

Rapping On Into '22

Pioneer Catchment Landcare is proud to announce the continuation of our successful Reef Assist Program, delivered by local Landcare organisations in Sarina, Mackay and Whitsunday and funded by Queensland Government through Reef Catchments.

PCL Coordinator Nancy Pratt said it was because of the success of the RAP project both for our community and the environment that the project had been extended until June 30, 2022.

Initially the program has had a core aim of stimulating employment and training in the natural resource management sector. With RAP Trainee Sabrina Black completing her Cert IV in Conservation and Land Management, there can now be even more focus on improving water quality in our Great Barrier Reef catchment.

“Activities will include riparian works and revegetation of water courses, to slow and/or filter runoff from the land into our waterways,” Ms Pratt said.

“One major target will be mangrove health, as this is a passion of Team Leader Darrell Barba and an area that I feel needs greater spotlight. The RAP team will be doing in-field monitoring, observations, surveying and water quality testing.

“We will be employing an new full-time Field Officer to work alongside Darrell in the new year.”

Over 2021, the team has worked with ten landholders with on-property projects that have benefits for quality of water run-off in the Pioneer Catchment. They have engaged in both site re-vegetation and invasive plant species management and education in the Pioneer Valley—particularly tackling Madeira and Rubber Vines, but also gaining experience with the extensive range of invasive species—and in coastal areas including a Reliance Creek palm forest, Sandringham Wetland, Sandy Creek, Lamberts Beach Lookout and a remnant suburban wetland area in Bucasia. They have also carried out vital maintenance work on some of PCL’s St Helens Creek disaster recovery and Reef Trust IV sites.

“I think the most valuable outcome of RAP for our catchment is putting the education into practise and making a difference.” said RAP team member Sabrina Black.

“Darrell and I are extremely passionate about caring for the environment. Having the opportunity to work for PCL, knowing that we are doing our part to help our great Pioneer Catchment, is extremely fulfilling.

“Over the course of the Reef Assist Program, we have engaged with several private landholders and many of which were very excited to show us around their property. Talking with enthused landholders has taught us about the history of the land, and on-ground knowledge. It also led us to explore private riparian sites which were unique and breath-taking.”



TOP: The RAP team with landholders who enrolled in the program. From left, Sabrina Black, Geoff Denman, Darrell Barba, and Hayley Denman.

CENTRE: Darrell Barba at PCL’s Reef Trust IV site, Calen.

BOTTOM: Sabrina Black speaking at a Madeira Vine Awareness Day at Finch Hatton Showground.

Photos: PCL RAP Team

OUR VISION:

To empower our community to build biodiverse ecosystems

OUR MISSION:

To implement an integrated, science-based approach to natural resource management through supportive partnerships across our catchment.

VALUES:

- ⊗ *We are innovative, and driven by action at a grassroots level* ⊗
- ⊗ *Ethical* ⊗ *Engaged* ⊗ *Passionate* ⊗

Mountain Heath Bottlebrush

Family: **Myrtaceae**

This form of *Melaleuca recurva* flowers throughout most of the year and is an attractive garden plant. The wide-spread *Melaleuca recurva*, shrub or tree to 7m high, known as Tinaroo Bottlebrush, occurs in higher altitude (400-1200m) eastern districts of North Qld from Atherton Tableland south to about Bowen, has been in cultivation for many years. However, it was only about five years ago, when the Curator of *Melaleuca* at the Qld Herbarium A. R. (Tony) Bean, was working on keys for this genus, that the species from Diamond Cliffs west of Mackay, originally thought to be *M. pearsonii*, was determined to be *M. recurva*. (Plants donated to the Mackay Regional Botanic Garden in 2007 and 2016 were grown from seeds collected in 1990 from a heath community near the top of Sydney Heads in Homevale National Park.)

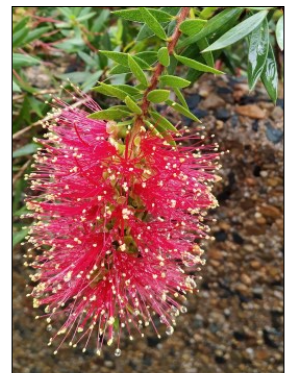
Form: Shrub to about 1m high with fibrous bark. Branchlets and pinkish new growth are silky hairy.

Leaves: Alternate, narrowly ovate 16-35 x 5-6 mm, somewhat recurved, petiole very short or absent, apex ending in a sharp point, veins indistinct. Moderately dense aromatic oil glands are visible with a hand lens as translucent dots.

Flowers: Bottlebrush-like inflorescences, 30-50mm x 35-50mm in diameter, borne just below the growing tip of the branchlets, are comprised of up to 30 stalkless individual flowers (easily seen in the bud). The showy parts are the bright red filaments of the stamens that are tipped with yellow anthers. **Fruits/Seeds:** Woody capsules 4-5 x 3-4mm long, contain numerous small, dark brown seeds.

