

NEWSLETTER

WINTER 2008



Photo: Dale Borgelt



Want these on your land? (see "You said" The Beautiful Chequered Swallowtail p.3) Photo: Dale Borgelt



Controlling Madeira Vine (see p.3) Photo: Bryan Hacker

Editorial

Our last issue included an opinion from outside MCCG that our belief that the name Moggill and thus our logo came from the Aboriginal name for the Eastern Water Dragon, maggil, is wrong. Rather, he proposed that the name followed from the address Moggs Hill, where an early person named Mogg lived. We now have a submission from someone else that such is not so. He has strong evidence that the first use of the name was in Moggill Creek, so named before there were any European settlers (i.e.residents) in the district. Accompaning that is a fairly reliable early written assertion that the name did come from the maggil.

This issue contains two items of importance to us. The Chairman, in his report, gives emphasis to the need for more members to volunteer their assistance in carrying out the numerous tasks which are necessary. Then, quite independently, there is the specific plea from our PR officer for help in her wide range of activities. Let's hope that the next newsletter can include some good news about responses to these two appeals.

Chairman's Report - February 2008

Our major focus at the present time has been to work on the administration of the group.

Whilst we all want to get on with the fun stuff we can not lose sight of the fact that it takes a lot of work behind the scenes to run a group with a turnover of approximately \$100,000 per annum, an Environmental Centre and many funded projects on the go.

Too often in Community Groups the administration work falls on the shoulders of the few who can become overworked, disillusioned and leave the organisation.

In the past few months I have experienced such feelings with family, work and sporting commitments restricting the time and mental energy I have been able to put into Moggill Creek Catchment Group. Whilst it has not affected my commitment it does cause a certain amount of frustration by not being able to achieve as much as I would have liked in my time as Chair of the group.

My plea is for people to volunteer to assist the committee with its administration work. If you can assist then please contact either out Co-ordinator, Jennifer Mulchrone, or me.

Richard Woodhead

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: Richard Woodhead Secretary: Gaynor Johnson

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Catchment Coordinator's Report

Thank you to all the MCCG members, particularly the Management Committee who have made me feel so welcome and provided me with so much assistance in my new role as coordinator. The last few months have been busy for me, where I have been learning about a new catchment, and all the various ways the community has been involved in caring for it. I have been trying to meet as many members as possible and visit your various sites across the catchment. This will help me gain a better understanding of what some of the environmental issues are in the region, and how I can assist you to address these.

In February we met to discuss ideas for ways of utilising 'The Cottage' at Gold Creek Rd and the Committee and I are now trying to put these great ideas into action. We are very fortunate to have the assistance of long-time member Dale Borgelt at The Cottage and Dale and I will be based there every Thursday from 9am until 2.30pm so please feel free to drop in if you would like to meet with us. An open day is being planned for MCCG's Cottage, surrounding land and Nursery in June, and we would like as many members to attend as possible. We will be sending out a flyer about this soon.

National Tree Day is coming up on Sun 27 July, so now is the time to start planning for it if you are considering holding a tree-planting or weeding activity. Please contact me if you would like further information.

Jenny Mulchrone

You said ...

The whoosh of rapid flight as the closely knit flock of Topknot Pigeons(Lopholaimus antarcticius) wheel overhead, their flight being of such high velocity that only the sound is usually heard ,the human response being too slow to catch the spectacle; similar to attempting to track an F111airforce jet. It's certainly more pleasing to the ear than our favourite piston engine P38.Yet these magnificent rainforest pigeons will feed silently in the Blue Quandongs, Picabeen palms and Kodas, their presence only known by the falling of regurgitated kernels These "flock pigeons" once blackened the skies on the East Coast, but now locally we have only a relatively small flock, less than 50 birds, residing in Cabbage Tree Creek and Hell Hole Scrub in Brisbane Forest Park. One of the encouraging aspects of our continual plantings is that birds like these will benefit from an enhanced food source like the Blue Quandongs.

