



Recreating structure and function in restored woodlands

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



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

Native woodlands are structurally complex typically including a tree layer (wide spaced trees) a shrub layer (may be dense or open) and a grass layer (commonly tussock grassland). The trees vary in age and have hollows and there is much woody debris on the ground. This is useful habitat for the fauna. Replanted (or restored) woodlands tend to be young, evenly spaced and have no old-growth characteristics. Commonly the shrub layer is poorly developed (although planted does not persist) and the grass layer is exotic. This does not change over time (e.g. 20 years), which indicates a stable Novel Ecosystem has been created rather than native woodland that is progressing towards a natural state. How do we recreate structure and function in restored woodlands?

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

For information related to this project please contact Professor Brad Potts Brad.Potts@utas.edu.au or Professor Mark Hunt Mark.Hunt@utas.edu.au for more information.

Partner Organisations

