LAND FOR WILDLIFE
South East Queensland

Newsletter of the Land for Wildlife Program South East Queensland

APRIL 2015
Volume 9 Number 2
ISSN 1835-3851

The Blue Tiger Migration

It was difficult to miss the Blue Tiger migration through SEQ earlier this year. It made the news and went where few insect stories go, into social media and general public chit-chat. But where are they now and what were they doing here?

Blue Tigers are mostly a tropical butterfly and can be seen nearly all year round in North Queensland. They are migratory and fly south during spring and summer reaching southern Queensland, NSW and even Victoria. Huge numbers, probably in the hundreds of thousands, were seen widely across SEQ from November 2014 through to March 2015, with the highest abundance in January. If you stepped outside, they were impossible to miss.

This recent irruption of Blue Tigers was probably due to the high rainfall and hot temperatures in late 2014. These factors led to flush of new foliage on their main larvae host plant, Corky Milk Vine (*Secamone elliptica*) and the ability for lots of caterpillars to successfully pupate.

Corky Milk Vine contains several chemicals that are poisonous to many animals, but not to the Blue Tiger larvae. When the larvae eat Corky Milk Vine, the poisonous chemicals get passed on to the pupae and adult butterflies. These toxins then work to protect adult Blue Tigers from being eaten by birds, as birds have learnt that they get sick from ingesting Blue Tigers.

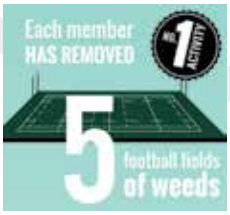
When cooler weather arrives, Blue Tigers will head back north passing through southern Queensland in April and May. They are known to congregate in huge numbers over winter, clustering on stems and vines in sheltered gullies in central and north Queensland. Individual Blue Tiger adults may live up to 6 months during which time they have migrated, bred and possibly over-wintered. Remarkable.

Despite there being a general migratory path of south in summer and north and autumn, Blue Tigers are often seen flying non-directionally or out to sea. There is still much to learn about butterfly migrations and invertebrate ecology in general, but the Blue Tiger migration is a welcomed spectacle of nature.

Article and photo by Deborah Metters

CONTENTS

editorial



Nature's intricacies are endless, therefore so is content for this newsletter. However, I am still surprised, even after ten years in this role, by the diversity of articles featured within this newsletter. This edition reflects a tiny part of the natural world found in SEQ including birds, butterflies, fish, pademelons, phascogales, beetles, frogs and orchids (sorry fungi!). All of which have evoked delight and have influenced land management decisions.

Land for Wildlife members in SEQ face a range of challenging issues. Weeds are the big one with most members investing considerable time, money and effort in controlling weeds on their properties. Inappropriate fire regimes and feral animals are two complex issues that lack a standardised solution. To tackle this, landholders are becoming informed and doing what is feasible on their own land, as shown in this edition with three articles on controlling pest foxes, cats and dogs.

Landholder innovation is something that greatly interests me. People find creative solutions to problems and the article by Nick Clancy on bush regeneration tools shows how more tools are being created to help landholders manage weeds.

I hope you enjoy the diversity of topics in this edition and I welcome your contribution, especially any innovative tips or tools that others may find useful.

On another note, I want to promote the Land for Wildlife South East Queensland Facebook page that was launched in late January. If you are a social media user, feel free to Like our page and follow our posts. Land for Wildlife members are welcome to post on our page too. I am delighted as to how well-received our page is, with over 500 followers. Our most popular post so far is a video of two Lamington Spiny Crayfish fighting over a dead Red-bellied Black Snake (photo below). It's no car chase, but it shows nature's competitive streak.

Finally, there have been several officer changes and I wish to welcome back Dave Burrows and Rachel Booth. All the best to Lyndall Rosevear and Fflur Collier on maternity leave, and welcome Amanda Maggs and Darren McPherson to the Land for Wildlife team. Thanks to Lexie Webster for years of service to Land for Wildlife.

Happy reading!

Deborah Metters
Land for Wildlife
Regional Coordinator
SEQ Catchments

Landholder Registrations, Land for Wildlife SEQ - 1/4/2014			
Registered Properties	Working Towards Registration	Total Area Retained	Total Area under Restoration
3067	821	56,393 ha	5,695 ha

Forward all contributions to:

The Editor
Land for Wildlife Newsletter
SEQ Catchments
PO Box 13204
George Street QLD 4003
07 3211 4404
dmetters@seqcatchments.com.au

Print run - 4795
Back copies from 2007 - 2015
available for download from
www.lfwseq.org.au
Back copies from 1998 - 2006
available upon request to the Editor.
ISSN 1835-3851

Land for Wildlife is a voluntary program that encourages and assists landholders to provide habitat for wildlife on their properties.

Land for Wildlife Extension Officers South East Queensland

Brisbane City Council
All enquiries, 3403 8888
Peter Hayes
Cody Hochen
Tony Mlynarik
Catherine Madden
Scott Sumner
Amanda Maggs

Gold Coast City Council
Darryl Larsen, 5582 8896
Saul Hondow, 5582 8344
Todd Burrows, 5582 9128

Ipswich City Council
Stephani Grove, 3810 7173

Lockyer Valley Regional Council
Kaori van Baalen, 5462 0376

Logan City Council
Rachel Booth, 3412 4821
Melanie Mott, 3412 4859
Peter Copping, 3412 5321
Rebecca Condon, 3412 4979

Moreton Bay Regional Council
Ainslie Wyer, 5433 2288
Zoe Samson, 5433 2244

Noosa Council
Conor Neville, 5329 6287

Redland City Council
Maree Manby, 3820 1106

Scenic Rim Regional Council
Keith McCosh, 5540 5436

Somerset Region
Darren McPherson, 5424 4000

Sunshine Coast Council
Alan Wynn, 5439 6477
Danielle Crawford, 5475 7339
Marc Russell, 5475 7345
Nick Clancy, 5439 6433
Stephanie Reif, 5475 7395

Qld Murray-Darling Region

Toowoomba, Crows Nest and western regions
Sandy Robertson, Qld Murray-Darling Committee, 4637 6228

Burnett Mary Region

Gympie, Fraser Coast, North & South Burnett, Bundaberg and Baffle Creek
Burnett Mary Regional Group, 4181 2999

LAND FOR WILDLIFE
VOLUNTARY WILDLIFE CONSERVATION

lfwseq.org.au
facebook.com/lfwseq

SEQ Catchments
Healthy Land, Healthy Water

Australian Government

Published by SEQ Catchments through funding from the Australian Government. *Land for Wildlife South East Queensland* is a quarterly publication distributed free of charge to members of the Land for Wildlife program in South East Queensland.

fauna vignette

PRIZES!

