

## Biodiversity Record: Sightings of the ladder gudgeon, *Bostrychus scalaris*, at Pasir Ris

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**Recommended citation.** Ong JXL (2026) Biodiversity Record: Sightings of the ladder gudgeon, *Bostrychus scalaris*, at Pasir Ris. Nature in Singapore, 19: e2026019. DOI: 10.26107/NIS-2026-0019

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**Subjects:** Ladder gudgeon, *Bostrychus scalaris* (Teleostei: Gobiiformes: Butidae).

**Subjects identified by:** Ong Jun Xiang Lumin.

**Location, date and time:** Singapore Island, Pasir Ris Park; 6, 7 & 8 November 2025; 2200–0015 hrs.

**Habitat:** Estuarine. Tide pools in back mangrove.

**Observer:** Ong Jun Xiang Lumin.

**Observations:** A total of seven sightings of *Bostrychus scalaris* were made over two nights in the same general area.

Five examples were observed on 6 November 2025 during a rising tide late at night. It was a day after a full beaver moon and the tide levels were still the highest at their peak. One individual was found alone in a leaf-littered pool with a burrow (Fig. 1), while the other four were found together in a larger pool connected via tide levels alongside other fishes (Figs. 2–5). The smallest was about 3 cm total length (Fig. 4) and the largest appeared to be below 15 cm total length (Fig. 2). All individuals did not display much activity other than hovering in the water column or resting on substrate. Some were more photosensitive than the others, ducking for cover shortly after they were photographed.

Two ladder gudgeons were observed on the following night (7–8 November 2025) at around the same time and tide levels. A different and larger individual (Fig. 6) was spotted in the same pool as the individual shown in Fig. 1. While all the fish mentioned so far were spotted somewhat in the same vicinity, the second individual was seen about 80 m down the trail in a muddy creek, although still in the back mangroves (Fig. 7).

**Remarks:** *Bostrychus scalaris* is a rarely seen and poorly known fish whose occurrence in Singapore was first known via a watercolour painting by F. L. de Castelnau in a notebook compiled between 1858 and 1862 (Larson, 2008; Larson et al., 2016). Nothing was known of this species in the country until June 2023, where an individual was photographed being attacked by a dog-faced water snake at the same site as the photographs herein featured (Tan & Lin, 2023). Thereafter, a number of sightings from undisclosed locations on Singapore, including the ones herein reported, have been posted on iNaturalist ([https://www.inaturalist.org/observations?place\\_id=6734&taxon\\_id=613929](https://www.inaturalist.org/observations?place_id=6734&taxon_id=613929)).

The apparent rarity of the ladder gudgeon could be attributed to its secretive behaviour, as well as being nocturnal and photosensitive. As suggested by the featured observations, it seems more likely to venture out in the open during rising tides. Due to its very recent rediscovery, the local conservation status of *Bostrychus scalaris* has not been evaluated (Jaafar et al., 2024). The featured sightings of multiple individuals over two evenings suggests that the species may not be locally rare. However, it seems to be restricted to mangroves, and could therefore be threatened by the scarcity of such habitats.

### Literature cited:

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Fig. 1. Ladder gudgeon of about 5 cm total length alone in a leaf-littered pool.  
Fig. 2. The largest individual, just under 15 cm in total length, in the bigger pool.  
Fig. 3. Another individual of about 5 cm total length in the same pool.  
Fig. 4. The smallest individual observed was about 3 cm total length.  
Fig. 5. The fourth individual of about 8 cm total length in the same pool.  
Fig. 6. An apparently different individual of about 8 cm total length in the same pool on 7 November 2025.  
Fig. 7. The last individual, under 10 cm total length, in a muddy creek away from the rest at midnight on 8 November 2025  
(Photographs by: Ong Jun Xiang Lumin).