



Streamlines

Newsletter of the Pullen Pullen Catchments Group Inc.

May 2019

Welcome to Streamlines for May 2019. We begin this issue with member Alan Anderson's illustrated account of the revegetation work he and wife, Sue, have carried out on their block at Pullenvale. The results they have achieved in a relatively short period of time are remarkable.

Lantana has been a recurring theme as a weed confronted by members restoring vegetation on their properties, so I have extracted some information from a recent State Government report on promising research into biological control of this menace.

At our Annual General Meeting in December, Landscape Designer and Native Plants Australia member Lawrie Smith, talked briefly about a wide range of native plants suitable for planting in gardens. During the year, I plan to publish notes on some of these plants concentrating on ones that occur naturally in this area. In this issue, two of the trees. I hope people revegetating their blocks find these notes useful. Bear in mind that trees tend to be large perennials so may only be suitable for larger blocks.

Finally, a few notes on a fungal disease, previously only known in caged populations of Eastern Water Dragons, that has been found recently on wild populations in Brisbane

All members are welcome to submit articles to Streamlines via helian@pretirementresorts.com.au. The deadline for the next issue is 15 August 2019. Enjoy!

Helen Ogle

Editor

CONTENTS

	Page
Pullen Pullen Catchments Group.....	2
NEWS.....	3
Plant Them and They will Grow.....	4
Biocontrol of <i>Lantana camara</i>	6
Trees for Our Area (1)	7
Fungal Disease of Eastern Water Dragons.....	8



Pullen Pullen Catchments Group

A Landcare Group

Meetings

Meetings are held at 7pm on the first Wednesday of each month at Pullenvale Environmental Education Centre, 250 Grandview Road, Pullenvale.

Website

www.pullenpullencatchments.org.au

Working Bees

Anstead Bushland Reserve – 1st Sunday of the month, 8.30 - 11 am.
Pullenvale Forest Park – 2nd Sunday of the month, 8.30 – 11 am

Tools, gloves, etc are provided at Working Bees. Just wear sturdy boots, tough clothes and bring water and a hat!

Committee Members 2019

President:	John Ness	3202 7556	john.ness@emsolutions.com.au
Vice President:	Richard Ponsonby	3202 9484	members@pullenpullencatchments.org.au
Treasurer:	Kaaren Ness	3202 7556	
Secretary:	Liz Dominguez	3202 7967	contactus@pullenpullencatchments.org.au
Committee Members:	Brian Dean	3202 8553	
	Irene Darlington	0409 026 883	wildlife@pullenpullencatchments.org.au
	Ron Tooth	3374 1002 (W)	
	Ray Krafft	3202 6470	
	Lynn Brown	0417 648 050	<i>Bushcare Coordinator, Pullenvale</i>
	Rob Preslmaier	0488 738 250	<i>Bushcare Coordinator, Anstead</i>
Website Coordinator:	Nola Dean	3202 8553	contactus@pullenpullencatchments.org.au
Streamlines Editor:	Helen Ogle	3323 7407	helian@pretirementresorts.com.au
A/Creek Catchment Officer	Andrew Wills	3407 0215	andrew.wilis@brisbane.qld.gov.au

Membership Options

Membership fees are:

- Annual Membership – \$10 per person payable on March 1 each year
- Life Membership – \$100 per person

We are delighted to accept donations.

- a) Send a cheque payable to PPCG to PO Box 1390, Kenmore, 4069 or
- b) Transfer the funds electronically to BSB 064 152, Account No.10107038 Ref: your name.



Dedicated to a better Brisbane

“The PPCG acknowledges the support of the Lord Mayor’s Community Sustainability and Environmental Grants Programs for a grant to help with administrative, bushcare and educational costs”

NEWS

Two major issues confront PPCG at the moment – the need to increase membership and the need to increase involvement of existing members in PPCG activities. Considerable discussion continues to revolve around these issues. One proposal involves growing plants from the Moggill Creek Catchment Group Nursery on and distributing them when more mature. At least one of the local schools has expressed interest in being involved in this project which could be extended to interested community groups. Members with ideas, suggestions, comments are most welcome to contact PPCG through contactus@pullenpullencatchments.org.au or by contacting one of the committee members directly.

