

MOGGILL CREEK CATCHMENT GROUP

www.moggillcreek.org.au



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NEWSLETTER

Autumn 2011



◀ Tyler's frog (See Flat out like a frog, p.8) Photo: Gordon Grigg



Bush curlews (See Bush curlew story, p.6) ▶
Photo: Alison Butterworth

Staghorn (See Ferns, p.8) Photo: Graeme Wilson



Emperor gum moth (See A night time visitor, p.4) Photo: Bryan Hacker



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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.

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Editorial

In the previous issue we expressed satisfaction that we began Summer with better than usual soil moisture which should get us through until "normal Summer rain". Little did we dream

Those who have put so much effort in to repairing the vegetation of lower Moggill Creek (in particular) have been left wringing their hands in despair. Still, ever optimists, we have to look for upsides, and there are some.

For some years now our creeks have become badly silted, where they were once gravel or rock bottomed; attributable to reduced flow and undesirable land management. Regular flow does not depend on runoff but on springs, which in turn depend on substantial rainfall. That has been missing in recent years, added to vegetation clearing which increases runoff instead of penetration. As for land-mismanagers, we can only try, but are they listening?

And coming away from the creeks: Continuous good soil moisture has given us growth such as we have rarely seen, including unfortunately weeds. It may particularly be helping with natural regeneration. Self-sown seed regularly leads to seedlings after rain but in the absence of long periods of moist soil, they are inclined to die. This time, we may have establishment of useful numbers, although that will depend on our recognition of them associated with weed control.

Another thing: Have you ever visited The Cottage? It is in a pleasant bush-land setting, our administrative headquarters, used for regular Committee and other Meetings, the monthly popular Talks at the Cottage and various public events, an increasing library and interesting wall displays. Outside is the Cottage Garden, a growing collection of forest species which may be useful for garden use or simply interesting in themselves for other reasons. The Cottage is regularly open on Thursday mornings from 9.30 am.

Draft Outdoor Recreation Management Strategy

The Moggill Creek Catchment Group has as its mission to "conserve and restore the natural environment of its catchment on both private and public land." Brisbane City Council had invited public response to its Draft Outdoor Recreation Management Strategy, released late in 2010 and MCCG Committee agreed to make a submission, particularly in relation to Mt Coot-tha Forest Park, much of which lies within our Catchment. Our emphasis is to sustain the natural environment of this unique area. If you would like to read our full submission, it is available on our website, www.moggillcreek.org.au.

Malcolm Frost

Chairman's Report

In November we had no idea as to what was to happen in the New Year. Heavy spring rain caused some flooding but most of us rejoiced at the new growth and abundant flowering brought on by well watered land. Our AGM was well attended and we enjoyed Dr Stanistic's talk on snails. Before his talk very few of us realised how many species and how varied were snails. He will come back to take part in one of our Cottage talks in March and he will tour the locality and show us what he can find in the way of snails.

Then in January matters changed radically. Life within Brisbane was dominated by The Great Flood of 2011. Fortunately, compared with what occurred throughout the city, our catchment was relatively little damaged, although we were deeply concerned at the floods that caused so much damage in low lying Kenmore suburbs close to the Brisbane River. There is little solace in knowing that the water level within Rafting Ground Park was 60mm below that of the 1974 floods when one's house is completely flooded.

We ran a well attended Friends of Moggill Creek meeting in late January. Let me emphasise once more that everyone is invited to these meetings. However, we appreciate that some supporters of MCCG are not interested in the ongoing activities that we initiate, nor do they want to be troubled by emails. But if you feel that you might be interested let me know and I'll include you on our emailing list. We are indeed fortunate to have within MCCG experts in many different fields. As a consequence, studies and tours on dragonflies, frogs, birds and dung beetles are about to begin within the catchment. We want to encourage members who are not interested in managing MCCG to enjoy discovering and learning about aspects of our diverse rich flora and fauna.

