

BEND OF ISLANDS CONSERVATION ASSOCIATION INC. NEWSLETTER

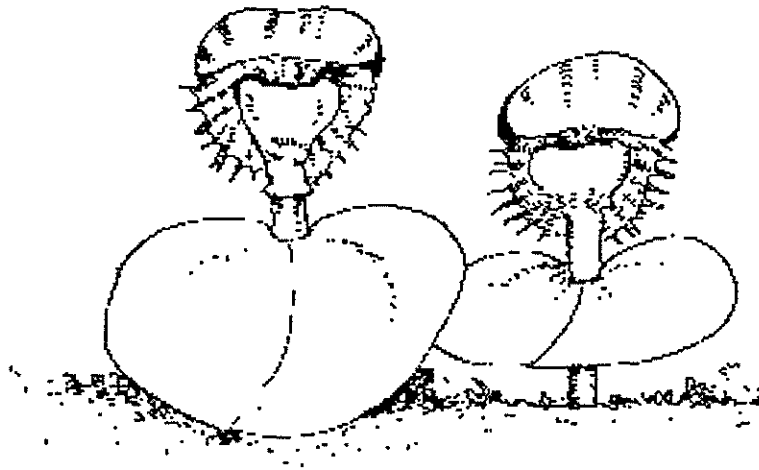
President: Alan Bonny 9712 0648 C/- Post Office, Kangaroo Ground, Vic, 3097 - Editor, John McCallum 9712 0319

Inc. No. A11100A

WHAT NATIVE'S FLOWERING? **Number 45 September 1999**

Botanical name: *Corybas diemenicus*
Common name: Veined Helmet-orchid
Family: Orchidaceae
Flowering period: June to September

Miniature orchids, 1-2.5 cm high, found growing in colonies. The plants reproduce by tuberoids, formed from the swollen end of the underground roots.



The small plant consists of a single, round, light green leaf, 2 cm diameter, which lies flat to the ground, with a single, short stalked, hood-like, purplish brown flower, sitting on the edge of the leaf in the leaf axil. The floral segments are translucent, glabrous and shiny, and typically of orchids consist of the 3 petals and 3 sepals. The dominant features of the flower is the large hooded, dark purple, dorsal sepal, over the labellum, the modified lowest petal, which is erect at the base, the upper part flared and curving over to form a concave tongue encasing the reproductive parts. The labellum features a central white patch with coarsely toothed, purple and translucent striated margins, pointing forward. The purple lateral sepals and petals are much reduced and narrow and are barely visible.

The flower, mimicking the fruiting body of a fungus in form, colour and texture, attracts small fungus gnats, ensuring pollination.

These small orchids prefer moist, humus rich soils and are found growing in amongst native grasses and low shrubs on the moss covered ground of the moist sheltered slopes of the valley sclerophyll forests of the Bend of Islands.

FROM THE PRESIDENT

It's the time of year that reminds us of all the reasons why we live in the Bend of Islands. The wildflowers are blooming, the choughs are squabbling over who'll be first to try out the nest they're building and the cuckoos are calling. Spring is showing all the signs of being an excellent orchid season if the proliferation of greenhoods is anything to go by. Now is the time to put a copy of *A Field Guide to the Orchids of Round the Bend Conservation Co-operative* in your pocket and go for a walk. While the *Field Guide* features orchids of the co-op many of them are found in various parts of the Bend of Islands. Take it on your next walk - you won't be disappointed.

The BICA timelines project is gathering momentum. We plan to use the BICA Committee meeting as a focus for recording natural events, with Cric Henry as coordinator. So get your observations to a member of the Committee prior to the first Friday of the month - either write them down or tell one of us so we can record them. The Newsletter gives us a wonderful opportunity to publish some of them.

On the planning front, the Planning Scheme is close to being approved by Council. BICA is still seeking to change Council's approach to a number of matters including the zoning of the land on the edge of the ELZ - Yanakie. We'll keep you informed of our progress.

Over the coming months the Committee plans to host visits to the area by the Nillumbik Shire Councillors and the Nillumbik Planning Department staff. The visits will introduce them to the Bend of Islands and reinforce the reasons for continuing to support our unique zoning as well as highlighting some issues in the area. We hope that some of our passion for this area will rub off on the visitors!

Robyn Duff

PARROTS IN THE ELZ

By Teri O'Brien

The attack upon eucalypt blossom in the ELZ, mostly upon red ironbark at the moment, by parrots is an evident feature of all tracks and roads

where the discarded flowers litter the area beneath the tree. If you pick up these shed blossoms, you will find they consist almost exclusively of two fragments. One is most of the flower, with a neat piece bitten from it at the edge of the disc that holds the stamens; the other is a tuft of stamens, perhaps what was attached to the bit of disc rim that has been eaten. Does anyone know what this pattern of attack on a eucalypt flowers means to the bird? The amount of tissue consumed from each flower appears to be very small - why do they not eat more of the disc if that is the intention? Or is this a way of opening the surface of the disc so they can drain nectar off it? And why cut the flower off after the attack? Inspection of a few hundred shed, eaten flowers showed that they rarely included an unopened bud. It is as if the parrots were carefully pruning off what they had attacked and leaving the rest on the tree to continue to develop as a resource. Nor is this behaviour specific to crimson rosellas, as here. A tree in the Eltham car park was having an exactly similar experience at the beaks of the rainbow lorikeets.

COMING EVENTS

Sunday September 12 Field Day: Wildflower Walk

Come for a wander through the bush on the Co-op and an adjacent property to enjoy the variety of plants in flower at the moment. Meet at the fire station at 2.00 pm. BBQ after at Millo's. BYO everything.

October 17 Annual Pub Walk

Lok for signs on the bridge

November 28 Annual General Meeting

Place and time to be advised.

POWERFUL OWL UPDATE

by Steve Craig

I last saw the pair of Powerful Owls in Catani Boulevard during the second week in July. This particular pair successfully raised two young last year and when the female entered a large hollow in a mature candlebark during the first week in July, it appeared that they were going to breed again this year. However, a week later I saw both birds roosting together during the day and then I lost contact with them. I relocated the male during the last week of July but he hasn't been present at any of his regular roost sites since then.

Following up on a reported sighting of a Powerful Owl on Watsons Creek during the July BICA working bee, I located an adult male in the territory previously occupied by the pair that I think were killed by foxes in 1997. To my knowledge there was no Powerful Owl activity in this territory in 1998 and there were no Owls present during my regular checks of old roost sites up until June this year.

I was therefore delighted to receive the report that a bird had been sighted roosting near the creek and to later discover that some of the old roost sites used by the original pair were back in use. Could this be the single surviving offspring of 1997 or the adult male from Catani Boulevard? Perhaps the pair had moved from lower Catani to Watsons Creek? It's well within their range, but what an amazing co-incidence that these birds were using some of the same roost trees as the original pair. More likely that the male in residence now was using these roost sites because he was already familiar with them, having grown up in the area.

The frustrating thing about all this is that I may never know the answers to these and other questions because these birds are not colour banded and I don't know who I'm looking at. It's possible to tell male from female without too much difficulty because of an obvious size difference and the shape and colour of the head. Sub adults can be easily distinguished from adults by their plumage, but one adult male

or female Powerful Owl looks pretty much the same as another.

To make things even more interesting, an adult female was roosting with the male on the 29th July and I watched by the light of the moon as these birds engaged in some "heavy petting" before making passionate love on the end of a dead branch high above the creek. The whole performance, including the foreplay, took less than 5 minutes, which is fairly standard for Powerful Owls from what I've observed over the years. Were these birds going to breed in this area? If so, it would be very late in the season. At this time of the year most females have been sitting on eggs for at least a month and possibly longer. More unanswered questions.

I last saw and photographed the pair roosting together on August 1 when the female had the remains of a ringtail possum. I could only find the male on August 17, but during a thorough search of all roost sites known to me on Saturday August 21, I was unable to find any birds.

If anybody sees or hears Powerful Owls calling in the area, I would be particularly interested to hear from you. You can phone me any time night or day on 9712 0029.

STOP PRESS!

More backyard jewels (see page 7)

Native wildlife becomes part of our daily lives when we choose to live in this area. Monique Decortis will talk about living with wildlife and how to help injured wildlife

Panton Hill Living and Learning Centre, October 20, 7.00 - 9.30 pm

To be confirmed. Mick Woiwod may be able to run another historical bus tour. The tour will take in sites of importance to the Wurundjeri people. Ring for information.

Bookings are essential for these two events. Phone Jacinda on 9730 1775

RECYCLING PAPER- THE LATEST

from Lynn Johnstone

After reading Steve Craig's article regarding environmentally friendly office paper in the March 1998 Newsletter, it is hoped that you all tried to purchase a ream of genuine recycled paper when you ran out of your current lot. You may, however, have had a little difficulty purchasing a small quantity from the suggested suppliers. Here is an update on the suppliers and their minimum purchase quantities.

Friends Of The Earth Bookshop
312 Smith St Collingwood
Phone 9419 8700

They sell Steinbeis recycled copy paper for \$7.50 a ream. This is German non-bleached recycled paper. Bruce and I have been using this with our inkjet printer and the results are comparable with Amcor's RENEW 100, which we now know is not genuine recycled paper!

K W Doggett
Heidelberg West
Phone 9459 4499

They sell Cyclus for \$8.25 a ream. This is a Danish paper made from 100% post consumer waste. It is virually dust and acid free and guaranteed for laser printers. As at our last phone call the mininum order is \$200

Canon
Phone 131 393

Canon supply Naudilas or Canon 100 paper which is an Austrian archival quality paper suitable for copiers which produce up to 40 copies per minute. It contains at least 21% post consumer waste and is not bleached. It is \$7.50 per ream. Only large quantities, heweever, can be ordered. This could be suitable for your workplace; why not give the boss a bit of a shake-up?

Further Information.

As stated in the March 1998 article RENEW 100 and RENEW 80 supplied by Amcor are produced largely from pre-consumer waste that hasn't seen the inside of an office. It is made from the build-up of material in the vats in the paper mill. These lines are made from wood chips that come from our native forests.

More information is available from
Environment Victoria: phone 9348 9044

RECONCILIATION LEARNING CIRCLES

from Mick Woiwod

At a well attended meeting on Sunday 18 July the Bend of Islands community chose to proceed with a series of eight workshops developed by the National Council of Aboriginal Reconciliation. The first of these 'Learning Circles' took place at the Fire Station on the evening of 12 May – the remaining seven will be worked through between now and May 2000 (second Thursdays of the month at the fire station or a chosen outdoor venue) – each dealing in depth with aspects of the following reconciliation topics.

- Reconciliation & the Search for Justice (9 Sept)
- Land, Sea and Culture (14 Oct)
- Family, Kinship Culture & Identity (11 Nov)
- Impact of the Past (13 Jan)
- From Resistance to self-Determination (5 Dec)
- Protecting & Valuing Culture (10 Feb 2000)
- Creating a Future Together (9 Mar 2000).

Join in and help make the Reconciliation process a success. If unable to attend all sessions please attend those you are able. One early workshop will feature an indigenous speaker; Peter Oyston hopes to arrange others.

The Shire of Nillumbik currently has before it its Reconciliation Plan proposing a range of projects including its four now completed successful public forums, an Indigenous Resource Trail on Watsons Creek, the design and placement of an Indigenous sculpture in Kangaroo Ground, the flying of the Aboriginal and Reconciliation Flags on days of significance, a mosaic wall at the Shire Offices, indigenous tours of the region and much more

Contacts: Mick Woiwod 97120563 – Anitra Nelson 97120010

ANOTHER PIECE OF NOSTALGIA

by Shiela Dixon

The other day I was parked outside the Kangaroo Ground stroerwhen I noticed something over at the school. It happened to be an Open Day and there was something going on in the playground. A cirle of kids holding hands and dancingaround in a rather folksy way. Some sort of music was blaring out and it thumped me back about sixty four years ago.

The secne; Middle Park Primary, circa 1934. The occasion would have been practice for the annual fancy dress ball whichwas always held at the South Nelbourne town Hall. I can't remember the namesof the dances but I know that they were frightfully English or els coming from european countries that we didn't know existed. A Rumanian wedding dance or a Bulgarian celebration of spring. Nobody in the Education Department in those days had any imagination whatsoever about using songs or dances pertaininag to poor old Oz. Even the Grade Readers of which I have a few, delighted in norse legends an english poetry. I still remember vividly those hot summer days locked in a stuffy old Victorian classroom reciting John Masefield's 'Cargoes' for what seemed like hours.

Anyway, back to the dancing. The facny dress ball was a gig deal. The most exciting aspect being that you got to choose a partner to all these strnage dances with. I fancied John Drolz and he fancied me. I knew this because he kissed me behind the incinerator in a corner of the school yard and I thought the was pretty much showing his feelings. The other good part of this ball was that you got to dress up in somethihg exotic, dependingon the skills of your mother.I was particular in not wanting to look silly like the girls who wore a Robur Tea uniform or the raabbit with floppy ears and always managed to talk Mum into something attractive lik a Gypsy or an Arabian girl, complete with flimsy trousers. These went with either Gypsy or Arabian girl and I thought they were pretty glamorous.