Pullenvale Forest Park Participants at Bushcare Mornings have put considerable effort in to removing balloon vine smothering plants. Of major concern in the Park is the number of dogs off-leash and the amount of dog faeces on the walking tracks not being cleaned up by owners. Lyn asked about the possibility of more signs advising owners of their responsibilities. A platypus has been sighted in the creek. The last confirmed sighting of a platypus was in 2011/12 so it looks like they are managing to survive. At present Pullen Pullen Creek has less water in it than at any time since 1981 and possibly well before that. **Bushcare Mornings will be held on June 9, July 14 and August 11. All members are welcome to attend, participate as much as their abilities allow and enjoy an excellent morning tea.**

Anstead Bushland Reserve More seedlings have been planted using waxed paper guards instead of plastic ones. Rob has organised watering sessions in between Bushcare Mornings and has achieved about 85% survival rate – wonderful considering the conditions. Weed growth was minimal during the hot weather but a concentrated weed spraying/line-trimming effort was needed after rain in late March. **Bushcare Mornings will be held on June 2, July 7 and August 4. All members are welcome to attend, participate as much as their abilities allow and enjoy an excellent morning tea.**

Airlie Road Watering, mowing and clearing has continued. If there is significant rain over the next month, some of the trees that have died during the extended dry period will be replaced. Survival of seedlings planted by Pullenvale State School students during the last school holidays is quite good, despite the conditions – thanks to John's diligent watering.

Wildlife Irene reported at the March meeting that the unusually hot weather had continued to result in many possums being treated for burns to their hands and feet from walking on hot roofs and wires. All the birds she was receiving at this time were underweight due to collapse of insect populations and fruit trees not bearing well. The situation was so dire that adult birds were killing other adult birds, not just young and adolescent birds, for food. She was advocating support feeding. Fortunately, at the April meeting she reported that the cooler weather had seen an improvement in both situations.



Irene running the PPCG Display on April 15 at the Ryan Candidates Climate Forum. Her efforts resulted in several new members

Plant Them and They Will Grow

Alan Anderson

Sue and I are lucky enough to live on a 1.6 ha property in Pullenvale that backs onto Pullen Pullen Creek (right). We moved here in late 2005 having sold our farm at Grandchester. When we moved in, the vegetation on the property consisted mainly of lawn and lantana. The lantana was so extensive that it totally hid an old rainwater tank, climbed high into the canopy of the few trees that were here and, initially, we did not know a large, but dry, dam existed down by the creek.



Evidently, our property had been heavily cleared in a bygone era with only a handful of mature trees surviving compared to neighbouring blocks. It had probably been used for horticulture as there was an old pump down by the creek with a metal tube running four hundred metres up the western boundary and several swales had been cut across the land sloping down to the creek – a pineapple farm, maybe?

I don't have photos of those early days to show the extent of weed cover but, fortunately, I had taken my tractor from our farm and with a heavy blade on the front forks the lantana was soon physically removed and then using the rear slasher, it was chopped up and made into excellent mulch. Any regrowth or seed germination the following year was easily dealt with by hand removal.

This approach may be contentious as regeneration convention has it that clearing and planting a weed infested area should not be carried out in one fell swoop but should be undertaken progressively in stages leaving some of the original habitat and cover for wildlife until the new plantings are established. However, my view was that the area under our control was relatively small and there was sufficient (weed) habitat on neighbouring properties and the creek corridor!

The next activity may also be contentious for some, as I had to fence the block to keep our golden retrievers secure. I am convinced that the large square mesh fencing used did not inhibit the passage of wildlife. Unfortunately, the fences were also no barrier to the feral deer as subsequent bark stripping of saplings would soon attest to.

I then installed a 5,000 gallon tank near the top of the block and after we got some rain, using gravity feed through long lengths of garden hose, the process of replanting the cleared area was ready to begin. The flats to the north down by the creek were planted first. This area lies at the bottom of a slope and so gets good run off from the rain (when we get some!) and, being very near the creek, has good alluvial soil. The leaf drop from the lantana over the years probably further improved the soil.

