Issue 4 - August 2007

Wombat Forestcare Newsletter

Winter has come to the Wombat Forest bringing some much needed rain and a the occasional blanketing of snow. In stark contrast to the long period of dry conditions we've been experiencing, it's great to see the creeks and rivers flowing again. In this issue, we report on our first Annual General Meeting, and thanks to the committee, all our members and supporters, for making Wombat Forestcare possible. We can and do make a difference, so enjoy reading the newsletter... Tibor Hegedis *(editor) - currently working in the Wet Tropics area of Far North Queensland. Forests are fabulous everywhere, so visit a forest near you.*

Having to cope with fire and ice - a Robin in this winter's snow *(photo by Murray Ralph)*

Responses Of Birds To Fire

By Tanya Loos and Gayle Osborne

Fuel reduction burning was identified by many groups in submissions for the Biodiversity White Paper as a key concern for Victoria's biodiversity. The committee have done some fantastic work communicating these concerns to local and state government regarding the Wombat Forest. The case against the current regime has been taken up by some very respectable groups, one of which is Birds Australia.

In their submission to the White Paper on Land and Biodiversity they stated that they "have real concerns about the current use of quota-based burning within State managed land. Altered and inappropriate fire regimes are a major threat for a number of birds."

The Australian bush and its wildlife are adapted to cope with single fire events but frequent fires can be detrimental to some bird species. It is difficult to predict the effects of fire on bird communities as fire varies in intensity, size and the season when it occurs. Spring fires can impact on breeding.

Many birds can escape or seek shelter, but some will be overcome by flames, heat or smoke. Damper unburnt gullies can provide refuge.

We need to ask important questions about what is happening in the Wombat Forest.

How is the large scale fuel reduction burning regime affecting our relatively common birds such as Scarlet Robins, Eastern Yellow Robins and White-throated Treecreepers? How do they respond immediately after a fire; are they able to move into the unburnt areas, or are their home ranges too small to be able to reach the unburnt areas, which may be hundreds of hectares away? How about the rarer species such as Pink Robin and Rufous Fantail that need moist, sheltered gullies with plenty of tree and shrub cover?

We would hazard a guess that the ability of these rare migrants to find food and shelter in the Wombat Forest would be severely compromised after fuel reduction burning, especially if the fire affects the moist sheltered areas. The responses of birds to the fuel reduction burning regime in the Wombat Forest are certainly worthy of a study of some kind! ■

Habitat Fragmentation And Wildlife Corridors

By Murray Ralph

Since European settlement, over 60% of Victoria's native vegetation has been cleared. This widespread loss of habitat has had devastating impacts on our native plants and animals, and natural ecosystems.

Widespread clearing has also resulted in remaining native vegetation becoming highly fragmented in many areas, placing further pressure on native species and ecological processes.

The feeding and breeding cycles of many native animals have been severely disrupted, including the dispersal of young animals into new territories. Fragmentation also effects the ability of many native animals to find refuge from wildfires and prolonged drought, or to recolonise areas following these events.

Pollination of many native plant species by birds and insects, and seed dispersal, have also been severely restricted by fragmentation.

Habitat fragmentation also affects the maintenance of genetic diversity, especially for native plants and animals that are confined to smaller or isolated patches of bush. In such circumstances species become prone to inbreeding as the distance from other remnants prevents the inflow of new genetic material.

The capacity of natural ecosystems to adapt to large-scale environmental change, such as climate change, is also severely reduced by the fragmentation of habitat. The current levels of fragmentation will be a major impediment to native plant and animal communities adapting to any future changes, especially human-induced climate change.

If native ecosystems are to survive and flourish into the future we must protect remaining habitat and restore the connectivity of habitat within the landscape. The establishment of a network of wildlife corridors (also called biolinks) on a landscape scale is one key way we can redress habitat fragmentation.

The design of corridors will depend on the types of native animals that are likely to use them. For example, research indicates that Sugar Gliders will use a 40m wide corridor, whereas Yellow Bellied Gliders require an 80m wide corridor. Very narrow corridors tend to be of limited value for most species. It should also be recognised that not all native fauna will use corridors.

The most appropriate locations for biolinks are best considered at a landscape level using aerial or satellite photographs. Corridors should link existing larger patches of native vegetation, such as State or National Parks. In connecting these larger remnants, corridors should also incorporate existing smaller patches of native vegetation on streamside reserves, private land and roadsides.

