

# BEND OF ISLANDS CONSERVATION ASSOCIATION INC. NEWSLETTER

President: Alan Bonny 9712 0648 G/- Post Office, Kangaroo Ground, Vic, 3097 - Editor, John McCallum 9712 0319

Number 42 June 1998



## WHAT NATIVE'S FLOWERING?

by Eric Henry

Botanical name: *Acianthus pusillus*

Common name: Gnat Orchid

Family: Orchidaceae

Flowering Period: March - August

*Acianthus pusillus* is a small slender orchid with a single erect flower stem 5 - 20 cm tall, bearing 3 - 20 tiny insect-like flowers at the end of the stem. Each flower is above a tiny leaf shaped bract and is made up of 6 pointed greenish segments i.e. 3 sepals and 3 petals, marked with pink and translucent patches. The sepals are thin and tapering, 8 mm long, with the dorsal sepal broader and concave. The petals are smaller and bent backwards. Glands at the base and tips of some of these flowering parts exude an odour in the warm weather, to attract small flies, which then pollinate the flower. The insect-like flowers sexually attract the males of the small fly, also ensuring pollination.

This tiny orchid has a single green heart-shaped leaf about 2 - 4 cm long and purple on the underside. The leaf is on the flower stem held flat 30 mm above the ground. The orchid grows from a tuberoid, i.e. the swollen end of an underground root, which remains dormant in Summer, and is replaced annually. In ideal growing conditions many tuberoids are usually produced forming a large colony of orchids. Propagation is also by seed.

*Acianthus pusillus* is widespread in dry, damp and valley sclerophyll forests, preferring moist soils during the growing season, which dry out over Summer.

## **PRESIDENT'S REPORT**

**by Alan Bonny**

With the short hours of daylight and a bit of rain filling our water tanks it is tempting to sit beside the fire and hide away from our winter bushland. Force yourself to put on the coat and boots and get outside to enjoy the full diversity that is just outside your door.

After sending an ELZ 'package' to John Faine of 3LO it was a bit daunting to be invited to do a spot on the all electric wireless. I took the opportunity to try to promote the Bend of Islands and the ELZ in the short ten minutes allocated. An interesting experience that has resulted in a few phone calls from people interested in our way of environmental living.

At the time of writing we have not been advised of any decision regarding the subdivision proposal for 200 Skyline Road. There is also in motion a proposal for another Skyline Road property to be subdivided below the 40 hectare minimum prescribed by the planning schemes in our immediate region. At the last BICA general meeting this subject of minimum subdivision size was discussed and it is an issue that will require ongoing consideration by the community. Your views are sought to help establish the BICA approach for the future.

By the time you get the newsletter the Mount Lofty/Whittons Reserve management plan should be available. We are optimistic that the outcome will be a minimum development concept and we will report on it as soon as possible.

The process of recognising 'Bend of Islands as the name for our area is continuing. BICA has sent a copy of the 1996 petition, together with other relevant information, to the Place Names Committee to support the regional submission drafted by Nillumbik Shire. I was recently advised that the new Gregory's street directory shows us as the Bend of Islands. If so I will have to trade in my Melways for the more accurate guide to the important parts of greater Melbourne.

## **LANDCARE**

**by Phil Vaughan**

We have almost made it to the end of our grant money. We have till the end of June to complete our major works at Oxley Bridge. The area is looking marvellous at the moment, but the Angled Onion is still present and sprouting here and there. We have, however, reduced its cover significantly. With further spraying over the next two seasons, we should see it gone for good!!!

Approximately 500 plants have been planted in the area over the last two working bees, with another 200 to 300 to go in at the next working bee on June 21st at 2pm. I hope you can all make it, we shall need the assistance!!

To all of you that have contributed to the project, sincere thanks, we could not have done it without you.

We still haven't heard from any of you regarding other projects worth considering for future grants. We need some ideas before October, when the next round of grants are available. So, get your thinking caps on and talk to either Peter Gurney, Trish Millington, Phil Vaughan, or Sue Vaughan over the next few months.

## **STREAMWATCH**

**by Carol Bonny**

The Shire has purchased a Streamwatch kit. It will be available to groups such as BICA to monitor the condition of our waterways. Alan and I attended a one day training course to learn about the testing procedures. The availability of the kit from Nillumbik has not been resolved but we are looking for a few volunteers to be involved in regular testing at various points along the river. Please contact me on 9712 0648 if you are interested.

