

Print Post Approved PP 424022/2141 **NEWSLETTER**



Hibernating echidna (see Echidnas p. 6) Photo: Gordon Grigg



A local platypus at early dawn (see Platypus survey, p. 6) Photo: Glen Flower

> Petalostigma triloculare is an attractive, hardy native Photo: Graeme Wilson

WINTER 2007



HUGO was there too (see Another Success p. 3) Photo: Christine Hosking



Editorial

While everyone is worrying about water supply for their personal use we have the additional worry about native plants and animals. Anyone with doubts that rainfall is declining should look at the article in this issue, simply stating the facts. Readers might expect that we should be giving advice on how best to go about our work for the environment. While there are many ideas we don't think that we are in a position yet to do so effectively. We intend organizing what we know and adding to it as we observe what is happening. At least we can give the subject prominence in the following Newsletter although we could, if we have worthwhile information, say something useful on our website. Meanwhile, members with ideas are encouraged to put them to those of us who are more centrally involved in MCCG activity.

Coordinator's Report

Grants: The group won a small equipment grant for roll-up displays which will add to the extensive range of photos used and the new display boards donated by Judy Gower. Chines elms and large leafed privets are being gradually removed from the creek banks between the Produce Store and Boscombe Rd, along the Brookfield School Boundary under the Australian Water Grant. When these weed trees have been removed work will begin on removing the shrub and ground cover weeds before the creek banks are rehabilitated.

The **Water sub committee** met in May to discuss catchment water priorities. Two issues will be focussed on in the immediate future, namely Over Pumping from the creeks and the spread of the water plant, *Egeria densa*. A Community Forum is being arranged to discuss the use of water in the catchment and generating a set of management guide-lines. Also, CSIRO will be commencing a study on the effects of Egeria densa on platypus, from July onwards. If you wish to raise any matters for the water sub committee please contact Greg on 0408 774 631 (greg.siepen@brisbane.qld.gov.au)

The **butterfly breeding cage** (a joint project between MCCG and RBRN) will be delivered in late May and will be erected near the nursery, ready for the breeding experiment under Don Sand's guidance.

The **Platypus Survey and Festival** was great success, thanks to Chris Hosking and the host of volunteers. Five platypus were seen and over 350 people attended the combined Wipe out Weeds and Platypus Festival, financially supported by BCC and a Natural Resources Awareness grant.

The group has set aside a total of \$10,000 for removal of weed trees (mainly Chinese elms) and restoration of native vegetation at Creekside Park (to extend the work being done by Malcolm Frost's team of volunteers) and to link Daryl O'Brien's restored creek-side habitats with restored habitats to the west at upper Brookfield. Congratulations to Malcolm and Daryl for their work.

Greg Siepen

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.

> Chairman: Bryan Hacker Secretary: Gaynor Johnson

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Chairman's Report

Since our last newsletter we have held our Platypus Festival, commemorating our tenth birthday year. It really was a great occasion, an estimated 350, many of them children, turning up to have fun, join in competitions and learn a little too. Chris Hosking and Greg Siepen are to be commended for a most successful day.

MCCG is progressing with a species list for the Catchment and by the time you receive this newsletter, a list with nearly 1,000 species (including weeds) should be on our website (**www.moggillcreek.org.au**). Many thanks to David Moore and Andrew Wilson for making all this happen. We are aiming to make this list as comprehensive as possible, so also on the website you should find a template and instructions so you can submit your identified collections.

Two workshops were held in March for horse owners, giving guidance in looking after their horses as well as the local environment. Several people who attended these workshops have told me how useful they were – Well done Greg!

In this newsletter I have included an article on local rainfall, which follows on from one a couple of years back. Even then, the situation was serious, but now it is critical. This year we have totally missed out on our wet season – In Upper Brookfield, 60% and 80% of average local rainfall for January and February 2007 can at best be termed 'grass rain'. Then in March we had 20% of our average rainfall, followed by just 2% in April. Many of our trees and shrubs – both native and exotic – are turning up their toes. Perhaps the only benefit is that we are learning which species can really cope with these conditions. On my spotted gum ridge, amongst the 'rainforest species', the real survivors are *Harpullia pendula*, *Jagera pseudorhus*, *Mallotus phillipensis* and *Flindersia australis*. We would be really interested to hear what species others have found to be good survivors.

