# **Science for Management Awards:**

Supporting targeted research on the Great Barrier Reef

## **Summary**

The 'Science for Management Awards' administered by the Great Barrier Reef Marine Park Authority (GBRMPA) aims to help Doctoral or Masters degree students whose research directly relates to the management of the Great Barrier Reef Marine Park. Six of the awards granted in 2009 address critical knowledge gaps about climate change impacts on the Great Barrier Reef.



### **Background**

Climate Change and the Great Barrier Reef: A Vulnerability Assessment (GBRMPA: 2007) highlighted a number of significant gaps in the knowledge about climate change and the Reef necessary to assess risk and develop effective climate change adaptation strategies for the Great Barrier Reef. The first objective of the GBRMPA Great Barrier Reef Climate Change Action Plan 2007-2012 (the Action Plan), Targeted Science recognises that robust information is the foundation for effective management action.

Among the key strategies outlined in the Action Plan to understand climate change implications for the Reef, the GBRMPA seeks to partner with research institutions and coordinate research projects that target species vulnerable to climate change (e.g., corals, fish, crustaceans, plankton, marine turtles, seabirds and seagrass) to optimise the effectiveness of resilience-based management.

Each year the GBRMPA invites postgraduate students to apply for the "Science for Management Awards" (up to \$4000 each). The awards are intended to help postgraduate students whose research could contribute to the management of the Great Barrier Reef Marine



Science for Management Award 2009 recipient Andrew Chin catching a blacktip reef shark (inset), and a tagged hammerhead shark (main photo).

Project name: Science for Management

Project code: 319
Outcomes: A1.3 & A1.4

Year: 2007-2011

Bulletin type: Final

project



## **Award recipients 2009**

Recipient	Project Title
Tara Clark	Dating and mapping historical changes in Great Barrier Reef coral communities
Andrew Chin	The biology and ecology of the blacktip reef shark <i>Carcharhinus melanopterus</i> and implications for conservation and management
John Dawson	Climate change and the geomorphological response of reef islands of the Great Barrier Reef
Alexandra Carter	The effects of no-take zoning, region and year on reproductive output of the common coral trout <i>Plectropomus leopardus</i>
Erin Graham	Temperature and the energetics of scleractinian coral larvae: implications for larval dispersal and reef connectivity
Tom Bridge	Substrates and benthic taxa on drowned shelf edge reefs, Great Barrier Reef
Danielle Dixson	Effect of ocean acidification on larval prey response to predation
Danielle Knip	Spatial ecology of mobile predators in a nearshore tropical environment and the implication of Marine Protected Areas
Jennifer Donnelson	Climate change and the future for coral reef fishes: the potential for acclimation
Jessica Stella	Threats to the biodiversity of coral infauna via habitat loss and ocean acidification due to climate change

Park. The awards raise awareness amongst the next generation of researchers about the importance of using science to support management.

#### **Outcomes**

Funding contributions from the GBRMPA to students undertaking Masters and Doctorate degrees can facilitate excellent research outcomes. Funding these awards also raises the profile of the GBRMPA amongst students who are likely to pursue careers in fields related to marine science or marine park management. Familiarising students with the GBRMPA's role in marine



park management and the use of current scientific knowledge to inform management decisions encourages researchers to consider the GBRMPA's information needs when designing research projects. Regular contact with postgraduate students also helps the GBRMPA keep up to date with current relevant research.

### **Further Information**

The GBRMPA Science for Management Awards forms and guidelines are available from the GBRMPA website

<u>http://www.gbrmpa.gov.au/corp\_site/info\_services/</u>science management/information for researchers/grants

or by contacting the Science Coordination Team at the GBRMPA.

For further information contact: Science Coordination Great Barrier Reef Marine Park Authority PO Box 1379, Townsville Qld 4810 07 4750 0700 www.qbrmpa.gov.au