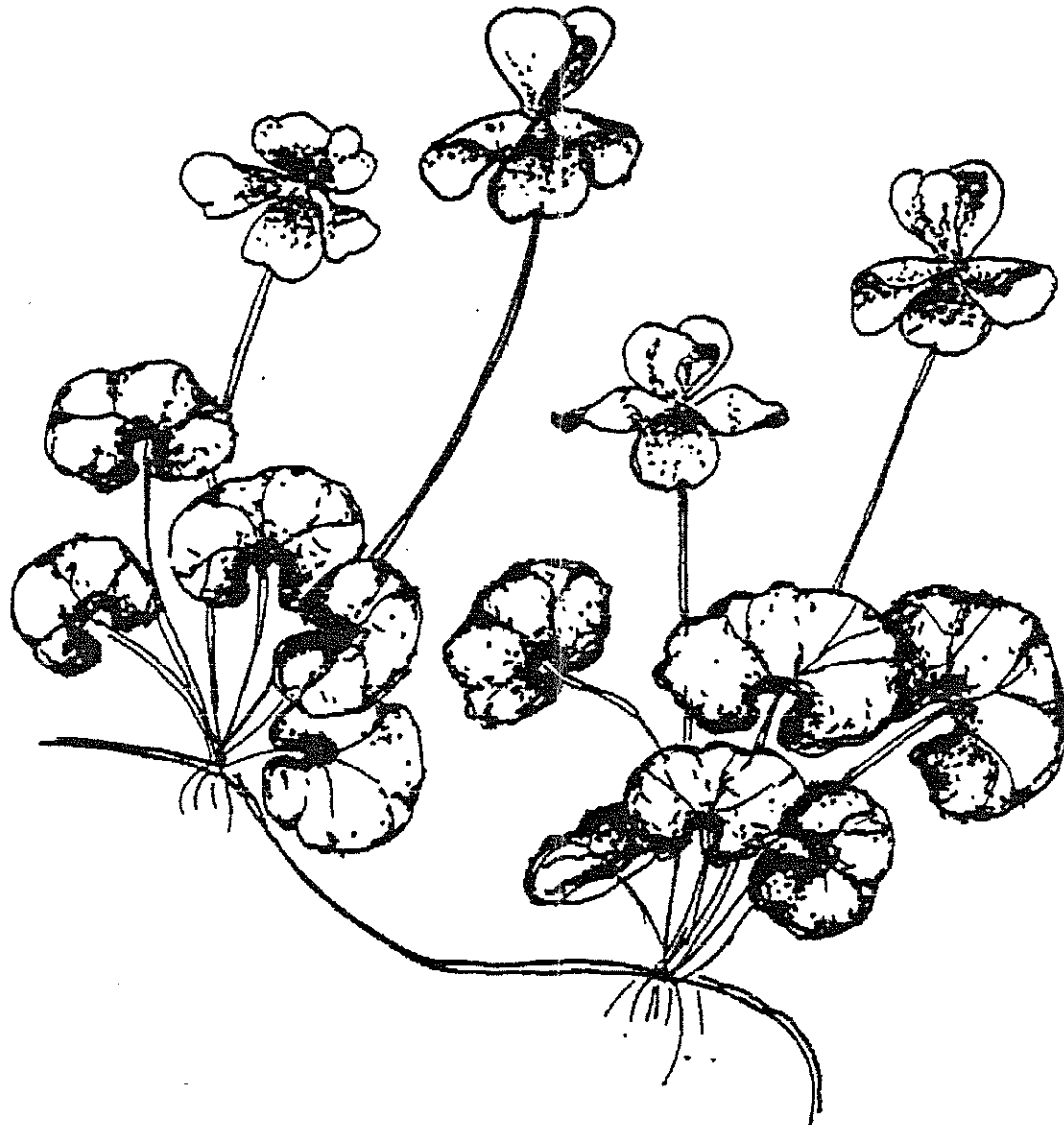


BEND OF ISLANDS CONSERVATION ASSOCIATION INC. NEWSLETTER

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

Number 35



What Native's Flowering?

Botanical Name: *Viola hederacea*

Common Name: Native or Ivy-leaf Violet

Family: Violaceae (Violet family)

A quick growing dense ground cover, 15 cm high and 1 - 2 metres wide.

The plant grows in heavy clay soils, preferring shady or sunny moist conditions.

The plant spreads by runners or stolons, which are basal stems running just above or below the ground surface, sending off roots at intervals. This layering technique makes this species a good soil binder and an effective cascading plant on embankments.

The leaves are light green, kidney-shaped with wavy edges and about 3 cm long by 4 cm wide, deeply cut where the stalk joins the leaf.

Small, white, hooded flowers with purple centres are held above the leaves on delicate flower stalks, 10 cm tall. The flower has a nectar spur, or a small nectar holding pouch, behind the flower to attract pollinating insects. The flowers are not perfumed and occur for most of the year.

Propagation is by seed or division

Cric Henry

President's Report

I'm sure that we are all inspired from time to time by what we see in our backyard. The Bend of Island provides amazing experiences if you want to take advantage of them.

Recently Carol and I were enthralled watching the birds in their bath. Not the choughs or rosellas in the bird bath but one of our resident Wedge Tailed Eagles splashing around at the edge of the dam.

BICA is committed to the preservation of the ELZ to allow us all to enjoy the experiences that the Australian bush can provide. For us to be effective we need your support, both financially and actively. We need your participation and involvement.

If you haven't already renewed your membership for 1996 please do so now. Support and participate in BICA events and activities. They are structured to be enjoyable and educational.

The ongoing strength of the area needs your input. Issues such as road sealing, potential subdivision of land and other planning issues can be influenced by community input.

The last News-sheet highlighted a subdivision proposal for a property in Skyline Rd. If you believe that this is an important issue it is not too late to voice an opinion. Your input can influence decisions; be in it! I'm going back up the road to the bird bath!

Alan Bonny

Ducks Count

The laying of mud bricks was up to waist height on the first floor when the work was interrupted by the chattering of a female wood duck. The duck emerged from the top of the red box, a relic from the 1962 fire, flew to the ground and continued its chatter until the progeny emerged and took their first great step. At the instigation of Mum down on the ground the tiny fluff-balls took the three metre plus drop onto the bare clay and shale surface that is typical of this area. Three ducklings took the leap and quickly moved to the protection of Mum duck. She took them in tow and continued her chattering until number four emerged and was coaxed to join the group on the ground. They moved away still chattering noisily until a reversal of direction brought the group back to the tree. The persistence of Mother was finally rewarded when number five was coaxed from its lonely nest to teeter on the edge of the tree until taking that first BIG STEP. With all five young in tow Mother started the long and slow trek to get the group to the safety of the Burgan near our dam.

We spent a total of about four hours watching the family traversing the fifty metres from the nest tree to the edge of the dam. Dad flew in late in the afternoon and relieved Mum of the crew for the night. Next morning they had moved on, probably down the gully to the river. We later spotted a family with five young and like to think they were our group.

