# treetalk

STORIES FROM THE SEEDLING BANK

### **TWO-WAY LEARNING**

Sharing knowledge on Martu Country

### **GREENER PASTURES**

Volunteers bringing biodiversity back to degraded land

# FRIENDS OF FORKTREE

Rewilding on the Fleurieu Peninsula

### THE SEEDS OF CHANGE

Setting up a sustainable food system in suburban Melbourne

# Acknowledgement of Country

Planet Ark acknowledges the Traditional Owners of the places in which we live, work and play. We recognise the enduring relationships they have with their lands and waters, and we pay our respects to Elders, past and present.



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# Foreword

As the CEO of Planet Ark, it is my privilege to introduce the latest edition of *Tree Talk: Stories from The Seedling Bank.* This report is a testament to the remarkable impact that the Seedling Bank program has on communities across Australia. It brings to light the inspiring stories of individuals and groups that receive funding through The Seedling Bank and showcases their dedication to environmental restoration and community engagement.

Each year, we are faced with the ever more urgent task of addressing environmental challenges and finding innovative solutions to safeguard our future. The projects featured in this report demonstrate the power of collaboration, passion, and the belief that positive change is possible.

From rewilding efforts on South Australia's Fleurieu Peninsula to habitat planting for the critically endangered western ringtail possum in Western Australia, these initiatives are making a tangible difference in protecting and restoring our precious ecosystems.

The benefit of this work goes beyond regenerating critical natural habitat. It also creates social good for local communities and reminds us of the restorative power of nature.

Many of the projects supported by The Seedling Bank provide platforms for healing, resilience and social cohesion. Whether that be kitchen garden classrooms for students with disabilities on the banks of Tasmania's River Derwent or urban food gardens that enable community members recovering from setbacks to connect and share skills.

Through *Tree Talk*, we celebrate the collective efforts of dedicated individuals, schools and community groups who have made a lasting impact on our environment. I would like to express my gratitude to all the beneficiaries, volunteers and supporters who have contributed to the success of The Seedling Bank program. Your dedication and passion inspire us all to continue our mission of greening Australia and nurturing a deep connection with and appreciation for our natural world.

Together, let us celebrate the achievements highlighted in this report and renew our commitment to preserving and protecting our environment for generations to come.

Kebeera Gio

Rebecca Gilling, Planet Ark CEO



# The Seedling Bank Sites

#### 2019 - 2023

Established in 2019, The Seedling Bank is Planet Ark's nature restoration grants initiative. It is an evolution of the work we do through Australia's biggest tree planting and nature care event, also known as National Tree Day, which has seen Australians plant over 26 million trees since 1996.

The Seedling Bank is our way of giving back to the thousands of Australian volunteers who roll up their sleeves each year to give something back to the environment.

Over 132 school and community groups have planted 80,000 native trees, shrubs and grasses since the program's inception. This year, another 119 groups will plant over 50,000 seedlings using funding from The Seedling Bank.



# The Children's Forest

CELEBRATING THE RITUAL OF TREE PLANTING.

Across cultures and through the centuries, communities have embraced the tradition of planting trees to mark significant moments – births, engagements, marriages and deaths. By planting in honour of these occasions, we commemorate our experiences and forge connections with one another; intertwining our personal stories with the enduring existence of a thriving, living tree. The act of planting trees takes on even greater significance in a time of climate crisis. It becomes a regenerative gesture, offering a glimmer of hope and a commitment to environmental healing and restoration. It's also a chance to make a tangible difference – as trees mature into forests, we can see our impact and feel a communal sense of pride.

Tree Rites is a Sydney-based environmental collective that plants tiny forests to commemorate rites of passage. The group has planted trees to celebrate birthdays and honour the passing of loved ones. Landscape architect Barbara Schaffer and artist Michaelie Crawford are the women behind the initiative. Between them, they have decades of experience working with communities to restore natural environments.

"This project is an opportunity to restore Sydney's urban forest – tiny forest by tiny forest," Barbara says.

The tiny forest model has been adopted all around the world, particularly in cities, where space is at a premium. Popularised by Japanese botanist Akira Miyawaki, this method of tree planting mimics the layers of a natural forest. It involves planting a diverse "This project is an opportunity to restore Sydney's urban forest - tiny forest by tiny forest," Barbara says.

range of native species close together on a small plot of land.

