

MOGGILL CREEK CATCHMENT GROUP

www.moggillcreek.org.au



Print Post Approved PP 100003123

NEWSLETTER

WINTER 2015



▲ Section 8 (See p. 8)
Photo: John Crowley



◀ Gum veins in a spotted gum branch
(See The story of a Fallen Branch, p. 4)
Photo: Bryan Hacker



▲ William will come to Kids' day again(See Kids Dady at the Cottage, p. 3)
Photo: Dale Borgelt



Before and after a flood (See "Landholders experience" p. 6) Photo Kate McVicar

Editorial

It is known to those of us who care for such things that of Australia's capital cities, Brisbane has the richest biodiversity, with an emphasis on rain forest. And going on from that, it is attributable very largely to what remains in the western suburbs; us and our neighbours.

How many of our residents know that and if they do, care about it? MCCG now has well over 500 members with the number increasing. Surely they are in some way supportive. But we want more. It is not simply for the membership fee, useful as that is to our operations. There are two ways in which they can help our cause.

One is political. The long-term survival of what we have saved or restored depends on Government protection and assistance. That can be affected by the proportion of residents who want it. The other is the amount of help we get from members. That affects what we actually do toward achieving our objectives, that in turn affecting our credibility. We need more volunteers, some to do small, one-off tasks such as manning displays, others prepared to be regular members of ongoing activities such as running our plant nursery or indeed new programs which we could establish if we had the people to do so.

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.

Website: www.moggillcreek.org

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Proudly supported by Brisbane City Council



Dedicated to a better Brisbane

Low profile workers

This continues a series giving credit to those who are essential to our productivity without being seen by members at large.

This newsletter is important as the only contact between our over 500 members and Management. It may appear to be the work of the Editor whose task is however only to gather material which will be printed. That has to be converted to the publication you receive and it depends on two highly competent volunteers. Margaret Hastie formats it, that is arranges it in an efficient and readable layout. That then goes to our printer, John Gower, who provides us with a newsletter with which we are rightly proud. We are sure that both members who receive it and others who see it are encouraged to read it more thoroughly than they might otherwise have.

Richmond Birdwing Vine Seed Pods

Have you got ripe yellow seed pods on your Richmond Birdwing vines? These are precious for us to propagate at our MCCG volunteer nursery. As it is a protected plant we do not collect from the wild, and we have to keep a record of where we get the seeds from. Please contact Graeme Wilson, Dale Borgelt or Bryan Hacker if you have any to offer from your vines. While all our tube stock native plants are **FREE** to members, the Richmond Birdwing vine *Pararistolochia praevenosa* is not. It is never let go as tube stock, requires different and longer care, and costs \$8.

Dale Borgelt

Chairman's Report

The weather has been at the forefront of my mind a lot lately. Specifically the unpredictability of it often becomes the subject of useful conversations around the district. The very dry Spring and the uncertainty about the El Nino indicators lead me to believe that we may be heading for a dry spell...but not so. Following the more than ample rains this year, our place has never looked so lush, even soggy in parts. The last bout of rain, while not the heaviest fall in total certainly contained some of the most intense downpours that I can remember. In the tiny sub catchment of 3-4 hectares above our house, a heavy 15 minute downpour makes an immediate difference, shifting rocks, soil and plants quite easily. I sometimes wonder how well I learn from these experiences. All of our Section leaders, both past and present know a lot about keeping plants alive under these circumstances. Their sections encompass riparian areas that experience the full force of raging waters and they have developed techniques that will improve the survival of plantings in this zone. If you want to know more, their contact details are on our website.

When my parents moved out to Brookfield on to acreage in the mid 1950's, the then Brisbane City Council already had a scheme to encourage landowners to plant trees and shrubs. The allocation was rather small but well intentioned. Some of the plantings still survive and are a reminder to me of how our attitude to what we plant and where has shifted. I live below my parent's old house and a number of times each day I pass the plantings of exotic pine (probably *Pinus elliotii* from the USA) an unknown eucalypt or two (not local species) and a struggling silky oak. Nowadays we have the benefit of a considerable body of professional expertise in the MCCG who ensure that our nursery, under the leadership of Andrew and Graeme Wilson is able to propagate and distribute local native species free to our members. Such indigenous species provide us with the best opportunity to rehabilitate our landscape. Our Landcare advisor, Bryan Hacker is also on hand to provide very practical and tailored advice to landholders.

I don't think anyone would now recommend planting an exotic pine instead of an Australian or local species, where the objective is to rehabilitate the ecosystem. I think we now appreciate much more the value of indigenous plant species that in the past were taken for granted.

Warren Hoey

Dyschoriste – one of our most invasive weeds

Several times over the past few weeks I have asked MCCG members whether they are familiar with the weed dyschoriste and the answer has been "What's dyschoriste?" In fact, it is one of the more invasive ground-cover weeds in our Catchment, is spreading fast and is extremely difficult to control. As recently as 2007 there was a Council directive to report where this plant has been seen, but now it is everywhere! A leaflet published by Council is available in Cr Margaret de Wit's office in Kenmore and detailed information is available at <http://weeds.brisbane.qld.gov.au/weeds/dyschoriste>.

Dyschoriste (*Dyschoriste depressa*) is an herbaceous but long-lived plant of South African origin which in Brisbane was first recorded in 2000, in Anzac Park, Toowong. Stems grow to a height of 60 cm, and bear opposite leaves up to 6 cm long (see photo on p.5). Flowers are small, pale, and clustered in upper leaf axils and are followed by fruit which release numerous seeds. It is now frequently to be found along creeks and moderately shady areas but also tolerates full sun and can withstand frequent mowing in grassed areas (see photo on p.5). New plants can establish from seeds but also from fragments of plant. Much of the rapid spread of this species is attributed to it being carried on machinery.

Small infestations can be hand weeded, taking care to retrieve all material and bag it for disposal in council rubbish bins. Glyphosate has been listed for chemical control but it will kill nearby species too. Dicamba (which does not kill grasses) has also been recommended. In all probability, though, seed will be left behind and re-infestations will occur.

Bryan Hacker

KIDS' DAY AT THE COTTAGE

(Photo p. 1) William proudly points to himself in a photo of 2014 *Kids' Day at the Cottage* on display in the MCCG tent at the 2015 Brookfield Show. He is looking forward to all the FREE fun activities at the 2015 *Kids' Day at the Cottage* again this year, Sunday 7th June 10am – 1pm.

This popular event has plenty to enjoy. Children make and do, find out more, watch and wonder – all for **FREE**.

MCCG is able to offer this community event free thanks particularly to a wonderful band of volunteers and expert presenters, proudly supported by the Lord Mayor's Suburban Initiative fund and the Pullenvale Ward Councillor.

Dale Borgelt

The Story of a Fallen Branch

Relaxing on our veranda, recently, I heard and watched as an 8 m branch fell out of a spotted gum tree. There was no wind and the branchlets were well-leafed. The tree, likely to be well over 100 years old, was healthy and some distance from our house.

When sawing up the branch (with next winter's need for firewood in mind), I saw at every cut crescent-shaped lines of brown discolouration (see photo on p 1) and wondered what this could be. The brown crescent lines extended as far as quite small twigs. Was it a fungal infection? So I took it to the Queensland Herbarium where a friend who is knowledgeable on fungi explained that it is what is often known as 'kino'. She recommended that a forester by the name of Garth Nikles might tell me more. As it happens, Garth is a neighbour and we have known each other for many years. Garth kindly provided me with a photocopy of the relevant section of the 1955 book by M. R. Jacobs, *Growth Habits of the Eucalypts*, the chapter being headed 'Gum Veins'.

In this book the phenomenon is generally referred to as 'gum veins' these being formed of many 'kino ducts'. Apparently most eucalypts are subject to this sort of reaction to damage (damage agents mentioned below), although some are more prone to it than others. Indeed, the popular name 'gum tree' apparently originates from this phenomenon. Gum veins are a source of concern in the timber industry as they are responsible for reduced timber quality. The gum veins form in response to damage in the cambial area of the branch (this being just within the bark layer, between the phloem and the wood). The damage can result from fire, insects, branch shed or accidental mechanical damage. In the case of my branch it is evident that, associated with the area shown in the photo, about seven events have given rise to gum veins over the life of this section of branch. This tree would not have experienced fire in the last 50 years and it is likely that insect attack would have been the cause. For spotted gum, my reference specifically mentions a small wasp, and bark borers are also considered to be a major cause of gum veins. Individual gum veins can be 1.5 m or more long and damage during warmer months gives rise to longer veins than when the damage is inflicted in cooler months. It seems probable that in this case, the gum veins weakened the branch and contributed to its falling. As a positive, though, the scars left by fallen branches contribute to providing nest hollows for local wildlife.

Kino apparently has some medicinal value as an antiseptic astringent and has been used medicinally. According to my Oxford Dictionary the name is of West African origin and relates to the tree *Pterocarpus erinaceus*, the source of 'African kino'.

