

2020 AWC Intern Program



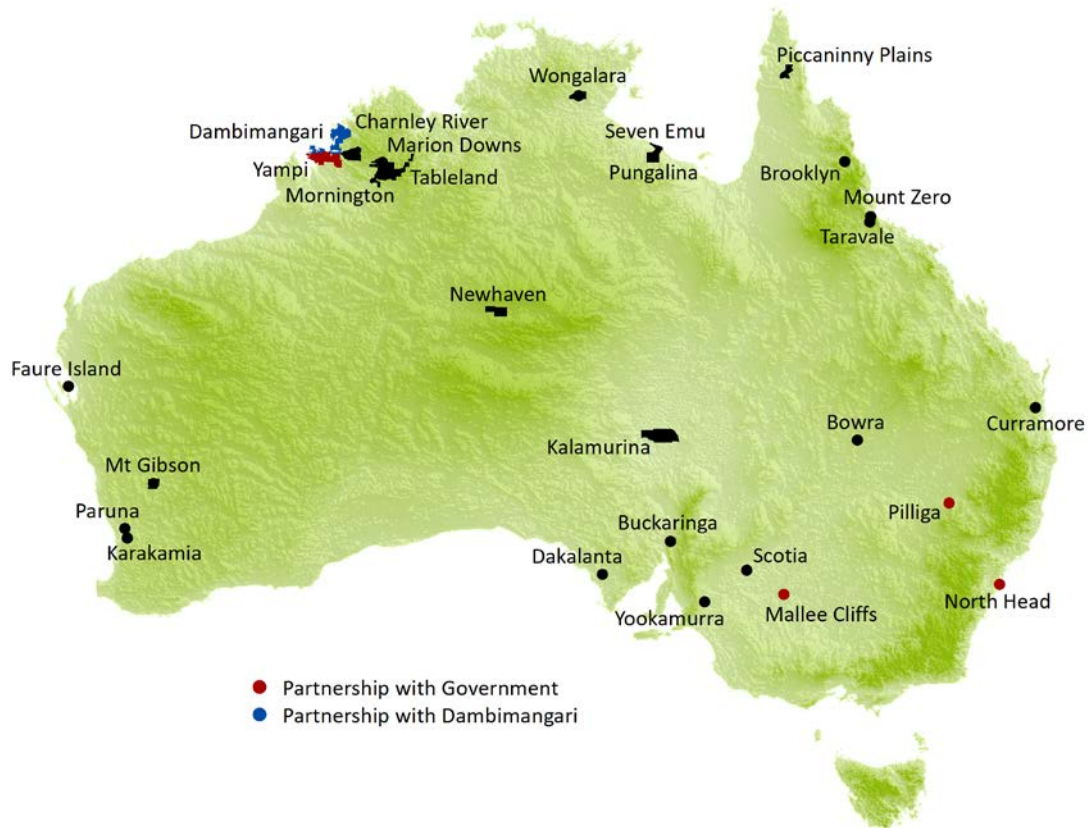
Australian Wildlife Conservancy (AWC) is an independent, non-profit organisation dedicated to the conservation of Australia's threatened wildlife and their habitats. Funded primarily by donations, AWC is taking action to protect Australia's wildlife by:

- 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 help address the key threats to our native wildlife; and
- Hosting visitor programs at our sanctuaries for the purpose of education and promoting awareness of the plight of Australia's wildlife.

AWC offers opportunities for promising graduate students to gain valuable field experience in conservation research via its Internship Program. In 2020, AWC will offer a total of twelve internships, of 4.5 – 6 months duration, across its network of sanctuaries. Each internship has been designed to provide an exciting training program. The program is designed to introduce conservation biologists to a variety of sanctuaries with a host of different ecosystems, flora and fauna, field techniques, and conservation issues. The internships provide a modest living stipend for the duration of the program, plus travel assistance.

- **North-west Interns** will spend **6 months** at Mornington, Marion Downs, Tableland, Charnley River-Artesian Range, Yampi [WA] and Newhaven [NT], with possible trips to other NW managed properties.
- **North-east Interns** will spend **6 months** based in Cairns* with trips to Brooklyn, Piccaninny Plains, Mt Zero-Taravale, Bowra and Curramore [QLD], Pungalina Seven-Emu, Bullo River Station and/or Wongalara [NT]
- **South-west Interns (Karakamia, Paruna and Faure Island)** will spend **5 months** at Karakamia, Paruna and Faure Island with the possibility of brief visits to Mt Gibson [WA].
- **South-west Interns (Mt Gibson)** will spend **5 months** based at Mt Gibson [WA], with possible trips to one or more of the south-west sanctuaries.
- **South-east Interns** will spend **6 months** based at Newhaven [NT] with trips to Scotia [NSW], Dakalanta, Kalamurina, Buckaringa and/or Yookamurra [SA].
- **NSW Interns** will spend **5 months** based at Scotia [NSW], Mallee Cliffs* and Pilliga [NSW]*.
- **North Head Interns** will spend **4.5 months** based at North Head [Sydney, NSW]*, with possible trips to one or more of the other NSW sanctuaries.

