

the CODLine



Incorporating **NEWS** of the Mary River Catchment Coordinating Committee

Belli Beautiful BY PETER TURNER

Moving to the Belli Park area in the 1980's, I immediately became absorbed in its contrasting beauty of green hills and slow moving creeks and water holes. I explored the creek system up into the surrounding hills of Point Glorious and registered the diversity of the flora in areas where logging was not permitted, enjoying the aura of peace interrupted only by the symphonic sounds of bird choruses.

When I arrived I brought with me cattle and the grandiose idea of raising stud cattle on a property that was originally a dairy farm. I soon learnt the fragility of the creek system and the impact of cattle on regeneration. The original fencing had no empathy to the vegetative belt along the creek system and the potential for erosion.

Moving from the cattle I wanted to create a small Host Farm operation where I could not only express my feelings for the environment but could show how a farm and the environment could act in partnership. Bellbunya Country Lodge was built and then the partnership with MRCCC commenced in an all-encompassing rehabilitation scheme which included water testing of the Belli Creek and a tributary.

With the assistance of the MRCCC, remnant riparian vegetation was enhanced along Belli Creek, which rises from the upper reaches of the Mary River. To the rear of the property is extensive State Forest and, by working in with the MRCCC, a connective corridor along the creeks was formed. The vegetation corridors have provided both a passive and active interest to guests of Bellbunya with recent visits from overseas personnel.



Green Army trainees planting at Belli

The branch of Belli Creek to the State Forest reserve began to establish itself however, the branch to the northern neighbour emerged as the new challenge.

With no cattle in the early days, regeneration along the creek started to blossom, but so did the weeds. In recent times a decision was made to fence off Belli Creek to allow my stud Aussie White sheep only to graze to the terrain change at the creek flats, and to dedicate the remaining 120 acres to the environment. Again MRCCC came to the fore and an active partnership was formed. Over 1000 trees are to be planted this year with MRCCC being the driving force in planting techniques and weed clearance. I am endeavouring to gain the assistance of Greenfleet Australia to support the rehabilitation program and enhance vegetation along the corridors to the State Forest.

Installation of "nesting boxes" is soon to be instigated to provide habitat for gliders, possums and other native fauna.

The creek is undergoing changes which I am now monitoring with my young son, Tom. Education through the property management and recent activities of the Belli/Cedar Catchment Care Community has enthused him into a program of investigative and identification options of the aquatic life in the creek.

I am a custodian of the land and the streams. I can't do it alone. MRCCC has been my partner for many years and together we have created a corridor of diversity for my son and his children, which I hope will ultimately enhance the flora and fauna for the Belli Park region and provide cleaner waterways for the Mary River.



COMING EVENTS

SUN 28TH JUNE - Lake Macdonald Catch and Release Bass Fishing Competition. Mary River Cod Park, Collwood Road, Cooroy. Visit www.mrccc.org.au to download an entry form or call the MRCCC on 07 5482 4766. Fantastic prizes on offer from Hooked on Angling and Outdoors, Tewantin.

SUN 28TH JUNE - Noosa Festival of Water. Noosa Botanic Gardens and Lake Macdonald Amphitheatre, Lake Macdonald Drive, Cooroy. 10 am to 3 pm.

SAT 18TH JULY - Tiaro Farming & Lifestyle Field day, Tiaro Recreation Grounds, 9 am to 3pm.

TUE 28TH JULY - MRCCC General Meeting, Albert Bowls Club.

MON 7TH SEPT - National Threatened Species Day.

TUES 8TH SEPT - MRCCC General Meeting, Albert Bowls Club.

FRI 11TH SEPT - Mary Valley College Sustainable Futures Forum, Imbil. All day at school grounds.

SAT 12TH SEPT - Valley Bees Annual 'Bee Open Day' - Mary Valley College Imbil. All day, presentations, displays, stalls, food.

SUN 13TH SEPT - Land for Wildlife Field Day - Fraser Coast location. Details to be confirmed.

SUN 27TH SEPT - World Rivers Day - and the start of the MRCCC's Mary River Month. See Calendar.

TUE 20TH OCT - MRCCC AGM - Albert Bowls Club.

SAT 14TH NOV - Mary River Festival - Kandanga, from midday.

TUE 1ST DEC - MRCCC General Meeting.

SUN 6TH DEC - Land for Wildlife Field Day. Details to be confirmed.

SNEAK

P E E K

Welcome...

Welcome to this June 2015 edition of the Codline and thank you to those who contributed articles.

The articles in this issue certainly demonstrate the diversity of activities undertaken in the name of natural resource management!

Available Now

In Retrospect: the Mary River DVD
\$11 or \$20 including postage.
See page 8 for story.

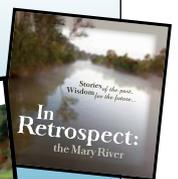
Frogs of SEQ Booklet.
\$8 or \$12 including postage

Once an Endangered Species DVD.
\$5 or \$10 including postage.

Something About Mary Booklet.
\$5.50 or \$10 including postage.

Nature's Gifts - Bee Book
Athol Craig - \$15 or \$22 incl post.

Mary River Brochure





Wired for sound

BY EVA FORD

You can't hunt plants using sound detection but some animals make noises and this can be particularly useful when finding and identifying species. Bird watchers know well the value of birdsong in this arena and even whale monitors are getting to understand the language of these large, social cetaceans. Recent work at the Griffith University is investigating the use of sounds of underwater fauna in gauging the health of an aquatic ecosystem (yes - invertebrates make noises too!). Around these parts, if you are a 'frogger' you will be pleased that most of the frog species have individual and discernible calls which the males make to call in a mate, or ward off a territory intruder.