Growing notes: Responds to pruning and the application of native plant fertilizer according to manufacturers' instructions. Useful low screen or hedge. Flowers best in full sun and has moderate water requirements once established. A pollinator attractor.

Sources: *Melaleucas: their Botany, Essential Oils and Uses* Brophy, Craven and Doran 2013.; Pers. com. between Irene and Tony Bean 14.01.22. Live material. **Images:** Kirili Lamb, PCL



Pest Spotting

Dolichandra unguis-cati

Cats Claw Creeper

(syn. *Macfadyena unguis-cati*)

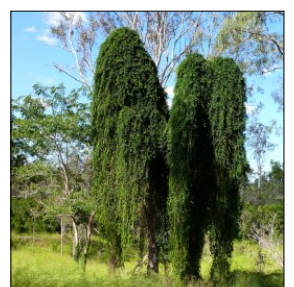
Family: **Bignoniaceae**

Cat's Claw Creeper, native to tropical Central/South America, is an aggressive climber which invades rainforests and creek banks, strangling trees and dominating the ground layer. A Weed of National Significance, it is a Restricted Invasive Plant under the Queensland *Biosecurity Act 2014* and must not be given away, sold or released into the environment

Form: Rampant woody climber; climbing by adventitious roots and tendrils. Extensive tuberous root system that sends up shoots; can cover the ground. **Leaves:** Opposite, compound with two ovate to oblong-elliptic lateral leaflets, 20-70 mm long and terminating with a three-clawed tendril (the cat's claw), each claw 10-15 mm long. Juvenile leaves are simple. **Flowers:** Large bright yellow bell-shaped with five petals, tube 40-80 mm long, borne singly or in axillary pairs; perfumed. Flowers for a few weeks in Spring. **Fruits/Seeds:** Narrow flat brown or black capsules to 150-450 x 8-20 mm, containing many flat papery seeds, winged at both ends, 20-40 mm long.

Spread By: Wind, water, contaminated soil and garden/property waste. **Control:** Treatment can be difficult and time consuming, and will involve ongoing treatment until eradicated. 1) Skirting the vine: there are several herbicides registered for use. Please follow the label in any treatment. Cut mature plant stems at 1-2 m high, the upper portion of the vine will die. Then cut closer to ground level and immediately (within 15 seconds) paint the cut stump with herbicide. 2) Spot spray foliage of regrowth and low growing stems. 3) Dig out seedlings and small plants including tubers. 4) Follow up surveillance/treatment regularly.

SOURCES: *Weeds of the Mackay Whitsundays Region 2nd Edition* (2018: Mackay Regional Pest Management Group, Mackay); Queensland Government /Business Queensland **Fact Sheet**. **Images:** Top/Centre QLD DAF; Bottom: PCL File— Steve and Alison Pearson



Feral Predators in the System

Invasive species pose a challenge to success in a Land for Wildlife zone, and that includes feral predators like foxes, wild dogs and cats. All will predate on everything from small reptiles to larger birds and mammals, impacting biodiversity across native plants and animals. All are designated restricted invasive animals under the *Biosecurity Act 2014*, and come with General Biosecurity Obligation, and all are a challenge to eliminate from an ecosystem.



Wild dogs will come into peri-urban settings and rural landholdings, particularly during the March – May breeding season

Image: MRC

Wild dogs will start to become more active as we move into their breeding season in March to May, with males and females seeking mates, followed by juveniles on the move looking for a new home range. Don't forget to protect your domestic dogs during this time by keeping them secure at night.

Exclusion fencing will assist with fox and wild dog control, but is costly, and presents challenges to ranging native fauna. Management fact sheets can be sourced through the Business Queensland website. Your local council Pest Management team are a go-to for reporting and to discuss management options, contact 1300 622 529 (MACKAY).

Fox sightings can likewise be reported to Council's Pest Management team. Foxes are an increasing problem in coastal tropical areas where the timing of their breeding season has adapted to coincide with turtle hatching season. The endangered hatchlings are a food source for fox pups.

Guard animals such as Maremmas and alpacas can offer some deterrent solutions for landholders.

The presence of dogs in the system, however, will deter feral cats, which present a massive issue in the Australian environment. A 2017 University of Queensland study, published in *Biological Conservation* found feral cats covered 99.8% of the Australian land mass, with the total feral cat population fluctuating between 2.1 and 6.3 million. Cat numbers increase substantially when widespread rains result in plentiful prey. They will range up to 2km from "home". Cat traps are available for hire from Mackay Regional Council, with an \$81.60 refundable deposit. Council does not collect cats, but the hirer can deliver trapped cats to the MRC Pound. Queensland Government permits other removal methods, such as rubber-jaw leg-hold traps and humane exterminatory methods.

