

MOGGILL CREEK CATCHMENT GROUP

www.moggillcreek.org.au



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NEWSLETTER

SPRING 2007



◀ *Stenocarpus sinuatus* flower
(see Firewheel Tree, p. 6)



Three moths (see You Said, p. 3)
Photos: Andrew Wilson



◀ A local koala
(see Koalas, p. 6)
Photo: Glenys Cadman



Editorial

The ongoing drought is of course our great obsession, at least at the time of writing; and with little prospect of it being a thing of the past by the time this issue is published. In consequence we have several articles round about the subject. But not is all despair; at least to those whose eyes are open to the state of the natural environment.

*Have you ever seen a more beautiful display by the wattles? It began with the Queensland silver wattle (*A. podalyrifolia*), soon followed Maiden's wattle (*A. maidenii*) and the Sickie wattle (*A. falcata*). Then came the Brisbane wattle (*A. fimbriata*) with a quite outstanding flowering, and now, in mid-August, the hickory wattle (*A. disparrima*) is promising, at least where it is not too drought stricken. There are a few others which have been introduced to the catchment as ornamentals and have now become part of our vegetation, such as the zig-zag wattle (*A. macradenia*). All those species occur close by where I sit; the others whose flowering time occurs about this time may be doing well for all I know.*

*But that is only the wattles. Walking in the bush where the general appearance is of halted growth, leaf shedding and dryness, one suddenly comes upon something making a fine show. Quite nearby, a Bennett's Ash (*Flindersia bennettiana*) just came in to flower. See photo on p.5. Now I see a Wonga Vine (*Pandorea pandorana*) flowering as well as usual.*

Coordinator's Report

One of the major activities in the Brisbane region was the holding of the **Sustainable Riparian Management Forum** in times of climate and social change. This Forum covered issues such as biodiversity indicators for riparian corridors, managing plant species in times of change, threats to riparian areas with the afternoon session viewing practical solutions in the field. Over 105 bushcare group representatives attended.

Water testing equipment has been purchased to assist with the CSIRO waterweed/platypus project and to assist with school student activities. The equipment will be stored at the new Catchment Centre (the Cottage) which has come on line in August. A small committee will be established to lead the development of the new centre and the associated grounds. Anyone interested in helping on the committee or with grounds development should call Greg on 0408 774 631.

National Tree Day was a great success with over 115 corporate volunteers helping to plant 1400 plants at Creekside Park under Malcolm Frost's tutelage and with the assistance of the Council's Habitat Brisbane Program. Kenmore Scouts removed weeds at Gold Creek Dam and planted out 120 plants at a Bundaleer Street site as part of their Centenary of Scouting and Guiding activities.

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

Correspondence to be addressed to the Secretary at:

P.O. Box 657, Kenmore 4069

E-mail: mccgsecretary@iprimus.com.au

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Editor: Graeme Wilson, Ph. 3374 1218

Email: zzzgrw@bigpond.com.au

Formatting: Margaret Hastie

Printing: John Gower

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Chairman's Report

Writing this report from New York State (where it seems to rain every second day) it is hard to realize that Brisbane's drought is still continuing. Hopefully spring storms will bring some relief.

We have recently been notified by the Council that the Gold Creek Dam Caretaker's Cottage has been made available to us for use as a Catchment Centre. Initially this is for a six-month lease from 1 August, but we anticipate this will be followed by a longer term arrangement. This is a great opportunity for MCCG – if any member would like to help us to develop the Cottage as a community resource they should contact Greg Siepen (Greg.Siepen@brisbane.qld.gov.au.)

Our MCCG treasurer Joanna Yesberg is shortly heading to the UK with her family for a couple of years and we would like to thank her for all her good work and wish her well. Shona Fisher has offered to step in to Joanna's shoes, which is great news. Welcome aboard, Shona!

