

Ruellia Composting at Reliance Creek

The weeds *Ruellia simplex* and *Hymenachne amplexicaulis* are invading the forest and, in particular, the revegetation site on Reliance Creek, at the bottom of Browns Rd, Habana. The nursery volunteer team is hand weeding around our revegetation species and the natural regeneration, but these two weed species cannot be left on the ground as they grow vegetatively. Instead of taking these weeds off site and eventually putting them into the waste stream, they are being composted on site. The process is simple - place the weeds on the ground, cover them with black plastic, with a dip in the middle of the pile to encourage moisture to go to the centre of the pile rather than leak off the outer rim. With the weeds touching the ground under the plastic there will be enough moisture and natural microbes to start the whole process of decomposition from the bottom. We will turn the heaps one month after laying them down. After that we will leave the heaps for several months until the mulch is black and ready to put around the trees we have planted.

Thanks to Dave Hunter for his advice on this method of composting. Information on other recipes for composting can be at the website theunconventionalfarmer.com Managing Ruellia and Hymenachne in the Reliance Creek Forest is being supported by funding from Mackay Regional Council and the Australian Government's Clean Energy Futures Biodiversity Fund. Project partners are local landholders and Queensland Parks and Wildlife Service.



Nursery volunteers Margaret, Dave and Peter with the first pile of weed composted on site.

Volunteers Needed

Pioneer catchment and Landcare (PCL) are looking for volunteers to participate in this year's "Great Northern Clean Up". The event will be held on Sunday September 13. Commencing at 8am and concluding at 10am. PCL will be sponsoring the Riverside Drive site, at the Sam's Road end of Riverside Drive. This is a litter hot spot and we are hoping to get plenty of volunteers to help clean up this area.



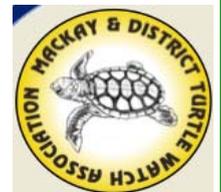
Did You Know?

Back yard gardeners can get rid of noxious weeds including nut grass by packing them as tightly as possible into a plastic bucket or 200litre drum then simply covering them with water, put a lid on to keep the rain and mosquitos out. This will make a rich organic liquid fertiliser to be used around the garden. If left for long enough the weeds disappear altogether, that is there is virtually no solid residue, in the shorter term they are rendered unviable and once you use the liquid off the top the residue can be safely used as mulch.



Condolences

It is with great sadness that we report the loss of our friend and Sea Turtle champion Ken Griffin who passed away on August 12. PCL offer sincere condolences to Ken's family. Ken will be remembered as a great advocate for the Marine Environment. Together with his wife Fay, Ken developed an extensive knowledge and understanding of Marine Turtles through hands on activities and constant research. Ken's knowledge and work with Marine Turtles is well recognised throughout the Marine Environment community. He will be sorely missed by all who knew him and benefited from his work.



Have Your Say

Council is currently preparing detailed design options for the remaining undeveloped section of the Botanic Gardens. There is approximately 30 hectares of Gardens to be developed. To get involved submit your feedback online, visit the project page at the online engagement website Connecting Mackay. <http://connectingmackay.com.au/botanic-gardens-public-consultation>

Eungella Bottlebrush**Family:** Myrtaceae

A small to medium shrub up to about 3m.

Leaves: alternate, narrow 20-68 x 1.3-8mm; 6 to 30 times as long as wide. Silky when young, becoming hairless, stiffer and sharp pointed with maturity. Oil dots visible with a hand lens.**Flowers / Fruit:** 10 to 40 pale pink flowers borne on spikes 20-30mm wide, followed by woody capsules 3-4.3mm long containing numerous fine seeds.**Habitat:** Wet sclerophyll forest in this region.**Propagation:** By seed or tip cuttings**Notes:** Eungella Bottlebrush is known in this

bioregion only from a single disjunct population at Eungella. It was only identified to species level in April this year when Botanist, Tony Bean examined Qld Herbarium specimens. It is fast growing, can be pruned to maintain a compact habit and is useful for screens or hedges. Excellent examples can be seen at the Mackay Natural Environment Centre and at the Mackay Regional Botanic Gardens. It is currently in flower. Flowers provide nectar for birds, moths, butterflies and other insects and foliage provides refuge for small birds.

References: April 2015 pers. com. between Tony Bean, Qld Herbarium, and Irene Champion. *Melaleucas their botany, essential oils and uses* by Brophy, Craven and Doran, ACIAR 2013

**Weed Spotting***Argyreia nervosa***Woolly Morning Glory****Family:** Convolvulaceae**Form:** Vigorous perennial twining climber with white woolly hairy stems up to 9m long; yellowish sap. Will scramble across the ground, covering large area if no climbing support available.**Leaves:** Alternate simple, large heart-shaped, size varies with age and conditions, leathery, grey-green above, white with woolly hairs below.**Flowers:** Funnel-shaped to 50mm diameter, pink with darker throats, borne in few to several flowered, axillary clusters.**Fruits / seeds:** Fruits resemble miniature woodroses and consist of a central bud-shaped berry, about 17 x 17mm, surrounded by 5 persistent petal-like calyx lobes, brown on the inside and silvery, hairy on the outside. Berries usually contain 4 wedge shaped hairy seeds, 4-7mm long. Fruits used for floral arrangements. Toxic seeds contain alkaloids.**Spread by:** garden waste and water.**Invades:** Rainforest margins, riverine rainforests, open eucalypt woodland and roadsides.**Notes:** Introduced as a garden ornamental; overtops and smothers trees; scattered distribution across coastal, north and central Queensland. Naturalised populations more common in drier northern section of this region but observed to be establishing as far south as Carmila.*Images: Di Salau*

Source: 2011, Weeds of Mackay Whitsunday Region, Mackay Regional Pest management Group.

