

The CODLine

*Incorporating NEWS of the
Mary River Catchment Coordinating Committee*

Land for Wildlife and Bushfoods

John King
Landholder, Conondale

Around 20 years ago I started looking for a block of farm land. Having camped for many years in the Conondale Ranges there was only one area for me to look – the upper Mary Valley. On the second block I looked at I wandered across a 10 acre flat paddock to a lovely small creek. I thought to myself, ‘Well, this has potential.’ Then I wandered over a ridge and down into 20 acres of bunya rainforest. I was hooked.

With raising children and volunteer work, we used the block for camping and bushwalking until 1997. Rain, rain and more rain and a 1-in-100-year flood in 1998 meant building the house took from January to November. The builder rang to hand over the house on the day of our middle son’s funeral. What a year.

In 1998 we fenced off the riparian zone with a Mary River Catchment Care grant and allowed Harpers Creek to start regenerating itself.

I have been planting native trees since I bought the land, finding that the only trees that the cows would allow to grow were banyas. For many years I gathered seed from my forest to germinate. I grew the banyas up to 6 inch pot size and planted them out. I lost very few, mostly to well-intentioned burning off by neighbours, none to cow predation.

Harpers Creek flows east-west through our property. The northern up-slope from the creek has done well with self-

regeneration and the closing canopy is pushing out the lantana. Lantana seals the edge of the regrowth areas and, with the good source of native seed still there, provides nursery conditions for the native trees.

The 1-in-100-year flood washed every weed you can think of down from the Maleny area. More of my time is spent trying to fight weeds than anything else. A large proportion of the property is still grazed to manage weeds.

We’ve noticed the wildlife won’t go where cattle are grazing. We extended the electric fencing to plant the bushfood plants we need to produce most of the fruit and leaves for our Rainforest Liqueurs business. One week after fencing the cattle out there was evidence of bandicoots and echidnas having returned – all those little conical holes providing water traps for the rains to fill. Feathered predators of insects also moved in, and then the predators of the furry and feathered predators flew and slithered in. As one level proliferates, another control arrives.

Antechinus, bush rats, water rats, field mice, yellow belly gliders, powerful owls, platypus, sea eagles, wedge tails, and the scaled predators of the small rodents. Lots of visitors and a few memorable moments, like Mary shaking me out of bed one night to say, ‘THERE IS SOMETHING ON THE VERANDAH’. So I wandered out, turned on the light and opened the door to peer blearily – straight into the eyes of a powerful owl perched on the railing. After a blink



The brown pine Podocarpus elatus, known as gidneywallum by the Aboriginal people, supplies succulent fruit for Rainforest Liqueurs. [Photograph by John King]

at me, he threw out his wings and was gone. A very moving moment.

In September 2002 we joined Land for Wildlife, which has been a valuable source of practical information. We were attracted to being able to get specific information about our local environment, and also to being able to pass on the information we are gathering. We value the contacts we’ve made with other landholders through Land for Wildlife and knowing there are others in

... continued on Page 2

Land for Bushfoods

... continued from Page 1

the area who share our interests and concerns.

I first started educating myself on bushfoods when the Cribbs' book came out in the early 1970s. I had the idea of creating a retirement job on a country block using what I had learned from many years of voluntary work with Greening Australia Queensland. If I had known about the hard work ahead, I would just have gone to the pub. Instead I did it the hard way. I had run a toy pub at the Caboolture Historical Village for 10 years as a volunteer and had tried out various sample liqueurs on the visiting public, giving away free drinks. Market research in real time, and from that I found the direction and recipes I would eventually use.

Not having the money to hire lawyers to do it all for me, I slogged away and gained an education. Planning approval for the business, building approval, State Liquor Licence, Federal Excise manufacturing licence, licensed bond store, permit to transport alcohol, full licensed commercial kitchen to Health Department standards, Council manufacturing licence, and application fees and continuing fees as the Council finds more ways to extract fees from us.

Twenty-six sets of plans and four years later I was able to start selling my Rainforest Liqueurs. It is good that I have a tolerant and hard-working wife.

The biggest hurdle was (and still is) finding enough native foods. With our wild plants being bi-annual or tri-annual fruiting and the effects of low rainfall years and fires, sourcing the raw materials for the business is interesting!

I try to work out ways to make two products from some of the botanicals I use, so as well as the liqueurs I have pioneered glace bushfoods, and I also supply some native herbs for flavouring and teas.

When we harvest we leave the top third of the fruit for the birds and the middle third for the continuation of the species. Wind, water and gravity spread seed, but where the rainforest is fractured into pockets, the forests need the extra little bit of help provided by the wildlife and we people who are into regeneration.

Birdwing blitz

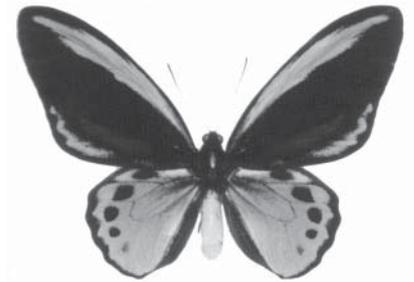
Eva Ford
Mary River Catchment
Coordinating Committee

The Mary River catchment is exceedingly important for the vulnerable Richmond birdwing butterfly. These stunning butterflies once ranged throughout the catchment, all the way to Hervey Bay. Now only small pockets remain in the upper catchment around Kenilworth and the Conondale Ranges. Rainforest clearing is, of course, the major cause of declining numbers, but drought can kill or reduce the new growth on their host vine *Pararistolochia pravenosa*.

The Richmond Birdwing Recovery Team (RBRT) is developing community activities towards recovering the vulnerable Richmond birdwing butterfly.

Under the banner of the RBRT, the Mary River Catchment Coordinating Committee's (MRCCC) Living with Threatened Species project, with assistance from Maroochy Shire Council, has developed a project to assist people who would like to plant the caterpillar's host vine on their property.

Each caterpillar requires about 2 m² of leaf to grow and pupate. People need to plant 30 to 50 vines to provide a good supply of food for a bunch of caterpillars. The vine requires semi-shade, well-drained soil and something to climb up (non-deciduous tree, fence or trellis). It is a slow grower and doesn't tolerate dry. For the first three years it may require watering and fertilising.



Richmond birdwing butterfly and foodplant Pararistolochia pravenosa in flower.
[Images courtesy of Don Sands & CSIRO]

The rewards are priceless as who can measure the joy of seeing these emerald-green beauties dancing amongst the trees again?

If anyone is interested in planting these vines, or knows of locations of the butterfly or vines in the wild, please contact Eva Ford at MRCCC on 5482 4766 or mrcceva@ozwide.net.au Eva would also like to hear from people outside Maroochy Shire as further funding will be sought if there is enough interest. The Richmond Birdwing Recovery Team can be contacted through Don Sands on dsands@bigpond.com or 3374 1608 or Sue Scott on 3200 7432 or Susanne.Scott@bigpond.com

Glossy Black-cockatoo needs help

SEQ has some significant populations of the glossy black-cockatoo *Calyptorhynchus lathami*, the rarest of Australia's cockatoos. The birds are extremely specialised feeders, favouring certain species of she-oaks (*Casuarina* and *Allocasuarina*) and even certain individual trees. To contribute to a more secure future for the glossy black-cockatoo:



Source: BAAM Pty Ltd

- Protect she-oaks and hollow-bearing trees on your property
- Get involved in organised searches
- Report all sightings.

If you have seen a glossy black-cockatoo or found evidence of their feeding (ie cone chewings) or would like to get involved in planning their future, contact Lisa Bailey on (07) 3824 8611 or lisab@redland.qld.gov.au

A Farmer's Life

Peter Stevens
Landholder, Maleny

It was with little regard for the complexities of farming that in 1990 I bought a small 62 ha cattle farm in Maleny. True, I did have a degree in Agricultural Science but it was in horticulture and not animal production. I took the broad view that I was really growing grass and got on with it.

Shortly after acquiring the farm it occurred to me there were productive and non-productive areas. Some areas were very difficult to manage and others were very wet and dangerous for my cattle. I saw I would need to improve fencing and remove some of the more difficult areas from stock access. I contacted the local landcare groups and sought their advice and possible funding for the most obvious areas.

We have about 1500 m frontage to our local creek, the Obi Obi, which is also the main water supply for Maleny and subsequently for the Sunshine Coast as it flows into Baroon Pocket Dam. The farm covers a small valley with the creek at one end. The farm itself has next to no vegetation, having been extensively cleared for dairying. However a small remnant on the creek, with approximately 180 species, is considered one of the three best remnants upstream of Maleny.

My strategy was to work from the remnant outwards, linking to another small gully that we intended to revegetate. It all seemed really easy until we actually started putting the planning into practice.

The first hurdle was the cost of establishing the required works. The landcare group was pretty good here but the true cost was underestimated. I foolishly thought I would undertake most of the maintenance, which turned out to be about ten times more time-consuming and expensive than I thought.

Then there were the floods, just two days after planting about 1000 trees; I think we saved about ten percent. Of course six fences, the stakes and mulch were all washed away too.

After that things went pretty well until the worst frosts in about twenty years

wiped out about eighty percent of the trees (our minus 6 degree frosts weren't taken into account when the species were selected). Of course, all this happened over about three years.

My advice for waterway revegetation is be prepared for everything to go wrong! If you're starting with a bare creek bank:

- Stick to a maximum of ten species that are bullet-proof and will perform even under the worst conditions.
- After three years, gradually introduce biodiversity using your initial planting as protection.
- Fence away from flood lines if possible and parallel to water flow. Incorporate sacrificial sections of fencing where you think there might be problems.
- Try to get a minimum width of 20 metres and up to 50 metres along the bank for revegetation.
- Start with easy areas and link them later on with more difficult areas.

During this time I thought I should give a little back to landcare by becoming involved in the local catchment group. I wouldn't call myself a greenie or an environmentalist, yet I have found myself President of this group.

Why did I go through all this torture and why am I still doing it? Good question. Apart from the practical considerations of farm management, I do derive tremendous pleasure and satisfaction from my catchment care activities. I also believe my farm will increase in value and be more saleable as a result of my activities. I should also mention that the health of my cattle has significantly improved since we installed crossings and restricted access to wet areas, particularly calf survival.

If we really want to make a difference in catchment care, I believe we need to change our approach to revegetation works, and we need to do it on a much bigger scale.

When all the responsibility and much of the cost is put on the landholder –



Peter Stevens standing by the high-quality vegetation remnant on his property on the Obi Obi Creek, upstream of Maleny.

[Photograph by Sharon Harwood]

when they see how much work is involved (probably doing most of it themselves) and they have to deal with the job running over cost and pick up the overrun – they can get burned and lose their spirit for the work, and may be less likely to continue.

On the other hand, if the initial works are fully funded – especially for the larger landholders who have the significant amount of streambanks that are needed to make a difference – then once people see the benefits and the results they are much more likely to get keen, feel empowered, and continue with the works. And projects, including maintenance, need to be funded for at least three years and up to five in difficult areas.

Any short term benefits to farmers from paid catchment care is adequately recovered in the long term by all that catchment care stands for.

I believe the major beneficiary of catchment care is the community and if they want catchment care we will need to find ways to fund this on a full cost basis. Farmers should be made to feel empowered to allow catchment care activities to be undertaken on their properties, allowing part of their land to be used and maintaining good fencing, while all revegetation and maintenance is paid for by the community.

Up, Up and Away

Rachel Lyons
Cooloola Shire Council

After over three plus years of hard slog by our small group of dedicated committee members, things are finally starting to materialise for our group, the Sunshine Coast Camphor Laurel Timber Initiative Inc.

The Sunshine Coast Camphor Laurel Timber Initiative Inc. is a not-for-profit community organisation based in Cooroy. We aim to assist Landcare, Councils and other groups tackle the invasive camphor laurel by harvesting, milling and value-adding the pest tree. The Initiative offers a sustainable, innovative and economic approach to tackling a significant natural resource management issue throughout the Sunshine Coast and Cooloola region.

The group is an unusual alliance of timber millers and manufacturers and those with environmental interests. Initially started as a means to provide employment and training diversity to the timber industry after the SEQFA Mill closures, our initiative has support from various Landcare and Catchment groups throughout the region as we attempt to tackle and value-add this particularly nasty environmental weed.

Our group has achieved a major milestone in constructing our manufacturing shed at the Cooroy Forest Park (ex Lower Mill) in the heart of Cooroy, with the outstanding support of Noosa Council and the Area Consultative Committee. Both organisations funded (in the tens of thousands) the base structure and various items of machinery soon to be housed in the shed.

The success of the Initiative to date is the result of donations of time, services and products by a large number of people and organisations. As I write, several committee members and a very generous volunteer plumber are installing the plumbing fixtures in the shed and associated absorption block. Then we will get onto painting and fitting out the shed and absorption block in time for the Ministerial opening in December.

Now that the shed is built there are a million and one things that appear to need attention to get the Initiative off to



Col Gunson and Stan Ryan relocating a camphor log prior to shed construction.
[Photograph by Phil Moran]

a great start toward becoming a highly valued community organisation. We are exploring the various local and national camphor product lines, refining our initial product lines, calling in local millers and fine furniture enthusiasts to participate, negotiating trainees and youth training opportunities, sourcing timber from throughout the region, fundraising, exploring oil extraction and eco-generation options, and writing grant applications for a truck and mulcher, just to name a few things.

Our goal of a quadruple bottom line community-based organisation can only

be realised with the help of the community. The support to date has been amazing and hopefully paves the way for a great operational start to the project. If you feel you may have something to offer the group, be it assistance in milling, fundraising, marketing or administration or the like, we would love to hear from you.

For more information or to offer your services, contact President Stan Ryan on 5447 6198 or Secretary Rachel Lyons on 0417 078 432.



Cod Contacts:

Nature conservation on private lands

Land for Wildlife

Caboolture Shire Council	Brad Dines	5420 0213
Caloundra City Council	Nick Clancy	5420 8791
Maroochy Shire Council	Stephanie Cumming	5441 8002
Noosa Shire Council	Dave Burrows	5449 5202

Voluntary Conservation Agreements

Contact your local council or the QPWS's Community Nature Conservation extension officers for southeast Queensland on (07) 3202 0222 or for Maryborough on (07) 4121 1800.

More information available through the QPWS on 1800 603 604 or www.epa.qld.gov.au/nature_conservation/nature_refuges



Conservation on private land

Phillip Moran
Noosa & District Landcare

Just think back to when you were young (or younger!), and remember how your local area used to look. I remember catching native fish for my aquarium from a little creek in Brisbane, called Kedron Brook. The same creek today is behind Westfield Toombul Shopping Centre. It is gun-barrel straight and lined with concrete ... it's not a creek, it's a drain!

State-owned National Parks and related reserves cover only four percent of Queensland. It is increasingly difficult for governments to manage these parks effectively. The reality of nature conservation for the future lies with private individuals – we *all* have a role to play.

Various options are available for protecting areas of natural environment on

private land. Depending on the type of agreement, financial and technical support may be available to the landholder. *The types of agreements available to landholder largely depend on what is offered through the local council.*

Land for Wildlife is a voluntary, non-binding program offered by some councils. Benefits include recognition and involvement with other like-minded landowners, regular information and advice, detailed maps, and possibly opportunities for funding. Probably the most important benefit is knowing you are not alone – some of your best advice can come from fellow Land for Wildlifers.

Voluntary Conservation Agreements are legally binding agreements (in the form of a statutory covenant) negotiated between landholders and their local council or the state government

(under the conservation or lands legislation). After the VCA has been satisfactorily negotiated, the area can be declared a **Nature Refuge**.

VCAs currently provide the highest level of protection. There is still a degree of flexibility in these agreements, but they are *intended* to protect the land in perpetuity, are attached to the land title, and bind successive landowners. Agreements, covering all or parts of properties, are tailored to suit the particular area's and landholder's management needs. Benefits to the landholder can include rates rebates, free trees, assistance with weed control and other works, and additional financial assistance, in addition to the Land for Wildlife benefits.

For more information on conservation agreements, see page 4 for contacts.

Burrawingee Nature Refuge

Phil Moran
Landholder, Noosa hinterland

'Burrawingee' is the aboriginal name for *Auranticarpa rhombifolia* (Diamond Pittosporum).

Around the 1950s, this land was part of a three thousand acre cattle property. At this time the Government subsidised the broad-scale use of superphosphate, which was spread by air. When this subsidy ceased the station became non-viable and was gradually broken up and sold as smaller land parcels. In 1998, I purchased 33 acres of this land.

At this time I was forty years old, had recently become separated, and had a decision to make. After some soul searching I decided that the biggest single thing I could do to help our 'Land' was to purchase a chunk and look after it. I therefore decided to buy more land and less 'house'.

The first thing I did was remove the remaining cattle.

At about this time I was lucky enough to gain employment at Noosa & District Landcare for one day per week. As this gradually increased to its current level of about 8 days a week (!), I became

involved with a number of like-minded individuals working for the fledgling Environment Services Section of Noosa Council. Through this association with people like Alison Buchanan (who now works for Maroochy Council) and David Burrows (Noosa Council's Bushland Management Officer), I was introduced to Craig Middleton from the Environment Protection Agency (EPA).

I was already a member of 'Land for Wildlife', so when Craig suggested Nature Refuges to me I knew I had to be involved.

A Nature Refuge is the top of the Conservation Agreements. It is a legally binding agreement between the landowner and the State Government. Craig and I sat down and set aside about three-quarters of the land for conservation under the Nature Refuge guidelines. This means that no building, subdivision, agriculture, earthworks, even collection of firewood can take place in the Nature Refuge.

It also means that if I sell the land, or when my thirteen-year-old son inherits the land, this agreement stays in place... forever.

To me, this is not draconian; it is exactly what I would have done with the land anyway.

I live in a reasonably sized shed. I have no phone, or mains power. I do have mobile reception and a small generator, which provides lights, computer, music, a small gas fridge and the usual trappings of 'civilization'.

I have a composting toilet (no, they don't smell), and an 'army' shower. This is a canvas bag that you fill with warm water and pull up with a rope... it's great. My son and I lived here for about three years without all these luxuries, so everything is relative!

Being part of the Nature Refuge Programme is one of the best things I will do in my lifetime...

Only after the last tree has been cut down,

Only after the last river has been poisoned,

*Only after the last fish has been caught,
Only then will you find that money cannot be eaten.*

Cree Native American Prophecy

Black Mountain Range on the mend

Joel Bolzenius
Noosa & District Landcare Group

An exciting project to be carried out in the west Cooroy area by Noosa & District Landcare was recently approved by the Burnett Mary Regional Group.

NDLG will be working with over 40 local landholders in the Cooroy, Blackfellow, and Happy Jack creek subcatchments (all of which are linked by the Black Mountain Range) to safeguard bank stability and improve water quality, and to improve biodiversity by protecting and restoring vegetation.

Currently the riparian zone along Cooroy, Blackfellow, and Happy Jack Creeks, although continuous, is narrow, leaving it highly vulnerable to rapid degradation. There is a need to increase the width of the riparian zone to ensure ecological thresholds are not crossed and to limit further degradation.

It is also important to establish corridors of vegetation linking differing regional ecosystems (designated vegetation communities) to enable seasonal and regular migratory movement within the catchments, particularly from lowland to upland areas. This will improve the ease with which wildlife can move during flood and drought events.

Streambank fencing and strategically positioned off-stream watering points will limit livestock access to each water-



Landholder Harry Kirk standing amongst vegetation to be protected as part of the Black Mountain Range subcatchments project.

way, reducing the current rates of stream bank erosion and creek bed disturbance and the consequential sediment loads.

Working with landholders is not only practical but allows for everyone to gain greater insight into the issues associated with the long-term management of this area.

For more information about the project contact Joel Bolzenius (project officer, NDLG) on 5485 2468 or Josie Kelman (biodiversity team leader, BMRG) on 5483 7718.

Wanted: Cat's claw

Dr K. Dhileepan
Alan Fletcher Research Station

We are researching molecular variations among Australian populations of the cat's claw creeper *Macfadyena unguis-cati*. This will help us to determine the weed's original source where we will look for potential biocontrol agents.

If you have cat's claw creeper growing in your area, kindly send leaf samples.

This is the collection protocol for collecting and preserving field samples of fresh leaves for DNA analysis:

- Select 5 plants.
- From each plant, pick 4 or 5 leaves that are healthy, if possible from the young, fresh growth.
- If the leaves are wet, wipe off the surface moisture with a tissue.
- Place all the leaves from each plant into a paper bag (separate bags for each plant).
- Label each bag with the location, and GPS reading if possible.
- Forward samples to Dr Dhileepan at Department of Natural Resources & Mines, PO Box 36, Sherwood Qld 4075.

For more information contact Dhileepan on (07) 3375 0743 or k.dhileepan@qld.gov.au

Lake Macdonald Hatchery Report

Darren Knowles
Hatchery Manager

The breeding season has been in full swing for a couple of months now, and there have been seven spawnings.

Whilst it doesn't look like being a record-breaking season this year – unlike the 79 500 released last year – there is still a fair number of fingerlings in the troughs. We are hoping to have around 60 000 ready for release in the period leading up to Christmas.

The fingerlings are being fed on their diet of blackworms from Victoria and as much plankton as can be supplied from the hatchery ponds.

Ten thousand of the larger fingerlings have already been released into Lake McDonald to alleviate the problem of overcrowding in the troughs.

This is necessary because when the fish are crowded, due to limited space in the hatchery, they become stressed

which allows disease to take hold quickly, leading to huge losses.

The hatchery held an open day during the Festival of the Water on Sunday 15 October which was very well received by the 100 or so people that came for a look through the hatchery.

If you are interested in having a look through the hatchery, now is the time, so give the hatchery a call on 5442 5341 to organise a tour.

Deeeep End 5

Eva Ford, Catchment Officer
Mary River Catchment Coordinating Committee

Each weekday as I make my way to my 3.00 pm appointment with the school gate, I have the pleasure of listening to Radio National's 'Deep End 5'. People from all over this little island of ours contribute lists of their five favourite 'things' – Greek gods, printing fonts, Kylie Minogue's outfits etc. I got to thinking – I wonder if they'd accept my five favourite frogs on the program?

This is the time of year when, as my role as Catchment Officer with the Mary River Catchment Coordinating Committee, I follow my ears and eyes up the tributaries of the Mary River to find and record our precious amphibious gems.

Our catchment is unfortunately home to some of Australia's disappearing frogs. Many other species remain although some are present in reduced numbers and some are declining still. The frog diversity of this catchment is fantastic with over 50 species. Ten of these are listed as Vulnerable, Endangered or Presumed Extinct, possibly due to habitat destruction, disease, pest species, changes to flow of waterways and pollution.

However as I am privileged to study the preferred habitats of our endangered and vulnerable frogs, I am usually able to turn up a good set of records on a night (weather and energy levels dependant of course).

So here are my five favourite frogs at this point in time – just a few of the many frogs I enjoy finding during my night-time escapades.



Stony creek frog (female).

[Photograph by Eva Ford]

No. 1. Giant barred frog *Mixophyes iteratus*. What a gem! What a monarch of the frog kingdom! To find one of these is the icing on the cake. The largest frog in our region, the giant barred frog is stunning in appearance and behaviour. Even though very well camouflaged to hide amongst the leaf-litter, it is hard to miss its large, gold eyes in the torch beam. Its call, too, is a dead giveaway that one is stoically parked along the creek bank awaiting the woman of his dreams. An Adam's apple is essential to mimic the deep, Rottweiler-like call, sounding much further away than it really is. Once in hand these frogs are docile and extremely cooperative to close inspection, unlike their restless, can't-have-me cousin the great barred frog *Mixophyes fasciolatus*. Although the habitat requirements of these two species overlap I rarely, if ever, encounter them together. But another reason I like the giant barred frogs so much is I can see if it has a nuptial pad without the assistance of a hand-lens (the over-40s will empathise).

No. 2. Clicking froglet *Crinia signifera*. On the rare occasions when I come across this species I just delight in its call (about the only way of knowing they are around). Reminiscent of a game of ping-pong (the double bounce version), it is much more relaxing to listen to this small brown frog's voice than it is to try to find it! It has a very big voice for such a small body (it does seem that the most penetrating frog calls come from the tiniest species, a bit like humans I suppose). *C. signifera* remind me that 'frogs rule' even during winter as the cold temperatures seem to stimulate them to get their bats and balls out and get to the ping-pong table.

No. 3. Southern orange-eyed treefrog *Litoria chloris*. One of the more stunning of the treefrogs and, for this reason, often pictured on cards and posters. Head out after heavy rain and you may be rewarded with a group calling and a visual feast. Their immaculate emerald green skin and contrasting fire-red iris and their willingness to perch around human height amongst the veg-



Giant barred frog (male).

[Photograph by Eva Ford]

etation gives the budding photographer a preverbal banquet. Timing is all when seeking this species as they like to get down to business during and after heavy spring and summer rains. Be prepared to get wet for the privilege.

No. 4. Stony-creek frog *Litoria wilcoxii*. Yes, its scientific name has changed (previously *L. lesueuri*). In the areas I frequent, when all is quiet and frustration starts to set in, old faithful can usually be relied on to appear. The Stony-creek frog, not often detected by its quiet call (although I have heard some pretty loud individuals), reveals itself by a rustle of leaves or a flash of movement in your torch beam. If you are lucky you might find a stunning male showing off his radiant yellow costume. More often they are a fawn or chocolate colour, blending in with the sand and gravel bars they favour. Even though they are very common along our waterways I like to keep a eye on this species because they are declining in other parts of their range.

No. 5. Striped rocketfrog *Litoria nasuta*. What an athlete! To catch this slippery subject you need a whole tribe of kids and a firm grip (that's why freezer bags as gloves are so good). I rarely get to size or sex these fellas during the quick glimpse they allow before being shot from an invisible bow to become one with their surroundings again. The challenge with this species (besides being difficult to find and catch) is that its call is frustratingly similar to that of the broad-palmed rocketfrog *L. latopalmata*. As their habitats overlap I am always reluctant to record one or the other without seeing it. But those back legs of *L. nasuta* just impress me no end and I will continue my daily walk/jog in a quest to emulate them!

MRCCC on the move!

Deb Seal
Mary River Catchment
Coordinating Committee

The MRCCC has been as active as ever during the past year. Our recent AGM re-elected Harry Jamieson to the position of Chair, Paul Marshall to the position of Vice Chair and Margaret Thompson to the position of Secretary/Treasurer. A call for further nominations subsequently returned Horticulture Delegate Jim Buchanan to the Executive.

Paul, Margaret and Jim have all represented various sectors on the Sector Representation Groups and the Community Reference Panel for the draft Mary Basin Water Resource Plan, which was released in November for consultation.

The MRCCC recently received notification from the Department of Environ-

ment and Heritage of entry to the Register of Environmental Organisations. This is an important milestone for the organisation, which also confirms our Gift Recipient Status and provides tax deductibility for donations made to the MRCCC.

During the next fortnight the MRCCC are on the move – literally across the road to QR Buildings. Whilst not as palatial as our former offices, they are centrally located and the price is right! With a little bit of paint and the odd lomandra here and there we should be able to work miracles.

Working in the old Wide Bay Dairy Factory Office in Tozer St Gympie has been both a pleasure and an honour for the staff of the Mary River Catchment Coordinating Committee. The whole complex is steeped in the history of the Dairy Industry, and so it is fitting that it was



ultimately sold to a dairy farmer! The building we are vacating was built during the 1920s and still displays the original plaster ceiling architraves and many other features of the period – apparently one of the best examples of the era in Gympie.

All contact details for the organisation will remain the same, the only difference being our physical address which will change from 53 to 42 Tozer St.

Visit the project officers at the Mary River Catchment Coordinating Committee's Resource Centre, 42 Tozer St, Gympie, or contact them on 5482 4766 or mrccc@qldwide.net.au

Widgee/Wide Bay Ck Waterwatch

Dale Watson
Mary River Catchment Coordinating Committee

A big welcome to the MRCCC's newest Waterwatch team, the Widgee & Wide Bay Waterwatch Network.

The MRCCC is currently forming a brand new Waterwatch Network in the Widgee and Wide Bay Creek subcatchments with funding supplied by the Federal Government's National Landcare Program and as a follow-on activity from the Wonga District Drought Recovery Project.

The Waterwatch Network will involve local volunteers monitoring the water quality along Widgee and Wide Bay Creeks and the tributaries flowing into them.

The volunteers will be monitoring for a range of water quality parameters including temperature, salinity, pH, dissolved oxygen, turbidity, nitrates and phosphates.

The monthly data collected by the volunteers will be used firstly as baseline data to determine the general stream health of the creeks. Eventually the data will be used to set local water quality

guidelines for these creeks, allowing the community to monitor any changes (for better or worse) in the catchment's water quality.

Widgee and Wide Bay Creeks are located in the west of the Mary River catchment. Widgee Creek begins in Wrattens State Forest, flowing through the township of Widgee and entering the Mary River near Sexton Road off the Wide Bay highway. Wide Bay Creek also begins in Wrattens State Forest, but flows north-west through to the town of Kilkivan, then east through the township of Woolooga, entering the Mary River just east of Sexton.

Both creeks are very important features in the western Mary River catchment. Wide Bay Creek supplies water for the township of Kilkivan as well as for many irrigators along its length. Widgee Creek is also an important water resource for local irrigators.

Both creeks are known habitat for the endangered Mary River cod. Older generations can recall a bountiful supply of cod in these two creeks in the early

1900s, but today unfortunately they are very rare.

Many local landholders are interested in becoming Waterwatch volunteers because they use Widgee and Wide Bay creek water on their farms for crop irrigation or livestock watering. Waterwatch testing allows landholders to monitor water quality parameters that may affect crop and livestock health on their properties, such as pH, nutrients and salinity levels.

On Saturday the 29th of October an Introductory Waterwatch Field Day was held at the Kilkivan Showgrounds. Local landholders came to find out what is involved in becoming a Waterwatch volunteer and to learn about the water quality issues of Widgee and Wide Bay creeks. There were demonstrations of water-testing equipment, water-bug sampling and a barbecue.

If you are interested in finding out more about the Widgee & Wide Bay Creek Waterwatch Network, please give Dale Watson a call at the MRCCC on 5482 4766.

Splatter that lantana!

by John Hunter, Ecologist
NSW Dept of Environment
& Conservation

An 'old' method for controlling lantana – 'Splatter gun/ Nine to One' – is being rediscovered, with considerable success. Our experience is that this method is extremely time efficient and allows us to treat areas that are totally impractical to treat using methods such as 100:1 overspray.

Glyphosate is registered for 'splatter gun use' at a concentration of 9 parts water to 1 part glyphosate for killing lantana and groundsel. Modified stock drenching guns (with the drench nozzle removed) satisfy the definition of 'splatter gun'. Two squirts of the mixture onto the foliage of lantana bushes that are dense, lush (full of water) and growing (not dormant because of frost or dry) is

generally sufficient to kill the bush. It is not a good method for treating scattered plants.

To get the maximum range, incline the gun at a 45 degree angle and squeeze out a continuous stream as you smoothly bring the gun to the horizontal position – this gives a line of 9:1 across 15 metres or more of the thicket.

We trialled 9:1 on lantana in Border Ranges National Park in mid-October 2005. The lantana we treated ranged from totally dense (metres of lush green leaves) to scattered.

We set our guns for 15 ml but could also deliver short, sharp squirts of much less. To be safe, we used squirt lines one to 1.5 metres apart. I checked in mid-November (after 4 to 5 weeks) and it appeared we had achieved a total kill of the thick lantana we had treated.

It is not necessary to cart large amounts of fluid around. There is no runoff, and with care desirable plants growing under the lantana can be avoided.

An alternative delivery option is to put the mix into a hand-held spray bottle. My father, who is 77 years old, uses 9:1 in a hand sprayer that is normally used as an ironing aid. He goes for a walk each day and kills 20 or 30 lantana bushes. Other people in his area (the Burnett) are killing plants from horse-back or from motorbikes.

For dense lantana, this method provides hope that lantana control can be an achievable goal.

If you implement the splatter gun method for lantana control in your area, John Hunter would like to hear from you on (02) 6650 7111 or john.hunter@environment.nsw.gov.au

'Fishing' for turtles

Lynn Klupfel, President
Tiario & District Landcare Group

Turtles nesting

The 2006 nesting season is well underway. Nesting commenced on 14th October following good spring rains. To date 32 nests have been protected. The river height has been up and down this season which seems to have modified the turtles' nesting behaviour. Understanding the link between weather patterns and nesting behaviour is complex and full of unexpected challenges.

One challenge for our Project Officers is outwitting the predators and each year innovative ideas are put into place. One solution is to arrive at the nesting banks at dawn before the other reptiles appear.

Tiario Fishing Comp

Against all odds, registrations at this year's catch and release fishing competition were on a par with last year's record. The heavens opened up on Friday and Saturday nights, but that didn't dampen the spirits of the keen campers and fishers. By Saturday morning Petrie Park was full of campers and tinnies on trailers. Daybreak brought the sound of

outboards purring up and down the river carrying optimistic fishermen. Dotted along the banks were fishing families who were trying their luck. Many thanks to the landholders who entered into the community spirit of this event, allowing fishers onto their properties.

Approx \$2000 was raised at our 2005 fishing competition to be allocated towards protecting the endangered Mary River cod and turtles. This enabled us to donate \$1250 to the Jerry Cook Fish Hatchery at Lake Macdonald, supporting their work with the Mary River cod. During the Fishing Competition, Vince Collis from the hatchery released 1000 cod fingerlings into the Mary River.

Many thanks to Tiario Lions, Tiario P&C, Tiario SES, Tiario Council, Hervey Bay Seabird Rescue, Gerry Cook Fish Hatchery (at Lake Macdonald), DPI Fisheries volunteers and Tiario Chamber of Commerce for their involvement and commitment to making this event such an enjoyable weekend.

Research

Natalie Mathie, a PhD student at the University of Queensland (where Mary River turtles have been participating in

comparative studies with other species), is the recipient of the inaugural Tiario Landcare Mary River Turtle support scholarship. Funds raised from the sale of chocolate turtles throughout Queensland have enabled us to establish this scholarship. In October the Maryborough Zonta Club presented a \$1000 cheque to Tiario Landcare to enable this project to continue. We greatly appreciate the support from Qld Landcare Foundation, Ergon Energy Green Teams and the Maryborough Zonta Club.

Very few studies have been undertaken on the endangered Mary River turtle. We hope that by establishing this scholarship it will encourage research on this species and build a beneficial partnership between the university and our group.

This season an extra string has been added to our research bow with the involvement of the MRCCC (Mary River Catchment Coordinating Committee staff) with water quality testing and logging data over 2x24 hour periods. It was interesting the water temperature only changed from 31.9°C to 28.9°C.

Kids @ Cairncross

- a exciting program of rainforest education

By Karen Shaw
Brush Turkey Enterprises

We are so fortunate to live in such an amazing and unique place. The Blackall Range is one of the diversity 'hotspots' and our rich rainforests are home to many fabulous animals and plants.

I have always been enthralled by this incredible environment and, as a mother and teacher, cherish sharing this magical place with children. It's quite special to stand quietly in the dappled light of the rainforest and hold my small child's hand whilst we watch a mother pademelon and her young joey grazing.

Mary Cairncross Scenic Reserve near Maleny has been called a 'green jewel of the hinterland' and is a spectacular learning space for adults and children alike.

'Kids @ Cairncross' began several months ago and is a program of rainforest environmental education. Children attend once a month, after school, for an hour and a half of fun activities including games, drama, art and rainforest-based science activities.

Afternoon tea is supplied and almost half the fee is donated back to the Reserve to contribute towards its maintenance and protection. The remaining portion of the fee is for purchasing bin-



Primary children encountering wildlife learning at Mary Cairncross Park.

[Photograph by Karen Shaw]

oculars, magnifying glasses and additional science equipment. The children pay \$5 a month for the activities.

So far we have explored the wonderful icon of the Reserve, the brush turkey, and got dirty on our hands and knees to investigate the mini world of insects. The next session will examine the different plant communities of the Reserve and the roles they play.

The program runs on the second Monday of each month at 3.30 pm. The next one will be on the 12th of December – the first week of the school holidays. Places are limited to 20 children for each session, so bookings are essential.

If you have a child who may like to join Kids @ Cairncross, you can contact Karen on 5494 3642 or 0427 607 628 or brushturkey@myplace.net.au

Draft Mary Water Plan released

Belinda Wedlock
Dept of Natural Resources & Mines

Natural Resources and Mines Minister Henry Palaszczuk has released the draft Mary Basin Water Resource Plan for public comment.

The water resource plan will provide a framework for sustainable management of the Basin's water resources into the future.

The Mary River is the major river in the plan area, which also includes the streams of the Sunshine Coast and Burrum River. Urban water use accounts

for about half the water used in the plan area, with the remainder taken up by agriculture and industry.

