

# Bend of Islands Conservation Association

Newsletter No. 24  
JUNE 1991.

## WHAT NATIVE'S FLOWERING?

Botanical name:	<i>Billardiera scandens</i>
Common name:	Common apple berry
Family:	Pittosporaceae

A wiry twiner or light climber which will twine up to two metres. If there is nothing to climb onto it will grow into a small mound of ground cover. *Billardiera scandens* tolerates a wide range of soils and climatic conditions so that it is quite widespread throughout Australia.

In this bush it tolerates the heavy clay soils and grows well in a sunny open position as well as a shady dry or shady moist spot, though its growth may not be as dense or compact as in the more open position.

Its flowering season is quite long with the first flowers sometimes appearing in May and extending right through to December, so that on the same plant flowers and berries may be found.

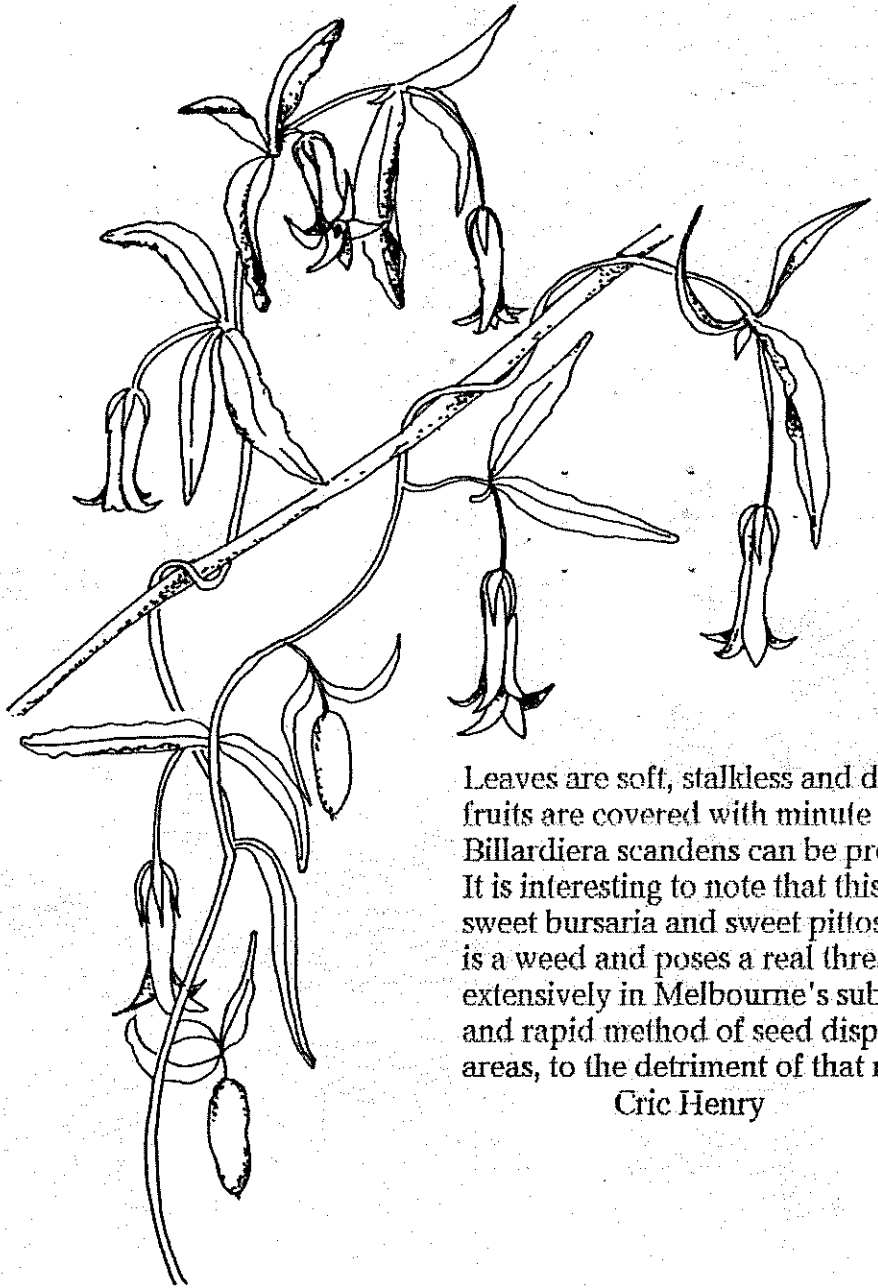
Flowers consist of five creamy green petals overlapping to form a bell shaped flower about 2 cm long, followed by cylindrical green berries about 2 - 3 cm long. The berries darken to indigo as they ripen. Both flowers and berries hang from leafy stems on their stalks and are an excellent source of food for many native birds.

Leaves are soft, stalkless and dull green with wavy edges varying in length from 1.5 to 5 cm. Often the leaves and fruits are covered with minute hairs giving the plant a silvery grey effect.

*Billardiera scandens* can be propagated from seed collected in January or by cuttings taken in autumn.

It is interesting to note that this plant is a member of the Pittosporaceae family of which two other common plants, sweet bursaria and sweet pittosporum, are members. Sweet bursaria is indigenous to our bush, yet sweet pittosporum is a weed and poses a real threat to our bushland. It is indigenous to East Gippsland, but has been planted quite extensively in Melbourne's suburban gardens for its fragrant creamy flowers. Due to its vigorous growth and easy and rapid method of seed dispersal by birds, the sweet pittosporum is firmly establishing itself into surviving bush areas, to the detriment of that native bushland. (Refer 'Weed to Watch', p.11).

Cric Henry



## THE BACK VERANDAH ROOM

The back verandah room, henceforth called the BVR. Now there was the handiest, cheapest and most versatile room any bush architect could subscribe to. These days they are a bit more upmarket and are generally referred to as sunrooms.

