

# THE BUSHLAND BULLETIN<sup>©</sup>

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*The Editorial Committee, PO Box 210 Panania NSW 2213 Telephone: 9785 2374*

## INCIDENT AT MILPERRA WETLAND

*By Daniel Clarke*

Milperra Wetlands (situated on the corner of Henry Lawson Drive and Milperra Road) remains one of the few remaining wetlands in the Bankstown area. Several years and many hours of bushland regeneration work has been undertaken on this site in recent times. Groups that have worked here in a limited capacity include Work for the Dole and other contractors but primarily, the Bankstown Bushland Society have been at the forefront, acting in a positive manner to restore the site, both in a paid and volunteer capacity.

During this time, significant inroads have been made and goals achieved in regards to weed control and native plant regeneration on this site. Other volunteers have taken it on themselves to document the flora and fauna that inhabit the site, resulting in the recording of some significant species.

Last year Bankstown City Council installed a row of bollards along Henry Lawson Drive to protect the wetland and the new mass plantings adjoining the wetland. This has greatly improved the security of the site; but just before Christmas last

year an unsupervised machine operator was allowed on site to remove asbestos. In an act of overkill the operator scraped a large area of topsoil; the soil excess was dispersed across the site, over an area of restored native grassland. This is an area of cabbage gum canopy with underlying native grassland and herbs where many hours of diligent hand weeding has been carried out. When this area is observed now, it is obvious that some of the grassland has been buried and the new surface is bursting with hundreds of thousands of weed seedlings. Sheets of tin laid down as habitat for native reptiles have been removed and patches of Dianella and Commelina gouged out and buried.

This is a setback for the regenerating native species and habitat on this site. Bankstown Bushland Society has several times now requested an on site meeting with those responsible in order to have a constructive discourse on the remedial action needed to limit the damage. It seems to us that a breakdown of communication or at least a lack of proper direction between those responsible for the work has caused the setback to the site. The machine operator should never have been left to run amok like this with no proper supervision. Around the edge of the wetland where our work had been concentrated there was no asbestos anyway.

I think it only fair that the Bushland Society should have been consulted ahead of this work taking place. This is not asking much, only for some recognition of the effort our volunteers and contract teams have put into the site over a number of years. Had we been consulted these damaging impacts would have been avoided.

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... Plus 2010 Bush Regeneration Dates

## CLIMATE CHANGE SOLUTIONS (Continued) No 2

*By Pat Bell*

The build-up of greenhouse gases is destabilizing the world's climate. Our food choices have a huge impact on our health and the environment.

A major source of greenhouse gases completely disregarded by governments, most scientists and environmentalists is the consequences of animal-based diets (the typical western diet).

“There is no doubt that reducing consumption of meat, especially red meat, is one of the most effective things the individual can do to reduce their greenhouse gas pollution”

*Prof. Ian Lowe, Aust. Conservation Foundation*

“Loss of species and climate change exemplify how current methods of rearing animals around the world take a large toll on nature. Overgrown and resource intensive animal agriculture is out of alignment with the earth's ecosystems”

*Worldwatch Institute*

**Livestock:** As at June 2007, Australia had 28.2 million cattle and 85.3 million sheep. (Aust. Bureau of Statistics)

Methane is produced by ruminants, i.e. Cattle and sheep, when they belch. Methane is a much more potent greenhouse gas than carbon dioxide. It breaks down in the atmosphere within 10-15 years, compared to carbon dioxide staying in the atmosphere

100 years more. Hence, the reduction of methane would have a faster effect than the reduction of carbon dioxide (of course, we need to reduce that also). Obviously, to reduce methane we'd have to reduce the number of ruminants and, in turn, lessen meat consumption.

Meat production is not an efficient one nor it is environmentally friendly or humane.

Vegetables and fruit yield between 5,00 kg-40,00 kg of produce per hectare. Animal food (meat) yields 40 kg of food per hectare.

