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BIODIVERSITY AND CLIMATE CHANGE MARINE AND COASTAL UPDATE STREET BLOCKS ROAD GRAMPIANS PEAKS TRAIL BENDIGO BUSHLAND FOREST INDUSTRY TASKFORCE THE DEADLY DIEBACK





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We share a vision of Victoria as a place with a diverse, secure and healthy natural environment cared for and appreciated by all.

EDITORIAL COMMITTEE

Euan Moore, Matt Ruchel, Philip Ingamells, Chris Smyth.

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Vale Russell Best

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FRONT COVER

Shelter for hikers at Bugiga campsite on the new Grampians Peaks Trail. See story page 8. Photo: Phil Ingamells.

BACK COVER

Head to Goongerah for the 2016 Forests Forever Easter Ecology Camp! Design: John Sampson.

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From the President

For my first 'From the President', let me introduce myself.

My appreciation of the natural environment grew while working for the New Zealand Forest Research Institute on erosion and feral animal control projects in alpine areas, and I have maintained my interest in conservation through organisations such as the VNPA, which I joined in 1986.

I've led many walks, plus canoe, cycle and cross-country ski trips, with BWAG, and more recently have been involved in the wider organisation as a member of Council. I know many members and supporters from walks or the monthly BWAG meetings and hope to meet many more of you during my time as president.

I'd like to thank Russell Costello for his excellent work as president over the past three years, and for staying on council and continuing to contribute his valuable knowledge and skills. I also thank the other councillors for making themselves available to serve our Association. We have a great deal of expertise on council covering all aspects of governing the VNPA.

During my first days as president I had the great pleasure of attending the Symposium, *Managing Victoria's Biodiversity under Climate Change*, organised by the VNPA's Phil Ingamells in association with the Royal Society of Victoria and Melbourne University. The speakers presented some of the best current research in climate change and ecology. I would like to congratulate Phil on a very successful Symposium, and also thank all those who assisted him.

There have been two other significant developments in recent weeks. Legislation to limit leases in national parks to 21 years (down from 99 years) has passed in both houses of parliament. Legislation is also before parliament to proclaim two new regional parks, Canadian and Hepburn. They will be welcome additions to our protected areas.

Around the time he commenced long service leave, our Director, Matt Ruchel, attended a meeting where a senior public servant described the VNPA as a 'think tank'. We should take this as a compliment, as it indicates the value put on our work by the State Government and the public service. Reports such as our fourth Nature Conservation Review (2014) and its supporting studies, extensive marine and coastal work by our acting director and others, as well as the recent symposium, all contribute to VNPA being the most effective conservation organisation in this state.

In coming months we will be working to replace and modernise our website and other means of communication with our members, supporters and the wider community. As Ian Lunt so eloquently stated in his talk at the AGM, we are a media organisation as well as a conservation organisation. Effective communication is the key to getting our conservation messages out.

Our ability to produce the excellent reports and analyses that underlie our credibility will be strengthened if we expand our supporter base. Our new website and associated processes will be key to this.

Our membership is also critical when we are talking to politicians. A larger membership makes our voice louder.

My challenge to everyone reading this is for each of you to introduce a new member to the VNPA. • PW

Euan Moore, VNPA President



Welcome to the last *Park Watch* for 2015! It's been encouraging this year to see environment and conservation concerns gaining a higher profile in the media and with government.

This edition has a number of positive stories – on Mt Stirling, children and nature, forest ambassadors and the Forest Industry Taskforce. We also welcome Parks Victoria's new CEO, Bradley Fauteux from Canada.

As well, and as always, there are articles about issues, activities, places and more.

Thank you to all our contributors for your fantastic support. And best wishes for Christmas and the New Year to all our members, supporters and readers. \bullet PW Michael Howes PHOTO: MARY FERLIN

Is the climate changing everything?

PHIL INGAMELLS REPORTS ON OUR RECENT BIODIVERSITY AND CLIMATE CHANGE SYMPOSIUM.

The time was clearly right.

The 200 people who had gathered in the lecture theatre, and the 50 or more who couldn't get a place, wanted to do something about the many ways in which a changing climate would impact on Victoria's natural areas.

In the course of two very full days (8-9 October) participants heard from some of the leaders in the scientific world. And the scientists, in return, heard from the audience: a remarkable mix of land managers (from State and local government bodies), private land holders, a range of non-government organisations, and enthusiastic Landcare members.

The occasion was a very lively symposium, *Managing Victoria's Biodiversity under Climate Change*, organised by the VNPA together with the Royal Society of Victoria and the University of Melbourne.

It opened with an outline of the changes Victoria faces under the seemingly inevitable continuation of high levels of greenhouse gas emissions. The CSIRO's Penny Whetton, a lead author of the regionalisation and climate scenario chapters of the IPCC's Third Assessment Report, told us that by the year 2050, there is a high level of confidence that:

- temperatures in Victoria would be 1.2° to 2.5°C warmer on average than in recent decades
- temperatures above 40° in summer would occur two to four times more frequently
- heat waves would be more frequent and longer, and there would be fewer frosts in winter
- projected climates would resemble the present-day ones of sites hundreds of kilometres further north, or at significantly lower elevation. For example, Melbourne's climate would be roughly like the current one of Wagga Wagga.
- later decades are likely to have rainfall below the long-term average, particularly in winter and spring
- there are likely to be more intense downpours in summer, making it more difficult to store and use water. Increasing areas would be at risk from flooding during intense summer storms

- soil moisture for cropping and pasture would be much lower and more inconsistent than now. Some drier summers are also possible.
- major bushfires would be more common
- in the mountains, snowpack would be reduced by 50%
- the sea level could rise 25cm above 1995 levels.

Victoria's native plants and animals already face problems caused by fragmented ecosystems, pest plant and animal invasions, land clearing and increased water usage by people, so these rapid changes in climate will add to the problems many stressed species currently face.

Victoria has warmed before. After the last ice age, Victoria's climate went through a warming period with temperatures above today's.

But brief in geological time as that period was, it was a much slower warming trend than our current warming one, giving many species the time they needed to evolve traits that would see them through.



Wetland species Pacific Black Duck and

Verreaux's Frog. The future integrity of wetlands will be a major concern under

predicted climate impacts.









Above: Part of the audience at the Symposium.

Left: Habitats for alpine species such as this Spotted Alpine Xenica butterfly will be seriously compromised by climate change.

Right: Once-common woodland birds like Superb Fairy-wrens are already declining around Victoria.

The symposium outlined many of the problems Victoria's 100,000 native species will face, and looked at a range of things we might be able to do to help natural systems cope.

With more than six hours of lively discussion time over the two days, many questions were asked, solutions offered and ideas challenged by speakers and audience alike.

Sessions looked at the impacts on alpine areas, wet forests, woodlands, the Mallee and Wimmera, riverine and wetland systems and the coast. Problems arising from increased fire, drought, flood, and invasive species were explored, and the benefits and threats of connectivity changes were raised.

Other sessions looked at the vexed issue of triage (how do we go about setting management priorities?), and the role and impacts of people in the landscape.

It's not just a story of negative impacts, of course. Some species may do very well indeed, and some currently troubling pest species might have a tough time ahead. And importantly, there's a lot of uncertainty in this area. Radical 'solutions', such as planting out existing ecosystems with 'new natives' more likely to survive, could simply amount to the introduction of new native weeds.

Ideas and concerns from the speakers and the participants have been gathered in one form or another, and are currently being compiled by ecologist Ian Lunt, with the assistance of the symposium's advisory panel.

The result will be a number of management recommendations: the best things we can do to help the long-term survival of Victoria's native species and ecosystems.

They are appearing in a series of posts on a website hosted by the symposium partners, www. vicnature2050.org, and on twitter at #nature2050. The complete set of recommendations should soon appear as a downloadable document on the vicnature2050 website, with links from the VNPA's website. Whatever we do, though, Victoria will be a changed place. This generation's children and grandchildren will not occupy the same landscape we have grown up in.

What this generation can do, however, is pool our knowledge and understanding, take action and, most importantly perhaps, carefully watch the impacts of our actions as well as those of the climate.

If the community, including private landholders, environmental organisations, local, State and Federal government agencies, rises to the challenge, we just might be able to do some very sensible things. • PW

To get involved, go to www.vicnature2050.org, or #nature2050. For more climate predictions, see www.climatechangeinaustralia.gov.au

> The symposium 'Managing Victoria's Biodiversity under Climate Change' was hosted by the Victorian National Parks Association, the Royal Society of Victoria and the University of Melbourne at the university's Bio21 Institute on October 8th & 9th this year. It was sponsored by the Department of Environment, Land, Water and Planning, and Parks Victoria.

PHOTO: RICK STUART-SMITH, REEF LIFE SURVEY

The White-barred Boxfish is found along Australia's southern coast from south-west WA to Western Port in Victoria. The species may be establishing itself in new parts of this coastline, with recent sightings reported in Port Phillip Bay.

Marine and coastal update

TILLY REYNOLDS AND CHRIS SMYTH UPDATE US ON EVENTS AND ISSUES IN VICTORIA'S SEA AND SHORE ENVIRONMENTS.

Let the planning games begin

We continue to await the release of planning processes for the Pt Nepean Quarantine Station and the Moolap coastal wetlands. There are also only scant details of progress on including the Anglesea Heathlands in Great Otway NP.

It's hoped that Parks Victoria will conduct a summertime consultation process on the draft 2010 Pt Nepean master plan for what the government refers to as a 'refreshment' of the plan. At the time of writing there were no details.

For Moolap, the first stage of the planning process will be for 12-15 months and cover the wetlands and also the closed Alcoa smelter and adjoining Alcoa land further east. This should give the flexibility needed to get the right level of protection for the wetlands, a conservation reserve that also offers passive recreational opportunities for Geelong residents.

Negotiations are under way between the Department of Environment and Alcoa to determine how much land at the edge of the Alcoa mine site at Anglesea will be needed to assist with the rehabilitation of the mine. This will influence the amount of heathland that can be included in the national park, though the VNPA will be advocating for the vast bulk of it.



FOI failure

In other Pt Nepean news, we have so far failed in FOI applications for the release of documentation on the negotiation process between Point Leisure Group and the Victorian government, the result of which was the leasing of 64ha of the park to the property developer.

Our most recent application focused solely on obtaining a copy of the (lapsed) lease. The reason for rejecting our application was:

"The lease was negotiated in confidence by the department. If the document were to be released, the department's ability to negotiate a competitive agreement would be diminished in future negotiations. Third parties entering into negotiations with the department would be made aware of the department's position and what had been offered to other parties in similar negotiations. Such a result would expose the department unreasonably to disadvantage."

What's more likely is that it would expose the department to ridicule for negotiating a deal that so favoured the developer rather than protecting the national park. Knowing the details of that deal is definitely in the public interest. It should be released to prevent such a deplorable outcome recurring.

Dogs vs Hooded Plovers

The population of Hooded Plovers in the Mornington Peninsula NP is threatened by disturbance and attacks by leashed and unleashed pet dogs. There is now a strong local campaign, spearheaded by state MP Martin Dixon, to have dogs banned from the national park. The VNPA supports this campaign and spent some time meeting with Martin in late November to talk about this and other conservation issues on the peninsula.

Chris Smyth

Great Victorian Fish Count 2015

At that time of writing we're about to kick off the 11th annual Fish Count (21 November to 6 December). This year the event has been organised by the VNPA in partnership with Parks Victoria, Coastcare Victoria, Museum Victoria and Redmap.

It's looking to be a great success, with 24 registered groups and some 400 divers and snorkellers expected to take part.

The Count has the theme 'Fish on the Move', focusing on species that may be changing their distribution due to changes in the marine environment, such as warming from climate change.

Participants are being encouraged to log sightings of potential 'fish on the move', like the Whitebarred Boxfish, with the national citizen science project Redmap (Range Extension Database & Mapping project).

