



LAND FOR WILDLIFE NEWS



Newsletter of the LAND FOR WILDLIFE scheme

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*Epicormic buds sprout on a Mountain Gum soon after the recent fires.
Photo: Donna Stone*

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Land for Wildlife
News
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See page 16 for a list of where Land for Wildlife Extension Officers and Contacts can be found.

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Editorial

Dear Land for Wildlifers,

I hope you have all had a wonderful summer and that your conservation activities have not been too affected by the ongoing drought conditions and bushfires. No doubt you would all be aware that the State experienced significant bushfires over the summer period, with the fires in the east burning over 1.12 million hectares, the biggest fire in Victoria since 1939. The many agency staff and landholders who were involved in fighting the fires should be congratulated on their amazing efforts. Debbie Colbourne, LFW Extension Officer (Benalla) and Donna Stone, LFW Extension Officer (Wodonga) recently visited one property affected by the fires in the north east, and their observations and those of the landholder, can be found on page 6 in the 'Life after the Fires' article.

Since the recent government decision to create the Department of Sustainability of Environment (DSE), and the Department of Primary Industries (DPI), new arrangements have been made concerning provision of services by the two departments. DSE incorporates the management of forests, fire, crown land, flora and fauna, coasts, and the planning and development section of the former Department of Infrastructure. DPI includes catchment and agricultural services, minerals and petroleum, the agriculture institutes and fisheries management. As I indicated in the last newsletter, however,

from the point of view of Land for Wildlife, there will be no change in service and the same field staff remain as your first point of call. In this newsletter, we

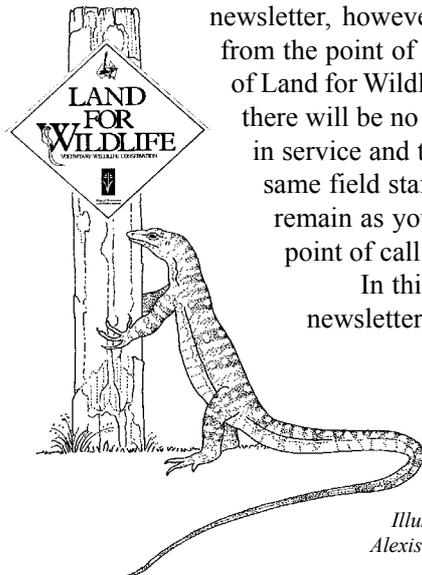


Illustration: Alexis Beckett

DSE/DPI Customer Service Centre
Phone the freecall number if you have any questions relating to natural resources and the environment
136 186.

DSE/DPI Information Centre
Books, Posters, Info, Maps, etc.
8 Nicholson Street,
East Melbourne, 3002
Tel: (03) 9637 8325
Fax: (03) 9637 8150
Email: publication.sales@nre.vic.gov.au
10% discount is available to all Land for Wildlife members. Please have your Land for Wildlife property number available.

Website

Go to www.nre.vic.gov.au and enter via plants and animals, native plants and animals and then Land for Wildlife

www.nre.vic.gov.au/notes/

acknowledge several Land for Wildlifers who have won recent conservation and Landcare awards. Both sets of winners are to be congratulated on their excellent and inspiring works to restore and protect wildlife habitat on their properties. They show that with enthusiasm and commitment, comes great rewards, with many wonderful species of flora and fauna appearing on their properties following their hard work in rehabilitating habitats. I hope their stories will inspire you, as they have me!

Pam Clunie
Statewide Coordinator
Land for Wildlife Victoria

Visit the Land for Wildlife Web site at www.nre.vic.gov.au

and enter via 'plants and animals', 'native plants and animals' and then 'Land for Wildlife'

LFW MEMBERSHIP	PROPERTY AREA	RETAINED HABITAT	HABITAT UNDER RESTORATION	NEW PROPERTIES SINCE LAST EDITION
5833	564,071 ha	133,674 ha	23,208 ha	78

Figures include reductions to areas due to de-registrations of properties. Current at 1 May 2003.

Letters to the Editor

Collecting Firewood Yields Some Surprises

Our efforts to increase our woodheap are often slowed by the things we find inside the timber. During the first winter after moving into our replacement house we felled a tall, slender sapling that had died since the Ash Wednesday bushfires, noting there were no hollows that might be harbouring soft cuddly animals. What a collection of not-so-cuddly creatures scuttled, sidled and soared as the sapling hit the ground!

Intricate white, cream and grey patterns on the wings of moths that fluttered off the bark had provided perfect camouflage until they moved. Long-legged flat brown spiders scattered in all directions as we removed bark. Chunky spiders with pale grey geometric patterns on their charcoal grey bodies plunged from knotholes. Black native cockroaches broke a communal group to seek more cover. Round orange beetles with black heads, and satiny midnight-blue beetles wandered away seeming confused by sudden daylight.

Fat creamy grubs with brown heads had tunnelled into the trunk and given the chance would eventually metamorphose into longicorn beetles. These large beetles have a chestnut brown body, light brown wing covers and spines along the edges of their wings. Another resident discovered among the tunnels was a wee beastie with a

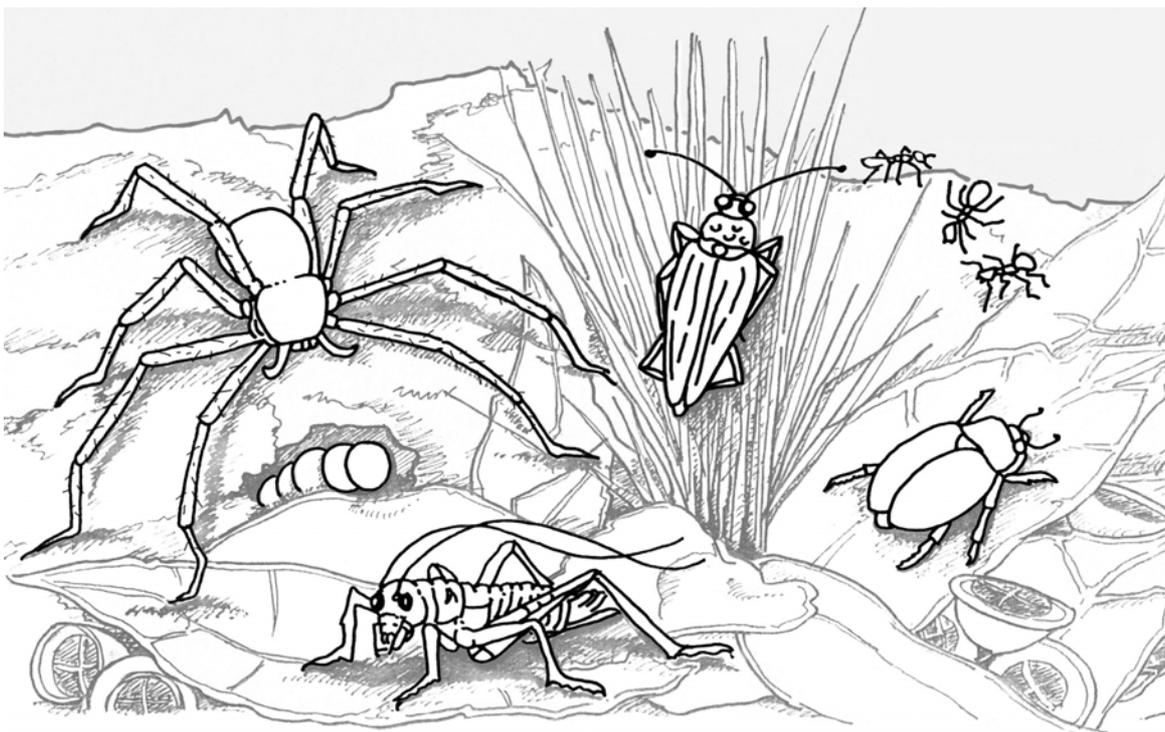
startling strong, though harmless, nip. The tree cricket had a sturdy, pale fawn body with a light green abdomen, feelers one and a half times as long as the body waving in all directions, strong hind legs for jumping and four smaller legs with a row of spikes on the trailing edge.

