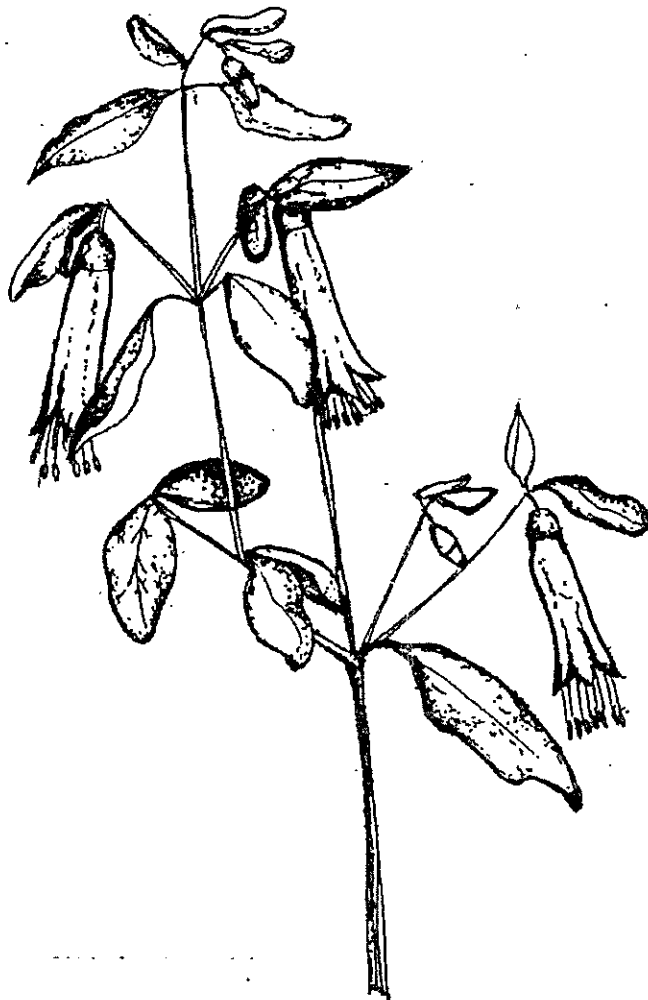


# BEND OF ISLANDS CONSERVATION ASSOCIATION INC. NEWSLETTER

President: Robyn Duff 9712 05070/- Post Office, Kangaroo Ground, Vic, 3097 - Editor, John McCallum 9712 0319

Inc. No. A11100A

Number 48 July 2000



## WHAT INDIGENOUS PLANT IS FLOWERING?

Botanical name: *Correa glabra*

Common name: Smooth or Rock Correa

Family: Rutaceae

Flowering period: May to August

A variable upright shrub, 1 metre high and 1 metre wide, widespread in riparian scrub on rocky outcrops and escarpments. The dark green, glossy leaves are oblong to oval in shape, up to 20mm long and 8mm wide and usually have wavy edges. The underside of the leaf is a paler green and are aromatic when crushed. The other local correa, *Correa reflexa*, (Common correa) has by comparison oblong to heart shaped and hairy leaves.

The tubular bell shaped flowers are pale green and appear on the plant for most of the year, though are more prolific from May to August. A distinctive feature of the flower is the longer projecting stamens (up to 1 cm.) beyond the lobes of the flower. The stamens of *C. reflexa* only just project beyond the lobes of the tubular flower and unlike *C. glabra* the flowers are clearly hooded by bracts.

The nectar producing flowers attract honeyeaters, including eastern spinebills. Birds with short beaks obtain nectar by piercing a hole on the side of the flower.

*Correa glabra* prefers a well drained soil and open position, though tolerates shade. A bushy shrub providing a low screen and a valuable bird habitat. Propagation is from cuttings.

Cric Henry

## FROM THE PRESIDENT

It's finally happened!. The Minister for Planning and Local Government has approved the Nillumbik Planning Scheme. It formally came into operation on June 22, 2000 and provides the legislative framework for the protection of the Bend of Islands as a conservation area. It underpins the work of residents in ensuring that the area stays a protected Box/Ironbark forest while also being a great place to live.

Maintaining the integrity of the flora and fauna while residing within the area is challenging and this issue was recently discussed with senior staff from the Environment and Planning Departments from the Shire of Nillumbik during a visit to the area. They were positive about the success the area is having in integrating these two functions and very supportive of BICA's efforts in working with the community to continue this.

As part of understanding more about our area and similar Box / Ironbark forests BICA has organised a weekend away later in July to visit the forest around the Bendigo area. If you are interested in joining this weekend away contact Barb Whiter on 9712 0532 or Trish Millington on 9712 0402. Hope to see you there.

**ROBYN DUFF**

## YOUR COMMITTEE

Following a request, here is a list of the members of the BICA committee for the rest of the year. Annual elections of office bearers and committee members takes place at the Annual General Meeting in November.

President: Robyn Duff (7120 0507)

Vice President: Peter Gurney (97120 0408)

Secretary: Lynne Johnstone (97120 0618)

Treasurer: Michael Pelling (97120 0286)

Committee members:

Alan Bonny (97120 0648), Carol Bonny (97120 0648),

Steve Craig (97120 0029), Cric Henry (97120 0547),

Jenny Taylor (97120 0614), Sally Timmins (97120 0636),

Michael Skewes (97120 0633)

## ALIEN INVASION

**Steve Craig**

Given that the Environmental Living Zone planning provisions require that only indigenous species can be planted outside "kitchen gardens" it seems rather ironic that we have such a wide variety of environmental weeds growing in our midst.

Here is my top 12 list of environmental weeds currently growing in the ELZ

*Acacia baileyana* (Cootamundra Wattle)

*Acacia elata* (Cedar Wattle)

*Acacia floribunda* (White Sallow Wattle)

*Acacia howittii* (Sticky Wattle)

*Acacia longifolia* (Coast/Sallow Wattle)

*Acacia iteaphylla* (Winter Wattle)

*Agapanthus praecox orientalis* (Agapanthus or African Lily)

*Grevillea rosmarinifolia*-all except Hurstbridge form (Rosemary Grevillea)

*Hakea salicifolia* (Willow-leaf Hakea)

*Pinus radiata* (Radiata Pine)

*Sollya heterophylla* (Bluebell Creeper)

*Watsonia meriana* (Bulbil Watsonia)

In my opinion, residents who have these plants growing on their properties (and they know who they are) should get rid of them as a matter of high priority before the new planning scheme is adopted, even if they are in what is considered to be a "kitchen garden".

