ARMIDALE TREE GROUP NEWSLETTER

Number 118 Winter Edition

August 2020



Surviving the Drought, the Bushfires (and COVID19)!



Editor: Kerry Steller Armidale Tree Group 80 Mann St, Armidale, 2350 Phone 67711620 www.armidaletreegroup.org Cover Photo: 'Happiness Wheel' made from banksias. See its story in this edition. Photo: David Curtis

Editor's note: 2020 Winter Edition

I chose 'Surviving the Drought, the Bushfires (and COVID19)! as the theme for our Winter 2020 Newsletter. It has been a very difficult twelve months for us all learning to adapt to new ways and trying new things to continue to survive what is happening in our world today. This edition has a few contributions on what some members have been doing during this time of pandemic. We'd like to hear from other members on what they have been doing.

In this edition we have the following to share:

- Committee report and manager's news.
- After the Drought A Wet Start to 2020 by Peter Metcalfe written in March when he could see what had and hadn't survived in his garden.
- Drought Monitoring photos from various members how is the bush recovering? Some before and after photos.
- What people are doing during COVID19 Banksia integrifolia by David Curtis and some nature journaling from some of those who attended Dr Paula Peeters' workshop.
- Happy 300th birthday Gilbert White. Take a look at this naturalist's amazing work.
- Our favourite tree Kerry and Dave Steller.
- An update on Enmore and the Urban Forest.

From the committee:

The committee have been meeting monthly via zoom to keep things going at the Tree Group.

ATG was successful in attaining a grant of \$30,000 through IRRC Community for **Increasing Resilience to Climate Change**. The drought and the high temperatures appear to have affected some species more than others and some locations are worse than others. We propose to work with experienced tree planters and bushland managers throughout the region to assess the damage to planted trees and bushland; evaluate the factors influencing these losses (species, landscape position, soil type, management); and consider alternatives to prevent such management. This will be carried out through structured interviews and an expert workshop.

The staff at the nursery have been very busy, as many people decided to plant after the great rains we have had. Vegetable seedlings and seeds were in great demand.

We wish Alicia Cooper and Ambrose all the best for their new family as Alicia takes maternity leave from 24th August. Gary Slocombe, our honorary treasurer, will look after the management of the business while Alicia is on leave.

From the Manager...Alicia Cooper:

Farewells and Welcomes

I would like to take this opportunity to let our members know that we have two staff moving on to pursue different fields - Eowyn Lacey, our Nursery Hand and Ed Ryan, our Field Officer.

Eowyn has been a vibrant member of our team for the past two years and many of our Facebook followers would have noticed her regular updates and photos of insects and flowering plants here in the nursery. Eowyn is moving to Tingha to pursue her passion for sustainable farming, and while we will miss her enthusiasm, we wish her all the best with her new property.

Ed joined us last year and worked on a number of difficult sites through the drought. Planting trees into baking soil around solar farms in the Northwest and keeping them watered through the hot months was not an enviable task, but one he and the crew continued to meet with good humour. Ed has moved on to train as a paramedic and we wish him all the best with his studies.

Thank you Eowyn and Ed for all your work and your time with us.

I would also like to welcome our two new team members - Rachael Bailey and Raymond Sievier. Rachael will be our new Nursery Hand and brings her passion for plants and her experience working in a wholesale nursery on the Gold Coast. Raymond will be our new Field Officer and brings with him a number of years experience working as a bush regeneration supervisor in Sydney.

New beginnings for all, with hopefully many positives to come!

AFTER THE DROUGHT – A WET START TO 2020 By Peter Metcalfe

After three years of drought 2020 began with good rains that gave us 380 mm by the end of April and that is more rain than we had all 2019. The good falls have continued.

2020 is proving to be a recruitment year for grasses, weeds and trees. One aspect of the recovery is the fact that during the drought many of the trees lost their leaves. This allowed more light to get to ground level and the extra light has allowed the germination and establishment of grasses, weeds eucalypts and wattle tree seedlings. The main factor, however, is the excellent rain. Watching this recruitment year unfold I am amazed at the resilience of the local flora. Virtually all **Blackwood Wattles** (Acacia melanoxylon) and **Silver Wattles** (A. dealbata) had lost their leaves entirely and appeared to be dead. The trunks were dead but they have sprouted prolifically from the roots. It looks as if there will be thickets of wattles where there were just one or two mature trees that are now dead. On closer inspection many of the new sprouts are multi-stemmed because they were initially nipped off by rabbits and have sprouted again from the lateral buds. It will be interesting to see is these bunches of stems sort themselves out and finish up as a single stem or remain a dense bunch of stems more suitable for finches to nest in.