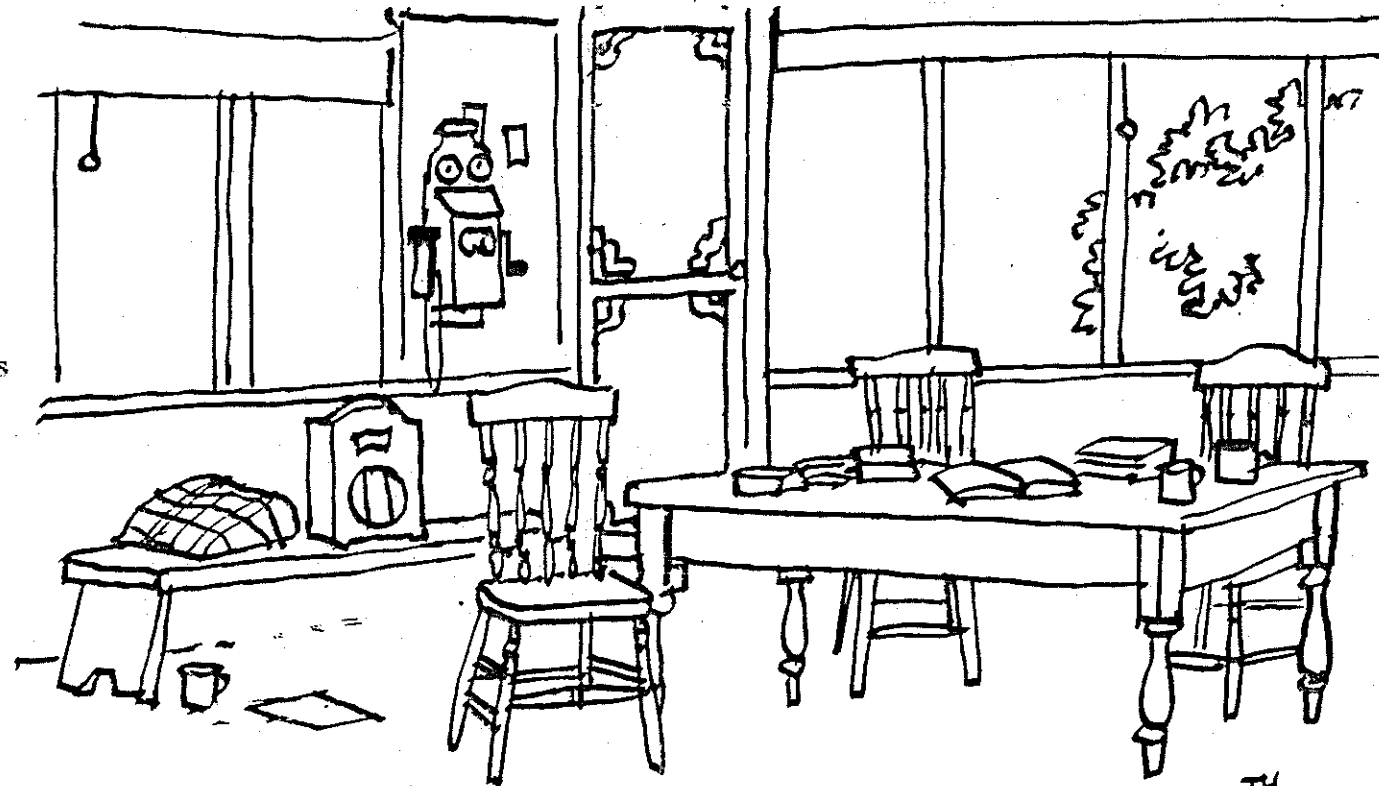
The rules were fairly common to all. Red pine or cedar weatherboards (or asbestos sheeting) up to about 3 1/2 feet from the floor, then the rest filled in with good old fly wire! Weather proofing consisted of rather grotty white canvas blinds going a bit mouldy where the guttering leaked and, of course, no self-respecting BVR roof had anything but the good old galvo. Usually the floor was covered with parquet patterned lino in brown dog brown and generally had a few tricky patches where it had worn.

Well, that was the bare bones of the BVR but Grandma's had its own idiosyncratic bits and pieces. First, the main focus of the room was the table. An enormous, slightly battered old blackwood, rectangular table with turned legs. Many a game of cards, beetles, snakes and ladders and fiddlesticks were played on it and fought over. Around this table were the ubiquitous kangaroo chairs and along one side, up against the weatherboard wall, was a long wooden bench for us kids.

Around 1937 I think it was, we were up here at Kanga for some months. There was a serious polio epidemic and all schools were closed. At first this was looked up by us as a dream come true, but it wasn't to last. The State government, ABC radio and teachers got their act together and began to

send out correspondence lessons. I think they were posted to K.G. store and then picked up by someone in the family on a weekly basis. Our mothers' undertook to oversee about ten cousins of assorted ages and we actually began to enjoy the novelty of listening to singing and poetry classes on the ABC and scribbling away on the old table.

On one of the walls near the flywire door there was a telephone. Up too high for us to fiddle with and a handle at the side to wind vigorously for the attention of the telephonist on the party line switchboard at Warrandyte. The telephonist won the gratitude of the locals in the 1939 fire by staying at her switchboard until the lines were cut. The fire brigade hosed the outside of the post office while the dear lady kept all lines open. I believe she finished up with a medal for this.



Altogether there was quite a large family up here for Christmas and Grandma always gathered everyone for Christmas dinner - where? - in the BVR of course! The kitchen was just off-stage and despite summer heat the old one fire stove would be blazing away from early in the morning. We generally ate one of the farm turkeys. Us kids didn't mind that at all. It was sort of rough justice for us. We hated those turkey gobblers. The caretakers' blue heelers and the turkeys menaced us every time we went down the beach and as far as we went it was good riddance.

Before the dinner the mothers and fathers packed into Grandma's lounge for sherry and a cold beer or two. Our mothers always managed to get a bit snakey at the fathers' beer drinking and gave them the pursed mouth, cold shoulder treatment. Uncle George used to sneak down to his back shed with a radio for the races and a couple of bottles just to get a bit of peace. At Christmas time some of us were allowed a shandy and used to imagine we were blind drunk and would fall about giggling. Just outside the back door was a large Coolgardie safe. Wet hessian all over, a couple of frogs living in the damp underneath and a temperature that didn't quite keep the meat from going off.

The BVR was cold in winter, hot in summer, a bit noisy in the wind but the perfect place for a bunch of kids to mess around in. It disappeared with Grandma's house in the fire of '62 but I can still see it as clearly as it was all those years ago.

When I had my house built up here I ordered a very similar BVR. At holiday time it bulges with little beds and clothes and looks rather like an op shop. The main thing is though, I'm carrying on the tradition, but I think I'll run out of room rather than grandchildren.

Sheila Dixon

## WHAT TO PLANT WHERE?

There is a bit of the gardener in most of us. We all want to grow plants for food, decoration or as a creative pastime. Around a newly finished house we need to cover bare ground and soften the ravages of the building process, no matter how careful we have been during construction.

When it comes to planting in the bush, particularly in the Environmental Living Zone (ELZ), a number of factors are important in determining what we can plant and where. Some of these are:

- \* the environmental conditions prevailing on the site
- \* the amount of water that can be provided
- \* the purpose for planting
- \* animal pests
- \* the provisions of the Planning Scheme which pertain to the ELZ

In the Bend of Islands, most of our soils are shallow and poor in mineral nutrients. Slopes are frequently quite steep and this, combined with the texture of the soils, results in poor water retention. The native plant associations such as the familiar box/stringybark open forest of our drier north to west facing slopes are well adapted to these conditions. Any bush that has been undisturbed by our building process is probably carrying all the native vegetation that it can already! Extra small shrubs such as dillwynias, acacias or correas planted in amongst the red boxes will probably show only very limited growth indeed.

When considering the "landscaping" of disturbed areas either close to the house or perhaps in an area a bit further away, thought must

be given to how well the plants can be looked after, particularly in the first few months. There is not much use planting out along a driveway that is remote from water supplies if the plants are going to need regular watering. Small plants are very attractive to a number of mammals, not only the rabbits but also the native ones. (What do you think the wallabies ate before we came along?) Sturdy plant guards must be provided. Having bought a hundred or so young trees from the nursery, can you afford to purchase the necessary guards? They'll probably cost more than the plants!