## THE 1997 'FOREST FOREVER' CAMP

by Norm Linton-Smith (continued from the last issue)

There were no paths leading to our destination so we had to push through the understory. Damien Cook and David Cameron led us down a steep gully, across a rudimentary log crossing over a creek up the slope on the other side and along the ridge top until they could identify the forest at the bottom of the gully on the other side of the ridge. I was impressed by the patience, fortitude and sheer strength of the two young couples and the good behaviour of the babies that they were carrying, sometimes on their shoulders and sometimes in their arms. At least one of the parents was barefooted as were one or two others in the group. I admired their sure-footedness compared with my sometimes clumsy progress caused by stiff knees and ankles and uncertain balance. David said the forest was similar to that which covered Australia millions of years ago before eucalypts intruded on the scene. I can't remember the names of the trees and other plants. David knew them all. Great vines, as thick as a wrist, found their way to the tops of trees, descended to the ground and then went along to another tree nearby. Thick vines sometimes had thinner ones entwined around them. The young children and teenagers had great fun sitting on or swinging on the vines. Not one broke. The 'wait a while' vine with a stem of about 40 mm diameter is covered in tiny barbs. It grows in profusion here and loves to trap you as you try to push through. Logs on the ground here were covered in thick moss.

After taking in the wonders of this place, we walked along the bottom of the gully until we came to eucalypts and continued through the now mixed forest before climbing up to the top of the ridge and back to the vehicles. We made it back to camp by about 8.30pm and I retired to bed at about 10.30 while the indefatigable David put on another rain forest slide show!

Next day dawned bright and sunny and I broke camp but before leaving for home I appointed myself spokesperson for BICA and interviewed Jill. She said she was born in Melbourne and developed an early interest in animal welfare. Later this interest must have embraced other forms of life and in 1975 she 'went bush'. About 17 years ago she found herself in East Gippsland where she worked for the Snowy River National Park and the local council. A teepee was her first home at Goongerah and she said that she nearly froze in it! However, she saved her wages until she could buy the 22 acres of cleared land on which

she now lives after building a two bedroom pole frame house. It has solar cells on the roof to provide electricity for lighting and she uses a petrol driven generator for such household appliances as she has. A wood stove heater provides hot water. Jill has a fruit and vegetable garden and a herd of dairy goats. Chooks run around the property and many of the trees that she planted around the house have reached maturity. In 1982/1983 she joined CROEG and subsequently became its chief executive. There are about 350 members now and CROEG liaises with similar groups in North America and Japan. CROEG needs money to carry on its vital work of monitoring the logging, milling and chipping of these unique forests. It also continues to inform the public honestly of what it sees and hears about in the area via the bi-monthly newsletter 'The Potoroo Review', an very readable little mag.



## NIGHT EVENT

The annual BICA Night Event was again a success. Thanks to all who supported it and especially to those who contributed to the appeal for help with Trish Millington's animal shelter. The money will go to accommodation for orphaned or injured native animals.

## TRIVIA NIGHT

Don't miss this year's Trivia Night, 7.00 pm, Saturday, July 11 at the Millingtons. Ring 9712 0403 to book.

## NEWSLETTER ARTICLES

Thanks to all contributors. We have material left over from this Newsletter and hope to bring out another issue soon; more copy would be welcome. It can be hand written, typed, emailed or on disc. If it is on disc or emailed please use Word and don't format the text, ie, single returns for paragraphs, no indents, bold, italics nor underlined passages.

## ARE YOU CONCERNED ABOUT THE ENVIRONMENT?

from Steve Craig

Most Australians are concerned about the declining health of the environment but appear reluctant to do anything about it unless the solutions are cheap, easy and convenient. According to a study by the Australian Bureau of Statistics, the environment was ranked fifth overall in a list of 10 social issues, but higher among the young and better educated. The study shows the environment has declined as an issue in recent times. In 1992, 75% of adults registered a concern for the environment but in 1996 interest had declined to 68% which perhaps explains why the Victorian Government has cut \$20 million from the budget of the Department of Natural Resources and Environment resulting in a further 300 "staff separations".