Species like the ones listed above have been known to spread more than 20kms from where they were originally planted. Birds transport seeds in their crops and honey bees cross-pollinate plants of local provenance with cultivated hybrids e.g. *Grevillea rosmarinifolia* and *Hardenbergia violacea*, causing contamination of the gene pool of our local plants. This is why you should only purchase plants grown from locally collected seed.

Bend of Islands Conservation Association will help you remove environmental weeds from your property and will also give you two replacement plants for every one you remove, FREE!

We also have some other nasties heading rapidly towards the ELZ along Menzies and Henley Roads in *Smilax Asparagus* or Bridal Creeper and Myrtle-leaf Milkwort, English Broom and St Johns Wort. Be on the look out for these.

You can contact me on 9712 0029 or any other BICA committee member if you require assistance with plant ID or help removing environmental weeds from your property.

## SPYING ON PLATYPUS

**Barb Whiter**

A pleasant April afternoon saw a happy band of 15 or so ELZers meeting at the fire station to car pool and grab a mud map to head off to the wilds of Whittlesea. We didn't need the mud map to get to Whittlesea, but we wanted to meet at Toorourrong Reservoir and the meeting point was near the car park at the picnic table - a Bend of Islands tour it wouldn't be unless food and drink were involved.

Why were we trekking so far to partake of lovely afternoon tea? We had actually booked in to spy on some platypus that had made the reservoir and the adjoining creeks their home.

Our guide for the late afternoon session was Geoff Williams, once of Healesville Sanctuary and now of the Australian Platypus Conservancy - a non-government, non-profit organisation dedicated to the conservation of the platypus.

Geoff squeezed us all into a small room for a brief talk and question half hour where we learnt that platypus are finding their way back into river and creek systems where they hadn't been seen for many years. The Diamond Creek system is one close to home where the APC has tracked them down happily living back in the system.

There were artefacts to handle gently, and the four younger members who came along - Rory, Ryan, Andrew and Eleanor - certainly enjoyed this part.

And then it was off for a hilly climb to the side of the reservoir.

We sat for about an hour on a steep hillside overlooking the water on a perfect April evening, but those platypus were elusive. Eventually excitement all around as we all caught a glimpse of a rippled surface and a dark brown moving object. After that there was much more staring through our binoculars, and a bit more activity in the water.

However, Geoff agreed he thought it was a slow evening, but we were quite happy with our choice of activity for the afternoon. We were out in 'our' bushland surrounded by nature - the birds were entertaining too - and enjoying the sunset and twilight - it was a lovely way to spend Sunday afternoon.

Platypus Insights run all year on Saturdays and Sundays at different times according to time of sunset - it's well worth a visit. Bookings must be made via the Australian Platypus Conservancy on 9716 1626.



## PROPOSED TRIP TO SCOTIA AND LAKE MUNGO

**Norm Linton-Smith**

I am proposing a tour of two sites in New South Wales for the Cup Day weekend, Saturday 4 Nov to Tuesday 7 Nov 2000. Details are as follows.

Co-ordinator: Norm Linton-Smith, phone 9712 0465

Number of persons required: Six

Itinerary: Two days at Scotia, a property of Earth Sanctuaries Ltd (ESL) and two days at Mungo National Park.

Transport: 8 seat PA 31 Navajo twin, cabin class commercial aircraft. The pilot will be our own Ed Car who has offered his services free. Passengers would cover his costs during the trip. Shareholders in ESL get 20% discount at Scotia. Ed and I are both shareholders. This is an opportunity for shareholders and others to see the 65 000 hectare Scotia sanctuary which is only one of ESL's 10 properties located in South Australia, Victoria and New South Wales. ESL is in the business of restoration of habitat and the building up of numbers of endangered species.

Both Scotia and Mungo offer a range of accommodation ranging from camping space or shearers' quarters to twin share in cabins or homesteads. An idea of what it could cost per person is as follows.

Aircraft hire and share of pilot's food and lodging:	\$300.00
2 nights lodging in shearers' quarters at Scotia:	\$30.00
2 guided night walks at Scotia:	\$30.00
2 dinners at Scotia:	\$30.00
1 night lodging at shearers' quarters at Mungo:	\$16.50
Total:	\$406.50

Shearers' quarters at both Scotia and Mungo have stoves, crockery cutlery etc

Approximate flying times would be

Essendon to Mildura (for refuelling) 1 hr 30min

Mildura to Scotia 30 min

Scotia to Mungo 40 min

Mungo to Swan Hill (for refuelling) 40 min

Swan Hill to Essendon 1 hr 00 min

If you are interested, contact me on the above number and I will give you an indication of what you would need to take.

## CO-OP PLANT SURVEY

Steve Craig

During the months of September and October 1999, Mathew Dell, a work placement student from Swinburne University of Technology surveyed 100 quadrats across the Co-op for the presence and abundance of vascular plants. The principal aim of this survey was to determine if there had been any change in the range and abundance of species since the initial survey undertaken by Robyn Adams and Dianne Simmonds in 1992. Vegetation surveys are part of an ongoing program of monitoring the ecological impact of prescribed burning on the Co-op. A total of 180 indigenous and 15 introduced species have been recorded to date. Preliminary results indicate a general lack of middle storey and overstorey recruitment. For example, *Acacia genistifolia* seedlings are abundant but there is a notable lack of mature plants. Many areas have little or no ground cover and post fire erosion is of major concern, while native and introduced grazing animals are contributing to the poor regeneration, particularly on the dryer west and north facing slopes. No *Grevillea rosmarinifolia* were located during this or the previous survey in 1992 and there is some doubt that the *Hurstbridge* form ever occurred on the Co-op.

Of particular interest was the presence of a single, adult *Hakea* that could be either *Hakea sericea* or *Hakea decurrans*. There are two subspecies of *Hakea decurrans*. *Hakea decurrans* subsp. *platytaenia* is restricted to far east Gippsland while *Hakea decurrans* subsp. *pysocarpa* is widespread and locally common in open forests, damp heath or dry scrubland, chiefly in hilly areas, on sandy loams or clayey soils, ranging from near sea level to c. 300 m and flowers from Jun. - Sep. (Walsh and Entwistle 1996). *Hakea decurrans* subsp. *pysocarpa* occurs locally in Warrandyte State Park, and in scattered populations around Christmas Hills and Kangaroo Ground.

I am reliably informed by Neville Walsh from the National Herbarium that *Hakea sericea* does not occur naturally in Victoria but has become "naturalised" from garden escapees in the Anglesea district where it has regenerated rapidly following the 1983 bushfires. All earlier records of *Hakea decurrans* subsp. *pysocarpa* were incorrectly described as *Hakea sericea* (see Flora of Melbourne, SGAP 1993). *Hakea sericea* occurs in Qld, NSW and is also naturalised in New Zealand, Spain and S. Africa and is being sold through various nursery outlets around Melbourne. So what does all this mean? Well, we will be keeping a close eye on the single plant located on the Co-op until it flowers and we can positively identify it. If it turns out to be *Hakea decurrans* subsp. *pysocarpa* we will collect seed for propagation and encourage it to reproduce. On the other hand if it turns out to be *Hakea sericea*, an environmental weed in this area, it will be given the chop very quickly.

