MOGGILL CREEK CATCHMENT GROUP

www.moggillcreek.org.au

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NEWSLETTER SPRING 2009

Microbats (p. 6)
Photos: Judit Kibedi

Gould's long-eared

Greater broad-nosed

Cottage garden (p. 3) *Photo: Bryan Hacker*

Callow talk audience (see Creak Health p. 4)
Photo: Dale Borgelt

National Tree Planting Day (p.7)
Photo: Malcolm Frost

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Editorial

News is usually expected to include both good and bad, but for us at present there is very little of the latter. Not included in the previous newsletter because it happened too late was the Great Flood in May. Certainly it damaged vegetation on a scale which had never been seen before, to the great distress of those who had done so much to restore it. But there was a positive side. Recent dry years and lack of flow had led to rather foul waterways and the flood may have long term benefits. And, as a bonus, the rain which caused flooding led to much of the catchment gaining soil moisture at depth, loss of which has been a serious problem.

Coming to the good news, there is plenty. Some appears in this issue, some not, and all are merely mentioned here. Our membership has risen greatly. Favourable growing conditions have led to more plants going out from the nursery than usual at this time of the year. There is expanded nursery capacity. The Cottage Garden venture is sure to be useful. The mid-year public meeting was exceptionally well attended and received. Most of all is the increasing use of the Cottage; for administrative activity, the very successful monthly talks, a base for research by outsiders, a meeting place for other like-minded groups, and a slowly expanding library.

Very recently, but too late for reports which will be included in the next issue, there were three events. The Photography Competition was a great success, the annual Environment Day (which has gone under various names) at Brookfield Hall took place, as has the annual Platypus Survey. Happily, the latter did record a number of sightings in spite of the great damage to creek banks caused by the flood.

Yes, a most satisfactory three months.

Creek Ranger's Report

It's been a busy few months for the Moggill Creek Catchment Group and I feel like I am beginning to settle in now! I have met many of you through nursery and bushcare working bees, cottage talks and property visits, and I'm starting to put some faces to names. I have been getting involved in a range of MCCG activities, and I'm very impressed by the breadth of activity the group engages in. Particularly exciting are the upcoming interest group forums (see article p.7), where all members of the MCCG have a chance to help shape the future direction of the group. I look forward to meeting many more of you there and hearing your great ideas! Another recent development in the MCCG that I find exciting is the start of a group of cottage gardeners, with a successful working bee in June that saw the first instalment of a native plant demonstration garden at the Cottage.

Recently, I have been working closely with the schools in the catchment, on environmental education and practical restoration activities. This year Upper Brookfield State School are participating in the citywide 'Catchment Kids' program – so far they have undertaken a clean up day, a catchment tour and a bush tucker planting, and in October they will perform a play at City Hall in front of school children from around Brisbane.

On a final note, apologies for any confusion I may have caused by getting married! My name has now changed to Shelley Dunlop and my email is *shelley.dunlop@brisbane.qld.gov.au* - the previous email will not work any more.

Shelley Dunlop

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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Chairman's Report

This quarter began with one of the worst flash floods on record. On the lower reaches water level rose by 5m over a few hours; 30m tall Casurinas that had stood for 20years or more were torn down, the shape of the creek was significantly changed and years of restoration work was destroyed. Brisbane City Council, through Habitat Brisbane, is doing all it can to assist. One would like to know if such events are going to occur more frequently. As well, it will be of great interest to discover whether Platypus are still about when our next Platypus Survey is carried out in September

Our lively and enjoyable community education program continues. For our public winter meeting we invited as guest speaker, Glenn Leiper, well known for his work on Mangroves to Mountains. The event was an outstanding success, with record attendance. Our cottage talks initiated by Dale Borgelt also continue to be very popular.

Our Catchment Group supported Planet Ark's National Tree Day both for schools and for the general public. Kenmore High School students planted more than 600 indigenous plants with our help. Then two days later, with considerable on site assistance from Brisbane City Council's staff and financial assistance from Councillor Margaret de Wit and AECOM, 112 volunteers planted more than 2,100 plants at the end of Huntington Park. The morning event, enjoyed by all, should result in the transformation of the eastern part of Huntington Park over the next few years.

Volunteer support is essential for all our activities. Our Catchment Group runs between five and nine working bees every month, usually on public land in different parts of the catchment. There is a list giving times and locations of these on our web page. During the last quarter, volunteers contributed 927 hours of their time and planted 1,715 plants. At our nursery managed by Graeme Wilson, 279 hours were worked and 4,043 were added to the nursery stock. In addition 3,918 plants were distributed mainly to MCCG members within our catchment.

MCCG thankfully accepted grants from BCC and GVEHO. Our membership has now exceeded 400 and we are receiving more donations, probably because we can now offer tax exemption. This is good news as the extent of our restoration work and educational initiatives depend on financial support.

Malcolm Frost

A Cottage Garden of Natives: Exemplars and Experiment

An idea is finding its expression in the planting of 'smallish' native plants around MCCG's cottage at the end of Gold Creek Road. People often ask what native species might be good for their suburban block, and of the large list of species from our catchment that Andrew Wilson came up with, less than one third could be found in commercial nurseries. Does this mean the rest are no good? Or has there been a lack of exploration? We don't know. So the purpose of the garden is twofold, to show plants which are native to the Moggill Creek Catchment and are suitable for gardens and that we can get easily, as exemplars, and to track down others and experiment with them. We might find some unexpected treasures. So there's plenty of opportunity for people who like collecting and germinating and rearing plants to contribute. I can send the list (above) if anyone wants one (*g.grigg@uq.edu.au*) and of course the list is incomplete anyway and will be added to.

After help from friends at Habitat Brisbane who provided mulch, the garden is underway with over 40 species planted at a working bee on July 11 (photo p1). Since then, volunteer gardeners have been watering and labelling. It's a long term project of course and we need more volunteers, so if you would like to join the MCCG Native Gardeners, please contact me on 3374 1737.

Gordon Grigg

Feral Deer

Recent changes to the Land Protection (Pest and Stock Route Management) Act 2002 have formally recognised the significant environmental and social impacts of feral deer in Queensland. Feral Rusa deer are now declared Class 2 pest animals, and Fallow and Red deer are declared Class 3 pest animals. Council and landholders have a legislative obligation to control the numbers of feral deer on their land.

Originally introduced to Brisbane in the 1990's, feral Rusa deer occur throughout the Moggill Creek area. Rusa deer are identified by their large ears, light tufts of hair above the eyebrows and large antlers. Their coat varies from grey to yellow to red-brown, with darker brown on the hindquarters. Undesirable consequences of their presence include destruction of native vegetation, erosion of creeks and waterways, dispersal of weeds, and the possible transmission of livestock parasites and disease. Feral deer damage fences, gardens and infrastructure, and represent a serious traffic hazard for motorists.

For feral deer control to be successful in Brisbane, Council relies on having the support of the community, to create a network of adjacent landholders who report feral deer issues to Council, and allow Council control programs to be undertaken on their private property. Should you have feral Rusa deer on your property and wish to become involved in the Council deer control program, please contact Council on (07) 3403 8888.

More information about feral Rusa deer and other pest animals can be found on the Brisbane City Council website (*www.brisbane.qld.gov.au*).

Leon Hill

Health Check on Local Creeks

For the August Talk at the Cottage, Dr Nikolaus Callow presented the outcomes of his students' field studies of water quality, riparian vegetation and river geomorphology at six sites in Gold Creek and upper Moggill Creek (above Brookfield).

In Dr Callow's presentation (see photo p1), there was much to give hope to MCCG members that their efforts were having a positive effect on the environment. Indeed, in summing up, Dr Callow said "Overall, the students found that the creek was in good condition at the time of the survey (April 2009), and was a key refuge habitat in the lower Brisbane River, particularly for species such as the platypus. Students observed that efforts to maintain the Moggill Creek catchment were critical to regional biodiversity in south east Queensland, particularly because of the poor water quality, riparian vegetation and geomorphic condition of many other creeks in the Brisbane River catchment. Many students concluded that the Moggill Creek may in fact be acting as a refuge habitat for many species, and therefore efforts to support work of the MCCG will be critical to long-term recovery of rivers and creeks within the greater Brisbane area."

The students reported that water quality in the Moggill Creek is significantly better than data reported for surrounding rivers and creeks which also connect to the Brisbane River. Most of the parameters that they measured, which included temperature, dissolved oxygen, pH, turbidity, conductivity, salinity and chlorophyll, were all within recommended values for south east Queensland freshwater creeks. There were however things for us to note. For example, the stream temperature showed significant variation between day and night of up to 4 0C which is at the upper limits for stream-life health. This happens for example when there is no overhanging vegetation to provide shade and prevent algal growth.

So, for us it means continuing our efforts to control weed invasion and planting suitable vegetation in the riparian areas. This is making a difference to the health of the creeks and rivers within our catchment. We should also keep in mind that multiple layers of vegetation with both overstorey and understorey species are important to not only provide habitat, but also to stabilise floodplains and riparian areas from erosion, provide a source of woody logs for habitat in the river and to reduce temperature fluctuation.

We are grateful that Dr Callow was able to report this snapshot of the health of our local creeks.

Dale Borgelt

A native that looks like coral berry

Two plants that can look somewhat similar are the weed coral berry (*Rivina humilis*) and the native plant *Deeringia amaranthoides* (see photographs on page 5).

Coral berry is a native of tropical America and is in the family Phytolacaceae. It is a small shrubby plant that flourishes in low-light conditions and has small white flowers born on racemes in leaf axils, followed by round, red fruit, about 3 mm in diameter. Where there is an otherwise clear understorey in moderate to heavy shade, coral berry can form a dense carpet, the plants growing rapidly and flowering and producing fruit when only a few weeks old. Although plants are easily removed by hand, it is one of the more troublesome weeds in shaded conditions.

Deeringia amaranthoides is a low, sparingly branched shrub or climber in the family Amaranthaceae, native to eastern Australia north of Bega and extending north to India and China. It occurs in rainforests and can climb to a height of 4 m. I have never knowingly seen this species in the wild, although it is known to occur in our Catchment and is growing quite happily in my garden to a height of about 1 m, flowering and fruiting at an early age. Terminal flower heads are often branched and the small flowers are followed by bright red fruits 4-7 mm in diameter. Like coral berry, it grows rapidly and fruits at a young age.

The native *Deeringia amaranthoides* may be distinguished from coral berry by its arching stems, flowers usually with five petals (four in coral berry flowers), larger fruit, generally branched terminal flower heads and – in some situations – climbing habit. We frequently have seedlings of this species at our Nursery to give to our members.

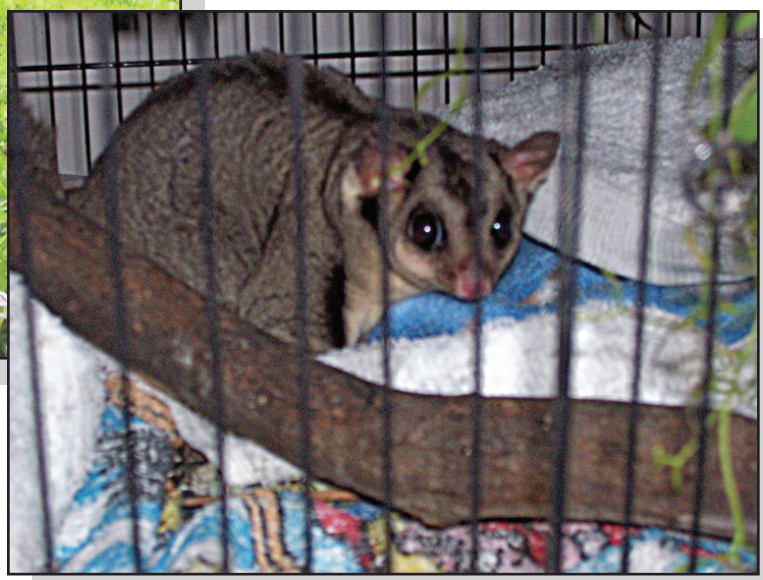
Bryan Hacker

Balance of nature

Caterpillars of the native transverse moth were eating leaves of native hibiscus in my garden (see photo on p5). Some of the caterpillars were being taken by birds. Should all this worry me? No. The plants will recover and provide the usual fine display of flowers. The birds need the food. Enough caterpillars will survive to keep the moths here. If hibiscus were not checked by insect predation, it may well become a weed. After all, most of our worst weeds are exotics introduced without their usual predators.

Graeme Wilson

Sugar glider rescue (see p.7) *Photo: Christine Hosking*



▲ Before rescue

After rescue ▶

◀ Chinese elm seedlings (see ...a smoking gun p.7)
Photo: Bryan Hacker

▲ Balance of nature (see p.4) *Photo: Graeme Wilson*

▲ *Deeringea amaranthoides* (top), *Rivina humilis* (bottom)
(see A native that looks like coral berry, p 4) *Photo: Bryan Hacker*

Microbats of Brisbane Forest Park: Observations from a 3-year study

As part of my PhD research I spent three years surveying microbat activity over a 35sq.km area of the south-east region of Brisbane Forest Park (Enoggera State Reserve).

Surveying techniques included acoustic monitoring of foraging bats via their echolocation calls, as well as trapping individuals using harp traps. From 28 acoustic recording sessions (Jan 2006 – May 2007) and 60 trapping nights (Jan 2008 – May 2009), a total of 15 bat species were identified (see Table 1) suggesting a large, diverse population exists at the Park.

From trapping efforts, the Little broad-nosed bat was the most commonly sampled species with a total of 72 individuals caught. They are small (4 – 8g), fast-flying, agile hunters that forage for insect prey over open spaces close to the edge of vegetation, such as forestry tracks, and roost in small colonies of about 20 individuals in tree hollows.

Surprisingly, numerous Greater broad-nosed bats were caught in 2008-2009, a species that previously had not been observed from trapping or acoustic surveys. These gentle giants, weighing 20 – 40g, have a reputation for eating other bats if caught together in traps. I am most pleased to report that I did not encounter such behaviour, and in fact they were the most docile of all species caught.

Of specific interest to my project, I successfully trapped 25 individuals from three species of long-eared bats. This group of bats are equipped with a remarkably well-developed sensory and behavioural system designed for specialized foraging strategies. Apart from the use of sonar in detecting insect prey, the large ears and highly sensitive hearing system of these bats enables them to switch their echolocation off, and 'listen' for the sounds generated by prey moving across surfaces. As well as catching insects in the air, long-eared bats will also pluck prey from vegetation and the ground, a behaviour known as gleaning.

In June 2009, I was generously invited by the Moggill Creek Catchment Group to present my observations on the microbat activity at the Park. This was a great opportunity to showcase the abundant diversity of microbats that exist in Brisbane's backyard. The genuine interest of the Moggill Creek Catchment Group in my PhD work was extremely encouraging, and the group's dedication to protecting the local fauna and flora will help to ensure that these amazing creatures, of which the public are often unaware, will continue to thrive at Brisbane Forest Park.

Table 1. Microbat species identified at Brisbane Forest Park (Enoggera State Reserve)

Common Name	**Scientific Name**
Little bentwing bat	*Miniopterus australis*
Eastern bentwing bat	*Miniopterus orianae oceanensis*
Beccari's freetail bat	*Mormopterus beccarii*
White-striped freetail bat	*Austronomous australis*
Eastern forest bat	*Vespadelus pumilis*
Little broad-nosed bat	*Scotorepens greyii*
Greater broad-nosed bat	*Scoteanax rueppellii*
Large-footed myotis	*Myotis macropus*
Gould's wattled bat	*Chalinolobus gouldii*
Chocolate wattled bat	*Chalinolobus morio*
Hoary wattled bat	*Chalinolobus nigrogriseus*
Eastern horseshoe bat	*Rhinolophus megaphyllus*
Eastern long-eared bat	*Nyctophilus bifax*
Lesser long-eared bat	*Nyctophilus geoffroyi*
Gould's long-eared bat	*Nyctophilus gouldi*

(photos on p1 show two species)

Judit Kibedi

No Trespassing

Goannas are very partial to eggs, not least the large ones in bush-turkey nesting mounds, so the turkeys have to patrol their territory. A member reports this incident:

A crashing in low vegetation was followed by the emergence of a goanna being hotly pursued by a turkey. The goanna decided to take refuge in a small tree which did not offer much height. The turkey immediately turned around and began scratching as only turkeys can, showering the goanna with soil, stones, sticks, whatever, and as the goanna moved around the tree for shelter, the turkey followed. After a while this was too much for the goanna which dropped to the ground and the pursuit was on again, crashing disappearing in to the vegetation.

..... a smoking gun!!

We have a bird bath in the garden. It is visited by a range of birds – scaly-breasted and rainbow lorikeets, pale headed rosellas, and, sometimes, currawongs.

Back in February I noticed a considerable number of some unidentifiable fruit, apparently regurgitated into the bird bath by a recent currawong visitor. Out of curiosity, I sowed the fruit in a flower pot, to see what species it might be. Perhaps a red ash, of which there are many in our neighbourhood? Or may be an axe handle wood – the fruit could possibly have been either species.

Imagine my disappointment to find ALL the fruit were from the environmental weed Chinese elm. The photograph on page 5 shows the resultant seedlings five months later. Clear evidence that our native currawongs are a major culprit in spreading this environmental weed.

Bryan Hacker

Rescued

Sugar gliders are beautiful, cryptic native animals that we are fortunate to have still living amongst us in the semi-rural western suburbs. They need tree hollows for shelter, and feed on invertebrates and sap exuded from Eucalypts and ageing Acacias. The much-maligned Acacia (wattle) is an important food source for many other species too such as insectivorous birds and microbats that feed on the numerous invertebrates found utilising wattles.

This sugar glider was found "spinning around and around" on a barbed wire fence in Brookfield (see photo p5). Sadly this style of fence commonly traps these animals as they glide low between trees at night. So thoroughly was this young male impaled that it was necessary to leave him in situ and cut the barbed-wire fence each side of him.

Thanks to the efforts of a wonderful local vet, this glider is healed and ready to release (photo p5). As a displaced young animal, his chances of survival are tenuous. However, he has been provided with a ready-made glider nest box that will be erected in a tree in eucalypt woodland on a Land for Wildlife property. This should help him as he seizes his second chance at life and hopefully forms a new group.

Christine Hosking

Interest Groups Forum

How would you like to help shape the future of the Moggill Creek Catchment Group? Maybe you have been an active member of the MCCG for years but aren't really the 'committee' type, or perhaps you have some great ideas about where your catchment group should be focusing its energies. Maybe you have recently become a member and you are looking for a way to get involved in preserving the health of your catchment, without giving up all of your free time! In early October, the MCCG will be holding four interest group forums on the key topics of Biodiversity, Water, Land and Community. We welcome all those interested in contributing to the future of your catchment! These forums are a chance to reflect on the achievements of the MCCG over the last twelve years, and discuss the best ways for the group to move forward in 2010 and beyond. But it's not all serious – there will also be time for a cuppa and socialising! If you are interested in participating or would like more information, please contact Dale Borgelt on 3374 1035, or Shelley Dunlop on 0408 774 631 or shelley.dunlop@ brisbane.qld.gov.au

Support for Planet Ark's National Tree Day

The sun had barely risen and Huntington Park, Brookfield was still heavy with the overnight dew when Tom Mc Hugh, Neil Milstead and other BCC Habitat Brisbane workers together with Shelley Dunlop, our Creek Ranger, arrived to set up the site for the 2009 Planet Ark National Tree Day. During previous months, Habitat Brisbane workers had cleared this site of weeds including several large Chinese Elms and Camphor Laurels, sprayed, mulched, spread weed mats and dug holes, while volunteers from Moggill Catchment Group's Huntington Bushcare Group had put in the stakes.