At planting, a handful of "magic dust" (crushed basalt rock or road base) was thrown in each hole and the hole filled with water. This helps provide essential minerals and, together with a good mulching around each tree, aids moisture retention without the need for follow-up watering, unless there is an extended dry spell after planting, which is why the planting is done at selected times of the year. The result was better than 99% initial survival rate among the young plants.



August 2007



April 2008



July 2010



December 2014

As the above photographs show, the flats went from bare earth to a mini rainforest in just a few years – from the initial planting of tube stock in 2007 with additional plantings in 2010.

The photo on the right shows how the area looked in February 2019, even after several months of drought, although some recent rain had helped revive the stressed trees.



Other areas were planted progressively at selected times of the year to form corridors along the eastern and western boundaries with extended plantings in more recent years. So far, well over 4,000 native trees and shrubs have been planted during the 13 years we have lived here.

There are over 170 different species or varieties of plants with the majority being dry rainforest types although a number of eucalypt (dry sclerophyll) species were included particularly on the hill slopes. An excellent guide I strongly recommend for anyone interested in planting local species on their land is: "Putting Back the Forest", a Landcare Guide for Brookfield, Pullenvale and Moggill by Bryan Hacker, Rona Butler and Rae Rekdahl, published in 1994 by Rural Environment Planning Association Inc.

I have tried different mulching techniques over the years. Initially, available mulch was only put round each plant with the ground between plants left bare. This worked well but needed more time for weeding later. Then I moved to blanket mulching with a layer of newspaper over the entire planting area covered in wood chip. This method incurred some time and, of course, extra cost. Now I just plant into mown grass and pile leaves straight on top of the lawn into which the tube stock is planted. As a result of the hot dry summer we have had plenty of leaf drop from our mature mango trees and the eucalypts. I find the ability of the grass to push through the leaf mulch is limited to a few manageable spots.

The downside of being next to the creek is that it can flood. This has happened several times since we have lived here but, fortunately, not too much damage has been done to the trees. Storms, and in particular, high winds can also be a problem. A few years back a magnificent celery wood (*Polyscias elegans*) had shot up and was by far the tallest tree in the area when it lost the top third of its trunk and all its foliage in a storm before it was able to flower and set seed. However, all was not lost, as little celery woods soon started to regenerate around the base of the tree, apparently growing from the root stock. Other trees, such as a silky oak (*Grevillea robusta*) and the well named flame tree (*Brachychiton acerifolius*) soon took over as canopy leaders.

Due to a fairly close planting scheme whereby each tree is within a metre or two of the next one, the plants are encouraged to grow upwards by competing for the light in order to form a canopy as soon as possible. Canopy, as shown on the top right, means that if you look up, you see mostly leaves as the tops of the trees are high enough and dense enough to overlap and partially, at least, block out the sunlight. This keeps the forest floor nice and cool even on a really hot day, aids with weed control and enables other types of plants such as ferns to grow. The bird's nest fern (*Asplenium australasicum*) on the right was planted but other ferns have regenerated naturally.



As the trees grew, they soon attracted a range of wildlife, especially birds, and provision of several water baths around the property has encouraged this. Various bird species that we previously did not see or hear have moved in although they come and go with the seasons and over time.



Some birds have established nests such as the mainly nocturnal ground dwelling Bush Stone-curlew (*Burhinus grallarius*). For several weeks late last year, we could hear their eerie, high-pitched wailing at night. Of the two beautifully camouflaged eggs, only one hatched and we hope the chick survived and prospers. The Stone-curlew parents were very attentive, trying to lure us away from the nest site if we ventured too close. One day, when we were walking up from the creek with our dogs, one of the curlews spread its wings wide and high in an impressive threat posture and made a hissing noise. Our puppy-in-training, Hanna, stopped in her tracks but quickly recovered her composure and like any well trained would-be Guide Dog, she simply walked around the feathered obstacle.