Bryan Hacker

Planting at KSHS

We often read of the difficulties that private land-owners face in rehabilitating their properties in this area – drought and issues with being able to water plantings, invasion by weeds, damage by feral animals such as deer and hares, etc. However, spare a thought for the issues faced by those working on public lands which can include vandalism or just plain carelessness leading to plants being broken off or trodden into the ground.

At Kenmore High School, we have been working for 15 years in rehabilitating areas of the School adjacent to Moggill Creek and McKay Brook. The School has a frontage of over one kilometre to the former so the job is enormous. Our first combined working bee with members of MCCG under the guidance of Malcolm Frost, Bryan Hacker, Michael Reif and Stephanie Cumming was held on 26 March 2000; when plantings were undertaken on the flats adjoining Moggill Creek.

With the incorporation of Year 7 students into High Schools rather than in Primary Schools from the start of this year, plans were made to demolish a small classroom block at the School and replace it with a large block to accommodate those Year 7 students. As a result of this construction, the loss of almost 50 plants which had been planted over the previous five years in areas near the construction site was very disappointing. In all over 200 hours of effort were gone in a couple of months. Contractors have now replaced eight of the most advanced lost plants; under a landscape management plan. They have also planted a large number of selected native species on the bank below the new building that slopes down to the roadway. The School community will be responsible for maintaining the plantings on the bank once the contracted maintenance period expires shortly, but that will give us an opportunity to put our own stamp on this landscape which borders the wonderful new building.

These are not the first of our plantings removed to make way for school buildings but we were concentrating our efforts in areas away from potential future development sites so were hopeful we would escape further losses. Members of the School's P and C Environment Sub-committee continue to work with students and parents to further improve the bio-diversity of the environment at the School with monthly working bees and we feel that we have made a big difference. This is borne out by satellite photos as can be seen on Google Earth which bear eloquent testimony to the worth of sustained effort over a long period, even if short-term set-backs (floods, misguided clearing, poisoning, mowing, etc) are very disheartening to the volunteers. The area attracts some positive recognition in that it has been the backdrop for various photo ops the School has used for publicity purposes.

Bruce Dymock
Convenor – Environment Sub-committee



▼ Plant guards, (See A Landholder's Experience, see p. 4)
Photos: Judy Dyson



▼ Plant guards, (See A Landholder's Experience, see p. 4)
Photo: Judy Dyson



▼ Plant guards, (See A Landholder's Experience, see p. 4)
Photo: Judy Dyson

A landholder's experience-What we have learned

The chequered history of our revegetation efforts is long and winding – too much to detail here. However, I would like to share some of the ways in which our experiences have completely changed our thinking and approach to revegetation over the years.

Our property in Upper Brookfield lies on Moggill Creek, with about 300m of creek frontage. When we moved here 22 years ago, the creek was barely visible behind dense vegetation. Migrants from afar, we naively thought it all very exotic. In fact it was just the usual suspects; lantana, asparagus vine, glycine, leucaena etc. The wildlife was abundant; water dragons, eels, yabbies, turtles, and our resident platypus.

One day we received a flyer in our mailbox offering free plants for revegetation. Being from the Namib Desert, the concept of revegetation was somewhat new. Still, free plants (my husband is Scottish). So we made the call and received a visit from Bryan Hacker, who began our education on the art of revegetation. Thank you Bryan!

Whilst I knew nothing about plants, I was won over by the idea that native vegetation would attract more native fauna.

We started our project as most novices do, with enthusiasm and ignorance. Over the following months we cleared every visible weed (and probably some natives, too). Our scorched-earth policy left only the Chinese elms that were too large for us to remove. An entire stretch of creek frontage was now cleared, leaving a large bare patch ready for planting of native species. With impeccable timing this coincided with the start of the el nino and one of the worst droughts on record. Our attrition rate was well above 50% of the plantings, with the return of some drought resistant weeds taking care of the rest. The area was now severely degraded. When the rains came at last and Moggill Creek flexed its muscles, the remainder of our plants, and what little soil we had, was washed away.

Devastated, we thought this might be the end of our revegetation efforts. However the erosion risk was so bad that something had to be done. We realized that we needed to radically alter our approach, so we decided to allow the whole area to revert back to its former weed-infested glory, in order to stabilize the creek bank. At the same time we began clearing small areas of about one metre between the weeds and planting natives.

This method was not the easiest as it was a slow and time-consuming process. We decided which weeds had to go (such as madeira vine, freckle face etc), and then removed them completely. Other weeds (such as asparagus, elephant grass, leucena, glycine) we would cut, leaving the roots in place to hold the bank and revisiting regularly to control their growth and spread. We would do this every month with a pair of garden shears, cutting them down to ground level and leaving the root system intact. The weed grasses we pruned high enough so they could bend over in the floods and protect the other plants. We had to be very conscientious not to allow this area to become a weed source for downstream. We subsequently learned that this was called the “mosaic method”.