Songmeter

Sonograph showing calls of Graceful treefrogs

Typically we at the MRCCC conduct our frog surveys on foot and at night when it is warm and when frogs are active. We can cover a couple of hundred metres during a survey which takes a couple of hours. Thanks to the Sunshine Coast Council we were recently able to purchase two Songmeter acoustic monitors to help us with our surveying. We chose to target Obi Obi Creek and Kin Kin Creek to see if we could detect the elusive and endangered Giant barred frog in those systems. Alas, out of six sites and more than 12 weeks of night recordings we were only able to hear them at one site on Obi Obi Creek.

The recordings from an acoustic monitor must be analysed either by listening to all or some of the recordings (arduous to say the least), by looking at the sonograph to see if there is anything that is worth listening to or by running the recordings through sound recognition software and double checking the results by listening to the point of vocalisation in the recording. This last option is not available as yet and so we have relied on the patience of Joel Crampton, an undergraduate student and a budding herpetologist. But the possibility of replacing humans is being realised through our partnership with the Faculty of Science and Engineering, Electrical Engineering, Computer Science at the Queensland University of Technology. To help them in this endeavour we have been able to send them local calls of Giant barred frogs from Obi during this past summer season. While this work is time consuming we are hopeful to be able to test drive the software this coming frog season.



A new home for the MRCCC



MRCCC's Brad Wedlock helps Symon Duggan with his Reef Program application



After many years of planning and collecting donations through the Mary Catchment Public Fund, the MRCCC has been able to purchase a 1928 Queenslander at 25 Stewart Terrace Gympie, and undertake renovations to transform the old lady of Stewart Terrace into a functional office space for the MRCCC staff downstairs, whilst the upstairs area will house the MRCCC's comprehensive Resource Library and also provide space for small meetings.

A 4 bay garage constructed on the site houses the MRCCC's wet room, where Waterwatch kits are calibrated monthly, a storage area for display materials and archives, and space for 3 vehicles to be parked securely. The renovation included the installation of a 15 Kw Solar Power system, which should ensure that power costs are minimal. The half acre property also features 15000 gallons of rainwater in three tanks, and ample space for staff and visitor parking.

In coming months, works will be undertaken to finish the car parking areas and landscape the grounds with local native species. A staged opening is planned when the renovations are finalised, hopefully in the not too distant future!

What do we do with fauna and flora records?

The MRCCC collects many records of fauna sightings from our own surveys, from the Waterwatchers' observations while they test the waters, from landholders and from groups like the newly formed Gympie Koala Action Group. In a past life I was Coordinator for NatureSearch; a state government run community flora and fauna surveying program. This is where some of the volunteers and I became friendly with the state's database system, WildNet.

Having little previous experience with how to store data that has a whole lot of extraneous information tagging along with it, I soon realised that people are little bowerbirds collecting records and storing them in individual nests; notebooks, filing cabinets, computers, their heads! I also learnt early on that having a central storage facility made good sense to someone who is looking for information about a particular area or species. This could be a researcher wanting to find out what is already known so they can expand our current knowledge and understanding. It can also help people who want to protect species from human interference such as vegetation clearing, building, regulating waterway flows, dredging, mining, waste management, setting up new industries etc. And then there is the scheduling of species; how threatened are they based on population trends and distributions?

If you are researching under an EHP Scientific Purposes Permit it is a requirement to pass on or enter your records into WildNet. This can be made easy by using an Excel spreadsheet and sending it in to WildNet staff for entry. Alternatively, an interface can be obtained; WildNet Lite, where data can be entered directly and exported to the WildNet team. I have always found the supporting staff at WildNet to be incredibly helpful. WildNet Lite takes some practice to master and we have trained a few invaluable people that help us with that task at MRCCC.



Government and non-government databases share information with WildNet such as all Australian Museums, the Queensland Herbarium, CSIRO, Birdlife Australia and many more. A database is only as good as the information that goes in. We are proud to have contributed around 7,000 records to date.

Anyone can access information from WildNet by going to <https://environment.ehp.qld.gov.au/report-request/species-list/> and requesting a species list for an area.

Photo - Sandra Noonan, Dale Ricketts and Ruth Hutchison have entered thousands of fauna sighting records into Wildnet Lite.

Koala Action Group

Our Mission Statement

The Koala Action Group seeks to ensure the conservation of the vulnerable koala and koala habitat through activities, actions and education that enhance its protection and sustainability, and that promote our community's commitment to the preservation of our precious wildlife for future generations.

Our aims and objectives

LEARN

- Collect information and data on the current status of the koala, its habitat and threatening processes in our region.
- Become informed of policy frameworks that impact on koalas and their habitat in our region, and to generally enhance our knowledge of koalas and broader koala conservation efforts.

ACT

- Initiate activities that reduce harms to, and mortality rates of koalas, and that maintain and improve their habitat.
- Foster public awareness of our koalas, the pressures they face, and what we can do to protect them and ensure



the long-term sustainability of this vulnerable species in our region.

Residents passionate about koala conservation are invited to join us. We meet on the first Friday of each month.

Visit our Facebook page where we share information about koalas in our region, and local and broader koala conservation issues.

Please give us a call anytime about koalas in the region! For more information, contact the Mary River Catchment Coordinating Committee.

How many 'C's?



The “Belli/Cedar Catchment Care Community” (that’s more ‘C’s than MRCCC!) was formed in April 2014 and is a group of landholders who live and undertake Rivercare activities along Belli and Cedar Creeks (Belli Park/Gheerulla between Eumundi and Kenilworth).

There are many landholders (around 43) in this sub-catchment that work with the MRCCC to better protect the wonderful natural values of the waterways. Belli and Cedar (Blackfellow too) are jewels in Mary’s crown. They are almost free of the very destructive viney weeds such as Cat’s claw and Madeira vine, have almost continuous riparian vegetation (although room for improvement there with some gaps and thin parts) and provide habitat for endangered species, particularly the Giant barred frog. The beautiful, but vulnerable, Richmond Birdwing butterfly can sometimes be seen in the area also.

