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Biodiversity Record: Elongate mudskippers, Pseudapocryptes elongatus, at Marina East

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Subjects: Elongate mudskipper, *Pseudapocryptes elongatus* (Teleostei: Gobiiformes: Oxudercidae).

Subjects identified by: Jiayuan Lin.

Location, date and time: Singapore Island, Marina East Drive; 24 June 2024 at around 1100 hrs and 28 July 2024 at around 1544 hrs.

Habitat: Marine. Exposed rocky breakwater over reclaimed land with pockets of muddy pools filled during high tide and fed by a drain or during rain (Fig. 4). Very few mangrove saplings and other plants.

Observers: Lumin Ong Jun Xiang and Tay Jing Xuan (24 June 2024), and Jiayuan Lin (28 July 2024).

Observations: On 24 June 2024, multiple individuals were sighted in the muddy pools alongside crabs and snails (Figs. 1 & 2). They were observed to be sifting through sediment and making burrows, darting around to chase each other or in response to the observers' movements. No other species of fish were observed and photographed alongside these individuals on the day. The identity of these individuals was undetermined until 28 July 2024, where an individual was caught by hook-and-line and photographed by Jiayuan Lin from the same location (Fig. 3).



Fig.1. In-situ dorso-lateral view of a juvenile of about 3 cm total length on 24 June 2024 (Photograph by: Lumin Ong Jun Xiang). Fig.2. In-situ dorso-posterior view of another juvenile of about 3 cm total length on 24 June 2024 (Photograph by: Tay Jing Xuan).

Remarks: The elongate mudskipper is an uncommon fish in Singapore that inhabits mangrove creeks and muddy tidal inlets, where it remains mostly submerged with its eyes protruding above the water (Baker, 2025). It has been recorded from locations such as Pasir Ris and Sungei Buloh, alongside islands such as Pulau Ubin and Pulau Tekong (Larson, Jaafar & Lim, 2008). It has been observed emerging from burrows in mangrove creeks on Pulau Ubin at low tide (Jiayuan Lin, pers. obs.). The species is listed as a 'vulnerable' species in Singapore in the third edition of the Singapore Red Data Book (Jaafar et al., 2024).

The mentioned locations all have habitats that fit the preferences of the elongate mudskipper, which makes the current observation a surprising one considering the exposure to harsh heat and less muddy, shallower substrate. Two adult individuals have been posted from the same location earlier on iNaturalist in 2021 (https://www.inaturalist.org/observations/101081636) and 2023 (https://www.inaturalist.org/observations/190893201). The continuous sightings, including a range of life stages of this species, suggest that there is a small but thriving population in the reclaimed coast of Marina East.



Fig. 3. Ex-situ lateral view of a juvenile of about 3 cm total length (Photograph by: Jiayuan Lin).



Fig.4. View of the highly exposed rocky breakwater at Marina East inhabited by the mudskippers (Photograph by: Tay Jing Xuan).

Literature cited:

Baker N (2025) Elongate mudskipper – *Pseudapocryptes elongatus*. Ecology Asia. https://www.ecologyasia.com/verts/fishes/elongate-mudskipper.htm (Accessed 3 January 2025)

Jaafar Z, Low JKY & Lim KKP (2024) Checklist of marine fish species with their category of threat status for Singapore. In: Davison GWH, Gan JWM, Huang D, Hwang WS, Lum SKY & Yeo DCJ (eds.) The Singapore Red Data Book. Red Lists of Singapore Biodiversity. Third edition. National Parks Board, Singapore, pp. 649–670.

Larson HK, Jaafar Z & Lim KKP (2008) An annotated checklist of the gobioid fishes of Singapore. Raffles Bulletin of Zoology, 56(1): 135–155.