

# AN ANNUAL SEA SHOW

Since 2002, NUS researchers have taken to local waters to study the spawning behaviour of coral. **By Karenne Tun (Science '94)**

*Astra inclinant,  
non necessitant.  
(The stars incline;  
they do not determine.)*

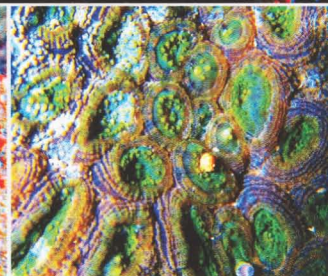
**This is a succinct** description of the annual synchronous mass spawning that occurs on coral reefs the world over. Taking place only once a year, this event sees millions of coral larvae released to the mercy of the waves.

Over the past 10 years, researchers from NUS and our partners – the National Parks Board and the National Institute of Education – have been documenting the coral spawning off Pulau Satumu, an island about 14 kilometres south of Singapore (and home to Raffles Lighthouse). Here, coral spawning occurs either before or after the Easter full moon, in late March or April.

This year, we set off on 10 April and over three nights, entered the waters to observe this spectacular phenomenon.

When this study was first initiated by Dr James Guest in 2002, we knew little about coral spawning patterns on Singapore's reefs. Now, a clearer picture has emerged. Species participation at the Pulau Satumu site varies annually, with certain species skipping a year. Some corals also display population-wide participation, while for others, only a sub-set of the population was observed to spawn.

Spawning times have varied over the years, ranging from dusk (7.20pm) to around 9.30pm. It should be said that we are often not the only ones who are interested in the spawning; reef inhabitants such as fusiliers, soldierfish



and shrimp also take the opportunity for some dinner. Meanwhile, we are frantically swimming from coral to coral documenting the event.

The data collected is part of a global effort to better understand the processes behind this phenomenon. Though we are now fairly confident about coral spawning patterns here, even after 10 years, we continue to make new discoveries. During our 2012 survey, we recorded three new spawning corals, bringing the total number of recorded spawning species to almost

73 (about 30% of Singapore's coral species).

Coral larvae are particularly important for Singapore's reefs as studies show that many of them will settle in local waters. This reflects the need to protect our reefs, for the sustainability of our natural habitat.



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