

"WCHL News" will be emailed out as usual and is also available from our Facebook group page and on the Brunswick Valley Landcare website. To be sure you don't miss out on events and news from a broader area, please refer to the Byron Shire Landcare and Dunecare newsletter. To subscribe or to look up current and archived editions, please go to http://brunswickvalleylandcare.org.au/newsletters/

Wilsons Creek Huonbrook Landcare News

As we 'go to press', the State of the Environment report has just come out and most readers will have seen the recent politically-based headlines as this report was actually released in December prior to the recent federal election.

Australia's environment is in a "poor and deteriorating state", according to the latest State of the Environment Report Despite the grim assessment, the report did find hope was not lost. To quote the report: "Immediate action with innovative management and collaboration can turn things around".

There's a link to the report in our project updates section but here's a couple of salient points:

- There are now more non-native plant species in Australia than there were native ones
- Of the 450 gigalitres of water for the environment promised under the Murray-Darling Basin plan, only 2 gigalitres have been delivered
- The number of species listed as threatened has increased by 8 per cent since 2016
- Up to 78 per cent of Australia's coastal saltmarshes have been lost since European colonisation and they continue to deteriorate
- Australia has lost more mammal species than any other continent

Let's hope our new Minister for the Environment, Tanya Plibersek can do some serious work in this space. She is quoted as saying; "It really does give us a wake-up call as a nation. It's really important that people ... take action based on the alarming warning bells that are ringing," she said.

Let us hope all that the land management projects, big and small being conducted in our beautiful valley which have of course been made even more difficult by the February and March rains, ensuing landslides and riparian damage can continue to flourish as we all do our bit to 'Think Global and Act Local'!



Our ongoing and exciting Glossy Black-Cockatoo project has yielded a number of fascinating visitors! Here's a Lewin's honeyeater in full flight hovering near one of the high-mounted nest boxes and caught on the monitoring camera



Many in the valley have heard of the Richmond birdwing butterfly but haven't had the pleasure of seeing one on their property. This one was spotted and quickly ' snapped' by a local bush regenerator working on a valley property

Wilsons Creek Huonbrook Landcare's projects

Our very special environment

Landcare projects have been on hold or barely ticking along since the floods. But as life veers towards some semblance of normal, it's time to place our environment at the forefront of our consciousness. It has all taken on another level of importance with the recent release of the <u>State of the Environment Report</u>

We are privileged to live in an area with very high biodiversity values, surrounded by three National Parks. It is now important to consider our place in the Richmond catchment. What sort of water quality and what sort of weed load is sent downstream to our immediate neighbours? And those further afield, as far away as Lismore, Coraki and Ballina, before our water finds its way to the ocean. The formation of the <u>Richmond Riverkeepers</u> will steer a new path towards healing our long neglected river system. Much useful information about landslips and riparian zones has been made available by experts in locally relevant workshops and can be accessed <u>online</u>.



Creek section in need of revegetation with White Ginger and Black Taro well established

New project - Flood dispersed weeds

In addition to our ongoing projects, we have received funding of \$20,000 from Local Land Services Regional Land Partnerships Program for a project entitled "Rapid response to flood dispersed weeds".

Floods have spread many pieces of weeds such as Kahili Ginger (toilet brush) White Ginger, Black Taro and Bana Grass right to the newly defined edge of the flood zone, and now is ideal timing to remove them and minimise future weed infestations. Ginger rhizomes (looking similar to the familiar pieces of edible ginger), Taro corms and chunks of Bana grass will have initially been quite difficult to detect, but now they are sprouting away and easy to recognise. They can be picked up and bagged before roots develop to anchor them in place.

While there has been massive damage to our creeks, there are many areas where well-adapted native vegetation is in place. It is recovering and will regenerate during the next growing season, so long as weed competition is removed.

The project will need community cooperation and assistance. We will need landholder permissions to work on the creek banks and all the volunteer effort we can muster to complement the work of our contractors.