Living near the top of the sapling was a family of tiny brown ants. We left their piece standing against a tree in the hope they would establish elsewhere. At the apex of the sapling we found a pale milk-coffee coloured fungi species, soft and thickly clustered like the fringe of a floor rug, each 'thread' white tipped.

While the wood was being split a pair of Eastern Yellow Robins arrived to enjoy the feast of termites that had been busy converting heartwood to sawdust. We took a break to watch the activities of these little grey and yellow birds that, though they seemed so confident, still kept a bright black eye on what we were doing.

In the first few months after Ash Wednesday, magpies were keen to include European wasps in their diet. Now they have lost interest and this day they left it to us to dispatch one that we discovered hibernating in a crack.

*Laura Levens, LFWer,
Upper Beaconsfield*



*Illustration:
Dawn Harris*

Rehabilitating Taylors Creek Shrubland

Taylors Creek shrubland is a patch of remnant vegetation located on the north western slopes of Taylors Creek upstream from Green Gully Road in Keilor. It is about 800m upstream from the confluence of Taylors Creek and the Maribyrnong River and is directly opposite Green Gully Reserve, once the Keilor Tip.



Tree guards protect Drooping Sheoaks from rabbit grazing.
Photo: Jason Summers

Mass regeneration of Drooping Sheoaks after rabbit control works.
Photo: Jason Summers



This Council-owned and managed conservation reserve is one of the best examples of escarpment vegetation in the Maribyrnong Catchment. It is a regionally significant vegetation community co-dominated by Lightwood and Drooping Sheoak with a shrub level and understorey containing Kangaroo Grass. The vegetation, described as one of the best in the region, extends over most of the slopes covering approximately 8ha. The Sheoak population has been recognised as viable, unlike most others in the urban area, and it would be useful as a local seed source.

When I started with Brimbank City Council over five years ago I wanted to inspect this site that was listed on the Natural Heritage Strategy. Upon visiting the area I saw a very nice remnant site but little or no regeneration. I put in a 5x5m temporary exclusion plot to see what rabbit pressure was on the site. Amazingly everything in the fenced off area shot up and started flowering - Eutaxias, Stackhousias, even Sheoaks were regenerating. So I asked the contractors 'Envirotechniques', who were working on the weeds in and around the site to put simple tree guards around all the Sheoak stumps that were constantly grazed by the rabbits. Suddenly we had over 100 new

Sheoaks growing on the site after just one hours work!

This was a good result since many of the older Sheoaks were showing signs of senescence and some had keeled over. With the core area of

Sheoaks (approx 2ha) now protected, I decided to try and expand the range of the Sheoaks over the entire site which had plenty of Lightwood and a mix of native grass species.

We collected seed from the Sheoaks and propagated over 500 plants in tubes. As they grew, we cleared all the Boxthorns, Sweet Briar and English Broom infestations that rabbits were harbouring in. Most of the rabbits were not burrowing but lived in amongst the Boxthorns. Our priority was to remove this harbour, then we undertook a large scale rabbit baiting program using Pindone and fumigated the few warrens. These works were spread over three years and we replanted Sheoaks, Bursaria and Tree Violets (thorny species) to replace the lost habitat.

This year we continued control works for rabbits and the population has been decimated. With so few rabbits around now, many plant species have started to appear including Feather Spear-grass, a species which had formerly been quite rare at the site because of the browsing pressure. Many other wildflowers such as Stackhousia species and Magenta Stork's-bill have also recently emerged.

The most obvious effect of our active management is the natural regeneration of Sheoak all over the site. Mass regeneration events have occurred and in some places will threaten the understorey species. Later this year a rabbit proof fence will be erected around the site and more rabbit control works undertaken within the fenced off area.

A detailed flora survey will be completed this year which will give us an even greater insight into what species occur on the site. There is still plenty of work for us to do and ongoing maintenance is needed to ensure the site survives in the longer term. I think when local native plants are naturally regenerating within a site that you manage then you must be doing something right. For more information go to www.brim.vic.gov.au/Environment/index.htm

Jason Summers, Open Space Coordinator, Hume City Council

Bush Detective Who made this? Who did this?

Photos: Ian Higgins



These strange lines in the soil were observed on the edge of a road near Inglewood in central Victoria. They are tunnels made by ants (*Melophorus* sp.), which are considered quite common species in many parts of Victoria. *Melophorus* ants are some of the fastest and most timid ants in Australia. They forage only during the day and will disperse into nests if disturbed. The tunnels may have been made for foraging or for simply moving between two points. Some species of *Melophorus* have flattened bodies, possibly to allow foraging in small crevices.



Did you know.....?

A Scream in the Night

Have you ever heard a blood-curdling scream outside in the night and wondered what it could be? Well, it may be the frightening screech of an owl.

Barking Owls are known to make such a call, usually when a potential predator is about and also at the beginning of the breeding season. Sometimes this human-like call can be heard during the day. Barking Owls more commonly make a 'barking' call, often around July/August.

There are also other bird species that can make a screeching call - these include Masked Owls, Barn Owls, Sooty Owls, Boobooks and even Nightjars.

The Fenton Family Receives a Conservation Award

On 18th of February, John and Cicely Fenton of 'Lanark' station at Braxholme near Hamilton received the Serventy Conservation Award and Medal. This award, presented by the Wildlife Preservation Society of Australia is bestowed each year in recognition of those who have made a significant contribution to wildlife preservation and conservation. This adds to the many other awards the Fentons have received in recognition for their outstanding conservation work.

Over nearly 50 years the Fenton family has transformed their 800ha property through the diversification of traditional grazing and cropping with large-scale farm forestry and the restoration of natural habitat. When the Fentons first took over the property, it was bare and comparatively waterless. At a time when other farmers were still clearing native vegetation and draining wetlands, the Fentons began reinstating wetlands, fencing off large areas and planting trees. They have now planted over 80,000 native trees and associated understorey and reclaimed some 67ha of wetlands.

