



### New Resource in the battle against weeds

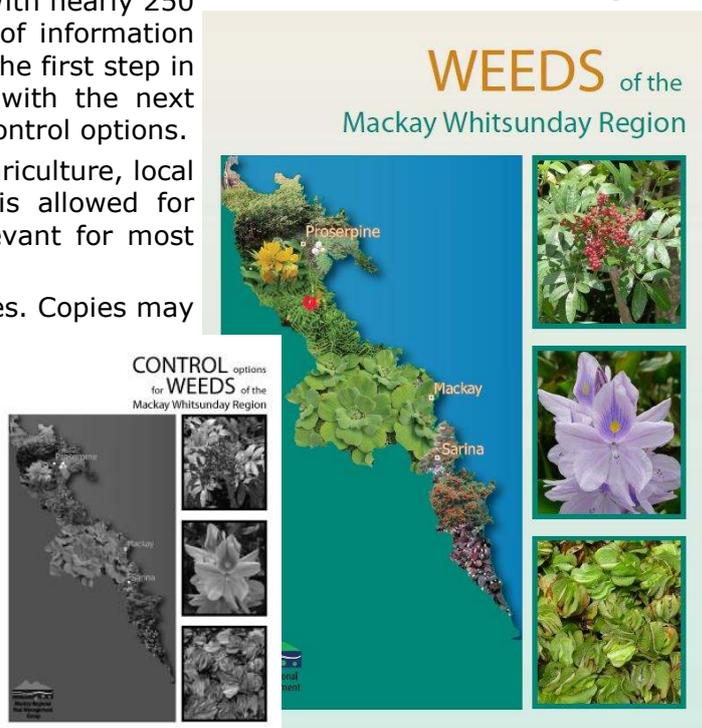
A new book is available to help landholders identify and control weeds. *Weeds of the Mackay Whitsunday Region* and its companion booklet *Control Options for Weeds of the Mackay Whitsunday Region* have been published by The Mackay Regional Pest Management Group (MRPMG). The book will be an invaluable resource for farmers, rural residential owners, contractors and Landcarers. With nearly 250 weeds detailed, the book is a comprehensive source of information on the prevalent weeds in the region. It will help with the first step in weed control—correctly identifying weeds. To help with the next step, we have also developed a booklet which details control options.

The MRPMG has a broad stakeholder base, including agriculture, local and state governments, and community groups. This allowed for good balance of content for the book, making it relevant for most users.

Copies of the book have been given to the town libraries. Copies may also be purchased for \$35 from the region's Landcare groups, Reef Catchments, Canegrowers district offices and Mackay Area Productivity Services.

The book was funded by the Queensland Government via Reef Catchments, Mackay Regional Council, MRPMG and has had a considerable amount of hours volunteered to its development by stakeholders of the region.

For more information on MRPMG or the book please contact Johnelle Stevens on 0457306152 or [johnelle.stevens@reefcatchments.com](mailto:johnelle.stevens@reefcatchments.com)



### Plant of the month

### *Vitex rotundifolia*

#### Creeping Vitex

There's been plenty of talk lately around protecting the coastline from the impact of storm surges and cyclones, and recent wet season events really provided evidence of the need for healthy, resilient native vegetation on our shorelines. We often think of trees as the strongholds of nature, but there are many ground covers and grasses that are the pioneers in holding the foredunes together. Creeping Vitex is common along the coastal margins of our region, and throughout the seashores of the Pacific.

**HABIT:** Usually a low shrub with long branches trailing over the sand for several metres, sometimes becoming partly buried and then producing short erect shoots and rooting at nodes. This rooting pattern allows the plant to spread rapidly.

**LEAVES:** Opposite, mostly simple, entire and ovate to obovate in shape, velvety on both surfaces, upper surface dark green, lower surface silvery-white. They are strongly aromatic, intensifying when crushed.

**FLOWER/FRUITS:** Blue-purple flowers that are borne in clusters year-round.

Ultimately yield small brown-black fruits. The fruits are drupes that contains 4 seeds, covered with a thick hydrophobic coating providing water resistance for extended periods and enabling the fruits to float and disperse on rivers and oceans. They can also be rolled across the surface of dry sand by strong winds.

**PROPAGATION:** Easy from rooted runners or cuttings but 'seeds' are very erratic.

**LOCAL HABITAT:** Grows along sandy and rocky coasts from 0 to 15 m above sea level. It is highly tolerant of the harsh beach dune environment characterized by intense heat, high wind, coarse-textured soil, and elevated salinity.