There are two lessons to be learnt from this anecdote. The first is the importance of habitat trees. That tired old stump that barely survived the 1962 fires now provides an essential nesting place; every component of our environment is important in some way or other.

The second and most intriguing information is that Wood Ducks can count! Mum wasn't leaving until all five members of her clutch were in tow.

Alan Bonny



Coming Events

Sunday May 19: Working Bee. Site and topic to be advised. Watch notice boards.

Sunday, June 2 World Environment Day. Philip Vaughan is now a registered 'indigenous seed collector' for BICA and in conjunction with the BICA landcare/working bee group will be launching the BICA seed propagation project. This will include a demonstration of seed propagation techniques.

Peter Gurney will demonstrate the art of exterminating pine trees in Ironbark Rd. He will demonstrate the 'drill and fill' method with the opportunity for everyone to have a 'shot'!

Program for the day.

10.00 am: Pine eradication workshop. Meet at Gurney's home and car pool to Ironbark Rd.

11.00 am: Launch of BICA propagation project at Gurney's home. Morning tea provided. Bring a mug and a chair. If you are interested in helping to propagate plants this is for you!

2.00pm: BICA general meeting. This will be held at Tim & Laura's, Skyline Rd. Bring a mug, a chair and some afternoon tea to share. The agenda includes the discussion of the formation of a Bend of Islands Land for Wildlife Group.

BICA committee

Back There in Spring.

I know that Spring has long since gone but there were some nice things to write about now that Autumn is with us. I put these thoughts down early in September when it was so cold that snow had fallen in the nearby hills and even a little around here.

Opposite Weller's Pub there is a dam with an island in its middle. On one end of this island sits a Spur Winged Plover (Masked Plover) on a mere scrape in the grass. After three weeks she produced her babies and only then did I see her move. Dad stood nearby gazing intently at his new family while Mum went off in search of tucker. Unfortunately after a couple of weeks they were gone. I suspect a calamity had befallen the family for I didn't see them again.

In Malcolm White's paddock there sit two bulls. They are companions and are generally seen whiling the day away with dreams of pleasures to come. Recently I saw them with the herd of cows. I didn't actually catch them at it but one day I saw one of them giving a cow a good sniff. She was standing there with an utterly bored look on her face and was totally unmoved by any thoughts of passion. In fact I think she was chewing gum at the time.

Early in August I noticed the larger birds like magpies and so forth getting stuck into stick carrying for nesting. My theory is that when their chicks are hatched there are plenty of smaller birds ready for the picking. I know our bellbirds disappear with gay abandon around this time and the same goes for swallows.

I saw something interesting the other day. It was a Magpie couple with the female actually behaving like an immature bird, squarking and begging from the male. I suppose that this means nesting has begun or is about to. I bet there will be no more of that when the kids arrive.

Then we had the September coming of the Yellow-Tailed Black Cockatoos. According to Barb's notes it's every August or September without fail. The big white wattle grubs are immediately attacked in the trees and wood chips are scattered everywhere. Then there was the sound of the first cuckoo, the Pallid. Two days later it was followed by the Fantailed, always on time. I love the way birds are so predictable.

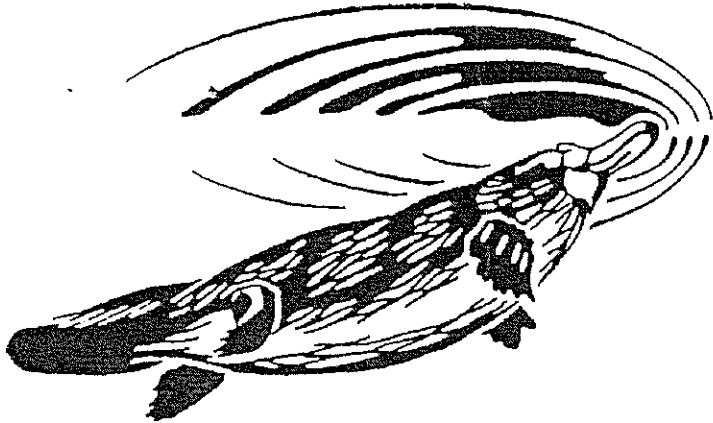
Well, it just shows you..... we can have Grandes Prix, Jeff Kennett, other politicians and colds while birds ignore all these unfortunate events and just go about their business in the same old way.

Sheila Dixon

Platypus

Australian Platypus Conservancy is a non-profit, non-government organisation dedicated to protecting and monitoring our platypus population. There is a Friends of the Platypus group providing information on our most amazing animal as well as field days and information days. The conservancy is also collating sightings and your observations would be welcomed. For further details contact me on 9712 0648.

Carol Bonny



Have Your Say

Feel like having a say in print? Can't be bothered writing an article for the Newsletter? Why not just write us a letter?

If you have something to say about any local issues or anything that you would like to ask, write us a note and we will find a space for it in the next issue of the BICA Newsletter. We will try to find an answer or obtain a comment to publish with your letter. Your comment or question may stimulate continued discussion in succeeding issues!

If you have something to get off your chest send it in to 'Have Your Say', in other words get it to Jannine Taylor (07120614) or John McCallum (97120319), both C/- PO, Kangaroo Ground 3097.

Editors

Live Local, Plant Local

Nillumbik Shire have released the above booklet again. It advises of plants indigenous to the Shire. It is good to see the use of indigenous flora promoted but it should be noted that the lists in the book refer to the Shire as a whole and are not classified according to the particular vegetation type in which they naturally occur.

For species appropriate for our area it is still best to refer to the list in the BICA folder. If in doubt we will be happy to advise or find someone who will. The Live Local, Plant Local booklet is available from the Shire Office and is well worth a read. Carol Bonny also has a small supply (phone: 9712 0648).

BICA committee

Land Sales and Rentals in the ELZ

The BICA committee provides a contact service for property sales and rental premises in the ELZ. We do get inquiries from potential buyers and people searching for rental properties. If you are thinking of buying, selling, letting or renting either now or in the future advise us of details of the available property or your requirements.

Carol Bonny 9712 0648

How regular is the BICA Newsletter?

Up to now the newsletter has been of an occasional nature, that is it is published when there is enough copy to make it worthwhile. Generally, obtaining sufficient copy entails one or two people chasing up the regular contributors and harrying the illustrators for suitable pictures. If you want more predictable publication dates we really need a steady flow of articles, comments, cartoons, letters, reports or any other material that you think might be worth including. The proposed new section 'Have Your Say' is intended to make it easier for people to contribute to our newsletter and to air for discussion issues that are of interest to our membership.

In 1996 we are aiming to issue two more newsletters after this one. We would like to get them out in late July and early November. Copy for these needs to start coming in as soon as the preceding issue is out. Start writing!

What Happens To Our Water?

It is well known that the amount of water that people use in their homes is proportional to the ease of its availability. You are certainly more frugal in its use if you have to carry it in containers from a distant source than if there is a water source outside your door. If the water is piped to your kitchen and especially if it is over a sink then it is even more tempting to use more. These days with full plumbing to several bathrooms as well as laundry and kitchen the average Melbourne household uses about 3000 litres of water per week. Most people connected to mains water probably have no idea of how much they use but those who depend on tank water and sometimes have to buy the odd load during dry spells are often acutely aware of their water consumption. Nevertheless to meet modern standards there is a certain amount of water that even country dwellers must use and, of course, dispose of!