Silver Wattle, Acacia neriifolia. Photo: Warren Sheather

Other wattles, including Acacia rubida (**Red-stemmed Wattle**) and A. fimbriatus (**Fringed Wattle**) have died completely but there are literally thousands of seedlings emerging. They are easily nipped off and eaten by rabbits so we will perhaps not finish up with an impenetrable thicket. In the early stages all the seedlings look the same while they only have their seedling leaves so we hope that all the seedlings are not Acacia rubida but that some of the other wattle species have produced viable seedlings. **Acacia cultriformis** and **Acacia amoena** have both survived the drought but they have also produced some seedlings after the rain.



Sticky Wattle, Acacia viscidula. Photo: Warren Sheather

Many species of wattles survived the drought and are now budding up prolifically with the good rains. Acacia boormanii, A. vestita, A. pychostachia, A. pubifolia, A. nana, A. baileyana, A. diphylla, A. ingramii, A. viscidula, A.neriifolia, A. mearnsii, A. lunata, A. cardiphylla, A. buxifolia, A. decurrens, and A. floribunda have all survived, especially the younger plants. Some of the old plants from these species did succumb to the drought. The survivors will make a great show in spring.

Virtually all the mature **Westringias** and **mint bushes**, other than the cultivars from Wollomombi, succumbed in the drought but there are dozens of seedlings coming up where the old bushes had spread their seeds. There are also **Correa** seedlings showing up where there were old plants.

The drought also killed quite a few of the Eucalypts native to the area and also others that had been planted from other areas. Among the victims of drought were the locals Yellow Box, Long-leaved Box, New England Peppermint, Wattle-leaved Peppermint, Black Sallee, Snow Gums and Nicolii. Also the introduced Bendemeer White Gums, and Bolivia Stringybark. The dead Yellow Box and the thicker trunks of some wattles are being added to the fire wood supply. Meanwhile there are quite a few seedlings of Yellow Box becoming established.

Prior to the drought we had some patches of **Microlaena**, a favourite native grass. There has been an amazing expansion of this species in the home paddock. At this stage Paspalum and Cocksfoot, both introduced species seem to have been greatly reduced. Microlaena normally grows in the shelter of trees but now grows in more exposed areas, such as under the power-lines. It will be interesting to see if it persists in sunny spaces. Kangaroo Grass, Wallaby Grass, Native Sorghum and Barbed-wire Grass have all reappeared after vanishing during the drought, probably due to the grazing pressure from kangaroos. Many small native legumes, for example Desmodium species and Glycine clandestine, have germinated after having been invisible during the drought.

The two local species of **Dianella** were knocked back by the drought but have recovered brilliantly with the rains. Two native shrubs that seemed untouched by the drought are **Cassinia** and **Indigo**.

Overall the sequence of drought followed by good rains has proven the resilience of many species of wattle. The susceptibility of old trees and the resilience of younger trees are also clearly illustrated. Keep on planting so there are young trees and shrubs ready to battle through the next drought.

With Wattle Day coming up on 1st September, celebrate by planting some wattles and enjoy their golden winter/spring colour.

Drought Monitoring Results

1. Waterfall Way Photos taken by Kerry Steller on Waterfall Way near Wollomombi Lat -30.4925 Long 152.1700



21st December 2019 After the bushfires near Ebor. The *Banksia integrifolia* appeared to have already been killed during the drought. All the *Casuarina cunninghamiana* appeared dead.

7 February 2020 After the summer rains all that appeared growing was the grass.

7 July 2020 Some signs of regrowth of the casuarinas and regeneration of the banksias (below)

2. Dumaresq Dam Photos by Patsy Asch of the far end of Dumaresq Dam over many years....



Oct 2010

Oct 2011



Feb 2019





July 2019



April 2020

Thank you to those who volunteered to monitor after the drought. We want at least 12 months of records. We will feature more in the next edition of the newsletter. Keep snapping and send us your monitoring shots. Even a bfore and after shot will suffice. Location is important.

3. Casuarina cunninghamiana at the Mike O'Keeffe Woodland



Photos by Kerry Steller

18 Nov 2019 A very bleak sight



4 April 2020 An amazing recovery



7 July 2020 Still looking good during winter

What we did during COVID 19

What did you do? Please send us a story or some pictures of your adventures or efforts.

