



“WCHL News” will be mailed 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.

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.

<http://brunswickvalleylandcare.org.au/newsletters/> to subscribe or to look up current and archived editions.

Landcare activity update

(Barbara Stewart)

Fires, floods and now a pandemic have left us all reeling, but our group has been continuing with existing projects and working towards new ones. Landcare is now more important than ever for our natural environment and for the humans who benefit from open air work and recreational spaces. How lucky we are to live here.

NSW Environmental Trust projects

Works are starting on new sites, or continuing, on properties involved in our NSW Environmental Trust-funded Bush Connect and Linkages in the Headwaters projects. Field days and workshops have unfortunately had to be postponed for the moment, but please look out for more details.



This project has been assisted by the NSW Government through its Environmental Trust.

Our bush regenerators have been trialling new techniques for initial lantana treatment as part of the process for converting lantana to subtropical rainforest. Please don't try this at home without some careful consideration! With the right machinery in the right place in an



appropriate season, a layer of fine lantana leaf litter and mulch will be formed over the native seed-containing surface soil layer. Light, warmth, moisture and soil disturbance will stimulate seed germination to produce dense regeneration of rainforest species such as Bleeding Heart, White Cedar, Celerywood and Pencil Cedar. Scraping the soil surface with a tractor blade will remove the critical

seed-containing layers. It is worth arranging some expert oversight as, if anything goes wrong, the result might be a big patch of unwanted weeds.

The project has provided a great opportunity to talk about lantana management more generally. Landcarers and bush regenerators recommend caution when clearing lantana, as we observe that many new residents move in, don't like the look of lantana, and launch into large-scale clearing. Clearing is fine if the next move is to plant an orchard or create some mown/slashed permanent open space. But to replace with natives, planting is expensive and resource-intensive to maintain. Sometimes, it all gets too hard or land changes ownership and weeds overtake. It is cheaper and less work to use bush regen techniques, possibly including machinery where terrain and access make it possible, to convert lantana to rainforest regrowth. Direct seeding and planting for enrichment can be considered later, if necessary.

Lantana is actually great holding pattern vegetation. It will often prevent more problematic weeds, such as privet, Giant Devils Fig and an array of much uglier / unpleasant weeds, from taking over. Native seeds will keep accumulating in the soil, especially if there are bird perch trees scattered through. Leave it there until the grand plan is ready for implementation.

The pros and cons of lantana have now been complicated by our recent bushfire observations. Around our valleys, lantana has sometimes burnt and carried fire into more valuable native vegetation and towards human spaces, but there are many instances of green lantana slowing or stopping a slow-moving fire. To clear or not to clear has become a complex question. A good solution in many circumstances may be to plan, clear appropriately and convert to low flammability high biodiversity rainforest.

Bushfire recovery



Our committee has discussed ways of supporting landholders whose native vegetation has been fire damaged, collected information, and sought out possible bushfire relief funding sources. We thank Landcare Australia for a Bushfire Recovery Grant of \$15,000. Already, landholders are appreciating some pointers from botanists and bush regenerators as they watch their burnt forests respond to recent rains. Rampant vine growth climbing trees and smothering the ground layer is currently causing concern. At a number of locations, the native Slender Grape is the main offender. The funding will provide some bush regeneration help with management.



The native Slender Grape (*Cayratia clematidea*) smothers regeneration on a burnt rainforest edge at Upper Wilsons Creek. Photo Ritamba Allen

Further feedback from the valley is very welcome –tell us about bushfire related weed and pest animal issues and all the positive native regeneration that you observe.

Fire in the Gondwanan Rainforest

(Paul Hudson)

Dr Rob Kooyman's talk in January informed an overflowing crowd about the sad losses of critically important biodiversity in our local National Parks. A side achievement – we collected about \$350 for the Wilsons Creek Hall.

Rob talked about the impacts and behaviour of the fires in different areas, considering various human disturbance and forest make-up. The fires responded quite uniquely in areas which have been previously logged or cleared etc, and which had different ranges of species and landscape. There is an opportunity now is to observe the country's responses, and learn ways to support strategies for fuel-reduction burning and forest management. National Parks are willing to learn, and are modifying behaviours, to understand and utilise better-informed preparation strategies. Such a diverse forest landscape in Australia means that a one-size-fits-all strategy doesn't apply. Adequate and well-directed funding is needed and would help to support communities and authorities to be as best prepared as possible in the future.

