

Pioneer Catchment & Landcare News





Sandringham Bay

On Friday 22nd September, on a beautiful warm and sunny, morning PCL officers travelled to Sandringham Bay Conservation Park to meet 10 Aurecon staff for a day of corporate volunteering. The day had been organised as a way for Aurecon to give back to the community by volunteering their time to a conservation project.

Sandringham Bay was chosen as the location due to its endangered regional ecosystems 8.3.2 (*Melaleuca viridiflora* woodland on seasonally inundated alluvial plains with impeded drainage) and 8.1.4 (*Schoenoplectus subulatus* and/or *Eleocharis dulcis* sedgeland or *Paspalum vaginatum* tussock grassland), as well as being important habitat for the Mangrove Mouse (*Xeromys myoides*).

The day started with a meet and greet with the volunteers from Aurecon and a review of the risk assessment and safe work procedures. Once completed ,we ventured into the forest and began a walk and talk. PCL officers Angus, Danny and Donna introduced the site and its importance to the group, including some of the history of the reserve before and after it was gazetted in the early 2000s, threats such a feral animals, litter, weed incursion and what this means for the fragile ecosystem. Angus gave a series of short talks on bush tucker plants, what life is supported by the 3 regional ecosystems present in Sandringham Bay Conservation Park including specific plants and itinerant bird species such as waders, and threats such as erosion which is exacerbated by 4WDs accessing the area. Danny talked about the Mangrove Mouse project, particularly the importance of the data collected by PCL in present and previous monitoring studies and how it will inform controlled burns and feral animal control conducted by Queensland Parks and Wildlife Service (QPWS). Donna completed the site introduction and history, why we are on site at Sandringham, what we hope to achieve with the volunteer group and how community engagement and involvement is so important in conservation efforts.

After the walk and talk, the group split into hand weeders, whipper snipper operators, litter pickers, and seed collectors for the next 2 hours of work. With the help of Aurecon volunteers, we achieved:

- Removal of most of a large patch of Singapore Daisy at the entrance to the reserve that contributed to the 25 bin bags full of Singapore Daisy
- 4 bin bags full of rubbish
- Bags of seeds for the MNEC nursery
- Control of a large area of Guinea Grass.

At the end of the volunteering, Aurecon kindly put on a BBQ lunch for everyone and donated 2 Browning Trail Cameras to assist PCL with the Mangrove Mouse monitoring and surveys.

Massive shout out to Tim Dalton from Aurecon who arranged the volunteers in support of PCL, to all the volunteers who made such a big difference on the day to the conservation efforts in the Park, and to Aurecon who have donated the trail cameras – honestly we couldn't do it without you!!! Thanks for an amazing day!

For all the pictures from the day head to: <u>Current Projects | Pioneer Landcare (pioneercatchment.org.au)</u>

Plant of the Month

Sims' Wattle Acacia simsii Family: Leguminosae (Caesalpinioideae)

This month we have chosen a small wattle suitable for most gardens, in honour of National Wattle Day which is on the first day of September every year.

Wattle Day celebrates the golden wattle as Australia's national floral emblem. The wattle is resilient, surviving Australia's droughts, winds and bushfires and represents the spirit of the Australian people. The golden wattle has more recently been used as a symbol of remembrance and reflection, with a sprig worn on national days of mourning.

We celebrate National Wattle Day because:

National Wattle Day includes everyone Golden Wattle (*Acacia pycantha*) is our national floral emblem. It is a symbol that comes directly from our land;

Golden Wattle is a unifying symbol of Australia and Australians. There is no other symbol that says so much about us and our land, Australia and

Wattles are Australian natives, with great diversity (more than 1,073 described species) and resilient like our people;

Wattle welcomes the spring, and is among the first plants to regenerate after fire, reminding us of the importance of renewal as it paints our national colours across our landscapes; and All wattles remind us of Australia and Australians.

Sims' Wattle is a medium shrub that occurs in NT, Qld from Cape York to Mackay and New Guinea.

