



The *CODLine*

*Incorporating NEWS of the
Mary River Catchment Coordinating Committee*

Waterwatchers from all walks

Lee Field
Maryborough & Dist Waterwatch
Mary River Catchment
Coordinating Committee

Ten Maryborough & District Waterwatchers have been testing a mix of urban and rural sites for just over a year now.

Helen Latham, Moyra McRae and Amanda Cobban from the Environment Protection Agency (EPA) have been keen volunteers from the start.

'We enjoy being a part of the Waterwatch Network as it builds a link between government and our local community,' Helen explained. 'Getting out in the catchment is a great opportunity to enjoy the local environment, giving us valuable insight into what is happening on the ground and keeping us in practice with current testing procedures.'

On the other side of the coin, small crop farmers George and June are testing to monitor water quality for their farm enterprise. George and June have a successful lemon grass and herb farm which is keeping them busy seven days a week.

'It is important for productivity, especially in these dry times, to ensure that the water we use on the crops does not have an excessive Electrical Conductivity (EC) reading.'

George and June have a lovely spot beside their creek which they share with their grandchildren most of the year



Waterwatch sampling site in the Maryborough district.

[Lee Field]

round as well as an abundance of water bug, reptile, fish and bird life.

This month has seen the beginning of a possible long term association with St. Helens State School. They have a paddock with a small creek and scattered native trees. We have done water bug and chemical testing to get an initial picture. The Grade 6/7 class will join the monthly water testing network from August onwards.

The efforts of these people are greatly appreciated as they contribute to the smooth running of this Waterwatch Network:

- Tony and Sue Wedlock for the vital role they play in allowing the testing equipment to be picked up and dropped off at their shop in Kent Street
- all the dedicated Waterwatchers who give their time once a month to do testing
- the Maryborough City Council for their financial support
- the MRCCA team in Gympie.

For more information on the Maryborough & District Waterwatch Network, contact Lee Field on 4121 6546 or clinkerfield@big.net.au

Wonga & Widgee landholders dealing with drought & salinity

Dale Watson
Project Officer
Mary River Catchment
Coordinating Committee

Both landholders and natural resource managers noticed the drought was having a major impact on the amount of water available in the Widgee sub-catchment for irrigation and stock watering, and also that levels of salt in the creeks were increasing.

Decreasing levels of increasingly saline water place considerable stress on irrigation, stock and domestic water use, as well as on the native aquatic life within our streams.

Water use efficiency and riparian management can help alleviate some of the effects of drought and salinised water.

The Wonga Drought Recovery Project, an initiative of the Mary River Catchment Coordinating Committee, was developed in early 2000 at the height of the drought.

This project aims to raise awareness and educate landholders on the issues of water-use efficiency and streambank management in order to help prepare landholders in the Widgee and Wonga district for future droughts and salinity problems, through irrigation water use efficiency awareness, riparian management, and water quality testing.

Water use efficiency

The Queensland Fruit and Vegetable Growers' Water for Profit Scheme is helping us out with Water Use Efficiency education through their project officer George Russell. Fields days will be held inviting local irrigators to learn about the benefits to farm management of using irrigation water efficiently.

We are working with a large horticulturalist in the area, analysing their irrigation systems.

Riparian management

We are working with several riparian landholders to fence off Widgee Creek, protecting it from the effects cattle can have on stream bank stability and water

quality. A weed education field day is also planned, specifically targeting the two major problem weeds in the area, cats claw creeper and giant rats tail grass.

Water quality testing

Our Water Quality testing is ongoing in the Widgee Catchment, with the Widgee Wonga Salinity Catchment Crawl being held every couple of months.

This water quality information is providing the community with invaluable data which helps us track the water quality of the Widgee/Wonga catchment.

Special attention is being paid to the levels of salinity in the streams, helping landholders and irrigators understand any changes in salinity levels.

For more info contact Dale Watson on 5482 4384 or mrcccdale@qldwide.net.au

Water for Profit

George Russell
Bundaberg

The Water for Profit program offers services and information to growers aiming to improve irrigation efficiency, resulting in better yields, improved productivity and water savings.

Water for Profit's regional field officers provide an on-farm service, assessing irrigation systems and demonstrating soil moisture monitoring equipment.

Water for Profit's practical workshops have generated a lot of interest among growers. Topics include

- Introduction to soils
- Irrigation performance and evaluation
- Irrigation scheduling calculation
- Irrigation scheduling management
- Soil moisture monitoring equipment
- Soil moisture monitoring installation
- Soil moisture data interpretation
- Issues in irrigation management
- Fertigation
- Salinity.

More workshops are being developed and each workshop is tailored to a particular group's needs.

Irrigation information sheets (on paper or CD) cover aspects of sustainable irrigation management, economics, maintenance and evaluation, as well as water use efficiency benchmarks for various crops.



WATERFORPROFIT

The program incorporates aspects of natural resource management and the development of a practical Farm Management System to enable horticulture farms to demonstrate that they are operating at acceptable environmental standards.

Water for Profit is operated by Queensland Fruit and Vegetable Growers through funding from the Department of Natural Resources, Mines and Energy. New funding for a second stage has been made available during early 2004. Water for Profit is horticulture's name for RWUE (Rural Water Use Efficiency) and Stage 2 will be running across the state until December 2005.

