

# Research Update



**Project title:** “Investigating the incidence of bi-annual spawning on two coral reefs off North Western Australia”

**Personnel:** Natalie Rosser (Honours student – Murdoch University); Dr Mike van Keulen (supervisor – Murdoch University); Luke Smith (supervisor – Australian Institute of Marine Science: AIMS)

## **Overview:**

Natalie is undertaking a research project comparing the incidence of bi-annual coral spawning on reefs at Dampier and Coral Bay. Recent research by AIMS in Dampier and some of the offshore reefs (Scott, Ashmore) has shown that some species of *Acropora* (staghorn coral) undergo bi-annual spawning. In addition to the usual March-April spawning observed in Western Australian reefs, some species have an additional spawning event in October-November, coinciding with spawning on the Great Barrier Reef. Previous research done in Coral Bay in 1993 suggested that bi-annual spawning may also occur there occasionally.

This project will involve the analysis of data collected by AIMS in Dampier, and additionally look at spawning behaviour of a number of *Acropora* species in Coral Bay. The field work will involve collecting small samples of a selection of *Acropora* species in October and March, to monitor for egg production. The samples will be assessed in the laboratory for the presence of eggs, preserved and taken to Murdoch University for detailed histological analysis. The data collected will provide important information about what factors trigger mass spawning in corals.

## **For further information please contact:**

Dr Mike van Keulen  
School of Biological Sciences & Biotechnology  
Murdoch University, Murdoch WA 6150  
Ph: (08) 93602369; Email: keulen@murdoch.edu.au