Please check the species and origin of any plants you purchase through local nurseries. Simply because they are sold locally or are on the list of plants for the Shire of Nillumbik does not automatically mean they occur naturally on your property, in the ELZ or the Bend of Islands. If in doubt seek advice from one of our local botanists or talk to a BICA Committee member.

## EAGLES OVER MT LOFTY

Glen Jamieson

*In BICA Newsletter Number 46 we published an article by Peter Gurney noting the failure of the Wedge-tailed Eagles to breed last season. Glen, who works with Parks Victoria at Warrandyte responded with this note.*

Wedge-tailed Eagles are one of the few Australian animals that have in some way benefited from the introduction of Rabbits on the Australian mainland. Although Wedgies have an extensive range beyond that of rabbits, the rabbits have provided a staple dietary item in the areas where their ranges overlap. In some cases rabbits provide 97% of Wedge-tailed Eagles diet, where other prey is scarce. What happens when, in the course of park management programs, we affect the biological opportunities of certain native species?

There has been concern across Australia that the dramatic reduction of rabbit numbers by Rabbit Calicivirus Disease (RCD), has had an impact on population sizes and breeding patterns of Wedge-tailed Eagles and other native predators.

The Bird of Prey Watch was carried out by Birds Australia and the Australasian Raptor Association across Australia between 1986 and 1998. The project included Wedge-tailed Eagle, Little Eagle, Brown Falcon and Brown Goshawk, all species which rely on rabbits as prey items.

It was thought that this information may assist to ascertain changes to abundance and breeding patterns of BOPs due to the affects of RCD on Rabbit populations. In some areas there has been a general decline in Wedge-tailed Eagle breeding activities most likely due to low rabbit numbers. BOP Watch data also indicates a statistically significant decline in observations of Brown Falcons for south eastern and central Australia. Brown Falcons were observed at Mt Lofty for a period of time during 1999.

However, there are difficulties relating RCD impact on abundance and breeding activities with so many other seasonal and ecological factors involved.

Wedge-tailed Eagles don't always breed every year, there are no doubt many factors involved in an eagle pair's decision whether or not to breed. At Plenty Gorge Park they didn't breed over this past year, maybe due to the drought conditions (Brendan Sullivan, pers comm). The building of the walking track below the nesting site should

not have affected the eagles. They can observe the comings and goings on the track from their vantage point with relative security. It would have been a different matter if the track had been built above them (David Baker-Gabb, pers comm).

The feeding behaviour of the Wedge-tailed Eagles is unlikely to be disturbed by the tree guards (David Baker-Gabb, pers comm). We have a rabbit proof fence around Mt Lofty with just a small section to complete (the front gate), but still have sufficient rabbit numbers to warrant the use of tree guards.

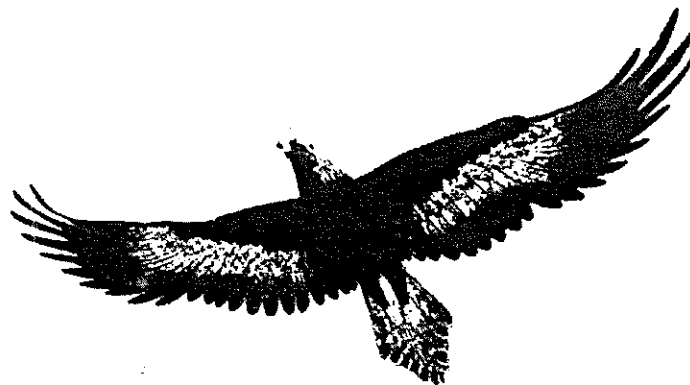
The biggest change for the ELZ eagles is the drop in availability of prey items at Mt Lofty due to the decline in rabbit numbers. Rabbits were recorded at 113 rabbits per Spotlight kilometer (RPK) in December 1996 and after the release of RCD on the site, plummeting down to below 50 RPK. Rabbit numbers after building up, have gone down further following the control program from 78 RPK in February 1998, to 4.8 RPK in May 2000.

The real worry was that during the baiting, the eagles may have taken up bait through capturing prey that carried pindone.

Wedge-tailed Eagles have a moderate to high sensitivity to pindone. We were careful to instruct contractors to pick up carcasses and they were diligent enough to do this well. Rabbits return to warrens to die once poisoned and this makes it difficult for raptors to find them. There is very little written material on this subject to guide an operation such as the Mt Lofty rabbit-control progra but it did not result in the poisoning of any Wedge-tailed Eagles..

The drop in rambbit numbers has a number of other implications:

- Predator numbers are directly affected. It has been observed at Mt Lofty that fox numbers have dropped with the reduction in rabbit numbers. A similar phenomenon was observed in New Zealand. A 96% decline in rabbit numbers was followed by a 71% decline in cats and ferrets, both predators on rabbits.
- The redution in selective grazing at Mt Lofty may set up the area for Burgan colonisation of the whole site. The process is well under way. If this is not manipulated and turned around, it may be irreversible with Burgan preventing a diversity of plant life to flourish.



## MOUNTING THOSE NEST BOXES

**Norm Linton-Smith**

A message to that great bunch of BICA volunteers that assembled and painted Tuan nest boxes for World Environment Day, 1999.

There may be some of you who have not yet mounted your boxes four metres off the ground and facing north. This is not a reprimand; I am guilty of not having hung mine until a few days before the BICA nest box survey on Sunday 4 June for World Environment Day 2000!

At age 75 and lacking the strength, agility and balance of even 15 years ago I procrastinated until I was asked to paint the sign notifying members of the survey. Something had to be done! Experiments proceeded. I put the extension ladder against the tree and hammered in the galvanised nail (thoughtfully provided by Wolfgang) from which the box would hang. However I was unable to carry the box up the ladder. I mucked around with a rope around the ladder rungs but still could not lift the box from its highest point to the nail. The solution lay with a handful of small pulleys called the 'Whirlwind Midget Hoist' which I used eleven years ago for lifting the engine block from my Land Rover. This ingenious device has a mechanical advantage of 6. I hooked one pulley block on the hanging nail and the other on the hanging bracket of the box (which was on the ground) and hauled away. This gave me a very short lift of the box.