Thanks to those who responded to my request in the last newsletter for information about cat's claw infestations. I have submitted data on more than 30 infestations to BCC and am looking forward to developing this project further through the Brisbane Catchments Network.

You might ask – what about our MCCG Catchment Centre? We had hoped to be well established in our Centre close to the Gold Creek Dam by now but despite our best efforts, we have not yet been given the go-ahead. We have been promised it, so it should just be a matter of time.

Bryan Hacker

You said -----

In the early hours of the morning in March while chauffeuring my son to and from his social engagements, I was glad to be driving slowly and able to stop for an unusual snake on the road. It was a spectacular looking Bandy Bandy (*Vermicella annulata*), jet black with white zebra-like stripes encircling its body and about a metre long. According to the bible (Wildlife of Greater Brisbane, 1995) this harmless snake is a burrower, found beneath soil, under stumps, rocks and logs and only occasionally forages on the surface at night.

A couple of months earlier, on the same stretch of road, again late at night, I stopped for an echidna waddling slowly across. There is much to see at night!

Christine Hosking

When weeding on my bush block I've often been concerned about mistakenly weeding out our native *Senna acclinis* instead of the South American weed, *Senna pendula* (Easter Cassia) particularly when there are no flowers to be seen. I have noticed however, that *S. pendula* always has a coppery-coloured edge to its leaves whereas *S. acclinis* is always a light green.(See photos p 5.) I hope this information may be useful to MCCG members.

Dianne Lloyd

Another Success

The annual Family Fun and Information event at the Brookfield Hall on 22April was, as usual, a great success. This one was the Platypus Festival and followed on from the early morning Platypus Survey. Opened by Councillor Margaret de Wit, about 350 people attended.

Thanks are due to many. Kenmore Scouts helped in several ways, including giving life to HUGO (photo p1.) Carolyn Parsons, helped by her husband Phil, Rachel Griffiths and Judy Gower ran the children's arts activities, Geckoes Wildlife Presentations provided their usual excellent performance, Ross McKinnon from Mt. Coot-tha Botanical Gardens and Dorean Erhart from Wipe Out Weeds (BCC) gave talks, and photographer Joseph McDowell gave tips on environmental photography. Neighbouring catchment groups were there and RSPCA, WPSQ and Healthy Warerways had information displays.

MCCG acknowledges financial support by BCC and the Department of Natural Resources, Mines and Water, and thanks the Brookfield Recreation Reserve Trust for providing the venue.

Christine Hosking

Plant Families 12 – Casuarinaceae

The Casuarinaceae is a small Family, in terms of number of genera, four and a little less than 100 species. Australia has 65 species in three genera while in our catchment we are down to four in two. Distribution is centred on Australia, reaching out to Pacific islands, Southern Asia and eastern Africa. It is rather isolated taxonomically from other Families. To many people it is thought to be some sort of pine because the 'foliage' seems similar to pine needles, but there is a great taxonomic divide between the Gymnosperms (which include the pines) and the Angiosperms (flowering plants, where the Casuarinas belong). And the fruits are superficially similar to pine cones. The name comes from the genus *Casaurina*, that derived from the rather fanciful similarity of its 'foliage' to the plumage of the Cassowary (*Casuarius*). The apparent leaves are in fact deciduous branchlets, comprising a series of short segments with leaves reduced to tiny scales at the nodes. These branchlets carry out the photosynthetic activity required by the plant.. The species are often referred to as She-oaks but they have no taxonomic affinity with the true oaks of the northern hemisphere.

The environmental adaptation of the Australian species is quite variable, ranging from the stately Desert Oak of Central Australia to the elegant Coastal She-oak behind the sea shore and the pretty Daintree Pine (not a pine) in the mountain rain forests of North Queensland.