Out and about with PCL

2021 came to a busy end for PCL. From left:

- 🌀 Plant Gift Pack stalls were held at Mackay Farmers Market, Bluewater Quay in the lead up to Christmas. Pictured staffing the first of these were Re-veg Officer Aimee Barclay, left, and Project Officer Tahnee Hamill.
- 🌀 As part of PCL's Support for Local Schools program, Support Project Officer Hannah Murphy worked with children attending Slade Point C&K Kindergarten in December, planting native species at the school.
- 🌀 Tuesday nursery volunteers celebrated Christmas and the end of a great year's propagation at Mackay Natural Environment Centre nursery. Nursery volunteering is one of the key opportunities for PCL members, and an activity we promote widely in the community. This great team, along with Thursday volunteers assisted the MNEC team to propagate 117,000 plants over the 2020-21 FY, and already 52,725 in the current financial year!



Upcoming Events

February

Tue 1 - PCL Volunteering in the nursery. 8am to 12pm; and Far Beach from 8:30am.

Wed 2 - World Wetlands Day

Thu 3 - Native Plants Queensland (Mackay Branch) Virtual AGM

Sat 5 - Birdlife Mackay outing Blacks Beach Spit; meet Pacific Drive Walkway 6am enq: 0407143823

Tue 8 - PCL Volunteering in the nursery. 8am to 12pm

Sat 14 - Mackay Community Garden Abundance Day, 10am

Tue 14 - PCL Volunteering in the nursery. 8am to 12pm.

Tue 15 - PCL Volunteering in the nursery. 8am to 12pm; and Far Beach from 8:30am.

Thu 17 - Birdlife Mackay outing, Plantation Palms and Kerrisdale, meet Rosewood Drv carpark 6am; enq: 0407143823

Tue 22 - PCL Volunteering in the nursery/display garden. 8am to 12pm

Fri 25 - Mackay Regional Botanic Gardens Survey on the Deck, 6:30am. Enq: 0411887546

March

Tue 1 - PCL Volunteering in the nursery 8am to 12pm; and Far Beach from 8:30am.

Thu 3 - Native Plants Queensland (Mackay Branch) meeting 7:30pm at Mackay Regional Botanic Gardens meeting room

Tue 8 - PCL Volunteering in the nursery. 8am to 12pm; and Lamberts Headland from 8.30am.

Sun 6 - Birdlife Mackay outing Cape Hillsborough; meet Coningsby Roadhouse 6am enq: 0407143823

Tue 15 - PCL Volunteering in the nursery. 8am to 12pm; and Far Beach from 8:30am.

Thu 17 - Birdlife Mackay outing, Wetlands Walkabout, Keeleys Rd, meet 6am; enq: 0407143823

Sat 14 - Mackay Community Garden Abundance Day, 10am

Tue 22 - PCL Volunteering: nursery/display garden. 8am to 12pm.

Tue 29 - PCL Volunteering in the nursery. 8am to 12pm; and Far Beach from 8:30am.



PCL'S ID:
C10041933

COVID SHIFTS VOLUNTEERING OPPORTUNITIES

Keen to volunteer with PCL? We are looking for new volunteers keen to get involved in Landcare planting activities, at beautiful locations like Far Beach and Lamberts Headland. Come join us! Contact projectofficer@pioneercatchment.org.au for more information.

Due to Mackay Natural Environment Centre COVID policy, there has been a temporary suspension on NEW volunteers for propagating activities at the MNEC nursery. Existing volunteers are still welcome.

Pioneer Catchment & Landcare Group Inc.

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Deputy Chair | Judith Wake

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Treasurer | SOUGHT

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The Back Block.....

Every so often, PCL is met with some challenges on our revegetation sites. Rains often bring on an explosion of life, and the Christmas rains have proven no exception, with one of our Mackay Ring Road sites being visited by a number of moths, butterflies and beetles. As the new ecosystem establishes where there are few other food-sources and predator numbers haven't had time to build up, we have found a variety of species making a meal of trees on-site, including tropical tiger moths (*Asota caricae*), hawk moths (Family Sphingidae), and leaf beetles. The most problematic visitor to our nine month old plantings has been Red Shouldered Leaf Beetle (*Monolepta australis*) which has actively ravaged several species, including *Glochidion* sp., Coastal Premna (*Premna seratifolia*) and Silver Wattle (*Acacia holosericea*). Project officers are exploring possible solutions.



From left: Red Shouldered Leaf beetle on Acacia; *Glochidion* sp. decimated by herbivorous insects; Tropical Tiger Moth caterpillars on Coastal Premna; Orange-black Leaf Cylinder Beetle (*Aporocera speciosa*) on Acacia; Beautiful hawk moth caterpillar; *Synodita* Leaf Beetle (*Synodita borrei*). Photos: Aimee Barclay,

Challenging Chompers

Pioneer Catchment & Landcare Group Inc. Proudly supported by:

