



the CODLine

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

Sharing our drought stories

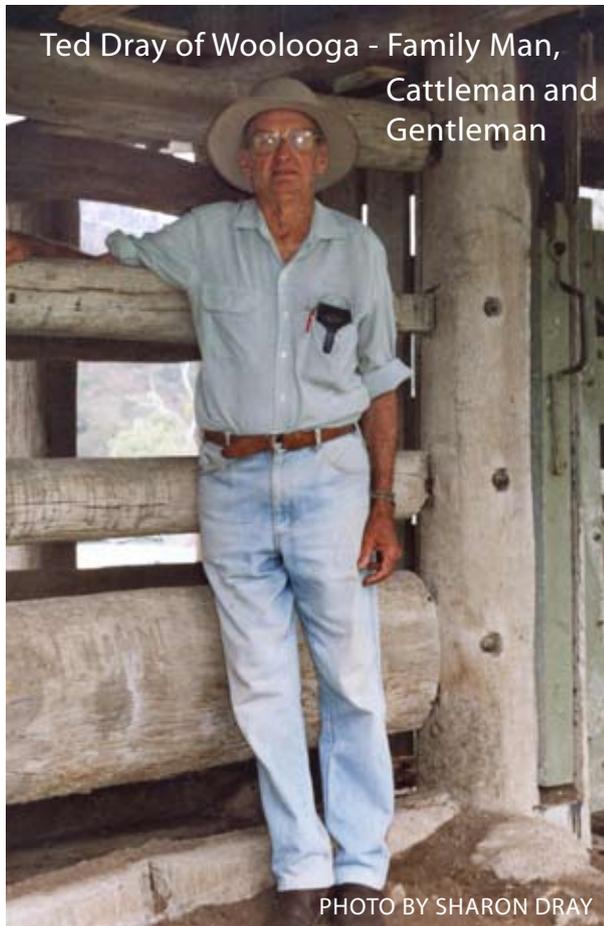
The country hasn't changed much since I was born here 90 years ago, although it was ringbarked for selection in my grandfather and father's time so would have been mostly forested prior to settlement.

When I left school I was working on the land with my father. In those days (the early 1940's) it was all dairies around here. Today there is not one dairy left in this area. I can remember hot days getting the cows into milk, when they all came into the bails trying to get in the shade, or down at the creek when they would all get in the water. In those days we used an arsenic dip, which was a terrible thing but that's all there was at the time.

According to my records, there has been less rainfall in the last 15-20 years, but this has happened before. There have always been bad droughts here but it's hard to judge the droughts because when we had dairy cattle they couldn't stand up to the droughts like the Brahmans do now. And back then there was nothing to feed the cows so they died in their thousands, the poor buggers.

I can remember 1946 was a bad drought and 1951/1952 was a very bad drought, the worst I have ever seen, and 1957 was another drought that went on and on. There was also a frost in April 1951, the only time we have ever had one. We definitely don't want one of those now.

I don't think the droughts are any worse now than they used to be, but this last drought was unusual because it went into the summer months, and the last time that happened was in 1952.



Ted Dray of Woolooga - Family Man, Cattleman and Gentleman

I also remember in 1969 we had a good spring, then it got drier and drier before we finally got rain in July. Thank goodness we didn't get any frosts. It doesn't take as much rain to keep things going in the winter time as it does in the summer.

The main defence against droughts is not to overstock, but then this year it didn't matter if you only had half the cattle; they still ate the country out.

Its best to have cattle that can handle the droughts like Brahmans, and weaning or selling the calves helps as well, although this last year the price for calves was terrible and the expenses have all gone up.

Bongmullerer Creek which runs through our property dried right out through the recent drought and a couple of times in the last 10 years. It has never done that before in my time, although in 1902 there was another bad drought, when my uncles and my grandfather took the cattle to Wide Bay Creek to water every second day.

In the recent drought, the bores here used to pump out and the creek dried up altogether - first time it would have been dry but we dug out all the sandy holes so we could get a bit of water. Otherwise all the holes were dry and the fish died, but there are certain holes in there

that last a lot longer but at that time it was completely dry.

When the rain came, it was wonderful - you couldn't have ordered it better. The rain soaked in, unlike the heavy rain which just runs away. You could stand here and just about watch the grass growing. For the time of the year, the country came good really quick. We didn't lose any trees this time.

MORE DROUGHT SNIPPETS PAGE 4



Sneak PEEK

PHOTO BY GLENBO

Thank you Eve

Welcome to Edition 25 of the CODLine - news for the Mary River Catchment. It is with much regret that we farewell longstanding Editor, Eve Witney who has been editing the newsletter for almost 15 years.

Thank you Eve for your dedication and commitment to keeping CODLine topical and informative over the years. Your contribution is greatly appreciated.

That's Eve on the left, with our very own Eva Ford at Kimbombi Falls.



Eve, we tip our hat to you . . .



And welcome in Glenbo!



Best known for his design, photography and publishing on local publications such as 'Something About Mary', the 'Love, Mary' (Traveston dam) book and the recently published 'Nature's Gifts' bee book, along with his work on native bees and habitat and local EcoProjects too numerous to mention.

We are all looking forward to the years ahead of the CODLine. I'm sure it'll keep us all as busy as a . . . nah, won't say it.

COVER MASTHEAD PHOTO : TODD FAUSER

Coming Events Available Now

22 June Jack-In-The-Box Ideas Fest at Tewantin School Hall. 12noon - 3pm.

29 June Lake Mac Catch and Release Bass Fishing Competition Mary River Cod Park, Collwood Road, Cooroy. 6.30am - 12noon.

29 June Noosa Festival of Water, Noosa Botanic Gardens and Lake Macdonald. 10am - 3pm.

11 July Roving Riparian Bus Trip departs Gympie 7am. Limited places. Contact MRCCC on 5482 4766 to book.

7 September 'Biocontrol' Field Day at the Gympie Landcare facility. Entry \$5 per person. Call 5482 4766 to book.

14 September Bee Open Day. Kandanga Hall - all day.

9 October MRCCC AGM Venue to be confirmed.

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

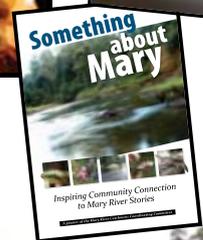
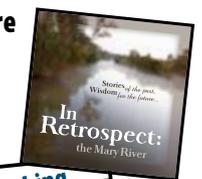
Frogs of SEQ Booklet. \$8 or \$12 including postage

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



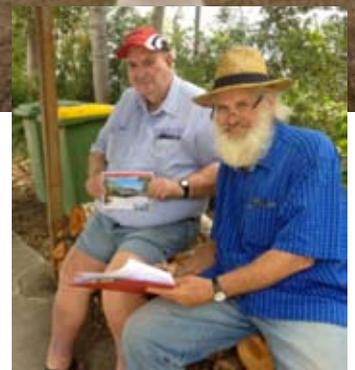
New home for the MRCCC

The MRCCC's purchase of an old Queenslander at 25 Stewart Terrace Gympie was made possible by contributions to the Mary Catchment Public Fund since 2005.