Funding Granted

Mackay Regional Council have recently provided funding to enable the Land For Wildlife project to be delivered in the 2015—2016 financial year. Individuals who have submitted expressions of interest will be contacted in the coming months to arrange site visits. Funding has been granted for 10 new properties to be added to the program. If you are an existing Land For Wildlife participant and you are interested in having an officer conduct a revisit to your property please contact our office. The funding obtained allows for 12 revisits in the financial year.



Rehabilitation of the Reliance Creek Palm Vine Forest

PCL has reached the end of a 3 year project (\$92,600) funded by the Australian Government's Clean Energy Futures Biodiversity Fund. Over those three years the project priority has been treatment of Cats Claw Creeper (*Macfadyena unguis-cati*), a Weed of National Significance (WONS) in approx 30ha. Conservation Volunteers Australia have worked on both private property and in the Reliance Creek National Park treating Cats Claw Creeper. Pest contractor Ray Greaves has worked on private property upstream undertaking initial treatment of this weed, as well as some follow up of regrowth that has occurred from tubers and seed bank. Throughout the project treatment has also been conducted for *Hymenachne amplexicaulus*, another WONS that occurs on this site. During the three years engagement has occurred with adjoining landholders to identify infestations of these species on their properties.

Important learnings from the project have been that the Cats Claw Creeper is not only invading creek bank forest, but has spread to the nearby hillsides. PCL is currently in the process of mapping the extent of the infestation. The best way to manage weeds in this ecosystem is to ensure there is dense canopy cover. To do this the control method of cut and poisoning the creeper at the base of the trees has been performed, causing the growth in the canopy to die and hopefully preventing regrowth from

the ground. A biological control was released into the project area several

years ago; there is current evidence it is having an impact. Planting of 1500 tubestock in the gaps in the forest just upstream of the National Park has been undertaken. PCL volunteers have been hand weeding to ensure that these plants and the natural regeneration are not overwhelmed by a wide range of invasive species that occur when the ground is disturbed and there is plenty of sun and water.

An important commitment to the Australian Government is that we look after this site for 10 years. To that end PCL has received funding for three years to find the best way manage the other major weed on site, *Ruellia simplex*. Reef



Image: Effective Cut and Paste treatment



Image: Landowner, Cr Laurence Bonaventura recently inspecting Cats Claw Creeper impacted by the biological control. Laurence commented there is an increased in natural regeneration in the forest since work began.

Catchments has provided funding in 2015 to continue maintenance of the revegetation and treatment of regrowth of the creeper, as well as extend the treatment of Cats Claw into adjoining areas. This funding will also allow us to map and treat Cats Claw Creeper in Sandy Creek.

Thankyou

PCL would like to thank the following individuals and organisations for their valuable contributions:

Peter Muscat—for the donation of 10 bales of cane trash, including delivery to use as mulch for revegetation planting at the Reliance Creek Project.

Carlisle Motors— for the provision of free vehicle services for our work ute inside the warranty period for the vehicle.

Change of Contact Details

PCL Postal address has recently changed, the new address is: PO Box 3181 Nth Mackay LPO 4740.

Weed Busters Event

A demonstration of splatter gun use and spot treatment of *Tithonia diversifolia* -Japanese Sunflower will be conducted on Monday September 14 at Ridgewood Drive Farleigh. The demonstration will commence at 9:30am. This is an opportunity to get valuable advice on the treatment of a serious environmental weed.

Attendees are invited to bring along weed specimens in a sealed plastic bag for identification and treatment advice. Please register your interest to attend by contacting the PCL office.



Upcoming Events

September

Saturday 5 - Morag Mc Nichol Reserve Working Bee ph: 49550153

Sunday 6 - Birdlife Mackay Outing, Tedlands Koumala.

Monday 7 to Sunday 13 - Landcare Week.

Sunday 13 - Great Northern Clean Up.

Sunday 13 - Bushcare's Major Day out. <http://www.bushcaresmajordayout.org/>

Sunday 13 - Marian Scouts Working Bee - Melba House. 8am.

Monday 14 - Weed Buster Event.

Saturday 19 - Family Fishing Day Gooseponds.

Saturday 19 - 22 - 20th Australian Orchid Council Conference and Show www.orchidparadise.com.au

Saturday 12 and 26 - Friends of MacKillop Wetlands Working Bee ph: 4956 0346

October

Sunday 4 - Birdlife Mackay Outing - Snake Rd Eungella

Saturday 10 - Morag Mc Nichol Reserve Working Bee.

Wednesday 14 - Ride to work Day.

Saturday 7 - Friends of MacKillop Working Wetlands Working

Pioneer Catchment & Landcare Group Inc. Management Committee

Chair: Dave Hunter

Vice-Chair: Di Salau

Treasurer: Margaret Lane

Committee Members:

Irene Champion Cr Theresa Morgan Grant Howard

Caitlin Davies Dianne Williams

Family Fishing Fun Day at the Gooseponds

Mackay families have an exciting opportunity to take part in a hands-on day of fishing action and education at the Reef Catchments Family Fishing Fun Day, **Saturday 19 September**.

Local kids are being called on to help release 1000 barramundi fingerlings into the Mackay Gooseponds as part of on-going tilapia predatory control trial. Young anglers will also be provided with bait to take part in two hours of fishing and fun.

Children will also be involved in a short information session where they will learn to identify aquatic pests and threats, such as the noxious pest fish tilapia. Adults won't be left out either, with plenty of information displays highlighting the outstanding environmental work underway in the Mackay and Whitsundays.

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