



Position description

POSITION TITLE	Integrated Pest Species Management Internship
ROLE GRADE	Grade 2
REMUNERATION	\$42,580 inclusive of 9.5% superannuation (\$10,645 pro rata for 3 months)
COST CENTRE	Science and Research
LOCATION	Bon Bon Station Reserve
DATE REVIEWED	January 2020
POSITION BASIS	Fixed Term – Full time 3 months

Introduction

Bush Heritage Australia is a national non-profit organisation that buys and manages land to protect our irreplaceable landscapes and our magnificent native species forever.

We buy land that has outstanding conservation values and reconnect fragmented landscapes to protect habitat for wildlife. Bush Heritage works across 19 priority landscapes and owns 44 reserves. In addition, we partner with Aboriginal people and agricultural landowners to achieve conservation outcomes. Currently, Bush Heritage is working across more than 8.86 million hectares, protecting more than 6000 native species and at least 239 endangered species.

Established in 1991, Bush Heritage has around 30,000 supporters Australia-wide and an annual operating budget of over \$20 million. We are primarily funded by donations from individuals and philanthropic sources.

Our culture is characterised by a collaborative and supportive approach, with a strong commitment to safety and professional development.

Bush Heritage Australia acknowledges the Aboriginal traditional owners of country.

Our values are:

Conservation: Conservation impact is essential. Our decisions are informed by best available science and evidence;

Culture: We respectfully engage with Traditional Owners of the land, and recognise Aboriginal culture, connection to Country and traditional knowledge. Working together and applying two-way science leads to greater understanding and better conservation outcomes;

Collaboration: Collaboration, pragmatism and innovation are essentials. We listen to and respect each other, finding creative solutions together;

Community: The broad Bush Heritage community underpins our success. By engaging with and within communities around Australia we achieve so much more than we could working alone; and

Safety: Our people's wellbeing and safety is critical.

CEO and the Board

Heather Campbell is Bush Heritage's Chief Executive. The Board Chair is Chris Grubb, and Directors include leading Australians from business and commerce, government, non-government and private sectors, conservation and science. Bush Heritage demonstrates a strong commitment to Aboriginal and Torres Strait Islander people and has Aboriginal representation on its Board.

Direction and guidance for this position

Reporting to the Restoration Project Officer and Reserve Manager, the Integrated Pest Species Management Intern is accountable for fulfilling the 'Key responsibilities and duties' associated with this position. As a self-starter, it is expected that the incumbent will contribute towards improving the effectiveness of systems being managed including the development of new systems where required. Through this role Bush Heritage aims to support the further education of the successful candidate with on ground supervised work experience.

In applying for this position, applicants should address the criteria set out in the 'Qualifications, skills and selection criteria' of this position description. Failure to address those criteria will likely preclude the applicant from consideration for the role.

Bush Heritage believes in inclusiveness, diversity and equality and we are committed to ensuring that our workplaces are a reflection of the (SA) community. We recognise the benefits that a diverse and inclusive culture brings for our employees and in turn, encourage talented people from all backgrounds, abilities and identities to apply to our vacancies.

The role has been funded by the Erica Foundation.

Position summary (background)

Two introduced predators, the red fox (*Vulpes vulpes*) and feral cat (*Felis catus*), pose an ongoing threat to many of Australia's native mammals and are implicated in the decline of many Australian native species. Little is known, however, about the mechanisms that underlie the abundance and associations between them and their prey species, including European rabbits (*Oryctolagus cuniculus*), diet and home range size and movements within the South Australia's arid rangelands. Effective control of both species also relies on an understanding of their activity patterns, habitat use, diet and demography, and to date there are limited comprehensive studies of these parameters in the SA rangelands. The aim of this internship is to participate in the integrated pest management program at Bon Bon which includes a range of monitoring and control activities for all three target species. Working with the team at Bon Bon, the position will involve field activities including monitoring activities such as sandpad monitoring, spotlighting, collection of remote camera data, trapping and radio-tracking, data collection for specific activities, data management, and collation/analysis of data where possible. This position will also include a research component looking into the relationship between introduced predator species and invertebrate prey and comparing this between pest management zones.

