- **15 years of Witchelina** Nature Reserve
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WINTER 2 2025

Engaging people in conservation

NatureMatters

VITAL WORK APPEAL:

Empowering volunteers for nature

See P. 2

Volunteer Cassie at 2024 Watchalunga Planting Day. Credit: Bill Doyle

Nature Foundation™

VITAL WORK APPEAL

Nature Foundation volunteers assisting with various activities over the past 12 months, most photos by Carolyn Pickering and Bill Doyle.

To donate visit:
naturefoundation.org.au/vwa25

Empowering **volunteers** for nature

Volunteers are crucial to Australia's environmental and climate change action response.

Every year, hundreds of thousands of volunteers work directly in the environmental and climate change space, from conservation, rehabilitation, and adaption to tree planting, threatened species protection, land management, clean-up, wildlife rescue, recycling, education and citizen science, to name a few.[1]

Nature Foundation volunteers play a vital role in contributing to our conservation efforts across our nature reserves, in the office, and at events. We are incredibly grateful for this passionate group of dedicated people actively participating in our work.

With our current and future conservation needs that can be supported by volunteers, it is essential that we support our volunteers so they can undertake this work effectively and safely.

Nature needs your help now more than ever.

Nature Foundation's annual Vital Work Appeal helps us achieve the property maintenance and infrastructure improvements required across our growing network of nature reserves, enabling us to conduct and improve conservation efforts and results.

It also gives you the opportunity to play a vital role in supporting biodiversity and nature, with all donations contributing directly to on-ground conservation work.

This year's appeal is focused on funding vital equipment to assist our field staff and volunteers in taking positive action to conserve, restore, and protect precious Australian landscapes and their unique native species.

We were overwhelmed by last year's response to our Vital Work Appeal, raising our highest amount in the history of the appeal, $148,000—thank you.

1. Source: Volunteering Australia—Environmental and Climate Change Volunteering: volunteeringaustralia.org/policy/advocacy-campaigns/environmental-volunteering/#/

Buoyed by this confidence from you and our dedicated supporters, we have increased the stakes in 2025, aiming to raise $150,000, which will help fund:

Volunteer infrastructure and equipment such as:

- Two dedicated trailers, equipped for fire control, watering, and spraying.
- A storage shed at Bullock Bridge Nature Reserve.
- Battery-operated tools e.g. drills for drill and fill weed control.
- A car fridge with solar panels for safe food and cool drink storage during day and overnight activities.
- Camping equipment for overnight stays on nature reserves.
- Binoculars for bird and fauna surveys.
- Training volunteers in relevant skills such as 4WD, safe chemical use, and equipment use.

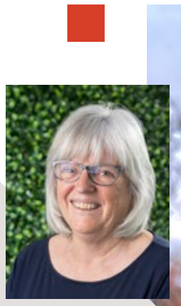
And ongoing fencing needs across the reserves, with a focus on our latest addition, Mongolurring Nature Reserve.

We want to express our heartfelt gratitude for your past donations to Nature Foundation. As an independent non-profit and non-government organisation, your charitable gifts have had a direct and positive impact on nature and our unique biodiversity across South Australia and beyond.

It's important to remember that every dollar you donate to the Nature Foundation is a powerful investment in our planet's future. Your contributions fund important conservation activities and programs, helping us to conserve and restore our current nature reserves, protect even more land, stop species loss, and mitigate the increasing effects of climate change.

As a charity with deductible gift recipient (DGR) status, all donations are tax-deductible. At the beginning of the financial year, we will resend you all your donation receipts to help you record your donations and accurately reduce your taxable income.

We understand the impact of the increased cost of living on Australians, and we sincerely thank you for all donations made to Nature Foundation. Every donation of any size truly makes a difference to nature.



From the Chair
Jan Ferguson OAM

It has been a relief to see some rain following a long, dry summer, though more is still required and some areas are yet to see some. The lack of rainfall has taken its toll across the state, particularly the arid zone, with compounding effects on native vegetation and feeding fauna. This is a stark indicator of the importance of our cause and the necessity of factoring the changing climate into land management plans.

This month's 15-year anniversary of Witchelina Nature Reserve is a significant milestone that underscores the value and impact of long-term conservation management, with positive results for native bird species and populations based on factors within our control, such as reduced grazing pressure.

Witchelina Nature Reserve remains one of Australia's largest private nature reserves; however, with ever-increasing species added to the threatened species index and a changing climate, more must be done to protect, conserve, and restore Australian landscapes for future generations. We continue working towards our goal of doubling our impact by 2030. We thank all donors who have supported the Forever Nature Fund through financial means or gifts of land.

In addition to the protected land, we need skilled people to assess situations and make evidence-based decisions. So, I would like to personally congratulate the five recipients of this year's Nature Foundation student research grants and the winner of the Mike Bull Award for Early Career Nature Scientists and thank the generous donors who make these grants possible.

Since 2000, Nature Foundation has awarded $1,974,786 in research grants to post-graduate students, academics, and the community to kickstart research careers, supporting 464 students. You can meet the grant and award recipients and learn about their research projects later in this issue.

I would like to take this opportunity to express my sincere thanks to outgoing Deputy CEO Mark Ashley. His strategic analysis, frank perspectives and significant contributions to the organisation have been invaluable, and I'm grateful for his continued support as Strategic Initiatives Advisor.

I would also like to welcome Daniel Leinfelder to the Deputy CEO role. A complex sector like ours requires diverse perspectives. I look forward to the benefits his experience and skills will bring to the organisation.

Lastly, but by no means least, I ask that if you are in a position to contribute towards this year's Vital Work Appeal, please do so. Along with the land and science, we need more people who are safely and effectively resourced to affect the critical change our environment needs and deserves.

This year's appeal will help fund equipment and infrastructure to support our field staff and valuable volunteer network, such as an on-site storage shed at Bullock Bridge, trailers, tools and survey binoculars, enabling them to undertake essential conservation tasks across our growing network of nature reserves. We were overwhelmed by last year's contribution to the Vital Work Appeal, which helped fund water and infrastructure upgrades at Hiltaba and Witchelina, the repair of the causeway at Watchalunga, which is due for completion this June and contributed to upgrading the shower and ablution block at the Shearer's Quarters at Hiltaba which is due to commence later this year.

Cost-of-living pressures continue to impact Australians; however, all donations of any size make a real difference for nature. On behalf of the Board, thank you for your ongoing support of Nature Foundation and our precious natural world.

From the CEO
Alex Nankivell

This update will see me echoing many of Jan's sentiments, including gratitude for the bit of recent local rain, ongoing concern for the changing climate, and continued focus on ensuring our conservation management plans support this future state.

I recently attended South Australia's second annual Climate Change Conference with some colleagues from the team. The conference focuses on addressing the challenges and opportunities of climate change across all state industry sectors. It brings together keynote speakers, experts, industry leaders and policymakers to discuss strategies for transitioning to net zero emissions, adapting to climate change impacts, and driving sustainable practices.

While there is still a way to go, I am pleased to see this emphasis on all industry sectors considering and planning with climate change in mind. Regardless of our professional role, we will all be impacted by these changes, and we need this whole-of-society approach to tackling and addressing the issues.

While Nature Foundation has its direct impacts through private land conservation, we welcome the opportunity to work with businesses who share our values and vision. Our commitment to 'Inspiring people to connect with and conserve the natural habitat of South Australia and beyond for future generations' is unwavering, and we are dedicated to positively impacting our environment.

As a parent, this strongly resonates with me; however, beyond my own family, I strive to leave this world in a better state than when I entered it.

I also recently attended the Australian Land Conservation Alliance (ALCA) strategy day. Nature Foundation is a member of this national private land conservation alliance. Following the federal election, it was a valuable opportunity to come together with other members nationwide to discuss and plan for the future. Our ALCA involvement plays an important role in collating and amplifying the issues and impacts for our sector at a national level while also bringing together a diverse cohort that provides strength through different perspectives and experiences.

