





Doctor of Philosophy (PhD) opportunity - Ecology of native fauna in areas invaded by buffel grass



Bush Heritage Australia (BHA), and Charles Darwin University's (CDU) Research Institute for the Environment and Livelihoods (RIEL) are seeking a PhD candidate to undertake a project on the ecology of native fauna in areas invaded by buffel grass on Bush Heritage properties in central Queensland.

Scholarship and financial support: The opportunity is subject to an open competitive Australian Government Research Training Program (RTP) Scholarship round (Australian citizens/residents or New Zealand citizens are eligible to apply). The RTP scholarship is valued at \$32,192 per annum (2024 rate), and indexed annually, for 3 years from commencement.

BHA is offering a \$10,000 per annum top-up to the preferred candidate (per the expression of interest application process below) if successful in securing an RTP scholarship.

For RTP scholarship recipients, an additional top-up scholarship is available for First Nations candidates, as well as a University Relocation Allowance if relocating to Darwin or Alice Springs.

Operational support, especially trapping equipment, is available to support the project.

Individuals that do not require financial support are also encouraged to apply.

About the project:

Buffel grass *Cenchrus ciliaris* is native to tropical and sub-tropical Africa, India and Indonesia and has been widely promoted in Australia as a drought resistant pasture grass. Buffel grass has now become naturalised, often dominating the ground-storey of multiple plant communities in semi-arid WA, NT, SA

and Qld. Buffel grass can promote more frequent, extensive and severe fire which leads to further transformation of ecosystems, especially loss of shrubs and trees over time. Buffel grass has been identified as a major threat to biodiversity. Impacts of fauna can be direct and indirect, caused by loss of structural and floral diversity and accelerated by shifting fire regimes. This project will focus on understanding mechanisms by which buffel grass and/or management of buffel grass impacts on faunal assemblages including one or more of the following groups: birds, reptiles, mammals, or possibly bats and frogs. The research will help to inform the management and conservation of fauna in invaded areas.

The successful candidate will work closely with BHA staff and Traditional Owners across several BHA reserves in remote Queensland. When not in the field they could be located at CDU's Darwin or Alice Springs campus (where the CDU supervisor is located) or anywhere in Australia by negotiation. The successful candidate will have the opportunity to shape the direction of the project and specific research questions with the option of and support for using a variety of field-based methods to collect data, including pitfall and Elliot trapping, camera traps and audio recorders.

About you:

- You bring a high level of academic merit and research background consistent with RTP Stipend Scholarship requirements (see https://www.cdu.edu.au/research-and-innovation/higher-degree-research/scholarships).
- A background and experience in ecological research and/or conducting biodiversity surveys relevant to one or more the following taxonomic groups: birds, reptiles, mammals, bats and/or frogs.
- Strong ability to work independently with a high level of initiative.
- Experience, ability and interest in undertaking remote field work.
- Experience or interest in working closely and respectfully with Indigenous people.
- Previous experience operating 4WD vehicles and working in sometimes challenging environments, is highly desirable.

Benefits to you:

- You will have the opportunity to craft a research project that aligns with your interests and the broader scope of the study.
- Work with and provide valuable management information to one of Australia's largest not for profit conservation organisations.
- Work within a highly collaborative environment, supported by BHA and CDU supervisors and other BHA staff, with ample opportunity for professional development as well as career progression following completion of the PhD.
- Opportunity to work or travel to the remote and spectacular regions of central Queensland and the NT.
- Be located anywhere in Australia with the opportunity to travel and conduct fieldwork on BHA properties.
- Access to Student Support Services and Wellbeing Support Program.
- Work with a University committed to changing people's lives for the better through training, education, and research.

Selection criteria:

 Per the RTP scholarship conditions you must be either an Australian citizen or permanent resident, or a New Zealand citizen.

- First-class Honours degree or equivalent Masters degree with substantial research component, and a high undergraduate GPA.
- Cultural sensitivity and cross-cultural communication skills.
- Strong analytical skills.
- A driver's licence with ability to drive manual vehicles being desirable.

Application process:

- Interested applicants should contact Christine Schlesinger by email at christine.schlesinger@cdu.edu.au.
- Please attach a CV and a one-two page cover letter outlining your interest in the project, your
 research interests, your experience, addressing the about you and selection criteria sections and
 including any other relevant information.
- Deadline for expressions of interest is 8th September 2024.
- The successful applicant will be invited and supported to apply for a domestic RTP competitive round scholarship through CDU by closing date 31st October 2024. The top up scholarship will commence at the starting date of the RTP scholarship.

Commencement date: The project is expected to commence in early 2025.

Supervisory Team: The supervisory team will include Associate Professor Christine Schlesinger, and Bush Heritage scientist/s with the potential to add additional supervisors from CDU or industry, depending on the specifics of the project.

Diversity and Inclusion

At CDU, we actively celebrate our diversity. We innovate, embrace new ideas, and act with courage and kindness. We're about what we can give to the world rather than what we take, and we believe in the transformative power of education. We work hard to make sure every member of our university community feels that they truly belong. Understanding that it is through our focus on our people and leveraging our differences that will make CDU the most connected university in Australia, we are striving to ensure that our culture and our community are inclusive of all our staff, students and visitors. We are committed to maintaining a culture where everyone feels respected, safe, encouraged to speak up and supported in achieving their professional goals. You make CDU. And we want you to be exactly who you are.