

AWC

Ecology and Conservation

Internships



Australian Wildlife Conservancy (AWC) is an independent, non-profit organisation dedicated to the conservation of Australia's threatened wildlife and their habitats. Funded primarily by tax-deductible donations, AWC is taking action to protect Australia's wildlife by:

- Establishing a network of sanctuaries that protect threatened wildlife and ecosystems;
- Implementing practical, on-ground conservation programs to protect the wildlife at our sanctuaries: these programs include feral animal control, fire management, and the translocation of threatened species;
- Conducting scientific research that helps address the key threats to our native wildlife; and
- Hosting visitor programs at our sanctuaries for educating the public and promoting awareness of the plight of Australia's wildlife.

Through its internship program, AWC offers opportunities for promising graduate students to gain valuable training and field experience in real-world conservation initiatives. The AWC supports two internships a year, awarded on a competitive basis, and each lasting six months.

The internships represent an exciting training program that introduces budding conservation biologists to a variety of sanctuaries and a broad range of conservation issues. They are unique in being predominantly field-based, providing interns with experience in a diversity of flora, fauna, field techniques, and monitoring methods. Interns will also gain experience working as part of a team in remote and often challenging conditions.

One internship is based in the Southeast region, and the other in the Northwest region; both provide a modest living stipend for the duration of the program.

- The Southeast Intern will spend six months spread between Scotia, Kalamurina, Buckaringa and Yookamurra Sanctuaries.
- The Northwest Intern will spend six months spread between Newhaven, Mornington and Wongalara Sanctuaries.



Training program

The AWC Field Ecology Intern Program will:

- Expose Interns to a diversity of flora and fauna across a broad range of Australia's ecosystems (e.g. arid zone, the mallee, the tropics).
- Provide the Intern with training in a wide variety of field techniques including:
 - a range of survey and trapping techniques,
 - capture and handling of many different types of animals,
 - specialist skills such as blood sampling and radio-tracking,
 - animal husbandry ,
 - plant collection and herbarium preparation, and
 - vegetation surveys

See below for more detail on the training program.

Supervision:

The Interns will be supervised by several experienced AWC ecologists, including:

- Dr Ben Phillips
- Dr Matt Hayward
- Dr Kerry Herman
- Dr Steve Murphy
- Danae Moore

The supervisors will provide the Intern with on-going assessment and support throughout the training program. At the end of the training program, the Intern's progress will be evaluated, gaps in skills will be identified, and an assessment report provided.

Required Skills before embarking on training:

Candidates for the Intern Program must:

- Have an undergraduate degree in ecology (or be in the latter stages of this degree);
- Have a basic understanding of data collection and management;
- Have the ability to learn identification of Australian flora and fauna;
- Have some introductory experience with fieldwork, including:
 - small mammal and reptile trapping techniques;
 - animal handling;
 - bird survey techniques;
- Demonstrate a knowledge and appreciation of animal welfare issues;
- Be physically fit;
- Be able to use maps and GPS for navigation.
- Speak English;
- Have a Driver's Licence;
- Be an Australian resident/citizen.

Stipend:

- Interns will be supported with a stipend of \$250 per week for the duration of the Internship.



- Travel between, and accommodation at, sanctuaries during the Internship will be arranged and covered by AWC. Accommodation will often be basic, including camping.
- Assistance, to a maximum of \$800, will be provided for travel at the beginning and the end of the Internship.

Application process:

To apply, please email us at intern@australianwildlife.org attaching both a letter addressing each point raised in the “Required Skills before embarking on training”, as well as your Curriculum Vitae (detailing paid and volunteer experience, and the contact details of two referees). Please indicate in the email whether you are interested in the Southeast Internship, the Northwest Internship, or both.

Application deadlines are:

- 30 April 2010 for the Southeast Internship, and
- 15 February 2010 for the Northwest Internship

Specific enquiries can be directed to:

Matt Hayward (Southeast)
Matt@australianwildlife.org
03 5024 5859

Ben Phillips (Northwest)
Ben.Phillips@australianwildlife.org
08 9191 4619

Further information:

See the AWC website for general information:
www.australianwildlife.org

Andrew Howe, intern at Mornington 2009,
with a Bluetongue.