About 80% of households in Victoria are serviced by 170 centralised sewage treatment plants. This means that once the water has been used it just disappears down the plughole and is someone else's problem. Of these 170 plants around the state 84 discharge treated sewage into inland waterways, 65 to the land and 21 plants discharge into coastal waters. In the ELZ where nearly all households have septic tanks and where there is little likelihood of connection to a centralised sewerage system, we are all discharging waste water onto our properties with potentially quite specific effects on the local ecology and will continue to do so for some time.

In a septic tank system of waste water treatment used water flows via gravity to the tank, where solids settle to the bottom to form sludge or float to the top to form a scum layer. The septic tank then reduces the volume of these solids by bacterial decomposition in anaerobic conditions. This means that the micro-organisms in the tank, thriving in the absence of oxygen, breakdown the toilet waste, soaps, fatty materials in sink water and other solid or liquid organic materials that are present in our waste water. The process produces a solution of mineral salts such as nitrates and phosphates. Gases are also produced during the breakdown process. Reduction of solids in a septic tank is about 40%.

As more used water from the house enter the tank, it pushes an equivalent amount out the other end. This effluent contains bacteria and other microbes, all of the dissolved minerals that resulted from the decomposition of materials in the waste water as well as some organic materials. Effluent then flows, again by gravity, into either an absorption trench or an evapo-transpiration system.

In an absorption trench, either agricultural or slotted PVC pipe about 100 metres long, the effluent is further treated by bacteria and other microbes. This is an aerobic process, in other words it takes place in the presence of oxygen and is further helped by soil bacteria. The water is absorbed into the sub-soil and is not generally a problem unless it surfaces somewhere.

Evapo-transpiration systems (transpiration beds or ReIn drains) are designed so that the plants in the bed take up and use ('transpire') the water. Combined with evaporation from the soil itself, this process is capable of disposing of septic tank outfall in drier climates. In this part of the country the rainfall is just too much for kind of system to work well and a transpiration bed would need an overflow into an absorption trench.

Studies have been done and have shown that large numbers of domestic septic systems perform inadequately. The main reasons have been:

Failure to desludge the tank (this needs to be done every few years).

Overloading of the trenches by subjecting them to too much used water.

Allowing rainwater to enter the trenches.

Using inappropriate chemicals (disinfectants and bleaches) that upset the anaerobic process in the tank.

Siting septic systems in areas with sandy soil or high groundwater tables or on slope of more than about 20

Adding minerals to soils increases their fertility and this is evident by accelerated plant growth. Transpiration beds are designed to exploit this fact and a number of successful vegetable gardens in the Bend of Islands are incorporated into such waste disposal systems. Harvesting the vegetables removes the minerals from the system. However where the waste water is discharged into the soil problems can arise. If the absorption trench is deep enough in the right kind of soil and on an appropriate slope absorption into the subsoil occurs and the mineral solution is dissipated adequately. More often there is a release of mineral rich water into the soil and this usually results in weed growth. Native plants have evolved to exist on soils that are low in minerals. With increased soil mineral levels, vigorous exotic species can out compete the indigenous species for space, water and sunlight.

To improve the performance of your septic system you can:

Check if the tank needs desludging (this needs to be done every few years).

Check if trenches are absorbing properly. You may need new ones.

Avoid cleaners and detergents that are high in sodium or phosphorous.

Avoid inappropriate chemicals such as bleaches and disinfectants (remember these are designed to kill bacteria and septic tanks depend on bacteria for their action!).

Consider ways to increase evapo-transpiration by planting appropriate trees and shrubs.

Investigate the need to divert rainwater from trenches by changing the surface drainage.

Monitor water use and consider modifying it, e.g. reduced flow shower roses, dual flush toilets.

Recycling Update

With the change from Healesville to Nillumbik there have been a number of changes to services including the collection of recyclable waste. This service was let out to contract and the current contractor is Maroondah Recyclers and the current arrangements are as follows.

Collection is still on Mondays with the garbage collection.

Paper and cardboard. This includes computer paper, junk mail, windowless envelopes, egg cartons, phone books and any other clean scrap paper. Must be tied in bundles or in a cardboard box. NOT in a plastic bag!

In the recycling bag you can put glass jars and bottles of any colour, aluminium cans, milk cartons, Tetra Paks and plastic containers with ANY number on the bottom.

Steel cans can't be placed in the recycling bag at the moment however they can be taken to scrap metal merchants which are listed in the Yellow Pages.

Motor oil in domestic quantities only can be taken to the Nillumbik Shire depot in Yan Yean Rd, Plenty.

Lyn Johnstone

Mount Lofty

Prior to the recent state election a press release was distributed by the office of the Minister for Conservation and the Environment, Mark Birrell which announced the long awaited integration of Mount Lofty with the Warrandyte State Park.

The press release notes the importance of Mount Lofty as '...a vital link in the Yarra River's series of conservation reserves..' and states that 'This positive result brings to an end speculation over the site's future and reinforces Warrandyte State Park's strong connection with the Yarra River'.

Mr Birrell also announced a \$100 000 funding boost for Mount Lofty. He said 'We look forward to finalising the transfer and securing the future of Mount Lofty as a priority project'

A copy of the press release is held by BICA if you want to read the whole thing. The big questions include eventual use of Mount Lofty, how the \$100 000 is going to be spent (on 'improvements'?) and when the transfer will occur.

BICA committee

Food For Thought

The attached Land for Wildlife Note addresses the issues involved in feeding native wildlife. It is something I've been thinking about for some time in regard to those of us lucky enough to live in the ELZ.

Should we feed the choughs etc.? It certainly encourages them to be *regular* rather than *occasional* visitors, but what other effects does it have on them?

Here are a few examples of detrimental effects of feeding that have occurred in the ELZ, that are more immediately obvious than those in the Land for Wildlife Note:-

- a fox took a chough from a group feeding under a verandah where they had become so familiar that they did not have their usual lookouts posted on sentry duty.
- a kookaburra was regularly fed at one house but when the occupants went away on holidays the bird started visiting a nearby house where it started attacking its reflection in the window. The bird was found dead after it had made a large hole in a flywire screen and then trapped itself between the screen and the window.
- a kookaburra has been visiting us this year that will take any uncovered food from our outdoor table, even when there are six people sitting around it. It has also taken food from the back of the car while the shopping was being unpacked. It is possible that this bird has learned its bad habits while being fed by picnickers at Sugarloaf Dam.

The aim of the ELZ is to maintain and enhance the natural environment as much as possible consistent with our residential occupation. It seems that, if we are to minimize our impact, we should refrain from feeding the wildlife.

Perhaps the choughs won't visit the house as often, but how delightful it is to come across them, in their natural environment, while strolling through the bush.

Frank Pierce

Wanted to buy.

Tim and Laura want to buy a used chain saw. If you can help contact them on 9712 0347.