This diversity is essential for dealing with the challenges our sector faces. So, I am pleased to welcome Daniel Leinfelder as Deputy CEO. Daniel's expertise in environmental impact assessment, traditional custodian and government engagement, and environmental management will complement and significantly enhance our existing team. His deep passion for nature and his commercial experience are valuable assets for further developing Nature Foundation's nature-based solutions and corporate partnerships. These are key to ensuring the organisation's growth and positive impact on South Australia's biodiversity.

Late last year, outgoing Deputy CEO Mark Ashley decided to return home to Darwin and transition to a part-time role. With the Board and staff team, I would like to express our deepest gratitude to Mark for his significant contributions to Nature Foundation. His work has been invaluable, including developing the reserve management system, securing significant multi-year funding for Kids on Country, and improving the organisation's land acquisition systems. I greatly appreciate Mark's support during my first few years as CEO. I am glad we will continue to work together.

I do hope you enjoy this edition of Nature Matters. As you will see, it is jam-packed with updates from across the organisation and our reserves. The team is doing an outstanding job, and we couldn't do it without your invaluable support. Your contributions, whether through active participation or financial assistance, are integral to our success. Thank you. If you are able to contribute towards this year's Vital Work Appeal, it would be very much appreciated. Every donation, regardless of size, helps further our efforts, now and for the future.

Celebrating 15 years of Witchelina Nature Reserve


Credit: Andy Rasheed

June 2025 marks a significant milestone – 15 years since the transformation of the former pastoral property, Witchelina, into a nature reserve.

This historic event, in 2010, saw Witchelina become the largest property to be incorporated into Australia's National Reserve System, a feat made possible through the Federal Government's Caring for Our Country Program.

For the past 15 years, Nature Foundation has protected the 421,000-hectare area, destocking the former pastoral property to assist with restoration of the land and other conservation tasks, such as weed and feral species management. Recent changes to legislation will now allow Nature Foundation to further protect Witchelina under a Native Vegetation Heritage Agreement.

Our work at Witchelina Nature Reserve has enabled people to experience the landscape and support conservation in action through volunteering and visitation offerings. Funds support its ongoing management, and research and biological survey work contribute to the ecological knowledge base of arid ecosystems.

We are also proud to have developed good relationships with Traditional Custodians from the Kuyani and Adnyamathanha peoples to ensure our conservation practices with traditional ecological knowledge and respect cultural sites and heritage.

It was through consultation with Kuyani Elder Beverley Patterson that the concept for the Kids on Country™ Junior Ranger Program was born. It has now enabled over 500 Aboriginal young people to return to the country, learning valuable life skills, Aboriginal culture and conservation practices.

From a wildlife perspective, the reserve has witnessed a remarkable transformation since its acquisition. The abundance of bird life has notably increased, a strong indicator of our successful conservation efforts. Regular bird surveys, conducted by birds SA volunteers since 2010, have recorded 75 bird species at the latest survey in September 2024. Since its acquisition, 168 bird species have been documented on Witchelina Nature Reserve, a clear sign of the thriving biodiversity. Analysis of long-term bird survey data indicates that strategic management of factors within Nature Foundation's control (such as grazing pressure and predation by cats and foxes) has enabled us to promote greater numbers of granivores and insectivores than likely would have occurred in the absence of this management.

Through consistent attention to and management of threatening processes such as tackling feral and invasive species, 3,040 goats, 814 feral cats, and 201 foxes have been removed from Witchelina since 2010, significantly easing pressure on the landscape and its native inhabitants.

Witchelina remains at the forefront of innovative conservation research, actively involved in several pioneering projects. These projects, which we are proud to be a part of, include:

- An Australian Research Council (ARC) Linkage grant, through UNSW in partnership with Nature Foundation and Bush Heritage, investigating the impact high numbers of kangaroos have on native ecosystems.
- A federally funded Innovative Biodiversity Monitoring project that, uses song meters to gather audio monitoring data. The project aims to improve the efficiency and cost-effectiveness of processing and analysing audio biodiversity data by developing a streamlined data workflow process for large-scale monitoring programs in remote Australia.
- Thick-billed Grasswren research to better understand population dynamics of a cryptic arid bird species.
- A recent grant by the Wetenhall Environment Trust to investigate heatwave refugia for native birds.

As a science-based organisation, we are proud of Witchelina's role in vital conservation research in Australia and as a refuge for native species.

We would like to take this opportunity to recognise the significant efforts of the many individuals and groups who have supported the activities and results achieved at Witchelina over the years and thank them for their service. This includes the contribution of the volunteers, along with Nature Foundation staff, contractors and partners.

Doubling our impact

With an area similar to Kangaroo Island, Witchelina is a vast conservation area. However, with increasing numbers of species being added to the threatened species lists annually and challenges due to a changing climate, more must be done to protect, conserve, and restore Australian landscapes, providing refuge for native flora and fauna.

Nature Foundation's goal is to double our impact to 1 million hectares of protected land by 2030. This is being achieved through our Forever Nature Fund, with valuable support from like-minded individuals and organisations, both financial and gifts of land. If you would like to learn more about or support the Forever Nature Fund, please visit forevernaturefund.org.au

Fighting the Phrag at Watchalunga

A key component of our conservation work is managing threatening processes. While people often consider the threats of invasive species, when we are working to restore the balance of an ecosystem, we are sometimes managing the threats of overabundant native species.

This is the case at Watchalunga Nature Reserve, located in South Australia's Fleurieu Peninsula, where managing *Phragmites australis* (Common Reed) is an important aspect of our conservation management plan.

Watchalunga is believed to be home to the largest population of Mount Lofty Ranges Southern Emu-wren *(Stipiturus malachurus intermedius)* and is thus critically important for the conservation of the species. Phragmites threaten the Emu-wren habitat as they grow through other vegetation and engulf it, forming dense monocultures. Phragmites management is essential for protecting the areas revegetated by our annual planting days, and the existing remnant habitat on the nature reserve.


Credit: Carolyn Pickering

In addition to being a vital aspect of our work across all nature reserves, protecting existing habitats and managing threats is a goal of the recently released Re-bird the Ranges Action Plan, which includes our work on Watchalunga and Para Woodlands Nature Reserves.

Phragmites growth is fast, with the invasion front moving at around 2 metres per year.

There are four documented methods of controlling *Phragmites australis*: 1. Cut and drown, 2. Burn, 3. Slash, and 4. Spray.

The first two methods, cut and drown, and burn, aren't feasible at Watchalunga Nature Reserve. Drowning requires altering the area's hydrology, which is not a viable option as this wetland is an open system. Burning, while very effective in managing swamps, could have a detrimental impact on the Emu-wren population due to the potential destruction of their habitat.

Research shows that slashing and spraying are maximally effective when used in combination, so this is the approach we are taking.

Timing is a vital factor for managing Phragmites. The aboveground biomass is highest in summer, making it the perfect time to spray because the plant has the largest surface area to absorb the herbicide. Spraying must also occur when the plant is flowering before directing its energy into its rhizomes underground, which, if unmanaged, will then reappear approximately 2 metres away in spring.

A couple of weeks after spraying, the Phragmites is then slashed. As a result of these activities, when the plant begins to regenerate in spring, it grows back weaker, and the process is repeated annually.

We completed this process at Watchalunga in March, with the valuable assistance of our volunteers. Seven volunteers spent two days supporting our team with slashing *Phragmites australis*, along with:

- Clearing tracks to assist movement around the reserve
- Slashing around the causeway area in preparation for the new causeway construction (funded through our 2024 Vital Work Appeal)
- Tidying revegetation areas and replacing tree guards

These crucial tasks play a significant role in conserving, restoring, and protecting our precious native habitats. Their efforts have a direct and positive impact on the environment, and the volunteers involved should be proud of their contribution.

To monitor the effectiveness of this threat management, we have established monitoring transects and take regular photo point data to visually record the impact. These photos show how tall and dense the *Phragmites australis* were before we commenced management in 2023 and how the treatment has not only cleared the area but also uncovered some revegetation plantings that had been engulfed by the front and can now thrive.

We extend our heartfelt thanks to our volunteers: Issy, Vicki, Catherine, Ian C, Ian H, Phil, and Anthony. Their wonderful work alongside Nature Foundation staff Jem Shimmield and Carolyn Pickering, and reserve contractors, Second Nature Conservancy, is greatly appreciated. Their contribution is invaluable to our conservation efforts.