AThe night of the ball was the ultimate in the social whirl of the school and someone was always sick in the afternoon from sheer excitement. once we were in that lovely old Town Hall though, the squealing and giggling took over and it was quite difficult for the teachers to take control. Did we have a piano or recorded music? I can't remember but off we went in our Bugarian whirles or Rumanian rhapsodies. I'm pretty sure that the mothers provided supper but I was so much into my exotic character that feeding my face was just too ordinary for words. Then, it was all over for another year and it just remained for the rehashing of the whole occasion the net day at school. There was bound to be some kids who got into trouble, nearly always the boys for they were much more lively than the girls in those days. We were still reasonably well behaved and subservient then. I do hope that times have changed.

By the way, if there is anyone out there as old as I am, we danced the Lambeth Walk and the Chestnut Tree!



LAND SALES IN THE ELZ

From Stephen Hill

Maybe the BICA committee could investigate Stephen's suggestions about improving the chances of selling to the 'right' buyers

No question unique, specialised, beautiful, abundant in native flora and fauna. When the time comes to sell out of the ELZ, owners are frequently surprised at the valuation in relation to the eventual sale price. Most Estate Agents are not familiar with the ELZ and its unique offerings, and even fewer, if any are aware of the Co-operatives requirements in relation to sales and purchases.

The general buying public may agree with the ideals of the ELZ, however when it comes to living with its obvious restrictions they shun this area. After eleven years here I have found the residents here to be something special and I love the area. We have had disagreements and debates yet life goes on and so people need to move on.

I suggest that there are better ways of offering the properties here for sale. Methods that with the cooperation of the residents, could facilitate all sales in the ELZ. We could remove some of the visual pollution of boards and create a package that would make the general public aware of the benefits of the area.

These methods could see a lift in property values and attract people with the ideals of the ELZ at heart. With the right approach and the benefit of a coordinated marketing effort, the expertise exists here to improve the sales methods and just as importantly save the seller money in the marketing and selling fees associated in selling.

I will (if there is enough interest from ELZ residents) be happy to discuss these structures and help in putting the structures in place. Sooner or later most of us will be moving and that means selling, some action now will help all and give you a real alternative to traditional methods and costs. Contact me on 9712 0545

AN AFTERNOON WITH A FOXY LADY

BOB MILLINGTON

Historians will have no trouble dating the formation of the Bend of Islands Hunt Club. It sprang, as we all know, from the BICA general meeting held on August 8 1999 at Barb and Alan's.

Marjolein van Polanen, who is undertaking a masters degree in science at Monash, had driven up from Chelsea to tell us about the latest research into giving foxes the flick. And she should know. Marjolein has



been conducting a series of trials into how to best bait the furry friends. She told us that one of the problems is that foxes like to bury their kills - generally the stuff that doesn't appeal to them (a bit like kids slipping the silver beet under the table)- while they concentrate on the more appetising morsels. Dogs, which have similar food hoarding habits, can therefore be at the risk of poisoning.

Marjolein has been researching which dainty death meals might appeal more to foxes. Fried liver laced with 1040 seems to be the go. A more specific

trap for the beasties is a recently developed American device. This is a mechanism, a bit like a fat pencil, that is anchored in the ground. When the fox worries the bait on the end - horseflesh heat sealed on seems to do the trick - a spring is triggered, sending a stream of poison into the fox's snout and thus giving a whole new meaning to the phrase "You get up my nose"!

When Marjolein asked for questions, BICA treasurer Michael Pelling wondered whether bloodhounds might not be a cost-effective and fun way of dealing with the problem. He was immediately elected president of the new Bend of Islands Hunt Club. We are currently searching for a pink coat, white jodhpurs and horn for Michael. Does anyone know where we might find a stirrup cup?

MORE OF WHAT'S ON?

Finding The Jewels Of Your Backyard

This information about events and activities from October 13 to October 24 to help appreciate the beautiful bushland of the Nillumbik Shire is provided by Jacinda Brown (phone 9730 1775).

