

Pioneer Catchment & Landcare News

January 2023

Conserving Quolls
in the Mackay
Highlands



Plant of the Month -
Wild May



Pest Spotting -
Guinea Grass



PCL Member Perks



PIONEER
Catchment
LANDCARE

Our Mission

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

Conserving Quolls in the Mackay Highlands

In 2022, PCL began working with Queensland Parks and Wildlife Service (QPWS) on a new project, funded by the Department of Environment and Science, to investigate the seasonal foraging behaviours of the Northern Quoll (*Dasyurus hallucatus*) in the Mackay Highlands. Working from previous studies conducted by QPWS in 2010, PCL has endeavoured to add to existing data through quoll tracking and trail cameras to determine a pattern in foraging habits, particularly in response to the controlled burn regime in Eungella National Park, Homevale National Park and Crediton State Forest.

The Northern Quoll is a nocturnal carnivorous marsupial, preying on invertebrates, small mammals, reptiles, birds, carrion and fruit. It is the smallest of the four Australian quoll species and has a pointy snout and reddish brown fur with a cream underside. It has white spots on its back and a long, unspotted tail. Quolls become sexually



mature at one year of age. During the breeding season (June to August), females den in tree hollows, hollow logs and rock crevices and raise a litter of up to eight young. Males often expend so much energy fighting other males that they do not survive to breed a second year and at the end of the mating season, the Northern Quoll population is comprised almost entirely of mature females and their young. Females may live for two or three years. In the Mackay Highlands, the Northern Quoll is known to inhabit a variety of vegetation types including vine thickets, margins of notophyll vine forests and several different kinds of eucalypt dominated forests and woodlands.



PCL Officers scoping out monitoring sites in the Mackay Highlands

The Northern Quoll is listed as endangered, facing many threats to remaining populations, including pests such as cane toads and feral cats, land clearing and grazing, weed infestations and intense bushfires. With the impact of climate change, more frequent and intense weather events are expected to occur, so it's important to understand how this will affect quoll populations in the future. This project will explore these potential threats, through monitoring of the existing populations and eucalypt habitat, comparing data with previous studies, as well as gathering information on foraging behaviour in relation to the high moisture burn regime that is currently in place.

PCL is very excited to be a part of such an interesting and important project that will contribute to the long term conservation of this unique Australian animal.

Sources: John Augusteyn, Tina Ball, Rhonda Melzer and Graham Hemson, 2010, Conserving Northern Quolls and their Eucalypt Habitats in the Mackay Highlands through the Management of Stock and Fire: Project Brief. The Department of Climate Change, Energy, the Environment and Water, 2017, Species Profile, <www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=331#:~:text=The%20Northern%20Quoll%20formerly%20occurred,arrival%20of%20the%20cane%20toad>. Image: Department of Environment, Land and Water, 2022.

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 ◦

Wild May**Family: Myrtaceae**

Leptospermum polygalifolium is somewhat variable in form, often occurring as a shrub 1-4m high by 1-3m across, but can be a slender tree up to 6m high with close firm bark. It can be found along the east coast of Queensland and New South Wales extending up to 500km inland from the ranges. There are six recognised subspecies. This is a complex group with widespread intergradation between the various forms.

Leaves: Alternate, light green, 5-20mm long oblanceolate-elliptical to narrowly linear-elliptical, flat or with recurved margins, the tip often recurved with a soft or sharp point or, occasionally, a short pungent point. They are sometimes aromatic.

Flowers: Delicate, 5-petalled, 10-20mm in diameter, usually white, but may be greenish, cream or sometimes pink, occurring singly on modified shoots on the ends of very short or long branches. New growth generally extends from the ends of these branches, during or after flowering. Flowering is in late Spring and Summer.

Fruit: Woody capsules up to 10mm in diameter, persisting after numerous fine seed have been released.

Growing Notes: Hardy shrub or tree, easily propagated from seed or cuttings. Bee attracting and suitable as hedging.

Sources: <https://www.anbg.gov.au/leptospermum/leptospermum-polygal.html>, <https://resources.austplants.com.au/plant/leptospermum-polygalifolium/>.

**Pest Spotting*****Megathyrsus maximus var. maximus*****Guinea Grass****Family: Poaceae**

Megathyrsus maximus var. maximus is one of the earliest African grasses to be introduced into northern Australia for cattle forage. It thrives on well-drained soils in wet climates but can colonise low lying areas and creek-lines. It occurs on just about every disturbed site, track, road and creek bank in our area. Where conditions are suitable, it dominates the understorey where its substantial biomass promotes intense fires. Dense growth encourages fungal infection when humidity is high. It can form large clumps, 1.5-2m tall.

Leaves: Blades are long, narrow (approx. 10mm wide), finely tipped with a prominent mid-rib.

Flower/Fruit: Seed heads are large (up to 400mm long), well-spread, with a large number of fine branches. Seeds are oblong in shape and often purple. Under the right conditions Guinea Grass can flower all year round.

Spread by: Seeds spread by water, animals, contaminated soil, vehicles and machinery.

Control: It's best to concentrate efforts in priority areas for controlling Guinea Grass. Brush cut the tall clumps then spot spray the stumps with recommended herbicide to ensure the patch dies. Dig out isolated plants. Revegetate the area with shading pioneer species as soon as practical, and work on preventing regrowth until the trees are at least 5m high. Shade created by native species should help to prevent regrowth of Guinea Grass and other weeds.



Sources: Mackay Regional Pest Management Group, 2018, 'Weeds of the Mackay Whitsunday Region: Second Edition'. Image: Sheldon Navie

Upcoming Community Events

January

Mon 9 - PCL office opens after Christmas break

Tues 10 - PCL Volunteering in the nursery, 8am to 12pm.

Tues 17 - PCL Volunteering in the nursery, 8am to 12pm.

Tues 24 - PCL Volunteering in the nursery, 8am to 12pm.

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

February

Thurs 2 - Native Plants Queensland (Mackay Branch) meeting 7:30pm at Mackay Regional Botanic gardens meeting room

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,



PCL'S ID:
C10041933

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.

There are no longer restrictions in place for new volunteers for propagating activities at the MNEC nursery. Existing and new volunteers are welcome.

Pioneer Catchment & Landcare Group Inc.

Executive

Chair | Sharon Dwyer

Deputy Chair | Judith Wake

Secretary | Fran Mann

Treasurer | Claire Stribbles

Committee Members

Earl Neilsen

Paul Tippett

Pioneer Catchment & Landcare Group Inc. **Office contacts:**

Phone | 07 4944 1979

Email | admin@pioneercatchment.org.au

Website | www.pioneercatchment.org.au

Coordinator | Nancy Pratt
coordinator@pioneercatchment.org.au

Project Officer | Sally Stutsel
projectofficer@pioneercatchment.org.au

Administration and Marketing Officer | Taleah Virgona
admin@pioneercatchment.org.au

Newsletter | Hannah Murphy
communications@pioneercatchment.org.au



Are you passionate about nature and want to do something that makes a difference? Join your local Landcare group to make meaningful connections, take positive action and contribute to projects that impact our community and local environment. Find out the ways you can get involved today!

As a member you will receive our monthly PCL e-newsletter and are entitled to 4 free native plants per year from the Mackay Natural Environment Centre. General membership is totally free!

You can also follow us on our socials or visit our website to stay up to date with upcoming community events, environmental projects and volunteering opportunities.