

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

## TAITUNG ISRA

### Asia Region

### SUMMARY

Taitung is located in southeastern Taiwan. The area is characterised by a narrow continental shelf that drops steeply to depths larger than 1,000 m very close to the shoreline. The area overlaps with the Chihben Wetlands Key Biodiversity Area and with six marine protected areas. Within the area there are: **threatened species** and **undefined aggregations** (Whale Shark *Rhincodon typus*).

### CRITERIA

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

— —  
**CHINESE TAIPEI**  
 — —  
**0-900 metres**  
 — —  
**283.8 km<sup>2</sup>**  
 — —





## DESCRIPTION OF HABITAT

Taitung is located in southeastern Taiwan. The area is characterised by a narrow continental shelf that drops sharply to depths larger than 1,000 m very close to the shoreline (Yang et al. 2020).

The area is influenced by the Kuroshio Current which produces upwelling and turbulent mixing that increases productivity especially during the boreal summer (June–August) (Cheng et al. 2020).

The area overlaps with the Chihben Wetlands Key Biodiversity Area (KBA 2024) and with six marine protected areas: the Yiwan, Xiaogang, Xiaoma, Fushan, and Ludao Aquatic Organisms Propagation and Conservation Zones, and the Ludao Haishenping to Fanchuanbi Marine Resources Conservation Area.

This Important Shark and Ray Area is pelagic and is delineated from inshore and surface waters (0 m) to 900 m based on the bathymetry of the area.

## ISRA CRITERIA

### CRITERION A – VULNERABILITY

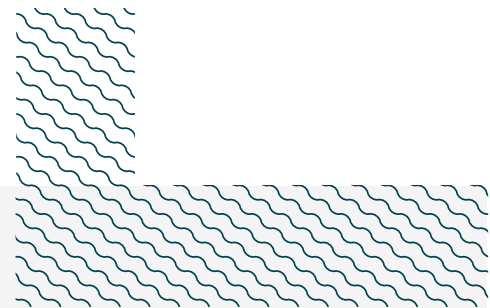
One Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species. The Whale Shark is assessed as Endangered (Pierce & Norman 2016).

### SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Taitung is an important area for undefined aggregations of one shark species.

Between 2001–2008, 198 Whale Sharks with an average size of 443 cm total length (TL) were landed in Taitung by trap set nets and spearfishing operating in the area (Hsu et al. 2012). Individuals were caught year-round, with a peak from January to May (Hsu et al. 2012; Cruz et al. 2013). Taitung was the location in Taiwan where a larger number of individuals were caught in that period compared to other areas (Hsu et al. 2012). After a fishing ban on Whale Sharks was established in 2008, hundreds of individuals were still caught in set nets along the Taitung coast every year (Hsu pers. obs. 2023). Between 2022–2023, 44 Whale Sharks were caught by these nets in the area, with larger numbers between June and October (Hsu unpubl. data 2023). Set nets are between 200–500 m long and generally catch a single Whale Shark. However, frequently they can catch aggregations of 3–5 Whale Sharks with a maximum of nine Whale Sharks caught in a single net (Hsu unpubl. data 2023). More information is needed to confirm the nature and function of these aggregations.





---

### **Acknowledgments**

Hua Hsun Hsu (Coastal and Offshore Fishery Research Center, Fisheries Research Institute, Ministry of Agriculture; Institute of Marine Ecology and Conservation, National Sun Yat-sen University), Chi Ju Yu (Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University; George Chen Shark Research Center, National Taiwan Ocean University), Shouou Jeng Joung (Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University; George Chen Shark Research Center, National Taiwan Ocean University), and Emiliano García-Rodríguez (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 9 - Asia 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. 2024.** Taitung ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

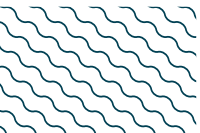
## QUALIFYING SPECIES

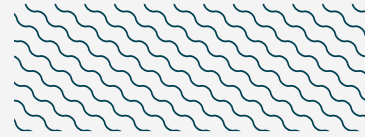
| Scientific Name        | Common Name | IUCN Red List Category | Global Depth Range (m) | ISRA Criteria/Sub-criteria Met |   |    |    |    |    |    |    |    |  |
|------------------------|-------------|------------------------|------------------------|--------------------------------|---|----|----|----|----|----|----|----|--|
|                        |             |                        |                        | A                              | B | C1 | C2 | C3 | C4 | C5 | D1 | D2 |  |
| <b>SHARKS</b>          |             |                        |                        |                                |   |    |    |    |    |    |    |    |  |
| <i>Rhincodon typus</i> | Whale Shark | EN                     | 0-1,928                | X                              |   |    |    |    |    |    | X  |    |  |

## SUPPORTING SPECIES

| Scientific Name                | Common Name          | IUCN Red List Category |
|--------------------------------|----------------------|------------------------|
| <b>SHARKS</b>                  |                      |                        |
| <i>Alopias superciliosus</i>   | Bigeye Thresher      | VU                     |
| <i>Alopias pelagicus</i>       | Pelagic Thresher     | EN                     |
| <i>Centrophorus granulosus</i> | Gulper Shark         | EN                     |
| <i>Isurus oxyrinchus</i>       | Shortfin Mako        | EN                     |
| <i>Sphyrna lewini</i>          | Scalloped Hammerhead | CR                     |
| <i>Sphyrna zygaena</i>         | Smooth Hammerhead    | VU                     |
| <b>RAYS</b>                    |                      |                        |
| <i>Mobula mobular</i>          | Spinetail Devil Ray  | EN                     |
| <i>Mobula tarapacana</i>       | Sicklefin Devil Ray  | EN                     |

IUCN Red List of Threatened Species Categories are available by searching species names at [www.iucnredlist.org](http://www.iucnredlist.org) Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.





## REFERENCES

- Cheng YH, Chang MH, Ko DS, Jan S, Andres M, Kirincich A, Yang YJ, Tai JH. 2020.** Submesoscale eddy and frontal instabilities in the Kuroshio interacting with a cape south of Taiwan. *Journal of Geophysical Research Oceans* 125: e2020JC016123. <https://doi.org/10.1029/2020JC016123>
- Cruz FA, Joung SJ, Liu KM, Hsu HH, Hsieh TC. 2013.** A preliminary study on the feasibility of whale shark (*Rhincodon typus*) ecotourism in Taiwan. *Ocean and Coastal Management* 80: 100-106. <https://doi.org/10.1016/j.ocecoaman.2013.03.017>
- Hsu HH, Joung SJ, Liu KM. 2012.** Fisheries, management and conservation of the whale shark *Rhincodon typus* in Taiwan. *Journal of Fish Biology* 80: 1595-1607. <https://doi.org/10.1111/j.1095-8649.2012.03234.x>
- Key Biodiversity Areas (KBA). 2024.** Key Biodiversity Areas factsheet: Chihben Wetlands. Available at: <https://www.keybiodiversityareas.org/site/factsheet/14308> Accessed February 2024
- 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>
- Yang YJ, Wen CC, Huang PY, Wang CY, Chu KS, Pai SC. 2020.** Verification of the internal tide off Zhiben coast, Taitung, southeast Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences* 31: 77-83. <https://doi.org/10.3319/tao.2019.07.14.01>