Murbpook **Environmental Watering** of the Northern Lagoon

Environmental water delivery aims to address the declining health of wetland ecosystems during prolonged dry periods and to achieve improvements in environmental condition.

It seeks to mimic key parts of the natural flow regimes where possible, to create suitable habitat to support breeding and regeneration of key species. Environmental watering in wetlands and floodplains has seen the return of threatened species to particular sites in the region including Murray Hardyhead *(Craterocephalus fluviatilis)*, Southern Bell Frog *(Litoria raniformis)*, Freckled Duck *(Stictonetta naevosa)* and Latham's Snipe *(Gallinago hardwickii)*. Long-term scientific monitoring indicates that e-watering can improve the condition of mature River Red Gum *(Eucalyptus camaldulensis)* and Black Box *(Eucalyptus largiflorens)* trees and increases height and vigour of seedlings and saplings.

In April, Nature Foundation conducted environmental watering of the Northern Lagoon within Murbpook Nature Reserve in partnership with the Murraylands and Riverland Landscape Board. The environmental watering contractor set up a small pump system to move water from the River Murray into the Northern Lagoon which is located close to the river. The wetland last received water in May 2024 which slowly evaporated throughout the year, with the basin becoming fully dry by late February 2025. This wetting and drying regime mimics natural wetland processes which would have occurred prior to river regulation, and aids removal of invasive fish species, such as Common Carp *(Cyprinus carpio)*, that entered the lagoon during the recent flooding event in 2022-23.

Monitoring is carried out twice a year at the Northern Lagoon to determine the ecological impact of the watering event, including tree health surveys. These surveys monitor the condition of River Red Gum and Black Box trees over time and provide an indication of the overall health of the wetland. Observations of other fauna utilising the wetland such as waterbirds are also noted and recorded.

Credit: Dr Hugh McGregor

Investigating **heatwave refugia** for native birds at Witchelina

Nature Foundation was recently awarded a grant by Wettenhall Environment Trust for a project to be carried out at Witchelina Nature Reserve investigating heatwave refugia for native birds.

Many bird species suffer tremendously during mega-heatwaves in the arid zone. Such heatwaves are predicted to become much more severe in future, increasing in intensity and frequency due to climate change. During such events, birds will aim to find somewhere to shelter with shade and preferably water. For example, during a heatwave in 2019, over 1000 small birds sheltered at a motel at Roxby Downs, despite the close proximity to people. Birds can die en-masse without access to such sites. The rocky habitats in the north of Witchelina might provide such refugia and could thus be critical to the survival of native bird species in future climate scenarios. Understanding the importance of these sites will promote evidence-based conservation management decisions that ensure positive outcomes for biodiversity.

The project will involve identifying heatwave refugia used by different species of birds (e.g. dams, caves, dense shrub thickets, rabbit warrens etc) using remote cameras paired with temperature loggers.

When key thermal refuges have been identified their availability will be mapped across the whole reserve. Artificial thermal refugia will also be built at selected sites to assess their success at providing shelter for native birds, relative to natural refugia.

Funding from Wettenhall Environment Trust will enable the collection of critical information that will guide future conservation management actions at Witchelina Nature Reserve. It will assist in the development of plans to mitigate short- and medium-term climate challenges for native bird species, particularly those found to be critically at-risk, and facilitate targeted actions to preserve and restore areas identified as thermal refugia. Successfully developed artificial refugia will be deployed across other arid-zone reserves in the Nature Foundation portfolio, further enhancing conservation outcomes for native bird species. These results will promote further research into the impacts of heatwaves on native birds that will reduce the consequences of future events.

Credit: Kelsey Bennett

Management update from **Mongolurring**

Mongolurring is our most recently acquired nature reserve east of Mount Bryan, South Australia, on Ngadjuri Country.

It is home to various native flora and fauna, with almost 200 native plant species recorded in the area and 16 reptile and 64 bird species. The 1,200-hectare nature reserve traverses multiple vegetation types, including mallee woodland, low woodland, low shrubland, senna species and grassland.

Native bird species recorded in the area include the Southern Whiteface *(Aphelocephala leucopsis)* and Diamond Firetail *(Stagonopleura guttata)*, both listed as threatened under the National Environment Protection and Biodiversity Conservation (EPBC) act, and the White-winged Chough *(Corcorax melanorhamphos)* listed as Rare under the *National Parks and Wildlife (NPW) Act*.

A generous benefactor gifted the property to the Nature Foundation in June 2024, and our recently concluded Mongolurring Conservation Management Appeal raised vital funds towards initial essential tasks to ensure the land's conservation, restoration, and protection.

Your donations—including a generous major gift of $10,000 by Jason from EASYFLOWERS—combined with a Friends of Parks invasive weeds grant won by our Volunteer program, will enable us to achieve critical initial reserve management actions:

- essential fencing works
- feral species control (goat and deer)
- initial weed control
- and establishing baseline biodiversity monitoring sites.

This baseline monitoring is necessary to help us to understand the landscape's intricacies and use this to inform evidence-based conservation planning and further actions.

The diversity of habitat types across Mongolurring requires multiple monitoring sites to assess the different ecosystems and achieve a foundational understanding of the local landscape and its inhabitants. We are currently undertaking biodiversity monitoring on the 203-hectare Bullock Bridge Nature Reserve in South Australia's southeast. The findings from this reserve are proving invaluable to our ability to manage this precious parcel of land effectively, as they are guiding our monitoring strategy at Mongolurring.

In April, our Reserve Management team, including recent addition Kelsey Bennett, Conservation Land Manager, visited Mongolurring to scope and plan the initial reserve management tasks and review the baseline monitoring site locations. They provided feedback and recommendations to the Science and Knowledge team, to assist with preparing for this survey, which is likely to commence in September/October 2025.

With the low rainfall across much of South Australia over the past months, the understorey vegetation was notably dry and showing some drought stress. However, the variety of native vegetation across the nature reserve indicates it will respond well to the weed and feral species control actions and the much-needed rain when it finally comes.

We look forward to bringing you further updates on the management and monitoring progress at Mongolurring.

Thank you to everyone who contributed to our Mongolurring Conservation Management Appeal. Your support—in any amount—is deeply appreciated and vital for achieving our goal of conserving, restoring, and protecting more land for future generations.


Credit: Nick Mocha

Critically endangered **Pale Sun-moth discovered** at Tiliqua Nature Reserve

The Pale Sun-moth *(Synemon selene)*, a species last recorded in South Australia in 1948 and considered locally extinct, was rediscovered in 2018 by SA Museum staff near Peterborough, in the state's mid-north.

This significant rediscovery occurred in an uncropped native grassland, home to a resident population of endangered Pygmy Bluetongue lizards (*Tiliqua adelaidensis)*.

Pale Sun-moths are listed as endangered in Victoria but have no conservation status in South Australia, likely due to a lack of data. Subject matter experts widely regard them as critically endangered in South Australia. This year, the Department for Environment and Water (DEW) has been undertaking widespread surveys in collaboration with expert entomologists to identify new colonies of Pale Sun-Moths and better understand the species' distribution and abundance.

In early March there were two sightings of Pale Sun-moth at Nature Foundation's heritage-listed 85-hectare Tiliqua Nature Reserve in South Australia's mid north, during management and research activities on the site. Northern and York Landscape Board staff observed around 50 individuals in one location on the reserve, with smaller groups of 2-5 individuals across the reserve. Grassland experts saw a group of around 24 moths in a different location on the reserve around a week later.

The Pale Sun-moth is typically found in uncropped native grasslands in the northern Mount Lofty Ranges and southern Flinders Ranges that have not been sprayed with herbicides or pesticides. It prefers areas dominated by Wallaby grass (*Rytidosperma* spp.) and Spear grass (*Austrostipa* spp.). Threats to this habitat include land clearance, agricultural processes, overgrazing, and bushfires. Pale Sun-moths have been recorded on multiple properties with resident Pygmy Bluetongue lizard populations, likely due to their similar habitat preferences.