**AWC provided accommodation may not be available at some locations. An additional accommodation/travel allowance may be provided to the intern to support other arrangements. This will be discussed further with the successful applicants.*



Required Skills/ Selection Criteria:

- A Bachelor degree with Honours (or equivalent experience) in an ecology/conservation program (e.g. BSc Hons)
- Strong commitment to wildlife conservation
- Fauna and flora survey experience
- Demonstrated capacity to live and work in remote areas (including extended periods camping in the field whilst undertaking surveys) with small groups of people
- Demonstrated capacity to diligently collect and manage data
- Understanding of, and ability to learn identification of Australian flora and fauna
- Physically capable to undertake strenuous fieldwork and possessing a high level of fitness
- Preparedness and capacity to follow OHS and animal ethics procedures
- Ability to conduct fieldwork for extended hours at night
- Valid manual Australian (or internationally recognised) drivers' licence and experience driving manual vehicles
- Fluency in English
- Internships are open to all applicants with the **right to work in Australia (appropriate visa, permanent residency etc)**, though noting key criteria is an understanding of Australian flora and fauna

Individuals of Indigenous background are encouraged to apply.



Training program:

AWC has constructed a training program that will:

- Enable Interns to experience a range of Australian ecosystems, and associated flora and fauna;
- Provide experience with a wide variety of field techniques including:
 - Different types of survey and trapping techniques;
 - The handling of many different types of animals;
 - Specialist skills such as blood sampling, pit tag insertion, animal sedation, animal husbandry, radio- and GPS- tracking.

The Intern will be mentored by a team of experienced ecologists, who will provide on-going assessment throughout the training program. At the end of the training program, the Intern's progress will be evaluated, and an assessment report provided.

Supervision:

Supervisors for interns in 2020 are listed below:

North-west

- Mornington Ecologist, Dr Rohan Wilson, Dr Melissa Bruton, Dr Karen Young, Larissa Potter, Keith Bellchambers

North-east

- Dr Richard Seaton, Dr Catherine Hayes, Dr Manuela Fischer, Dr Eridani Mulder, Jessica Koleck, Felicity L'Hotellier

South-west (Karakamia, Paruna, and Faure Island)

- Dr Michael Smith, Chantelle Jackson, Nicola Palmer, Carly Moir

South-west (Mt Gibson)

- Dr Michael Smith, Nicola Palmer, Chantelle Jackson, Georgia Volck, Raquel Parker, Georgina Anderson

South-east

- Dr Rachael Collett, Keith Bellchambers, Helen Crisp, Dr Leah Kemp, Dr Jeff Foulkes

NSW

- Dr Greg Holland, Dr Laurence Berry, Dr Rod Kavanagh

North Head

- Dr Viyanna Leo, Dr Rod Kavanagh

How to apply:

Email a cover letter (max. one page) and a separate section on how you meet the selection criteria, together with your up-to-date resume (CV), to intern@australianwildlife.org. Your application should be a single PDF file. In your letter, explain why you wish to apply for an internship and specify for which internship(s) you are interested in applying.

Applications must be received by the Sunday 10 November 2019



For general **enquiries**, please contact:

- North-west: Dr Karen Young karen.young@australianwildlife.org
- North-east: Dr Jennifer Anson jennifer.anson@australianwildlife.org
- South-west: Dr Michael Smith michael.smith@australianwildlife.org
- South-east: Dr Jeff Foulkes jeff.foulkes@australianwildlife.org
- NSW and North Head: Dr Rod Kavanagh rod.kavanagh@australianwildlife.org

Sanctuaries where the North-west Intern will be located:

Newhaven [NT] lies at the southern edge of the Tanami Desert and protects a range of arid zone habitats and wildlife across its 260,000 ha. Brush-tailed Mulgara, Black-footed Rock-wallabies and Great Desert Skinks are examples of threatened species 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, Marion Downs and **Tableland** protect almost 900,000 ha of the central Kimberley, WA. Massive sandstone mesas and heavily folded ranges overlook savanna plains and a large section of the mighty Fitzroy River. Mornington's Wildlife Link Centre for Research and Conservation is the base for an award-winning conservation program that is helping to protect iconic species like the Gouldian Finch, Northern Quoll and Purple-crowned Fairy-wren.