The group has come together under the MRCCC’s “Catchment Care in the Sunshine Coast Hinterland” project as funded under the Sunshine Coast Council’s Environment Levy Partnerships program. So far the group has gathered together seven times now.



They are forming friendships, learning from each other’s experiences and from creek activities and are helping each other. Recently we had an outing to Cedar Creek to catch and identify fish and aquatic macroinvertebrates (water bugs), test the water and undertake a riparian assessment as a basis for determining management options for improvement.

The future of the group is largely to be determined by the group members and we are working together on what that may look like.

For now activities along the creeks are welcomed by the group and these help to cement the links between the landholders and provide opportunities



to learn about the environment and land use. They also provide a space where possibilities for the group can be created.



Getting down the Obi

BY EVA FORD

My first experience of Obi Obi Creek was doing a fantastic lilo ride from someone's farm around Maleny to where Skene Creek joins. My mates and I had such a thrilling day that we got more mates together a week later to show them what it was like. That event lasted about 50 metres before lilos were in tatters. The first party had lucked it – such is the fickle way of waterways and teenagers!

Who would have thought that a few decades later I would again be visiting the Obi, this time discovering its human and animal inhabitants? Things have changed for the Obi since my first encounter; a large 'lake' now sits where our lilos once passed, farms have been split into smaller blocks, more people live in and frequent the towns within its catchment area. I can't say I had my environmental eyes on during the early 1980s so I can't tell you whether the vegetation or stream habitat values are different. Stream flows are of course altered due to the presence of Baroon Pocket Dam; minor floods don't always make it downstream and flows are more consistent due to environmental releases from the dam.

Early on in my role as Catchment Officer with the MRCCC, I set about seeing what could be found of the amphibious fauna in the Obi catchment. From 2003 to 2012 several surveys were

conducted between Maleny and the Coolabine area on willing landholder's properties which appeared to have riparian vegetation with reasonable habitat values for the Giant barred frog; an endangered species and one of the target species of the Mary River Threatened Aquatic Species Recovery Plan (in draft). Puzzlingly, this species could not be found while several others (17 in fact) were making Obi their home.

Then in late 2012, Barung Landcare commissioned us to help set up a community monitoring program for the Maleny Community Precinct which involved doing some preliminary frog surveys along the Obi. And there they were! Not many of them, but males, females and juveniles were present. More surveys since, on foot and with the aid of acoustic monitors that could be left out for a few weeks, have expanded the current range of this beautiful, indicator species to several kilometres downstream of Maleny.

So why are they not found along the whole length of the Obi? We assume they once were. The lake is not suitable habitat for a species that requires closed canopy over slow, deep pools with stable banks and abundant leaf-litter. Upstream of Maleny the riparian vegetation is not continuous; fragmented we call it. This creates long stretches of open country with little or no refuge for a large,

ground-dwelling frog. Downstream of the dam the riparian vegetation mostly looks good until we get to the floodplain. Here there are many kilometres of weed trees and shrubs such as Broad-leafed and Small-leafed privets and Camphor laurel, often in narrow strips of only a few metres from the water. The density of these weeds indicates a system that has been extensively disturbed in the past. In more recent times we see an increasing infestation of Madeira vine; a destructive plant that smothers and kills trees.

So what to do? The MRCCC, Barung Landcare and the Lake Baroon Catchment Care Group have excellent working relationships with many landholders along the length of the Obi who are protecting and restoring the riparian vegetation. This is the best foundation for recovery of the frog and our other threatened aquatic species that still manage to hold on in the Obi; the Mary River cod, Mary River turtle and Australian lungfish. However, we need to consider ways to return the Giant barred frog to places where they once lived and bred. One way is to aid natural dispersal up- and downstream from their current stronghold at Maleny through regeneration and revegetation of open and thin sections.

It may work for the upstream reaches if connectivity is restored however, Lake

continued next page...

Baroon to this species is as much a barrier as a desert is to us. Are relocations an option to consider? This requires discussion with experts and approvals, and would only work if there were a suitable source of frogs/tadpoles and if a large enough area of suitable habitat was available that could support populations and breeding. Further surveys particularly downstream of the dam, assessment and mapping of the extent of suitable habitat for the Giant barred frog are essential while we continue the momentum of habitat protection and expansion with landholders.



MAP OF OBI OBI CREEK

Volunteer Waterwatching

A volunteer Waterwatch program operates throughout the Mary River Catchment. Once a month participants receive a testing kit that they use to collect data on the health of their creek or river.

Simple hand held equipment is used to measure the temperature, salinity, pH, dissolved oxygen, and turbidity of the river, and general observations are made of aquatic plants and animals present at the time of testing. Data is received and processed by the MRCCC. Participants receive an annual report summarising the health of their site and subcatchments.

The program has provided long term baseline information on the health of the Mary River and her tributaries and the seasonal variations that occur.

New volunteers with new sites can always be added to the program. At the moment MRCCC is especially looking for several additional volunteers to help with Waterwatch water testing in the Gympie Region:

- A new volunteer to test Eel Creek (near Gympie) replacing a retiring Waterwatch monitor.
- A person routinely travelling between Kandanga and Amamoor who can conveniently drop a water testing kit to Amamoor Store. This volunteer may choose only to transport the equipment or may like to start testing a site as well.
- Someone who travels between



WATERWATCHING ON TANYALBA CREEK NEAR GUNDIAH

- Gympie and Kenilworth to help transport a water testing kit at the beginning of the month.
- A person regularly travelling between Cooroy and Gympie able to return a testing kit at the end of the month. This volunteer may choose only to transport the equipment or may like to start testing a site as well.