This amazing effort has resulted in the return of most of the bird species that originally inhabited the region's native woodlands and wetlands, with 155 species of native birds now being recorded from the property. The property has also provided a safe haven for the critically endangered Eastern Barred Bandicoot, a species once common across the basalt plains of western Victoria. Establishment of native vegetation and feral animal control has provided suitable habitat for this species.

'Lanark' was one of the very first *Land for Wildlife* properties, registered in 1981. The Fentons' achievements were featured in *Land for Wildlife News* 3(8) back in 1997. I'd like to congratulate the Fentons on receiving this recent award and for their continued and inspiring efforts in demonstrating it is possible to develop systems of farming that are both more ecologically and agriculturally sustainable.
Pam Clunie, Land for Wildlife Coordinator



The Fentons are congratulated by Dr Vincent Serventy (President, Wildlife Preservation Society of Australia) and the Hon Bob Debus MP (Minister for the Environment).

Photo: David Rose

Property Profile

Life After the Fires

Following the recent bushfires in the alpine areas of Victoria, Donna and myself visited a Land for Wildlife property near Falls Creek to see for ourselves the effects of the fires on the flora and fauna. We wanted to see how the property had survived and hopefully how the wildlife had coped with these conditions. As we drove up the Kiewa Valley Highway towards Falls Creek, we were surprised by the 'mosaic' effect of the fires on the landscape which would have been affected by wind direction, speed and intensity of the fire.

It was extremely interesting to hear the landholders' observations of the fire and the immediate effects on the plants and animals in the area. Between the 8th and 17th of January there was very little wind and the fire crept slowly from the Mt Arthur lightning strike down the spur towards Bogong village and Mt Bogong. On the 17th the wind picked up and it then began spotting 4km ahead of the main fire. The valley below acted as a chimney, the wind sucking in from the flanks as the fire raced up the valley - birds were trying to fly out of the valley but were being sucked back in. The fire itself passed through very quickly in what the landholder described as a storm. The bush around the property was burnt at varying intensities, but due to a comprehensive fire management plan the site was well protected. The back up of 15 fire fighters with two tankers was greatly appreciated by the owners.

The LfW property is sub-alpine, with a south-west facing gully of Montane Damp Forest. Montane plant species are adapted to cope with fire in different ways and the landholders' observations were invaluable in piecing together a picture of how plants are regenerating in the area. The first thing they noticed were large fungi growing around the bases of the burnt trees. Within three weeks ferns, such as Mothershield Fern and Tree Ferns, started to reappear, providing the first shades of green to the charred surroundings. The next plants to appear were Tasman Flax-lilies, resprouting from their bases. Hoveas and

Grevillea are now also starting to regrow, eight weeks after the fire. Epicormic buds started to appear on the Mountain Gum after two weeks - these buds appear from under the bark along trunks and branches. Some eucalypts can also resprout from lignotubers beneath the ground. Alpine Ash respond to intense fires every couple of centuries by producing large numbers of seed which fall to the ground and wait for an opportune time to sprout. In the meantime wattles may quickly dominate the area, sprouting from root suckers and soil stored seed. Seeds of many species are stimulated to open and germinate following fire.

Animals, like plants, have different ways of coping with fires. On the day of our visit it was very encouraging to see 12 bird species on the property. We observed Australian Magpie, Pied Currawong, Gang-gang, Crimson Rosella, Wedge-tailed Eagle, Grey Fantail, Brown Treecreeper, Superb Fairy-wren, Kookaburra, Satin Flycatcher, Yellow-faced Honeyeater and Red Wattlebird. Lyrebirds recolonised very quickly after the fire and large numbers of Gang-gangs took up residence in the Red-stemmed Wattle in the garden and fed on that until the food ran out.

The landholders have found themselves overrun with Agile Antechinus, Bush Rat and Broad-toothed Rats, all of whom are welcome except in the kitchen! They have also been joined by Wombats and a dazed Ring-tailed Possum. Snakes have followed the mammals onto the property and the owners have recorded a large increase in Tiger and Copperhead snakes as they have lost their food source.

Fires are a natural part of the landscape and the flora and fauna have evolved in an environment that includes fire. It will be interesting to observe the changes, both in plants and wildlife, as the ecosystems recover from the fire event.

For more information on fire and biodiversity, check the departmental website www.nre.vic.gov.au and follow the prompts to Plants and Animals, then Fire and Biodiversity.

*Debbie Colbourne, LFW Extension Officer,
Benalla &
Donna Stone, LFW Extension Officer,
Wodonga*

*Regrowth of Mountain
Ash after the fire.
Photo: Donna Stone*



Little Miss Muffett's Mistake

Arachnophobia, the fear of spiders, affects a substantial number of people. One reason for this fear is that most spiders use venom to kill prey. The venom of two Australian species (the Sydney funnel-web and the Red-back spiders) have been fatal to people in the past (although anti-venenes are available for both species now). Another reason is that there are a lot of spiders – they can be found in all environments including highly urbanised areas. Yet these factors also make them a very important component of the ecological food web. All spiders are predators, and the potentially high number of species and number of individuals make them an important predator of many insects and other invertebrates.

Australia is estimated to have some 3500 species of spiders, and only half of these have formal scientific names. All spiders make silk. Some spider species utilise silk more than others to capture prey. Some spiders are active hunters for prey – they will chase after and catch prey. Some of these hunters use silk as trip lines to signal the presence of prey. Others build webs in which prey become ensnared, and one group actually builds a net of silk which it throws over prey.

We can only guess at how many spiders can be found in a particular area. The English arachnologist W.S. Bristowe once estimated that there were 2.25 million spiders in an acre of field in Sussex. Regardless of the discussion about the accuracy of this figure and its applicability to Australia, there are still a lot of spiders out there and they eat a lot of insects and other invertebrates. The thought of over a million spiders an acre could increase the heart rate of arachnophobes. Yet we do not notice them because our eyes are used to looking for the less common larger bodied spiders, such as huntsmen, trapdoors, orb-weavers, etc. The majority of spiders are small bodied and go unnoticed. They are most obvious when some of the young spiders disperse by ballooning, and the enormous number of

little bits of silk can be seen hanging in the air, on plants or on fences on chilly mornings.

However, spiders are very dependent upon suitable microhabitats for shelter and also for food. Many ground dwelling spiders rely on a good layer of leaf litter or coarse woody debris for shelter. Others rely upon a relatively undisturbed soil layer. Trampling by grazing cattle has been shown in Western Australia to destroy the burrows of trap door spiders. Other spiders depend upon plants – often to spin their webs. Trees also provide microhabitats such as bark for hunting spiders to hide beneath. Some spiders hide in flowers to catch their food, while another group skate across the

surface of water bodies to catch food.