A list of plants that are indigenous (native) to the area, and therefore in general suited to the conditions, is available and indicates the approximate size of each species. Don't forget, however, that this refers to the plant when growing in conditions best suited to it; don't expect a blackwood wattle (*acacia melanoxylon*, a plant of our moister gullies) to do much if you plant it on a ridge! Blackwood is a good looking tree with relatively dense foliage but if you need a screen in a drier location, consider golden wattle (*A. pycnantha*) or hedge wattle (*A. paradoxa*). Similarly, wild violets (*Viola hederacea*) form a lovely carpet on the gully floor but need constantly moist topsoil - no good for bare clay in the full sun!

The provisions of the Shire of Healesville Planning Scheme that relate to planting in the ELZ seek to maintain the native bushland and the animals that live in it. Consequently they state that landscaping must only be carried out using species indigenous to the area. Planting with other species, either Australian plants from other areas or overseas species may only be done in the area designated as the "kitchen garden", probably either a set block or a border around the house.

Further, the Planning Scheme lists a number of plant species as being prohibited from the ELZ. These are species that are known to be **environmental weeds**, that is, plants which will invade and

become established in native bush. There they thrive at the expense of the native species. Some are garden plants from overseas such as forget-me-nots and berry bushes. Others are Australian natives such as Cootamundra wattle (*A. baliyana*) or sweet pittosporum (*P. undulatum*). (See "A Weed to Watch" this newsletter - Ed.) A wire netting fence around your veggie patch and flower garden will, if correctly constructed, keep out the herbivores but it won't keep in the seeds!

One of the special privileges of living in the ELZ is being able to enjoy the beauty of the native bush "as it was made". The attraction of our drier forests grows on you, particularly as you become more familiar with what's what and where everything fits in. Exotic species and out of place indigenous ones do stand out as different and detract from the visual integrity of the bush as well as reducing its ecological soundness.

So.....

- \* try to learn more about your bush
- \* don't try "adding" to the native bush
- \* landscape with local species raised from local stock
- \* keep exotics to the kitchen garden
- \* avoid known environmental weeds altogether
- \* plant only what you can look after
- \* ask if you are unsure - there are locals in the know and who would love to help

John McCallum



## BIRD OF THE MONTH

### Treecreepers

There are two species of Treecreeper in the ELZ - the abundant white-throated Treecreeper and the rarer red-browed Treecreeper. These birds are the Australian equivalent of the woodpeckers of other countries. Small, brownish tinged birds with

downward curving bills and, in flight, they have a prominent buff wing-band. They have relatively large feet which enable them to cling to vertical tree trunks while they probe the bark and crevices for insects - mainly ants.

They are usually seen gliding from the top of one tree to the base of another which they then climb with extraordinary agility; at times almost defying gravity as they spiral around the trunk or hop along the underside of a branch, methodically searching for food. At night, they generally roost in crevices or hollows of trees. Both species' nests consist of a loose collection of bark lined with feathers or fur in a hollow branch or trunk.

### White-throated Treecreeper

White-throated treecreepers are solitary birds but they're certainly not shy and, with care, can be observed quite closely. They are generally about 170cm long and are dark olive-brown above with buff underparts and streaked sides. Their throat and upper breast, as the name suggests, are a prominent white. (The female also has a rusty orange spot on the lower cheek.)

Their most frequently heard call consists of a series of loud, high-pitched, piping whistles which gradually become slower and fall slightly in pitch. They rarely come to

ground and their preference is for rough-barked trees such as boxes and stringybarks.

### Red-browed Treecreeper

This species is shyer and slightly smaller than the white-throated variety and has a rich, rusty coloured eyebrow and eye-ring. Although both species have a whitish throat, red-browed treecreepers are brownish-grey on the upper breast and their underparts are more boldly and uniformly striped (with black bordered white streaks.) Their voice is also softer, less piping and less sustained.

They rarely compete with the white-throated for food and prefer smooth barked eucalypts such as candlebarks and manna gums - seeking out ants in the debris that tends to collect in the forks of such trees. If they are spotted in rough barked trees, it's usually only on the smoother branches. They are also more likely to come to ground in order to pick over fallen logs.

So, keep an eye out for treecreepers around the ELZ: particularly the rarely sighted, red-browed species.

Robyn Duff

BICA bird walks are held every second Sunday of the month at 8.30am. Everyone is welcome. Meet at the Henley Road tank near Catani Blvd:  
next dates June 9 and July 14.

# FRIENDS OF THE CHRISTMAS HILLS FIRE BRIGADE REPORT

Before and after Christmas we had two really successful musical afternoons - not only for the money raised, but also for the pleasure they gave everyone.

The first event was a programme of Haydn and Mozart by a talented group of girls playing as a trio which blended in so naturally amongst the bush surroundings at the O'Briens. I couldn't get over the way the acoustics came over so well, we lost none of the subtlety of the instruments and the birds in the neighbourhood were also suitably impressed.

The afternoon was completed with champers, sandwiches and beautifully decorated sponge cakes. There's no doubt about it, we do ourselves proud up in these parts. Thanks to all those nice people who slaved away in kitchens beforehand!

Our second afternoon of delight was held at Tim and Laura's home. This was a knockout! Young Dominique Oysten sang for us and what a beautiful programme! From Gershwin to Danny Boy and a lot in between with a voice which seemed capable of absolutely anything really.

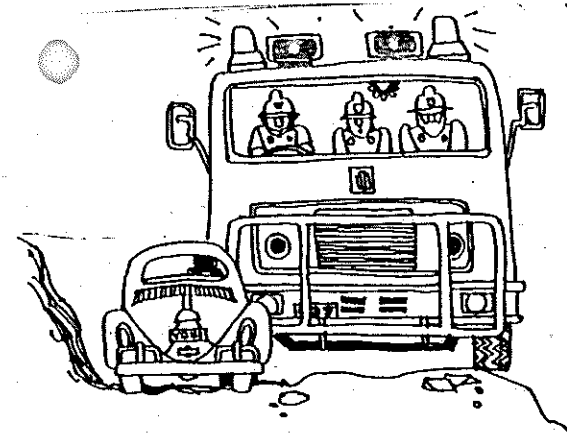
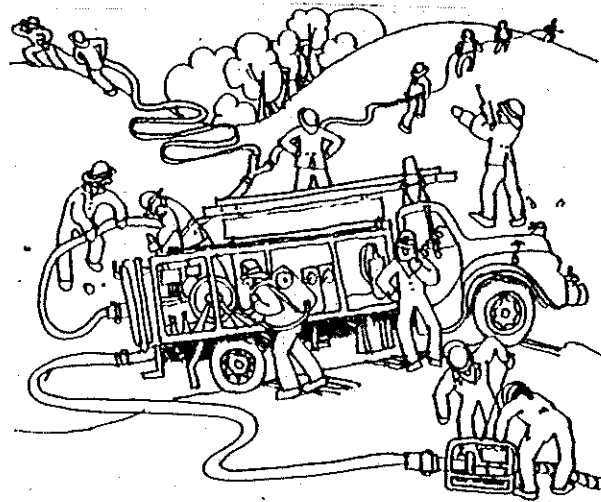
We seemed to have a full house which was gratifying so it would appear that these musical afternoons are extremely popular.