If you can help or if you would like a copy of the Waterwatch report for the Gympie region please contact MRCCC on 5482 4766 for further information.



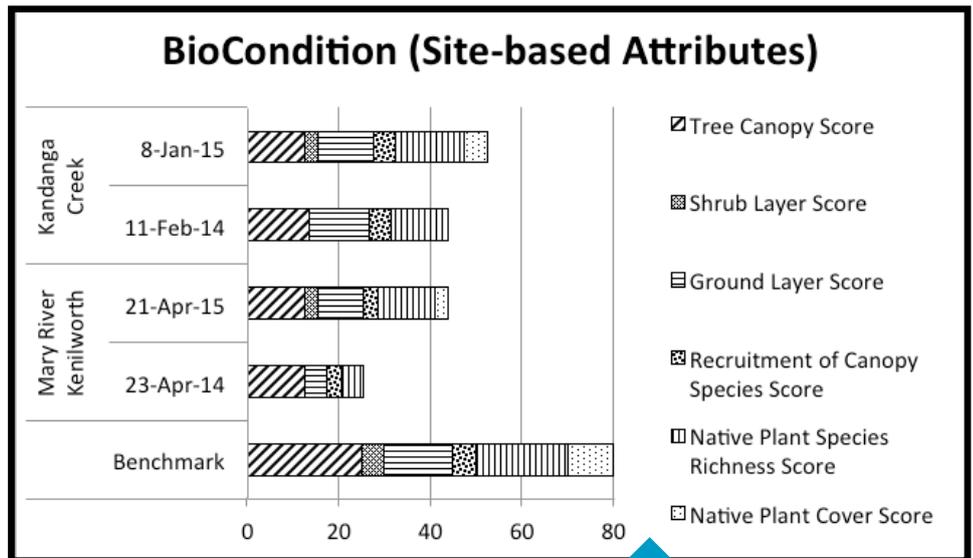
EXTRA HELP WITH OUR ASSESSMENT PROCESS

Project activities • Measuring the impact

Since 2012 MRCCC has been working on the “Restoring Riparian Resilience: implementing the Mary River Threatened Species Recovery Plan” project funded through the Clean Energy Future Program. Improving the health of riparian vegetation is important for the survival of threatened species in the Mary River catchment such as the Giant barred frog, Mary River cod, Mary River turtle and Australian lungfish. Improving the health of riparian zones is also recognised as one of the key land management actions needed to improve the health of the Great Barrier Reef.

MRCCC has been undertaking monitoring to assess the improvement in riparian vegetation and river health as a result of this project. As of June 2015, eighteen sites have been assessed - the most northerly in Tiaro and most southerly near Conondale. Seven sites are on the Mary River itself, one on Tinana Creek and the remaining ten on various tributaries of the Mary River. One of the assessments undertaken is called BioCondition which focuses on vegetation quality. The maximum possible score for site based attributes of this assessment is 80. In the initial round of assessments BioCondition scores ranged from 25.5 to 70.5. The BioCondition Assessment measures several different aspects that reflect the quality of the vegetation at a site. The overall score is divided into six attributes. The maximum possible score for each attribute defines the “benchmark” which is provided by the Queensland Herbarium and is based on the “natural” state of the vegetation type – commonly known as the Regional Ecosystem.

We aim to revisit project sites one year after the initial assessment and have observed some significant improvements already. The graph shows results from two different locations which illustrate some of the variation in the sites we have monitored. The benchmark to which we compare the sites is shown at the bottom of the graph. As the initial scores suggest, the Mary River, Kenilworth site had very little established vegetation to begin with. The Kandanga Creek site had more vegetation along the creek and also on the highest creek terrace. Weed control and revegetation was completed



at both of these sites between the initial and one year assessments.

As the graph shows, the biggest improvement happened at the Mary River, Kenilworth site where the score increased from a low 25.5 to a pass mark of 44. This change was largely due to the introduction of a shrub layer. Any woody plant under two metres is considered a shrub for this assessment. This means the newly revegetated trees which have been planted at the site come under this attribute. The ground layer score also improved significantly as did the native plant cover and species richness (i.e. number of species) score. This is a result of the revegetation and weed control activities which have removed some exotic grasses and introduced a greater diversity of native species. The Kandanga Creek site initially scored 44 and after one year had improved to a score of 52.5. This change was caused by improvements in the shrub layer and in the native plant cover - a direct result of the project activities.

It shall be interesting to see how these sites change over the next 12 months. We expect that both sites will continue to improve at a slower rate, reflecting the major benefit that initial revegetation activities make to a site compared to ongoing growth of revegetation and natural regeneration.

We have been trialling the use of BioCondition Assessment as part of our project and are finding it a very useful tool for analysing the impact of our activities. Through linking this assessment with the Index of Stream

The graph shows site-based attributes. Landscape Scale attributes are also part of the BioCondition Assessment and are not shown here.



Monitoring in comfort in MRCCC's Triton.

Condition, which measures stream health, we are gaining evidence in favour of riverbank restoration for improving river health and threatened species habitat. Monitoring will continue for the next two years, enabling us to not only measure the impact of our project but to improve the design of future projects.

If you are interested to know more about our monitoring activities please contact Tanzi Smith or Caitlin Mill at MRCCC.

Turtle nesting season

Tiaro Landcare's Mary River turtle conservation project consists of a two pronged approach to reduce predation. Nesting banks were fenced and individual nests were protected where the adult female turtle had laid them. Nineteen potential banks were regularly checked for nests in the Tiaro and Traveston reach. A record 110 nests were protected with 968 known hatchlings successfully emerging from their nests during the 2014/15 nesting season. Despite the team starting work at dawn, sixteen nests were predated before the Tiaro Turtle Landcare Team was able to protect them. Although most clutches had hatched before the January 2015 floods, a few clutches of developing embryos were drowned. Thanks to funding received from Qld Governments Everyone's Environment Grant and Wildlife Queensland which assisted funding project activities.



