

General Manager Muses

Bush Regeneration - working with Nature, not against her.

BY PHIL MORAN

Aims:

- 1. Create conditions conducive to Natural Regeneration.
- 2. Create conditions suitable for Native Wildlife.
- 3. Work with nature as much as possible

Regeneration is **not** landscaping or gardening.

The Australian Bush is not **neat**.

Step one

Have a good look around, in all weather conditions...Drought and flood, see the difference in this country between winter and summer. Observe which species grows where, both native and weed species. Remember that man can never do a job as well as nature, so let her guide you as to proper species selection. During this phase try to identify any degrading factors, this could be stock, erosion, fire or weeds.





Same location in both dry & wet seasons

Step two

Before doing anything else, try to halt these degrading factors; or at least slow them. This may mean fencing areas from stock or stopping burning. Fire is a great risk, particularly in our current conditions, most of our area has been inadequately managed for fire. Burning is easy, but it is of little use in revegetation. At all times look after life and property, and take appropriate precautions. A "controlled" burn, can easily get out of hand.

Weeds! Stopping weeds is pretty impossible, controlling them is at least achievable.... sometimes!

The best way to treat weed infestation is to get 'em before they establish. "Early detection and rapid response"

This ties in with the observation phase, observation is an ongoing thing. One of the most attractive attributes of our Australian bush is its dynamic nature. It is constantly changing to suit varying conditions, and in response to these conditions. If you can recognise some "Cats Claw" (Macfadyena unguis-cati) seedlings, and you rip 'em out; you will have saved yourself many hours of pain in the future.



Cats Claw that is completely choking native bush at Somerset

I don't have Camphor laurel *(Cinnamomum camphora)*, or Chinese elm *(Celtis sinensis)* on my place. It is all around, and will quickly establish if I don't keep an eye out.

Remember that some weeds are your ally at a point in time, and not all need to be attacked. These plants will be shading the soil [our most precious resource], creating habitat for wildlife, adding to the mulch layer which encourages worm activity to repair our fragile soil profile, and possibly reducing erosion.

It is a good idea to 'triage' your weeds and decide which one you need to control and which ones you can leave.

The price of weed freedom is eternal vigilance!



Step three - Identify an area to work on.

I strongly advise that individuals don't set their goals too high. It is easy to maintain an area in winter, with low rainfall, but the same area becomes a nightmare in midsummer, when its 35 degrees. Remember as with any "budgeting" you are a resource, and if you lose the will to keep going, your whole project will stop.

It makes good sense to work from the good areas out towards poor areas, as pointed out by the Bradley sisters many years ago.

Underlying this principle is my most basic belief.... Wherever possible work with nature, not against her.

Often weed removal will activate an existing seed bank, either by soil disturbance, or increased light penetration.

Step four - Primary weed clearance.

This is the "breaking the egg" part of the omelette!

If you have big Camphor's, masses of privet [Ligustrum sinense], etc; then it is wise to try controlling them.

In doing so, some collateral damage may be unavoidable. I prefer to take a soft approach if at all possible. Consider killing the large trees in situ, as long as there is not a safety risk to yourself, property or the public.

Advantages include a gradual change of light levels, giving existing vegetation time to adjust. It also retains perch sites, and hollows in the future [until it falls down, when it will provide a home for a different animal]!

With a mature Camphor laurel, it will likely produce between two and three hundred thousand seed per year; so it is important to stop this cycle as soon as possible.



Dead wood left on the ground

Consider leaving any cut wood on site....this is all valuable habitat. True, it will make it difficult to "mow" between rows; but remember Nature is beautiful, not neat!

Hand removal, if possible is always a good place to start. Even cutting vines to stop flowering and hence seed set, to buy you time is an effective strategy

Step five - Natural regeneration or assisted regeneration?

If you are working on a bare paddock, you will need to get some trees up and going as quickly as possible. Pick quick growing, tough species. This often means Wattles [yep, Wattles], Brown Kurrajong (Commersonia bartramia), Alphitonia ssp, Macaranga tanarius, Homalanthus etc. Even Tobacco bush (Solanum mauritianum), which is considered a 'weed' can help you to provide shade and reduce grass competition. They also attract lots of birds who bring seed with them. Consider incorporating some Eucalypts, they are really quick growers.

