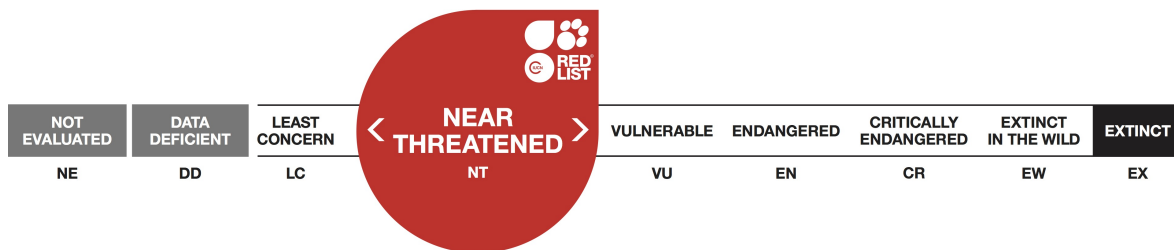


## *Rhinobatos punctifer*, Spotted Guitarfish

Assessment by: Ebert, D.A., Khan, M., Ali, M., Akhilesh, K.V. & Jabado, R.



View on [www.iucnredlist.org](http://www.iucnredlist.org)

**Citation:** Ebert, D.A., Khan, M., Ali, M., Akhilesh, K.V. & Jabado, R. 2017. *Rhinobatos punctifer*. *The IUCN Red List of Threatened Species 2017*: e.T161447A109904426.

<http://dx.doi.org/10.2305/IUCN.UK.2017-2.RLTS.T161447A109904426.en>

**Copyright:** © 2017 International Union for Conservation of Nature and Natural Resources

*Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.*

*Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).*

*The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).*

*If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.*

## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Rhinopristiformes	Rhinobatidae

**Taxon Name:** *Rhinobatos punctifer* Compagno & Randall, 1987

### Common Name(s):

- English: Spotted Guitarfish

### Taxonomic Source(s):

Compagno, L. J. V. and Randall, J. E. 1987. *Rhinobatos punctifer*, a new species of guitarfish (Rhinobatiformes: Rhinobatidae) from the Red Sea, with notes on the Red Sea batoid fauna. *Proceedings of the California Academy of Sciences* 44(14): 335-342.

## Assessment Information

**Red List Category & Criteria:** Near Threatened [ver 3.1](#)

**Year Published:** 2017

**Date Assessed:** February 8, 2017

### Justification:

The Spotted Guitarfish (*Rhinobatos punctifer*) occurs from the northern Red Sea to Sea of Oman and Arabian Gulf/Persian Gulf (hereafter referred to as the 'Gulf') to depths of 70 m. Due to previous misidentification with the Bengal Guitarfish (*Rhinobatis annandalei*), accurate information on the species is limited. Guitarfish are commonly caught in gillnet, trawl and line fisheries throughout the region, but specific threats to this species are poorly known due to the lack of information on distribution and fisheries data. Declines of several species of inshore guitarfish have been documented within the region and present levels of catches are of concern with fishing pressure increasing. Furthermore, the loss and modification of coastal habitats in the Gulf is a significant concern for inshore species such as this. A decline of <30% is suspected across its range due to current levels of fishing, which is ongoing and suspected to result in a future decline over the next three generation periods (2017-2032). The species is therefore assessed as Near Threatened (nearly meeting VU A2d+3d). Further investigation of this species is required to accurately define its range, biology, extent of catches in local fisheries and levels of declines. This assessment should be revisited as soon as this is available.

### Previously Published Red List Assessments

2009 – Data Deficient (DD)

<http://dx.doi.org/10.2305/IUCN.UK.2009-2.RLTS.T161447A5426288.en>

## Geographic Range

### Range Description:

The Spotted Guitarfish is endemic to the Arabian Seas region, occurring from the northern Red Sea,

including Sudan, Egypt and possibly Saudi Arabia, to the Sea of Oman and the Gulf (Bonfil and Abdallah 2004, Last *et al.* 2016). The species has been frequently misidentified in the literature, sometimes confused with the Bengal Guitarfish (*R. annandalei*). It has sometimes been referred to with the code 'RHY' before species placement was resolved (e.g., Henderson *et al.* 2004, Moore *et al.* 2012).