A Tiaro turtle summer internship for Dutch student

Rosanne Beukeboom, a Masters student from Utrecht University, Netherlands has just completed her internship in Tiaro with the Mary River turtle project. Watching green sea turtles nesting in Costa Rica inspired her to do a second degree, this time in biology. Her initial interest in turtles led her to google 'turtles, research and Australia.' Mariana Campbell's PhD studies on the Mary River turtle at the University of Queensland attracted her attention.

She investigated threats to the early life stages of the Mary River turtle. This involved analysing over 200,000 photos and collecting 3 months of temperatures from 23 nests. Many animals that could be passive or active threats to this turtle were captured by the wildlife cameras. However only the European Red Fox and Lace Monitors were photographed predated a nest. Foxes were more active during the night when turtles are on the nesting bank. Some photographs had foxes and turtles in the same image with the fox not showing any particular interest in the turtle. Lace Monitors appeared on the nesting bank during the day with a peak before noon. The Queensland Museum confirmed that two species of goannas were patrolling the nesting banks, the lace monitor (*Varanus varius*) and the yellow-spotted monitor (*Varanus panoptes*), the same species that are patrolling marine turtle nesting banks. No evidence was found of adults being predated by any species. Images included eastern water dragon and nankeen night heron. While they both are known to predate hatchlings, there was no evidence on camera. Other wildlife captured by the cameras included carpet python and the red-bellied black snake, brushed-tailed possum, platypus, water rat and the tawny frogmouth. This last group might eat a hatchling if their paths cross.

Rosanne: "It was great experience and special opportunity to work with an animal that was just discovered in the 1990's and has so much still unknown. Seeing hatchlings pop out of a protected nest was extraordinary".



www.maryriverturtle.com

**Teaching Unit
now on web**

A Primary school unit, Unique Adaptations in a Unique Environment based on the endangered Mary River turtle has just been added to Tiaro Landcare's Mary River turtle website (www.maryriverturtle.com). The unit which fits in with the Australia curriculum includes downloadable lesson plans and video clips. It was created by Gympie School Teacher Zela Bissett in conjunction with Tiaro Landcare.

NOOSA Festival of Water

Packed full of fun art and music the Noosa Festival of Water splashes in for its 11th year at the Noosa Botanic Gardens and Lake Macdonald in the heart of the Noosa Hinterland on Sunday 28th June. This year's Amphitheatre program includes the fabulous Lyndon Davies and the Gubbi Gubbi Dancers and wildlife specialist Martin Fingland. There will also be top local music from bagpipes, harps and the catchy roots/reggae/dancehall tunes of Sunshine Coast band Bearfoot, to the "earthy blend of hiphop, funk and soul with an island roll" sound of Andrea Kirwin and band .

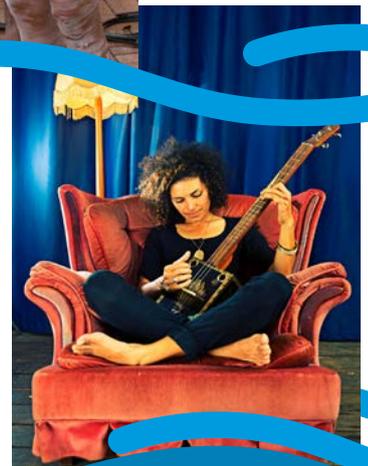
The Festival highlights the diversity of life in and around our waterways with information displays, wildlife shows, guided bird and fauna walks around the gardens and free kids activities including face painting, jumping castle and kids' creative art activities. Budding anglers can also learn to fish at the 'Take a Kid Fishing Clinic' with the experts from the Lake Borumba Fish Stocking Association. The annual Lake Mac Bass Fishing competition will also be held in conjunction with the Festival. Entry forms are available from Hooked on Angling and Outdoors, Hilton Terrace, Noosaville, or visit www.mrccc.org.au and follow the links from the home page.

This year the Festival welcomes the Noosa Botanic Artists and the Spinners and Knitters, who will have a gallery of their art works on display in the Rotunda near the rear of the Amphitheatre. Snake and reptile shows will run throughout the day, and Festival patrons can also try out Stand Up Paddle Boarding and Kayaking on Lake Macdonald free of charge.

The Noosa Landcare group will be giving out free trees to Noosaratepayers with a current rate notice, and the Mary River Catchment Coordinating Committee (MRCCC) will be offering free dam, creek or bore water testing, as well as an opportunity to win prizes in the Mary River Detective game!

As well as their display and fund raising raffle, the Friends of the Noosa

Sunday 28 June

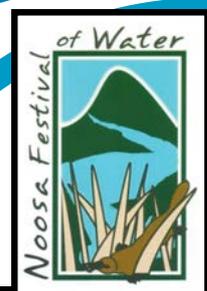


Botanic Gardens are offering guided walks of the Gardens, and there is also an opportunity to take part in a guided bird walk with Cooloola Nature's Kelvin Neilsen.

There will also be a selection of food vendors including the Tewantin Noosa Lions.

The 2015 Noosa Festival of Water is sponsored by the Noosa Council, Seqwater, the Burnett Mary Regional Group, the Mary River Catchment Coordinating Committee, Noosa Landcare, Hooked on Angling and Outdoors and an army of volunteers who contribute their services to the Festival each year.

Entry to the Festival is free. For more information, visit the Noosa Festival of Water on Facebook or contact the MRCCC on 07 5482 4766.



Noosa Botanical Artists

Botanical art is a liaison between art and science. It opens our eyes to the world around us by capturing the essence of the plant by its form, texture and growth habit. A good drawing can record and stand in place of the living plant, in a two dimensional form using a variety of media the most common of which being watercolour.