It has been four years since we adopted this approach and I am absolutely convinced of its efficacy. During the 2013 floods our creek bank held for the first time and all of our plants survived. The native plants now outnumber the weeds and I believe it won't be long before we will be weed free and lush with natives. There has been a gradual return of animals (birdlife, water dragons, snakes) along the creek, and we are looking forward to welcoming back the platypus!

I would like to acknowledge and thank MCCG for the support I have received from them throughout this journey – the advice, the free plants, the encouragement and the friendship.

The before/after photos on p 1 show the scorched earth clearing followed by the bank degradation caused by the first flood.

Kate McVicar

Working Bee at Don and Yvonne Midgley's property

After retiring as a full-time farmer, Don Midgley began revegetation activities on his property at Gillies Road Upper Brookfield. For more than 20 years, Don nurtured and weeded his native plantings, gradually creating a picturesque roadside habitat which, today, not only attracts native wildlife, but also provides pleasure and inspiration for the walkers, cyclists and drivers through this part of Upper Brookfield.

Unfortunately, because of failing health, Don is no longer able to care for his revegetated gullies. Not wanting to see his beautiful established plantings overtaken by the rampant vine weeds that threaten so much of the native bush in the area, on Saturday, 28th March, a group of locals came together to tackle cat's claw creeper, morning glory and other weeds that have flourished since the rain. After a productive morning, twelve of Don's neighbours, ably assisted by Bryan Hacker and Phil Bird of MCCG, enjoyed the sight of native plants freed of smothering weed vines and roadsides cleared of untidy and invasive ground weeds.

After the working bee, those who did not have to rush off enjoyed socialising and a sumptuous morning tea at the home of one of the locals. See photo p 5. Don and Yvonne Midgley both expressed their appreciation for the help provided

Linda Cusack

Conservation at a Community Level

The editor of THECA's newsletter has undertaken to carry out a series of interviews with people who have long histories in grass-roots/hands-on environmental groups. The aim is to distil what are key components in the successful development and maintenance of these groups. She invited us to put in our newsletter the following summary of her first interview, with Graeme Wilson, Moggill Creek Catchment Group (MCCG).

1. Tell me about your background

“Conventional” background: First degree (UQ) in Agricultural Science. D.Phil Oxford. Lecturer in Botany UQ 1950. Transferred to Agriculture 1967, became Professor of Agriculture. Retired 1982,

Came to Brookfield in 1950 and began working with the vegetation on my 8 ha. My initial interest was simply getting more trees of any kind on my land. That progressed to an interest in natives then on to local biodiversity followed by a conservation agreement with BCC. Soon thereafter MCCG was formed since which I have been an active member, not merely as another landholder but also on the management committee, the nursery manager and newsletter editor. I don't regard background as something well back in the past but accumulated knowledge up to the present, which is the basis of what I do.

2. How do you maintain energy and commitment in the long-term?

It's my life interest now. I see all living things as being together as a super organism. I am part of it. I have a moral obligation to protect it. Damaging part of it damages the whole thing, including me.

3. What are the key components of well-functioning grass-roots environmental groups?

To have enough people in the group to do the job, someone with the knowledge to provide leadership, and the group's activity must be appropriate to the objectives of the whole organisation (in our case, MCCG)

4. Are there any particular difficulties confronting small environmental groups?

Those which may arise from 3 above, including leaders who don't know enough. Such can cause damage, including to MCCG's credibility.

Beware of individuals in the group being critical of others with less knowledge. You are likely to lose them. Rather, help them.

Be sure to show appreciation for help given.

5. Are there any specific pitfalls that should be avoided?

Most of the sites on which we work have not only damaged vegetation but also damaged soil fertility. Thus the plants we are introducing are not well adapted to the soil, so soil remedy should be incorporated in the program.

Watch out for Council plans to engage in activities which are in conflict with your objectives. Attempt to discuss with them how damage can be minimised.

Avoid too hasty or complete destruction of weeds from a site which is likely to do more harm than good. If you are not sure of your proposed activity, discuss it with someone who may understand your situation better.

6. Who are your role-models/inspirations?

As stated in 1, I did not commence with our present objectives and thus no need for role models, As I progressed, I did not look for information in the literature as I should have, although there was probably little at the time. I don't think there was similar on-the-ground activity hereabouts then which we could have looked at.

7. How can we enable grass-roots groups to thrive?

We need volunteers, public awareness of what we are doing, and to make good use of PR; events, newsletter, public talks, talks and displays at our headquarters, information stalls at public events, etc.