There will be a great opportunities to work alongside specialist bush regenerators, who can answer any questions, identify both weeds and natives and set our community up for effective follow up. Besides, isn't wandering our beautiful creeks banks one of the joys of living in our valleys? Absolutely no pressure is intended where so many remain at the pointy end of flood recovery, but those who can help will be welcomed and are sorely needed. In later stages, we will be aiming to manage the existing established weed patches.

"This project has been assisted by the NSW Government through Local Land Services"



Local Land Services team using a drone to capture images of landslip damage to a regenerated site.





NSW Environmental Trust

We have other projects which have been on hold during disaster recovery. Three projects funded by the NSW Environmental Trust (ET) are included. Recently, Michael Dine from ET visited from Sydney and we showed him around Goonengerry, Upper Coopers Creek, Wilsons Creek, Koonyum Range and Huonbrook (his first visit to our area). He was very impressed by past achievements, horrified by the scale of recent damage and beyond helpful in committing to facilitate changes to schedules and budgets.

"These projects have been assisted by the NSW Government through its Environmental Trust."



Lawyer vine stories

The plant

Lawyer vine or wait-a-while (*Calamus muelleri*) is a climbing palm that grows vigorously in rainforest gaps and edges, climbing trees up to 20m high. It is well known for its fierce spines, which assist its climbing. The leaf margins and flowering/fruiting stems are also prickly. The most annoying, and often painful, encounters involve a modified flowering stem, which have no flowers but are armed with dozens of strong, curved barbs. The barbs latch on to human clothing and sometimes skin, stopping us in our tracks like a bush lawyer and encouraging us to wait-a-while.



Lawyer vine is found only in north east NSW and south east Queensland, but closely related species occur in tropical Australia, Africa and Asia.

The botanist

My lawyer vine eye wounds included long sheath thorns into the eyeball collected while walking (and slipping and falling) alone on steep ground late in the day (fading light) still a kilometre or so from the vehicle. The tear ducts went into overdrive in both the wounded and unwounded eyes, and the initial prognosis looked like a long uncomfortable night in the forest with no sight. After what seemed like an hour (likely 15 minutes) the right good eye settled down a bit and I could actually see with one eye again. I walked out just on dark using one eye (not easy), called in on one of the houses on the way out and called the doctor, and then drove into Mullumbimby. The doc flooded the eye with that yellow dye and then proceeded to extract the thorns. All the while describing the fact that this was one of the best lacerated eyeballs he had ever seen and that the thorns had missed everything of importance. Recovery, as the doc suggested it would be, was rapid (an evolutionary adaptation to promote survival) and Calamus remains one of my favourite plants.



The bushwalker

Saturday, January 15: I'm in a tangle of calamus canes that are running in every direction. I use secateurs to cut one that is right across my eyeline. One side snaps back so hard that I have no chance of closing my eyelid. It feels like a finger has been flicked into my eyeball with maximum ferocity. I'm stunned for a while which halts our off track hike in Nightcap. Should I go straight to Lismore hospital? It just feels like a scratch so I don't seek help until Monday. A tiny spike from the cane stem has just penetrated through the cornea and into the fluid inside the eyeball.

It is removed in theatre, the surgeon digging in enough to remove all the fragments and hoping not to permanently scar the cornea. A big contact lens is placed in the eye to stop the fluid leaking out. I can only make out light and shade, like looking through a frosted window.

On Wednesday I have the contact lens removed and I have NO vision. "We'll do everything we can to restore your vision. A fungus has grown inside your eyeball and is blocking your vision".

Five months later and my vision has returned perfectly, the scar on the cornea is outside the line of focus but there is still a tiny fungus inside. I am using only 4 drops a day now, down from 18 at the beginning.

The artist

I lived in Wanganui from 1975 to 1979 and used to make baskets from lawyer vine canes for sale at the Channon market.

The Wanganui rainforests were State Forests at the time, much later being transferred to National Park. To collect lawyer vine canes, I needed a permit and made the trip to the Forestry Commission office in Murwillumbah every year to obtain one.