Yampi Sound Training Area is managed under an agreement with the Department of Defence, in partnership with the Dambimangari Aboriginal Corporation. Yampi consists of a diversity of habitats including lowland plains and riparian areas, rugged dissected sandstone ranges with rainforest pockets, and coastal habitats such as mangroves and mudflats. These diverse landscapes provide refuge habitat for threatened species (e.g. Northern Quoll, Kimberley Brush-tailed Phascogale, Western Partridge Pigeon, Golden Bandicoot), as well as endemic species such as the Golden-backed Tree-rat and Wyulda.

Charnley River-Artesian Range lies in the northwest Kimberley, the only part of Australia that hasn't experienced mammal extinctions in the past 200 years. Its rugged sandstone and volcanic ranges protect a suite of regionally endemic species (such as Golden-backed Tree-rat, Wyulda, Monjon, Black Grasswren, and Western Giant Cave Gecko), as well as threatened mammal species that have declined significantly from other parts of northern Australia (e.g. Northern Quoll, Golden Bandicoot). AWC's science program focuses on inventory and monitoring, plus research on the impacts of fire and feral cats on this unique community.

Sanctuaries where the North-east Intern will be located:

Curramore is located about 90 km north of Brisbane, on the western escarpment of the Maleny Plateau in south east Queensland. Despite its relatively small size, Curramore is home to a remarkably high diversity of wildlife, thanks to its wide range of vegetation types and its connectivity to more extensive forest on adjacent land including the Maleny National Park. Curramore Sanctuary protects a total of 279 species of native vertebrates, including several hundred species of birds and reptiles that dominate the forests during the day. The canopy comes to life at night with possums and gliders, and threatened species like the Koala, Marbled Frogmouth, Grey-headed Flying Fox, and the rare Golden Tipped Bat.



Bowra Wildlife Sanctuary lies northwest of Cunnamulla, in central southern Queensland. The property protects 14,113 ha of diverse habitat from mulga woodlands to alluvial sands and claypans. Bowra supports over 300 species of native vertebrate animals including a number of species near their eastern or western range limits, such as the Striated Grasswren, Blue-Winged Parrot, Desert Spadefoot Toad, Striped Skink, Pebble Dragon and Little Red Flying-Fox. The diversity of species is a consequence of the sanctuary's location, straddling a suite of habitats on both the Warrego River plains and the plateau further west.

Brooklyn Wildlife Sanctuary lies in far north Queensland, spanning a range of habitat types and topography: from a wall of mountains reaching the edge of the Daintree rainforests in the east, to the open floodplains of the Mitchell River in the west. Brooklyn Wildlife Sanctuary contains an extraordinary concentration of wildlife, and provides a refuge for more than 30 species that are threatened with extinction. Over 40% of Australia's bird species and 30% of Australia's mammals can be found on the property, giving it immense conservation value. The 86 mammal species on the property include many that are restricted to particular rainforest types in the region like the Lumholtz Tree Kangaroo, Musky Rat Kangaroo and three species of mountain ringtail possum.

Piccaninny Plains, situated in the centre of Cape York Peninsula, extends from the foothills of the McIlwraith Range to the western plains of the Gulf of Carpentaria. Fifty-two kilometres of the Archer River and its towering gallery forest form the southern boundary, from here, a network of wetlands, woodlands, tall grasslands and deciduous vine forests extend 60 kilometres to the north, meeting the rainforests of the Wenlock River and the north eastern boundary. The gallery and vine forests are home to some of the sanctuary's more striking wildlife, including the Spotted Cuscus, Striped Possum, Palm Cockatoo, Magnificent Riflebird, Eclectus Parrot. Feral horses, cattle and pigs are the most problematic feral herbivores on the property, and are being removed by trapping, mustering and shooting, as well as strategic fencing to limit reinvasion and protect wetlands. In the last 5 years, field staff have removed over 6,000 pigs, 5,500 cattle, and over 900 horses.

Pungalina is perched on the edge of a rugged sandstone plateau, overlooking the vast coastal plains of **Seven Emu**. The two properties are connected by the Calvert River and together cover an area of 306,911 ha. The vast sanctuary supports a rich montage of habitats including coastal rainforest, mangroves, riparian forest, eucalypt woodlands, perched wetlands and bubbling thermal springs. This diversity makes it a refuge for many species that are in sharp decline elsewhere in northern Australia. Pungalina-Seven Emu is an important refuge for the declining wildlife of the Gulf of Carpentaria, protecting nearly 50 mammal species, over 200 bird species and over 100 reptiles.

Bullo River Station AWC has formed an innovative partnership with the owners of Bullo River Station to deliver land management and science on one of Australia's most iconic pastoral leases. AWC and Bullo River are working in partnership to demonstrate how conservation and pastoral activities can co-exist. This partnership protects a suite of threatened species consistent with its use as a commercial cattle property and eco-tourism operation.