MCCG has been very fortunate in the past to receive donations from several members of the local community who support our activities. However, up to the present MCCG has not had tax-deductibility status. At our June public meeting a motion was passed that our Rules be slightly modified to enable us to gain tax deductibility status. Anybody considering making a donation should contact committee member Richard Woodhead (richardw@gpsinvest.com.au) for further details.

Members of our committee have been very concerned about the blanket of smoke over the Brookfield valley late in July. We were informed that this was due to a large-scale 'hazard reduction-prescribed burn, over 1,100 ha being conducted by the EPA in the Lake Manchester area. The aim was apparently to burn up to 70% of this area in order to 'control weeds' and 'protect remnant rainforest'. Some of us question whether such large-scale burns are necessary in our sub-tropical climate and whether they are likely to achieve their stated goals.

At long last the updated "Know Your Creek" booklet for Moggill Creek is about to be released by the Council and should be available at or soon after this newsletter is printed. A number of MCCG members contributed to the text and illustrations, and the Council has thanked me for their contributions.

Bryan Hacker

You said -----

Looking round my ultra dry DRf reveals trees that have done better than most in these harsh conditions. Four native trees stand out for me as survivors that keep their good looks. Brown Pine, *Podocarpus elatus*, Firewheel Tree, *Stenocarpus sinuatus*, Flintwood, *Scolopia braunii* and Shiny leaf Canthium, *Canthium odorata* now *Psyrdrax odorata*. We have lost none of the many examples of these trees, regardless of their size or position on our 2 acre ridgy block. They still have green, healthy looking growth while other species around them wilt, brown, show signs of stress or die. Of course there are other individual trees that are still doing okay despite the conditions, but these four species get my vote as consistently reliable, good-looking survivors.

Dale Borgelt

Have you noticed that most of the gardens that are currently getting praise for being beautiful and waterwise are full of succulents and exotics? They might be pleasing to the human eye, but they are hardly wildlife friendly. Congratulations to those of you who are persevering with your bedraggled looking bush gardens. These are gardens to sustain wildlife which is also having a hard time in this long dry.

Dale Borgelt

Almost no one has any feeling for that enormous group of species, the moths, beyond usually some annoyance because they swarm in to house lights and finish up on or in everything. And no one bothers to take a close look at them; often difficult because so many are very small. One of our members started taking photographs of them. Most are in fact so interesting one way or another; beautiful, or weird or comic looking. Photos of three are shown on p 1, of over 500 he has collected in a short time, and he has a long way to go with the many thousands of species there are. This is simply an example of the opportunities there are for people interested in our wonderful wildlife diversity.

Graeme Wilson

WANTED GOOD HOMES FOR FURRY LOVEABLE ORPHANS

A major dilemma facing our local volunteer wildlife carers is where to release their injured and orphaned native animals once they are ready to be returned to the wild.

If you have a wildlife-friendly property that is well stocked with native vegetation, you may be able to help!

Call Chris on 3374 3453. Email: cjmhosk@optusnet.com.au

Plant Families 13-Proteaceae

The Proteaceae is a Family of over 1000 species in some 80 genera. It occurs in practically all landmasses derived from the Gondwanaland breakup and is thus largely confined to the Southern Hemisphere, and is most strongly represented in Australia and Africa, particularly the former. Notwithstanding that, we have only three species in our catchment, which may seem strange when we have so many species in S.E. Queensland, especially the Banksias which are particularly abundant along our coast. What keeps these out is our geology, which has not given us sandy soils. Go a little west to the sandstones and some of the Proteaceae turn up again.

Our three species are the firewheel tree (*Stenocarpus sinuatus*), Silky Oak (*Grevillea robusta*) and Forest Geebung (*Persoonia sylvatica*). The first of these is described in an article (p 6) with a photograph of its beautiful flowers. The Silky Oak is one of the commonest and best known trees of our area, again with most attractive flowers. The Geebung is a less conspicuous shrub to small tree, mainly associated with sclerophyll forest.

Graeme Wilson

Any lessons from the drought?

