

# **NEWSLETTER**

# **AUTUMN 2009**



Kurrajong flowers (see The Kurrajong p. 4 )

Photo: Bryan Hacker



Flood damage (see Lessons from the storm, p. 4)

Photo: Damien Egan



- Butterfly cage construction Photo: Damien Egan
- Job done (see Repercussions, p.7 )

  Photo: Dale Borgelt



### **Editorial**

This is the worrying time of the year. Will we yet again miss out on heavy wet-season rain which wets the soil to depth and recharges springs on which prolonged stream flow depends? So far we have had, as in recent years, better than usual Spring rain, and now (at the time of writing) we are well in to February without the monsoon rains having yet done anything for us.

Attention is particularly drawn to the notice on p.8 to the series of talks/workshops/whatever commencing at The Cottage in March. It is intended that these will continue indefinitely. They should be an important addition to our activities, providing interest and useful information in themselves and an opportunity for people who know little of us to become aware of our presence and objectives.

The content of this issue reveals something of an obsession with weeds, and properly so. The number of weed species and the extent of infestation in many areas are increasing. Unless we can turn the tide, much of our endeavours to improve the vegetational condition of our catchment will be in vain. It behoves everyone to contribute to the struggle.

Reports for 2008 from the various activities in the Group (BushCare, Nursery, Public Relations etc.) are being prepared and will be shown on the Web. Whether some will be included in future issues of the Newsletter is yet to be decided.

From time to time we ask readers for contributions to this newsletter but very rarely indeed do we see anything from persons beyond the regulars. Surely there must be a few people among our almost 400 members who see or think or know something which could be of interest to others.

### Chairman's Report

It was with considerable satisfaction that Moggill Catchment Group was notified by the Australian Tax Office that an application to become a deductible gift recipient has been endorsed. Donations to our organisation to assist us in conserving and improving our local environment will now be tax deductible for donors. Thanks to Richard Woodhead who with considerable skill and perseverance has successfully managed this task.

On a less satisfactory note, our Catchment Coordinator Jenny Mulchrone has resigned and will leave us in mid-February to return to Coffs Harbour. For the past year Jenny has been our Catchment Coordinator, one of the environmental specialists employed by Brisbane City Council to assist catchment groups. We have enjoyed working with Jenny and have valued her contributions to our catchment group. We wish her well.

Malcolm Frost

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: Malcolm Frost Secretary: John Crowley

Correspondence to be addressed to the Secretary at: P.O. Box 657, Kenmore 4069 E-mail: mccgroup@live.com.au

This Newsletter is published quarterly, scheduled for early March, June, September and December. It is distributed to members. Articles may be cited but should not be reproduced without consent of the authors who alone are responsible for the views expressed. Illustrations are copyright and should not be reproduced without permission of the author and MCCG.

Editor: Graeme Wilson, Ph. 3374 1218 Email: zzzgrw@bigpond.com Formatting: Margaret Hastie Printing: John Gower

Proudly supported by



Dedicated to a better Brisbane

# Balloon vine - a serious weed we want to keep out of our Catchment

Balloon vine – *Cardiospermum grandiflorum* – is a seriously invasive vine which is quite common in other parts of Brisbane, but less frequently to be seen in our Catchment. An infestation near the Brookfield Rd Bridge had become apparent earlier this year but has now largely been brought under control. Since then I have seen the species along McKay Brook and also had reports of it elsewhere along Moggill Creek.

Balloon vine is an aggressively invasive vine which climbs by means of unbranched tendrils. It has densely hairy stems and ornately lobed compound leaves. The tendrils arise *beside or within leaf axils*, in contrast to the superficially similar but more delicate native slender grape, *Cayratia clematidea*, in which the tendrils arise *opposite* to the leaf. (*C. clematidea* also has much smaller leaves – up to 6 cm long, compared to up to 15 cm long in balloon vine.) Flowers are borne in clusters and are small and white. These are followed by fruit which are 3-angled capsules and are superficially similar to the Cape gooseberry. When these dry and break up in autumn-winter, each releases three seeds attached to boat-like wings which carry the seed on the wind (see photos of both species on page 5).