**Country Occurrence:**

**Native:** Bahrain; Djibouti; Egypt; Eritrea; Iran, Islamic Republic of; Kuwait; Oman; Pakistan; Qatar; Sudan; United Arab Emirates; Yemen

**FAO Marine Fishing Areas:**

**Native:** Indian Ocean - western

# Distribution Map

*Rhinobatos punctifer*

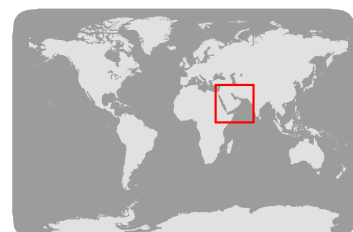


**Range**

Extant (resident)

**Compiled by:**

IUCN SSC Shark Specialist Group



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

Frequent misidentification with the Bengal Guitarfish in the past may have complicated inferences of relative population size of this species. A recent study has recorded landings in the UAE where it is one of the most commonly landed guitarfish (6.1% of rhinoprists) (R.W. Jabado unpub. data). It has also been reported as *R. cf. punctifer* (RHY) in Kuwait and Qatar where it represented less than 0.1% of elasmobranch landings and from Bahrain where it represented 1.38% of elasmobranch landings (Moore et al. 2012, Moore and Peirce 2013). In Oman, specimens were collected during market surveys in Muscat and taken on bottom-set research longlines, but is not considered a common species (Henderson et al. 2004).

To date there have been no dedicated surveys or population estimates for this species. Further research is needed in order to determine population size and trends in abundance. However, significant declines in wedgefish and guitarfish (including rhinobatids) landings have been documented in other parts of the region. For example, landings surveys in the UAE in recent years have demonstrated a rapid decline despite ongoing fishing effort of the Halavi Guitarfish (*Glaucostegus halavi*); 10-20 individuals were regularly observed during 2010-2012, while landings of 1-2 individuals were more common five years later (R.W. Jabado unpub. data). Furthermore, data available from Maharashtra, India, although outside the area of occurrence of this species, further demonstrate the declines in inshore batoid landings in an area where there are also high trawler numbers (5,613 trawlers in that state; CMFRI 2010). There, the annual average catch of rays landed by trawlers at New Ferry Wharf, Mumbai, between 1990-2004 was 502 t. During this period trawler hours doubled, and consequently, the catch rate declined by 60% from 0.65 kg/hr in 1990 to 0.24 kg/hr in 2004 (Raje and Zacharia 2009). Overall, a decline of <30% is suspected across the range of the Spotted Guitarfish due to current levels of fishing, with a future decline suspected over the next three generations.

**Current Population Trend:** Decreasing

## Habitat and Ecology (see Appendix for additional information)

This species inhabits the inshore continental shelf to depths of 70 m (Weigmann 2016). Reproduction is viviparous and the species reaches at least 90 cm total length (TL) (Weigmann 2016). Maximum litter size is up to at least seven and size at birth is ~25 cm TL (A.C. Henderson unpubl. data). Data from Oman indicates that females taken during autumn off Muscat were all mature at less than 77 cm TL while males matured at less than 71 cm TL (Henderson et al. 2004). Generation length is inferred to be 5 years from the Lesser Guitarfish (*Acroteriobatus annulatus*) from southern Africa (Compagno et al. 1989).

**Systems:** Marine

## Use and Trade

The meat of this species is sold fresh for human consumption at local markets across the region and also enters the international trade in dried form. In countries such as Pakistan, it is highly valued for its fins and high quality flesh.