The house will provide a permanent location for the MRCCC to operate from. Planning to convert the ground floor to a large open office for the MRCCC staff is underway!



Ian Mackay and Jim Buchanan sign the contract for Stewart Terrace.



Nesting Mary River turtles

Fourteen nesting banks were regularly checked for signs of female Mary River turtles looking for a suitable nesting site. Nesting started late last year, with the first clutch laid on the 1st October. In total, 48 wild laid nests were protected by Tiaro Landcare's Mary River turtle conservation team. Nests are protected where they are laid, so there is minimal human interference and the turtles can continue doing what they have been doing for eons.

We employ a number of strategies to help reduce the chances of predation of turtle eggs. Some nesting banks are fenced to help keep out cattle and foxes/dogs, individual clutches are protected to keep out dogs, foxes and goannas and lastly fox baiting occurred at a number of sites. At the end of the season each protected nest is monitored. The good news is that despite the very dry summer, 386 turtles successfully emerged from protected nests.

Tiaro Landcare Group and researchers from The University of Queensland have been using infra-red surveillance cameras to monitor the nesting behaviour of this shy turtle.



A POPULAR SPOT

Cameras have been deployed every year for the past five years on the same nesting bank. Using specific image analysis software, tens of thousands of images have been analysed. Researcher, Dr Mariana Campbell found that for one of the identified nesting females, 2013 was the fourth nesting season she accessed the same nesting bank since 2009. Furthermore, two other identified females have been recorded accessing this same bank through three different seasons.

This research indicates that Mary River turtles exhibit some nest site fidelity. We now have images of the same turtles returning to the same nesting bank year after year.

Financial assistance from the Queensland Government, Everyone's Environment Grant assisted with offsetting some out of pocket expenses of this conservation project. For more information about this project go to - www.maryriverturtle.com

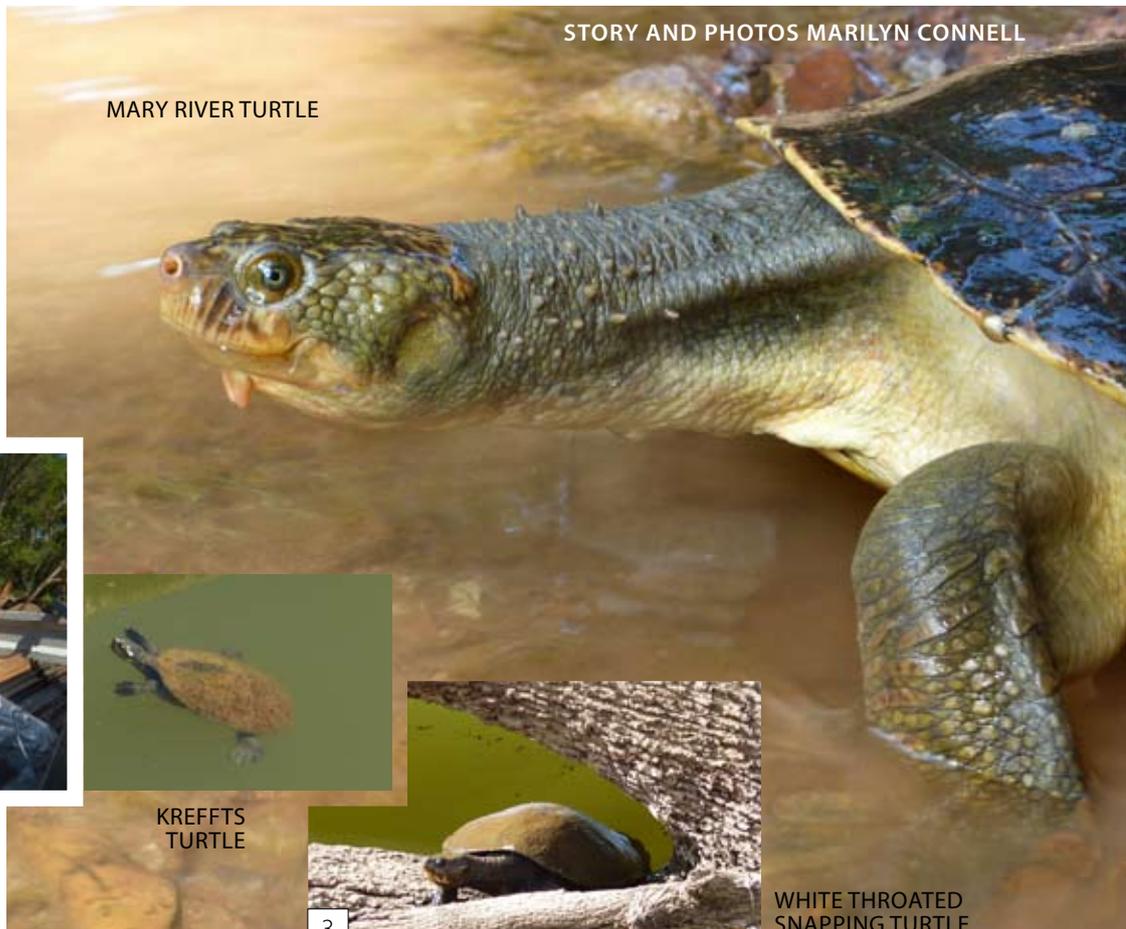
or Facebook - Mary River Turtle project - Tiaro Landcare.

CLUTCH-RESULTS AT THE END OF THE SEASON



STORY AND PHOTOS MARILYN CONNELL

MARY RIVER TURTLE



BUILDING TURTLE FENCE
TIARO LANDCARE



KREFFTS
TURTLE



WHITE THROATED
SNAPPING TURTLE

A new tourist attraction at Tiaro

The Mary River turtle is being incorporated into tourist attractions throughout the catchment. Most recent is the stunning bronze sculpture of a male Mary River turtle which is about to be placed in his purposely built home beside the Bruce Highway in Tiaro.