Tiny forests are said to grow 10 times faster, 30 times denser and contain 100 times more biodiversity than those planted by traditional methods1. Tree Rites wants to help communities across Sydney and beyond embrace these benefits. The group is piloting a tiny forest planting model for schools with support from The Seedling Bank.

Tree Rites will help preschool students put 300 trees in the ground on Schools Tree Day. The project is aptly named 'The Children's Forest' and will mark the students' transition from preschool to primary school. Randwick Sustainability Hub has generously provided a site for the planting. And the local Aboriginal and Torres Strait Islander community has been consulted on the design of the forest.

Tree Rites worked with Indigenous design consultancy Yerrabingin to embed principles of connecting with Country into the project. They held a workshop with local Aboriginal Elders, including Aunty Barbara Simms, artists, educators, environmentalists and researchers to get feedback on the project. The recommendations of this group shaped plans for the site and a strategy to grow, develop and expand this living network.

This true community effort will come to fruition on Schools Tree Day when preschoolers come together to plant a range of indigenous species, including the critically endangered Eastern Suburbs banksia scrub. The planting will be commemorated with a ceremony that ties the growth of students with that of the forest.



Yerrabingin's vision of how this pilot project could grow and expand throughout Sydney. Graphic: Tree Rites Children's Forest: Connecting with Country Concepts Report, May 2023.

With each future planting, a form of music, poetry or reflection will strengthen students' memories of the day. How wonderful to know that they will create cherished memories of planting trees while their seedlings continue to grow and bring happiness to others.



Tree Rites planting event in Bondi. Photo: Annabel Osborne.

# Two-way Learning

SHARING KNOWLEDGE ON MARTU COUNTRY.

In the heart of the Western Desert region, school students and locals are coming together to plant a diverse array of native species that hold significance for the Wiluna Martu people.

The Martu are the Traditional Owners of a vast area of central Western Australia, stretching from the Great Sandy Desert in the north to Wiluna in the south. Martu Wangka is the Aboriginal language spoken in this area.

Martu lands possess immense conservation value on a local, national and global scale. The area is one of Australia's last havens for several iconic but highly endangered desert species, such as the mantarngalku (greater bilby), nganamara (malleefowl) and tjakura (great desert skink).

Wiluna Remote Community School caters for students from kindergarten to year 12, with approximately 63 enrollments. The school promotes a Two-way Science approach that connects Martu

knowledge with Western science under the Australian Curriculum.1

Teachers at Wiluna follow a Martu calendar created in collaboration with the local community. This calendar depicts events occurring on Country at different stages of the year related to weather, plants, animals and water. As part of their curriculum, students also delve into the life cycles of tjawul (frogs), wukarta (honey ants) and nganamara (malleefowl).

Wiluna's teaching methods ensure education remains deeply connected to the land and culture through on-Country learning; this allows for the transfer of knowledge from Elders to the next generation.

All plants selected for Wiluna's National Tree Day event have cultural significance and uses for food and tools. Endemic species could not be sourced from a nursery due to the town's remote location. To tackle this problem, students and teachers collaborated with Birriliburu Indigenous Protected Area rangers to gather a variety of local seeds.

Students sorted the seeds before they were

transported 956 kilometres away to Chatfields Tree Nursery. Here, they were carefully nurtured into healthy seedlings over a period of several months. The mature seedlings then made the ten-hour journey back to the school ready to be planted by students and the community.

With guidance, the students established the seedlings in their new home. Each student received a plant to take care of with name tags proudly identifying their tree. Elders from the area joined in to make damper for everyone to enjoy after the activity. And honey ants - an important ancestral totem for Aboriginal Australians and a bush delicacy – provided a sugary treat.

Honey ants have a symbiotic relationship with mulga trees. The ants collect secretions from these trees to feed specialised worker ants, whose sole job is to gorge themselves on nectar. Their abdomens enlarge to the size of marbles with this sweet substance that can be eaten directly from the ant or crushed into a delicious paste.



Tiantiuru (black gidgee)

The hard wood of this large tree is a favourite choice for making hot fires that can burn all night. It also produces ngurtul (resin/ sap) that is eaten as a bush lolly.



(corkwood hakea) A sturdy tree that is suitable for making tools. It has large yellow flowers that can be soaked in

water to make a sweet drink



Pakurta (horse mulga) A tree with bean-like seed pods that can be eaten when young.

