



Autumn Edition

Newsletter issue 47: April 2021



MRL secures funds to upgrade facilities

MRL President, LB Joum, is excited to announce a successful \$35,000 application to the Gaming Community Benefit fund which will allow an upgrade to the organisation’s office facilities. The increasing popularity of workshops and our growing staff numbers are the main drivers for the upgrade. We are currently considering layout options and will provide more detail after we have some layouts to consider. Thanks to our volunteer Kadi, for preparing the successful application, and to Jason Hunt MP and the Gambling Community Benefit Fund for their support.



From left: Karen Schmidt and Kadi Warner accepting our first giant cheque from Jason Hunt MP

- ◆ A Sunshine Coast Council cane toad information session was recently hosted by MRL, in an effort to help Land for Wildlife members better manage their Cane toads (*Rhinella marina*). Land for Wildlife members learnt about frog/toad ID and constructed their own trap to take home.
- ◆ Nursery Assistant Sarah Roberts operated a stall at the Mooloolah 4 Seasons Market stall on Saturday 20 March. Despite the gloomy weather Sarah kept smiling, selling plants, proving information and making connections. See page
- ◆ Our most recent Bug Workshop with entomologist Michelle Geeson, ‘Eating Insects for Sustainability’ saw participants sampling home grown crickets and meal worms! See photos Page 5. Next talk ‘Sects, bugs and rock ‘n roll’ is on 1st May.

Nursery opening: Wednesday—8.00am to 4.00pm Saturday—9.00am to 1.00pm

Volunteer days: Monday & Tuesday **MRL phone:** (07) 5494 5074

Nursery email: nursery@mrwl.org.au **General email:** coordinator@mrwl.org.au



MRL welcomes our Biocontrol Assistant Leesa Beutel

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Photo by Sarah Roberts



Coordinators corner



The events keep rolling at MRL. In the past month or so, we've done seed collecting, waterbug monitoring, a bug talk, a frog walk, Let's go for a Walk, a market stall, tadpole trap making, and the inaugural school session for our Bugs to the Rescue project! It's so nice to be able to run these interactive and informative sessions again - and we're making up for lost time.

On top of this, we've been reviewing our branding and signage, which has evolved over the years, along with our website presence. While our logo is great, we will be refreshing our overall branding to present a consistent message through all of our communication formats (website, letterhead, email signatures and front signage). The website will be re-launched very soon.

We would love to thank Caloundra and Hinterland Community Development who have provided MRL (and other non profit groups) with access to a Communications Officer, Sonia Clark, who has been helping us with this process.

Biocontrol Update: Jessica tells all

Despite less of the preferred hot, sunny, conditions this summer season, our beetle numbers are defying the weather with over 35,000 beetle bioagents released to date.

To make the collection a little easier, our President (Joum) and Jessica have been developing an easy to carry (in a backpack) and less laborious "proton pack" (modelled from the Ghost Busters design) which allows for a more efficient and less breath-reliant collection of beetles.



MRL President LB Joum with new "proton pack" collector.

Nursery musings

It's all about the irrigation system at the moment—and there's a bright light at the end of the tunnel. The Pump House (Beerwah) has been installing the

system this week, which is due to be finished on 9th April. This comes as a huge relief to the nursery staff and volunteers who have been unblocking filters and hand watering for far too long. We also have some schmick new benches to couple with the new irrigation. Fancy!



- ◆ Alyssa Barwick at the graphic design company 'Two Cats Creative' are helping MRL update our website and provide us with a consistent style guide for our marketing and communications.
- ◆ As fans of MRL, Two Cats Creative have kindly provided us with a bargain price for the job. Thanks Alyssa!
- ◆ Check out the new website soon which will sit under a much easier-to-remember URL: www.mrl.org.au
- ◆ Two Cat's Creative do graphic design, web design, copy writing, websites, and more: <https://twocatscreative.com.au/>

Fast Facts:

- ◆ Ghost buster's inspired "proton pack" bug catcher in operation
- ◆ Engineered and built by MRL President LB Joum, a small (battery), vacuum pump sucks beetles into collection jars
- ◆ See Page 6 for our 'Bugs to the Rescue' program held at Peachester State School



New benches and irrigation! So exciting!!

MRL volunteer, Rod Kerr, talks grazing projects

Rod is a new volunteer to MRL and provides some insights into his work in the Burdekin River Catchments based around Bowen and Collinsville. “An early project success was a trial of utilising livestock in remediation of a black soil gully - a bit counter intuitive for traditional views of the impact of grazing animals and erosion”, Rod says.



1400 weaners camped overnight on an active black soil gully November 2014, reprofiled + nutrients, and the site in 2018 — no longer active



800 cows camped on a 1ha hostile and bare erosion site November 2017, and the revegetated site in 2020 with the untreated control in foreground



Active head of gully (gully is approximately 3km in length and up to 2m in depth) and completed rock chute on the gully head November 2020

Fast Facts:

- ◆ Involved with grazing projects in the Bowen, Broken and Bogie River Catchments (the BBB) since 2014
- ◆ BBB catchments are a dominant source of fine sediment to the Great Barrier Reef lagoon
- ◆ 3 year grazing project using the principles of Holistic Management (see [Alan Savory TED talk](#)) 2014-16
- ◆ Holistic Management is gaining traction within the grazing industry
- ◆ Boosted by publication of Charles Massy's "Call of the Reed Warbler"
- ◆ 5 year Aust. Government Reef Trust Program project investigating use of livestock in remediating erosion and gullies — ends June 22
- ◆ 12 projects on 7 properties to date with a range of actions, including fencing & shifting stock watering points to increase stock density, diversion banks, pasture reseeding
- ◆ Project example: one property rotated 3000 weaners through 5 x 70ha paddocks for 2 days/paddock (late February) aiming to increase pasture and impact erosion areas
- ◆ Massive pasture cover improvements on most sites— strategic livestock grazing and long pasture recovery periods critical to success
- ◆ Also includes full remediation of gully sites with mechanical reprofiling and rock capping, and construction of rock chutes

Feature Story

MLR board member, Jasmin Annett, is involved in exciting research in the Northern Territory, through the University of the Sunshine Coast. Jasmin said that the aim of the research was to understand the ecology of Australia's largest lizards, the Perentie. "This study will contribute invaluable information for future conservation works " she added.