Please let me know if you would like help to mount your box. I can bring around my ladder, hammer and hoist and I promise not to sue you if I fall off! Ring me on 9712 0465

## BEND OF ISLANDS POSTCODE

**Alan Bonny**

The local papers have advised that the new format planning scheme has been approved by the state government so the ELZ lives on but the acceptance of Bend of Islands as the official tag for our area is still complicated by an inappropriate postcode. Council has initiated a review process to look at the locality boundaries and residents may have received, or may get, some sort of request for comment regarding the address of their property. I urge that you respond supporting the Bend of Islands name for our locality but noting that it cannot be used unless Australia Post apply the same postcode as Kangaroo Ground, 3097. I look forward to being able to use our unique place name for our unique area in the near future.

## FUEL FOR THOUGHT

Steve Craig

The use of wood for home heating continues to rise in Melbourne and the current demand for Sugar Gum by Bend of Islands residents is currently exceeding supply. Storage is the secret to success. Many people are unaware that it's not just the type of wood burnt but how it's stored that influences the amount of heat generated. One of the main factors affecting the value of wood as fuel is its moisture content. When green (or wet) wood is burned, a lot of energy is used to evaporate the large water content; thus weight for weight, green wood has about 40% of the heating value of dry wood. To get full heating value from your wood the moisture content should be approximately 10-15%. Wood MUST be stored under cover to achieve this result. Loosely stack wood off the ground in a criss cross fashion to allow air to circulate freely. Firewood should ideally have been stored for 6-8 months before use so that it is properly seasoned. Don't buy or attempt to burn wood that still has the bark attached as it will probably be green.

When buying wood strike two pieces together. Dry wood gives a resonant 'crack' while unseasoned wood sounds more like a dull 'thud'. Be careful not to use wood treated with copper-chrome-arsenate (the green colour of treated pine) as it releases poisonous fumes when burnt.

### Getting Started

Use kindling, firefighters or paper to light the fire. Larger pieces can then be added after a bed of coals has been established. Leave the door of your heater slightly open until the fire is well alight before gradually adding bigger and bigger pieces of wood. To make the wood burn longer it should be fed end first into the firebox, so you will need to make sure it's cut to right length first. When the fire is burning well, shut the door and leave the air holes or baffle fully open for at least 30 mins. A hot fire will heat the fire box quickly and a coal bed will be also be quickly established. Burning becomes self sustaining as the temperature reaches 280 degrees centigrade, but you also need to have a proper mix of air and hot combustion gases to promote complete burning. You've got the mix right when the coals are glowing brightly and there are swirling flames. Dark, smouldering, barely-alight fuel and a lot of smoke in the firebox indicates poor or incomplete burning. After about 20-30 minutes when the wood is burning properly you can reduce the air intake and if your heater is fan forced now is the time to turn it on for a comfortable fire. Keep the fire burning at a moderate rate. Don't pack it full of wood and allow it to smoulder with low air intake as this causes smoking and, as well as polluting the environment, upsets your neighbours. If your wood heater is not hot enough and especially if you have been burning wet or

unseasoned wood, a dark sticky substance called creosote attaches to the wall of the flue and may lead to a flue fire if allowed to build up too much. It can be minimised by operating your wood heater at higher temperatures and by cleaning your flue annually with a flue brush.

More on the DO'S and DONT'S of wood heater operation next edition.

**SOURCE: SMOKE IS NO JOKE. ISSUED BY THE AUSTRALIAN AND NEW ZEALAND ENVIRONMENT & CONSERVATION COUNCIL.**

**FIREWOOD FROM VICTORIAN FORESTS. FORESTS SERVICE. RESEARCH & DEVELOPMENT. JUNE 1994 NO. 26**

## FREE SEMINARS

Thursday 3rd August "Weed Ecology"

Geoff Carr, director of Ecology Australia, has an extensive knowledge of Victorian Flora and the processes that threaten our precious bushland. The seminar will focus on the ecology of weeds, their lifestyles, control and management.

Thursday 7th September "The impact of Urbanisation on Remnant Vegetation"

Nick Williams from the Australian Research Centre for Urban Ecology (at the Botanic Gardens), will speak on changes in urban vegetation over a period of 10 years on landscape and community scales.

The FREE seminars are held at Currawong Bush Park conference room, Reynolds Road, Doncaster east. Melways Map 34 H6, starting at 7.30pm. Refreshments provided. Sponsored by Manningham Council.

## A LOCAL FERN- DOWNY GROUND FERN

John McCallum

The Ground-fern family comprises a whole suite of plants that have the same basic life form as the very familiar Austral Bracken (see BICA Newsletter No 46). That is they all have a creeping underground rhizome, have thrice pinnate fronds and stand from about 50 cm to one metre tall.

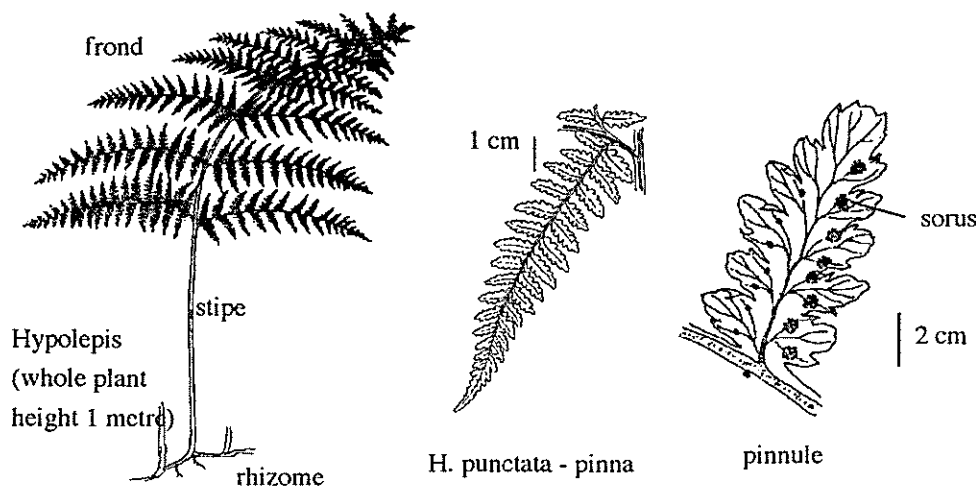
The genus *Hypolepis* (the name refers to the sorus being situated under the scale-like modified leaf margin) is represented in Victoria by five species, three occurring in the Yarra Valley.

*H. punctata* (Downy Ground-fern) is common along stream sides or clearings such as the edges of car parks where it forms quite dense stands.

