LAND FOR WILDLIFE NEWS

Newsletter of the LAND FOR WILDLIFE scheme

Turn to page 11 to read about how the Jubilee Golf Course is helping to protect the Turquoise Parrot. Photo: Tadao Shimba.

Land for Wildlife Open Property Scheme
October
Come and see what is behind the green diamond-shaped sign! Go to page 15 for more details.

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BOCA Appreciation Education Conservation

Victoria The Place To Be

LAND FOR WILDLIFE VOLUNTARY WILDLIFE CONSERVATION

Statewide Coordinator and Editor, Felicity Nicholls Department of Sustainability and Environment, Box 3100, Bendigo Delivery Centre, Bendigo, 3554.
Tel: (03) 5430 4363
Fax: (03) 5448 4982
Email: felicity.nicholls@dse.vic.gov.au

See page 16 for a list of Land for Wildlife Extension Officers and Contacts.

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Editorial

Dear Land for Wildlifers,

First I would like to congratulate the Bird Observers Club of Australia (BOCA) on celebrating their 100th birthday. I remember fondly my first trips with BOCA as a little girl, heading out on bus trips without my parents, safe in the hands of many bird observers. Land for Wildlife and BOCA have had a association since Land for Wildlife first started. In fact, as mentioned in the last issue, it was BOCA who initiated the idea of recognising the efforts of private landholders in conservation of wildlife. I would like to acknowledge BOCA's huge contribution to encouraging landholders, government, companies and the community to value flora and fauna and the habitats they rely on.

Annette Cook from BOCA has kindly written an article on how to encourage children to birdwatch. Turn to page 9 to discover how we can encourage the future generation to not only become birdo's but to increase their knowledge on bird habitat, ecology and conservation.

I would like to apologise for the lateness of the last issue of Land for Wildlife News. Our administrative officer left our team for a new position and I was responsible for mailing out 7000 newsletters. Along with my part-time capacity, this meant that the mail out took 9 weeks instead of 2.

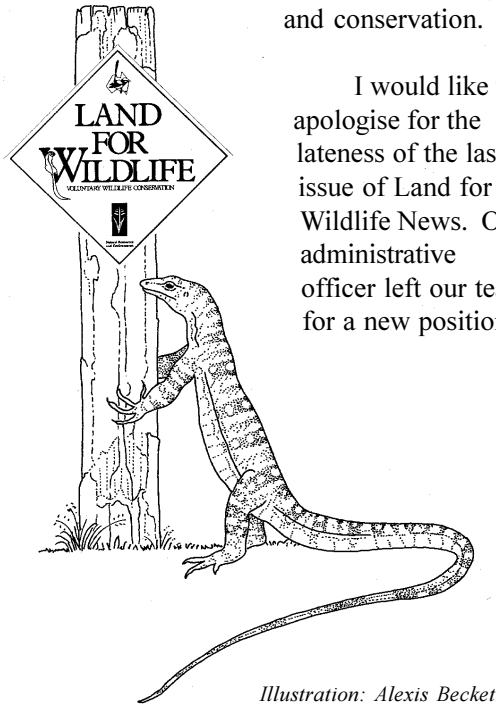


Illustration: Alexis Beckett

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

Every year we open up several Land for Wildlife properties to the public. This event usually occurs in September, however this year we are delaying the event until October (although there will still be an open property in September in South West Victoria). We hope the wildflowers, especially orchids, and the weather will be better. This also coincides with the Trust for Nature's open property scheme, Bush Month (visit the website www.tfn.org.au or contact them on 9670 9933). Have a look on page 15 for information on this event. The open property scheme gives people the opportunity to understand what the Land for Wildlife program is about as well as to see all the wonderful actions landholders are undertaking to conserve biodiversity on their property. We hope you can come along and catch up with the local Land for Wildlife Extension Officer as well as other members.

Felicity Nicholls
Statewide Coordinator
Land for Wildlife Program

Visit the Land for Wildlife Web site at www.dse.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
5,944	566,026 ha	138,327 ha	23,926 ha	73

Figures include reductions to areas due to de-registrations of properties. Current at 25th August 2005.

Letters to the Editor

Dear Editor,

Over the years I have noticed quite large groups of White and Straw-necked Ibis feeding in separate groups or together on winter pastures, particularly after rain. The ground did not appear to be under water, would have been quite soft and the grass was usually quite short. We live in South West Gippsland and the pastures are mainly used for beef grazing and hay. Memory suggests they are probably feeding on Cockchafer beetle grubs but my information does not say. Can you please help solve this mystery for me. I know the Straw-necked Ibis is often called the "farmers friend", apparently for good reason.

Tony Hughes, *Land for Wildlifer*, South West Gippsland

Dear Tony,

I was reading a new booklet recently by Clive Crouch "Tangible Benefits of Native Vegetation" (available free from Wimmera Catchment Management Authority - 5382 1544 or wca@wcma.vic.gov.au) about some observations in the 1950's. Two naturalists came across a flock of approximately 240,000 ibis breeding in the Riverina. A few were shot for gut analysis and each ibis contained an average of 2000 young grasshoppers. That is a lot of grasshoppers eaten by the whole flock in one day! I asked an officer from Birds Australia, Chris Tzaros (ex-Land for Wildlife officer) his opinion and his reply follows - "I've often seen both species of ibis foraging in pastures, particularly in winter, but also in other seasons when conditions allow (e.g. irrigated pastures during summer). At irrigated sites in warmer weather, and after heavy summer rains, my perception was that they foraged for crickets that had risen out of subterranean shelter sites such as cracks in the ground. When I see ibis feeding in pastures of short grass, I've often wondered whether they'd be taking earthworms. This is the time of year that worms come to the surface and I've recently seen lots of worm activity after this rain period. In areas of short pasture grass, they use their visual senses (their eyes!) to locate prey, but in shallow and murky water, or where there is vegetation to sieve through, most of their food is detected by mechanoreceptors in the tip of their bills."

Editor

Dear Editor,

I thought you might be interested to hear about an incident involving a delightful little pardalote with a very happy ending.

Last year I spotted this beautiful little bird burrowing into a big heap of gravel behind my shed. It was fascinating watching the grains of sand being propelled out of the burrow with great speed. Unfortunately we had some very heavy rain a couple of days later and the burrow collapsed whilst still in construction stage. I scratched a horizontal channel into the sand heap to a depth of about 20 inches. I got a 1-litre ice cream container, cut about 2-1/2 inch opening in one side and placed it upside down in the sand heap. I then placed a piece of 1 3/4 inch PVC pipe about 20 inches long into the sand and the ice cream container then covered it over. I was thrilled to see that both birds commenced building their nest in the make shift tunnel I made for them. I kept a constant eye on the nest of the next few weeks.

To my surprise and delight I happened to be having a cup of coffee one morning whilst sitting on a chair near the nest when I observed a female fluttering almost in a hover position out in front of the nest opening. She was about a foot away from the opening. My first reaction was that there was something wrong, like a lizard or rat or something was raiding the nest. While I was pondering what to do, out came a baby bird and fluttered to a nearby branch making a heavy landing and hanging onto a small twig with some difficulty. It was escorted to the tree some 20 feet away by the parent bird. She returned to the nest opening three more times using the same technique to encourage the young ones out, four in all. It gave me great satisfaction to observe this happening, and also to think that they used the make shift nest, because in a lot of cases human invention is not always tolerated by wildlife.

These little birds have been building their nest on my property for the last twenty years to my knowledge. I usually find one nesting couple every year.

I have enclosed a snapshot of this little fellow about to enter his borrow. This photograph was taken on my property in Lakes Enterance, Victoria last year.

R. Lineham, *Land for Wildlifer*, Lakes Entrance

AAA-FarmBi$ - providing financial support in learning activities

AAA-FarmBis is a joint Commonwealth/State Initiative that provides financial support by way of subsidies to assist primary producers, land managers and Indigenous land owners/managers to participate in training activities to improve their management skills. The program aims to assist individuals' ability to manage change, improve self-reliance, and develop a culture of continuous learning and skills development.

- Courses registered with FarmBis attract a 50% subsidy on the full eligible cost of the training.
- 75% subsidies are available for Indigenous participants.
- There is financial support available for childcare and carer costs as well as for travel and accommodation.

There are currently over 400 training activities registered with FarmBis that encompass a range of topics including: people management, financial management, general business management, marketing, production management and **natural resource management**. Training activities are delivered throughout the State by a range of training providers. FarmBis supports both group and one-on-one training activities. Go to the web site below to find a list of course categories and subcategories offered through FarmBis or contact your local Networker (see end of article for contact details).

To be eligible you must be either a:

- Primary Producer
- Indigenous Land Manager
- Land Manager
- Wild-catch Fisher

Primary producers are eligible to receive a subsidy for the full range of training activities registered with FarmBis. **Land managers** (who own or have management responsibility for a landholding zoned rural or rural residential greater than 2 hectares) are **eligible** for assistance when at **least 50%** of the **course content** is **natural resource management**. This includes courses on habitat conservation and management, sustainable land management, small property land management, soil care and native grassland management (refer to list of NRM courses on the website www.farmbis.ruralfinance.com.au.).

For **more information** on the FarmBis program including what type of training activities are supported please see the website www.farmbis.ruralfinance.com.au

FarmBis Networkers are also available to answer any of your questions regarding the program:

Janine Dridan
South West, Port Philip and South Gippsland regions
Phone: 03 9296 4638
Mobile: 0407 491 119
Email: janine.dridan@dpi.vic.gov.au
HOURS OF WORK: Full-time

Heidi Lindner
North Central, North West and Wimmera regions
Phone: 03 5430 4518
Mobile: 0400 641 972
Email: heidi.lindner@dpi.vic.gov.au
HOURS OF WORK: (Part-time) Mon - Wed

Helen Jerome
North East, Goulburn Broken and East Gippsland regions
Phone: 02 6043 7900
Mobile: 0418 334 694
Email: helen.jerome@dpi.vic.gov.au
HOURS OF WORK: (Part-time) Mon - Wed

www.farmbis.ruralfinance.com.au

Has it been a long time since your property was visited by a *Land for Wildlife* Extension Officer?

Have you got lots of new questions to ask?

Would you like to show them the changes that have happened on your property to improve its conservation value?

Give your local *LFW* Extension Officer (see page 16 for contacts) a call and invite them out to your property for another visit.

Did you get.....?

As members of *Land for Wildlife*, you should have received a folder with some back copies of newsletters and a full set of *Land for Wildlife* Notes series (43 notes in the set).

Please contact your local *Land for Wildlife* Extension Officer if you did not receive these after your property assessment. They are also available on the Web. See page 2 for more details.

Bush Detective
Who made this?
Who did this?

Photo: McCann/DSE

Mud glorious mud!

Fairy Martin nests at a Land for Wildlife property at Shelbourne East. Photo: Felicity Nicholls

Fairy Martins are responsible for building these amazing nests. Breeding occurs mainly from August to February, with the same site used year after year. The distinctive nest is a bottle-shaped structure of compacted pellets of mud, plastered against a vertical or overhanging surface. Nests are often crammed together, and the underside of bridges, caves, cliffs, building eaves, eroded banks or roadside culverts are typical sites.

Fairy Martins are found in a wide range of open woodlands and grasslands, usually near water and predominantly in low altitude and low rainfall areas. They feed on small flying insects, captured in flight.

Sugar Gliders in a nest box

A family group of Sugar Gliders have moved into a nest box on Jim and Joan Nancarrow's *Land for Wildlife* property at Paynesville.

Sugar Gliders are communal, often living in groups of 3-8 animals, sometimes more in summer when juveniles are present. Group members share a tree-hollow as a den site, in which a neat spherical nest of green eucalypt leaves is built. When disturbed in the nest, they make a growling agitation call. Although communal, they are most often encountered foraging alone, though others are usually in nearby trees.

Reference: Tzaros, Chris (2005). Wildlife of the Box-Ironbark Country. CSIRO Publishing.

Photo: Belinda Rossack, DSE

The Satin Bowerbird - Don Juan of Aves

"Love is the noblest frailty of the mind" (John Dryden, *The Indian Emperor*)

On a recent visit to Jeanette Mitchell's Barongarook property in the Colac-Otway Shire I had the opportunity to take this photo of a Bower of one of my favourite quirky avian characters, the Satin Bowerbird (*Ptilonorhynchus violaceus*). For those familiar with this particular species, no introduction will be necessary. However, for those uninitiated I would speak for a while on a very unique personality who resides within South Eastern Australia's Rainforests, Wet Forests and Woodlands.

Male Satin Bowerbird. Photo: Ian McCann/DSE

In Victoria, the Satin Bowerbird occurs throughout Gippsland, casually in the Mt Macedon area, and commonly in the wet forests of the Otway Ranges southwest of Aireys Inlet. Breeding occurs September through January, with the species subject to autumn dispersal into lowlands. Flocks numbering twenty to fifty individuals are often seen over the winter months, mainly comprising the green females and immature males (Prizzy & Knight, p.478, 1997).

So what makes this species a source of fascination to bird enthusiasts and scientists alike? Well, the Satin Bowerbird is a romantic, you might say, particularly the male with his iridescent blue-black plumage and bright blue eyes. Flamboyant by nature, he likes to woo his women, many women if he can actually, and for a bird he has a complex way of going about it.

The bower. Photo: Kelly Dufty

We now return to the Bower. The structure is essentially an arching thatched avenue, painstakingly constructed of grasses and fine twigs, and lined with mulched berries and occasionally charcoal. The Bower itself is not a nest, but a purpose built theatrical stage for the enactment of courtship rituals and subsequent consummation of Bowerbird love. Some have quite rightly called them Bachelor Pads. Their purpose is to press the male's suit to interested females, in his ardent desire to impress. When the Bower is structurally complete, the male then surrounds it with certain gathered treasures; objects intended to further impress admirers with his architectural proficiency; objects, which in the case of the Satin Bowerbird are almost always, blue. Enveloped now by blue feathers, flowers, berries, glass, pens, plastic straws, bottle caps and the like, the Bower becomes the setting for elaborate courting displays.

Bearing a blue treasure in his beak he will leap about singing and flaring wings and tail, performing with lascivious zest, or alternatively freezing in trance like stillness for short periods of time. These displays can take up much of the Bowerbirds day (Prizzy & Knight, p.478, 1997). Should the female Satin Bowerbird find the male suitably alluring, mating will occur within the Bower itself. The female will then construct a nest in the vicinity of the Bower, where she will lay one to three eggs and rear the subsequent young. All the while, the male will be off in his Bower attempting to lure, seduce, and generally lead astray other women (raises eyebrows in an exasperated gesture of tolerance towards the males of the world – joking now, don't write and complain!).

So, in suspecting dotty old Merle from next door, of continually making off with your best blue clothes pegs you may, in fact, have erred. The culprit could easily be an ostentatious blue-black shadow with an obsessive-compulsive fetish for blue. Lurking in you trees, he could be waiting patiently…waiting in stealthy silence for the minute you pop inside for that ill fated coffee, only to return to find, shattering as it may be, all your blue things nicked.

Fret not dear people, you are not the only victims of such treachery. Satin Bowerbirds are no strangers to devious subterfuge. Dominant males often ransack the Bowers of lesser adversaries, stealing their competitor's blue things with fiendish abandon and trashing their pad for good measure. Apparently, this is a species that goes by the theory that all is actually fair in love and war. But we do so love a dashing villain don't we?

On a serious note - if you have Satin Bowerbirds in your area, please ensure any blue plastic milk container rings (or yellow for that matter – they occasional snatch yellow things too) are cut into two pieces before disposal, as whole, they present a significant risk of strangulation to Bowerbirds.

Kelly Dufty LFW Extension Officer - Colac.

Reference: Pizzey, G. & Knight, F. 1997. '*Field Guide To The Birds Of Australia'*, Angus & Robertson, Imprint of Harper Collins *Publishing.*

Borgia, G. 2005. www.pbs.org/wgbh/nova/bowerbird/trail.html

Sea-Eagles Nest Surveys, Help Needed!

The White-bellied Sea-Eagle is one of Australia's most majestic and beautiful coastal birds of prey. Unfortunately they are also one of Victoria's most endangered bird species. White-bellied Sea-Eagles are usually found along the coastline of Australia and also range inland. In Victoria they are most common between Gabo Island and Wilsons Promontory.

The adult White-bellied Sea-Eagle is a large white bird, with large greyish wings, a short, white tipped wedge shaped tail, a white head, breast and abdomen. Juveniles are often mistaken for Wedge-Tailed Eagles, are speckled brown with a pale face leading to white at about two years of age. They usually acquire their full adult plumage at three to four years of age and females are generally larger than the males.

To build on the understanding of numbers and distribution of the Sea-Eagle, the Department of Sustainability and Environment is asking landholders to come forward with any sightings of Sea Eagle nests. Faye Bedford, Fauna Officer with DSE said "We are currently undertaking surveys of the Eagles and their nests in the Gippsland region and are always looking at improving our knowledge of their distribution and numbers. Most of our records have come from the community".

"The causes for the Sea Eagles declining numbers include the clearing of suitable nesting trees, loss of habitat due to clearing of coastal forests for both agricultural an urban expansion particularly in the central and western coastal areas of Victoria".

Above: White-bellied Sea Eagle in flight. Below: Volunteers in the field at Sale. Note the nest in the dead tree. Photos: Faye Bedford.

"With an impressive wingspan of around two meters, these are big birds, and big birds need big trees to nest and roost in. Their nest can be up to 2 metres across and 2 meters deep" Ms Bedford said.

In Gippsland the birds prefer roost sites in prominent living or dead trees usually nesting in Red Gums or Southern Mahogany. "We often underestimate the value of a tall dead tree and only see it as a good source of firewood. Any dead tree has ecological value and felling it often displaces a wide variety of wildlife species whose life cycle may revolve around it".

"Hollow nesting parrots, owls, nightjars, many species of bats, possums, gliders, reptiles and insects often call these old stags home" Ms Bedford comments. "It's not just about providing habitat and shelter for one species; these trees benefit many…it's all interconnected".

Mating of Sea Eagles is for life. These impressive birds usually produce one or two eggs between the months of April and August. Nests of the 'White Bellied's' are often a huge construction located in large Eucalyptus trees or cliffs overlooking the ocean, which they build upon year after year. To build their nests, Sea Eagles require sticks and branches. However in their quest for firewood, people often pick up these critical Sea Eagle building items without giving it another thought.

To ensure privacy for the Eagles during nesting, Ms Bedford asks that people observe Sea Eagles from a distance. "Surprisingly for their size, they are quite a timid bird and may abandon a nest with eggs and chicks if the disturbance is too great for them. Often people have good intentions by wanting to find the nest, but inadvertently cause the birds to abandon." Watching the birds with binoculars from a distance is highly recommended.

To assist identification, the Department has a mounted specimen in their front foyer at their new office located on the Princess Hwy Bairnsdale.

All sightings of either birds or nests can be made directly to Faye Bedford on (03) 51520469.

Refer to Land for Wildlife Note No 37 "How you can help White-bellied Sea-Eagles on Private Land". Pam Clunie 1996, DSE. Please do not use the form on the back of the Note for this survey. Please ring Faye direct.

