

Cool Season 2022

Trees for the Evelyn & Atherton Tablelands (Inc.)

April - June

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Coming Events

Date	Time	Event	Location
Sat 4 June	10 am - 2 pm	Open Day	Lake Eacham Nursery
Sat 16 July	2pm	Field Day	Burchill's 937 Peeramon Road

Open Day

TREAT and QPWS will celebrate TREAT's 40th birthday year with an Open Day party at the Lake Eacham Nursery on Sat. 4th June, from 10am till 2pm.

There will be a BIG spread of food for a morning tea at 10.30am, in the top area of the nursery. At 11am there will be a Welcome to Country followed by some short speeches, from Angela for TREAT, Peter Snodgrass and Andrew Millerd for QPWS, and Nigel Tucker who saw the partnership between TREAT and QPWS develop in the early days. Afterwards we'll hear tales from a few landowners who've done successful revegetation over the years.

Tours of the nursery can be given, the Rainforest Display Centre will be open, and plenty of informative brochures will be on hand as well as TREAT volunteers to help with questions. Visitors will probably be thinning out by 2pm, when we'll pack up and clear away. We hope you can come along and celebrate with us!

Because the nursery is a Qld. Govt. workplace, new visitors will need to show proof of

vaccination and

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everyone needs to abide by Covid regulations current at the time. If you bring plants for identification, you will need to bring them in a plastic bag to prevent disease escaping to nursery plants.

Field Day

Our last field day at Burchill's was in 2014 and this coming field day is an opportunity to see how things have progressed, and to see some problems associated with different soils and conditions and how they might be overcome. Meet at the sheds area (past the house) where there's plenty of parking space. See Doug's article this newsletter.

The Three Corridors Project

Nigel Tucker

Two threats loom large for north Queensland's unique tropical wildlife - forest fragmentation and climate change. Breaking up continuous forest into patches of various sizes has immediate and long-term effects, including a creeping loss of genetic and species diversity as isolated populations of plants and animals slowly decline. Add a warming climate to the mix, and suddenly, isolation, and the need to find a cooler place to live, become critical to your survival. For rainforest plants and animals in small patches, being in a warming world surrounded by a hostile sea

of settlement, crops and pasture, means finding a new home or to swap genes depends mostly on two things - (i) the availability of habitat to colonise or use, and (ii) a way of getting there in safety.

Crater Lakes National Park (Lake Barrine) Donaghy's Corridor Lakes Crater Lakes

National Park

(Lake Eacham)

Curtain Fig National Park <u> Leterson Ck. Corridor</u>

Intuitively, one can see that restoring habitat between patches not only expands the area of habitat, but potentially re-connects patches, allowing safe movement to alternative habitat. Such was the reasoning behind TREAT corridor projects at Donaghy's, Peterson Creek, Massey Creek, and the Lakes Corridor established by Landcare (and now being extended by TREAT). All were designed to reestablish habitat connections between forest patches with the intention of allowing wildlife colonisation and fostering the movement of pollen, seeds, genes and wildlife - what we recognise as the wildlife corridor concept.

For the past year, myself and a small team of scientists, park rangers and volunteers have been assessing the effect of Donaghy's Corridor Nature Refuge, examining how the corridor is developing and being used by wildlife. If you were one of the hundreds of people who planted the thousands of trees to make the corridor a reality, then you'll be pleased to know that after almost 25 years your efforts are literally bearing large fruits. Studies show birds and ground mammals have increased in diversity and in their degree of specialisation. In a first-time continued on page 2

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study, we've found that insectivorous bats are using the corridor habitat and are also diverse and abundant. Planted and regenerating vegetation in the corridor is increasingly similar to adjacent intact rainforest

But Donaghy's is one corridor in one landscape, and by itself doesn't provide a real indication of whether the wildlife corridor concept is of value, or not. A better understanding would come from looking at similar corridors and being able to detect similar trends in plant and animal colonisation. For this reason, we have brought together a group of scientists, landholders, students, National Parks staff and TREAT volunteers who will now begin a year-long project comparing colonisation by plants, birds, bats, mammals and the make-up of soil seed banks in the corridors at Donaghy's, Peterson Creek and the Lakes Corridor, simultaneously sampling the National Parks to which the corridors are connected. Our group has received a Nature Refuge Landholders Grant to carry out this study, which seeks to answer the basic question about whether corridors are an effective strategy to manage our imperilled wildlife. We thank in advance the Donaghy family, Don Crawford and the many Peterson Creek landholders, especially South Endeavour Trust, whose cooperation will make the Three Corridors Project a reality.