See March 2016 *Park Watch* for an update on the Fish Count and its results. $\bullet PW$

Tilly Reynolds

Street blocks road to nowhere

VNPA ACTING DIRECTOR **CHRIS SMYTH** HAS A GOOD NEWS STORY ABOUT MOUNT STIRLING.

It was a morning in late November and Charles Street was a very happy man. Just 12 hours before, he'd heard that what he had dubbed 'the road to nowhere' had been rejected by the Victorian planning minister.

Until recently Charles had been the Secretary of the VNPA and, along with VNPA staff and volunteers and other community groups, he had campaigned steadfastly against the road project. It was this opposition that eventually led the previous planning minister, Matthew Guy, to 'call in' the proposal and appoint an Advisory Committee to review it.

That committee subsequently presented its report to the Labor Government's planning minister Richard Wynne, and it was he who came to reject the planning permit application in late November.

The 'road to nowhere' had been proposed by the Mt Buller and Mt Stirling Alpine Resort Management Board (ARMB) to link Mt Buller and Mt Stirling. Even though it would have been a major construction project in a very sensitive alpine area, the first that Charles and the VNPA became aware of the Buller Stirling (Touring) Link Road was when, in 2010, the ARMB applied for a planning permit to build it.

In Charles's view, there was no logic in building a road parallel to an existing road link between Buller and Stirling, and it would have sliced through intact sub-alpine forests of high to very high significance, and impacted on threatened species.

It seemed that the main reason for the road proposal was to open up Mt Stirling to major commercial tourism development, something that community groups have fought against for years.

As Charles and the VNPA began delving into the proposal they were unable to find even the most basic of supporting documentation. As well as not having a completed strategic master plan for Mt Stirling or a business case for the road, there were no records of public consultation and support, nor a mountains or regional fire management plan, a visual impacts study, or geotechnical studies on the steep landslide-prone slopes that the road would cut across.

Charles Street on Corn Hill, between Buller and Stirling. The proposed road was on the steep landslip-prone slopes of this mountain, and its construction would have threatened the integrity of the Delatite River's headwaters below.

> In its report, the Advisory Committee expressed concern about some of these matters, as indicated by the planning minister's letter informing the VNPA of his decision:

'I note that the Advisory Committee identified that the Mt Buller-Mt Stirling Link Road is supported by strategic planning policy, however, further details to address issues in relation to erosion, landslip and native vegetation removal should be known prior to determining an application.'

But it is this quote that also gives encouragement to the ARMB to try again sometime in the future if it can cover off on those issues.

To avoid this, the VNPA believes that Mt Stirling should be added to the Alpine National Park, along with some adjoining state forest, and the existing road between Buller and Stirling upgraded to a suitable standard.

For Charles, the battle might be won but the war is not yet over.

For now, though, a Street has blocked a road to nowhere. Thank you, Charles. \bullet $\ensuremath{\mathsf{PW}}$



The Grampians Peaks Trail gets going

PHIL INGAMELLS GIVES QUALIFIED APPROVAL TO THIS NEW WALK.

Some years ago, in a burst of local enthusiasm, Grampians Tourism came up with the idea of a 13-day walking experience from the northern reaches of Grampians National Park, all the way to Dunkeld in the south.

Grampians Tourism is an organisation dedicated to promoting the livelihoods of the region's tour operators, B&Bs, cafes and other enterprises.

The one-way north to south trail was an ambitious proposal for the Grampians (it doesn't get a mention in the park's Plan of Management), and it floundered for a number of years.

Today, however, it is well underway with a guaranteed \$15 million of state and federal funding – many times the very inadequate management budgets for most of Victoria's national parks.

The initial idea was to design and construct a new walking track for most of the journey, with nine dedicated campsites along the route suitable for 'today's camper'. That camper, it seems, aspires to a somewhat higher level of comfort than yesterday's, including a shelter in which to escape bad weather and the possibility of being nurtured and catered for by a tour operator.

A year or so ago the trail took a grander turn, when the promoters fell into line with the previous government's plans for 99-year private tourism lease opportunities in parks. The campsite proposals quickly morphed into lodges equipped with kitchens and showers, with unencumbered hikers strolling along

Grampians Peaks Trail. Metal 'trapdoors'

in each platform allow private tour operators to store camping gear.

the new track till they happened upon the next fully catered 'icon experience'.

But despite the hype no tourist operator, it turns out, was actually willing to invest in a lodge.

Well, 99-year leases are no more. The current state government recently reversed the legislation, allowing only 21-year leases in parks (with three exceptions – see box on opposite page).

So the Grampians Peaks Trail has now reverted to hikers' camps, the first of which, the Bugiga camp, has been installed on a small hilltop below Mount Rosea.

It has allowed the first section of the new walking track to be promoted to the The stark toilet block at the new campsite. It is designed to allow wastes to be gathered in a trailer to be towed away by a quad bike.

public, adding the possibility of a loop walk if you return to Halls Gap via the eastern side of Fyans Creek.

While the walking track will open new vistas to Grampians walkers, and the route of the new track has been carefully planned, some of the features of the new track may not appeal to all walkers.

For a start, while the track itself is open to all, anyone planning to camp along the way will have to pay \$30 a night for a camp platform designed to accommodate two at the most. And the sites are also designed to allow a more comfortable option: hikers may soon be able to opt for a serviced campsite, with a tourism operator providing tents and/or meals along the way.

The general ambience and utility of that first campsite below Mt Rosea (illustrated here) has attracted some criticism. The massive toilet block, and the unnecessary tunnel-like shelter, dominate the site as if fulfilling some architect's dream. Yet there is no convenient place for preparing meals, and very little capability for collecting water for use by thirsty hikers.

Hopefully, as development of the trail extends, the campsites will be more socially and practically suited to campers, and more sympathetic to the natural environment.

On the plus side, however, the notion of privately operated lodges is already being revealed as redundant. A number of existing local hotels and B&B venues are offering transport to and from the track at any point, so those who want a fine meal and a comfortable bed after their day's walk can choose from several offerings in and around Halls Gap and Dunkeld.

This validates the VNPA's position that private infrastructure within national parks would only serve to compete, unfairly, with the many emerging tourism operators situated adjacent to our parks.

Perhaps the most contentious issue in the development of the remaining campsites comes with the site planned for the rugged summit of Mount



William. It has been suggested to the VNPA that this site will be altogether too uncomfortable for hikers (it can snow there in winter), so a constructed hut of some kind will be needed there.

Surely, though, there should be at least one section of the trail that allows people to test themselves in the wild. Anyone unwilling to engage in that occasionally challenging experience can easily bypass the Mount William/ Major Mitchell Plateau section, leaving more than 100 km of the trail still open to them.

Experience shows that buildings in parks, particularly those providing serviced accommodation, inevitably grow until they become simply another problem for park managers to deal with.

And then there's the issue of fire. Grampians/Gariwerd has experienced some fierce wildfire in recent years. The boardwalks and camping platforms of the Bugiga campsite are apparently made of specially sourced timber that can withstand a moderate fire. But severe fires will come to many of these sites, and infrastructure will inevitably have to be replaced.

Raised camping platforms are increasingly seen as a sensible park management practice, helping to avoid understory damage and weed invasions. But keeping infrastructure as simple as possible seems an expedient way to go.

The trail will give Grampians walkers some fine new experiences.

Whether it generates the projected \$2.5 million in revenue for local tourism this year and \$6.39 million by 2025, or whether it just becomes a burden on over-stretched park staff, remains to be seen. • PW

You can find out more about the recently opened section of the Grampians Peaks Trail, and about the proposal for the whole trail, at Parks Victoria's website www.parkweb.vic.gov.au

99-year leases voted out!

The VNPA welcomes the successful move by the current State Government to reverse the legislation allowing 99year private development leases in our national parks. Now, a maximum lease period of only 21 years is allowable in Victoria's national parks, except for the Mt Buffalo Chalet, the Arthur's Seat chairlift and Pt Nepean's Quarantine Station, each of which can be managed under a lease of up to 50 years.

Falls to Hotham Alpine Crossing

Another tourism-generated walk proposal, the Falls to Hotham Alpine Crossing, is on the agenda again. Earlier proposals have included serviced huts, including one on the slopes of Feathertop. A Masterplan for the walk (the three day walking track goes via Tawonga Huts, the Jaitmathangs, Blairs Hut and the Diamantina spur to Feathertop) is currently under development. More information and 'have your say' options are available by going to **www.parkweb.vic.gov.au**, and clicking on 'Falls to Hotham Alpine Crossing Masterplan'.

Spotlight on Bendigo's bushland ambassadors

YASMIN KELSALL EXPLAINS A NEW VNPA PROJECT AIMED AT BUILDING PEOPLE'S AWARENESS OF THE BUSH. Project officer Leah Cripps is based in Bendigo.

Marcel van Regteren Altena filming a bushland story near Bendigo.

So what is a bushland ambassador? Broadly, someone who promotes or advocates for the bush and its protection to the wider community.

And since Bendigo is surrounded by bush, it was a good place to set up an Ambassadors project.

A small pilot project, the Bendigo Bushland Ambassadors Project funded by the Ian Potter Foundation and Melliodora Trust, has been coordinated by the VNPA for the past six months.

Working with a local community steering group, this project focuses on a series of activities that are designed to help people become more aware about, and interested in, Bendigo's bushland, and more active in caring for it.

The first activity, the **Bushland Stories Project**, saw RMIT media student Marcel van Regteren Altena seeking out some Bendigo personalities to share their memories of Bendigo's bushland.

They included Bob Dean, a former forestry worker who used to camp out for months on end in the Kamarooka forest, and Laurie Wheelan, former Mayor of Bendigo and owner of 'The Good Loaf' sourdough bakery in the heart of town.

Marcel filmed each story and has compiled a set of nine short films as well as twelve transcripts.

There will be a launch of the Bushland Stories in Bendigo in mid-December, and the stories themselves will be promoted through Facebook and the VNPA website.

The second activity is the production of a 'Living Next to Nature' booklet for landowners and residents. With Bendigo's population set to double (from 100,000) in the next twenty years, the bushland that surrounds the town will be under more pressure than it is today.

The booklet's aim is to introduce some of the things residents can do (or not do) to minimise their impact on the Bendigo bushland. A contacts section will list the Bendigo groups and businesses already supporting the bushland and explain how residents can be involved as well.

Project officer Leah Cripps is working closely with the City of Greater

Bendigo and other key land managers and community groups to ensure that the content of the booklet will be relevant and appropriate for its audience. She's spoken to representatives from the Department of Environment, Bendigo Field Naturalists, Dja Dja Wurrung Clans Aboriginal Corporation, Conservation Volunteers, the CFA and more.

The booklet will need to look great too, so design and presentation are a key focus.

Leah, who also works at the Bendigo Sustainability Group, has a strong background in education and natural resource management with past experience at the Loddon Plains Landcare Network and Department of Primary Industries, as well as working as a Waterwatch Facilitator.

She is a teacher by profession, teaching secondary school maths and science. The booklet will be distributed to schools as well as residents, so students can learn how diverse and important Bendigo's boxironbark forests are.

Leah is based in Bendigo in an office kindly supplied at a reduced cost by the Bendigo Field Naturalists. She will complete the booklet by the end of the year, with a launch planned for early in 2016. • PW

PHOTO



Native vegetation laws: are they enough?

STRONGER REGULATIONS ABOUT CLEARING NATIVE VEGETATION ARE VITAL, SAYS **YASMIN KELSALL**.

Cleared farmland near Dergholm SP, south-west Victoria. (See story page 30.) Victoria has a higher proportion of cleared land than any other state.

The Andrews Government's review of Victoria's native vegetation clearing regulations is on track to deliver some results within the government's first term.

This review, the result of an election promise, comes after the Baillieu and Napthine Government undertook their own review and introduced regulations which aimed to streamline the permitted clearing process, with a focus on using the offset market to regulate clearing.

Their policy moved away from valuing large old trees and threatened vegetation communities. It also introduced the use of computer models and flawed mapping products for fundamental decision-making. The mapping products in particular brought widespread criticism from all quarters.