Contact the Water for Profit staff for more information:

Bundaberg
George Russell 0417 783 313
Gatton
Scott Wallace 0408 135 002
Toowoomba
Evan Howard 0427 138 118
Emerald
Toni Anderson 0439 898 867
Tully
Callum Rowe 0407 597 403

National win for Mary River CCC

Brad Wedlock
Rivercare Coordinator
Mary River Catchment
Coordinating Committee

In recognition of the success of Queensland's first River Rehabilitation Plan and the high level of community involvement in catchment management in the Mary, the Mary River Catchment Coordinating Committee has won the 2004 National Rivercare Award at the National Landcare Awards in Canberra.

Over the last decade, the MRCCC's dedicated Committee and staff have forged strong partnerships with a vast range of organisations and individuals and assisted in establishing networks of landholders throughout the catchment.

This has enabled the MRCCC to involve over 3000 landholders in catchment management activities on their land, including riverbank rehabilitation, sustainable land management, effluent recycling, water quality monitoring and protecting and preserving habitat for the unique aquatic species of the Mary Catchment including the endangered Mary River cod and Mary River turtle.

The MRCCC was one of the first groups in Australia to develop a devolved grants scheme, which provided modest financial incentives for landholders, primary producers, landcare groups and local government to undertake on-ground river rehabilitation activities.

Active partnerships

The MRCCC has received valuable ongoing support from Dairyfarmers, who have provided office space and a Resource Centre for the group in Gympie.

We also recognise the ongoing financial support of local government, without which the effectiveness of our organisation would have been greatly limited.

- The **Maryborough Community Waterwatch Network** has been operating in the Maryborough district for two years with the strong support of Maryborough City Council. More than 70 volunteers in this and other **Community Waterwatch Networks** at Maleny, Conondale, Kenilworth, Belli, Gympie, Amamoor and Munna use equipment provided by the MRCCC with the further support of Caloundra and Coolooloolo councils.
- In partnership with Noosa Shire Council, the Lake Macdonald Catchment Care Group was formed in 1999. Since the Lake Macdonald Catchment Care Group's inception over \$1.5 million worth of projects have been generated through this group.
- In partnership with Caloundra City Council, the **Friends of Kilcoy Creek** and **Policemans Spur Rivercare Group** have been formed in the upper Mary River catchment. These community-based rivercare groups have performed miracles in the upper



catchment around Conondale, with the assistance of the MRCCC.

- Maroochy Shire Council has also assisted the MRCCC to undertake resnagging of creeks in their Shire to create habitat for the endangered Mary River cod, as well as supporting riparian restoration and improved biodiversity, targeting rare frogs of the area. The MRCCC's **Living with Threatened Species** project is also working with landholders in the Conondale, Cooroy and Imbil areas with the support of Caloundra, Noosa, and Coolooloolo councils.
- In partnership with Coolooloolo Shire Council, MRCCC project officers have developed the **Coolooloolo Shire Water Education Program**, providing brochures and class presentations to schools in Coolooloolo Shire.

Visit the project officers at the Mary River Catchment Coordinating Committee's Resource Centre, 53 Tozer St, Gympie, or contact them on 5482 4766 or mrccc@qldwide.net.au

Unexpected blessings

Gillian Crossley
'Milima', Wonga

Having fenced off more of our Wonga Creek from the stock, I wondered how on earth I could tackle the weeds and general degradation by myself, with only occasional help from my family when they had time. So I rang the Mary River Catchment Coordinating Committee's Resource Centre and was told it was unlikely any help would be available for months, if at all.

However imagine my excitement when Eva Ford rang me back soon after to say a group of overseas conservation volunteers had been put off another

project and could come to me in a couple of days!

They arrived, seven plus their leader, an Australian. The volunteers were 5 girls and 2 boys – Korean, Japanese, Belgian, and British. They set up tents in the garden and fed themselves.

We started work that afternoon, walking down to the creek with mattocks, loppers, saws and secateurs.

Everyone got stuck into various jobs, some clearing thick grass and digging holes for trees, others sawing and cutting prickly cockspur thorn entangled with awful glycine and Madeira vine.

A bucket of water was poured into each hole ready for planting next day. I had previously bought lots of trees from the Gympie Landcare nursery.

The same procedure carried on for two and a half days. Each tree was planted with water-saving crystals and a tree guard placed around it, kindly provided by Dale Watson of MRCCC.

It was so dry and even with water crystals I watered every tree once more two weeks later, and then we had 15 ml of rain two days after that!

The volunteers were super. I know when it eventually rains properly we are going to have a terrible weed problem, but at least one can get to the area now and do some spraying.

Dangerous beauties

Joan Dillon
Hunchy

Many weedy plant species are introduced garden escapes, but others are in fact Australian natives. Many in south-east Queensland would be aware of the north Queensland umbrella tree which has infested many creeks. Geraldton wax is a weed in Perth, and Cootamundra wattle can be a weed outside its home range in NSW.

