



Scientific name

Echinodiscus truncatus

Common name

Key-hole Sand Dollar

Phylum/Family

Echinodermata / Astringlypeidae

Photo by: David J W Lane

National Status: Vulnerable (VU)

Description: A large sand dollar about 8-9cm across, with a pair of elongated holes or lunules close to the disc edge.

Habitat and Ecology: Using its velvet-like covering of small, short spines it burrows just beneath the surface of intertidal sands.

Distribution: Indo-west Pacific from East Africa to New Caledonia.

Threats: This uncommon species, restricted to very few sites, mainly in the Pulau Ubin/Tekong area, is under threat from coastal development in land scarce Singapore.

Scientific interest and potential value: Various explanations for the adaptive value of the lunules have been put forward. One theory is that the lunule spines assist in burrowing while another idea is that the holes have a hydrodynamic function in reducing lift in strong currents and thus preventing dislodgment.

Conservation measures: The only location where these sand dollars are known to occur in significant numbers is the sandy foreshore at Chek Jawa on Pulau Ubin. Effective conservation of this sand dollar (and the rich assemblage of many other invertebrates species) hinges on designation of this site as an MPA (Marine Protected Area).