Acacia (Greek for thorn or spike) simsii (19th century British physician and botanist, Dr John Sims, editor of the Botanical Magazine)

Leaves: Pyllodes (modified leaf stems) linear to narrowly elliptic, straight to incurved, 50 – 140mm x 2 – 7mm.

Flowers: Globular bright yellow/gold from the leaf axils **Seeds:** In flat linear leathery pods up to 80mm long and 4 – 7mm wide and raised up over the seeds.

Habitat: Usually occurring in sand and gravel in eucalypt open forest and woodland. Found on slopes and plains in coastal areas and gentle undulating terrain in inland areas.

Growing notes: Tolerant of a variety of soils, and dry periods. Bird attracting, butterfly attracting. Prefers full sun. Will tolerate a light prune after flowering.

Ref: Factsheet - Acacia simsii (lucidcentral.org) Acacia simsii.pdf (mackay.qld.qov.au)





Sources: Factsheet - Acacia simsii (lucidcentral.org) Acacia_simsii.pdf (mackay.qld.gov.au) Indian Myna Bird (Acridotheres tristis)

Family: Sturnidae

The Indian Myna Bird (*Acridotheres tristis*) is native to Asia and the Middle East and was introduced into Victoria between 1863 and 1872 to control insects in the market gardens of Melbourne. They have now spread along the east coast of Australia. Named in 2000 by ICUN as one of the worlds most invasive species and as Australia's 'most important pest/problem' in 2008, the species is a serious threat to Australian ecosystems.

Acridotheres (Greek for locust hunter) tristis (Latin for sad, dark coloured)

Description: Brown body, black hooded head and bare yellow patch behind the eye; bill and legs are also bright yellow; white patch on the outer primaries and the white on the underside of the wing is clearly visible in flight. The sexes are similar and birds are usually seen in pairs. Body length 23 to 26cm.

Habitat: Pre-adapted to habitats with tall vertical structures and little to no vegetative ground cover, it thrives in urban and suburban parks and gardens and cleared agricultural land

Threats to Australia: Aggressive, takes over nesting sites of native birds and animals such as sugar gliders, lorikeets, honeyeaters, which nest in hollows; carry diseases such as avian malaria and parasites which threaten native animals and birds; outcompete other species for food, water, and nesting sites; kill chicks of native birds; cause damage to crops; build nests blocking gutters and causing other building issues.

Control: Plant native vegetation that is not attractive to this species; limit access to additional food such as pet food; reduce nesting sites by blocking access to gutters and removing exotic palms; remove nests and eggs; conduct coordinated trapping (e.g. through a community action group).

Ref: Common myna - Wikipedia

Queensland government https:// www.business.qld.gov.au/industries/farms-fishingforestry/agriculture/biosecurity/animals/invasive/other/ indian-myna

WIMAG (Whitsunday Indian Myna Action Group)







Tangaroa Blue Monitoring

The Tangaroa Blue Litter monitoring and cleanup event at Harbour Beach on 1st September and Pioneer River on 4th September was a great success. The collaboration between Tangaroa Blue, Pioneer Catchment Landcare Officers, and the dedicated volunteers resulted in the removal of over 9kg of litter from this beautiful coastal area.

Litter consisted of over 780 broken hard bits of plastic and over 90 plastic lids and bottle tops. Once collected the rubbish was sorted by PCL and recorded for data collection purposes.

Thank you to the volunteers who joined us at the Harbour Beach event.









Image: PCL Volunteers at Harbour Beach cleanup. Left to Right, David, Chris, Jacky, Lesley

Owens Creek

Dick Jensen and his son Bruce are committed to restoring their Land for Wildlife cattle property in Owens Creek.

Their primary goal is to revive the land to its natural state. They've already taken crucial steps, such as fencing off two areas to protect them from cattle. One area, bordering the creek, is being vegetated. The other is a gully, heavily impacted by erosion, and adjacent to potential Koala habitat.

