June 2010
Issue 21

The CODLine

Incorporating NEWS of the Mary River Catchment Coordinating Committee

Caring for upper catchments

Secrets of Little Cedar Creek

Susie Duncan
Wildlife Ecologist, Maleny

Little Cedar Creek begins its life on the eastern slopes of Donovan's Knob on the Blackall Range, between Maleny and Kenilworth. It flows into Cedar Creek which enters the Mary River just downstream from Conondale.

Most of the upper catchment of Little Cedar Creek falls within the Curramore Wildlife Sanctuary, a property of 175 ha which is owned and managed by a private organisation, the Australian Wildlife Conservancy (AWC). The area has been subject to historical logging and slopes that were cleared for banana plantations have become seriously infested with lantana. AWC has employed two locals, Klaus Runde and Murray Wall, to eliminate the lantana and other serious weeds whilst enhancing the regeneration of native species. A committed volunteer, Jennifer Dobinson, also spends regular weekends at the reserve removing lantana.

At Curramore Sanctuary all the upper tributaries of Little Cedar Creek are well forested except for one which flows off adjacent farmland and is dammed. This probably has minimal impact on the creek because grazing levels are low but of course the dam influences the in-stream flow in dry periods such as we experienced in spring last year. Lantana removal in the sanctuary is being done in a mosaic fashion to limit soil and short-term habitat loss and to provide shelter for the regeneration of local indigenous species.

The sanctuary is home to a swag of threatened species including the Golden-tipped Bat, Stephen's Banded Snake, Hip-Pocket Frog, Plumed Frogmouth, Richmond Birdwing Butterfly, Pink Underwing Moth and Mountain Freshwater Crayfish. The presence of these threatened species gives an indication of the quality of habitat in the reserve and this will continue to be enhanced by good land management.

Value of upper catchments

Protecting the upper catchments of streams plays an important part in whole stream conservation.

Forested upper catchments, with fallen woody debris and ground

Little Cedar Creek. *[Photo by Susie Duncan]*

cover, have a much greater capacity for absorbing and/or slowing down water run-off. This means that water enters the creek over a longer period, maintaining flows. Maintaining flows throughout the year is important for sustaining aquatic life such as the larvae of freshwater insects and freshwater crayfish. These in turn provide food for fish, frogs, water dragons, water rats, platypus and birds.

Vegetation in the headwaters also helps to filter sediments and nutrients from water entering the stream from surrounding farmland. Even during deluge events, when water can barely

... Continued on Page 2

Seeing the forest ...

... continued from page 1

be absorbed into the soil, vegetation and fallen branches will still slow the overland flow and reduce soil loss.

Reducing the sediment entering streams is critical for many species. If gaps between river stones are filled with soil, the invertebrates and frogs that shelter in these crevices lose their habitat.

Clearing out weeds in upper catchments benefits the whole stream. Weed seeds and plant pieces tend to be washed on down to the lower reaches of the stream. Mist Flower *Ageratina riparia* is a well known stream-clogging weed. Managing weeds downstream is a lot easier if fresh material is not constantly invading from higher in the landscape.

Helping upper catchments

If you have land in the headwaters of a stream, you're in a great position to influence the health of the whole stream. Protecting these headwaters from heavy grazing and providing off-stream stock watering points will greatly enhance the health of the stream.

Even better, revegetating cleared areas or protecting remnant vegetation on your land will provide valuable upland habitat for many species as well as ensuring improved water quality downstream.

You never know, you might just have a colony of Hip-Pocket Frogs or some Richmond Birdwing Butterflies in your catchment.

The Mary Valley looks to our Future

Steve Burgess
Catchment Officer
Mary River Catchment
Coordinating Committee

(Adapted from a summary report to the Qld State Government in April 2010)

Following the decision to not proceed with the Traveston Crossing Dam, it's become clear that the people of the Mary River catchment are concerned about and want a say in the Mary Valley's future.

An alliance of community-based organisations (including the MRCCC) and local governments has formed the Mary Valley Renewal Team to advocate for

- those who continue to be affected by Government decisions in relation to this proposal
- adequate resourcing to rebuild community capacity, and
- a continuing voice in future decisions affecting the Valley and the Mary River.

From December 2009 onwards, the team organised community meetings to identify issues, collect ideas, and develop a shared social, economic and environmental vision for the Mary Valley.

Feedback from these meetings is being used to produce a Community and Economic Action Plan.

The plan will be subject to continuous review but will continue to be based on agreed community values and a shared community vision. It is intended that the plan will inform government policy at all levels.

The key strategy areas identified for the future of the Mary Valley are:

- CERTAINTY AND HOPE
- Agriculture
- Tourism
- Business
- Opportunities for young people
- Environmental stewardship
- Community building
- Civic pride
- Health and wellbeing
- Aged care and support services
- Arts, culture and heritage
- New industries and innovation
- Coordination of effort
- Sport and recreation.

At present, the main issue we need a clear answer to is: What will happen to the land purchased for the proposed Traveston Crossing Dam?

The community has expressed strong preferences for land use and new businesses which enhance opportunities for the strategy areas identified above.

The community wants to avoid the land being used for large scale speculative investment for future residential development, broad scale monoculture plantation forestry, industries not in keeping with the rural character, or industries or rates of water extraction that threaten the ecological health of the Great Sandy Straits, Mary River estuary, Mary River and its tributaries.

A working copy of the Community and Economic Action Plan (CEA Plan) is being launched in early June 2010.

Following this, the team is very eager to engage with all levels of government, business and community groups to see how aspects of this plan can be put into action.

