

## Large congregation of yellowfin needlefish at Harbourfront

**Subjects:** Yellowfin needlefish, *Strongylura leiura* (Teleostei: Belonidae);  
Slender sharksucker, *Echeneis naucrates* (Teleostei: Echeineidae).

**Subjects identified by:** Contributor.

**Location, date and time:** Singapore Strait, Keppel Channel between Harbourfront and Sentosa Island, below Sentosa Boardwalk; 31 December 2015; 1550-1600 hrs.

**Habitat:** Marine. Sea channel beside concrete bridge.

**Observer:** Contributor.

**Observation:** See accompanying pictures (Figs. 1 & 2). At least 30 individuals, the largest about 70 cm total length, possibly larger, were observed in a congregation at the surface of the water below the Sentosa boardwalk beside a long concrete structure. Small sharksuckers of about 10 cm total length were seen attached (one sharksucker per needlefish) to at least four of the larger examples. Flesh wounds were observed on some of the needlefish. One of the fish made a splash at the water surface, lunging at a dead leaf that had fallen on the water. The fish were all facing in one direction, against the water current. Once in a while, a larger specimen would chase after a smaller individual for a short distance, but no injury was inflicted.

**Remarks:** The identification of the needlefish from the pictures is not definite. They are most likely *Strongylura leiura* as they do not appear to have a distinct lateral keel on the caudal peduncle, and the caudal fins are apparently emarginate and not deeply forked (Collette, 1999: 2157). The members in the congregation are also assumed to be conspecific. The contributor is aware that the species is gregarious, as he had previously seen groups of two to five individuals. This is the largest gathering of *Strongylura leiura* that he has seen.

It is not certain what caused the flesh wounds noted on some individuals. Occasional skirmishes among members of the group suggest that the injuries were inflicted by conspecifics.

Sharksuckers latch onto large fishes and other marine animals with a suction apparatus on top of their heads. They feed on scraps from the feeding activities of their hosts, and sometimes eat parasitic crustaceans that have attached themselves to their hosts (Allen & Erdmann, 2012: 425). Although plausible, it is not known if the sharksuckers are picking on the exposed flesh on the wounds of the needlefish. Such an act was not seen in the featured observation.

In Singapore, the yellowfin needlefish occurs in the sea along the coast. It has been recorded from the Punggol estuary (Ng et al., 2015: 322), and has been obtained from Bedok Jetty (Lim & Low, 1998: 75).

### References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies. Volume II*. Tropical Reef Research, Perth, Australia. pp. 425-856.
- Collette, B. B., 1999. Belonidae, needlefishes. In: Carpenter, K. E. & V. H. Niem (eds.). *FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 4. Bony Fishes part 2 (Mugilidae to Carangidae)*. FAO, Rome. pp. 2151-2161.
- Lim, K. K. P. & J. K. Y. Low, 1998. *A Guide to Common Marine Fishes of Singapore*. Singapore Science Centre. 163 pp.
- Ng H. H., H. H. Tan, K. K. P. Lim, W. B. Ludt & P. Chakrabarty, 2015. Fishes of the eastern Johor Strait. *The Raffles Bulletin of Zoology*. Supplement No. 31: 303-337.

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Fig. 1. Dorsal view of part of congregation of *Strongylura leiura*. Note small sharksuckers riding on the backs of the fish at the upper right corner and above the bottom margin, and on the side of the fish at the middle right, and on the underside of the fish with injuries at the lower centre and one at the upper left (note blackish streak).



Fig. 2. Dorsal view of part of congregation of *Strongylura leiura*. Note small sharksuckers riding on the back of the fish at the left centre (note the whitish streak), and on the side of the fish at the right centre (note blackish streak). The fish at the centre of the picture has raw lacerations on its side.

Photographs by Kelvin K. P. Lim