SEQ Catchments is giving away copies of *Australian Subtropical Fungi (*RRP $30) to selected Land for Wildlife members who contribute published articles in the January and April 2015 editions. Limit of two free books per newsletter edition. Please send your article and/or photographs to the Editor (details pg. 2).

It's a Pademelon!

One morning, four years ago, our Land for Wildlife Officer Catherine Madden thought she saw a pademelon blur past her in Upper Brookfield. Since then she had been trying to confirm her sighting as these elusive animals are an uncommon sight in the Brisbane City Council area. Everyone she spoke to said that pademelons hadn't been seen in the area for years.

We regularly see wallabies on our property, and we referred to them simply as 'small' wallabies and 'big' wallabies. The 'small' wallabies come regularly as a family group to nibble at grasses on a track adjacent to the house. The 'big' wallabies have a white mark on their cheeks and are often encountered when we are working in the bush. We had also seen what we believed to be pademelons scurry very fast across our access road. We promised Catherine we would try to get images of these pademelons with our motion detection camera.

Initially we set the camera up to capture the pademelons scurrying across the road but had no success. After a deer sighting close to our sheds, the camera was moved to monitor the deer's movements, but instead of deer, we captured images of both our 'small' and our 'big' wallabies. Catherine emailed back, "It's a pademelon! The bigger one is a Swamp Wallaby".

The camera was assigned to watch birds at our gully pond and what should we capture but another 'small' wallaby. "It's a pademelon!" Catherine emailed.

The camera was then set up to capture the 'small' wallabies that come regularly to feed adjacent to the house. At first the images were just in greyscale, and then at last, we had it captured - a colour picture of a Red-necked Pademelon.

Mission accomplished and confirmation that Red-necked Pademelons are still alive and well in the western suburbs of Brisbane.

Article by Tina Heybroek
Land for Wildlife member
Upper Brookfield, Brisbane

These above three images are of Red-necked Pademelons and were taken on motion-sensor cameras.

These two images, also taken on a motion-sensor camera, are of Swamp Wallabies. Note their dark long tails, dark front paws and pale line along their face.

These images of foxes predating on medium-sized mammals, mostly Mountain Brushtail Possums, were taken on Wal's property. They prompted him to research feral animal control options including 1080 baiting.

pest management

To Bait or not to Bait

Many of us are involved in ecological restoration work, and over the last 20 years Heather and I have made some real progress on the vegetation front on our relatively remote 25 ha property in the Gold Coast hinterland.

The theory is that with vegetation repair comes broader ecological repair with birds, insects, fungi, mammals and reptiles returning to once degraded sites.

Ten years ago I started working with spotter and catcher, Michael Dickinson. He set up cameras on our property to monitor feral animal activity. The images on this page are a small sample of the native fauna casualties that Mike has collected.

Clearly we had a major fox problem. The camera had highlighted something that we were totally unaware of. I suspect the problem is almost universal through the Gold Coast, and over much of Australia.

In 2007 the Land for Wildlife team within City of Gold Coast (Council) commissioned an ecological study of our property. In his conclusion the author commented that:

> *"The fauna recorded from the study area shows some noticeable trends. The mammal community lacks terrestrial species (e.g. macropods and murids*), indicating major impacts to this group. Although the terrestrial mammals are low in diversity, the arboreal species appear abundant."*

The study confirmed what the photos seemed to indicate. Foxes were vacuum cleaning our terrestrial fauna. In effect, by creating more habitat, we were creating a smorgasbord of food sources for foxes.

This was a real dilemma for us. Trapping was too dangerous for other animals and baiting would take out any chance of reintroducing quolls, which is a major long term goal of ours. Anyway that is what we thought. After ten years of inactivity we started researching 1080 bait and the trapping question in more detail. It is a complex decision, but on balance we have decided that baiting and trapping will be ecologically better for our property than doing nothing.

This decision was based on a number of factors:

- 1080 is not perfect but it is selective. Native Australian animals need to eat very large quantities to die. For instance a Spotted-tailed Quoll has nine times the relative resistance to 1080 than a fox. Field studies support this.
- 1080 was used to help eradicate foxes in the Flinders Ranges before the reintroduction of quolls.
- The proposition that Dingos will act as top predator and manage meso-predators such as foxes and cats is very much weakened by the genetic evidence that pure Dingos (that act like Dingos) are virtually non-existent.
- Soft-jaw foot traps we are using are relatively injury free and the use of scents instead of meat baits reduces the risk of off-target capture significantly.

Once the decision was made I started working with the Pest Management Unit within Council. I then got involved with The Gold Coast Hinterland Pest Management Group. This group is comprised of City of Gold Coast, Seqwater, National Parks,

"Management of feral animals, particularly predators, are a critical part of restoring our ecosystems."

Scenic Rim Regional Council, Biosecurity Queensland and three landcare groups. The group is a broad, well-run consortium of public and private sector members whose mission it is to manage pest animals and plants in a co-ordinated and large scale way. What impresses me about this group is that it is very action orientated and is achieving real results.

Baiting and trapping is carried out to strict standards of safety and notification. Baits must be wired to the ground and buried 10 cm deep. They must be safely disposed of within one week. All residents within two kilometres of the property being baited must be informed at least three days before the event. Signs must mark all entries into a baited property. All bait users must sign off with the State Government for the use of 1080.

Weed control and habitat restoration are important first steps, however management of feral animals, particularly predators, are a critical part of restoring our ecosystems. We have chosen to trial baiting and trapping rather than witness the inevitable decline and possible local extinction of our terrestrial fauna.

** Macropods are large marsupials such as kangaroos, wallabies and pademelons. Murids are small mammals such as rats and mice.*

Article by Wal Mayr
Land for Wildlife member
Mudgeeraba, Gold Coast

An unfortunate Noisy Pitta killed by a roaming pet cat. Noisy Pittas have beautiful aqua feathers on their wings and are usually active at night, walking on the ground looking for snails to eat. They can be easy prey for cats.

pest management

What's Killing our Birds?

A few months ago I was puzzled by the appearance of a decapitated Emerald Dove next to the house, gratefully recognised by a Grey Butcherbird as a welcome breakfast. It made me wonder if the butcherbird would be capable of killing this species?

Some months later I came across another beheaded bird on our property, this time a Noisy Pitta. How did this happen? Had it been accidentally dropped by a bird of prey?

A bit distressed about finding such a beautiful bird killed on my property, I contacted Todd Burrows from the City of Gold Coast Conservation Partnership Program in the hope of getting to the bottom of this.

Our property does not have rainforest, which is the preferred habitat of Noisy Pittas, but is rather semi-open forest with a denser understorey, so I wasn't quite sure if the bird was a Noisy Pitta at all. Todd confirmed the identity of the bird and pointed out that the cat we had recently photographed on our wildlife motion sensor camera may be responsible. He also suggested that the cat was likely to be someone's pet that was just killing instinctively.

Armed with the printout of the cat image, I decided to check the neighbourhood to see if this cat belonged to someone. It turned out that a few people had also seen the cat, but nobody seemed to own it. That felt like a free ticket to buy a cage trap and get the cat as soon as possible to prevent any more unnecessary wildlife deaths. It took only one night and the cat was in the trap! Oily, smelly sardines did the trick.

The cat was then picked up by an officer from Council's Animal Management Unit. It turned out that it was a pet cat, but the owner did not claim the cat from the Council animal shelter within the time allowed, so the cat was transferred to the Animal Welfare League. Perhaps it will be re-homed and hopefully a more responsible pet owner will look after it in the future.

It is pleasing to know that we have done our bit to support the wildlife on our property by removing this cat, but sadly it was too late for those ground feeding birds, and probably many other animals, that were easy prey.

As I have experienced, it only takes one straying cat to do significant harm to wildlife. Given our wildlife are already under great pressure due to habitat loss and introduced feral predators, they certainly can do without being hunted by straying pets, regardless of whether they are killing because of hunger or not.

"It only takes one straying cat to do significant harm to wildlife."

The wildlife motion sensor cameras, installed in our bushland, have proved to be very helpful tools on more than one occasion to help manage our little Land for Wildlife property. The list of native and unfortunately feral animals on our property has grown ever since we put up the first camera a few years ago. Once you know what's 'down in the bush', in particularly at night, you see your property in a very different way and the urge to protect and support it grows with these discoveries.

Article by Ute and Jens Sohnrey
Land for Wildlife members
Clagiraba, Gold Coast

This seemingly well-fed pet cat was allowed to roam widely at night and was instinctively hunting, but not eating, wildlife.

The culprit caught in a trap.

pest management

A pregnant wild dog on the Farrelly's property as captured by a fauna monitoring camera.

A Surprising Encounter

The purpose of my visit to Stephen and Penny Farrelly's Land for Wildlife property in Calvert was to set up a fauna monitoring camera hoping to capture images of fauna using a well-beaten track. However, the day's events proved to be nothing like I had expected.

Suddenly, stopping at the hand signal of Stephen, I was on alert as he intently watched his dog, Missy. She had heard something just ahead of us in the Lantana thicket. We continued warily along the track, making as little noise as possible. Then, out of nowhere a wild dog pup ran from the well-worn track into the Lantana. Missy ran after it, displaying no aggression as she interrogated the pup who exhibited relentless yapping and howling. This event had triggered the curiosity of other pups, with one showing its face and others rustling about deeper in the Lantana thicket.

I have never been a fence sitter when it comes to wild dog management, but I was completely captivated by the behaviour of the two pups interacting with Missy. Discussions were made regarding the fate of the pups, knowing all too well they had to be 'managed', despite their undeniable charm and innocence. As adults, their pack hunting instinct takes over, leaving a destructive trail. Surrounded by a couple of thousand hectares of bush, Stephen and Penny are experienced in wild dog management, with the overall intent to conserve our native wildlife.

Past experience of Council Pest Management Officers has shown that wild dog parents generally abandoned their den and pups following interactions with other dogs, such as Missy. Knowing that these pups we encountered would likely starve, Stephen and Penny 'managed' the pups knowing that this was the most practical and kindest way for all involved.

I would like to congratulate the efforts of Stephen and Penny, and their commitment to wildlife conservation. Missy accomplished an exceptional job at locating the pups and she was probably the most composed of us all.

Article by Stephani Grove
Land for Wildlife Officer
Ipswich City Council

A Brush-tailed Phascogale (above) captured by a fauna monitoring camera - one of the wildlife species that Stephen and Penny Farrelly (shown right with their dog Missy) are working to protect.

my little corner

Discovery of a Chain Ribbon Orchid

Chain Ribbon Root Orchid (*Taeniophyllum muelleri*). Above right and middle images were taken by Rob and Carla on their property. Image left shows the fruit and was taken by Glenn Leiper, a co-author of *Mangroves to Mountains*.

We joined Land for Wildlife in 2012 after Rob had already owned the property for multiple years. It wasn't until the house was built in 2008 and we were able to live there permanently that we had the opportunity to really start concentrating on 'bringing back the bush', which has been a lifelong passion of Rob's. A friend told us about the Land for Wildlife scheme in 2011 and we became members soon after in February 2012, at that time not realising the amazing benefits we would experience, in a sense of both giving and receiving.

We have undertaken a Sunshine Coast Council Landholder Environment Grant project (2012) with 300 tubestock plantings and a Land for Wildlife Incentive project (2013) with 150 tubestock plantings. We are also systematically removing all Slash Pines (*Pinus elliottii*) and other weed species from the property. Throughout these two projects our knowledge and experience has expanded and we marvel at what we have learnt and how much we didn't know in the beginning!

Late last year was the first time we had noticed the Chain Ribbon Root Orchid on the property. It is a single orchid on the trunk of a sapling cheese tree about three metres from the edge of the dam, and it's only about 30 cm from the base of the tree. The dam (pictured below) is of a relative size with a combination of remnant bush and Slash Pines around its perimeter so the area where the orchid is growing experiences some dappled sun throughout the day and has protection from the harsh western sun. The dam is fed by an underground spring, the head of which is located two properties away.

The property is identified as wet sclerophyll forest that has eucalypts, vines and grasses. The Regional Ecosystems (REs) on the property are 12.9-10.14 Sandstone ranges (not of concern) and 12.3.2 Alluvium river and creek flats (of concern). The orchid is located in the 12.3.2 RE area.

We're not sure if the early September spring rain, which we haven't had for several years, was the trigger for the orchid's growth and flowering. We have witnessed quite a few other species, both planted and established, on the property flowering for the first time during this spring period.

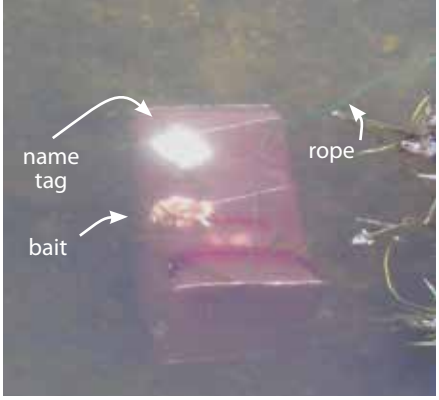
Rob literally stumbled on the Chain Ribbon Root Orchid while we were by the dam one morning taking out some sapling Slash Pines and generally cleaning up the area. He had noticed something on the tree in the morning, and it was only after returning to the site later that day to have a look at 'something he'd seen' that we realised it was truly something special. We referred to our *Mangroves to Mountains* handbook (which is invaluable) to pinpoint the species of orchid.

It was still there after the dry October, albeit slightly less plump and lush, but still healthy. We will definitely be marking this September in our diary to see if any more orchids appear. In the meantime we'll keep an eye on the one by the dam and take note of its progress.

Article by Robert Gillman and Carla Nicholson
Land for Wildlife members
Eudlo, Sunshine Coast

practicalities

Surveying Freshwater Fish



Above: A box trap set in a shallow creek. Note the bait in the centre (with some fish swimming around), a name tag of the trap owner that is required by law, and the rope leading to the creek bank. Photo by Leo Lee.

Left: Crimson-spotted Rainbowfish. Photo by Gunther Schmida.

In the October 2014 newsletter, I mentioned that I would share some tips on surveying freshwater fish. These tips are for landholders who want to identify freshwater fish on their own properties as a hobby. Please note that if you wish to survey freshwater fish as part of a structured scientific study, including collecting ecological data or publicly presenting data, two Queensland Government permits (animal ethics and fisheries) are required.

These tips come from fish geneticist, Leo Lee, who has been playing with fish since he was three years old. Ithaca Creek in western Brisbane has been his "home" creek since that age, and he fondly remembers catching huge numbers of Crimson-spotted Rainbowfish there. These fish used to be called Giant Rainbowfish and Leo caught individuals that were 20 cm in length. These days, you are lucky to catch one that is 8 cm in length. As with all native freshwater fish, Crimson-spotted Rainbowfish used to be abundant and widespread, whereas now they are found in low numbers in a few isolated locations.

Please follow Leo's main advice: "Don't translocate (move) fish". Moving fish from one creek to another can reduce genetic diversity and introduce new diseases into healthy populations. For the same reasons, never release captive fish into creeks.

To find freshwater fish on your property you will need three things: a trap, a large bucket and some strong rope. For less than $10, you can pick up a box trap (also called a yabby or funnel trap) from most camping stores. These traps have two funnels that lead into a main chamber, preventing fish from easily swimming out. Remember to never use 'Opera Style' traps as their large entrance holes can trap and kill platypus.

Firstly, you need to find a suitable site to survey. Box traps are most effective in shallow water, so you want a site with a gradual sloping bank and water about half a metre deep.

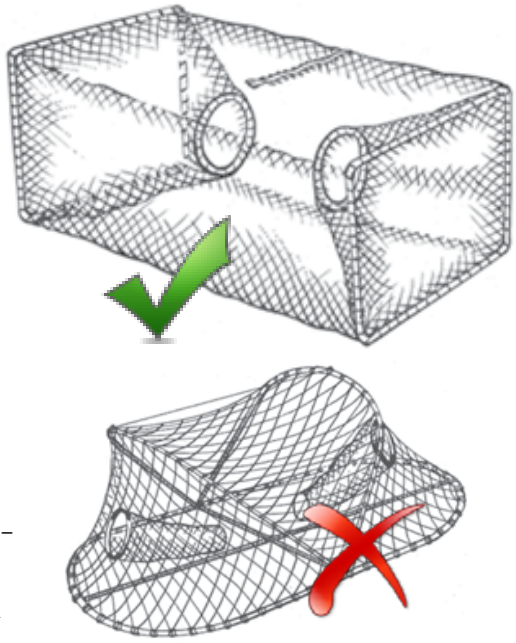
Now attached a long rope to both the trap and large bucket. This allows you to retrieve these items from the creek without getting your feet wet. Then, fill only one-third of the large bucket with creek water (if filled fully, fish will jump out) and leave it on the bank edge.

Now we need to bait the trap. Leo recommends using one quarter of a slice of fruit bread, with vegemite, as bait. Naively, I thought that most freshwater fish were carnivores. Leo corrected me by saying that Australian freshwater fish have evolved to cope with the highest variation in water flows worldwide, meaning that they have learned to survive in tiny pools of water during drought, to raging torrents during flood. Thus, they will eat almost anything – invertebrates and vegetation.

Once baited, place the trap into the creek remembering that it will work best in shallow water that just covers the trap. Don't walk into the creek as this will disturb the fish. Check the trap (remove it from the creek) every five minutes. In a healthy creek in the Upper Brisbane catchment, Leo has caught 200 fish in one trap after five minutes. If you leave the trap in for too long (over an hour), trapped fish can die.

To remove the trap, pull the trap out (using the rope) reasonably quickly so that the fish are pushed to the bottom of the net. Don't yank it out and send the fish flying, but just quickly remove it in one motion. Once caught, transfer fish from the trap to the large bucket filled with creek water so

"Australian freshwater fish have evolved to cope with the highest variation in water flows worldwide"



A box or funnel trap (top image) must be no longer than 70 cm or no more than 50 cm in width or height. The trap entrance must be made of rigid material. If the trap does not have a mesh made of rigid material, the size of the mesh must be no more than 25 mm. All freshwater traps must have a tag on the trap showing the owner's surname and address.

