

Knobbly seastar on the shores of Tanah Merah

Subject: Knobbly seastar, *Protoreaster nodosus* (Echinodermata: Asteroidea: Valvatida: Oreasteridae).

Subject identified by: Tan Yi Mei & Siti Maryam Yaakub.

Location, date and time: Singapore Strait, Tanah Merah beach at approximately 2 km east of Tanah Merah Ferry Terminal; 6 July 2015; 0739 hrs.

Habitat: Marine. Sandy shore of the lower intertidal zone with seagrass.

Observers: Tan Yi Mei & Siti Maryam Yaakub.

Observation: A young adult example with a radius of about 8 cm (see attached photograph) was observed during low tide (about 0.2 m CD) exposed on a sandy substrate adjacent to a bed of the seagrass *Halophila ovalis*.

Remarks: The knobbly seastar is commonly found in seagrass habitats and shallow sandy areas (Clark & Rowe, 1971; Bos et al., 2008), and is classified as 'endangered' in Singapore (Lane, 2008). It is rarely observed along the shores of the Singapore main island, and this appears to be a first sighting record for Tanah Merah.

References:

- Bos, A. R., G. S. Gumano, J. C. E. Alipoyo & L. T. Cardona, 2008. Population dynamics, reproduction and growth of the Indo-Pacific horned sea star, *Protoreaster nodosus* (Echinodermata; Asteroidea). *Marine Biology*. 156: 55-63.
- Clark, A. M. & F. W. E. Rowe, 1971. *Monograph of shallow-water Indo-West Pacific echinoderms*. British Museum (Natural History), London. 690: vii + 238, 31 pls.
- Lane, D., 2008. Echinodermata. In: Davison, G. W. H., P. K. L. Ng & H. C. Ho (eds.). *The Singapore Red Data Book: Threatened plants and animals of Singapore*. The Nature Society (Singapore). p. 129-133.



Dorsal view of the *Protoreaster nodosus* at Tanah Merah. Photograph by Siti Maryam Yaakub.

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