Pioneer Catchment & Landcare News

Autumn 2025

Plant of the Month

Pest of the Month

National Award

Landcare School Support

Koala *(Phascolarctos cinereus) PCL Image:* Donna Jackson, Sarina Marlborough Road.
The word "koala" comes from the Dharug gula, meaning 'no water'.

PIONEER Catchment LANDCARE

Our Mission

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

National Recognition for Clean-Up Efforts

We've been recognised on the national stage, winning the prestigious Group Community Champion Award at the Clean Up Australia Day Awards in Canberra—an extra special honour as Clean Up Australia Day marks its 35th anniversary.

The award celebrates outstanding commitment to environmental stewardship, considering longevity, event participation, and community engagement.

For years, we've led on-ground environmental efforts in Mackay, hosting four annual clean-ups at Harbour Beach and the Pioneer River, plus the large-scale Clean Up Australia Day event.

"This award is a testament to the dedication of our volunteers, staff, and community members who show up year after year to make a real difference," said Coordinator Nancy Pratt.

Engagement officer Taleah Virgona travelled to Canberra to accept the award on 6 February. "Over the years, we've removed hundreds of kilos of waste, preventing pollution from harming wildlife and waterways," she said.

One story that caught the judges' attention was Taleah's run-in with a dumped beanbag at Harbour Beach—home to not beans, but a colony of cockroaches. "I screamed and ran for the ocean, pulled myself together, then got back to work!" she laughed.

Beyond clean-ups, we engage the community in education, conservation, and biodiversity projects. This award recognises our achievements and ongoing commitment to a healthier environment.

We extend our gratitude to Clean Up Australia, local volunteers, and the broader community for their support. We look forward to continuing our mission of protecting and restoring nature for future generations.

Left to right - Pip Kiernan chair of Clean Up Australia, Taleah Virgona, The Hon. Tanya Plibersek, MP, Federal Minister for the Environment and Water

Winners across all categories

Clean Up Australia Day 2025

A huge shoutout to everyone who joined us for Clean Up Australia Day! Thanks to the incredible efforts of over 45 volunteers, we removed over 100kg of rubbish from our local environment—just within 400 metres. This goes to show that when a community comes together, real change happens.

It was fantastic to see so many passionate locals working side by side, including Mackay and District Turtle Watch, Yuwi Aboriginal Corporation RNTBC Mackay QLD, RACQ Mackay, Vote Lila Young Mayor, members from Mackay City Hawks, and other dedicated volunteers.

But here's a sobering fact—in just 400 metres, we collected:

- 3,188 pieces of hard plastic remnants
- 523 plastic bottle caps and lids
- 34 bait bags

This highlights just how much plastic pollution is out there and why community efforts like this are so important!

Pioneer Catchment Landcare delivered the event as part of Tangaroa Blue Foundation's ReefClean project, funded by the Australian Government's Reef Trust, along with Mackay Regional Council's Landcare Support Program for Clean Up Australia Day.

PIONEER Catchment LANDCARE

VOL 2 | APRIL 2025

Protecting *Bertya pedicellata*

Pioneer Catchment Landcare (PCL) is proud to be part of a crucial conservation effort to safeguard *Bertya pedicellata*, a protected plant species native to the Brigalow Belt.

We are working to preserve a population identified within the footprint of a proposed construction project near Coppabella. Our approach combines translocation and propagation to secure the species' survival. Healthy *B. pedicellata* specimens will be carefully relocated to a designated recipient site, while smaller plants will serve as mother stock for propagation. Ongoing maintenance, including weed management, will support their long-term establishment.

So far, our team has meticulously numbered, tagged, assessed, and accessioned individual plants using both physical markers and GIS technology. The next phase will involve carefully extracting viable plants from the project zone and relocating them to either the recipient site or the Mackay Natural Environment Centre (MNEC) nursery. Larger plants will be replanted immediately, while propagated cuttings will be nurtured for future reintroduction.