Weedwatch, the publication of the Weeds CRC, tells us that weeds cost our country approximately \$4 billion per annum just in terms of lost agricultural production and control programmes.

Designing a garden with plants native to our own region (and unlikely to become weeds) is obviously highly desirable, although choice, particularly amongst shrubs and groundcovers, may be limited. Nevertheless, many of the plants of the nearby coastal wallum have wonderful form and flowers plus drought tolerance.

When we favour plants that are exotic or from another part of Australia, the challenge and the pleasure is in making choices which will help to create the gardens we want without endangering the local environment.



Australian species of paper daisies are unlikely to become weeds. [Joan Dillon]

Any of us can be caught unawares. *Pennisetum alopecuroides*, whose provenance is admittedly doubtful but often regarded as Australian, had to be removed from my garden with a combination of poison, mattock and crowbar! I loved the fluffy inflorescences and they looked great in dried flower arrangements but seedlings came up all over the garden and it had the potential to be an environmental disaster.

Generally any plant which is a heavy seed producer and/or propagates readily from cuttings has weed potential. Be particularly careful of those which favour moist areas, especially if you are planting a gully or creek area.

However all is not lost. There are many local plants which can form the backbone of the garden design and many others which appear to be 'safe'. Some 'must have' plants need very careful management. Containment and removal of spent flower heads to avoid seed set are good management tools.

Tempting plants are often featured on gardening programs. *Orthrosanthus multiflorus*, a native iris recently shown on television, is from southern Australia and could be a real problem in subtropical areas. In its own region it's probably controlled by frost or other seasonal conditions which don't apply in our cultivated environment.

Don't forget the herb and vegetable garden. Vietnamese mint, *Persicaria odorata*, should always be contained and **never** plant it near a watercourse. It's already naturalised in creeks near Melbourne and certainly has the potential to naturalise elsewhere.

Despite the potential pitfalls, everyone can have a wonderful garden. It's a matter of careful choices and if you can't resist those dangerous beauties, then strict management will reduce the likelihood of adding yet another weed to the already too long list. In the final analysis, if it can't be controlled, it's best to find an alternative plant.

The river, then and now

Rudi Hoffman
Owanyilla, Tiaro

In 1930 we arrived at our new farm of 130 acres on the river in the Bell's Bridge area, opposite the mouth of Widgee Creek.

In those days, the scrub was thick along the banks, which very likely helped stop erosion of the river banks when floods came.

As the first wave of floodwaters moved down the river, you could actually hear it as it surged through the lagoons that ran alongside the river. And if you looked closely, you could see little fish leaping in the front of the wave.

But we, like other farmers, had to live and so the clearing began. Our farm started out as a mixture of scrub and

open forest requiring a lot of work to clear by hand in order to eke out a living. We cleared 50 acres in one lot that was full of scrub turkeys, wallabies and flock pigeons, along with numerous other wildlife.

After the war, in 1947, we had two floods in the short space of two weeks. It was apparent that the first one wet and soaked the soil and river banks, the second left a huge mess. Gum trees slipped into the river taking tons of soil with them. The river banks eroded badly, ruining cattle drinking sites and irrigation sites.

The river changed dramatically that year. These days, one can hardly recognise it as the same place.

My father, my older brother and I often used to camp on the riverbank, catching

our breakfast of cod or flock pigeons, or we often sat on the banks of the river and watched what seemed like hundreds of lungfish come up for air in a very short time. (About 1940, we set a cross line in the river and caught 20 lungfish.) Today, I venture to suggest, you will see but a few.

The river was clean in those days. More often than not, we used the river water as our bath, something few would be willing to do today given the condition of the river.

I do hope that some day in the future people will see the river as it was many years ago. Brimming with wildlife, lush vines and scrub along the river's banks, crystal clear water, just the sounds of nature.

Let's hope for a better day.

Salinity in the Mary Valley

Ross Searle
Department of Natural
Resources, Mines & Energy
Bundaberg

There are about 330 known salinity sites within the Mary River catchment, but this is most likely an under-estimate. The Burnett Mary Regional Group is currently surveying the situation.

Salinity hazard mapping prepared by NRM&E suggests 8 per cent (739 km²) of the Mary River catchment has a high potential for salinity to develop if the landscape is not well managed. A further 25 per cent has a moderate to high salinity hazard. Most of the moderate-to-high salinity hazard areas are in the lower reaches of the catchment near the coast. Most of the upper and western parts of the catchment only have a low to moderate salinity hazard.

Salinity causes

Salinity results basically from a hydrologic imbalance in the landscape. A natural landscape (including vegetation) establishes a hydrologic equilibrium where rainfall enters the landscape (groundwater) in 'recharge' areas and drains out into watercourses or naturally wet 'discharge' areas.

When we modify a landscape by clearing native vegetation, we increase the water entering the landscape. Irrigation adds even more water. As the watertable rises, natural salts dissolved from lower levels are transported up through the soil profile. When the watertable reaches ground level, these salts concentrate at the soil surface, resulting in a salinity outbreak.



Decreased cane production and surface erosion at a salinity outbreak near Bidwill Ck

Salinity effects

Salinity can have quite dramatic impacts but often the evidence of outbreaks is very subtle. In Queensland, salt may not appear on the soil surface until an outbreak is quite well progressed.

