

## Giant clams at Sentosa

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

**Subjects identified by:** Neo Mei Lin.

**Location and dates:** Singapore Strait, Sentosa Island, Serapong reefs; 2014, 2018, 2019 and 2020.

**Habitat:** Marine. Coral reef. Intertidal reef flat next to seawalls.

**Observers:** Ria Tan, Loh Kok Sheng and staff of the Sentosa Development Corporation (Desmond Ong, Tan Yi Gain and Siti Sukainah Sairi).

**Observation:** Four different live individuals have been observed on the reef flat on four separate occasions –

- 1) One individual of *Tridacna crocea* (shell length ~6 cm) on 19 May 2014 (Fig. A).
- 2) One individual of *Tridacna squamosa* (shell length ~20 cm) on 18 June 2018 (Fig. B).
- 3) One individual of *Tridacna squamosa* (shell length ~36 cm) on 22 April 2019 (Fig. C).
- 4) One individual of *Tridacna squamosa* (shell length ~21 cm) on 15 December 2020 (Fig. D).

**Remarks:** Giant clams are the largest marine bivalves inhabiting the coral reefs of the Indo-Pacific region (Neo, 2020). Of the five species recorded from Singapore, only two remain extant: *Tridacna crocea* (burrowing giant clam) and *T. squamosa* (fluted giant clam) (Neo et al., 2012a, 2012b). A comprehensive survey of the Southern Islands carried out between 2009 and 2010 revealed that both species occur in very low densities, and are therefore, regarded as locally critically endangered (Neo & Todd, 2013).

The Serapong reefs at Sentosa were not surveyed for giant clams in 2009/2010 by Neo & Todd (2012b). These four live examples recorded here represent the giant clams known so far to recently occur at Sentosa.

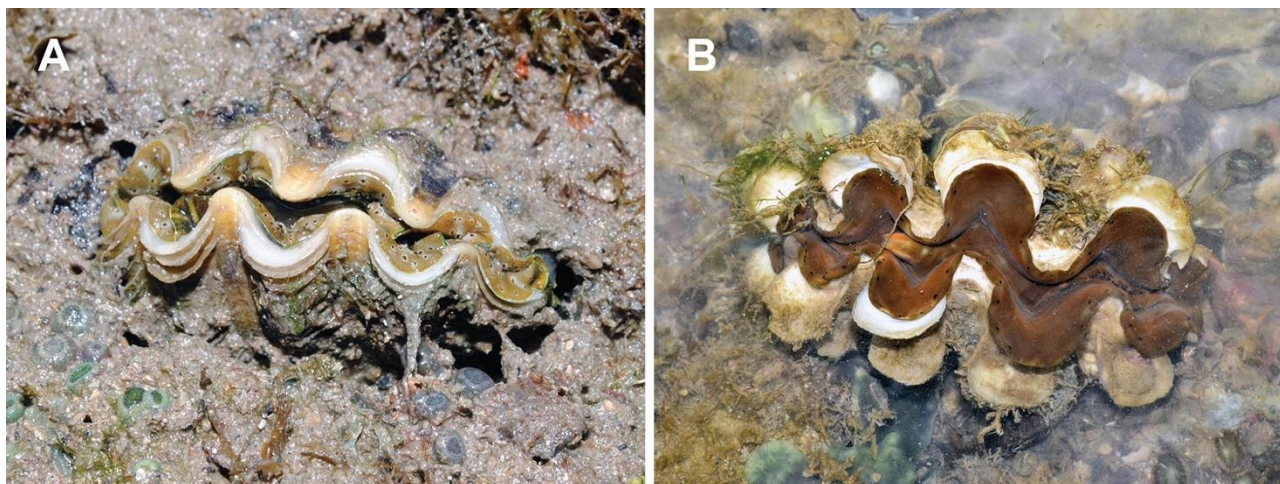


Fig. A-B. In-situ views of (A) *Tridacna crocea* and (B) *Tridacna squamosa*. Photographs by Loh Kok Sheng.



Fig. C-D. In-situ views of two *Tridacna squamosa* individuals. Photographs by the staff of the Sentosa Development Corporation (Desmond Ong, Tan Yi Gain and Siti Sukainah Sairi).

**References:**

- Neo ML & Todd PA (2012a) Giant clams (Mollusca: Bivalvia: Tridacninae) in Singapore: History, Research and Conservation. *Raffles Bulletin of Zoology*, 25: 67–78.
- Neo ML & Todd PA (2012b) Population density and genetic structure of the giant clams *Tridacna crocea* and *T. squamosa* on Singapore’s reefs. *Aquatic Biology*, 14: 265–275.
- Neo ML & Todd PA (2013) Conservation status reassessment of giant clams (Mollusca: Bivalvia: Tridacninae) in Singapore. *Nature in Singapore*, 6: 125–133.
- Neo ML (2020) Conservation of Giant Clams (Bivalvia: Cardiidae). In: Goldstein MI & DellaSala DA (eds.) *Encyclopedia of the World’s Biomes*, Vol. 4. Elsevier. Pp. 527–538.