

MOGGILL CREEK CATCHMENT GROUP

P.O. Box 657, Kenmore 4069



MOGGIL CREEK CATCHMENT NEWSLETTER

Newsletter of the Moggill Creek Catchment Group

Autumn 2003

Chairman's Report

A very happy New Year to all our members. I imagine we are all facing the new year with some trepidation, regarding developments overseas and at home too. All most of us can do is to try and make the world a better place within our sphere of influence. Improving our local environment is one way in which we can do just this.

After Christmas, we had to say farewell to Liz Gould, as there was no opportunity to attract funding to keep her on. Liz did a magnificent job while she was working with us, and we all regret that she could not continue. Much of her work will now be shared between Graeme Wilson and myself, supported by volunteers from our Group. Currently, we have a well-stocked nursery; members from the Gold Creek - Savages Rd area requiring plants should contact Graeme (3374 1218), and those of you from elsewhere in the catchment should contact me (3374 1468). As in the past, plants are native to our catchment and are provided free to members. Graeme is going to manage plant-propagation through our Gold Creek Nursery and volunteer growers (Brisbane Forest Park has kindly allowed us to continue using this facility, and to provide back-up help when required). We are on the lookout for home-growers and also seed collectors, to make sure we keep up the supply of plants into the future. So if you can offer help in either of these areas, please do contact either Graeme or myself.

In our last newsletter I reported that we had applied for funding through the Natural Heritage Trust to attack significant weed invasions in our catchment and neighbouring catchments. Unfortunately, this funding source only allowed a small component to be spent on salaries, but it did allow for work to be done under contract. This project is in association with three neighbouring catchment groups, as well as THECA (The Hut Environment and Community Association). We were successful in obtaining funding, and the fact that we are starting to take on a subregional approach appears to have made a favourable impression. In our catchment, the areas we are targeting are:

- an area of Philippine Violet (otherwise known as hophead) along Gold Creek Road (see later in this issue for details),
- the western end of Upper Brookfield Road, where the emphasis will be on 'rescuing' a few groups of native trees from asparagus vine, morning glory and other weedy creepers,
- Moon's Lane Reserve, where we will be targeting cat's claw and dutchman's pipe.
- a major cat's claw invasion on a property along Savages Rd (this area is a threat to Brisbane Forest Park, and BCC are working with us on this area)

Two other aspects of the project are weed mapping and support for local landholders in their battle against weeds. Weed mapping will be through ground surveys associated with analysis of aerial photographs. To support landholders, this year we can continue to offer free glyphosate to members with approved projects and we can also offer a 50% subsidy on a limited number of knapsack sprays and items of protective clothing (see later in this issue for details). Also, we can continue to provide members with tubestock of a wide variety of species native to our area.

We can only make these offers to financial members of the MCCG, so, if you have not already renewed your membership, now is the time to do so. A reminder notice is enclosed with this newsletter addressed to members who have not renewed their membership for 2003. If a notice is enclosed with your newsletter and you believe you have paid up, please do not hesitate to tell us.

Bryan Hacker

Sandpaper figs – a must along our creeks

Sandpaper figs are amongst the commonest trees still surviving along Moggill Creek and its tributaries, but they also occur away from creeks, generally on more fertile soils. There are three species in south-east Queensland (*Ficus coronata*, *F. fraseri* and *F. opposita*), and they all occur in our catchment. Mostly they are quite small trees, struggling valiantly amongst the crowds of ochna, Chinese elms and other exotics. Occasionally one comes across a large tree, which has somehow escaped the pioneer's axe. When fruiting, the trunks of such trees are covered with fruit, ranging from green when under-ripe through burgundy-red to black, depending on ripeness. Fruiting on mature wood (cauliflory) is not uncommon in tropical trees, although rare in temperate latitudes.