Richard Tumman

A sighting of a koala was reported from Gap Creek Rd. This was of particular interest in the context of ongoing discussion about upgrading the road, wherein the increased threat to wildlife is an issue if more and faster traffic results. The animal was about 200m from the road, which puts it in the danger zone. It is valuable to have a record of all animal sightings to assist in preparing submissions about road development. Please provide them to me by phone (3374 34530) or e-mail (cjmhosk@optusnet.com.au).

This beautiful Chequered Swallowtail, *Papilio demoleus*, is sipping from an exotic Pentas flower, but it is only in our area because we have the native groundcover legume Cullen tenax to feed its caterpillar. (see photo p.1)

Dale Borgelt

Controlling Madeira vine - from the ground upwards.

There is no doubt that Madeira vine (*Anredera cordifolia*) is one of our very worst environmental weeds. I was dismayed in March to view the numerous areas of white lambs' tails scattered along the Upper Brookfield valley and extending up the hillsides where the Madeira vine was flowering, each representing a significant infestation.

Madeira vine rarely or never produces seed in this part of the world, but reproduces by means of tubers that form in leaf axils. One of the problems in trying to control the plant is that, even if the stem is cut off near the base, the aerial tubers will mature, eventually falling and sprouting to produce more plants. In the past I have scraped the lower stem and applied 50% Roundup, but this method seems not always to be successful in killing the aerial tubers. Recently, remembering some advice from another bushcarer, I have tried another approach. If the aerial end of the stem is placed within 15 seconds of cutting in a container of 50% Roundup, the plant can suck the solution up into its tissues (See photo on p.1). In my trial I used 35mm film containers secured with a rubber bands and the Roundup had all disappeared within 24 hours. (There is no point in refilling an empty container, as the cut surface, when dried, would by then be unlikely to absorb any more poison.) Containers can then be re-used to treat other Madeira vine stems. Other containers, such as plastic drink bottles, would also be suitable for the purpose.

I have yet to see whether my treatment has been effective, but the method has been used before and will undoubtedly be better than just cutting. Of course, the lower cut surface should be treated too. If any reader has used this method, do please respond to the Editor with your experiences.

A lesson by the roadside

This year has been a phenomenal year for seed production. So it was not so extraordinary that, while walking down Mirbelia Street I spotted a sward of seedlings beneath one of two tulip wood (*Harpullia pendula*) trees that had been planted by the Council between the road and foot path. What I had not expected, though, was that many of them were pure white – that is, albino (see photo on p.5). Why so, I hear you ask.

This is probably just one example – and a pretty obvious one – of 'inbreeding depression'. Plants, and animals too, generally have genes in pairs. Some plants, like wheat, are characteristically self-pollinating, and the two genes in a pair are identical. Other plants are cross-pollinating, needing insects, wind or even bats to carry pollen from one plant to another. Such plants frequently have the two members of a gene pair different – i.e. they are '*heterozygous*'. In such cases plants can usually cope with one member of a gene pair being deleterious, but not both. Many cross-pollinating plants are not capable of setting seed when self-pollinated, but it appears that tulip wood is able to set seed in the absence of another source of pollen.

Back to our tree beside Mirbelia Street. The tree next door to the one that seeded so prolifically did not flower, or at least not at the same time as the seeding tree. So the flowers of our tree were pollinated by pollen from the same tree. The tree must be *heterozygous* for a gene essential in the production of chlorophyll, the green pigment in the plant essential for photosynthesis and without which seedlings will inevitably die. One dose of the deleterious gene has no observable effect, but with two doses, the seedling lacks chlorophyll and is pure white. If the tree had been pollinated from another source, the chances are that all the seedlings would be green. Many genes are likely to act this way, not all with such a striking effect – thus inbreeding of a characteristically out-breeding plant can result in progressive lack of vigour and 'fitness'.

How does this affect our goals in the Moggill Creek Catchment? If simply planting a garden, probably not much. But, where the goal is to restore an area to locally native vegetation for the long term, the example is relevant. In a planting, we should make sure that we plant several plants of each species, and also endeavour to plant them from different sources, so as to minimise chances of adverse genetic effects in future generations.