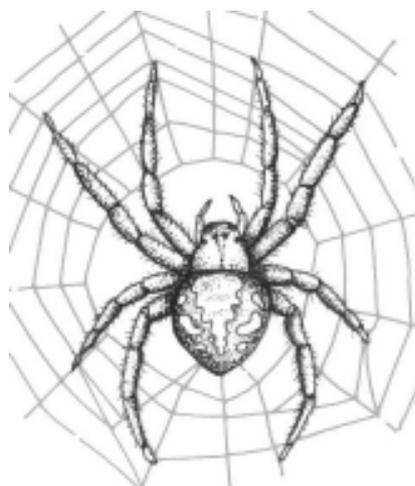
In general, as habitat diversity increases, spider diversity usually also increases because more spiders with different hunting strategies can coexist.

While spiders are accepted as an important element of the ecology of terrestrial environments, they have also been used as subjects in

bioprospecting and biotechnology – searching for useful chemicals in their venoms, and the study of their silk in endeavours to make synthetic silk. Spider silk is one of the strongest and most elastic substances known.

One area remains relatively unstudied and untested in Australia – habitat manipulation to increase spider numbers for natural pest control. This is an area with enormous potential because there are a lot of spiders out there!

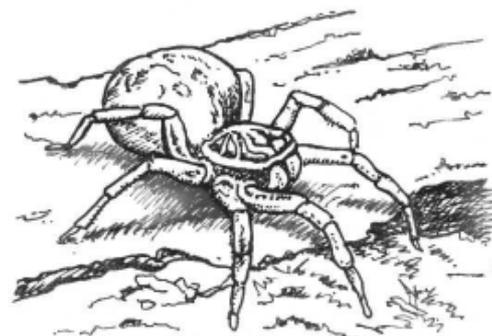
Alan Yen,
Invertebrate Ecologist



Left: A Garden Orb-Weaving Spider

Below: A Wolf Spider

*Illustrations:
Dawn Harris*



Recording Wildlife On Your Patch

Ever thought about recording what animals live on, or visit, your property? Making a list of species you've seen on your land can provide a great understanding of your local biodiversity and also help you plan future conservation works. For example, you might notice important habitats that are being used by particular species (e.g. old trees with hollows used by gliders). After observing certain species, you might consider suitable rehabilitation activities (e.g. planting understorey species as shelter and nest sites for small native birds). You may want to also record the presence of non-native species and consider suitable management (e.g. tree guards to protect seedlings from rabbits, fox control to protect ground nesting species).

Species vary in their activity patterns both during the day and the year, so regular monitoring at different times of the day may increase the number of species you observe. Adding to your list over time, you might be surprised at the number of native species you observe. As your revegetation and conservation efforts mature and provide more habitat, you're likely to see more and more native species appear on your land.

Gaining a better understanding of the distribution of native wildlife can help us work out how we can better protect them and their habitats. Our knowledge of biodiversity on private land is quite limited since in the past most comprehensive surveys have tended to be carried out on public land (e.g. national parks, reserves). So, recording wildlife on your patch can help

both you and wildlife managers. Wildlife managers are particularly interested in records of threatened species as well as unusual records (e.g. a sighting of a species outside its expected range). So if you make such an observation, why not send it to the Atlas of Victorian Wildlife.

The Atlas of Victorian Wildlife (AVW) is a computer database of locality records of Victorian wildlife, threatened invertebrate and freshwater fish species, run by DSE. It's a tool for managers and researchers, speedily providing baseline data about species distributions and their status within defined areas of Victoria. It can also help groups such as 'Landcare' obtain funding for a project (e.g. fencing and revegetation works along creeks, or the establishment of vegetation corridors to join patches of isolated remnant vegetation) especially if a threatened species has been recorded in that vegetation type or locality.

Sending a Record to AVW

If you send an interesting record to AVW, here are a few things that will help:

- A good map to ensure locality is as accurate as possible (e.g. a CFA map book & NATMAP, or a GPS [global positioning system] if you've access to one)
- A wildlife field guide to help in identification
- An experienced observer with you (e.g. field naturalist, Park Ranger, Flora and Fauna Officer)
- A list of wildlife codes (available from your LFW Officer or Flora and Fauna branch of your local DSE office)
- An atlas card (see left; available from the officers mentioned above)
- A photo - this can help clarify identification. A photo, video footage or your own sketch can also give you a personal permanent record of your observation.

I'd encourage all interested people to use the data cards and sheets to submit their observations of significant sightings to AVW. Please send completed cards to:

Atlas of Victorian Wildlife
Flora and Fauna Branch
PO Box 137, HEIDELBERG 3084

If you have any problems with the AVW field data book, please contact your local LFW Extension Officer or call 03 9450 8600.

*Tanya Wood, LFW Extension Officer,
Portland*

Atlas of Victorian Wildlife
Wildlife Management Branch,
Natural Parks and Wildlife Division

Name: _____ Phone: _____

Address: _____

Ref: [] Proj: [] Obs: [] Pooled: [] Checked: [] Rec'd on: []

First Date: [] Second Date: []

Locality: _____

Grid Ref: Lat: [] Long: [] Area: [] OR Map no: [] ASGC: []

Altitude: [] Year Ref: [] Coverage: [] Birds: [] Mammals: [] Reptiles: []

Species	Code	Count	X	T

Prepared by: Atlas of Victorian Wildlife, PO Box 137, Heidelberg Vic 3084

Species = Common or Scientific Name (e.g. Laughing Kookaburra)

Code = From list of wildlife in AVW data book (e.g. Kookaburra = M322)

Count = How many animals seen (e.g. 2 Kookaburras)

X = Extra coded info (e.g. road kill, found dead = K)

T = Type of record (e.g. Observation (seen or heard = O))

Property Profile

Chateau Tahbilk - Encounters with the Birds

A property profile on Chateau Tahbilk was featured in the Land for Wildlife News in 1995 (Vol. 2, No. 8). Nearly eight years on I was asked to visit the property to provide information on planting food trees for gliders and native birds as part of Alastair Purbrick and Bob McMasters' commitment to wildlife protection on the property. The winery is located south of Nagambie on the Goulburn River, and has a network of billabongs and waterways surrounded by Red Gums.

Apart from the winery, owned by the Purbrick family, there is a 1012ha farm run by Bob McMaster, for both stock and cropping. Bob and I walked around the billabongs to see what birds there were about, and in a couple of hours turned up around forty species, not bad considering the recent warm and dry conditions. One of the highlights was seeing two Latham's Snipe. These subtly marked wetland birds are perfectly camouflaged for life amongst tussocks and paddocks with their mixture of brown, black and cream streaks. When disturbed they will fly up and zigzag through the sky to escape and drop down again further away. A small flash of brilliant blue drew our attention to an Azure Kingfisher darting across the water and landing on a small overhanging branch. Two tiny Peaceful Doves could be seen high up in the tree, their loud call belying their size. Waterbirds were not seen in great abundance, but given the weather conditions, perhaps this wasn't too surprising. We saw several ducks, including Australian Shelduck and Grey Teal as well as Yellow-billed Spoonbill and Purple Swamphens.