There is limited data on the lifecycle of the Pale Sun-moth in South Australia, with current life history observations based on Victorian populations. Female Pale Sun-moths are known to lay their eggs in the base of Wallaby grass or Spear grass tussocks, or small cracks nearby to these species. The eggs can take up to 3 months to hatch, with larvae then moving down into the root zone of grasses, where they remain for 2-3 years. Adults emerge from mid-February to mid-March, living for approximately 5-7 days, during which time they do not eat. The males fly about looking for females to mate with, and the females then lay their fertilised eggs, with each female laying up to 120 eggs, and the cycle repeats.

The species potentially represents a valuable food resource for the grassland ecosystem during what is typically a hot and dry time of the year and may be preyed upon by bird species and small reptiles such as Pygmy Bluetongues.

Nature Foundation will monitor this critically endangered species on an ongoing basis as part of our conservation management activities at Tiliqua Nature Reserve.



Photos by Emma Lewellyn
Above and middle: healthy Iron-grass, far right: unprotected Iron-grass that has been grazed.

Restoring the **Iron-grass** at Tiliqua

In 2022, Nature Foundation staff, volunteers, members and supporters planted 700 Iron-grass seedlings at Tiliqua Nature Reserve near Burra as part of a collaborative 'Iron-grass native grassland project' supported by the Murraylands and Riverland Landscape Board and the Northern and Yorke Landscape Board through funding from the Australian Government's National Landcare Program.

Iron-grass *(Lomandra multiflora ssp. Dura, Lomandra densiflora and Lomandra effusa)* is a fascinating plant. Despite its name, it's not a true grass but a member of the asparagus family. Its spiky, tussock-like appearance and its long lifespan make it a significant habitat feature in native grasslands. It's also a crucial element in the restoration of Tiliqua's former pastoral land, which provides a home for the nationally endangered pygmy bluetongue lizards *(Tiliqua adelaidensis)*. Its deep root system helps to stabilize the soil, and the plants themselves act as seed traps which can support higher floral biodiversity.

Prior to the plantings, meticulous planning was undertaken. Plots were carefully mapped across the 81-hectare reserve to ensure that digging holes for the seedlings would not disrupt the existing ecosystem, particularly the Wolf and Trapdoor Spider burrows, which are home to the pygmy bluetongues.

Northern and Yorke Landscape Board funded ongoing watering of the Iron-grass seedlings over the subsequent years, giving them the best chance of establishing and surviving in the landscape. These regular funded waterings ended recently, and the Iron-grass plants are looking very healthy and well established despite the long, dry summer.

Science and Knowledge Project Officer Dr Lucy Clive will undertake a survival survey in June to assess the impact of these supplementary waterings on the survival of the plants. This assessment will involve a comprehensive study of the health and growth of the Iron-grass seedlings. This information will be crucial for future plantings, with another 100 Iron-grass seedlings due to be planted by Nature Foundation volunteers in August, and a further 300 in 2026, funded by a Waterloo Wind Farm Community Grants Program grant.

The Iron-grass Natural Temperate Grassland of South Australia is listed as a critically endangered ecological community by the Environment Protection and Biodiversity Conservation Act (1999), and we are proud to play a role in restoring and maintaining this community for future generations and supporting the pygmy bluetongue lizards and other native species at Tiliqua Nature Reserve.

This project is funded by the Murraylands and Riverland Landscape Board and the Northern and Yorke Landscape Board through funding from the landscape levies.

Announcing our 2025 student research grant recipients

High quality nature science underpins all of our efforts to manage our unique biodiversity for future generations sustainably, and an essential aspect of this is offering research grants for university students, funded by donations from our generous supporters.

Since 2000, Nature Foundation has **awarded $1,974,786 in research grants** to post-graduate students, academics, and the community to kickstart careers in research, supporting 464 students. This year five student research grants were awarded in the March 2025 round, including a new grant sponsored by benefactor Lyn Ballard, to the value of $5,000.

We are delighted to share this year's student research grant recipients and their projects with you.

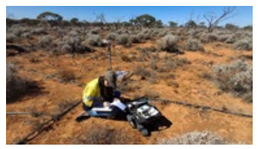
Grand Start Grants – Honours

These grants provide up to $2000 for one year to assist an Honours student undertaking research. Projects may be field-based or involve non-field-based research such as geographic information systems, remote sensing-related projects, or data analysis.

Jaclyn Wilmot

Bachelor of Science (Honours) (Ecology and Evolutionary Biology), University of Adelaide

To Seed or Not to Seed: can nitrogen addition improve the fecundity of Pearl Bluebush (Maireana sedifolia) in the Australian arid lands?



Maireana sedifolia (Pearl Bluebush) is a dominant shrub across many Australian chenopod arid-lands. Its capacity for flowering/fruiting is low and shows remarkable spatio-temporal variation, which poses a significant environmental problem for revegetation projects of previously mined lands.

Previous studies have shown that water is not the main factor limiting *M. sedifolia* fertility and growth, unlike other arid plants. Jaclyn's project will be conducted within the Yellabinna Regional Reserve surrounding the Jacinth-Ambrosia mine site, approximately 200km northwest of Ceduna. It will investigate whether soil nitrogen deficiency could be the main culprit, and how nitrogen addition via facilitation could be a potential solution for this problem.

Nature Foundation Scientific Expedition Foundation RL & GK Willing Grant

This annual grant provides up to $2000 for one year to support an Honours student. The student's research must focus on:

- *Trends in the abundance and distribution of native populations of South Australian fauna and flora; or*
- *Soil, water, geology or climate where it will affect abundance and distribution of native populations of South Australian fauna and flora.*

This is a partnership between Nature Foundation and Scientific Expedition Foundation.

Hannah McKennall

Bachelor of Science (Honours) (Animal Behaviour), Flinders University

Distribution, habitat use and behaviour of Rakali (Hydromys Chrysogaster) across locations of varying human disturbance in the Goolwa and associated tributaries catchment

Hannah's project will investigate the presence of the native Australian water rat, Rakali *(Hydromys chrysogaster)*, its habitat preference, and behaviour in multiple locations of varying human disturbance in the Goolwa region of South Australia. Study locations include Watchalunga Nature Reserve, the Finniss River tributary (mouth), Currency Creek tributary (mouth), and Goolwa township.

Through camera and live trapping, Hannah aims to quantify the presence and distribution of Rakali across locations, investigating the environmental variables (including human presence) that may significantly affect their habitat preferences. Hannah will also examine differences in scavenging behaviour across locations, which may indicate diet shifts due to urbanisation. Rakali is a significantly understudied species, despite having important roles in freshwater ecosystems and longstanding indigenous significance. Data from this project will contribute to more effective and accurate conservation for Rakali.

Grand Starts Grants – PhD

PhD/Masters Grand Start Scholarships provide grants of up to $3000 per annum for a maximum of three years to assist a PhD/Masters student undertaking research.

Kathryn Bugler

PhD, University of Adelaide

Roos on the move: Understanding kangaroo movement for improved conservation

Kathryn's project involves deploying 60 GPS/accelerometer collars on Red Kangaroos *(Osphranter rufus)* at Bush Heritage's BonBon Station Reserve in South Australia to address applied ecological and management questions relating to their movement and behaviour. Using an experimental approach, Kathryn will investigate how agricultural fencing, artificial water points and drought influence Kangaroo movement and behaviour.

Findings will refine knowledge and address long-standing human-wildlife conflicts relating to home ranges, travel distances, and use of key resources. Movement data will be incorporated into an individual-based model to test various Kangaroo management strategies. The project's findings will inform evidence-based Kangaroo management and welfare practices in South Australia and beyond.

Lynette Aplin 'Knowledge in Science' Research Grant

This new grant provides $5000 to a PhD student to support their next year's research.

Natarsha McPherson

PhD in Ecology, University of Adelaide

Spatiotemporal patterns of semi-fossorial mammals in rangeland Australia: A case study of the wombat and [illegible] remote sensing and ecological modelling

A deficiency of spatial distribution data in remote semi-arid and arid rangeland habitats often limits the efficacy of wildlife conservation and pest management. In the Nullarbor Plain and Nullabor bioregion in South and Western Australia, warrens of the Wombat and Rabbit offer fixed proxies that can be detected from satellite imagery, enabling the broad-scale assessment of distribution and ecological interactions.