As a group, they are readily distinguished by their large leaves (up to 17 cm long) which have a very rough surface. Leaves on young plants are frequently variable, often broadly lobed and sometimes toothed. Other local trees with rough-surfaced leaves are native elm and the whalebone tree, both of which are readily distinguished from sandpaper figs by their small leaves which always have prickly margins. Another local tree, the *koda* (*Ehretia acuminata*) also has leaves which are slightly rough-surfaced; they also have toothed margins. The three sandpaper figs, though, are not so readily distinguished from each other. *F. coronata* (creek sandpaper fig) has alternate leaves, all in one plane (as in the



Fig 1. Fruiting branch of the creek sandpaper fig, *F. coronata*

photograph), whereas the other two species have spirally arranged or opposite leaves. *F. opposita* and *F. fraseri* are most readily distinguished by their fruit – the former has fruit which are well-rounded or even depressed at the tip, whereas the latter has fruit which are drawn out at the apex. However, there are intergrades between these two species, and it is possible that they occasionally hybridise. *F. opposita* is much less common in our catchment than the other two species.

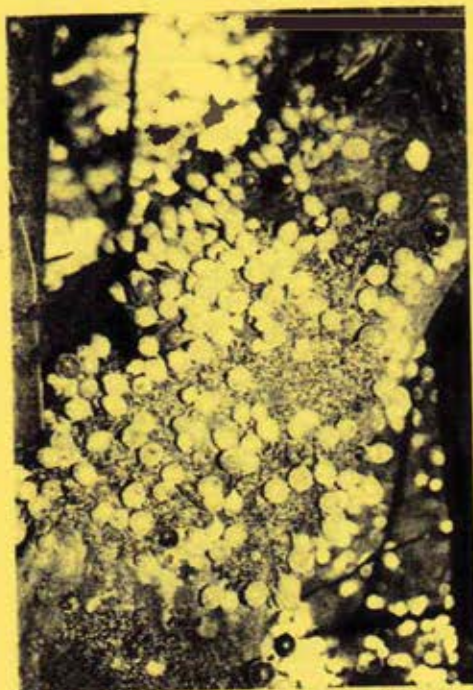


Fig 2. Fruit formed on the trunk of an old sandpaper fig

Figs have fruit that are very different from those of other groups of plants. Flowers are tiny, and form inside the 'fruit'. The flowers rely on small wasps to pollinate them, so as to produce seed, and different species of fig need different species of wasp – the fig and the wasp totally rely on each other for their survival. Female wasps enter the fruit to lay their eggs in some of the flowers' specialised ovaries and the wasp larvae then develop, forming galls. The ovaries of female flowers pollinated by the wasps develop to produce fig seeds¹. The fruit of sandpaper figs is an important source of food for fruit-eating birds, and is particularly relished by native pigeons.

Germinating seed of figs is not difficult. Figs should be picked when ripe (dark-coloured) and broken up into a mush. This may be spread on a bed of potting mix, lightly covered with sand or fine mix and kept moist. Seedlings should appear in 2-6 weeks.

Bryan Hacker



Fig 3. Fruit of *F. opposita* (rounded)



Fig 4. Fruit of *F. fraseri* (drawn out at tip)

¹Sands, D. & House, S. (1990). In: 'Tropical Rainforests'. CSIRO.

***Barleria lupulina* – a new invasive weed in Brookfield**

This species has recently been noted along the Gold Creek Valley, Brookfield, where it is invading dry, skeletal soils on a north-facing ridge. A nearby resident, concerned that the plant had formed thickets over about 0.5 ha, raised the alarm and the plant was identified at the Queensland Herbarium. Interestingly, this species has rarely been collected in Queensland, the only records of naturalized plants being Mareeba ('locally naturalized and spreading'), Magnetic Island ('adjacent to private residence'), James Cook University, Townsville ('common in small area') and Mt Cotton Rd, Burbank ('six plants naturalised on acreage block').



Fig 1. *Barleria lupulina* stems have large spines at the leaf bases



Fig 2. Flowers are yellow, produced from terminal heads

Barleria lupulina is believed to be native to Mauritius but is now widely naturalized through the tropics, particularly on tropical islands. It is a thorny shrub growing to about 1.5 m tall, with narrow, simple leaves up to 9 cm long and 12 mm wide, with a prominent red mid-vein and pairs of spines at the leaf-bases. The inflorescence is terminal, with yellow flowers emerging progressively from large bracts. Like so many of our environmental weeds, it was probably introduced as an ornamental (the flowers are quite attractive, when the plant is grown in good conditions). The common name is hophead or Philippine violet, the latter name also being applied to the blue-flowered *B. cristata*, which used to be popular in Queensland gardens.