(bush potato) A plant with delicious tubers that can be eaten raw and cooked

Kulyu

#### Reference

1. Australian Curriculum. (2023). Learning together through two-way science at Wiluna Remote Community School. Retrieved 10 July 2023 from: https://www.australiancurriculum.edu.au/resources/aboriginal-and-torres-strait-islander-histories-and-cultures/illustrations-ofpractice/learning-together-through-two-way-science-at-wiluna-remote-community-school/



Team Wiluna ready to plant their seedlings. Photo: Scott Olsen

The seedlings planted for National Tree Day will provide shade and cool areas to rest, beautify the school grounds and offer shelter for precious wildlife for years to come. The event was a special opportunity for Elders to pass their knowledge of native plants on to the younger generation, reinforcing the strong sense of community and cultural heritage among the Wiluna Martu people.



Wanari (mulga)

Wukarta (honey ants) like to make their nests under this tree and the strong wood is used to make tools. You can also collect honeydew from the branches after rain.



(dead finish)

A tree with edible seeds and lunki (witchetty grubs) in its roots



Watja watja (bush bean)

A plant that is very sweet when young and tastes similar to beans.



Karakula (bush banana)

The fruit of this plant is also very sweet when young and can be cooked in the hot sand when ripe

# Friends of Forktree

REWILDING ON THE FLEURIEU PENINSULA.

One of the first plantings undertaken as part of The Forktree Project. Photo: Miles Rowland

The Fleurieu Peninsula is a diverse region 40 minutes south of Adelaide bordered by Gulf St Vincent, the Southern Ocean and Lake Alexandrina. Traditionally home to the Ngarrindjeri, Kaurna and Peramangk people, the peninsula covers approximately 6,700 square kilometres of land and sea. But today, it's home to only 130,000 people.

A Mediterranean climate of cool, wet winters and hot, dry summers made the region popular for settlement, farming, tourism and recreation. But converting the land for wheat growing and pasture for cows and sheep came at a cost. It's estimated that over 90 per cent of mature native vegetation cover and 99 per cent of native grass cover has been lost, leaving only a small number of remnant native vegetation patches in the region.

Enter the Forktree Project, a registered charity with the goal of returning a 133-acre pastoral property on the Fleurieu Peninsula to its pre-agricultural glory. The group hopes to use this small land holding to demonstrate the possibilities of rewilding in the area.

"Historically, the Fleurieu region is a wonderful peninsula with great rainfall and good soil. And it was a very, very culturally important part of South Australia for Aboriginal people," Tim Jarvis AM told Planet Ark. Tim is the Order of Australia member, environmental scientist, author and filmmaker who heads up the Forktree Project.

"I think habitat is incredibly important because Australia has the highest rate of native species loss in the OECD and we need to reverse this..." says Tim. "The region that they knew for tens of thousands of years would now be largely unrecognisable to a Ngarrindjeri person from 100 years ago; because, of course, it was changed into pasture for cows, sheep and wheat growing for the most part."

With a vision to turn back time in the Fleurieu region, Tim and Forktree Project co-founder Elizabeth Blumer purchased a former farming property in April 2019. The land was denuded by wholesale tree clearance, pastoral activity and, more recently, being used as a dumping ground for building waste.

With the support of volunteers and corporate organisations, they set out to re-establish native trees and shrubs on the property to achieve the following key goals:

- 1. Provide habitat for native species and help combat climate change through rewilding the land.
- 2. Trial and showcase sustainable practices to encourage others to follow suit.
- 3. Establish a seed nursery and rare seed orchard to grow native plants and trees and provide a security population for endemic rare species in the wild.
- 4. Be an educational resource to schools and landowners to encourage both sustainability and small-scale land regeneration.

"The Forktree Project was about trying to put native vegetation and habitat back into a region that desperately needs it. If you can put vegetation in near existing remnant patches of native vegetation, you can start to reduce habitat fragmentation," Tim explains.

"I think habitat is incredibly important because Australia has the highest rate of native species loss in the OECD [Organisation for Economic Cooperation and Development] and we need to reverse this for biodiversity reasons. But we also have this very real need to take down 200 years of excess  $CO_2$  from the atmosphere as fast as possible. And that's really all about habitat restoration."

Before that habitat restoration could begin, however, Tim and Elizabeth first had to identify the vegetation needed in the area and the tools required to plant it. They also built a shed to house equipment, installed rainwater tanks to provide water on site, and rounded up volunteers to help them plant and repurpose or recycle the building waste they'd inherited.





This work meant it was three months before the project could start putting plants in the ground. And ongoing recycling and reuse of building rubble continues.

