

2022 AWC Ecology &

Conservation Internship Program

Australian Wildlife Conservancy (AWC) is the largest private (non-profit) owner of land for conservation in Australia, protecting endangered wildlife at 31 sanctuaries in which we own or manage in partnership, covering a total of more than 6.5 million hectares in iconic regions such as the Kimberley, Cape York, the Top End and Kati Thanda-Lake Eyre. With a focus on practical land management, informed by world-class science, AWC is implementing a dynamic new model for conservation.

AWC's mission - to deliver effective conservation for all native animal species and their habitats - is achieved by:

- **Operations** delivering effective large-scale land management including fire management, feral animal control, weed control and infrastructure management.
- Science delivering a nationally-coherent program of ecological surveys with a focus on monitoring key
 conservation assets and threats, conducting applied research relevant to wildlife conservation,
 implementing conservation programs including reintroductions, and providing advice to management.
- **Fundraising** mobilising finance (primarily, tax deductible donations) from the general public and philanthropists including through effective communication of AWC conservation programs.

AWC's work is directed at achieving our mission and is guided by the following values:

- **Respectful** demonstrating care, recognition and integrity
- Informed working together to acquire and apply evidence, knowledge and experience
- **Dedicated** committed to delivering effective outcomes, with resilience and tenacity
- Innovative applying creative thinking for effective solutions
- Accountable taking ownership of our actions and outcomes
- Sustainable delivering long-term financial and ecological viability

OneAWC is defined as 'a cohesive, engaged, collaborative, high performing group guided by strong, effective leaders. A group of people who all understand AWC's mission, vision and their role in contributing to the achievement of mission and vision, all connected and working towards a common purpose, guided by a set of shared values'. The delivery of AWC's mission is highly reliant on all AWC working collaboratively with each other.

AWC offers opportunities for promising graduate students to gain valuable field experience in conservation research via its Internship Program. In 2022, AWC will offer nineteen 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.

Internship Placement

North-west Interns will spend **6 months** at Mornington, Marion Downs, Tableland, Charnley River-Artesian Range, Yampi [WA] with possible trips to other NW managed properties. Note, there will also a *possibility* of commencing at Newhaven [NT]. This will be discussed further with the successful candidate.

North-east Interns will spend **5 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.

Central and South Interns (Yookamurra, Kalamurina, Buckaringa, Dakalanta and Kangaroo Island) will spend 5 months based at Yookamurra [SA], with trips to one or more of the central and south sanctuaries.

Central and South Interns (Newhaven) will spend **5 months** based at Newhaven [NT], with possible trips to one or more of the central and south sanctuaries.

South-east Interns will spend **5 months** based at Mallee Cliffs NP*, the Pilliga* and Scotia [NSW].

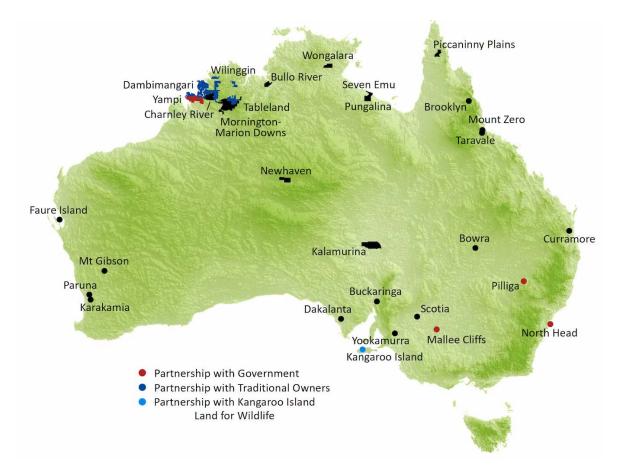
North Head Interns will spend **4.5 months** based at North Head [Sydney, NSW]*, with possible trips to one or more of the other NSW sanctuaries.

Intake dates

- 1. April September 2022
- 1. March July 2022
- 2. July December 2022
- 1. February July 2022
- 2. July December 2022
- 1. February July 2022
- 2. July December 2022
- 1. February July 2022
- 2. July December 2022
- 1. February July 2022
- 2. July December 2022
- 1. February June 2022
- 2. August December 2022
- 1. March July 2022
- 2. July December 2022

Due to **COVID-19**, AWC will be imposing relevant border restrictions as per relevant state and territory regulations. Internship placements may be reviewed and changed by AWC as required without or with minimal notice. Candidates are encouraged (but not limited to) to apply for intern placement(s) within their own region.