Do not use 'Opera Style' traps (lower image) as these can trap and kill platypus.

Images from Department of Agriculture and Fisheries www.daff.qld.gov.au

Gunther Schmida is a Gold Coast-based nature photographer who has several excellent eBooks available for download on native freshwater fish. They are only $5 each and boast wonderful photos to aid identification. They are fantastic value for money. Visit www.guntherschmida.com.au

you can easily see and identify the fish.

Put all native fish back into the same creek in the same location where you caught them. It can be strange to think about fish having 'local provenance', but they do. We often hear this term in regards to plants, but animals also have local provenance. Fish are confined to their creeks and cannot move between catchments unless there is an extreme weather or climatic event. This isolation as well as mutations give rise to genetic variation. Therefore, there may be important genetic differences within one fish species along the same creek. This genetic diversity keeps the whole population healthy.

If you catch any pest fish in your trap, you are required to immediately and humanely kill them according to the Queensland *Fisheries Regulation 2008*. This applies to both declared noxious fish species such as tilapia, carp and gambusia (mosquitofish) and also non-indigenous fish such as guppies and swordtails. Remove pest fish away from the creek and dispose of them in landfill or bury them. Please note that it is illegal to keep or use as bait noxious fish.

According to Leo, the best time to survey for native freshwater fish is late October to early November. During this period water temperatures are warming and hungry fish are emerging from their winter dormancy. They will readily be attracted to bait.

There is lots of information online about native and pest fish including the Department of Agriculture and Fisheries at www.daff.qld.gov.au

Article by Deborah Metters
Land for Wildlife Regional Coordinator
SEQ Catchments

fauna survey

Mark the 3rd May as Glossy Black Cockatoo Birding Day

If you think you have Glossy Black Cockatoos on your property please get involved in this year's Birding Day on the 3rd of May. Even if you don't have Glossies on your own property, you can still help out.

To register, or for more information, please contact a Birding Day Coordinator shown below. Training is offered to help with bird identification and survey skills.

There are fabulous prizes to be won for participants in this year's Birding Day including accommodation the picturesque Mt Barney Lodge and Spicers Peak Lodge.

Last year, 153 people were involved in the Birding Day and 89 Glossy Black Cockatoos were seen. Glossies are a threatened species and the more we know about their distribution and population size the better. Please get involved, or call your Birding Day Coordinator to have a chat and find out more. Information can also be found at www.glossyblack.org.au

Region	Coordinator	Email	Phone
Gold Coast	Guy Castley	g.castley@griffith.edu.au	5552 8918
Scenic Rim	Tracey Larkin	trace@mtbarneylodge.com.au	5544 3233
Redland	Lisa Bailey	lisa.bailey@redland.qld.gov.au	3820 1105
Brisbane	Lyn Cole	lyncole99@gmail.com	3378 3763
Logan	Trevor Kanapi	environment@logan.qld.gov.au	3412 4821
Moreton Bay	Andrew Evans	andrew.evans@moretonbay.qld.gov.au	5433 2256
Sunshine Coast	Conor Jenkins	conor.jenkins@sunshinecoast.qld.gov.au	5499 5142
Noosa	Peter Milne	peter.milne@noosa.qld.gov.au	5329 6328
Western Regions	Liz Gould	lgould@seqcatchments.com.au	0400 748 157

A female Glossy Black Cockatoo. Photo by Deborah Metters.

practicalities

Need some leverage with your weed control?

So long as mature weed trees such as Camphor Laurel persist in the landscape we can expect that their seedlings will continue to germinate on our properties. Many birds feed on the fleshy fruits of camphor, privets, Chinese Elm and the like, and in doing so disperse their seeds around the landscape. If you find the seedlings while they are still small enough, they can be yanked out by hand without too much effort. However, once their roots develop to the point where they can't be hand-pulled (without risking a hernia), there are few practical non-herbicide options available to landholders. It also has to be said that treating large numbers of saplings with the cut and paint technique is time consuming and requires a lot of bending and/or kneeling.

There is however, a growing range of tools available on the market for the manual control of weeds. While many of these are designed for the removal of relatively dainty garden weeds some are suited to, and have been specifically designed for, bush regeneration applications. The Root Blade and the Lantana Fork are examples of this and both have been profiled in previous editions of this newsletter (for Root Blade see October 2010, and Lantana Fork see January 2013).

A tool purpose built for woody weed removal to recently come on to the market is the "Tree Popper". Like the Lantana Fork the Tree Popper offers a means of manually levering woody weeds out of the ground. Obviously it has limitations in terms of how large a plant it can remove.

The Tree Popper comes in three sizes:

- Large (7.5 kg) can remove woody weeds with a stem diameter up to 60 mm. Some people may find this model too heavy to be practical.
- Medium (5 kg) can pull stems up to 40 mm.
- Small (2.5 kg) can pull stems up to 20 mm. Given that it is lighter in weight, the small model would be the most practical for removing thickets of small seedlings.

All three sizes are effective on weeds with a stem diameter down to 5 mm.

The Tree Popper works by grasping the sapling at the base of the stem, and then it pulls the whole plant out of the ground using the lever principle. It is claimed that the large Tree Popper has the equivalent pulling power of 10 times the weight of the operator.

While the Tree Popper doesn't provide a non-herbicide solution for large established weed trees it does provide an alternative option for manually removing the saplings of these species. Landholders who have thickets of pine wildings will find it particularly useful. It is also suited to the removal of smaller woody shrubs such as Night-scented Jessamine (*Cestrum nocturnum*), Ardisia (*Ardisia crispata*), Indian Hawthorn (*Rhaphiolepis indica*) and of course Lantana.

Thanks to the Tree Popper, this Ochna plant with a 60 cm tap root (shown above) was easily prized from the ground. Ochna is a notoriously hard weed to hand pull due to the long tap root and also the twists along the root that create breaking points, allowing this invasive weed the opportunity to re-sprout if not removed entirely. Photo by Mt Gravatt Environment Group (Creative Commons BY 3.0).

Bushcare volunteers in Brisbane have found the Tree Popper effective for removing Ochna (*Ochna serrulata*), which is renowned for its difficulty to hand-pull or to kill with herbicide. The Tree Popper

This large Chinese Elm sapling with extensive spreading roots was removed using a Tree Popper. Photo by Mt Gravatt Environment Group (CC BY 3.0).

Left: Nick Clancy demonstrates the Lantana Fork, which is another useful bush regeneration tool designed to lever out woody weeds.

Right: Close-up of the Lantana Fork.

has also proved effective for removing plants with tap roots such as Glycine and Silver-leaf Desmodium. Like all manual weed removal techniques this tool will be most effective if used when there is a good amount of soil moisture. One draw back of the Tree Popper is that it requires a firm surface to obtain leverage and is therefore ineffective on very soft ground such as sand.

If you have used a Tree Popper on your property we would love to hear your experiences.

Another handy bush regeneration tool is the Peter Lever that has been available commercially for over 20 years. It is a versatile, nearly unbreakable tool, which is much used in the bush regeneration industry. It can be used for digging, crowning and hacking weeds such as Lantana and Ground Asparagus (*Asparagus aethiopicus 'Sprengeri'*). The blade of the lever consists of recycled leaf spring (car suspension) providing its strength. It comes in two sizes, the large is 87 cm long and weighs 2.2 kg, while the smaller version is 58 cm long and weighs just 1.45 kg.

The Peter Lever works best when the blade of the tool is driven down at an angle under the plant to cut the base or roots, downwards pressure is then applied to the handle, levering the plant out of the ground. Being a relatively short tool it does have a low centre of gravity and lends itself to ground level work rather than standing.

It is especially useful for weeds that require crowning (e.g. Ground Asparagus), but is also effective for removing exotic clumping grasses such as Whiskey and Vasey Grass. I find this tool more efficient and easier on the back for digging small holes than a shovel, spade or mattock. It is useful for planting things like lomandras and grasses that often come in half-tubes, which do not required large holes for planting.

For landholders that don't use herbicides, the Tree Popper is useful for digging out hard to pull weeds, such as Ochna, that would otherwise require herbicide treatment to kill.

Article by Nick Clancy
Land for Wildlife Officer
Sunshine Coast Council

Left: The Peter Lever has been around for 20 years and is useful for digging up and hacking weeds. Shown here is the large size.

Above and below: Land for Wildlife member, Sue McGruer demonstrates the Root Blade, a modified shovel designed to cut through roots of woody weeds and then lever them out.

The Channelled Boat-Lip Orchid:
Left - Taylah Mitchell standing in front of a magnificent plant.
Middle - An unopened flower spike.
Above - Several flower racemes.

flora profile

The arching beauty of the Channelled Boat-Lip Orchid

A routine Land for Wildlife revisit began with a few recommended riparian species and concluded with a genuine admiration for an orchid, tree hollows, native bees and rhinoceros beetle larvae.

Scott Mitchell, his partner Karen Salter and their daughter Taylah live on approximately 5 hectares in South Ripley. A portion of their property is also under a Voluntary Conservation Agreement with Council which backs onto large open woodland with enormous rocky outcrops. Just across the boundary is one of Ipswich's largest reserves, the Flinders-Goolman Conservation Estate.

Beautifully displayed in their house yard is an array of Channelled Boat-Lip Orchids (also called Channel-leaf Orchids, *Cymbidium canaliculatum*). Found in warmer areas of Australia in open sclerophyll forests, this orchid is described as an epiphyte. It differs from other epiphytes in that its root system invades rotting wood in the middle of the tree where most of the moisture is retained, therefore prolonging life in drier periods. Epiphytes are known as non-parasitic plants using other vegetation as their host. They derive moisture and nutrients from their surroundings such as air, rain and accumulated debris around the orchid itself, therefore having little impact on their hosts' survival.

The Channelled Boat-Lip Orchid's extensive root and rhizome system contributes to stabilising a hollowed tree, their roots extend deep into the decaying wood and often reappear from other hollows several metres away from the original plant. Their inflorescence is abundant and varies in colour and patterns. Scott and Taylah have predominantly seen the green with brown spots variety.

Racemes can grow up to 40 cm long and have the ability to carry close to 60 flowers per raceme. *Cymbidium canaliculatum* can be easily recognised by its ovoid pseudobulbs which are thickened stems growing up to 15 cm long. These act as essential water storage organs in times of drought. Cattle have recognised the moisture in the pseudobulbs and tend to graze on new shoots at an edible height.

Cultivating the Channelled Boat-Lip Orchid is possible; however, careful attention is required when re-potting and watering as they have sensitive roots that resent disturbance.

While wondering around Scott and Karen's property during my visit, we came across larvae of the Rhinoceros Beetle. These spongy grubs with a thick hairy texture were eating out the hollowed material left in a fallen tree. The topic of bush tucker was instantaneously discussed and it was decided that the grubs would only be consumed in a moment of desperation. Scott later confirmed this to be a survival tool rather than an appetizing bush snack.

After observing Scott's native bee hive and admiring the vigour of the bees' activities, my inspection came to end. I left the property feeling enlightened; Taylah's enthusiasm for environmental management and wildlife conservation is commendable as well as Scott's willingness to teach and share his knowledge. Protected from cattle, Scott's orchids have found a fantastic home.

Article and photos by
Stephani Grove
Land for Wildlife Officer
Ipswich City Council

The Rhinoceros Beetle is a popular pet in South East Asia with the larval stage (shown left) lasting several years. Primarily consuming rotting wood, the larvae play a vital role in breaking down organic material.

book reviews

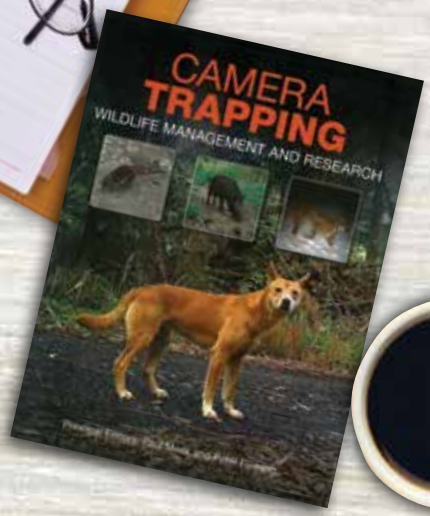
Camera Trapping:
Wildlife management and research

Principal Editors: Paul Meek and Peter Fleming

This book is comprised of papers from a selection of presentation at the first international camera trapping colloquium in wildlife management and research held at Taronga Zoo Sydney in September 2012. The book is in four sections relating to the themes of the colloquium: case studies, constraints and pitfalls, design standards and protocols, and management and analysis.

