

ARMIDALE TREE GROUP NEWSLETTER

Number 125 – AUTUMN 2022



Editor: Narelle Clarke

Armidale Tree Group

80 Mann St, Armidale, 2350

Phone 67711620

<http://armidaletreegroup.org.au/>

This Edition is dedicated to Kath Wray in celebration & gratitude



Editor's Note: Autumn 2022

Kath has left a living legacy of wildlife corridors across the New England. She led by example and her quiet, constant commitment has left a path that the ATG is following with 'Every Tree Counts'.

In this edition

From the committee

- **VALE Kath Wray – Kerry Steller**
- **Manager's Report – Alicia Cooper**
- **Lead Article – Adapting Revegetation to a Hotter and Drier Climate – Dave Carr**
This report on progress of work being carried out under the NSW Government *Increasing Resilience to Climate Change* program has revealed encouraging results on meeting the challenges of revegetation in a changing climate.
- **Details of 'Cash for Critters' – Eastlake** a free event to explore NSW Biodiversity Trust opportunities

VALE Kath Wray OAM **12th Spetember 1928 – 20th April 2022**



The Armidale Tree Group wishes to farewell an Armidale champion, Kath Wray, a dedicated conservationist, hardworking member of the Armidale Tree Group and nursery, the Armidale National Parks Association, and many other local groups in our community.

As founder in 1991 of the Citizens Wildlife Corridors, Kath worked voluntarily in partnership with landowners, Landcare, ecologists, conservationists, Local Government and government agencies, Catchment Management, politicians, and the community to protect native wildlife and habitats by creating corridors across diverse land tenures.

Kath's passion for plants began whilst working with Dr Noel Beadle in Sydney. In 1952 she travelled with her husband George and a group of students to the 39,000-hectare Fowlers Gap Arid Zone Research Station where specimens were collected. Kath mounted the specimens for the herbarium and two collections were created. One for Fowlers Gap, which was later washed away in a flood, and one for the Sydney University Herbarium. After their first daughter, Miriam was born in 1953 they moved to Armidale for George to take up a position with the new Science Department at the University of New England in Armidale, which was being established by Professor Noel Beadle. Kath's two other daughters Helen and Julia were later born in Armidale.

Kath joined the Armidale Tree Group Inc. on her retirement from the Armidale CAE in the early 1980's and was on the original committee as Secretary and Public Officer. In a voluntary capacity Kath opened the nursery on Ampol Lane from Monday to Saturday from 10am-4pm, weeding, watering, and selling stock. The nursery moved to the Show Ground site opposite O'Connor Catholic College. Kath organised the movement of an old shed to the site and set it on bricks as there was no shelter and there was a need to store equipment and money and to lock this up. Volunteers and community service workers joined Kath to prick out seedlings, weed and water and sell plants. Kath kept the Tree Group Nursery going as it couldn't afford to employ anyone

permanently to keep the nursery open and viable as any employees were out planting trees.

On meeting farmers who needed advice Kath started visiting their farms to help and encourage them and she started networking with their neighbours. From these early meetings the Citizens Wildlife Corridors (CWC) network was formed. As CWC developed, Kath continued her involvement in the nursery until a permanent nursery manager, Mike O’Keeffe, and nursery assistant, Rob Johnson, were employed. When Mike took over Kath stepped back but continued as a volunteer and she took charge of collecting and processing milk cartons to be used as tree guards for many years. It is estimated that in this time she saved and reused nearly 30,000 milk cartons.

Kath was the person responsible for the success of CWC. She visited, at her own expense, many hundreds of farmers in the New England region, having quiet conversations over a cup of tea, about tree planting and conservation. In her non-threatening, non-confrontational way she educated many people, who came to trust her as a friend. She added their properties to the growing collection of maps and showed them that they were not acting alone. The maps became a powerful tool for empowering people to act. These maps are now permanently housed at the Botany Department at the UNE and have now been recently digitised for future reference. In 1998 *Nova-anglica: the web of our endeavours* exhibition at NERAM was installed with Kath’s CWC maps as the central focus and inspiration for this amazing display of environmental conservation and restoration on the Northern Tablelands of NSW.

Citizen’s Wildlife Corridors now covers an area of 600 x 150km, mostly on the Northern Tablelands and Northwest Slopes of NSW from the Queensland border to Tamworth. These achievements are impressive from an environmental perspective, but CWC has also had an important social role to play. The organisation itself has been a community group bringing people together to meet and discuss conservation, but Kath’s work talking to landholders has created greater social cohesion and brought otherwise isolated neighbours together to work on shared projects.