^{*}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.



Please visit: <u>australianwildlife.org/where-we-work/</u> for more information on properties we manage or work in partnership with.

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 <u>right to work in Australia (appropriate visa, permanent residency etc)</u>, 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;
 - o The handling of many different types of animals;
 - Specialist skills such as pit tag insertion, DNA sampling, animal husbandry, radio- and GPStracking.

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 2022 are listed below:

North-west

Dr Skye Cameron, Dr Karen Young, Dr Pippa Kern, Dr Tom Sayers, Dr Katrin Lowe, Larissa Potter

North-east

 Dr Alexander Watson, Dr Manuela Fischer, Dr Eridani Mulder, Dr Ana Palma, Andy Howe, Felicity L'Hotellier, Emily Rush

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

Dr Michael Smith, Carly Moir, Joshua Hungerford

South-west (Mt Gibson)

Dr Michael Smith, Georgia Volck, Raquel Parker, Georgina Anderson, Phoebe Dickins

Central and South (Yookamurra, Kalamurina, Buckaringa, Dakalanta and Kangaroo Island)

• Helen Crisp, Alexandra Ross, Keith Bellchambers

Central and South (Newhaven)

Helen Crisp, Kirsten Skinner, Aliesha Dodson

South-east

• Dr Greg Holland, Dr Laurence Berry

North Head

· Dr Greg Holland, Dr Viyanna Leo, Aiden Wright

How to apply: www.australianwildlife.org/work-with-awc/careers/

To submit an application, visit our careers page (linked above), select the click 'APPLY' and complete an intern application form as prompted.

Your application must include CV and covering letter, briefly addressing the selection critera listed above, also explaining why you wish to apply for an internship and for which region(s). Applications that do not meet these requirements will not be accepted.

Please note:

- 1. If you apply for this role, AWC will include you in its ongoing updates and communications about its events, activities and fundraising initiatives. You may opt out of these communications at any time.
- 2. Any application submitted to AWC will be handled in accordance with our Privacy Policy, available at www.australianwildlife.org/privacy. By providing us with your contact details, your consent to receive communications and direct educational material will remain current until you advise us otherwise.

Applications must be received by Sunday 31 October 2021

For general **enquiries**, please contact:

- North-west: Dr Skye Cameron, Regional Ecologist skye.cameron@australianwildlife.org
- North-east: Dr Alexander Watson, Regional Ecologist alexander.watson@australianwildlife.org
- South-west: Carly Moir, Senior Field Ecologist carly.moir@australianwildlife.org
- Mt Gibson: Georgia Volck, Senior Field Ecologist georgia.volck@australianwildlife.org
- Central and South: Helen Crisp, Regional Ecologist helen.crisp@australianwildlife.org
- South-east: Dr Greg Holland, Regional Ecologist greg.holland@australianwildlife.org
- North Head: Dr Viyanna Leo, Wildlife Ecologist viyanna.leo@australianwildlife.org

Sanctuaries where the North-west Intern will be located:

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), and Tammar Wallaby.

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, Brush-tailed Bettongs (Woylies) and Brustail Possums 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, Brush-tailed Bettongs (Woylies) and Brushtail Possums have already been introduced into the feral predator-free enclosure on the sanctuary.

In 2022, 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 <u>Central and South (Yookamurra, Kalamurina, Buckaringa, Dakalanta and Kangaroo</u> Island) Intern will be located:

Yookamurra was established more than 30 years ago and protects over 5,000 ha of mallee, particularly rare old-growth mallee in south-eastern South Australia. Four regionally extinct mammal species including the Burrowing Bettong, Brush-tailed Bettong, Numbat, and Greater Bilby have been reintroduced into the 1,100 ha feral free area. Yookamurra is also an important stronghold for other wildlife such as the Southern Hairy-nosed Wombat, Common Brushtail Possum, Malleefowl, Carpet Python, and a range of woodland birds.

