

Giant clam shells ‘graveyard’ at Semakau Landfill

Subjects: Fluted giant clam, *Tridacna squamosa* (Mollusca: Bivalvia: Cardiidae: Tridacninae).

Subjects identified by: Neo Mei Lin.

Location, date and time: Singapore Straits, northern part of Semakau Landfill; 1 February 2014; 1800–2000 hrs.

Habitat: Intertidal reef flat next to mangroves.

Observer: Loh Kok Sheng.

Observation: The observer stumbled upon an aggregation of dead *Tridacna squamosa* shells on the reef flat during an intertidal walk (Fig. 1 & 2). There were at least 15 pairs of clam shells in the pile (Fig. 1). All were mature adults with estimated mean shell length of 30 cm (Fig. 2).

Remarks: Giant clams have been an important coastal resource to man as food and for materials across the Indo-West Pacific region (Mingoa-Licuanan & Gomez, 2002). In Singapore, exploitation of giant clams was evident based on early accounts from European travellers (Traill, 1847) and of local fishing practices (Chuang, 1961; Purchon & Purchon, 1981). Physical evidence of exploitation was also discovered during archaeological excavations, where aggregations of tridacnine shells were found at sites previously located along the old coastline of mainland Singapore (Neo & Todd, 2012).

This record adds to the exploitation history of giant clams in Singapore (Neo & Todd, 2012), and represents the largest assemblage of mature shells found so far. The species of interest, *Tridacna squamosa*, is one of the five species that can still be found in Singapore, but is locally critically endangered (Neo & Todd, 2013). This intensity of exploitation is unsurprising as there have been early accounts of larger clams being preferentially harvested (Harrison & Tham, 1973; Chou, 1984). Such exploitation could explain the current population status — sparsely distributed with few mature individuals, coupled with poor recruitment rates (Neo et al., 2013).



Fig. 1. Aggregation of dead fluted giant clam shells (foreground). Photograph by Loh Kok Sheng.

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Fig. 2. Close-up view of the fluted giant clam shells in the pile. Photograph by Loh Kok Sheng

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