

Port of Townsville

If established, marine pests could affect the high recreational, commercial and natural value of the Port of Townsville and surrounding coast. It is crucial to determine the location and numbers of any marine pests in the port. Townsville Port Authority is committed to sound environmental management of the Port of Townsville. In collaboration with James Cook University and the Cooperative Research Centre for the Great Barrier Reef World Heritage Area (CRC Reef), the Authority will survey the port and adjacent marine areas for marine pests. The Introduced Marine Pests Port Baseline Survey will also provide an inventory of native marine biodiversity and act as a health check of the Port of Townsville.

How the project will help us to manage the Port of Townsville

The Introduced Marine Pests Port Baseline Survey will identify and monitor any introduced pest species in the Port of Townsville.

The Port Baseline Survey will also provide a thorough ecological assessment of the port and surrounding area. This information will be used to ensure a comprehensive approach to managing the port's marine environment.

In addition, the results of the survey will be used in Australia's Decision Support System (DSS). The DSS incorporates results from port surveys around Australia and is used to assess the risk associated with both commercial and recreational marine transport and determine whether a particular vessel could be a carrier or vector of a foreign marine species. By incorporating results from the Townsville Port Baseline Survey, the DSS will become a better tool for managers of ports around Australia. It will enable better risk assessment of ships visiting Townsville and will improve the efficiency of management of hull fouling and ballast water to prevent the introduction of new marine pests.

Timeline

The project will start in October 2000. Samples will be collected throughout the port and adjacent marine areas. They will be sorted and the organisms identified to the lowest taxonomic level.

The project is labour-intensive and expected to take about 9 months.

There will be progress reports in December 2000 and March 2001 and a final report in May 2001.

Brown kelp

Marine Pest Fact File

- In their native environment, populations of organisms are usually kept in check by predators, parasites and competitors. When introduced into a new environment, they may not be controlled by these mechanisms and their populations can explode.
- Introduced species can disrupt ecosystems by introducing diseases or competing with native species for space and food.
- Most introductions into Australian waters are accidental. While some species have survived journeys as fouling organisms on ships' hulls or in ballast tanks, others were brought into Australian waters with organisms used for mariculture.
- Introduced marine pests in Australian waters include the European fanworm (*Sabella spallanzanii*), the brown kelp (*Undaria pinnatifida*), the green crab (*Carcinus maenas*), the black striped mussel (*Mytilopsis sp.*) and the northern Pacific seastar (*Asterias amurensis*).

Northern Pacific seastar



PHOTO: TERENCE BOGUE

Black striped mussel

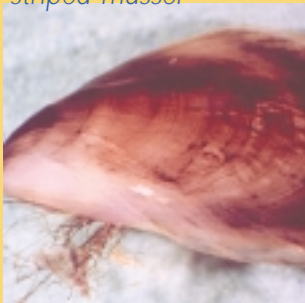
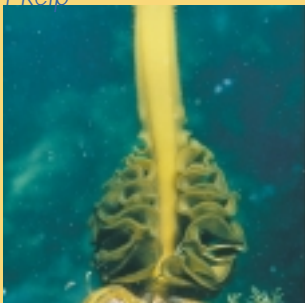


PHOTO: CSIRO MARINE RESEARCH

Brown kelp



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How you can help

Many local community groups have extensive knowledge about marine populations. They are often the first to detect changes in natural populations such as the invasion of a marine pest. If you have information that could help us with this project, please contact:

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Timeline

The project will start in October 2000. Samples will be collected throughout the port and adjacent marine areas. They will be sorted and the organisms identified to the lowest taxonomic level.

The project is labour-intensive and expected to take about 9 months. There will be progress reports in December 2000 and March 2001 and a final report in May 2001.