Botanical artists can be enthralled by the most simple to the most complex of plants; great patience is needed and a curious mind, and the journey is priceless. As a group we exhibit annually at the Noosa and Cooroy Library, NACA and at the J

This year the group exhibited at the Gympie Regional Gallery and will also have an exhibit at this year's **Noosa Festival of Water in the Noosa Botanical Gardens, Sunday 28th June, together with the Spinners and Knitters group.**

The Noosa Botanical Artists meet every Monday a/noon at Noosa Arts & Crafts, 2 Wallace Drive, Noosaville.

Contact Gabi Dick - 0422 225 965

Mollie McCloskey - 54556526

Helma Maiwald - 54424592

Cost : Annual membership to NACA plus \$2 per meeting fee. New Members are always welcomed at any level.



Mollie McCloskey



Eucalyptus
by Gabi Dick



Mollie McCloskey



Banksia
by Mollie McCloskey



Water lilies
by Pauline Putland

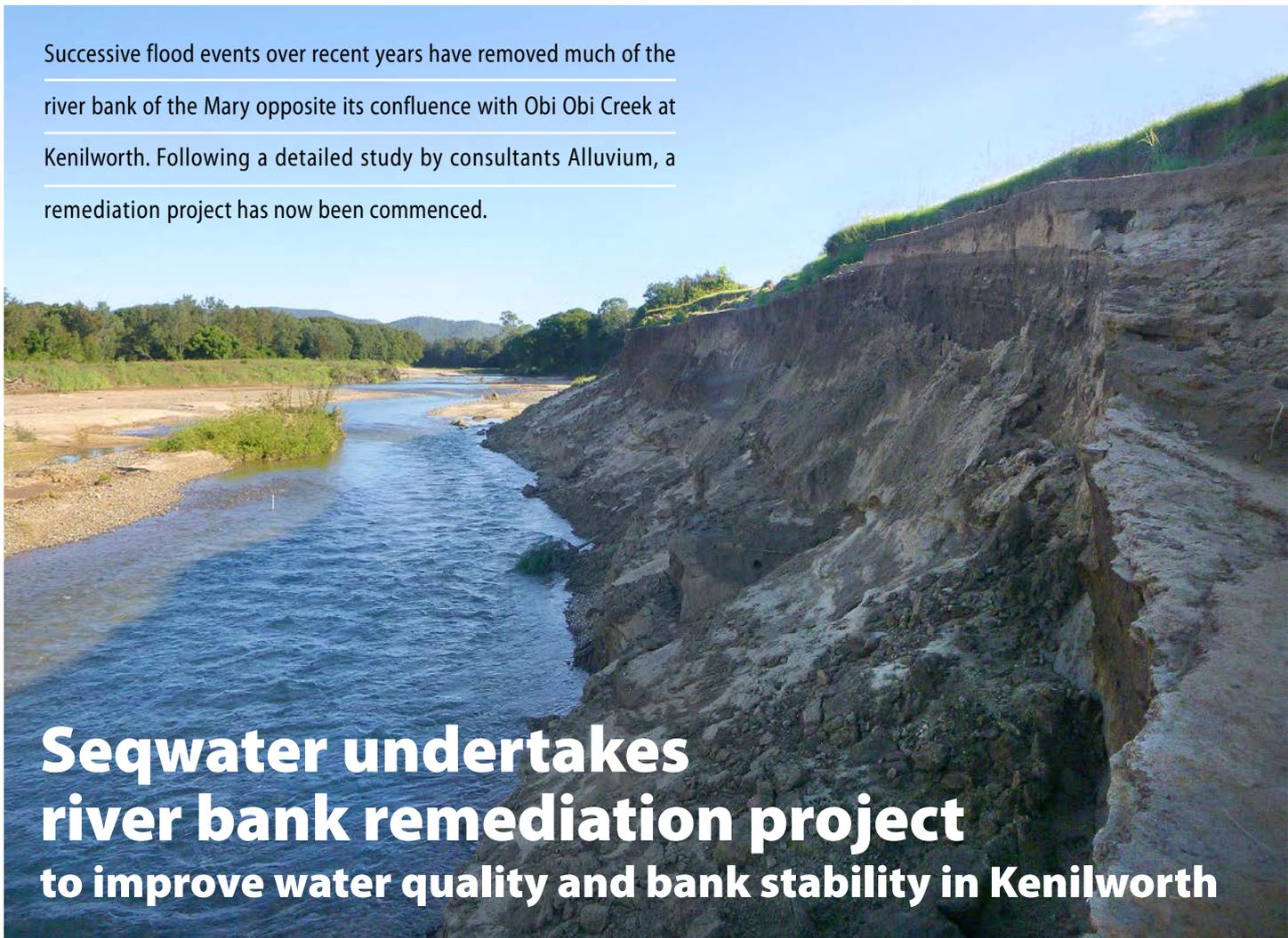
Banksia2
by Helma Maiwald



Banksia

Helma Maiwald

Successive flood events over recent years have removed much of the river bank of the Mary opposite its confluence with Obi Obi Creek at Kenilworth. Following a detailed study by consultants Alluvium, a remediation project has now been commenced.



Seqwater undertakes river bank remediation project to improve water quality and bank stability in Kenilworth

Seqwater recently hosted a meeting for those interested in learning more about its river bank stabilisation project in Kenilworth. Around 40 community members attended the event, including representatives from project partners – the Mary River Catchment Coordinating Committee and Sunshine Coast Council.

Work to stabilise the eroding river bank on the Mary River (see photo), have now commenced.

Seqwater Chief Executive Officer Peter Dennis said the erosion of the river bank was threatening the integrity of the intake wells and affecting the quality of water reaching the Kenilworth Water Treatment Plant.