The project has since grown greatly in complexity. Jobs undertaken include installing solar panels to provide power to the site; setting up an intelligent irrigation system to provide the nursery and seed orchard with optimal amounts of water; building an on-site seed nursery; crafting nesting boxes out of fallen logs; and repurposing building materials into retaining walls and tracks across the property.

When the site of the Forktree Project was purchased, an audit of the existing trees was undertaken. On the entire property there were a mere 22 pink gums, a short windbreak of a dozen blue gums and sheoaks, a copse of radiata pines and a solitary, 250-year-old Rottnest teatree.

Since then, well over 18,000 native trees, shrubs and grasses have been planted around the property with the help of volunteers from schools, the University of Adelaide, the Biology Society of South Australia, the Fleurieu Planters Group and others. The result?



A landscape slowly but surely returning to its former state, along with the wildlife a healthy ecosystem can bring.

In 2023, a grant from Planet Ark's Seedling Bank will support the planting of a further 3,000 trees and shrubs, which will grow into critical overstorey and understorey to support local biodiversity.

"It will take all of us to combat these twin issues of biodiversity loss and climate change, but we can do it, you know, we really can do it. There's so much goodwill out there and so much, frankly, available land to be rehabilitated, it's about encouraging that behaviour," Tim said regarding his outlook for the future.

"We believe passionately that engagement in rewilding activities is empowering for individuals and communities, leading to deeper awareness of environmental issues, improved stewardship of our natural resources and surroundings, and increased engagement in other sustainable action."

Images: The Friends of Forktree group have been conducting annual plantings to rewild the site for over four years. Photos: Miles Rowland and Friends of Forktree.

# The Seeds of Change

SETTING UP A SUSTAINABLE FOOD SYSTEM IN SUBURBAN MELBOURNE.

Photo: Adam Crews

In the outer east of Melbourne, on Wurundjeri land, a team of volunteers is gathering to tend to a food garden behind the local cinema. This dedicated group took over the disused block of land in 2021 to set up Belgrave Food Garden. The garden provided a space for locals to heal and learn new skills during a difficult time for the community.



That year, Belgrave was rocked by a severe storm that saw many people rebuilding their homes and, like many other places around the world, was suffering from the impacts of successive COVID lockdowns. Motivated to find a positive outlet for locals, Ellie McSheedy decided to put her research skills to use by setting up a space where locals could connect.

"I had seen how community connectivity or resilience can really help people get through these sorts of events," Ellie says. "And I really wanted to create a group in a space that brings people together to form those bonds."

Ellie has a background in health research. Through her work, she became aware that food security – the ability to access sufficient affordable, nutritious food – was an issue of concern in her local area<sup>1</sup>. She was also familiar with the health and wellbeing benefits of community gardening, that include physical, nutritional, social and psychological factors<sup>2</sup>.

Armed with this knowledge, Ellie saw the potential for a community space that could address food security and boost self-esteem. The Belgrave Food Garden was born with the goal of giving locals



Building connections over a cuppa. Photo: Ellie McSheedy



Community members learn about hen care. Photo: Ellie McSheedy

access to a sustainable food system. Ellie describes the garden as a living classroom that teaches the community about the shared benefits of growing food locally.

Today, Belgrave Food Garden is a thriving community hub where locals learn how to grow, harvest and cook healthy food. For those who want to broaden their skills, the garden runs regular workshops on everything from permaculture, soil health and composting to pickling, leaf mould bins and gardening with kids.

Locals are encouraged to pick fresh produce from the garden and any excess is donated through partnerships with charities like the Dandenong Ranges Emergency Relief Service, which distributes food to people in need.

With many schools nearby, Ellie hopes to expand the garden's education program to primary school students. She has already seen the beneficial impacts of nature care in high school students from Mater Christi College who weed and tend to the garden.

The Seedling Bank is supporting this grassroots effort with funding to plant 600 seedlings on the vacant land surrounding the food garden. On National Tree Day, volunteers will replace weeds Ellie describes the garden as a living classroom that teaches the community about the shared benefits of growing food locally.

and blackberry shrubs with edible natives that will bring more biodiversity to the area.

What started as a balm for loneliness has grown into so much more. The Belgrave Food Garden is increasing food security, boosting health and wellbeing, and providing practical education in a safe and inspiring outdoor space. The edible natives planted on National Tree Day will further establish this once-barren patch of land as a beacon of community resilience.