For more information, the CEA Plan, and contact details for people on the Mary Valley Renewal Team, go to

www.maryvalleyrenewal.org

or contact **Glenda Pickersgill** *(spokesperson) on* **5484 3150**.

Some representatives of the Mary Valley Renewal Team (from left): Heidi Lacis, Derek Foster, Marie Hensley, Ken Meldrum, Tony Perrett, Dave Sims, Kerry Rolfe, Glenda Pickersgill, Col Huddy, Roger Hogg, Larry Friske, Steve Burgess, James Arkle.

Turtle season changeover

Marilyn Connell
Tiaro & District Landcare Group

The Mary River Turtle *Elusor macrurus* nesting season has finished and the White-throated Snapping Turtles *Elseya albagula* are starting to nest. Unfortunately evidence of nesting is most likely to be confirmed by the presence of predated *Elseya* eggs.

Turtle nesting patterns are dependant on the weather. As we watch the turtles' nesting activities, we are constantly reminded of how seasons change from year to year.

Spring and early summer in 2009/2010 were very dry. October 2009 was the second driest October in the past decade and November the driest November in the same period. This limited the opportunities for *Elusor* to nest and meant some females laid much later in the season than usual.

In total we monitored 35 nests which resulted in 265 wild hatchlings emerging successfully. By protecting in-situ nests, we minimise human interference and thus minimise the chances of humans accidentally damaging nests.

Our project is dependant on partnerships. Water testing was carried out with the expert assistance of Steve Burgess from MRCCC.

An interesting observation was the high oxygen readings in the top metre of water. Late in the day the water was often supersaturated (i.e. more oxygen in the water than in the air). However towards the bottom of the deep pools, oxygen levels fell dramatically.

Another partner is the Dept of Environment and Resource Management's Turtle Conservation Project led by Dr Col Limpus, whose contribution is greatly appreciated and essential for the project.

The April 2010 issue of Australian Geographic magazine features an article on the Mary River Turtle written by Dr Hamish Campbell, who works regularly with Tiaro Landcare.

For more information on Tiaro Landcare's Mary River Turtle project, visit www.maryriverturtle.com *or contact Tiaro Landcare on 4129 6206 or* info@maryriverturtle.com

Noosa Festival of Water 2010

Join us at the Noosa Botanic Gardens and Lake Macdonald Amphitheatre to enjoy the annual NOOSA FESTIVAL OF WATER on SUNDAY 20th JUNE 2010 from 10 am until 3 pm

Over at the Hatchery

A free boat ride will take you to the Gerry Cook Fish Hatchery where you will learn how Mary River Cod fingerlings are bred for release throughout the Mary River catchment. You can also visit the Water Treatment plant and the Camp Cooroora Open Day, which coincides with the Festival this year.

Also by the hatchery will be food and drinks, scull training and rowing demonstrations by the Noosa Boat Club, and a display by Bat Rescue inc.

On and by the water

Dave Whelan, well known Bush 'n Beach Journalist, and volunteers from the Lake Borumba Fish Stocking Association will again hold the popular 'Take a Kid Fishing' Clinic.

Supervised 30 minute kayaking sessions are on offer, with all equipment for water activities provided (but please bring sun protection and footwear).

Refreshments and coffee will be available from a range of food stalls and music provided by local bands in the Greek-style amphitheatre.

Wildlife on hand

Always popular, Martin Fingland from Geckoes Wildlife will display a diverse collection of Australian wildlife and provide opportunities for getting up close and personal with some of his friends.

Info & Advice

The many displays will include:

- **Noosa Landcare**, who will give **two complimentary tree seedlings** to residents of the Noosa Biosphere who show a copy of their rates notice.
- **Mary River Catchment Coordinating Committee** staff who will provide a **basic water testing service** to landholders who bring a sample of water from their dam, creek or bore. For best results collect your water sample in a clean dry container.
- **Lake MacDonald Fish Stocking Group** and **DPI–Fishcare** with fishing advice.

Free entry, prizes

Entry to the festival is free. To be in the draw to win 30 litres of Rockcote Ecostyle Internal house paint, simply place your name and phone number in the box provided in the Amphitheatre.

The Lake Macdonald Catchment Care Group organises the festival each year and is grateful for the support of the Sunshine Coast Regional Council, Noosa & District Landcare Group, Mary River Catchment Coordinating Committee, Burnett Mary Regional Group, and Seqwater. In addition, the 'Take a Kid Fishing' Clinic is held with support from Dave Whelan, Australian Monofil, Alvey Reels, DPI–Fishcare, Fisherman's Warehouse Gympie, Anaconda Kawana Waters, Cooroy IGA, and the Lake Borumba Fish Stocking Association.

For more information, phone 07 5482 4766 or email lakemacgroup@ozwide.net.au

Frog roundup

Eva Ford, Catchment Officer, Mary River Catchment Coordinating Committee

The 2009/2010 frog season has drawn to a close with the cooler weather. During the 73 surveys, 1472 records of 27 frog species were collected. These surveys were made possible with funding from the Sunshine Coast Regional Council, WWF's Threatened Species Network and the Australian Government's 'Caring for our Country' CoastCare program.

The previous season's records are currently being entered for submission to the WildNet database (DERM). Data entry and verification is a lengthy process but the benefits to MRCCC and the wider community are great. WildNet data can be accessed online through DERM's 'Wildlife online' resource. Go to the DERM website www.derm.qld.gov.au and search for 'Wildlife Online database'.