“By stabilising and revegetating the river bank we will protect the water supply to the community and improve the raw water quality,” Mr Dennis said.

“Seqwater has worked in partnership with the Burnett Mary Regional Group, the Mary River Catchment Coordinating Committee and Sunshine Coast Council on the design and planning for the works to stabilise a 200 metre section of river bank within River Park, Kenilworth.

“Following the heavy rainfall and flooding associated with ex-tropical cyclone Marcia in February, the project was prioritised to stabilise the eroding bank as soon as possible.”

Mr Dennis said the recent bank damage and impact on the intake wells had forced the temporary shutdown of the Kenilworth Water Treatment Plant.

“The plant will remain off-line while we stabilise the river bank, with an upgrade of the plant planned for later this year. Water will continue to be tankered to Kenilworth throughout the remediation works and plant upgrade,” he said.

The river bank works will include bank reprofiling, revegetation and the installation of a number of pile fields with the necessary rock protection. The project is expected to take around six weeks, subject to weather conditions and any unforeseen project delays. Normal work hours will be between 6.30am and 5pm, Monday to Saturday.”



Totally Wild about Mary

You know you’ve made it when you have the opportunity to entertain and educate kids all over Australia in, not just one, but two episodes of Totally Wild!

The good folk from Channel 11 contacted us late last year after browsing our website and seeing potential for a few good stories.

We were fortunate to be able to film with the fun-loving crew in March this year and the resulting items can be viewed at the following Youtube link :

Giant barred frogs - <http://youtu.be/mFqLbZ8UL0A>

River health - <http://youtu.be/3d8LirHPPrUc>

Green Army showcased in new promotion



Noosa & District
Landcare

On a warm and sunny day in May Green Army recruits are telling their stories and sharing their experiences of working in the Green Army team. James Proctor from 'One Small Step Collective' based in Victoria and his team have visited three sites recording the activities of Green Army teams. They first visited the rural town of Horsham, followed by Kiama on the coast of New South Wales, before coming up to Noosa to check out Noosa & District Landcare Group's [NDLG] Green Army team. NDLG has teamed up with Campbell Page, Skillset and the Federal Government's Department of Environment to assist young people gain experience and skills to get them ready for the big wide world.

Our team members are a diverse bunch, however under the stewardship of Supervisor Geoff Haack have all fitted in really well and are a great bunch to have around. They have been planting trees, killing weeds, helping out in the Nursery and have helped build a biological control facility.

The other aspect of the Green Army is the social interaction, not just amongst themselves but with other staff and volunteers of NDLG. So, the spotlight was on our young team members, and they acquitted themselves really well. James's team of Trudy, Michael, Nick and Mark made the process painless and fun.

Lake Macdonald Dam Improvement Project

Lake Macdonald (Six Mile Creek Dam) was originally constructed in 1965. The planned dam upgrade will be the first major upgrade of the dam since the dam wall was raised in 1980.

PHASE 1 of the Lake Macdonald Dam Improvement Project concluded in late 2014. It involved site and geotechnical investigations on the dam spillway, which confirmed that an upgrade is required and identified some preliminary options, including concept designs.

Now in Phase 2 of the project, additional site and geotechnical investigations are being carried out to enable dam upgrade options to be assessed and the development of preliminary designs.

While still in the early planning stages, the indicative timeline for the dam upgrade is as follows. It's important to note that the upgrade project is subject to approvals and this timeline may change.

PHASE 2 UPDATE - Phase 2 is now underway and will include additional investigations to assess dam upgrade options and develop preliminary designs. Site and geotechnical investigations will commence in May 2015.

Investigative works will run for 6-8 weeks, subject to weather conditions. Works will involve a barge-mounted drilling rig upstream of the spillway and main embankment, and a truck or track mounted rig downstream. It is not anticipated that the works will impact neighbours or the local community, however there will be increased vehicular movements and some operating noise. Work will be performed from 6.30am to 6.30pm Monday to Saturday.



INDICATIVE ACTIVITY TIMELINE - LAKE MACDONALD DAM IMPROVEMENT PROJECT

ACTIVITY	TIMEFRAME	STATUS
Phase 1 - Planning and concept design <i>(including investigative works)</i>	2014	Completed
Phase 2 - Options assessment and preliminary design	2015	Underway
Phase 3 - Detailed design and approvals	2016	
Phase 4 - Construction works	2017 - 2018	<i>(Subject to approvals)</i>

Lake Mac Fishing Comp

Catch and Release Bass Fishing



ED VAN DER KRUK WITH THE JUNIOR WINNER OF THE 2014 LAKE MAC FISHING COMP, LUKE PAGE



The Lake Macdonald Catch and Release Bass Fishing Competition is on again this year, supported by Hooked on Angling and Outdoors and the Lake Macdonald Fish Stocking Association. The competition is on Sunday 28th June, from 6.30 am until midday, from Mary River Cod Park, Collwood Road, Cooroy. The Noosa Festival of Water is also on Sunday 28th June, in the Noosa Botanic Gardens, from 10 am until 3 pm. Fishing Comp winners will be announced at 1.00pm in the Lake Macdonald Amphitheatre. Bring the family for a great day of fun and entertainment and don't forget to **register by Monday 22nd June** to be in the running for a fantastic prize from Hooked on Angling and Outdoors.