B. lupulina is potentially a very serious weed. Where we found it in Brookfield, there were 2-3 plants per square metre, and walking through the area was difficult owing to the thorniness of the plants. It is apparently tolerant of drought (as over the past year) and of infertile skeletal soils. The only thing in its favour is that it is quite easy to pull out by hand.

Working with neighbouring catchment groups and THECA (The Hut Environmental and Community Association), we have been successful in obtaining an Envirofund grant from the Natural Heritage Trust to target significant weed outbreaks in the western suburbs. This infestation of *B. lupulina* we regard as a high priority, as it is a potentially a very nasty weed, and because the site is small and there is a good chance that we can totally eliminate the plant from the area. If anyone sees plants in our area which they suspect are this species, I would be grateful for a specimen (please send to me at PO Box 657, Kenmore, or leave in my letterbox at 41 Gap Creek Rd, Kenmore Hills). If practicable, plants should be destroyed.

Bryan Hacker

Seeds Wanted

We have about 100 species of native plants in our nursery, sufficient for making a good start on a revegetation project, not enough to meet our aim of maximizing biodiversity in the catchment. A few dedicated seed collectors are not going to come across mature seed of many in one or two years. We need many people to keep their eyes open as they move around, and if they see something, collect seed for us.

Don't strip plants bare of seed; leave some to play their part in natural regeneration. We can not give advice of a general kind to tell if seed is mature, but people with an interest in plants can often make a good guess. Unless you know for certain what the species is, include a small amount of foliage. No amount of seed is too small, especially of some of the less common species.

Include your name, place of collection and preferably your phone number. We are not in a position to travel throughout the catchment to pick up seed which has been collected. For most of the area, residents travel occasionally through central Brookfield. Brookfield Produce has kindly allowed us to place, near their counter, a box in which seed can be deposited. It is not necessary to advise us that you have done so; we check it regularly. For persons who do not come that way, phone me if you have something. Ph.3374 1218.

Graeme Wilson

Healthy Waterways

At our last AGM we had an excellent talk from Professor Stuart Bunn of the Centre for Catchment and In-Stream Research at Griffith University, on the management of waterways. Not only was it interesting but the content provided valuable guidance to those of us who are engaged in restoration work and sent a message to those who are not, that activities around the waterways can have detrimental effects far beyond their own properties.

Actually, the issue is management of not only the streams themselves but also riparian land, that which adjoins or directly influences a body of water or creek. Stuart pointed out that the degraded condition of our streams is largely a consequence of how we have managed the riparian land, where we have extensively cleared and cultivated or stocked with grazing animals. The riparian zone is not just a narrow strip along stream banks. Further, it is to be understood that waterways are not just permanent streams or waterholes; they include the gullies and drainage lines which carry runoff following rain.

The following summarizes some of the issues he discussed.

Mismanagement has led to erosion of creek banks and beds, and adjacent land. Not only are these damaged but the creek becomes silted or sanded up. Its capacity to carry water is reduced while absence of fringing vegetation and buffer strips behind it hasten runoff of heavy rain, these two together increasing flooding. Trees, shrubs and herbaceous plants are necessary to stabilize banks, all three having different roles.

Other features of the physical structure include habitats for aquatic animals; deep holes (particularly important as refuges if flow ceases and shallow water goes); and live tree roots, aquatic vegetation and logs-including hollow logs for breeding- for refuge. It is widely believed that wood (logs and branches) in streams restrict flow and increase flooding, but research is showing that is often not the case. On the other hand, such material contributes greatly to formation of desirable stream structure – to the extent that serious repair work on degraded streams often includes appropriate placement of logs. In addition, these materials hold debris, allowing for its decomposition as a starting point in the food chain; while algae and other lower forms of life which are essential in the biological system establish there.

Water quality depends on both what goes in to streams and conditions within them, many influences being involved.