Malcolm Frost

Creek Ranger's Report

Once again change is in the air with yet another maternity leave for one of us Moggill Creek Rangers. I am due to finish my temporary role as the Creek Ranger for Moggill Creek in mid February with a baby due in the first week of March. As you may be aware I took over Shelley's maternity leave to find out soon after that I was expecting myself, which was great news for me and my husband. With Shelley not due back from her leave until after July means that you will have another Creek Ranger stand-in until she returns. I would like to take this opportunity to thank MCCG, especially the hard working management committee. I wish the MCCG all the best for the future.

With the New Year upon us and school back to normal I have just locked in a school for the year long Catchment Kids program. The lucky school for a second year in a row will be a class from Brookfield State School. 'Catchment Kids' is an award winning program that the Creek Rangers coordinate throughout all of Brisbane and 10 different schools, with each school undertaking at least one major activity per term.

The Creek Health Monitoring Project has had some delays but we now have about 35 volunteers ready to get started in the coming months. We are planning to hold an information session for the volunteers and then start the monitoring in March/April. If you want to be a part of this project please contact the Creek Ranger.

The Dung Beetle survey is well and truly underway with Richard Woodhead doing a great job as project manager. A large diversity of dung beetles has already been identified and we anticipate a great report on this at the completion of the survey.

I have also been involved with Kenmore SHS and the Stream Savers project. I had to apply for additional grants to keep this project going which was a success. Damien Egan will now be able to continue with the good job he is doing with the school and rehabilitating the creek.

Also remember to check the catchment group website – www.moggillcreek.org.au – it is regularly updated with news, events and environmental information that you might find interesting! Creek Ranger contact details are 3407 0052 if you have any questions of me.

Stacey Hodge

Is Wandering Jew a weed?

The plant commonly known as Wandering Jew or scurvy weed, previously known as *Commelina cyanea*, but now identified as *C. diffusa*, has all the attributes of a weed. Certainly during this very wet summer, this species has shown itself to be very invasive, out-competing lower growing natives and exotics alike. And it persists during dry seasons too. I am sure many of our readers will be surprised, though, to learn that Wandering Jew, with its pretty blue flowers (see photo on p. 5), is, indeed, a native.

The problem becomes complicated, though. There are two local species of *Commelina*, the less common and more robust *C. benghalensis* being exotic. This latter species may be distinguished by having long, dark hairs at the top of the leaf sheath. The genus *Commelina* is distinguished by having flowers emerging from spathes – leaf-like bracts that enclose the developing flowers (see photo of *C. diffusa*, p. 5).

Wandering Jew has weak creeping stems that root down at the nodes and soft leaves mostly up to 8 cm long and 2 cm wide. Flowers are bright blue, the 3 petals about 1 cm long. It is a food plant for larvae of a species of Tortricid moth which has a substantial controlling effect in late summer to autumn. With its ground-covering habit, it is valuable in areas subject to occasional flooding but does need to be controlled where tree seedlings are being established.

The similar species *Tradescantia fluminensis*, previously *T. albiflora*, which has white flowers, is exotic, together with all similar species with variously striped leaves.

As a further complication, the white-flowered native *Aneilema biflorum* (see photo, p.5) can be confused with *Tradescantia fluminensis*, but it is much more delicate, with inflorescences of two short branches, each with two flowers with 2-4 mm petals (cf. 8 mm long in the weedy species). Another white-flowered species, *Aneilema acuminatum*, also occurs in our area. Both *Aneilema* species are native and have whitish to silvery undersides to their leaves, in contrast to the green undersides to the leaves of the weed species *T. fluminensis*.

Bryan Hacker

(With thanks to David Moore for advice on recent taxonomic changes.)

Two similar native vines

Two very similar native vines are wombat berry (*Eustrephus latifolius*) and scrambling lily (*Geitonoplesium cymosum*). Both have bright green narrow leaves up to c. 12 cm long and 4 cm wide and delicate white flowers with 6 'petals' about 1 cm or less long. They are both in the family Philesiaceae, a family with just seven genera and nine species, distributed from South America to Australia. The genera *Eustrephus* and *Geitonoplesium* differ botanically in that the former has flowers mostly in axillary clusters whereas the latter has flowers in terminal cymes (the central flower opening first, lower flower buds then developing).

The two species we have in our area are readily distinguished in fruit, wombat berry having orange fruit, scrambling lily, black fruit (see photos on p.5), the fruit of the wombat berry splitting to show the black seeds. The photos also show how to distinguish the species when not in fruit – the leaves of wombat berry have several distinct veins, whereas those of scrambling lily have a single prominent vein.

Both species are quite common in our Catchment; wombat berry perhaps occurring more frequently in less fertile eucalypt woodlands. Both should be encouraged in native plantings – unlike some vines, they rarely climb to more than 2-3 m and never cause problems to companion plants they use for support.

Bryan Hacker

A Night-time Visitor

One of the few advantages of not having air-conditioning during our Queensland summer is opening the French windows at night and enjoying meeting some of our nocturnal wildlife. I must admit, many of our nocturnal visitors I could well do without, but I was delighted one night late in January to meet the gorgeous moth shown on page 1

Bryan Hacker



▲ Wandering Jew

▼ (See Is wandering Jew a weed? p. 4) Photo: Bryan Hacker



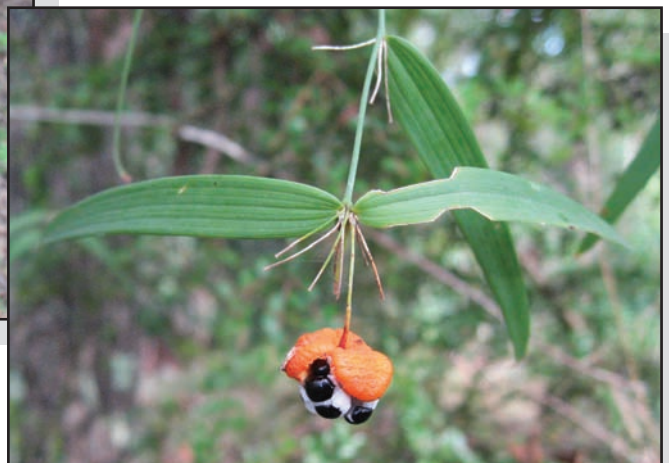
▲ Aneilema biflorum

What is this? (See Insect Cabinet, p. 7) ►
Photo: Dale Borgelt



▲ Scrambling lily

▼ (See Two vines etc., p. 4) Photo: Bryan Hacker



Wombat berry ►

Flood Height at Rafting Ground Park

Pullenvale was isolated from the World by flooding over Moggill Road so all we could see of the disaster was the huge lake at Rafting Ground Park. We could not see the marker post that records the 1974 water level so we assumed the present flood was higher than that one.

After the water had subsided we spent an hour or so making measurements. We had an instrument that measures distances to about ± 1 mm over 10 m and angles to about ± 0.05 degrees. We had a well-defined tide mark on the roof of the picnic shelter near the marker post and so we set up our tripod below that.

The result was interesting. The water level was actually 64 mm below the 1974 mark (estimated error of ± 15 mm) so we assume that we could not see the top of the marker post either because of flotsam in the water or just poor eyesight. The other interesting point is that the flood level in the Brisbane River in the City is reported to be about 1 m below the 1974 mark. We had not expected such a difference and suppose it may be something to do with water being banked up by the flow in Moggill Creek while the tide from the river is pushing up the creek.

John & Rachel Griffiths

Bush Curlew Story

For three years now the Bush Curlews have laid their eggs on the bottom side of our driveway. In the past we have witnessed the young chicks following close behind their Mum and Dad and within two weeks they have moved on. To our delight they returned once again and in what seemed no time at all the little chicks hatched. Dad began the tedious job of finding food for the chicks while Mum kept them warm. The chicks would jump up and hide underneath the mother's feathers. With each passing day the chicks grew fat and strong (photo p1). They learnt quickly from their parents the importance of playing statue when danger came near. With the continuous rain we had in October, we noticed that one of the chicks had disappeared. Then sadly the other chick perished. The parents guarded the dead chick for two days and two nights. Each night we could hear their mournful cries for their babies. About two weeks later we noticed the mother sitting on two new eggs. Each day the parents would take their turn sitting on the eggs. Early one morning I noticed something lying near the nest. On closer inspection I saw the father laying dead one metre from the eggs. I saw the trail of feathers leading up the hill towards the nest. The Bush Curlew had fought to its death protecting his family. Now the mother was left with the solitary task of raising her young on her own. The following day I saw the mother sitting on the driveway. The day after that I saw her walking around with one chick following close behind. I couldn't help thinking about her task ahead, not only did she have to find food for the two of them; she also had to guard her chick from the three local kookaburras watching from the branches above and the water dragon, possibly the one that I had rescued the month before from the old chook pen. She was a single parent with an enormous job ahead of her. She didn't return to the nest again. It was time to dispose of the dead bird's body so I walked to the orchard where he still lay and that's when I noticed his body had been moved. I can only assume that the mother, having helped her baby chick free itself from its egg, dragged the dead bird over to where the remaining egg lay. The dead bird's wing was positioned perfectly over the egg to keep the rain off. On closer inspection I bent down and lifted the wing to find the remaining egg. It was cold but I could see where a small hole had begun to appear. I placed the egg in my hand and walked around the property thinking how cruel Mother Nature can be. I was walking around feeling very sad when suddenly I felt movement coming from the egg. Through the tiny hole I heard a strong cheeping sound. My sadness was replaced with a feeling of hope. I carried the egg up to the house and proceeded to help it free itself from its tight space. I then picked up the chick with cotton gloves and rubbed the wing of the dead parent over its tiny body, then offering it to the mother, knowing that I couldn't care for it like its mother could. She gave a short hiss, then stood up and gently took the new born chick in her beak like a dog would carry a puppy. She turned and walked away with her first born running close behind. After three days of feeding the mother mealworms twice a day they moved on. That afternoon I thought to myself about the fact that the eggs had been laid underneath a peach tree that my mother had bought me when she was visiting last. It's called an 'Angel' peach tree. I'm left wondering if we will see them again next year. I truly hope so.

Alison Butterworth

Planned habitat restoration and more food plants for the Richmond Birdwing butterfly in 2011

Several major Projects are underway for the Richmond Birdwing Conservation Network (RBCN) as it gathers momentum after it has formed close ties with the Wildlife Preservation Society of Queensland (WPSQ). A new logo has been selected for RBCN and several projects have made progress, including the research on captive breeding, in collaboration with the Queensland Department of Environment and Resource management (DERM). There are very positive indications from this study which are expected to lead to a new and novel way of addressing in-breeding depression by the birdwing butterfly in fragmented populations.

This year in 2011, field activities are focussing on identifying more suitable and secure bushland sites, for rehabilitating as habitats for the butterfly. The selected sites will be planned to form a network of breeding sites with ample food plants, expected to be accessible (within 30km of each other) as breeding sites for dispersing adult female butterflies. The plans are to create a series of inter-connecting “stepping stones” of food plants in corridors to link the fragmented natural areas where the Richmond Birdwing butterfly Vine, *Pararistolochia praevenosa* is already present, or where it can be planted in sufficient densities to be used as habitats. Each area to be planted with 30 or more vines will be maintained and monitored by RBCN members or collaborators from Catchment groups, until they are large enough to support breeding colonies. The vines will need to produce healthy growth (no more droughts – please!) with sufficient soft leaves and a biomass of large leaves suitable for the caterpillars to complete development. We always expect some losses from plantings but the larger numbers planted will offset the loss of vines and those that do not thrive due to the soils, inadequate moisture, shading, nutrients, drainage or substrates on which the vines can climb.

Birdwing vines are being planted in selected school yards and at “Flagship Birdwing Recovery Sites” including at least two areas planned in Brisbane’s western Suburbs. The first trellis was erected at Kenmore State High School and the second at Moggill State Primary School. Another major site is being considered as a collaborative project with DERM, at the Mill Road Conservation Park, Pullenvale. This has the potential to become the most important “core” area for recovering the Richmond Birdwing west of Brisbane. It is close to the Brisbane River, a water course suitable for dispersal of females searching for food plants, and it is not too far from the “stepping stones” of planted vines in areas and gardens planted with birdwing vines from Pullenvale, Brookfield, Kenmore, Chapel Hill to the Brisbane River. Other Flagship sites are planned on the Gold and Sunshine Coast to link the already-effective “stepping stones” and corridors where the butterfly has recovered in the last two years.