The VNPA was a strong advocate for a better policy in the past review and is now in the current review, and is participating as a member of the Stakeholder Reference Group as well as encouraging the participation of others. This review is not intended to change the policy fundamentally, but does aim to improve it in practical ways.

The government is stating that there are links between the Native Vegetation policy review and the review of the Biodiversity Strategy and *Flora and Fauna Guarantee Act*, under which decisions around larger policy change will be made.

The Victorian review is taking place at a time when we are seeing weakening of native vegetation protection laws around the country under conservative governments.

New South Wales is about to abandon its *Native Vegetation Act* in favour of a Biodiversity Conservation Act that will result in reduced protection for native vegetation.

South Australia is considering adopting some of the elements of Victoria's 'streamlined' policy, and Queensland under the Newman Government opened up large swathes of the countryside for clearing, a policy which the Palaszczuk Government has not reversed. Victoria is the most cleared state in Australia but the others are catching up.

The problem with Victoria's review focusing only on small fixes to the current policy is that we are not taking the opportunity to look at wider issues facing native vegetation in this state and across the country.

At the recent Biodiversity and Climate Change Symposium, we heard about the devastating changes that are already occurring within our landscape, and the importance of refuge areas for wildlife. We also know of the importance of conserving native vegetation for myriad benefits to people, agriculture and the environment.

The review process has not adequately considered illegal clearing, incremental loss through mis-management, the effects of fire management regimes or the legacy of poor land-use zoning decisions – which a recent VNPA study has shown would allow up to 30,000 hectares of land with native vegetation to be cleared.

The review of the clearing regulations is due to provide some draft policy recommendations early in the new year, with adoption planned by mid-2016. • PW



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Matilda likes her special leaf.
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Bush Kinder leads the way

NICOLE HOWIE INTRODUCES US TO A SPECIAL KINDERGARTEN AT WHICH SHE IS SUSTAINABILITY EDUCATOR.

Spring Gully Kindergarten, nestled in the Box-Ironbark forest surrounding Bendigo, is leading a flourishing movement of nature-based play with its innovative Bush Kinder program.

Bush Kinder is inspired by the Nature Kindergartens and Forest Schools of Scandinavia and elsewhere in Europe, and more recently by the growing nature movement in America, where it is recognised that an education in nature connects children to nature, leading to stewardship of the planet.

Building resilience

Research also shows that these environments allow children the space and opportunity to build much-needed emotional, social and physical resilience.

In 2012 a passionate group of Spring Gully Kindergarten parents, staff and community members decided to enhance the connection of children and families with nature. Starting in 2013, the Bush Kinder program offers weekly opportunities for explorative, creative, unstructured and uninterrupted play for children in the bush, using only the natural materials around them. Spring Gully Bush Kinder is in Jaara country, on a parcel of land behind an old school site in Mandurang South near Bendigo. A group of 26 kindergarten children meet every Monday morning (except during high winds, extreme temperature and thunderstorms) as a permanent part of their kindergarten week.

Now in its third year, the curriculum is rich in areas such as ecology, botany, life cycles and seasonal changes. Children are thriving as they engage their senses and get to know and love the bush.

Experiencing weather

They experience weather as it changes from moment to moment and with the passing seasons. They watch the light change, notice the feeling of wind from various directions, get to know the warmest and coolest places to play, and from the elevated view of our southern aspect they watch and smell approaching rain, see the trees in the distance blur and then observe the changes rain makes to the landscape.

Children enjoy the various layers of vegetation, from lichens, mosses and fungi to the grasses and shrubs, through to the



Tree-climbing is part of the curriculum.

understorey and then our 'roof', the canopy that they observe while quietly lying on their backs.

They discover native tubers and mushrooms that sprout in winter, learn which rocks crush to creative rainbows of colour, and taste the sticky sap of the Black Wattle, the sugary lerps found on gum leaves and the occasional deep red saltbush berry.

Birds, animals and people

The children delight in seeing and hearing the array of birdlife, from the tiniest pardalotes to the screeching feeding frenzy of lorikeets devouring eucalypt blossoms in the canopy and the grand Wedge-tailed Eagle that graced our site earlier this year.

We often see kangaroos in neighbouring paddocks in the early morning and have watched a Ringtail Possum scurry between two tree hollows on the site. Insect life is a constant source of wonder and activity as children hunt for slaters and millipedes and discover cocoons of all shapes and sizes.

With all this, we learn about the people who lived, played, built their shelters and hunted and gathered their food here before us. An Indigenous facilitator has added immense depth to the program this year and imparted Indigenous ways of knowing and being, including some language.

The past is becoming our present and future as we develop an understanding of the interdependence of an environment and its inhabitants. The children are learning to tread carefully, respect their surroundings and find beauty and interest in the everchanging cyclic world around them, unhindered by walls and ceilings.

The impact this natural environment has on children's behaviour and learning is very real. Far less direction is required from staff, as children are fully engrossed in finding and using tools for play from their natural surroundings. They draw, paint, play music, build and make-believe using the tools of nature to represent their thinking.

With extensive uninterrupted time to think, learn and engage, they take joy in their discoveries and share them with friends.

They increasingly cooperate and work with others to build cubbies, make fairy gardens and pirate ships and balance logs for see-saws. They take considered risks and learn to trust their own capabilities as they run full speed down a hill, balance over uneven terrain or climb a tree.

The Bush Kinder concept is being adapted in other kinders in the Loddon Mallee Preschool Association, with successful programs now being run at Huntly and Marong kindergartens. Early childhood centres across Victoria want to develop nature-based programs, and sustainability education is a huge growth area in primary schools.

Nature deficit disorder

People throughout the world are yearning to get back to nature and add meaning and essence to their lives.

This couldn't come at a better time. Richard Louv, author of *Last Child in the Woods*, coined the term 'nature deficit disorder' to explain the link between social, mental and physical health problems and less time spent in nature in our increasingly busy, technology-driven lives.

He is deeply concerned that children are being starved of nature as they lead over-organised sedentary lives dominated by screens and out-of-school activities.

As adults, some of our strongest childhood memories are endless times of outdoor play: climbing trees, building cubbies and feeling the sun on our back, the breeze on our face and the smells of fresh grass and gum leaves.

Somewhere we have lost our way. Children are capable and competent learners.

Forgetting to respect their need for independence and to trust in their self-preservation, we overlook the importance of giving them time and space to explore and discover. We forget that nature gives a sense of wellbeing and is a place to connect with one another, free of other distractions.

Leanne Grogan, Lecturer in Early Childhood Education at La Trobe University Bendigo, recently travelled to the University of Stavanger in Norway as a result of her research conducted at Spring Gully Bush Kinder.

This invitation is acknowledgement that a program tucked away in Greater Bendigo is catching the eye of the international research community as it allows us to discover more of the benefits of time in the bush for children and families. • PW

The 5% burn target goes

PHIL INGAMELLS SETS OUT THREE IMPORTANT CONSIDERATIONS FOR FUTURE FIRE MANAGEMENT IN VICTORIA.

In mid-November, the Victorian Government finally announced the inevitable: the policy to perform fuel reduction burns on at least 5% of public land annually would be abandoned. Our fire managers are, at last, free to manage the state's fuel loads strategically.

The independent monitor of the Victorian Bushfires Royal Commission's recommendations had already pointed out serious problems with the target. And early this year, Victoria's Inspector-General of Emergency Services had advised moving to a 'risk-based approach', something DELWP was actually already planning for.

We could ask why it took the government so long to make the announcement, but it's more useful to look at where this change can take us.

The official line is that burns will remain much the same for now, with 'risk-based' planning taking hold in mid-2016.

What's missing so far is the complete assessment of fire management that the release from the 5% target allows.

Three things to consider are foremost in my mind.

VNPA's excellent researcher and campaigner, Jenny Barnett, died with her husband at their Steels Creek home on Black Saturday. In line with the Commission's recommendations, their house site was purchased by the government, and the access road ploughed up; it had been declared an area of 'unacceptably high bushfire risk'.



To protect the habitat of the rare Smoky Mouse, Grampians NP's managers have carried out a series of ecological burns in wet heathland below the southern Serra Range. The area to the right has been recently burnt, while to the left is an earlier burn. Some long-unburnt heathland will be protected from fire as much as possible.

Bizarrely, there are now a number of new houses on previously vacant land adjacent to their block. We need a very good look at how regional planning processes operate, and whether they take account of predictions for an increased occurrence of severe fires in Victoria.

Then there's the extraordinary issue of the forgotten shelters. We know the Commission made an urgent recommendation for approved designs for private bushfire shelters. And we know people don't leave well in advance of a bushfire, even though they might have planned to.

Emergency Management Victoria recognises this, and has produced a report that puts well-designed private fire shelters as the next best option for saving lives. They are the fire rescue equivalent of a lifeboat on a sinking ship.

Yet there is no incentive in place, such as a tax break, to encourage people living in fire-prone areas to install one, let alone any public acknowledgement of their worth.

And then there's the mostly forgotten Black Saturday Dandenong Ranges fire – forgotten because a quick-thinking fire manager diverted a fortuitously situated helicopter and put the fire out as soon as it started. That action should be famous, and the gratitude of those living in the fire's likely path should be unbounded. But no one has mapped the path that fire would have taken, and no one has assessed the scale of damage, and the number of lives that would have been lost, if that fire had roared through the Dandenongs in the horrific fire weather of that day.

That example of rapid attack capability must stand as extremely cost-effective fire management.

It's time for a complete reassessment of the whole spectrum of fire planning and mitigation activity, so we can most effectively allocate our expertise and resources.

We should look at the need to reassess Victoria's planning regulations, at mandating shelters for new homes, and at encouraging shelters in existing houses in fire-prone areas. And we should look at a range of options for controlling fire ignition points.

We should also look at fuel reduction burns in that broad fire management context – what gives the best bang for the community's buck, in each very different part of Victoria.

Only then can we be sure we're doing our best to look after our communities. And in that process we might also manage a burning regime for Victoria that supports our overstressed native ecosystems. • PW

Forest Industry Taskforce gets under way

THE VNPA'S **MATT RUCHEL** REPORTS ON THE STATE GOVERNMENT'S PLAN TO REACH COMMUNITY CONSENSUS ON FOREST MANAGEMENT.

A week before the Andrews Government celebrated its first year in office, the Premier released the Terms of Reference for the long-awaited Forest Industry Taskforce.

These Terms are the starter's gun for discussions to begin on the future of state forests in Victoria's east, and the future of the timber industry.

According to Premier Daniel Andrews: "The Taskforce will work to reach consensus about the future of the forests and wood products industry, jobs and the protection of some of Victoria's most critical forests and species."

The aims of the Taskforce are to:

- create and sustain jobs and industry growth
- conserve high value ecological assets
- protect key species such as Leadbeater's Possum
- implement a durable plan for timber supply, for jobs, for nature conservation and for the good stewardship of Victoria's forests that can be embraced by the Victorian community.

The government will consider the consensus recommendations and proposals of the Taskforce, following a commitment at the 2014 State election.

Over the last six months, conservation, industry and worker representatives, including the VNPA, have had a series of face-to-face meetings to develop proposed Terms of Reference. The government has now officially adopted these without significant change.

The Taskforce comprises representatives from the CFMEU, Victorian Association of Forest Industries (VAFI) and the Wilderness Society, plus representatives from Australian Sustainable Hardwoods, Australian Paper, harvest and haulage contractors, MyEnvironment, VNPA and the Australian Conservation Foundation.

It is envisaged that there will also be a range of working groups with relevant expertise, including scientists and others, supported by a government secretariat based in the Department of Premier and Cabinet. The Taskforce will seek broad community support to address key challenges facing workers, forests, the wood and fibre industries, and Victoria's environment. Tim Johnston, CEO of VAFI, welcomed the Taskforce, as did Jane Calvert, National President of the CFMEU Forestry and Furnishing Products Division.

Conservation groups including the VNPA and the Wilderness Society are also positive. "This is a unique opportunity for stakeholders to work together to recommend solutions that benefit all Victorians, conserve highvalue ecological assets, and deliver new investment and employment opportunities, especially in regional communities," said Amelia Young, Victorian Campaigns Manager for the Wilderness Society.