Bob also told me that a few months ago he had found a glider entangled in barbed wire on a fence. He was not sure if it was a Sugar or a Squirrel Glider, but he had released it safely, and seeing it has reaffirmed his commitment to providing food plants for the gliders. The nectar and pollen of Silver and Golden Wattles are an important local food source in Red Gum wetlands, although they will also eat insects and invertebrates. There are abundant old Red Gums for them to use as den sites. Other mammals regularly seen on the property are Eastern Grey Kangaroo, Swamp Wallaby, Koala and Echidna.

Since 1995 Bob has been planting trees and understorey and collects the seed himself from local plants; he has also undertaken some direct seeding. Given the extremely dry weather that has been on hold for a while now, but Bob plans to continue as soon as conditions permit. Other works carried out include the removal of introduced Lilies by Goulburn Murray Water that has allowed the Native Water Lily to thrive once more. The introductions have been sprayed and Goulburn Murray Water has been monitoring all work that it has done to ensure that there is no negative impact on the waterbirds or other species.

Recent fish surveys, initiated by the Nagambie Angling Club, have also turned up a self-sustaining population of the threatened Freshwater Catfish, as well as smaller native species such as gudgeons and Smelt within the network of billabongs.

The plan now is to give visitors the opportunity to share in this lovely environment by creating a nature trail around the wetland areas so that everyone can share in this well kept secret. You could also try the wine as well!

*Debbie Colbourne, LFW Extension Officer,
Benalla*



*These beautiful wetlands, connected to the Goulburn River in times of flood, provide a haven for wildlife including birds and native fish.
Photo: Debbie Colbourne*

Helping Injured Wildlife

Land for Wildlife Officers often receive calls from landholders wanting advice about stray or injured animals on their properties. Many native animals are highly mobile and move in response to food, breeding sites and shelter. This movement seems to be more apparent with the recent fires and the continuing drought. Animals are moving closer to towns in search of water and lack of food due to wildfire. Many birds, mammals, snakes and other reptiles, have been seen on properties where they may not have been seen before.



A Tawny Frogmouth recovering from a dislocated wing that had been caught in a barbed wire fence.

Photo: Brenda Cheers.

Helping wildlife – in the long-term

Protection of remnant vegetation, provision of wildlife corridors and native shelterbelts, and revegetating areas with local indigenous plant species can provide wildlife with suitable habitat in the long-term. Leaving fallen logs, rocks, branches and leaf litter can also provide food and shelter for a wide range of birds, mammals, reptiles and invertebrates.

Finding sick or injured animals

You may encounter sick or injured animals on your property, as a result of many different causes. Animals may be ill for natural causes or might be injured by collisions with cars, attacks from domestic and feral predators, or injured during fire. Usually, the landholder's own judgment is required to determine whether an animal should be left to fend for itself or whether it needs to be cared for. In the latter case, its survival may be largely dependent on specialised care and rehabilitation from a Wildlife Shelter or a Foster Carer. Sadly although humanely, it is also possible that the best action may be to destroy the animal to ease its pain and suffering if it has life threatening injuries. It is recommended that you seek advice if you are ever in doubt. If you do find a sick or injured animal on your property, there are several important points that you need to consider.

Handling an animal

Wild animals are not used to being handled and may become stressed and therefore likely to struggle. Wildlife rescuers and carers are experienced in the handling and care of native wild animals, undergoing training with proper instruction and they are also appropriately licensed. Handling animals correctly can require skill to reduce the chance of injury to both the handler and the

animal. It is recommended that you seek advice from an experienced person before considering handling a wild animal.

For smaller animals

Remove any threat to the animal (e.g. lock up cats and dogs, keep small children away). Minimise stress by placing a towel or blanket over the animal, and then gently place in a secure, well-ventilated cardboard box. Put the box in a warm, quiet, dark room and do not disturb. Do not feed or give fluids to the animal. Seek advice.

Please note that the above treatment is suitable for animals such as birds. Young mammals such as joeys however need specialist care. Echidnas should be placed in a rubbish bin or something similar - they are likely to escape from a cardboard box!

It is important to remember that the stress associated with human contact or pets may result in severe stress and consequently death.

For roadside casualties/larger animals

If the animal is small, remove it from the road, then action as above. If the animal is too large to handle, contact your local wildlife rescuer immediately for advice. Dead kangaroos, koalas, wombats and possums should be checked for joeys in the pouch. Carrying a wildlife emergency kit in your car (e.g. a towel or woollen rug, box, torch, protective gloves and a local wildlife rescue number) can be useful.

Who to contact

Help for Wildlife (0417 380 687), Wildlife Victoria (0500 540 000), Wildlife Rescue (WRIN - for Central Victoria) (0419 356 433) offer 24 hour service. Local wildlife shelters and foster carers operate in some areas of the State, and your local DSE/DPI office can offer advice with contacts. RSPCA, veterinary clinics may provide advice depending on your local area.

If you'd like more information on animal rescue or how to become a Wildlife Foster Carer, please contact Julie Deleyev on (03) 5183 9103.

It is very important to remember that keeping native animals requires a permit. People are strongly encouraged to take injured animals to a properly qualified carer rather than care for the animals themselves.

Julia Deleyev, Land for Wildlife Extension

Weevils, Spider Mites and Thrips? Of Gorse!

I'm sure many of you are very familiar with gorse *Ulex europaeus*, unfortunately introduced into Australia in the mid-1800s as an ornamental and hedge plant. It is now a significant environmental and agricultural weed in south-eastern Australia.

Gorse invades many different habitats, being tolerant to a range of conditions. Infestations are particularly troublesome in central and southern Victoria, often being found along roadsides, creeks and forest margins. Gorse can invade and smother native vegetation and reduce natural regeneration, provide habitat for pests, increase fire hazards due to its high flammability and reduce pasture productivity. While gorse may provide cover for some native wildlife, replacing it with native vegetation is of greater ecological benefit.

Gorse is very hard to control since seeds can remain viable in the soil for up to 30 years, even after removal of plants. Seeds are spread by their explosive pods, water, birds, ants, vehicles and contaminated soil.

We can most effectively tackle gorse by using a mix of methods together - manual and mechanical removal, mulching and slashing, cultivation, hot burns, grazing, chemical control and limiting spread through the hygienic management of equipment. Biological control has also been investigated as a method to reduce gorse abundance. Plants are often introduced without their natural enemies, giving them an advantage over native species. Biological control aims to restore the balance by introducing the weed's natural enemies to reduce the competitiveness, vigour and reproductive ability of gorse in the long-term.