According to the Flora of South-east Queensland, *Cardiospermum* species are annuals, but the strong growth of the Brookfield plants suggested they might be perennials. Whether annual or perennial, if you spot this plant along your section of creek, try to prevent in from spreading.

Bryan Hacker

#### Plant Families 17-Orchidaceae

Orchidaceae (the orchids) is probably the largest family, in terms of number of species, in the flowering plants. They are distributed worldwide. Our Combined Species List, which records all species reported to occur in our catchment, lists 19. They are not all conspicuous, partly because many of the larger ones are taken by collectors while most of the tiny and fragile ground orchids have little chance of survival in the way we treat our land.

The king orchid (*Dendrobium speciosum*) is well known and widely cultivated, while our two species of *Cymbidium*, robust plants, are seen often enough by those walking in the forest and looking up in to trees. Most others will be found only by those knowing where to look.

It is hoped that when we establish a collection of native plants at The Cottage, suitable for use in gardens, many of the epiphytic orchids will be included.

Graeme Wilson

### Care when hand-weeding

If someone helps me when hand-weeding where there are natives to be saved, I insist on four things: Only two weed species are to be removed; he (or she) must readily recognize these species; always check via the foliage that it is the target plant which is about to be removed; and don't touch any other plant no matter what ideas he has about its right to remain.

I recently had a reminder of the importance of those requirements. Some years ago I planted a small seedling of *Tinospora smilacina* at the base of a steelwood, up which it climbed fairly rapidly. After a couple of years, no leaves remained visible; just a bare stem disappearing in to the upper canopy. Nor did this stem appear to be thickening at ground level. Had the plant died? Anyhow I left the stem there. A current photo on p.5 shows it. Then to my surprise a few years on, after a recent storm, I saw a robust stem with foliage (photo p.5) emerging from the top of the steelwood, having evidently then climbed up another tree from which it had been dislodged in the storm and is now attached at some height to a red kamala a distance away. The "top" of my *Tinospora* is now perhaps more than 12m from its inconspicuous base. Had that miserable base been destroyed I would not now have this somewhat uncommon and biologically interesting plant. (Read about it in the Winter 2005 edition; *The menisperm vines and their moths.*)

You may well wonder how such a slender stem base can supply the necessary water and mineral nutrients for such a large plant..

Graeme Wilson

### The Kurrajong, Brachychiton populneus.

The kurrajong, *Brachychiton populneus*, should not be confused with the more commonly planted brown kurrajong *Commersonia bartramia*, which is a quite different species and in a different genus. The kurrajong is related to several rather better known species, the Illawarra flame *Brachychiton acerifolius*, the lacebark, *B. discolor* and bottle trees, *B. australis* and *B. rupestris*. The lacebark, kurrajong and Illawarra flame are recorded in our Catchment, although there are doubts that the latter species grew here before Europeans arrived. Several of the *Brachychiton* species inter-hybridize.

The kurrajong is a small deciduous tree to 20 m tall, with a dense crown and rather small, cream-coloured, bell-shaped flowers with reddish or brownish spots (See photo p1.) Leaves are often somewhat lobed and up to 10 cm long. The fruit is boat-shaped and also up to 10 cm long. The species is distributed from Townsville to Victoria and west to about Charleville. In our area it is not uncommon in eucalypt woodlands towards the tops of ridges.

Seeds of the kurrajong germinate readily, and it may also be propagated from cuttings. Growth on poor soils tends to be quite slow.

This species has a multitude of uses. Quoting the Australian National Botanic Gardens website\* "Native populations on agricultural land are often retained to provide dense shade and drought fodder. Leaves lopped from branches are nutritious and desirable to stock, however consumption of the fruit may cause illness. The deep rooting trees have minimal impacts on cropping and also support honey production. Ground-up seeds can be brewed into a coffee substitute or added to bread. The swollen, carrot-like taproot is a nutritious and agreeable vegetable and the gum exudate is also edible. Kurrajong fibre taken from the stem has been used in twine and netting manufacture."

Bryan Hacker

\* http://www.anbg.gov.au/gnp/interns-2002/brachychiton-populneus.html (26 Jan 2009)

### Lessons from the storms of last November

The storms and high winds of November last year wreaked havoc on some of our bushcare areas but even more so at our neighbours in The Gap. Rob Whyte, from SOWN (Save our Waterways Now) has summarised his observations:

#### Wind

Grey gums and forest red gums were badly affected by wind, tallowwoods and spotted gums fared better. Figs were damaged by wind but most held up well. Acacias of all types were devastated by wind.

#### Flooding:

Lomandras and *Carex* spp. didn't suffer at all, and all reveg areas which were dominated by lomandras survived more or less intact. Red and green kamalas did well, as did black beans, cheese trees, casuarinas and *Callistemon* spp.

Pioneers like macaranga, poison peach, native hibiscus, native mulberry and *Acacia* spp. did not do well in the floods, many were torn out by the roots.

His observations generally mirror what we have observed regarding flood damage. To be added to his list, though, native ginger does not withstand a strong flood.

Along sections of Moggill Creek we have been trying a number of techniques to aid recovery, including propping up potential survivors with forked branches or tying them up to stakes, cutting back to stumps to encourage regrowth, earthing up exposed roots, and removing flotsam and plants unlikely to survive.

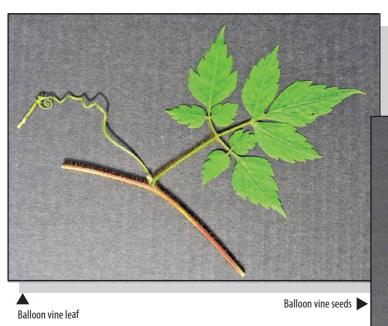
As expected, the very wet conditions also promoted growth of environmental weeds, including vines, and a close watch will be necessary to ensure that they don't take over.

The photo on p1 shows what was a track beside Moggill Creek near the Brookfield Showgrounds.

Bryan Hacker, with thanks to Rob Whyte of SOWN

(MCCG has prepared a report on the damage here, and it will be put on the web-Ed.)

When pulling out herbaceous or small woody weeds, especially where they tend not to come easily, it is tempting to give a sudden yank, which not infrequently leads to breaking off, leaving the base to regrow. At least on more friable soils, especially if damp, try this: Grasp the stem firmly close to the base and pull slowly with increasing force. If the plant does not come out readily at a point where the effort is too great, give up. This procedure is unlikely to work on compacted soils.



Leaf of slender grape

(See Balloon vine p. 3) Photos: Bryan Hacker





▲ Madiera vine tuber trial (See Having trouble with Madiera vine? p. 8 ) Photo: Malcolm Frost



Tinospora Stem base (see Care when hand-weeding p. 3 ) Photo: Graeme Wilson

Tinospora Upper Stem



# Climbing asparagus; get rid of it

Climbing asparagus (*Asparagus africanus*) is one of our most troublesome weeds. It is adapted to a wide range of environmental conditions, produces huge crops of seeds which are dispersed by birds and it rapidly climbs trees, killing them by shading. It is essential that they be kept in check and above all that seed production be prevented. This latter should be given priority over plant removal. Armed with your secateurs, take occasional strolls through the bush, cutting off at any comfortable height the more robust stems. Leave the base for later removal.