Streamsides and gullies are some of best locations to place biolinks as they are more fertile areas, and therefore more productive for wildlife. They also tend to have more complex vegetation and habitat than surrounding areas. However, research indicates that more native animals are recorded in corridors that also provide links to other parts of the landscape, such as ridges. ■

Walk The Domino Trail

We are meeting at the Trentham Railway Station at 1pm on Sunday 16 September to walk the Domino Trail along the old railway line. Please wear sturdy shoes and have lunch beforehand. In the event of torrential rain the walk will be cancelled.

Newsletter articles (and suggestions) are most welcome. Please limit articles to about 500 words and send a selection of photos if appropriate. The newsletter is published quarterly in February, May, August and November, with articles due by the middle of the preceding month. Please contact **Tibor Hegedis at wombatoz@iprimus.com.au** for more information or to discuss your ideas.

White Paper On Land And Biodiversity

By Gayle Osborne

We know that there is an environmental crisis; that we are in the midst of the 6th mass extinction of biodiversity in the world and that this is the first mass extinction to be caused by human beings.

Biodiversity encompasses species, communities, ecosystems and their relationships. Declines in biodiversity occur primarily due to habitat loss and fragmentation, introduced species, over-harvesting of natural resources and inappropriate disturbance regimes.

Our health and well being is dependant on biodiversity. As an example, mature forests play a unique role in the provision of wildlife habitat, carbon storage and water supply.

We view Victoria as a green and productive state with National Parks and State Forests, so it comes as a shock to find that Victoria is the most cleared state in Australia.

Over 60% of Victoria's native vegetation has been cleared, and on private land this exceeds 90%. According to the Victorian National Parks Association "44% of our native plants and 30% of our native animals are now threatened or extinct." Much habitat now exists as only isolated fragments. The flora and fauna of these fragments is at great risk, particularly including many species of woodland birds.

With encouragement from environmental groups, the Victorian State Government responded to this crisis by calling for submissions to a White Paper on Land and Biodiversity. Over 350 submissions were received from a variety of groups and individuals. These submissions will now be examined and the White paper produced early next year. This process will be chaired by Sir Gustav Nossal and will also comprise of four eminent scientists.

The aim will be to set the direction for Victorian Government policy in natural resource management, land health and biodiversity for the next two decades.

Eight environmental groups have joined forces. Victorian National Parks Association, Australian Conservation Society, Environment Victoria, Australian Bush Heritage Fund, Trust for Nature, Invasive Species Council and Greening Australia has formed a partnership called "Victoria Naturally".

Victoria Naturally is promoting the establishment of Biolinks or wildlife corridors. This would require revegetation on a massive scale and would involve all tenures of public and private land. This proposal provides an opportunity to recover our biodiversity.

There are a multitude of Acts of Parliament covering environmental and species protection, both Federal and State, lists of Threatened Species, Action Plans and Australia is signatory to the Convention on Biodiversity and yet the destruction of native vegetation continues.

This process offers one of the greatest potentials for biodiversity restoration and conservation and it is hoped that the Victorian Government acts to achieve its stated goal of "a reversal across the entire landscape of long-term decline in extent and quality of native vegetation". ■

The backgound for the White Paper is available at www.dse.vic.gov.au/landwhitepaper, and you can access submissions from individuals and groups (such as Victoria Naturally and Birds Australia). It is all informative and interesting reading.

Ecological Vegetation Classes of Wombat Forest

By Murray Ralph

The types of native vegetation that occur across Victoria vary significantly. This variation reflects differences in geology, soil type, aspect, climate, altitude and position in the landscape. Depending on these environmental conditions, particular plant species and groups of plants will tend to grow together. These distinct native vegetation types are called Ecological Vegetation Classes (EVC's).

Within the Wombat Forest approximately 30 different EVC's have been mapped.

Heathy Dry Forest (EVC 20)

Heathy Dry Forest is found on gently undulating hills to steeper slopes and ridge tops with shallow, skeletal soils with low fertility and water-holding capacity. This EVC has a scattered occurrence to the north, north-west and north-east of Daylesford, including in the Hepburn, Porcupine Ridge and Shepherds Flat areas. It is also common in the Hepburn Regional Park and the Lerderderg State Park.