Despite concerns, household energy consumption, a key contributor to the greenhouse effect, rose 46% for the 20 years to 1996, making Australia the third highest per capita energy consumers in the world after Canada and the USA. Australians have also been slow to take up environmentally sound energy systems such as solar heating because of the high cost.

Solar power still accounts for less than 1% of household energy use, while electricity, the key contributor to greenhouse emissions, has risen from 32% to 43% over the past two decades.

Although environmental groups tend to rate destruction of forests and loss of biodiversity as of most concern, the general community is more concerned about their immediate surroundings.

City dwellers are concerned about air quality, while people in rural areas are more concerned about land degradation. South Australians are most concerned about the quality of their drinking water.

**SOURCE: THE AGE**

**TO SPEND AN INFORMATIVE AND INTERESTING AFTERNOON WITH ALAN REID (FROM THE GOULD LEAGUE) BE AT JANET MATTISKE(S HOME (199 SKYLINE ROAD) ON SUNDAY 9TH AUGUST AT 2PM. REMEMBER TO BRING A CHAIR, MUG, AND AFTERNOON TEA TO SHARE.**

## UP THE CREEK WITHOUT A PADDLE

by Alan Bonny

Not a creek but the Glenelg River and with a canoe complete with paddles and camping gear for a few days. The Krause and Bonny teams recently spent a stretched weekend along the lower Glenelg River on the Victorian/SA border. Its a long drive for a paddle but the scenery is impressive with vertical limestone cliffs along the river and good bushland as a backdrop, all with the compliments of the Lower Glenelg National Park.

Canoe camps are provided along the river with good landings, pleasant grassed areas, fireplaces and toilets. Bookings are essential for overnight stays. The river itself is slow-flowing, with tidal influence and saline water for many kilometres upstream. The musk duck was one of the interesting inhabitants along the way and it entertained us with its diving prowess and display behaviour of flicking water out from the sides of its body with both feet. Another feature along the river is the Princess Margaret Rose caves. With easy access from the river they provide a diversion from paddling and contain the usual interesting limestone formations.

While we were there it was very peaceful but I believe that it could be very busy during peak season with power boats and water skiing in certain defined areas. I suggest that you time your visit carefully! Also, watch out for the leeches as you wander about on shore. Wolfgang had a surprise when he blew his nose on one occasion, only to dislodge a blood gorged stowaway onto his handkerchief!



## ARE YOU PREPARED TO BE PART OF THE RAT-PACK ??

by *Dianna Simmons, Christmas Hills Fire Brigade Captain*

Bushfires are hazardous to people and assets, but they can be ecologically beneficial, and even essential, for the maintenance of flora and fauna. The greatest environmental threat of fire comes from activities during the suppression of fires. For example, many kilometers of bulldozer trails and control lines in the Alpine National Park now need very costly rehabilitation. At Mt Martha the bulldozer trails put in for blacking out have higher numbers of weeds, and soil compactions five times greater than the areas off-track, and instead of being allowed to regrow these tracks are now being maintained as access tracks. Last year at the Bill's Track fire in Kangaroo Ground, a large number of old eucalypts (the ones with all the hollows !) were felled as part of the blacking out process, and the same thing happened again at Spring Hill (near Trentham) this year.

If the fire itself does little long-term damage to the bush, how can we reduce the damage done while putting the fire out ? In North America the idea of minimum impact suppression has become part of the planning for major fires, but so far it has not been considered as part of the fire suppression effort in rural Australia. The first 'rule' of minimum impact is that it will not hamper the suppression effort, but if there are alternative tactics, the most appropriate one to use would involve the least environmental damage. Environmental rehabilitation is a very costly exercise, and in the future agencies like DNRE or Parks Victoria are likely to accept the idea of minimum impact suppression on public land because it involves least long term cost to them. However, if the damage is to your land, you will continue to bear the ecological damage and the rehabilitation cost just as you do now.

How can we make this approach to minimizing fire suppression damage happen locally ?? I am wondering whether we could start a "loose-but-

organized" group (thats us !!) - the Recovery Action Team - the fireRATS ! This group might take on a role of planning for recovery, and giving ecological assistance during the blacking out phase and in the weeks immediately after a fire. Activities (possibly requiring a largish number of people) might include local advice about particularly important locations, monitoring of fire boundaries as an alternative to a bare earth control lines (bulldozer trails), monitoring of burning trees to avoid the need to fell them, welfare of injured wildlife, and a wide range of other recovery activities.