Killing plants by spraying with herbicide has limited use. If they are climbing on trees to be saved, obviously they can't be sprayed. In the uncommon situation where there is a substantial mass of foliage on the ground, they can be, provided it is not at the expense of too many small self-sown natives. In practice, if you have asparagus, you are faced with eliminating plants one by one. How you do so depends largely on the size of plants. And for a start, their structure must be understood. Just below ground level is the crown, a tuberous stem mass, from which arises aerial shoots and numerous lateral more or less horizontal roots. The crown must be removed or killed. Regrowth does not occur from roots.

Very small plants, particularly on friable and moist soil, are easily pulled out. If they are difficult, lifting with a trowel or similar hand-held tool usually suffices. With firmly rooted plants, cut around the crown to sever the roots and lift it out. You can cut forward with secateurs or backwards with something like a curved pruning saw. Large plants with a large crown and numerous thick roots are more easily dealt with by cutting the shoots down to crown level, gouging in to the crowns and putting in a couple of drops of concentrated herbicide. Nothing more.

Graeme Wilson

### Don't forget the wildlife

The central interest of our Group is the restoration and conservation of biodiversity, and that means plants and animals (not just furry and feathered ones but also insects, reptiles and all the rest). Our hands-on activities are with plants, and much effort goes in to removal of weeds with a view to planting natives. These weeds have often colonized land from which natives have been lost through land management practices. There is now a substantial time gap before adequate native vegetation is established.

Following the loss of original vegetation, wildlife dependent on it for food and habitat have either gone, or if they are lucky with the particular weeds, have adapted to this new vegetation. If a revegetator now comes in with wholesale weed removal, the wildlife will be lost. That is not speculation; examples abound. One is reported in a publication where colonization by fairy-wrens was examined. Where original native vegetation remained, bird populations continued. Where such vegetation had been fragmented, with some intrusion by exotics, they had left. But in an area where original vegetation had been replaced by lantana, the birds were well established. They had been able to adapt to lantana.

There is an important lesson here for one-track-minded revegetators. Clear only sufficient area of weeds to have a small loss of habitat, and no more until there is effective replacement by the planting.

Graeme Wilson

<sup>1</sup> Parsons, H., French, K., and Major, R.E. (2008) The vegetation requirements of Superb Fairy-wrens (*Malurus cyaneus*) in non-urban edge and urbanized habitats. *Emu*, 108, 283-291

### Photographic competition

We have for many years run a photographic competition which has always been a great success. Last year there were more than 140 entries from young and adult photographers to illustrate both the beauty of our flora, fauna and landscape, together with matters of environmental concern. This year photographs will be displayed from August 31st at Kenmore Shopping Centre with prizes presented on September 5th. So start dusting off your lenses. Enquiries to Geoff Lawrence (gacozshop@optusnet.au or 0405 478 899).

### Repercussions

Storm damage is still having repercussions at our Nursery and Cottage, even though they were relatively unscathed at the time.

Damage to power lines has meant no power for the Nursery pump and watering system, so some dedicated members have been hand-watering regularly through our rainless days.

No power at The Cottage has meant no lights, fan, phone, computer, etc, etc, so essentially no working office. MCCG has been establishing its home base at The Cottage, so we are certainly hoping to be re-energised by the time this Newsletter reaches you. Nobody enjoys being powerless.

Storm damage had a much more direct effect on another project on the Lease when the RBRN Butterfly Cage was wrecked and carried away in pieces by a fierce torrent of water. It had always been intended to move the cage to become an extension for the Nursery at the end of the project, but retrieving it as flood-scattered pieces had not been part of that plan. Now, thanks especially to the hard work of Don Sands and Damien Egan, a transformation and re-location is nearing completion. The flood ravaged Butterfly Cage is ready to morph into an extension for the Nursery. (Two photos on p1 show the cage being assembled and the finished job.)