**Water:** Meat production and dairy farming are not only major sources of greenhouse gas emissions, but they are also massive users and polluters of water. Much of the water involved in the meat industry ends up seriously polluted and needs treatment. Abattoir waste water and piggery effluent is some of the most highly polluted water in the world, requiring extensive treatment before release or reuse. Prior to its closure, the Homebush abattoir was the greatest source of pollution into Sydney's waterways. The comment is often made that in such a dry continent as Australia rice shouldn't be cultivated. However, it appears that meat uses twice as much water as rice.

The production of 1 kg of wheat requires 250 litres of water while 1 kg of beef requires 2.500 litres of water.

Many people have put in the effort to save water (by choice & by regulations) by watering their gardens less frequently, installing tanks and using low-flow showerheads and toilets, but all these measures combined don't save anywhere near the amount of water saved if a plant-based diet was adopted.

4/5 of the world's available arable land is used to grow food for livestock. 1/5 of the world's available arable land is used to grow food for human consumption.

In Australia in 2000, 8,000 sq kms of land was used to grow livestock feed.

In discussions about meat-based versus plant-based diets is often remarked that humans have always been meat eaters. Our pre-historic ancestors, according to palaeontologist, Richard Leakey, were not heavy meat eaters and would have only rarely eaten meat. Their diet, according to him, would have been similar to that of the chimpanzee, our closet genetic relative.

Humans are NOT carnivores. Carnivores have pointed molars and an almost immobile jaw (little or no ability to chew). Carnivores must swallow their food in chunks—they have tiny incisors dwarfed by large fangs on each side.

Human incisors, on the other hand, are efficiently suited to shredding the fibre of fruits, vegetables and nuts. Once



## WORKING FOR COLIN

*By Susan Roberts*

Asked by Colin to write something for the Bushland Bulletin, I hummed and ha-ad, procrastinated, thought “ I don’t have enough detailed scientific knowledge about the bush”, tried to get out of it and finally decided to put fingers to keyboard. So here is an article about 10 things you MUST know if you work as a bush regenerator for Colin.

Let me introduce myself first. I am Susan, with a background in high school teaching and working in bush regeneration for the last 4-5 years. It began innocently enough as volunteer work for Mt Annan Botanic Gardens, going after African Olives, then progressed to volunteer work for Sutherland Shire and Bankstown City councils. Not content with that, I moved on to studying bush regen at Ryde TAFE and to the insane desire to work and be paid for it. I have done a stint working for the local council team and also for the National Trust. I have been all over the Eastern Suburbs- Nielsen Park, Tamarama and on various golf courses over there, looking after Eastern Suburbs Banksia Scrub, and also in The Shire and Hurstville area. Also Campsie - did you know there is a bit of bush there? It’s hidden away, so no-one can trash it (sad but true). Finally I have ended up here in the Bankstown area, under the misguided belief that I can make a small contribution to the preservation of our local bushland. Also, it’s not so far to drive. I have cut it, painted it, pulled it out, dug it out, scraped it and sworn at it. Occasionally, to tell the truth, I have had to put it back in very quickly before anyone noticed that I had mistakenly pulled it out.

My worthy colleague, Grant Solomon, is a hard working, softly-spoken, always early, needs a coffee in the morning to get started, good joke telling resident of both the Blue Mountains and Padstow. His bush regen background is mostly up in the Mountains where he has had some daunting experiences: working in leech infested hanging swamps, mass poisoning huge woody weed infestations, and being stabbed by Bursaria thorns (those plants can be vicious). You’ll have to ask him about all his experiences. He is also a marshal arts practitioner, Monty Python

enthusiast and likes to discuss post-modernism and Inspector Rex.

Now for 10 things about working for Colin:

### **Can you just pull out the Paddys/ Ehrharta/Mother of Millions/ Briza subaristata etc.**

When Colin says this, it really means tackling an infestation of about 3 million of the things, which will take you 2 days and fill up about 20 Council bags. I’m not joking.

### **Colin walks very quietly.**

When you’re working, concentrating, suddenly there he is, materialised out of thin air, generally with an arm full of the weeds which you thought you’d got, but actually missed. Even after 20 bags full. Nothing is more startling when you thought you were alone. I have shrieked in shock more than once.

### **Colin will always find the weeds you missed.**

See above.

