Edition 1, No. 11 February 2024

WCHL News will be emailed out as usual and is also available from our Facebook group page and on the Brunswick Valley Landcare website. Once in a while, we hope to do a hard copy letterbox drop. Brunswick Valley Landcare Newletters provide landcare posts from a wider area and allow us to concentrate on local subject matter. Visit http://brunswickvalleylandcare.org.au/newsletters/

Happy 2024 and best wishes to all landcarers.

We hope everyone is enjoying the rain and warmth that is encouraging fantastic growth in our native forest, regrowth and plantings. The weeds are less enjoyable!
In this issue, turn to the back page for news of our recent AGM, election of office bearers and summary of the year's activities.

We bring you landholder and project stories. Hear from Neil on Giant Devil's Fig and read about Valley's regen journey. Also water quality in our creeks, , cat trapping, photos from our Rainforest Regeneration and Climate Change project, ghostly plants in our forests, Albert's Lyrebird, Tree of the Month and more. Why would we live anywhere else?

Giant Devil's Fig: the Unfriendly Fig

Neil Amber

Driving around our valleys, many examples of Giant devil's figs can be observed, including healthy mini forests that are being ignored by property owners. These include prime examples of how well they grow when not managed.

Giant devil's fig *(Solanum chrysotrichum)* is a naturalized weed in the nightshade family, found along forest edges, riparian zones and disturbed areas. Yet it will grow nearly anywhere, and its yellow fruit produce an abundance of seeds that are spread easily by wind, water and birds. It is regarded as an environmental weed in Queensland and New South Wales. Devils fig is suspected of poisoning livestock and its sharp prickles, found along the trunk, can inflict injuries on animals and people.

If not managed, each plant can grow up to 6 metres and in prime growing conditions the dense growth crowds out natives and is nearly impassable. In northern NSW, land managers are required to mitigate spread of the plant from their land and reduce the impact of the plant on assets of high economic, environmental and/or social value.

Giant devil's figs are native to Central America, where they offer many medicinal attributes. A water infusion from the leaves help treat scabies and other skin conditions. They have been used as an antioxidant and anti- inflammatory, improving digestion, gut health and controls weight. I refer to these medicinal qualities not to advocate growing the plant, but to note that nearly every plant has pharmacological activity. I have spent my adult life studying the useful properties of plants, yet we can all live and thrive without Giant devil's figs.

Physical Removal

For many years I believed slashing the plant with a machete would control the spread and I would comb paddocks twice a year. However, it became clear that it could not be eradicated this way. I maintained my farm for over 20 years using strict organic practices, yet eventually admitted that Giant devil's figs required a program which included safe use of herbicides to paste onto the freshly cut stalk.
Seedlings and small plants can be dug out with a mattock or pulled out by hand wearing gloves. It's important to remove plants before they flower and fruit to minimize the spread.
I was very fortunate to have our farm included in a Landcare grant eradication program. Over a 6 month period, Severena and her skilled team visited the farm and we went across every gully and paddock, slowly removing and treating the plants of all sizes ranging from tiny seedlings to tall spiky trees. I have never known such an invasive plant species.
I am very grateful to have participated in this program and now have the skills to remove them when I see them coming up. We periodically remove them especially on my landslide recovering hill.
To summarize, here is a link to more information on site of Dept of Primary Industries:
https://weeds.dpi.nsw.gov.au/Weeds/Details/311

If you need further information or assistance contact Landcare or myself Neil 0415271761

Caring for our creeks

Please…….

NEVER dump garden refuse in the flood zone (likely to contain weed propagules).
NEVER empty pond or aquarium contents into the creek (aquatic plants and exotic fish may establish and compete with our natives).

My Regen Journey

Valley Lipcer

2022 was the start of my intensive regen journey on our 5 acre property in Wilsons Creek. It was the combined effect of Covid slowing my arts career down, the destruction of the 2022 floods on our land and a bit of a mid-life reassessment of EVERYTHING that lead me to commit more of my time to working on the land.

In 2023 , I started the Certificate 3 course at Kingscliff TAFE and did not look back (or up out of the forest most of the year). From being surrounded by people and events and spreadsheets I shifted to days out on the slopes covered in prickles, mud, leeches and jumping ants – enthusiastically pulling weeds and celebrating little rainforest seedlings popping up everywhere as I made more space and light for them. I began to obsessively identify both the weeds and native plants and started to notice things I had never taken the time to before; like flowers, seeds and growth habits.