Dale Borgelt

### Yes, we have koalas here

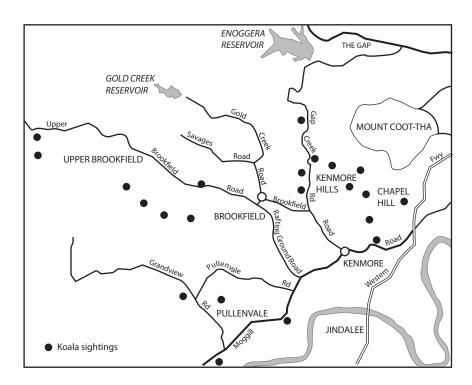
As reported in the previous newsletter, koala sightings are continuing which is wonderful news. The most recent reports for 2009 are from Upper Brookfield, spanning Haven Road to the end of Upper Brookfield Road.

Due to the critical situation regarding the survival of koalas in southeast Queensland, the Environmental Protection Agency has recently commenced a survey to map the region's koalas and has called for the community to provide information regarding where koalas are occurring. The MCCG has submitted these sightings (while not divulging the personal details of any of our members). The accompanying map shows areas from which sightings have been reported from Jan 2004 to Jan 2009, during which there were 41. Remember that many people do not see koalas even if present, nor if they do, report it. The conclusion is that koalas are quite widely distributed here.

It is vital for the protection of this species that the authorities are made aware of the important role our catchment plays in providing habitat, food and corridors for koalas that are under continuing threat from urbanization.

Please report all koala sightings to Chris Hosking, email: cjmhosk@optusnet.com.au or phone: 3374 3453

Chris Hosking

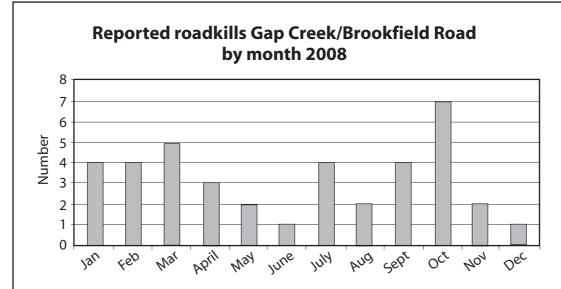


### Having trouble with Madeira vine?

As many of us know, Madeira vine is difficult to eradicate. We pulled a mature vine off a tree and in doing so many tubers fell on the ground. We selected randomly 10 and put them aside; the rest we sprayed with standard strength Round Up while still on the ground. We again randomly selected 10 from the sprayed tubers. In July both the sprayed and unsprayed were planted in separate seed boxes. Now in January the sprayed tubers have decomposed while the unsprayed have flourished (See photo on p. 5).

To prevent cut down stems and leaf matter from growing, we find it best to spread the material on the ground, spray with Round Up and make sure every leaf is sprayed. Although we would welcome other opinions, we consider the main stem is best cut close to the ground and immediately sprayed with strong (50:50) Round Up. If the stem is pulled up, any remnant left in the ground will grow again.

Malcolm Frost



This graph shows reported wildlife road kills in the Gap Creek-Brookfield Rds. area for 2008.. The animals were: possums (11), wallabies (10), bandicoots (8), birds (6). echidnas (2) and reptiles (2). Note that this is only a small part of our catchment and the figures are only reported kills which are far below actual.

We are losing much of our wildlife through loss of habitat, dogs, cats and other feral animals, and general disturbance. We don't want additional road-kill, so please drive carefully.

### **Great Topics for Small Groups at the Cottage**

A program of topics has been set up for the 3rd Thursday of the month at our Gold Creek Reserve Cottage. There will only be space for a small group of 15 members for each topic, so book early to avoid disappointment. The next ones are:

19 March 10am - noon Presentation by Botanical Artist, Margaret Hastie.
 16 April 10am - noon Local Butterflies and their Food Plants with Dale Borgelt
 21 May 10am - noon Suburbs with ecologist Jesse Rowland

Reserve your place by contacting daleborgelt@bigpond.com or phone 3374 1035