Natarsha's project will integrate remote satellite digitisation, field validation, and ecological modelling to establish detailed occurrence data, assess burrowing impact and ecological interactions (abiotic and interspecific), and predict range shifts under environmental change. The project's outcomes will focus on refining methodological approaches for integrating remote data and models into conservation and pest management planning, improving the long-term monitoring of native species and allowing targeted management of invasive species in semi-arid ecosystems.

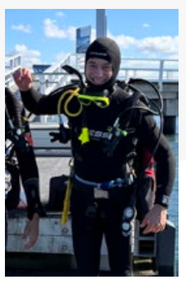
Roy and Marjory Edwards Scholarship

This scholarship provides up to $12,000 per annum for up to three years to support a student at an Australian university. This scholarship was initiated in 2002 by a generous donation from Mrs Marjory Edwards to establish a perpetual scholarship in conservation biology.

Raphael Clement

PhD in Marine Ecology, Edith Cowan University WA

Overcoming barriers to seagrass restoration



Seagrass meadows provide essential ecological and economic services, including marine biodiversity, improving water quality, and stabilising sediments. In southern Australia, the dominant *Posidonia* seagrass species forms vital habitats for key fisheries, like juvenile King George Whiting *(Sillaginodes punctatus)*. It can store more carbon than any terrestrial forest, but it suffers from serious decline globally.

Raphael's research investigates a remarkable natural *Posidonia* recovery in South Australia, likely driven by seed dispersal. The project operates locally, focusing on the metropolitan coastal waters of Adelaide, and at a broader regional scale, encompassing South Australia's coastline from Port Lincoln to Kingston. Using genetic analysis and hydrodynamic modelling, Raphael aims to understand the ecological drivers of the recovery and connectivity between populations. This project will help develop evidence-based strategies to enhance seagrass restoration in Australia and beyond.

We wish all of our 2025 grant recipients well with their research and look forward to bringing you more updates.

Mike Bull Award 2025

2025 Mike Bull Award winner: Kristoffer Wild

Kristoffer Wild (The University of Melbourne) is the 2025 Mike Bull Award for Early Career Nature Scientists winner.

This award was established with the support of Mike's family and colleagues through the Professor Mike Bull Research Fund for Early Career Nature Scientists, to continue his important legacy in animal behaviour, ecology and conservation research and mentorship of students. The award supports the emerging career of a nature scientist. It includes a medal for academic excellence along with a $3000 grant to support the career of the recipient.

Kristoffer is a postdoctoral researcher at the University of Melbourne, specialising in understanding the ecophysiology, ecology, and conservation of arid-zone ectotherms. Kristoffer's research integrates field ecology, physiological experimentation, and advanced biophysical modelling to understand how reptile populations respond to complex environmental changes.

Over the past several years, Kristoffer has developed substantial expertise in collecting and analysing robust field data, particularly focusing on the resilience of arid-zone reptiles to climate variability. These contributions advance reptile ecology and conservation, and Kristoffer's investment in developing the next generation of ecological researchers.

Mike Bull's pioneering research, especially his influential studies on reptile-tick interactions and collection of ecological data, significantly shaped Kristoffer's early academic trajectory. Kristoffer's current research continues Mike Bull's legacy by emphasising rigorous field ecology and long-term datasets while integrating novel biophysical approaches to deepen our understanding of how arid-zone lizards will cope with environmental change.

Kristoffer hopes that these data will advance our understanding of reptile responses to environmental change and contribute meaningfully to the long-term conservation of Australia's arid-zone fauna, continuing the legacy of Mike Bull's impactful ecological research.

Daniel Leinfelder appointed as Deputy CEO

Nature Foundation is pleased to announce the appointment of Daniel Leinfelder as Deputy CEO.

Daniel brings a wealth of experience to his new role, with over 25 years in the private sector. His expertise in impact assessment, traditional custodian and government engagement, and environmental management will be instrumental in leading Nature Foundation's innovative natural capital business development programs. His leadership will be key in achieving strong conservation, biodiversity, and business growth outcomes.

Daniel will also be accountable for developing Nature Foundation's First Nations engagement and philanthropic initiatives and growing a portfolio of commercial collaborations that achieve high-impact nature positive and conservation outcomes.

Before joining Nature Foundation, Daniel was the Social Performance and Regulatory Affairs Manager for BHP's West Musgrave Nickel and Copper Mine in Western Australia. In this role, he secured Government approvals and the Native Title Agreement by listening to and developing solutions with the Ngaanyatjarra people. His efforts led to the successful development of the mine while respecting the rights and needs of the local community. Before BHP, Daniel was the Approvals Manager at OZ Minerals, where he helped to drive their stakeholder-centred strategy and led regulatory and land access across various projects in Australia and Peru.

Outgoing Deputy CEO Mark Ashley, who has held the position since 2022, has decided to return home to Darwin and transition to a part-time role. He will continue his work with Nature Foundation as Strategic Initiatives Advisor to enhance the organisation's capacity to deliver biodiversity outcomes.

Mark's contributions, including developing the reserve management system, securing significant multi-year funding for the Kids on Country™ Junior Ranger Program, and improving the organisation's land acquisition systems to protect more land for positive biodiversity outcomes, have had an extraordinary impact on Nature Foundation. The leadership team is deeply grateful for his efforts and is pleased to have his ongoing support and contribution.

Please join us in thanking Mark, and welcoming Daniel to Nature Foundation. You can learn more about Daniel later in this issue.

Officeworks Make a Difference Appeal supporting Kids on Country™ this June

We are delighted to share that Nature Foundation has been selected to take part in Officework's eighth annual **Make a Difference Appeal** throughout June.

The Make a Difference Appeal is an annual fundraising initiative that provides Officeworks team members the opportunity to champion local causes and organisations that are important to them and their community.

Officeworks will raise funds for 20 organisations nationally, including Nature Foundation and our Kids on Country™ Junior Ranger Program. Last year's Make a Difference Appeal raised more than $830,000 for 16 charities across Australia.

"At Officeworks, we're passionate about supporting the local communities where we live and work, and the Make a Difference Appeal provides an annual opportunity for our store teams to champion organisations that are close to their hearts," said Officeworks Community Manager Zoe Cairns.

"The funds raised by our customers and teams this June will enable students to learn, create and connect - together, we can make a positive difference and help change the lives of children in our local communities across Australia."

"We're incredibly thankful to be a part of the Officeworks Make a Difference Appeal this June, as we continue to develop the program and inspire future careers in conservation," said Nature Foundation CEO Alex Nankivell.

Funds raised will support the capacity for schools and students to participate in the Kids on Country™ Junior Ranger Program. Since commencing in 2016, the Kids on Country program has delivered 44 camps for over 500 Aboriginal young people, aiming to build skills in leadership and conservation, provide a place of belonging, and inspire confidence 'on-country'.

For the month of June, customers of Officeworks Marion, Noarlunga, Adelaide, Keswick and Croydon stores, along with five regional Victorian and NSW Officeworks stores, will be encouraged donate to the Appeal to support Nature Foundation at the check-out, both in-store and online.

If you are shopping at Officeworks this June, we would be grateful if you would consider making a donation with your purchase at one of the participating stores, or by selecting Nature Foundation—Kids on Country online.

Thank you for your support!

Family on Country camp at Witchelina

In March, our Kids on Country team hosted a Family on Country camp at Witchelina Nature Reserve, providing the opportunity for around 40 of Witchelina's Traditional Custodians of multiple generations to spend time out on country.

The camp began with Welcome to Country from Adnyamathanha/Kuyani Elder Beverley Patterson, included tours and walks around the nature reserve, participating in some of the Kids on Country activities and spending time connecting and yarning around the campfire.

We are grateful for the support of Traditional Custodians in contributing their traditional ecological knowledge to our conservation practices, and the opportunity for their continued connection to country and culture.