Wed 13 at 6.00 pm The Jewels of Your Backyard' is an exhibition opening of photographs by Jacinda Brown showing some of the wondrous flora and fauna found in and around the Nillumbik Shire. The opening features complimentary music by 'Invention in Time'. Eltham Library Gallery, Panther Place, Eltham

Thurs 14 at 7.00 pm David Cameron will show slides and talk about species diversity and terrain within our local remnant bushland. Eltham Library Gallery, Panther Place, Eltham

Sat 16 at 12 noon Boomers Reserve will reveal a myriad wildflowers in all their intricate beauty as we amble through the reserve with dedicated naturalist Rob Dabal. Meet at Blue House Road, on the main road between Pantan Hill and Smiths Gully.

Sunday 17 at 10.00 am David Cameron will facilitate a species survey and enlighten people with an abundance of information as we meander through Birru-rung (Yarra) country at Laughing Waters in Eltham. Meet at the corner of Mt Pleasant and Reynolds Road, Eltham.

Sunday 17 at 1.30 pm At Home In The Bush' a chance to rediscover the magic and beauty of nature with Doug Frood. Meet at the end of Laughing Waters Road, Eltham. If you wish to attend both sessions, bring lunch and water

Tues 19 at 7.15 pm Richard Francis, Environmental Works Officer and resident of Nillumbik, will lead us on a 'Family Night Prowl' along the Diamond Creek in search of creatures of the night. Meet at the Eltham Library, Panther Place, Eltham

Wed 20 at 2.00 pm Lynlee Smith will take us through the recently acquired Watsons Creek Reserve at Pantan Hill, enlightening us as to its ecological integrity and ideas for its future. Meet at the Pantan Hill Living and Learning Centre

Thurs 21 at 7.00 pm Ironbark Reserve is one of Nillumbik's best kept secrets. It is easily accessible and covered in wildflowers. A sunset walk through this hilltop reserve will be guided by Steve Darroch. Meet in car park in Ironbark Road, Melway 11 J4.

Sat 23 at 12 noon 'Adventure For Little People' Saer and Jacinda will take an exploratory crawl through the bush to see who's home. For primary age kids. Meet at St Andrews Market entrance.

Nillumbik Shire Council Community Training Sessions

Sunday 19 September 1.00 - 4.00 pm **Orchid Identification**. Meet at Boomers Reserve, Blue House Road, Pantan Hill Melway 264 D5

Sunday 26 September 10.30 am - 4.00 pm **Planning Your Revegetation Project**. Lenister Farm Homestead Road Eltham Melway 21 J11 Lunch provided.

Sunday 3 October 1.00 - 4.00 pm **Identifying plants in the pea family**. Meet at Boomers Reserve, Blue House Road, Pantan Hill Melway 264 D5

Sunday 24 October 1.00 - 4.00 pm **Advanced Eucalypt Identification** Meet at Long Gully Road car park, intersection Long Gully and Bakehouse Roads, Pantan Hill, Melway 264 E10

Sunday 24 October 1.00 - 4.00 pm **Advanced Eucalypt Identification**. Meet at Long Gully Road car park, intersection Long Gully and Bakehouse Roads, Pantan Hill, Melway 264 E10

Wednesday 24 November 7.00 - 10.00 pm **Indigenous and exotic grass identification** Meet at Nillumbik Shire Council offices, Civic Drive, Greensborough, Melway 11 A10

Sunday 19 December 1.00 - 4.00 pm **Indigenous seed collection**. Lenister Farm Homestead Road Eltham Melway 21 J11

If you wish to attend any session, please RSVP to Richard Francis on 9433 3192 at least 5 days before the session.

National Threatened Species Day

The Threatened Species Network have planned a wide range of activities to mark this day. Many will have already occurred by the time you read this but yet to come and of more local interest are the following events.

Great World Grasslands Experience at the Werribee Open Range Zoo on September 11 and 12. Contact 9731 9600

Great Australian Grasslands Experience at the Melbourne Zoo on September 11 and 12. Contact: 9285 9343

Stagwatching for Leadbeater's Possum in the Central Highlands on September 11. Contact 9874 4408

Plantation for Helmeted Honeyeaters at Yellingbo on October 21 - 24. Contact: Friends Group 5964 8341

Threatened Species Network Co-ordinator: (03) 9650 8296

TIMELINES IN THE BEND OF ISLANDS

Steve Craig

Pre Spring (3rd week of July to 3rd week of August)