I, for just one, would dearly love to hear Dominique again.

Then followed the usual pigout (if I may be so coarse!) and the ubiquitous raffle. I think we made well over \$300 on the day, but isn't it a nice way to extract money from people?

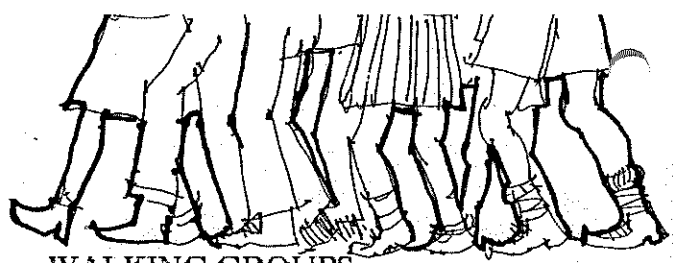
We have since handed over \$500 to the Fire Brigade.

Sheila Dixon



## BRIGADE REPORT

This season like the past two have been fairly quiet, with no serious fires in the brigade area. We attended a fire in North Warrandyte and were required to be on standby during the Warburton and second North Warrandyte fires. However, small fires were deliberately lit in our area late in the season, which is a worry. We hope the person who lit them is not around next year. The brigade has decided to hold public information nights each year, alternatively in the south and north fire stations. The first, (7th March 91) in the South was well attended particularly by new people to the area. The night consisted of a short presentation by John McCallum followed by questions from the floor which were answered by the Officers present. Please note you are welcome to attend all meetings. Brigade meetings are held in the South Fire Station during winter on the first Wednesday of each month.



### WALKING GROUPS

\* Friday morning very informal, rather occasional walks in the local area: contact Dee 712 0286, Meg 712 0391.

\* Occasional day walks during weekends in and out of the local area. Programme to be arranged according to people's interests: contact Marie 712 0498 or Anne 663 5359 (Mon-Thurs) 712 0354 (Fri-Sun).

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### BIRD SURVEY

Every second Sunday of each month, at around 8.30am for most of the year, sees several keen bird folk dedicated to the art of putting binoculars on just the spots our local birds are conducting their lives. On the March amble Frank tells us that 24 species were spotted doing what comes naturally to them.

Join them by just turning up to Henley Tank on time with comfy shoes, a smile, binoculars if you have them and an eagerness to spot birds! No prior knowledge of anything but coughs needed or expected, they all delight in showing our area and our birds off!

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## COMMUNITY NEWS

### NATIONAL CLEAN UP DAY REPORT

It was a nice day for National Clean-Up Day on Sunday 24th March. Peter had everything set up at the parking space near the horse paddock - stacks of leaflets to sign up the cleaners, bags for rubbish and information sheets. Eight people showed up: Alan Bluhm, Sheila Dixon, Barb Snell, Maria and Wolfgang Krause as well as Guy, Cara and Peter Gurney. In teams they set off.

Alan and Guy took the river bank from Woiwod's to Henry's and ended up with five big bags of rubbish. While Wolfgang and Marie, having already cleaned up from their place east along the river in the morning, then tackled from Gurney's to Woiwod's picking up heaps of rubbish.

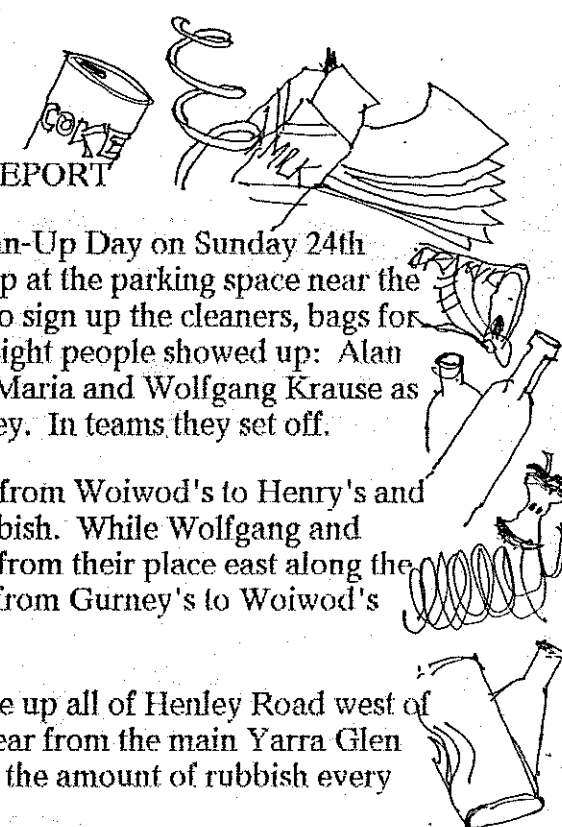
Peter and Cara, intending to spruce up all of Henley Road west of Calwell Road, only managed to clear from the main Yarra Glen Road to Nicholas Lane because of the amount of rubbish every metre - very time consuming.

Sheila and Barb worked on Catani Reserve, around Oxley Bridge and along Henley Road on each side of the bridge. Sheila's little car was completely filled with collected junk by the time they finished. They also received a contribution of two big bags of rubbish from Eleanor Steed and her family who were unofficial cleaner-uppers.

We're going to join in again next year on National Clean Up Day - let's make it a huge once-a-year community effort, over and above what everyone does already! See you all in 1992! We won't let you forget!

Guy and Cara Gurney

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# Communal Grader Hire!

Are you interested in joining together and jointly hiring a grader for a day or days, so we can get our drive-ways/tracks graded inexpensively?



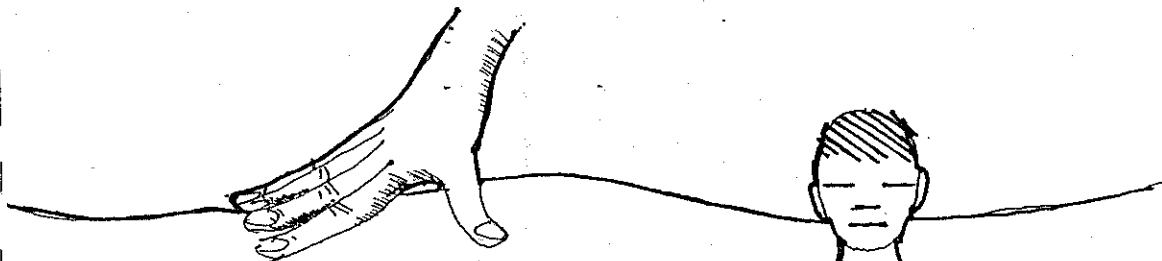
We're trying to organize the communal grader hire. If your drive-way or track is in need of repair phone Inde or Ven on 5259371.

N.B. If you already have a grader organized, please let us know. Thanks.