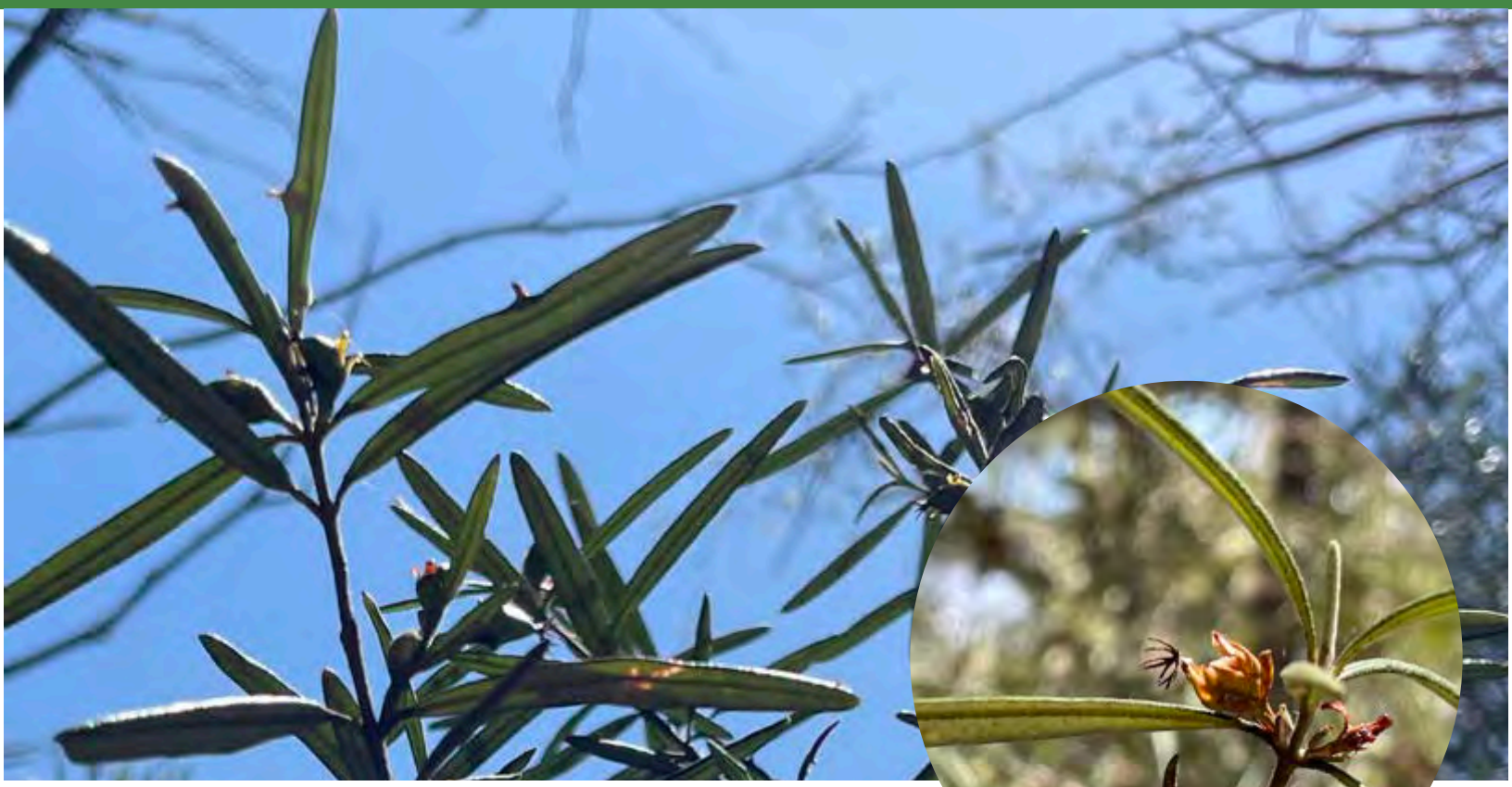
Cuttings taken from the site are already thriving in the nurseries at Mackay Regional Botanic Gardens and MNEC. Additionally, we are exploring tissue culture techniques to propagate *B. pedicellata* from both seed and vegetative material, further enhancing our ability to restore the species.

Our ultimate goal is to ensure no net loss of *B. pedicellata* populations once project construction begins. Through a combination of strategic translocation, propagation, and ongoing care, we are committed to preserving this unique species and its role in the Brigalow Belt ecosystem.

Stay tuned for updates as this important project unfolds!

Seed collection

Bertya cuttings



Species profile

Bertya pedicellata is from the Euphorbiaceae family. It is listed as a threatened species under Schedule 1 of the Nature Conservation (Plants) Regulation 2020.

Bertya pedicellata (B.pedicellata) is an extensively branched monoecious (having both male and female reproductive organs on the same plant) shrub, growing up to 6 m tall.

Little is known about the reproductive biology of *B. pedicellata*, flowers have been recorded from March to November and fruits from August to November (Queensland Government Species Profile, 2022). The inflorescences occur as a single flower or umbelliform with two flowers.