ENDANGERED WESTERN RINGTAILS.



Australia has the highest number of possum species in the world, each with its own enchanting qualities. There is the honey possum that delicately delves into flowers with its brushtipped tongue in search of a sweet treat. And the elusive mahogany glider that disappeared from the scientific radar for 100 years, only to be rediscovered in 1989. Each species possesses unique characteristics and adaptations, but what unifies all possums is their shared reliance on trees.

#### References

1. Victorian Agency for Health Information. (2023). Victorian Population Health Survey 2020. Victoria State Government, Victoria. Retrieved 10 July 2023 from: https://vahi.vic.gov.au/reports/population-health/victorian-population-health-survey-2020-dashboards

Protecting habitat is critical to the survival of these iconic Australian animals. Even more so in Western Australia, where mammal extinction rates are among the highest in the world. One species facing serious threat is the ngwayir, or western ringtail possum, whose population has plummeted by 80 per cent over the last 15 years. Ngwayir is the Aboriginal name for this shy relative of the common brushtail possum that is rarely seen on the ground. Western ringtails are one of 100 threatened species prioritised for protection by the federal government under the Threatened Species Action Plan 2022-2032.<sup>1</sup> They are also on the International Union for Conservation of Nature's critically endangered list – a classification given to species that face an extremely high risk of extinction. At present, estimates put the figure of adult possums left in the wild at less than  $8,000.^2$ 

Western ringtails are endemic to the southwest corner of Western Australia, where community members are fighting to keep them safe. GeoCatch, a not-for-profit in the Geographe Bay Catchment area, is leading a volunteer effort to protect possum habitat through education and tree planting. This year marks the group's fourth consecutive National

<sup>2.</sup> Leisure Studies. (2016). Community gardening and health-related benefits for a rural Victorian town. Volume 36. Retrieved 13 July 2023 from: https://www.tandfonline.com/doi/abs/10.1080/02614367.2016.1250805?journalCode=rlst20

Tree Day event, with 1,000 native seedlings set to be planted with support from The Seedling Bank.

"We hope to improve habitat for the critically endangered western ringtail possum and to provide the community with the opportunity to be part of the solution," GeoCatch Natural Resource Officer, Nicole Lincoln, says.

A major threat to western ringtails is the loss of large, mature trees that keep them high above the ground. As the trees diminish, possums are forced to make their way to the ground more frequently, leaving them vulnerable to predators. Each year, as many as 200 western ringtails end up in the homes of wildlife carers due to loss of habitat or injury.

The towns of Busselton and Dunsborough on the banks of Geographe Bay serve as a crucial stronghold for one of the last remaining populations of these endangered critters. Through habitat creation and possum-aware behavior – such as planting possum-friendly gardens, installing possum boxes and keeping domestic pets inside at night – the GeoCatch community hopes to bring western ringtails back from the brink of extinction. Recent research adds even more urgency to their mission. The latest predictions estimate western ringtails will become extinct within the next 20 years if immediate action isn't taken to safeguard their populations and habitat.<sup>3</sup>

This year, GeoCatch volunteers will plant infill canopy trees (*Agonis flexuosa*) as a food source for western ringtails. These trees also provide materials that possums can use to build their homes. If tree hollows aren't available, western ringtails rest in self-made spherical nests known as 'dreys'. These cosy beds are made from grass, bark and other plant material loosely woven together by possums.

The group will also plant native understory species (*Lepidosperma gladiatum*) to provide safe passage between trees and protect possums from the heat. Local western ringtails can rest easy in this new safe haven thanks to the work of this dedicated community group.



The GeoCatch team. Photo: Nicole Lincoln



#### WHAT CAN WE DO TO SAVE THE WESTERN RINGTAIL POSSUM?

- Plant food for possums in your garden such as golden wreath wattle.
- Prevent clearing of habitat and retain peppermint trees on public and private land.
- Improve planning of urban areas so that more habitat is retained.
- Manage bushland sensitively.
- Revegetate habitat corridors to reconnect fragmented bushland.
- Ensure community members are responsible owners of cats and dogs.
- Increase public awareness about the vulnerable status of ringtails.
- Get involved! Volunteer with one of the local organisations saving our ringtails.