According to the Terms of Reference, the Taskforce will give the Victorian Government recommendations on how best to ensure that Victoria conserves high-value ecological assets, maintains healthy forests and builds and maintains a vibrant world-leading forest, fibre and wood products industry, based on:

- secure fibre and wood supplies, including from native forests and existing and new plantations
- jobs maintenance and growth protection of unique native flora and
- fauna and threatened species, specifically including Leadbeater's Possum
- creation of new conservation reserves and national parks

• forest management which maintains forest health and supports the full range of economic, social and environmental values and benefits at state, regional and local levels.

Importantly, the focus will be on the future use and management of Regional Forest Agreement (RFA) state forests east of the Hume Highway, and will be informed by consideration of:

- whole-of-community benefits including the full range of economic, social and environmental values
- existing plantations and development of new private and/or public plantations
- wood resources on private property
- state-wide supply chains
- industry economics and the competitive environment the industry operates in
- conservation values in RFA areas, and in existing and new national parks and other reserves
- landscape-wide biodiversity
- fire and climate change impacts.

The taskforce will seek to report to government by June 2016.

The VNPA has welcomed the release of the Terms of Reference and will be participating in the Taskforce.

We acknowledge that the exercise may not be easy, but we will work hard to ensure that the unique natural values of our forests are protected, and that we move towards a timber industry that the overall Victorian community can support. • PW

See also review of new book *Mountain Ash* on page 37.

Welcome to Sarah Day

"Having worked and volunteered with various grassroots groups protecting Victoria's majestic forests, I am thrilled to now have the chance through VNPA, which is hosting the position on behalf of the forest groups involved, to assist in preparations for Forest Industry Taskforce discussions.

"As Forest Conservation Groups Coordinator I'll be resourcing groups from across eastern Victoria as they tap into decades of conservation experience and bring their astounding knowledge bank to bear on a lasting plan for the protection of our forests, their wildlife and the communities that rely on their flourishing into the future."



Sarah is based in the VNPA office.



Striped Legless Lizard on Kangaroo Grass.

Endangered lizards and bandicoots lose out again

YASMIN KELSALL EXPLAINS HOW PLANNING FAILURES IN MELBOURNE'S GROWTH AREAS HAVE PUT DEVELOPMENT AHEAD OF BIODIVERSITY CONSERVATION.

The grassland habitat of one of Victoria's most endangered species, the Striped Legless Lizard, is being cleared for development.

These animals will now suffer from 'death by bulldozer', following planning failures by state and federal governments.

Environment groups, academics and industry figures were shocked to learn recently that the state government is abandoning its translocation trial for the Striped Legless Lizard. The trial was to see if the species could be successfully moved from development sites to a managed reserve.

Ironically, this decision was made on the basis that there will not be *enough* clearing to collect enough lizards to run the trial!

Government staff stated that there would need to be 11,000 hectares of grassland cleared to salvage the 900 lizards that the trial would eventually need. But within Melbourne's Growth Areas there are 'only' 2,000 hectares available.

Lizards were formerly being collected from clearing sites and held at the Melbourne Zoo, but they will now be left in place to await the bulldozers as their habitat continues to be cleared for urban growth in Melbourne's west.

The state government is allowing lizard habitat to be cleared on the basis that this clearing could be compensated for by the creation of a large native grassland reserve (the Western Grasslands Reserve) planned to the west of Melbourne. This was approved and signed off by the federal government.

An additional action was to find out if the species, once salvaged, could be moved or successfully translocated into the grassland reserve. At the time, no one really knew if this was possible or not.



This lizard is well-named.

As clearing within the growth areas is proceeding more slowly than was expected, the rate of acquisition of private land for the Western Grassland Reserve is also slow, as the creation of the reserve relies on 'offset' money generated from clearing.

Although the government says that this reserve will compensate for clearing lizard habitat in the rest of the growth areas, only a few individuals have been discovered within reserve land acquired so far. This contrasts with the approximately 30 lizards that have been salvaged from the growth areas. The numbers don't add up.

Lizard hotspots

The government study also confirmed a series of lizard hotspot areas around

Cairnlea and Rockbank and along the Kororoit Creek. The obvious solution is to protect these areas as well as others, but this has been ruled out in favour of development.

Under a joint state and federal government conservation plan for Melbourne urban growth areas, we were promised that we could have both urban growth and conservation, yet it is conservation and threatened species that lose out whenever there is any conflict.

The harmless and endangered Striped Legless Lizard lives in one of Victorian's critically threatened habitats – the native grasslands of the Victorian Volcanic Plains. It looks like a small snake but is more closely related to geckos and skinks, differing from snakes in having obvious ear holes, a flat tongue and remnant hind limbs.

Fifteen community and environment groups from across Melbourne have signed a joint statement calling on the state and federal governments to revisit and review the plans to protect the Striped Legless Lizard and the unique and critically endangered grasslands to the north and west of Melbourne.

Action needed

The groups are calling for the following actions.

- Revise the agreement between the federal and state governments to ensure that Striped Legless Lizard habitat is protected in situ.
- Revise the EPBC listing advice for the Striped Legless Lizard to recognise new research that shows it has less likely habitat around Melbourne than previously believed, and also to emphasise the importance of the hotspot areas. Hopefully this will affect any future decisions that are pending.
- Review the decision to allow offsetting into the Western Grassland Reserve for clearing Striped Legless Lizard habitat outside of the Melbourne Strategic Assessment area.
- Make allowance for funds generated from clearing within the growth areas to be used to support the conservation of known populations outside the Melbourne Strategic Assessment area, on the basis that larger populations occur outside the Western Grasslands Reserves.



- Convene a group of experts to undertake an independent review of the government's decision to abandon the salvage and translocation trial.
- Conduct surveys in all areas proposed for development that support likely habitat for the Striped Legless Lizard, so that informed decisions can be made and losses documented.
- Set up a research program to be funded by the Victorian Government that uses expert information and survey data to identify likely additions to the hotspot locations. Follow-up surveys would then occur.
- The Victorian Government to better support management of existing conservation reserves known to contain higher populations of the Striped Legless Lizard, particularly within hotspot areas.

Bandicoot blues

In the meantime, on the other side of Melbourne, a population of Southern Brown Bandicoots is in danger of losing a key lifeline for crucial habitat links as the City of Casey contemplates the approval of a Precinct Structure Plan for the area known as Botanic Ridge.

Botanic Ridge is a residential housing development south of the Cranbourne Botanic Gardens. It should include at least two adequate wildlife corridors to enable the healthy population of bandicoots at the Gardens to link with other populations to the east (Koo-wee-rup area) and south (Western Port area).



A bandicoot investigates a 'Caught on Camera' bait station.

However, current plans for the area only show corridor links that are a far cry from those originally proposed. They will not meet the species requirements to safeguard against a local extinction.

None of the corridors are dedicated to conservation of bandicoots; they were formerly put aside as either a drainage corridor or an electricity pylon easement. Nor do they have the width requirements needed for bandicoots, some narrowing to less than 10 metres.

Experts on the species provided recommendations to the government outlining minimum corridor requirements, but they have been ignored in the current proposals.

The VNPA and local groups have made submissions to the state Environment Minister asking her to suspend the approval process and review the current corridor provisions, which were agreed to by the federal government last year. • PW Latrobe University botany students sampling soil to assist with large-scale revegetation planning on private land.

Habitat 141°

Responding to climate change

JESS GARDNER, WHO WORKS WITH GREENING AUSTRALIA AT NATIMUK IN THE WIMMERA, DESCRIBES A VISIONARY BIODIVERSITY PLAN WHICH THE VNPA'S KAREN ALEXANDER HELPED SET UP.

Acting boldly

Current threats to our native flora and fauna will only get worse under predicted climate changes.

It is not enough just to protect what we have. Without urgent and wellcoordinated action, we will see an accelerated rate of species decline and extinction.

We can't let up on existing efforts to combat pest plant and animal incursions, continued clearing and decline of habitats. However, to build resilience (ability to withstand stress) and adaptability into our natural systems, we also need more and betterconnected habitat.

We must ensure that native plants and animals can withstand the impacts of climate change so that they can survive and so future generations can still enjoy the sights and sounds of our unique Australian wildlife.

Habitat 141° is a vision and framework for action developed by Greening Australia in partnership with many other like-minded organisations and individuals. The realisation of the Habitat 141° vision will see wildlife and plants moving through restored and re-connected habitats from the outback rangelands of NSW to the coast near Portland.

The ability to move throughout the landscape – and hence the promotion of natural genetic exchange between populations of species – is believed to give species the best possible chance of adapting to predicted changes.





Red-tailed Black-Cockatoos live in SW Victoria.

Focus

In the region covering southern and north-eastern South Australia, western Victoria and south-western New South Wales we are fortunate to have a significant legacy of protected places.

This area contains two nationally recognised biodiversity hotspots, 14 national parks and a myriad of private and public conservation reserves. These areas are the building blocks of the Habitat 141^o vision.

These amazing remnants are vulnerable, surrounded as they are by highly productive agricultural lands and suffering from isolation and habitat fragmentation. But they also offer an outstanding opportunity, through coordinated and strategic action, to restore south-eastern Australia's most threatened habitats at an unprecedented scale.

The scale of the problem is large and resources are limited, so careful planning is essential to ensure that on-ground activities are undertaken in strategic areas where the need is greatest.

An Alliance with a plan

The Habitat 141° Alliance is made up of ten organisations across three states, enabling collaboration at an unprecedented scale. Greening Australia, Conservation Volunteers Australia, Trust for Nature, Parks Victoria, the Glenelg Hopkins, Wimmera and Mallee Catchment Management Authorities, along with Natural Resources South East, the Murray Darling Basin and the Government of South Australia have agreed on a blueprint for action underpinned by extensive planning and analysis at a number of scales.

The formation of this Alliance is critical to support and advocate on behalf of the many other organisations and individuals contributing to the realisation of the Habitat 141° vision.

It's important to understand that the Alliance is not intended to add another organisational layer, or indeed to carry out or oversee on ground works. It is there to keep Habitat 141° on the agenda and ensure that the big picture is at the forefront of people's minds well into the future.

We need everyone!

Anyone can help realise the Habitat 141° vision, by volunteering, sponsoring a project, helping to promote the vision, donating to a specific project or undertaking your own project.

By working together we can achieve far more than on our own. The opportunities for collaboration are endless.

Please go to www.habitat141.org.au to find out more and to get in contact. • PW

Monitoring mounds

VNPA PRESIDENT **EUAN MOORE** AND VOLUNTEERS FIND EVIDENCE OF A THREATENED BIRD IN THE WIMMERA.

VNPA volunteers found two unrecorded Malleefowl nest mounds during a recent search of private land near Nurcuong, south of the Little Desert National Park. The finds were the result of two days of line searching where we covered about one square kilometre of mallee heathland.

Malleefowl were once widespread across most of western Victoria. Their range extended from the outskirts of Melbourne, near Melton, to the far north-west of the state, and they have been recorded as far south as Portland.

However, as their name suggests their prime habitat is mallee woodlands, although they do extend into stringybark woodlands in the west of the state. Today their Victorian population is largely confined to the large Mallee national parks and suitable remnant habitat on private land.

The Malleefowl is a member of a small group of birds called Megapodes, which are mainly found in Australia and the islands of the tropical western Pacific.

Megapodes are characterised by their use of natural processes such as warm volcanic sands or the heat from fermenting vegetation to incubate their eggs. The precocious young are fully independent when they hatch.

The only member of this group that lives in arid or semi-arid environments is the Malleefowl. Its nest consists of a large mound, 3-5 metres in diameter, consisting of sand, leaf litter and small twigs. There is a crater in the centre where leaf litter is collected before being covered over with sand or earth to allow fermentation to start.





The eggs are laid in the mound, and the birds maintain its temperature within a small range by opening or further covering it as required. They can accurately gauge the temperature with their beak.