Rob finished his talk on a positive note by showing us a couple pictures of seemingly burn't out landscapes with signs of new life, and by reminding us that 'in the midst of fire, there is hope'.

If you missed Rob's talk, or would like to catch-up and refresh your memory, most of his talk is on you tube, divided into 4 parts:

An intro

www.youtube.com/watch?v=bX2960dNtx0

Part 1

www.youtube.com/watch?v=8OEaShmUnfc

It is easy to follow onto the next 3 parts.

Madeira Vine

We recently reported on a release of Madeira Vine beetle for biological control, and carried out the first monitoring inspection in late January, in hot dry conditions. Unfortunately, no signs of infestation were evident, but these can be long term endeavours. We will keep monitoring and consider more releases.

Black Taro

We continue following up various leads for support and coordination in a quest to remove Black Taro from Wilsons Creek, and we have detected and removed a small clump that appeared in Coopers Creek. This patch had the potential to infest Wanganui Gorge. Huonbrook and Wanganui people are asked to be vigilant and keep an eye out for the source of this newly observed clump.

Coral Tree

Follow up works on the remaining Coral Trees were carried out during January. Continuing vigilance is the key to, one day soon (?) declaring this project a total success.

More to come

More projects are in the pipeline following our January committee meeting. We are writing new funding applications and always welcome suggestions, doubly so if you can offer to help make them work. Stay tuned.

Drought, fire, floods and creeks



Life in our creeks will have taken a battering, first struggling to survive in the meagre flows of the drought period, then subject to raging floodwaters (possibly with runoff from burnt areas in the catchment).

We all feel particular affection for our platypus. Large healthy populations occupy our creeks in good years, but it remains to be seen how they have survived severe flooding in likely weakened condition.

Excellent guidelines for platypus management come from the Platypus Conservancy <https://platypus.asn.au/management-guidelines/>. Ecology and conservation are also covered, along with information about the Australian Water Rat or Rakali, another local inhabitant.

We can't directly control drought, fire and floods, but there are many other ways to support our platypus populations and their habitat.

- Platypus often drown in illegal yabby nets, fish traps or on unattended lines. Find out if you can fish legally and, if trapping is legal (probably not), check what designs are safe for non-target animals.
- Pumping from the creek? Have your inlets checked for platypus safety.

- Like the marine turtles we often hear about, platypus can be caught up in floating plastic, ropes and cables and fishing line. We don't usually have a lot of rubbish in our creeks, but it is really important to keep the flood zone clear.
- Platypus can go wandering looking for water sources, like dams that are close to the creek. Animals have actually been run over on roads in our valleys. Another reason to drive carefully.
- Water quality is an obvious concern, and improvements could involve stock exclusion, bank stabilisation and shading with riparian vegetation (remove weeds in stages and replace with natives, plant or encourage natural regeneration on wide strips).
- Logs and woody debris in the water improve habitat for platypus, fish and other aquatic organisms. Logs may have been moved around somewhat in recent floodwaters, so leave them where they are unless they are really in the wrong place.
- Platypus burrows can be crushed if machinery or vehicles operate on creek banks. Check before excavating (approvals probably required and may not be forthcoming) and avoid driving on banks. It is easy to imagine that vehicles might be creating new accesses to pump water onto trucks or farm vehicles for watering or fire fighting purposes.

How can we tell whether our platypus population is contracting or expanding? They are notoriously hard to observe, so counting them is not a simple task. We have been investigating a method for locating them underwater by detecting acoustic signals. Apparently platypus make a "quack" sound underwater - rather appropriate for an animal with a duck bill! Quite simple apparatus is used, and the younger members of the family can readily become involved in platypus detecting projects. More info soon.

After (or between) floods, it is really worth checking our creek banks (so long as flow has dropped to a safe level). Look out for rubbish, but especially weeds washed from upstream. Collect them up before they take root to save headaches for later on. Water dispersed weeds include Coral Tree, Madeira Vine, exotic gingers, Black Taro and Barner Grass. Dispose of carefully. There are lots of resources (web and human) if you need help with identification.