#### References

3. National Environmental Science Program Threatened Species Research Hub. (2019). *Threatened Species Strategy Year 3 Scorecard: Western Ringtail Possum*. Australian Government, Canberra. Retrieved 10 July 2023 from: http://www.environment.gov.au/biodiversity/ threatened/species/20-mammals-by-2020/western-ringtail-possum

# **Greener Pastures**

VOLUNTEERS BRINGING BIODIVERSITY BACK TO DEGRADED LAND.



Department of Climate Change, Energy, the Environment and Water. (2022). Priority Species. Australian Government, Canberra. Retrieved 10 July 2023 from: https://www.dcceew.gov.au/environment/biodiversity/threatened/publications/priority-species
Department of Climate Change, Energy, the Environment and Water. (2017). Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan. Australian Government, Canberra. Retrieved 10 July 2023 from: https://www.dcceew.gov.au/sites/default/files/ documents/recovery-plan-western-ringtail-possum.pdf

It's a sunny spring weekend. Fifty keen volunteers have travelled to a rural farm where they are scattered around the pasture ready to plant 1,000 native seedlings. With the right care, the seedlings will create important habitat for threatened wildlife, rebuild soil health and return some of the previously degraded land to nature. In just one weekend, the volunteers will have made some great friends and seen the benefits of sustainable land management first-hand.

You would be forgiven for thinking the only way to protect our native plants and animals is to create more national parks. However, given a vast area of land is privately owned, the activities we undertake in these spaces can also have substantial environmental benefits. The real challenge is managing private property, such as agricultural land, in a way that meets human needs without compromising biodiversity.

The agriculture sector is one of the main drivers of global biodiversity loss. Food production systems have significant environmental impacts, including pollution from runoff containing fertilisers, landscape degradation from overgrazing and habitat loss from land clearing. Agriculture also accounts for 70 per cent of global freshwater consumption.<sup>1</sup>

Regenerative agriculture is a potential way forward. This farming method balances the essential human activity of food production with the need to maintain healthy ecosystems that support biodiversity.<sup>2</sup> By shifting to more regenerative practices, such as organic and biodynamic farming, holistic grazing and re-establishing native vegetation, agricultural land can better sustain all forms of life.

Rotary's Adopt-A-Tree program is a prime example of the shared benefits of restoring agricultural land. Launched after recent bushfires and floods, the program is a joint initiative of around 140 Rotary Clubs across NSW and the ACT. It provides individuals and organisations with the opportunity to adopt seedlings that are planted on privately owned land in need of regeneration. Those who adopt a seedling can choose to receive regular updates on its growth.

Barry Antees, from the Rotary Club of Parramatta City, helps run the Adopt-A-Tree program. He says many people are adopting plants in the name of their children to reduce anxiety about the climatic conditions the next generation will inherit.

"It has been rewarding when the children, accompanied by their parents, are enthusiastically planting on our days out," Barry says.

Since 2022, the Adopt-A-Tree program has planted over 8,500 seedlings on private property, much of which had been cleared or depleted by past agricultural practices. One of these properties is a 3,000-acre sheep farm called Moorlands in the NSW Southern Tablelands. Moorlands has been in the same family for over 180 years and is currently owned and managed by Vince Heffernan, an expert on regenerative land management.

Given a vast area of land is privately owned, the activities we undertake in these spaces can also have substantial environmental benefits.

Much of the original native vegetation at Moorlands was cleared for agriculture. However, over the last 20 years, Vince has started to restore biodiversity and improve the functionality of the ecosystem through regenerative practices.

"An example is the planting of native trees, shrubs, grasses and native aquatic plants. Another is the elimination of introduced pest species that impact native fauna," he says.

Moorlands is a certified biodynamic farm, which means no use of chemicals, such as pesticides or artificial fertilisers. Vince explains that "biodynamic practices are focused on producing healthy, living, well-structured soil – healthy plants and animals are a result". The farm also implements holistic grazing techniques and does not overgraze, which improves



Superb parrot at Moorlands. Photo: Vince Heffernan.

soil health so that native vegetation can thrive. In an inspirational effort to regreen the property, over 60,000 seedlings have been planted at Moorlands to date, most of them by Vince and his family. This regreening is an ongoing project supported by groups like Rotary Adopt-A-Tree and Greening Australia.

"We'll plant some 6,000-plus native trees and shrubs this year and again in 2024 and 2025," Vince reports.

This effort has already yielded significant benefits, including improved biodiversity. The threatened superb parrot, a species Vince says is at the heart of revegetation efforts, is now a regular visitor on the farm. The region around Moorlands is home to several other threatened species which landowners like Vince are helping to protect, including the golden sun moth and the yellow-spotted bell frog.