I promised in the previous issue of this newsletter to include advice appropriate to the ongoing drought, that most likely being a listing of more tolerant local species. Such information is not easy to come by; survival being too dependant upon the particular situation they are in, so I can do little more than make some personal remarks based largely on what I see on my own property.

Despite obvious damage from the long dry, there are few plants which I can be sure actually have died. There is often severe leaf loss, but that is a survival adaptation in plants. Some plants appear to have died, yet others of the same species may be surviving well and so I remain hopeful.

It is worth standing back from the problems of just a few plants and contemplating the forest and environmental adaptation. Enormous numbers of seeds of many species arrive every year. Some will have fallen close to the parent plant and will therefore already have some adaptation to the area. Most, however, will have come from elsewhere, via birds, wind and in other ways. Following some rain and perhaps warmth, germination and some growth begins. A year or so later only a few will have survived, with those that chanced to land in a good spot having the best chance.

Only plants in the most favourable positions are likely to survive drought, frost and fire and become established members of the forest community. The present drought is killing those in the less favourable positions. Some of them, of course, are plants put in by our revegetators. Some will have died from poor planting and inadequate early maintenance, but many will die from being placed in an unsuitable position, and it is often impossible to know what is suitable in advance. Many self-established plants die as well, as growing drought stress bites into what was adequate habitat in moister seasons. The result is what appears to be an erratic pattern of drought survival within a single species, even over small distances.

So planting is a gamble, but a necessary one. All one can do is put plants into situations where experience suggests chances will be best and, very importantly, plant only when there is certainty of providing adequate early maintenance. Also very important, particularly so in dry conditions, is to get rid of weeds nearby which will otherwise compete for what scarce water there is.

If you expected a list of drought-hardy species, I will disappoint you. There is too much variability to permit generalization and, looking around my property as it dries out, I am amazed at the huge range of species which are, so far, surviving.

Graeme Wilson

***Ruellia squarrosa* – a weed that tolerates dense shade**

This is a low-growing plant that seems to be equally at home in moist conditions near Moggill Creek or in much drier situations. Indeed, it is even listed on one website as a 'water plant' Common names include creeping ruellia, blue shade and bluebell.

Although creeping ruellia is not listed in the EPA top 200 environmental weed species, back in 1998 Csurhes and Edwards (QDNR) listed it as a 'Candidate Species for Preventative Control.' Certainly it is an aggressive weed along sections of Moggill Creek, where it crowds out other herbaceous vegetation. Our 'Save Our Waterways Now' neighbours along Enoggera Creek have also noted its weed potential.

Ruellia squarrosa is an open, spreading shrub to about 50 cm, with spreading rhizomes (underground stems) and blue to cerise flowers. Leaves are opposite and velvety hairy on both surfaces. (See photo p 5). At least until the 1990s, it was sold as a garden ornamental. It is probably native to Mexico, home to several other species in the genus. Its ability to thrive in dense shade makes it a particular problem. Control is difficult because of its rhizomatous habit.

Bryan Hacker



▲ Water economy (see Potplants, p.8)
Photo: Graeme Wilson



▲ Vice Chairman Malcolm was said to have been on holiday in north Australia, but Chairman Bryan saw this vehicle in UK.
Photo: Bryan Hacker



◀ *Flindersia bennetiana* (see Editorial, p 2)
Photo: Graeme Wilson

Ruellia squarrosa (see p. 4)



◀ This joey could have been saved from bird attack if someone had stopped to check the mother's pouch. (see Speed kills wildlife too, p 8)

Photo: Christine Hosking



The Firewheel Tree – *Stenocarpus sinuatus*

The firewheel tree must be one of the most spectacular of our locally native trees, with showy red flowers arranged in ‘catherine wheels’ in summer. It is commonly seen growing naturally along the Moggill Creek valley downstream from Upper Brookfield, and here and there along Gold Creek Road. It is in the Proteaceae family, a family that also includes the South African genus *Protea* as well as our own *Banksia*, *Grevillea* and several others.