Kath Wray retired and was farewelled from the Armidale Tree Group in December 2017 after 33 years of volunteer work as a member of the ATG committee. At 88 years of age, this dedicated lady retired from her active work. She was awarded an Order of Australia Medal in 2016 ‘for services to conservation and the environment.’ CWC subsequently merged with the Armidale Tree Group as a subcommittee to continue this ongoing work. As Kath’s mobility slowly declined, she chose to move to Wollemi at Autumn Lodge Nursing Home.

Thank you, Kath Wray. You have been an inspiration to us all.

Manager's Report - Alicia Cooper

Free Trees for Habitat

The Armidale Tree Group was awarded The Foundation for National Parks & Wildlife's (FNPW) Bushfire Recovery Grant to purchase a new greenhouse and benches to hold 15,000 native tree and shrub seedlings, to aid the ongoing recovery of habitat affected by the recent bushfires and drought. These seedlings will be provided free of charge to landholders and community groups, feel free to call the Nursery and discuss your project with Jane.

Under Jane's careful supervision, ATG staff, volunteers and the Work for the Dole team recently constructed our new greenhouse. With roll up sides to control warmth and ventilation, a gravel flooring and height-appropriate seedling benches, it's a far cry from what we had! But in the spirit of waste not-want not, we will be repurposing the framework of our old structure for use elsewhere. We are planning on having around 7,500 seedlings available for spring/summer 2022 planting, with the remainder ready for autumn 2023 planting. We'd like to give special thanks to Martin Belcher, whose assistance with putting up the framework was greatly appreciated.



Jane and the crew working away

Before and after!



Adapting Revegetation to a Hotter and Drier Climate

Dave Carr

Despite COVID stopping us from running workshops, we managed to interview 30 revegetation practitioners and gain a better understanding of the prospects for revegetation under climate change. The good news is that despite predicted hotter and drier conditions, with more frequent, more extreme droughts, our respondents believe that successful revegetation is still possible. Based on their experiences in the recent terrible 2018-19 drought, the key to success lies in good preparation, quality seedlings and follow-up maintenance. We may need to move to more autumn plantings and use wider spacing in our plantings to maintain our current success.

So far we have produced some guidelines, a two-page summary of the guidelines, (which is included in this edition of the newsletter), and a podcast. There is also money remaining in the budget, which will be used to produce a number of videos to promote good techniques to ensure revegetation success and to produce a second podcast on managing regeneration after drought.

I would like to thank all those who have contributed to the success of this project. In addition to the landholders who have been hands on in the revegetation process I would particularly like to thank Rachel Lawrence and Garry Slocombe, the ATG Treasurer. Rachel's ability to communicate with landholders and her writing skills were a vital contribution to the really good results that were achieved and the value of this project to the challenges to revegetation in the years ahead. Garry's enthusiasm for the project was matched by his efforts to keep me on track and to keep all the finances and reporting on target.

Here is a link to the first podcast:

<https://anchor.fm/climate-resilience/episodes/Revegetation-success-with-future-climate-change-for-New-England--NSW-e1i53o5>

The two page summary is included below.

David Carr
Vice President ATG

Adapting revegetation to a hotter and drier climate: Lessons from the drought.

Rachel Lawrence and David Carr

Armidale Tree Group.
6771 1620
80 Mann St, Armidale, NSW, 2350



The drought of 2018/2019 was considered the worst in recorded history for the New England Tablelands. At the time, it seemed many plantings, including long-established ones, had died. Fortunately, in-part due to the good rainfall that followed the drought, most revegetation sites recovered well. The region is expected to experience similar hot and dry conditions under predicted climate change scenarios. Armidale Tree Group interviewed 30 experienced revegetation experts in the region and captured their insights from the drought, regarding maximising revegetation success in future droughts. Presented here is a summary of outcomes from these interviews.

A clear message from this project is that **current recommendations for revegetation, when done well, lead to very successful revegetation**, even under predicted hotter and drier conditions. These are:

- Rip the soil to >450mm deep, at least 6 months before planting to build subsoil moisture.
- Keep weeds and competing grasses at least 50 cm away from planting lines and planted seedlings at least 6 months before and 12 months after planting.