Donaghy's Corridor is named after the Donaghy family who contributed the vast majority of the 8ha used to plant the corridor. John Donaghy, first a butcher and grazier, recognised the value of creek

bank restoration, not only to improve water quality and reduce soil erosion, but also to create the kind of habitat that now bears the family name. John's willingness to donate land, to permit re-planting and then to allow scientists and students to visit, count and evaluate for over 20 years, has given us real insights into the way restored areas are used by wildlife. But more significantly, John set an example that other landholders would follow, and much of the impetus for establishing the Lakes and Peterson Creek corridors was due to his example.

Sadly, John passed away earlier this month. Over this past summer, at the end of a day's survey, we chatted regularly about life in the corridor and life in general. Ever the optimist with an iron-fisted handshake, John was the quintessential larrikin and he will be sorely missed by many, myself included. It is fitting that the legacy of John and the Donaghy family can continue to provide future researchers with new insights.

Right now, volunteers are needed to assist in the Three Corridors Project with a range of tasks including keeping landholders informed, laying out camera traps and microbat detectors, establishing vegetation transects, collecting and maintaining soil samples and assisting with data collection. We also need assistance to find, collect and lay out old fence-posts which will be used to examine reptile colonisation. If you are interested in helping out with any of these tasks, please contact myself at Biotropica Australia (4095 1116) or Peter Snodgrass at the Lake Eacham Nursery (4095 3406).

SEX IN THE CANOPY and on the (forest) floor

Dinah Hansman

We know that rainforests have a diversity of plants and that some of the lineages (families) have been around for a very long time. This means that there has been a lot of time and opportunity to try out different ways for 'boy meets girl'. Plants rely on some external agency, whether it be water, wind, different types of insects, birds, bats or even geckos, to transfer pollen from the male part of the flower to the gynoecium, the female part of the flower, which contains the eggs.

The more ancient groups of plants use passive forms of pollen transport – water in the case of ferns and wind for gymnosperms such as kauri pines and podocarps. Wind is also the way northern hemisphere temperate forest trees are pollinated – not just the pine forests but also the broadleaf deciduous forests which are leafless when they flower – this makes it easier for the pollen to be blown onto recipient flowers. Windpollinated flowers produce masses of pollen and are quite hairy to catch the pollen. This is a pretty inefficient way to go about it if you are in the rainforest canopy where there might be not much wind, there is a lot of foliage in the way, and where others of your kind are widely scattered in amongst other species.

Flowers and insects have had a love-hate relationship that goes back more than 200 million years. In Far North Queensland we have a lot of rainforest species that come from some of the first flowering plant families to evolve. The majority of these species are pollinated by beetles who come to feed on

the pollen. Examples are *Piper, Aristolochia, Myristica, Eupomatia, Tasmannia, Cananga, Uvaria* and *Pseuduvaria.* About a quarter of rainforest flowering plants are pollinated by beetles.

Most rainforest species have tiny flowers that are pollinated by tiny, 'generalist' insects – beetles, flies, wasps and bees, and thrips. These feed on pollen from a wide range of species. This means there is always something for them to eat and flowers have a steady supply of pollinators. This is a cheap 'no frills' service and following the evolutionary principle of 'good enough' it has survived for 120 million years.



Five-bar Swordtail on Psychotria flowers

Right tree in the right place... For the right reason Pollen and flower wastage can be reduced by paying for a more efficient pollination service. Rewards are usually nectar or pollen but can be offers of a place to breed or tricks such as sexual allure or the promise of food. The shape, size, colour, smell, opening times, and even sensitivity to sound of a flower gives clues as to what or who gives the best results in bringing pollen to the eggs.

Many plant species have evolved to target one particular group of pollinators so that pollination is more efficient. For example, flowers may contain a nectar rich in sugars and amino acids sought after by butterflies or moths, and placing the nectar at the base of a long tube means that only butterflies or moths with the right length of proboscis ('tongue') can access it. Other aspects of the flower design ensure that when the butterfly or moth lands to feed, pollen is transferred from the insect's body to the female structure on the flower.

Flowers visited by nocturnal pollinators (such as hawk moths or bats) are usually white or cream, and scented. Flying foxes find the honey or sweaty-armpit smell of flowers such as *Eucalyptus* or *Melaleuca* irresistible. The pom-pom stamens dust the bats' fur with pollen. Bees are attracted to blue or purple (including in the UV range) and yellow in particular,



Castanospermum australe

whereas birds are attracted to the red-yellow colour spectrum. *Castanospermum australe* is an example of a bird-pollinated flower.

The following table shows the sorts of flower characteristics associated with different pollination agents.