Wongalara Covering over 190,000 hectares on the southern edge of Arnhem Land, Wongalara makes a vital contribution to conservation within the poorly reserved Gulf Fall and Uplands Bioregion. It contains a range of topography and a variety of landscapes supporting distinct assemblages of plants and animals. The various ecosystems on Wongalara form an intricate and complex pattern, with fine-scale variation. AWC's management at Wongalara is aimed at halting and reversing the decline in wildlife that is sweeping across northern Australia. One of the measures undertaken was the establishment of the largest feral herbivore-free area on mainland Australia (1,000 square kilometres).



Sanctuaries where the South-west Intern (Karakamia, Paruna, Faure Island) will be located:

Karakamia protects 275 ha of Jarrah forest in the south-west of Western Australia. Karakamia was the first property acquired by AWC. A 9 km feral proof fence around the entire property has provided sanctuary for the Brush-tailed Bettong (Woylie), Southern Brown Bandicoot (Quenda), Tammar Wallaby, and the Western Ringtail Possum.

Paruna is located in the Avon Valley east of Perth. The sanctuary was established by AWC in 1998 to create a 2,000 ha wildlife corridor between two regionally National Parks: Walyunga National Park to the southwest and Avon Valley National Park to the northeast. The majority of the Paruna sanctuary vegetation is dominated by Wandoo and Powderbark woodlands. The sanctuary supports populations of Black-flanked Rock-wallaby, Tammar Wallaby, Southern Brown Bandicoot (Quenda) and Chuditch (Western Quoll).

Faure Island is AWC's only offshore sanctuary, located within the Shark Bay World Heritage Area. At almost 6,000 ha, Faure Island provides a feral predator-free refuge for four species of nationally threatened mammals released onto Faure Island: Burrowing Bettong (Boodie), Shark Bay Mouse, Banded Hare-wallaby and Western Barred Bandicoot.

Also, the possibility for visits to **Mt Gibson** which covers 130,500 ha of largely pristine semi-arid ecosystems in the mid-west of Western Australia. Mt Gibson is the site of one of Australia's most ambitious mammal reintroduction projects. AWC has established a 7,800 ha feral-free area – the largest cat and fox-free area on mainland WA – into which at least 10 regionally extinct mammals will be reintroduced. Greater Stick-nest Rats, Numbats, Bilbies, Banded Hare-wallabies, Western Barred-bandicoots, Shark Bay Mice, Red-tailed Phascogales and Brush-tailed Bettongs (Woylies) have already been introduced into the feral predator-free enclosure on the sanctuary.

Sanctuaries where the South-west (Mt Gibson) Intern will be located:

Mt Gibson covers 130,500 ha of largely pristine semi-arid ecosystems in the mid-west of Western Australia. Mt Gibson is the site of one of Australia's most ambitious mammal reintroduction projects. AWC has established a 7,800 ha feral-free area – the largest cat and fox-free area on mainland WA – into which at least 10 regionally extinct mammals will be reintroduced. Greater Stick-nest Rats, Numbats, Bilbies, Banded Hare-wallabies, Western Barred-bandicoots, Shark Bay Mice, Red-tailed Phascogales and Brush-tailed Bettongs (Woylies) have already been introduced into the feral predator-free enclosure on the sanctuary.

In 2020, it is likely that Mt Gibson interns will also visit one or more of the **south-west sanctuaries**, to assist in the science program there and broaden their internship experience.

Sanctuaries where the South-east Intern will be located:

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. Brush-tailed Mulgara, Black-footed Rock-wallabies and Great Desert Skinks are examples of threatened species 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.

Yookamurra near Sedan, SA, protects reintroduced populations of several highly endangered mammal species, including Brush-tailed Bettong, Numbat and Greater Bilby. AWC's science program monitors the status of these populations.



Kalamurina is the largest private reserve in Australia, located on the northern shores of Lake Eyre. 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, such as Dusky Hopping Mice and Crest-tailed Mulgara.

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.

Scotia protects 65,000 ha of mallee in western NSW. AWC is implementing an effective feral animal control program and a reintroduction program for threatened fauna, based out of Scotia's 'Cook Field Research Centre'. To date, seven regionally extinct and highly endangered mammal species and a bird have been reintroduced to the largest feral-free area on the mainland (8,000 ha), including Numbat, Greater Bilby, Burrowing Bettong, Brush-tailed Bettong and Bridled Nailtail Wallaby. 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.

Sanctuaries where the NSW Intern will be located:

Scotia protects 65,000 ha of mallee in western NSW. AWC is implementing an effective feral animal control program and a reintroduction program for threatened fauna, based out of Scotia's 'Cook Field Research Centre'. To date, seven regionally extinct and highly endangered mammal species and a bird have been reintroduced to the largest feral-free area on the mainland (8,000 ha), including Numbat, Greater Bilby, Burrowing Bettong, Brush-tailed Bettong and Bridled Nailtail Wallaby. 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.