I would see BICA taking the organizational responsibility for the group, and in a loose way the group would act as the 'ecological auxilliary' of the brigade. The main tasks would start as soon as a fire was under control, so that the suppression and blacking out activities had ecological input as early as possible.

The Brigade has just had a BIG training night where brigades from the whole area participated. The exercise went very well, and gives the brigade a level of credibility that allows us to make some fire management suggestions that might not be generally part of the thinking in the wider area. I think this is a good time to start talking about minimum impact methods and managed recovery, so we can have some clear guidelines in place for next fire season for anyone managing a fire in our area. If we have anything other than a small fire in our area, we will have the assistance of many brigades from anywhere in Victoria, so we need to be able to make our intentions and procedures for appropriate fire suppression and blacking out activities in this area VERY CLEAR.

I think a pack of fireRATs might allow us to achieve that. I would appreciate any feed-back , or you could tell Alan Bonny, what you think of the idea.

Have you got your fire brigade T-shirt yet ? Tell me your size (or what size you'd like to be) and I will order more (\$10 each). Windcheaters are also available. How about some nice 'green' fireRAT T-shirts ?

## THE MONEY OR THE BIRD?

by Teri O'Brien

I am drawn from the words of the editorial in the Sunday Australian 'The stock market is a casino...' by the sharp crack of flapping wings a few feet away, a noise announcing unmistakably the arrival of an eastern spinebill to feed on what flowers are left on the Grevillea after their pruning by three crimson rosellas earlier in the week. It is the male and he is nervous of even my small movements as I turn to look at him and he comes and goes over the next few minutes. But there is nothing nervous about the two grey fantails and the mixed flock of thornbills that follow him up the hill, or about the pair of white throated tree-creepers going from bottom to top of all the trunks in sight. A white-naped honeyeater searches the blossoms and in the distance two grey shrike-thrushes are having a singing contest. Yesterday it was pied currawongs looking for handouts at the doorstep, cockatoos at dusk, four sittellas head down on the branches and a magnificent eagle at the Market

My eyes returned to the paper that I had broken off reading '...and those who play with money they cannot afford to lose run a serious risk of being hurt' Quite so, quite so; perhaps we should play with money less and learn more to value and enjoy that which is free.

## HEATING YOUR HOME THE ENVIRONMENTALLY FRIENDLY WAY

by Steve Craig

Most people only consider the cost of heating their home and give very little thought to the effect their choice of heating has on the environment.

As I reported in the October Newsletter, Victorians currently burn a staggering 4.2 million tonnes of firewood each year consisting mainly of Red Gum, and Box species cut mainly from private land in Victoria and

NSW. The current level of firewood production exceeds all other forms of timber production in the State and cannot be sustained in the long term..

I currently have a fan forced, slow combustion wood heater which is designed to operate most efficiently on the denser woods like Red Gum and Grey Box. I am concerned about the burning of wood purchased from commercial wood merchants because the trees that are being felled are not being replaced and therefore the industry is not ecologically sustainable.

It also appears somewhat hypocritical to me that we don't support the felling of trees for firewood on our own land but are happy to take it from other peoples. The cost of this fuel will also continue to rise as the more accessible areas are cut out and transportation costs rise.

With the nights getting colder and the pile of "free" firewood which resulted from clearing my house site getting smaller, I recently decided to review my heating needs and to research the most cost effective and environmentally friendly way of keeping warm over Winter.

The choice is basically between wood, electric or gas heaters. Forget about open fire places, they might be nice to look at but 85% of the heat goes up the chimney and they consume large quantities of wood in the process. Similarly, non-airtight stoves like potbellies which supply mainly radiant heat have an efficiency of only 30%.

The main things I considered were the cost of the appliance including installation, fuel costs and the production of greenhouse emissions e.g. Carbon dioxide. The results surprised me a bit. Modern, slow combustion wood heaters produce much less CO<sub>2</sub> (0.12 tonnes/year) than gas heaters (2.6 tonnes/year) and electric radiators or fan heaters (12.6 tonnes/year). Electric off-peak heaters produce 14.3 tonnes/year (See Choice May 1997 for details on how CO<sub>2</sub> levels were calculated).