AGENT	EXAMPLES CHARACTERISTICS OF FLOWERS		
Wind	Agathis robusta	Drab green, separate male and female flowers. Female flowers have feathery structures to trap pollen	
Flies		Purple, brown, rotting smell	
Tiny generalist insects	Family Lauraceae	Small, bowl shaped, cream or green	
Beetles	Piper, Aristolochia, Myristica, Eupomatia, Tasmannia, Cananga, Uvaria, Pseuduvaria.	Cream, spicy or ammonia smell, bowl shape	
Butterflies	Micromelum, Psychotria	Brightly coloured, strong sweet smell. Landing platform and trumpet shaped	
Hawk Moths	Clerodendron tomentosum	White, open at night, strong sweet smell	
Thrips	Disopyros, Euroschinus falcatus, Myrsine variabilis	White or yellow, open at night, bowl or urn-shaped	
Bees	Melastoma malabathricum subsp. malabathricum	Blue, pale yellow, purple, UV guides, sweet smell, broad tube shape	
Wasps	Orchids, Figs		
Blossom Bats	Xanthostemon formosus, Syzygium cormiflorum	Open at night, white colour, pompom shape, nectaries on strong branch or trunk	
Birds	Alloxylum, Castanospermum australe, Brachychiton acerifolius, Stenocarpus sinuatus	Large, bright red or orange, often hanging, watery nectar	

Flowers might have many different sorts of visitors and the above suite of characters or 'pollination syndromes' suggests who or what is doing the pollinating. However, it takes a lot of fiddly research to confirm who is **actually** doing the pollinating. There aren't many studies done in Australian tropical rainforest but Tony Irvine did some – including on *Syzygium cormiflorum*.

Syzygium cormiflorum flowers are visited by all sorts of insects including ants that transfer pollen, but blossom bats (and possibly hawk moths) were the most effective pollinators. Tony called it 'two bob each way'.

A few groups of plants (such as orchids or figs) have very specialised flowers that mean only one type of insect (such as a wasp) is physically capable of transferring pollen. At the other end of the spectrum are rainforest trees with 'no frills' flowers and visited by all and sundry. Other rainforest plants are somewhere in between – where one group of animals is the best pollinator but other animals that come to feed on the flowers provide a pollination service with varying degrees of effectiveness. Think of it as a work in progress – a trade-off between flexibility and efficiency.

Right tree in the right place... For the right reason

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Having a specialist pollinator service means that pollen is not wasted, **but** you have to provide a reward for the service. If something happens to the pollinator you will go extinct. The pollinator needs a source of food for the whole of its life span. There is also a tradeoff between putting resources into ensuring genetic fitness through spreading your seed (fruit) or spreading your seed' (in pollen).

Without effective pollen dispersal there is inbreeding, often producing seed that may have low viability or offspring that won't thrive. Many plants have systems to prevent inbreeding – then eggs don't get fertilized and we have aborted fruit or fruit without seed. The loss of pollinators – whether it is insects or flying foxes or blossom bats – will cause the eventual decline and extinction of plant species. This may already be happening on islands where endemic flying foxes have been exterminated.

Some visitors might be simply helping themselves to pollen or nectar without performing any service. *Melastoma malabathricum* subsp. *malabathricum* is pollinated by native giant carpenter bees that buzz at a specific frequency which causes the anthers to split open. The same effect can be achieved with a tuning fork. Other bees simply chew a hole to steal the pollen.



Melastoma

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Cox, P.A., Elmqvist, T., Pierson, E.D. and Rainey, W.E. (1991). Flying foxes as strong interactors in South Pacific island ecosystems: a conservation hypothesis. *Conservation Biology*, 5: 448-454.

Burchill's Revegetation 1980 to 2022

Doug Burchill

The Burchill family moved to the Atherton Tablelands in May 1978, on transfer from Townsville.

We found this property, lived here and became owners a year later. During that time we realized that we needed windbreaks as the nearest trees were the Peeramon Scrub.

The only really affordable source of seedlings was the Queensland Forestry Department who would make trees (min 300) available for purchase for approved 'wind-break' plantings. These were to be spaced at 3 X 4 metres! In December 1979 we purchased our first 300 tubestock - *Eucalyptus drepanophylla*, Grey Ironbark. The choice was *Pinus* or some limited species of *Eucalyptus*. The next year we planted more, some 400, three species - *Eucalyptus grandis*, *E. microcorys*, *Pinus caribbean*.