Pilliga is one of two new projects run by AWC in partnership with the NSW Government, in the dry forests and woodlands of north-western NSW. These projects are part of an exciting initiative to reintroduce regionally-extinct mammals to NSW. A feral-free area of 5,800 ha has recently been established within the 36,000 ha reserve, with the first two of the planned reintroductions (Greater Bilby and Bridled Nailtail Wallaby) having occurred in 2018-2019. Other species, including the Brush-tailed Bettong, will be reintroduced during 2020. A comprehensive biodiversity monitoring program has been established throughout the Pilliga forest which will continue through 2020, as well as detailed monitoring (including radio-tracking) of the new reintroduced species.

Mallee Cliffs is one of two new projects run by AWC in partnership with the NSW Government, in the mallee/semi-arid woodlands of far south-western NSW. These projects are part of an exciting initiative to reintroduce regionally-extinct mammals to NSW. A feral-free area of 9,600 ha has recently been established within the 58,000 ha reserve. Planned reintroductions of several mammal species (including the Greater Bilby) will begin in late 2019. Other species will be reintroduced during 2020. A comprehensive biodiversity monitoring program has been established throughout the Mallee Cliffs reserve which will continue through 2020, as well as detailed monitoring (including radio-tracking) of the new reintroduced species.

Sanctuaries where the North Head Intern will be located:

North Head is a small sanctuary surrounded by the Sydney Harbour National Park. AWC is contracted by the Sydney Harbour Federation Trust to conduct ecological research, biodiversity monitoring, species reintroductions



and wildlife management within the reserve. Three previously extinct mammals on the Headland have recently been reintroduced (Bush Rat, Eastern Pygmy Possum and Brown Antechinus) and radio-tracking and trapping are used to measure the success of these reintroductions. Other research programs are focussed mainly on conservation of the endangered Long-nosed Bandicoot population and the Eastern Suburbs Banksia Scrub ecological community.

In 2020, it is likely that North Head interns will also visit one or more of the **NSW sanctuaries** to assist in the science programs and broaden their internship experience.



North-west Intern

The table below summarises the tasks that the North-west Intern will undertake at Newhaven, Mornington, Marion Downs, Tableland, Charnley River-Artesian Range. **Dates of internship: April - September 2020**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
<p>Biological surveys in the arid zone</p> <p>Newhaven (April to early May)</p>	<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 surveys • Record keeping • Enter data from field work meticulously and as instructed 	<ul style="list-style-type: none"> • Experience with different trapping techniques • Experience with animal handling • Vegetation survey techniques • Experience with arid zone ecology • Use of GPS • Team work • Value of accurate records 	<ul style="list-style-type: none"> • An understanding of conservation issues in arid Australia • Ability to learn a variety of monitoring techniques • Ability to handle animals • Knowledge of vegetation survey techniques • Accurate record keeping and data entry • Ability to work independently and as part of team
<p>Fauna and flora survey</p> <ul style="list-style-type: none"> • to examine the effects of fire and large herbivores on biodiversity <p>Mornington, Marion Downs, Tableland and Charnley River-Artesian Range (mid May to late August)</p>	<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 • Record keeping • Enter data from field work meticulously and as instructed 	<ul style="list-style-type: none"> • Experience with different trapping techniques • Experience with animal handling • Vegetation sampling techniques • Experience with northern Australian ecology • Use of GPS • Team work • Value of accurate records 	<ul style="list-style-type: none"> • An understanding of conservation issues in northern Australia • Ability to use different capture methods and handle animals proficiently • Knowledge of vegetation sampling methods • Accurate record keeping and data entry • Ability to work independently and as part of team • Ability to lead a team
<p>Assist with annual mammal monitoring program</p> <ul style="list-style-type: none"> • Assess distribution and abundance of Golden Bandicoot and Golden-backed Tree-rats 	<ul style="list-style-type: none"> • Targeted mammal surveys • Mammal handling (measuring, genetic sampling) • Remote camping and logistics • Record keeping 	<ul style="list-style-type: none"> • Remote area trapping techniques • Remote camping and logistics • Medium-sized mammal handling • Navigation proficiency 	<ul style="list-style-type: none"> • Understanding of conservation issues in north-western Australia • Ability to use mammal capture methods and handle medium-sized mammals proficiently