### **Colin knows all there is to know about every weed and native.**

You will NEVER know as much as him. Just accept it. Try to keep up a little bit.

### **Colin has the oldest car in the world.**

It is also full of spray packs, poisons, tools, bags and heaven knows what else. There is also stuff on top. It is a miracle it still is drivable. Sometimes he manages to squash his son Harry in there too. I don’t know how he finds the space.

### **Colin is 100% committed to the local bushland.**

This is very inspiring. His enthusiasm helps keep you motivated on the 380 days when you are working in the sun and on your 18<sup>th</sup> bag.

### **The biggest Paddys pull out the easiest.**

Who would have thought? It’s the little ones that are the toughest.

And watch out for the blisters on your fingers.

### **You will work in areas no-one else seems to bother with.**

This is good. Areas like Smith Park and Monash Reserve and Riverlands Golf Course. You will also be targeting weeds that others don’t seem to notice or prioritise. Colin sets very high standards for the bush and sees the potential in every area. He does not let the bush allow itself to underachieve or tolerate resident weeds. He wants everyone to get their act together.

### **Edges, edges, edges**

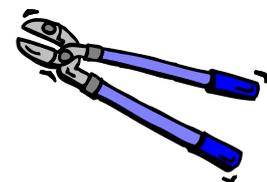
This is Colin’s mantra. No weeds are allowed on bushland edges. These have to be weed free and kept that way with regular spraying or hand weeding. This helps stop weeds spreading into the bush in the first place. It makes good sense.

### **The 400 year plan**

Colin looks far into the future. Once you start working a site it is understood that you now have an ongoing commitment to that area and there has to be lots of regular follow-up weeding. It is almost as big a commitment as rearing a child (you will be responsible for them for many years).

So there are 10 things about working for Colin. I could tell you more. Next time you might like to find out about near disasters we have known. Such as the day the electricity tree chopping down contractors decided to dump their mulch all over bits of happily regenerating Lambeth Reserve. Or the day some truck driver decided to drive off road through the bush at Lansdowne. Little things like that!

Happy regenerating



## Greetings From The West

**Long time contributor to The Bushland Bulletin, David West, now living in Warren, sends us the following:**

Everyone here has asked me why I stopped and stayed on in Warren, a town that has seen a lot of better days, back during the halcyon times of big prices for wool, sheep, wheat, and the cotton booms, now there is a backlog of debt affecting some farmers and graziers from 10 or so dry years and the banks are there in the background ready to pounce.

It seems the only valuable asset that a few will be forced to sell to pay off debt is water irrigation entitlements, once that goes, what is left? Corporate farms seem the likely take-over scenario for the poorer ones to sell to, those people that haven't invested their earlier big money earnings into blue chip shares or money in the bank for carrying them through such times. What appealed to me was the greenness of, it's one of the few towns I passed through in drought during my initial wanderings that has plenty of water and the streets and lawns are green and grassy.

Recently I visited the property paddock at "The Mole", about 112 km out along the Carinda Road from Warren. This property runs cattle and the bias is towards supporting growth of useful pasture, quite understandably, however it lies against the northern section of the Macquarie marshes and does receive floodwaters from the now rare flood episodes. The recent release of an environmental flow did very briefly inundate the flood channels in the paddock, but I believe the main body of

water dissipated within 19 days.

You may have read of the release from Burrendong dam, I think it was 1,900Mls, useful but not nearly what is needed to prevent the loss of habitat due to the extended drought situation, areas of River Red Gum are being lost on the north side I understand. During the visit I was reminded of how I had tried to emulate a shallow water area in Freshwater Creek Number 2 pond where I planted *Eleocharis* sp. and others including *Triglochin multifructum*, in my ignorance I simply knew they did require shallower water to grow, but that was the extent of my understanding at the time.

When I located *Triglochin multifructum* at Chullora in 1997, it was growing in permanently damp soil, no ponds there, however it may have been growing in water at Freshwater Creek Golf Course, I can't recall, but that is where I gathered a couple of *Eleocharis*. There were other things, it doesn't really matter, what is important, and this was trumpeted at The Mole visit, is that a varying water level gives all of the plant community a chance to establish a sustainable population.