It is a medium-sized tree, commonly to about 15 m tall, with a narrow canopy. Leaves are large and shiny, up to 40 cm long, commonly deeply lobed on young plants, unlobed or sparingly lobed on mature trees. (See photo p 1). The 5-10 cm long cylindrical fruit occur in clusters and open to reveal the flattened and winged seeds. Seeds should be sown fresh and they germinate quite quickly. Once established, the firewheel tree is quite hardy, and moderately quick-growing.

We usually have stocks of this attractive plant at our nursery to give to members.

Bryan Hacker

Koalas: Action needed now

It was a cold and windy night but 40 or so members received a warm welcome at the June meeting, held at Brookfield Hall. Deborah Tabart, CEO of the Australian Koala Foundation (AKF), began her talk by congratulating all members of the group on their superb work in the Moggill Creek Catchment. A local resident, Deborah gave an insight into life before the AKF and some of the many experiences that shaped her passion for charitable fundraising and lobbying. In her 25 years as CEO the AKF has grown to having a website with over 24m visitors a year. It is now seen as the first port of call in the battle to protect the remaining land used by Australia’s dwindling koala population. This is a major challenge as, despite the listing of the koala as an endangered species by the USA, Australia is yet to protect its ‘national icon’ with listing as such.

This leaves the protection of the koala against the onslaught of developers and road-building in the hands of the 320 local authorities across Australia who have koalas. Clearly to charge local councils with responsibility for biodiversity without adequate funding and legal support from the Commonwealth makes the protection of the koala a daily challenge. Deborah illustrated her arguments by tabling a number of AKF documents and commenting on key extracts – including an update on the limited wildlife impact assessment currently underway on Gap Creek Road.

The AKF is certainly an effective and focused ‘voice’ for Australian koalas. But the Federal Government appears yet to listen – rejecting recent significant AKF research reports. 11% of international tourists said they would not come back to Australia if they were not able to see the koala – suggesting that the koala is an icon that represents \$2.1bn income of tourist dollars a year to Australia. Not only is there a moral imperative but a strong financial argument to protect it. From Deborah’s presentation it was clear that rejection of their report is not stopping the AKF. The work on mapping Australian koala habitat (in particular by PhD student Christine Hosking) will be a vital step in continued AKF lobbying. Certainly in Deborah the koala has a passionate advocate.

A wealth of information on Koalas in general and the issues discussed at the meeting are also available at the AKF website (www.savethekoala.com). The ‘hat’ was not passed round during the evening but Deborah commented that corporate sponsorship for the environment is limited. The AKF survives on the support and donations of many private individuals and their website also includes a shop that MCCG members might like to use to show their support!

Despite the cold, it was a testament to the interest in the presentation that there were many interesting questions from the floor, and as a new member to have the opportunity to join the active discussions over coffee afterwards.

Note: One of the questions from the floor was what are the preferred tree species for koalas in the MCCG area. These are *E. tereticornis* (Forest Red Gum), *E. robusta* (Swamp Mahogany), *E. microcorys* (Tallowwood) and *E. propinqua* (Small-fruited Grey Gum).

Cathi Lawrence

A hint

A plant in a very small pot, and particularly with an organic potting mix, can run out of water in a short time. This applies to plants we provide from our nursery. It can be almost impossible to rewet the mix without dunking it in water for a long period. The plant is likely to die. If you acquire such a potted plant and are unable to plant it out more or less immediately, you are advised to pot it up in to a substantially larger pot.

Greywater

With present water restrictions there is much interest in household waste water for garden use. To a large extent, significant use in our revegetation activities is unlikely because the amount of such water will be very small in relation to our needs. Still, there may be situations where individuals feel that some use could be made of it. This is written to provide some lead in to the subject for those seeking information.