But what are our local representatives? There are two species each of *Casuarina* and *Allocasuarina* (allo = different from the normal. The difference is explained in Wild Plants of Greater Brisbane.) *C. cunninghamiana* (the River She-oak) is the large tree strongly represented along the banks of Moggill Creek but occurring rarely or not at all along lesser creeks where there is not permanent water. Also taking to the water but in saline and swampy areas is *C. glauca*. It tends to be found where fresh and salty water meet and thus occurs around the mouth of Moggill Creek. *A. torulosa* (Forest She-oak) and *A. littoralis* (Black She-oak) occur on higher areas.

All species are interesting looking and should be included in plantings on appropriate sites.

Graeme Wilson

The RSPCA And 'Responsible Wildlife Guardianship'

Volunteer wildlife carers across Brisbane are called upon to rescue suffering injured and orphaned native animals on a daily basis.

It is a sad fact that the majority of these incidents are a result of native animals being attacked by cats and dogs. (The young mountain brushtail possum photographed on p5 is an example.) Sometimes these animals have been left vulnerable because their habitat trees and bushland have been cut down.

Brisbane's suburbs are still inhabited by a surprisingly high diversity of native wildlife, particularly when compared with other major cities in Australia. This is something we are lucky to have and should be valuing and endeavouring to protect. In addition to being unique and cute, their presence suggests healthy ecosystems-essential for humans. Koalas, echidnas, possums, gliders, bandicoots, insectivorous bats and antechinus are all native species still seen in the Brookfield, Kenmore Hills and Upper Brookfield areas. Some, such as sugar gliders, micro-bats and possums also appear in suburban gardens.

Janet Gamble is the State Wildlife Coordinator for RSPCA Queensland. In a recent communication with the MCCG she outlined some of the RSPCA's concerns regarding native wildlife and pets and commented that approximately 10% of animals that come to the RSPCA are actually wildlife.

Ms. Gamble said that the RSPCA actively promotes the 'denning' of dogs at night and 'safe areas' in the yard for wildlife where pets are excluded. The RSPCA suggests keeping cats indoors at night or in the increasingly popular external 'cat enclosures' and 'wildlife-friendly fences' that allow safe passage of animals such as koalas and wallabies. She added that in spring many fledgling birds come into their care and stressed that often they are learning skills, with their parents overseeing nearby and should be left alone, safe from pets.

If animals come into your care and they need assistance, call the Queensland Parks and Wildlife Service or RSPCA Qld on 1300ANIMAL (1300 264 625).

Christine Hosking

JOB VACANCIES

The MCCG is in need of two volunteers to fill the positions of:

Treasurer Public Relations assistant (PR)

If you have some spare time and enjoy numbers or writing articles and organising events, it could be you!

For **Treasurer** contact Joanna Yesberg on 3374 4703, email joanna.yesberg@gmail.com For **PR** contact Chris Hosking on 3374 3453, email cjmhosk@optusnet.com.au



Orphaned Mountan Brushtail Possum (see RSPCA p. 4) Photo: Christine Hosking





Senna pendula and Senna acclinis (pendula has the flowers) (see You Said, p. 3) Photos: Dianne Lloyd



Leaf of Siratro and Siratro Flower (see Siratro, p. 7) Photos: Bryan Hacker

A Brachychiton discolor (see the Lace Bark tree, p. 6) Photo: Bryan Hacker

Echidnas - electrosensitive, egg-laying, hibernating mammals

In our catchment we fuss over platypus, but have you seen an echidna? We probably have more echidnas than platypus, but they attract much less excitement and interest. It is hard to know why, really, because they too are egg-laying mammals, both Monotremes, and separated from the rest of the mammals for a couple of hundred million years. Perhaps it is because they are harder to find. They are quite secretive, mostly nocturnal, and you see them only by chance or when they get baled up by a dog or skittled on the road.

Apart from laying eggs, which is always referred to, platypus and echidnas are the only mammals which can sense weak electric fields. Platypus have many tiny electrosensitive organs in their bill, and echidnas in their snouts. Platypus undoubtedly use this sense to help them find food as they scrabble the bill in and around the stones on the bottom of creeks looking for insect larvae. It is harder to see what echidnas use it for, digging in dry earth. Working out what echidnas use their electrosensitive organs for will be an interesting research project for someone.