- Ensure seedlings are planted with the rootball 25 mm below the surface and in firm contact with surrounding soil and water seedlings in well after planting.
- Use sufficiently wide spacings between rows and between plants.
- Aim to plant in autumn as this is now likely to be a more reliable time to plant than spring.

Most tree and shrub **species** that are currently used in plantings are surviving well, with the exception (in some situations) of Snow Gums (*Eucalyptus pauciflora*) and *Banksia integrifolia*. Species from higher rainfall areas have struggled in recent years and should be avoided. These species include Shining Gum (*Eucalyptus nitens*), Sydney Blue Gum (*E. saligna*) and Eurabbie (*E. bicostata*).

More species that are found in the western region of the Tablelands could be added to plantings to increase diversity and climate resilience. Obvious contenders include Kurrajongs, Cypress Pines and *E. bridgesiana*, *E. albens*, *E. moluccana* and *E. sideroxylon*. More Casuarinas in plantings would increase climate resilience with these trees also providing a range of biodiversity values.

While the **genetics** of species currently used in Tableland plantings are generally doing well, future seeds should be sourced from areas along a gradient from the current climate to areas likely to approximate future climate conditions. This ‘climate-adjusted’ seed sourcing strategy will improve the likelihood of including genetics in revegetation projects to better adapt to future challenging conditions. Increasing the number of plants (and locations) that seeds are collected from for each species will also increase genetic diversity.

Ensuring **fencing** is adequate to protect your investment in revegetation may become even more critical in dry and hot conditions as hungry native herbivores can place additional pressure on already stressed plants in revegetation areas.

Major **natural regeneration** events commonly follow drought, especially where good and prolonged rainfall occurs in following years. The abundant

regeneration is due to ample bare ground providing good conditions for seedling germination and reduced stocking rates. Eucalypts are the most conspicuous element of this natural regeneration, but other species have also germinated. To facilitate diversity, it may be necessary to exclude stock for long enough to allow a range of understorey species to grow to maturity, or to do in-fill plantings into these areas to encourage greater diversity.

Wildfires have not been a regular threat for the Tablelands previously. However, the Black Summer fires of 2019/20 highlighted that this could be an emerging threat and management strategies such as controlled burning, managing biomass with grazing and the use of less flammable species should be used in certain areas.

More detailed guidelines for revegetation that incorporate these lessons, and a podcast, can be found on the ATG website (www.armidaletreegroup.org.au)



This project was supported by the NSW Government’s *Increasing Resilience to Climate Change Program*.



CASH FOR CRITTERS 'EASTLAKE'

Exploring NSW Biodiversity Conservation Trust Opportunities
with Gordon Williams & Joe van Eyk

What's possible if you get a return on investment for your remnant vegetation?

How can protecting biodiversity add to your bottom line and improve the health of your whole property?

Hear from experienced landholders and NSW Biodiversity Conservation Trust personnel on:

- Potential financial benefits
- Eligible vegetation types
- Types of opportunities and agreements
- How to explore and initiate an agreement
- Maintenance obligations
- Visit a 72 ha agreement area.

Morning tea and lunch provided.



Image courtesy Ben Vinech

FREE EVENT
9 am - 2.30 pm
Friday 17th June
2022



Registrations essential at

<https://snelandcare.org.au/event/protecting-new-england-biodiversity-eastlake>

OR call Struan on 02 6772 9123.



**Biodiversity
Conservation
Trust**

Landcare NSW is working in partnership with the NSW Biodiversity Conservation Trust to raise awareness and support for private land conservation.



Volunteer Registration

Date: _____ / _____ / _____
Name: _____
Telephone: _____
*Email (Required): _____

<p>I am keen to help out the Armidale Tree Group, on a volunteer basis, in any of the following (ticked) areas:</p> <ul style="list-style-type: none">• Propagation• Planting (Field Days)• Gardening• Media• Grant Applications• Cleaning• Office• Wildlife Corridors - mapping, planning and landholder communications• Seed and Cutting Collecting• Other - Please specify <p>_____</p> <p>_____</p> <p>_____</p>	<p>I would like to help out on the following basis:</p> <ul style="list-style-type: none">• Weekly• Fortnightly• Monthly• Occasionally• Other - Please specify <p>_____</p> <p>_____</p> <p>_____</p>
---	---

Thank you so much for your offer of help. The Armidale Tree Group provides a lot of value to the community and it will be greatly appreciative of your efforts. Together we will make a difference.

Office use

Date processed: _____/_____/_____