A couple of rules to live by, for our creeks' sakes.

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).

Tree of the Month

(Dr Graham Watson)

Bush regeneration work being undertaken by Wilsons Creek and Huonbrook Landcare across several properties, under funding awarded by The Environmental Trust, has been rewarded with the discovery of Southern Fontainea (*Fontainea australis*) on one of the properties in Huonbrook.

Southern *Fontainea* was only formally described as recently as 1985 and was then only known from near Limpinwood Nature Reserve in the upper Tweed valley. Since then it has been found in the upper Tallebudgera valley in Queensland, a few more records from the upper Tweed, a few locations around Burringbar and also in Goonengerry National Park. It is still a very rare tree.

This latest finding is believed to be the first for Huonbrook. But none of us is surprised as Huonbrook has been turning up exciting finds of rare species for many years – the valley is an absolute botanical treasure trove!

Southern *Fontainea* is a rare tree and has a conservation class of Vulnerable in both NSW and Qld. It is normally found at elevations below 300m in subtropical rainforest on basaltic alluvial soils. These requirements describe the Coopers Creek valley in Huonbrook and Wanganui.

Picture below: Tree architecture of *Fontainea australis* at Huonbrook



It is described in the literature as a shrub or small tree to 5 metres tall however the specimen at Huonbrook is at least 7 metres tall. For those interested in hunting for this species on their land, the tree has a smooth dark grey trunk with a conical crown. The leaves are arranged alternately on the branchlet, glossy on both surfaces, ranging from 6 to 12 cm long and 2 to 3.5 cm wide. Their shape is roughly elliptic but they have a long leaf tip and a narrow wedge shape at the leaf base. Some of the leaves have a distinctly wavy margin. The key distinguishing feature of the leaves is the presence of two flattish, oval glands on the margin of the underside of the leaf about 20 mm from the base of the leaf. The leaf stalk is between 5 and 21 mm long, swollen at both ends, somewhat channelled and has a bend just before its

attachment to the leaf. The tree is dioecious, that is, it has separate male and female flowers. The small white flowers appear in December to January and the fruit matures from April to July. The fruit is a red fleshy ovate shaped capsule about 3 cm long and 2 cm in diameter with six grooves running from top to bottom.

The remarkable thing about the fruit is the seed. The ovary has three locules but even if all three set seed, one seed grows far faster than the other two eventually crushing the others out of existence. So, if you are lucky enough to find a fruit it will contain only one seed and

that seed will be enclosed in a woody covering called an endocarp. The endocarp is also unusual as it has three prominent sharp ridges running along its length.

It is not known what, if any, animals feed on the fruit, nor is anything known about the viability of the seeds or how they are disseminated. It is presumed that, being a rare tree, it has low fruit production and low seed viability. This new finding will be monitored for the next few years in the hope that we will be able to collect fruit, germinate some seeds and, if permitted by law, distribute some seedlings. Watch this space.



Typical leaf of *Fontainea australis* showing wavy leaf margins and marginal glands



Endocarp showing sharp ridges



Red fruit with surface grooves

Catching toad tadpoles Feb/Mar 2020

(Peter and Margie Hall)

After February's rain we found out plenty about the movement of water on our property and where water lies for an extended period. One area we have called 'the Soak' duly filled and held water until early April. Whilst admiring our new water body, we noticed thousands of toad tadpoles present in the water and knew that we'd be in for a big toad problem if we didn't do something about it.



'The Soak' – an intermittent water body after February 2020 rain

We had heard of bufotabs (tablets made from adult toad toxin) which were being tested by UQ as toad tadpole attractants when placed in a funnel trap. We contacted Peter Ryan from Brunswick Valley Landcare who we knew had some spare bufotabs. Apparently, they'd had little or no success over the summer on a number of trial sites but we gave them a go having made two funnel traps. We trialled the bufotabs and funnel traps over a few days. Here were the results from Day One.

First day; funnel trap (with white bufotab placed inside)

After 2 hours 11AM 25/2



After 7 hours 4PM 25/2



After 24 hours 11am 26/2



Salient points:

- Over the seven days we caught thousands of toad tadpoles
- Placement is vital and catching is difficult with receding water
- There is a significant bi-catch of native tadpoles which are dead in the funnel trap (incidentally, in our main dam where we had a toad tadpole infestation in 2018/19, the first thing that we noticed was dead and floating native tadpoles – due to the native tadpoles eating the cane toad eggs)
- The funnel traps do work without the bufotab although the largest two catches were with bufotabs.