The fronds are erect, triangular (like bracken) and are a soft green colour. The young fronds in particular are covered by fine sticky hairs. The stipe is olive to dark green and again, particularly in a young frond, densely hairy. The creeping rhizome is stout, up to 15mm diameter and quite fleshy. The sori (bundles of spore-cases) barely covered by the reflexed edge of the pinna, are a rich rust colour

In the local area *H. punctata* is to be found along stream-sides. It is very easy to find where Westering Road crosses Sugarloaf Creek.

All *Hypolepis* species are easily grown if you have enough water. They are generally too large for pots. They do, however, make a nice meal for the usual plant predators that we are lucky enough to have living with us!



BICA Newsletter July 2000

## BOOTBENDERS

Carol Bonny

A beautiful winter morning, fourth Sunday of the month and five boot benders car pool to Jumping Creek Reserve, dump a car and then travel on to Homestead road Wonga Park for the start of our monthly walk. As we ascend Mount Lofty we pause and discuss the progress of the Heritage Golf Club and marvel at the views to the east before we turn to look out over the Bend of Islands. On reaching the highest lookout point we watch a beautiful little raptor hover above us. We identify the visible houses in the ELZ before we move down the track. Lots of chatter and plant and animal spotting fill the time before we reach the new bridge over Brushy Creek where we have a yarn with Glen Jamieson, ranger at Warrandyte State Park. He joked that we should get a move on as we have a long way to go and the gate where we have left Karyn's car will be closed at 5pm. He assured us that he would make sure that didn't happen as it was his job to lock up that day. The weather continued to get better and layers of clothes began to be peeled off. Lunch was enjoyed opposite the rapids at the Bend of Islands opposite lower Catani. We relived the dunking that we suffered on the Easter Canoe trip. Next stop was opposite Claire Watson's. It is great to view places that you know in your area from the other side of the river. Marie showed us the koala that has been in the same tree each time that she has led walks over several years, we joked that maybe it was stuffed. The last leg of the walk was varied and we had many discussions about where we were relative to our side of the river. The trail became difficult to find in the next section, Marie and Alan were out in front calling to me through the dense Burgan, I would then call back to Jenny and Karyn. In a badly weed infested section we came across another ranger, David Van Bockel, who was monitoring a test site of Bridle Creeper (*Smilax*) weed infestation. What an environmental disaster this introduced plant is but the Bridal Creeper Leaf Hopper has been released at some sites in the Warrandyte area so all may not be lost. The sounds of voices meant the carpark was near. Great walk, great company, great day.

Come join us sometime. Boot benders is held on the fourth Sunday of the month. For details phone Marie Krause 9712 0498 or Carl Bonny 9712 0648

## ANOTHER BENDERS BABY (WELL ALMOST)

A delayed welcome and congratulations to Jenny & Neil Taylor for their grandson Joel Joseph.

# SO YOU HAVE FOUND A YELLOW ORCHID!

**John McCallum**

Spring is here and you've found a yellow orchid. You dig out the Round The Bend Conservation Co-operative's trusty field guide, augmented by Frank's nifty index. Which one of the six yellow-coloured orchid species have you found?

## Is It An Orchid?

Orchids are flowering plants in the group that have three fold symmetry. Lilies, grass-trees, irises, grasses and sedges all belong to this group, which botanists call the Monocotyledons. There are three sepals (outer floral segments) and three petals (inner floral segments). In lilies such as our common Yellow Star the sepals and petals are often very similar, although they can be distinguished by the fact that they are in two whorls. The outer whorl comprises the sepals, the inner one, the petals. (Diagram 1)

The basic plan of an orchid flower is quite distinct. One floral segment is very specialized in its structure and function. It is the labellum or front petal and its structure is often a key to the identification of the species. The sepals and the other petals are also often very important in diagnosis.

Further, orchids have a very distinct arrangement of their reproductive parts. Instead of distinct stamens and an easily recognizable stigma perched atop its style, they have a structure known as the column, which is made up of both male and female reproductive structures. The structure of the column varies from species to species. The overall shape of an orchid flower follows bilateral or two-sided symmetry, distinct from the radial symmetry of a flower such as Burgan. (Diagram 2)

## Which Yellow Orchid?

If you are very lucky you will have found a Twisted Sun Orchid. Sun Orchids, (genus *Thelymitra*) depart a little from the orchid norm in that they have petals and sepals that are fairly similar, giving them an appearance of almost radial symmetry. See Photo 46 of the Co-op's orchid book. The flowers only open on sunny days. More likely you will have found a member of the genus *Diurus*, which sometimes have brown markings on the yellow petals or sepals. *Diurus* means "two tails" and refers to the front (lateral

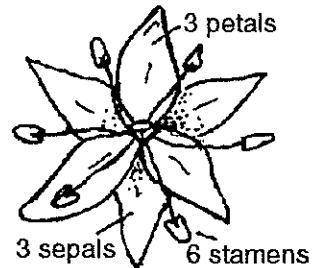


Diagram 1  
Generalised  
lily flower

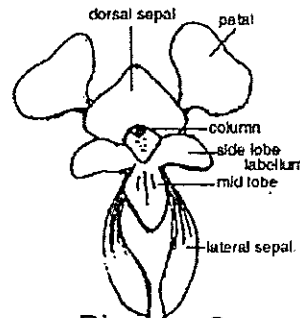


Diagram 2  
Generalised  
*Diurus* flower

sepals) which are more or less elongated and hang down each side of the labellum. They sometimes go under the common name "Doubletails".

## Which *Diurus*?

Here are some things to look for when identifying the species in this genus that have been recorded on the Round the Bend Conservation Co-op.

## Flower Colour

*D. lanceolata* has mainly yellow flowers with a few brownish streaks. All others have brown or red markings. *D. sulphurea* has two distinct brown marks at the base of the lateral sepals. *D. pardina* has brown spots and blotches on most floral segments.

## Leaves.

*D. lanceolata*, *D. pardina* and *D. x palachila* have a loose tussock of thin leaves while the other species have fewer more robust leaves.

## Petals

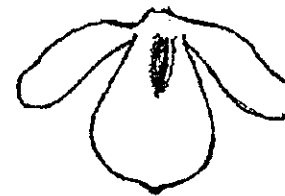
*D. sulphurea* has ovate petals that are more or less erect. *D. pardina* has markedly stalked petals that are upright or reflexed. The other three have spreading petals.

## Lateral sepals

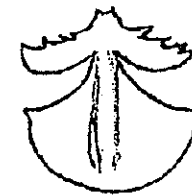
In *D. lanceolata* these are usually parallel. *D. corymbosa* has linear strongly downcurved lateral sepals. *D. pardina* has them crossed.

## Labellum

This is the front petal and is a very distinctive feature in orchid flowers. It usually has three lobes and the shape and relative size of these lobe is important (Diagram 3). The labellum often has distinctive markings and/or small structures called calli (sing. callus). These pictures of the labella of our *Diurus* species are not to scale.