Research assistants, Lisa Albino and Ben Gilby, with some prize captures.



Lead researcher Jordan Di Cicco with a beautiful specimen.



VHF tracking of captured animals.

Fast Facts:

- ◆ Previous observational studies have tracked these lizards to an extent but knowledge of their ecology is still predominantly assumed
- ◆ Used small puck sized devices called accelerometers to obtain robust data
- ◆ Accelerometers are a novel method in animal behaviour research
- ◆ Records movement as a change in velocity in 3 dimensions
- ◆ Attached to captured animals, with the device recording on release
- ◆ Also GPS and VHF trackers to easily locate the animal for recapture
- ◆ Successful in capturing nine perenties during the study period, all fitted with devices
- ◆ The effects of climate change, the accelerated expansion of urbanisation and subsequent land degradation is becoming a significant threat to natural ecosystems
- ◆ The outcome of this research will have significant ecological importance for Perenties as their life history strategies remain somewhat undiscovered.



Photo Gallery



Sarah at Mooloolah markets and with 15 species of local native plants for sale, blueberry ash, yellow buttons & pig face sold out.



Author of 'Frogs of the Sunshine Coast Region', Mike Donovan's a "Wild Night Out" of frog spotting in March. More events in future.



Mmmmm.... Insects... Entomologist, Michelle Gleeson's bug talks are ever popular & sell out quickly.



Sampling some meal worms and crickets.



Sarah building cane toad traps.

Project News

Macroinvertebrate Monitoring happens on the last Friday of each month. Macroinvertebrate (waterbug) monitoring provides community members an opportunity to collect data to help monitor stream health and changes in condition.

Next dates are: 28th May, 25th June and 30th July—10.00am to 1.00pm, let Jessica know if you're interested, mrwl.projects@gmail.com



Waterbug monitoring

Bugs to the Rescue!

The program was launched in March at Peachester State School. Our program delivery approach is a highly interactive presentation that aims to inspire children to consider future careers in science.



Following this presentation, the Peachester students participated in a real science activity: two groups of students compared macro invertebrate (waterbug) samples from Coochin Creek and the Stanley River. Feedback from one student was that she has decided to be a “bug scientist” instead of a mathematician when she grows up.

Communities Environment Program (CEP)

As a part of this exciting grant provided by the Andrew Wallace's office, we will be doing a revegetation planting on part of the South Mooloolah River, on South River Drive (see photo). The planting will see a mown grass area of Council-owned land re-wilded using 650 native plant species from the Endangered gallery rainforest community (Regional Ecosystem 12.3.1).

A planting day will be held on Tuesday 11th May 2021, we would love to see you there. Let Karen know if you can make it along on: coordinator@mrwl.org.au.



Revegetation site at South River Drive, Mooloolah

Fast Facts:

Macroinvertebrate monitoring:

- ◆ Program aims to raise community awareness about the health of our waterway.
- ◆ Some waterbugs are very sensitive to pollution, so their absence in our sample raises a red flag for that site.
- ◆ Contact Jess to get involved.

Bugs to the Rescue!

- ◆ Program supported by Qld. Government's Advance Queensland Engaging Science Grant
- ◆ Aims to inspire students by showing importance of insects
- ◆ Demonstrates how people, in a range of fields, work with and learn from insects to solve environmental problems.
- ◆ Connecting with more schools next term and inspiring more future “bug scientists”!

Communities Environment Program

- ◆ Get your hands dirty and help transform a mown grass paddock back into a Gallery rainforest.
- ◆ Tuesday 11th May ,from 9am.
- ◆ Bring your gloves, hat, water and sun safe clothing.
- ◆ This revegetation is made possible from the Communities Environment Grant (CEP) through Andrew Wallace MP's office.
- ◆ The site is provided by Sunshine Coast Council, and will be maintained by them too.

Plant of the season: *Eustrephus latifolius* (Wombat berry)

Eustrephus...from Greek eu, well, and strepho, to twist, referring to the twining habit

latifolius...having broad leaves.

Tubestock just \$1.25 at the nursery this Autumn.



Photo credit: Brian Walters – Australian Native Plant Society 2015

Wombat Berry Fast Facts:

- ◆ Fast growing twining vine that can be used as ground cover or screen.
- ◆ Orange berries are decorative but should not be eaten by humans.
- ◆ Tuberos roots eaten by wombats and berries are eaten by birds.

Bassett Barks

A big shout out to Bassett Barks at Glasshouse who donate the bark that we use in our propagation mix, tube mix and biocontrol unit. And a huge thanks to Mooloolah Mitre 10 for delivering it to our nursery!

Bassett Barks is Queensland's largest manufacturer of premium grade potting media supplying wholesale nurseries and other users for over 20 years. We can't do it without them.



Fast Facts:

- ◆ Use approx. 25m3 of potting mix annually.
- ◆ Biocontrol has 700 plants for each beetle season and takes up to a load of mix.
- ◆ Propagating and tubing up plants for the nursery is the major user of mix.

DEDUCTIBLE GIFT RECIPIENT

Anyone wishing to donate to our organisation can receive back a deductible gift recipient (DGR) tax benefit from the Australian Tax Office