Your personal choice will be influenced by such things as the different levels of tolerance to cold by people in your household, the area to be heated and your ability to pay for the cost of installing and running the

appliance. For me, the choice came down to either an electric oil-filled heater or an unflued gas heater. The main advantage with these heaters is that you can get "instant heat" on those nights when you get home late and it's not worth lighting the fire.

Choice compared different brands of electric oil-filled heaters and concluded that they are really only useful for heating small areas and can take between 50 and 90 minutes to raise the temperature in the room by only 5 degrees. Similarly, electric radiators and fan heaters are ineffective in heating large areas, are expensive to run and produce high levels of CO<sub>2</sub>.

Unflued gas heaters are about 90% efficient and some models will heat 8 squares. They cost much less than wood heaters, are relatively cheap to run and produce less CO<sub>2</sub> than most electric heaters.

#### Heating Tips

The following tips will help to reduce the amount of energy you use in heating your home. They will save you money and help you to care more for our environment at the same time.

- Build smaller, insulated houses which include passive solar principles as much as possible.
- Draught proof your home.
- Open curtains and blinds on north facing windows during the day
- Cover windows at night with heavy curtains or blinds to reduce heat loss
- Close doors between heated and unheated areas
- Heat rooms to sensible temperatures. Put on warm clothing rather than putting more wood on the fire or turning up the thermostat.
- Reduce temperatures at night - add an extra blanket or wear pj's.
- Only heat the rooms you use
- Install a ceiling fan to circulate warmer air more evenly through out the room.

Give me a call on 9712 0029 if you would like to know more. Alternatively, for those of you with access to the internet, check out the Energy Information Centre home page at [www.energyvic.vic.gov.au](http://www.energyvic.vic.gov.au)

## A LOAD OF RUBBISH

You may have seen the report in the Diamond Valley News (3 June 1998) that the reduced garbage charges made possible by the high-tech, chip-impregnated bins will not be implemented. The economic-rationalist, user-pays principle has been over-ridden by another economic imperative; the Shire's revenue will be decreased by an estimated \$106 550 if it occurs. Instead of rewarding the responsible ratepayers the Council will spend \$25 000 of our rates to educate the recalcitrant disposers of excessive waste. If you think that this is not a good idea, perhaps a line to the Shire and your councillor would be appropriate.

Nillumbik Shire Environment and Engineering Manager, Mr Stephen Plater, is at PO Box 476, Greensborough, 3088 and Cr Robert Marshall is at PO Box 232, Hurstbridge, 3099.

## KILLING THEM WITH KINDNESS

By Steve Craig

Well meaning members of the public, including residents within the ELZ are literally killing native wildlife with kindness by feeding them junk foods like meat, bread, seed and sugar water on a regular basis. The commercial production of seed bells and assorted accessories is now well established to service an increasing demand from people who are being encouraged by some seed producers, animal welfare groups and bird clubs to feed native wildlife.

Damage to fruit and nut trees, cereal crops and houses constructed of softwoods like Western Red Cedar and Radiata Pine have all been directly linked to the feeding of Sulphur-crested Cockatoos. Discarded food attracts vermin and sick birds visiting feeding tables may also increase the risk to human health.

Many people derive enormous, personal pleasure from "taming" wildlife and seeing them close at hand by giving them hand outs but did you know that you could be literally "killing these animals with kindness"?

It is inappropriate to treat our wildlife as though they were simply there for our own pleasure. Feeding wildlife alters their behaviour and turns them into beggars. If you are genuinely concerned for the well-being of our wildlife you will actually be helping them more by not feeding them

There are a number of reasons why you should not feed wildlife.