This Family on Country camp was made possible thanks to funding from the Foundation for Rural Regional Renewal.

NITV screening date for Kids on Country documentary

We are thrilled to share the initial screening date for the Kids on Country documentary on NITV.

The film is currently scheduled to appear on NITV at 8:30pm on Monday 4 August 2025, to coincide with National Aboriginal and Torres Strait Islander Children's Day.

The documentary was filmed and created by Walkley Award winning journalist and documentary filmmaker Daniel Clarke and follows a passionate cohort of Aboriginal girls from Le Fevre High School as they immerse themselves in a week-long adventure, learning to care for Country, develop leadership skills, and strengthen their cultural identity.

Once the film has had its first live screening on NITV it will be available to stream on demand through a free SBS On Demand account.

Thank you to everyone involved in the film, particularly the incredible students.

- To check and confirm the screening time closer to the date, please visit: sbs.com.au/guide/ondemand
- To learn more about and create an SBS On Demand account, please visit: sbs.com.au/ondemand/

Hiltaba habitat of Black Oak (*Casuarina pauper*) and Bullock Bush (*Alectryon oleifolius*) by Paul Drummond.

Understanding the carbon market

The carbon market is one of the newest financial markets in the world. It was initially born in the early 1990s to reduce sulphur emissions through a cap-and-trade scheme. Over the years, it evolved in various countries until the Paris Agreement of 2015, when it was recognised that an international system to price and mitigate emissions was essential for reducing global warming.

The fundamental role of the carbon market is to incentivise either the removal of greenhouse gases from the atmosphere or avoid their future release into the atmosphere. The global carbon market establishes carbon credits as a mechanism for international trade between carbon emitters and carbon credit producers. The global carbon market was estimated to be worth $948 billion in 2023 and is experiencing ongoing growth.

What is a Carbon credit?

A carbon credit is a tradeable certificate (similar to a share certificate) that the owner receives for sequestering various greenhouse gas emissions from the atmosphere. A carbon credit represents the value of 1 tonne of carbon dioxide equivalent (CO_2E). Different greenhouse gases have varying levels of environmental harm and are traded as the equivalent harm of 1 tonne of carbon dioxide to ensure consistent and comparable trading. It simply converts all gases into a comparable financial unit worldwide—for example, like the US dollar in current financial markets.

Different countries have different methods to produce carbon credits, and just like the share market, carbon credits are valued differently subject to the robustness and scientific quality underpinning their certification. The Australian carbon market has been identified as one of the world's most robust and scientifically rigorous markets. It is legislated by the *Carbon Credits (Carbon Farming Initiative) Act 2011* and is administered by the Clean Energy Regulator, a statutory authority created by the Act. The Act provides for the production and certification of Australian Carbon Credit Units (ACCUs) as the standard tradable carbon credit unit.

In Australia, there are numerous methods to create carbon credits, from planting and growing native trees, allowing natural generation of native trees by removing grazing pressure, improving the ecological condition of soils to absorb and store carbon, to several methods that avoid methane gas emissions from intensive agricultural production systems such as piggeries.

Each of these offset methods is defined within the Act, with robust procedures to quantify, audit and adjust the emission offsets of individual carbon projects. To generate carbon credits, a project must be established under one of these methodologies and approved and registered by the Clean Energy Regulator (CER). Nature Foundation, in partnership with the project developer Green Collar and Traditional Custodians for the region—Gawler Ranges Aboriginal Corporation (GRAC), which represents the Barngarla, Kokotha and Wirangu peoples—currently have an approved carbon offset project on Hiltaba Nature Reserve—a Human-Induced Regeneration (HIR) Carbon Offset Project that has been registered and operational since 2020.

Nature Foundation's Hiltaba Human-Induced Regeneration Carbon Project—How does it work?

When Nature Foundation acquired Hiltaba Nature Reserve in 2012, its habitats were in poor ecological condition following many decades of overgrazing by feral goats, rabbits, and sheep. This overgrazing was compounded through grazing by native marsupial populations that had significantly increased following the establishment of stock water points and dams. This combined grazing pressure is referred to as the total grazing pressure and includes the combined impact of all herbivores, both native and introduced, on native vegetation.

Many grazing animals, particularly goats, sheep and rabbits, are known to selectively graze emerging native seedlings or native plants regenerating from "suckers" that emerge from lateral root systems. These seedlings and suckers are high in nutrients, often softer and more palatable than parent perennial trees, and allow for regeneration of overstorey plant communities as parent plants succumb to natural mortality. They provide the ecological basis for the long-term survivorship of native overstorey of vegetation communities, particularly in times of drought when larger and older plants become more susceptible to environmental moisture stress.

The Hiltaba Human-Induced Regeneration (HIR) Carbon Project aims to decrease this total grazing pressure and allow for natural regeneration of these seedlings and suckers, and the success of the project is now becoming evident. There are many locations throughout Hiltaba where emerging Black Oak (*Casuarina pauper*) and Bullock Bush (*Alectryon oleifolius*) regeneration can be observed, and stands of juvenile trees are growing beyond established groves of parent trees. These regenerating, emerging, and juvenile-growing trees are vital in facilitating biological carbon fixation through the process of photosynthesis. This process, which converts carbon dioxide into organic compounds and stores the removed CO2 in trunks, branches, and roots, is significantly hindered by overgrazing. The amount of carbon a tree removes can be measured through various scientific methods and is key in accounting for the production of ACCUs within the project. One tonne of CO_2E is approximately equivalent to the impact of 50 trees growing for one year.

To achieve this, the carbon project at Hiltaba Nature Reserve has primarily by focusing on reducing total grazing pressure. The project facilitated the removal of over 20,000 goats from the landscape and the decommissioning of artificial water points. Collectively these have resulted in the widespread recovery in vegetation communities and underpinned the recovery of the nationally threatened Yellow-footed Rock-wallaby (*Petrogale xanthopus*) and improved the habitat of threatened Short-tailed Grasswren (*Amytornis merrotsyi*).

The project has maintained strong engagement with Traditional Custodians throughout, from early scoping and regular reporting to hosting a Gawler Ranges Aboriginal Corporation Women and Girls Camp at Hiltaba in November 2022, which was funded by GreenCollar and successfully delivered by the Kids on Country™ team.

How are ACCU's issued?

ACCUs (Australian Carbon Credit Units) from the Hiltaba Carbon Project are issued based upon a 25-year abatement schedule developed by Green Collar at the commencement of the project and recorded within the project registration documentation. This abatement schedule estimates the amount of carbon that will be sequestered each year of the project based on numerous factors, including rainfall, vegetation type and soil structure.

Credits are issued annually as management data is provided to the Clean Energy Regulator. Nature Foundation reports on feral control, weed management, grazing pressure monitoring, and other land management activities. Green Collar manages the reporting and approval process with the Clean Energy Regulator before issuing ACCUs.

In addition to this annual reporting, the project is subject to a rigorous auditing process by the Clean Energy Regulator. As defined in the approved HIR method, the project is subject to five yearly "gateway audits" during the 25-year lifespan of the project. Green Collar conducts the gateway audits that include on-ground and spatial analysis to ensure appropriate management practices have been implemented and vegetation regeneration has occurred at a rate consistent with the abatement schedule described in the project registration documents. If regeneration is found to have not occurred at the rate described in the abatement schedule, future ACCU yields are adjusted and the future abatement schedule amended. Similarly, if regeneration exceeds the abatement schedule, the future abatement schedule is adjusted accordingly.

This audit process is the key to maintaining project integrity and ensuring it delivers robust carbon offsetting outcomes as seasonal conditions vary over time.

Australian carbon market — ensuring ongoing integrity

Individual carbon project audits are complimented by a continuing process of independent third-party review of the broader carbon offsetting frameworks in Australia to ensure that the Australian carbon market remains one of the world's most robust and scientifically rigorous markets.

These reviews include independent assessments from Beare and Chamber Analysis (2021), an independent panel led by Professor Ian Chubb (2022), the Australian Academy of Science Review (2022), the Climate Change Authority (2023), and Dr Cris Brack's ongoing HIR reviews (2023-2024). All assessments found the scheme is fundamentally 'sound' and producing genuine abatement. This degree of external review is vital to ensure the ongoing integrity of Australian offset methodologies and underpins the value of ACCUs in the international market.