Objectives	Tasks	Learning outcomes	Evaluation of outcomes
(late June / early July)		<ul style="list-style-type: none"> • Experience with diversity of partnership management arrangements 	<ul style="list-style-type: none"> • Ability to work in a close-knit team environment • Ability to adhere to different working requirements of partnership properties
<p>Predator dynamics</p> <ul style="list-style-type: none"> • to estimate population density and distribution of Dingoes and cats • to estimate population size of Northern Quolls <p>Mornington and Marion Downs (intermittently between other activities)</p>	<ul style="list-style-type: none"> • Set up camera traps, download photos and store data • Conduct mark-recapture survey of Northern Quolls 	<ul style="list-style-type: none"> • Experience with different trapping techniques • Experience with animal handling • Experience with northern Australian ecology • Team work • Experience with camera trap technology • Experience with PIT tagging 	<ul style="list-style-type: none"> • An understanding of conservation issues in northern Australia • Ability to use different capture methods and handle animals proficiently • Accurate record keeping and data entry • Ability to work independently and as part of team
<p>Bird census</p> <ul style="list-style-type: none"> • Annual survey to measure abundance of seed-eating birds (finches, pigeons, quail, parrots) <p>Mornington (September)</p>	<ul style="list-style-type: none"> • Participate in granivore counts at waterholes • Assist in collection and organisation of data from volunteers 	<ul style="list-style-type: none"> • Experience with bird survey techniques • Data organisation and management • Volunteer management 	<ul style="list-style-type: none"> • Ability to use different survey methods • Accurate record keeping and data entry • Ability to work as part of a team • Ability to direct and assist volunteers



North-east Intern

The table below summarises the tasks that the North-east Intern will undertake at several of the following sanctuaries; Brooklyn, Piccaninny Plains, Mt Zero-Taravale, Bowra and Curramore [QLD], Pungalina Seven-Emu, Bullo River Station and Wongalara [NT]. **Dates of internship: April - October 2020.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with biodiversity surveys and fauna monitoring programs to monitor the ecological health of the sanctuaries and responses to land management	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, observational, vegetation, audio recording, camera trapping, track and spotlighting surveys • Fauna identification • Fauna handling (including microchipping, collecting morphometric data and genetic samples) • Image processing from camera traps • Spotlighting • Targeted searches • Record data from field work • Enter data into established databases 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Experience with different survey techniques • Experience with identifying and handling a wide range of fauna including birds, small-medium mammals, reptiles and frogs • Quarantine and husbandry procedures • Value of accurate records • Team work • Use of GPS 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to use different capture methods and handle animals proficiently • Ability to identify and handle a range of Australian fauna • Ability to carry out fieldwork promptly and to schedule • Careful record keeping • Understanding of quarantine issues • Ability to work independently and as part of team
To assist with monitoring of feral animals and predator research	<ul style="list-style-type: none"> • Image processing • Camera trapping 	<ul style="list-style-type: none"> • Careful record keeping • Accurate navigation and use of GPS 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to carry out fieldwork promptly and to schedule
To assist with supporter events at Mt Zero-Taravale			
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff



South-west Intern (Karakamia, Faure Island, Paruna)

The table below summarises the tasks that the South-west Intern will undertake at Karakamia, Paruna, Faure Island and Mt Gibson. **Dates of internship: 1. February to July 2020 2. July to December 2020.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with the fauna reintroduction and monitoring program at Faure Island, Karakamia, and Paruna Wildlife Sanctuaries	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, camera trapping and spotlighting surveys to monitor the health of reintroduced species • Fauna handling (including microchipping, collecting morphometric data and tissue sampling) • Learn and adhere to quarantine protocols • Image processing from camera traps • Scat and track identification • Spotlighting • Transportation of animals • Record data from field work • Enter data into established databases 	<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 • Accurate navigation and use of GPS • Team work • Value of accurate records • Knowledge of alternative approaches to monitoring 	<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 • Ability to work independently and as part of team
Assist with biodiversity surveys and fauna monitoring programs at Karakamia, Paruna, Faure Island and Mt Gibson to monitor the ecological health of the sanctuaries and responses to land management	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, observational, vegetation, audio recording, camera trapping, track and spotlighting surveys • Fauna identification • Fauna handling (including microchipping, collecting morphometric data and genetic sampling) • Image processing from camera traps 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Experience with different survey techniques • Experience with identifying and handling a wide range of fauna including birds, small-medium mammals, reptiles and frogs • Quarantine and husbandry procedures • Value of accurate records 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to use different capture methods and handle animals proficiently • Ability to identify and handle a range of Australian fauna • Ability to carry out fieldwork promptly and to schedule • Careful record keeping



	<ul style="list-style-type: none"> • Spotighting • Targeted searches • Record data from field work • Enter data into established databases 	<ul style="list-style-type: none"> • Team work • Use of GPS 	<ul style="list-style-type: none"> • Understanding of quarantine issues • Ability to work independently and as part of team
If required, assist with the Mammal Restoration Project at Mt Gibson including monitoring of reintroduced species and conducting wildlife translocations	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, radio tracking and camera trapping to monitor populations of reintroduced species • Capture of animals from source locations and release at Mt Gibson • Monitoring of populations at source locations • Fauna handling including collection of morphometric data, microchipping and genetic sampling • Transport of animals • Image processing from camera trapping • Record data from field work • Enter data into established databases 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Working with external organisations and government departments • Capture and handling of animals • Animal welfare and husbandry procedures • Team work • Careful record keeping • Accurate navigation and use of GPS • Experience with different trapping and survey techniques 	<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 animal welfare issues • Ability to work as part of a team
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff



South-west Intern (Mt Gibson)

The table below summarises the tasks that the South-west Mt Gibson Intern will undertake at Mt Gibson. **Dates of internship: 1. February to July 2020 2. July to December 2020.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with biodiversity surveys and fauna monitoring programs at Mt Gibson to monitor the ecological health of the sanctuary and responses to land management	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, observational, vegetation, audio recording and camera trapping surveys at a series of permanent monitoring sites • Fauna trapping, identification and handling (including collecting morphometric data, microchipping and genetic sampling) • Image processing from camera traps • Record data from field work • Enter data into established databases 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Experience with different trapping and survey techniques • Experience with identifying handling a wide range of fauna including birds, mammals, reptiles and frogs • Animal welfare and husbandry procedures • Careful record keeping • Accurate navigation and use of GPS 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to use different capture methods and handle animals proficiently • Ability to identify and handle a range of Australian fauna • Ability to carry out fieldwork promptly and to schedule • Careful record keeping • Understanding of animal welfare issues
Assist with the Mammal Restoration Project at Mt Gibson including monitoring of reintroduced species and conducting wildlife translocations	<ul style="list-style-type: none"> • Conduct systematic live trapping, scat plot, radio tracking and camera trapping to monitor populations of reintroduced species • Capture of animals from source locations and release at Mt Gibson • Monitoring of populations at source locations • Fauna handling including collection of morphometric data, microchipping and genetic sampling • Transport of animals 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Working with external organisations and government departments • Capture and handling of animals • Animal welfare and husbandry procedures • Team work • Careful record keeping • Accurate navigation and use of GPS 	<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 translocation methods • Understanding of animal welfare issues



	<ul style="list-style-type: none"> • Image processing from camera trapping • Record data from field work • Enter data into established databases 	<ul style="list-style-type: none"> • Experience with different trapping and survey techniques 	
Assist with the Introduced Predator Ecology Project – Mt Gibson	<ul style="list-style-type: none"> • Camera trapping • Image processing 	<ul style="list-style-type: none"> • Careful record keeping • Accurate navigation and use of GPS 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to carry out fieldwork promptly and to schedule
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff



NSW Intern

The table below summarises the program for the NSW Intern: Scotia, Pilliga and Mallee Cliffs. **Dates of internship: 1. February - June 2020 2. August – December 2020**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
<p>To assist with the fauna reintroduction program (of endangered species) at Scotia, Pilliga and Mallee Cliffs Wildlife Sanctuaries:</p> <ul style="list-style-type: none"> • Conduct systematic trapping, transect surveys, or radio-tracking of (depending on Sanctuary) Greater Bilby, Bridled Nailtail Wallaby, Brush-tailed Bettong, Burrowing Bettong and Numbat populations • Monitor health of reintroduced populations 	<ul style="list-style-type: none"> • Fauna trapping • Radio-tracking • Fauna handling (including micro-chipping, taking of morphometrics, tissue and blood sampling) • Captive animal husbandry • Assist vets with treatment of animals • Learn and adhere to quarantine protocols • Record data from field work 	<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 • Use of GPS • Team work • Value of accurate records • Knowledge of alternative approaches to monitoring 	<ul style="list-style-type: none"> • An understanding of conservation issues in Australia • Ability to use different capture and research methods and handle animals proficiently • Understanding of quarantine issues • Ability to work independently and as part of team
<p>To undertake biodiversity monitoring surveys at Scotia, Pilliga and Mallee Cliffs sanctuaries</p>	<ul style="list-style-type: none"> • Fauna identification • Fauna trapping (installing monitoring sites, setting traps, checking traps) • camera trapping • nocturnal fauna surveys • diurnal bird surveys • Malleefowl mound surveys • Vegetation and habitat assessments • Fauna handling and data collection • Record data from field work 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna and flora • Experience with different trapping and other survey techniques • Experience with handling a wide range of fauna • Use of GPS • Accurate record keeping • Accurate navigation 	<ul style="list-style-type: none"> • Ability to identify and demonstrate knowledge of Australia's fauna and flora • Ability to carry out fieldwork efficiently and to manage time • Ability to handle and collect data from a wide range of fauna • Accurate record keeping • Ability to work independently and as part of team
<p>To assist with feral animal research</p>	<ul style="list-style-type: none"> • Carry out track surveys throughout Scotia to monitor foxes, cats. • 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 derive indices of abundance • Ability to locate tagged animals