At the time we had only the car and trailer we had arrived in and a garden lawnmower, for any work. We were able to borrow a tractor with a post hole auger on the back to drill the holes for the trees - 300mm holes. Qld. Forestry recommended that plantings on the flood plain area be on raised ridges and we were able to borrow a small bull-dozer to get rows in place parallel to the road, and at a patch diagonally across from near the sheds and yards. These turned out to be a less than satisfactory way of preparing a site.

With a tight budget and lacking knowledge of what I really needed to plant, I purchased seed from Qld. Forestry and started raising my own young seedlings. This was slow, and many of the species were of a much different provenance (a word I hadn't at that stage heard before) to the locals.

In the mid 1980s I asked Geoff Tracey whom I had met through our sons being in the Yungaburra Scout Group together, to check out the plantings I had done on parts of the mid creek banks. He was more than horrified at some of the species I had chosen – willows from a southern nursery and various Melaleuca that were more suited to coastal back swamps.

At this meeting he pointed out that TREAT now existed and worked out of a nursery by Lake Eacham and volunteer members turned up on Fridays to assist and learn. So with the next school holidays I headed for the Lake Eacham Nursery, met Nigel Tucker, Joan and James Wright and various other early notables of TREAT and from there the plantings on Burchill's improved and progressed.

By 1992 we had the earlier plantings being thickened up by planting chosen native conifers and various other species. We then noticed that trees we didn't even have near the place started to sprout from the ground and form an understorey to the dominant Eucalypts. In 1990 we got 100 trees from the Wet Tropics Tree Planting Scheme and planted closely in the very wet conditions at the foot of the red soil slope along the roadside. This did very well. Greening Australia beefed up the southern part and in 1994 QPWS/TREAT planted to the north of this.

In 1998, after the plantings at Byrnes' or Palumbo's of the nascent Peterson Creek Corridor project, one Saturday morning we planted some 900 trees in somewhat better levee soils on the banks of Peterson Creek. James Wright was totally exhausted by the end of this. In 2004 TREAT continued the Peterson Creek Corridor planting by putting in some 5,000 trees in 2 plantings along our southern boundary on the banks of Peterson Creek. The fortnight following the planting the trees were inundated by flood waters, and then, later in the year we had repeated heavy frosts knocking them back severely.

One of our issues was the hassle of keeping cattle away from plantings, as they are attracted to head rubbing the tree tops and the delicious fresh grass growing around them. As fencing was quite expensive at the time (when has it ever been cheap) we went for the cheapest option - electric fencing. This was first set up to separate the agisted dry dairy cows in calf from the hand raised young we now possessed. This



eventually became the only fencing on the property. The creeks and permanent swamp areas were all fenced off, with off-stream watering for cattle established eventually at a single 'home' based watering, supplement and back-rubber area largely under shelter.

At some stage we planted on both sides of the cattle crossing established across the middle creek, just beside the yards and sheds and diagonally into the paddock. This was extended downstream on both sides of the channel and as well, Simon undertook patch plantings, mainly of Casuarina on the slightly higher rises near the northern channel in the area that is largely permanent swamp.

Since 2011 we have widened the Peterson Creek Corridor along the creek, then extended that along the road verge, and then along the 'middle' creek to the creek crossing planting done some time earlier.

Around about 2016 some of the edge of the northern red soil paddock had a narrow belt of trees planted along it. In more recent years an effort has been made to widen this, but due to lack of easy watering and lack of maintenance it is now a disgraceful patch.

I noticed that the fence lines near and on the western boundary had numerous volunteer recruits coming up in the grass-free areas. I decided to see if this would translate into a reasonable 'Kick Start' project by fencing off and spraying a rather small wedge about 2019. There was notable success by 2020 - 21 and I then broadened the area and sprayed it out. I have yet to get back to continue the spraying of the regrowth grass and weeds. The object of this larger area is to use some of the recruits and transplant them more widely into this area to enhance the Eucalypts (*E. tereticornis* and *E. pellita*) and Swamp Box *Lophostemon suaveolens* that are native to the area and assist in the water table management and habitat here.

One of the major benefits of the windbreaks on the property has been the improvement to the microenvironment that the trees create down and to a lesser extent up wind of the tree corridors. Once the young

stems started to make an impact on the area we noticed that there were benefits that went beyond the amelioration of wind speed.

The cattle spend less time eating as they are not as stressed as in open country. Also the pasture is green for longer in the year.

We very soon noticed an increase in bird and insect species and now have some rainforest species as well as open country species. There has also been an increase in the variety of mammals found on the property. Apart from Agile Wallabies, we now have a largely resident population of Lumholtz Tree-kangaroos as well as Green Ring-tailed Possums.