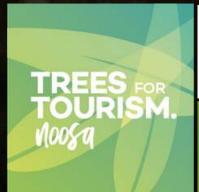


I prefer the wire cages

Step six

Maintenance is vital, particularly for the first few years. I like to make tracks in a work area, and this encourages you to walk through the area and observe. You might be able to just bend down and pull some weeds out when they are small. This also goes to step three – don't try to do more than you can manage. Try to get one area established, and then move onto another.





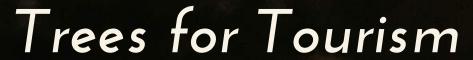












By Rachel Lyons

The Noosa community is amazing and our Tourism and Business community is really stepping up to address a number of environmental issues, ensuring our Tourism events and operations are becoming more sustainable.

Recently in partnership with Tourism Noosa, the 'Trees for Tourism' program commenced and it is already seeing some great contributions flowing in.

The 'Trees for Tourism' program is a way that tourism events and businesses can help protect and improve the local environment of Noosa that both residents and tourists enjoy. Each prospective Event Committee or Tourism Business that is interested in giving back to the environment is presented with several project options to invest in with Noosa Landcare.

Project Options that were presented this year have included:

- The Noosa Koala Habitat Rehabilitation Project within Yurol and Ringtail Forests.
- 2) Revegetation of the Noosa Trails Network Paths.
- Erosion remediation works and the re-establishment of critically endangered riparian rainforest in the Kin Kin Catchment as part of the 'Keeping it in Kin Kin' Project.
- 4) Revegetation of the last remaining areas of Elanda Plains, within the Great Sandy National Park, Cooloola Section.

To date we have seen extraordinary donations from Peppers Noosa Resort and Villas towards the Noosa Koala Habitat Rehabilitation Project.



For every conference guest that attends a function at Peppers Noosa, \$2 is set aside. So far over \$26,848 has been raised...... Amazing!



This year the Noosa Triathlon Multi Sports Festival is contributing \$1 for every participant which will raise over \$12,000. These funds will be put towards the Revegetation of the Noosa Trail Project, more specifically the revegetation of a section of the Noosa Trail at Black Pinch Rd. The works will not only help beautify the trail network but will help this section of the trail be stabilised from erosion and land slip processes and provide much needed shade for walkers.



The Noosa Food and Wine Festival is contributing \$1 for every Festival Village ticket sold. These funds will support the work we are undertaking along the Noosa Trail also.

What cannot be left unsaid however is the significant changes that these events and businesses are undertaking on the sustainability front, in addition to these contributions through the Trees for Tourism projects. The Food and Wine Festival diverted 5.3 tonnes of compostable material away from landfill in 2018 and the triathlon replaced 180,000 plastic cups used by competitors with compostable ones.

In addition to the amazing partnerships happening with the Tourism industry, Noosa Landcare and Noosa Tourism recently acquired three Donation Tap Point devices. These donation devices allow people to make a small set-amount donation to the 'Trees for Tourism' program projects simply by tapping their bank cards as opposed to needing physical money. Two devices are located in the Tourism Information Centre's in Hastings Street, Noosa. The other device is sited in our retail nursery and accompanies us to our Landcare Linkup Workshops, stalls and presentations at festivals.

So feel free to tap away if you see one of these devices... or register for the Noosa Triathlon, indulge in the Noosa Food & Wine Festival Village events or select Peppers Noosa as the venue for your next function!!



Landcare Linkup

UPCOMING LANDCARE LINKUP WORKSHOPS FOR 2019

ECO-CONVERSATIONS





NOOSA KOALAS

16 May 2019, 5-7pm - BOOKED OUT WAITING LIST With Rachel Lyons Noosa Landcare / Wildcare Australia

Noosa and District Landcare have been involved in caring for Koala habitat for a number of years in a number of situations. Join us to hear about our latest project on rebuilding Koala habitat in the Ringtail and Yurol forest reserves. Learn about the challenges koalas face in Noosa.