- Runoff carries suspended matter, soluble mineral nutrients and miscellaneous organic substances, such as herbicides, pesticides and effluent from inadequately treated household wastes.
- Organic materials can be directly toxic to aquatic life and animals drinking from streams, or carry human diseases.
- Excess minerals, especially nitrogen and phosphorus, encourage excessive and unusual vegetative growth, including some algae which are toxic.
- Excess plant growth clogs stream flow and by its decomposition reduces oxygen content below that necessary for aquatic animal life.

Loss of water quality follows also from absence of trees on stream margins, full sunlight causing large diurnal temperature fluctuations in the water with high maxima, beyond the tolerance of aquatic animals. It also contributes to excessive plant growth in the water.

A serious problem in waterway restoration is access of livestock. Banks are damaged and water fouled. It is essential that an adequate strip be fenced off to prevent access.

A recent national report has indicated that gullies have contributed most of the sediment to our major river systems. Dry gullies are particularly important in this catchment because of the general topography. Whereas the creeks are to some extent on public land, the gullies are largely on private land. Often the owners "have had the rubbish cleared out", with both bottoms and slopes left bare. In heavy rain they carry rushing water causing erosion which escalates quickly over successive rainfalls, damage which is extremely difficult to repair. That must be avoided by having adequate and appropriate vegetative buffers. The consequences of such erosion extend beyond the loss of soil at the source, through damage to our creeks, then the Brisbane River and finally Moreton Bay.

Reported by Graeme Wilson

RETAIL LINES

Caps \$9.95

Cotton – one size fits all,
khaki, embroidered logo

Calico green bags \$5.00

Screenprinted logo
Library, shopping, student, carry-all bag

Hats \$14.95

Cotton – S/M navy with stone rim
L/XL stone with navy trim
Embroidered logo

Polo shirt \$29.98

Colorado cotton with embroidered logo
Loose fitting and Brisbane made

Vines, Good and Bad

A list of our worst weeds would have a number of vines near the top. Think Madiera vine, cat's claw, climbing asparagus and glycine. And there are a few other serious ones nearby but apparently not yet in our catchment. At the same time we are in the business of at least maintaining and preferably enhancing biodiversity. That means seeing that all endemic species are represented. Some 50 species of vines are recorded for the catchment. Interestingly, the important vegetation type that we usually refer to as dry rainforest is also known as vineforest because of the conspicuous presence of vines.

Having worked for some time with volunteers engaged in weed removal, it is fairly clear that except for the very few who have a good knowledge of our vegetation, there is some deepseated objection to vines. The good and the bad go indiscriminately. Workers must remember a golden rule: If you don't know what it is, don't touch it. (Which applies to plants of any growth habit.)

There is another problem with working among vines. Many species have slender stems and no leaves near ground level. Therefore the odd vine among many weeds is likely to be removed with the latter. That leads to another important rule: Don't remove a plant before glancing up at the foliage which, unlike the stem, is quite distinctive. Again, apply this test to all species.

The foregoing is about saving vines which are there, but there is another aspect of the matter, the addition of vines by planting them. In the first place, we can not easily keep them in our nursery, their climbing habit making it almost impossible to hold them to any size because of the tangle which forms among closely spaced pots. Then, they can not be planted in the field until there are plants on which to climb, and so they can not be included in early plantings in cleared areas. They can be added only where there are trees of sufficient height.

Incidentally, there is an erroneous belief that vines will overgrow and destroy our trees. That is certainly the case with undesirable exotics, but endemic species have evolved to share the aerial space with the trees they occupy.

We are beginning to add vine species to our nursery holdings, although it may be some time before we can get seed of a wide range of species.

Graeme Wilson

Do you need a new Knapsack Spray for your revegetation project?

Thanks to Natural Heritage Trust, we can offer sprays

50% Off Cost Price!!!

to a limited number of acreage land holders with major weed problems.