David Curtis- Banksia Integrifolia

(Editors note) David Curtis decided to make a video of Plant of the Week each week during COVID19 and send them to some friends so I asked if he could share some. Thanks David and Fran for letting us post this very artistic video (see link at the end) on Banksia integrifolia and some thoughts about this great food source for our birds.

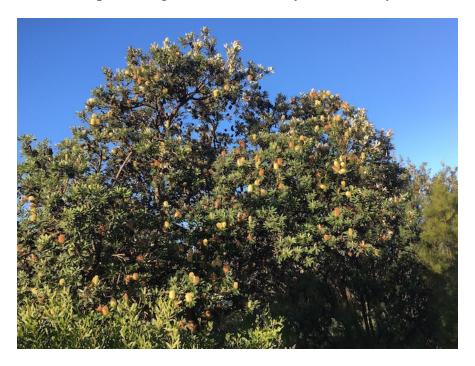


Coast banksia, Banksia integrifolia. Photo: David Curtis

I love the coast banksia (*Banksia integrifolia*). It forms a forest beside the beach near us here in Wollongong. It grows from southern Victoria to southern Queensland providing an amazing continuous food resource for birds, flowering all the way through autumn and winter and fruiting for months also.

We live only a few hundred metres from the beach and its dunes are covered in banksia trees. Consequently, we have several growing in our garden. Recently we had to prune the tops out of a few of the trees as they were beginning to shade our solar hot water, leaving with us with a big pile of prunings. With my granddaughter, we decided to pick all the flowers and fruits and construct a magnificent mandala on the lawn, which she called a "Happiness Circle".

I was struck by the huge number of flowers and what a large food resource for the nectar feeders (such as honey-eaters), and the seed eaters (such as the various parrots). From our small pile of branches we counted 130 immature flowers, 50 flowers, 154 old flowers, 234 fruits — some 600 flowers and fruits in all. And these trees extend over such a long geographic spread! For birds it must be equivalent to us having a continuous paddock of wheat cropping for months on end ... providing food for virtually the whole year.



Coast banksia, Banksia integrifolia. Photo: David Curtis

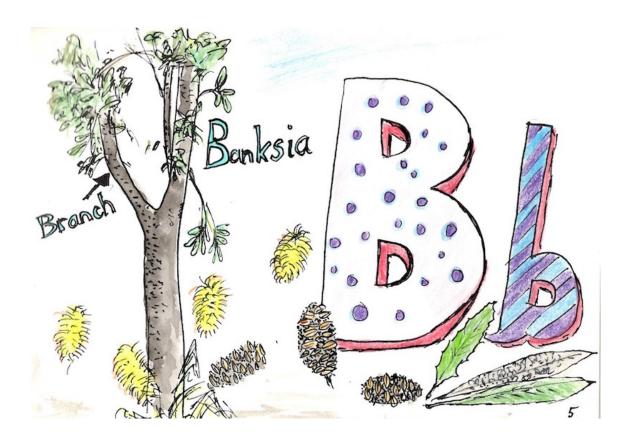
As an ex-Armidalian who now lives on the coast, the other thing I particularly love about *Banksia integrifolia* is that in one sense it connects to me with the New England which I still love. Whilst there is a more or less continuous spread of the species along the coast, it also extends, with smaller outlying populations, onto the tablelands ... with populations at Ebor, closer to Armidale and up at Ben Lomond, for example. We always used to enjoy collecting seeds from the little outlying populations and bring them into cultivation at the Armidale Tree Group, and this is still occurring I know, with even a new pink-flowered variety having recently been discovered. Also now in cultivation there is a prostrate variety.

Another interesting thing I reflect upon, is that *Banksia integrifolia* will never become an endangered species — it is just too common and too widespread. With so many of our biodiversity conservation strategies based around endangered species, therefore, it would never be particularly protected or subject to a campaign of "save our banksias" in the same way we have "save our koala" campaigns. Nonetheless, it is such a critical keystone species for entire forests and ecosystems.

And I might say, extremely satisfying to grow in one's garden or as part of a revegetation project.

