NERP Tropical Ecosystems Hub Project Factsheet

Harnessing natural regeneration for cost-effective rainforest restoration

Project leaders: Prof. Carla Catterall (Griffith University) & Dr Luke Shoo (University of Queensland)

Project summary

The project will assist decision-makers to more efficiently restore biodiversity to degraded rainforest landscapes by providing new knowledge about the outcomes of lower-cost natural regeneration (including potential for minimum intervention management) relative to higher-cost active reforestation (replanting). The outcomes of this project will enable planners to assess the costs, risks and benefits of different approaches to reforestation and choose the most appropriate method for any particular ecological and economic context.

Why this research is needed

Replanting rainforest is an expensive activity. This project will explore the potential for naturally regenerating forests (regrowth) to provide a much needed lower-cost option to restore critical habitat over large areas.

Research-user focus

Government agencies, conservation groups and community organisations in the Wet Tropics region will use the outcomes of this research to achieve better revegetation outcomes. Identified research-users include the Wet Tropics Management Authority, Terrain NRM, the Department of Sustainability, Environment, Water, Population and Communities, the Queensland Department of Agriculture, Fisheries and Forestry, Far North Queensland Regional Organisation of Councils, Conservation Volunteers Australia and other non-government community conservation and restoration organisations.

Project Partners:

Griffith UNIVERSITY

THE UNIVERSITY OF QUEENSLAND AUSTRALIA

Passive restoration (natural regrowth).

Active restoration (replanting).

Photos: Luke Shoo

Outcomes

This project will:

- Compare the likely biodiversity and biomass returns over time from investment in active (replanting) and passive (natural regrowth) approaches to rainforest restoration.
- Deliver information about the likely outcomes over time of natural regeneration in different land contexts.

This will help government agencies and landholders to better forecast outcomes resulting from passive regeneration over defined timeframes. This knowledge will also be useful to private enterprises interested in capitalising on emerging carbon markets.

Find this project at www.nerptropical.edu.au
Theme 3: Managing for Resilient Tropical Systems
Program 12: Managing for Resilience in Rainforests
Project: 12.2

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Reef & Rainforest RESEARCH CENTRE