The draft plan accounts for all uses and provides flexibility in future water provision. A management framework is also proposed for sub-artesian water taken from the ecologically sensitive Cooloola Sandmass aquifer.

The release of the draft plan coincides with an announcement by NR&M of the intention to prepare a Resource Operations Plan (ROP) for the basin. The ROP will be developed in consultation with the community and stakeholders.

It will provide rules for implementing the objectives of the final water resource plan.

All interested people are urged to obtain the draft plan and make a submission. Comments and submissions can be lodged until 10 February 2006.

For more information, contact Belinda Wedlock at the NR&M Gympie office on (07) 5480 6226. The draft plan and overview report can be obtained at www.nrm.qld.gov.au/wrp/mary or on (07) 5480 6226.

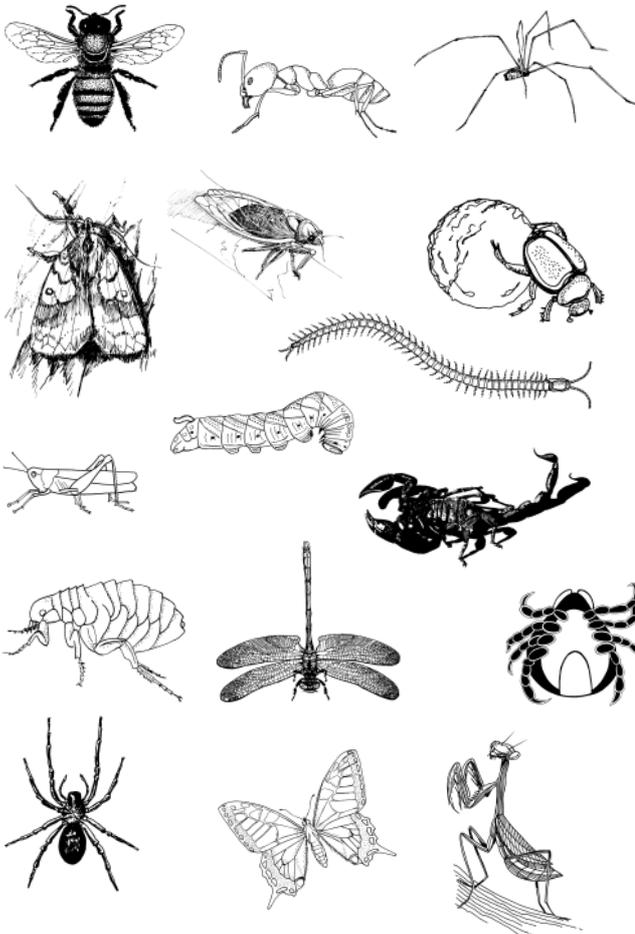
What are ARTHROPODS?

Karen Shaw, Brush Turkey Enterprises

Arthropods are a group of animals. There are three types of arthropods.

1. **Insects** (which have mandibles) and **true bugs** (which have a beak to feed)
2. **Arachnids** – which include spiders, scorpions and mites
3. **Myriapods** – centipedes and millipedes.

Can you tell your arthropods apart? Colour the *insects* red, the *spiders* blue and the *myriapods* yellow.



Insect Word Search

Look for the following words. They might be horizontal, vertical or diagonal. And there might be a few more, too ...

- | | | |
|--------|----------|---------------|
| ANT | COCOON | MANDIBLES |
| INSECT | MAGGOT | CATERPILLAR |
| MOULT | PHASMID | DUNG BEETLE |
| WEEVIL | PARASITE | CAMOUFLAGE |
| CICADA | ROSTRUM | INVERTEBRATE |
| NECTAR | CHRYSLIS | METAMORPHOSIS |
| THORAX | ANTENNAE | |

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

Did you know?

- A water scorpion can suck the body fluids out of its prey underwater without drowning.
- Earwigs don't live in ears!
- Bees dance to communicate to each other.
- Native bees are sometimes called "sugarbag" bees and are stingless.
- Hunting wasps can paralyse creatures their own size.
- The largest cockroach in the world is an Aussie. Wingless giant burrowing cockroaches grow to 80 mm long and weigh up to 35 g. They make great pets!
- Spitfire grubs are sawfly (a type of wasp) larvae and can spit foul chemicals to defend themselves.



WORKING FOR OUR
FUTURE

The CODLine

is hosted by
Barung & District Landcare Group.

MARY RIVER



CATCHMENT COORDINATING COMMITTEE

Additional support from the
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and
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This issue ...

Landholders' experiences

Land for wildlife and bushfoods	1
A Farmer's Life	3
Burrawingee Nature Refuge	5

Community group projects

Black Mountain Range	6
Widgee/Wide Bay Waterwatch	8
'Fishing' for turtles	9

Wildlife features

Birdwing blitz	2
Glossy black-cockatoo	2
Deeeeeeep End 5	7

Practical advice

Conservation on private land	5
Splatter that lantana!	9

Weeds

Up, up and away	4
Wanted: Cat's claw	6

Cod research and restocking

Hatchery report	6
-----------------------	---

MRCCC News

MRCCC on the move	8
-------------------------	---

Water sharing

Draft Mary Water Plan released	10
--------------------------------------	----

Students' activities

Kids @ Cairncross	10
Students' activities	11

Cod Contacts

Nature conservation on private lands	4
---	---

The CODLine

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