The male flowers are sessile (attached directly at its base with no stalk), with five sepal lobes, which are yellow-green coloured, elliptic or ovate-elliptic, 4.5 to 5.5 mm long and 3 to 4.2 mm wide with 56 to 70 stamens, and rudimentary petals. The female flowers are pedicellate (attached by a stalk-like structure) , with a stem which is 1.5 to 3 mm long when in flower and up to 4 mm long when in fruit with five sepal lobes which are light green in colour, the petals are rudimentary. The capsule is narrowly ellipsoid or narrowly ovoid, 8.5 to 11.3 mm long by 4.7 to 5.2 mm across, glabrous or with scattered stellate hairs, usually 1-seeded.

The seeds are obloid or obloid-ellipsoid, 5.1 to 5.8 mm long by 3.2 to 3.6 mm wide and 2.8 to 3.1 mm across, light brown and mottled with dark brown and black, with a fleshy creamy-white caruncle. Seed viability and germination are not known for this species, however, research on other threatened members of the Bertya genus indicates seeds may contain a form of conditional dormancy. Records from Atlas of Living Australia indicate pollinators in the form of native bees are attracted to the flowers of *Bertya pedicellata*.

Explore & Discover : Flora Survey Training Workshop

Earlier this year on the 3rd of March, PCL teamed up with Queensland Threatened Plant Network (QTPN) to deliver a hands-on Flora Survey Training Workshop at the Mackay Regional Botanic Gardens and Slade Point Reserve, proudly presented by Paul Donatiu.

Participants spent the day learning how to understand plant profiles, identify key data to collect during surveys, and explore the field tools used in conservation work.

The afternoon wrapped up with a practical session in the field, where attendees had the opportunity to apply their new skills and get up close with local native flora.

A big thank you to everyone who joined us—and to Paul—for a day of learning, connection, and conservation!

Participants included staff from Sarina Landcare, Whitsunday Landcare, and Mackay Regional Council, all coming together to build their flora survey skills

Digging into the details: Dung Beetle Workshop

PCL recently hosted an insightful online dung beetle workshop, with 22 keen attendees tuning in to learn more about these powerful little recyclers. The workshop was expertly led by Russ Barrow from Ecoinsects, who shared his extensive knowledge on dung beetles and their vital role in ecosystem health.

The session explored how dung beetle activity is influenced by the protein content of livestock feed and highlighted their important role in improving soil and water health. A study by Melbourne Water demonstrated that dung beetle tunnels increase soil infiltration, which in turn reduces run-off and enhances soil porosity—benefits that directly support healthier pastures.

It was also noted that dung beetles have a limited flight range of only 1 to 1.5 kilometres. With this in mind, landholders are encouraged to keep livestock movements within a reasonable distance to retain dung beetle populations. Another key point discussed was the natural pest control benefits dung beetles offer, as dry dung can disrupt the lifecycle of flies and nematodes.

Unfortunately, cane toads are a significant predation threat to dung beetles. To build resilience in populations, it's recommended to maintain a good variety of dung beetle species that are active across all four seasons. Attendees also learned how to carry out monthly bucket tests on dung to monitor which beetle species are present on their property.

The workshop stressed the importance of understanding how livestock pest treatments may impact dung beetles. Chemicals that are excreted primarily through urine tend to be less harmful than those excreted in dung. Considering the beetle lifecycle when planning treatments is essential to minimising unintended harm.

Threats to dung beetle populations include flooding, drought (particularly in cases of destocking), chemical use, and predation. With the right management and awareness, landholders can support healthy dung beetle populations and gain long-term benefits for their land.

A big thank you to everyone who joined us online! PCL hopes the workshop provided valuable insights to support dung beetle-friendly farming practices. If you wish to receive the workshop slides, please don't hesitate to reach out to: admin@pioneercatchment.org.au.

Introduced to Australia in 1935, cane toads (*Rhinella marina*) threaten dung beetle populations in North Queensland. As opportunistic feeders, they consume dung beetles emerging from dung piles, reducing their numbers. This disrupts dung decomposition, leading to more flies and poorer soil health.

PIONEER Catchment LANDCARE

VOL 2 | APRIL 2025

Bee Inspired: Native Bee Conservation & Habitat Building

April Native Bee Workshop was a fantastic day of learning and hands-on conservation, with community members coming together to support our vital pollinators. Held at the Botanic Gardens Nursery in Mackay, the event provided practical skills in native bee management, rescue, and habitat building.