*D. corymbosa*



*D. x palachila*



*D. lanceolata*



*D. pardina*



*D. sulphurea*



## A KEY TO DIURUS SPECIES ON THE CO-OP

I have put this little key together to try to steer people who wish to identify Diurus species towards the important characteristics. I have based it on the features used in the key to Victorian species of Diurus in Backhouse and Jeans. See how it goes and let me know whether it works or not..

1. Flower mainly yellow, petals narrowly elliptical and spreading horizontally. Labellum mid-lobe much larger than the side lobes. *D. lanceolata* (Golden Moths)
1. Flower yellowish with brown or red blotches or suffusions, petals ovate to orbicular and more or less erect. Labellum mid-lobe not much larger than the side lobes.. Go to 2
2. Callus on labellum consisting of one central ridge. Go to 3
2. Callus on labellum consisting of two basal ridges. Go to 4
3. Labellum lobes similar in length, callus on base of mid lobe, flower yellow with bold markings.. *D. corymbosa* (Wallflower Orchid)
3. Labellum mid lobe twice as long as central lobe, callus extends well into mid lobe, flower yellow with two prominent brown blotches. *D. sulphurea* (Tiger Orchid)
4. Labellum mid lobe flat, fan-shaped. *D. x palachila* (Broad-tip Diurus)
4. Labellum mid lobe flat, folded longitudinally at a right angle. *D. pardina* (Leopard Orchid)

A good book to use for more extensive orchid identification is The Orchids of Victoria by Gary Backhouse and Jeffrey Jeans, MUP, 1996.

## MOUNT LOFTY ON FIRE!

For those of us that live adjacent to Lofty it is usual to keep an eye on what is happening on the mount. Fire is usually a concern but on the 29 March we watched with interest as Parks Victoria staff conducted a control burn as part of the re-vegetation process. The Gurney verandah was an excellent vantage point to photograph and observe the ten acre burn. It was interesting to watch the varied response of the clumps of Burgan. Some caught fire instantly and disappeared in flame, others did not catch at all. It seemed to depend on the amount of grass fuel available to cause the Burgan to catch. The result was a clean and uneventful burn. With a shower of rain a week later the black scar was soon covered in a green carpet. We watch with interest to see the long term results. Parks Victoria intend to conduct a burn next year on another Lofty slope

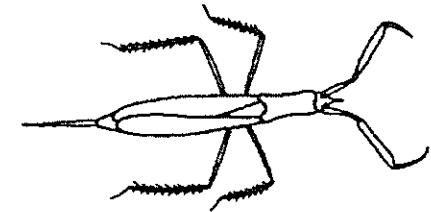
## LIVE LOCAL PLANT LOCAL

Alan Bonny

The Nillumbik Shire have released the new and revised edition of their publication "Live Local Plant Local". The book emphasizes the importance of indigenous vegetation to conserve the integrity of the regional environment and specifies plants suitable for the shire. I point out that not all plants specified are appropriate (or legal) for the Environmental Living Zone. Our planning scheme requires local provenance species only (with the exception of a kitchen garden). For the ELZ a comprehensive species list is contained in the ELZ information package or can be obtained from BICA on request. Live Local Plant Local also contains a list of environmental weeds and it is disappointing to see some of these represented in our area. Cootamundra Wattle, Agapanthus, Bluebell Creeper, Sallow Wattle, Belladonna Lilly, Bridal Veil Creeper, Asparagus Fern, Bonesced, Silver Pampas Grass, Spotted Gum, Red Hot Poker, Honeysuckle, Madeira Winter Cherry, Blue Perriwinkle, Ivy, Monterey Pine and lots more. Get a copy from the shire and have a look or ask for help to identify if you are not sure.

## WATER WATCH

Peter Gurney



Almost every month for nearly three years BICA members have been monitoring the water quality at four sites along the Yarra. Monitoring is done using a kit and instructions provided by the Nillumbik Council and the results are recorded and passed back to the Council for compilation along with other Waterwatch Groups elsewhere in the Shire. The results show that the Yarra has fair to good water quality (but not very good or excellent) at the various sites, with quite marked variation in some of the tests from time to time, especially following rain with consequent urban run off.

Recently we have recruited two new teams of water testers and we have two further Waterwatch sites to monitor. We now cover the Yarra upstream and downstream from the Heritage Golf and Country Club development, upstream and downstream from the Brushy Creek confluence, and also upstream and downstream from the Watsons Creek confluence. We also test one site on Watsons Creek.

Many thanks to the original Waterwatch team of Ed Car, Ross Henry, Peter Gurney, Carol and Alan Bonny and welcome to the new Waterwatchers: Annie Skewes, Sally Timmins and Anurag Gershi.

## ARCHAEOLOGICAL SURVEY OF THE ELZ

Phillip Edwards

The archaeological survey of the ELZ is up and running, with the official parts of the procedure having been completed. Firstly, a permit was obtained from Aboriginal Affairs Victoria, and then a separate one from the Wurundjeri Aboriginal Community. The final step was completed by Daryl Taylor at Nillumbik Shire, who graciously managed to arrange the administration fee required from the Wurundjeri Aboriginal Community permit. The survey period runs from May 30 through to October 31, 2000. So far, I have been working along the Yarra River on lower Catani. I have noticed that the surface distribution of natural quartz is patchy, requiring intense scrutiny to search some areas, but less time for others. Quartz was commonly used by Koori stone knappers, but it fractures poorly, and when doing so it often imitates the natural fracture patterns of the stone. Therefore, most of our putative quartz tools have had to be tossed back. We have found a couple of persuasive ones though, and these emanate from the Watsons Creek area, where Dylan Osler led me to several small scatters of flaked stone tools he had found on his ramblings.

Numbering between two and seven pieces of grey silcrete in a scatter, these small and unobtrusive sites are reasonably variable. Some contain tiny scrapers, and others have cores for flaking small stone blades. Already we can say that the types and styles of manufacture of some of the tools are diagnostic enough to relate them to the 'small tool tradition' which was characteristic of south-eastern Australia in the past 4,000 - 5,000 years. The most distinctive item found so far was a broken backed blade, spotted by Joanne Rockwell. Joanne and Jacob Rockwell have been a great part of our small team in the recording, photography, and measuring of stone tools with calipers. While finding the sites can be quick, the recording takes patience and concentration amongst the distractions of a fine bush day.