Practicalities.... *handy hints and ideas*

Native alternatives to lawn

Have you had to think about how much water to put on your garden? Maybe you would like to change to a lawn that requires less mowing and less water. If you have a native garden you may like to consider having a native lawn as well.

In many modern garden designs you will notice a greater use of grasses. More of the grasses used in design work are native. Some like kangaroo grass make a spectacular display in a garden situation when flowering. Native grasses also provide habitats for butterflies and other insects.

Native grasses have a deep root system, which means they require less water than a conventional lawn. Some native grasses remain greener over the summer and if they have taken on a dry tinge, green up quickly after summer showers. As native grasses are adapted to Australia's low fertility soils, they do not require great amounts of fertiliser to keep them going.

When deciding to grow a native lawn you may decide to start with a small area before tackling a larger one. If using trays of plugs allow the grass to grow and fill in the gaps and you may find that as seed sets the grass will gradually take over a larger area.

How do I grow a native lawn?

Native grasses can be grown from seed and some nurseries sell the plants as trays of plugs, which can be planted in a grid pattern into a prepared surface. As with the establishment of any lawn the more preparation that goes into it the better the results, so follow the directions in any good gardening book. One of the most important aspects is to get rid of the old lawn and any weeds that may have been in it. If the previous lawn was made of a creeping grass then you will need to make sure no pieces of that grass remain.

If growing the lawn from seed you need to make sure the area does not dry out while the seed is germinating. Native grass seed is expensive to buy so you may choose to harvest your own if you have some growing on your property.

Any lawn requires additional watering while it is establishing but in the long term it should require less water than a conventional lawn. Lawn using native grasses also often have less weeds because of the lower fertility levels.

Which native grass to choose?

There are several species of grass suitable for lawns and they are found growing naturally in many parts of Australia. Some work is being done by the native grass industry to develop special cultivars suited for use in lawns.

Weeping Grass, *Microlaena stipoides*, Common Wheat Grass, *Elymus scaber,* Wallaby Grass, *Austrodanthonia sp.* and Kangaroo Grass, *Themeda triandra*, make good natural lawns. Find a good nursery that sells indigenous plants and ask their advice on what to plant in your area. Native grasses are suitable for areas that do not have a lot of traffic and are not cut too low.

If you leave your grass to grow longer you may decide to grow some of our wonderful grassland plants and have a native "grassland" in your garden. Often the seedheads of native grasses provide an interesting feature that means you can leave the grass longer between mowing and enjoy the seed heads.

Other plants to include in your grassland in your garden:

Ajuga australis	Austral Bugle
Arthropodium fimbriatum	Nodding Chocolate-lily
Arthropodium milleflorum	Pale Vanilla-lily
Arthropodium strictum	Chocolate Lily
Brachyscome multifida	Cut-leaf Daisy
Brunonia australis	Blue Pincushion
Bulbine bulbosa	Bulbine Lily
Burchardia umbellata	Milkmaids
Calocephalus citreus	Lemon Beauty-heads
Chrysocephalum apiculatum	Common Everlasting
Chrysocephalum semipapposum	Clustered Everlasting
Convolvulus erubescens	Pink Bindweed
Helichrysum rutidolepis	Pale Everlasting
Helichrysum scorpioides	Button Everlasting
Kennedia prostrata	Running Postman
Leptorhynchos squamatus	Scaly Buttons
Leptorhynchos tenuifolius	Wiry Buttons
Microseris scapigera	Yam Daisy
Ptilotus erubescens	Hairy Tails
Ptilotus spathulatus	Pussy Tails
Viola hederacea	Ivy-leaf Violet
Wahlenbergia communis	Tufted Bluebell
Wahlenbergia gracilis	Sprawling Bluebell

Why use native grasses?

Native grasses require less water once established
There is no need to add lots of fertilizer
They are drought tolerant
The seedheads are attractive
They provide habitat for native fauna

Elspeth Swan, Land for Wildlifer, Mt Egerton

Little Land for Wildlifers

Kids and Birdwatching

According to one web site for beginner birdwatchers all you need to begin birdwatching is: a pair of binoculars, a field guide and curiosity. It is probably the last attribute that is most important when it comes to children.

Asha Dufty (left) and Adia Quinlivan (both 4 years old) birdwatching. Photo: Brian Dufty

Birdwatching can be done from the kitchen window, in the local park, schoolyard or in the back paddock. Birds are very visible, sometimes noisy and, unlike mammals, they can be observed mostly during daylight. Children can record not only what birds they see but when, where and what they are doing. This helps to give a complete picture of bird ecology. Comparing seasons and even observations from one year to the next can add further pieces to the jigsaw.

I have visited several schools to deliver bird talks and activities. There is always a high level of interest. Children, even at schools where environmental education is not a key feature, make terrific observations. At one city school, while showing the skin of a Masked Lapwing, there was immediate recognition and exclamation, "They're the ones that swoop us on the oval!"

The children always love to look at bird skins. Other tools I have used when talking to children are posters, computer images and craft activities. We have made bird-shaped kites, decorated raffia bowers and painted rocks to look like owls. The favourite activity for many children has been dissecting owl pellets. "Yuk, but fun", was child's description.

These classroom activities help to build on the children's observations and to learn some of the facts behind the bird. It is the outdoors that provides the most fun and adventure though. Have those binoculars handy, a field guide or poster on the wall and get out there, looking. A notebook to record observations can be useful, a little sketch, time of day, where the bird was seen, perhaps a photograph of the habitat, if not the bird.

At the Bird Observers Club of Australia we have a junior club called the Stickybeaks. The club is open to children under 14. There are four newsletters a year, which include contributions from members, as well as lots of information about birds and conservation, and also quizzes and craft. In addition to Stickybeaks we will be running school holiday activities in September and can provide resources and ideas for schools or community groups to run their own bird activities for children.

The dictionary definition of stickybeak is – inquisitive. Perfect, let's encourage those young, curious minds. Provide opportunities to observe, record and discuss birds in their habitat and we are on our way to future generations who know and understand much about ecology.

Annette Cook, Education Coordinator,
Bird Observers Club of Australia
Ph: 9877 5342 or 1300 305 342 country callers

Congratulations to the Bird Observers Club of Australia on celebrating their Centenary

Bird Observers Club of Australia
1905 • 2005
CENTENARY

Sketch of bandicoot by Alexis Beckett

Eucalypt Plantations as Habitat for Wildlife

Birds and mammals are being studied in eucalypt plantations (59 sites so far) and nearby farmland and forest, to develop ways of enhancing plantations as habitat for wildlife. Plantations can make a positive contribution to conserving biodiversity in the landscape, supporting intermediate populations of forest species (higher than open farmland but lower than remnant forest).