- wild animals often become dependent on the provision of food and lose the ability to forage for themselves. Adults that are dependent on artificial food fail to teach their young how to find natural foods.
- artificial feeding concentrates birds in large numbers in one place and attracts vermin and pest birds. This upsets the balance and social behaviour of natural populations and may also increase the risk of predation. Increased concentrations of animals dependent on "hand outs" may displace other species in the local area.
- feeding wildlife on a regular basis with artificial items like bread and processed foods contains salt in quantities which is not present in the natural diet of birds and other wildlife and this can cause inadequate dietary balance.
- processed meats like mince which is often fed to birds like Kookaburras and Magpies contain large amounts of fat. The natural diet of these birds includes lizards, frogs and insects which are all low in fat.
- bird seed sold through supermarkets, grain stores and pet shops is not the kind of seed birds normally eat. It is often of low quality and contains the seeds of pest plants as well. PVA glues are used to hold some seed bells together and this unnatural product may be harmful to wildlife
- seed left out in damp conditions rots and grows mould which is toxic to parrots and other animals. Artificial sources of food can maintain sick birds that would normally die rapidly. The disease Psittacosis, which can also affect humans, is spread from bird to bird at feeding tables more readily than in a natural situation.

Birds that feed on honey or sugar water can also suffer from a bleeding disease caused by lack of pectin normally obtained from the nectar of flowers.

Many people have the mistaken belief that wildlife and particularly birds, need supplementary feeding and that without this supplementary feeding the local wildlife will starve. However, Australian wildlife are well adapted to the changing seasons and climate and are able to exploit a range of natural foods at different times of the year

Droughts, floods and fires are natural events which may create temporary food shortages but this is a natural form of population control. The fittest individuals survive and produce well adapted offspring.

The greatest threat to our native wildlife is the loss and degradation of habitat. Remnant habitat, particularly areas containing fallen logs, old hollow trees and native shrubs and grasses should be maintained and protected.

## A LOCAL FERN

by John McCallum

Fishbone Water Fern (*Blechnum nudum*)

Ferns in the genus *Blechnum*, a world wide genus of about 200 species, are usually pinnate, ie, they have fronds that are once divided to form the familiar fish-bone outline. Some species have entire (undivided) fronds and some are divided more than once. Most members of the genus bear two kinds of fronds. Barren fronds are typically green and leafy; the fertile ones have much thinner pinnae, almost entirely given over to accommodating the sori (bundles of sporecases). The rhizome is usually tufted rather than creeping

Fishbone Water Fern is typical in all of these respects and it is common in all forested areas in eastern and south-western Victoria as well as much of the rest of eastern Australia. It is plentiful in the Bend of Islands on moist creek flats including Stevenson's and Watson's Creeks. The species is hardy and grows well in pots; it is available from nurseries that specialise in ferns.



*Blechnum nudum*, barren frond  $\times \frac{1}{3}$



## **NILLUMBIK SHIRE'S APOLOGY AND COMMITMENT TO ABORIGINAL RECONCILIATION**

by Mick Woiwod

This important event in the region's history occurred in the beautiful surrounds of Wingrove Park, Eltham, on Saturday 9 May, before a crowd of around 1,000 local residents and interested onlookers among whom was a large representation from the Bend of Islands.

The day began with a 'Walking Together' from Alistair Knox Park to the Festival Grounds where those arriving moved through an avenue of 400 weereeps (a traditional form of welcome, comprising decorative bush poles) to a large marquee within which the shire made its formal Apology and Commitment. The site proved most appropriate for the occasion surrounded as it was with magnificent mannas and birdsong. With the document handed across to the Wurundjeri elders the afternoon was then handed across to indigenous performance and workshops continuing through to sundown.

We're indeed lucky to have a shire willing to make this all possible. It is hoped that the occasion will be followed up in the coming year with

further events designed to help residents develop a better understanding of a culture with a well-proven commitment to the natural environment of which they see themselves an integral part.

Comment was made on the day to the notion that perhaps an afternoon or evening could be set aside here in the Bend of Islands for a similar such event in a scaled down form. If so, it could consist of a mid-afternoon workshop designed to develop an understanding of Aboriginal culture followed by a night event at some suitable spot on the banks of the Yarra. The days have long since gone when we could comfortably ignore the once Aboriginal presence in this district we've so fortuitously inherited. The past 160 years of European occupation of this part of the Yarra has been largely one of continuing land degradation. Whilst now gradually being turned around there is nevertheless an urgent need for each of us to develop our own personal mythologies to see it through into the future. What better way than acknowledging the traditional owners of its soil.