## IT'S HELLO TO THEM...

Welcome to the following who are all either new BICA members, new residents, new landowners or a combination of the above:

Neill and Karyn Kamminga  
Alwyn and Marion Hansen  
Robbie and Jan Todd  
Neil and Jenny Taylor  
Wayne and Leone Robinson  
David Verrall and Jenny Brown  
Alan James and Jennifer Shepherd  
Peter and Debbie Mann  
Peggy, John and Eleanor Kerdo  
Dion Ventor and Jane Armes



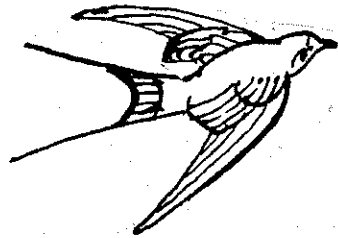
## LIFE GOT YOU IN KNOTS?

Then you'll be delighted to know that you can unravel at Robbie Todd's yoga mornings each Sunday at 9am. He'll welcome total beginners, those of you with some experience or devotees, although he emphasises that the morning may consist of some yoga movements coupled with other body movements from tai chi and corrective exercise. A relaxing meditation finishes the session. Also, all day Monday finds Robbie at home on call for queries and treatment in oriental medicine. Call him for more details 712 0548.



# BUTTERFLIES AND SWALLOWS

Despite all the building activity around our house last winter and spring a pair of Welcome Swallows built their nest under our verandah. They were never comfortable as we walked by, which we did frequently, and would fly off in alarm only to return a few moments later. Nesting started in October and between then and mid-January two lots of young were raised, three of which survived to leave the nest. Despite the swallows not liking our activity around their home we very much enjoyed them and their antics.



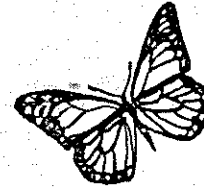
How they both managed to keep darting out and catching insects all day long for weeks amazed us. They were completely untiring in their food gathering efforts, and as a result we did not have a mozzie

near the place until after they left. Occasionally these days we observe them flying past, zooming and swooping around the house for a few minutes and departing without revisiting their nest.

As much as we enjoyed watching the swallows it was when the Happy Wanderer butterflies started chasing them that we really became enthralled. The ubiquitous Happy Wanderer is a butterfly everyone can recognise in south eastern Australia. Its orange and brown wings are observed all summer, but in December and January it seems it is at its most prolific in the ELZ. Kunzea bushes appear to be a favourite and we had lots of butterflies taking up the airspace at the same time as the swallows were raising their two broods of young.

One warm January lunchtime we were sitting on our verandah overlooking the Yarra and the swallows were zooming out, wheeling and darting in again to feed their fledglings. It was a constant coming and going:

one would no sooner fly out when the partner would zip in under where we were sitting to feed the young and quickly dart out again.



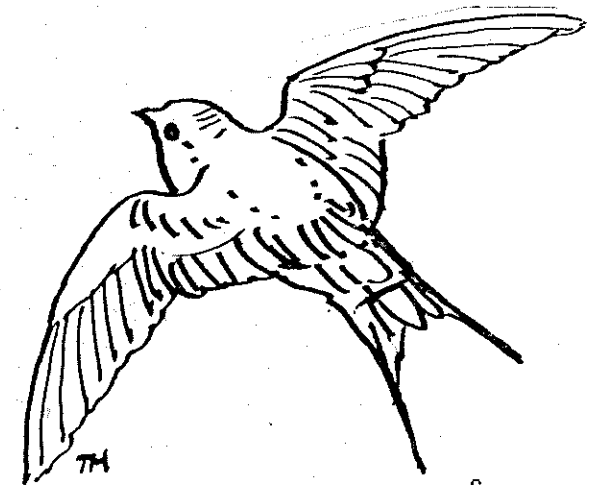
We noticed that our swallows had a number of predetermined arrival and departure lanes and would skillfully fly between various trees straight out from the house until they were high over the ground which drops away steeply to the river. If they chose one particular lane between two large Kunzea bushes a flight of three Happy Wanderers would launch from these bushes and "aggressively" fly up in a seeming attempt to intercept the bird. At first we thought it was a coincidence, but it happened time and time again over several days, with sometimes only one or two butterflies, but generally three. Perhaps they were protecting caterpillars or chrysalis, but I think that unlikely. Whatever

the reason, the butterflies added another dimension of wonder to our welcome swallows' nesting time.

The butterflies were certainly optimistic, as, by the time they saw each bird and launched themselves all they could manage to do was ride the swallow's slipstream. Perhaps this was their aim? It was like Snoopy in his Sopwith Camel trying to intercept a modern fighter aircraft, but I for one admired the Happy Wanderers' persistence.

Has anyone else noticed similar behaviour or have an explanation for us?

Peter Gurney





## PRESIDENT'S REPORT

The 1991-1992 year begins for BICA with a few new faces on the committee, including a few recycled ones! Here they are:

- John McCallum: (still on the committee, recycled as president)
- Frank Pierce: Vice President
- Chris Steed: Treasurer
- Janet Mattiske: Secretary
- Robyn Duff: Assistant Secretary
- Alan Bluhm
- Cric Henry (recycled)
- Felicity Faris (recycled)
- Barb Whiter (new)
- Dave Bradley
- Anne Morton (new)
- Andree Leffers (new)

THE END

I would like to welcome the new members to the committee and to thank those who agreed to carry on for another year; there is certainly enough work to go around. We also need to thank the people who have just retired from the committee. They are Tim Ealey, Robyn Langford, Michael Pelling, Neil Harvey and Ross Henty. Special thanks are due to Frank Pierce who has been our President for the past three years.

Over the past number of years members of the committee have been working on the production of a publication about the Environmental Living Zone. The need for

such a publication was first mooted by the Christmas Hills Study Group set up to monitor the ELZ when it was first gazetted. The Shire of Healesville have funded the production of a colour cover and a number of BICA members have help with the writing of the various articles which cover such things as the history of the ELZ, how the ELZ works, information about building and landscaping as well as information about the wildlife in the area. The next month or so should see this project completed.

A number of other projects are still underway and we hope to see progress on these over the next twelve months. Among these are the Weed Management Strategy and a proposed strategy for management of roadsides.

BICA is currently working to have the ELZ listed as National Heritage and this involves preparing a comprehensive submission which brings together all the special qualities of the area.

As well as working on these jobs the committee will continue to organise regular events as outlined in the BICA calendar and to deal with all the unforeseen matters that, no matter how carefully we plan our year, continue to crop up and occupy our time. It will be another busy year!