I enjoy seeing images of wildlife taken on camera traps, especially surprising ones, such as the pademelons that were found on the Heybroek's property (see page 3 of this edition). Therefore I was excited when I learnt about a new book being released on camera trapping. I must admit it was a big read. Most of the papers where not relevant to South East Queensland, however I did learn a lot about how camera trapping is one important tool for conservation and monitoring biodiversity of animals all over the world.

Many papers made me question my camera trapping techniques and realise that other monitoring techniques need to be used to capture the entire picture of species numbers and diversity. I now feel after reading this book that I can try some different techniques and it broadened my mind for future monitoring of wildlife.



CSIRO Publishing, 2014
Paperback, some colour photos, 392 pages
ISBN: 9781486300396
RRP: $89.95
Available from CSIRO Publishing and other online retailers.

Review by Catherine Madden

Wildlife of the Gold Coast

By Damian White

What a cracking little book this is. It is an unexpected surprise and, I am sure, a much appreciated addition to any natural history book collection in SEQ.

Congratulations to the Loders Creek Catchment Association for organising this publication and to Narelle Power for providing wonderful colour photographs throughout. The author Damian White is a respected environmental consultant so the information within reflects his considerable experience documenting wildlife of the Gold Coast region. This is no bias towards the cute and cuddly animals, but instead this book portrays a diverse range of invertebrates, fish, frogs, reptiles, birds and mammals.

Each animal described is accompanied with a photograph, habitat description and localities where it occurs on the Gold Coast. I recommend that you get your free copy of this book today.

Self Published, 2014
Soft cover, full colour, 112 pages
RRP: Free
Available from City of Gold Coast Management Unit or the Loders Creek Catchment Association via jeanniefw@hotmail.com

Reviews by Deborah Metters

The Gold Coast Transformed:
From wilderness to urban ecosystem

Edited by Tor Hundloe, Bridgette McDougall and Craig Page

Written by staff and students of Bond University's Institution of Sustainable Development, this book has an academic flavour, and recounts the recent history of the Gold Coast region. Its focus is the transformation of the coast strip from lowland rainforests, wetlands and alluvial plains to Australia's sixth largest city and global tourism magnet.

I enjoyed getting a glimpse of what the Gold Coast once was. It tells some fascinating stories such as the eerily-accurate forecast written by the Governor of Queensland in 1885 of how development would take over, and a photograph of coastal rainforest where Cavill Ave is today. I must admit that I wanted more information about historic indigenous land use.

The chapters on Gold Coast wildlife emphasise commonly found species, human-wildlife interactions and some pest animals. I learnt, for example, that Green Treefrogs are in serious decline due to mosquito control efforts. If you live on the Gold Coast, or are simply fascinated by its contradictions, I am sure you would enjoy reading this book.

CSIRO Publishing, 2015
Paperback, some colour photos, 224 pages
ISBN: 9781486303298
RRP: $59.95

Five years ago, this section of forest was so choked with Lantana that you could not walk through it.

One of our frog ponds made from recycled glass and an old bathtub.

property profile

Encouraging Frogs and Expanding Remnant Rainforest

Our 40 acre property is in Captain Creek, about 20 km inland of the coastal tourist town of Agnes Water, South of Gladstone. We moved here about five years ago and shortly after joined Land for Wildlife. We decided to regenerate the bush rather than replanting cleared land as we knew that it would provide faster results for a healthier and broader diversity of plants and animals.

The property we chose had large areas of long established Lantana, with natives choking under it, and a variety of different vegetation zones including areas of Spotted Gum, turpentine and tall mixed eucalypt forests, as well as remnant rainforest. The main rainforest is located in a gully that traverses the property, and there are also other rainforest patches.

We decided on a hilly piece of land finding its contours appealing. The land varies from around ten degrees around the house, to around 24 degrees and very rocky on the slopes and creek beds. The lower slopes surrounding where we built support plants such as grass trees, Queensland Blue Gums, bloodwoods, turpentines, Rusty Kurrajongs, Brush Coral Trees, sandpaper figs, she-oaks, wattles, native hibiscus and rainforest species. The higher sections of the property are predominantly drier species including Spotted Gums.

Weeds we have encountered include Lantana, Billy Goat Weed, Corky Passionfruit, White Passionfruit, Snakeweed, various grasses such as Molasses Grass and many others weeds to a lesser extent. Lantana and Billy Goat Weed (*Ageratum houstonianum*) have been the most extensive and persistent weeds. We expect it to realistically take around 20 years to control the Lantana considering our other commitments.

We create weed heaps close to where we are working. They break down over time and create wildlife habitat and damp, shady zones that encourage plant growth. Many a weed pile has sprouted a native plant next to it.

Introduced grasses were one of the first weeds we tackled and we now have large areas of ground covered with native grasses such as *Oplismenus* sp., *Ottochloa* sp., and other grasses. The understorey is also full of native sedges, rattlepods, native flax (*Dianella* sp.), Shepherd's Crook Orchid (also called the Pink Nodding Orchid, *Geodorum densiflorum*), *Plectranthus* sp., Australian Bugle (*Ajuga australis*) and a variety of other creepers, ferns and herbs.

Some of the more interesting plants on our property include the Tree Zamia (*Cycas megacarpa*), Large-leaved Chain Fruit (*Alyxia magnifolia*) and Wedge-leaf Tuckeroo (*Cupaniopsis shirleyana*).

We retain logs and dead trees for natural breakdown and as homes for fauna. We use them to create gardens and paths, or leave them in situ in the less traversed areas. Large sticks are also used around emerging seedlings to protect from accidently being damaged. They have a similar effect as weed piles in encouraging plant growth near them and creating homes.

Our long-term goals are to remove all Lantana, continue to regenerate and expand the rainforest, and create inviting conditions for all fauna, with frogs a particular focus.

