This template has been developed as a guide to information that may be included on the website to advertise a scholarship linked to a specific project. Please note that not all areas of the template may be applicable, please remove these areas.

Title:

Using 'patterns' to understand the processes shaping ecosystem structure and dynamics

Type:

Living allowance, operational/logistical project funds, and scholarship top-up (competitive)

Value & Duration:

TGRS or APA scholarships provide AUD \$26,288 per annum (2016 rate) living allowance for 3 years, with a possible 6 month extension. This rate is indexed annually. The linked Ph.D. research project also includes substantial operational funds and logistical support, funded by a 5-year Australian Research Council grant to Prof. BW Brook (ARC Australian Laureate Fellow). An additional top-up award of \$4,000 pa will also be considered for outstanding applicants, as will some support for the costs of relocation by non-Tasmanian candidates, judged on merit and need.

Closing date:

Applications close on 31st August 2016. (The student must be enrolled in the 2016 calendar year.)

The Research Project:

"If a tree falls in a forest and no one is around to hear it, does it make a sound?" This well-known philosophical thought experiment reflects on the nature of reality and observation. Yet, for forest ecologists, it embodies a practical question! Many ecological factors shape the dynamics and structure of forests that can leave imprints of past processes, these legacy events are conserved in the observable spatial positions of living (and even dead!) trees. PhD projects now offered in the Dynamics of Eco-Evolutionary Patterns (D.E.E.P.) research group go right back to principle questions in ecology: "Why is a tree found here, and not there?", "how do plant-plant interactions shape plant patterns across time and space?", and practical problems like "how will the structure and character of forests evolve under global change?". Additional projects that involve modelling and programming forest ecosystems (using field collected data) are also on offer. Study systems for which we have data that can be used for these projects include; Tasmania, Australia-wide (tall eucalypts) and global (Brazil case studies, for example).

Eligibility:

The following eligibility criteria apply to this scholarship:

- The scholarship is open to Australian (domestic) candidates and to international candidates.
- The PhD must be undertaken on a full-time basis.
- Applicants must already have been awarded a first class Honours degree or hold equivalent qualifications or relevant and substantial research experience in an appropriate sector.
- Applicants must be able to demonstrate strong research and analytical skills.

Candidates from a variety of disciplinary backgrounds are encouraged to apply. Knowledge and skills that are particularly desirable, and will be ranked highly, include:

- Ecological, evolutionary or conservation biology theory and practice (including fieldwork)
- At least basic experience in ecological modelling, and statistical packages such as R
- Database management and high-level computer skills
- Work well in a team environment

Funding:

This PhD scholarship is funded by the University of Tasmania, with project support and top-up

supported by an ARC Australian Laureate Fellowship project grant to Prof. BW Brook.

Application Process:

Applicants should complete the application via the University of Tasmania's admissions system and scholarship section (see How to Apply on the <u>Graduate Research Future Students</u> page) and indicate under 'Scholarship Support: Living Allowance' that you wish to be considered for a 'UTAS merit-based scholarship for a living allowance'

More information:

Contact Prof. Barry Brook (e: <u>barry.brook@utas.edu.au</u>; p: 0420 958 400) and visit <u>http://ecological-dynamics.org</u> for more information.