The open air display will feature the three 'giants' of the Mary River, the Mary River turtle, the Mary River Cod and the lungfish. Installation is expected to be completed by the end of May. It is a Fraser Coast Regional Council project funded by the Qld government.

Sandstone Seat

Another piece of public art featuring the turtle, cod and lungfish is a beautiful sandstone sculptured seat at Kenilworth. The seat overlooks the river at the park behind Kenilworth township. One of the members of Tiaro Landcare's Mary River turtle conservation team was a driving force behind the Kenilworth project.

Mr T



DROUGHT Snippets

Ivan Naggs - Neusavale :

Driest since 1953 according to a long term Neusavale resident who has records back to 1946. Springs that were never known to go dry stopped running because of the lack of spring/summer rainfall. Pasture growth has been severely restricted.

Ron Williams - Cootharaba :

Has rain records back to the 60's. Although there was still some green grass at Cootharaba, the dams were as low as I have ever seen them. We did get some showers of rain, but the heat and the wind dried everything up straight afterwards.

Steve Burgess - Dagun :

The driest our property had been in living memory - our middle dam dried to dust, which was the first time this dam had been dry since its construction in the late 1970's. Growing conditions for vegetable crops seemed at least as harsh as they were in 2002 and 2006.

George Cotter - Widgee :

In the Widgee area it was the driest I have ever seen it but when the rain finally came it was just the way you would have ordered it - slow soaking rain. People think the drought's over but it isn't. It's a long way through to September/October and we need warm weather with no frost and some moisture every now and then.

Gail and Ross Smith, Tiaro :

- Bloody scary • Amazing that inland Queensland got the rain and coastal Queensland didn't • Longest level of dry in the river since we have lived there • We walked across the river at Tiaro.

Bob Clem - Kin Kin :

We operate a small beef finishing business at Kin Kin. The period from Aug 2013 to Feb 2014 was particularly dry. I'm not sure you could call it drought but some locals said it was as dry as they could

remember. Rainfall recorded on our property for the 7 months was 220mm or about 25% of the long-term average.

There was no run-off and our water supplies were declining. One dam was very low so we pumped it out and took the opportunity to do some repairs. Other dams were 50-75% capacity and Pender Creek which runs through the property had dried back to a few waterholes.

We were fortunate to sell some cattle in August. There was some pasture growth following rain in November (which gave us some false hope that the worst was over) but from then on pastures got shorter and drier.

While we have got through relatively well compared to those inland, it was fairly stressful and there are on-going issues that will have some impact. The pastures are in poorer condition with more weeds and much less legume than normal, ergo my fertilizer bill will be high because twice the normal area was fertilized.

Reef Rescue - it's as easy as ABC...D

Graziers within the Mary River catchment can now access a new round of Reef Rescue #2 funding. MRCCC's Brad Wedlock is available to assist graziers with the application process.

Investment from the Australian Government's Reef Rescue #2 program will provide local graziers with advice and financial support to implement eligible on-ground projects that can demonstrate improved land management practices, enterprise sustainability and contribute to Reef Rescue water quality outcomes.

The 'Great Barrier Reef Water Quality Improvement Plan' was released by the Federal Government in 2003, in recognition of the important role grazing landholders play in improving the quality of water entering the Barrier Reef lagoon. The Mary River is the southern-most of the catchments that discharge into the Great Barrier Reef lagoon, and the Mary's grazing sector is the largest freehold land use i.e. about 70% of the catchment area.

Reef Rescue #2 will build on the success of the previous Reef Rescue program in the Mary, which was delivered by the MRCCC from 2010 to 2013. In partnership with the Gympie District Beef Liaison Group, BMRG & QDAFF the Reef Rescue #2 project aims to work with graziers to improve downstream water quality by improving grazing land and riparian zone condition, and reducing sediment and nutrient losses to the Mary River system.

THE MRCCC PROJECT TEAM WILL ASSIST GRAZIERS WANTING TO ACCESS THE INCENTIVE FUNDING TO UNDERTAKE AN ASSESSMENT OF THEIR CURRENT GRAZING LAND PRACTICES USING AN A, B, C, D REPORT CARD SYSTEM.

This review process will identify potential on-ground projects that could contribute to improved grazing land practices and a higher report card rating.

Improved grazing land condition leads to greater pasture productivity and enterprise profitability, whilst reducing the loss of valuable sediments and nutrients from our grazing lands. Wetland systems such as a billabongs, marshes and riparian zones will be a particular focus due to their important function of filtering nutrients and sediments from the grazing landscape, before they reach the river systems.



The image above shows a trough located as far as possible from the creek and off the creekflat, to filter as maximum as possible manure and nutrients for pasture growth.

Examples of eligible on-ground projects could include :

- fencing and off-stream watering to reduce bank erosion and manage cattle access to creeks and wetlands to improve water quality.
- fencing and off-stream watering of wetlands to encourage natural regeneration of aquatic vegetation to filter sediments and nutrients.
- sub-division fencing and troughs to separately manage different grazing land types, to improve grazing land condition.
- fencing to restore groundcover and encourage the natural stabilisation of eroding gullies and scalds.

Expression of interest :

If you are a grazier and are interested in a Reef Rescue #2 on-ground project, please contact the MRCCC on :

- Phone 07 5482 4766 or email : admin@mrccc.org.au

STORY BRAD WEDLOCK, OPERATIONS MANAGER

Gerry Cook Fish Hatchery



Demonstrating the correct way to handle a cod if you catch one

As breeding season fast approaches again the Codfather Vince Collis and his band of volunteers are busy preparing the ponds for the introduction of the broodstock and attempting to source resources to upgrade the filter and hygiene equipment within the hatchery.

The preparation of the ponds is relatively simple and involves brushcutting the weeds and grass that have grown since the ponds were emptied and removing the green waste to prevent the subsequent decay of this organic matter causing dissolved oxygen and pH issues. Once the waste is removed the pond beds are treated with lime which has three purposes; 1) Increasing the availability of nutrients for phytoplankton, 2) Increases the pH of the water and as a buffer against pH fluctuations caused by photosynthesis and respiration and 3) as a steriliser.

