

Seeking PhD students: the seed biology and ecology of endangered grassy woodland plant communities

We are seeking PhD students interested in conservation biology, ecology and/or physiology to lead a new research program into the seed biology and ecology of Australian grassy woodland plants. There is potential to conduct fieldwork across temperate southeast Australia and you can gain skills in survey, experimentation and modelling of ecological and evolutionary processes to solve current problems in evolution, ecology and biodiversity conservation.

Many grasslands and grassy woodland communities in SE Australia are endangered and understorey species which are key contributors to the diversity, structure and habitat values (e.g. Figure 1) often have poor seed germination. This research program seeks to:

- Investigate the biological, evolutionary and ecological determinants of seed dormancy, germination strategy, and seedling establishment traits in the endangered community
- Determine drivers of seed germination, seedling growth and adult traits to understand if there are shifts in tolerance at different life history stages
- Integrate biological, evolutionary and ecological knowledge gained through laboratory, glasshouse and/or field trials to find restoration solutions that improve seedling survival and establishment in the field

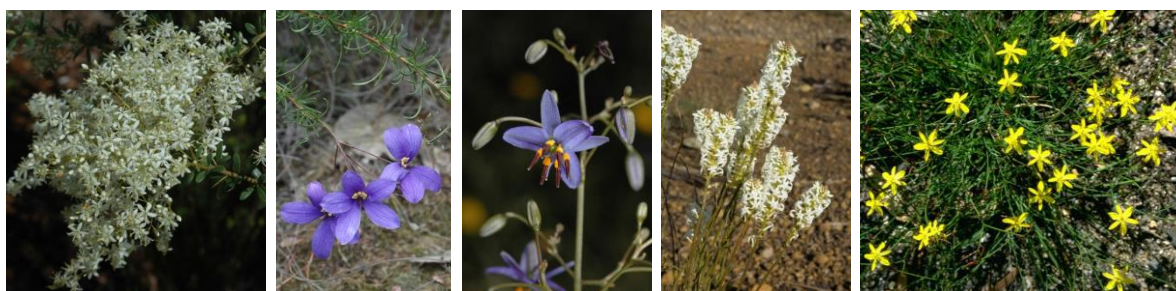


Figure 1. Example grassy woodland understorey species that have variable seed germination and establishment. Images M Fagg © ANBG.

Top-up scholarship

In addition to standard university contributions you will receive support from organisations interested in restoration:

- a top-up scholarship (up to \$10,000 per year for 3 years)
- laboratory and travel funding (potentially up to \$15,000 per year for 3 years)

Research environment

Enrolment will be at ANU and/or CSU Albury. You will be co supervised by Dr Lydia Guja (Australian National Botanic Gardens (ANBG) /CSIRO), Dr Jodi Price (Charles Sturt University (CSU)) and Professor Adrienne Nicotra (Australian National University (ANU)).

Application

Interested students who hold a Masters or 1st class Honours degree should email

Lydia.Guja@environment.gov.au:

- a 2 page statement of research interest and experience, how your interest/experience aligns with this project, and the kind of research you envisage conducting for this project
- maximum 2 page CV
- academic record
- names and contact details of 2 academic referees

Applicants will be selected to submit a PhD scholarship application at ANU and/or CSU. Students must secure a PhD stipend scholarship to conduct the research.

The successful candidate(s) can commence their projects in 2017 or 2018.

