

THE CREEK

Volume 14 No 1, February 2010



Alcombe Estuary Rehabilitation Group

No A0034645Y ABN 50 224 628 623

WATERWATCH UPDATE

John Inchley reports

The November data from our three-monthly Waterwatch testing of chemical and physical parameters showed lower electrical conductivity (ie, lower salinity) levels and increased dissolved oxygen. Both of these can be attributed to large rain events that flushed out the creek system, and the closure of the estuary entrance.

Overall, the data fall into the range that support a healthy ecosystem. The macro-invertebrate survey, however, was disappointing. Although the black sludge we found in August and monitored over the next three months had disappeared, the macro-invertebrate count had not improved and remained low.

Monitoring by another group far upstream, at the back of Mt Eliza, however, has identified the nationally significant and endangered small fish, Dwarf Galaxia – an exciting find. Interestingly, the December *Friends of the Briars Newsletter* reported that Melbourne Water is considering the use of two small ponds in The Briars Wildlife Reserve as a refuge for the Dwarf Galaxia.

Waterwatch has applied for funding to expand its River Health Monitoring and Education Program to include estuaries, and to establish norms and indicators of health for their brackish waters. If this occurs, it will be of great value to BERG's monitoring program.

We plan, in any case, to expand our monitoring program upstream, to include measurements at The Briars (currently not monitored) as

MORNINGTON PENINSULA SCHOOLS' ENVIRONMENT WEEK AT THE BRIARS 19TH – 23RD APRIL 2010



Volunteers
needed to help
with student
environmental
programs such as

Waterwatch or Horticulture.
No experience required!

For information contact

Jenny Selby, on 5974 2402 or
selby.jennifer.j@edumail.vic.gov.au

Clean Up Australia Day SUNDAY 7TH MARCH Join with BERG to clean up Mount Martha!

Register and collect a rubbish bag
at the car park on the corner of
The Esplanade and Watson Road
(opposite the shops), anytime from
9.30am to 12.30pm.

Bring gloves and tongs if you need
them.

well as in the area of Century Drive
and above the entry of Harrap
Creek. This will require a few more
'Waterwatchers' in our three-
monthly testing team. If you'd like
to help, phone John Inchley on
5974 1095.

Next Waterwatch testing will be
on Saturday 20th February, 9.00 at
the Augusta St Bridge.

HOME FROM HOME

By Katie Robinson

I had not been in Mount Martha
for 48 hours before I was
making a contribution to the local
community ecological effort.

What's unusual about
that you may ask? I live in
England. Why 'Home from
Home'? In my home town
of Tunbridge Wells in Kent, as part
of its corporate social policy the
firm of Lawyers that I work with
(Cripps Harries Hall) has a
Community Involvement Policy - a
program of projects that focus on
commitment to our
local community. The projects
range from reading each week with
immigrant children in a local
Primary School to planting gardens
for disabled people and clearing
woodland for the National Trust.

So there I was at 9.00 am on a
Monday morning planting native
grasses under the careful
supervision of members of BERG,
16,500 kilometres from home but
feeling right at home.



*Katie Robinson hard at work with the
Hopetoun Creek Greenfield Reserve
Group, Hazel Athey looking on*

BERG welcomes new members:
Heather & Ian Gunn

TO MULCH OR NOT TO MULCH

This article originally appeared in "Friends Net", newsletter of the Victorian Environment Friends Network. It was contributed by Dr Peter May, who was at that stage Head of The University of Melbourne's Burnley Campus.

Research indicates that in many situations mulch is a highly valuable regeneration tool. However, use of inappropriate materials or not following basic guidelines in application can also lead to establishment failures.

Why are mulches used?

The main uses of mulch are for weed suppression and/or water conservation. Other uses include changing soil temperature (usually cooling, although clear plastic mulches are used to raise soil temperature) or improving soil physical conditions at the surface (such as water infiltration rate or soil particle aggregation).

Materials used as mulches

Particulate mulches include gravel, sand, crushed rock, bark, compost, sawdust, straw and chipped green waste. In general, they are applied as reasonably thick layers. They are relatively easy to use and spread and are especially valuable for mulching around existing plants.

Sheet of film mulches include paper, polyethylene film, woven weed mat, jute matting and carpet. They are efficient ways of covering large areas, but are simplest to use on clear sites where they do not have to negotiate existing plant material.

Mulches in revegetation projects

I have seen most of these materials used in revegetation works. All have advantages and disadvantages. Chipped green waste is readily available, largely from arboricultural activity. It generally comprises a mixture of species and may range from quite woody to quite leafy, depending on source.

Given that the main reason for using mulch in revegetation works

is to suppress weeds, can chipped prunings be used?