After the dry ponds are limed they are refilled and when the system stabilises the broodstock are introduced to the ponds at a rate of two pairs of fish in each pond. Each pond has several artificial hollow logs for the cod to choose from for a brood area and then it is a matter of waiting for the right conditions to induce the breeding cycle.

A priority this year at the hatchery after the loss of a significant amount

of last year's fingerlings is to upgrade the hygiene and filtration system within the hatchery. As a volunteer organisation running on the proverbial shoestring budget the hatchery is desperately in need of new ultraviolet sterilisers, filtration medium and pipes and troughs to establish aquaponic plant beds to remove nitrogenous waste from the recirculating water.

As a closed system the hatchery fingerling tanks and troughs reuse the same water in a continuous loop. Unfortunately the aging infrastructure currently in place is not able to keep up with the demands of keeping the water relatively free of pathogens and keeping the nutrient levels within a range that is acceptable for the health of the fingerlings.

Replacing the existing ultraviolet filters with newer models capable of withstanding the higher volumes of water circulating through the system when the fingerling troughs are all in use will act as a safeguard within the system from the harmful build up or presence of certain microorganisms and pathogens.

Due to the high density of fingerlings within the troughs after a successful brooding the young fish are very susceptible to diseases which can spread rapidly within the system and result in very high mortality rates. Ultraviolet sterilisers are proven

technology, are relatively inexpensive to run and maintain and have the additional benefit of keeping the water free of pathogens without having to add chemicals to the water.

Running in tandem with the ultraviolet filters is the filtration system to remove organic matter and nitrogenous wastes from the recirculating water.

Plans for this season are to enhance and improve the current system with the addition of several extra trickle filters as well as plant troughs to remove the nutrients from the water once the nutrients are mineralised by the trickle filters.

This will have several benefits including preventing the build-up of nitrogenous waste to harmful levels, the removal of organic particles from the water and finally the provision of aquaponically grown fruits and vegetables for consumption by Vince and the volunteers.

Though hoping to be able to source the modest amount of funds required for this work through a government funding program or a private philanthropic fund the upgrades are vitally essential so a Plan B has also been developed. Plan B is to utilise existing infrastructure and beg borrow and steal the necessary equipment in order to adjust, upgrade and modify the system to achieve the necessary outcomes for this seasons hatchlings. Though more than likely a temporary measure it is hoped that by doing so a repeat of last year's losses will be avoided.

STORY CHRIS ROSIN -
CATCHMENT OFFICER MRCCC



The value of frogs in learning and engagement

The MRCCC is not alone in its desire to empower members of the community to make decisions in their lives that benefit our environment and all that live in it. Over the past 11 years with MRCCC, I have been fortunate to have had many opportunities to pass on information and ideas to landholders managing rural land, students from schools and university and even on occasion government staff. Lately we have become involved in the University of the Sunshine Coast's student workplace learning program and our first student, Jono Hooper, started with us in late 2012. Based on the awesome outcomes of having Jono in our midst, this summer season we have had the pleasure of involving two additional undergraduate students into our working life.

The students and MRCCC commit to 96 hours in the workplace and the students are assessed on and obtain credit for their participation. Summer is a busy time in the field for MRCCC staff so the extra help is most welcome.

We see it as our responsibility and privilege to interact with the students at a time when they are in a key learning phase and emerging into the working world. It is an opportunity to share our values with them and to expand their environmental and social outlook. We get a huge amount from the students too as they come with fresh eyes, asking questions, making comments and giving suggestions that cause us to think and re-think what we are doing and why.

Frog surveys have been a large component of all the students' experience so far. This activity takes them outside their normal realm; tripping and slipping along steep, heavily vegetated creek banks in the dark is enough to make anyone pay attention to what is around them! The world that is illuminated by a small beam of light becomes a very personal space and concentrates one's attention on the small details underfoot and on the sounds and smells of the night.



JOEL UP CLOSE AND PERSONAL WITH A GBF ON COOROORA CREEK

You now know that some frogs have lipids in their skin that protect them from dehydrating!



STORY EVA FORD - CATCHMENT OFFICER MRCCC

We become acutely aware that there is more beyond our vision; trusting as we can so easily in Australia, that whatever is out there is not going to jump out and eat us! The students, and other participants on frog surveys, are challenged to focus their senses and recognise small, subtle signs of life. It allows us to be alone, to be quiet for a change and to be surprised at the thrill of finally finding an amphibious sentinel overseeing its chosen arena.

Besides this fluffy account of what night adventures can do for us, frogs in themselves have proven to be invaluable for igniting a keenness to protect and improve habitat value along the waterways of the Mary River catchment. We hope that our visiting students take with them their new-found appreciation of frogs and work to improve conditions that will benefit them as well as other species sharing their environment.



Eastern sedgefrog - *Litoria fallax*.
By Todd Fauser.



Angel-headed Dragon, Conondale Ranges. By Susie Duncan.

Mary River Waterwatch



MRCCC's Mary River Waterwatch Program is an integral component of work to monitor the Mary River and its tributaries.

Waterwatch volunteers test water at their site monthly, using simple handheld probes to gather information on salinity, turbidity, dissolved oxygen and pH and making general observations on their stretch of river. With some Waterwatch sites monitored continuously for over 11 years this simple low tech program provides remarkable insight into the catchment and how it changes with the seasons.

A new Waterwatch network was formed in January 14 to target the Lower Munna, Gunalda and Tiaro districts. This network captures information from Gutchy Creek, Tanyalba Creek, Ooramera Creek and Myrtle Creek,

and lower sections of Munna Creek and nearby sections of the Mary River, and will fill significant gaps in knowledge of the water flowing in the catchment.