---

## **A NEW BOOK**

by Teri O'Brien

I recently attended the launch of Mary White's new book 'Our Land is Crying' at the Royal Society of Victoria, sponsored by Trust for Nature Victoria and wish to bring both the book and the Trust to the notice of members. Mary White is the author of both *The Greening of Gondwana* and *The Browning of Gondwana*, excellent books on the ancient past of our country. At the launch she pointed out the 21 000 years of European agriculture, upon which our white settlers based their attempts to farm Australia, is predicated upon dozens of preceding ice ages in which glaciation ground up rocks and left behind the classic deep and often fertile soils of Europe and North America. Australia's glacial history is small by comparison and certainly never generated these deep soils. I know that my agriculture course never mentioned this most salient fact. This piece of ignorance, coupled with the lack of knowledge about the ground water and what can happen to it

under irrigation, our failure to understand the fungus-root associations that drive our forests and the impact on them of logging styles appropriate to North American forests, go a long way to understanding how we got to the mess that she outlines in her work. The sub-title of the book is 'Australia's Environment; Problems and Solutions' and we all should have it on our shelves. It will be in the library in due course.

The Trust for Nature Victoria I have also recently joined as it aims to assist the purchase of conservation sensitive land (it has acquired 6500 ha since 1987), helps with covenanting, with public appeals and provides other services which include habitat management advice, preparation of conservation plans and flora and fauna surveys.

If you are interested in joining, contact them on 9670 9933 (fax 9670 9977) or write to them at 2/385 Little Lonsdale St. Melbourne 3000

## NATIONAL ENVIRONMENT LAWS TO BE OVERHAULED!

by Bruce Rogers

Under the cloak created by the media concentration on the knife fights in Parliament over Wik, the GST, etc., our Federal Government has been quietly drafting new national environment laws. These 'reforms' are to be a sudden and severe reverse step against the movement towards broad and strong national environment laws, which have been evolving successfully since the early eighties.

Essentially, the reforms aim to reduce the Federal Government's roles and responsibilities for environmental matters by transferring these to the States wherever possible, all under the guise of 'efficiency and reduction of inter governmental duplication'. These include:

An increased reliance on state-based assessments, such as Environmental Impact Assessments and agreements concerning World Heritage areas.

Severe restrictions on the range of environmental matters that require the auto-

matic involvement of the Commonwealth. Strangely, issues such as climate change, vegetation clearance, land degradation, water allocation and Regional Forest Agreements affecting native forest are not considered to be of national significance. Little or no public involvement in the decision making processes affecting conservation agreements and management plans. Provisions that assist the rights of citizens and community groups to enforce laws will be limited.

The Government plans to rush through this legislation as quickly as possible and indications are that this could happen as early as June.

If you wish to speak out about this before it's too late, the people to contact are:

Senator Robert Hill, c/- Parliament House, Canberra ACT 2600, Ph 02 6277 7640 (Fax 02 6277 6101)

Fran Bailey MP, P.O. Box 700, Healesville, Vic. 3777, Ph 1800 134 105 (Fax 5962 1364)

This matter was originally brought to our attention by the Australian Conservation Foundation, and you can obtain more background information, if you wish, by contacting them.

---

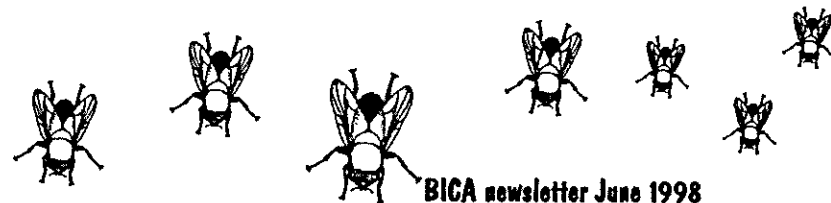
## MAGGIE AND THE MARCHIES

by Teri O'Brien & Costanza Maffi

We were visited on our verandah one hot summer's day by a juvenile, probably male, magpie. To the best of our knowledge, no one close to us feeds magpies, and we certainly don't, yet this maggie behaved like one that had been fully habituated. It strolled around between our chairs like a pet animal, seeing what it could pick up, often passing within a foot of us. We were besieged by March flies which, in trying for their feed, were making our lives a misery, when all of a sudden we saw maggie catch one on the wing going past! And then another; and another. We watched amazed as in the course of the next 30 minutes, he caught them while they were sitting on the chairs, and even after they had landed on our legs. It takes a little courage to allow a magpie to pluck a March fly off your bare, if hairy, leg, but after I realised how skilful he was at this, we just sat back and allowed him to get on with it. The whole time he wandered

around, chuckling softly to himself in the way maggies do, occasionally plucking a March fly out of the air to add to those he was catching off our bodies. Cos has a photo of me lying on the paved verandah, dripping water from my finger into his raised beak. That photo is a good match for one of my late brother-in-law, whom I trapped dripping beer from his ever-present mug into the raised beak of a grateful kookaburra some years ago at Lake Eildon.