In the early stages, a salinity outbreak often appears as a seepage of boggy area. Sometimes trees will die off, but grass growth will increase because of the increased moisture.

As the salinity outbreak develops and the watertable gets closer to the surface, most of the vegetation will die off, except for salt-tolerant species. Bare patches or surface scalds may develop, leading to erosion.

Salinity is often considered an agricultural problem, but the dollar cost of salinity in urban areas can be much higher. Salinity can cause structural problems in roads, bridges and houses and affect the quality of town water supplies. Millions of dollars are currently being spent to rectify problems along the

Bruce Highway south of Maryborough, caused in part by salinity.

Managing salinity

In the Mary valley, recharge areas are generally close to discharge areas, which means areas affected by salinity outbreaks are usually fairly localised. This makes management easier.

The main aim of management is to lower the watertable, using either biophysical or engineering methods.

Biophysical methods are used either to reduce the amount of water entering the groundwater, or to use up excess water in the discharge area. Biophysical options appropriate for reducing the water entering the groundwater in the Mary valley include increasing native vegetation in the recharge area, reducing fallow periods, and using deep-rooted crops.

Salt-tolerant species can be grown in outbreak (discharge) areas to try to reduce water levels, but success may be limited depending on the severity of the outbreak.

Engineering options include subsurface drains or pumps to remove excess water from a salinity outbreak area. Sometimes this excess water can be reused elsewhere. Engineering options are generally relatively expensive, but they can often be feasible.

To view the Burnett, Mary and Western Catchments salinity hazard map, follow the links from www.nrme.qld.gov.au/salinity. Contact Ross Searle on 4131 5843 or ross.searle@nrme.qld.gov.au



Parkland in Maryborough severely affected by a salinity outbreak close to houses.

The Frog 'n Toad

Eva Ford, Project Officer
Living with Threatened Species
Mary River Catchment
Coordinating Committee

Unfortunately for our native tusked frog *Adelotus brevis*, listed as vulnerable under the Nature Conservation (Wildlife) Act 1996, it looks a lot like a juvenile cane toad.

If you're undertaking some juvenile cane toad eradication, it might be a good idea to check them out before helping them on their way.

Adelotus has a black and white marbled belly, as do young cane toads. It is also a bit warty on its back. It doesn't have poison glands, but then these aren't apparent on juvenile cane toads either.

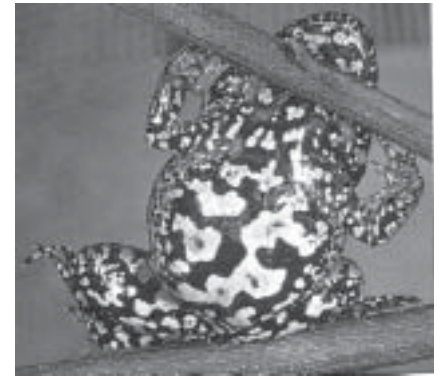
So how do you tell the difference?

- Toads have fully webbed back feet whereas the toes of *Adelotus brevis* have only a small trace of webbing.



- *Adelotus brevis* has bright red patches in its groin and on the backs of its thighs that cane toads don't have.

Always handle frogs and toads with clean, wet hands or preferably with disposable gloves to protect the frog's delicate skin and to avoid the spread of frog-specific diseases.



Unfortunately for *Adelotus brevis*, it looks a lot like a juvenile cane toad. [Left: Eve Witney; Above: Queensland Museum, 'Wildlife of Greater Brisbane', 1996]

The Living with Threatened Species project carries out many frog-related activities in the Mary River catchment.

If you have questions about frogs/toads or managing creeks and riparian vegetation, call the Mary River Catchment Coordinating Committee on 5482 4766 or mrccc@ozwide.net.au

On weeds, weedkillers, and natural regeneration

An update from 'Laughing Waters'

Denis Wood
Laughing Waters Rainforest
Retreat,
Flaxton

'Laughing Waters' is a 60 acre property bordering State Forest at Flaxton in the Blackall Range. Our cabin sits near the place where two creeks meet. Baxter Creek joins Mapleton Creek in a rocky gorge and drops via a series of pools and a waterfall into the valley below, eventually finding Obi Obi Creek, and soon after, the Mary River.

We arrived six and a half years ago with the idea of hanging out, relaxing, watching the water drop into the valley below. The responsibility of managing a big block of land has been sobering for us. We are still committed to fixing up the creeks as we were back then, but it is SLOW work, and our expectations are certainly more realistic now.

The first 500 trees we planted six years ago are now self-sufficient, providing a delightful canopy along Baxter Creek.

Three years ago, 2500 creeks went in along Mapleton Creek, with mixed results. We put cardboard rings then mulch around these trees to suppress weeds and keep the plants moist, but two years of drought meant the ground dried out, and the cardboard prevented any rain we did get from reaching the roots. We lost hundreds of trees. Eleven frosts in two years knocked out more trees.