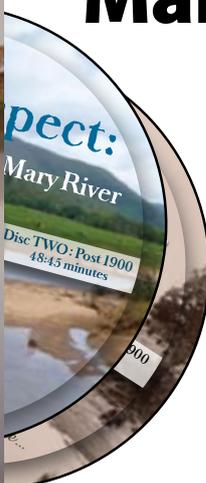
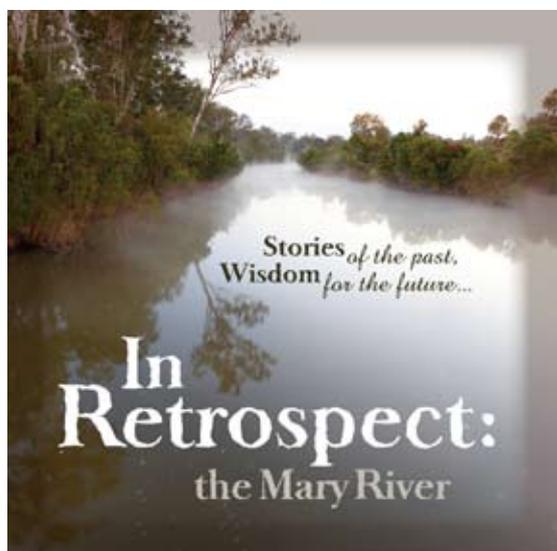
MRCCC routinely looks for people with an hour or so to contribute each month to maintain the Waterwatch program. In-coming volunteers may replace previous monitors or establish new sites that improve coverage of the catchment. Training and followup support is provided. Electronic equipment passed between volunteers gives a simple digital reading MRCCC is currently looking for new volunteers to fill priority gaps in the monitoring network :

- The Mary River's headwaters, upstream from Maleny : on the plateau around Mary Cairncross Park, Gardners Falls and Fryers Creek (new sites).

- East to southeast of Gympie, including creeks in the Mothar Mountain, Gympie East and Cedar Pocket districts (new sites).

Several people also help in transporting the kits to and from Gympie for monthly calibration and maintenance. If you routinely travel between Cooroy and Gympie and would be able to return a waterwatch kit for calibration once a month we would welcome your assistance. There is also a recurring need for someone to take a kit from Gympie to Kenilworth at the beginning of each month.

For more information or to become involved speak with Steve or Jenny at MRCCC.



Mary on the big screen

Congratulations to Luke Barrowcliffe and the MRCCC's Dr Tanzi Smith on the production of the 'In Retrospect: the Mary River' DVD which has been screening around the catchment recently. The 1hr 30min film takes you on a journey through the history of the Mary River catchment, telling stories of interactions with the river and the people and places that make our catchment community what it is today.

The film is a product of the 'Looking Forward, Looking Back: learning from the past to create a better future' project, which was funded by the Australian Government's Your Community Heritage program. Copies of the film are available for purchase from the MRCCC for \$11 each or \$20 including postage and handling.

* If you are interested in helping to organise a screening in your neck of the woods call MRCCC on 5482 4766.

Reef Impact

Measuring changes in the impact of the Mary River Catchment on the Great Barrier Reef

The Mary River Catchment is the most southerly catchment in the Great Barrier Reef. As a result the sediment and nutrients that flow out of the Mary River are recognised as having an impact on the reef. It is for this reason that our catchment is part of the Reef Rescue program and other programs designed to improve the health of the reef.

Over the past few years, all government programs aimed at improving the health of the Reef come under the banner of 'Reef Plan' which is jointly funded by the State Government and the Australian Government. The objective of Reef Plan is 'to ensure that by 2020 the quality of water entering the reef from broadscale land use has no detrimental impact on the health and resilience of the Great Barrier Reef.'

In order to know whether the water quality has actually improved, amounts (kilograms) of key pollutants such as pesticides, sediment, dissolved inorganic nitrogen and phosphorus and nitrogen attached to particles of sediment flowing out of the Mary River are being estimated by Reef Plan. Models of catchment land use and the resulting water quality are the main means by which these loads are being estimated. In some of the catchments, the load estimates coming out of the models are checked against actual measurements of water quality. Less than half of the reef catchments are checked in this way, so there is a heavy reliance on the models.

In late 2013, MRCCC was very pleased to have the opportunity to encourage the installation of monitoring sites within the Mary River Catchment. The loads of pollutants currently predicted

by the catchment models are somewhat puzzling, showing that the Mary is the most polluting river in the Burnett Mary Region by far. Whilst this could well be the case, having actual data to calibrate the models and ensure they are giving reasonably accurate predictions will enable a more accurate picture of the 'catchment loads' to be created.

Staff from the State Government's Department of Science, Information, Technology, Innovation and the Arts (DSITIA) have worked with MRCCC to establish a monitoring program that meets the requirements of the Reef Plan catchment load models. This monitoring program includes monthly sampling and intensive sampling of the river during rainfall 'events'. Because of the hazardous nature of events and the inconvenient times samples are likely to be needed, the event samples are collected by refrigerated automatic samplers which DSITIA has installed in gauging stations at Home Park on the Mary River north of Tiaro and on Tinana Creek at the Tinana Barrage. These locations were selected because they are the places closest to the river mouth where flow measurements are taken. Knowing the volume of water flowing past is crucial for calculating loads.

DSITIA has invested many tens of thousands of dollars in purchasing and installing this equipment and has contracted MRCCC to undertake the sample collection, processing and dispatch. MRCCC has engaged residents living near the gauging station to undertake this regular sample collection. The MRCCC Catchment Loads monitoring team have undertaken



STORY
DR TANZI SMITH -
CATCHMENT
OFFICER MRCCC



training conducted by DSITIA and are responsible for unloading the autosamplers and processing the samples (decanting, filtering, labelling and preserving) after events and taking the monthly manual sample which involves similar processing. These samples are packed in eskies and sent to Brisbane where they are analysed by State Government laboratories for pesticides, nutrients and sediments. The Burnett Mary Regional Group is assisting by paying for the pesticide analysis of samples from Tinana Creek. The results will inform the Reef Plan Reports for 2013/2014 which will probably be published in 2015, however MRCCC is expecting to get the raw data from the sampling program prior to the publication of this report.

The program is scheduled to run for three years in total. Over this time, we should develop a good picture of the pollutant loads coming out of the Mary River catchment, and most interestingly the impact that floods have on pollutant loads. The data collected will compliment the Waterwatch program which involves monthly collection of results on pH, electrical conductivity, dissolved oxygen and turbidity at many different sites. In the long term, we will be better placed to ascertain the impact that the different catchment management activities have because of all of this data that has been collected.

Here's hoping that the new entity called 'The Reef Trust', which was created by the Federal Coalition Government to implement their \$40 million Reef 2050 Long-Term Sustainability Plan will continue to support this program.

You can find out more about Reef Plan here: <http://www.reefplan.qld.gov.au/>

The Glossy Black Cockatoo



When it comes to Australia's Black Cockatoos, the Glossy Black Cockatoo (*Calypthorhynchus lathami*) seems to almost be completely forgotten, largely because its better known cousins are more common. Of the seven species of black cockatoo, all but two (the Palm and the Gang Gang) are related, all being members of the *Calypthorhynchus* family. *Calypthorhynchus* means that the birds have covered noses but also indicates the covering of their beaks with feathers.