Sources are toilets, whose water is required to be inaccessible, kitchens, laundries and bathrooms, with which latter handbasins can be included. Kitchen water is usually disregarded because of its grease (fats and oils) content. Although going through a grease trap, sufficient remains to make the water at least unpleasant to handle and a problem with distribution equipment.

Laundry water seems to be widely regarded as being reasonably suitable for application to plants, but there are substantial problems with it. Anyone thinking of using it should read an article in the April issue of *Choice*, the magazine of the Australian Consumers Association. There, undesirable effects of the high alkalinity and high contents of phosphorous and sodium are discussed. These can affect not only plants directly but also soils. That article goes on to list alkalinity and phosphorous levels for many commercial laundry products, but not sodium contents. Because of the severity of sodium damage in soils with a significant clay content, readers are advised to look at the figures available on the internet at www.lanfaxlabs.com.au Personally, I would be reluctant to use it on particular plants, although whether going through septic systems or to direct use, at least the phosphorus and sodium remain and will finish somewhere in your soil.

Shower, bath and handbasin water is relatively benign. My conclusion is that this could be used cautiously, perhaps for keeping plants alive but without using it copiously and frequently at one place, and fairly certainly not with pot plants where undesirable content might accumulate.

There is further useful reading on BCC's website, www.brisbane.qld.gov.au Search under Grey Water. BCC also has a substantial publication, *Greywater*, available from Council offices.

Graeme Wilson

Getting to the Top

Plants must have light and in most forest situations there is competition for it. There are some species which do not compete by way of height but have adaptations giving high efficiency in use of the reduced light at the forest floor. For most species however success is dependent on gaining height, and among these the way ahead for most is to put much of their growth in to tall, strong trunks and branches which can carry the weight of foliage at high levels. There are however others-and we have upwards 100 of them in our catchment- which exploit the height of the former to achieve height of their own foliage without putting much of their growth in to robust stems. They are the vines and scramblers. And they go about it in many ways.

Some crawl with very slender stems along the ground until they encounter something rising and then attach themselves to it in a way which allows them to climb. One common device is, if the structure is of limited diameter, to spiral upwards around it, as do the birdwing vines we are producing in our nursery. On the other hand, some climb vertically by forming attachments to the surface, e.g. cat's claw and silkpods. Yet others do not form such continuous close stem contact but make a succession of holds which fairly reliably keeps them moving up. A very common version of this is via tendrils, thread-like structures growing out from nodes, which on touching the host plant, curl their tips around it, then coil the intermediate lengths in to tight spirals, thus tying the climber firmly to the host. With each new node close to that which has interattached, there is a good chance that its tendril will make contact. An unusual variant of that technique is seen in *Flagellaria indica* whose strap-like leaves are drawn out into long tips, which on touching something immediately curl firmly around it.

Then there are many species with less intimate attachment to one plant on which they have started. They are the scramblers which invest sufficient growth in elongated stems to achieve elevation before eventually drooping and with a bit of luck falling across a branch of a tree, and having some kind of structures-usually thorns- which ensure they remain supported there, with the foundation for a repeat of the performance. Examples are cockspur in the bush and bougainvillea and climbing roses in the garden. A variant is the lawyer vine whose hooks are not forgotten by anyone who has strayed in to one.

These are enough examples. It is hoped that you (yes, you) will look at some climbing plants to see how they did it. And if you are perplexed by those vines rising from the ground to great heights with no supports which allowed them to climb up, it is because those supports have since died and fallen away.

Graeme Wilson

Speed kills wildlife too

Spring time is upon us and our wonderful native wildlife wastes no time in becoming more mobile. However this means that those species we are so fortunate to still have in our catchment such as wallabies, koalas, possums, bandicoots and echidnas run the gauntlet of our increasingly busy roads.

We can help our wildlife by driving significantly slower between dusk and dawn because this is when nocturnal native animals are moving about. Reducing speed on the roads from 70km/h to 50km/h makes a great difference in terms of being able to spot wildlife on the road and slow down to let them cross safely.