## Threats (see Appendix for additional information)

The Spotted Guitarfish is taken in a variety of fisheries including demersal trawls, inshore set gillnets and set nets operating that are common throughout its range or through targeted fisheries in the northern Red Sea (Bonfil and Abdallah 2004). There is little information on catches of the Spotted Guitarfish as species-specific data is not always recorded, however, the high level of exploitation on its habitat is of concern. For example, in the Saudi Red Sea, the number of traditional vessels operating increased from about 3,100 to 10,000 between 1988 and 2006 (Bruckner *et al.* 2011). In Iran, there is increasing fishing effort with the number of fishermen going from 70,729 in 1993 to 109,601 in 2002 (Valinassab *et al.* 2006). In Pakistan waters, about 2,000 trawlers operate in shelf waters, targeting shrimp in shallow waters and fish in outer shelf waters (M. Khan pers. comm. 06/02/2017). The species is also taken as bycatch off Oman and the UAE but is usually only seen in small numbers at the markets (R.W. Jabado pers. obs.).

Marine habitats in the Gulf are experiencing high levels of disturbance and quickly deteriorating due to major impacts from development activities (including dredging and reclamation), desalination plants, industrial activities, habitat destruction through the removal of shallow productive areas and major shipping lanes (Sheppard *et al.* 2010) which is likely to impact this species. Little is known of this species' biology or habitat but, like other guitarfishes this species may be vulnerable due to similar life history characteristics that lead to low productivity. Their young may use coastal nursery grounds that are easily impacted by habitat degradation through pollution and coastal development.

## Conservation Actions (see Appendix for additional information)

Kuwait and Pakistan are the only countries across the range of this species with regulations specifically banning catches of rays. Kuwait bans the catches of all rays, while Pakistan protects all guitarfishes, wedgefishes and the Bowmouth Guitarfish and therefore has specific regulations protecting this species. The UAE, Qatar and Oman have banned trawling in their waters (since 1980, 1993 and 2011, respectively) while Iran, Kuwait and Saudi Arabia have seasonal trawl bans that might benefit the species. However, incidental catches occur in other fisheries (e.g., gillnetting). Finning has also been banned in the UAE, Oman, Iran, India and Yemen, yet trade surveys indicate that some trade in the fins and meat of this species still occurs.

Effective monitoring of fisheries is required, as is the effective implementation and management of marine protected areas. An education program on sustainable fishing and bycatch mitigation is needed for fishers.

## Credits

**Assessor(s):** Ebert, D.A., Khan, M., Ali, M., Akhilesh, K.V. & Jabado, R.

**Reviewer(s):** Pollom, R. & Kyne, P.M.

**Contributor(s):** Henderson, A.

**Facilitators(s) and Compiler(s):** Jabado, R., Kyne, P.M.

## Bibliography

Bonfil, R. and Abdallah, M. 2004. *Field identification guide to the sharks and rays of the Red Sea and Gulf of Aden. FAO Species Identification Guide for Fishery Purposes*. FAO, Rome.

Bruckner, A.W., Alnazry, H.H. and Faisal, M. 2011. A Paradigm Shift for Fisheries Management to Enhance Recovery, Resilience, and Sustainability of Coral Reef Ecosystems in the Red Sea. *American Fisheries Society Sustainable Fisheries: Multi-Level Approaches to a Global Problem*,: 85–111.

CMFRI. 2010. Marine Fisheries Census (2010), Part 1. India, Govt. of India, Ministry of Agriculture, Dept. of Animal Husbandry, Dairying & Fisheries and Central Marine Fisheries Research Institute, Indian Council of Agricultural Research. New Dehli.

Compagno, L.J.V., Ebert, D.A. and Smale, M.J. 1989. *Guide to the sharks and rays of Southern Africa*. Struik, Cape Town. 160 pp.

Henderson, A.C., Al-Oufi, H. and McIlwain, J.L. 2004. Survey, status and utilization of the elasmobranch fisheries resources of the Sultanate of Oman. Department of Marine Science and Fisheries, Sultan Qaboos University, Muscat, Oman.

IUCN. 2017. The IUCN Red List of Threatened Species. Version 2017-2. Available at: [www.iucnredlist.org](http://www.iucnredlist.org). (Accessed: 14 September 2017).

Last, P., White, W., de Carvalho, M., Séret, B., Stehmann, M. and Naylor, G. 2016. *Rays of the World*. CSIRO Publishing, Clayton.