The flowering of Silver Wattle has passed its peak while the blossoms of Golden, Hedge and Spreading Wattles are beginning to dominate the bush. As the days begin to warm with the strengthening power of the sun, resident bush birds are in full song as they establish and vigorously defend breeding territories. Choughs are constructing or renovating nests as Fairy Martins, the first of the summer migrants arrive, followed soon after by Olive-backed Orioles, Rufous Whistlers, Black-faced Cuckoo Shrikes and Satin Flycatchers. The large flocks of Red Wattle Birds and the small groups of Grey-headed Fruit Bats have dispersed after feasting on the nectar of flowering Ironbarks over the past three months and Female Powerful Owls will soon emerge from breeding hollows to help the male hunt for possums to feed to rapidly developing owlets. Male Echidnas, intent on mating, can be seen following a single female around. Exotic grasses including Shell Grass and Sweet Vernal Grass grow vigorously during this season outcompeting native grasses which need the extra warmth of True Spring before their growth phase commences. The Australian Painted Lady Butterfly, one of the first butterflies to emerge, can be seen hovering above native grasses. Flowering plants include, Golden Bush Pea, Early Nancy, Scented Sundew and a few Waxlips and Caladenias.

True Spring (4th week of August to 1st week of November)

The weather is becoming more stable and days warmer as the return of the Sacred Kingfisher signals the onset of True Spring. Rain water tanks are overflowing and fungi are in profusion as Platypus are laying eggs in their burrows deep within the river bank. Young Wedge-tailed Eagles are ready to leave the nest as Rufous Fantails return from New Guinea to join other Summer migrants. Bush birds are very active as the next generation becomes independent. This is the wildflower season and the

normally sparse Box-Ironbark Woodlands are transformed with the colourful displays of Milkmaids, Pink Bells, Common Correa, Bundled Guinea Flower, Purple Coral-pea, Love Creeper, Clematis, Blue Pin-cushions, Chocolate Lily, Grass Trigger Plant, Austral Bears Ears and Small Grass Trees. Many of our orchids also reach their peak now including Wax-lips, Green Comb Spider Orchid, Pink Fingers, Tall and Nodding Greenhoods and Leopard Orchid. Mole crickets call on warm nights while Powerful Owl young are fledging.

SOME ECOLOGICAL PRINCIPLES

Teri O'Brien

The ELZ is a remarkable social and biological experiment and it may be unique; I know of no other similar attempt at residential conservation so close to a city of over 3 million. There are many keen observers of Nature in the ELZ as well as professional biologists and it is my hope to summarize here some principles that may help guide the future management of the area.

The ELZ is contained in two fairly distinctive ecosystems, dry sclerophyll woodland and riverine valleys. All ecosystems are an interactive mix of physical and biological units. All their units are dynamic, and undergo change through time.

Dynamic shifts in ecology are common where ecosystems are exposed to fire, such as those that embrace the ELZ. In addition to fire, slope is one of the most important controllers of ecological processes in the ELZ. Very little ELZ land is flat. Fallen eucalypt leaves shed water for some time after a rain, and further increase the redistribution of the rainfall that is due to the steepness of the slope. The effective rainfall at the top of eucalypt-covered slopes may well be less than one third of that measured in a rain gauge, while that in the deeper valleys is en-

hanced.

I identify fire and slope and their combined effects as the most important factors determining the distribution of plant communities in this area prior to white settlement. Clearly, slope is a factor over which we have little or no management control, but we can and do intervene strongly in the fire regimen.

The climate of the ELZ has been affected in parallel with that of the whole of South-Eastern Australia by steadily increasing aridity that began in earnest about 6 million years ago and has tightened its grip a great deal in the last 750,000 years. Thus, well within the period when the Aborigines occupied this area, the vegetation has undergone major changes driven by climate, in addition to those imposed upon it by the burning practices of the Aborigines.

Curiously, although much of the vegetation is fire tolerant, eucalypts, the dominant tree species of the area, are not ideally adapted to drought conditions. Water loss from all leaves occurs mainly through holes (stomata) in their leaves. Most plants regulate water loss in drought by closing down their stomata during the middle of the day but eucalypts do no such thing; they open their stomata about half an hour after dawn and close them again about an hour or two before sunset. Eucalypts also tend to stop growing when drought stressed, and may flower instead; a sensible strategy that creates lots of seeds stored in woody fruits in the canopy.