People and industry invest effort into establishing eucalypt plantations on farmland for many purposes, often hoping that they provide habitat for native wildlife. Until recently, there was little information about which species would benefit, and even less about ways to improve the value of new plantations for wildlife while meeting commercial objectives.

Now a team of biologists from the Arthur Rylah Institute for Environmental Research (DSE) and the Department of Primary Industries is addressing these questions, in collaboration with the Rural Industries Research & Development Corporation and the Natural Heritage Trust. Five experimental plantations were established in north-east Victoria, with understorey shrubs planted among the eucalypts, and will be monitored for five years. Existing eucalypt plantations (5+ years old) are also being examined at 59 sites in north-east and central-west Victoria, along with nearby sites in farmland and remnant forest. The 5-year project focuses on practical ways to enhance biodiversity values in commercial eucalypt plantations.

What value are eucalypt plantations to wildlife?

The study so far has shown that plantations support higher densities of forest birds and mammals than cleared farmland, and slightly lower densities than native forest. The reverse applied to open-country birds. Pessimists expected that introduced birds or invasive native species would dominate the bird fauna, but this was not the case. Introduced birds formed less than 1% of the bird population in plantations, compared with 1.7% in native forest and 2.5% in cleared farmland. Evidence was found that plantations could help protect adjacent remnant native vegetation against adverse effects of stock and invasive birds.

The common mammals in eucalypt plantations included bats (recorded by ultrasonic detection at all sites) and eastern grey kangaroos *Macropus giganteus*. Plantations provided day-time shelter for kangaroos, and night-time foraging for bats, which need large old hollow-bearing trees for roosting and are known to fly many kilometers between roosting and foraging habitats. Arboreal marsupials were scarce but five species were recorded by spot-lighting or hair-tubing, mainly close to remnant native forest. Five introduced mammal species were recorded, in low numbers.

The common birds in plantations were species that were also common in nearby native forest, along with a few that favour open country (e.g. Australian magpie *Gymnorhina tibicen* and yellow-rumped thornbill *Acanthiza chrysorrhoa*). Forest birds that feed from the eucalypt canopy (e.g. striated thornbill *A. lineata*) or open ground among trees (e.g. buff-rumped thornbill *A. reguloides*) were as common as in native forest, and made little use of open farmland. They have clearly benefited from plantation establishment. A forest bird that often visits open farmland in winter (flame robin *Petroica phoenicea*) was common in eucalypt plantations and nearby pasture. Seed-eating parrots and finches were as common as in forest. Insectivores that forage from understorey, honeyeaters, carnivores and hollow-nesting birds inhabited plantations at intermediate densities (higher than open farmland, lower than native forest). Insectivores that feed from the eucalypt bark (e.g. white-throated treecreeper *Cormobates leucophaeus*) used some plantations, but were much less common than in native forest.

Proposed analysis and further work

Analysis is planned to examine how various habitat features (e.g. retained old trees) contribute to the value of plantations as habitat for wildlife, and how values can be enhanced through small changes to plantation design or management. We hope to extend the project by examining low-rainfall plantations in the Wimmera, and extensive plantations in south-west Victoria. We propose to compare more patches of remnant native vegetation, embedded in eucalypt plantations or farmland.

Conclusions

The study so far confirms what many tree growers know or hope. Eucalypt plantations can make positive contributions to conserving forest wildlife in rural landscapes, even though they cannot be expected to provide the complex habitat needs of all species. From preliminary analyses, we can begin to describe these contributions for two regions of Victoria, and hopefully will be able to do so more broadly in the near future.

Richard H. Loyn[1], Edward G. McNabb[1], Phoebe Macak[1] and Philippa Noble[2]
1.Arthur Rylah Institute for Environmental Research, DSE, Heidelberg
2. Department of Primary Industries, Wangaratta

Taken from an article in "Victorian Landcare & Catchment Management" Autumn 2005 Issue 34.

Property Profile

Jubilee Golf Course - more than just a green

When we think of golf courses, it is usually as a series of beautifully tended greens and very little natural habitat, not as a wildlife haven. At Jubilee Golf Course the Course Superintendent Andrew Heslin is slowly changing ideas and attitudes with his enthusiasm for attracting and protecting wildlife. I first visited the Golf Course, nestled below the Warby Range State Park, near Wangaratta, in January 2004, during the height of the drought and was amazed by the diversity of native animal and plant species that were thriving around the course. Turquoise Parrots utilise the area for feeding and Andrew Heslin often sees them feeding on native grass seeds in winter. He had seen the potential to improve the wildlife habitat on and around the golf course and was working towards increasing habitat areas and educating the golf club members about the importance of these areas.

The golf course contains many native grasses such as tussock grass *(Poa sp.*), wallaby grass (*Austrodanthonia sp.*) and spear grass (*Austrostipa sp.*). In addition there are many herbs, trees and grasstrees present. Andrew was mowing the native grasses in the 'rough' but was planning to allow them to grow in certain areas and re-establish shrubs as well. The Ecological Vegetation Class is Granitic Hills Woodland which means that it contains species such as Red Stringybark, Red Box, Long-leaf Box, Grasstree, Alpine Grevillea, growing amongst the granite boulders.

Already Andrew had prepared an Environmental Management Plan for the course, which recognised the need to sustainably manage the course for wildlife, and, in addition had set up an environmental committee to discuss and recommend areas which could be set managed for wildlife. This includes actions such as allowing the native species to grow naturally without mowing, leaving logs on the ground for foraging birds and reptiles and erecting nest boxes to provide additional habitat for Sugar Gliders and possums. The course was awarded Working towards Registration and we discussed changes that Andrew could make in order that the Golf Course would qualify for full registration.

I went back in June 2005 to see what progress had been made, and was amazed at how much had been achieved in a short space of time. As you can imagine, a bright green lawn requires a lot of precious water, and a golf course is no different with its greens and fairways. Andrew however, has been able to cut the water consumption by well over a half with smarter watering techniques proving popular with neighbouring landholders. In addition he has limited the use of insecticides and uses natural deterrents such as Tea-tree, eucalyptus and biological controls to limit pests such as African Black Beetles. He is also planning to replace the imported grasses used on the fairways with native grass.