Bryan Hacker

(There seems to be another example of this in our nursery right now. We raised 32 seedlings of Rhodamnia of which eight have leaves with the full length of midrib but lamina (the flat green photosynthetic part) only on a short basal section. (The photo on p.5 shows this together with normal plants.) The capacity of those plants to grow is severely restricted. Following on from the brief lesson in genetics (above), it looks fairly certain that we have here a recessive gene for the defect, with the result that self-pollination leads to a progeny in which one quarter(one in four; just what we got) are homozygous for the defective gene and therefore express the character. If this is correct, then the remaining 24 plants are normal because eight have two of the normal genes, while 16 are heterozygous, with one normal gene. Self pollination in the former would give the same result as we see here, whereas in the latter, the whole progeny would be normal. For those who have another explanation for these weird plants: No, we have no herbicides in our nursery. Graeme Wilson)

It's on again, with more than \$1000 in cash prizes on offer from local sponsors!

The 2008 Moggill Creek Catchment Group's Annual Photography Competition and Display will be held from 1-6th September, 2008 at Kenmore Village Shopping Centre.

Since this marks the 10th Competition, the boundaries have been extended so that photos may be taken in other Brisbane Catchments, as well as within the Moggill Catchment. So, all you keen photographers, amateur and professional, young and old, start looking for those perfect camera shots! Why not take your camera with you next time you go to your local creek to walk the dog, ride a mountain bike, take part in a school creekside excursion, participate in a Bushcare activity, spot a platypus/koala, etc?

Entries will need to be delivered to the Trustees' Room, rear Brookfield Showgrounds on Saturday 30th August.

Conditions and entry forms will be available from Pullenvale Ward Office, sponsoring Kenmore shops, camera shops, BCC libraries and website www.moggillcreek.org.au

Enquiries: Robyn 3374 0649 or Jenny 0408 774 631

Help wanted in PR

Much work has to be done within the area we call Public Relations. It has been carried very largely by Chris Hosking but has become too much for her. She needs help and we are looking for someone with initiative to provide it. The work is varied and largely interesting. Some is ongoing but other is for finite activities. We ask for a few people to put up their hands to help out. New ideas are always welcome! We have some 350 members but far less than 50 contribute to the numerous tasks necessary to keep MCCG productive. It can not be that among the other 300, there is no one able to come to our help in this need.

If you think that you might be able to help us, please discuss it with Chris by phone (3374 3453) or e-mail (cjmhosk@optusnet.com.au).



Photo: Graeme Wilson

Victims of inbreeding (see A lesson by the Roadside p.4)



Photo: Bryan Hacker



A *Rhodamnia rubescens*, fruits *Photo: Bryan Hacker* (see Malletwoods, p.7)

Rhodamnia rubescens, flowers (see Malletwoods, p.7) *Photo: Bryan Hacker*



Another weed (see Castor oil p.7) Photo: Bryan Hacker

Words have meanings

We talk and write about the ststus of our plant species; of natives, endemics, exotics and weeds. It is important that anyone using these words knows just what they mean.

A native is a species of at least long-standing occurrence in a designated area. An Australian native clearly belongs in Australia but is not, for example, necessarily a Moggill Catchment native, even though it may have become widespread here as a result of introduction - such as *Eucalyptus torelliana*. A native to our Catchment is necessarily an Australian native.

A native occurring exclusively in a designated area is endemic to that area. We are unaware of any one here.

An exotic comes from elsewhere and normally implies having come from another landmass, which in our (Australian) case means another country.

The word *weed* is not understood everywhere. It is strictly a plant where it is not wanted, although it has come to be used for a species which is widely such a problem. For example, lantana is understood to be a weed which it really isn't until it escapes and becomes a problem.

Graeme Wilson

The Australian Government Community Water Grants assist Moggill Creek Catchment Group in their restoration work

Moggill Creek Catchment Group has recently completed a project to assist in the restoration of the part of Moggill Creek that runs behind Brookfield Produce Store on Rafting Ground Road.