Biological control is likely to be most successful if a range of natural enemies are introduced that attack different parts of gorse in different ways. So far, three biological control agents have been released into Australia:

The **Gorse spider mite** *Tertranychus lintearius* and the **Gorse thrips** *Sericothrips staphylinus* are natural enemies of gorse in Europe that reduce plant growth by piercing the leaf surface and sucking out the leaf's cell contents. Spider mites, first released in Victoria in 1998, now occur in over 150 sites. These tiny red mites live in an easily identifiable communal web and prefer to feed on mature growth. The thrips, which feed on fresh growth, were released in Victoria in 2001 and now occur at 20 sites. Affected plants

can have brownish or bleached foliage, and experience reduced plant growth and reproductive success.

The **Gorse seed weevil** *Exapion ulicis*, introduced in 1939, now occurs throughout the country. The weevil feeds on gorse seeds, however, significant reductions in seed production have not yet been noted.

Several other biological control agents have been identified and planned for release once scientific testing has ensured they will only impact on gorse and not affect native or economically important plants. Currently being tested is the gorse pod moth *Cydia succedana* which also feeds on gorse seeds and, with the weevil, may help reduce seed production.

Would you like to get involved?

For biological control agents to have the greatest chance of working effectively, it is important to spread them over a wide area rapidly. Many landholders, Landcare groups, councils, Parks Victoria rangers, and DPI/DSE staff have already helped in the release of gorse spider mites and thrips.

DPI continues to identify possible release sites for gorse thrips as well as harvest and redistribute spider mites from areas where they are established. Suitable sites include those with large dense infestations, those hard to access and where other control options are inappropriate or uneconomical.

If you'd like to get involved and have a site in mind please contact departmental staff from KTRI Gorse Project, KTRI, PO Box 48 Frankston 3199, ph 03 9785 0188, or email Sarah.Holland-Clift@nre.vic.gov.au. Regional field days are being held for people to obtain agents and gain information on gorse control. If you release a control agent on your land, you're also encouraged to become involved in monitoring its establishment and spread.

For advice about controlling gorse, please contact your local DPI Catchment Management Officer, Gorse Facilitator or check the Landcare notes (www.nre.vic.gov.au).

Sarah Holland-Clift, DPI



A gorse thrip. Photo: Landcare Research New Zealand



A gorse spider mite. Photo: Landcare Research New Zealand



Gorse spider mites in a communal web. Photo: KTRI



A gorse weevil. Photo: KTRI

A large gorse infestation at Tylden, in central Victoria. Photo: KTRI



Economic Benefits of Biodiversity

Central Victorian Woolgrowers to Demonstrate 'Green' Credentials

Healthy native vegetation and biodiversity on-farm can go hand in hand with the long-term success of wool growers' business. There are many examples of farm businesses that have developed, and are now implementing, a vision that incorporates profitability, other private goals and biodiversity outcomes.

Better ways of managing native biodiversity while maintaining farm profitability and production will be sought in a new three-year project being run on wool properties across Central Victoria.



*Above:
Inspecting natural
regeneration in an
area being strategi-
cally grazed.*

Photo: Jim Moll

*Below:
Sheep grazing close
to trees and therefore
limiting the chance
of regeneration.*

*Photo: Kathryn
Trewick*



The project, funded by Land, Water & Wool, a joint investment by Australian Wool Innovation Limited and Land & Water Australia aims to demonstrate how wool producers can undertake conservation works as well as main-

tain or even improve long-term farm profits. The project is being conducted by the Department of Primary Industries (DPI) and the Department of Sustainability and Environment (DSE). Selected properties from the Ararat Hills, Maryborough-Lexton and Wangaratta regions will be used as demonstration farms to help show how native biodiversity and profitable wool production can co-exist.

The project will seek practical ways of conserving local native plants, animals and ecosystems while minimising the impact on farm cash flow, productivity and other producer goals. Case study wool properties will be used to demonstrate that biodiversity can be managed as part of a productive, profitable commercial wool enterprise. The costs and

benefits borne by wool growers of undertaking conservation work will be highlighted by the project. The financial, knowledge and physical barriers faced by woolgrowers when conserving native biodiversity will also be clarified, with rec-

ommendations developed for farmers and policy makers on how these barriers may be overcome.

A financial and agronomic appraisal, flora and fauna survey and aerial mapping will be carried out on each case study property and copies of results provided to the farmer. Case study wool properties will be selected on a basis that enables comparison of different property management practices and situations. Selection criteria will include; interest and time to be involved in the project, current management of native pasture and vegetation, and ability to divulge farm financial information (which will be handled in confidence).

There will be ongoing monitoring of various management practices and subsequent impact on farm profits on each property, culminating in a field day. Each participating woolgrower will be provided with a report and copy of all information collected, and it is hoped they will be actively involved throughout the project.

The project team will collect information from each case study property including; personal goals and visions for the property, fertiliser and cultivation history, list of native vegetation, pastures and wildlife present, detailed financial figures, pasture and livestock production, and current grazing management systems, including stocking rates and stock numbers.

Options for managing native biodiversity will be discussed with each grower with a view to seeking changes in management where these are realistic and feasible. Options for improving management on other parts of the property will also be canvassed if there are opportunities - Land, Water & Wool is addressing all components of sustainable wool production. This may lead to further involvement of DPI and perhaps private experts in pastures, farm business and other aspects of farm management, to help achieve growers' long-term goals whether they be financial, social or environmental.

Woolgrowers from Central Victoria who are interested in being involved or would like more information, are encouraged to call Project Coordinator, Jim Moll at DPI, Benalla on 57611 619.

Jim Moll, DPI, Benalla

Property Profile

'Better Farming' Award Winners

I was pleased to recently be invited to judge the Victorian Landcare 'Better Farming' Awards in South Gippsland in the category of Bushcare Nature Conservation 'for excellence and innovation in implementing nature conservation activities on private land'. Three different properties and a wildlife corridor community revegetation project were nominated. Each nominee exhibited exceptional effort and contribution in protecting remnant native vegetation, planting and revegetation as well as habitat for wildlife.

Phil and Anne Hargreaves, Land for Wildlifers from near Leongatha, South Gippsland were the winners. They purchased their 56 acre property about 12 years ago and hand-built their own home. About two-thirds of the property was cleared paddocks but there were two patches of remnant native vegetation each about 5 acres in size. Phil and Anne immediately fenced these remnants to exclude their domestic cattle that were using these areas for shelter and feed and causing a lot of damage to the understorey.

The two remnant patches are dominated by Scented Paperbark and contain a diverse ground and shrub layer primarily of ferns and mosses, as well as a few wet forest and poor drainage species. The fern species include Necklace Fern, Finger Fern, Mother Spleenwort Fern, Fishbone Water-fern and Rough Tree-fern. A few species such as Coral Fern were however lost to grazing. The property also supports many orchid species such as Potato Orchid, Bird Orchid, Greenhoods, Helmet Orchid and Maroonhoods.