20 June 2019, 5-7pm

Soils with Nina Saxton and Dave Clark Alternative Herbicide Trial with Steve Ogbourne

Between them, this tag team of soil biota experts will provide you with a greater understanding of soil, what lives in it, why it's important to our pasture and crops and how we can look after it. They will brew up a natural activated tea that will make your soil come alive and show us how to do it simply at home. Whether you have a small veggie patch or acres of pasture these activated composting brews will help.

Steve is a research fellow at USC and has been working in partnership with NDLG to trial alternative chemicals on his farm in Pinbarren. He will be here to chat with us about some of the results and data collected.



THE NEW NATURE

4 July 2019, 5 -7pm (NOTE CHANGE OF DATE) With Tim Low

Tim Low is highly regarded as a biologist and writer. Author of titles such as Feral Future, Where Song Began and The New Nature are just a start to his breadth of knowledge on ecological thought and environmental issues. Please come and join Tim as he chats with us on the re-re-lease of his book the New Nature and listen to his ecological viewpoint.





By Steve Husband

NDRRA - Boundary & Island Revegetation, Kenilworth

Planting was recently completed on two Mary River sites near Kenilworth. The work was carried out for Mary River Catchment Coordinating Committee (MRCCC) as part of a Natural Disaster Relief and Recovery Arrangements Project funded through Burnett Mary Regional Group for NRM. 5846 trees and Lomandras were planted by our Conservation Services Contracting Crew.

In December 2018 extensive engineering works preceded the planting. Bank re-profiling, pile fields, rock armouring and jute-matting of re-profiles banks were designed to prevent further flood erosion and stabilise long stretches of river bank vulnerable to flooding. Landowner Tim Elliott contributed new fencing and site preparation slashing at the Boundary planting site. Posi-track mulching was required at the Island site due to thick weed cover and access problems. Noosa Landcare workers will maintain both sites for the next three years to help the plantings along.

Phyto-remediation planting at Wattle Glen, Swanbank, for Veolia Pty Ltd

April saw the planting of 6450 trees at Wattle Glen, Swanbank. Over two hectares was planted as part of ongoing phytoremediation of a large landfill site on the outskirts of Ipswich.

A team of nine planters with four vehicles, ably led by supervisor Darrin Barden, spent five days on the job, planting by aquaspear. Tree species were specially selected for the site, taking into account local species, growth habit and past performance. Noosa Landcare will return to the site over the next twelve months to maintain the planting.









All done - the Veolia Wattle Glen planting site, April 2019.





By Ilana Kelly

We are almost coming to the end of year one for the Noosa Landcare and Seqwater 'Lake Macdonald Water Supply Catchment Protection Program' and what a great start to this 3 year program to help improve and support a healthy Catchment and water supply for the wider community.

Noosa Landcare and Seqwater have been working with five landholders within the Catchment undertaking a variety of projects to improve water quality and land health on their properties. Over the last 12 months we have planted over 6700 native tube stock, undertaken weed control of the invasive Cat's Claw Creeper Vine and installed riparian fencing and livestock water troughs.

The key impact to water quality we identified across these project sites included:

- The direct access of livestock (i.e. horses and cattle) into waterways and dams for drinking. This can degrade dam and stream bank vegetation, cause erosion and livestock defecate directly into water.
- Soil erosion due to the lack of stabilising vegetation along waterways, & degradation of waterway vegetation by the Cat's Claw Creeper Vine.

In undertaking these projects we have contributed to the improvement of water quality by:

- Reducing the direct input of pathogens and nutrients into waterways and dams from livestock feces.

- Reducing the input of sediment into waterways and dams by water erosion processes.
- Increasing the filtering capacity and stabilisation of waterways and dams.
- Controlling the spread and reducing the vegetation degradation caused by the invasive vine species and 'ecosystem changer' Cat's Claw Creeper.

One of the highlights of the program has been working with the Cooroy Community Golf Club. We have assisted the club in the revegetation of School and Ferrells Creek that run through the course, reducing the erosion occurring along these waterways. The club members came together with the Noosa Landcare contract crew for a planting working bee and despite a very rainy day planted over 800 grasses and sedges in a single day, with a total of 2000 grasses and sedges planted during the project.

We are looking forward to year 2 of the program, which will begin in late June. Noosa Landcare and Seqwater are currently looking for Lake Macdonald Catchment landholders for the year 2 program year.