All you need to do is

- send us an outline of your weed problem
- tell us what you intend to do about it
- arrange for one of us to come and check out the problem
- tell us this coming December how many hours you have given to weed control

A Decision

Most people restoring vegetation in our Catchment have problems because of the drought. Our main one is this. Although most of our efforts depend on natural regeneration and weed removal, we do some planting where that is necessary. For the most part it is remote from water supply. Some plants have died and without rain soon, more will. The question is whether we should start a program of watering. That would take up practically all the time and labour we have and mean watering many plants which are going to survive in any case. We have decided otherwise.

Assuming (hoping) that in the reasonably near future there will be one or two rainfalls sufficient to keep most of the survivors alive, we are putting our efforts in to weed removal (weeds being the greatest long-term threat to our success), and site preparation for planting when favourable conditions for that return. We find that such preparation in hard or stony soils (we are not working on alluvial areas, as the Habitat Brisbane programs usually are) usually takes most of the time and effort in the planting operation. Thus we will be able to plant quickly. And the overall saving in time can be used to replace plants lost in the drought.

Wish us luck!

Graeme Wilson

Moggill Creek Catchment Group Committee

Chairman	Bryan Hacker	3374 1468
Vice Chairman	Malcolm Frost	3374 0649
Treasurer	Noreen Mardell	3878 9040
Secretary	Kate McVicar	3374 1471
Public Relations	Judy Gower	3878 4790
Plant Propagation & Nursery	Graeme Wilson	3374 1218
Committee member	Peter Metzdorf	3374 2774
Committee member	Adrian Webb	3374 2686
Section Leaders		
Section 1	Vacant	
Section 2	Rob Waller	3378 6897
Section 3	Malcolm Frost	3374 0649
Section 4	Stephen White	3374 1653
Section 5	Tina Heybroek	3374 1401
Section 6	Darryl O'Brien	3374 4964
Section 7	Bruce Noble	3300 4855
Section 8	Graeme Wilson	3374 1218
Section 9	Gordon Grigg	3374 1737
Section 10	Chris Mackey	3374 1676
Section 11	Bryan Hacker	3374 1468
Section 12	Michael Humphreys	3374 1467
Section 13	John McKenzie	3407 0013

ARE YOU A MEMBER?

WORKING BEES AT OUR NURSERY

There are now two Nursery working bees each month, on the first and third Monday. Tasks include pricking out any seedlings that are ready, weeding and tidying.

We would welcome any participation in these working bees, as there is much to be done – even if you can only spare one or two hours – every little bit helps.

These working bees are a lot of fun and Bryan has promised to provide excellent morning tea!



The working bees are also a great opportunity to :

- meet and socialise with other MCCG members
- share what others are doing on their properties
- exchange ideas and tips
- learn about plants, their propagation and care



If you want to come along simply call Graeme Wilson on 3374 1218

We look forward to seeing you there!