Some years ago studies were carried out to check the rate of water absorption into the soil under tree plantings of various ages and in neighbouring open paddocks up wind of the property. I never received the actual research data but the technician doing the test had been on the open site for over 30mins and only half of the metre high tube of water had been absorbed, while under the trees he said it all happened in about 10mins. Thus the water runoff from the treed areas is much less than that from open grassed areas. It is also affected by the retention of moisture in the canopy. The micro-climate under the trees, and close to the trees, has meant that these areas are moister, cooler or warmer than the surrounding areas depending on the time or season.

The planting of trees on the property has not only improved the home living environment, but often we can get caught out with inadequate wind protection when we venture out onto Peeramon Road.

We have, of course, experienced a number of cyclonic wind events during the time we have been here. Larry's visit on 20th March 2006 was the most damaging, but apart from some damage to trees, especially the Tallowwood and Rose Gums, very little property damage happened.

On Saturday afternoon 16th July, TREAT is holding a field day at the property. Visitors will be guided around to view the vegetated areas and to experience the variation in micro-weather to be found in various parts of the property.

Planting Season 2022

Barb Lanskey

The 12 community plantings held January-April were well supported, with generally 50 or more volunteers attending. The Wongabel planting had a record 110 people sign on. No planting was cancelled due to weather or covid restrictions.

The schedule for the plantings is decided at a SATRA (Southern Atherton Tablelands Revegetation Alliance) meeting at the Lake Eacham nursery in December. It needs to suit those involved in site preparation and those who supply trees for the plantings. Predicted weather is also a consideration.

NQLMS was a key player this year, with 7 plantings involving the Reef Assist team in site preparation, planting and maintenance. Geoff Onus was responsible for setting up the team last year, and this year, funding was again available for 6 sites. (The schedule in the Jan-Mar TREAT newsletter noted funding was 'via NQLMS' as the successful Reef Assist projects secured through WTMA, hadn't yet been publicly announced.) QPWS and TREAT were involved in 4 sites for preparation and 1 site (Clarkson's) was privately prepared. The QPWS/TREAT and TRC nurseries were responsible for the supply of trees to many of the projects, Emms

supplying their own and some being supplied by NQLMS.

All sites are well prepared and fertiliser (tablet or pellets) and (generally) hydrated water crystals are added to the augered planting holes. At Clarkson's site, water crystals aren't used as the weather there is generally so wet. Mulch is either on site from poisoned grass or brought onto the sites.

This year the weather wasn't very wet and the 2nd half of March was unusually hot and dry. TREAT sites were prepared by Mark McCaffrey and the past has proven that trees do best when watered immediately after planting. This was done at the McLean Ridge and McAuliffe sites, with assistance from volunteers. It takes longer, and often the barbecue is held before all the trees have been watered, but then some volunteers go back to finish the job. At the Hoare site there was so much showery weather during the week that some of the holes had water in them (baled out prior to planting). Water crystals were still used though, to help the plants through the dry season. At the last Reef Assist planting (Stewart's), the weather had been so dry that the Reef Assist team watered the

Right tree in the right place... For the right reason

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holes prior to planting, as well as watering the trees after planting. With unreliable wet seasons, watering trees will need to be part of the costs of preparation and maintenance.

On the planting days, conditions were generally comfortable with cloudy and sunny periods; some had light showers. At the second Misty Mountain NR planting there was a hot dry wind, but the planting was finished by 9am. Most plantings were finished by 9.30am, volunteers turning up at 8am or earlier.

TREAT holds a barbecue after each planting, and it is always much appreciated. At the large Wongabel planting, Atherton was close enough to obtain extra

supplies. The barbecues generally cater for about 60 volunteers.

This year there were 2 plantings where a Welcome to Country was given by Traditional Owners. One was at Wongabel and the other at Carcary's. Both were very informative about where and how the Traditional Owners lived.

There was a final small planting of 500 trees at Donaghy's on 14th April, just before Easter. This was a special occasion to suit an ABC film crew who wanted to document what is involved in revegetation in the tropics. There were about 30 volunteers and just a morning tea was held afterwards.

Thanks to all who contributed to the plantings.

Wongabel Mabi Forest Planting - Saturday 12th March 2022

Sheryl Fitch and Christine Wolf, coordinators for BCC

Barron Catchment Care is keen to thank everyone who contributed to this marvellous opportunity to further the regeneration efforts in Wongabel State Forest.

Barron Catchment Care has received tremendous support on this project through collaboration with many people contributing to Mabi Forest regeneration and habitat protection in this critically endangered ecological community. Along with BCC, key players in the project were Terrain NRM, QPWS, NQLMS, TREAT, WTMA, Mabi Action Group and Tablelands Yidinji.