Bush Stone-curlew on nest

Some bird species eat the seeds of the trees and spread them around and bring in seeds from other areas. This is good and bad. There are new trees and shrubs shooting up in numerous places, but there are also lots

of weeds such as asparagus fern, Brazilian nightshade, glycine, ochna, coral berry and exotic grasses that get pulled out as soon as they are discovered.

One weed of particular concern at the moment is creeping inch plant (*Callisia repens*). According to the Brisbane City Council Weed Identification website, this is “a long-lived (i.e. perennial) herbaceous plant with creeping (i.e. prostrate) stems forming dense mats of vegetation.” It originates from Central and South America and first appeared on our block a few years ago following heavy rain and creek flooding – presumably washed downstream. The *Callisia* encroached up the creek bank and onto lower parts of our property that were shaded and moist. As we do not use toxic weedkillers the only alternative was hand removal. Fortunately, it is easy to pull out and/or rake up although this is time consuming because of the large areas affected. In addition, I am trialling a method of smothering the weed under layers of palm fronds (of which we have plenty from the front garden) and other leaf droppings. This may constitute a form of biocontrol through an allelopathic effect – time will tell how successful it is.

A variety of plants seem to readily regenerate on their own in different locations. These include White cedar (*Melia azedarach*), Poison peach (*Trema tomentosa*), Red ash or Soap tree (*Alphitonia excelsa*), and various wattles (*Acacia* species). In addition, numerous vines such as Wonga vine (*Pandorea pandorana*), Wombat berry (*Eustrephus latifolius*), Native sarsaparilla (*Hardenbergia violacea*) and the very prickly Smilax (*Smilax australis*) need no encouragement to spring up.

Although we have been planting natives to create the look and feel of the bush, this is first and foremost a garden for the family to enjoy and relax in. That is why there are paths through the forest areas and, in an area of 16,000 square metres, there are still lots of open grassy areas for our grandchildren to run around and our dogs to chase a ball. The various native flowering plants that attract birds and insects also provide bright and uplifting splashes of colour. These include several types of native hibiscus such as *Hibiscus heterophyllus* (native rosella) and a number of the hundreds of different grevillea varieties that are very popular with nectar eating birds and bees.



We have 30 hives of native stingless bees, primarily *Tetragonula carbonaria*, courtesy of Tony Goodrich and one section planted with a range of butterfly foodplants, including the well-known Richmond Birdwing vine (*Pararistolochia praevenosa*).

The job isn't finished. There is a bit of on-going maintenance required to keep the weeds at bay but this becomes easier as the plants shade out some weeds and the leaf litter accumulates. There will be more plantings and expansion of the bush areas in the future as the weather permits.

Photos: A & S Anderson

Biocontrol of *Lantana camara*

Extracted from State of Queensland publication

CS8691 Invasive plant and animal research 2017–18 Technical highlights

Project summary

Lantana is a major weed of grazing, forestry and conservation areas. It is found throughout coastal and subcoastal areas of eastern Australia, from the Torres Strait Islands in the north to the Victorian border in the south. Lantana can be controlled using chemicals, machinery and fire but some of these methods are not suitable in forestry or conservation areas or are not cost-effective. Biocontrol is seen as the only viable option in many areas.

Although biocontrol has been in progress in Australia since 1914, recent research has emphasised the need to find agents that damage specific parts of the plant or prefer the climatic regions in which lantana grows. This project has relied on strong overseas collaboration to identify new agents, and collaboration with stakeholders in eastern Australia to release agents and monitor their establishment and impact.

The lantana budmite *Aceria lantanae* has been widely field released. Populations have persisted at only a few sites around south-eastern Queensland, but the budmite is becoming abundant in northern Queensland at numerous sites, especially from Charters Towers to Townsville and south to Bowen. It is also found around Kuranda (on the Atherton Tableland) and Cardstone. Field releases of the budmite are continuing.

The herringbone leaf-mining fly *Ophiomyia camarae* is widespread in northern Queensland and is becoming more common in south-eastern Queensland. It has recently been reported in numerous suburbs around Brisbane. Collectively, biocontrol agents have been causing severe defoliation to lantana in many areas of south-eastern Queensland, resulting in reduced number of flowers and seed set.