Solstice Party

Tim and Laura are having the traditional celebration of the Winter at their place on 22 June from 2.00 PM onwards. BYO everything.

A Perspective on Rabbit Calicivirus Disease

Tim Ealy has provided us with a copy of a paper that he has prepared which summarises the current situation regarding Rabbit Calicivirus Disease (RCD). In it he points out that the RCD is not the ultimate answer to the rabbit problem and that careful management will be needed in order to best exploit this potential method of biological control. As is usual in implementing biological control measures, detailed understanding of the biology of the rabbit is needed.

The following table shows the immunity of rabbits of particular ages to the virus.

Age	Killed	Survive
Adults	99%	1%
7 - 9 weeks	89%	11%
5 weeks	54%	46%
4 - 10 days	0%	100%

It can be seen that young animals are immune; this immunity lasts for life. This has obvious implications as to the best time for exposing rabbit populations to the virus. The premature release of the virus, whether accidental or deliberate, was at a time when there were a lot of young animals in the rabbit population. The result was of course that a lot of immune rabbits survived the release.

The virus that causes RCD only spreads by contact, vectors (insects such as fleas and mosquitoes in this case) and ingestion. Infected rabbits only live for about 30 hours compared with many days for rabbits infected with myxomatosis. The affected rabbits usually die in their burrows. These aspects of the interaction between rabbits and RCD make the whole business of spreading the disease a little tricky!

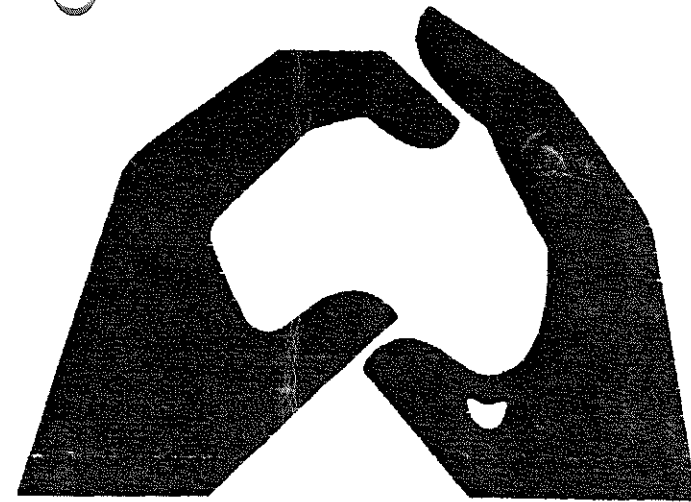
Tim concludes that in order for the virus to have maximum impact State and or Commonwealth funds must be made available to

- train operators to produce and spread the virus.
- inform farmers on vital follow up operations.
- provide extra staff and budget for works on public and private land and for increased monitoring and follow up work.
- enable more practical and theoretical research.

For more information contact Tim on 9712 0347

John McCallum

If/when the Calicivirus reaches the Bend of Islands there will be lots of pressure on the small mammal population by foxes. If you would like to join the Co-op in a fox baiting programme (Foxoff) please contact Jeph Neale 9712 0458



LANDCARE

We have recently formed the Bend of Islands Landcare Group from what was known as the Working Bee Sub-committee. Our intention is to provide an overall management plan for the ELZ, to focus activities on the primary goal of conserving the environment in which we live. Obviously, this is a long term goal but with continuing efforts we are sure it can be achieved.

We intend to introduce a number of new programs to complement the past activities of the old sub-committee. One such goal is to apply for the many grants that are available through government organisations, like the Department of Conservation and Natural Resources, if we are successful, they will provide additional monies to undertake major weeding and revegetation works throughout the ELZ.

We are also keen to initiate a program of local seed collection and propagation, to help provide plants for the proposed ongoing revegetation works. Rather than relying on a few people to grow the plants, we would like some community involvement. We need volunteers to provide a little time, energy and water, we'll provide the rest! Volunteer growers will receive pots, potting mix, fertiliser, seeds, fruit boxes and all appropriate instructions to grow healthy plants. You can grow as few, or as many plants as you like, it's up to you. Over the next few months we would like to hear from all frustrated horticulturists who would like to assist so the propagation program can get under way in September 1996.

Please contact Phillip Vaughan on 9730 1148 if you would like to help in any way.

Regards Phil

BICA Bird Survey Report

The bird survey enthusiasts have now been recording their walks in the ELZ (Second Sunday of each month) since 1989. The results of the first 64 walks were published in the last Newsletter. This report outlines the basis of the survey, some observations that can be drawn from it, and some challenges for the future.

The ELZ is rich in habitat variety - there are dry hillsides, damp valleys, river margins, billabongs, forest and cleared land. This variety gives rise to the diversity of birds seen in the area.

The BICA Bird Survey Records are classified according to the broad habitat areas in which the birds are observed.

AREA A

This covers the area generally bounded by Henley Road and the Yarra River. It consists of open Box-Stringybark of the drier slopes interspersed with damper gullies supporting Peppermint and Swamp Gum as well as the riparian vegetation of the river banks.

AREA B

This area which is generally north of Henley Road, including the Round The Bend Conservation Cooperative, is characterised by stands of Red Ironbark. This nectar producing species is an important food source for a number of different kinds of Honeyeaters. The understorey vegetation and ground litter in this dry forest seems to be the main habitat for the Spotted Quail-thrush in the ELZ.

AREA C

This includes Manna Gum and Silver Wattle stands along Watsons Creek and the open grassland known as "Yanakie". This variety of habitat provides for a rich species diversity .

Some interesting observations can be made from the records:-

The noisy birds such as Magpies, Currawongs etc., are rarely missed due to their ease of detection

As our knowledge of bird-songs has improved so has

our ability to record various species. Butcher-birds and Cuckoos are much easier to hear than see.

A number of migratory birds visit the ELZ such as the following summer visitors which come to breed ; Olive-backed Oriole, Rufous Fantail, Sacred Kingfisher and the three flycatchers.

The drought last year caused many unusual bird movements throughout the country. The Olive Whistler and the Yellow Tufted Honeyeater were seen in the ELZ and we don't have any previous records of their presence.

The ten most commonly recorded birds are the Grey Shrike Thrush, Magpie, Red Wattlebird, White Throated Treecreeper, Kookaburra, Grey Fantail, Superb Fairywren, White Eared Honeyeater, Brown Thornbill and the Grey Butcher-bird.

Each year we seem to find one or two 'new' species for our list. This is often due to improvement in our detection skills. For instance the Spotless Crake occupies at least two dams on Stevenson Creek yet we did not detect them until their amazing array of calls were learnt a year or so ago. They are heard at almost every visit to these dams but are extremely furtive and have only been seen twice.

Some birds are unlikely to be seen on our bird walks such as the Owls, the White Throated Nightjar and the Tawny Frogmouth. These are more likely to be heard at night and are only found roosting on rare occasions. In the past I have been lucky enough to see a pair of Powerful Owls roosting with their two downy young, and I once flushed three Boobook Owls which were roosting together. Bruce McCallum once found a Powerful Owl roosting with a decapitated Ringtail clutched in its talons.