A high-quality carbon market is vital to providing essential resources for conservation and biodiversity protection across Australian landscapes. In July 2024, the Wentworth Group of Concerned Scientists released a report highlighting the 'Blueprint to Repair Australia's Landscapes.' The report modelled scenarios in which $7 billion was needed annually to fully restore Australia's ecosystems to a healthy and functioning state within 30 years, with the carbon market contributing 7% to 15% of that funding. Additionally, the carbon market could offset 18% of Australia's emissions over the next 30 years. By harnessing the potential of landscapes to remove carbon from the atmosphere, significant investment pathways can be opened to fund nature repair, enhance agricultural productivity, and contribute substantially to achieving net-zero emissions.

The future of the Australian carbon market

A new carbon offset project method is being realised in the near future, called the Integrated Farm-land Management Method (IFLM). This method will integrate previous vegetation and soi-related methods to reduce project registration and administration costs and provide additional revenue options for individual land managers. Nature Foundation has provided input into the development of this new method and will explore its application across Nature Foundation's nature reserves.

Additionally, Nature Foundation is exploring the application of the new Nature Repair Market, a voluntary biodiversity market mechanism established through the *Nature Repair Act (2023)*. The Nature Repair Market aims to mobilise private finance to repair and protect natural environments by establishing a biodiversity certification and trading framework. This will allow landowners to monetise biodiversity improvements and potentially "stack" biodiversity and carbon credit benefits and provide businesses with opportunities to invest in nature-based projects. It represents a unique opportunity for Nature Foundation to realise revenue from its conservation programs and grow the impact of its work.

Revenue streams like the carbon market provide an opportunity to fund vital environmental management efforts while reducing emissions and improving biodiversity. With adherence to established regulations and collaboration among stakeholders, these methods can evolve and contribute to large-scale environmental and land management improvements.

Daniel Leinfelder

Deputy CEO

Staff profile

Daniel Leinfelder has recently joined the Nature Foundation team as Deputy CEO, where he leads Nature Foundation's innovative natural capital business development programs, achieving strong conservation, biodiversity, and business growth outcomes.

Daniel's work also includes developing Nature Foundation's First Nations engagement and philanthropic initiatives and growing a portfolio of commercial collaborations that achieve high-impact nature positive and conservation outcomes.

Briefly describe the path that led to your role with Nature Foundation:

I've always loved nature and how it grounds me to the most important things in life. I studied Environmental Management at Flinders University and wanted to spend all of my life in nature.

Although I haven't quite spent all my time in nature, I've had a varied career that has taken me across Australia and given me experience in a good cross section of sectors that relate to the environment (mining, transport, urban development, defence, etc) along with a varied exposure to technical areas through impact assessment, traditional custodian and government engagement, and environmental management.

The Deptuy CEO role allows me to bring all the skills I have developed across my career journey to assist Nature Foundation achieve it's mission of '*engaging people, resources and good science to conserve the precious habitat of South Australia and beyond*'.

What attracted you to the role?

Nature Foundation fills an important role in bridging the gap between development and conservation outcomes. This is an important challenge for society, and I am excited about the opportunity to work with all our current and future stakeholders to enable nature positive development.

What are you looking forward to most as part of your role?

Being part of our next phase of growth and working with our partners to develop opportunities that help achieve our common conservation goals.

What are some of your interests outside of work?

Outside of work, I love spending time with my family. I enjoy helping to coach their sporting teams and getting out in nature with them. We love camping in random spots around SA. I also love riding, surfing and live music. My New Year's resolution was to learn to catch King George Whiting, so I'm loving sitting on my kayak and waiting for that moment. I'm a passionate Crows fan and love going to the footy.

Amber Marwede

Supporter profile

In this edition of Nature Matters which features so many examples of the great work our volunteers do, we shine the spotlight on one of our amazing vollies, Amber Marwede.

How long have you been a Nature Foundation volunteer and what inspired you to get involved?

I've been a volunteer with the Nature Foundation for just over a year now. I've always been passionate about conservation and caring for the environment, and during my studies where I recently completed a Bachelor of Marine and Wildlife Conservation Biology, I wanted to gain more hands-on experience. After talking to some family (who are also members) about wanting to get involved with an organisation, they recommend I look into the Nature Foundation which I'm so happy that I did!

What type of volunteering activities have you undertaken and enjoyed during this time?

I've participated in a few different activities now which included going up to Tiliqua to help with the pygmy blue-tongue survey which was incredible and also helping serve food and drinks at the promotion for the Kids on Country documentary. I've also been lucky enough to help with some research through the University of NSW (UNSW) at Witchelina twice now, which have been huge highlights. The property is absolutely gorgeous and such a unique place. It was really cool to be a part of Matt Smith (UNSW PhD candidate) and Mike Letnic's (UNSW Professor in conservation biology and ecosystem restoration) research and to gain such great field experience – doing work that I might end up doing one day! I hope that I can jump on a few more field surveys with the Nature Foundation in the near future, especially the regent parrot survey.

What do you find most rewarding about volunteering for nature?

I love the feeling of giving back to the earth and helping protect and conserve what we still have left. Australia has such unique species and high levels of biodiversity which we should protect at all costs. It's easy sometimes to get caught up in the doom and gloom when looking at the state of our environment, but the great thing is, there's still so much that can be done and it's really rewarding when that's put into practice. Being outdoors and immersed in nature is also such a huge bonus and it does wonders in clearing my mind and making me feel more connected with the environment.

I'm also interested in science which backs nature conservation as I love knowing and understanding the why and how of things, and the problem solving that comes with complex, multifaceted issues which can be teased apart and then addressed. The people you meet along the way have to be one of the best parts too. There's no incentive which I can think of when it comes to volunteering for nature apart from your love and passion for the environment and wanting to make a difference and have a positive impact.

What are your hopes for the future of nature conservation and biodiversity in Australia?

I would love for revegetation and ecosystem restoration to be at the forefront of Australia's push for future nature and biodiversity conservation. Invasive species control should also go hand-in-hand with this to minimise inter-species competition and reduce overall ecosystem pressure.

There are still so many critical biodiversity hotspots in both terrestrial and marine environments which need to be protected, and unfortunately, we sometimes don't act quickly enough in first recognising this and then acting to ensure its preservation. Take the Mt. Lofty Ranges for example, where we're seeing huge declines in woodland bird species as a result of habitat loss, destruction and land-use change. Many species will now become regionally extinct in the area due to poor and fragmented habitat.

If we can prevent these occurrences from happening altogether, the positive cascading effects through the rest of the environment ensure things like biodiversity and ecosystem balance is maintained, along with reducing anthropogenic pressures and unnecessary interference with the natural world.

Introducing our 2025 **Artist Residency Program** recipients

We are delighted to announce and introduce the three successful artists selected to participate in Nature Foundation's Artist Residency Program for 2025 – Emma Neill, Stephen Bowers and Jane Evans.

Founded in 2019, Nature Foundation's Artist Residency Program offers artists with a professional profile the opportunity to spend up to two weeks at either Witchelina or Hiltaba Nature Reserves.

Nature Foundation provides accommodation and general support for participating artists, including orientation and guidance on the Nature Reserves. We also promote and sell works created from the artists' visits through an exhibition.

Thank you to all artists who applied to participate in this year's residency program and to our Artist Residency Program Advisory Group—Catherine Bourne, Kirsty Darleson, and Peter Hastwell—who reviewed all applications and assisted with the selection process.

We wish the three artists all the best for their residencies and look forward to seeing the artworks inspired by Witchelina and Hiltaba Nature Reserves. These artworks will be presented at an exhibition in 2026. To be notified, subscribe to our email updates or follow our social media accounts.

We eagerly anticipate the exhibition of the 2024 residency program artists' work at The Gallery at St Peters from **3 October to 15 November 2025** as part of the Nature's Foundations 4 exhibition. We will share further updates closer to the date.

Nature Foundation gratefully acknowledges the Artist Residency Program sponsorship by the Helen James Endowment Fund.