Expert presenters Sian from Native Stingless and Solitary Bees and Alan from Native Bee Rescue Service guided participants through identifying native bee species, ethical hive care, and sustainable management practices. The morning session focused on bee rescue and relocation techniques, while the afternoon session gave everyone the opportunity to build their own habitat boxes to take home—helping to support native pollinators in their own backyards.

A huge thank you to the QCoal Foundation for funding this workshop, making it possible for our community to gain valuable skills in conservation. Their support plays a crucial role in protecting biodiversity in our region.

QCOAL Foundation

Landcare School Support

Pioneer Catchment & Landcare (PCL) proudly supports schools across the Mackay region in achieving their landcare goals and engaging students in hands-on environmental projects.

Funded by: Mackay Regional Council

Marian State School

On Wednesday, 19th February, PCL Senior Project Officer Donna visited Marian State School to share the fascinating world of native bees with students. The session focused on the importance of bee and insect hotels, which provide much-needed shelter for our tiny pollinators. Donna even brought along an example, inspiring students to create their own backyard insect havens!

Students eagerly asked questions and explored native plants up close, learning how flowers play a crucial role in supporting bees and insects. One of the most exciting facts? Some bees use their tongues to reach deep into flowers for nectar and even shake blossoms to release hidden pollen!

Through hands-on learning and engaging discussions, students discovered how vital native bees are to our environment—and ways they can help protect them.

C&K Slade Point

Taleah and Jayde recently visited C&K Slade Point for a special session with the curious 3- and 4-year-olds! The children enjoyed a small but insightful discussion about bush tucker plants, learning how native plants have provided food and medicine for generations.

After exploring different plants and their uses, the little eco-warriors got their hands dirty, helping to plant 50 native plants in their outdoor space.

Images: keys.trin.org.au

Plant of the Month

Common name: Native jasmine

Family - Oleaceae

Botanical name: *Jasminum didymum subsp. didymium*

A low shrub or vigorous woody climber with stems to 60mm in diameter. It is native to mainland Australia some Pacific Islands and SE Asia

Leaves: Opposite, compound with 3 leaflets, blades about 45-100 x 22-65mm,with middle leaflet longer than laterals.

Flowers:
Strongly perfumed, white or cream, tubular with 5-6 lobes, borne in axillary or terminal panicles.

Fruit: Black or purplish black berries, usually in pairs, 1 seed in each.

Growing Notes: Full sun to part shade, drought tolerant once established. Insect and bird attracting. Native bees love this plant! Flowers are used in perfumes and teas.

Name origin: Jasminum Latinised form of Arabic “yasemin” sweetly scented plants—didymium Greek “double or twin” referring to the bilobed stigma.
Jasminum didymum subsp. racemosum also common in this district.
Leaflets smaller about 25-55 x 7-11mm
Flowers in axillary racemes or in umbels

Source: Vitex trifolia - North Queensland Plants - Oleaceae, Factsheet - Jasminum didymum, desert jasmine (Jasminum didymum) · iNaturalist, https://apps.lucidcentral.org/rainforest/text/entities/jasminum_didymum_

Pest of the Month

Common name: Yucca **Family -** Agavaceae
Botanical name: *Yucca aliofolia*

Yucca from Carbi name for Manihot (cassava/yuca) which has similarly enlarged root structures –aloifolia “having leaves like an aloe (stiff foliage with sharp spines).