When my partner and I bought the property 8 years ago, a large part of it was impenetrable. It was covered in weeds – lantana, madeira, camphor, cestrum, freckle face, morning glory, privet, giant devils figs, ochna...and many more. Living full and busy lives we only managed to work on the land in bursts. When there was sufficient budget and energy we would make headway and then we had periods of letting things go and getting overwhelmed. I realise now that the most important thing in making a difference is actually persistent follow up (and having a good plan). It's very easy to go backwards and make more space for more weeds.

It feels great to have the knowledge and confidence to make a solid and informed plan and have clear long term goals to chip away at regularly. It's a beautiful journey to have embarked on and the rewards are many.

Here's a picture of the next work site by the creek.

Water quality testing 2023/2024

Peter Hall

We all care about water quality not only from a consumption perspective but also, and importantly, from the perspective of the health of our river systems. Water plays a vital role in our ecosystem nurturing our riparian areas and local flora and fauna.

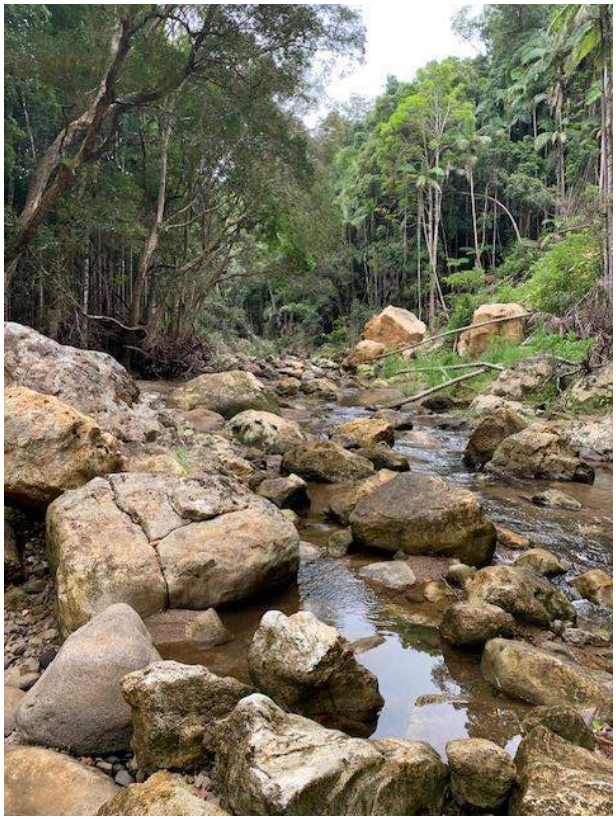
It is with this in mind that we joined the Richmond River Ecological Health Program run by Brendan Cox of River Ecology Australia. Brendan, who is also supported by Southern Cross Uni, has been running this program since early 2023 with the number of sites increasing as the program grows. Brendan's report card from the early catchment-wide sampling (note comments on upper catchment sites) in March 2023 says:

> The overall ecological health grade of C - from the data collected in the first round of sampling for the Richmond River Ecological Health Program 2023 reflects the recent extreme conditions (significant flooding events in February 2022) and historical land management and use of the Richmond River catchment. Results indicate that the lower catchment sites tend to have poorer water quality and low macroinvertebrate diversity. However, even for our upper catchment sites, where the water quality is better , macroinvertebrate diversity is still quite low. This indicates that aquatic habitat is compromised throughout the catchment, including in the upper reaches.

We recognized both Wilsons Creek Huonbrook Landcare and the new Community Association (under its Biodiversity subcommittee) as our representative organisations and in August 2023 we chose two sites in the Valley, one on the Wilsons River in Upper Wilsons Creek and the second on Coopers Creek in Wanganui. After having been through a training day with Brendan Cox, our intrepid volunteer water quality testers (7 over the two days of testing) were then set up with testing kits and in mid-November 2023, we undertook testing on the two sites.

Sites were rated according to **biological** aspects (riparian vegetation, weeds present, macroinvertebrates present), **chemical** aspects (pH, dissolved oxygen, salinity) and **physical** aspects (width of stream, temperature, turbidity) and the team developed report sheets which were then dispatched to Brendan Cox for individual assessment and to add to the whole program results. Our sites are 2 of the now 39 sites throughout the catchment.