Here is a link to the video I made with my granddaughter about the banksia. I hope that you like it:

https://vimeo.com/429126822



A great example of nature journaling by David Curtis

Nature Journaling

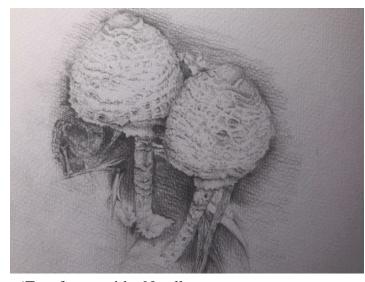
Dr Paula Peeters ran a Nature Journaling workshop for us on 29th February and we had 23 people in attendance. We took our chairs to the Mike O'Keeffe Woodland and sat in the shade of the bush and Paula showed us how to make lots of observations...to ask lots of questions such as: I notice.... I wonder....It reminds me of....It makes me feel....and to use words and pictures in our notebooks.

Paula described nature journaling 'a conversation between you and nature' and promoted it as a meditative experience. She suggested poetry, conversing with a bug, doing study of a large item such as a tree, a close-up of something small such as a leaf, a flower, a fungi or a gumnut. Add some sounds! We were all inspired as Paula provided some tips and showed us some tools to choose our own adventure. Paula suggested we look at John Muir Laws for further inspiration and skills development.

Thank you Paula for the inspiration. I've included a few sketches from our contributors.



Mushrooms by Deb



'Two fun guys' by Narelle



Possum tree by Kerry



Winter woodheap by Gem

Happy 300th Birthday Gilbert White Contributed by Kate Boyd.

The 18th of July 1720 was the birthday of one Gilbert White – 300 years ago today.

Gilbert lived most of his life in the village and parish of Selborne in Hampshire, England, where he paid attention to the details of nature in gardens, fields, woods, hedgerows and ponds. He kept a journal of these observations (now easily searched here). His book, *The Natural History and Antiquities of Selborne*, was published in 1789 and soon became so popular that it has been in available in print ever since (300 editions). This article will give you an idea of how significant his field-based study and his captivating book were, for example, in getting Darwin interested in biology.

I suggest you enjoy Gilbert's 300th birthday by making your own careful observations of nature in your environment and record or share them in whatever way suits you – have fun looking closely, listening and talking or thinking about how the species in your garden, park, paddock, creek or patch of bushland respond to or interact with each other and their environment.

You can look at some of Gilbert's <u>observations here</u> (by date or try entering some of the topics listed bottom right in the top search space – the links don't all work). You can download his <u>book here</u>. But it is more important and even more enjoyable to pay attention to our own environments now than to computer screens and the Selborne of the 1700s.

I don't accept the claim that that Gilbert White was the first ecologist because I'm sure there had been many people over millennia who closely observed and developed understanding of interactions between species and their environments, sharing knowledge orally not in writing. While Aboriginal communities used to depend on their ecological knowledge, the future of all human communities may now depend in part on our ability to spread the message of the need to live in harmony with nature – as Gilbert's book did. Sharing our appreciation of the nature in our own environments with colleagues, family or a wider community can be influential. Promoting love of nature is more effective than raising fears about what is being lost.

Gilbert's successful book is in the form of a series of letters. You could share observations in the form of a letter, email, or social media post with images or sound recordings as well as your thoughts (factual, emotional or scientific speculations). Now you can also share observations through <u>iNaturalist</u> which enables experts to confirm species in photos or sound recordings and other naturalists to use your observations. Most importantly, whenever you can, do share your love and wonder out in nature directly with others.

While the <u>online Celebration</u> was on 18th July Gilbert will be 300 all year so you can celebrate outside in nature all year. Enjoy doing and sharing our natural history.

Happy Birthday Gilbert. Have fun and stay safe

Our Favourite Tree

Kerry and David Steller

River Red Gum Eucalyptus camaldulensis





Eucalyptus camaldulensis at night and by day from a restaurant window on the Gwydir River in Moree. Photos: Kerry Steller

The Mighty River Red Gum 'Icon of the Driest Continent'

A sense of awe and amazement hit me when I discovered I was being watched over by this ancient sentinel in the night. Lit up by carefully positioned spotlights to highlight her colours and her shadows, the huge river red gum posed naked and venerable in the night, haunting in her grandiosity. She was gnarled, twisted and bent with a girth so wide I felt dwarfed and insignificant. How such a tiny seed could grow to so grand an old lady with massive outstretched limbs amazed me. She was certainly a survivor on the banks of the large river surrounded by imposing urban sprawl.