John McCallum

## WHERE AM I, BIRD LOVERS?

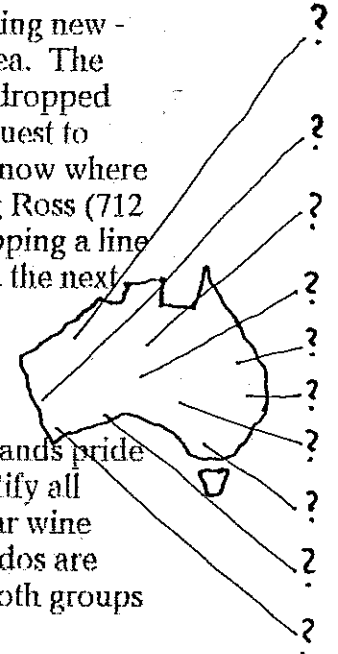
This could be the start of something new - if you, dear members, like the idea. The co-ordinators had the following dropped on the newsletter desk with a request to make it a regular quiz, so let us know where you think the trip went by calling Ross (712 0547) or Barb (712 0532) or dropping a line and we'll publish the answer and the next quiz next newsletter!

Dear Ed

The wine buffs of the Bend of Islands pride themselves on being able to identify all sorts of features about a particular wine and in a similar vein the local birdos are equally adept. Or, that is what both groups would have us think.

Let me describe a trip I have done recently: where was I?

"Last weekend we decide to go bush. So we fired up the ol' troop carrier (no, Hilary didn't come this time; which is a pity because she missed some beautiful landscapes.) We camped that night beside a famous river. The swimming was great, the scenery spectacular, the food good, the wine passable (no Brown Bros



Chardonnay) and the company was scintillating.

The next day the bird list was exciting. Besides magpies and magpie larks, we saw white-faced herons and pink eared duck. A whistling kite was gliding along the escarpment. Later that same day, and at another river, we saw a pied butcher bird, black faced cuckoo shrikes, painted firetails and Australian ravens. At both locations we saw a sacred kingfisher.

Later in the afternoon, and a long way from water, we saw Port Lincoln ringneck parrots, galahs and pink cockatoos. Crested pigeons and Richard's pipit were also seen, but not the Australian bustard; although I had seen it around here about 2 1/2 years ago. Where was I?

## A WEED TO WATCH

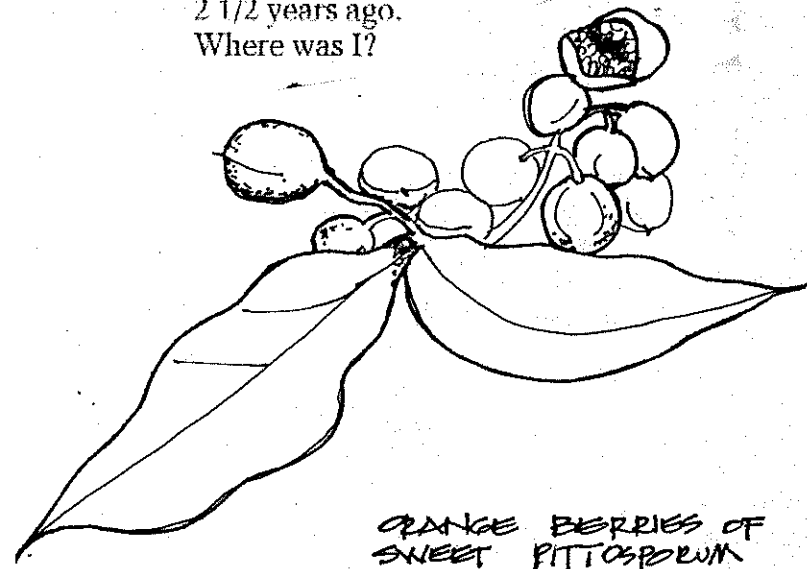
*Pittosporum undulatum* (sweet pittosporum)

A number of shrub and small tree species popular in gardens, particularly Australian species have shown themselves to have the potential to invade bushland and become established there at the expense of the native flora. One such is sweet pittosporum. It has a firm foothold in an area of Christmas Hills and some of the moister areas of the Bend of Islands provide suitable habitat for it.

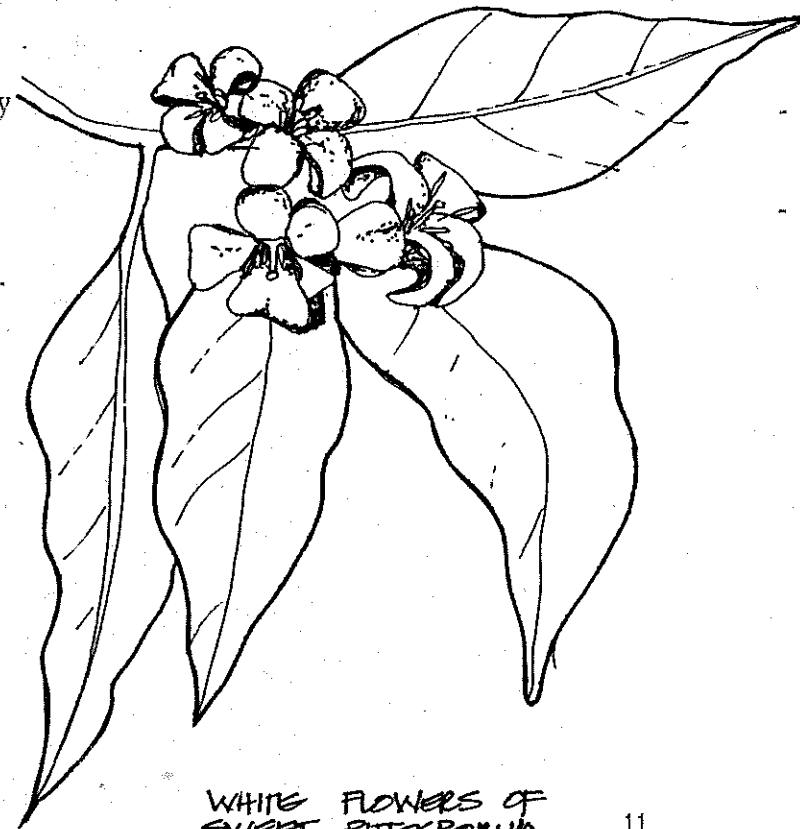
Sweet pittosporum is a small tree with shiny dark green leaves that have a slightly wavy edge, giving it its scientific name. The flowers and fruits make an attractive contrast with the sombre tones of the foliage and stems. The flowers are creamy-white in clusters and the fruits are a brilliant orange. When the fruits mature they split open revealing a mass of very sticky seeds. These will stick to anything including the fur or feathers of animals which touch them and are, no doubt, the main cause of the successful dispersal of this species. A popular variant that is widely planted is variegated form with "three-tone" leaves in cream, and two shades of light green.

This "woody weed" is best controlled by physical methods, ie, cutting or pulling for smaller plants. Unlike wattles and the host of related pea species, pittosporum is not favoured by fire. Note however, that pulling will disturb the soil and thereby facilitate the invasion of other weeds, particularly herbaceous species. If you are pulling weeds, take precautions. The methods advanced by the Bradley sisters, although labour intensive, are worth studying for this kind of thing.