Under pre-human conditions, fires were ignited mostly by lightning, and therefore started mostly in December-March. In drought years, all of the vegetation, not just the eucalypts, was by that time in a state where various strategies maximized survival of the species from fire. But even the best-adapted species are killed by fire. However, burning the bush deliberately in January-March is a recipe for disaster, so white man has taken to burning at times away from the fire season.

No practice is more likely to have a negative impact on many plant species than burning them before they have got themselves to a fire-

tolerant state. Plants that need to regenerate via a seed cycle will not have formed the present year's seeds and protected them in woody coats by November. Many of the bulb and corm reproducers (some orchids, chocolate lilies, flax lilies, fringe lilies etc.) cannot produce their bulb if burnt too early. Seedlings of many shrub species make little seed for several years after they germinate.

On the other hand, perennial grasses such as the native *Poa* and the introduced sweet vernal grass are favoured by this process in several ways. Perennial grasses and other tussock species are always in a state of competition with trees and shrubs. Fire invariably pushes this equilibrium towards increased grasses in Southern Australia, the basis of so called firestick agriculture as practiced by the Aborigines.

What little is known of Aboriginal fire practices in areas such as the ELZ suggests that they were extremely sophisticated users of fire. Women and children apparently managed most of the burns, done under tight control to ensure that no harm came to species used for food or medicine.

In the ELZ, the past effects of logging and fire are clearly evident in the woodland ecosystem. A proportion of the trees has multiple stems, produced either by logging or fire or both. The large stands of adult burgran are testimony to the power of suckers from roots to encourage massive stands of this native "woody weed."

Acacias are promoted by fire, which breaks open the hard seed coats, allowing germination of some of the stored seed in the soil. Large clumps of various acacias are present throughout the ELZ, some now dying out having reached their use-by date because they germinated in 1962/3.

What might this mean for the Health and Management of the ELZ? I will treat this as a series of points.

continued page 10

- NOT REPRODUCED R/PT, YOUNG BARR NO SPECIMENS
* NO RECORDS OF SEEDS
- MONITORING - WARRA / BIANCAHOUSE / ZONING 9
- DIVERSITY / THREATENED PROCESSES - DATA

* No pristine forest exists in the ELZ; most of it is a re-growth forest that has been impacted upon by extensive logging and most of it was burnt in the 1962 fire.

* Fuel-reduction burning and/or raking of litter are essential components of management of the area to render homes and people safer in a fire in a blow-up situation.

* The vegetation in the riverine system has been extensively modified throughout most of the ELZ by introductions of exotic floras and alterations to the patterns of stream-flows associated with dams, mining operations, and cattle access for drinking.

* Major roads, especially where accompanied by farmland as along Henley Rd., have roadside verges with a high proportion of exotic species, many recorded as naturalized here for more than a century (e.g., shell grass, vernal grass). This is also true of the margins of the aqueduct track.

* Roadside verges along Skyline Rd, parts of Catani Blvd., Gongfler's Dve., and most minor tracks in the area (e.g., those in the Co-Op.), are relatively free of exotics though minor infestations exist, especially in areas of high disturbance where houses have been established.

* Feral cats, foxes, rabbits, and black rats are common in the whole area, and have a wide variety of impacts which are often interactive with native animals.

* Despite these exotic animal species, most native animals that should be in the area are here and appear to be doing reasonably well..

* The presence of good numbers of the two large raptors, wedge-tailed eagles and powerful owls, shows that their food chain is reasonably intact. However, it is likely that the eagles here depend upon rabbit for a large proportion of their diet. No native predators (e.g., dingoes, quolls) of the larger native mammals have survived white settlement

* Substantial areas of the woodlands have crowns of eucalypts showing signs of ill-health (crown die-back, lower trunk resprouting, damaged

wood). In some cases (A-track in the Co-Op) damage is associated with extensive termite invasion. In the riverine valleys (e.g., near Oxley Bridge), the problem may be due to lerps encouraged by bell birds.

* Fuel-reduction burns undoubtedly have an impact on species composition. Close to houses this is probably unavoidable, but these burns should not be dressed up as "regeneration burns". Long continued, they are by and large catastrophic for many species, especially where seedlings are burnt before seed can be set.

* The alternative of raking into windrows and/or heaps, with or without burning of the windrow or heap, causes massive disturbance of the litter but may be preferable to widespread burns of the same area on a regular basis. This should be investigated; (see Part 2: Detailed Ecological Analysis of the ELZ and Matters for Research).