Last year, 2,000 seedlings were planted at Moorlands as part of the Adopt-A-Tree program. Two more plantings of 1,000 seedlings each will take place this September with support from The Seedling Bank. The team will plant a huge variety of indigenous trees and shrubs, including eucalypts, wattles, bottlebrushes, sheoaks, banksias and grevilleas. Vince says species are chosen for both habitat and feed sources, so something is flowering every day, which is essential for nectar-feeding birds.

#### References

Parramatta Rotary Club's Barry Antees says the Moorlands plantings, like all carried out under the Adopt-A-Tree program, will support local nurseries and bring the community together to care for the environment.

For landowner Vince Heffernan, it's all about restoring biodiversity and building a resilient ecosystem.

"Regenerative agriculture is not an attempt to wind the clock back to 1788 and re-establish the ecosystem that was here then. It is an understanding of the impact of farmers' decisions on all aspects of an ecosystem and an effort to repair and re-establish that ecosystem whilst still running a productive agricultural unit," he explains.

Ultimately, Vince, Barry and the volunteers involved in the Adopt-A-Tree plantings want to leave the land in a better shape than they found it. Regreening privately owned land through community planting events is an important (and highly rewarding) piece of this puzzle. The plantings help those involved connect with nature and reinforce the reciprocal relationship between humans and the environment.

<sup>1.</sup> National Geographic Society, (2023). 'Environmental Impacts of Agricultural Modifications'. National Geographic. Retrieved 29 June 2023 from: https://education.nationalgeographic.org/resource/environmental-impacts-agricultural-modifications/ 2. Local Land Services. (2023). Regenerative Agriculture. NSW Government. Retrieved 29 June 2023 from: https://www.lls.nsw.gov.au/ regions/hunter/projects-and-programs/regenerative-agriculture

# The Impact of Seedlings

#### BUILDING A THRIVING FUTURE FOR THE PLANET AND ALL WHO LIVE IN IT.

All the tales we hear through National Tree Day remind us of the power of nature and the importance of collective action in creating a brighter future. Our volunteers come from all walks of life and span across generations. School children, teachers, Landcarers, bush carers, urban regenerators, wildlife carers and farmers who are looking to regenerate the land with their communities.



# The Garden Classroom

EMPOWERING STUDENTS WITH DISABILITIES THROUGH NATURE-BASED LEARNING.

On the banks of the River Derwent, in central Tasmania, sits the half-acre plot of Southern Support School. There's a kitchen garden classroom, chicken coop, and herbs and natives growing in the playground. It's all part of the school's nature-based learning programs for students of all abilities.

Garden harvesting with So

The garden classroom is integrated into every subject and academic year at Southern Support School, from kindergarten through to year 12. Around 60 per cent of students have been diagnosed with autism spectrum disorder and many have a strong preference towards a narrow selection of foods. The garden gently introduces them to new tastes and textures as they grow, harvest, cook and savour their produce.

For some students, the kitchen garden provides more than just a space for learning and exploration. It is a sanctuary where they can regulate their emotions and find calm. Touching the soil, feeling the texture of the leaves, smelling the perfume of plants and listening to the sounds of nature is a multisensory experience that can have therapeutic benefits, including improved concentration and relaxation.

Annette Counsell is the teacher who coordinates the kitchen garden program. She has 25 years of experience in special education and has taught at Southern Support School for the past 12 years.

Annette organises weekly sessions in the garden as part of the students' Access to Work program. These lessons focus on practical job skills like seed saving, potting up plants and garden maintenance, including



Jack and his mother Nicole sell fresh produce from the garden. Photo supplied by Nicole Gates.

mulching, pruning and weeding. The students also wash, pack and deliver excess produce from the garden to local restaurants.

Connecting with these businesses creates a clear pathway from the tasks students learn to job opportunities in the community. "It's meaningful and authentic work experience," Annette says.

"The kitchen garden is incorporated into all our subjects," she adds, explaining that it serves a crucial role in helping students learn autonomy. "We want students participating as much as they can – we don't want adults doing it for them," she says. Tasks are modified for students based on their abilities to ensure everyone can take part in the program.

Finding employment after school can be challenging for some students, but the garden can help them discover unknown passions and skills. Jack, a former student, fell in love with all aspects of gardening. He now grows and sells his produce - including vegetables, herbs and handmade condiments – at the local markets. His grandparents still volunteer in the school garden.