Some of the unusual sightings reported in the past year are:-

- Rainbow Bee-eater at Pelling's in January
- Three Tawny Frogmouths at McCallum's on Christmas Day

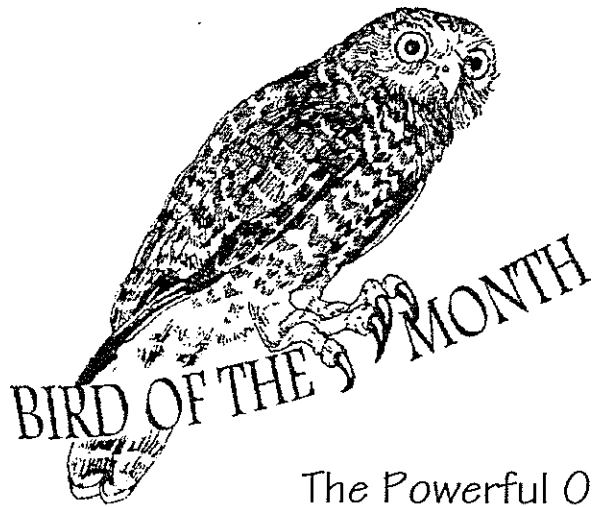
- Rainbow Lorikeets at Shelia Dixon's in June
- A juvenile Collared Sparrow-hawk disturbed after just finishing a Yellow Robin for supper on the Co-op
- Wedgetailed Eagles and Brown Goshawks breeding at Krause's in summer
- Blackfaced Cuckoo Shrike nesting at McCallum's at Christmas, their flat nest on an open branch was extremely exposed and the nest was raided, we suspect by the Goshawks from Krause's
- Owlet Nightjar in a tree hollow at McCallum's in January
- Six Wedgetailed Eagles seen flying together by Graham Dennis in April
- Darter on the river near Bonny's in August
- Whistling Kite on the Co-op. in August
- Rose Robins nesting in a gully near the Co-op.

Appended to this newsletter are two recording sheets (with plenty of space for 'new' species and notes). You may wish to photocopy these and use the annual record for listing the birds seen each month, as well as for keeping on overall list for your property. The bird recorder sheet is useful for recording sightings on a bird walk.

The page numbers refer to the SLATER FIELD GUIDE TO AUSTRALIAN BIRDS, this is the most convenient one off bird book available. The fieldguides by PIZZEY and SIMPSON AND DAY provide excellent back-up while THE READERS DIGEST COMPLETE BOOK OF AUSTRALIAN BIRDS is an excellent bookshelf reference.

We are always keen to find new species in the ELZ and are equally eager to learn more about any of the birds that are found in the area. If anyone notices any unusual species, behaviour or happenings please phone Frank Pierce (9712 0237), Robin Duff (9712 0390) or John McCallum (97120319).

Frank Pierce



The Powerful Owl

I was awoken at 6.00 am on Sunday morning the 3 March by a male Powerful Owl calling from a large Grey Box outside my bedroom window. Hoping to catch a glimpse of this supreme hunter of the night, I quickly dressed and grabbed my spotlight and binoculars and hurried after the bird which was now calling from a position about 100 metres from the house.

As I approached the tree the bird was calling from, he flew over my head and landed on a horizontal branch only about 5 metres above ground. Clearly silhouetted against the sky in the half light he appeared as interested in me as I was in him and glared back at me cocking his head from side to side. Why is it that on occasions like this you never have a camera at the ready?

Just as the dawn was breaking, the owl flew silently off in the direction of a distant gully and no doubt to his daytime roost. I returned home excited as always by a close encounter with the king of owls, determined to try and locate his daytime roost.

Later that evening, a male bird was heard calling some distance away but responded quickly to my imitation calls. Within a minute he had flown in and landed close to the house. I watched the owl for a brief period aided by a red filtered spotlight before withdrawing inside. I have learned through experience that nocturnal birds and

mammals are less stressed and easier to observe for longer periods under filtered light. The owl continued calling for a further 20 minutes before falling silent. Perhaps he had decided that he had driven the intruder away and had returned to his routine which I had briefly interrupted. The Powerful Owl is rare both at the State and National level and is one of a number of threatened species which occur within the ELZ.

With a head to tail length of 600-650 mm (20-22 inches) and weighing about 1000-1300 gms, Australia's largest owl is well named. The male bird is slightly larger than the female, but it is difficult to tell them apart as both birds are dark brown above, barred with white and pale brown and white below with bold grey-brown chest barrings (chevrons). The head is a darker brown and the piercing eyes a deep yellow. Legs are feathered and the feet (talons) are dull yellow in colour. Young birds have whiter chests and paler backs and wings. Black eye patches contrast with their white faces.

The male bird is the more vocal of the two, his mournful *woo-hoo* lower pitched and slower than the female. Powerful Owls can call throughout the year but they are more vocal during the Autumn months leading up to the breeding season starting in May, their first calls often being heard as the sun is setting.

Powerful Owls mate for life and are strongly territorial. By day they can be found roosting in protected gullies often in a Blackwood or amongst the canopy of a tall eucalypt. Each pair has a number of "roosts" scattered throughout their home range and can roost in different trees on different days, not always together but generally within calling range. Regurgitated pellets containing animal fur and bones together with the characteristic "whitewash" of the birds droppings accumulate below these roosts and provide a good clue to the presence of Powerful Owls. Powerful Owls need very large hollows in which to rear their young. These hollows take about 200-300 years to form and the owls often change nest trees from year to year. The female begins incubating eggs in June or July and after 33-38 days generally one or two young hatch.

For a further 10 weeks up until the owlets fledge, the male continues to hunt alone, providing for all members of the family

The Powerful Owl hunts at night feeding on small to medium sized tree dwelling mammals as well as the occasional bird. As many as 300 possums may be consumed by a family of Powerful Owls in one year. In the Christmas Hills area, their meals would consist mainly of Ringtail Possums and Sugar Gliders supplemented with the occasional Tuan, Kookaburra and White-Winged Chough. It's not unusual to see a Powerful Owl at its daytime roost with the remains of a Ringtail Possum held firmly in its talons which will be eaten before leaving the roost that evening.

There is still much to learn about the life style of the Powerful Owl to ensure their long term survival, particularly within the Box-Ironbark forests. We need to know more about their use of habitat throughout the ELZ, their diet, nest locations and roost sites so these areas can be fully protected. Breeding pairs at Warrandyte State Park and One Tree Hill produced two and one young respectively last year, but as far as I am aware we do not have this information for the Powerful Owls in this area. How many pairs are there and are they breeding successfully? If anybody has this information I would be very interested to hear from you.

I would like to initiate an "owl census" this year centred around recording the location, date and time of either sightings or calls of Powerful Owls in the ELZ. If you would like to participate in this exercise, please give me a call on ☎ 9712 0029. Alternatively you can contact either Frank Pierce on ☎ 9439 3196, Janet Mattiske on ☎ 9712 0237 or Felicity Faris on ☎ 9712 0501 to register your interest. If people feel they need some help in recognising the birds or their calls this can be arranged, just let me know.