Although the birds are the size of a large domestic hen, they are cryptic and difficult to see. The easiest way to obtain a population estimate is to find the nest mounds and assess the degree of activity at each mound.

Earlier this year, VNPA was approached by Jess Gardner from Greening Australia with a request for help in a search for Malleefowl nest mounds in an area north-west of Natimuk. The area is private property but it is hoped that it can be bought and added to the conservation estate with protection under a conservation covenant.

If protected, this property will add another link to the chain of protected areas within Zone II of Habitat 141°. The known presence of Malleefowl on the property will support the case for fully protecting this area.

The search method used was similar to that used for our Hattah rabbit warren

Above: VNPA monitoring group at one of the Malleefowl mounds they found near Nurcuong in the Wimmera.

Left: Malleefowl build a mound containing leaf litter to incubate their eggs.

and weed searches where we have people line-searching the area using a GPS. In this case the searchers were about 15m apart.

The vegetation was quite thick, with Broombush (*Melaleuca uncinata*) the dominant shrub, although there were many other plant species. The low trees consisted of mallee eucalypts and cypress- pines.

The two Malleefowl mounds that we found were both close to the centre of the search area. Both had been used recently (within the last 2-3 years) but were not currently in use. This may be due to the low rainfall in the area this year. There has been insufficient rain to properly moisten the leaf litter in the mound and start the fermentation process.

Although the mounds are not currently active, they will be regularly monitored. The birds will return to these mounds and reuse them in the future.

Malleefowl will also use the same mounds across generations, so even if the current birds do not return, others may do so when conditions are suitable. $\bullet PW$

Be aware of the deadly Dieback!

DEB HENRY, A MEMBER OF THE VNPA COUNCIL AND THE BWAG COMMITTEE, AND ALSO PRESIDENT OF FRIENDS OF THE PROM, EXPLAINS WHAT WE CAN DO TO REDUCE A SERIOUS THREAT TO OUR PARKS.

When I started bushwalking as a uni student back in the 1980s, my main aim was adventure and fun.

Friday nights meant a carload of friends headed for some distant 'wilderness' place. Often we'd arrive and pitch our tents in the dark, filled with expectations of a great weekend's exploration.

I rarely considered the effect of my presence on the ecosystems surrounding me. But fast forward to today, and my awareness has taken a U-turn.

My understanding of environmental impacts on the bush was not fully realised until I joined Friends of the Prom.

Recently, the VNPA NatureWatch program went to Wilsons Promontory to educate the Friends about *Phytophthora* and show the group how to monitor it in the northern part of the Prom.

Julia Pickwick, long-time NatureWatch team leader and BWAG committee member, provided the following information.

"Phytophthora cinnamomi is a microscopic soil-borne pathogen that attacks and destroys plant root systems, causing plants to die through lack of water and nutrients.



The drastic effects of Phytophthora dieback on grass-trees at Wilsons Promontory NP.

Patches of dead or dying vegetation can indicate the presence of this silent killer, which has no known cure. It is spread through infected plants and the movement of contaminated soil and gravel.

Known variously as Cinnamon Fungus, dieback, root rot, Jarrah dieback and wildflower dieback, *Phytophthora* literally means 'plant killer'. And it has destroyed vast tracts of vegetation around the world.

It is listed in the top 100 of the world's most invasive species and is Victoria's most significant plant pathogen, affecting both native ecosystems and the horticultural industry. Initially thought to be a fungus, it has now been found to be a soil-borne water mould closely related to brown algae. Since its initial detection in Australia in the early 1930s, *Phytophthora* has spread to infect thousands of hectares of native vegetation in Victoria, Tasmania, WA, SA and Queensland. It was first detected in Victoria in 1969 when four small isolated patches were discovered in the Brisbane Ranges. Since then it has become widespread across both private and public land.

Heathlands, coastal woodlands and dry eucalypt forests are generally most at risk. Floristic families most susceptible to *Phytophthora* include the *Myrtaceae*, *Proteaceae*, *Fabaceae*, *Mimosaceae*, *Casuarinaceae* and *Xanthorrhoeaceae*.

Since people and vehicles are major *Phytophthora* vectors, the initial point of entry for many infestations is along roads, tracks and pathways. It can also spread from old infected sites.

Phytophthora is invisible to the naked eye and so difficult to detect without proper soil testing. It can be present even if vegetation appears healthy, as not all plants are susceptible.

Infected plants often appear to be drought-affected, showing signs of chlorosis (wilting and yellowing of leaves) and retaining dead foliage. It is rare for all infected plants to be at the same stage of decline at any one time. Visible disease symptoms are only evident in areas of recent infestation.

The presence of *P. cinnamomi* not only threatens vegetation communities: it can alter the ecology of entire ecosystems.

As susceptible canopy species and understorey shrubs and herbs gradually die out, they are replaced by pathogenresistant species like grasses and sedges. Birds, insects, reptiles and mammals that depend on the original plant species for their survival also decrease as shelter and food sources disappear.

To date, there is no means of eradicating *Phytophthora*. The regeneration and recolonisation of susceptible species in infected sites is significantly lower than in uninfected areas. Thus, *Phytophthora* can cause localised extinction of endangered plant species and threaten populations of rare or vulnerable plant species.

To help prevent the spread of *Phytophthora*, observe the following hygiene procedures.

- Be clean on entry and exit. Before you enter or leave any park or reserve (particularly high-risk areas), ensure that all footwear, camping gear, vehicles, tyres and machinery are clean and free from soil and gravel. Use a 70/30 mix of methylated spirits and water for cleaning.
- Stay on formed walking tracks, obey all track closure signage and avoid quarantined areas.
- Where available, use vehicle washdown or boot cleaning stations.
- Never wash footwear or equipment with water alone, as this can promote pathogen spread."

Now, when someone asks me about the effects of PC Dieback on our parks, I can respond! And so can you!

It's a good idea to remind ourselves of what a precious asset we have in our natural areas. It's a shock to realise how quickly we can lose them. The pressure on ecosystems will continue to grow into the future. To preserve the biodiversity we already have, we can take measures which are not difficult, but which will help to protect the bush.

Armed with correct knowledge and taking some practical steps, we can all do our bit to help our wild places. $\bullet PW$

NatureWatch and PC

Grass-tree monitoring was the first NatureWatch project established by the VNPA. We started in 2007 in the Brisbane Ranges NP, with the Friends of the park. Our monitoring project commemorates the work of Dr Gretna Weste, who carried out over 30 years of valuable research on *Phytophthora cinnamomi*.

NatureWatch has now established grass-tree monitoring projects in the Brisbane Ranges and Wilsons Promontory national parks, and we have supported projects carried out by other groups such as the Friends of Point Addis.

For more information, or to get involved, contact our NatureWatch Coordinator Christine Connelly via **christinec@vnpa.org.au** or **9341 6510**.

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Healthy grass-trees and undisturbed vegetation near Vereker Outlook, Wilsons Prom, 2009.

Tread lightly this summer

KEEN READERS OF THE BWAG PROGRAM WILL HAVE NOTICED IN RECENT MONTHS THAT 'EXPLORATORY' (OFF-TRACK) WALKS ARE NO LONGER OFFERED OR ENDORSED BY THE BWAG COMMITTEE. AND FOR VERY GOOD REASONS, EXPLAINS COMMITTEE MEMBER **JULIA PICKWICK**.

In the early days of European settlement, the colonists considered the Australian bush to be 'virgin territory' – somewhere to be explored and conquered.

National parks and other protected areas didn't exist, and designated walking tracks were rare – as were introduced plants and pathogens.

Tomahawks were an important part of the kit of early bushwalkers keen to open up tracks through the wilderness.

As Europeans cleared the land, walkers followed mining, droving and logging tracks to engage with nature. Today, some of Victoria's best loved walking tracks follow these trails, like the Sealers Cove track at Wilsons Promontory.

But for the more adventurous, going 'off the beaten track' meant that one was able to commune with nature in 'virgin' country.

Fast forward to the 21st century, and adventurous off-track walkers run the risk of destroying the very environment they seek to enjoy.

There are the obvious risks of soil compaction and erosion, vegetation trampling, weed introduction, and disturbance to habitats and Indigenous cultural sites, but it's the less visible threats that pose the biggest risk to our wilderness areas.

For many years, BWAG has highlighted the threat of *Phytophthora cinnamomi*, a micro-algae considered to be Victoria's most significant plant disease. Invisible to the naked eye, this pathogen is easily spread by people through the movement of contaminated soil and gravel.

In recent years, other introduced pathogens and fungi have also been spread across the country, seriously impacting on native plant species.



PHOTO: DAVID SMITH

Myrtle Rust was first detected in NSW in 2010 and has since spread to Victoria, Queensland and the Tiwi Islands.

Originating from South and Central America, this pathogen affects members of the Myrtaceae family, notably some eucalypts and tea-tree and paperbark species. The spores are easily spread by people coming into contact with infected plant material.

An emerging pathogen is *Favolaschia calocera*, a small, fleshy bright orange fungus that grows on dead wood.

Native to Madagascar, southern China and Thailand, this fungus may produce a fungal inhibitor, thus outcompeting native fungi. It is spread via air-borne spores and people moving contaminated dead wood.

Though native to Australia, *Armillaria luteobubalina* is a very aggressive fungus that can infect over 50 different native plant families including the *Proteaceae, Myrtaceae* and *Epacridaceae*.

Common in eucalypt forests and woodlands, it can be spread through contaminated plant root material or, like *Favolaschia* and Myrtle Rust, through spores. It's easy to think that just one person walking off-track isn't going to do any harm. However, even apparently innocent offtrack pursuits can easily damage the natural environment.

A few years back, a very popular geocache (small container with messages inside that people search for) was placed about 100 metres off the Vereker Track at the Prom, an area already infected with Phytophthora. Keen geocachers searched in a 100m radius off-track trying to find the cache.

As time went by, more and more people left comments on the geocaching website saying how awful the area was looking, but not realising that they were actually helping to spread the pathogen.

Fortunately, after authorities contacted the cachers, the cache was removed and an explanation put on the website.

This example is not given to lay blame for pathogen spread in Victoria. It's simply to show how easily pathogens can be spread without people even realising they're doing it.

So if you're heading out to embrace the great outdoors this summer, think twice before you head off-track. You just never know what unwelcome guests you may be carrying with you. • **P**W

Missy the sniffer dog speeds through the alpine heath.

Letter from a hawkweed hunter



Falls Creek Friday 30th January 2015

I can do something you can't. I can sniff out a weed. No; not one with what you call 'perfumed' flowers or 'aromatic' leaves. My sense of smell is so much more sensitive than periumed flowers of aromatic fleaves. My benee of smell is so much more sensitive duan yours that I can smell this weed's 'non-aromatic' leaves. And, what's more, I can distinguish Hello humans, You call me a sniffer dog, or perhaps a sniffer spaniel because I'm an English Springer its scent from those of other plants. Spaniel. And please remember, I'm a working dog not a show dog. Steve Austin is my trainer. First he trained me to detect rabbits and other feral animals. Then he trained me to detect hawkweed. When he says 'weed', I know that I'm to search for inen ne trainea me to detect nawkweed. when he says weed, I know that I m to search for hawkweed. So I do. I can sniff out hidden hawkweed - whole plants and small fragments. This January [2015], Steve drove us to Falls Greek so that I could star in a field experiment designed to determine the feasibility of using my nose to detect hawkweed on the Bogong High Plains. Consequently, I've spent many cold, wet, windy hours running around with something that doesn't keep out the weather strapped to my back. It's called 'GPS', whatever In response to Steve's whistle and arm commands, I've scampered across grass tussocks and heath plants, head up to catch wind-borne scents or down to follow scents on the ground. You may call open heath 'low', but for me it's head high. Luckily I'm a fit young bitch who that means. Whenever I found hawkweed, I crouched down and pointed my nose towards it and, sometimes, whenever 1 lound hawkweed, 1 crouched down and pointed my hose towards 10 and, something scratched at it. Steve rewarded me with fetch-the-ball games. Sometimes, when I hadn't can jump as high as my height. found any hawkweed for a while, he checked that I could detect leaves inside a plastic bag. At the end of each hawkweed day, Steve checked me for any cuts and bruises. He patted me and are fully combed out any knots and Bidgee-widgees in my fur. And he made sure that I had a Did he think that I'd forgotten? hearty meal and a long rest - in my own kennel-cage in the back of his van. Before we head back to Sydney, I have written this letter to let you know that you humans Missy sniffs for hawkweed. are no longer the only hawkweed hunters on the Bogong High Plains. Missy, sniffer spaniel

For information about this summer's hawkweed surveys, contact Keith Primrose at the Parks Victoria Mt Beauty office – phone **0409 859 875** or email **keith.primrose@parks.vic.gov.au**



A special dog on the High Plains

LINDEN GILLBANK, SERIAL HAWKWEED VOLUNTEER, DESCRIBES A NOVEL WAY OF FINDING INVASIVE WEEDS.