If you are interested in being involved or would like to find out more about the program, please visit https://noosalandcare.org/projects/watersupply-catchment/ or email projects4@noosalandcare.org













By Rachele Wilson (@Beescapes)

The European honeybee (*Apis mellifera*) is just one of almost 20,000 bee species worldwide. In Australia, we are lucky to host about 10% of the world's bee species, including 12 species of social stingless bees (the tiny black ones that live in colonies). The rest of our native bees are solitary.

The life of a solitary bee begins as an egg, laid upon a mixture of pollen and nectar (pollen 'bread'), which it consumes as a larva within its cell until it pupates and emerges with its siblings. Upon emergence, the adult feeds, mates and begins to construct its own nest (if it is a female), starting the cycle again. Like the foragers of their social bee relatives, it is very important at this time for adult solitaries to have access to a range of plant resources for the construction and provisioning of their nest.

Gardeners can attract and support native bees during his period by:

Planting a wide selection pollen and nectar rich plants for food. Plant these in large, showy blocks to increase their attractiveness, as many bees tend to forage on the same plant in one trip. Aim for continuous flowering by choosing varieties that flower for most or all of the year.

Weeds can be an attractive food source in times of low flowering; try mowing less often or designating edges where weeds can flower temporarily.

Limit insecticide and herbicide use to non-flowering periods or use non-spray strategies such as companion planting or predator-attracting plants.

Keep resinous trees and soft-leaved woody shrubs to provide nesting materials for resin-collecting and leaf-cutter bees. Most solitary bees are actually ground-nesting, so leave sheltered patches of bare ground where possible for these species to burrow.

Artificial nesting sites (i.e. "bee hotels") are a great way to support and observe solitary bees. For above-ground nesters, try drilling holes of different lengths and diameters into timber and placing in sheltered, sunny areas; or tying lengths of hollow stems together and hanging undercover. Provide fresh bee hotels each season or line cavities with paper tubes for easy replacement. Blue-banded and other ground-nesting bees can be encouraged to live in cobb-filled tubes or pots; use a mixture of 4 parts sand to 1 part clay. Importantly, don't put all of your bee hotels in the one place, as this makes them an easy target for pests and parasites.

Colonies of stingless bees are a beautiful addition to any garden and can be purchased in hive boxes from local suppliers. Some businesses, like Kin Kin Native Bees, may allow you to "host" hives for free. Landholders and community groups interested in hosting hives can express their interest via the website www.nativebees.com.au.

Finally, connect with other bee lovers and educate yourself by joining online groups and forums. My favourites are 'Bee Aware of Your Native Bees' and 'Bees in the 'Burbs in a Biodiversity Hotspot', both accessible via Facebook. Happy beekeeping!





By Liam Scanlan

Since early January, the trainees have turned their hands to weed management in natural areas to assist natural regeneration, and revegetation by planting in areas where natural regeneration is lacking. We have been involved in the process from start to finish, from seed collection, propagation and nursery duties, preparing the planting areas, planting the trees (a laborious but satisfying task) to finally undertaking maintenance of planted areas.

Many sites we have worked on are in gallery rainforests along creeks, which is classified as an endangered ecosystem. These sites including Yellow Belly Hole, Active Riders and Upper Pinbarren Creek have had contractor crews and previous trainees put in massive amounts of work, so we can't take all the credit, but it has been enormously rewarding to reduce the abundance of the worst weeds and observe the slow but steady pace of natural regeneration.

The trainees have wholeheartedly embraced their roles in the nursery, contributing their efforts that will go towards revegetation and conservation projects. Some of the threatened flora we have been propagating, which carries on from work started by a Noosa Council Community Grant, includes *Archidendron lovelliae* (Bacon wood), *Macadamia ternifolia* (Small leaved Macadamia), *Floydia praealta* (Ball nut), *Hernandia bivalvis* (Grease nut), *Xanthostemon oppositifoius* (Southern penda) and *Mallotus megadontus* (Toothed kamala). So far, we have planted some of these species at the Rural Futures Centre and the Noosa Botanic Gardens, which will provide a safe refuge for the species and future propagation material, with more plantings planned for the future.