You might have already heard that echidnas go into hibernation, just like many northern hemisphere mammals. (See photo p1.) Lyn Beard, Mike Augee and I discovered this in 1986 with a radiotelemetry study of echidnas in Kosciusko National Park. They often hibernate in the Granite Belt too, and they sometimes do in Brisbane, although not for long, even though the winters are not so cold.

So, as I write this, an echidna near you might be deciding it is time to find a nice safe retreat and drop its body temperature, dropping out of life until July when it will be time to wake up and find a mate.

Gordon Grigg

(The MCCG Wildlife database records four sightings-two dead-between September and December 2006. Ed.)

Annual Platypus Survey

On 22 April, 32 volunteers took part in the 2007 Platypus Survey. There were five sightings, three in the lower and one in the upper Moggill Creek, and one in the Gold Creek Reservoir, this latter site not having been included in previous surveys. The absence from Gold Creek where there had previously been sightings is disappointing, and is associated with a decline in its condition. The total compares with six in 2006 and four in 2005.

The murky photograph on page 1 of one of "our" platypuses goes with a dawn sighting and the difficulty of seeing one at any time.

The results have been passed on to the Wildlife Preservation Society of Queensland's Platypus Care Project which is monitoring the presence of platypus statewide.

Christine Hosking

The Lace Bark tree – Brachychiton discolor

I am quite often asked by members seeking plants at our nursery "Does it flower?" For almost all the better known plants (excluding pine trees and their allies (Gymnosperms), and the lowly ferns, mosses and liverworts), the answer must be yes, although for many of our trees the flowers are tiny and easily not spotted.

For the lace bark, *Brachychiton discolor*, though, there can be no doubt. This local tree is spectacular when in flower, with pink bell-shaped flowers about 5 cm across in summer, when the tree is leafless (See photo p5.). Soon after flowering the leaves appear; they are more or less lobed and up to 16 cm across. In the wild, lace bark can grow to a height of 30 m, but is generally shorter in cultivation. In form it is similar to its better-known cousin *B. acerifolius*, the Illawarra flame tree, and when grown in proximity the two species can hybridize.

Lace bark is reported to occur naturally from Newcastle to Maryborough. The genus *Brachychiton* includes six species native to South-east Queensland, with *B. discolour* and *B. populneus*, the kurrajong, native to our catchment.

Lace bark deserves to be much more widely grown. It is tough and quite quick-growing. Thanks to one of our members who has donated a bag of seed, we hope to have good numbers of plants in the coming summer.

Bryan Hacker

Siratro – another pasture plant gone feral

Siratro (*Macroptilium atropurpureum*) is one of several pasture legumes that have become troublesome environmental weeds in our catchment. Undoubtedly the worst is glycine – the others include siratro, Velcro plant (silver-leaf desmodium), leucaena and axillaris. These plants were selected for sowing in pastures and, associated with their ability to 'fix' atmospheric nitrogen and synthesize protein, they have the capacity to improve animal production in areas to which they are adapted. Unfortunately, many of the attributes that make them successful pasture plants, such as seed production and persistence, are also attributes that enable them to become environmental weeds.

Siratro is a native of Central America. Even when not in flower, it is readily distinguished from all other species in our Catchment by its leaves, which have three leaflets, the lateral ones being distinctly notched (see photos, p5.). It has prostrate or twining stems which arise from a deep tap root and can twine to a height of several metres. Flowers are produced on a long stalk and are almost black in colour (hence its species name *atropurpureum*); these are followed by long pods. Seeds may remain viable in the soil for several years.

This species is not as aggressive a competitor as some exotic species but should still be controlled in revegetation areas. Cutting stems close to the base and spraying immediately with 50% roundup is generally effective.

Bryan Hacker

Are we serious about controlling the spread of weeds that threaten our catchment?

My wife Carolyn and I have lived on our 8 ha at the end of Savages Road for well over 20 years, and yes, we can even remember the last time we had cyclonic rain here, but only just! Some 13 years ago our neighbour employed a Drott to level a pad that over-looks a gulley running through our place. Later it was noted that an infestation of Mother-of-Millions was occurring on the cleared and levelled area and was spreading down slope into our place. Since that time we have tried unsuccessfully to eradicate this invasive weed.