Though rainbow bee-eaters will pluck March flies on the wing, I have never seen a magpie do this before. Curiously, we never saw him do this again, nor are we sure that we ever saw him again. Have others spotted maggies doing over March flies in this manner?



BICA newsletter June 1998

## TERMITES AND THE ELZ

by Teri O'Brien

I first became interested in termites when I read Marais's famous book "The Soul of the Ant", but personal experience with them did not come till I moved to the ELZ in 1988. Like others before me, I soon found that any logs or any timber offcuts left on the ground for a time, and sleepers used for creating terracing in the garden all too often had termites in them, and often with severe consequences. They invaded the cottage door step at Atunga and at one time invaded the bathroom wall.

However, it was an experience with them in the trees along A-track in the Co-Op that sent me off to find out more about them. I noticed one day that many of the trees along A-track and those that face places where houses have been built, have been attacked by a termite species. The attacked trees develop a long, linear scar that can run the full length of the trunk. Where the tree has large branches, these scars often follow out along the branches. What was odd was the fact that adjacent trees had these scars all facing in the one direction, towards the track, or towards the house where it had been built in a clearing made for it. Puzzled by this, I noticed that this was true no matter what side of the track one investigated; the damaged area faced the track on trees on either side of the track, eliminating the possibility that it was the side of the tree that faced a compass point.

Chain-saw sectioning of one of these scarred trunks showed that the bark and sapwood had been killed along the length of the scar, created in part by an attempt by the tree to heal the wound. Underneath, and sometimes filling the centre of the trunk, was the usual rich-brown material that remains in a termitary after the termites have attacked the wood. Specimens were collected of this termite and eventually I also got the winged forms when a mating flight took place from a tree I knew had them in it. Through the help of Dr Alan Yen at the Museum of Victoria, these were given to "the Termite Man" Dr Don Ewart who has identified them as *Nasutitermes dixonii*, one of the species

commonly found in trees in the SE of Victoria. He confirms that the damage does often face the more-lighted side of the trunks as this corresponds to an increase in the warmth of that region, allowing for greater activity of the insects. It is important not to confuse this termite-induced damage with firescars, created by the effects of flames wrapping themselves around trunks in a wind. Usually the absence of any charcoal on the trunk will allow you to separate the two at a glance.

Termites digest the cellulose of wood, and may in some cases also destroy some of the lignin that makes wood hard enough to bear loads, but like us, termites are not personally able to digest cellulose. They do this with the help of protozoa, single-celled animals about the size of an amoeba, which live in the lower part of their guts. It is these small organisms, living symbiotically within the termites, that are really responsible for termites being able to live on wood. And there is some evidence that these protozoans can also fix atmospheric nitrogen, aided perhaps by their own internal bacteria, allowing the termite to synthesize proteins from wood, a source otherwise very low in nitrogen.

The ecological effects of termites in our dry sclerophyll forests are therefore likely to be quite profound. Damaged trees, and especially stumps, are especially prone to attack, Nature's way no doubt of "cleaning up the ill and handicapped". In the process, trees are hollowed, weakened and many break off in windstorms. The hollow logs may be re-attacked on the ground, and eventually an echidna will attack the termite homes or former homes, scattering the debris around the fallen trunk. That debris has been enriched in nitrogen and other nutrients by the activities of the termites, and will act as a gentle fertiliser. Some will be scavenged by surface roots of plants, others will be taken up by the mycorrhizas, the fungal-root combinations used by so many of our native plants to attack litter.

So, when termites are attacking your house, they are really just trying to help turn it into a good compost to regrow a forest!

Sender: Bica, C/O Post Office Kangaroo Ground 8097