Summer spurs the appearance of people and flowers in the Alpine National Park.

On the Bogong High Plains, hawkweed plants sprout orange and yellow daisy flowers, and lines of fluoroclad volunteers move slowly, eyes downwards, searching for these invasive weeds (see *Park Watch* June 2012).

Missy's involvement resulted from an innovative idea first aired in Victoria in 2012.

By then, hawkweeds had been surveyed over enough summers for volunteers and Parks Victoria (PV) and Department of Primary Industries (DPI) staff to know how difficult it is to spot hawkweed rosettes and, sometimes, their flowers.

An experiment designed by a University of Melbourne mathematician confirmed this. Dr Cindy Hauser's January 2012 field experiment showed the degree to which we humans more readily notice flowering than flowerless hawkweed plants, more readily see them in grasslands than in heathlands, and, in the presence of other yellow daisies (of many High Plains species), more readily notice orange than yellow hawkweed daisies.

Could something detect hawkweeds more reliably than human eyes? What about the canine nose?



In 2012, the DPI officer responsible for Victorian hawkweed control, Dr Karen Herbert, suggested that hawkweeds might produce scent that dogs could distinguish from the scents of other plants. DPI took this possibility seriously, and agreed to fund the training of a dog to sniff out hawkweed and a field assessment of its hawkweeddetecting ability.

Karen chose the experienced Sydney dog trainer Steve Austin, and propagated large numbers of hawkweeds and daisy lookalikes from the Bogong High Plains. She drove her car-load of potted plants to Steve in 2013 for his scent discrimination training of his English Springer Spaniel called Missy.

Missy was soon identifying hawkweed plants with great success, and Cindy designed the experiment to evaluate Missy's hawkweed-detecting ability on the Bogong High Plains.

Like her earlier human hawkweeddetection experiment, Cindy's January 2015 experiment was undertaken at various sites on the Bogong High Plains within the Falls Creek Alpine Resort.

For each trial, potted rosettes of Orange, King Devil and Mouse-ear Hawkweed, and non-hawkweed species (control plants), were hidden at precise locations in a site.

Then, directed by Steve's whistle and arm commands, Missy scampered back and forth across heath and grasslands, and sometimes, as she was trained to do, signalled a hawkweed find by crouching, nose pointing to the plant, and excitedly awaited her ball-game reward.

GPS devices worn by Steve and Missy recorded their routes within each site, and Cindy and her assistants recorded when Missy was searching, signalling, being rewarded, and resting.

Missy detected some of the hidden hawkweed plants and, like us, found those in open grassy areas more speedily than those in more shrubby vegetation. While Cindy documented Missy's partial success in her report to Victoria's Department of Economic Development, Jobs, Transport and Resources (DEDJTR), NSW coffers funded the training of two new puppies to detect hawkweed.

Their hawkweed sniffing efforts in Kosciuszko National Park this coming summer will be shaped by Missy's field results. And PV and DEDJTR will await their results before making any sniffer dog plans for future summer hawkweed surveys on the Bogong High Plains.

Since Missy detected less than half of the hawkweed plants hidden on the Bogong High Plains, Cindy has recommended that detection dogs 'should not be solely relied upon in priority management areas'. So, we human searchers will continue to use our eyes to find hawkweed in the near future. • **P**W



PROJECT HINDMARSH 2015

HINDMARSH LANDCARE FACILITATOR STEVE HEMPHILL REPORTS ON THE 18TH ANNUAL WIMMERA PLANTING IN WHICH THE VNPA HAS BEEN INVOLVED.

DOROTHY HOWES

10T0:



Left: Tree guards seen through the window of an old house once used by Bosisto's. Above and below: Some 9000 trees and shrubs were planted.



A former Bosisto's eucalyptus oil property at Antwerp, near the Wimmera River north of Dimboola, was the site for this year's Project Hindmarsh, the Hindmarsh Landcare Network's annual tree-planting event.

Some 160 people from across Victoria joined local volunteers to plant 9,000 locally indigenous trees on the property, now owned by Tim and Ben Inkster.

As in many previous years, around 100 VNPA members made the long trek to Dimboola to join locals for the weekend, one group coming from Melbourne on the V-Line train and bus service.

Local volunteers included participants from the Green Army and staff from Wimmera Health Care Group.

Preparations for the event started 12 months beforehand, culminating in the 18th Project Hindmarsh planting on Saturday 15 August.

It was a wonderful event - volunteers were well looked after, with food and drinks supplied.

Cliff Unger, Chair of the Hindmarsh Landcare Network, welcomed all the attendees and thanked them for giving up a weekend to help the environment.

"Project Hindmarsh's motto is 'City and Country, working together for the environment", Cliff said.

"Project Hindmarsh has a long history of creating biolinks between the Big and Little Deserts, Lake Hindmarsh, Wimmera River and the South Australian border."

The project is a component of the Habitat 141º vision.

Groups in the local area that benefited through catering and support opportunities included the Dimboola Lions Club, Dimboola Scout Group, Antwerp Hall committee, Antwerp Tennis Club, Dimboola Lutheran School and Dimboola A&P.

The event was assisted through generous donations and support from the Handbury family trust, Luv-a-Duck, Lowan Foods, Bosisto, Victorian Landcare, Hindmarsh Shire Council and Wimmera CMA.

As mentioned in September Park Watch, if you have attended any Project Hindmarsh plantings, Bosisto's has donated copies of a book on eucalyptus oil and sample bottles of oil that are available free from the VNPA. • PW



Birds, drought and tree cover

INCREASING TREE COVER, PARTICULARLY ON STREAM SIDES AND FLOODPLAINS, COULD HELP BIRD COMMUNITIES SURVIVE DURING LONG AND SEVERE DROUGHTS, ACCORDING TO CHARLES STURT UNIVERSITY ECOLOGIST **DR DALE NIMMO**.

Dr Nimmo and his team's research, monitoring bird communities throughout south-eastern Australia's 'Millennium Drought' from 2001 to 2009, has recently been published in *The Journal of Applied Ecology*.

The team monitored bird species in different types of agricultural landscapes near the beginning of the drought, in the middle, and after it broke. This was one of the most severe droughts on record.

Dr Nimmo said that bird communities remained more stable in landscapes with more tree cover on stream sides and floodplains – otherwise known as riparian vegetation.

"Our previous research showed that the Millennium Drought led bird communities across Victoria's dry woodlands to 'collapse' with numbers falling to around half those of pre-drought levels," he said. Above: Wimmera River near Dimboola. Protecting and restoring riparian vegetation will help birds cope with future droughts. Below: The Hindmarsh Antwerp planting is on the Wimmera River floodplain. Old Bosisto house in background.



"This study has shown that landscapes with more riparian tree cover retained a higher proportion of their species.

"The loss of trees from riparian areas occurs because these areas often have very fertile soils and so are of greater value to agriculture. However, this has deprived biodiversity of a key mechanism for coping with long droughts."

Dr Nimmo is urging conservationists, land owners and land managers to focus on protecting and restoring native riparian woodlands to help birds cope with future droughts.

"Our findings suggest that we can create drought refuges for bird communities by protecting, revegetating and restoring cleared streamsides and former floodplains," he said. "The study's findings are particularly timely given that climate scientists have observed the coming El Nino strengthening to levels not seen since the 1997-1998 event that was the precursor to the Millennium Drought."

Dr Nimmo's work investigating whether, and how, landscape structure can enhance the resilience of biodiversity to climatic extremes has been awarded a grant from the Hermon Slade Foundation. • PW

'Riparian tree cover enhances the resistance and stability of woodland bird communities during an extreme climatic event' by Dr Dale Nimmo of CSU, Professor Andrew Bennett and Dr Angie Haslem of LaTrobe University, and Dr Jim Radford of Bush Heritage is online in *The Journal of Applied Ecology*.

VEAC looks at Victoria's public land

FORMER VNPA PRESIDENT **RUSSELL COSTELLO** IS ON VEAC'S COMMUNITY REFERENCE GROUP FOR THIS IMPORTANT STUDY. HERE IS HIS PROGRESS REPORT.

In September this year, the Victorian Environmental Assessment Council (VEAC) published its first report in a threepronged Statewide Assessment of Public Land. VEAC is the body that makes recommendations to the Victorian Government on public land use and reservation status.

The last statewide review was conducted by VEAC's predecessor, the Land Conservation Council (LCC), in 1988.

This initial *Interim Report on Public Land Classification* looks at the pros and cons (and the seemingly unnecessary complexity) of all of the great suite of land classifications in Victoria, as a step towards fulfilling the first of its terms of reference – to assess that classification system and recommend any improved (and presumably simplified) system of categories.

VEAC's second term of reference is to assess the current reservation status of all public land, noting where land use has changed.

The third, rather vague, term of reference for this investigation is to make 'an inventory of the types on values on public land'.

The purpose of this study is to build on the earlier study in the light of different community expectations, changing land use pressures and economics, the increasing Indigenous community involvement in public land management, and factors like climate change and increasing habitat fragmentation.

The study is an overview: it is not intended to make recommendations about changing any use or specific reservation status of any particular piece of public land. What this initial *Interim Report on Public Land Classification* does do is:

- offer an excellent overview of the history of public land reservation in Victoria
- list and describe Victoria's current public land use categories and the area of land in each
- give a summary of the relevant legislation for reserving and/or administering the public land use categories
- describe the changing pressures, community awareness and the issues with the current system of public land use categories
- propose four options for changing that system
- append very useful information, including a summary of reservation systems from other states and elsewhere in the world, the proposed simplified categories from the 1988 LCC review, descriptions of current VEAC public land use categories and a simple table of permitted uses for some major categories. (I have attached this last as an example of how helpful this report is).

The four options for changes to our system of public land classifications are as follows.

- 1. Minimal change mainly to make it clearer to the public, including minor name changes and minimal variation to usage. For example, awareness surveys have shown that many in the community confuse State Park with State Forest and what uses are permitted in each.
- 2. Simple consolidation and re-categorisation, resulting in few categories and park types, with overlays to change usage as necessary.
- 3. A comprehensive review and alignment to legislation – the latter would require legislative amendments such as a broader National Parks and Nature Conservation Act to cover all protected area categories.

4. Next generation – Builds on option 3 but addresses emerging issues like managing fragmented landscapes across both public and private land, and responding to public discussions about appropriate management of some categories.

There is no call for submissions following this report (though VNPA made a preliminary submission to its development).

VEAC's next step is to produce a discussion paper on all three terms of reference in March, at which time it will call for public submissions. A draft proposals paper will then be produced, after which there will be a final public submission process, followed by VEAC's final recommendations to government.

I recommend that you read the initial Interim Report on Public Land Classification, available at www.veac.vic.gov.au

The VNPA would be happy to hear any suggestions you may have, in advance of the next consultation period. \bullet PW

On the adjacent page we have reprinted a useful table from VEAC's *Interim Report on Public Land Classification* which outlines the difference in the main current land classifications applicable in Victoria.

Note that while there are some apparent differences in uses between the categories of national park and state park, these two categories actually have the same level of protection under Victoria's National Parks Act. (This sort of confusion is one of the reasons for undertaking the review.)