We're looking forward to getting feedback on our water quality especially as there are so many and often conflicting land uses on the water's edge! These tests will be completed twice a year as we continue to monitor our Valley waterways!



Photos show our two sites plus some action! It was great to have a couple of our younger valley folk join us, in this case testing water turbidity!

Is this a Feral Cat? Part 3

John Wynberg
(see previous newsletters for Parts 1 and 2)

I am now the custodian of two cat traps, one quite old and somewhat cumbersome, the other was recently given to me by someone leaving the Valley. I've only had it a few days however it is easy to move around and set.
I have spoken to quite a few people in the Valley about trapping feral cats and I have yet to talk to anyone who has successfully trapped a feral cat.

A few years ago, there was the potential of joining a workshop on learning how to trap feral cats, however sadly this was cancelled during the COVID scare.
I am endeavoring to find which organisation was planning to run the workshop and see if it could be brought back to life. There is of course a lot of information and clips on YouTube and other info channels all of which I've taken on board, however you can't beat hands on, or face to face instructions in any endeavor.

Some of the things I've learned so far is that obviously the trap needs, to be located where there is evidence of the presence of feral cats. To this end I have now bought a movement detector camera and I have been setting this camera up in areas where neighbours have sighted feral cats. It's also very important to monitor the trap. I do this early every morning. This is super important in case a native animal may have wondering into the trap. Also the trap needs to be covered so if a feral cat is caught it potentially will be less stressed in a covered dark environment. Covering the trap also applies whilst moving the trap for identification / euthanasia purposes.

There are a host of other things that can make trapping a more successful process including some better instruction and some luck.
In the meantime as I bumble and fumble trying to trap our feral cat on the bigger picture the issue is huge. I have copied below a recent email received from Andrew Cox the CEO of the Invasive Species Council.

The email claims that the Invasive Species Council will endeavour to push the Government into allocating more funding for eradicating feral cats in the next budget.

Dear John,

We just can't keep going around in circles like this.

Time is running out for the unique numbat, one of the many victims of feral cats. Only 800 numbats remain in Dryandra and Greater Kingston national parks in Western Australia.

The previous federal government promised to tackle feral cats for our little Aussie battlers like the numbat. But they didn't put their money where their mouth was.

Now the Albanese government is touting their plan to tackle feral cats and promise of no more extinctions. But without much, MUCH more funding, their plans and promises are not much more than fantasy.

Our native animals like the numbat need more than promises. They need a lifeline. To think that 1.5 billion native mammals, birds, reptiles and frogs are killed by feral cats every year is astonishing. To know that 13 of the 17 recent extinctions from invasive species were animals found in protected areas– says something is drastically wrong.

Feral cats are also decimating populations of the endangered nabarlek in our world heritage Kakadu. **Many endangered Australian animals are fighting a losing battle.**

There is still a small window of time to stop the world's most destructive invasive predators and pests from ravaging the precious sanctuaries of our unique animals – if we act fast.

Back to the reality, the numbers of native mammals, birds, reptiles and frogs that are cited above are staggering and as I've said before uncontrolled domestic cats do a huge amount of damage as well. More about that in our next newsletter.

(Prof Sarah Legge's project with Wilsons Creek Public School students is already spreading the word about domestic cats. Many will have seen the poster they prepared – if not, there is one on display at Council and its been shared widely).

Rainforest Restoration in Times of Change

Our Stage 1 report for this four stage project was submitted towards the end of last year, following a big admin and on ground work catch up. We are grateful to the NSW Environmental Trust for recognizing our disaster disruptions and allowing a reporting extension. Gondwana Rainforest Trust has committed substantial additional funding and landholders have also contributed cash and in kind towards a very big project. In our report to the Trust, we documented a massive 46 ha of regeneration works, mainly Camphor and Lantana conversion to rainforest, but also incorporating some disaster repair associated with the worksites. Our bush regeneration contractors, project manager Harry Hackett and landcare volunteers have worked tirelessly.

Many worksites are looking pretty good even in the early stages of the project. We'll let some pics tell parts of the story.

Drilled Camphor forests drop leaves quickly and rainforest responds. But also weeds, so bush regenerators step in for some early stage weed management.

Climate change is delivering many challenges, including fire-impacted rainforest still needing surveillance for shade-tolerant weeds

Landslip site – expert judgement needed to achieve the right balance between the soil-stabilising functions of weeds while minimising competition with emerging natives

This project has been assisted by the New South Wales Government through its Environmental Trust.