Another aspect of the survey is recording and tracking down items found by residents long ago. For example, Peter Oyston showed me the spot at his place at the end of Ironbark Rd where his predecessor, Sandy Lowe, chanced upon a fine edge-ground axe while digging on the inner, sandy Yarra bank many decades ago. An unusual story surrounds a very recent looking scarred tree, also on Peter's property, carved in the traditional way. This was cut some years ago by Ghanurare Waitari from the Injibunji people, on a visit from Port Hedland. And so, the archaeological record continues in the making, which leads me to think of the archaeological record modern residents and (mostly) casual visitors create in the ELZ. This will be the future archaeologist's bread and butter, but at present it's mostly unsavoury rubbish, and I have had to resort to carrying a garbage bag around. The variety of items left lying around is remarkable: golf balls shanked deep in to the forest, old threepences, and suspicious-looking rows

of garden pots lying in remote, moss-covered vales.

We plan to have a BICA field day in August to look at some artefacts on the ground. Please come along; or phone me on 9712-0564 if you want me to check any artefacts you have found, or examine any bush trails or promising leads. For the many who have left their contact details with me, I promise to get round to you all.

## NILLUMBİK WEB SITE

The recent edition of Nillumbik News that was delivered to your postbox featured the Shire's new web site. It is well put together and easy to navigate around. It was pleasing to see that BICA's web site headed their list of links to environment related pages The Café Benders page from the Christmas Hills Fire Brigade site also was listed. The URLs are listed below.

Nillumbik Shire: <http://www.nillumbik.vic.gov.au>

BICA: <http://home.vicnet.net.au/~bica/index.shtml>

Christmas Hills Fire Brigade: <http://home.vicnet.net.au/~chfb/welcome.html>

## NEAR BLOODBATH AT BICA EVENT!

The feared Kamminga-Bonny axis received a shaking at the recently held BICA Trivia Night. They tied for second place with Ms R. Duff's party who, after a somewhat conservative start and a consistent second last position for most of the evening, were able to rally and come in well placed at the end.

The winning table who needed (and obtained) all the help that they could get were very excited at their win and had difficulty controlling their jubilation. A high standard of decorum was set and maintained with little unruly behaviour, although the leader of one table showed some signs of anxiety. He was last seen at midnight leafing through a large pile of answer sheets, engaged in some kind of recount.

The quiz was conducted by Mr R Millington who was a paragon of fairness and even-handedness. He was ably assisted by Mrs T Millington and we are most grateful for them both for graciously offering their home for this annual event.



## GREENCORPS AT THE BEND

**Carol Bonny**

Over the last month and in the months to come GREENCORPS have been working on Watsons Creek as part of the Natural Heritage Trust project. GREENCORPS provide an opportunity for young people to become active in taking care of the environment and gain some environmental expertise. Work days have removed infestations of Ivy and other weeds from the culvert in Calwell Road and collected 24 bags of Tutsan and Watsonia from the creekside upstream from Oxley Bridge. An introduction and a tour of the Bend of Islands has been provided as well as a weed walk along the creek with Ranger David Van Bockel from Warrandyte State Park. To reinforce the value of our section of the creek David identified a locally rare plant *Cynoglossum latifolium* (Forest hounds tongue). David also assisted with updating our weed mapping and joined in on attacks to various weeds. We look forward to the continued help from the Greencorps group and take this opportunity to thank them and the "locals" who have supported the group with their time or a cuppa and cake. Thanks to Marg and Mick, Jenny, Marie, Pamela and Robyn. If you can provide a cake or some time please contact Carol Bonny to arrange dates etc. 9712 0648.

## WHAT'S BEEN GOING ON WITH LANDCARE?

**Peter Gurney**

Heaps, is the answer. We have had a number of energetic working bees since the last newsletter and most residents of the ELZ will have noticed the plantings on Henley Rd and at the lower Catani intersection: completed in May. We removed a number of exotic species from the road verge and have replaced them with indigenous plants, having planted many more plants than we removed. The planting sites have been temporarily fenced to allow the seedlings to become established with the fences to be removed in the next year or two. We have also continued our work at Oxley Bridge and are very pleased to see the success of our earlier plantings and weed control work. The primary weed of this site has been Angled Onion, but we can now clearly see that there are many fewer plants than in the past and we are now able to control the weed around the bridge using hand weeding methods. Previously we have used a combination of hand weeding and herbicide.

Over the next couple of months we will be working on Bluebell Creeper in Catani Blvd (18th July) and back to Watsons Creek in August.

Our work on Watsons Creek has been substantially reinforced by the efforts of a team of Green Corps workers in recent weeks. This team has been provided by the National Heritage Grant funding arranged and coordinated by Margaret Burke of the Osborne Rd Land Care Group in Warrandyte to improve the Watsons Creek wildlife corridor. A

number of ELZ people have been supporting the Green Corps Group by providing encouragement, morning tea and working alongside them. Many thanks to all; special thanks to Carol and Alan Bonny who regularly provide support, refreshments, encouragement and labour to this project.

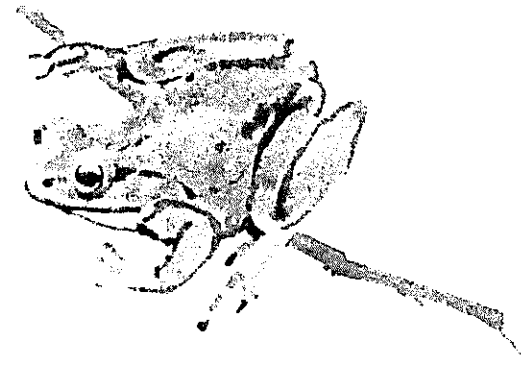
The stretch of Watsons Creek between the Yarra and Calwell Rd is a gem. Come and join us working along the creek and just see how beautiful and intact the creek ecosystem is. It is easy to imagine how Victoria would have been prior to European settlement when you are standing below the magnificent Manna Gums and Candlebarks, looking over the understorey plants and observing the fantastic variety of bird life and animal life active along the creek. It is very worthwhile work to protect the creek and its surrounds from weed invasion. Creek working bees are held the third Sunday afternoon every second month, the sign tree always has details.

## FROGS

**John McCallum**

We need more good records of amphibians and reptiles from the Environmental Living Zone. We have a number of Wildlife Atlas records from the general area but are trying to build up a list for the Bend of Islands. If you encounter any frogs during this wetter part of the year Steve Craig (9712 0029) or I (9712 0319) would like to be able to identify them. They can be kept in an ice cream container with a small amount of water for a while and can be released where they were found after identification.

If you are interested in finding out more about our frogs get hold of a copy of the Frogwatch Field Guide to Victorian Frogs by Hero, Littlejohn and Marantelli. It is published by and available from DNRE.