We'd like to acknowledge Terrain NRM for providing a funding opportunity through their *Building Rainforest Resilience Program* with funds from the Australian Government's *National Landcare Program*. Representing Terrain on Saturday was Manager of Biodiversity & Climate, Sarah Hoyal who brought her young son Henry to help with planting.

To progress Wongabel revegetation, QPWS staff have worked with Hancock Plantations to help relinquish Hancock's Lease - handing it back to the State and QPWS management. QPWS also supplied 2000 (in-kind) Mabi Forest trees with the remaining 1000 trees being supplied by NQLMS. Thanks to QPWS staff including Peter Snodgrass and TREAT volunteers for helping make this possible.

TREAT was once again a major player - bringing their amazing volunteer workforce to help make this planting day the success it was. TREAT members also provided a great post-planting spread to feed the

more than 100 hungry volunteers.

Geoff's resilient NQLMS team together with a great WTMA crew was responsible for the mammoth task of site preparation. The two-metre-high Guinea Grass, Tobacco Bush and Lantana were only some of the obstacles they took in their stride.

Through their *Reef Assist Program*, WTMA provides valuable in-kind support with site preparation and maintenance. WTMA's Scott Buchanan and Ellen Weber travelled from Cairns to support the project and add their energy to the planting.

Yidinji Board Members Lanora, Evelyn and new Chair, Cheryl Wright represented *Tableland Wadjanbarra Yidinji Corporation* and made time before their Saturday workshop to be on site. Yidinji Elder Evelyn Johnson delivered a special *Welcome to Country* on behalf of all Tablelands Traditional Owners.

Saturday's planting builds on Barron Catchment Care's *Stage I Mabi Forest Project* at Wongabel which was tackled during the 2020 COVID lockdowns. The NQLMS team stepped in to do a strict COVID-safe Wongabel planting when the planned TREAT Community Planting was derailed due to COVID-19 regulations.

Many of the 110 volunteers present on Saturday 12th inspected the impressive Mabi trees resulting from this 2020 Stage I - Mabi regeneration planting - which was also funded through Terrain NRM's Rainforest Recovery Grants and coordinated by Barron Catchment Care.

Nursery News

Peter Snodgrass

Yet another fantastic year for tree and plant production in the nursery, with TREAT volunteers excelling in every aspect. The nursery was bursting at the seams mid-summer so there has been some beautiful stock distributed to members and funded projects alike. I would like to thank those members who gave even more time to assist with sorting trees for distribution on the occasions when we were in need of an extra hand.

Plantings: It has also been an outstanding year so far, for tree planting on the Atherton Tablelands. TREAT has assisted with over 23,000 trees being planted on strategic sites and even more have been planted via individual projects. One of the plantings that was very significant was a 2nd area being planted in the critically endangered Mabi forest zone in Wongabel State Forest conservation area. This planting site is part of a 72.8ha area that, through

negotiations with Queensland Parks and Wildlife Service, Hancock Queensland Plantations agreed to surrender and return to QPWS management. The areas planted in 2020 and 2022 are on a 59.45ha parcel with the remainder of the agreed area to be released post harvesting of plantation timber. Under the original agreement the land was not due to be released until 2050.

Assistance for this project came through many channels. Gratitude for organising it should go out to Sheryl Fitch, coordinator for Barron Catchment Care (BCC). We also welcome Christine Wolf to the tableland revegetation community through BCC, who will be sharing some of the workload at BCC which I'm sure will be of great relief to Sheryl. Preparing the Wongabel site would not have been an easy task as Mabi forest is renowned for being extremely rocky with a reputation for testing both man and machine. Well

Right tree in the right place... For the right reason done NQLMS and the Reef Assist crew. QPWS are committed to supporting and being a significant part of restoring this section of a critically endangered ecosystem.

It is great to see the tremendous effort of volunteers on so many revegetation sites organised by both TREAT and other stakeholders via the SATRA group. It is equally great to hear about the success of the smaller, and some large, privately organised plantings where friends are getting together to help each other out.

We had a great turnout for the QPWS planting on the Massey Creek section of the Tully Gorge National Park this year with 1200 trees planted to infill and consolidate the sites from the last 2 years with the addition of one new small area where 300 trees were planted. Massey Creek is looking fantastic overall and I would like to thank the Reef Assist crew as well as QPWS staff from Tinaroo and our heavy plant unit, for their help with site preparation. A huge thank you to those who helped to plant on the day.