John McCallum



ORANGE BERRIES OF  
SWEET PITTOSPORUM



WHITE FLOWERS OF  
SWEET PITTOSPORUM

# SWAMP WALLABY STORY

*Reprinted with permission from Wildlife Australia*

In 1790 in Dumfries, Scotland, an artist named Thomas Watling was indicted for the forgery of Bank of Scotland one guinea notes. As might be expected in things of a monetary nature, the Scots were self-righteously indignant and decided that Watling might be better occupied in the warmer climate of Australia. A short interruption to his journey occurred when he disembarked in Cape Town (in South Africa) without leave of absence. However, he was eventually recaptured and continued his journey to Australia. One might be excused for wondering what possible connection there could be between a Scottish forger and the Swamp Wallaby (*Wallabia bicolor*).

However, once settled in Australia, Watling turned his artistic talents to more socially acceptable pursuits. The result is that today, housed in the Natural History Museum in London, is a collection called the *Watling Drawings* which were completed at Sydney Cove in the period 1788 through to the early 1790s. Besides Watling's works the collection contains others by unknown artists, including works by an artist called the Port Jackson Painter - Port Jackson being Sydney Cove at the time. It was this

illustrator who was to provide the first European knowledge of the Swamp Wallaby, with a watercolour drawing and noted observations. The drawing is labelled 'Native Name Bag-ga-ree, or a species of Kangaroo'. On an attached label is the description:

"This Animal was run down by Greyhounds and the only one of the colour seen, it differs from the Pattergorang or Kangaroo a little in the shape of the Head and in the form of the Ears, but in nothing so much as in the Tail, which has the Hair longer near the tip than in any other part. The hinder parts are not so much out of all proportion to the fore parts as in the Kangaroo. I take it to be a kind of mixed Genus between that Animal and some other, perhaps the Kangaroo Rat. I was led to the conclusion because it was found near a Brush or low woody swampy place where the Kangaroo Rats mostly frequent..."

It was not until 1804, however, that the species was officially described by the French naturalist A.G. Desmarest. The origin of his specimen is unknown, but it was probably collected during Nicolas Baudin's scientific exploring expedition to Australia in 1802-03.

## Distribution

The Swamp Wallaby's range extends from Cape York in Queensland, south through the forests of eastern Australia and into south-western Victoria. In the early 1900s it was reported to be present in south-eastern South Australia, but it seems unlikely that it occurs there today. It is not found in Tasmania.

Within this extensive geographic area, it inhabits wet and dry sclerophyll forest, rainforest, woodland and heathland. The naturalist John Gould, in his early description of the species, noted that 'with but few exceptions, the species was found in all the thick brushes of New South Wales, especially those which were wet or humid'. Indeed he observed it leaping with 'apparent enjoyment' through flooded areas at the mouth of the Hunter River and even crossing from one island to another.

An important factor for its continued presence in a region appears to be the existence of thick undergrowth for protection from predators. For example, it particularly favours brigalow scrub, and in the brigalow belt of southern inland Queensland it is a common species. Areas of dense grass or ferns in wet spots on hillsides in open eucalypt forest provide daytime shelter from which it emerges at night to feed. The Swamp Wallaby serves as

a reminder to conservationists that the provision of adequate food is not the only survival requirement when trying to preserve wildlife. Animal species must have suitable homes for protection from the elements and predators, and the specifications may differ between species.

Within its range the Swamp Wallaby is regarded as common and secure where there is suitable habitat.



## Identification

The Swamp Wallaby is one of the larger wallabies: adult males average 17kg and females 13kg. As the subspecific name, *bicolor*, suggests, it has two predominant colours. The fur, which is quite coarse compared to most macropodids, is dark brown to black on the back and light yellow to rich, rufous orange underneath. Its fur is darkest, almost black, in the southern parts of its range, while further north, lighter shades appear. It has a light yellow to light brown cheek stripe which tends to be more conspicuous in the northern part of its range. In some animals, particularly in Queensland, the tip of the tail may be white. In all areas where they occur, however, their dark colour distinguishes them from other wallaby species of similar size. Where their range overlaps with some of the small, dark coloured pademelons, their greater size and long, well haired tails is sufficient to distinguish them.

Its dark colour makes it hard to detect in the forest and it may occasionally be seen watching an intruder from the protection of dense undergrowth. When alarmed it will make off at high speed with its head held low and tail streaming out behind as it charges through the vegetation. Its gait is unique for a wallaby.

Its coarse fur, small body size, and the generally dense vegetation of its habitat has probably protected it from exploitation by commercial shooters. Its solitary nature (although they sometimes collect to feed) could also explain why hunters did not bother to hunt it, as they would have to hunt individuals rather than groups. Although human hunters may not preferentially choose the Swamp Wallaby, life in the forest is not easy. The Swamp Wallaby rates highly on the dingo's menu (in recent years scientific studies have shown the dingo to be a selective hunter). After bushfires the loss of protective cover also results in intensified predation.

#### Common Names

It gets the name 'Swamp Wallaby' from its association with wet areas. However, the species has other common names which are equally descriptive. These are: the Black Wallaby, the Black-tailed Wallaby, the Fern Wallaby, the Black Pademelon, the Black Stinker (New South Wales), and the Stinker (Queensland). These names are indicative of its characteristic dark colour and, presumably, an odour detected by some observers. When I examined Swamp Wallabies, either in the field or in captivity in Canberra, where I kept some for many years, I was never aware of a conspicuous scent. At the same time I could always detect the strong 'stale coffee' or musky

smell of Western Grey Kangaroo males (*Macropus fuliginosus melanops*). I can only speculate that if the Swamp Wallaby gives off a scent, it depends on the area in which the animal is found and hence the food it may be eating. The genus *Macropus* represents the larger kangaroos and wallabies and on the basis of its general appearance it would be quite reasonable to expect the Swamp Wallaby to be found in this category. However, several less conspicuous features set it apart from the other macropodids so that it has the distinction of being the sole member of the genus *Wallabia*. This separation is probably well deserved because *Wallabia bicolor* conceals some surprises which make it quite different from most other wallabies. These differences are a combination of genetic (macropodid wallabies have 16 chromosomes, while the male Swamp Wallaby has 11 and the female 10), reproductive, dental and behavioural characteristics.



#### Reproduction

In most macropodid species, females are able to store a fertilised egg in their uterus while carrying the young in the pouch - a phenomenon called embryonic diapause. This occurs because immediately after giving birth the female once more enters oestrus (comes on heat) and becomes receptive to the male. The result is that an egg is fertilised. However, signals from the small young in the pouch sucking on a teat tell the female that this is not the time to become actively pregnant and have another young. Instead the signals tell the mother that it would be preferable for the newly fertilised egg, or blastocyst, to remain dormant in the uterus until there is space available in the pouch.

The Swamp Wallaby female also adopts this strategy, but returns to oestrus before, rather than after, the birth of the preceding young. Observations of captive females have shown that they may return to oestrus at some time between eight days and one to two hours before birth. This condition has never been detected in wild females, but this is not entirely surprising since the number of animals examined is relatively low and it is a condition which occupies a very short period in the overall cycle of gestation and lactation (the milk production period).