Their main objectives are to slow water flow to prevent erosion and create pathways for gliders and koalas. PCL prepared these sites, performing tasks like brush cutting and installing logs in the gully's base. They strategically planted around these logs to form natural sediment traps.



Image: PCL Field Officer, Angus and Cadet, Elijah at Owens Creek

Goodluck Darrell

Unfortunately we bid farewell to one of our dedicated field officers, Darrell as he sets out on his next adventure.

Darrell has worked tirelessly for PCL since February 2020 and has been an integral part of our Landcare family, dedicating his time, expertise, and enthusiasm.

We invite you to join us in saying thank you to Darrell for his incredible contributions and in wishing him all the best in his future endeavours. While he may be leaving our organisation, we know that his passion for the environment will continue to make a positive impact wherever he goes.



Mangrove Watch Expedition - Boyne Island - August 2023 -

PCL project officers Danny and Donna attended the Mangrove Watch expedition at Boyne Island, Gladstone with expert mangrove scientist Jock MacKenzie and the team from Earthwatch. The expedition was a chance to be part of one of the world's longest running mangrove forest studies, helping to understand how mangrove forests change over time, including carbon storage, response to cyclones and floods and the impacts of pollution and land-use change. Earthwatch citizen scientists have been helping the research team measure mangrove forest dynamics since 2012.

"Mangroves are one of the world's most underrated coastal ecosystems. You may not know it, but mangroves provide habitat for most of the seafood that ends up on our plates, help filter the waters of the Great Barrier Reef, protect coasts from storms and erosion, are home to iconic wildlife and are carbon storage powerhouses that help mitigate climate change. Unfortunately, mangroves are globally threatened by sea level rise and coastal development. 30% of the world's mangroves have been lost in the past 30 years." (Earthwatch Australia)

A range of techniques were learned over the 6-day workshop including methods for measuring mangrove forest and salt marsh health.

Methods for measuring mangrove health included using rapid long plot assessment which provides a biomass and forest health assessment by measuring height, girth, health, and number of canopy trees. Crab monitoring studies were completed by laying out a square plot with an 2m x 2m exclusion zone in the centre and baiting the crabs with leaves tied to string which is anchored to the ground. The crabs take the leaves into their holes so when you return you can see how much activity has happened by the number of strings which have been pulled into the holes. Pit fall traps were also used to catch the surface dwelling crabs. Crabs are an indicator species for mangrove health due to their sensitivity to pollutants, and mangrove forests rely on crab activity to remain healthy. Did you know that mangrove forests hold up to 10 times more carbon than other forests and trap it 50 times faster due to the action of crabs recycling the leaves on the sustrate!!

Salt marshes were studied using a rapid assessment model. The assessment is subjective and covers fish habitat values, carbon storage potential, water quality, habitat value, recreational value as well as threats to the system. These threats include direct damage, litter, physical processes, habitat replacement, pollution, altered hydrology, sea level rise and drought. Salt marshes are made up of plants that are highly adapted to high salt levels, dry conditions interspersed with tidal inundation and full light exposure. The ground is covered by an algal mat which helps bind the fine soil particles and helps stop erosion. Did you know that salt marshes play crucial role in fish productivity by providing food and habitat for fish nurseries! Salt marshes are also a good indicator of sea level rise. As they become inundated with more sea water, the salinity reduces allowing mangrove species to colonise the salt marsh. Our salt marshes are some of our least understood wetland areas and are frequently damaged through being used for driving, riding motorbikes, and dumping of rubbish. Please help to share the message that in damaging our salt marshes we damage our fish populations by reducing the habitat they need to create nurseries.





Small Engine Workshop

PCL held a small engines workshop in partnership with JAK outdoor power centre, on Tuesday 12th September. The workshop was very popular with all 20 places being booked prior to the event.