Moore, A.B.M. and Peirce, R. 2013. Composition of elasmobranch landings in Bahrain. *African Journal of Marine Science* 35: 593-596.

Moore, A.B.M., McCarthy, I.D., Carvalho, G.R. and Peirce, R. 2012. Species, sex, size and male maturity composition of previously unreported elasmobranch landings in Kuwait, Qatar and Abu Dhabi Emirate. *Journal of Fish Biology* 80: 1619-1642.

Raje, S.G. and Zacharia, P.U. 2009. Investigations on fishery and biology of nine species of rays in Mumbai waters. *Indian Journal of Fisheries* 56(2): 95-101.

Sheppard, C., Al-Husiani, M., Al-Jamali, F., Al-Yamani, F., Baldwin, R., Bishop, J., Benzoni, F. and Dutrieux, E. 2010. The Gulf: A young sea in decline. *Marine Pollution Bulletin* 60: 13-38.

Valinassab, T., Daryanabard, R., Dehghani, R. and Pierce, G.J. 2006. Abundance of demersal fish resources in the Persian Gulf and Oman Sea. *Journal of the Marine Biological Association of the United Kingdom* 86: 1455-1462.

Weigmann, S. 2016. Annotated checklist of the living sharks, batoids and chimaeras (Chondrichthyes) of the world, with a focus on biogeographical diversity. *Journal of Fish Biology* 88(3): 837-1037.

## Citation

Ebert, D.A., Khan, M., Ali, M., Akhilesh, K.V. & Jabado, R. 2017. *Rhinobatos punctifer*. *The IUCN Red List of Threatened Species 2017*: e.T161447A109904426. <http://dx.doi.org/10.2305/IUCN.UK.2017-2.RLTS.T161447A109904426.en>

## Disclaimer

To make use of this information, please check the [Terms of Use](#).

## External Resources

For [Images and External Links to Additional Information](#), please see the Red List website.



# Appendix

## Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
9. Marine Neritic -> 9.4. Marine Neritic - Subtidal Sandy	Resident	Suitable	Yes
9. Marine Neritic -> 9.5. Marine Neritic - Subtidal Sandy-Mud	Resident	Suitable	Yes
9. Marine Neritic -> 9.6. Marine Neritic - Subtidal Muddy	Resident	Suitable	Yes

## Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.1. Intentional use: (subsistence/small scale) [harvest]	Ongoing	Unknown	Causing/could cause fluctuations	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.2. Intentional use: (large scale) [harvest]	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale) [harvest]	Ongoing	Unknown	Causing/could cause fluctuations	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		

## Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Research, Monitoring and Planning

<b>Conservation Actions in Place</b>
Action Recovery plan: No
Systematic monitoring scheme: No
<b>In-Place Land/Water Protection and Management</b>
Conservation sites identified: No
Occur in at least one PA: Unknown
Area based regional management plan: No
Invasive species control or prevention: Not Applicable
<b>In-Place Species Management</b>
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
<b>In-Place Education</b>
Subject to recent education and awareness programmes: No
Included in international legislation: No
Subject to any international management/trade controls: No

## Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Conservation Actions Needed</b>
1. Land/water protection -> 1.1. Site/area protection
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
3. Species management -> 3.1. Species management -> 3.1.2. Trade management
4. Education & awareness -> 4.2. Training
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level
5. Law & policy -> 5.1. Legislation -> 5.1.3. Sub-national level
5. Law & policy -> 5.2. Policies and regulations
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-national level

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Research Needed</b>
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
2. Conservation Planning -> 2.3. Harvest & Trade Management Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends
3. Monitoring -> 3.4. Habitat trends

## Additional Data Fields

<b>Distribution</b>
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): Unknown
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): Unknown
Continuing decline in number of locations: Unknown
Extreme fluctuations in the number of locations: Unknown
Lower depth limit (m): 70
Upper depth limit (m): 0
<b>Population</b>
Continuing decline of mature individuals: Unknown
Extreme fluctuations: Unknown
Population severely fragmented: No
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: No
Generation Length (years): 5
Movement patterns: Unknown

## The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#).

The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).