

Biodiversity Record: New Singapore record of the wedgefish, *Rhynchobatus palpebratus*

Maryam Saleel Kolakkodan^{1*}, Christina Choy² & Zeehan Jaafar¹

¹Department of Biological Sciences, National University of Singapore, Singapore 117588

²National Parks Board, Singapore 259569

Email: maryam.saleel@nus.edu.sg (*corresponding author)

Recommended citation: Kolakkodan MS, Choy C & Jaafar Z (2026) Biodiversity Record: New Singapore record of the wedgefish, *Rhynchobatus palpebratus*. Nature in Singapore, 19: e2026088. DOI: 10.26107/NIS-2026-0088

Subjects: Eyebrow wedgefish, *Rhynchobatus palpebratus* (Elasmobranchii: Rhinopristiformes: Rhinidae).

Subjects identified by: Christina Choy and Zeehan Jaafar.

Locations and dates: 1) Singapore, unknown location; 1963.
2) Johor Strait, Changi Beach; 1968.

Habitat: Changi Beach is a shallow estuarine coast with sand-silt substrate.

Observers: Christina Choy and Zeehan Jaafar.

Observations: Two preserved specimens, both males, previously mis-identified as *Rhynchobatus springeri*, were noted in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, at the National University of Singapore. The 41 cm (total length) individual catalogued as ZRC 3118 lacks specific collection locality. The other, of 45.5 cm total length, catalogued as ZRC 39622 (Fig. 1), was obtained at Changi Beach.



Fig. 1. Dorso-lateral view of specimen ZRC 39622 obtained in 1968 from Changi Beach. Note the diagnostic curved black mark behind the eye (indicated by arrow). (Photograph by: Zeehan Jaafar).

Remarks: This is the first documentation of occurrence of *Rhynchobatus palpebratus* within the territorial waters of Singapore. The species, described by Compagno & Last in 2008, is distinguished from its congeners by the characteristic curved black bars or ‘eyebrows’ posterior to the eyes. Other diagnostic characters include a large black blotch surrounded by 3 or 4 white spots on each pectoral fin and a faint white line passing through white spots on the tail (Last et al., 2016; Then et al., 2025).

Rhynchobatus palpebratus is regarded as Near Threatened in the IUCN Red List of Threatened Species (Kyne et al., 2019). It is distributed from northern Australia and southern Papua New Guinea, northwards to Taiwan and westwards to Thailand and Malaysia (Last et al., 2016; Kyne et al., 2019; Then et al., 2025). Its occurrence in Singapore is unsurprising given that the species was recently reported from Pontian in south-western Johor (Then et al., 2025) and right at the Malaysia-Singapore border in the western entrance of the Johor Strait (Seah et al., 2026). Even though the present record is based on specimens obtained in the 1960s, the species is expected to be present from material reported recently from the Malaysian border.

Acknowledgement: This report is part of a broader research project to understand the distribution of sharks and rays within the territorial waters of Singapore, funded by Mandai Nature.

Literature cited:

- Bateman RL, Morgan DL, Wueringer BE, McDavitt M & Lear KO (2024) Collaborative methods identify a remote global diversity hotspot of threatened, large-bodied rhino rays. *Aquatic Conservation Marine and Freshwater Ecosystems*, 34(1): e4047. <https://doi.org/10.1002/aqc.4047>
- Compagno LJV & Last PR (2008) A new species of wedgefish, *Rhynchobatus palpebratus* sp. nov. (Rhynchobatoidei: Rhynchobatidae), from the Indo-West Pacific. *CSIRO Marine and Atmospheric Research Paper No. 022*: 227–240.
- Kyne PM & Rigby CL (2019) *Rhynchobatus palpebratus*. The IUCN Red List of Threatened Species 2019: e.T195475A2382420. <https://dx.doi.org/10.2305/IUCN.UK.2019-2.RLTS.T195475A2382420.en> (Accessed 29 June 2026)
- Kyne PM, Jabado RW, Rigby CL, Dharmadi, Gore MA, Pollock CM, Herman KB, Cheok J, Ebert DA, Simpfendorfer CA & Dulvy NK (2020) The thin edge of the wedge: extremely high extinction risk in wedgefishes and giant guitarfishes. *Aquatic Conservation Marine and Freshwater Ecosystems*, 30(7): 1337–1361.
- Last PR, White WT & Séret B (2016) Wedgefishes. Family Rhinidae. In: Last PR, White WT, de Carvalho MR, Séret B, Stehmann MFW & Naylor GJP (eds.) *Rays of the World*. CSIRO Publishing, Clayton, pp. 522–618.
- Seah YG, Sato MC, Matsunuma M, Koreeda R, Ali MS, Repin IM, Nor AM, Kimura S & Motomura H [eds.] (2026) *Marine and Estuarine Fishes of the Selat Johor. Southernmost Coast of Peninsular Malaysia*. Universiti Malaysia Terengganu, Kuala Nerus and The Kagoshima University Museum, Kagoshima, xxii+160 pp.
- Then AY, Lim KC, Leung AJ, Puebla O, Helmkampf M & Adam S (2025) Unwedging the secrets: Species and genetic diversity of wedgefishes (Rhinidae) in Malaysian waters. *Aquatic Conservation Marine and Freshwater Ecosystems*, 35(3): 1–15.