Kalamurina is a vast desert wilderness, covering a remarkable 679,000 ha in northern South Australia on the northern shores of Kati Thanda-Lake Eyre. Kalamurina protects the lower sections of three major drainage lines that flowinto this expansive inland lake as well as the extensive dune and swale systems and other unique landforms of the three deserts that are found there. Kalamurina protects a range of threatened ecosystems and fauna, such as the Dusky Hopping Mouse, Crest-tailed Mulgara, Australian Bustard, Grey Falcon, and Woma Pyton.

Buckaringa in the central Flinders Ranges is a small but critical piece of the rugged ranges bisected by spectacular Redgum-lined gorges, typical of this landscape. Buckaringa protects an important colony of the threatened Yellow-footed Rock Wallaby. 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.

Dakalanta on the Eyre Peninsula of South Australia protects over 13,600 ha of mallee, Callitris woodland, and Drooping She-oak grassy woodland. Dakalanta is an important stronghold for the Southern Hairy-nosed Wombat and a range of woodland bird and reptile species and was the site of a large revegetation program focussed on restoring the threatened Drooping She-oak woodland.

Kangaroo Island protects critical habitat that supports a suite of endemic and threatened species such as the Kangaroo Island Dunnart, Glossy Black-Cockatoo, and Southern Brown Bandicoot. In response to the 2019/20 bushfires AWC has partnered with Kangaroo Island Land For Wildlife and local landholders to protect 369 ha of critical habitat for threatened species (the Western River Refuge) and work in partnership to deliver effective conservation.

Sanctuaries where the Central and South (Newhaven) Intern will be located:

Newhaven lies on the southern edge of the Tanami Desert in the Northern Territory and protects over 260,000 ha of arid zone ecosystems. It is a renowned hotspot for central Australian wildlife and threatened species such as the Brush-tailed Mulgara, Black-footed Rock-wallaby, and Great Desert Skink. Newhaven is also the site of one of Australia's most ambitious mammal reintroduction projects. AWC has established a 9,450 ha feral-free area into which at least 10 regionally extinct mammals will be reintroduced. Mala, Red-tailed Phascogales, and Brush-tailed Bettongs have already been reintroduced, with several other mammal species planned for reintroduction over the coming years. In 2022, it is likely that Newhaven interns will also visit one or more of the **central and south sanctuaries**, to assist in the science program and broaden their internship experience.

Sanctuaries where the South-east Intern will be located:

Pilliga is one of two projects run by AWC in partnership with the NSW Government, in the dry forest/woodlands of north-central NSW. A key pillar of the Pilliga project is an ambitious program to reintroduce six regionally-extinct mammals to the forest. A 5,800 ha feral predator-free fenced area has been established within the 36,000 ha reserve, with two species already reintroduced (Greater Bilby and Bridled Nailtail Wallaby). A further three species will be reintroduced in 2022 (Brush-tailed Bettong, Western Barred Bandicoot/Shark Bay Bandicoot, Plains Mouse). Work in the Pilliga includes a comprehensive biodiversity monitoring program, as well as detailed monitoring (including radio-tracking) of reintroduced species.

Mallee Cliffs is one of two projects run by AWC in partnership with the NSW Government, in the semi-arid woodlands of far south-western NSW. The project is part of an exciting initiative to reintroduce 10 regionally-extinct mammals. In 2019, AWC completed construction of a 9,570-ha feral predator-free fenced area within the 58,000 ha reserve. To date, 4 species have been reintroduced into the Park (Numbat, Greater Bilby, Brushtailed Bettong and Greater Stick-nest Rat) with a further 5 species scheduled for release in 2022 (Red-tailed Phascogale, Bridled Nailtail Wallaby, Western Barred Bandicoot/Shark Bay Bandicoot, Burrowing Bettong, Mitchell's Hopping Mouse). A comprehensive biodiversity monitoring program is delivered across Mallee Cliffs National Park as well as detailed monitoring (including radio-tracking) of the newly reintroduced species.