Don Sands

Insect Cabinet for the Cottage

This wonderful Insect cabinet is now at home in the Cottage. MCCG is exceedingly grateful to Dr William Palmer, Principal Entomologist of the Alan Fletcher Research Station, who gave us this generous gift when Biosecurity research was moving to their new Boggo Road premises. Bill is happy that historical drawers of eg *Cactoblastis* and *Cactophagus* specimens will be preserved for educational purposes. Some drawers are available for our future collections, such as the Dung Beetles found in our current survey.

Apart from its extremely functional design, the cabinet is a beautiful piece of woodwork from an earlier century. (See photo p. 5. Dale, left, Bill, right.) Put it on your list of things to see when you drop in to the Cottage one of these Thursday mornings - we open from 9.30am to 1pm.

Dale Borgelt

**REMINDER for members who have not renewed as yet:
2011 MCCG MEMBERSHIPS DUE**

Ferns

In the general traffic of our talking and working, we hear a lot about trees and other woody species, grasses and dianellas. We struggle to get adequate recognition of the 100 or so species of vines. But there are some groups of which we hear nothing. One of these is the ferns.

There are about 40 species of fern recorded for our catchment. Perception of them is largely of small plants occurring in wet environments. True, many of them are smallish but by no means all. While there is evidence of tree ferns having once been here, we seem to have destroyed them, but other large species remain such as the staghorn (see photo p 1). And many species are adapted to very dry situations.

We don't propagate ferns in the nursery. That would be just one more thing when we have enough to do now, but it would be good to see them given a conspicuous presence. Here is an offer which could be accepted by someone among our 400+ members. Introduce and help in the maintenance of some ferns in the Cottage Garden. If you are interested, discuss it with me. (phone 3374 1218. zzzgrw@bigpond.com)

Graeme Wilson

Flat out like a frog (?) drinking

The last two wet seasons have been great for frogs, but you may recall it was dry before that, very dry. We hadn't seen or heard a frog for months. Then in May 2009 we had rain, a deluge; our creek flooded and our tanks filled, and suddenly there were frogs again, emerged from their dormancy in nooks and crannies. Checking our water butt under the cascading downpipe, I chanced upon a Tyler's Frog (*Litoria tyleri*) (see photo p 1). Actually, this species is not easy to tell from its close relative the Emerald Spotted Tree Frog (*Litoria peroni*) which also occurs here (a minor difference about presence or absence of a stripe across the ear drum!).

No prize for working out what it was doing; it was rehydrating; drinking! Even a dehydrated frog does not drink via its mouth, but through its 'seat patch'; the skin under its abdomen takes up water by osmosis. This one sat peacefully and trustingly in the torchlight, having a long and welcome drink. I wondered where it had spent the dry months, and was reminded that Andrew Amey and I measured water loss across the skin of several local frog species and published the results in 1995. We found that two arboreal species, *Litoria peroni* and the Eastern Sedge Frog (*Litoria fallax*) each have a fatty layer in their skin. This helps to waterproof them, so they lose water at a slower rate and survive for longer through dry times on the water they store in their bladder. Presumably the fatty layer is absent over the seat patch, which doesn't matter when they are hunkered down in a water conserving posture with their legs tucked in and pressed against the substrate.

Gordon Grigg

TALKS (and WALKS) AT THE COTTAGE

3rd Thursdays of the month

10am-noon

FEBRUARY 17	EUCALYPTS with Bryan Hacker
MARCH 17	SNAIL ID WALK with John Stanisic
APRIL 21	BIRDWALK with Dawn Muir
MAY 19	DRAGONFLIES with Sandy Pollock

A further treat, starting May 19, will be 3rd Thursday 8am-9.45am birdwalks with Dawn Beck. As per Hugh Possingham's emphasis on regular recording over time, these walks will be on a defined route around the Cottage, Gold Creek and the Reserve, each month at the same time. They are timed to fit in with the 3rd Thursday Talks at the Cottage so that interested members can attend both if they wish.

To book your place for a Talk or Walk contact Dale Borgelt
daleborgelt@gmail.com or 3374 1035