Picture by Hilary Jackman

## WINTER BIRDS

Shiela Dixon

I'm always aware of the changeover of birds in the winter in the same way there is a different outlook in the flora department. Most noticeable with the birds are the rainbow lorikeets. They are all over the place at the moment and especially live in the Stringybarks. I worry about them for so many of them have dieback and what are the lorikeets going to do if they go?

Just recently I heard a bunch of Gang Gangs creaking their doors down by the river. That's a rare one for me. And not forgetting the old Powerful Owl woo-hooing to the east of Barb's house. Then one early evening Barb and I were sitting having a quiet one on her back deck when 35, yes 35 Yellow-tailed Black Cockatoos all came and perched noisily in the trees round about. I reckon there must be wattle grubs around at the moment. Isn't it amazing what large chunks of hard wattle wood they leave around the trees?

The Mags are acting up too at this time. Lots of shrieking and yelling as whole families sort out their territories for Spring. Great gangs of them making out they are F-III'S and diving on each other from a great height. I love the Mags they are my favourites.

Then when I get up at 6 a.m. I hear the yellow robin. As a kid we called them the bush canary and they used to hang around when we dug worms. We didn't hear them make any sound until I grew up and became a lady. Alright, John M.! Now I hear them only in the night or early in the morning making a loud chock-chock noise down by the river. A very loud noise for a little bird.

Walking across to Barb's the other evening I was suddenly set upon by a very nasty gang of Blue Wrens. They were everywhere, leaping about and sounding very busy. I hadn't realized they were here in such force in the winter. With our peculiar weather though for all I know they were getting ready for spring.

One last bit which concerns my bellbirds. They won't bathe in the bird bath now unless I empty it and put fresh water in. I mean, really!

## INDEX FOR ORCHID BOOK

Frank Pierce has produced a nifty little index for the trusty little orchid book that the Round The Bend Conservation Co-op published about a year ago. It also includes a reference for the likely flowering months for each species. It is enclosed with this newsletter and the instructions are almost foolproof. If you have one of the limited edition books with double first and last pages, don't forget to take account of this when using the index!

## COUNCIL MOVES

Alan Bonny

You may have noticed the item in the local papers regarding the successful prosecution for the illegal removal of trees in the Diamond Creek area. It's good to see the council (and the courts) taking vegetation retention seriously. Our Bend of Islands planning scheme is stricter than the rest of the Shire and it is timely to remind all that unauthorized removal of any vegetation is not permitted. This includes ground cover, shrubs and trees living or dead. The planning scheme also specifies that local indigenous vegetation only can be planted in our area and non-compliance may incur an unfortunate response from the council. It's your choice.

## SUBS NOW DUE

If you are not up to date with your membership subscription you will have noticed a red sticker on the label. A membership form is included on the cover of this Newsletter and BICA's address is on the mailing label.

## FROM THE EDITOR

Once again, thanks are due to the many contributors to this edition of the BICA Newsletter. Contributions are welcome from anyone and can be submitted in any format including email to [mccallum@minopher.net.au](mailto:mccallum@minopher.net.au) JM

## LAND FOR WILDLIFE

We finally got around to applying for Land for Wildlife registration and I can recommend it to all. Living in the Bend of Islands Environmental Living Zone is halfway to complying for the registration but it is worthwhile to be evaluated to review what you are doing or what you should be doing. The Natural Resources and Environment officer was pleasant and knowledgeable and helpful as she reviewed our property. With your registration you also get ongoing support and information via the Land for Wildlife Bulletins. If you want more information or an application form contact the Department of Natural Resources and Environment or Alan and Carol Bonny. 9712 0648

No.	Common Name	J	F	M	A	M	J	J	A	S	O	N	D
15	Beard-orchid Naked										1	1	
17	Beard-orchid Purplish										1	1	
16	Beard-orchid Red										1	1	
14	Beard-orchid Slender	1											1
18	Bird-orchid Common										1	1	1
23	Broad-tip Diuris										1	1	
2	Caladenia Blue								1	1			
6	Caladenia Bluebeard								1	1			
11	Caladenia Early								1	1			
7	Caladenia Musky									1	1	1	
12	Caladenia Tiny									1	1		
4	Caladenia White										1		
25	Duck-orchid Large										1	1	
22	Golden Moths									1	1		
34	Greenhood Alpine									1	1		
36	Greenhood Blunt									1	1	1	
39	Greenhood Dwarf								1	1	1		
45	Greenhood Large Autumn			1	1	1							
40	Greenhood Nodding								1	1	1	1	
42	Greenhood Red-tip			1	1								
37	Greenhood Slender										1	1	1
38	Greenhood Tall	1							1	1	1	1	
41	Greenhood Tiny			1	1	1							
35	Greenhood Trim						1	1	1	1			
9	Hare Orchid										1	1	

FEED TABS THROUGH INSIDE OF COVER AND TAPE TO TITLE PAGE

CUT LINES

No.	Common Name	J	F	M	A	M	J	J	A	S	O	N	D
26	Helmet-orchid Slaty								1	1			
19	Helmet-orchid Veined								1	1			
20	Hyacinth-orchid Rosey	1	1										1
33	Leek-orchid Short-lip										1	1	
24	Leopard Orchid										1	1	
13	Mantis Orchid										1	1	
43	Maroonhood									1	1	1	
29	Midge-orchid Sharp	1	1	1									
1	Mosquito Orchid					1	1	1					
32	Onion-orchid Common											1	1
31	Onion-orchid Slender										1	1	1
28	Parson's Bands			1	1								
3	Pink Fingers										1	1	
44	Ruddyhood Small										1	1	
5	Spider-orchid Plain-lip									1	1	1	
10	Spider-orchid Small									1	1		
8	Spider-orchid Wine-lipped								1	1			
50	Sun-orchid Salmon										1		
49	Sun-orchid Slender										1	1	
47	Sun-orchid Spotted										1	1	
48	Sun-orchid Tall											1	1
46	Sun-orchid Twisted									1	1		
27	Tiger Orchid											1	1
21	Wallflower-orchid										1		
30	Wax-lip Orchid										1	1	

## **Bend of Islands Conservation Association Inc A11100A**

If undeliverable, please return to:

BICA inc,  
C/- P.O. Kangaroo Ground  
Victoria 3097  
AUSTRALIA

The next major event is the general meeting to be held on August 6  
Don't forget the Working Bee at 2.00 pm on the third Sunday and the Bird Survey at 8.30 am  
on the second Sunday of each month. Dates are on the web site.

Field Night on September 16

Pub Walk on October 21

Next Newsletter early November; start writing now.

AGM on November 26

### **Membership Renewal or Application**

**Name:**

**Address:**

**Phone:**

**Email:**

Full membership	(\$10.00)
Concession membership	(\$6.00)
Family membership	(\$20.00)