



**eXtreme
plant ecology
research team**

PhD opportunity starting mid 2023 - Deakin University, Melbourne, Australia

Determining the resilience of Australian alpine plants in a future climate



The [eXtreme Plant Ecology Research Team](#) in the [Centre for Integrative Ecology](#) and [School of Life and Environmental Sciences](#) at Deakin University is seeking a PhD candidate to contribute to an Australian Research Council funded research program aimed at enhancing the resilience of Australian alpine plant communities through strategic restoration practices.

The Australian Alps are recognized as one of the world's major biodiversity hotspots and critically vulnerable to climate change. Alpine plant communities are already showing signs of climate stress, are under threat from exotic pest plants and animals, and are recovering from a legacy of stock grazing. As a result, large areas of alpine environments require ongoing restoration works across National Parks and Alpine Resorts. There is urgent need for progressive management strategies to maximise restoration success through consideration of future soil water availability, plant thermal tolerances, and the adaptability of functionally important plant species. To bolster the resilience of alpine landscapes under climate change; we must understand the interactions between the physical and biological processes underpinning the health of alpine environments and adaptability of alpine plant communities

Excellent PhD candidates with a background in plant ecology, ecophysiology, and/or botany are sought to join an exciting project, co-funded by the Australian Research Council and our industry partners Parks Victoria, Royal Botanic Gardens Victoria, Mount Hotham Alpine Resort and Southern Alpine Resort Management Board, and will make use of the [Australian Mountain Research Facility](#). Depending on the project scope, the candidate will have a unique opportunity to focus on aspects of:

- **Plant water relations and ecophysiology**
- **Plant regeneration and recruitment**
- **Seed ecology**
- **Snow ecology**
- **Plant thermal tolerance**
- **Alpine plant community ecology**

The results of the project will assist alpine land managers choose the right species for restoration projects, thereby building resilience into these vulnerable environments

The candidate will join the [eXtreme Plant Ecology Research Team](#) at Deakin Burwood (Melbourne) and will be primarily supervised by Assoc Prof Susanna Venn. Depending on the topic, co-supervision by Dr Adam Miller (Deakin), Assoc Prof John Morgan (La Trobe University) or Prof Adrienne Nicotra (Australian National University) may be appropriate. Applicants are expected to have an excellent grade (>85% H1 or HD) in an Honours or a MSc research program, and proven skills in scientific writing and publishing. We are seeking candidates with a specific interest and experience in plant ecology, botany, or plant ecophysiology. The successful candidate will be awarded a 3-year PhD scholarship (~AU\$28,000 p.a. tax free) through the [School of Life and Environmental Sciences](#). An anticipated commencement date is mid 2023.

Please email Susanna.venn@deakin.edu.au with a brief background about your research experience, your goals for a PhD project and your CV. <https://www.deakin.edu.au/about-deakin/people/susanna-venn>