For Schools Tree Day, students will buddy up with the Young Leaders of Tasmania to plant native seedlings on the school grounds. A local nursery is providing the seedlings and teachers will be on-hand to show students how to use planting equipment and care for the trees as they grow. The planting will beautify the area and provide shade for students with physical disabilities, including those in wheelchairs.

# For some students, [the kitchen garden] is a sanctuary where they can regulate their emotions and find calm.

Every day, the staff and students at Southern Support School embrace nature-centred education. This event will continue this tradition, helping students connect with nature as they plunge their hands into the soil to sow seeds for the benefit of future pupils.

# Reforesting the Daintree

FROM AGRICULTURAL LAND TO RAINFOREST HABITAT.

The Daintree stands as the most ancient surviving rainforest on our planet. Nestled in Kuku Yalanji Country, this extraordinary place resonates with the timeless songs and stories of its Traditional Owners.

The forest contains the highest number of rare plant and animal species of all ecosystems worldwide. But despite the abundance of life in the Daintree, many of its residents now face the looming threat of extinction. Together, these facts underscore the incredible capacity of the Daintree Rainforest to support biodiversity and the urgent need for its preservation.

The Daintree's World Heritage status protects the highlands of the forest, but the lowlands remain vulnerable to significant degradation caused by land clearing and agriculture. To address this environmental challenge, several organisations have united their efforts to acquire land and undertake the vital task of rainforest habitat restoration.

Among them is Rainforest Rescue, a not-for-profit that has been involved in rainforest restoration since 1999. The organisation manages pockets of land with high conservation value. It has acquired over 170 hectares of rainforest – most of which was zoned for development – with several land holdings in the Daintree and a property adjacent to Mount Victoria Reserve in Tasmania.

This year, with support from Planet Ark's Seeding Bank, Rainforest Rescue embarked on a mission



Rainforest Rescue at work. Photo: Silvia Di Domenicantonio.

to plant 3,300 seedlings from 90 rainforest species on former agricultural land in the Lower Daintree area. The community tree planting event is part of an ongoing effort to restore 15 hectares of land cleared for sugarcane farming to its former glory as flourishing rainforest habitat.

Rainforest Rescue's revegetation work is important for keystone species, which are organisms that have an extremely high impact on an ecosystem. The endangered southern cassowary, for example, plays a vital role in maintaining the diversity of rainforest trees by spreading and germinating seeds. Some trees may not survive without the work of this rainforest gardener.

Known as Australia's 'living dinosaur', the southern cassowary is one of the closest living relatives to prehistoric creatures. This majestic bird is only found in Far North Queensland where its natural habitat is under threat. At last count, less than 5,000 southern cassowaries were estimated to remain in the wild.<sup>1</sup>

Revegetation projects like the one underway in the Daintree can help connect isolated areas of remaining cassowary habitat. This work is critical to the longevity of this species.

Rainforest Rescue has established a new native nursery to support its conservation efforts. With the capacity to propagate upwards of 150,000 seedlings



Southern cassowary in the Daintree Rainforest. Photo: Connie Pinson.

a year, the nursery is set to be the biggest in the Daintree region. In the coming years, the group plans to plant new habitat for several native species, including southern cassowaries, Bennett's treekangaroos and flying foxes.

Rainforest Rescue CEO Branden Barber is keen to bring the local community along for the journey.

"If we can have more and more people witnessing first-hand these community tree planting days – thanks to the likes of The Seedling Bank – we will encourage more and more communities to be aware of why trees are the answer."

#### Reference

<sup>1.</sup> Sexton-McGrath, K. (2023). 'Push to save southern cassowary, Australia's 'living dinosaur', in federal draft recovery plan'. ABC News. Retrieved 10 July 2023 from: https://www. abc.net.au/news/2023-06-28/southern-cassowary-endangeredfederal-draft-recovery-plan/102531682



# Acknowledgements

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# Partnership: Toyota Australia

A 24-year partnership between Toyota Australia and Planet Ark has been the foundation of the National Tree Day program and together we have seen thousands of environmental projects completed across 60,000 planting sites throughout the country. After consulting with our volunteer community and identifying a need for funding to support schools and community groups in their tree planting efforts, Toyota Australia assisted Planet Ark in launching The Seedling Bank in 2019. The program's impact has grown in each of the four years since and we are proud to share the stories of some of the beneficiaries of these grants, highlighting the important work of community-led environmental projects across Australia.

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