Steve Craig

Land For Wildlife Group A New Initiative

A **land for wildlife group** provides a way of encouraging a group of landholders to co-ordinate nature conservation activities across a number of properties.

A group must be able to demonstrate that, as a result of their activities, there will be significant benefits for nature conservation.

FOR EXAMPLE, there are quite a few individual *Land for Wildlife* properties scattered throughout the ELZ. These properties could become members of a **Land for Wildlife Group** to achieve a common purpose such as conservation of a threatened species like the Powerful Owl or Brush-tailed Phascogale, the creation of a wildlife corridor across adjoining properties or the revegetation of stream frontage boarded by a number of properties. The landholders' properties do not necessarily have to be adjoining for them to be registered as a **Land for Wildlife Group** and landowners that currently have their properties registered under the *Land for Wildlife* Scheme can remain as individual members if they wish.

WHY HAVE A LAND FOR WILDLIFE GROUP IN THE ELZ?

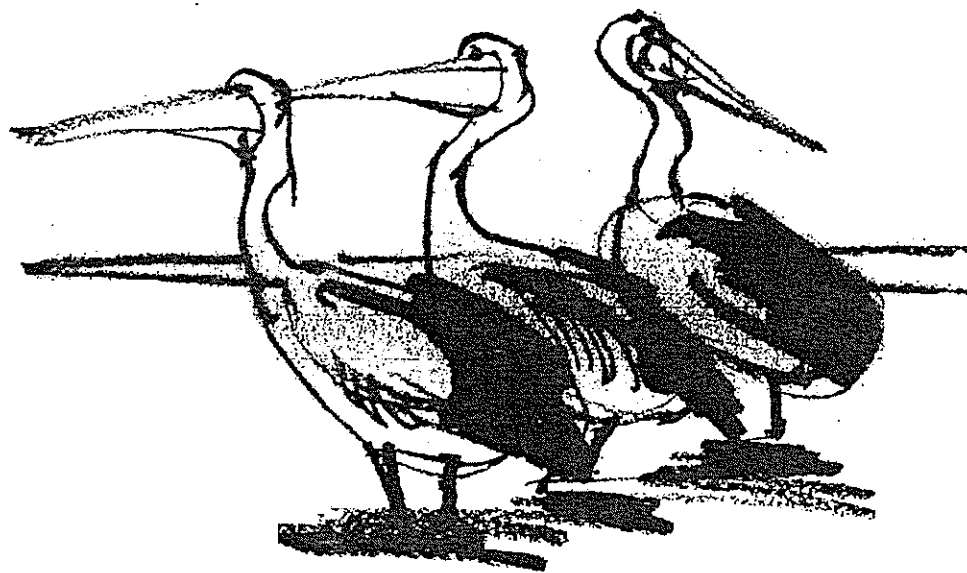
A **Land for Wildlife Group** is focused on wildlife conservation within a particular area and has different but complementary aims to a Landcare Group. BICA is a registered Landcare Group and members who have their properties registered under *Land for Wildlife* may feel there are no additional benefits in establishing a **Land for Wildlife Group**. However, there are a number of additional benefits including the following -

- group registration is particularly suitable for areas where individual properties may not qualify, but, as part of a group, are able to provide significant wildlife habitat.
- further recognition of the importance of maintaining the ELZ because of its value as habitat for wildlife including a number of rare and threatened species. This could be particularly helpful in challenging moves to “water down” the planning controls in the ELZ or in resisting future development proposals in this area. In other words, strength in numbers
- a number of people have expressed concern about the proliferation of signs throughout the ELZ and the “environmentally unfriendly” colour. If a **Land for Wildlife Group** is established in this area, it would be possible to erect one sign at both ends of the ELZ in an agreed colour, with the names of the individual members of the group listed on the sign. If this idea was introduced, it would be necessary to develop a system that could be easily updated with changes in property ownership.

- support, and assistance from the Department of Conservation and Natural Resources in all areas of wildlife conservation, the preparation of a land management plan and applications for conservation project grants focusing on wildlife conservation.

HOW DO WE SET UP A LAND FOR WILDLIFE GROUP?

If a consensus decision is made to establish a **Land for Wildlife Group** in this area, it will be necessary to make a formal application to the Department of Conservation and Natural Resources. A plan of proposed activities will need to be prepared, including the identification of areas that are to be managed for wildlife. Some on-ground works should have commenced.



ELZ BIRD RECORDER

DATE: TIME: to

WEATHER:

LOCATION:

PAGE	OBSERVERS:	
188	BEE-EATER, RAINBOW	
162	BLACKBIRD	
210	BLACK COCKATOO Y-TAILED	
182	BRONZE-CUCKOO, H'FIELD'S	
182	BRONZE-CUCKOO, SHINING	
152	BRONZEWING, BRUSH	
152	BRONZEWING, COMMON	
320	BUTCHER-BIRD, GREY	
90	BUTTON-QUAIL, LITTLE	
88	BUTTON-QUAIL, PAINTED	
316	CHOUGH, WHITE-WINGED	
212	CICADA BIRD	
244	CISTICOLA, GLDN.-HEADED	
160	COCKATOO, GANG-GANG	
160	COCKATOO, SULF. CRESTED	
96	COOT, EURASIAN	
48	CORMORANT, GREAT	
48	CORMORANT, LITTLE BLACK	
48	CORMORANT, LITTLE PIED	
48	CORMORANT, PIED	
92	CRAKE, AUSTRALIAN	
92	CRAKE, BAILLON'S	
92	CRAKE, SPOTLESS	
180	CUCKOO, BRUSH	
180	CUCKOO, FAN-TAILED	
180	CUCKOO, PALLID	
210	CUCKOO SHRIKE, B'FACED	
322	CURRAWONG, GREY	
322	CURRAWONG, PIED	
48	DARTER, AUSTRALIAN	
188	DOLLAR BIRD	
154	DOVE, PEACEFUL	
64	DUCK, PACIFIC BLACK	
62	DUCK, WOOD (MANED)	
78	EAGLE, WEDGE-TAILED	
52	EGRET, CATTLE	
52	EGRET, GREAT	
246	FAIRYWREN, SUPERB	
80	FALCON, BROWN	
82	FALCON, PEREGRINE	
243	FANTAIL, GREY	
243	FANTAIL, RUFOUS	
306	FIRETAIL, RED-BROWED	