The table does not include the multitude of older classifications, such as flora reserve, wildlife reserve, forest park, etc. These complexities are detailed elsewhere in the report.

Summary of permitted activities in major land use categories

This table is sourced from an ECC brochure (2001) summarising the activities allowed in the major land use categories recommended in the Box-Ironbark Forests and Woodlands investigation area. It illustrates the complexity of providing accurate information, given the number of exceptions and conditions that apply – including allowance for the land manager's discretion – in relation to many activities.

ΑCTIVITY	National park	State park	National heritage park	Regional park	Nature conservation reserve	State forest		
Recreation and tourism activities								
Nature observation	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Picnicking and barbecues	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Camping ¹	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Bushwalking or short walks	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Car-touring, four-wheel driving and trail bike riding ²	✓	✓	~	~	✓	✓		
Dogs	×	√ 3,4	√4	√4	x 3	\checkmark		
Visiting historic features	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Orienteering and rogaining ⁴	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Car rallies ⁴	× 3	× 3	√7	×	×	\checkmark		
Horse riding⁵	X 3	√4	√4	√4	x 3	\checkmark		
Hunting	× 6	× 6	× 6	× 6	× 6	√6		
Prospecting/ metal detecting								
Metal detecting	X 3, 8	√7	√7	\checkmark	√7	\checkmark		
Gold panning	× 8	√7	√7	\checkmark	×	\checkmark		
Gemstone fossicking	× 8	×	√7	\checkmark	×	\checkmark		
Resource industries								
Mineral exploration	× 9	× 9	√ 9, 10	√ 10	√ 10	\checkmark		
Mining	×	×	\checkmark	\checkmark	\checkmark	\checkmark		
Sawlog and post production	×	×	×	×	×	\checkmark		
Firewood	x 11	x 11	x 11	× 11	x 11	\checkmark		
Apiculture	√ 12	√ 12	\checkmark	\checkmark	√ 12	\checkmark		
Eucalyptus oil production	×	×	×	×	×	√ 13		
Other uses	_							
Environmental education	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Approved research	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Water production/distribution	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Stone extraction	× 14	× 14	× 14	× 14	× 14	\checkmark		
Grazing ¹⁵	×	×	×	×	×	\checkmark		
Utilities	x 16	x 16	× 16	× 16	× 16	\checkmark		

1 Camping may be at designated campsites only, and may be excluded from some smaller reserves

- 2 Only on roads and tracks formed for the passage of four-wheel vehicles; may be subject to seasonal or permanent closure
- 3 Some exceptions
- 4 Subject to certain conditions
- 5 Only on formed roads or specially designated tracks
- 6 Land managers may organise shooting drives to assist in the control of feral animals
- 7 Some areas may be excluded in management plans
- 8 Permitted along Reedy Creek (Chiltern-Pilot National Park)
- 9 Existing exploration or mining licences continue; Government may approve mining following such exploration

Specified park and reserve areas will extend only 100 metres below the surface, allowing new exploration and mining beneath this depth

- 10 Restricted under the Mineral Resources Development Act 1990
- Some firewood may be available from ecological management in parks and reserves. Previously felled firewood can be collected from new parks and reserves
- 12 Permitted where an existing use
- 13 Confined to areas used since 199514 Extraction for local management
- use only
- 15 Only small areas are suitable for grazing. Light grazing for ecological management may continue in limited areas
- 16 Some existing utilities are within recommended parks and reserves. These will generally continue



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GEOFF DURHAM VISITS A LITTLE-KNOWN BUT IMPORTANT PARK IN SW VICTORIA.

Last year our annual trip was a car tour of Gippsland. This year, prompted by Parks Victoria's release of the *Ngootyoong Gunditj Ngootyoong Mara South West Management Plan*, we toured the South West of the State.

Ngootyoong Gunditj Ngootyoong Mara translates from the Gunditjmara Dhauwurd Wurrung language to 'Healthy Country Healthy People', a take on Parks Victoria's Healthy Parks Healthy People. The pronunciation is 'noot (as in foot) yoong guhn-ditch noot-yoong mah-ra'.

The plan, prepared in partnership with Gunditjmara traditional owners, is 'a strategic guide for managing and protecting over 130 parks, reserves and Indigenous Protected Areas (IPAs) in south-west Victoria'. There are six Aboriginal community owned properties, including three IPAs.

The plan replaces individual plans for Lower Glenelg NP, Mount Eccles and Mt Napier NPs, the Dergholm section of the Dergholm and Mount Arapiles SPs, Discovery Bay Parks including Mount Richmond NP, Cape Nelson SP and Discovery Bay Coastal Park, and Discovery Bay Marine NP. It lacks the helpful detail of the individual park plans and adopts a broad 'goals' and 'strategies' approach.

Dergholm is a village, little more than a pub, on the Casterton-Naracoorte road, 34 km north-west of Casterton in western Victoria. According to Les Blake's *Place Names of Victoria*, the name is derived from 'Lough Derg' (a lake in Eire), and 'holm' from Old Norse *holmr*, flats subject to flooding. The Glenelg River flows past Dergholm and the flats flood, but there is no lake.

Dergholm State Park is little known outside the Casterton area. I was keen to see it, as it was the only one of Victoria's 26 state parks I had not visited.

In the words of the relevant legislation (the National Parks Act), the prime purpose of state parks is the same as for national parks – the protection and preservation of indigenous flora and fauna.

Importance

By that measure, the remote, isolated, unspectacular and little-visited Dergholm is a very important park. It's a long way from Little Desert NP to the north, Mt Arapiles-Tooan SP and Jilpanger Flora & Fauna Reserve to the north-east, Black Range SP and Grampians NP to the east, and Lower Glenelg and Cobboboonee NPs to the south.

The pastoral development of southwestern Victoria meant that little native vegetation remains on the basalt plains with their expanses of pasture and occasional 200+-year-old River Red Gums. The plains give way in the west to the rolling hills of dissected tablelands.

By contrast, Dergholm SP and the adjoining Youpayang State Forest, on gently undulating sand dunes, are thickly vegetated with predominantly heathy Brown Stringybark woodlands. The new Management Plan says the park is regionally significant for its distinctive landscape character.



Baileys Rocks in the park's Bogalara block.



Remarkable 'fused' gum in the Bogalara block.

Wildflowers

Wildflowers are a feature, and the park is important habitat for a range of threatened fauna such as the Red-tailed Black-Cockatoo, as well as numerous regionally significant species.

The park is one of the least weed-infested in the State. Pest plants include pines (the biggest threat), Coast Wattle, Blackberry, Cape Tulip and Patterson's Curse. Pest animals are rabbits, foxes, and cats. It is yet another park where deer management has been ignored by Parks Victoria – in this park it is Fallow Deer.

The old Management Plan recognised that an appropriate fire regime was an important requirement for vegetation management and that inappropriate fire regimes were a major threat. The last significant wildfire was in 1997.

With eleven Ecological Vegetation Classes, including heathlands and heathy woodlands, fire is a complex issue as many plant species and communities require an appropriate regime to maintain their populations. Fuel reduction burns are a major management activity.

Attractions and facilities

The main attraction for visitors is the readily accessible Baileys Rocks in Bogalara block. In 1888 John Bailey built a four-roomed slab walled house near an outcrop of 500 million year old Ordovician Dergholm granite boulders, and the area became a popular picnic spot.

In 1970 a mining company wanted to quarry the pink granite for building veneer, and a 'Save the Rocks' committee was formed, leading to the reservation of 510 hectares. Following the Land Conservation Council South-western Area District 1 Review, Dergholm State Park was proclaimed in September 1992. Grazing and timber cutting ceased, but apiculture continues.

Camping is free at the Baileys Rocks camping and picnic ground, which has caravan access, fire places, tables and basic pit toilets. It is a base for orienteering events. Dogs are permitted on lead at the day visitor area only. A short loop walking track winds through the boulders and a there is a 5 km return walk along Rocky Creek.

The park has a network of two-wheeldrive gravel tracks with seasonal closures in wet months. Trail bikes are permitted on all public roads and horse riding on a few. The Parks Victoria 'Level of Service' is 'basic', with one ranger based at Casterton responsible for all the reserves in the region.

While you're in the vicinity, for a small admission fee visit the privately owned Warrock Homestead and its 33 buildings all classified 'A' by the National Trust, the relics of a selfcontained community of the 19th century pastoral (squatting) era.

Also, inspect Bilston's Tree, a River Red Gum 40.8 metres high said to have the largest volume of millable timber of any example of the species. We hope it remains standing for a long time to come. $\bullet PW$

The 10,400 ha park is in two blocks – Bogalara and Youpayang – that are roughly the same size and about 4 km apart, with cleared farmland, Blue Gum plantations, and the Dergholm-Edenhope Road and the Glenelg River in between.

Biolink

A biolink along the lines of Project Hindmarsh and Grow West immediately comes to mind.

The old Dergholm Management Plan said 'Improved habitat links between the blocks and the River would help maintain fauna populations' and had as a Priority Management Strategy 'Encourage habitat enhancement between the two blocks'. The new Management Plan has an overall Strategy to "Strengthen partnerships across public-private land for whole of landscape and integrated approaches to increase connectivity ... through habitat corridors and programs ..."

The park has two Broad Vegetation Types – Heathy Woodland and Plains Grassy Woodland. As well as Brown Stringybark, other eucalypts are River Red Gum, Yellow Gum, Manna Gum and Swamp Gum.

The Bogalara block has a mosaic of heath communities and, in the northwest, Pink Gum, *Eucalyptus fasciculosa*, a mainly South Australian species at its easterly limit. The Youpayang block has circular freshwater swamps and two nationally significant vegetation communities, Swampy Riparian Woodland and Clay Heath. Bradley Fauteux in the Algonquin winter. Luckily it does sometimes snow in Victoria.

Welcome to Bradley Fauteux

PARKS VICTORIA'S NEW CHIEF EXECUTIVE, BRADLEY FAUTEUX, IS THE FORMER MANAGING DIRECTOR OF ONTARIO PARKS AND A FORMER CHAIR OF THE CANADIAN PARKS COUNCIL. WHAT ATTRACTED HIM TO A LIFE IN PARK MANAGEMENT? THIS IS AN EDITED VERSION OF HIS RESPONSE.

I have lived outdoors since I was a small child. I grew up in the woods, fishing and canoeing and hiking.

Every day I am grateful for the opportunity to work in the service of my fellow citizens as a public servant. But even more important than that, in the service of the ground you walk on, the trees you walk through, the water you swim in.

Park experiences

I was born at Iroquois Falls, about 300 km south of James Bay. Just north of there is where the tree line disappears and there is the subarctic tundra, and eventually you have a park called Polar Bear Provincial Park.

In my previous role, I got to visit this amazing place. The thing I remember is a big field of arctic bluebells, which have a remarkable fragrance, and the breeze was blowing over me. All of a sudden, I ran over a bluff and just lay down in the field of bluebells. The combination of the smell and the beautiful scenery created an overwhelming experience.

That's what landscape is like for me. I've had many of those experiences, always outdoors and always that experience of connection to where you are. They are experiences you want for your own children. You want them to remember those overwhelming connections to landscape.

Victorian parks

I'm excited about the challenge of understanding Victoria's ports, parks, beaches, marine and alpine environments. I am keen to learn how they function, how we manage them, and how thoughtful we are about the balance between use and protection. I relish the opportunity to be a learner.

Parks Victoria

Parks Victoria is an organisation of about one thousand that seems to be very well integrated with the communities in which people live. I'm grateful for the opportunity to work alongside such a dedicated and esteemed group of colleagues.

Parks Victoria's vision is to be a world-class parks service ensuring healthy parks for healthy people. That tells you everything you need to know about what we aspire to be.



In terms of gender equality, I am the son of a feminist mother and I am so proud of the example that my wife Alison sets for our daughters. Gender equality is something I'm very conscious of in park management, which has been traditionally male dominated. I am going to have to grow into that and learn how our organisation's gender voyage has been in Victoria.