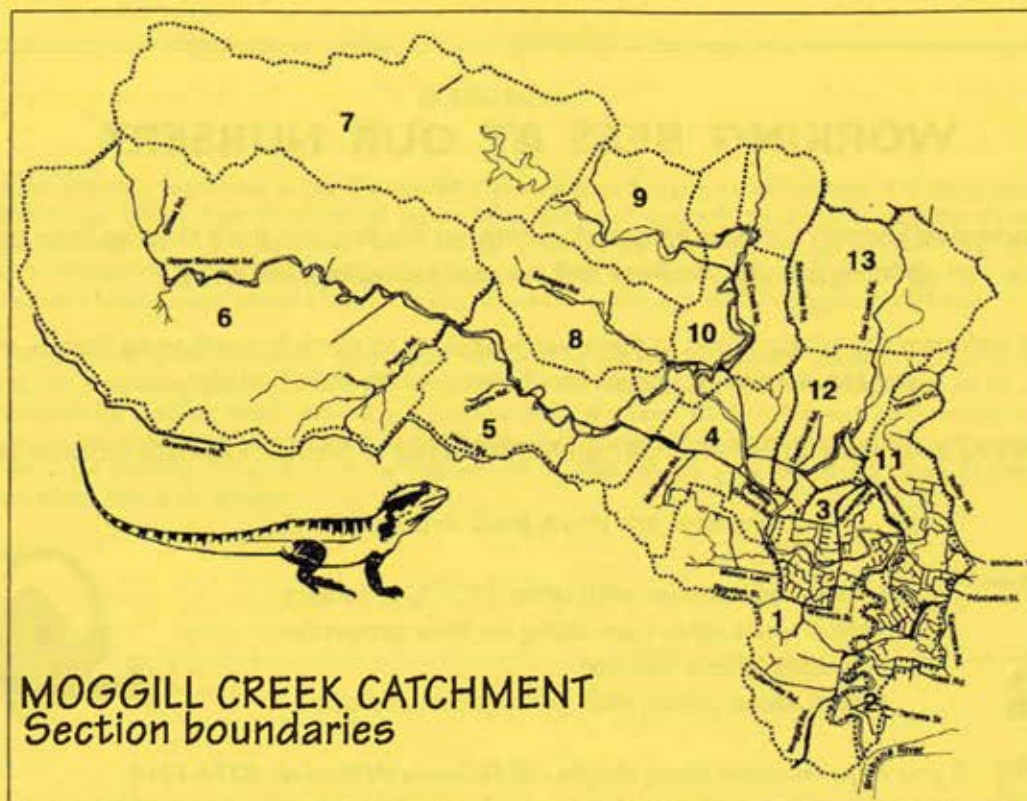
That's Life

A member reports finding on his land the tail of a feather-tail glider beside the feather of a powerful owl. Apparently the owl had eaten its dinner. You might feel sad about that; but perhaps you are pleased to know that both the species are here. That is what we are on about, ensuring that as much as possible of original biodiversity remains in the Catchment. And remember that the range of animals depends on the range of plant species. In fact, both species of animal represented in that encounter are having a battle for survival here because of land-use history, together with current ignorance or indifference. Both need hollows in trees. We are short of old trees, live or dead, and as far as possible, such should be left.

Have you something to tell us?

Most of the newsletter is inevitably given over to information of various kinds coming from the Management Committee. But surely amongst our many members there must be occasional interesting observations which others would like to hear. If you have something like that, do get in touch with the Editor to discuss a submission for inclusion in the next issue.

The Editor apologises for there not being a Section report in this issue.



Section Workingbees

For various reasons, the Catchment is divided into 13 Sections. We recognize firstly the subcatchments, corresponding to Moggill Creek itself and its main tributaries, Gold Creek, Wonga Creek, Gap Creek and McKay Brook. The latter three define Sections (8, 12 and 11, respectively). The two larger (Moggill and Gold Creek) are each divided for practical reasons into more than one Section. In addition, there are three areas which do not directly correspond to catchments but become Sections (Gold Creek Reserve, Mt. Coot-tha Park and Pullenvale/Moons Lane). These Sections are shown on the accompanying map, and each is represented on the Management Committee by a Section Leader (see Committee details elsewhere in this issue).

Most of the Sections have arranged for volunteer groups to carry out restoration work, mainly on public land, usually along creeks and roadsides. That is done via affiliation with Brisbane City Council's Habitat Brisbane (also known as Bushcare) program, from which some material support comes. To some extent the groups also go on to private land, commonly adjacent to their public land activities.

Residents in the sections are invited to join in such activity and those wishing to do so should get in touch with their Section Leader. In addition to making a useful contribution, participation gives an opportunity to meet other people in the neighbourhood with a likeminded concern for the health of the natural environment; not least as represented by the condition of roadsides and creeks. In the last 25 years or so, that has gone from being, in so many places pleasant, to an eyesore.

The workingbees are held mainly monthly, according to the following schedule:

Section 2	Lower Moggill Creek	3rd Sunday 8.30-11.30
3	Huntingdon	Last Sun. 8.30-11.30
4	Showgrounds	No set times
5	Haven Rd.	Early mornings, late afternoons
6	Upper Brookfield	monthly
8	Wonga Creek	Last Sun. 9.00-12noon
9	Upper Gold Creek	Approx. 6-weekly
10	Lower Gold Creek	No set times
11	Mc Kay Brook	3rd Sun. 8.30-11.00 1st Sat. 2.00-5.00
12	Gap Creek	4th Sun. 8.30-11.00

Where the date/time is not fixed, Section Leaders advise their members

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