Weed invasion of revegetation sites can come from two sources. One is the growth of weeds from propagules remaining in the soil at the time of planting. These propagules include seed and vegetative material (buried stems, bulbs and corms, rhizomes etc). They may also include the roots of plants that had been decapitated as part of the site clearing process.

A thick layer of organic mulch can reduce germination of weed seeds by blocking the light that many species require for germination. Organic mulch is generally less good at preventing vegetatively propagated weeds from establishing as these have large reserves that can be used to push shoots up through the mulch layer. Sheet mulches do that job much better and plastic mulches are probably best for that purpose.

The other source of weeds is seed that comes to the site after planting – for example, wind-blown or bird-carried seed. Research has shown that coarse-textured mulches are best at minimising the growth of such seed, because the surface stays dry enough to reduce chances of germination. Research has also shown that a mulch layer of about 75 mm deep is about optimal for weed suppression. Layers of mulch thicker than this may lead to problems with soil aeration (the mulch keeps the soil too wet).

Organic mulches of this type have another advantage: as they decompose they enrich soil organic matter levels and improve soil conditions for plant growth. As the material decomposes, finer, leafy organic fractions are broken down to humus. Heavier, twiggy material will take longer to decompose and will be retained as a soil protective layer. On heavily degraded sites, chipped green waste can function as a replacement for the litter layer that would normally occur in undisturbed bushland. The presence of an organic layer on the soil surface will result in improved plant growth in many situations.

It is also worth remembering that chipped prunings can themselves be a source of weed seed.

I have seen native seedlings come up in chipped tree pruning mulches at a couple of places and have thought that using mulch as a vehicle for direct seeding would be an interesting experiment.

Film or sheet mulches can also be very effectively used in revegetation projects, but can be unsightly. Black polyethylene, weed mat and jute mat have been shown to be very effective as weed-suppression mulches. They are perhaps best used in sites that are particularly difficult, such as steep slopes, stream banks and sites with infestations of difficult perennial weeds. In the latter case, weed mat may be the best solution as it is difficult for resprouting weeds to penetrate the fabric and has reasonable permeability to oxygen and water. I remember seeing weed mat used very effectively in some early revegetation work along the Merri Creek where the site was heavily infested with fennel and kikuyu grass. The weed mat was able to suppress the weeds for long enough to allow very good growth of trees and shrubs along the creek.

A contentious issue is the use of black polyethylene as a mulch. While research shows it can work very well, a body of opinion suggests it has deleterious effects on soil. And there is always a disposal problem. It is not commonly used at present.

The ultimate choice of mulch material will be based on a combination of factors. No one material is perfect and understanding the properties, advantages and disadvantages of each is important before a decision is made. Good site preparation is very important and removal of as much weed material as possible before planting will also contribute to the success of mulch for weed suppression.

The requirements are often a little different for mulching in the home garden. We'll consider this in a future edition.

FIELD NEWS

Field Officer Liz Barraclough reports

Working Bees

We had a great start to the year at the January working-bee, with a large turn-up, including a number of new faces as well as our band of regulars. And even a passing dog walker: we commented on how much we appreciated him having his dog on a lead, and he then offered to get his ute and take some of our weeds to the tip at his expense!

The weather was in our favour, as was the fine morning-tea – Jenny’s excellent chive and cheese scones. We did a terrific job cleaning up the weeds on the northern side of Uralla Bridge between the firetrack and the creek – *Solanum pseudocapsicum*, Hawthorn, Bone-seed, Thistles and a number of sticky-seeded scrambling ground-covers including Galium and Fumitory. Two couples also had the rotten prickly task of cutting and bagging the Scotch Thistles along the boardwalk and the tracks.

Banksias surviving

The Coast Banksias planted way back in June along the foreshore between the Yacht Club and South Beach have so far survived the extreme hot and dry spells. Indeed, some are thriving, with new growth up to 60 cm. The heavy rain bursts have saved them just in time from desiccation and death.



Morning tea beside the creek at the January working bee, with the results of hard work in the background

Grants

Our Melbourne Water grant applications have been assessed and we are waiting to find out if they have been successful.

We have also applied for a \$5,000 Caring for our Country Coastal Grant to continue essential follow-up of a previous project along the foreshore from Coolangatta Rd to the northern car park.

The burn that wasn't

We reported in the last newsletter on that a site next to the previous burn site (near the start of the board walk) had been prepared, trees felled, for a prescription burn. Unfortunately, the conditions have not been right to carry out the burn, and the ground fuel has been mulched to lessen the fire risk.

We are disappointed, as regeneration will be less spectacular and of poorer quality. It will also require a high degree of ongoing maintenance.

Rabbits

It's been a good year, from the rabbits' point of view. They are in abundance again, and there is no point in starting our control until their feed supply dries out. The rain, which is great for our plantings, also keeps the grass nice and green and plentiful for these little pests.