Diversity results

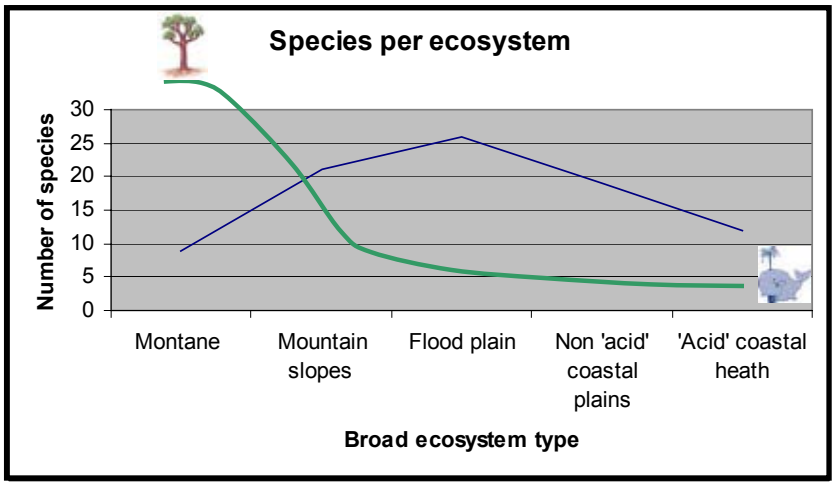
The accompanying diagram illustrates the diversity of frogs in the Mary River catchment based on our survey results. The data indicate that the frog diversity of the mountain tops and the acid areas of the coastal wallum is lower than the areas in between where ecosystems are more varied and conditions less stringent. Some species, like the Eastern Sedge Frog *Litoria fallax*, occur and breed in a wide variety of habitat types, whereas the Wallum Sedge Frog *L. olongburensis* is confined to the wallum sedge swamps.

Specialists may struggle

This diagram helps us to better understand the implications for our amphibious fauna in an age where swift changes to our world's natural environment are becoming a reality. If, for instance, climate change raises overall temperatures, frogs of the cool mountaintops won't have alternative areas to colonise. Species that currently utilise this area as well as the mountain slopes (e.g. Giant Barred Frog *Mixophyes iteratus*) may be able to maintain their presence. Certainly as conditions change the generalists will be better equipped to continue utilising the areas they did previously.

For coastal species, sea level rises will bring saline waters into the current habitat of the coastal 'acid' frogs. These species are habitat specific and vulnerable to competition from the more common species that utilise a wider range of habitats. The 'acid' frogs would have difficulty maintaining their current distribution and population levels.

Unfortunately highly specialised species may struggle to persist as their environments change.



We can all help

Land and property managers facing climate and environment change are challenged to protect and enhance habitat areas to be as resilient as possible. In this way refuge can be provided to a greater variety of fauna and flora species, maintaining the functionality of ecosystems.

Habitat protection can be achieved by fencing out stock, safeguarding increased areas for habitat and environmental services, controlling feral animals and weeds, encouraging natural plant regeneration and replanting where necessary.

We can also damage habitats through our everyday actions if we inadvertently spread weeds, pollute, ignore bad practices and allow pets to hunt.

The continuing MRCCC fauna survey and monitoring program will help to collect information on species that are often indicators of environmental health.

Eastern Sedge Frog *Litoria fallax*
[Photo by Eva Ford]

"Shade for Mary" – a Streambank Blitz

Motivating landholders to revegetate streambanks to provide shade, bank stability and wildlife habitat along the Mary River and its tributaries.

- Get talking – find people who want to get involved
- Start up a group of up to 8 people
- Walk stretches of streambank and discuss what's needed
- Have farm walks, project days, BBQs
- Revegetate disturbed areas after floods
- Look for opportunities through exchange working bees, government grants, work schemes
- Share ideas and resources.

More information is available from **Glenda Pickersgill** *on* **0411 443 589** *or* **5484 3150**. *Coordinated through Save the Mary River Coordinating Group Inc.*

Planting at Traveston Crossing

Glenda Pickersgill
Landholder, Kandanga

Upstream of the bridge at Traveston Crossing is a stretch that has long been known for its unstable cliff bank; back in the 1970s it was used as a local diving spot.

After the current bridge was built the Cooloola Shire Council stabilised the toe of the bank with rock. In 2001 the community, with assistance from WWF and Gympie & District Landcare, decided to plant the bank with riparian rainforest species. Nine years later, this area has reached a stage of canopy closure and has showed resilience to flooding in the last big flood of 1999 and numerous minor floods (see photos below).

It is well worth a walk along the bank to get a closer look at the shade and stability the revegetation has started to give to this part of the river. The revege adjoins a remnant area of weeping lillypilly/blackbean-dominated vegetation with stable steep banks and swift-flowing riffle that is shaded for most of the day by the overhanging vegetation.

Revegetation site on the Mary River upstream of Traveston Crossing bridge, in 1998 (above) and 2010 (below). [Photos by Glenda Pickersgill]

'Shade for Mary' Project

As part of the 4th Anniversary Canoe Floatilla on 24 April, the 'Shade for Mary' project was launched with a symbolic tree planting on the riverbanks downstream of the Traveston Crossing bridge to encourage more stream bank restoration work.

In what resembled a 'Stream-bank Blitz', about a thousand native riparian plants were planted in a few hours. These had been grown locally by the community with the seed collected just after the 'No Dam' decision was announced in November 2009. These plants mark a significant act of riverbank rehabilitation, and will be a long term tribute to the fight to save the Mary River.

New planting downstream of Traveston Crossing Bridge. [Photo by Arkin Mackay of www.stoppress.com.au]

The objective is to establish native riparian plants that will withstand flooding, reduce bank erosion, provide perch sites to attract birds who will import seed of other plant species, provide shade and inputs to the stream food web, and shade out many of the weeds within two years to minimise weed maintenance.