232	FLYCATCHER, LEADEN	
232	FLYCATCHER, RESTLESS	
232	FLYCATCHER, SATIN	
196	FROGMOUTH, TAWNY	
160	GALAH	
262	GERYGONE, WHITE THROATED	
72	GOSHAWK, BROWN	
12	GREBE, AUSTRALASIAN	
202	GROUND-THRUSH, AUSTRALIAN	
62	HARDHEAD	
258	HEATH WREN, CHEST.RUMP	
54	HERON, PACIFIC	
54	HERON, WHITE-FACED	
280	HONEYEATER, BLCK CHINNEED	
280	HONEYEATER, BROWN-HEADED	
290	HONEYEATER, CRESCENT	
288	HONEYEATER, FUSCOUS	
290	HONEYEATER, NEW HOLLAND	
290	HONEYEATER, REGENT	
274	HONEYEATER, SP.-CHEEKED	
284	HONEYEATER, WHITE-EARED	
280	HONEYEATER, WHITE-NAPED	
288	HONEYEATER, WHITE-PLUMED	
284	HONEYEATER, YELLOW FACED	
284	HONEYEATER, YELLOW TUFTED	
58	IBIS, SACRED	
58	IBIS, STRAW-NECKED	
220	JACKY WINTER	
82	KESTREL, AUSTRALIAN	
188	KINGFISHER, AZURE	
186	KINGFISHER, SACRED	
80	KITE, BLACK-SHOULDERED	
76	KITE, WHISTLING	
184	KOOKABURRA, LAUGHING	
98	LAPWING, MASKED	
164	LORIKEET, RAINBOW	
324	MAGPIE, AUSTRALIAN	
316	MAGPIE-LARK	
64	MALLARD	
200	MARTIN, FAIRY	
200	MARTIN, TREE	
278	MINER, BELL	
278	MINER, NOISY	
300	MISTLETOE BIRD	
96	MOORHEN, DUSKY	
316	MYNAH, COMMON	
96	NATIVE-HEN, BLACKTAILED	

194	N'JAR, WHITE-THROATED	
198	NEEDLETAIL, WH.-THROATED	
54	NIGHT HERON, RUFOUS	
314	ORIOLE, OLIVE-BACKED	
192	OWL, BARKING	
190	OWL, MASKED	
192	OWL, POWERFUL	
192	OWL, SOUTHERN BOOBOOK	
194	OWLET-N'JAR, AUSTRALIAN	
304	PARDALOTE, SPOTTED	
304	PARDALOTE, STRIATED	
176	PARROT, BLUE-WINGED	
168	PARROT, KING	
	PEA FOWL	
50	PELICAN	
152	PIGEON, DOMESTIC	
88	QUAIL, BROWN	
88	QUAIL, STUBBLE	
238	QUAIL-THRUSH, SPOTTED	
94	RAIL, BUFF-BANDED	
92	RAIL, LEWIN'S	
334	RAVEN, AUSTRALIAN	
334	RAVEN, LITTLE	
218	ROBIN, EASTERN YELLOW	
214	ROBIN, FLAME	
214	ROBIN, PINK	
214	ROBIN, RED-CAPPED	
214	ROBIN, ROSE	
214	ROBIN, SCARLET	
172	ROSELLA, CRIMSON	
172	ROSELLA, EASTERN	
254	SCRUB-WREN, WH. BROWED	
60	SHELDUCK, AUSTRALIAN	
226	SHRIKE-THRUSH, GREY	
222	SHRIKE-TIT, CRESTED	
300	SILVEREYE	
270	SITELLA, VARIED	
208	SONGLARK, BROWN	
312	SPARROW, HOUSE	
72	SPARROW-HAWK, COLLARED	
294	SPINEBILL, EASTERN	
58	SPOONBILL, ROYAL	
58	SPOONBILL, YELL. BILLED	
314	STARLING, COMMON	
200	SWALLOW, WELCOME	
96	SWAMPHEN, PURPLE	
60	SWAN, BLACK	

198	SWIFT, FORKTAILED	
66	TEAL, CHESTNUT	
66	TEAL, GREY	
268	THORNBILL, BROWN	
266	THORNBILL, BUFF-RUMPED	
264	THORNBILL, STRIATED	
264	THORNBILL, YELLOW	
266	THORNBILL, YELL. RUMPED	
272	T'CREEPER, RED-BROWED	
272	T'CREEPER, WH. THROATED	
154	TURTLE-DOVE, SPOTTED	
234	WAGTAIL, WILLIE	
274	WATTLEBIRD, BRUSH	
274	WATTLEBIRD, RED	
264	WEEBILL	
236	WHIPBIRD, EASTERN	
222	WHISTLER, GOLDEN	
222	WHISTLER, OLIVE	
224	WHISTLER, RUFOUS	
318	WOODSWALLOW, DUSKY	

of Red Wattlebirds to head north on their usual migration. Dr. Paton has estimated that a Red Wattlebird would need to consume about 500 small insects per day to obtain the same protein (and thiamine) as is available from large insects during warmer months. This would be a major drain on the time and energy needed to collect and defend major carbohydrate sources (nectar producing plants, such as eucalypts).

So, the birds that remain behind may suffer from inadequate intake of thiamine and suffer the effects of beri beri.

Seed bells

Commercial seed bells are widely available. However, many questions remain unanswered about their potential effect on wild bird populations. What are the levels of pesticides in seed bell grain? What effect does indiscriminate artificial feeding have on wild bird populations? What other ingredients are consumed by birds using seed bells? Wood glues are used to bind the seed together in some bells. Are viable weed seeds present in seed bells that might be spread by birds?

Artificial feeding has the potential to disrupt the dietary balance of natural populations, attract predators, disrupt social behaviour and spread disease. Increased numbers of animals may affect other species in the area.

Kookaburras and minced meat

In nature, Kookaburra families vigorously defend areas of bushland against rival kookaburras. When confronted with their own reflection in a house window they may attack it, thinking it to be another individual. In one extreme case, ten windows were broken. Often the birds are first attracted by the landholder's food offerings. Minced meat, the food usually proffered, is not the same as natural dietary items.

Kangaroos

Kangaroos live in social groups and in the wild consume coarse native grasses and forbs. They are readily attracted to food offerings by humans. Complications that arise include attacks by males, asserting dominance on humans as they vie for female attention during the breeding season (kicks by the hind feet can cause serious injury), physical abnormalities, such as extended toe nail growth due to insufficient movement over hard surfaces, and increased incidence of the disease lumpyjaw which is caused by infection by several organisms entering the jaw around a tooth or via the gums. The main visual symptom of lumpyjaw is an open decaying wound around the jaw area. The common name is derived from the response to infection whereby additional layers of bone are laid down around the infected area.

For the above reasons, and in the best interest of wildlife, *Land for Wildlife* recommends against the feeding of wildlife. However, in instances where it does occur, irregular feeding is preferable to regular feeding and quality foodstuffs from natural sources are better than manufactured products of unknown origin.

Weaning animals off human food sources

For wild animals that are partially dependent on food supplied by humans, it is best to reduce the supply over a period of time, thus forcing the animals to rely on natural sources whilst not causing an immediate food shortage. Wildlife that has been raised in captivity may be entirely dependent on human food sources and expert advice should be sought as to whether release to the wild is an option and legal. Sick or injured animals should be taken to a Wildlife Shelter where experienced carers can look after the animal. Contact flora and fauna staff at your nearest office of the Department of Conservation and Natural Resources for advice.

How to encounter native wildlife without regular feeding

There are steps that you can take to increase your chances of

encountering native wildlife without the need for regular feeding.

Habitat management

You can improve the management of habitat in the area that you visit to view wildlife. For example, by maintaining a healthy understorey and leaf and twig litter layer and eliminating weeds.