The Hargreaves have also undertaken extensive revegetation works, turning about 10 acres of pasture back into forest. Anne propagated over 3000 trees and these tubestock were hand planted. Planting native species, encouraging natural regeneration, and controlling introduced weeds and pests has produced a remarkably diversity of flora and fauna. Over 200 native and naturalised plant and animal species occur on the property. Native animals roam freely, including wombats, koalas, possums, lizards, echidnas and abundant bird species! Each year, a pair of Swamp Harriers successfully nest in one of the remnants and Wedge-tailed Eagles often visit.

Two wonderful farm dam wetlands

have been created to attract wildlife with the second dam established only a few years ago. Already, many ducks visit including the rarely seen Pink-eared Duck. Other birds such as herons, grebes and Japanese Snipe also frequently visit both dams.

Their house looks out over magnificent coastal views on one side and the main wetland on the other. An island provides for shelter and breeding, logs in the water provide perches for waterbirds and lizards and there are varying water levels with large shallow areas for feeding and roosting. Gentle sloping margins in the wetland allow aquatic vegetation and trees to grow, help oxygenate the water as well as provide food and habitat. Black-fronted Dotterels have nested there and successfully raised two chicks last year. However, Rainbow Trout have been introduced into the wetland, which may have a potential negative impact on the native fish and frog species.

A recent trial of direct seeding near the second dam has been very successful. Their method was to simply collect and scatter branches containing seed, leaving them to dry and fall naturally. Every week or so they'd give the branches a 'kick' to help the seeds along! The Hargreaves face constant challenges of controlling unwanted species such as Juncus and Coast Wattle around the dam, which tend to take over.

The Hargreaves' efforts in creating their own paradise have been outstanding and much hard work has gone into maintaining the property and its wildlife habitat. It is no wonder that their 'excellence and innovation in implementing nature conservation activities on private land' has made them winners!

Julie Deleyev, LFW Extension Officer, Yarram



Below: Phil Hargreaves standing in a remnant patch of Scented Paperbark with a fern understorey.



Above: Anne Hargreaves in an area where natural regeneration is occurring.

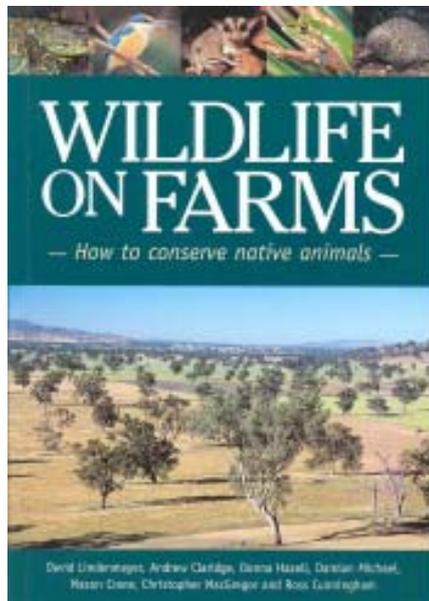
Below left: Main wetland showing shallow areas, logs and island.

Below: Successful direct seeding near dam.

All photos: Julie Deleyev

Recent Publications (see page 2 for member discount)

Wildlife on Farms - How to Conserve Native Animals. (2003). D. Lindenmayer *et al.* Many landholders are interested in the native wildlife that occurs on their land and how they can protect them. This book explains the importance of conserving wildlife, and describes different habitat components including trees, understorey shrubs, logs, rocks, ground cover and aquatic habitats. Practical ways of integrating farm management and wildlife conservation are discussed. The key habitat needs of a number of species that depend on habitats described in the book are discussed in more detail. \$49.95. Available from DPI/DSE Information Centre (see page 2 for more details).

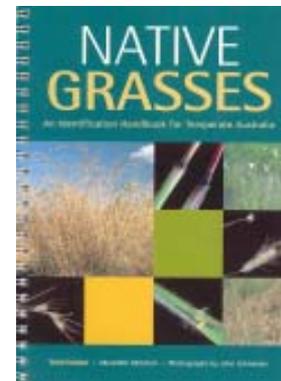


Spiders and Scorpions Commonly Found in Victoria.

(2003). K. Walker *et al.* This book, a fully revised version of an early popular guide for spiders, now also incorporates details of local species of scorpions. The guide provides notes on identifying features, habitats, biology and venoms of numerous species. There are many beautifully presented photographs as well as illustrations and easy to understand measurements of body size. The publication is likely to be useful to anyone interested in learning about spiders and scorpions throughout Victoria. \$25. Available from DPI/DSE Information Centre (see page 2 for more details).



CD Rom - Birds of Australia Version 5.0. (1999). **Simpson and Day.** This CD Rom contains 790 bird images, over 655 birdsong recordings, a complete list of Australian habitats and a bird finder to help identify species observed in the field. This useful guide provides illustrations of species, as well as species descriptions, information on habitats, food, breeding season, movement, abundance, size and distribution maps. The CD is a helpful companion for those who want to know more about the wide range of bird species that occur in Australia. \$49.50 (BOCA members \$45) + \$4.10 postage and packing. Telephone orders Jenny or Trish (03 9877 5342), email enquiries boca@ozemail.com.au



Native Grasses: An Identification Handbook for Temperate Australia. (2002). M. Mitchell. This is the 3rd edition of a useful guide to important grass groups in temperate Australia. Clear descriptions and photographs are provided for 17 grass species common to south-eastern Australia. Details include the general appearance of plants, distinguishing features, responses to fertilisers and grazing, tolerances to frost and drought, and forage value. The guide also includes useful diagrams of the generalised anatomy of a grass to assist in identification. \$24.95. Available from DPI/DSE Information Centre (see page 2 for more details).

Conservation Properties for Sale

Yan Yean. 75.77ha (approx. 188 acres) located within an area of State faunal significance with views to Kinglake and Dandenong Ranges. Only 32km from the GPO - 15 minutes north of the Ring Road. This registered Land for Wildlife property includes 59.2ha (147 acres) managed as a private flora and fauna reserve with the protection of a Trust for Nature conservation covenant and consists of magnificent grassy woodland dominated by ancient River Red Gums. A seasonal creek meanders through the property and is fringed with Swamp Gum, Manna Gum, River Red Gum, Black Wattle, Sweet Bursaria, Prickly Moses, Lomandra etc. There is also a large wetland frequented by a great variety of birds including the rare White-bellied Sea Eagle. This is a wonderful wildlife haven with over 95 species of native birds recorded.

The remaining 16.57ha (41 acres) contains a comfortable and spacious three bedroom weatherboard home surrounded by a mature garden. There is a separate bungalow, large garage/workshop, three bay machinery shed, hay shed and floodlit tennis court. Surrounding the home are excellent horse facilities including a 60m x 20m dressage arena. For more details go to www.eulomo.ozefamily.com or phone Geoff on 0417 569 801.