I wished to see her in the morning light and was delighted by her welcome of smooth bark with mottled colours of cream and orange and red amongst the grey, an artists delight. Her whirling lumps and bumps glowed and her far-reaching branches loomed precariously overhead and provided dappled shade as the sun warmed her unpretentious but imposing form.

what had she seen over her lifetime? The massive river was so parched that her roots were searching for underground water at an unimaginable depth. She must have loved the floods that brought easy thirst-quenching relief from the relentless hot dry spells of the unrelenting drought. She must have seen great change in the landscape, the settlements and the building over many centuries. How many animals had she harboured over her lifetime, providing a home in her hollows and food in her branches? How many insects had sucked, chewed and found sustenance from her leaves? How many bees had hummed in her myriad of white flowers after a good season? How many seeds had she dropped so that her offspring could continue to grace us with their presence along the winding river downstream?

That she was still here on the riverbank so close to buildings, pruned for safety and lit up on display proved that her resilience and longevity was appreciated and that she was there to inspire us all and to teach us of hope in the driest of times.

Facts about River Redgums from The Conversation

 $\underline{https://theconversation.com/the-river-red-gum-is-an-icon-of-the-driest-continent-118839}$

- Originally called *Eucalyptus rostrata*, *Eucalyptus cameldulensis* got its name from the Italian monastery Camoldi near Naples from a specimen in the garden named in 1882. How it got there no one knows.
- The river red gum has blood-red wood when cut and contains chemicals that protect the wood, warding off pests and having natural antibiotic properties and used by indigenous people.
- Trees can live for up to 1,000 years and trace the watercourses of mainland Australia.
- They shed up to two thirds of their foliage during drought to prevent water loss and wilting and can tolerate immersion in floodwaters for up to nine months.
- They exhibit alleopathy where chemicals on the leaves inhibit plant growth under the trees allowing for germination of seedlings after floods.

- They were used to make canoes, bowls and utensils by indigenous people.
- They were used for railway sleepers, fence posts and piers and wharfs due to their durable and water-resistant nature.
- Hollows provide a refuge for birds, mammals and reptiles.
- Prolific white flowers attract bees in swarms for honey production.

Eucalyptus Camaldulensis; River Red Gum

Small digit temperatures outside, chunky eucalypt in ready piles. Its muscled blocks like sentries, on watch in garages and proximate porches.

Deep crimson and sienna combined, some logs with the look of new-dried blood. Formally classified and grown in Naples, and colonists here felled acre upon acre.

The tree's robust seed offered for exchange by botanist, Cunningham to Chief Gardener, Dehnhardt. Off to Italian shores with high Empire and plantsmen, a grove's destruction came prior to taxonomic rescue.

This hardy wood's welcome heft on the arm, exudes such earthen scent when spliced. Yet River Red Gum's density and girth, divides the novice chopper from the expert.

Healing tree, craft and shelter for Aboriginal people, hosting diverse creatures along their watercourses. Tonne after tonne fed early steam power, now best burning fuel in hungry domestic grates.

Katherine Healy

Katherine Healy: Biography Katherine Healy lives in the Adelaide Hills, South Australia. She holds a Master of Letters in Creative Writing from Central Queensland University. In 2018 Katherine was shortlisted for both international Peter Porter Poetry Prize and the national Nillumbik Ekphrasis Award. She has a collection of poetry and a novel as works in progress. This poem first appeared in the Adelaide e-newspaper, InDaily, Poet's Corner. Katherine loves writing about trees, nature generally and art.

Do you have a favourite native tree?

Send a picture and tell us about why you love this particular tree. If you have a poetic bent you may wish to send us a poem about a tree or trees, as well as or instead of a photo. Send to manager@armidaletreegroup.org.au

Every Tree Counts -

Maintenance of Projects The Urban Forest and Enmore TSR





We have had a couple of working bees organised by Helen Webb to maintain some of our Every Tree Counts projects.

Pictured here is John Lemon tidying up between the rows at the Urban Forest on Dumaresq Creek near Cooks Road. Photos by Helen Webb

Our cancelled planting at Enmore TSR in March (due to COVID restrictions) which was ready to go was successfully planted out by ATG staff. Volunteers had a couple of working bees to do some further maintenance of the planting. Thanks Helen for organising this.

We do plan another community planting there once it is safe to do so again...Watch this space.



Membership Application/Renewal

| Name: | <u> </u> |
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| Address: | |
| Telephone: | |
| *Email (Required |): |
| Payment method | cash / cheque / credit card / direct credit |
| Please indicate your membership is due: | membership preference, you will receive an email when |
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| \$10 for 2 year | |
| \$25 for 5 year | |
| \$50 for 10 year | ars |
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| Card type: | Visa / Mastercard only |
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