For the most part it appears that sites planted throughout the tablelands this year have received sufficient rain in order for trees to establish and hopefully all that good site preparation is paying off and weed control is not becoming too much of a challenge.

Staff: In early March I was fortunate to be appointed to the privileged position of RIC (Ranger In Charge) of the Restoration Services Unit / Lake Eacham Nursery. I would like to thank everyone for their humbling support in the lead up to this process. I will certainly do my best to fulfill this role and to further enhance the relationship between QPWS and TREAT and promote our achievements into the future. It is not only amazing what we are able to achieve together for the environment through our individual projects, but even

greater with the support provided to each other as stakeholders across the broader landscape. I am very grateful to be a part of this stimulating process, the wonderful atmosphere and comradery created through community involvement and focus to improve our environment.

As a result of my own appointment we will now be looking to recruit someone permanently to the 004 position (my previous position) in the nursery, which should enable more stable operations within our work unit. Having said that, we will see the 003 position rotate again at the end of June which means Themi will return to the Lake Eacham Management Unit. We are grateful to Themi for his work ethic over the past 12 months and wish him the best until we see him again.

We will sadly lose Tayla Croxford at the end of April as she begins further study. Tayla has been a very significant part of our team at the nursery since December 2021. She has endured the busiest time of the year for a revegetation nursery, having to be part of production, maintenance in the nursery and in the field, as well as the distribution and planting of trees. Tayla has excelled in all fields associated with this facility and I would personally like to thank her for her support and effort in the workplace. We will definitely miss Tayla and her contributions but we wish her all the very best into the future.

A point to mention at this stage concerns those TREAT members who have had tree applications approved but have not yet collected their trees. Could you please let us know either way if you still intend to collect your trees or no longer require them.

Thank you all again for your efforts, over the planting season in particular, and we look forward to seeing you in the nursery or in the field throughout the coming year.

Fruit Collection Diary Jan - Mar 2022 continued on page 8

Species	Common Name	Regional Ecosystem	Collection Date
Acronychia acidula	Lemon Aspen	7.8.2	30/03/22
Acronychia crassipetala	Crater Aspen	7.8.4	27/01/22, 3/02/22
Aglaia sapindina	Boodyarra	7.8.2	5/01/22
Alectryon connatus	Alectryon	9.8.3	2/03/22
Aleurites rockinghamensis	Candlenut	7.8.4	17/03/22
Alphitonia petriei	Sarsaparilla	7.8.4	18/02/22
Alyxia oblongata	Prickly Alyxia	7.8.4	17/03/22
Aphananthe philippinensis	Native Elm	7.3.37	10/03/22
Blepharocarya involucrigera	Rose Butternut	7.8.2	05/01/22,
Breynia oblongifolia	Oblong Leaved Breynia	9.8.3	2/03/22
Callitris macleayana	Cypress Pine	7.8.2	17/03/22
Calophyllum costatum	Satin Mahogany	7.8.4	4/03/22
Carissa ovata	Kunkerberry	9.8.3	2/03/22
Casuarina cunninghamiana	River Sheoak	7.11.19	24/03/22
Cerbera inflata	Cassowary Plum	7.8.2	5/01/22
Cordia dichotoma	Glue Berry Tree	9.8.3	3/03/22
Cryptocarya triplinervis	Brown Laurel	7.8.3	21/01/22
Cupaniopsis foveolata	White Tamarind	7.8.2	5/01/22
Darlingia darlingiana	Brown Silky Oak	7.8.3	21/01/22, 3/03/22
Denhamia oleaster	Denhamia	9.8.3	2/03/22
Dysoxylum mollissimum	Miva Mahogany	7.8.3	5/01/22
Dysoxylum parasiticum	Yellow Mahogany	7.8.3	5/01/22
Elaeocarpus grahamii	Quandong	7.8.2	17/02/22
Emmenosperma alphitonioides	Bonewood	7.8.2	18/03/22
Endiandra insignis	Hairy Walnut	7.8.3	5/01/22
Euroschinus falcatus	Pink Poplar	7.8.3	18/03/22
Everistia vacciniifolia	Small Leaved Canthium	9.8.3	2/03/22
Ficus henneana	Superb Fig	7.8.3	3/03/22
Ficus leptoclada	Atherton Fig	7.8.4	3/02/22
Ficus obliqua	Small Leaf Fig	7.8.4	30/03/22
Ficus platypoda	Rock Fig	9.8.3	2/03/22