In working with these species, we have come to appreciate the valuable remnant vegetation in which they exist and rely on for their survival in the wild. We have also observed natural areas that have been transformed by invasive species and learnt the importance of early detection and control. As a supervisor I am continuously impressed by the interest and curiosity shown by the trainees. Although the real work lies ahead, the trainees have proven their ability to balance the art of working in environmentally sensitive areas, with the hard work and determination required to work in the bush.



James planting Floydia praealta at Noosa Botanic Gardens

Our office admin trainees have been equally impressive, coming up with innovative ideas to improve our administration systems while also carrying out their daily duties. Their hard work can go unnoticed while we are busily working in the field and nursery, but their support to the admin and nursery staff is enormously appreciated and helps keep the Noosa Landcare systems in motion.



Notes from the field

By Brent Whitworth

Hervey Bay Planting

Our conservation crew headed north for warmer weather in Hervey Bay last month.

The crew did an amazing job planting close to 2000 native tube stock along Eli Creek as part of Fraser Coast Regional Council's environmental program.

Congratulations on a terrific job in new challenging conditions!





Greening the Creek Program

A new joint project with Unitywater, Noosa Council and Noosa Landcare has just kicked off with Unitywater's "Greening the Creek Program". The project duration is over 18 months commencing with a Community Planting day.

The conservation crew undertook site preparation activities that include weed control of invasive grasses, woody weeds and numerous vines!

Most importantly the team pre-dug 1000 holes for the community planting and an additional 560 holes for other revegetation zones along the creek.





NATIVE OF THE MONTH

HOVEA ACUTIFOLIA HOVEA



By Jo Nicholls

Hovea acutifolia are often found within Eucalypt forests. They are hardy, slender stemmed shrub with small pea shaped flower. The flowers are intense light purple or mauve in colour and delicately grow along the leaf axils.

This shrub copes well in drought conditions and are ephemeral, therefore will need replacing around every 7 years. They produce dark sage green pointed leaves with a rusty coloured underside that attach to branches and stem that are densely covered in grey or rusty hairs.

The flowers are bee-attracting and will also attracts other beneficial insects. After spring when this shrub finishes flowering it produces a seed pod which will audibly make a 'pop' sound when the seed is ready for propagation.

This beautiful native perennial would make a beautiful addition to any garden and provide habitat for many small bird species, insects, butterflies and bee species.

WEED OF THE MONTH

SPATHODEA COMPANULATA AFRICAN TULIP TREE



By Jo Nicholls

Spathodea companulata is a tall, upright tree to 25m, native to tropical West Africa, with large compound leaves and a slightly buttressed trunk. These leaves are paired along the branches and produce very showy bright red tulip shaped flowers. Seed distribution is by birds mostly carried by water or wind. This species will also sucker from damaged roots.

Due to its bountiful distribution, *S.complanulata* has become listed on the Global Invasive Species Database as "Top 100 World's Worst Invaders". With a scattering of distribution across most of South East Queensland from coastal areas to inland. You will find this tree invading abandoned agricultural land, roadsides on forest edges and disturbed rainforest sites within sub-tropical and tropical regions. It loves moisture and wetter habitats so is especially common along creeks and gullies.

The most detrimental outcome of the integration of this weed species is its lethal threat to our stingless bees. Stingless bees are attracted to the flowers for foraging pollen and nectar. If you look closely you will find many dead bees in the flower sprays.

To remove trees, you must remove or kill the entire root system as suckers will grow from the damaged roots. Remove any small wildlings and seed pods.

GIFTS ON SALE AT OUR RETAIL NURSERY



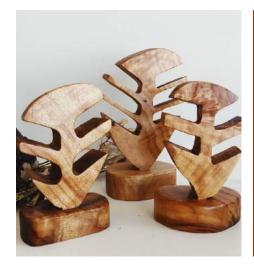
New $Stock\ this$ Autumn











More than just plants



Now stocking more than just plants at our retail nursery located on Station Street in Pomona.

We are looking to expand on these wonderful gifts, if you are a local producer or artist of sustainable products get in touch with us on info@noosalandcare.org.



