

NERP Tropical Ecosystems Hub Project Factsheet

Monitoring the health of Torres Strait coral reefs

Project leader: Dr Ray Berkelmans (AIMS)

Project summary

This project will conduct a biodiversity assessment of coral communities on Torres Strait reefs to establish a baseline of coral condition and start a longer-term monitoring program of corals in the region. This monitoring will look for changes in the condition of coral reefs in the Torres Strait. As part of this project, an early warning system will be established for coral bleaching. This will give the Torres Strait Regional Authority (TSRA), Torres Strait communities, industry and other stakeholders, the ability to predict, prepare for and respond to coral bleaching.

Why this research is needed

The reefs of Torres Strait are a key component of the lives and livelihoods of local communities. These reefs are threatened by a variety of local and global factors: notably coral bleaching, crown-of-thorns starfish, shipping and increasing levels of coral diseases. Compared to the Great Barrier Reef, little is known about the biodiversity or condition of reefs in the Torres Strait. Improved knowledge of Torres Strait coral reefs and monitoring their status and health will help identify problems and enable the TSRA to respond where necessary.

Research-user focus

The project will contribute knowledge for the conservation and management of regional biodiversity by the Torres Strait Regional Authority. Regular updates on environmental conditions, including real-time weather and oceanographic data, not only keeps stakeholders in touch with developments but provides a vehicle for stakeholder engagement, education and information sharing. The e-atlas will archive and display data collected as part of this project and enable integration with data from other research projects (past and present) in the Torres Strait.

Project Partners:



Find this project at www.nerptropical.edu.au

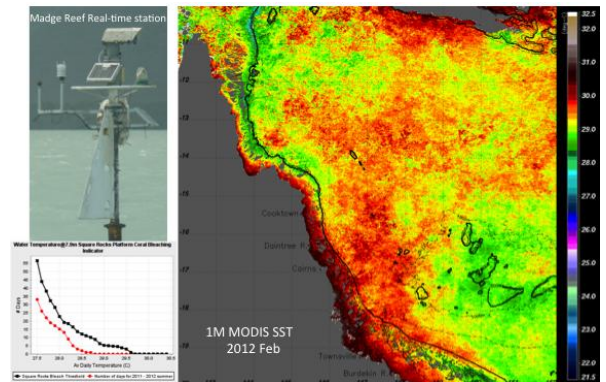
Theme 1: Assessing ecosystem condition and trend

Program 2: Natural resources of the Torres Strait land and sea

Project: 2.3



Very little is known about reefs in the Torres Strait. A detailed biodiversity assessment will be conducted as part of this project which will be followed by a longer-term monitoring program to check on their health.



Monthly updates on environmental conditions combine the latest satellite and in-situ observations to keep stakeholders informed of trends in key environmental variables and provide early warning of stressful conditions to coral reefs.

Outcomes

- A review of past research on coral reefs in the Torres Strait.
- A report on coral reef biodiversity in the Torres Strait.
- A monitoring program for Torres Strait reefs that meets community needs.
- Enhanced Torres Strait ranger capacity in monitoring coral reefs and in interpreting trends in the abundance of coral reef organisms.
- A program for long-term monitoring of reef temperatures.
- A real-time weather station and an early warning system for coral bleaching.

For more information about this project, contact:

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