The Project has been funded largely by the Australian Government Community Water Grants, together with Brisbane City Council and Brookfield Produce Store. Community Water Grants are part of a \$2 billion Australian Government Water Fund. It provides grants of up to \$50,000 for community organisations to put in place practical on-the-ground solutions to either help save, reuse or improve the health of the local water sources.

In order to supply the area with a more regular supply of water for the maintenance of new plantings along the creek bank, two large water tanks each holding 20,000 l. of rain water have been procured and installed in the grounds of the Produce Store. Restoration workers can access the water from the back of the store.

The creek bank behind the store and along Rafting Ground Road has been cleared of many Chinese Elms and other weeds, it has been mulched and now is being replanted with many different native plant species.

Plants have been obtained from Moggill Creek Nursery.

Malcolm Frost

Plant Families 15 - Meliaceae

The family Meliaceae takes its name from its genus *Melia*. It is a family of some 1400 species in about 50 genera, occurring around the world in tropical and warm temperate latitudes. It is perhaps best known as the source of some valuable timbers, which include our red cedar (not a true cedar, which is a conifer), white cedar (not much used for that purpose although it is attractive) and rosewood, together with African mahogany and the different West Indian mahogany (this latter famous for its use in cigar boxes!).

In our catchment we have the two species of *Dysoxylum*, *frasierianum* (rosewood) and *rufum* (hairy rosewood-the fruits being covered in stiff irritating hairs). Then there is the scented rosewood (*Synoum glandulosum*) which was described in last Summer's issue. Red cedar (*Toona ciliata*) was, and remains the source of one of our most valuable timbers, so much so that it moved from being abundant in this area to being very rare as a mature tree. White cedar (*Melia azerdarach*) remains common here, although not restricted to Australia, being quite common in Asia. And we have two more members of the family, *Owenia venosa* (Crow's Apple) and *Turraea pubescens*, the latter not common, with highly scented flowers of very similar appearance to those of white cedar.

Graeme Wilson

Erratum: In the previous issue of this newsletter (Autumn 2008) the front page carried photos of three species of kingfishers. The captions accompanying the Sacred and Forest Kingfishers were interchanged. Our apologies.

Malletwoods – genus Rhodamnia

The genus *Rhodamnia* is in the Myrtaceae family, which includes gum trees and lilly pillies. The genus occurs from south-eastern Asia to eastern Australia and New Caledonia, and is represented by about ten species in Australia, six in south-eastern Queensland.

Rhodamnia species are usually shrubs or small trees and have opposite leaves and a fairly distinct vein just within the leaf margin. The only *Rhodamnia* species listed in our species database is *R. rubescens* (scrub turpentine, brown malletwood), although there is a report that *R. dumicola* (malletwood) also occurs. Another species that is commonly grown by revegetators is *R. argentea* (malletwood, white myrtle), so named because of its silvery leaf undersurfaces.

Rhodamnia species are well worth growing in a local rainforest revegetation project and several at least are regarded as food plants for fruit-eating birds. The clusters of small and white scented flowers in spring along every branchlet of a *R. rubescens* tree growing close to Savages Road were quite reminiscent of the English shrub known as may (see photo on page 5 - this also shows the distinctive intramarginal veins). I have had a plant of a *R. dumicola* growing for several years, and this year it fruited heavily. Keen to collect seed for our nursery, when the fruit turned from green to red, I supposed them to be ripe. However, much to my surprise, they changed colour yet again, this time to black (see photo on page 5). Hopefully we will soon have young plants at our nursery available for landholders.

Bryan Hacker

(I can vouch for the appropriateness of the common name. As a woodturner, I fashioned a bowl from a block of the timber. The grain is so twisted that it would be almost impossible to split and the wood is very heavy, these two features making it excellent for mallet heads. Graeme Wilson.)

Castor oil – a medicine hard to take

The castor oil plant, *Ricinus communis*, is a significant weed in our area, particularly along creek lines. It is extraordinarily quick growing, achieving a height of two metres in a year. It is the only species I am familiar with where seedlings can emerge through a 10-15 cm layer of mulch! Fortunately, seedlings are quite easy to pull out, even when as tall as a metre. Also, I suspect the seed has a relatively short viability in the soil. Larger plants should be cut down (before flowering, preferably) and given a squirt with 50% glyphosate.