It's Toilet Brush time again

Toilet Brushes (Kahili Ginger *Hedychium gardnerianum*) are everywhere and are a very serious weed in Queensland, New Zealand and other Pacific islands.

If you are not going to remove these plants right away, the responsible thing will be to cut the spent flowers before seed develops. Please get expert advice so that removal methods are effective. Excavation can work if all plant parts are removed.

Are our forests haunted? The Ghost Orchid arises

Barbara Stewart

Have no fear, only the most benevolent of spirits inhabit our valleys and a close look at the delicate pink-mauve markings on the white flowers of the Ghost Orchid will quickly charm you. If lucky enough to encounter one, it is puzzling to note the absence of leaves and any green colouring. How can it capture the sun's energy? It is a myco-heterotroph, which gets its energy and nutrients from dead material in the soil by parasitising a fungus.

Blue Knob (Photo John Allen)

The Ghost Orchid *Epipogium roseum* is a widespread species, found as far away as Asia and Africa, and is probably not rare within its range. It is hard to tell as it spends most of its life underground, sending up a flowering spike to 60cm in height during the summer rains. Then the flowers persist for just a few days.

I know of two records for our valleys. At our place, forty years ago, a specimen would arise every year at the same location, until a turkey built its mound on top of it. There is also another record from Cedar Road. But there are doubtless many more coming and going out there and who knows what a band of ghost hunters might find in a rainy summer. Let us know of any finds and perhaps invite neighbours and friends for a viewing.

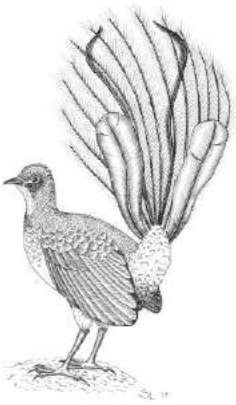
Alstonville (Photo Rodney Falconer)

Lyrebird news

Sandy Gilmore introduces the showing

Lots of locals ventured out of the valley to the Brunswick Picture House for Brunswick Valley Landcare's screening of *The Message of the Lyrebird* - Mark B Pearce's "photographic odyssey into one of the world's most mysterious creatures, the pristine lands that it inhabits, and the native forest friends it imitates"

The subject of the film was the Superb Lyrebird, found in Victoria, NSW, southern Queensland and Tasmania (introduced), but not in our area where the much rarer Albert's Lyrebird is found. So the organisers arranged for Sandy Gilmore, from Goonengerry, to present some background and findings from his research on our own Albert's Lyrebird. Viewers found the local perspective and contrasts between the two branches of this ancient evolutionary lineage invaluable as the showing unfolded.



Albert's Lyrebird
Suzi Lechner

Sandy explained:

- Lyrebirds are an ancient group among the songbirds, a major radiation of birds thought to have originated in early Australia/New Zealand 50 million years ago.
- A distinctive feature of the lyrebirds is the anatomy of their syrinx which although "primitive" in the lyrebirds, is capable of an extraordinary variety of sounds including the very accurate imitation of other species, plus industrial noises.

Some points about Albert's Lyrebird ecology, life history and conservation status:

- They have an interesting mating system called a dispersed lek which is where males call and display from often visited platforms to attract females to mate.
- The females only lay one egg and choose amongst a sample of males as to who becomes the father of her offspring.
- The male takes no active role in bringing up the young and the female feeds and cares for the young for most of a year until the following breeding season.
- Albert's Lyrebird spends much time on the ground and does short flights up to roost in trees but doesn't fly much. Typically they do multiple leaps up to their nest on a rock ledge or tree.
- A small patchy population indicates a species at risk of further decline. This motivated the research project to quantify the habitat and total population of the Albert's Lyrebird.

Sandy has information on distribution, population densities and habitat variation from a study of Albert's Lyrebird distributional ecology conducted In NE NSW in the mid 1990's. With the help of the Albert's Lyrebird Conservancy the project is currently being extended into southern Qld.

TREE OF THE MONTH: VELVET LAUREL

Graham Watson

Velvet Laurel (*Endiandra hayesii*) is normally encountered as a small, often crooked tree and it is found just in our region from Richmond River remnant rainforest patches to the Gold Coast. But, in the limited zone of the gorges from Minyon Falls around to Huonbrook, this species grows to huge proportions reaching the canopy at heights of 35 metres with a stem diameter of 60 cm. This dramatic localised dimorphism may ultimately lead to the two forms being separated, perhaps into subspecies.