Scotia protects 65,000 ha of mallee in western NSW and is the location of one of the longest running reintroduction programs in Australia. The sanctuary supports established populations of four reintroduced mammals within an 8,000-ha fenced area, including Numbat, Greater Bilby, Burrowing Bettong, and Bridled Nailtail Wallaby. The sanctuary also protects extensive areas of high-conservation value Mallee woodland home to a range of extant and nationally significant threatened species such as the Malleefowl, Western Pygmy Possum and Southern Ningaui. AWC's science program monitors the status of these species, plus the impacts of its land management programs on the biodiversity of the sanctuary.

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 radiotracking 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 2022, 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 Mornington, Marion Downs, Tableland, Charnley River-Artesian Range. **Dates of internship: April - September 2022**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Biological surveys in the arid zone Newhaven (April to early May)	 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 	 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 	 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
Fauna and flora survey • to examine the effects of fire and large herbivores on biodiversity Mornington, Marion Downs, Tableland and Charnley River-Artesian Range (mid May to late August)	 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 	 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 	 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
Assist with annual mammal monitoring program • Assess distribution and abundance of Golden Bandicoot and Golden-backed Tree-rats	 Targeted mammal surveys Mammal handling (measuring, genetic sampling) Remote camping and logistics Record keeping 	 Remote area trapping techniques Remote camping and logistics Medium-sized mammal handling Navigation proficiency 	Understanding of conservation issues in north-western Australia Ability to use mammal capture methods and handle mediumsized mammals proficiently

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
(late June / early July)		Experience with diversity of partnership management arrangements	 Ability to work in a close-knit team environment Ability to adhere to different working requirements of partnership properties
Predator dynamics • to estimate population density and distribution of Dingoes and cats • to estimate population size of Northern Quolls Mornington and Marion Downs (intermittently between other activities)	 Set up camera traps, download photos and store data Conduct mark-recapture survey of Northern Quolls 	 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 	 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
Bird census • Annual survey to measure abundance of seed-eating birds (finches, pigeons, quail, parrots) Mornington (September)	 Participate in granivore counts at waterholes Assist in collection and organisation of data from volunteers 	 Experience with bird survey techniques Data organisation and management Volunteer management 	 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: March – July 2022, July –December 2022**

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	 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 	 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 	 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	Image processing Camera trapping	Careful record keeping Accurate navigation and use of GPS	 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 and Bullo River			
Participate in staff meetings	Discuss issues relating to research and management	Public speaking Negotiation	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 2022 2. July to December 2022.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with the fauna reintroduction and monitoring program at Faure Island, Karakamia, and Paruna Wildlife Sanctuaries	 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 	 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 	 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	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	 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 	 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

	 Spotlighting Targeted searches Record data from field work Enter data into established databases 	Team workUse of GPS	 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	 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 	 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 	 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	Discuss issues relating to research and management	Public speakingNegotiation	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 2022 2. July to December 2022.**

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	 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 	 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 	 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	 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 	 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 	 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

	 Image processing from camera trapping Record data from field work Enter data into established databases 	Experience with different trapping and survey techniques	
Assist with the Introduced Predator Ecology Project – Mt Gibson	Camera trapping Image processing	 Careful record keeping Accurate navigation and use of GPS 	 An understanding of conservation issues in Australia Ability to carry out fieldwork promptly and to schedule
Participate in staff meetings	Discuss issues relating to research and management	Public speaking Negotiation	Ability to interact in a positive way with a range of staff

Central and South Intern (Yookamurra, Buckaringa, Kalamurina, Dakalanta, Kangaroo Island)

The table below summarises the program for the Central and South Intern: Yookamurra, Buckaringa, Kalamurina, Dakalanta and Kangaroo Island (Western River Refuge). Dates of internship: Intake 1. February - July 2022 Intake 2. July – December 2022

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with the fauna reintroduction and monitoring program at Yookamurra Wildlife Sanctuary	 Conduct systematic live trapping, spotlighting surveys, diurnal transect surveys at a series of permanent monitoring sites to monitor the population and health of reintroduced species Fauna handling (including microchipping, collecting morphometric data and genetic samples) If required, assist vets with treatment of animals Learn and adhere to quarantine protocols Record data from field work Enter data into established databases Assist with report writing 	 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 Teamwork Value of accurate records Knowledge of alternative approaches to monitoring Writing for scientific purposes 	 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 Ability to clearly communicate survey results through written reports
Assist with biodiversity surveys and flora/fauna monitoring programs at Yookamurra, Buckaringa, Kalamurina, Dakalanta and Kangaroo Island (Western River Refuge) to monitor the ecological health of the sanctuaries and responses to and management	 Conduct systematic live trapping, camera trapping, spotlight surveys, diurnal transect surveys, and observational surveys at a series of permanent monitoring sites Image processing from camera traps Fauna and flora identification 	 Increased knowledge of Australia's fauna and flora Experience with different trapping and survey techniques Experience with identifying and handling a wide range of fauna including small-medium mammals, birds and reptiles Quarantine and husbandry procedures Use of GPS 	 Ability to identify and demonstrate knowledge of Australia's flora andfauna 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