AWC Intern Program 2010



Southeast Intern

Scotia protects 65,000 ha of mallee in western NSW. AWC is implementing an effective feral animal control program and a highly successful translocation program, based out of its field research centre. To date, six regionally extinct and highly endangered mammal species have been reintroduced to the largest feral-free area on the mainland (8,000 ha), including Numbats, Bilbies and Bridled Nailtail Wallabies. AWC's science program monitors the status of these reintroduced species, plus the impacts of its land management programs on the biodiversity of the sanctuary.

Yookamurra protects reintroduced populations of several highly endangered mammal species, including Brush-tailed Bettongs and Bilbies. AWC's science program monitors the status of these populations.

Kalamurina is the largest private reserve in Australia. It hugs the northern shores of Lake Eyre and the three major rivers that drain into the lake travel through the Sanctuary via the Warburton Groove. Its vast desert landscapes protect a range of threatened ecosystems and fauna.

Buckaringa, in the central Flinders Ranges, protects an important colony of Yellow-footed Rock Wallabies. AWC implements a feral animal control program to help safeguard the rock wallabies and other species. The success of this management is measured by AWC's science program.

The table below summarises the skills that the Southeast Intern will develop at Scotia, Kalamurina, Buckaringa and Yookamurra.

Dates: July 2010 to December 2010

Objectives	Tasks	Learning outcomes	Evaluation (assessment of outcomes)
<p>To assist with the fauna reintroduction program (of endangered species) at Scotia and Yookamurra Wildlife Sanctuaries</p> <ul style="list-style-type: none"> • Monitor population abundance (via trapping and spotlight surveys) of reintroduced species • Monitor radio collared Bridled Nailtail Wallabies, Woylies and 	<ul style="list-style-type: none"> • Fauna trapping • Fauna handling (including micro-chipping, measuring, blood sampling) • Radio telemetry • Captive animal husbandry • Assist vets with treatment of animals • Learn and adhere to quarantine protocols 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Capture and handling techniques • Translocation methods • Quarantine and husbandry procedures • Other veterinary procedures • Team work • Value of careful data management 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to use different capture methods and handle animals proficiently • Understanding of quarantine issues • Care of record keeping • Ability to work independently and as part of team



Objectives	Tasks	Learning outcomes	Evaluation (assessment of outcomes)
<p>Numbats</p> <ul style="list-style-type: none"> • Manage captive population of Bridled Nailtail Wallabies 	<ul style="list-style-type: none"> • Enter data from field work meticulously • Design and undertake monitoring surveys for Stick-nest Rats 	<ul style="list-style-type: none"> • Knowledge of alternative approaches to monitoring 	
<p>To assist with biodiversity surveys at Scotia, Kalamurina and Buckaringa Sanctuaries</p>	<ul style="list-style-type: none"> • Fauna identification • Fauna trapping (installing monitoring sites, setting traps, checking traps) • Fauna handling and data collection • Enter data from field work meticulously 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna • Capture and handling techniques for a range of fauna • Value of careful data management • Team work • Accurate navigation 	<ul style="list-style-type: none"> • Ability to identify and demonstrate knowledge of Australian fauna • Ability to carry out fieldwork promptly and to schedule • Ability to use different capture methods and handle animals proficiently • Care of record keeping • Ability to work independently and as part of team
<p>To assist with bird surveys at Scotia Wildlife Sanctuary</p>	<ul style="list-style-type: none"> • Carry out surveys for the Black-eared Miner (Endangered) • Carry out surveys for Malleefowl (Vulnerable) • Enter data from field work meticulously and as instructed 	<ul style="list-style-type: none"> • Understanding of robust sampling designs in ecology • Careful record keeping • Experience with analysis of results 	<ul style="list-style-type: none"> • Ability to understand sampling design • Ability to collect data carefully
<p>To assist with feral animal research</p>	<ul style="list-style-type: none"> • Carry out track surveys throughout Scotia to monitor foxes, cats, goats and cattle. • Carry out monitoring of pest animal control techniques 	<ul style="list-style-type: none"> • Understanding of indices as a method of monitoring wildlife • Knowledge of pest animal control techniques • Knowledge of introduced species ecology 	<ul style="list-style-type: none"> • Ability to identify tracks of terrestrial fauna • Ability to understand the calculation and data collection required to derive indices of abundance.



