

We are seeking a PhD student to work on an exciting new project: Deer movement and behaviour in the Australian Alps (NSW region) to inform pest management

In collaboration with the NSW National Parks and Wildlife Service (NPWS) Environment Trust Deer Project team we are seeking a **PhD student** to undertake the above project in Kosciuszko National Park (KNP) and adjacent privately managed lands.

Background

Deer are considered pests in NSW and the Environment Trust has granted NPWS \$9.2 million over 8 years to develop a cross tenure feral deer management plan, including the development of a cost-effective 'toolkit' for application across other areas of NSW. A key component of the project involves tracking the movements and behaviour of deer, as a complementary element to ongoing deer monitoring and integrated pest control trials.

Deer movement and behaviour work:

The deer movement and behaviour work will include:

- GPS collaring of sambar, red and fallow deer,
- Collection of deer DNA and analysis of population structure (primarily sambar and fallow),
- Collection of longitudinal deer behaviour knowledge from public and private land managers,
- Collection of ongoing observational data using qualitative and quantitative survey techniques.

This work will contribute the main elements of the PhD, which will answer the following:

To what extent can understanding the movements and behaviour of deer be integrated into pest management?

What are the implications for deer management across NSW and nationally?

How can behavioural responses of deer to intensive pest control influence pest management design and effort?

What is the local population structure and degree of interrelatedness of deer populations?

To what extent is there a local / external (inter or intra- district) population component? Can this knowledge be used to better focus management efforts?

Are there invasive source populations of deer affecting pest control efforts? Are there barrier or conduits to deer movement through the landscape?

Benefits of the PhD project:

Significant in-kind project support via the Environmental Trust and NPWS Deer Project Team, including assistance in field work, equipment (aerial netting gear, GPS units, sampling kits, etc) and other key project costs. The student will be based at The University of Sydney in the School of Life and Environmental Sciences within the Global Ecology Lab supervised by Dr. Thomas Newsome and Dr. Catherine Grueber.

Australian candidates must be competitive to receive stipend support under the Research Training Program (RTP). A variety of scholarships are available for international students. The current RTP stipend rate at The University of Sydney is \$35k tax free per annum. A top up scholarship of up to \$10k per annum will be provided to a candidate who successfully receives an RTP stipend. If the selected candidate does not receive RTP support, we will consider funding a full scholarship at the rate of \$40k per annum.

For more information and to submit an expression of interest, please contact Dr. Thomas Newsome at thomas.newsome@sydney.edu.au [lab website: <https://thomasnewsome.com/>]

The expression of interest should include a cover letter and CV. Please include details of your degrees (including average marks), relevant work and research experience, field experience in remote locations, publications, and ability to use programs like GIS, statistical packages like R and/or experience undertaking genetic analyses. A shortlist of applicants may be required to interview or meet the project team. A single applicant will be selected for the position and invited to apply for stipend support. The student will ideally enrol in Q1 or Q2 2021 (enrolment and RTP applications are due to The University of Sydney by December 4th 2020).



Expressions of interest will close 25th November 2020

