

Print Post Approved PP 100003123 NEWSLETTER

SPRING 2015



▲ Snake (See Native Wildlife Night, p. 8) *Photo: Dale Borgelt*







◄ Buff-footed Antechinus (See Mammals of the MCCG catchment – a 'new' discovery, p. 4) Photo: Jesse Rowland



Koala Skins (See A Century of Change, p. 3)



Restoration (See A Landholder's Experience, p. 6) Photo: Phil Bird

Editorial

There are now three main channels of information flow to our members; the recently much improved Web, the new Facebook and the Newsletter which has been published quarterly since the formation of MCCG. It is doubtful that many of our more than 500 members will go to the first two except on rare occasions and so have any idea on what we are on about.

The Newsletter is another thing altogether. Strictly, it is not a newsletter at all, having few items of news. It is something which physically comes in to the hands of all members and one way or another perhaps many others. Its format is designed to catch attention which encourages the reader to turn some pages and find an interest. The content is deliberately diverse to achieve that. Articles are rarely long and major technical content avoided. There are descriptions of plants and animals, occasional "how to do it" articles, landholder experiences in revegetation, interesting observations and ideas from members, and information on activities and events; these latter not being picked up by people who don't follow Facebook and Web.

Moggill Creek Catchment Group is a volunteer action group aiming to conserve and improve the natural environment of its catchment on both private and public land.

Website: www.moggillcreek.org

Chairman: Warren Hoey Secretary: Cathi Mortimer

Correspondence to be addressed to the Secretary at: P.O. Box 657, Kenmore 4069 E-mail: mccgsecretary@live.com.au

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Editor: Graeme Wilson, Ph. 3374 1218 Email: zzzgrw@bigpond.com Formatting: Margaret Hastie Printing: John Gower

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Low Profile Workers

This continues the series mentioning individuals whose quiet contributions are essential to keeping our programs moving. To date, they have been people doing hands-on tasks. But much of what we do requires money. The annual Photographic Competition is one such and very important. Geoff Mohr heard mention of this and made a generous donation. We are proud of what we do and are encouraged by such support.

Interesting Things

The article on the Water Penny (p.3) expresses some surprise to the keen observers at what they saw. That is but one of myriads of things to be wondered at in the biological environment. Here are two examples, with photos on p 5.

Fruits of native citrus (*Citrus australis*) fall to the ground and occasionally one of them, as seen here, has been attacked by something. The skin has been carefully removed from half of the fruit without damage to the juice sacs; a very delicate operation. Adjacent to that, the outer green layer of skin has been removed. What did that and why?

The other photo shows a leaf with what appears at first sight to be numerous spines on the underside and along margins. To those with some familiarity with plants, this is quite abnormal and perplexing. In fact the "spines" are galls. *Thanks to Wikipedia, Plant galls are abnormal outgrowths of plant tissues, similar to benign tumors or warts on animals. They can be caused by various parasites, from fungi and bacteria, to insects and mites.* The plant is *Beilschmiedia obtusifolia,* a common enough tree.

Chairman's Report July 2015

Our hardworking Section Leaders and their teams of volunteers have learnt many valuable and productive lessons over many years on how to rehabilitate the landscape. Weed infestations have been identified and controlled or eliminated and plantings of appropriate native species are now commonplace in our catchment.

After severe weather events, these hardworking teams are seen rescuing the flattened plants, replacing the lost ones and working out how they can improve the survival and resilience of their plantings against future natural challenges. Unfortunately, as Mike Humphreys points out in his article (p. 4) the impact of the deliberate destruction of plantings in his Section poses other challenges. I can't understand this anonymous action. It will certainly not deter us in our mission.

In November 2014 I mentioned the Rafting Ground /Rowena Park Restoration Project being led by Malcolm Frost. This project is part of the \$2.1M Brisbane wide What's your nature? urban waterway restoration initiative, funded by SEQ Catchments through the Australian Government. Since then there has been considerable planting along parts of the high bank. The site poses particular challenges mainly caused by periodic flooding and the consequent erosion. This project has a few years to run and Malcolm is keen to further engage the local community in keeping this work going beyond that.

The Brookfield Show and our Kid's Day at the Cottage have come and gone. Well done to Dale Borgelt and her helpers. I am told we had record attendance at the Cottage for this very popular annual event.

Warren Hoey

A Century of Change

Legal attitudes to native animals have changed in the last 100 years or so. A friend has sent me a photocopy of an item published in "Queensland Times" of 2 March 1914. It is difficult to read so I copy it:

Our Esk Letter Marsupial Board

Mr. Norman Cross attended at the Court-House on Friday, and received the following number of scalps: nine hundred and fifty nine wallabies, 134 paddy-melons, bandicoots and kangaroo rats, 36 dingoes, one fox; total, 1130. Amount, 14 pounds, 3 shillings, 7 pence. Number of scalpers, 14.

The Marsupial Board had been operating since well back in the 1800s and continued for a few years after this record; and presumably in all or many localities in Queensland.

And now another shocker. August 1927 was the Final Open Season on Koalas in Australia. The Qld Dept. of Agriculture and Stock reported on the results here. 584,738 skins were marketed in that month. The photo on p1 shows a load of 3,600 on its way. It was estimated that the number of animals wounded and left to die, plus young left without mothers, and discarded, damaged skins meant that 800,000 koalas died in Qld. in that month.

Don't think our animals are spared now. There is some legal culling and much illegal culling as pests. And the once large population of koalas is reduced to a dangerous level through loss of habitat.

What bug is that?

Let me confess up front that I am not an entomologist so I won't venture too far into the bug world; just enough to make this story interesting.

A bit of background first. Every 6 months, several teams observe and measure the conditions in a number of our local creeks. We count the number of fish by species, note the presence of certain invertebrates and assess the condition of the bed and banks of the creek. Adrian Webb, who leads the Creek Health Monitoring Project also measures the quality of the water using sensitive analytical equipment.

This small creature (see photo p 5), along with other species, was caught in a fine net trawled along the bed of the creek. We had not seen it before although I am told it is relatively common. We later identified it as a 'water penny'. These creatures sift through the debris to consume microscopic plant and animal life and are themselves food for fish and other invertebrates. This little one was about 5mm in length.

The water penny is a common name for a group of aquatic beetles and their presence seems to indicate that the water quality is good as they are sensitive to pollutants and a build up of algae. This is good news although we know that in small catchments, conditions can deteriorate rapidly due to changes in landscape management or severe weather events.

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Mammals of the MCCG catchment - a 'new' discovery

In the last year of my Bachelor degree at the University of Queensland in 2008, I did a small project surveying the mammals and reptiles at bushland restoration sites in the Moggill Creek and Cubberla-Witton Creek catchments. It was a fantastic and insightful opportunity to see what critters were living amongst us, particularly in restored riparian habitats, where countless hours of hard work are put in to improving the biodiversity values of these areas.

One of the small mammals I identified was an antechinus. Antechinuses are mouse-sized, native marsupial carnivores that are short-lived and breed only once a year. They are quite unique in that all of the males die not long after bouts of frenzied mating, over the space of just several weeks. It was exciting to catch these voracious predators throughout Moggill Creek catchment, as they are generally uncommon in the Brisbane area - facing threats such as habitat loss and fragmentation as well as predation by introduced species (i.e. foxes and cats).

But back then I was calling them all yellow-footed antechinus (*Antechinus flavipes*), and didn't realise at the time that I may have been catching another species masquerading as this one. For many years, Steve Van Dyck (former Senior Curator of Mammals and Birds at Queensland Museum) had been suspicious of these abnormally patterned 'yellow-footed antechinus' from around Brisbane, until in 2012 when he and two other colleagues (Dr Andrew Baker and Thomas Mutton, QUT) genetically screened populations of antechinus and subsequently described and named a new species, buff-footed antechinus (*Antechinus mysticus*), in the journal Zootaxa. I hadn't really given much thought about the antechinuses I caught during those surveys until this new one appeared. So knowing this species existed, I began to question what antechinus I had really caught in 2008, as the restoration sites along Gold Creek where I was surveying looked much like the habitat where the buff-footed antechinus is known from, in and around D'Aguilar National Park. It led to a few of us equipping ourselves with Elliott traps and trapping at a few of the same restoration sites on properties along Gold Creek . In 2014 and 2015, several nights trapping over a few weeks, we were finally rewarded with the cute face of a buff-footed antechinus looking up at us (see photo p 1)

It was a great little discovery and somewhat a relief to finally confirm the presence of buff-footed antechinus in the local area, adding it to the wide variety of small mammals that have been recorded in Moggill Creek catchment, including yellow-footed antechinus (see recent article by the author published in the June 2015 issue of The Queensland Naturalist). Knowing this new species occurs in the catchment fills an important knowledge gap and just shows that continued efforts of restoring bushland, especially riparian areas, may contribute significantly toward the conservation of mammal diversity in Brisbane.