The new revegetation site at Traveston Crossing will be subject to very fast flowing water during flood events. We must expect there will be some damage to our plantings depending on how long the plants have to get established before the next big flood.

However the native riparian plants that have been selected for planting are adapted to survive floods. Some will be flexible and will lay over and re-shoot from the stem. Some like the Weeping Lillypilly *Waterhousea floribunda* will sucker and produce more stems to make it stable. The River She-oak is a pioneer species and is quick to replace itself as surviving mother trees release seed soon after a flood.

After the recent floods, most of the **weeds** on the site had been destroyed, leaving lots of material for mulch and new weeds just germinating. A **planting area** of about 50 cm was prepared with a mattock. Because some of this site can get quite dry, the plants required extra attention: a handful of **rain saver gel** was incorporated into the soil at the base of each planting hole; a small **moat** was formed below each plant to catch water; and nearby weeds were used as **mulch**. Most seedlings also received a light spray of **ENVY**, a polymer solution that assists in reducing water loss after transplanting and protects against frost. Each plant was given at least a litre of **water at planting**.

Local waterlilies

Phil Moran, Natural Resource Manager
Noosa & District Landcare Group

In our region the most commonly encountered waterlilies are:

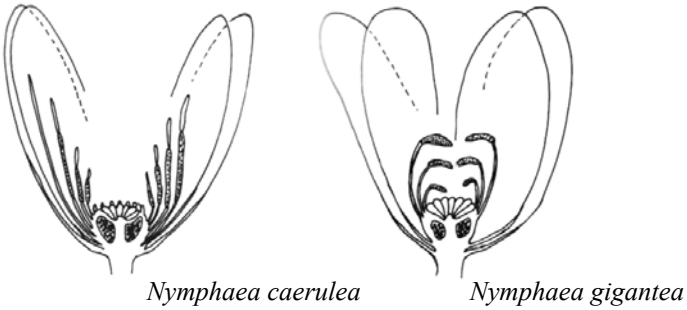
Water Snowflake *Nymphoides indica* (native)
Blue Waterlily *Nymphaea caerulea* sub. *Zanzibarensis* (exotic)
Yellow Waterlily *Nymphaea mexicana* (exotic)
Swamp Lily *Ottelia ovalifolia* (native)

Water snowflake is a very common and beautiful plant, seen in many of our dams and slow-moving streams. It has a small white fringed flower with a touch of yellow at the base. It develops a propagule under the mature leaf. This drops to the bottom of the water body and develops into a new plant. Its leaves are up to 50 cm across, entire and often eaten by various insects. Its name, *Nymphoides indica*, comes from the Greek *Nymphaea* meaning 'water nymph', *oides* meaning 'like', and *indica* meaning 'white'. It can be quite dense at times but is usually only seen around the edge of dams as it does not grow in water deeper than 2 metres.

Blue Waterlily is also very common in similar locations to water snowflake. Its flower can vary in colour from blue to pink. *Caerulea* means 'blue'. Leaves are large (to about 50 cm in diameter) and have sinuate margins (slightly scalloped). Often you will notice that leaves of this plant are not eaten nearly as much by insects … because it isn't a local.

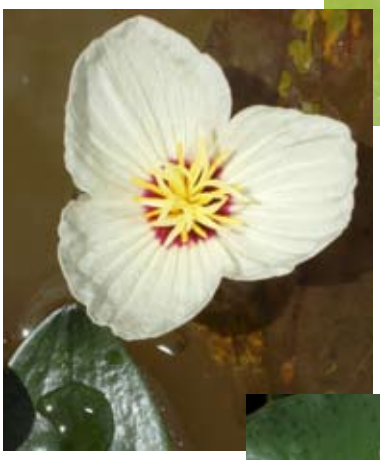
There are a couple of other blue-flowering waterlilies but they aren't likely to occur in the Mary River catchment. *Nymphaea gigantea*, a native, is considered to be almost extinct in south-east Queensland (see the diagrams for distinguishing *N. caerulea* and *N. gigantea*). *Nymphaea violacea* is a beautiful water lily with a pinkish/blue flower that grows across the north of Australia. It has a wavy margin to the leaf rather than toothed or serrate.

Blue Waterlily *Nymphaea caerulea* subsp. *Zanzibarensis*



Nymphaea caerulea *Nymphaea gigantea*

Water Snowflake
Nymphoides indica



Swamp Lily
Ottelia ovalifolia

Yellow Waterlily
Nymphaea mexicana

[All photos this page by Phil Moran]

Yellow Waterlily is also very common (unfortunately!). This is a native of Mexico. Leaves have slightly wavy margins and a habit of 'sitting up' rather than lying flat on the top of the water like most other waterlilies. Grows in water up to two metres deep. It has rhizomes and long stolons from the top of the rhizome. Have a look at the Duck Ponds in Gympie for a positive ID. Flower colour ranges from pale to deep yellow.

Both the Blue Waterlily and the Yellow Waterlily are very pretty plants. The blue one is common in our dams and usually does not get to the stage where it is a real 'weed'. This cannot be said of the yellow one. It can take over and completely choke a water body. The problem with both these plants – indeed with most of the aquatics – is that we have few ways of combating them. If you recognise them early, you can remove them by hand.

The **Swamp Lily** (*Ottelia ovalifolia*) is common, native and beautiful. It can handle more of a water flow than the others. The leaf is more oval rather than round, up to around 16 cm long. Flowers are glorious...white with a maroon base.

Others you *may* see are **Wavy Marshwort** *Nymphoides crenata*, which has a fringed yellow flower, leaves to 12 cm with crenate margins (not common around here, found more to the west), and **Watershield** *Brasenia schreberi* which has oval leaves to 8 cm with entire margins, maroon flowers and is a member of the family CABOMBACEAE (yes, that family)!