Judicious use of herbicide has saved an enormous amount of maintenance. And using the 'frog friendly' Round-Up®, we can now clear 50-metre long strips along the creek, plant them out, let them get established, and then do another 50 metre strip six to twelve months later. It's slow, but it's manageable, and the results are there. I don't feel good about using herbicide, but once the

trees are established (two to five years) it's not needed after that.

We've found this way we can maintain two or three times as many trees and on balance, for us, it's the way to go.

The rainforest is coming back naturally in some areas on our property. There are clumps of wattles, cheese trees and guioas in some of the paddocks, which is great. The rainforest edge has been creeping out at about half a metre a year. The trees along the edge carry a heap of vines which seal the forest from light, but occasionally the vines bring these trees down, opening up the rainforest edge, and weeds get in. You have to be on the ball.

There is negligible regeneration in large tracts of lantana and blackberries. If left to their own devices these weeds would engulf 'Laughing Waters'.

So these days we plant about 1000 trees a year, maintain these, and keep the lantana and blackberries under control.

And with the time left over we swim, watch the water drop over the edge, and pray for the day when it will all look after itself.

Those Old Trees

Alan Franks
Hollow Log Homes

My wife Stacey and I run a small business designing, building and installing nest boxes. Our love of birds and mammals led us to this strange occupation.

In our ongoing research into the fauna that relies on hollows, we have become passionate about the greatest nest boxes of all, the Big Old Habitat Trees. We seem to be constantly advocating the value of retaining these beauties.

Recently we were asked by arborist Brendan Martin of Tree Solutions to join him in looking at a very old tree on Caloundra City Council land. The tree was apparently in danger of falling and could possibly be host to much native fauna.

The tree was on a road edge in the semi-rural area of Beerwah. It stood about 40 metres high, was hundreds of years old, had a huge fire scar at its base, and was very unstable. I could see the pain on Brendan's face when we realised just how unstable it was. The giant had to go.

We talked to neighbours and established that the tree was used by galahs and a very large owl. Council hired a 40-metre cherry picker and we began the task of looking in all the holes.

The first deep hollow we looked in had a brushtail possum tucked in behind a large lump of termite mudguts. He was sleeping on a bed of gum leaves that the galahs had brought in for future nesting. He would take some getting out.

As we travelled up the tree, hollow limb by hollow limb, we saw much evidence of nest building by mammals – deep compacted nests of eucalyptus leaves picked from nearby younger trees and carried curled in the tails of gliding possums.

As we rose above the top hollow, a squirrel glider appeared and without hesitation leaped from the 40 metre tower. We watched in awe as she gently glided over the road, did a beautiful left turn, landed without skidding on a tallowwood, and ducked straight into a small hole in the trunk. WOW.

The next hollow had an owlet night-jar in residence (a small nocturnal bird of the frogmouth family). We gently placed her in a bag and later transferred her to a nest box for a soft release later that evening.

I blocked each hollow with a towel as Brendan trimmed back the wood. We removed whole hollow sections and carefully handed them down to the ground crew. Inside one of these hollows we later found two feathertail gliders (the smallest of our gliding possums).

The hardest job was always going to be the brushtail; he loved his home and did not want to leave it. We had to dig through the termite mudguts to get him out and as we did so, the history of the nest hole unravelled itself like an archaeological dig. We found layers of egg shells, down and feathers belonging to galahs, wood ducks, scaly breasted lorikeets, rainbow lorikeets, owls, rosellas and kookaburras.

The history of these old trees is simply awesome. Many of them were already forest giants when Captain Cook sailed down the east coast.



Home to a wide variety of native animals, this forest giant was dangerously unstable and had to go. [Alan & Stacey Franks]

Because these animals can't speak for themselves, I would like to thank Caloundra City Council for allowing this situation to be handled in such a sensitive manner.

Contact Alan and Stacey Franks of Hollow Log Homes on 5472 3142 or info@hollowloghomes.com.au or visit their website at www.hollowloghomes.com.au

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A new bully on the block

Phillip Moran
Noosa & District Landcare

In 1993 the irrepressible Keith Garrity, Noosa Council's Noxious Weeds Officer, noticed an unusual plant growing around the edge of Lake Macdonald. This was identified as *Hygrophila costata*, or glush weed.

In February 2003 David Burrows (Noosa Council) mapped the extent of hygrophila in Lake Macdonald, and found 52 per cent of the Lake's 31.4 kilometre perimeter covered in this weed. Hygrophila had spread to cover approximately 73 hectares, at an average width of 4 metres...and this in ten years!

Hygrophila's ability to form dense thickets, excluding other vegetation, is truly mind-boggling.

A native of Mexico and Argentina, hygrophila is predominately a herbaceous riparian plant that can tolerate both low light and periodic water inundation, thriving in and around the margins of freshwater lakes and slow moving streams. Hygrophila grows to about one metre in full sun and taller in shade.

If you suspect you have this nasty little number, please contact your local council Weeds Officer.

The Lake Macdonald Catchment Care Group, in conjunction with the Alan Fletcher Research Station, is investigating various methods of eradication.



Phil Moran confronts an infestation of *Hygrophila costata* on the banks of Lake Macdonald [Lake Macdonald Catchment Care Group]

These include burning, covering in black plastic, grazing, and native plant competition.