After the initial flooding settles down, some plants do best with only 20mm depth of water, others need 50mm, and perhaps this is only needed briefly. It was pointed out that "Water Couch" (*Paspalum distichum*), grew best when water was 50 to

150mm deep initially, but as it grew a further depth of 300mm could be coped with because the grass was able to form floating rafts and access the necessary oxygen for growth.

Remember that reeds and sedges have stem adaptations which move oxygen to the underwater parts. The water couch laid down rhizomes which survived as dry conditions burn off the foliage, seed was able to survive for a few years in drought conditions also. The water couch is particularly well adapted to heavy grazing; in fact it does better in such conditions during wet periods, spreading more rapidly across the damp habitat that suits it.

This is an ephemeral wetland or floodplain situation, soakage into the ground and a fierce evaporation rate; many plants die back and disappear as damp soils dry further.

So it is an important part played during wet and dry cycles, that water levels allow a range of conditions which sustain all the species within a wetland community, it can change year by year but left out for too long some species will be lost. Another thing to be aware of is acid sulphate soils are the product of anaerobic wet soil conditions, which should be considered as part of a wetland maintenance regime.

## Typhonium Population Survey at The Crest of Bankstown

By Darryl McKay

A population survey for *Typhonium brownii* was undertaken at The Crest between 11th March and 11th June 2007. forty-nine individual plants were identified in this period. As the plants shoot from different parts of the corm, the total number of shoots seen during the period for each plant was also tallied. Each shoot was marked with a white tag.

By June almost all plants had withered or been eaten by caterpillars. Predation by caterpillars took a high toll on the above ground parts of the plant, both stalk and leaves. Two caterpillar grubs were identified as responsible for this, *Amata huebeneri* (Wasp Moth) and *Theretra oldenlandiae*. ( Impatiens Hawk Moth) The heavy predation on the small population is the likely reason why no plants flowered during the study period. A single flower had been observed in 2005, with no flowers recorded in 2006 or in 2007. a single plant produced a flower in the years 2008 and 2009. a sight survey was continued during 2008 when approximately 110 plants were counted and the overall effect of predation was not so pronounced. The larger



than plants in shadier situations. The population was probably more extensive further down the gully (Typhonium Gully) but no longer occurs there owing to landscape modifications and weed encroachment.

Typhonium are pollinated by dung beetles: the aroma of the flower is 'dung scented' in order to attract the beetle which crawls inside the flower, or 'trap chamber', where it is trapped overnight. The flower partially collapses but the next morning the beetle is able to crawl out, to go off to pollinate another flower. The flower then withers and, if pollinated, produces fruit and a single seed.

No fruit or seed has yet to be observed at The Crest. Survival of the species at The Crest seems largely due to vegetative spread of the short tuberous corms. Dung beetles have not yet been found in the habitat. The nearest recorded populations of *Typhonium brownii* are on the Nepean River,

Windsor and Menangle.

number of plants observed after 2007 may be due, to the extent, by active bush regeneration of the habitat, but also to the moister conditions prevailing during the summer and autumn seasons over those years.

*Typhonium brownii* is one of Sydney's rarer and more unusual bush plants. Since it was first observed at The Crest in 1990, flowering plants have rarely been seen. The peak opening period of the flower only lasts one day. During warm moist conditions vegetative growth is faster and produces lush leaves. The plant that flowered in 2008 & 2009 receives more sunlight than the majority of the population, and may therefore be more inclined to flower



*Amata huebeneri*



*Theretra oldenlandiae*

## BANKSTOWN BUSHLAND SOCIETY MEETINGS AND ACTIVITIES

Bankstown Bushland Society meetings are held at Padstow Progress Hall (annex), Ryan Road, Padstow.  
3rd Wednesday of every month. In annex at the rear. Time: 7.00 pm  
Tea and biscuits provided. All welcome.  
Further inquiries please ring : 9785 2374