With my dog Paris, I would drive the old green FC Holden ute as far down the gorge as possible. Excellent canes grew along the slopes of the gorge and I would cut them at the base and pull down from the tree tops. Then I would roll them into coils and load into the ute. Back home, the canes were soaked in the bath to keep them pliable.





The plants were very spiny, but I wore gloves of course and don't remember ever hurting myself. Safety glasses are a good plan around lawyer vine. Try Bunnings or Specsavers

Weed Management



'Dead' lantana stick used to mark a new plant in the ground takes root and goes again!



A Giant Devils Fig pulled out during hand weeding and left on the ground puts down roots when stem is in contact with wet ground!

The Platypus, a true Valley Local!

Chris Brooks

Pictured is one the valley treasures. Remarkably within a few weeks after the flood event they reappeared much to our joy.

Especially given the turmoil of the recent flood in the creek and the amount of debris including the vehicles that were washed along the creek.

Our platypi number around five that frequent the deeper water hole along our section of Wilsons Creek.

Usually only one or two are visible at a time with possibly the others moving up and down their creek territory. They need to be protected as part of the natural assets we are fortunate to enjoy in our beautiful valley.

We are fortunate to see them often daily when they are usually foraging for their food but occasionally see them on a rock having a scratch.



Like so many Australian species their numbers are declining so we need to ensure our precious waterways are kept clean with sensible water use so they continue to enjoy their part of our world.

Seedy workshop

Connect. Collect. Grow.

Our recent workshop was with Michelle Chapman, co-author of "Australian Rainforest Seeds: a guide to collecting, processing and propagation".

We began with 'seed dating' where Michelle had us in stitches as a single (seed) with a red fleshy coating just waiting for someone to pick her up and take her to a new place for her very fertile seed to germinate. She wanted to be fermented, softened, agitated and de-pulped. The Red Apple [*Acmena ingens*] was so enticing! We then took turns acting like a seed who wanted to be picked up....





Yes, we have seeds! Michelle explaining and Tulipwood [*Harpullia pendula*] pods make a wonderful popping sound but not all the pods will contain seed.



Tulipwood seeds [and a stray Native Ginger!]



Firewheel Tree [Stenocarpus sinuatus] capsules, but sadly the winged seeds, called Samara, have already flown away

We had a full table of local specimens of seeds to enjoy and to take home and try our hands at macerating, crushing, boiling, scarifying among other techniques to bring a seed out of dormancy. There was some theory about this, some morning tea and then a walk which opened my eyes to the many native seeds in a Mullum walk.



Checking viability ... Sandpaper Fig [Ficus coronata] no seeds yet



Attempting a Pandanus [Pandanus tectorius] harvest



Michelle with a White Apple [Endiandra virens] seed

Interested in further details on Michelle's seed mapping?

SEEDTREE MAPS provides a mapping service that informs clients about the native trees on their property and enables them to participate in community-based reforestation and conservation and potentially benefit financially at the same time. Specialising in subtropical rainforest species, **SEEDTREE MAPS** is at the forefront of using technology to popularise tree identification, seed collecting and community-based restoration of the critically endangered 'Lowland Rainforest of Subtropical Australia' in the Northern Rivers. Based on the understanding that many subtropical rainforest seeds are recalcitrant and therefore may not survive the drying and/or freezing processes required to be stored in the Australian Plantbank's Seedbank, **SEEDTREE MAPS'** main aim is to support a decentralised seed storage, seedling storage and living collection of a diverse suite of quality seed-producing species on private property.

The Experience

Botanists and mapping consultants take clients on a **SEEDTREE TOUR** of their property, mapping GPS locations of quality seed-producing trees. During the tour, an overview of where the property sits in the context of the landscape is given, ecological questions are answered, and a clear understanding of the responsibilities and legalities of sustainable seed collecting is provided. Currently, Nan Nicholson is resident botanist and Michelle Chapman is GIS mapping consultant.

The Map

Clients then receive an interactive digital **SEEDTREE MAP** that can be opened on any device that provides accurate, well-researched information about their trees, simply by clicking on the tree icon. Information can be customised to client interests and will include scientific and common names, conservation status, distinguishing ID features and two images. Optional information may include botanical name derivations, fruiting months, fruit and seed features and simple seed collecting instructions.