Reproduction in marsupials is generally characterised by gestation periods that are short and lactational cycles that are long. The Swamp Wallaby, like any other macropodid, is no different in this respect. The 33-38 day gestation period is followed by a pouch life of around 260 days (approximately eight months) after which the young leaves the pouch permanently. It then suckles from outside the pouch as a young-at-foot and its consumption of milk gradually decreases until it is independent when about 15 months old. Captive females reach sexual maturity at about 20 months of age.

One interesting exception was observed when a 5g Swamp Wallaby pouch young was transferred to the pouch of a Red Kangaroo (*Macropus rufus*). It not only grew more quickly than a half-sister and sister reared in their own mother's pouches, but was sexually mature when ten months old. This resulted in the young wallaby suckling from its foster-mother as a young-at-foot while both had young in the pouch.

#### Diet

The adult Swamp Wallaby eats a wide range of native and exotic plants, but prefers shrubs and bushes rather than grass. In Victoria, its diet includes the seedlings of the introduced Monterey Pine (*Pinus radiata*), Bracken Fern (*Pteridium esculentum*),

believed to be poisonous to cattle and Hemlock (*Conium maculatum*), which is highly poisonous to humans and stock. Further north, in New South Wales, studies have shown that it has similar preferences and that forbs, shrubs, ferns, fungi, grasses, sedges and rushes are also part of its diet. In Queensland it grazes on agricultural crops adjacent to suitable shelter, especially during winter and in dry times. The wide array of food in its diet suggests that it is a more general than specialist feeder and that it is more of a browser than the larger macropodids.

Its choice of food may be reflected in its dentition (the way its teeth have formed). The swamp Wallaby differs from other wallabies in the shape of the crowns of its grinding-molar teeth. Like other macropodids it has a fourth premolar, but in common only with the agile Wallaby (*Macropus agilis*), the tree-kangaroos and the New Guinea forest wallabies, this tooth is broad and never shed as the animal gets older. It is believed to be used for cutting coarse plant material. Other macropodids grow blade-like fourth premolars when they are young. These teeth are just milk-teeth, and are shed as the animal gets older.

#### Conclusion

The swamp Wallaby is seen as the most abundant wallaby of the wet forests. Its

presence in forests all the way from the south to the north of Australia supports this and attests to its adaptability in meeting the challenge of a range of climatic conditions. Its generalised diet is an asset in coping with a variety of environments and the conclusion must be reached that the Swamp Wallaby is a tough survivor which is doing well in the areas in which it occurs. For the Swamp Wallaby, the most likely threat to its future survival will be loss of suitable habitat, a situation which may already have occurred in some of the more arable parts of its range.

by Jim Merchant



PROBABLY THE FIRST RECORDED ILLUSTRATION OF THE SWAMP WALLABY BY A EUROPEAN PAINTER.

# GOULD LEAGUE OF VICTORIA PROGRAMS

Just for your information we list the forthcoming topics and dates for the natural history monthly evening sessions and field trips for Friends of the Gould League and other interested members of the community.

Lectures are held at the Gould League of Victoria, 67 High Street, Prahran (510 1493) where information material will be available. The field trips are to be held in suitably chosen locations. The cost is \$75 for the complete ten-month program, or \$10 for individual topics. Children under 14 years must be supervised by an adult.



## Program 1: Tuesday evening, 7.30pm

Date	Topic	Field Trip
11 June	Weeds	13 July
9 July	Waterbirds	13 July
13 August	Nocturnal life	14 September
10 September	Orchids	14 September
8 October	Pond life	16 November
12 November	Insects	16 November

## Program 2: Wednesday evening, 7.30pm

12 June	Eucalypts	17 August
10 July	Wattles	17 August
14 August	Frogs	12 October
11 September	Butterflies and moths	12 October
16 October	Wildflowers	23 November
13 November	Native grasses	23 November

### Applications

Further details and application forms are available from Gayle Seddon, Programs Coordinator, Gould League of Victoria Inc, PO Box 446, Prahran 3181 (510 1493).



## SOS!

A few years ago we had a spate of drownings in a rainwater tank attached to a shed. There was a downpipe running into a large diameter hole in the top of the tank and small mammals were going in for a drink, probably slipping off the downpipe and were then unable to get out of the water.

We then tried to close the hole using wire netting and so forth. The animals continued to enter and meet their doom.

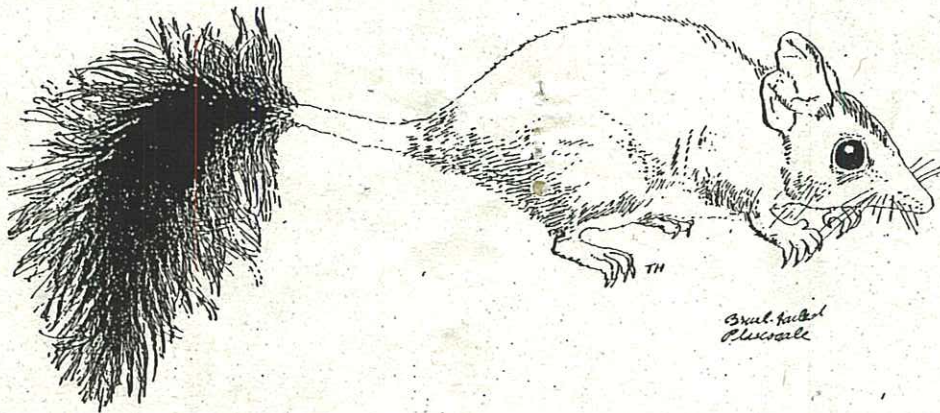
After many such attempts we hit upon the idea of resting a stick (actually a piece of four by two hardwood) in the water and leaning against the side of the opening. This provided an easy escape route and there hasn't been a casualty since.

It is important to use a technique such as this whenever water is stored in open containers. During the summer, when you keep drums and/or buckets of water on verandahs and other places for fire safety, leave a stick in each of them as an escape for thirsty antechinus and tuans!

On a recent walk in the area a disused tank was found to contain the floating corpse of a phascogale; it was actually one of the animals wearing a radio transmitter collar fitted by Todd Soderquist in his research into these animals.

So, can we ask that you have a good think and a look around your place to identify any situations that need a stick taken to them?

John McCallum



TODD SODERQUIST WILL BE TRAPPING  
TUANS IN THE AREA DURING THE  
NEXT FEW MONTHS — BEGINNING.  
AS THIS NEWSLETTER HITS THE  
STREETS | — ANY SIGHTINGS  
OF TUANS CAN BE REPORTED  
TO TODD ON. 739.6258  
SIGNED — TUAN TODD.

Thanks to all contributors - please feel free to contact Ross or Barb to put your name in print we'd love to hear from you - we're aiming for another newsletter in August, so we need lots of newsy/whimsical/knowledgeable or just plain fun bits!

Thanks, too, to Barb Whiter for doing all the typing; Jeph Neale for cutting and pasting on computer; to our wonderful illustrators Dave Bradley, Tony Harvey, Ross and Cric Henry and Andrew Skeoch; Carol Anne Fisher for varying the heading styles for us; Sheila Dixon for printing everything up and all the locals who help with the collating, stapling and posting.  
Thanks!!

Barb Whiter and Ross Henry



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