Photo: Creeping Vitex in flower at Far Beach, Mackay (K Steel)



## Weed spotting this month

## Goldilocks and the Three Burrs

De-prickling your dogs, or horse's mane and tail is something most of us don't look forward to. If your paddocks have prickles then you will most likely know that prickle season is on its way. You may have even noticed the culprits starting to grow over the last few months. The main 'prickle' plants in our region are Urena Burr (*Urena lobata*), Chinese Burr (*Triumfetta rhomboidea*) and the big one that hurts is Noogoora Burr (*Xanthium occidentale*). All of them are coming into flower at the moment (or will do soon) and getting ready to give you some prickles over the winter months.

As with all weeds, if you can identify them while they are still young, you will be well on your way to controlling them into the future. If you can prevent them from seeding (or even flowering) you will stop them from adding to the soil seed bank and be able to contain or reduce the size of the infestation. Prior to seeding, you can successfully remove plants by hand for small infestations or, for larger infestations: cultivation, slashing or use of a registered herbicide may be required.

So, how to identify these little treasures:

**Urena Burr** (*Urena lobata*) is an upright, short-lived perennial small shrub growing 0.5 to 3m. Leaves are alternate along the stem, round with shallow triangular lobes and toothed margins. Fine hairs appear on both leaf surfaces, but more dense on the lower surface. 1 or more glands appear on the main vein on the underside of the leaf. Young stems are green (sometimes reddish) and covered with fine hairs while older stems become woody. Pink hibiscus-like flowers, about 1-2cm across occur on short stems in the forks of the upper leaves during Summer-Autumn. Followed by round, brown burrs 8-1cm in diameter. On maturity, the burr separates radially into 5 wedge-shaped segments covered in bristles with star shaped hooks at the tips. Each segment has 1 seed.



Photos: *Urena lobata* flower (S von Fahland); seedling (C Peterson)



Photos: *Triumfetta rhomboidea* leaves and flower (C Peterson)



**Chinese Burr** (*Triumfetta rhomboidea*) is an upright, annual or perennial small shrub growing to 1.5m. The leaves, alternate along the stem, are variable in shape from unlobed to shallowly 3-lobed with toothed margins. Fine hairs appear on both leaf surfaces. The lower surface more dense and paler in colour. Brown stems covered in stiff velvety hairs with tough bark. Small yellow flowers occur in clusters along upper branches. The round, brown, hairy burrs, 0.5-1cm in diameter have hooked spines. Each burr has 1-6 orange or brown seeds. When not in

flower or fruit, it is easily confused with Urena Burr, however Chinese Burr does not have glands on the underside of the leaves.

**Noogoora Burr** (*Xanthium occidentale*) is an upright annual herb to 2.5m. The green stems are often blotched purple and rough to touch (due to being covered in short stiff hairs). Alternate, round or triangular leaves with 3 to 5 lobes are dark green above and paler below, with coarsely toothed margins. The rough leaves (covered by small bristles) have 3 prominent veins which along with the leaf stalk are often reddish. Small greenish flowers occur in clusters at the ends of the branches. The large burrs change from green to yellow to brown upon maturity; 2-3 cm long and covered in hooked spines with 2 stiff spines at the tip. Each burr has 2 brown, grey or black seeds in separate compartments.



Photo: *Xanthium occidentale* leaves with fruit (S von Fahland)

If you have a plant that you would like identified or advice on weed control please contact your local Landcare group, Council Pest Management Officer or Biosecurity Officer. Article by Saskia von Fahland, March 2014.

## Revegetation Notes, part 2—Planting

Our February newsletter featured Site Preparation for revegetation. Now it's time to cover practical aspects of Planting.

Before planting out, plants in tubes or pots should be thoroughly watered—immerse them in water, and don't let them dry out while waiting to be planted.

Care should be taken to plant eucalypts so that the lignotuber is below the soil surface (lignotuber is a woody swelling at the top of the roots, it stores starch for the plant to regenerate from after fire. It needs to be below ground).

A Rainforest plot is planted at random spacing to create a natural effect, at around 1000 plants per hectare. Rainforest trees typically have shallow, spreading roots sensitive to cultivation and grazing. Close spacing encourages rainforest species to compete and grow fast.

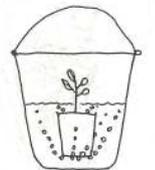
Eucalypts can be planted 3-4 m apart. They are gross feeders possessing deep root systems and do not need to be planted close to encourage tall growth.

Eucalypts are more tolerant of weeds and poor soil.

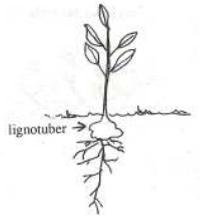
Riparian and other sloped sites can be terraced to help manage erosion and capture rainfall for young trees.

Post hole augers can leave hard polished holes especially in clay soils, which are difficult for roots to penetrate. A mattock is preferred. Dig holes much larger than the pot, and back fill with the site soil. Leave a shallow depression around the plant to collect moisture. Don't be tempted to introduce soil from elsewhere, especially in clay soils as this can form a sump, waterlogging the plant.

