

MEDIA RELEASE

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Reef and Rainforest Research Centre (RRRC), Cairns

For immediate release



Workshop helps set guide research on Crown Of Thorns Starfish

Outbreaks of Crown Of Thorns Starfish (COTS) have been identified as one of top three threats to the health of the Great Barrier Reef and the \$5 billion tourism industry it supports.

Each one of these starfish can grow to over 60 centimetres wide across its central disc (with the largest individual sighted measured at over 1.3 metres wide), is covered in poisonous spines and can eat its own body size in coral in a single day.

For decades, successive outbreaks consisting of millions of individual starfish have swept across the Great Barrier Reef, consuming vast quantities of various hard coral species, which are vital building blocks in the Reef's complex ecosystem.

Outbreaks are also increasing in frequency and severity, with population spikes previously only seen once every 30 or 40 years now occurring every five to seven years.

Although the species is naturally present on the Great Barrier Reef, the size and frequency of these outbreaks are believed to be caused by human activity - current research strongly indicates that one of the major contributors to Crown Of Thorns outbreaks is nutrient-laden runoff entering the Reef from coastal rivers, which boost numbers of the plankton on which Crown of Thorns larvae feed.

Controlling Crown Of Thorns populations is a key area of Reef health management because the starfish represent a major threat to the Reef's health that direct action (ie culling) can be taken against.

A two-day workshop held at James Cook University Townsville campus held on September 1-2 brought together Crown of Thorns experts to establish to review how scientific research and management can be aligned to better control impacts of the starfish.

Another of the workshop's aims was to provide a knowledge base for the development an Integrated Pest Management Strategy (IPMS) for the starfish, which would borrow from strategies for controlling land-based pests such as locusts or mice and also apply principles of coordinated surveillance, monitoring and managing Crown Of Thorns at all stages of its life cycle.

Chaired by Dr David Westcott from CSIRO, the workshop was attended by scientists and managers from James Cook University, Sydney University, CSIRO, the University of Queensland, the Australian Institute of Marine Science (AIMS) the Association of Marine Park Tour Operators (AMPTO) and the Reef and Rainforest Research Centre (RRRC).

Dr Westcott said the workshop had been an excellent opportunity to bring together expertise and diverse perspectives on Crown Of Thorns to set future research priorities.

"What we achieved is a strategic approach to COTS management based on an understanding of the underlying processes that drive COTS outbreaks," David said.

"This allows us to identify key management needs and the contribution research can make to fill those needs.

“Now we have a much better idea of how to plug research into management to ensure that COTS management is acting operating as efficiently and as smartly as possible. This will lead to new approaches in surveillance, new methods for identifying where and when we should manage and clear guidance on what we should be looking to achieve with our management.”



Attendees at the Crown of Thorns Control Workshop at James Cook University (image: RRRC)

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