Groups such as MCCG need to be seen to be doing something good.

8. What would you like to see as the future of grass-roots environmental groups?

They must be successful and added to as necessary (e.g. our Creek Health Program.)

The success of MCCG's existence will be judged on success of its sub-groups. More volunteers are needed and not least from young people.

Black Beans and White Beans

Probably most readers are familiar with the black bean tree, otherwise known as the Moreton Bay chestnut. Botanically known as *Castanospermum australe*, this is a magnificent tree which is well represented along mid- to lower-reaches of Moggill Creek, where it withstands flooding and does a great job holding the soil and reducing erosion. It is in the Fabaceae, the pea family, as is the edible bean. This is evident from the form of its flowers and especially from its fruit (see photo on p.5) which are much like an enormous broad bean pod. Unlike the edible broad bean (*Vicia faba*), though, the black bean is a large tree and the seeds are poisonous unless leached in water and roasted, as was the practice of Aboriginal people. The timber has been used for various purposes, including as a cabinet timber.

The white bean tree (*Ailanthus tryphisa*), though, is very different. I have no idea why it is called a white bean. Perhaps the reason for the name is the leaves are somewhat similar to those of the black bean. It is not in the pea and bean family, it is in a quite different family, the Simaroubaceae. Flowers are small and not very obvious. Also the fruit looks nothing like a bean pod, being a samara, a term which was new to me (see photo on p.5 showing foliage and samarae). My Flora defines a samara as 'an indehiscent 1-seeded fruit provided with a wing'. Apparently the name derives from the Latin word for the fruit of the [European] elm tree, which has similar winged fruit. The white bean tree can grow to a height of 30 m and the leaves are pinnate, with up to 60 leaflets, these being narrow and somewhat sickle-shaped.

In our Catchment the white bean tree is quite common as a rainforest tree not necessarily associated with creeks. As well as being native to Queensland, northern NSW and parts of WA, it extends to southern Asia including India where its resin has been used for incense. The timber has been used for matchwood and plywood, but is nothing special. This year my white bean seeded prolifically, and for the first time, and I am aware of a number of other trees of this species also seeding well this year.

Bryan Hacker

Section 8, BushCare

Savages Road follows Wonga Creek and is crossed by it several times to the junction with Gold Creek Rd. Historically, BushCare management has emphasised containment of weeds and encouraging regeneration of native vegetation, with lesser emphasis on clearing areas, mulching, and replanting the whole area, with follow-up weeding and infill planting. This latter has been my approach since becoming Section 8 leader in 2014.

Collaboration within the community is essential and thanks must go to volunteers, while Habitat Brisbane assisted by providing mulch and trees and organising a small army of Conservation Volunteers for planting the first part. But firstly, planning is crucial. A small mud map of the proposed riparian section of Upper Savages Road, which was divided into subsections and significant obstacles such as power lines, steep banks etc. taken into account. An annual plan allocated tasks for these subsections each month though this was not rigorously followed. Habitat Brisbane supplied contractors for spraying and weeding and supporting the creek bank with jute logs, extremely effective in the recent heavy downpour in 2014. We were very pleased to have won a small grant from NRMA Community Grants which was useful in buying jute meshing for one particularly steep creek bank, and it is envisaged this will continue along that bank in 2015 (hopefully funded by another NRMA grant this year).

Enough can't be said for MCCG volunteers and advisers. Graeme Wilson, previous Section 8 leader, has been an exceptional mentor in all aspects of bush care, as also have been a number of experienced Catchment Group leaders, without whose invaluable help Section 8 would have not prospered. However, many thanks go to the volunteers of our small group, for without the tireless weeding and planting, introduced weeds would soon prevail. I'd like to thank all of MCCG from the Chairman to nursery workers and volunteers for making a very rewarding part of my career possible.

The photo on p 1 shows a successful planting along the road verge. Immediately beyond, a steep bank falls to the creek. It is held by the jute logs between which appropriate plants have been established. The bare looking area beyond is across the creek and is covered with jute matting in which planting has been made since the photo was taken.

Bryan Hacker

Local Wildlife on Show

Monday 27 July at 7pm in Brookfield Hall

Martin Finland will feature local wildlife in a special presentation for our public meeting in Brookfield Hall. Like last year, with young people in mind, it will start at 7pm and there will not be any supper after.

This is a wonderful opportunity to see the wide variety of local wildlife not always seen, let alone seen up close.

Don't miss this **LOCAL WILDLIFE ON SHOW** - 7pm Mon 27th July Brookfield Hall
For more info contact daleborgelt@gmail.com