Illustrations drawn by Carolynn Waldron and reproduced from Mangroves to Mountains *(2002, 2009) by G Leiper, J Glazebrook, D Cox & K Rathie.*

More Plans for taking Mary's water

by Steve Burgess
Catchment Officer, MRCCC

The rest of this year will see the continued construction of Stage 2 of the Northern Pipeline Interconnector (NPI) which will connect the water supply systems of all the Sunshine Coast catchments and major impoundments into the SEQ water grid as part of the complete restructuring of the water supply, management, transport and retail industry in SEQ.

What are the consequences for the Mary?

The pipeline system was designed with enough capacity to handle the planned yield of the Traveston Crossing Dam of about 70 billion litres/year. However, that project failed to gain federal environmental approval and since the NPI's subsequent assessment under the same federal law, extraction from the Mary River at Goomong Pocket to supply the pipeline has been limited to about 6.5 billion litres/year. This is the same as was allocated from the river to the old Noosa Shire via the existing pump station.

The Department of Infrastructure has justified continuing with the original large capacity pipeline because they are still investigating ways of accessing a 'strategic reserve' of an additional 150 billion litres/yr of water which they believe is available in the Mary Basin.

What strategic reserve is this?

The extraordinarily comprehensive assessment of the environmental impacts of the Traveston Crossing Dam showed that accessing less than half (70 out of 150 billion litres) of the theoretical reserve is not environmentally sustainable, which makes the theoretical 150 billion litres per year of strategic reserve mentioned in the 'Mary Basin Water Resource Plan' look 'pretty dodgy' (to use a technical term).

The Mary's 'Water Resource Plan', which plans the allowable levels of extraction from the river and sets out the annual volume of the strategic reserve, is not expected to be revised until 2016.

Within the next few months, a draft 'Resource Operation Plan' for the Mary Basin will be released for public comment. This regulation outlines the rules, procedures and licence conditions for water management in the river. Interestingly, it is not expected to contain any procedures for accessing the strategic reserve.

At the other end of the river, a draft Wide Bay Burnett water strategy is also expected to be released this year. Not surprisingly, there is also considerable political pressure for Mary River water to be transferred northwards (more new pipelines?) to supply the burgeoning demand for water on the Fraser Coast.

We have other really viable options for a sustainable urban water supply without further threatening the health of our river. The Qld Water Commission is on the right track with its promotion of 'Total Water Cycle' water planning of looking at all aspects of the water cycle rather than just focussing on surface water storages.

Informed public comment on these various plans and documents is needed to keep the pressure on for water planning and infrastructure that leaves our river in a fit state for future generations.

Notes/links to detailed information about the NPI (including maps):

Cabinet statement

http:/statements.cabinet.qld.gov.au/MMS/StatementDisplaySingle.aspx?id=68478

Department of Infrastructure and Planning

www.dip.qld.gov.au/projects/water/pipelines/northern-pipeline-inter-connector-stage-2.html

Linkwater

www.linkwater.com.au/?id=166

Northern Network Alliance

www.nnalliance.com.au/faqs

Weeding: A 'holiday' on Lord Howe

Gillian Crossley
Landholder, Wonga

I'm just back from my third Weeding Ecotour trip to Lord Howe Island. We are tackling climbing asparagus fern and ground asparagus where they were completely smothering the forest. It's amazing how a group of dedicated weeders can make such a difference. It's exciting to think that this is one island that might be free of weeds one day. They've gotten rid of the cats and the pigs, and now they're thinking of how to get rid of the rats.

My job this time was mainly to deal with the weed regrowth – cutting out the crown (the growing point is below the soil surface) and painting with Roundup. Apparently one doesn't need to worry about getting out the water tubers as they won't regrow. Asparagus fern reproduces from the berries which can remain viable in the soil for several years, hence the importance of follow-up weeding.

This work has been going on for quite a few years during winter. Groups of about 12 people go and weed in the mornings then we are taken for the most wonderful walks in the afternoon. It's all quite steep of course, and fairly challenging.

Ian Hutton, a naturalist who lives on Lord Howe, arranges about four of these trips each winter. We pay for the pleasure! Ian is the most amazing and knowledgeable man, yet so unassuming. Lord Howe Island is his passion. He has been awarded an Order of Australia Medal for his services to conservation and tourism.

Talking of climbing asparagus, it is only in the last few years that I have been finding it along our creek. There isn't very much because I deal with it as soon as I see it, but it wasn't there 10 years ago! Of course the other weed here that is most troublesome is cat's claw creeper. It's even coming up along the driveway. If it's very little it can be dealt with easily by digging or spraying, but it becomes much more difficult when it gets big.

On Lord Howe, it was heartening to see how the farmers had replaced the barbed wire fences with plain wire. Some seabirds were being tangled up in the barbed wire. It would be good if everyone could put a plain top wire on all new fences, especially in vulnerable areas, to save our little sugar gliders and other flying animals.

Strategic planning for vine success

by Eva Ford
Mary River Catchment
Coordinating Committee

The support of the Sunshine Coast and Gympie regional councils for the MRCCC's biodiversity program has allowed us to start planning further into the future.

A healthy Richmond Birdwing Vine by a chook pen.
[Photo: Eva Ford]

Over the past 12 months about 700 Richmond Birdwing vines have been provided to about 45 property owners in the Mary catchment. At this stage, vines are available to anyone who requests them. I usually advise people to start with a few vines rather than taking on the 30+ that is recommended.

Extra measures must be taken if vines are planted on a less than ideal site. On shaly clays, common in this area, it is best to plant where you can keep a close eye on the vines. There have been many reports of vine deaths or slow growth, and also some success stories.