Perhaps one of Andrew's most innovative actions has been to set up a propagating area to grow his own plants with the assistance of some unemployed people from the Work for the Dole program. They helped to set up the irrigation system and build the greenhouse for the plants. He has been able to use these plants to enhance the environmental areas at the golf course, and just as importantly is in a position to donate some of these plants to the local community such as schools, the cemetery and local Landcare Group. As well as improving habitat the planting also helps with small areas of erosion caused by water running from springs through the course and improving the aesthetics. Andrew sees the education of members and the community as vitally important to the success of the works he is undertaking, both in encouraging others to follow his example and in attracting more visitors to the Golf Club. The Jubilee Golf Club is a wonderful example of a recreational facility in a community being able to give something back to the environment and to the community.

Golf Courses are eligible for Land for Wildlife membership and interested people should contact their local Land for Wildlife contact at their DSE office or online at www.dse.vic.gov.au

Debbie Colbourne, LFW Extension Officer, Benalla
Photo: Debbie Colbourne

Environmental Management in Agriculture: Native Biodiversity Resource Kit

Imagine a new approach to farming that could assist production, sale of produce, environmental sustainability and conservation of Victoria's native biodiversity. By demonstrating their biodiversity conservation, Victorian producers may have an edge over their competitors that benefits them in the marketplace and back on the farm.

A native Biodiversity Resource Kit is now available on-line from the Department of Sustainability and Environment website to assist farmers and other landholders to work towards improved conservation of native biodiversity. The Resource Kit has been extensively trialed by Departmental staff over the last 12 months and its release has been eagerly awaited as it provides a consistent and practical method that landholders can use to assess and manage native biodiversity resources on their property.

Major features of the website include:

- An introduction which includes a flow-chart for dealing with native biodiversity and information on how the Resource Kit relates to ISO 14001 EMS.
- Work sheets relating to the self-assessment process (eg assessing habitat quality, determining conservation status and vegetation types), setting targets, determining management actions and monitoring. Instructions on using mapping tools to determine EVCs and conservation status are included in this section.
- Individual Ecological Vegetation Class (EVC) Group score sheets.
- Fact sheets summarising the key native biodiversity information. This section includes general information, Environmental contacts (listed for each region as well as for emergency incidents), native biodiversity assessment (including information on professional contract briefs), targets and actions.

Limited hard copies of the Resource Kit (CD ROM) have been produced, if you experience difficulty downloading any of the PDF documents please contact:

Andrew Straker, Policy Analyst, DSE, Ballarat on 5336 6716 or andrew.straker@dse.vic.gov.au

www.dse.vic.gov.au > Conservation and Environment > Environmental Management in Agriculture - Resource Kit

The Gallery of Strange Nest Sites

Here are a couple of photos showing unusual nest sites from *Land for Wildlifer* Adrian Fyfe from Foster. On the left is a Grey Fantail nest, built last season, in his garage/workshop, nestled between the cords for the power board and fluorescent light. The birds were building the nest even when Adrian was working in the garage. Two or three nestlings were hatched from the clutch. Adrian always made sure he remembered to leave the side door open (or window) to allow the birds access to the nest.

The photo on the right is of a Willy Wagtail nest in an outside light frame under the front verandah. It was built four years ago and the birds manage to get at least two hatchings each season. The nest is above the sleeping spot of Stella, their Maremma dog and the birds have no problems sharing the area with her. Stella has become quite protective of the young fledglings when they leave the nest and has donated large amounts of her white hair for the construction of both nests.

Photos: Adrian Fyfe

Economic Benefits of Biodiversity

Riparian Ecosystem Services

What are Ecosystem Services?

Ecosystem services are the benefits to humans that come from plants, animals and microorganisms in nature interacting together as an ecological system, or ecosystem. The functioning of natural ecosystems provides services that are essential for human health and survival. Examples of the kinds of services we receive from nature include water filtration, maintenance of soil fertility, pollination, pest control, and cultural and spiritual fulfillment.

Riparian areas, which are the focus of this article, are where the land and water meet in landscapes (see box below for definition). They are particularly important producers of ecosystem services because the diversity of ecological processes that characterise riparian areas support a wide range of human activities.

Riparian vegetation on a LFW property at Arcadia. Photo: Felicity Nicholls

Some of the ecosystem services provided by riparian areas include:

- **Decreased erosion.** Well vegetated riparian areas stabilise riverbanks and protect them in times of flood. Accelerated bank erosion can lead to loss of valuable agricultural land and infrastructure such as roads, bridges and buildings;
- **Improved water quality.** Good management of riparian land can decrease the amount of soil and nutrients moving from cultivated fields upslope into the stream;
- **Healthy ecosystems**. Good management of riparian land can prevent or minimise damage to both land-based and river ecosystems. Such damage can upset important biological balances;
- **Maintaining biodiversity.** Riparian lands play an important role in the lifecycle of many native animals and plants. Riparian areas provide wildlife corridors as well as being a refuge for animals in times of drought and fire;
- **Maintaining river courses.** Healthy riparian vegetation protects riverbanks and channels and reduces the risk of erosion. When riverbanks are cleared, increased flow can cause rivers to change their course and form new meanders or flood channels;
- **Decrease in insect pests.** Healthy vegetated riparian land provides habitat for insect-eating animals and insect parasites that can help protect pastures and crops from damage;
- **Decreased algal growth.** Riparian vegetation helps to reduce light and temperature levels of stream ecosystems. It has been shown that this controls the growth of nuisance plants and algae, even when nutrient levels in the stream water have increased;
- **Maintaining fish stocks.** Healthy riparian vegetation helps maintain good habitat for aquatic animals, including insects and the fish that feed on them;
- **Increase in capital values.** Anecdotal evidence from real estate agents suggests that well managed riparian frontage can add up to 10% of the market value of a rural property;
- **Shelter effects.** The shelter and microclimate that riparian vegetation creates can help to reduce death in newborn or newly shorn sheep, and lead to improved growth and productivity through reduction of heat or cold stress in animals. Also reduces wind speeds and this can assist growth and production of crops and pasture;
- **Retention of nutrients.** In addition to preventing erosion and improving water quality, riparian vegetation can absorb and use natural or added nutrients that might otherwise be washed into streams, resulting in the growth of nuisance plants and algae;
- **Lowered water tables.** Deep-rooted riparian vegetation may, in some circumstances, act to lower water tables, reducing the movement of salt into streams;
- **Recreation.** Provide opportunities for fishing, canoeing, swimming or simply relaxing;
- **Cultural and spiritual fulfilment.** They provide people with connection to the environment, their past, present and future; and
- **Ecotourism.** Can provide opportunities for this industry.