Sean (my partner) has built five ponds on our property, which is otherwise free of permanent water. Ponds have been built with rocks from our land, recycled glass sheets, an old bathtub and even old dinghies. All have been built with the intention of minimising the entry of Cane Toads, encouraging frogs and running as self-sustaining ecosystems. Longer term, we will create 'natural dams' using existing watercourses.

The first two ponds built saw frogs breeding a few days after they were filled. Unfortunately (given my love of frogs), soon after the ponds were filled came the predators from up the food chain. Though disappointing that the frogs were being eaten, the ponds have improved the broader food web being a magnet for everything else. Fauna then aids in seed dispersal, so there are multiple benefits to having a permanent water source.

There is now nice regeneration around the seasonal creek that was once choked with Lantana. It was quite a slow process to start with, especially during dry periods, although each year there is less work as shade cover increases. Native plants prefer the conditions under a canopy and weeds are not so hard to control.

Two other frog ponds made from recycled glass and rocks collected from our property.

Lessons Learnt on our Land so far:

- Create weed heaps close to where work is being done to reduce workload. They break down over time and become refuges for lots of creatures including frogs.
- Kill Lantana in place by cut and paste technique. Leave it to dry out (minimum three months) still hanging in the surrounding vegetation. When dry and brittle it is easy to remove without damaging native vegetation in which it is tangled. Leaving Lantana to dry in place gives native plants some recovery time without them being immediately immersed in excess light, heat or drying conditions.
- We don't do controlled burns. We prefer to encourage microorganisms and retain nutrients on the land, and reduce fire risks in other ways.
- Mosaic weeding makes weeding more manageable and less daunting - smaller areas of weeding of different layers. So, one area might be tackling fresh Lantana, one old Lantana, one where Lantana is well under control; then another area with Billy Goat Weed or invasive grasses, and so on.
- Collect seed from rainforest areas and spread them to regenerating areas for self-propagation. This encourages rainforest regenerating with minimal work and helps keep seed on our land rather than washing away in big downpours.
- Catalogue nature as much as possible by taking photographs, especially when plants are fruiting, even if the species are not immediately identifiable.

"Ponds have improved the broader food web."

We have confirmed over 70 bird species at our place. There are a variety of macropods, antechinus, gliders, microbats, fruit bats, goannas, snakes, Mountain Brushtail Possums, bandicoots, native bees, rainforest scorpions, rainforest snails and more awaiting discovery.

We have around ten different species of frog here in an area that can be hot and dry for many months. We hope that on our property we can continue to increase our frog populations by providing lots of different environments and choices of water bodies, and continue to increase the biodiversity in general.

I started a social media group for my local area where we discuss, share photos, share ideas, share plants and help each other identify what we encounter on our properties. My hope is to encourage like-minded people to continue improving their natural environment by enjoying and understanding the things in it. Many people in our area come from 'somewhere else' and have had steep learning curves with identification of species. By sharing information, identification can be a lot faster, and fun.

Queensland has such amazing diversity and there are always so many new things to find.

Article and photos by Jolita Burneikis
Land for Wildlife member
Captain Creek, Agnes Waters

Some of the wildlife we have found on our property. Shown clockwise starting from the image directly below: Roth's Tree Frog (*Litoria rothii*); Green Tree Frogs (*Litoria caerulea*); a rainforest scorpion; and, Red Tree Frog (*Litoria rubella*).

An adult Silvereye.

Philosophy with Phil

Rescue of a Silvereye

The Silvereye (*Zosterops lateralis*) is a small bird with a white ring around its eye; hence its name. They are native to Australia, New Zealand and some Pacific Islands. They can produce up to three broods per season, laying two to four small pale blue eggs. The nest is made out of hair, grass, fur and cobwebs, which can be a problem at times! They eat fruit, seeds, nectar and also insects. Fast flying and mostly olive green in colour makes them hard to spot.

I have never been any good at relating bird calls, but the Silvereye is said to have a high, sharp 'tseep' as a contact call and 'we-wee-ee-ee-ee' in alarm. Bird calls are fascinating in themselves and Land for Wild-lifers can do themselves a favour by buying a CD or app of Australian bird calls. There are many options these days for purchasing recordings of bird or frog calls. A local, respected sound recordist, David Stewart (www.naturesound.com.au), has many products available. Alternatively you can listen to all of David's bird recordings on the *Michael Morcombe eGuide to the Birds of Australia* available as an app. The recently released *Pizzey and Knight Birds of Australia* is also another excellent app that includes a wide range of call recordings.

The Silvereye migration is a true marvel of nature. They migrate around May travelling north from Victoria and Tasmania (flying across Bass Straight!) to Queensland. Interestingly, they migrate mostly in the evenings and early mornings. It is believed that the migration is brought on by the search for food in the winter months. It is also believed that they store up fat before the flight to provide the necessary fuel. The idea of a 'fat' Silvereye is an strange one given they are only 12 cm long and weigh 10 grams, but can fly for 1,600 kilometres!

We were coming home late one evening, when my observant 10 year old daughter (at the time) exclaimed that there was a bird resting on the spokes of her push bike. I could hardly see it in the dark. Molly rescued the little bird, which had spider web tangled around its body. The little fella was distressed. I removed the spider web and Molly looked after it for a while. We later took it into the bush and Molly held it up towards a branch. The bird flew to the branch, and immediately we heard chirping (or was it tseeping?) and two adults flew down and took control of the situation.

What a great thing to see. A Silvereye.

This lucky Silvereye was rescued from entanglement in a spider web. Juvenile Silvereyes, such as this one, lack the distinctive white eye ring.

Phil Moran
Land for Wildlife member
Cooran, Sunshine Coast
Manager, Noosa and
Districts Landcare

Phi•los•o•phy (say fuh'losuhfee) *n*. a system of principles for guidance in practical affairs. *Macquarie Dictionary.*

Land for Wildlife South East Queensland newsletter is published by SEQ Catchments through funding from the Australian Government.

Land for Wildlife South East Queensland is proudly supported by:

SEQ Catchments – Healthy Land, Healthy Water
Dedicated to a better Brisbane
City of Ipswich
City of Gold Coast
Moreton Bay Regional Council
Australian Government
Logan City Council
Lockyer Valley
Noosa Council
Burnett Mary Regional Group
Scenic Rim Regional Council
Somerset Regional Council
Redland City Council
Sunshine Coast Council