Species	Common Name	Regional Ecosystem	Collection Date
Ficus pleurocarpa	Banana Fig	7.8.2	15/02/22
Ficus racemosa	Cluster Fig	7.8.1	24/02/22
Ficus rubiginosa	Small Leaved Fig	9.8.3	3/03/22
Ficus watkinsiana	Watkin's Fig	7.8.3, 7.8.4	10/02/22, 30/03/22
Flindersia bourjotiana	Queensland Silver Ash	7.8.2	5/01/22
Flindersia pimenteliana	Maple Silkwood	7.8.2	3/02/22
Flueggea virosa	Snowball Bush	9.8.3	2/03/22
Gillbeea adenopetala	Pink Alder	7.8.4	10/02/22
Gmelina fasciculiflora	White Beech	7.8.2	27/01/22, 17/03/22
Gossia bidwillii	Python Tree	9.8.3	2/03/22
Guioa acutifolia	Glossy Tamarind	7.8.4, 7.8.3	5/01/22, 27/01/22
Halfordia kendack	Kerosenewood	7.8.2	25/03/22
Homolanthus novo-guineensis	Bleeding Heart	7.8.4	10/02/22
Karrabina biagiana	Brush Mahogany	7.8.4	10/02/22
Levieria acuminata	Straw Beech	7.8.2	25/03/22
Mackinlaya macrosciadea	Blue Umbrella	7.8.3	22/02/22
Mallotus paniculatus	Turn-in-the-Wind	7.11.19	24/03/22
Melaleuca viminalis	Creek Bottlebrush	7.3.23	24/02/22
Melicope elleryana	Pink Euodia	7.8.3, 7.8.2, 7.8.4	3/03/22, 24/03/22
Melicope jonesii	Evodia	7.8.2, 7.8.4	30/02/22, 4/03/22
Melicope rubra	Little Evodia	7.8.3	3/03/22
Melicope vitiflora	Northern Euodia	7.8.2	3/03/22
Melicope xanthoxyloides	Yellow Evodia	7.8.2	24/03/22, 30/03/22
Nauclea orientalis	Leichardt Tree	7.3.23	24/02/22, 2/03/22
Neisosperma poweri	Red Boat Tree	7.8.3	5/01/22
Neolitsea dealbata	White Bollywood	7.8.3, 7.8.4	17/03/22, 24/03/22
Ostrearia australiana	Hard Pink Alder	7.8.2	10/03/22
Pararchidendron pruinosum	Snowwood	7.8.4	5/01/22
Phaleria clerodendron	Scented Daphne	7.8.3, 7.8.2	21/01/22, 15/02/22
Phaleria octandra	Dwarf Phaleria	7.8.3	17/03/22
Pilidostigma tropicum	Apricot Myrtle	7.8.4	3/02/22
Pittosporum spinescens	Orange Thorn	9.8.3	2/03/22
Pittosporum venulosum	Rusty Pittosporum	7.8.3	10/03/22
Pittosporum wingii	Hairy Pittosporum	7.11.19	24/03/22
Pleiogynium timoriense	Burkekin Plum	9.8.3	3/03/22
Prumnopitys amara	Black Pine	7.8.4	17/03/22
Pullea stutzeri	Hard Alder	7.8.4, 7.8.2, 7.12.16	24/02/22, 10/03/22
Sarcomelicope simplicifolia	Hard Aspen	7.8.3	3/03/22
Schefflera actinophylla	Umbrella Tree	7.8.4, 7.8.2	10/02/22, 17/02/22
Schizomeria whitei	Crabapple	7.8.3	22/02/22
Siphonodon australis	Scrub Guava	9.8.3	2/03/22
Stenocarpus davallioides	Fern Leaved Stenocarpus		27/01/22, 15/02/22
Strychnos psilosperma	Strychnine Bush	9.8.3	2/03/22
Synima cordierorum	Synima	7.8.4	5/01/22
Syzygium australe	Creek Cherry	7.8.3, 7.8.2	20/01/22, 18/02/22
Syzygium gustavioides	Watergum	7.8.2, 7.8.4	24/03/22
Syzygium luehmannii	Small Leaved Lilly Pilly	7.8.2	10/03/22
Syzygium tiernyanum	River Cherry	7.3.23	24/02/22
Toechima monticola	Mountain Toechima	7.8.4	3/02/22
Tristaniopsis exiliflora	Kanuka box	7.3.23	24/02/22
Triunia erythrocarpa	Spice Bush	7.8.4, 7.8.2 7.8.2	3/02/22, 17/02/22
Xanthostemon whitei	Red Penda		5/01/22
Zanthoxylum veneficum	Thorny Yellowwood	7.8.4	3/02/22

Species and Common names taken from 'Australian Tropical Rainforest Plants Edition 8' online key.

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