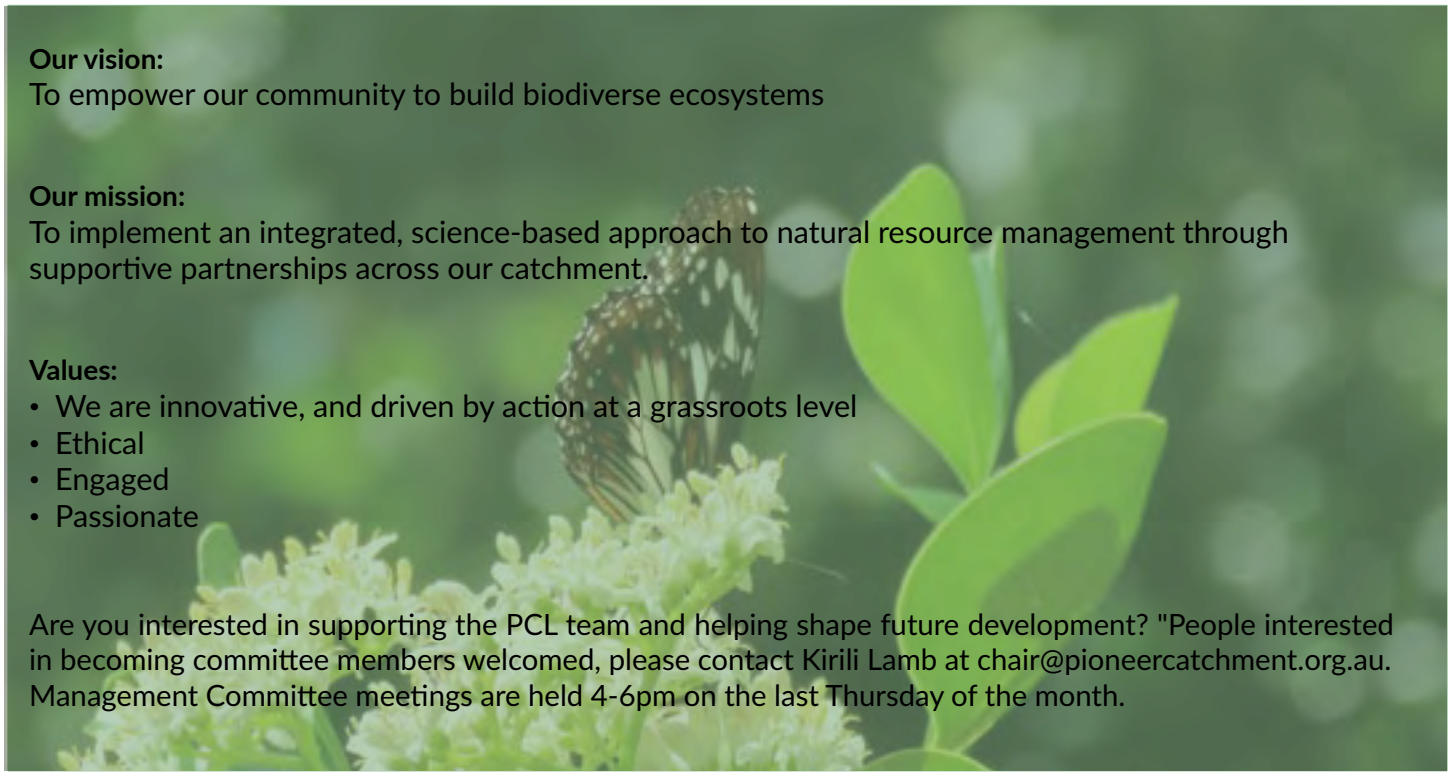
Distribution: Native to Atlantic and Gulf Coasts of USA, Mexico and Bermuda. This species is introduced and widespread but scattered in Australia and is mainly found in coastal districts.

Description: Upright evergreen succulent growing to 4m in height. Takes on a multi-stem form if cut. Leaves are in whorls, green, narrow lanceolate to 1m long, margins finely toothed, terminal spine up to 20mm long. Flowers are bell-shaped, creamy white and borne in many-flowered panicles on a flowering stem up to 3m high. Fruit indehiscent, oblong purplish capsules, 60–80mm long with black seeds.

Habitat: Typically found in dry, elevated and infertile areas. Often grows after being dumped as garden waste in natural bushland reserves.

Threats to Environment: Produces saponins that are quite toxic to people, and have been used to stupefy or kill the fish indicating a hazard to aquatic life. Out competes native vegetation. Has sharp spine on end of leaf that can cause injury to soft tissue. The persistence of the deep tap roots makes Yucca removal a challenging task, requiring thorough techniques to ensure the bulk of the entire root ball and root system is removed completely .

Source: Yucca Species profile—Yucca aloifolia | Environment, land and water | Queensland Government, https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Yucca~aloifolia



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

Are you interested in supporting the PCL team and helping shape future development? "People interested in becoming committee members welcomed, please contact Kirili Lamb at chair@pioneercatchment.org.au. Management Committee meetings are held 4-6pm on the last Thursday of the month.

Contact Us

Pioneer Catchment & Landcare Group Inc.

07 4944 1979

admin@pioneercatchment.org.au

www.pioneercatchment.org.au

Coordinator | Nancy Pratt
coordinator@pioneercatchment.org.au

Senior Project Officer | Donna Jackson
seniorpo@pioneercatchment.org.au

Member Services and Marketing Officer and Newsletter | Taleah Virgona
admin@pioneercatchment.org.au

Join as a member:

Your membership fees are an investment in our region's environment!

PCL'S ID: C10041933