Velvet Laurel is a member of the laurel Family Lauraceæ, becoming a relatively recent addition to the Family when it was formally described in 1970. The species was named by the Dutch expert on Southeast Asian laurels, Dr André Kostermans (1906-1994), and honours the late Harold Hayes from Kyogle who Alex Floyd (1926-2022) described as the finest rainforest field botanist he ever knew. Although, in his modesty, Alex Floyd became the finest rainforest field botanist that we have ever seen in this country.

Velvet laurel is listed as rare and vulnerable in both NSW and Federal legislation. While it is undoubtedly rare, without access to its leaves the trunk characteristics are remarkably unhelpful for on-the-spot identification. So, it may have been under-recorded. The bark is a non-descript grey-brown with all of smooth, rough, scaly and finely fissured patches. Other growth scars on the trunk are characteristic of many other rainforest trees. The only way I have managed to close in on an identification from the

Stem of a 30 metre Velvet Laurel tree in the rainforest gloom at Huonbrook. The trunk base is developing several buttresses.

trunk appearance is the presence of distinctive orange edges to young buttresses (see example photo below).

The base of a 60 year old Velvet Laurel showing its young buttresses. Note the distinctive orange colour of the buttress edges.

It is the leaves that ensure an immediate identification of Velvet Laurel. They are alternatively arranged on the branchlets and typically are egg-shaped about 10-12 cm long. The leaves are slightly glossy on the upper surface. They have small brown hairs on both leaf surfaces but much more densely occurring on the lower surface. Sometimes you will find tiny caramel-coloured domatia in the axils of the lateral veins and the main mid-vein. There are three other local laurels which have hairy leaves. Velvet laurel is distinct from the Southern Brown Bolly Gum (*Litsea australis*) on the basis of leaf shape and it is distinct from both Hairy Walnut (*Endiandra pubens*) and Northern Rose Walnut (*Endiandra muelleri* subsp. *muelleri*) by the presence of more, closely-spaced main lateral veins.

The fruit, if you find one, is distinctly elongated almost like a mini Tamarillo but with a tougher skin and about 3 cm long. They ripen in the autumn to a dark purple or black colour.

This species is not usually available from nurseries but if you maintain a patch of rainforest in our area then the chances are that one will germinate there for you all by itself!

The hairy undersurface of the leaves. Note the closer spacing of lateral veins than occurs in the leaves of other hairy-leaved laurels.

Annual General Meeting

Our AGM was held on 22 November 2023, and resulted in the election of office-bearers as follows:

President: Barbara Stewart
Vice President: David Oliver
Secretary: Mary Fox
Treasurer: Robyn Berrington
Public Officer: Robyn Berrington
Committee members: John Wynberg (assistant treasurer and pest animal officer), Graham Watson, Valley Lipcer

Newsletter editor: Please be in touch if you've always wanted to be a newsletter editor!

Thankfully, most of our ongoing projects have been finalized or almost so, providing some breathing space for consolidation.

Completed or nearly so are:
NSW Local Land Services Bushfire and Drought Support - Giant Devil's Fig Management
NSW Local Land Services – Flood dispersed weeds.
Environment Restoration Fund (Federal Government) Threatened Species Strategy Action Plan – Priority Species program - Recovery of the Border Ranges Lined Fern.

The Glossy Black Cockatoo Tree Hollows and habitat mapping projects have now been transferred to Brunswick Valley Landcare. Thanks to Margie Hall for driving and managing these projects and Prof. Sarah Legge for her expertise and we wish them and the Glossies all the best.

We have one major project running.
Rainforest Restoration in Times of Change (NSW Environmental Trust) – see page 7

A productive year despite long term disaster recovery. We look forward to more settled conditions and continuing achievement for our special environment and community. Big thanks to everyone who has supported our group. Special mention of present and outgoing office bearers.

Contact us: Barbara 66840378, Mary 0421701949 Email wilsonscreeklandcare@yahoo.com.au

WCHL is on Facebook

facebook

To become a member of our Facebook group, go into Facebook, search for Wilsons Creek Huonbrook Landcare and request to join. Any member can approve you. Alternatively, you can go to the URL below: http:/www.facebook.com/groups/551428364915585/?ref=ts Once accepted as a member, feel free to post photos and stories, ask and answer questions and check in regularly.