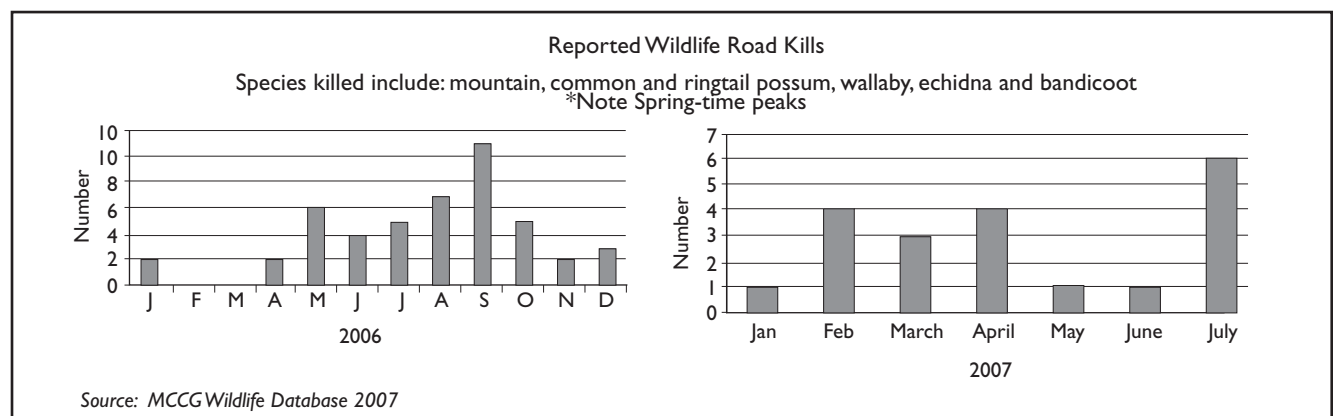
In Kenmore Hills, Gap Creek Road dissects Mt. Coot-tha Forest Park, a Brisbane City Council 'Conservation Area' that is well recognised for its scenic and biodiversity values.

The proposed sealing of this road that dissects the Forest will have a profound impact on the abundant native wildlife living in Mt. Coot-tha. Unless Council makes a concerted effort to control speed along this road when it is 'improved', for example by installing speed humps, we will see a steady decline in native wildlife in this area.

Always happy to give credit where credit is due, the MCCG does have a 'tick' for Brisbane City Council's recent decision to install wildlife road signs at road kill 'hotspots' around the catchment. Keeping a wildlife database proved helpful in identifying this need.

Christine Hosking

Report wildlife to: cjmhosk@optusnet.com.au, phone 3374 3453



Pot plants

With severely restricted water supply, gardeners want high efficiency of water use which depends on the maximum of available water being used by, that is, passing through plants. That can be achieved with potted plants but only if a number of requirements are met.

Unglazed earthenware pots lose much water by evaporation through their walls. Apply a sealer or use glazed or plastic pots. Put something on the soil surface (e.g. coarse gravel) to prevent loss from there. If the potting mix becomes dry, as can easily happen, it will shrink from the walls and usually be unwettable, with applied water running down the sides and out through drainholes. This can be avoided by having the pot in a shallow saucer containing water and contact of that with the mix, water rising to prevent shrinkage at lower levels and thus a gap existing. (This is written in the context of large pots; with small ones, waterlogging occurs.) Don't have the common arrangement of separation of mix from drainholes, that preventing water rising. If the drainhole is central, place something between the pot base and the saucer to avoid possible sealing off continuity. Develop a watering regime which does not lead to overflow from the saucer, which is water loss. The saucer should be wide enough to provide a useful reservoir of water, but the wider it is the greater the evaporative loss. I have used gravel to minimize that. A small gap is needed to observe the water level. The arrangement means little water loss except through the leaves, an unavoidable association with growth.

The photo on p 5 shows a set up. It is a native but not local species (*Gymnostoma australianum*).

Graeme Wilson

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.