Jesse Rowland

Vandalism

The Gap Creek Bushcare Group is supported by the Moggill Creek Management Group and Habitat Brisbane. Habitat Brisbane program is a Brisbane City council Program which assists local bushcare groups to restore native vegetation on Council-owned public land. In 1998 the Bushcare Group started working in what is now called Deerhurst Road Park. This park runs alongside Gap Creek from Brookfield Road past Kookaburra Street. When we started there was a mown trail for about 200m but after that the park was almost impassable. In about 2007 we finally completed a very rough informal trail along the rest of the creek. We originally put in this trail to access the areas where we were working. However, a local landowner and some of our members worked to improve the trail and it is now used by hikers, bike riders and horseback riders. We also continued with our weeding and revegetating with native Brookfield plants. The very lovely heavily forested park through which the trail now runs is very different from the park we started working on 16 years ago.

Recently we became concerned that portions of the trail were going to wash away. In consultation with Habitat Brisbane we decided to move a portion of the trail away from the creek. Signs were prepared and installed announcing that the old trail was closed for revegetation and directed people to use the new trail. In order to prevent any further erosion we started to plant next to and on the old trail. This was in a section that was in real danger of washing away. The following week we discovered that our plantings on the trail along with the stakes had been torn out of the ground and thrown away.

The vandals seem to be asserting a "right" to use the park for their preferred form of recreation. While we are not opposed to the use of the park for recreational purposes the protection of the environment and the safety of those using the trail must come first. Thus there will necessarily be some restrictions on the use of any narrow trail in a sensitive environment.

In addition, it is futile to assert a "right" if nature is going to take it away. There is another section of trail which is also threatening to wash away. If this section goes it will not be possible to ride a bike or a horse through the park. It will also be difficult for most hikers. We are trying to shore up this section but we do not have enough volunteers to do everything that needs doing. If people want to continue to use the park for recreational purposes and if they want more say in how it is used they should help to maintain and extend the park.

If you want to help I can be contacted on 33741467 or mh@psy.uq.edu.au

Mike Humphreys



▲ Horse Gram, (See Horse Gram – *Macrotyloma axillare*, p. 7) *Photo: Bryan Hacker*



▲ *Peripleura hispidula* (See Just Like a Tiny Scotch Thistle, p. 7) *Photo: Bryan Hacker*



▲ Perplexing Leaf (See Interesting Things, p. 2) *Photo: Andrew Wilson*



▲ What did this? (See Interesting Things, p. 2) *Photo: Andrew Wilson*



✓ Water Penny, (See What Bug is That?, p 3) Photo: Warren Hoey

A Landholder's Experience

The 2.05 Ha property (Tugulawa) at 679 Upper Brookfield Rd is on the south-east facing slope of Moggill Creek with red soil, a eucalyptus ridge across the top and running down into dry rainforest to the creek, with some remnant vine forest. This area has good diversity with more than 60 species and counting, as well over 100 bird species recently recorded. Our planting efforts have been rewarded by increasing number of small birds including superb and red back wrens, golden whistlers and yellow robins. Other wildlife frequently sighted are the swamp wallabies and very recently echidnas. We also have a dam on the property which is visited by waterbirds and home to frogs.

We bought the property in 2005. One third was cleared and had been managed with a mowing, brush cutting and spraying regime. The bush areas had been unmanaged for many years. One of our property boundaries is Moggill Creek and part of that was so overgrown that we didn't realise it was the creek. It was during the dry, the creek was full of sediment and overgrown with (*Pennisetum purpureum*), and even had mature wattles growing in the creek bed. Either side was a mix of lantana and glycine. The "bush" areas either side of the creek had an understory of lantana, glycine and panic. There were the usual suspects of exotic vines including Maderia vine and asparagus vines and unbeknown to us at the time, cats claw creeper.

We are both "gardeners" Marie's experience whilst being familiar with native species has been planting on a suburban block and while I had been an inner city dweller I had had a bit of experience with bush rehabilitation with managing a Habitat group at Bowman Park, Bardon. Even so, when you start to work on the property you don't take the time in seeing what's there and start too early to clear the weeds. What you see are weeds and they have to go. You are aware of the natives but they seem to get lost in the pursuit of managing the weeds. The quickest way was to brush cut, spray, mulch and plant. Fine, looks great with plastic bags and trees poking out the top surrounded by a sea of mulch.

The creek area was treated the same with the help of Council with the use of a mechanised mulching arm, brush cutting, spraying and mulching too. Again you forget or are not aware of the many ground dwelling native plants that are amongst the weeds and there are seedlings waiting to push their way out of the soil so what the spraying didn't kill, the mulch suppressed their growth. Over the past 10 years, trees planted on the road side of the creek have grown into a dense canopy, with a number of understory plants. It still requires attention in removal of weeds as the weed seed stock in the ground can last for years. One year a seed, 14 years a weed, so you learn of the nuisance weed, cobbler's peg's (Bidens pilosa). The creek bank was planted out and again looked great. In 2010 we had the first flooding rains and experienced the first of a few years of the creek in flood. The water raged through, the sediment banks and trees disappeared in the brown surging water. Some of the trees that were starting to get height were torn off at the roots and a number of younger plants disappeared as well. You learn to cope with this. You learn that the creek does what a creek does and takes no prisoners. Over the years you learn to look and see what plant species survives and where on the bank they grow. Learning from nature. We have rebuilt the creek banks and parts have survived the ravages of the floods and we build on to that and expand those areas. It was good to attended seminars and looked at what others are doing. If you look at how the creek has built the banks over the years and try an imitate nature, use rocks, soil (sediment) and plants to bind the banks and over time this seems to be working (until the next big flood). However the main issues are what is coming downstream after the floods. Currently these are invasive understory plants such as Dyschortise depressa, Callisa repens (creeping inch plant), the thick stemmed, lilac flowering, hairy wandering jew (Commelina benghalensis) and others that grow upstream in the creek and the drainage ditches on the road margins. Most of these weeds have been spread by contract mowing. These emerging weeds, especially Dyschortise depressa and Callisa repens (creeping inch plant) will destroy the understory of the creek, so be very afraid.

We have planted out the steeper mown areas, where mowing was a challenge and in the areas where the dry creeks run after the flooding rains. We have joined Land for Wildlife and place 1.3Ha under a management program to reduce weeds and maintain the natural area for our visiting wildlife. We also joined MCCG and Save Our Waterways Now (SOWN) which both supply native plants from their nurseries. However the main areas for rehabilitation were below the house above the creek which was a mass of lantana and Madeira vines. This has a number of dry rain forest species including native vines struggling to get above these weeds. We were fortunate to receive a small MCCG grant in 2013 for help in removing the competing weeds and as Bryan Hacker says "shift the balance toward the natives". Above the house, an area of 1.0 Ha is being managed and is a dry rainforest with a eucalyptus ridge. This time we have taken our time in removing weeds as we have learnt that it best to remove weeds in patches and over time using the Bradley method, which follows three main principles: (1) secure the best areas first, (2) minimise disturbance to the natural conditions and, (3) don't over clear and let the regenerative ability of the bush set the pace of clearance.

However in the first instance we did spray to remove the lantana and exotic grasses such as panic grass. We were told "how many lives do you have". But now mostly all of the weed removal is by hand or on occasion by pasting cut stumps with 50:50 glycphosate. We have an area of about 0.3Ha with cats claw creeper. Last year we were successful in a CCA Council grant to help treat this. It took a while to be able to recognise this vine but once you know the vine you start to see it everywhere. This past year we have become aware it was on neighbouring properties. With the help of Adrian Webb (MCCG) and the SEQ Catchment funds we have managed to treat neighbouring properties, made our neighbours aware of CCC on their property and helped to cut the vines from the trees. However we will be on the lookout for the yellow flowers around Christmas time. When CCC is part of the property it is really the whole and neighbouring properties that is affected.

So what have we learnt and how can you sum it up in such a short article? Well take your time is one, learn from nature and shift the balance. Another is you may work for an hour but nature works 24/7 so a small change by you will allow nature to continue her work for 24/7 (as per Michael Fox of Fox Gully Bushcare, Mt Gravatt). On your knees, in the bush

A Landholder's Experience continued from page 6

early in the morning, mattock or secateurs in hand, quietly removing weeds, listening and watching the birds. When you are close to the ground in and amongst the plants there are little treasures to be found, a plant not seen before covered by weeds and there it is. What is it? So flicking through pages of books or on screen or a trip to the herbarium. That's what it is. This one's uncommon, only one on the property. Feeling good, another one on the list. That's what is so enjoyable. Not drowned out by noise from the motor or too late at the end of a spray but there enjoying what nature intended. Quiet, mediative and therapeutic. Enjoy.

The photo on p 1 shows the re-established creek with the weed-free well established vegetation up the slope and the beginnings of appropriate vegetation on the flood plain, which will hopefully resist flood erosion when established.

Phil Bird and Marie Toohey

Horse gram – Macrotyloma axillare

Horse gram, *Macrotyloma axillare*, is a weed which is causing increasing concern in the upper Gold Creek area. It is a member of the legume (pea) family, the Fabaceae, and was introduced from the Grassland Research Station at Kitale, Kenya, in the 1950s. (Incidentally, my very first job, after leaving school in 1956, was at this Research Station.) The 1950s and 1960s were a period when there was strong interest in introducing legumes to the Australian tropics and sub-tropics for the purpose of pasture development, as these species fix atmospheric nitrogen, thus producing a protein-rich diet for grazing livestock. This introduction proved to be high-yielding in trials, palatable to stock – although it was reported that they needed to become accustomed to it. Being so promising, it was released in 1966 as a pasture species and the cultivar named Archer. However, it appears that it is no longer commercially available as a pasture legume.

In our area it is understood it was purposefully sown under the high-voltage power lines close to Gold Creek Reservoir soon after release, presumably associated with vegetation clearing to put in the power lines. It is also causing concern elsewhere in SE and Central Queensland.

Horse gram is native to Central and southern Africa, Saudi Arabia, Yemen and Sri Lanka. It is a twining vine, vegetatively rather similar to glycine, the leaves with three leaflets up to 5 cm long, 3.5 cm wide. The flowers and pods, though, are quite distinct from those of glycine (see p 5). The c. 15 mm long yellow flowers are clustered, with 2-6 in leaf axils, and are typical of those of the pea family. The pods are 3-5 cm long, about 7 mm broad, with the tip extended to a point. This species is considered to be a serious environmental weed and is rapidly spreading in South East Queensland. It has been listed as being number 191 amongst the top 200 most invasive weed species in the region. While glycine scores much

been listed as being number 191 amongst the top 200 most invasive weed species in the region. While glycine scores much higher at number 19, that doesn't mean we should not work to control horse gram too!

Bryan Hacker

Just like a tiny Scotch Thistle

A small shrub which we have been distributing from our Nursery has the botanical name *Peripleura hispidula* but no common name. As shown in the photo on p 5, it has a 'flower' very much like that of a Scotch Thistle, although much smaller, about 8-10 mm long.

Checking in Volume 2 of *Flora of Southeast Queensland*, published in 2002, I found it as *Vittadinia hispidula*, the new name included in a list of updates at the back of the book. It is listed as *V. hispidula* occurring on Mt Coot-tha in the BCC *Mt Coot-tha Forest Management Plan*, dated 2003.

Peripleura hispidula is a well-branched herbaceous shrub to about 45cm tall and flowers throughout the warmer months of the year. Leaves are alternate, usually up to 4cm long and 0.5cm wide, lacking petioles (stalks). This species is in the daisy plant family Asteraceae, which also includes the Scotch Thistle. The 'flower' (as is characteristic of this plant family) is in fact a cluster of tiny flowers grouped in a small head up to about 10 mm long, and is purple in colour.

I have found this species to be remarkably tough on my ridge-top block forested with spotted gums and other eucalypts. It is still not uncommon on the slopes of Mt Coot-tha.

Bryan Hacker

Errata

In the previous (Winter) issue, all photos on p5 had the same caption, one used in the Autumn issue. Hopefully, there would have been little difficulty in linking the photos to their articles.

The correct author of the article on Section 8 was John Crowley.

These errors were seen at a stage which allowed a note to be inserted saying that a correct version could be found on our Web, but unfortunately the erroneous one went there.

Get Your Camera Out

It is time to get the camera out for that great shot of our native fauna or flora or catchment activity. We love seeing what you find in your viewfinder as entries in the MCCG photography competition. We love seeing all the attention the public gives to these individual views of our native plants, wildlife and environment when we display the entries in Kenmore Village Centre Court. We hope yours will be among them.

There's over \$1,500 in cash prizes to be won across the three Open and two Young People categories and special prizes such as winning the public popular vote. As well, local schools are encouraged to enter the special competition for the Lord Mayor's Shield with an additional prize of \$250 to spend on environmentally themed resources.

All the prizes are made possible by local sponsors who have generously supported the competition for many of its years and his year we welcome two new local sponsors, Aussie Beaver Chipping and Kenmore Fresh. All the ingredients for another successful photocomp are there: Organising committee; very good sponsors and prizes; Trustees Room beside Brookfield Hall booked for receipt of entries on Saturday 24th October 10am – 2pm; Judging by Dr Joseph McDowall; Kenmore Village Centre Court display of photographs Monday 26th October to Saturday 31st October, with Prize Presentations at 2pm Saturday 31st. All that is needed is that wonderful contribution of photo entries that focus on our native plants, wildlife or people enjoying activities in the catchment. We'd love to include your individual view.

You can find all the details and entry forms at **www.moggillcreek.org** or request by writing to **PO Box 657 Kenmore QLD 4069.**

If entry forms do not answer all your questions, contact the organisers at MCCGPhoto@gmail.com (Contact for Schools only is MCCGPhotoSchools@gmail.com)

Dale Borgelt

Native Wildlife Night

Younger or older, everyone in the audience enjoyed the locally native wildlife that Martin Fingland brought to his night presentation for MCCG in July at Brookfield Hall. Examples of every reptile, marsupial and bird that Martin brought to show us can be found in *WILDLIFE OF GREATER BRISBANE: a Queensland Museum Wild Guide*, but this was a chance to see local wildlife up close in real life - and even touch the touchable ones.

Older as well as younger hands reached out to feel the skin, fur or feathers of the friendlier ones, but it was the snakes who stole the show for many of the youngsters who spent a long time holding, handling and showing around twisting, twining, colourful "Green" Tree Snakes that were not green (See photo p 1). Also, gentle hands touched the glider (photo p 1).

Another show stopper was the Channel-billed Cuckoo which raucously proclaimed its independence and its total unwillingness to be friendly, even though it has had long term human care because it can't fly. Therein lies the secret to its success as a cuckoo - from the moment it hatches it is never imprinted to bond with the caregiver. The cuckoo noisily demands and accepts food from the host parents, around here usually crows, but never identifies with them and instead happily recognises and flies off with its Channel-billed parents when they come calling on their return migratory trip.

Younger or older, attendees on the night were sure to find out something new about our native wildlife because of Martin's wonderful presentation.

Dale Borgelt

Volunteering is good for you. Especially in our Great Outdoors!

An article, dated 15 June 2015, from the Bush Heritage online Newsletter tells a story that many of us firmly believe – that volunteering is beneficial in many ways. Apparently about 4,400,000 Australians contribute about 701 million hours to various volunteering projects each year. A considerable proportion of these volunteers are working in our great outdoors, and a published research project by staff of Beyond Blue and Deakin University has shown a clear link between a person's time outdoors and their sense of physical, emotional and mental health.

Quoting the Bush Heritage paper "In fact, researchers worldwide are finding that regular contact with nature has been linked with health benefits ranging from reducing cholesterol to helping manage diabetes. The psychological benefits of nature include lowering anxiety, stress and depression while simultaneously improving mood and increasing a person's physical activity." The paper later points out "that people who combine volunteering with working outside are getting the best of both worlds."

So, keep up the good work, Catchment Group volunteers - It's good for you!

Bryan Hacker