This last one is interesting ... it was noticed that native dodder (*Cuscuta sp.* and *Cassythia sp.*) were covering dense thickets of hygrophila. The relentless vigour of the waterfront bully seemed to be lost in these situations. However in one trial area the dodder mysteriously disappeared. We have no idea what happened to it. Any ideas?

For more information on the activities of the Lake Macdonald Catchment Care Group contact Phillip Moran on 0412 507 363 or futurescentre@spiderweb.com.au



Hygrophila costata has angular stems, hairy stipules, and opposite leaves with fine hairs, prominent veins and a distinct midrib. [Waterplants in Australia, Geoff Sainty, 2003]

Fishing competition helps endangered species

Lynn Klupfel
Tiaro & District Landcare

For a relaxing and rewarding weekend, it doesn't get any better than the Tiaro Landcare Fishing Competition. This year's competition will be held on the weekend of 16-17 October. All proceeds go to conservation projects, so an added bonus is you will be contributing to protecting local endangered species.

This catch-and-release competition is based at Petrie Park at Tiaro. Anglers can fish the peaceful 29 km of the

ponded area of the Mary River above the barrage.

Facilities include a concrete boat ramp; numerous free camping sites; food, drink and bar facilities; and a concert on Saturday night.

We encourage children to participate, with many prizes being reserved especially for our junior anglers. Fishing workshops will be open to all children less than 15 years old.

Entry into the competition, whether you fish or not, makes you eligible for the

prize draws, including the \$1000 cash draw on Saturday afternoon.

The heaviest fish caught last year was an 89.2 kg eel!

For further information, contact Lynn Klupfel on 4129 6138 or David Burns on 4193 9017.



Sooty grunter threat

Michael Hutchinson
Department of Primary
Industries & Fisheries

A large sooty grunter, a fish species native to north Queensland, was captured near Kenilworth in early June. This followed reports of other sightings by anglers fishing near Gympie and Tiaro, raising fears local populations of endangered Mary River cod and Australian lungfish could be threatened.

These sooty grunter may have been released directly into the river, or they may have escaped from a farm dam during floods or when the dam overflowed.

In either case, it is illegal to stock sooty grunter into streams or farm dams in the Mary River catchment.

Sooty grunter are aggressive predators and could compete with lungfish and Mary River cod for food, or even prey directly on juveniles of local species. Sooty grunter prefer habitats which juvenile Mary River cod favour as nursery habitat and lungfish favour for spawning.

People wishing to stock farm dams must comply with the freshwater fish translocation policy to prevent accidental escape of non-native species and



Sooty grunter - illegal in the Mary River catchment. [Drawing from Grant's Fishes of Australia, 1995]

non-local species into waterways. Public waterways cannot be stocked with any fish species without a permit.

If you catch sooty grunter when fishing in the Mary River, you must not return these fish to the river (regardless of size). Please dispose of them humanely and report your catch to DPI Fisheries.

Information on which fish species can be legally stocked into farm dams in the Mary River catchment and other areas can be found on the DPI&F Fishweb website at <http://www.dpi.qld.gov.au/fishweb/1261.html>

For further information or to report catches of sooty grunter, contact Michael Hutchinson at the Southern Fisheries Centre on 3817 9540.

Plans for the Hatchery

Darren Knowles
Hatchery Manager
Gerry Cook Fish Hatchery

With the days getting longer and the temperatures getting milder, by the time this article is printed another breeding season should be underway.

We have found in previous seasons that the first of the spawnings coincide with the first full moon in late August/early September and the rise in water temperature to around 20 degrees.

The hatchery is operating with six pairs of broodstock this year. They all seem to be feeding well so another good season should be expected.

The brood-stock are currently being fed on a diet of cows' liver, pilchards and as many shrimps and yabbies as can be found. The shrimps and yabbies provide a great live food for the cod to keep their natural hunting instincts in tune, as well as provide calcium from their exoskeletons for the cods' egg development.

The ponds are currently running at around 17 degrees so the first dive to check the breeding pipe liners is not far away, unfortunately!! Brrr...

In other hatchery news the Noosa Shire Council, thanks largely to Ray Kelly and Ben McMullen, has recently passed a \$35,000 boost in funding for a proposed new hatchery building. This money is much needed; if you have ever visited the hatchery you would vouch that the building is in need of some TLC.

The new building would include improved educational facilities for hosting the ever-popular hatchery visits from schools and other associated groups.

To arrange a tour, find out more about the hatchery, or let the hatchery know about potential broodstock, contact Darren Knowles on 5442 5341 or 0407 126 256.

The Cod Conundrum

Gerry Cook

Considerable time and effort has been spent developing a captive breeding programme for the Mary River cod. About 50,000 fingerlings are successfully released most years into public waters.

Where are they now?

Follow up investigations are not being carried out, and we must rely on hearsay evidence for the very little information we receive.

Over the years, reports from anglers have indicated that at least some released cod have grown to maturity in places where cod did not previously occur, such as in Lake Macdonald.

The only targeted research into the survival of these fish was carried out a few

years ago by DPI Fisheries in the Widgee Creek catchment, confirming the survival of fingerlings in that area.