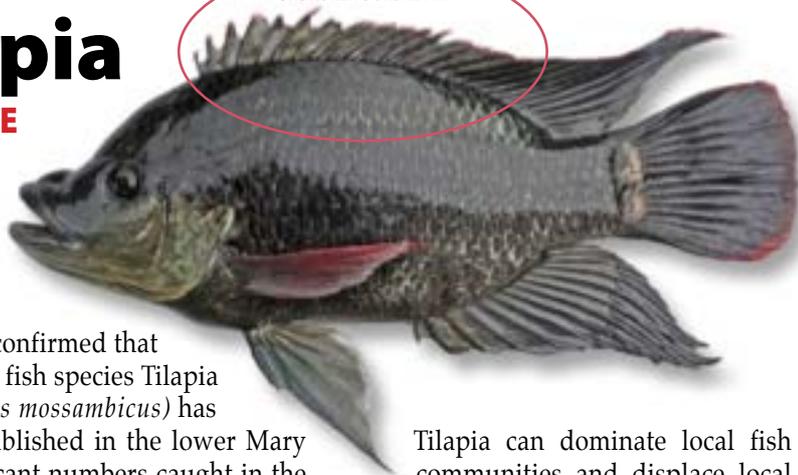
Visit the MRCCC website, or call in to Hooked On Angling and Outdoors in Hilton Terrace to pick up a copy.

For more information, contact Ed at Hooked on Angling and Outdoors on 07 5449 7541 or Deb Seal at the MRCCC on 07 5482 4766.

Tilapia

INVASIVE SPECIES

UNBROKEN DORSAL FIN



It has been confirmed that the invasive fish species Tilapia (*Oreochromis mossambicus*) has become established in the lower Mary with significant numbers caught in the barrage pondage near Tiaro.

Tilapia is a predator fish commonly included in the Top 100 list of invasive species. Tilapia have a highly successful breeding strategy (up to 1200 eggs a year, in up to 4 broods) and low juvenile mortality as the female stores the eggs and hatchlings in her mouth.

Tilapia can dominate local fish communities and displace local species through aggressive behaviour and competition for food and space. They pose a significant threat to the native fish in the Mary River.

Regardless of colour, all Tilapia have a continuous, unbroken dorsal fin (as circled above). Most native fish have a dip or break in their dorsal fin.

The Mary River Catchment Coordinating Committee would appreciate your help in tracking the distribution and spread of this fish. At this stage knowing where the fish is not yet established is just as important as knowing where it has been observed. Tilapia can be relatively easily identified by the continuous dorsal fin along its spine. If you catch a Tilapia, do not release it back into the river and please notify MRCCC or Boating and Fisheries on 13 25 23.

For more information, visit www.daff.qld.gov.au/fisheries/pest-fish/noxious-fish/tilapia

Mary River Month **EVENTS**

SUN

MON

TUES

WED

THUR

FRI

SAT

Commencement of Mary River Month					25 SEPTEMBER	26 BROWNWATER CLASSIC TBC
27 World Rivers Day River Listening & The Big Jump - 3pm	28	29	30 School Holidays	1 OCTOBER	2	3 Belli/Cedar Catchment care Community get-together – site and activity (TBC)
4 Tiario River Care Day (TBC)	5	6	7 Frog monitoring Noosa Shire	8 Catchment Crawl Day 1 (MRCCC)	9 Catchment Crawl Day 2 (MRCCC)	10
11	12	13	14 Frog monitoring Sunshine Coast Hinterland	15 One more step - bird calls and beyond with David Stewart (Noosa Landcare)	16	17 Fraser Coast Koala Count
18 Fraser Coast Koala Count	19	20 MRCCC Annual General Meeting	21	22	23	24 Community Waste Recycling Tour (Wide Bay Water, FCRC and Fraser Coast Waste)
National Water Week						
25 Farm Riverbank Walk (Mary Valley Co-op)	26	27	28	29 Upper Mary River Heritage Bus trip	30	31 Entries to Spring in the Mary Photo Story Comp close
1 NOVEMBER Workshop to Weave Mary River Festival Welcome Entrance	2	3 Fraser Island frog workshop and community survey	4	5 Lower Mary River Heritage Bus trip	6	7
8 Focus on Rivers & Bees (Valley Bees)	9	10	11 Community Waste Recycling Tour (Wide Bay Water, FCRC and Fraser Coast Waste)	12	13 Festival set-up and BBQ	14 Mary River Festival
National Recycling Week						

The MRCCC would like to invite you to be part of the first ever **MARY RIVER MONTH** between World Rivers Day on Sunday 27th September and the Mary River Festival on Saturday 14th Nov

MARY RIVER MONTH aims to create a focus on the Mary River and the Great Sandy Strait to raise awareness of what makes this part of the world so special and to encourage more people to get involved in creating a positive future for communities and ecosystems in the catchment. We'd like to have a special focus on hands-on, experiential activities, collaborative opportunities and creating a feeling of connectedness throughout the catchment.

You can be involved by assisting with one of MRCCC's **MARY RIVER MONTH** events or by holding your own event during this period and associating it with **MARY RIVER MONTH** – to be part of **MARY RIVER MONTH** an event needs to relate to catchment management and to the building of knowledge and networks around this theme. All **MARY RIVER MONTH** events and the groups leading them will be listed in the **MARY RIVER MONTH** Calendar and we'll do our best to cross promote and encourage support for your event.

You can keep up to date with the latest events here <https://www.facebook.com/MRM2015>

Contact : tanzi@mrccc.org.au
or on 5482 4766 to get your event listed as part of Mary River Month

Good News for the Mary River Cod and the Mary River Turtle is hosted and supported by the Mary River Catchment Coordinating Committee with funding support from the Sunshine Coast Council and Noosa Council gratefully acknowledged.



Mary Landcare on FaceBook

- Mary River Catchment Committee
- Noosa and District landcare
- Mary River Turtle Project - Tiaro Landcare
- Mary River Threatened Species Recovery Plan
- Noosa Festival of Water
- The Greater Mary Association Inc

'Like' the pages to keep in touch with information and events relating to natural resource management in the Mary River catchment.

For a luscious full colour version

of CODLine please go to www.mrccc.org.au and download our free PDF, either in a low-resolution or high-resolution format.

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the CODLineTeam

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