## LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.

## Marine Creature of the Month: January – February 2008



Giant clam (Tridacna gigas)

Giant clams (Family Tridacnidae) are the largest living bivalve mollusks in the world. They are most commonly found in shallow lagoons and reef flats of coral reef communities, and are typically embedded in sand or coral rubble. In Western Australia giant clams can be found in tropical waters from Ningaloo Marine Park to the north. The largest giant clam species, *T. gigas*, lives on WA's oceanic coral atolls, such as the Rowley Shoals.

Their shells grow up to 1.5 metres long and contain a fleshy mantle which is usually golden brown, yellow or green with many iridescent blue, purple or green spots. Large clams may have so many of these spots that the mantle appears solid blue or purple. Giant clams cannot completely close their shell once fully grown.

Giant clams filter food, including microscopic marine plants and animals, from seawater using their gills. However, they obtain most of their nutrition from photosymbionts living within their tissue. As with coral, they suffer bleaching of these symbionts if the ocean temperature rises, and so may also be at risk due to global warming.

Giant clams are eaten by people throughout the Indo Pacific area, and are also taken for the aquaculture and aquarium trades. Overharvesting in combination with their

slow growth rates has caused their local extinction in many parts of the region, and they are listed as Vulnerable on the IUCN Red List.

In Australia there are no authenticated cases of people being trapped and drowned by giant clams. Generally they are lethargic and slow to close.

This giant clam was photographed by DEC research scientist Shannon Armstrong on a recent DEC-Australian Institute of Marine Science survey of the Rowley Shoals Marine Park.