Unfortunately this work ceased after insufficient data had been collected.

If this programme had been extended to Tinana or Coondoo creeks, which have natural (not stocked) populations of cod, we might have gained insight into how successfully cod in the wild are breeding.

There are other areas and river systems where cod have been released over the years where enthusiastic stocking groups operate.

Perhaps we should seek to co-operate with these people to develop a broader programme of investigation.

Water for the future



Children at Gympie Central State School look for bugs in the mud. [MRCCC]

Deb Seal Mary River Catchment Coordinating Committee

Year 3 students at Gympie Central State School were the first to enjoy the MRCCC Waterwatch crew's new presentation with an interactive visit to the world of bugs.

The MRCCC and Cooloola Shire Council have joined forces to bring the message to the people of Cooloola Shire to 'turn off the tap' to save money and our environment.

New brochures tell residents and visitors to the shire about how to save water and where the water from household and garden drains ends up. These bro-

chures will be distributed to students throughout Cooloola Shire as part of a light-hearted, innovative presentation, prepared by MRCCC project officers with assistance from Cooran artist Peter Teakle.

The presentation encourages children to think about the environmental impact of using too much water by considering the needs of all the other creatures that rely on abundant clean water supplies.

Copies of the brochures are available from the Cooloola Shire Council offices and the Mary River Catchment Coordinating Committee Resource Centre, 53 Tozer St, Gympie or call 5482 4766.

Water Plan CRP news

Scott Buchanan Department of Natural Resources, Mines & Energy

At their August meeting, the Mary Basin Community Reference Panel (CRP) discussed farm modelling prepared by Ridge Partners as an aid to understanding the use of water as an input to agricultural enterprises.

After incorporating the CRP's advice, staff at the Department of Natural Resources, Mines and Energy will use the

models to test the sensitivity of irrigated businesses to change in the process of developing the Mary Basin Draft Water Resource Plan (WRP).

The CRP also considered advice to set aside a reserve of unallocated water to cater for potential future demand, as a way of ensuring environmental flow objectives and existing water allocations are protected.

For more information contact Scott Buchanan in Gympie on 5480 6226 or scott.buchanan@nrme.qld.gov.au.

COD Contacts

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Friends of Kilcoy Creek

Dale Watson, MRCCC Project Officer
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Living with threatened species

Eva Ford, MRCCC Project Officer
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Noosa & District Landcare Group and Plant Nursery

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Gympie & District Landcare Group

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Gympie Landcare Plant Nursery