### BANKSTOWN BUSHLAND SOCIETY VOLUNTEER BUSH REGENERATION PROGRAM

**February to July 2010**

**9.30am To 12.00pm**

**Telephone contacts: Pat 9785 2374, Colin 9788 6232**

**MONTH:**

**2<sup>nd</sup> MONDAY**

**3<sup>rd</sup> SUNDAY**

	<b>2<sup>nd</sup> MONDAY</b>	<b>3<sup>rd</sup> SUNDAY</b>
<b>MAY</b>	<b>10<sup>th</sup>: Lansdowne Reserve:</b> Cumberland Plain Woodland. Meet in car park on Lansdowne Parade, off Hume Highway, Lansdowne.	<b>16<sup>th</sup>: Lambeth Park:</b> The Steps. Meet in carpark at Lambeth Park off Henry Lawson Drive, Picnic Point.
<b>JUNE</b>	<b>14<sup>th</sup>: Smith Park:</b> Transition Forest. Meet in tennis courts car park, Lehn Road, East Hills	<b>20<sup>th</sup>: Lansdowne Reserve:</b> Cumberland Plain Woodland. Meet in car park on Lansdowne Parade, off Hume Highway, Lansdowne.
<b>JULY</b>	<b>12<sup>th</sup>: The Crest:</b> Turpentine Brushforest. Meet in the Athletics Complex carpark via McLean Street, Bass Hill.	<b>18<sup>th</sup>: Padstow Park:</b> Ironbark Forest. Meet at Padstow Park, Banks Street, Padstow.
<b>AUGUST</b>	<b>9<sup>th</sup>: Lambeth Park:</b> The Steps. Meet in carpark at Lambeth Park off Henry Lawson Drive, Picnic Point.	<b>15<sup>th</sup>: Nerida Hrazdil Memorial Day:</b> With Friends of Yeramba Lagoon. Meet at the end of Kennedy Street. .
<b>SEPTEMBER</b>	<b>13<sup>th</sup>: Lansdowne Reserve:</b> Cumberland Plain Woodland. Meet in car park on Lansdowne Parade, off Hume Highway, Lansdowne.	<b>19<sup>th</sup>: The Crest:</b> Turpentine Brushforest. Meet in the Athletics Complex carpark via McLean Street, Bass Hill.
<b>OCTOBER</b>	<b>11<sup>th</sup>: Padstow Park:</b> Ironbark Forest. Meet at Padstow Park, Banks Street, Padstow.	<b>17<sup>th</sup>: Milperra Wetland.</b> Meet off Henry Lawson Drive, south of Milperra Road intersection.

It is with great sadness we report the passing of our dear friend Nerida Hrazdil, who succumbed to the debilitating effects of Motor Neurone Disease in February aged 65. Nerida was an enthusiastic supporter of the Bushland Society and of Friends of Yeramba Lagoon. A keen bush regenerator, she was the first resident of Yeramba Lagoon to conduct bush regeneration work over her back fence, setting an example to all. Nerida worked in the Society's bush regen contract team for a few years and was a regular at our volunteer days. She was a cheerful and thoughtful person who loved the bush and will be greatly missed by all. To Bill and his family we express our deepest sympathies.

**WHY NOT JOIN THE SOCIETY ?**



The Bankstown Bushland Society is an incorporated association under the Associations Incorporation Act (NSW) 1984.

We are Bankstown's only incorporated association dedicated to protecting our City's environment.

The Society's objects are:

- To protect the environment of Bankstown
- To assist other persons in the protection of the environment in Bankstown
- To foster better community awareness of environmental issues
- To lobby through Government, commercial and other persons for the maintenance of a high quality of life through the progressive improvement of the environment

If you are concerned about the local environment, then consider joining our Society. As a member, you receive one year's subscription to this newsletter, and can participate as a voting member in the direction and decisions of the Society.

✂

Yes, I wish to join the  
***Bankstown Bushland Society Inc:***

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Suburb: \_\_\_\_\_ Postcode \_\_\_\_\_

Telephone Number: \_\_\_\_\_

**Membership fees**  
 Family/Group - \$20  
 Ordinary - \$15  
 Concession - \$10  
 "student/unwaged/pensioner"

Attached please find my payment of:  
 (\$ .00) \_\_\_\_\_  
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Send this coupon with payment to:  
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