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The overstorey is generally a low open Eucalypt forest to 20m tall. On the steeper slopes and ridges common overstorey tree species include Long–leaf Box *(Eucalyptus goniocalyx)*, Red Box *(Eucalytptus polyanthemos)* and Red Stringybark *(Eucalyptus macrorhyncha)*.

Heathy Dry Forest near Shepherds Flat *(photo by Tibor Hegedis)*

On more gentle slopes common species include Yellow Box *(Eucalyptus melliodora)*, Candlebark *(Eucalyptus rubida)*, Scent Bark *(Eucalyptus aromaphloia)*, Broad-leaf Peppermint *(Eucalyptus dives)* and Messmate *(Eucalyptus obliqua)*.

The shrub layer is very variable, depending on site characteristics and management history. Generally it is dominated by narrow-leaved shrubs, including Peas and Heaths. Larger shrubs include Wirilda *(Acacia retinoides)* and Drooping Cassinia *(Cassinia arcuata)*. Smaller shrubs and sub-shrubs include Daphne Heath *(Brachyloma daphnoides)*, Common Hovea *(Hovea linearis)*, Common Beard-heath *(Leucopogon virgatus)*, Honey Pots *(Acrotriche serrulata)*, Creeping Bossiaea *(Bossiaea prostrata)* and Pink Bells *(Tetratheca ciliata)*.

The ground layer is generally sparse with a low diversity of scattered native herbs and grasses. The most common herbs are Common Raspwort *(Gonocarpus tetragynus)*, Button Everlasting *(Helichrysum scorpioides)* and Variable Stinkweed *(Operularia varia)*. Common grasses include Grey Tussock-grass *(Poa sieberiana)* and Silvertop Wallaby-grass *(Joycea pallida)*. Other common species include Mat-rushes *(Lomandra spp.)*, Black-anther Flax Lily *(Dianella revoluta)* and Chocolate Lily *(Arthropodium strictus)*. Thatch Saw Sedge *(Gannia radula)* may occur in some areas.

All EVC are assigned a conservation significance based on the extent to which they have been cleared from their former range. Heathy Dry Forest is classified as being of 'least concern'. However, many areas of this EVC have been subjected to a history of burning, clearing, logging or mining. The main current threats to this EVC include climate change, firewood and post harvesting, fuel reduction burning and weed invasion. ■

Wedge-Tailed Eagle Nest

Some years ago we located a Wedge-tailed Eagle's nest in the forest, and in April, we visited for a closer look and to check around the base of the tree for any evidence of occupation during the previous season.

As we arrived a "Wedgie" glided across the sky and out of sight. They are our largest bird of prey and one of the largest eagles in the world. There was no evidence of recent use; we were looking for evidence that the nest had been in use, such as debris from feeding the chicks, or white splash from the eagle's droppings. We did find an eagle's feather and a very old jaw bone from a small wallaby and then set off to see if we could locate other nests.

Wedge-tailed Eagles build their nests in tall trees with a good view of the surrounding countryside. The nest is a large structure of dead sticks, usually reused for years, often reaching considerable size. They can be up to 1.8m across and 3m deep and have a shallow cup on the top, lined with fresh twigs and leaves. Sticks are added while the bird stands in the nest.

The Eagles usually have several nests in their territory, using one of these each season. They repair the nest and the male will line it daily with fresh leaves while the female is breeding and incubating. Two eggs are laid but usually only one chick survives by killing its sibling. ■

Wedge-tailed Eagle's nest *(photo by Gayle Osborne)*

Restorative Ecological Thinning Of Native Forest On Private Property

By Gayle Osborne

When Marilyn Tulloch and Adrian Thomas moved onto their property in Glenlyon fifteen years ago, part of the property included a 3.5 hectare section of native bush. The best trees had previously been removed leaving some large old hollow bearing trees and thick eucalyptus re-growth.

Marilyn and Adrian wanted to start a process of restoration. The area had a very high fuel load and they wished to reduce this but also to create a diverse forest and to improve it for fauna and flora.

The Ecological Vegetation Class is Herb Rich Foothill Forest and they hope to gradually restore the forest to what was originally there by thinning some of the eucalyptus regrowth.

Adrian Thomas inspects his property during the thinning
(photo by Gayle Osborne)

They employed Gary McIntosh to apply his prescription for ecological restoration and then successfully applied for a permit to carry out the thinning works. (It is illegal to remove native vegetation without a permit). Gary's method focuses on what to retain. Habitat (including hollow bearing trees), understorey and ground cover are to be protected.

The species mix of retained trees is important. On this block most of the Messmate (E. obliqua) had been removed so all the Messmate was to be retained. Gary aimed for 3m – 4m spacing between retained trees, with the possibility of further thinning some years later.

Marilyn and Adrian also wanted to utilise the removed timber as best they could; however the wood was of a low quality and has mainly been used for firewood and poles.

The heads from the removed trees are reduced to small sections and placed across the contours to break down. This helps hold moisture and slow the run off.

Marilyn and Adrian have planted Blackwoods through the area and Silver Wattle, Tea Tree and Austral Indigo are starting to establish themselves as well as the herb layer. Adrian has carried out weed eradication on an area of blackberries.

It is inspiring that Marilyn and Adrian so carefully researched the ecological values of their bush before carrying out any works, ensuring a more diverse landscape to create a home for wildlife. ■

Gary McIntosh has developed and trialed the *McIntosh Method of Forest Restoration and Resource Utilisation,* over many years on both private land and public forest (including three ecological thinning trials in Victoria's domestic water catchments between 2002-2007), and is based primarily on ecosystem management principles.

Gary is secretary of Daylesford Region Landcare Group, a sessional speaker at the University of Melbourne's School of Forest and Ecosystem Science and winner of the 2006 Maxwell Ralph Jacobs prize in Silviculture. For more information on his methods and the trials, please contact Gary directly.
email: gary.mcintosh@optusnet.com.au

Back Page Report

By Angela Halpin

Annual General Meeting 2007

The Wombat Forestcare Inc. Annual General Meeting was held at the Glenlyon Hall on a chilly Wednesday evening on the 25 July 2007. It is really rewarding to see so many locals turn out mid-week, at night, in the middle of winter because they care about the management and future of our beautiful Wombat Forest. A big "thank you" to all who made the effort to come (13) and to those who sent their apologies (10). In the nine months we have been incorporated, we have 72 members – and growing.

The evening began with a warm welcome from Murray Ralph (convener of the group). The first matter of general business was the presentation of our Annual Report. The financial statement was kindly prepared by Eric Fah.

The next item was the election of the new committee. Gayle Osborne, Paul Ulrik, Murray Ralph, Judy Weatherhead, Tanya Loos, Tibor Hegedis and Angela Halpin were elected unopposed. It was decided that the cost of membership should remain the same.

Murray presented an overview of the groups activities and submissions over the last nine months. These include the Wood Utilization Plan, Fire Operations Plan, Submission to the State Government Land and Biodiversity White Paper and the Parliamentary Inquiry into Fire Management on Public Land. We have published three newsletters to date. Thanks to Tanya Loos for our first newsletter and Tibor Hegedis who is now our editor. We have held picnics and other activities around the forest.

Our Community Fauna Project is almost completed. An incredible amount of work has gone into this project especially by Gayle Osborne, Tanya Loos and Murray Ralph. This project has provided a wonderful opportunity to more fully understand our forest and enjoy the company of good friends in the process.

After the official business was finished we watched a slide show of the amazing creatures that live in the Wombat Forest. The evening finished with a friendly get together over hot drinks and a fine array of cake and nibbles brought along by our generous membership. Here's to another good year of Wombat Forestcare! ■

We also held our mid-winter picnic on Sunday June 17th at Nolan's Creek, which was attended by about 20 members. We had a lovely walk and a bbq lunch.Fabulous fungi and flora spotting fun was had by all... (ed.)

Wombat Forestcare (Inc.) Membership

Wombat Forestcare Inc. is dedicated to preserving the biodiversity and amenity of the Wombat State Forest by utilising the skills and resources of the community. It will monitor activities affecting the forest and will work with government departments and their officers to improve or correct procedures which may impact on it. By becoming a member you will have input into our activities and projects, and give support to caring for our forests. For memberships and further information contact Gayle Osborne on 03 5348 7558 or gayle.osborne@bigpond.com - Membership Fees are only $10 Single and $15 Family.

Wombat Forestcare

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