Near the home or viewing area, you may increase the wildlife visiting by planting local native food plants that provide nectar, fruits, different foraging substrates (e.g. bark types) and a shallow source of water for birds away from vegetation that could conceal predators. Old feathers, natural fibres (wool) and short stems of dried grass can be used to attract birds in the breeding season. Place them in a tree or shrub fork, away from potential danger from predators, near a place from where you can observe the animal whilst remaining concealed. A few nest boxes can be added to increase the chance of seeing hollow-nesting and roosting species near your home (see *Land for Wildlife* Note 14 'Nest boxes for wildlife').

Understanding wildlife

Increasing your knowledge of wildlife will help you to locate and view species. Become familiar with the habitats that animals use, their patterns of activity, where they breed, shelter and feed. Waterholes are often good observation points.

Learn how to determine which animals are in the area by looking for tracks and traces left by animals passing by and listening for the noises they make. For the more determined, remotely operated cameras and hides can be used to view wildlife with minimal disturbance. Some excellent audio tapes and videos are available but nothing beats learning from an experienced naturalist or researcher. Fortunately there are many naturalist clubs available in Victoria.

Learning about wildlife and searching for it in the wild, though less predictable than feeding, adds to the adventure of encountering wildlife. Alternatively, some species can be viewed at close hand in captivity (see 'zoos, sanctuaries and animal parks' in the Yellow Pages telephone directory).

Avoiding danger

Although most of our wildlife is harmless, close encounters with some species in the wild poses a degree of risk. Care should be taken whenever you are in bushland areas where the presence of dangerous wildlife may go undetected. Sturdy, protective clothing should be worn and first aid materials kept close at hand. Animals of unknown capacity should be regarded as dangerous until better information is obtained and are best avoided. Attempting to kill the animal increases the risk substantially. Avoidance is a better solution. Close contact with animals during the breeding season should be avoided. Wildlife is more likely to be aggressive at this time and you are more likely to cause disturbance and stress to the animals or their young. Wildlife faeces should not be handled due to potential contamination by disease-causing organisms.

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Encountering wildlife without feeding

Land for Wildlife Note No. 35.

November 1995



Key words: encountering wildlife, feeding wildlife, dangerous wildlife
W: 12-Ex-35 wildlife viewing

Area: Statewide
Author: Stephen Platt

Introduction

Feeding wildlife is an exceptionally popular activity and most people will have done it at some time. But is it a good idea? This Note looks at the pro's and con's of feeding wildlife so that you can make better decisions about your own actions.

The main reason people feed wildlife is to have a close encounter with a wild animal. This Note also looks at how close encounters can be obtained without harming wildlife or posing a risk to humans.

Feeding wildlife - issues

There are a number of convincing arguments against feeding wild animals. They include:

- potential dependence on fluctuating food sources supplied by humans, rather than natural sources;
- inadequate dietary balance;
- alteration to the community structure of the animal population, due to increased resources, with potential consequences for other species of plants and animals;
- the potential for transmission of diseases or harmful chemicals as a result of contamination of the food or feeding location or direct transmission between animals at the feeding station. The feeding station may also act as a focus for predators.
- potential conflicts arising between human social and economic needs, and wildlife, including human disease transmission.

Case studies

Choughs and orchids

White-winged Choughs live in eucalypt forests and woodlands, in colonial groups of 2-20 individuals, where their main natural food source is invertebrates. Choughs are large native birds and are an important part of natural ecosystems. They have a lot of character and many landholders enjoy their company.

To the north of Melbourne, Chough numbers have apparently increased as a result of regular feeding with bread supplied by local landholders. When not being supplied with food from our larder, Choughs seek natural foods. Because Choughs are very systematic feeders, working together to locate food items, they can cause considerable disturbance to the bush. One food item that can be severely affected is orchids. The Choughs dig up the orchid tubers, systematically excavating complete colonies. This probably happens in nature to some extent. However, the artificially high numbers of Choughs, and acquired taste for high starch foods, such as bread supplied by people, is having major unnatural consequences for orchid populations in the foothill areas north of Melbourne and perhaps elsewhere. One particularly rare species of orchid has had to be placed in an enclosure to exclude Choughs. The problem is not the Choughs but the imbalance in their numbers brought about by feeding. Choughs would benefit from a healthier ground layer of twigs and leaves in which to forage for insect prey.

Sulphur-crested Cockatoos and house damage

Sulphur-crested Cockatoos can cause considerable damage to

timber houses, in particular western red cedar window and door frames. Cockatoo beaks grow continuously and regular use is probably important to maintaining beak condition. In the wild, cockatoos have often been observed to bite off twigs and small branches from the trees they are resting in. Cockatoos also excavate holes in the wood of trees in search of wood-boring grubs and enlarge nest hollow entrances using their strong beaks. These activities might help explain why cockatoos like to chew wood.

A common factor, which indirectly contributes to the damage caused by cockatoos to houses, is the provision of food by the victim or a near neighbour which attracts the birds to the area.

Crimson Rosellas

A brilliantly coloured bird, the Crimson Rosella is exquisite to look at and readily becomes tame enough, when fed regularly, to alight on humans. In the wild, wattle and eucalypt seeds form a major part of the diet. At regular feeding sites, large numbers of rosellas may congregate in anticipation of food being provided. These groups typically include a lot of immature individuals which are naturally abandoned by their parents as they become independent.

Problems encountered by artificially fed birds include irregular supply (e.g. a lower number of holiday-makers at parks in winter leaves a reduced food supply), an unbalanced diet of seeds they would not encounter in the wild, and the flocking of starlings with rosellas. Starlings are introduced birds that compete with native wildlife for breeding hollows and can benefit from food left for native bird species.

Red Wattlebirds and beri-beri

Red Wattlebirds are raucous birds common in the dryer forests of Victoria and the suburbs of Melbourne. Occasionally, these birds have been found on the ground convulsing, always in winter months. Frequently, this symptom is followed by death. It has been suggested that the most probable cause of these deaths is thiamine deficiency. Such a disease, in humans, causes the nerve disease beri beri which is characterised by pain and paralysis of the extremities and accompanied by severe emaciation or swelling.

Red Wattlebirds collect their energy requirements from nectar, manna, honeydew or psyllids (sap-sucking insects) which are high in carbohydrates but low in protein. Like all honeyeaters, they require a supplement of insects which supply essential proteins. Red Wattlebirds 'hawk' a number of insects, big enough to supply the needs of this large bird and worth the energy expenditure, from the air each day for this reason. During winter there is a marked deficiency of large insects in Melbourne and so Red Wattlebirds normally migrate to northern Victoria where milder winters support more large insects.

Dr. David Paton, of Adelaide University, has suggested that development of the Melbourne suburbs, which has included planting many nectar-producing shrubs and trees (e.g. Western Australian eucalypts, such as *Eucalyptus caesia*, red-flowering Yellow Gum *E. leucoxylon* var. *rosea*, Red Ironbark *E. sideroxylon* and banksias) may have encouraged Red Wattlebirds to remain in Melbourne over winter. Sugar solutions supplied in bird feeders by humans may have also contributed to the reluctance



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