TAFE Campus, Cartwright St, Gympie
Ph: 0407 821 100

Tiaro & District Landcare Group

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Lower Mary Landcare Group

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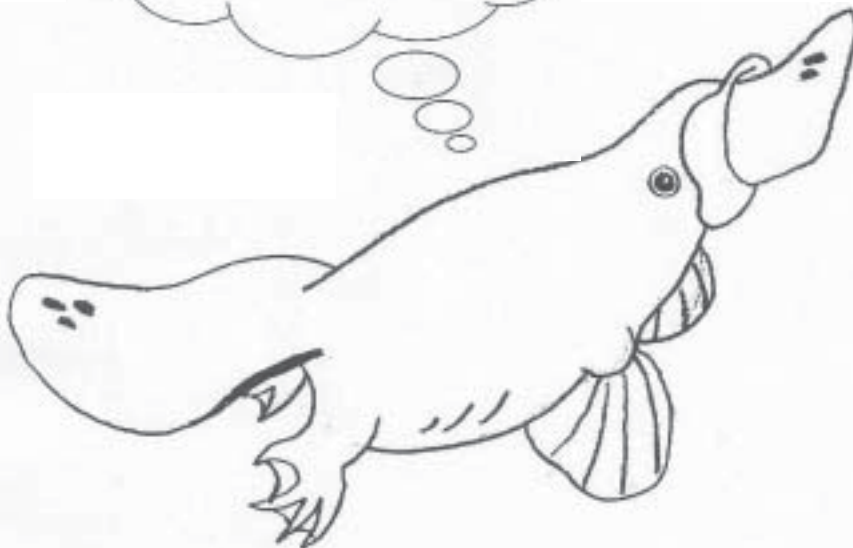
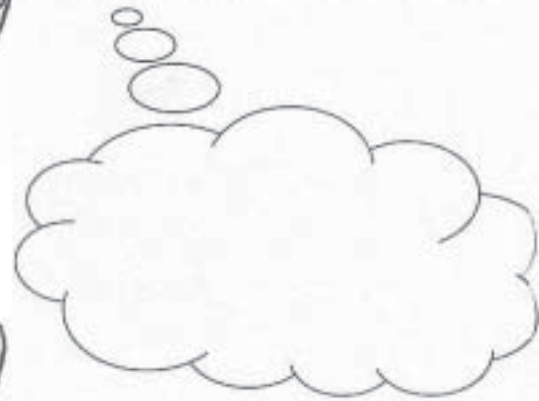
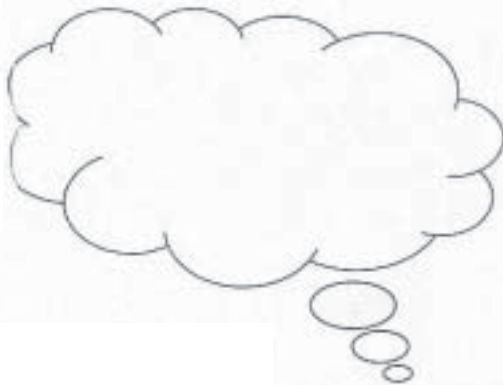
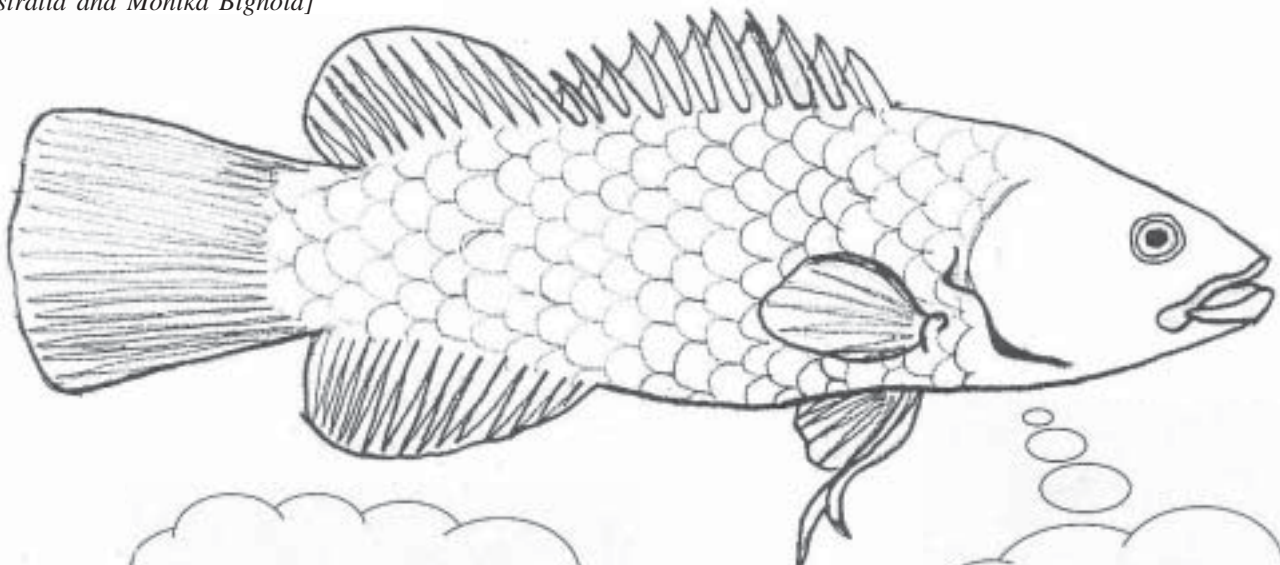
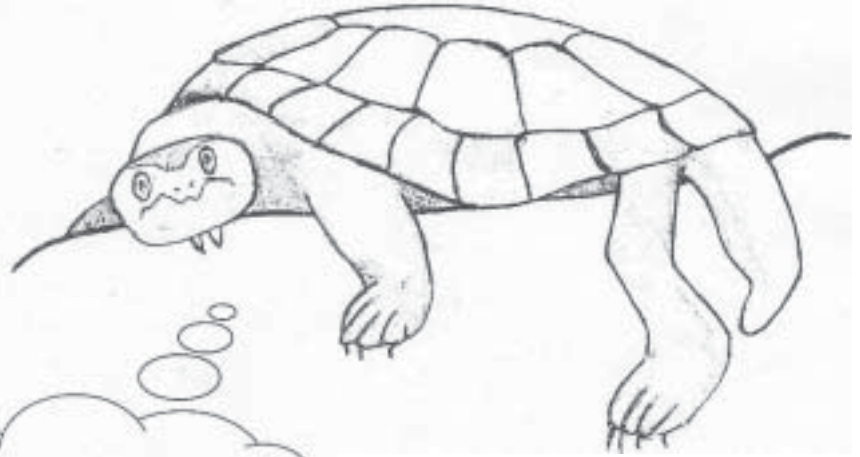
Imagine ...

... you are an endangered Mary River turtle, sunning on a log and contemplating your choice of sand banks for nesting, or an endangered Mary River cod, lurking by a snag ready to ambush your next meal, or a platypus, gliding up for a breath of fresh air.

What would you have to say to the people who live in the Mary River catchment?

Fill in the thought bubbles, colour in the animals, and if you like, send your finished work to ewitney@campac.net.au or The Editor, PO Box 755, Maleny 4552, including your contact details.

[Drawings courtesy of Greening Australia and Monika Bignold]



Amphibious trivia

A group of frogs is called an 'army of frogs'.

A group of toads is called a 'knot of toads'.

The CODLine

is hosted by Barung & District Landcare Group.

Additional support from the Mary River Catchment Coordinating Committee and Mary River catchment local authorities is gratefully acknowledged.



MARYBOROUGH
CITY COUNCIL



WORKING FOR OUR FUTURE

MARY RIVER



CATCHMENT COORDINATING COMMITTEE

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