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
	 Fauna trapping (installing monitoring sites, setting traps, checking traps) Fauna handling and data collection and management Vegetation surveys Record data from field work Enter data into established databases Assist with report writing 	 Value of accurate record keeping Accurate navigation Writing for scientific purposes 	 Ability to work independently and as part of team Ability to clearly communicate survey results through written reports
If required, assist with the reintroduction program at Newhaven including monitoring of reintroduced species and conducting wildlife translocations	 Assist with report writing Conduct systematic live trapping, radiotracking and camera trapping to monitor populations of reintroduced species Capture of animals from source locations and release at Newhaven 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 	 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 	 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
Promote AWCs mission through engagement opportunities	Help facilitate visitor experiences while at AWC sanctuaries	 Experience with public speaking Experience with adapting information for the audience Experience with science communications 	Ability to interact in a positive way and effectively communicate AWCs mission

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
	 Convey accurate information through guided walks and presentations 		
Participate in staff meetings	Discuss issues relating to safety, research and management	Public speakingNegotiation	Ability to interact in a positive way with a range of staff

Central and South Intern (Newhaven)

The table below summarises the program for the Central and South Intern: Newhaven. **Dates of internship: Intake 1. February - July 2022 Intake 2. July – December 2022**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with the reintroduction program at	Conduct systematic live	Increased knowledge of	An understanding of
Newhaven including monitoring of	trapping, radio tracking and	Australia's fauna species and	conservation issues in
reintroduced species and conducting	camera trapping to monitor	their conservation status	Australia
wildlife translocations	populations of reintroduced	 Working with external 	Ability to use different
	species	organisations and government	capture methods and
	 Capture of animals from source 	departments	handle animals proficiently
	locations and release at	 Capture and handling of animals 	 Understanding of animal
	Newhaven	 Animal welfare and husbandry 	welfare issues
	 Monitoring of populations at 	procedures	Ability to work as part of a
	source locations	Team work	team
	 Fauna handling including 	Careful record keeping	
	collection of morphometric	 Accurate navigation and use of 	
	data, microchipping and genetic	GPS	
	sampling	Experience with different	
	 Transport of animals 	trapping and survey techniques	
	 Image processing from camera 		
	trapping		
	 Record data from field work 		
	Enter data into established		
	databases		
Assist with biodiversity surveys and fauna	 Conduct systematic live 	Increased knowledge of	Ability to identify and
monitoring programs at Newhaven to	trapping, camera trapping, next	Australia's fauna and flora	demonstrate knowledge of
monitor the ecological health of the	box surveys	Experience with different	Australia's flora & fauna
sanctuary and responses to and	 Image processing from camera 	trapping and survey techniques	Ability to carry out
management	traps	Experience with identifying and	fieldwork efficiently and to
	Fauna and flora identification	handling a wide range of fauna	manage time
	Fauna trapping (installing	including small-medium	Ability to handle and collect
	monitoring sites, setting traps,	mammals and reptiles	data from a wide range of
	checking traps)	Quarantine and husbandry	fauna
	Fauna handling and data	procedures	Accurate record keeping
	collection and management	Use of GPS	