Clients can use the **SEEDTREE MAP** to connect with their trees, enjoy showing their friends the trees on their property, engage their children with nature, collect seeds to grow their own trees for restoration, harvest bush tucker foods, give or sell the seeds to nurseries, or sell trees to the public.



'Before and Afters'

This has been a new segment in our last two newsletters that have generated positive comments, however, with the massive changes to our valley landscape over the last few month, we'll pause our 'Before and After' segment to show some post landslip and riparian recovery photos in our next edition. Stay posted and please send through any photos you may have for publication.

If you have some great before and after shots and a timeframe, please send them through to <u>wilsonscreeklandcare@yahoo.com.au</u> No names, no addresses!

Flood survival

Could the threatened Thorny Pea *Pedleya acanthoclada*, one of the special plants found on our creek banks, have survived the unimaginable rushing water, bouncing boulders and debris dumps of our recent floods? There was every reason for concern, but a landcarer reports that the brave little shrubs are surviving and thriving at many of the known locations downstream from Blackbean Road. This is excellent news. We hope that the species also survives in Wanganui, including the Gorge where it has been recorded in a number of places. Observations would be much appreciated.

It is a robust little plant and obviously well adapted to riparian conditions.



Thorny Pea at Wilsons Creek (Photo Julie Gardner)

Monitoring cameras

A number of valley land managers have placed wildlife monitoring cameras on their properties and these can produce great images (note Lewin's honeyeater on page 1) however these cameras can also show pest species around in the valley. 4 dingoes can be seen in this one image below!



A new 2021 study led by UNSW shows almost all wild canines in Australia are genetically more than half dingo



Likewise, a lurking fox in the foreground! More on wildlife cameras in our next edition.

Report pest sightings !

Are you seeing foxes, dogs or even feral deer ?

There have been recent sightings of feral deer in Byron shire. Deer have been sighted in the north of the shire including Crabbes Creek, Myocum and recently an unconfirmed sighting in Wanganui. In order to limit further spread of feral deer into new areas and reduce impacts of large deer populations on primary production, communities, and the environment report any sightings on feral scan.

https://www.feralscan.org.au

DeerScan is a free resource that anyone can use to identify and record sightings of deer, report the damage (or problems) they cause, and record control actions. It has been developed to address the growing problem with free-ranging populations of deer in Australia, and it is intended to assist landholders, communities, government, industry and pest controllers to use data on deer to support strategic pest management. Deer are increasingly encroaching on urban and residential settings, and they are causing significant human-wildlife conflicts. Data entered into DeerScan can be used to identify strategies for cost-effective deer control.



After the floods.

Julie Gardner

Many have been - and still are - dealing with the floods which have caused so much loss and have altered the landscape.

I am writing about a particular loss - the loss of the swing bridge which had conveyed people to the property opposite the school for three decades.

This bridge was built by the landowner and his father in 1989 with design assistance from Peter O'Reilly who created the rainforest canopy walk at O'Reilly's Rainforest Retreat on the Lamington Plateau. Plans were drawn up by a local engineer, submitted to and passed by Byron Shire Council.



An early photo of the swing bridge with young valley resident (who is now a 34 year old)!

During the build of the bridge a local old-timer – one of the original dairy farmers in the valley who could remember travelling Wilsons Creek Road by horse and cart- came by and advised raising it somewhat – having witnessed the magnitude of floods in Wilsons Creek over many years. The advice was duly taken – and the bridge survived floods for three decades.

I remember the opening ceremony when the bridge was completed - coloured flags and music and lots of friends and relatives celebrating the achievement. Vogue magazine did a fashion photo shoot on the bridge a couple of years later. People Magazine also featured it.

The swing bridge has provided flood access to numerous people on the "other" side of the creek for years– for those who always had compelling reasons to get across the flooded creek – work, flights

to catch, meetings to attend , for parents anxious to pick up their children from school -or if food and tobacco was getting low.