The workshop was presided over by Jim Lowe, director of JAK outdoor power centre. A variety of tools and equipment were examined by Jim in front of the audience, with how to conduct a pre-start, simple maintenance and trouble shooting covered as topics. The workshop was interactive with participants asking questions as the talk progressed about their own garden equipment and raising some of the issues they face. Some of the questions asked included "What sort of snipper line should I use?" Answer – each situation and machine is different so try out a small bit and see what works best for you. As a general rule, industrial machines operate on a thicker line than the home gardener machine. "What is the fuel/oil ratio and what does it mean?" Answer – 50:1 with 100ml oil to 5 litres of petrol. Use good quality oil, a brand name if possible, and make sure your fuel is fresh, only mix up small amounts at a time. All participants enjoyed the workshop and found it informative, with many commenting on how useful it had been.

JAK outdoor power centre also provided a \$500 and \$100 voucher (financed by the RALF funding through Reef Catchments) which were won by Bronwen Howard and Paul Tippett respectively.







Pindi Pindi State School

On 23rd August, PCL officers visited Pindi Pindi State School as part of the Landcare Support Program, and 50 plants were planted in a range of pots and hanging baskets as part of a edible indigenous garden.

The plants incorporated into the garden are part of our natural ecosystems and they play a vital role in supporting local wildlife and preserving biodiversity. By incorporating these plants into the garden, we are contributing

to the conservation of our native flora and fauna.



- Plants at Pindi Pindi State School
- Bacopa monnieri (Brahmi)
- Mentha satureioides (Native Pennyroyal, Creeping Mint)
- Viola banksii (Native Violet)
 - Abelmoschus moschatus (Native Rosella)
- Glycosmis trifoliata (Pink Lime Berry)
- Melastoma malabrathium (Blue Tongue)
- Acronychia acidula (Lemon Aspen)
- Antidesme erostre (Wild Currant)
- Eugenia reinwardtiana (Cedar Bay Cherry)
- Pipturus argenteus (Native Mulberry)
- Syzygium australe (Creek Cherry)
- Backhousia citriodora (Lemon Myrtle)
- Atractocarpus fitzlanii (Native Gardenia)
- Myristica globosa (Queensland Nutmeg)
- Nauclea orientalis (Leichardt Tree)

Upcoming Community Events

	October 2023					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
						Platypus count @Broken River Carpark 7.30am
2	PCL Volunteering in the nursery, 8am to 12pm.	PCL Volunteering at Edward Lloyd Park River Access Site10amMarian, meet at Southern side of Melba House at 10am.	Native Plants Queens- land (Mackay Branch) meeting 7:30pm at Mackay Regional Botanic gardens meeting room.	6	7	8
9	PCL Volunteering in the nursery, 8am to 12pm.	11	12	13	14	15 Bonsai Workshop 2-4pm
16	PCL Volunteering in the nursery, 8am to 12pm.	18	19	20	21	22
23	PCL Volunteering in the nursery, 8am to 12pm.	25	Health horse, healthy land workshop Mackay/ Proserpine @ Bloomsbury Community Hall 9am—2.30pm	Health horse, healthy land workshop Sarina @Sarina Bowls club, 9am – 2.30pm	28	29
30	PCL Volunteering in the nursery, 8am to 12pm.					

<u>November</u>

Tues 7- PCL Volunteering in the nursery, 8am to 12pm.

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

Tues 21 - PCL Volunteering in the nursery, 8am to 12pm.

Tues 28 - PCL Volunteering in the nursery, 8am to 12pm.

Tues 31 - PCL Volunteering in the nursery, 8am to 12pm.

Contact Us

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Follow PCL on social media to keep up to date with recent projects and events

Volunteering Opportunities

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

Big shout out to our volunteers who have shown their support of PCL by assisting with plant propagation at the MNEC nursery, and for registering their interest in our events and workshops - we couldn't do it without you!





Pioneer Catchment & Landcare Group Inc. Management Committee

Executive

Committee Members

Chair | Sharon Dwyer

Earl Neilsen Paul Tippett

Deputy Chair | Judith Wake

Secretary | Fran Mann

Treasurer | Claire Stribbles



PCL Membership is Changing

Keep an eye out for upcoming changes to our membership policies and new opportunities coming for PCL members



PCL'S ID: C10041933

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