf of Oman (Robinson et al. 2017). Additionally, 422 individuals were photo-identified in the Gulf (81% of which were encountered in the Al Shaheen area; Robinson et al. 2016). Thirteen of these individuals were resighted in other locations across this body of water, including into and out of the Gulf through the Strait of Hormuz (Robinson et al. 2016).



Acknowledgments

David Robinson (Sundive Research; Qatar Whale Shark Project; Marine Megafauna Foundation), Mohammed Al-Jaidah (Qatar Whale Shark Project), Steffen Bach (Qatar Whale Shark Project), Simon Pierce (Qatar Whale Shark Project; Marine Megafauna Foundation), Christoph Rohner (Qatar Whale Shark Project; Marine Megafauna Foundation; IUCN SSC Shark Specialist Group - ISRA Project), Jenny Bortoluzzi (IUCN SSC Shark Specialist Group - ISRA Project), and Asia O. Armstrong (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2023 ISRA Region 7 - Western Indian Ocean workshop for their contributions to this process.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

Suggested citation

IUCN SSC Shark Specialist Group. 2023. Strait of Hormuz Corridor ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	C1	C2	C3	C4	C5	Dı	D2
SHARKS	,											
Rhincodon typus	Whale Shark	EN	0-1,928	Χ					Х			

REFERENCES

Convention Aon Biological Diversity (CBD). 2023a. Arabian Sea Oxygen Minimum Zone. Ecologically or Biologically Significant Areas (EBSAs). Available at https://chm.cbd.int/database/record?documentID=237787 Accessed September 2023.

Convention on Biological Diversity (CBD). 2023b. Daymaniyat Islands. Ecologically or Biologically Significant Areas (EBSAs). Available at https://chm.cbd.int/database/record?documentID=237824 Accessed September 2023.

Convention on Biological Diversity (CBD). 2023c. Qeshm Island and Adjacent Marine and Coastal Areas. Ecologically or Biologically Significant Areas (EBSAs). Available at https://chm.cbd.int/database/record?documentID=237780 Accessed September 2023.

Key Biodiversity Areas (KBA). 2023a. Key Biodiversity Areas factsheet: Daymaniyat Islands. Available at: http://www.keybiodiversityareas.org Accessed September 2023.

Key Biodiversity Areas (KBA). 2023b. Key Biodiversity Areas factsheet: Faror Islands. Available at: http://www.keybiodiversityareas.org Accessed September 2023.

Key Biodiversity Areas (KBA). 2023c. Key Biodiversity Areas factsheet: Musandam Islands. Available at: http://www.keybiodiversityareas.org Accessed September 2023.

Pierce SJ, Norman B. 2016. *Rhincodon typus. The IUCN Red List of Threatened Species* 2016: e.T19488A2365291. https://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T19488A2365291.en

Pous S, Lazure P, Carton X. 2015. A model of the general circulation in the Persian Gulf and in the Strait of Hormuz: Intraseasonal to interannual variability. Continental Shelf Research 94: 55–70. https://doi.org/10.1016/j.csr.2014.12.008

Robinson DP, Jaidah MY, Jabado RW, Lee-Brooks K, Nour El-Din NM, Malki AA, Elmeer K, McCormick PA, Henderson AC, Pierce SJ, et al. 2013. Whale sharks, *Rhincodon typus*, aggregate around offshore platforms in Qatari waters of the Arabian Gulf to feed on fish spawn. *PLoS One* 8(3): e58255. https://doi.org/10.1371/journal.pone.0058255

Robinson DP, Jaidah MY, Bach S, Lee K, Jabado RW, Rohner CA, March A, Caprodossi S, Henderson AC, Mair JM, et al. 2016. Population structure, abundance and movement of whale sharks in the Arabian Gulf and the Gulf of Oman. *PLoS One* 11(6): e0158593. https://doi.org/10.1371/journal.pone.0158593

Robinson DP, Jaidah MY, Bach SS, Rohner CA, Jabado RW, Ormond R, Pierce SJ. 2017. Some like it hot: repeat migration and residency of whale sharks within an extreme natural environment. *PLoS One* 12(9): e0185360. https://doi.org/10.1371/journal.pone.0185360

Sheppard C, Al-Husiani M, Al-Jamali F, Al-Yamani F, Baldwin R, Bishop J, Benzoni F, Dutrieux F, Dulvy NK, Durvasula SRV et al. 2010. The Gulf: A young sea in decline. *Marine Pollution Bulletin* 60: 13–38. http://dx.doi.org/10.1016/j.marpolbul.2009.10.017