Wedderburn. Singing Tree Farm - LFW 22 acres. Lots of birdlife attracted to the landscaped garden and frog pond surrounding the lovely character stylish mudbrick 8 year old house. The house has been carefully built with views from every room, and passive solar heat in mind, with natural

stone and handbuilt floors. Full solar power system, plenty of house tank water and two huge dams, 4 year old planting of 2000 trees and older grey and yellow box - 1/2 of the property is good grape or olive soil. Big shed, studio, gazebo, double carport. Not a house in sight, yet close to town. \$275,000. (03)5494 3675.

Nagambie. 100 acres Land for Wildlife and Trust for Nature covenant. Old-growth Box-Ironbark bushland on the rolling hills of Bailieston. Habitats range from Grey Box gullies, an ephemeral wetland to Stringybark ridgelines. Hundreds of mature Grey Box, Yellow Gum and Red Ironbark, with a variety of flora and fauna including listed *Flora and Fauna Guarantee Act 1988* species. The covenant allows for the construction of one dwelling and associated outbuildings. A peaceful retreat, and a rare unspoilt wildlife haven. All weather access. Only 130km from Melbourne. \$60,000 Contact mstewart@pocketmail.com.au or Ralph Dalton at Trust for Nature 9670 9933.

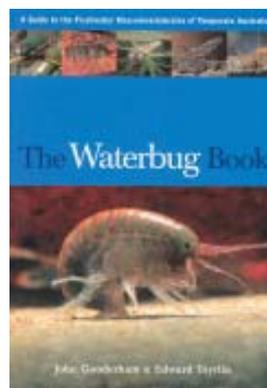
Have you sold or are you thinking of selling your Land for Wildlife property?

If you sell your Land for Wildlife property, please inform the Extension Officer or Statewide Coordinator. We can then alter the database and invite the new owners to join. **The Land for Wildlife sign is the property of DSE and needs to be returned or picked up.**

Advertising your property here is free to Land for Wildlife members.

Continued from page 14

Waterbug Book - A Guide to the Freshwater Macroinvertebrates of Temperate Australia. (2002). J. Gooderham & E. Tsyrlin. This guide provides an abundance of information concerning the biology of macroinvertebrates and includes a helpful and easy to understand key. It outlines distinguishing characteristics, distribution, habitat, ecology and natural history of a wide range of freshwater macroinvertebrates. The numerous, beautifully presented photographs that accompany the text, make this book a very useful guide for amateur naturalists, fishing enthusiasts, Waterwatch members,



students and stream ecologists. \$39.95. Available from DPI/DSE Information Centre (see page 2 for more details).

Land for Wildlife Extension Officers are at the following Department of Sustainability and Environment Offices:

Alexandra

- (03) 5735 1240
- (03) 5772 0257

Bairnsdale

- (03) 5152 0400

Ballarat

- (03) 5333 6736

Benalla

- (03) 5761 1611

Bendigo

- (03) 5430 4368

Central and West

Gippsland

- (03) 5183 9103

Geelong

- (03) 9785 0134

Portland and

Colac

- (03) 5523 3232

Melbourne area &

Port Phillip East

- (03) 9785 0134

St Arnaud

- (03) 5495 1700

Wodonga

- (02) 6043 7947

Other Land for Wildlife contacts:

Horsham

- (03) 5362 0765

Swan Hill

- (03) 5036 0832

Bird Observers Club of Australia

PO Box 185,
Nunawading, 3131
(03) 9877 5342 or
1300 305 342
(country callers).

Courses/Field Days/Information Sessions

7 June 2003. Farm Forestry/Plan for Trees. Peppermint Ridge Farm, Tynong North. Cost \$70 (\$20 for Cardinia Shire residents). (03) 5942 8580.

8 June 2003. Managing Salinity. Peppermint Ridge Farm, Tynong North. Cost \$70 (\$20 for Cardinia Shire residents & Melbourne Water Stream Frontage program participants). (03) 5942 8580.

15 June, 6 July 2003. Planning for Sustainability and Stewardship - Tools for Land Managers. Peppermint Ridge Farm, Tynong North. Cost \$220 or \$22 for eligible FarmBis members. (03) 5942 8580.

19 & 22 June 2003. Woodland Birds. Thursday evening lecture, Sunday excursion, Edna Walling Room 183-185 Springvale Road Nunawading. Cost \$35, or \$30 for BOCA members. Jenny or Trish (03) 9877 5342.

19 June 2003. Landscaping with Indigenous Plants. Greening Australia. Heidelberg. Cost \$220, concession \$88. Benita De Vincentiis (03) 9450 5305.

21 June 2003. Horses and Land Management. Peppermint Ridge Farm, Tynong North. Cost \$70 (\$20 for Cardinia Shire residents & Melbourne Water Stream Frontage program participants). (03) 5942 8580.

22 June 2003. Soils and Sustainability. Peppermint Ridge Farm, Tynong North. Cost \$70 (\$20 for Cardinia Shire residents). (03) 5942 8580.

28 June 2003. Property Planning. Peppermint Ridge Farm, Tynong North. Cost \$70 (\$20 for Cardinia Shire residents & Melbourne Water Stream Frontage program participants). (03) 5942 8580.

2 July 2003. Generating Income from Native Plants. Greening Australia. Venue to be confirmed (Melbourne area). Cost \$220, concession \$88. Benita De Vincentiis (03) 9450 5305.

9 July 2003. Advances in Plant Propagation. Greening Australia. Venue to be confirmed (Melbourne area). Cost \$220, concession \$88. Benita De Vincentiis (03) 9450 5305.

13 July 2003. Habitat Conservation and Management. Greening Australia. 15 weeks (Tuesday nights). Heidelberg. Cost \$880, or \$88 for eligible FarmBis members. Benita De Vincentiis (03) 9450 5305.

13 July, 23 July 2003. Introduction to Sustainable Land Management. Peppermint Ridge Farm, Tynong North. Cost \$465 or \$46.50 for eligible FarmBis members. (03) 5942 8580.

23 July 2003. Small Property Management. Victorian Landcare Centre, Creswick. Cost \$35/\$20 concession. Gayl Morrow (03) 5345 2200.

8 August 2003. Knowing What You've Got - Local, Natural Assets, Vegetation Communities. Victorian Landcare Centre, Creswick. Cost \$35/\$20 concession. Gayl Morrow (03) 5345 2200.

Volunteer Assessors Wanted! (In the Port Phillip)

Land For Wildlife Port Phillip is looking for new people to join its Volunteer Assessor Program, particularly in the western half of the region. The Port Phillip region extends from Aireys Inlet up through Meredith to Daylesford, Kyneton and Lancefield, down past Whittlesea and across to the upper Yarra catchment, and down through Bunyip to Cape Paterson.

We are looking for people with:

- Good flora and fauna knowledge
- An understanding of habitat management issues and solutions
- Excellent communication skills
- A friendly and positive manner
- Time and energy to commit on an ongoing basis

If you are interested in helping out with property assessments within this area, please contact John Hick (ASAP) on 9296 4631 or email John.Hick@nre.vic.gov.au.