WEEDERS NEEDED!

We hope to form a small **hand-weeding group** to do vitally important follow-up on a number of our regeneration projects.

We are looking for just a few people who:

- could meet regularly – when and how often will be determined by the participants
- enjoy a few hours in the reserve – and, of course, good company and an excellent morning tea
- like to make a difference.

You don't know a weed from a treasured plant? – We'll provide on-the-spot training

You'd like to help, but can't get to our regular monthly working bees? – Here's your opportunity.

It's vital work. We spend hours and hours and lots of money to start the process of restoring an area, but the weeds can move in fast and swamp new plantings. It makes all the difference if they can be carefully weeded out in the early stages, until the new plants are established.

Queries and offers of help to Liz Barraclough, phone 0408 388 430.

Recipes for the Workers

Another scrummy working bee morning tea recipe, this time for

Flourless Almond & Coconut Cake

180 gms ground almonds

60 gms coconut

250gms castor sugar

4 eggs

½ tsp vanilla essence

¼ almond essence

200 gms butter

2 tbls flaked almonds

Combine ground almonds, coconut and castor sugar. Whisk eggs, vanilla and almond essence. Melt butter and cool. Then mix all together. Turn into in a greased or lined 8 inch/20 cm round spring-form tin, sprinkle flaked almonds, and bake at 160° C for about 40 mins.

SUPPORT MORNINGTON PENINSULA YOUTH ENTERPRISES

The Australian Welsh Male Choir

is presenting a concert with all proceeds to MPYE.

When: Sunday 21st February, 2.30

Where: Peninsula Community Theatre, Wilsons Rd, Mornington

Tickets \$22 from

- Peninsula Visitor Information Centre, 5987 3078
- info@tourism.mornpen.vic.gov.au,
- or on line at www.visitmorningtonpeninsula.org

What is MPYE?

Mornington Peninsula Youth Enterprises provides a range of training, education and support services to assist disadvantaged young people to develop self esteem, pride and confidence and become valued members of the community.

The MYPE nursery supplies BERG with most of its plants, which are raised from seed collected in an around the Reserve.



This friendly male Superb Blue Wren posed for Bob Athey in his garden opposite the Hopetoun Creek Greenfield Reserve

BERG Working Bees	Other Activities	Meetings
<p>❖ Monthly working bee: 3rd Sunday, from 9.00 to 12.00. Next are 21st February and 21st March. Meet at the Rotunda (Mel: 144 K11). If running late, phone Liz (0408 388 430) to find the work site. Coffee and BERG-baked delicacies at 10.30.</p> <p>❖ Tuesdays 9.00 to 12.00, coffee break 10.30 – restarting after the summer heat. Contact Mary Stemp to confirm, on 5974 3996.</p> <p>❖ Hopetoun Creek Greenfield Reserve, first Monday of the month, 9.30 to 12.30. Contact Hazel Athey to confirm, on 5974 3034 or 0419 899 560.</p>	<p>❖ Waterwatch: next physical and chemical testing on Saturday 20th February, 9.00 am, at the Augusta St Bridge.</p> <p>❖ Fairbairn Bushland Reserve Friends Group working bees: contact John Stoker for details on 5974 4726.</p>	<p>❖ BERG Committee meets every 7-8 weeks at Mt Martha House, Saturdays 9.30. Next meeting 13th March. All members welcome.</p> <p>❖ SPIFFA (Southern Peninsula Indigenous Flora and Fauna Association) meets 1st Monday of the month, 7.30 pm, at Parks Vic, Hinton St, Rosebud (Mel 170 C4). Contact Jan Dwyer on 5986 6566.</p>
<p>BERG COMMITTEE</p> <p>PRESIDENT JOHN INCHLEY • VICE PRESIDENT MICHAEL SANDERS • SECRETARY MARY STEMPT • TREASURER RICHARD KIRSNER FIELD OFFICER LIZ BARRACLOUGH • NEWSLETTER, MEMBERSHIP ANGELA KIRSNER • MINUTES SECRETARY PAM HEARN SCHOOLS LIAISON JENNY SELBY • ROTARY CLUB LIAISON ANDY MCGUIGAN • CENTURY DVE HABITAT LINK GROUP TONY O'CONNOR CO-OPTED MEMBERS: HARRY HARRIS • DIANNE LEWIS HOPETOUN CREEK GREENFIELD RESERVE GROUP HAZEL ATHEY • PUBLICITY BARBARA THRAVES</p>		
<p>PO Box 433, MT MARTHA 3934 • PHONE (SEC): 5974 3996 EMAIL: INFO@BERG.ORG.AU • WEBSITE: WWW.BERG.ORG.AU</p>		

THE CREEK

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