

# Strategies for choosing and deploying provenances for resilient revegetation



**Amount:** \$30,746 (2015 rate) tax free scholarship with possible 6 month extension plus project operational funds

**Location:** Hobart, Tasmania

**Eligibility:** Domestic and International students with First Class or Second Uppers Honours/ Masters or equivalent

**Submission dates for applications are listed on <http://www.utas.edu.au/arc-forest-value/phd-project-opportunities>**

## About the Centre

This research project is part of the ARC Centre for Forest Value. The Training Centre will build the capacity to shift the forestry and wood products sector from a traditional, resource driven, low-technology base to a market-driven, precision-manufacturing focused industry that applies modern technologies and business approaches to the value chain from germplasm to commercial buildings, and from production to restoration plantings.

Learn more at [www.utas.edu.au/arc-forest-value](http://www.utas.edu.au/arc-forest-value)



## Project Overview

This project will provide a genetic, ecological and silvicultural framework to guide establishment and integration of environmental plantings within multi-use production landscapes. It will be embedded in an active program of forest restoration being undertaken by Greening Australia and exploit a unique infrastructure of long-term restoration trials established in Tasmania under two ARC Linkage grants. It will address research on:

1. Establishment and management of environmental plantings, including issues of plant production, site selection and preparation, species and provenance choice, plant establishment (including direct seeding), management of plantings (including drought, frost, browsing and disease risk, and weed control)
2. Monitoring the biodiversity impacts and use of tree plantings
3. Management of offsite effects (e.g. wildling spread and pollen flow) of tree plantings

## Specific Project

Provenance choice can be critical to the long-term success of revegetation. Traditionally local provenances have favoured due to a long history of site adaptation and the minimisation of the risk of adverse on- and off-site effects. However, local provenancing is increasingly being questioned due to issues of seed supply and quality (e.g. inbreeding), anthropogenic site modification and global environmental change. The later not only includes climate change, but increasing exposure to exotic competitors, pests and diseases through globalisation.

This project will exploit the large resource of eucalypt provenance trials established with Greening Australia restoration trials in the Midlands of Tasmania to address these issues. It focus on eucalypts, work closely with Greening Australia staff, involve interactions with landowners and other restoration organisations, and (i) test for evidence for climate adaptation and local versus non-local provenance superiority, (ii) identify the key selective agents/factors shaping the trajectory of tree plantings, and (iii) test the new provenancing strategies proposed to develop climate resilient tree plantings, including climate-adjusted provenancing.

The ARC Industrial Transformation Training Centre for Forest Value is supported from the Australian Research Council's Industrial Transformation Training Centres scheme (project number IC150100004).

To submit an expression of interest or for general information, please contact the Centre for Forest Value at [forest.value@utas.edu.au](mailto:forest.value@utas.edu.au)  
For information related to this project please contact Professor Brad Potts [Brad.Potts@utas.edu.au](mailto:Brad.Potts@utas.edu.au) or Professor Mark Hunt [Mark.Hunt@utas.edu.au](mailto:Mark.Hunt@utas.edu.au) for more information.

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## Partner Organisations