Key responsibilities and duties

The primary responsibilities associated with the role include:

- Mapping – Identifying rabbit warrens in and around the core area and inner buffer area for control.
 - a. On ground mapping using GPS and other mapping software
 - b. Use of ArcGIS to visualise mapping and allocate control measures
 - c. Assist with a range of on ground rabbit control methods

- Monitoring with sandpads
 - a. Creating sand pad networks to compare predator control between treatment areas.

- b. Developing an off-road network of sandpads in both treatment areas for assessing relative abundance of all species with a focus on the difference between the two areas for predator species (foxes and cats) and their prey to demonstrate the impact of predator control activities
- c. Assisting with the quarterly sand pad monitoring event

- Monitoring with cameras – assisting with camera trap monitoring (Core vs Control)
 - a. Assisting with the management of established camera grids in the Core and Control area.
 - b. Image processing and management
 - c. Use of cameras to assist other monitoring as required

- Monitoring with spotlight/thermal surveys
 - a. Assisting with spotlight survey assessment of pest animal abundance
 - b. Assisting with spotlight pest animal control

- Research Activities
 - a. Assisting with on-ground projects which may include GPS collaring and radio-tracking of collared predator species

Research Component

Conducting a dedicated research project (pilot study) to compare invertebrate presence, in particular centipedes, between two predator control zones. This study will assist the overall Integrated Pest Management programs ability to assess the impact of control measures between treatment zones.

This will include the following activities:

- b. Conduct a literature review on invertebrate sampling methods
- c. Conduct invertebrate trapping in both treatment zones
- d. Analyse data and prepare a report

Qualifications, skills and selection criteria (used to assess your application)

Essential

- A Bachelor's degree with Honours in an ecology or conservation program (eg BSc Hons).
- Appropriate experience relating to ecological systems and/or land management.
- A desire to learn, develop new skills, collaborate, build networks and be innovative.
- A commitment and passion for nature conservation and the objectives and values of Bush Heritage.
- Practical experience with flora and fauna survey techniques, including experience handling wildlife and understanding of animal welfare issues.
- Ability to learn identification of Australian flora and fauna.
- A level of fitness and physical capability to undertake strenuous fieldwork for extended periods, including at night.
- Advanced emotional competence with excellent interpersonal skills, and capable of working effectively with a diverse range of people (staff, volunteers and supporters, neighbours and representatives of other organisations).
- Demonstrated effectiveness in understanding and addressing conservation needs across a range of Australian environments, ecosystems or contexts.

- High level of computer literacy and proficiency with personal computers including word processing, spreadsheet and data software.
- A valid manual Australian drivers' licence
- Four wheel drive/off-road driving experience.

Desirable

- First aid training
- Experience working with Aboriginal and Torres Strait Island communities.
- Knowledge of Health, Safety and Environment and risk assessment procedures and requirements.
- Experience in the not-for-profit sector.

Key outcomes for the role

It is expected that the following outputs will be provided as part of this role:

1. A Bush Heritage blog and media write-ups for publication through Bush Heritage website and social media platforms
2. Written report for research project (with the potential for a scientific publication).
3. An evaluation report about the intern role and experience.
4. An oral presentation and report to the Erica Foundation.

The key learning outcomes expected from this internship include:

- Understanding of key biodiversity conservation issues, particularly as they relate to the arid rangelands.
- Understanding of arid rangelands ecology.
- Understanding of issues relating to invasive species management.
- Ability to undertake fauna surveys using a range of survey techniques.
- Proficiency with species identification (particularly with track counts), and collection of basic survey data.
- Ability to use variety of ancillary tools (eg. GPS, databases, apps) to support primary data collection.
- Experience in data management, data presentation and report writing.
- Experience in conducting field work in a remote workplace, including adherence to safety procedures and protocols.
- Ability to work independently in the field and as part of a team.

Policies and work place practices

Bush Heritage people are responsible for and commit to:

- Using and ensuring adherence to Bush Heritage's values, policies and work-place practices;
- Ensuring Health, Safety and Environment compliance, acting and encouraging others to act in a healthy and safe manner; and
- Maintaining a team-oriented environment, managing and developing staff, and valuing diversity.

Position relationships

Position title of manager	Reserve Manager
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Position titles which also report to manager	Project Officer, Field Officer
Titles of positions that report to this position	None
Key internal relationships	Bon Bon Reserve Manager, Bon Bon Project Officer, Bon Bon Field Officer (x2), SA Arid Rangelands Ecologist
Key external relationships	Traditional Owners, neighbours, volunteers, Kingoonya NRM