At my property, I have planted 15 vines along the eastern edge of a rainforest patch. Sounds ideal, but they have all died a slow death except one. We are on yellow podsolic soil; shaly clays of low pH which, despite enrichment with good soil, fertiliser and chook poo and plenty of watering, could not support the vines.

I have since established a vine next to my chicken pen, keeping it in a large pot and allowing the roots to come out the bottom. After 18 months it is looking pretty good as I inspect and water it daily and provide added 'extras' from the chooks. Recently I have noticed it flowering although no fruit has set yet. Several vine recipients have reported flowering after one or two years and some vines have set seed.

Over the next few years we will likely become more strategic about distributing vines according to soil types and corridor linkages. It will be useful to hear from vine recipients about the success, or otherwise, of their plantings. We will be considering the characteristics of areas where vines are more likely to establish successfully, and how many vines are needed to provide a food supply for the caterpillars of the Richmond Birdwing Butterfly.

Butterfly sightings are still scarce. Most sightings in the Gympie area seem to be from the west which indicates there are still some linkages throughout the state forests of the western ranges. A lady of around 70 reported seeing them out at Wondai when she was a little girl!

Around October this year the regular crew and hopefully some newcomers will present a Fraser Coast workshop.

For more information, contact Eva Ford at the MRCCC on 5482 4766 or mrccceva@ozwide.net.au

Brownwater Classic celebrates its 21st

By Ian Mackay, Commodore,
Moy Pocket Yacht Club

Each year, in the blackbean forest at Pickering Bridge near Moy Pocket, people gather on what can be the coldest day of the year to compete for the coveted Numabulla Cup as well as a host of rock-skipping awards.

Highly decorative craft vie with sleek unadorned blackbean pods to be the first to the finishing line.

Since the first Brownwater Classic in 1988, kids have grown up and come back with families of their own, while some past contestants are no longer with us.

One year the event was deferred as the river was in flood; on another it was cancelled as the river had all but stopped flowing due to a drought.

This year's event, the 21st Classic, will be held on Saturday July 3 from 1 pm at Pickering Bridge.

Boat-building materials are provided, as are barbecues and fires for an evening meal. Everything else (including chairs, food & drink) is byo.

The Commodore and members of the Moy Pocket Yacht Club look forward to a lively field for this year's event.

Geographical Note: Pickering Bridge is about 2 km along Moy Pocket Road from where it leaves the Kenilworth–Eumundi Road near Gheerulla Hall. The Commodore can be contacted on 5446 0124 or imackay@bne.catholic.edu.au

Brownwater Classic entrants.
[Detail from a photograph by Birgit Kehr]

Better Catchments update

Dale Watson
MRCCC Catchment Officer

The Mary River Catchment Coordinating Committee's 'Better Catchments' project team has been busy working with landholders in the Upper Mary, Mary Valley, Kilkivan, Widgee and Gympie East districts to improve catchment health and on-farm sustainability across the Mary River catchment.

The MRCCC project team is working with local landholders from across a range of commercial grazing enterprises, smaller grazing properties, horticulture enterprises and lifestyle blocks to undertake projects on two priority actions:

1. Promoting the implementation of improved **soil management practices** by targeting organic carbon, soil acidification, hillslope erosion etc.

2. Developing **Property Pest Management Plans** (PPMPs) using best management practice for priority weeds such as Lantana and Giant Rat's Tail Grass.

To date eighteen landholders have completed PPMPs Twenty-eight landholders have been involved in improving their soil health management.

On-ground projects identified under these priority areas have included:

- Weed management
- Grazing management
- Strategic legume introduction
- Fencing by grazing land type
- Fencing for specific management requirements such as landslips or riparian areas
- Keyline ripping.

Better Catchments is an initiative of the Burnett Mary Regional Group (BMRG) and is funded by the Australian and Queensland governments through the 'Caring for our Country' Program.

If you are interested in becoming involved in the Better Catchments program, please do not hesitate to contact Dale Watson at the MRCCC on 5482 4766 or mrccdale@ozwide.net.au

Blady grass management

Brad Wedlock, MRCCC &
Graeme Elphinstone, DEEDI

Blady grass *(Imperata cylindrical)* is native to Australia. This perennial grass is unpalatable to stock when mature and reduces the carrying capacity of both sown and native pastures. It often indicates a run-down in soil fertility.

Blady grass has underground stems so it is fire resistant. Regular burning often increases blady grass dominance in a pasture.

To manage **small patches of blady grass in a good pasture paddock**, selectively slash the patches a few times in a year to let light through to the ground. Fertilise in and around the patches with a nitrogenous fertiliser e.g. DAP to encourage stoloniferous grasses to run in. If no running grasses are present, poke in some runners on a wet day e.g. Rhodes, creeping blue, pangola, African star or kikuyu.

To manage **large patches in paddocks where intensive pasture improvement is not an option**, oversow the patches with Wynn cassia seed at 2 kg/ha. Slash the blady grass patches in late summer/autumn. Graze during winter; the cattle will trample the legume seed in while selectively grazing the blady grass green shoots. Spell the paddock during the next summer to allow the legumes to set seed and fix nitrogen. Graze during the following winter; the legume content will encourage the cattle to graze the blady grass patches. If you continue this regime for a few seasons, trampling by the cattle will help suppress the remaining blady grass.

To manage **blady grass-dominant pastures where slashing is not an option**, burn one last time in late summer/early autumn. Immediately oversow the patches with Wynn cassia seed at 1 kg/ ha. Follow up with the winter grazing/wet season spelling regime outlined in the previous situation.