Cars could be put on the road side of the creek and residents could still "get out" to continue their lives and work away from the valley.

The bridge was used in flood times by Telstra and Essential Energy to reinstate telephone and electricity lines as these outages often occurred during weather events. It also gave access to an important riparian Landcare site which over the years has been transformed from a kikuyu cow paddock to diverse rainforest which is home to koalas, wallabies and numerous species of native birds and reptiles.

Sadly, that convenience is no more. The 2022 flood was so much higher than anyone anticipated and the swing bridge was ripped from its moorings. There are no plans to replace it.

Not only has a valley icon disappeared, but the infrastructure of the property now has to be rethought.

In this valley we have become very focussed on the critical nature of access to our homes. We are learning about landslips and the inherent instability of the landscape, not only revealed in recent months, but over many years. We are also learning about the ways to best protect our landscape through the knowledge of bush regenerators and other experts whose intimate observations of the landscape can help to guide us towards better protection of our environment and of natural and human-built assets.



A later image showing the swing bridge that many in the valley will sorely miss.

Tree of the Month RED CARABEEN

Graham Watson

Red Carabeen (*Karrabina benthamiana*) is one of our finest local rainforest trees. This tree grows to an impressive 35 metres high with a trunk diameter of well over a metre. The 'red' in the common name refers to the attractive dark pink heartwood and 'carabeen' is the anglicisation of the indigenous name caribin.

The species was first botanically named Geissois benthamiana in 1851, by he who named almost everything, the great Victorian botanist Ferdinand von Mueller (1825-1896) but who, in 1866, changed the specific epithet to benthamii. The genus Geissois had been created by the French botanist Jacques Labillardière (1755-1834) in 1825. Labillardière is remembered for writing the first general description of the flora of Australia in 1816. The specific epithet honoured George Bentham (1800-1884) who was described by the eminent Queensland botanist, F.M. Bailey (1827-1915), as the greatest botanist of the nineteenth century.

It was not until 2013 that English botanist and world authority on the Family Cunoniaceæ, Helen Hopkins, recognised the floristic differences between Australian members of the genus and those occurring throughout the Pacific. She moved the Australian species to the new genus *Karrabina* and gave Red Carabeen its new name.

Red Carabeen is essentially a New South Wales tree but is found as far north as Mt Tamborine. It is reasonably widespread from the Taree hinterland in both subtropical and



This large Red Carabeen tree at Huonbrook towers over young regenerating rainforest

warm temperate rainforest. It reaches its most prolific expression in the Border Ranges where the brilliant pink of its new growth lights up ridges and hillsides. It is a frequently encountered canopy species in our valleys as well. The tree has a dark brownish-grey and smoothish trunk and can sometimes be identified by the presence of rows of horizontal wrinkles. As the tree approaches old age, it can develop very prominent buttresses a bit similar to those that we see on the Yellow Carabeen (*Sloanea woollsii*).



arge buttresses just beginning on this 100 yea old specimen at Huonbrook

Another large tree at Huonbrook showing rows of horizontal wrinkles on part of the trunk

When in flower in early summer, this tree provides a spectacular display of creamy-yellow racemes, like small macadamia flowers. Tell-tale trunk and flower characteristics aside, it is easiest to identify this tree by examining the foliage. The leaves are opposite to each other on stalks of up to 30mm in length. At the end of the stalk there are three leaflets on shorter stalklets. The leaflets are bright green to begin with but gradually darken as they age, they have toothed margins and are 100-150 mm long. Finally, the key feature that separates this species from all others is the presence of four reinform (kidney-shaped) toothed stipules at the point where the opposite leaf stalks join the branchlet. The stipules can be up to 20 mm across.

The Red Carabeen is very handsome but very slow-growing tree so if you plan to add the species to a rainforest tree plot, start as soon as possible!



Red Carabeen leaves showing the cluster of four stipules at the point where the leaf stalks meet.

Contact us: Barbara 66840378, Julie 66840242 Email wilsonscreeklandcare@yahoo.com.au

WCHL is on 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.