The first volunteers who arrived found plants in place ready for planting, as well as plenty of advisers from Habitat Brisbane and local volunteers to assist. (See picture p1.)

At the end of 2 hours, 2181 plants had been planted by 112 volunteers, a wonderful effort. The sausage sizzle provided with the support of AECOM and BCC through Councillor Margaret de Wit and served by Shelley, Tom and volunteers proved extremely popular.

The event attracted volunteers including family groups and students from all over Brisbane. Special mention should be made of groups from AECOM, QR and Bechtel.

Robyn Frost

The Cottage hosts BRAIN Rainforest Garden Workshop

MCCG is always keen to make its home – The Cottage – available for meetings of groups with similar interests. We were particularly pleased to welcome members of BRAIN (Brisbane Rainforest Action and Information Network) who ran their Workshop on Gardening with Rainforest Plants, held on Sunday 23 August.

Presenters were landscape architects Shealagh Walker and Karen Webster, and our meeting room (which we tell groups can only comfortable fit 18) was quite cosy, with 30 attendees!! The presentation largely focussed on small-medium sized gardens, and included aspects of design, soil texture and acidity, management, watering, weeds and availability of native plants. The presenters share our goal of revegetating with local natives, showing that it is not necessary to have a large garden to establish an area of rainforest. It was a very successful workshop and was enjoyed by all.

Bryan Hacker

Progress at Nursery

The last Newsletter reported the erection , at the nursery, of a shadehouse being reassembled from the ruins of the butterfly house which had been demolished by the May flood. We have now installed an irrigation system and two thirds of the planned benches.

It will be mainly used for seedling raising with an ability to have an appropriate watering schedule, not possible up to now. We hope that the enclosure excludes small animals which have been doing great damage. In addition, the tingid bug project (see last Newsletter) will be moved there, we will be able to carry out some vegetative propagation, and will have space for experiments we may plan.

Graeme Wilson

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Bryan Hacker

The Cottage on Thursdays

More and more members are finding their way to the end of Gold Creek Road and up the hill to the Cottage when it is open on Thursdays between 10am and 2pm and Dale and Creek Ranger Shelley Dunlop are there.

Members are also enjoying going to the Talks at the Cottage on the third Thursdays of the month. The varied topics have interested capacity audiences of up to 17 people. Topics so far were Botanical Art, Local Butterflies, Micro-bats, Figs, and Creek Health Check.

Still to come:

- **15 October Frogs - and what do all those noises mean? with Gordon Grigg**
- **19 November Small mammals and reptiles in the Western Suburbs – Jesse Rowland**

Booking essential, contact Dale at daleborgelt@gmail.com or 3374 1035
(Please note: There will not be a Talk at the Cottage in September)

We successfully trialled the 10am-noon timeslot this year, but we know it didn't suit some interested members. I would especially like feed–back suggesting alternative timeslots for consideration in planning next year. I would also like to hear suggestions for topics that would interest you.

Dale Borgelt

AKF = Australian Koala Foundation

Australia's first koala shop has opened in Anzac Square Arcade in Brisbane City, open Mon – Fri 9 – 4.30 . Proceeds from the new Save the Koala Shop go to the Australian Koala Foundation's efforts to protect the wild koala and its habitat. They sell uniquely Australian gifts from koala travel pillows to jewellery to cute children's clothes.

September is Save the Koala Month.
Koala badges say clearly *NO TREE NO ME*