In native pastures where blady grass occurs naturally, **annual** spring burning can progressively increase the blady grass component. Changing to autumn burning or burning only every second or third year can help to reverse the process.

Remember:

- Keep fire out of the blady grass after the pasture improvement cycle starts.
- Encourage the establishment of competitive grasses and legumes.
- Manage the pasture to increase the legume component.

For advice on best practices for managing pastures, contact Brad Wedlock, MRCCC, on mrcccbrad@ozwide.com.au, or Graeme Elphinstone, DEEDI, on 5480 4403 or graeme.elphinstone@deedi.qld.gov.au

Vale Gerry Cook

Ben McMullen, Sunshine Coast Council

From Ben's speech at Gerry Cook's funeral. Gerry passed away recently at the age of 94.

I knew Gerry best for his work on the conservation and rehabilitation of the Mary River Cod. In the minds of many nature lovers, the Mary River Cod is a beautiful, captivating, charismatic top predator. It is also particularly vulnerable to over-hunting and habitat loss.

Some 30 years ago, the Mary River Cod was critically endangered, a species on the brink of extinction due to habitat loss, over fishing and neglect.

Enter Gerry Cook. Gerry was a man on a mission, a man who saw an opportunity to give something back to the sport of fishing, which he loved, and to save this wonderful species from extinction.

Gerry and his mates worked out of each others' sheds with cobbled-together equipment. Over the years of determined effort Gerry's work provided the foundation for what we have today: a conservation recovery breeding program that has formed the basis for more than just the recovery of a species on the brink; it has also been the catalyst for a social movement in the Mary River catchment.

Gerry was a gentleman and a scholar and, well, just a really lovely guy.

He has shone a light on the path that those of us who would choose to protect and heal this amazing blue planet must walk down together.

The MRCCC Splatter Gun

– Helping to Battle Lantana

Dale Watson
MRCCC Catchment Officer

The MRCCC has purchased a gas-powered splatter gun for lantana control for use by Mary River catchment landholders and land managers. Lantana is a Class 3 declared plant under the Land Protection Act 2002 and is often viewed as one of Australia's worst weeds, affecting both productive and environmentally valuable land.

A splatter gun delivers a stream of high concentration herbicide in low volume and large droplets to thickly clumped lantana foliage at a distance of 6 to 10 metres. The splatter gun technique limits off-target damage to pasture and native plants due to its accuracy and limited spray drift. The gas-powered apparatus is easy to carry and use in difficult to access areas, areas of environmental values, and pasture management areas. Its range means it can be used from an elevated position to control lantana in gullies.

A field day was held at a Walli Creek property where the landholders have been using their own splatter gun for the past year and a half. The landholders have been very happy with the results as the gun has enabled them to reach hard to access lantana infestations and easily control large lantana bushes in pasture while minimising off-target damage.

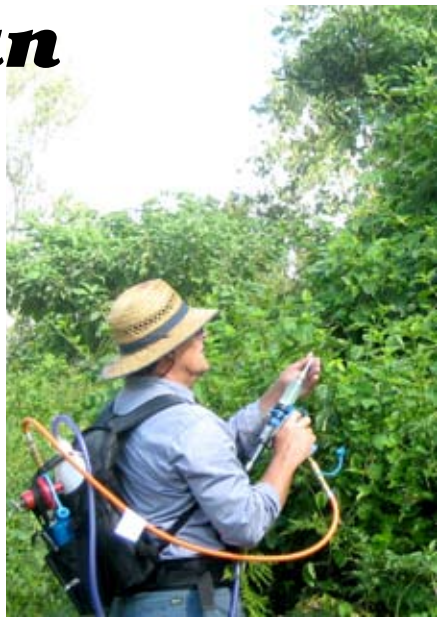
The splatter gun method is best suited for use on thickly clumped lantana or compact lantana regrowth that is at least 30 cm high. The splatter gun technique does not work well on spindly canes as it is difficult to apply the total volume of required herbicide to the leaves in this situation.

A high concentration herbicide mixture is used in the splatter gun; for glyphosate 360g/L the mix is 1:9 (500 ml glyphosate to 4500 ml water). However the actual amount of herbicide applied is very low. For example, a 2 metre by 3 metre wide by 2 metre high lantana bush requires only 96 millilitres of the 1:9 herbicide mixture. It is very important not to apply more than this registered rate of herbicide and not to spray to the point of runoff: using too much herbicide can put the plant into shock which will inhibit the plant's uptake of the herbicide. Using the splatter gun method, a 5 litre bottle of herbicide mix should cover approximately 2000 m^2 (half an acre) of moderately dense lantana.

Unfortunately the splatter gun method is not the silver bullet for lantana control and follow-up is essential. Best options for follow-up will depend on the weed and landscape situation and include:

- Fire (depending on fuel load)
- Spot spraying of regrowth
- Further splatter gun use (if re-growth is compact and has reached 30 cm)
- Revegetation or encouragement of natural regeneration.

The splatter gun purchased by the MRCCC can be borrowed by landholders battling lantana in the Mary River Catchment. Landholders are required to complete a Lantana Property Pest Management Plan to ensure the lantana is being controlled strategically.



Walli Creek landholder Graeme Eales demonstrating how to adjust the splatter gun's nozzle to distribute the herbicide mix as large droplets. [Photo: Brad Wedlock]

For more information, contact the MRCCC on mrccc@ozwide.net.au *or 5482 4766.*

Carbon munching

Nadia Joyce
Noosa & District Landcare

Throughout April 2010, thirteen families from Pomona and Cooran took on the Queensland Government's Low Carbon Diet, a climate change initiative aimed at reducing household greenhouse gas emissions and individual carbon footprints.