Castor oil is a shrub that can grow to a height of 6 m or more. It is readily recognised by its very large palmate leaves, lack of sharp prickles, narrow terminal inflorescence, and fruit with soft spines (see photo on p.5). It is sometimes confused with giant devil's fig, but that species – also a weed – is exceedingly prickly. There are no even remotely similar native species. Some variants with reddish colouring have been developed as ornamentals

Because of its fast growth, castor oil has been considered as a potential biofuel, but hopefully its weediness attributes will be a deterrent. All parts of the plant are poisonous. Oil, derived from the seeds, is used as a lubricant, in varnishes and paints and in various industrial processes. Castor oil is still widely used as a purgative in modern medicine, and is also used to treat skin diseases. According to an Indian reference – "Ayurveda and Siddha, being holistic systems of medicine, have spelt out practices to keep healthy. Having castor oil once in three months ensures that the entire digestive system is cleansed. The recommended dosage ½ to one teaspoon of pure warm oil for children above one year and one to two teaspoons for adults. This results in four to five purges." (*The Hindu :Online edition of India's National Newspaper Sunday, Jan 12, 2003*).

Despite its various beneficial attributes, we strongly recommend that this species is brought under control and eliminated where it occurs in our Catchment.

Bryan Hacker

Plant Feast at the Nursery

Our catchment nursery stock of native plants has attracted or helped maintain a wonderful diversity of butterflies in our area. It does however mean that months of care and effort by nursery volunteers can disappear inside more than one 'very hungry caterpillar'.

Over the past few months I have rescued many plants or caterpillars, depending on your point of view, by taking seedlings plus feasting caterpillars home where I have grown-up versions of the plants. For example Dainty Swallowtails (Papilio anactus) on native lime (*Citrus australis*), and Orchard Swallowtails (*Papilio aegeus*) on Crow's Ash (*Flindersia australis*).

The latest recue was in answer to Graeme's plaintive plea "What is this destructive thing which is demolishing the beautiful wattle I sought to distribute?" The beautiful wattle was *Acacia spectabilis*, and the destructor in this case was the larva of the bright and beautiful Grass Yellow Butterfly, *Eurema hecabe*. (See photo sequence on p.1).

Yes, it might be hard to see precious plants being eaten by not-so-lovely larvae, but look at the beautiful creatures that result. So, I say, plant even more native plants just so they can be eaten. Butterflies bring life and colour into any garden.

7

"Grasses" which are not

Yes, to the many who don't know much about these things, they do look a bit like grass. Some even have common names which declare them to be so. The real grasses belong in the family Poaceae.

There are many sedges, particularly *Carex spp.* and *Cyperus spp.*, both in the family Cyperaceae, as is also Sword Grass, *Gahnia aspera*. Then there are the numerous species of *Lomandra*, which belong in the family Xanthorraceae, together with *Xanthorrea spp.*, the Grass Trees; although these latter are, in spite of the name and foliage, unlikely to be mistaken for real grass when they have such massive trunks. However, what would you say about bamboo and sugarcane, which *are* grasses? And some forms of flax lily, *Dianella caerulea* (Family Phormiaceae), look sufficiently like a grass for those with only a casual knowledge of plants, as do many other Monocotyledons.

Graeme Wilson



Some suggestions regarding effective meetings

It's fun reading through old publications. The other day we came across one that could hold some hints for ensuring our various meetings are well attended!

The reference refers to the fact that in 1745 a group was formed named the Moyallow Loyal Irish Protestant Society. Amongst other gems appeared the following:

1. "absent members were to be fined one British shilling", (a considerable sum in 1745!) and

2. They resolved that "nor shall more than one bottle of wine or a like proportion of other liquor be allowed to each member."

Should we perhaps take these suggestions on board?

Source: Brady, W. Maziere. (1864) Clerical and Parochial Records of Cork, Cloyne and Ross V2, pp. 324 & 325.