Source: Lovett, S. Price, P. and Cork, S. 2004. "Riparian Ecosystem Services". Fact Sheet 12, Land & Water Australia, Canberra.

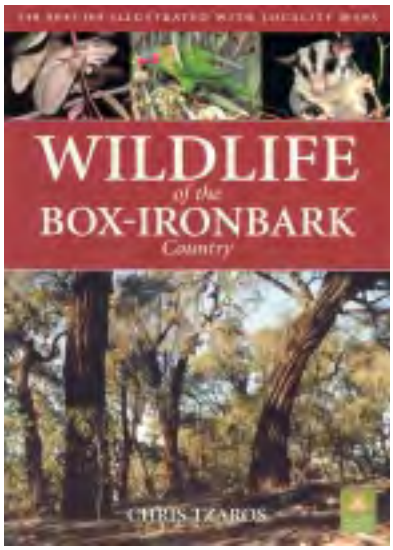
Riparian Land

Riparian land is any land that adjoins or directly influences a body of water. It includes:

- the land immediately alongside small creeks and rivers, including the river bank itself;
- gullies and dips that sometimes run with water;
- areas surrounding lakes; and
- wetlands and river floodplains which interact with the river in time of flood.

Recent Publications

Wildlife of the Box-Ironbark Country. 2005. Chris Tzaros (Birds Australia). CSIRO Publishing. This stunning guide gives a comprehensive overview of the ecology of the box-ironbark habitats and their wildlife. It covers all of the mammals, birds, reptiles and frogs that occur in the region, with a brief description of their distribution, status and ecology, together with a distribution map and superb colour photographs for each species. The book includes a 'Where to Watch' section, featuring a selection of national parks, state parks and nature conservation reserves as places where people can experience the ecosystem and its wildlife for themselves. The book includes an audio CD of nature sounds and bird calls. $39.95. Available from CSIRO Publishing (Ph 1300 788 000 or www.publish.csiro.au or publishing.sales@csiro.au or from any good bookstore. [Eds. note - Chris was a LFW Extension Officer based at Bendigo]

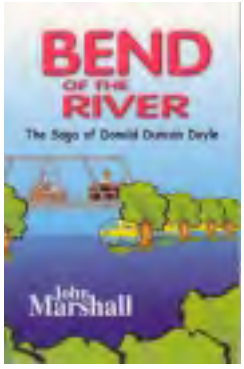


A Vision Splendid: Dreams, inspirations and experiences of farm forestry in Australian landscapes. 2005. Greening Australia. This inspiring new book presents the fascinating first-hand accounts of eight Australian farmers who are 'having a go' at something different. This unique compilation glimpses the journeys taken by these remarkable farmers and their families as they strive towards their own evolving visions of enjoyable, profitable, and environmentally sustainable farming and country living. $22. Production of this publication is supported by the Natural Heritage Trust. Available from Greening Australia by phoning (02) 6281 8585, visiting www.greeningaustralia.org.au or emailing general@greeningaustralia.org.au

Fungi Down Under - the Fungimap guide to Australian Fungi. 2005. Pat and Ed Grey and edited by Leon Costermans. Published by Fungimap. This book is a field guide to the 100 Fungimap target species, covering all major groups of macrofungi. One page per species, with comprehensive descriptions, and comparison against look-alikes. Each species is accompanied by colour illustrations with important features annotated. Also includes distribution maps. $29.95. Available from Fungimap (fungimap@rbg.vic.gov.au).

A Field Guide to Fungi. 2005. Bruce Fuhrer. A definitive field guide covering more than 500 fungi species with 548 superb colour photographs. All fungi photographed in their natural environment - many for the first time with information on fungal biology, ecology, classification, distribution, roles of fungi in nature, and spore prints. Descriptions cover size, range, shape, habitat information as well as spore print colour, spore descriptions and a pictorial guide to groups. $49.95. Available from Blooming Books (03) 9427 1234 or www.bloomings.com.au or any good book store.

Bend of the river - the saga of Donald Duncan Doyle. 2005. John Marshall. Pallas Publishing. PO Box 335, Kangaroo Ground, 3097. (03) 9712 0323. A novel about an eccentric artist and his mate who challenge a scheming businessman, whose intention is to destroy the pristine bushland at the bend of a river to construct a sterile caravan park. John Marshall has been a Land for Wildlife member since the program started.



Conservation Properties for Sale

Contact the Editor if you would like to advertise your Land for Wildlife property for sale in this section. It is a free service to members.

Junortoun (Bendigo). Secluded LFW contemporary north facing brick and timber home on 2.5 acres, (1 hectare) 7 kms from Bendigo city centre. A rare diversity of plants, including Rosy Heath Myrtle, Ausfelds, Whirrakee wattles, Melaleuca, Calytrix and grasses are protected by a Bushcare covenant on the remnant wooded grassland block. The home comprises a comfortable, light, open plan living, dining, kitchen area. With two bedrooms, main, north east facing with walk in robe, and 2 bathrooms downstairs, two spacious bedrooms upstairs, our home makes the most of winter sun and is protected from summer heat by covered pergola. The vegie garden and paved outdoor areas sit well with the natural bush surrounds and take advantage of the very private aspect. Large separate workshop, car port, water tanks and town water. Price $280,000 - $320,000. Contact Martin Skahill at realmartin@eldersre.com.au. Ph 03 5443 1744.

West Wimmera. This 90 acre property in the West Wimmera, approximately 1/2hr from Horsham, is situated adjacent to the Little Desert and close to Mt. Arapiles. It comprises about 50 acres of cleared land and 30 acres of native vegetation. Geraldton wax and foliage gums have been planted on the remainder. The cream b/v home has a s/c wood heater, a s/c wood stove, an electric stove, r/c air conditioner, 2 toilets, 2 showers and a solar h/w/s boosted by the s/c wood stove and electric backup. Other facilities include a double garage, a tunnel house and attached shade house, a 60ft by 40ft shed with a 91000 lt rainwater tank and a bore. This sheltered tranquil property enjoys an extensive range of native flora and fauna and is for sale at $240000. Enquiries phone (03) 5387 0526. Not a Land for Wildlife property.

15kms south Colac. 7 acres LFW opposite State Forest. Secluded bush setting. 3 acres remnant vegetation with diverse understorey. Other areas of land revegetating. Plentiful flora and fauna including frogs and echidnas. Well fenced. High rainfall. 90,000 litre tanks and 2 dams. Charming 2 1/2 bedroom 2-storey mudbrick home. Large powered shed with mechanics pit. Not suitable for grazing. $270,000. Ph. (03) 52 358130.

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.