BVL (and now WCHL) are continuing the bufotab program as part of UQ's Cane Toad Challenge. We are going to run the bufotab distribution, monitoring and reporting to UQ. We will let interested parties know when bufotabs are in stock and toad tadpoles are once again spotted.

Time to deal with the Toilet Brushes

(Barbara Stewart)

Flowering is pretty much over for the Toilet Brush plants, and it is important to remove all spent flower heads before they develop the fleshy orange-coated seeds that birds love to spread. Also called Kahili Ginger *Hedychium gardnerianum*, the Toilet Brush plant is one of the worst weeds in the Pacific region and is spreading out of gardens and through our valleys.



Some like to grow plants that look like Toilet Brushes in their gardens, and can do so responsibly only if meticulous about preventing seed development and dispersal – every season, every year. It is a lot of work, so please consider removing the whole plant and replacing with a local native or non-invasive exotic. We have a leaflet setting out removal techniques – email us for a copy.

Watering Stations for Wildlife

Julie Gardner

(With assistance from Margie Hall and Linda Sparrow)

We have been very fortunate this last month to be in receipt of three Wildlife Watering Stations, two of which have already been installed in our valley. Providing water for Koalas is the main focus of the project.

One has been installed at Wanganui, one at Huonbrook and the third will be installed on a property on Koonyum Range. How have we and the local koalas been so fortunate??

Late last year during the catastrophic bushfires the Port Macquarie Koala Hospital put out a call for funds to support wildlife, particularly the koalas whose habitat was being so severely impacted. The Hospital hoped for about \$25,000 but received almost 2 million! It was a GoFundMe record for Australia.

The money was put towards the manufacture of watering stations – solid frames about 2 metres in height holding a 220 litre tank at the top which feeds into a drinking tray (with a cistern arrangement) high up on the frame – and another ‘drinker’ at ground level for ground dwellers such as wallabies and echidnas. The frames are attached to a suitable eucalyptus tree with cables. The tanks need refilling about every 3 weeks, depending on how dry conditions are.

Bangalow Koalas (a registered environmental not-for-profit organization) received a number of the drinking stations through their association with IFAW (International Fund for Animal Welfare). Goonengerry Landcare, who were receiving drinkers, suggested Wilsons Creek Huonbrook Landcare might have suitable sites as well.

We provided possible sites to Linda Sparrow who is the President of Bangalow Koalas and she was able to supply us with three drinking stations. She arrived in the valley with installer-in-chief, Rossco Faithful, of North Coast Bush Regeneration and his son, Seamus, who have been working gratis on this project, to install the watering stations on two of the properties in the space of one morning.

Recent drought and very high summer temperatures, in addition to habitat loss, have all contributed to critical conditions for koala (and other wildlife) survival.

The response to the call for funding for this project demonstrates the concern many people have for the welfare of our wildlife – and this is very heartening.

We are grateful to all who gave, and continue to give, their time and energy to this project. The Water Stations will go some way towards extending our care for the wildlife in our valley.

Have a look at a picture below of one of these great engineering feats!



Water for Wildlife- continued

(Peter and Margie Hall)

Julie Gardner (above) has written about the installation of three of Port Macquarie Koala Hospital's Wildlife Water Stations in Wilsons Creek/Huonbrook/Wanganui area during March. This is exciting news, however they are substantial in size and numbers are very limited. We can all play a role in providing water for wildlife with bowls in our garden etc, however there is another low-cost option which is easy to put together and can also be a welcome addition to garden or bush area.



These can be made from downpipe fittings, filled and attached to a tree or stake. They work on a vacuum principle and the tube can contain up to 10 litres of water. It will slowly refill the bowl at the bottom when an animal drinks. The bottom should contain a couple of rocks so that smaller critters don't get into strife! Costs are approximately \$25 for materials including paint and a bracket. Details on design and setup will be on the Wilsons Creek Huonbrook Landcare Facebook page.

I know that Peter and Margie are happy to help with any queries. Thanks guys!

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.