Northwest Intern

Newhaven lies at the southern edge of the Tanami desert, and protects a range of arid zone habitats and wildlife across its 260,000 ha. Mulgara, Black-footed Rock wallabies and Great Desert Skinks are examples of threatened animals that live on Newhaven. AWC's science program is examining the impact of fire and feral animals on native wildlife, in order to help us manage these threats to desert ecosystems more effectively.

Mornington protects over 320,000 ha of the central Kimberley. Massive sandstone mesas and heavily folded ranges overlook savanna plains and a large section of the mighty Fitzroy River. Mornington's field research centre is the base for an award-winning science and conservation program that is helping to protect iconic species like the Gouldian Finch, Northern Quoll and Purple-crowned Fairy-wren.

Wongalara covers 190,000 ha at the southern edge of Arnhem Land. Fire management and feral animal control programs are protecting its diverse ecosystems and fauna. The science program there is helping us to understand and manage the threats to north Australia's wildlife, including whether Dingoes can effectively control feral cats.

The table below summarises the skills that the Northwest Intern will develop at Newhaven, Mornington and Wongalara.

Dates: March 2010 to August 2010

Objectives	Tasks	Learning outcomes	Evaluation (assessment of outcomes)
To assist with biodiversity surveys in the arid zone at Newhaven (March to May)	<ul style="list-style-type: none"> • Carry out biodiversity surveys for small mammals, birds, and reptiles at a series of permanent trapping sites • Fauna trapping • Fauna handling (including measuring, genetic sampling) • Vegetation sampling • Record keeping • Enter data from field work meticulously and as instructed 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna • Experience with arid zone ecology • Experience with biodiversity monitoring designs • Capture and handling techniques for a range of fauna • Value of careful data management • Team work • Accurate navigation • Vegetation sampling techniques 	<ul style="list-style-type: none"> • An understanding of conservation issues in arid Australia • Ability to use different capture methods and handle animals proficiently • Knowledge of vegetation sampling techniques • Accurate record keeping and data entry • Ability to work independently and as part of team
To carry out fauna and flora	<ul style="list-style-type: none"> • Carry out biodiversity surveys for 	<ul style="list-style-type: none"> • Experience with northern Australian 	<ul style="list-style-type: none"> • An understanding of



Objectives	Tasks	Learning outcomes	Evaluation (assessment of outcomes)
<p>surveys at Morningson (May to July)</p> <ul style="list-style-type: none"> to examine the effects of fire and large herbivores on biodiversity to assist with long-term monitoring of feral cat and Dingo abundance 	<p>small mammals, birds, and reptiles at a series of permanent trapping sites</p> <ul style="list-style-type: none"> Fauna trapping Fauna handling (including measuring, genetic sampling) Assist with track surveys for predators Vegetation sampling Record keeping Enter data from field work meticulously and as instructed 	<p>ecology</p> <ul style="list-style-type: none"> Capture and handling techniques for a range of fauna Use of tracks as a monitoring technique Value of careful data management, and an understanding of experimental design/execution in ecology. Team work Accurate navigation Vegetation sampling techniques 	<p>conservation issues in northern Australia</p> <ul style="list-style-type: none"> Ability to use different capture methods and handle animals proficiently Ability to carry out track surveys Knowledge of vegetation sampling techniques Accurate record keeping and data entry Ability to work independently and as part of team
<p>To conduct wildlife surveys at Wongalara (July to August) to examine:</p> <ul style="list-style-type: none"> The effect of fire on vegetation The interaction between Dingoes and feral cats, and their effects on native fauna 	<ul style="list-style-type: none"> Carry out surveys at a series of permanent trapping sites Fauna trapping Fauna handling (including measuring, genetic sampling) Vegetation sampling Track surveys Record keeping Enter data from field work meticulously and as instructed 	<ul style="list-style-type: none"> Experience with northern Australian ecology Capture and handling techniques for a range of fauna Use of tracks as a monitoring technique Value of careful data management, and an understanding of experimental design/execution in ecology. Team work Accurate navigation Vegetation sampling techniques 	<ul style="list-style-type: none"> An understanding of ecosystem functioning Ability to use different capture methods and handle animals proficiently Ability to carry out track surveys Knowledge of vegetation sampling methods Accurate record keeping and data entry Ability to work independently and as part of team