Australia currently rates poorly compared with other countries, with a typical Australian family household accounting for the use of 13 000 kg of carbon/yr. This means there's a lot we need to do and it all starts with individual households and local communities setting the example.

The Low Carbon Diet program was designed to help local schools and families to reach a reduction of 2000 kg/yr.

Noosa Landcare supported the participating families and provided incentives for reaching their carbon reduction target.

It was great to see that most families actually reached their target just by switching to energy efficient light bulbs, turning computers off at the wall, walking to school, eating locally produced food and doing a bit of fuel-efficient driving.

This well-deserving group of families who are taking climate change matters seriously were treated to a Low Carbon Celebration Lunch with scrumptious, healthy, locally sourced food and a range of vouchers and other benefits.

Journey with Mary ...

Three puzzles in one this time!

STEP 1: *Take a tour with Mary and fill in the names of the major tributaries, towns, impoundments and councils.*

Just downstream of C _ _ _ _ _ _ _ E, the first town to grace her banks, Mary is joined by the waters of C _ _ _ R Creek (mentioned on the front of this issue of the *CodLine*). Shortly after invigorating the town of K _ _ _ _ _ _ _ _ H, Mary is met by O _ _ _ _ I Creek, which has already refreshed the town of M _ _ _ _ Y and replenished the impoundment of L _ _ E B _ _ _ _ N.

All this time the Mary and her tributaries have been flowing through the Regional Council of the S _ _ _ _ _ _ E C _ _ _ T.

As Mary continues on her way, she is joined from the west by Y _ _ _ A Creek, which feeds B _ _ _ _ _ A D _ M and enlivens the town of I _ _ _ L, and after that by K _ _ _ _ _ _ A and A _ _ _ _ _ R creeks.

Near G _ _ _ _ E, administrative centre of C _ _ _ _ _ _ A Regional Council, from the east Mary greets D _ _ P Creek, whose name gives us a picture of earlier times, and the longer S _ X M _ _ E Creek, which has explored Lake M _ _ _ _ _ _ _ D and delighted the town of C _ _ _ _ N.

As she flows further along her journey to the sea, Mary is joined by the creeks of G _ _ _ _ _ _ _ _ _ Y and W _ _ _ _ E which flow from the south-west.

W _ _ E B _ Y Creek flows in from the west, after visiting the western town of K _ _ _ _ _ _ N, and next it's M _ _ _ A Creek, which joins the main stream near the town of M _ _ A.

Downstream from here, Mary energises the town of T _ _ _ O, which is famous for researching and protecting Mary's River Turtle.

Just upstream of the next major administrative centre, M _ _ _ _ _ _ _ _ _ H, Mary is joined by T _ _ _ _ A Creek, a major tributary that shares a key characteristic with Mary herself (revealed in Step 3). A little later, Mary meets up with her sister, the S _ _ _ N River.

Finally, Mary completes her journey at R _ _ _ R H _ _ _ S, where her waters join with the those of the Great Sandy Straits in the lee of F _ _ _ _ R Island.

STEP 2: *Hunt through the Word Search for the names you've discovered in Step 1.*

K	E	N	I	L	W	O	R	T	H	T	H	M
I	E	E	L	M	I	B	D	E	E	P	E	A
L	G	M	A	C	D	O	N	A	L	D	I	L
K	D	S	K	C	E	R	A	T	O	R	P	E
I	I	I	E	O	B	U	Y	I	B	R	M	N
V	W	X	B	O	A	M	I	A	I	V	Y	Y
A	E	M	A	R	Y	B	O	R	O	U	G	H
N	L	I	R	A	A	A	M	O	B	C	R	F
L	I	L	O	N	B	D	I	O	I	O	W	S
F	B	E	O	R	B	A	V	O	M	N	S	O
U	M	U	N	N	A	M	A	M	O	O	R	T
T	I	N	A	N	A	G	N	A	D	N	A	K
N	H	R	I	V	E	R	H	E	A	D	S	T
A	O	Y	R	U	B	N	O	T	S	A	L	G
S	N	O	R	C	O	O	L	O	O	L	A	T
U	C	E	D	A	R	F	R	A	S	E	R	H
S	U	N	S	H	I	N	E	C	O	A	S	T

STEP 3: *Find the letters in the Word Search that haven't been covered by any of the names. List these letters from left to right, top to bottom, to discover a fact about the Mary River that is rare among Queensland's east coast rivers.*

_ _ _   _ _ _ _   _ _ _ _ _ _   _ _ _ _ _ _   _ _ _ _   _ _ _ _ _ _   _ _   _ _ _ _ _ _

*** Like a little help? Check out the Mary River Catchment Locality Map on the Mary River Catchment Coordinating Committee's website at www.mrccc.org.au and navigate through 'Maps'. ***

The **COD***Line*

Good news for the Mary River Cod and the Mary River Turtle

is hosted and suported by

Barung & District Landcare Group

and the

Mary River Catchment Coordinating Committee

The support of the Sunshine Coast Council is also gratefully acknowledged.

Sunshine Coast Council

WORKING FOR OUR FUTURE

Editor, *The CODLine*

Eve Witney
PO Box 755
MALENY QLD 4552

Ph: 5494 4005
Fax: c/- 5494 3141

email: eve-eden@bigpond.net.au

This issue ...

The *CodLine* can be viewed online (later editions in GLORIOUS COLOUR!) at

www.mrccc.org.au/newsletters.html

The **COD***Line*
PO Box 755
MALENY QLD 4552

Print Post Approved
PPP# 440524/00004

SURFACE MAIL

POSTAGE PAID AUSTRALIA

Issue 21
June 2010