Aceria lantanae damage on lantana at Charters Towers

Trees for Our Area (1)

Helen Ogle

Only four trees from Lawrie's list grow naturally in our area. Two are described here. One is ***Auranticarpa rhombifolia*** (formerly *Pittosporum rhombifolia*), a small rainforest tree that occurs naturally between the Richmond River in NSW and Forty Mile Scrub National Park in North Queensland. It has a number of common names – **diamond leaf pittosporum**, hollywood, diamond leaf laurel, white myrtle and white holly – and is widely grown as an ornamental and street tree. It is popular with gardeners because of its glossy green, diamond or rhomboid shaped leaves with a more or less serrated margin (hence the common names involving holly), numerous perfumed white flowers between November and January and masses of brilliant orange fruit (*Auranticarpa* = gold fruit) from February to May. It grows better in drier, well-drained conditions but responds well to watering and needs full sun to develop strong fruit colour.



Leaves, flowers and fruit of *Auranticarpa rhombifolia* (Diamond leaf pittosporum)

The second plant from the list is the **Plunkett mallee, *Eucalyptus curtisii***, so-called because it was first collected by local farmer and naturalist Densil Curtis near Plunkett to the north of Mount Tamborine in 1923. It has a restricted natural distribution in south-east Queensland. Plunkett Mallee is one of the few eucalypts suitable for suburban gardens. It grows from 2-7 m tall, often with multiple trunks covered with smooth grey

bark that sheds in long strips. It is evergreen with typical long narrow eucalypt leaves darker above than below. Its main claim to fame is masses of creamy-white typical eucalypt flowers in late spring. The flowers attract honeyeaters and various insects including native bees. It is attractive, adaptable, hardy and frost resistant, growing better in open to sunny positions. Incidentally, Ipswich City Council adopted Plunkett mallee as its floral emblem in 1996.



Grey barked multiple trunks, flowers and leaves of plunkett mallee, *Eucalyptus curtisii*

Fungal Disease of Eastern Water Dragons

Dr Celine Frere from the University of Southern Queensland has been studying the water dragon populations in Roma Street Parklands, City Botanic Gardens, South Bank and Mt Coot-tha Botanic Gardens in Brisbane for several years. At each park the dragons are slightly different in appearance. The Roma Street dragons are smaller, but have really big heads. The City Botanical Garden dragons are immense compared to eastern water dragons in the wild, but have smaller heads and shorter limbs. For an interview with Dr Frere, see <https://www.abc.net.au/news/2018-02-10/water-dragons-are-evolving-at-a-pace-we-can-witness/9415990>

A fungal disease has recently been confirmed in free-ranging water dragon populations in Roma Street Parklands, South Bank Parklands, City Botanic Gardens and at Redbank Plains. The disease presents as crusted, thickened tan, brown or yellow plaques on the skin. Lesions are most commonly seen on the throat, ventral abdomen, limbs and tail of the water dragons, but may present anywhere on the body. In advanced cases, animals may lose digits or the end of the tail and become emaciated and lethargic.

The disease is caused by a fungus in the genus *Nannizziopsis* which has been associated with severe fatal disease in captive coastal bearded dragons. This is the first time it has been reported in free-living animals. Worldwide, *Nannizziopsis* and two related genera of fungi have been increasingly reported associated with fatal skin and systemic infections of reptiles over the last few decades. Infection is often fatal with limited treatment success. This outbreak may present a serious threat to Australia's reptilian fauna.

Should you identify a suspected case, **please contact one of the researchers listed below as soon as possible**. Please note the number of affected animals, species, location, date and supply photographs if possible.

Nicola Peterson, University of the Sunshine Coast, nrp005@student.usc.edu.au 0401 603 036

Dr Stephanie Shaw, University of Queensland, s.shaw@uq.edu.au 0413 103 886

Dr Celine Frere, University of the Sunshine Coast, cfrere@usc.edu.au 07 5456 5415

For further information, check out the Wildlife Health Australia Fact Sheet [Yellow Fungus and Related Diseases In Australian Reptiles Dec 2018 \(2.1\)](#) [PDF]

Full statement about this outbreak of an emerging fungal disease is on the PPCG website