About six years ago another round of levelling was undertaken by our neighbour. Several months later an extensive infestation of a woody weed was noted. It had already spread well into our grassed and tree planted paddock, and was later identified as Snake Weed. In spite of my diligence and persistence I must confess that I now consider it endemic to our property. I am not blaming my neighbour for the introduction of these weeds which at that time it was unforeseeable.

As a coal exploration geologist and field project manager in Central and Southern Queensland it is often my responsibility to ensure that exotic weeds are not spread from shire to shire. This is achieved my managing the overall project in such a way that contractor's vehicles enter a shire free of weeds and seeds. A thorough clean at the shire wash-down facility has been an effective means to stop the spread of Parthenium and other pests. The shire engineer or his agent issues a certificate for that vehicle that can be presented to the landholders. Sometimes, in an infected shire, it is necessary to wash-down for entry to each property.

I am therefore proposing that MCCG members start a discussion group to see if it is viable to follow some of the wash-down procedures for earthworks within our catchment. I believe we need to review and perhaps adopt a similar successful strategy, perhaps with a wash facility near the Show Grounds. With wisdom, hindsight and the support of our group, it may be possible to introduce some checks and balances before we create further problems.

Tim Spencer

2007 Healthy Waterways Awards

A campaign to reduce outboard motor emissions, community riparian management programs and a program which took school students from Bunya to the Bay in canoes were amongst the winners in the 2007 SE Queensland Healthy Waterways Awards announced at a Gala Dinner in the Brisbane Customs House on April 4th. Among the official guests were the State Environment Minister and Mayors of Brisbane and Queensland municipalities.

Moggilll Creek Catchment Group was a finalist in the Community Award for its project, *Connecting with your Catchment*, but the Award was won by the Maroochy River Community for its project, *The Mosaic of Magnificent Maroochy*. The Environment Minister, Ms Nelson-Carr, remarked "All of the nominations, finalists and award winners did outstanding work throughout 2006 and their efforts for protecting our precious waterways in the Great South East are to be highly commended".

Robyn Frost

What is happening to our rainfall?

Has Climate Change come to Brookfield? Back in Summer 2004 I wrote an article for our newsletter and concluded "... the current drought [is] more extended that any over the last 35 years." These data applied to Smith's Rainforest Nature Refuge, in Upper Brookfield

Two years later, and considering data for the same site, we see that the situation is even worse – far worse. Only for eight of the past ten years has our annual rainfall exceeded 85% of the long-term mean for this site. Furthermore, the graph shows what appears to be a steady decline in Upper Brookfield rainfall over the last 35 years.

Climate change is not just an hypothesis – it's a reality. And it has arrived here in Brookfield.

Bryan Hacker

Moggill Creek Catchment Group's Public Meeting

Our Guest Speaker will be:

Deborah Tabart, CEO of the Australian Koala Foundation. She has 20 years of experience in advocating for the protection of koalas and their habitats. Her talk will evaluate government policies and performance for koala and wildlife conservation, and she will discuss local issues such as Gap Creek Road which dissects wildlife habitat in Mt Coot-tha Forest and broader perspectives.

> When:Tuesday 19 June, 7.30-9.00pm Where: Brookfield Hall, Brookfield Rd, Brookfield Free admission and refreshments

Note: At the meeting there will be a motion to amend the Rules of Association to facilitate the establishment of an Environmental Trust.

Moggill Creek Catchment Group - Photographic competition

Celebrate ten years of Moggill Catchment Management Group by entering the Annual Photography Competition to be held 10-15 September at Kenmore Village Centre, with entries to be submitted on Saturday 8th September, at Brookfield Showgrounds.

Adults and Young Photographers are invited to enter with photos of the Catchment's native flora and fauna, its environmental problems and its people working to make a difference.

> Entry forms from local shops, Ward Office, Moggill Creek Web Site, www.moggillcreek.org.au. Further information from Greg 0408 774 631 or Robyn 3374 0649.