The birds are in three distinct sub groups;

- *C. lathami erebus*, which ranges from Eungulla NP near Mackay to about the Fraser Coast and west to about Roma,
- *C. lathami lathami*, which is found along the east coast of Australia and has been recorded as far west as Broken Hill in NSW, and
- *C. lathami halmaturinus*, which is found only on Kangaroo Island where current estimates place the population at about 500 birds. Reports suggest that there could be as few as 10,000 pairs of *C. lathami lathami* on the mainland.

The Glossy Black Cockatoo is listed as threatened under Queensland's Nature Conservation Act, and endangered under the Federal EPBC Act.

The Glossy Black is the smallest of the black cockatoos growing to around 50cm. It is readily identified by its distinctive colouring, the female often showing patches of yellow on her cheeks especially during breeding season and the male by his dull brownish head. Neither the male nor female could be honestly described as 'glossy'; the plumage looking like a really bad blue black hair dye. Easily confused with the Red Tailed Black and Yellow Tailed Black, their beak is a steel grey colour

whereas the Red and Yellow Tailed birds have a chalky white beak and this is the most certain method of accurate identification. The Glossy Black also has distinctive 'barring' on it's tail.

The bird is possibly its own worst enemy, being a highly specific feeder and only producing a single egg during breeding season. In the Fraser Coast area, their preferred food is the seeds of *Allocasuarina littoralis* and *Allocasuarina torulosa* both of which are viewed generally as having very little conservation value.

Councils, developers and land managers have to be aware of the importance of these trees for the survival of these birds. Glossy blacks are a wide ranging bird and can travel up to 50km to their favourite food trees and waterholes.

The Birdwatchers of Hervey Bay and the Fraser Coast Regional Council together with friends of the Glossy Black including the Wildlife Preservation Society of Queensland are seeking to engage landholders in the identification of the birds and the collection of feeding and roosting data to add to the conservancy's database.

Landholders and interested people can become involved by visiting the Glossy Black Conservancy website :

www.glossyblack.org.au

and following the links to 'report a sighting'. You can also become involved as a 'friend' which has no financial outlays. Councils and other organisations can become partners with the Conservancy where the obligation is \$5,000 or 'in kind' to that value. In kind contributions of efforts are valued at \$50 per hour and even for a small group this equates to 100 hours contribution. This could be time spent surveying, watching, growing out and planting food trees, and school or community presentations. Land for Wildlife members are urged to consider the role that their properties could play in the conservation of this valuable species.

For further information email :

cliffg@skymesh.com.au or visit the Glossy Black Conservancy website www.glossyblack.org.au

NOOSA Festival of Water

The Lake Macdonald Catchment Care group is delighted to be staging the 10th Annual Noosa Festival of Water on Sunday 29th June at the Noosa Botanic Gardens and Lake Macdonald Amphitheatre. The Festival had its origins back in 2004, when the 40th birthday of the construction of Lake Macdonald was celebrated on the 16th October. As well as celebrating the provision of town water to Tewantin and Noosa, the first Festival also helped to increase the profile of the Noosa Botanic Gardens, the Amphitheatre and the Lake as a fabulous venue to hold such an event.

EACH YEAR THE FESTIVAL PROGRAM HAS INCORPORATED DISPLAYS AND ACTIVITIES WHICH HIGHLIGHT OUR UNIQUE LOCAL ECOLOGY AND PROVIDE OPPORTUNITIES FOR PEOPLE TO LEARN ABOUT AND EXPERIENCE SOME OF THE ATTRIBUTES OF THE ADJACENT NOOSA AND GREAT SANDY BIOSPHERES.

The Festival starts at 10 am with the Noosa Pipe Band in the Macdonald tartan warming up the Amphitheatre for the Gubbi Gubbi dancers and a top line up of entertainment until around 3pm. Over in the Botanical Gardens, Lyn McCrae and the Arting About crew will be encouraging budding young artists to decorate the huge biosphere mural and the people from Valley Bees and the Mary Valley Co-op will be providing heaps of advice and fresh produce.

Noosa Landcare will be handing out two free trees to Biosphere residents with a current rate notice and the MRCCC group will provide a basic creek, bore or dam water testing service (please bring at least a 500ml sample). Save the Fraser Island Dingos are back with some representatives from the Fraser Coast Wildlife Sanctuary, Conondale Photographer Todd Fauser will have some of his stunning Mary River images on display and for sale and the Cooroy Camphor Laurel group will also have carved and turned objects for sale.

Sunday 29 June



Noosa Council, Land for Wildlife, Noosa Biosphere and the Sunshine Coast Environment Council will also be there to provide information and advice.

Over near the boat ramp, the Lake Borumba Fish Stocking group will coordinate Take a Kid Fishing with all gear supplied, whilst over at Mary River Cod Park the Noosa Yacht Club will be conducting a sailing school for kids! There will also be standup paddle boarding and kayaks to try free of charge, plus free boat trips across the lake to the Gerry Cook Hatchery where Mary River cod broodstock and other aquatic species will be on display, as well as Bat Rescue.

Martin Fingland from Geckoes Wildlife will be back with a selection of his menagerie of native wildlife, and Allen Burnett from Reptile Displays of Australia will be staging shows throughout the day. The kids will also enjoy the free face painting and jumping castle. A selection of food vendors will be at the Festival or bring your own lunch and have a picnic in the Gardens or by the Lake.

For more information, contact the Lake Mac Group on 5482 4766 or email lakemacgroup@mrccc.org.au



The Noosa Festival of Water is supported by Noosa Council, Sunshine Coast Council, SEQ Water, MRCCC, Unity Water and BMRG.



Fishing Competition

Catch and Release Bass Fishing



The Lake Macdonald Catchment Care group will host a Catch and Release Bass Fishing Competition at Mary River Cod Park in Collwood Road, Cooroy, Sunday 29 June 2014. Sign on will be at 6.30am with winners announced in the Amphitheatre at the Noosa Festival of Water at 12.40pm. Hooked on Angling and Outdoors are sponsoring the competition with a fantastic selection of prizes.

There is no restriction on fishing from the shore or from a kayak, although there will be a limit on the number of boats with electric motors permitted to enter.

Entry costs \$20 for adults and \$10 for children under 17.

All proceeds raised support the breeding program for the endangered Mary River Cod at the Gerry Cook Hatchery on Lake Macdonald.