Callignee. LFW property, 5 acres, 20 minutes from Traralgon, nestled in sheltered valley in Strzelecki Ranges, Central Gippsland. Property is hillside of bush facing east, warm winter sun and cool summer afternoons. Established wetland and small creek flows into Flynns Creek. BV 3-bedroom home, verandahs all around, garage, double carport, 2 water tanks. Wildlife visit all year. Rich red soil, rambling garden paths and plenty of flat areas for shed or garden expansion. $260,000. Contact Rosemary or David on (03) 5195 5457.

Woolshed Valley, 10 km from Eldorado and 15km from Beechworth. 30 acres of bush adjoining Mt Pilot NP on one boundary and permanent Reedy Creek on another. There is a winter creek and lots of indigenous plants and wildlife. Everyone in valley is on solar power and a pending conservation covenant will restrict building to environmentally sensitive and site specific design. Hooved animals will not be allowed on the land. $95,000. Also 100 acres of mainly bush and some cleared land with a small dam and winter creeks. Also waiting on a TFN covenant with restriction as above. $115,000. Contact owner on (03) 5728 3107.

Land for Wildlife Open Property Scheme

Wildlife Custodians opening the Doors to the Public

The Land for Wildlife Open Property Scheme has been designed to provide landholders the opportunity to be in contact with like-minded people and a chance to share in their ideas and experiences. The properties range from small to large, bushblocks to farms and are just a small sample of the 6000 properties involved in the program. Come along to one or more of these properties and learn about nature conservation on private land. Have a look at the achievements of other Land for Wildlife members and learn from each other.

Contact your local Land for Wildlife Extension Officer or the officer in the area that you would like to travel to and ask them if they are opening any Land for Wildlife properties. See back page for contact details. Some members may have flyers sent to them in the mail from their local LFW Extension Officer. You can also contact The Land for Wildlife Statewide Coordinator for more information on (03) 5430 4363.

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

Alexandra
Mike Kopanica
- (03) 5772 0257
Bairnsdale
Lucy Clausen
- (03) 5152 0400
Ballarat
Elspeth Swan
- (03) 5336 6722
Benalla
Debbie Colbourne
- (03) 5761 1526
Bendigo
Shaun Burke
- (03) 5430 4368
Central and West Gippsland
Kylie Singleton
- (03) 5172 2123
Colac
Kelly Dufty
- (03) 5565 4417
- 040965 4425
Geelong
John Hick
- (03) 9785 0134
Horsham
Paul Gray
- (03) 5362 0721
Melbourne area & Port Phillip East
John Hick
- (03) 9785 0134
Portland
Tanya Wood
- (03) 5522 3445
St Arnaud
Geoff Harvey
- (03) 5495 1700
Swan Hill/Mildura
Murray Rohde
- (03) 5036 4824
Wodonga
Mary Titcumb
- (02) 6043 7956

Statewide Coordinator
Felicity Nicholls
- (03) 5430 4363
Bendigo

Bird Observers Club of Australia PO Box 185, Nunawading, 3131 (03) 9877 5342 or 1300 305 342 (country callers).

Courses/Field Days/Information Sessions

September (various dates). Commonwealth Games Tree Planting Event. Lurg Hills. DSE, Greening Australia Victoria and Port Phillip CMA. Free. Contact Nicole Adams on 9450 5315.

September 9. Commonwealth Games Tree Planting Event. Bears Lagoon. DSE, Greening Australia Victoria and Port Phillip CMA. Free. Contact Nicole Adams on 9450 5315.

September 14. Commonwealth Games Tree Planting Event. Lake Narracan. DSE, Greening Australia Victoria and Port Phillip CMA. Free. Contact Nicole Adams on 9450 5315.

September 14 & October 5. Sustainability and Stewardship. Tynong North. Peppermint Ridge Farm. $70 (subsidies available and is FarmBis funded). Ph. 5942 8580.

September 16. Habitat Restoration. Location to be determined. Greening Australia Victoria. Free. Ph John Rees on 5231 6910.

October 1 & 2. Birds Australia Annual Congress and Campout. Bendigo. $100 congress fee. Birds Australia. Ph. 9482 2112 or www.birdsaustralia.com.au/congress

October 1 & 2. Commonwealth Games Tree Planting Event. Maffra Rail Trail. DSE, Greening Australia Victoria and Port Phillip CMA. Free. Contact Nicole Adams on 9450 5315.

October 1 & 2. Commonwealth Games Tree Planting Event. Hamilton. DSE, Greening Australia Victoria and Port Phillip CMA. Free. Contact Nicole Adams on 9450 5315.

October 5. What's in my soil? Soil testing and analysis. Tynong North. Peppermint Ridge Farm. $25 (subsidies available including only $5 for Cardinia and Casey Shire residents). Ph. 5942 8580.

October (date to be determined). Direct Seeding Field Day and Demonstration. Wantirna South. Greening Australia Victoria. Free. Ph. Marty White on 9450 5314.

October (date to be determined). Soils: Health and Biodiversity. Location to be determined within Surf Coast Shire. Greening Australia Victoria. Free. Ph. John Rees on 5231 6910.

October 22. Bushfood. Tynong North. Peppermint Ridge Farm. $70(subsidies available). Ph. 5942 8580.

November 12. Introduction to Sustainable Land Management. Tynong North. Peppermint Ridge Farm. $70 (subsidies available and is FarmBis funded). Ph. 5942 8580.

March 19-23 2006. Veg Futures - the role of vegetation in productive landscapes. Albury Wodonga. Greening Australia. Contact Haydn Burgess (02) 6281 8585.

Land for Wildlife Accommodation

Have you ever planned a visit to another part of Victoria and wondered whether there were *Land for Wildlife* properties which offered accommodation?

Well the answer is a definite yes. There are a number of LFW properties that do offer accommodation. This provides a great opportunity for you to visit and stay with like-minded landholders keen to protect and enhance their land.

If you'd like to find out more, we can provide a list of LFW properties that offer accommodation. Please contact Felicity Nicholls via email on felicity.nicholls@dse.vic.gov.au or phone 5430 4363 if you would like a list or if you would like to be added to the list.

Illustration of sandpipers by Dawn Harris

Visiting WA this year

Want to meet some Western Australian Land for Wildlifers who offer ecotourism services - from B&B to wine-tasting - and learn first-hand about our flora, fauna, farming and landcare?

You need the WA LFW Ecotourism list!

Contact LFW WA
Ph: (08) 9334 0427 Fax (08) 9334 0199
Email: claireh@calm.wa.gov.au