MOMENTOUS DISCOVERY ROCKS TRIVIA NIGHT

Bob Millington

The annual trivia night took place at the Millingtons' on July 10 with the usual recriminations, accusations and nibbles spilt on the floor.

With Bob once again donning his tux to conduct the event, the contest seemed about to settle into the ritual trial between the Bonny and Gurney tables, and early money was on the Gurneys, given that Pam and Peter were joined by their smart children and Cara's and Guy's partners. But Jenny and Neil Taylor made a late spurt and were in the end only one off the pace. The UN observation team, however, spotted Millington, who was described as being the better off for drink, during a break, while the Taylor team pondered the flag question. Pointing to one of the banners he said: "Some of these flags look double Dutch to me!"

So it came to pass that the Taylors recognised the Netherlands ensign while Neill Kamminga, to his ancestors' shame, didn't.

The Bonny mob triumphed by one, although team member Neil Harvey almost blew it by ill-considered insults to judges Trish and Bob, who are known to have long memories.

A VISIT TO GLENBURN

Bob Millington

The BICA mob - about 30 of us had turned up - were just setting out on a tour of Alan Reid's Glenburn property when someone squinted into a tree. "What's that bird, Alan?" she asked.

Our host looked up and gave a little gasp. "Goodness me," he said. "That's a superb parrot. I've never seen one here before. They're normally up on the Murray, you know. It's a funny thing but almost every time I take a party around the place I see an exotic bird. It's probably an escaper."

"Yes" came a voice from the back of the bunch. "We've just let it out of the cardboard box we brought it in." If the Bend of Islands didn't have a Peter Gurney we'd have to build one.

Alan, president of the Gould League of Victoria, which these days cares for more than just the beaky brigade, had been a guest speaker at a BICA meeting late last year when he explained his intriguing Timelines Project. This involves hundreds of volunteers becoming mass observers, noting the regular changes in the environment around them, from the flowering of shrubs to the migration of birds. He believes that these are signs of a different system of seasons, unconstrained by the mere four that we inherited from Europe. For instance, Aborigines in the Melbourne area apparently recognised six seasons and those around Darwin three.

Alan invited us to visit his farm and see his Timelines Centre and wildlife refuge. On Anzac Day we did. It was an eye-opener to those who might feel that commercial farming and conservation cannot mix. Alan runs a cattle stud on part of this 300 hectares yet retains wooded and wild oases where endangered plants and animals can find sanctuary. He has been careful to position natural corridors so that animals can roam in safety from one part of the property to another.

We learned that it doesn't take much to restore degraded land. One patch of six hectares or so had been grazed intensely for more than 80 years. Five years ago, Alan simply fenced it off from the cattle. Where little more than skimpy grass grew, today dozens of plant species have returned.

Alan took us on the grand tour, up minor mountains where his cattle graze, along the corridors and through the areas that he is revegetating. The Ben's major botanical botherers, Marie Krause and

Carol Bonny, were trilling away in names vulgar and Latin. Peter Gurney was merely vulgar. "I'd chop that down for a start," he muttered, indicating a wattle that he said should have been living in New South Wales.

We ended the day in the Timelines Centre, a two-storey treated pine building that doubles as headquarters for Alan's project and as a marshalling point for visitors. It was a satisfying and intriguing day. Alan welcomes organised groups. If you plan to go there, see Gurney for the cardboard box and the parrot.

A LOCAL FERN

John McCallum



Small rasp fern (*Doodia caudata*) is in the same family as the water ferns (genus *Blechnum*) that have featured in this series in the last few Newsletters and shares with them a number of features. They have dimorphic fronds, that is, the barren fronds have a different appearance to the fertile, spore bearing ones. Also they are 'once pinnate'. This means that the frond is divided into leaflets only once. Many ferns, for example bracken, have the fronds divided several times to form the familiar lacy pattern that we associate with this group of plants.

Rasp ferns are tufted rather than creeping plants with erect fronds, the barren ones reaching 25 cm. and the fertile ones 40 cm. The plants that I have seen along Watson's Creek are generally much smaller than this. They have a somewhat harsh texture, giving them their common name. The veins are obvious when the barren frond is held up to the light and are in a pretty branching pattern.

Fertile pinnae bear oblong sori (bundles of sporecases) protected by a membranous indusium.

The picture shows a barren (left) and a fertile frond of a plant found growing alongside Watson's Creek. They are shown at 50% of their real size.