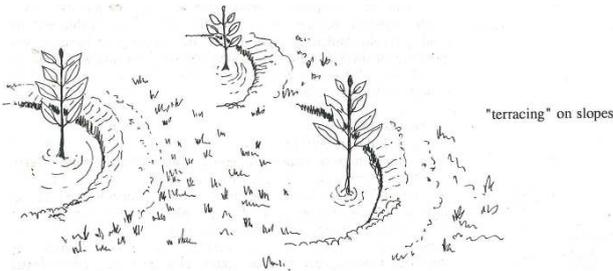
Always water in new plants, even if it is raining. This helps bed the roots in with no air spaces. And take time to mulch! (notes from SGAP Mackay 1994—Harvest Tenfold)



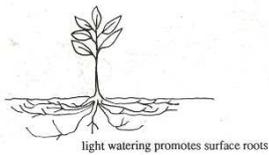
soak till bubbles cease rising



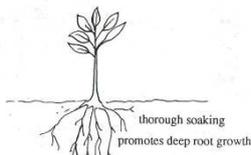
lignotuber



"terracing" on slopes



light watering promotes surface roots



thorough soaking promotes deep root growth

## Landcare activities in March 2014...

Right— Year 9 Students from Mercy College, Mackay get a lesson in dune revegetation from CVA staff, before planting 200 coastal ecosystem plants at Far Beach.

Below—35 students from prep to Year 7 at Gargett and Finch Hatton schools work together watering the 100 creek bank trees they planted at Owen's Ck.



Below— Marian Community Working Group members, Frances Mackenzie and Alicia Jensen plant some of the 400 seedlings at Melba House revegetation site.



## Upcoming Events

### April

- Saturday 5** — Morag McNichol Reserve Working Bee. Contact 4955 0153
- Sunday 6** — Birdlife Mackay outing to Armstrong's Beach Strathdickie. Contact 4959 3382
- Saturday 12-13**—Coastal Revegetation Working Bees at Blacks beach (9am) and Eimeo (2pm). Contact 0429 155 841
- May**
- Thursday 1** - SGAP meeting, *A Walk on Maria Island* by Margaret Lane. Contact 4954 8176
- Saturday 3** — Morag McNichol Reserve Working Bee. Contact 4955 0153
- Sunday 4** — Birdlife Mackay outing to Sandringham Reserve Contact 4959 3382
- Saturday 17**— Coastal Revegetation Working Bees at Ball Bay (9am) and Bucasia (2pm). Contact 0429 155 841
- Sunday 18** — Farleigh Palm Fete
- Saturday-Sunday 24-25** —Mackay Coastal Clean-Up (Southern sites). with Eco-Barge Clean Seas. Contact 4946 5198
- Wednesday 28** — Mackay Youth Leadership and Sustainability Summit. CQU Mackay. Contact 0423 044 431

## FAUNA RESCUE WHITSUNDAYS ASSOCIATION

Information Morning Sunday 13th April 10am to 12 noon.

Learn what you need know to look after rescued and recovering wildlife in our region.  
Held at QPWS, Jubilee Pocket.

Contact [frwsecretary@gmail.com](mailto:frwsecretary@gmail.com) or 4947 3389

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## Pioneer Catchment & Landcare News

April 2014

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## Get 'Wild' About Our Islands

In late April Wild Mob, with support from Reef Catchments, is setting off to two more islands in the Cumberland Group to target invasive weeds in critically endangered littoral rainforest, as well as plastics on turtle nesting beaches - and they are looking for six intrepid volunteers to take part in the expedition.

This is the last trip for the season, so get on board now if you are keen!

Volunteers will be working alongside natural resource managers with vast knowledge and experience in this part of the world, providing a fantastic opportunity for those who take part to learn more about these environments.

Volunteers will also have plenty of time to explore the incredible island ecosystems, and pull the snorkel on to explore the world below the water as well.

If you want to be part of the 'mob' and are up for some hard work, adventure, and sailing amongst stunning islands and scenery send [renee@wildmob.org](mailto:renee@wildmob.org) a brief statement about yourself and why you want to get involved.

**Where:** South Percy and Pine Peak Islands

**When:** April 27th – May 3rd,  
Departs/Returns: Mackay Marina

**Cost:** \$325 (Includes all food, camping and working equipment)



**Where:** Mackay Community Gardens  
Streeter Avenue  
West Mackay

**When:** Saturday 10 May 2014  
9:00am to 11:30am

This workshop will highlight the benefits of composting and assist householders with setting up a successful compost or worm farming system at home.  
It's FREE, but bookings are ESSENTIAL.  
**Call Fiona Patterson on 49619051**

If unable to be delivered please return to

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