Register by Friday 20th June and go into the draw to win a fantastic prize valued at \$500 from Hooked on Angling and Outdoors.

Pick up an entry form from Hooked on Angling and Outdoors on Hilton Terrace, Tewantin, or visit the website to download an entry form and pay online:

www.mrccc.org.au/2014/05/lake-macdonald-catch-and-release-bass-fishing-competition/

The Lake Macdonald Fishing Competition is supported by Hooked on Angling and Outdoors and the Mary River Catchment Coordinating Committee. For more information :

Phone 5482 4766 or email : lakemacgroup@ozwide.net.au

Fauser's Mary

A drive through the Mary Catchment, from Maleny where the Mary River flows from the Conondale Ranges to Hervey Bay where the Mary flows to the sea some 320 km later, will take you through a diversity of landscapes and environments.

Conondale resident Todd Fauser's environment is near the headwaters of the Mary River.

The lush, rainforest landscape lured the Fausers to Queensland several years ago, from the dry flat country of the Eyre peninsula in South Australia where too many droughts and the need for change saw Todd and wife Julie leave sheep and wheat farming and make the 2500 km journey to greener pastures.

The Fausers subsequently spent many years rehabilitating the riverbanks on their property; removing weeds like lantana and revegetating with native riverbank species which would in time, reduce the erosion on the banks, improve water quality and also create habitat for a myriad of native fauna species. So impressed were the neighbours by the work the Fausers were doing that they were also encouraged to work on rehabilitating and protecting their own piece of the river.

Inspired by the landscape that surrounded him Todd picked up a camera when he moved to Conondale and joined a photography club so that he could learn to capture the stunning scenes he saw around their property. Todd's award winning image of the Obi Obi Gorge in flood is one of the more spectacular scenes he has captured, and as Todd tells the story, it took some doing to actually take the photo.

'You would only see the Obi like that for a couple of days of the year, when it's in flood after having hundreds of millimetres of rain, plus the weather was really stormy and threatening - it created an atmosphere that you wouldn't get on a sunny day' said Todd. 'To get the shot, I had to climb out onto the rocks into the floodwaters with my tripod and camera and it was a bit tricky with boots muddy from the rainforest trail to the gorge'.

Todd's images of the Mary River now appear in a number of publications, including the *Something About Mary* booklet produced by the Mary River Catchment Coordinating Committee. Most recently, Todd was honoured to have one of his images selected as the cover image for the Australian River Restoration Centre's prestigious RipRap Publication, a professional publication for water and river managers throughout Australia.

Todd's Mary River photography will hopefully encourage the wider community to appreciate and care more for the river by creating recognition that there really is Something about Mary.

Todd will have a selection of his images for display and sale at this year's Noosa Festival of Water on Sunday 29 June from 10am until 3pm - details on previous page.

To view a selection of Todd's images, visit MRCCC's website: <http://mrccc.org.au/2014/05/mary-as-you-have-never-seen-her-before/>

To view the RipRap cover visit <http://arrc.com.au/edition-37-rivers-of-carbon-rivers-of-life/>





R I V E R M A G I C



PHOTOS BY **TODD FAUSER**

We forget that the water cycle and the life cycle are one.

JACQUES COUSTEAU, OCEANOGRAPHER

Boundaries don't protect rivers, people do.

BRAD ARROWSMITH

Any river is really the summation of the whole valley. To think of it as nothing but water is to ignore the greater part.

HAL BORLAND - THIS HILL, THIS VALLEY

A river seems a magic thing.

A magic, moving, living part

of the very earth itself.

LAURA GILPIN

We all live downstream.

DAVID SUZUKI, GENETICIST

A river is the report card for its watershed.

ALAN LEVERE

Water is the most critical resource issue of our lifetime and our children's lifetime. The health of our waters is the principal measure of how we live on the land.

LUNA LEOPOLD, HYDROLOGIST

...the beauty of the (river) unfolded before my eyes, and the gurgling waters of the river sang to the hum of the turning earth.

RUDOLFO ANAYA



Bees in the Riparian Zones

We have been keeping honeybees in the Mary Valley since 1982. For 25 years we managed 120 hives mainly for pollination but harvested a lot of honey. At present we have 30 to 40 hives. Most sites have been within 100m of a water course of the Mary River catchment, and above the flood zone.

BESIDES PROVIDING READY ACCESS TO WATER, RIPARIAN ZONES OFFER A GREATER DIVERSITY OF NECTAR, POLLEN AND RESINS FOR THE BEES, WITH THE BEES FROM ANY ONE HIVE FORAGING UP TO 10KM OF THE WATERCOURSE.

Diversity of pollen sources is of most importance in maintaining the strength of the hives. Callistemons, melaleucas, lilly-pillies of the riparian zones provide reliable and regular supplies of pollen and nectar. But the shrubs and ground flora should not be discounted. These are the flora that can provide pollen in the moist environs of a water course during droughts.

Our best site was near Bell's Bridge when pollinating small crops. The hives were on a sandstone outcrop overlooking the river. They were always strong and could fill with honey every 14 days during summer. Strong hives always provide effective pollination for the crops.

No matter where bees are situated, careful management is necessary. It is important to know the flower patterns of your area and harvest the honey accordingly, always leaving generous supplies for the bees in lean times. We refer to it as beekeeping by observation, not by expectation.

On a site on Oakey Creek (a tributary of Wide Bay Creek) we had great bees July through to December. In January they were often hungry, so we would move them to a more productive environment. This proved to be a very seasonal site. Ideally, if you have a strong, diverse site with consistent flowerings all year round, it is best to have the hives remain in that same spot. Cool, damp, shady sites should be

avoided at all costs. We prefer to place bees in full sun all year, with entrances facing E.N.E. and on dry soil.

We are fortunate to live in a catchment that provides food for bees on permanent sites year round.

So manage your bees well and enjoy the rewards of beekeeping.

Article by Athol Craig, author of the bee book 'Nature's Gifts.'

Additional notes from Lynn Klupfel :

The Klupfel's have had around 30 hives serviced on their riverbank property near Myrtle Creek, Tiaro, for the past 15 years. Their property has 3km of river frontage, which they say provides the most productive of all bee-sites.

The diversity of flowering plants kept the bees alive during the recent droughts: Ironbark, Blue gum, Blackbean, River tea-tree, Bennett's ash to name a few. Foambark & Weeping bottlebrush are bee-popular, and were were observed as 'dripping with nectar' and 'smothered in bees.'