Objectives	Tasks	Learning outcomes	Evaluation of outcomes
	<ul style="list-style-type: none"> • Trapping, radio collaring and radio-tracking of foxes and cats at Scotia and Pilliga 		
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff



South-east Intern

The table below summarises the program for the Southeast Intern: Newhaven, Dakalanta, Kalamurina, Buckaringa, Yookamurra and Scotia. **Dates of internship: 1. February - July 2020 2. July – December 2020**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
<p>To assist with the fauna reintroduction program (of endangered species) at Newhaven, Yookamurra and/or Scotia Wildlife Sanctuaries</p> <ul style="list-style-type: none"> • Conduct systematic trapping or transect surveys of Mala, Boodie, Woylie, Greater Bilby, Bridled Nailtail Wallaby, Red-tailed Phascogale and Numbat populations • Monitor health of reintroduced populations 	<ul style="list-style-type: none"> • Fauna trapping, radio collaring and telemetry • Fauna handling (including micro-chipping, taking of morphometrics, tissue and blood sampling) • Captive animal husbandry • Assist vets with treatment of animals • Learn and adhere to quarantine protocols • Record data from field work 	<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 • Use of GPS • Team work • Value of accurate records • Knowledge of alternative approaches to monitoring 	<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 • Ability to work independently and as part of team
<p>To undertake biodiversity surveys at Yookamurra, Scotia, Dakalanta, Kalamurina, Newhaven and/or Buckaringa sanctuaries</p>	<ul style="list-style-type: none"> • Fauna and flora identification • Fauna trapping (installing monitoring sites, setting traps, checking traps) • Fauna handling and data collection and management • Vegetation surveys • Record data from field work 	<ul style="list-style-type: none"> • Increased knowledge of Australia’s fauna and flora • Experience with different trapping techniques • Experience with handling a wide range of fauna • Use of GPS • Accurate record keeping • Accurate navigation 	<ul style="list-style-type: none"> • Ability to identify and demonstrate knowledge of Australia’s flora & fauna • Ability to carry out fieldwork efficiently and to manage time • Ability to handle and collect data from a wide range of fauna • Accurate record keeping • Ability to work independently and as part of team
<p>To assist with monitoring of feral animals and predator research at Newhaven and/or Scotia</p>	<ul style="list-style-type: none"> • Carry out track surveys to monitor introduced predators and large herbivores • Trapping, radio collaring and telemetry of foxes and cats 	<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 derive indices of abundance • Ability to locate tagged animals



Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to safety, research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff



North Head Intern

The table below summarises the program for the North Head Intern. **Dates of internship: 1. March - July 2020 2. July – December 2020.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with fauna monitoring at North Head	<ul style="list-style-type: none"> • Mammal trapping • Animal handling (including micro-chipping, measuring, genetic/ blood sampling) • Radio- and GPS- tracking • Camera trapping • Spotlight surveys • Frog surveys • Habitat assessments • Record data from field work 	<ul style="list-style-type: none"> • Increased knowledge of Australia's fauna species and their conservation status • Experience with different trapping techniques • Experience with handling a wide range of fauna • Use of GPS • Careful record keeping 	<ul style="list-style-type: none"> • Understanding conservation issues in Australia • Ability to use different capture methods, identify a range of fauna species, and handle animals proficiently • Ability to work independently and as part of team
Assist with fauna reintroduction projects at North Head	<ul style="list-style-type: none"> • Fauna trapping and handling • Habitat assessment • Assist with logistics • Monitor and record outcomes (as above) 	<ul style="list-style-type: none"> • Increased knowledge of reintroduction practices • Capacity to work as part of a team in a complex project 	<ul style="list-style-type: none"> • Understanding of contemporary reintroduction practices • Ability to work independently and as part of a team
Assist with monitoring restoration of Eastern Suburbs Banksia Scrub at North Head	<ul style="list-style-type: none"> • Vegetation surveys 	<ul style="list-style-type: none"> • Increased knowledge of Australia's flora and its management • Vegetation survey techniques 	<ul style="list-style-type: none"> • Understanding of vegetation conservation issues • Ability to use vegetation survey techniques
Assist with ecological survey and monitoring elsewhere in NSW Australia (one or more trips of 3-4 weeks duration)	<ul style="list-style-type: none"> • <i>see NSW Intern</i> 	<ul style="list-style-type: none"> • <i>see NSW Intern</i> 	<ul style="list-style-type: none"> • <i>see NSW Intern</i>
Participate in staff meetings	<ul style="list-style-type: none"> • Discuss issues relating to research and management 	<ul style="list-style-type: none"> • Public speaking • Negotiation 	<ul style="list-style-type: none"> • Ability to interact in a positive way with a range of staff