Colus pusillus



Boletellus deceptivus



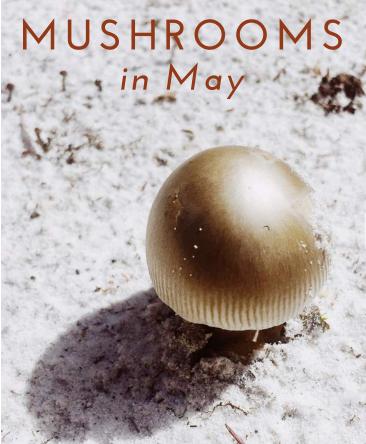
Dacryopinax spathularia



Austroboletus mutabilis



Cyathus striatus



Laccaria canaliculata



Ben Hoekstra & Jazzy Connors



Boletellus emodensis



Coprinellus disseminatus



Ramaria sp



Geastrum saccatum



Tremella fuciformis



Phillipsia subpurpurea

'Mushroom ID to the best of our ability!!!'



Mitigating Gully Erosion



with Steve Burgess

Join us for a FREE two part workshop that will give you the tools to deal with erosion on your land

Part 1
Wednesday 22nd May
5:30pm - 7:30pm
Kin Kin Community Hall

Light supper provided

Part 2
Saturday 25th May
8:30am-12:30pm
Meet outside Kin Kin
Community Hall
8am to travel to site
Morning Tea provided

Part 2 requires you to wear
Work shoes
Gloves
Sun safe clothing



Registration Essential

www.noosaanddistrictlandcaregroupinc.wildapricot.org/event-3387582

For more information please contact Noosa & District Landcare info@noosalandcare.org
(07) 5485 2155













Offers Over \$890,000

Type: House Land Size: 31.65ha

Conservation Rainforest Retreat

352 Eastern Branch Road Kin Kin, Qld 4571

This beautiful 31.65 hectare property has two titles and two road frontages.

'Land for Wildlife' property managed largely for rainforest regeneration by same owners for last 38 years.

One with a 4 bedroom, 2 bathroom pole home and the other with a 12m x 6m weekender shed/granny flat.

For further information contact Raine + Horne Noosa Hinterland agent Wayne Colley on 0447 748 408. www.realestate.com.au/property-house-qld-kin+kin-131090402









Bedroom: 3

Bathroom: 2

Garage: 2







New Native Plant Stock List

Our new and improved Native Plant Guide shows what we currently have in stock, and with just one click, you can view information on every species.

Click here to access

To subscribe to our monthly stock list visit www.noosalandcare.org/plant-sales

Recycle with us

We have registered for the 'Containers for Change' recycling program.

Funds raised will go towards our Threatened Species Programs and other various programs of Noosa Landcare

Bags can be collected from the retail nursery located on Station St, Pomona.

Fill each bag with 50 recyclable items and return back to Envirobank deposit station at 5 Johnson Court, Cooroy. Use Containers for Change **ID C10147043**





Please remove all lids and rinse bottles before placing into bags



Local Events

11th May 2019 Cooroy Fusion Festival www.cooroyfusionfestival.com.au

15th May 2019 Soil Health and Die-Back Information Evening www.facebook.com/events/2259621084083889/

16th-19th May 2019 Noosa Food & Wine Festival www.noosafoodandwine.com.au

22nd & 25th May 2019 Keeping It In Kin Kin - Mitigating Gully Erosion noosaanddistrictlandcaregroupinc.wildapricot.org/event-3387582

1st June 2019 The Coolum Women's Shed Garden Gathering www.facebook.com/events/424396608360350/

2nd June 2019 World Environment Day Festival www.wed.org.au

9th June 2019 Permaculture NOOSA Festival www.facebook.com/events/341665203158347

14th - 16th June 2019 Sunshine Coast Agricultural Show www.sunshinecoastshow.asn.au

14th - 16th June 2019 Clean Up Double Island *www.facebook.com/events/2526197127408025*

7th July 2019 Noosa River Clean Up (Incl. Paddle Against Plastic) www.facebook.com/events/300486740859754

Rural Futures Centre

65 Pavilion Street, Pomona QLD 4568

Retail Nursery

Station St, Pomona QLD 4568 (Opposite the Pub)

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