We are currently compiling an overview of all bees in the riparian zones, with particular focus on native stingless bees and solitary bees. We are asking landholders to please share their stories with us for future publication.



LEPTOSPERMUM LILLY PILLY



BLACKBEAN PODS



BOTTLEBRUSH



PHOTOS BY GLENBO



Mary's very own RiverCross

This crossword has been designed inHouse especially for the Mary River and her catchment, as a tribute to (no, not a tributary to) our ongoing love and respect for water, catchments and healthy river flows.

In fact, this is one of the few times you'll ever hear a Cross Word about our Mary!

Enjoy the challenge, and please note : send a copy of your completed crossword in to us here at MRCCC soon, the first correct 20 received will go into a draw for a fabulous Mary River Prize Pack.

And apologies to all the crossword purists out there, for our extravagant little perimeter extensions, we simply couldn't resist the peripheral possibilities!

ACROSS

- 3 Endangered freshwater fish of the Mary (or a 70's hairstyle) (6) *n.*
- 10 Ridges of rock or coral just below the water's surface (5) *n. plural.*
- 12 Abbev : Farmers use semen for this (2).
- 13 A plant grown as a food crop (6) *n.*
- 14 Slithery snake-like fish (3) *n.*
- 15 A natural flowing water system (5) *n.*
- 16 Having knowledge of a situation (5) *adj.*
- 17 Grass-like water plant (4) *n.*
- 18 Having a pH greater than 7 (8) *adj.*
- 19 Saturated land, land consisting of swamps (8) *plural.*
- 23 Expanse of salt water surrounding land mass (3) *n.*
- 25 Surname of a pivotal MRCCC staff member (4).
- 27 Floats on water (4) *n.*
- 28 Local authority regulation or ordinance (5) *n.*
- 30 Native critters, collectively (8) *n.*
- 32 In the shadows (5) *n.*
- 34 Prefix : Entry (2).
- 35 Our cosmic source of light & heat (3) *n.*
- 37 Our favourite Pocket near Kenilworth (3).
- 38 To persuade by deception (3) *v.*
- 39 Endangered frog of our region (5,6) (*See Page 7*).
- 41 A small narrow river, or a continuous flow of water, air or gas (6) *n.*
- 43 Half of a beautiful creek near Maleny (3).
- 44 To persistently bite at or nibble (4) *v.*
- 45 Fine sand or clay, carried by a river and deposited as sediment (4) *n.*
- 46 Be quiet! (3).
- 47 Top order river predator (3) *n.*
- 48 Something about - - - (4).
- 49 Tall deciduous tree, the Chinese version is unwanted here (3) *n.*
- 52 Commits a crime (like keeping a Mary River cod) (8) *n.*
- 53 Action - to propel a boat with oars (6) *n.*
- 55 Residue left after burning (3) *n.*
- 57 Wetland ecology adjacent to rivers and streams (8,4) (*See page 14*).
- 60 Flat buoyant boats or platforms (5) *n. plural.*
- 62 Weather website acronym (3).
- 63 A receptacle for recyclables (3) *n.*
- 64 Don't stop (2) *v.*
- 65 Endow with a quality or ability (5) *v.*
- 66 Prefix : Of having two (2).
- 67 Q : Can you keep a lungfish in a tank? A : - - (2).
- 70 Tidal mouths of large rivers (9) *n. plural.*
- 72 The place where a river begins, or relating to football : State of - - - - -.
- 73 Circulating fluid in a plant (3) *n.*
- 74 Type of heron, seen around cattle (4) *n.*
- 75 Mary River turtles use this unique type of ventilator to breathe (6) *adj.*
- 77 Biological control weapon (5) *n.*
- 78 The earth below, the - - - above (3) *n.*
- 79 An alluring pretense of modesty (3) *adj.*

DOWN

- 1 A minor tributary of a river (5) *n.*
- 2 Severe flooding rains (6) *n.*
- 4 Hidden rest place of a wild animal (6) *n.*
- 5 Not stuffed (4) *n.*
- 6 Six species live in the Mary (6) *n.*
- 7 The plants of a particular region (5) *n.*
- 8 She rules over the beehive (5) *n.*
- 9 An unwanted plant (4) *n.*
- 11 Of little depth, particularly water (7) *adj.*
- 15 What we wish for during drought (5) *pl.*
- 17 A shallow place in a river where fast flowing water becomes turbulent (6) *n.*
- 19 A method of doing something, or a path for travelling along (3) *n.*
- 20 Abbrev : Germany (2).
- 21 Accumulated river sediment (8) *n.*
- 22 Plants that take 2 years to grow (9) *plural.*
- 24 Movement of tide, - - - - and flows (4).
- 26 Noah knows all about this (5) *n.*
- 27 Preposition (2).
- 29 Prehistoric Mary River dweller (8) *n.*
- 31 The early invasion of weeds (9) *n.*
- 33 A place where the controlled hatching of fish occurs (5) *n.* (*see page 6*).
- 36 Collection of rainfall over a river drainage area (9) *n.* (*see page 9*).
- 37 A river following a zigzag course (7) *v.*
- 40 The action of conserving, protecting & repairing our natural environment (12).
- 41 Freestyle, backstroke, breaststroke (8) *n.*
- 42 Abbrev : for a large steep hill (2).
- 44 Ready, set, - - (2) *v.*
- 47 Album technology after vinyl (2).
- 50 The animals of a particular region (5) *n.*
- 51 Venomous snake (not found here) (3) *n.*
- 54 Troughs used for ? (8) (*see page 5*).
- 55 A desired outcome, direct at a target (3) *n.*
- 56 The natural home or environment of an animal or plant (8) *n. plural.*
- 57 Mass of eggs in a female fish (3) *n.*
- 58 The early stage in the growth of a river (the river is in its - - - - -) *n.*
- 59 An area having a particular use or characteristic (I'm in the - - - -) (4) *n.*
- 61 A hidden obstacle in the river (4) *n.*
- 62 Large river system north of the Mary (7).
- 68 Abbrev : Everywhere except Australia (02).
- 69 Descriptive of the skin of a fish (5) *adj.*
- 70 A planet much in need of our nurture (5) *n.*
- 71 Representative symbol (the Mary River turtle is an - - - - of the region) (4) *n.*
- 73 Glenbo's favourite biscuit (you'll just have to ask him!) (3).
- 76 Abbrev : to copy an email.



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

'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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