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with the reintroduction program at	Conduct systematic live	Increased knowledge of	An understanding of
Newhaven including monitoring of reintroduced species and conducting wildlife translocations	trapping, radio tracking and camera trapping to monitor populations of reintroduced species Capture of animals from source locations and release at Newhaven Monitoring of populations at source locations	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	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
	 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 	 Careful record keeping Accurate navigation and use of GPS Experience with different trapping and survey techniques 	
	 Vegetation surveys Record data from field work Enter data into established databases 	 Value of accurate record keeping Accurate navigation 	Ability to work independently and as part of team
Promote AWCs mission through engagement opportunities	 Help facilitate visitor experiences while at AWC sanctuaries Convey accurate information through guided walks and presentations 	 Experience with public speaking Experience with adapting information for the audience Experience with science communications 	Ability to interact in a positive way and effectively communicate AWCs mission
Participate in staff meetings	Discuss issues relating to safety, research and management	Public speakingNegotiation	Ability to interact in a positive way with a range of staff

South-east Intern

The table below summarises the program for the South-east Intern: Pilliga, Mallee Cliffs and Scotia. **Dates of internship: 1. February - June 2022 2. August – December 2022.**

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
To assist with the fauna reintroduction	Fauna trapping	Increased knowledge of	An understanding of
program (of endangered species) at Scotia,	Radio-tracking	Australia's fauna species and	conservation issues in
Pilliga and Mallee Cliffs Wildlife	Fauna handling (including micro-	their conservation status	Australia
Sanctuaries:	chipping, taking of	Capture and handling techniques	Ability to use different
 Conduct systematic trapping, transect 	morphometrics, tissue and	Translocation methods	capture and research
surveys, or radio-tracking of (depending	blood sampling)	 Quarantine and husbandry 	methods and handle
on Sanctuary) Greater Bilby, Bridled	 Captive animal husbandry 	procedures	animals proficiently
Nailtail Wallaby, Brush-tailed Bettong,	 Assist vets with treatment of 	Use of GPS	 Understanding of
Burrowing Bettong and Numbat	animals	Team work	quarantine issues
populations	 Learn and adhere to quarantine 	Value of accurate records	Ability to work
Monitor health of reintroduced	protocols	 Knowledge of alternative 	independently and as part
populations	 Record data from field work 	approaches to monitoring	of team
To undertake biodiversity monitoring	Fauna identification	 Increased knowledge of 	 Ability to identify and
surveys at Scotia, Pilliga and Mallee Cliffs	 Fauna trapping (installing 	Australia's fauna and flora	demonstrate knowledge of
sanctuaries	monitoring sites, setting traps,	Experience with different	Australia's fauna and flora
	checking traps)	trapping and other survey	Ability to carry out
	camera trapping	techniques	fieldwork efficiently and to
	 nocturnal fauna surveys 	Experience with handling a wide	manage time
	 diurnal bird surveys 	range of fauna	Ability to handle and collect
	 Malleefowl mound surveys 	Use of GPS	data from a wide range of
	 Vegetation and habitat 	Accurate record keeping	fauna
	assessments	Accurate navigation	Accurate record keeping
	 Fauna handling and data 		Ability to work
	collection		independently and as part
	 Record data from field work 		of team
To assist with feral animal research	Carry out track surveys	Understanding of indices as a	Ability to identify tracks of
	throughout Scotia to monitor	method of monitoring wildlife	terrestrial fauna
	foxes, cats.	Knowledge of pest animal	Ability to derive indices of
	Carry out monitoring of pest	control techniques	abundance
	animal control techniques	Knowledge of introduced species	Ability to locate tagged
		ecology	animals

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
	 Trapping, radio collaring and radio-tracking of foxes and cats at Scotia and Pilliga 		
Participate in staff meetings	Discuss issues relating to research and management	Public speakingNegotiation	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 2022 2. July - December 2022.

Objectives	Tasks	Learning outcomes	Evaluation of outcomes
Assist with fauna monitoring at North Head	 Mammal trapping Animal handling (including micro-chipping, measuring, genetic sampling) Camera trapping Spotlight surveys Frog surveys Habitat assessments Record data from field work Post-fire monitoring 	 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 	 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	 Fauna trapping and handling Habitat assessment Assist with logistics Monitor and record outcomes (as above) 	 Increased knowledge of reintroduction practices Capacity to work as part of a team in a complex project 	 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	Vegetation surveys	 Increased knowledge of Australia's flora and its management Vegetation survey techniques 	 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)	See South-east Intern	see South-east Intern	see South-east Intern
Participate in staff meetings	Discuss issues relating to research and management	Public speakingNegotiation	Ability to interact in a positive way with a range of staff