Emma Neill

Emma Neill is an emerging artist living and practising on a farm in the Adelaide Hills, using drawing and painting mediums.

Emma's artworks aim to express her daily experiences and emotions, as well as living and exploring farm life and rural South Australia. She wants her audience to step back from the everyday bustle and be present with her paintings, reflecting on nature and the world before towns became cities.

Stephen Bowers

Stephen Bowers is an Australian visual artist working in the key areas of drawing, painting and ceramics who has participated in numerous exhibitions, with artwork represented in many public art galleries and museums within Australia and overseas.

Stephen's work is intricate and layered, with a strong conservation narrative that can connect landscape, flora, and fauna through a variety of mediums.

Jane Evans

Jane Evans is a Nature Foundation volunteer and an award-winning artist from Kangaroo Island, with distinctive and appealing mixed media work, including drawing, painting and printmaking.

Jane's professional background as a Freshwater Biologist, combined with her artistic skills and experience, gives her a unique ability to intricately understand the natural environment and interpret it into engaging works of art.

Nature Reserve Visitation. 5 tips for remote travel and camping with kids

Left: Devil's Bridge, Sedona, Arizona USA
Below L–R: Snowstorm in Yosemite, USA; Camping in the bus, 2019; Rest stop, Northern Territory

Our family of five loves to explore, both here in Australia and in the United States. Our camping journey has included many small trips in South Australia, road trips across to New South Wales and up to Alice Springs, Uluru, Lake Argyle and El Questro.

*This guest post comes from Nature Foundation supporter **Kate Potter**, whose family has vast remote travel and camping experience across Australia and the United States.*

We have also spent a total of 8 months travelling in a rustic DIY RV vehicle over four separate trips to the United States. We love hiking, especially in US national parks—we've visited 33 of them! Driven largely by my husband Isaac's insatiable need for adventure, I've learnt a few things along the way about how to travel in remote areas and camp with kids.

1. Practice

Set up a tent in your backyard, go to a friend's rural property for a night or two, cook outside for a couple of nights. It's important to practice on a small scale before you set off on a longer journey in remote areas, so that you can work out where the pain points are and how to make the experience enjoyable for all.

2. Plan (but also don't plan)

We have worked out that a mixture of pre-planned destinations and "on the road" decisions are what works best for our family.

Isaac was very eager to stay in some of the top-tier national parks in the US, and securing a campsite at these locations can be very difficult. But he's very determined, staying up late at night refreshing the booking websites waiting for a cancellation. Once he's managed to find something and book it, our travel can then work around these immovable dates and we make plans on the road using campsite locating apps and websites that allow us to pull up on the day.

Weather can also play a huge part in your planning or unplanning. When in California we saw a snowstorm was forecast in Yosemite National Park, which caused many local travellers to cancel their bookings, so we snapped the campsite bookings up. While it was very cold it was a magical, memorable experience for our family.

If you're at a loose end on what to do on an unplanned day or night, head to official and unofficial travel guides, apps like Atlas Obscura, and asking fellow travellers what to do and where to stay. I love having the freedom to change plans as we go, if there aren't bookings in the diary ahead to consider.

3. Prepare meals in advance

I spend time before remote travel preparing a few meals to freeze and then take with us on the journey. The serves two purposes – the frozen meal acts as an esky cool pack for the first couple of days, and then after it's defrosted, that's dinner done without any of the messy camp prep.

I also stock up on easy to snack on fruit and vegetables to ensure that when the kids say, "I'm hungry", I have lots of options available.

Once this food is gone, I then try not to flinch about expensive remote area groceries and food by reminding myself that I'm supporting the local economy of the regions that we are visiting.

4. If you're camping, you don't "need" all the camping stuff

It was a light bulb moment when I realised that the thing I hate about sleeping in a tent wasn't the tent, it was the sleeping bag.

Sleeping bags twist and turn all night, slip and slide all around the mattress, are too hot at the bottom and too cold at the top. They are impossible to straighten up in the middle of the night, and a pain to pack up. I enjoyed camping 1000% more when I switched the sleeping bag for a sheet, quilt and my regular pillow. I now consider sleeping bags reserved for ultra-cold overnight hiking, and for everything else, I'm just stealing the covers from my bed and enjoying the experience so much more!

The same goes for other specialised camping equipment. Think about your own circumstances and do some research about what you actually need, before going out and buying new gear.

5. It will be hard, but it will be worth it

There will be times when you feel dirty, cold, hot, tired, hungry, frustrated. And there will also be times when you will see landscapes that take your breath away, your children discover something new and wonderful about the world, and you'll experience magical moments and memories that you can't make at home. Remember this motto: It will be hard, but it will be worth it.

Find out more about Kate and Isaac's US travels here: shubbo.com

Experience Witchelina and Hiltaba this visitation season

Witchelina and Hiltaba Nature Reserves are open for the 2025 visitation season (April–October). With rustic accommodation options and camping areas, you and your family can experience nature conservation in action, with fees supporting our work.

Some nature drives (4WD required) are available on both reserves and walking trails at Hiltaba. These provide ways to explore the landscape respectfully.

Online bookings are required. See all details, including FAQs and how to get there, on our booking site: visit.naturefoundation.org.au

Members play a vital role in supporting Nature Foundation and our work

In return, we offer a range of membership benefits that we believe provide excellent value for your support.

To ease the membership renewal process, we recently transitioned to a calendar-year annual membership, with pro-rated fees each quarter. From 1 July, new member fees will be 50% of the full year price:

- Individual membership: $25
- Couple membership: $40

Nature Foundation members receive benefits including member only events (see our Upcoming Events calendar) and special member offers. Most importantly, our members show how much they care for nature and lend their voice to our cause. If you would like to learn more about Nature Foundation membership or join, you can do so online at naturefoundation.org.au/join

2025 Member Offers

This year, Nature Foundation members can enjoy a range of discounts from like-minded organisations, including State Flora Nursery, Cleland Wildlife Park, and Bec Hardy Wines.

Full details of special member offers (including how to redeem offers) are sent to members soon after joining or renewing their membership.

An example of these member offers is a complimentary Bec Hardy Experience wine tasting at Bec Hardy Wines in McLaren Vale, South Australia, for up to 6 people, valued at up to $90. Granddaughter of Nature Foundation co-founder Dr Barbara Hardy AO, Bec Hardy, is a passionate conservationist and Life Member of the Nature Foundation. Bec founded Bec Hardy Wines in 2015 and became the first woman in the family to own vineyards and produce her own wine.

If you would like to check your membership status or receive member offer details, please call the office during business hours on (08) 8340 2880 or email members@naturefoundation.org.au

Upcoming Events

Some dates for your 2025 diary:

27 July	Member Event: Watchalunga Planting Day
August (Date TBC)	Conservation Conversations —in person and online
3 Oct–15 Nov	Nature's Foundations 4 —2024 Artist Residency Exhibition at St Peter's Gallery
28 October	Member Event: Annual General Meeting

Please note: Dates may be revised closer to the event. Please keep an eye on our website and your emails for further details and any other events.

VOLUNTEER FOR NATURE

Volunteers make a vital contribution to our conservation efforts in many ways. If you share our passion for nature and are interested in hands-on conservation work, supporting our nature reserves, or helping with office-based projects or events, there's a role that's perfect for you.

As a Nature Foundation volunteer, you'll be part of a supportive community. You'll receive a uniform, personal accident insurance, travel reimbursements, and regular updates. Most importantly, you'll undergo comprehensive training to ensure your safety and success in all activities, with the reassurance of continuous support from our staff.

If you're ready to volunteer for nature, visit our website via the link below. Then, follow the 'Register Your Interest' prompts to start the process. You'll have a chance to chat with our Volunteer and Visitor Engagement Coordinator in a matching phone call, where you can learn more about volunteering with us before committing.

Learn more and get started at naturefoundation.org.au/volunteer

Nature Foundation

Get social with Nature Foundation!

Do you follow us on Instagram? If not we'd love you to follow our account and help us get the word out about the amazing work we do for nature!

We are also active on Facebook and LinkedIn. See you online soon.

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