Healthy Parks Healthy People

I worry a great deal about the advent of sedentary lifestyles, about the rise of technology as an enabler. I worry about the change in children's health. I also worry that we are turning into a worldwide culture of fear of the outdoors and fear of nature.

Healthy Parks Healthy People is a core element of wellbeing for everybody. The rise of diabetes and other preventable diseases is linked to inactivity, and studies show clearly that you're healthier when you're outside.

When you're outdoors and active, your mental health, your mood, all sorts of things are positively affected. I worry that soon doctors are going to be writing prescriptions for children to get out of the house.

We really limit ourselves because technology is so easy. I'm an adopter of technology, but I'm really conscious of it too. We can't deny technological progress, but you have to be conscious of its impacts.

My kids sometimes go nuts because they spend a tremendous amount of time outside when they want to be on their iPads like





Bradley with a familiar message.

Polar Bear Provincial Park, Ontario. These bears are rarely seen in Australia.

I am deeply interested in how we are thinking about fire. It's an integral part of how you do your park management planning.

Invasive species

Invasive species are a huge concern for parks around the world and a very important focus in Victoria. Victorians have picked these places to protect, so we need to be vigilant about the threats. We need to be very quick to react and thoughtful about how to keep them intact in the longer term.

Visitors and camping

Parks provide the landscape and the visuals for people to be inspired by when they visit. I think we're getting more oriented to the experience economy. I think that's where parks are perfect. We provide experiences that people take home with them as memories for the rest of their lives.

I am a camper first and foremost. That is how we as a family go on holiday and how we spend our free time. I have canoed most of the rivers in Ontario and I hope to bring my canoe to Victoria and continue to canoe there.

Traditional Owners

I think my job is to figure out how to best serve Traditional Owners, not the other way around.

The most satisfying days of my working career have been when we have been able to reach a mutual understanding that truly honours the reconciliation between what we call First Nations in Ontario, and the people who have colonised.

I really do look forward to working with Traditional Owners, whether it's in communities or through joint or co-management, or with Parks Victoria's Aboriginal rangers and staff.

The next generation of volunteers

Friends groups are incredible resources for parks to have. We have to think about how our message translates to the next generation. I really want these groups to be sustainable. $\bullet PW$

their friends. I remind them that people are going to be so thankful when they are older and realise that they've had this life full of experiences outside.

Digital communications

I'm really interested in how we communicate with Victorians about their parks. The wonderful thing about technology now is that we can engage in active, real-time dialogue with people.

It's such an opportunity for engagement at every level and every age.

Sustainability of the park system is directly related to the ability to attract younger people to our cause. Technology has tremendous opportunities for communicating a message. I really am interested in what Victorians think of Parks Victoria and the work we do. I'm interested in having a conversation with them, in any way or shape or form possible.

Fire management

I have had a lot of experience in Ontario, but it's a very different delivery model because of the breadth and size of the landscape.

Fire management in Ontario is almost exclusively in the forests. We fight fires with crews on the ground but also with helicopters and aeroplanes. We are rich with water, so we have a very different perspective. We burn to lower the [fuel] load or because ecologically the landscape needs fire.

Exploring western Canada's parks

Black bear at his blueberry patch.

For many years, thanks to trip leader John Bales, the VNPA has organised overseas trips, most recently (Aug-Sept. 2015) to Canada. This trip included two weeks in western Canada (British Columbia, or BC, and Alberta) and two in eastern Canada.

Such trips invite comparisons with Victoria, to see how we rate and how we might improve our parks.

The VNPA trip included much time in and around parks. Western Canada has a few federally-controlled national parks and many provincial parks, the latter generally equivalent to Australia's state-controlled national parks.

Near Vancouver we walked in Cypress and Garibaldi provincial parks. Both contain downhill ski areas that have been carved out of the parks.

Over the years, the ski area operators have pushed for land to be taken out of the parks and added to their areas. Provincial governments have agreed, despite significant public opposition.

Commercial developments

There are currently proposals for four major new downhill ski resorts in BC, all of which would have a negative impact on wilderness and conservation values. All four, however, are currently in limbo for a variety of economic, political and environmental reasons. At Cypress, we walked in the sunshine up a couple of ski runs to near the top of Mt Strachan, where there's a great view of the mountains north of Vancouver and the beautiful fjord below.

VNPA COUNCILLOR MICHAEL FELLER DESCRIBES SOME OF

CANADA'S NATIONAL AND PROVINCIAL PARKS AND COMPARES THEM WITH VICTORIA'S PARKS.

This was also a wonderful half-day backcountry ski-touring trip from Vancouver in the snow season, but a new owner of the ski resort some years ago sought to ban ski-tourers from skiing through the (public land) downhill ski area.

Demonstrations, arrests and negotiation resulted in ski-tourers being allowed through as long as they carried a valid (free) day-ticket. But the owner wanted to build a large restaurant near the top of Mt Strachan, clear more old-growth forest for ski runs and new lifts, and a golf course.

The golf course proposal was rejected by the public and local council, and a subsequent new owner of the resort, more socially responsible, has dropped the expansion plans.

Commercial interests inside a park can wreak havoc, but can be prevented by strong public opposition. Currently, conflict between mountain bikers and walkers is causing concern in the area, the only real solution being to separate the two user groups.

The public and certain key politicians do not favour further depletion of

old-growth forest. Logs on the ground in Cypress park can be from trees that died over 700 years ago, slow decomposition and infrequent fires (well over 1000 years apart) making the forests structurally stable for centuries – unlike most of our Victorian forests, where fires are more frequent and decomposition much faster.

The next day we split into two groups which walked into different parts of Garibaldi provincial park, north of Vancouver. One group went to Garibaldi Lake with its magnificent turquoisecoloured water; the other went further south to the Diamond Head area, which has scenic alpine meadows.

Berries, bears and funding

Both groups encountered lots of prime blueberries. For someone with a European palate, Canada offers much more abundant, and nicer, bush tucker than Victoria or Australia. Blueberries, raspberries, blackberries and strawberries mingle with other berries traditionally used by indigenous peoples.

The Diamond Head group found a superb patch of blueberries, and munched away before noticing a black bear munching on another patch nearby. A black bear eating blueberries is generally not a threat, so I was able to approach quite close to take photos.

While Australians tend to be unnecessarily paranoid about bears in





Near Diamond Head, Garibaldi Provincial Park.

Canada, and Canadians are paranoid about snakes in Australia, the chances of being killed or even attacked by either animal are low. We must learn to live with and respect wildlife in both countries.

Garibaldi unfortunately illustrates the effect of continuing cutbacks in park funding in BC – run-down infrastructure, filthy toilets, people ignoring park regulations with almost no one there to enforce them, and overcrowded camp sites. Visitors this year beat up one park ranger who tried to enforce regulations.

From Vancouver we drove east to Fort Langley, built by the Hudson's Bay Company. The fort is a small version of Sovereign Hill near Ballarat, but Sovereign Hill offers much more.

From there we drove to the town of Clearwater in the Columbia Mountains, and on to see Canada's fourth highest waterfall (Helmcken Falls, with a 141m clear drop) in nearby Wells Grey provincial park.

Burning

The surrounding park is noted for being the place where ecological prescribed burning began in BC. This was to create more habitat for wildlife, such as deer, that people could hunt.

Early 'studies' of the effectiveness of the burning involved people walking around and noting what wildlife was present.

VNPA group on top of Mt Strachan, Cypress Provincial Park.

The presence of animals (no data on whether numbers actually increased or decreased after burning) indicated a successful burn!

Such abysmal science has some similarities to that put forward by those claiming fuel reduction burning in Victoria is invariably ecologically good, or that logging Mountain Ash (Eucalyptus regnans) forests does not result in an increased fire hazard.

Access

From Clearwater we drove north to Jasper National Park, stopping in the adjacent Mt Robson provincial park for lunch. There the impressive bulk of Mt Robson, the highest mountain in the Canadian Rockies (3954m) towered above us. The Coast Mountains of British Columbia contain higher mountains than the BC Rockies (Mt Fairweather, 4671m, is the highest) but Robson has the greatest rise from valley to summit.

Mt Robson has no really easy route to the summit, the easiest being subject to ice avalanches, so its ascent is an achievement. This contrasts with all our Victorian mountains, where there is nearly always an easy walking route to the top.

As a result of poor management of the Victorian bush by the then Forests

Commission from the 1950s to the 80s, networks of eroding and unmaintained fire access tracks were bulldozed throughout the Victorian mountains. This substantially reduced wilderness areas, let more people in to light fires, and brought enhanced weed invasion, soil erosion and lower streamwater quality.

The effect of the tracks on reducing areas burned by fire remains unquantified and questionable.

BC never adopted such an approach to fire-fighting, preferring to use aerial access. Consequently, vast wilderness areas remain. The Rockies north of Mt Robson are traversed by only one highway in 1000 km, and contain numerous unroaded major valleys and many unnamed and unclimbed mountains.

With no guidebooks to detract from the spirit of adventure, and little mobile coverage, a vast mountain wilderness awaits those who wish to challenge themselves.

No area of the Victorian mountains offers this, and those few areas of wilderness or semi-wilderness that remain are rapidly being littered with developments. The proposed lodgestudded long-distance walking track through the Grampians, and a similar proposal for the Hotham – Falls Creek area, are the latest examples. • PW



Southern Cross Safari

Around Australia by bus and train

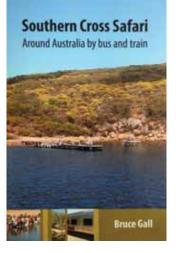
By Bruce Gall. Redgum Publishing, Canberra, 2015. RRP \$34.95. Order online at **www.southerncrosssafari.com**

Bruce Gall is well qualified to write a book on Australia's national parks. He worked as a park ranger and wildlife research officer in NSW, then became successively Superintendent of Kakadu NP, Manager of the ACT Conservation and Wildlife Unit and Director of the Queensland NPWS.

He also has the stamina and motivation needed to travel around Australia, largely by train and bus, visiting 165 nature conservation areas, including 101 national parks. Amazing.

The reader needs stamina too. The book has over 500 pages and no photos. For these, you have to visit the above website, which has a gallery of over 1000 photographs as well as a blog and contact details.

The book includes many quoted conversations between the author and



people he met. Some of these are of interest but many aren't, and could be omitted.

It's best used as a reference book. By picking out the states or parks you're interested in (although there's no index), you'll find some good information, and also revealing assessments of the parks and their facilities.

Gall's introductory chapter on the national parks around Sydney is excellent, but you have to wait until chapter 16 before he reaches Victoria, via Queensland, NT, WA and SA. Some of his comments on our parks are in the box below.

His overall conclusions are worth quoting. "National parks protect the very best of our natural heritage. They also attract over 100 million visits annually, underpin our tourism industry, and support regional economies. They need to be well managed.

"With few exceptions, the parks [I visited] were clean and tidy, and facilities mostly well looked after. Information was good if the park had a visitor centre, variable otherwise.

"Of most concern was the condition and signposting of tracks: it was not good ... Visitors should be encouraged to explore parks. Walks need to be welcoming, but trackhead advice was often scant. Signs without distances and estimated times don't inspire walkers to start ... 'Guess which way' junctions don't entice people to keep going.

"Many tracks were in poor condition, eroded and washed out due to ineffective drainage and heavy usage."

And why is this, he asks? "The endangered *Homo sapiens rangeri* may have the answer – if you can find one!" But we can supply the answer – lack of funding and staff.

I hope Parks Victoria's new CEO Bradley Fauteux reads this book, at least the chapters on Victoria. It highlights the often wide gap between the purple prose of park marketing and the on-ground realities in the parks. • PW

Review by Michael Howes.

Bruce Gall on Victoria's parks

Lower Glenelg NP: lack of signs meant he couldn't find the Sapling Creek walk.

Mt Richmond NP: great flora and fauna, and 'a little display shelter was good'.

Grampians NP: Brambuk centre had good displays but no national park souvenirs, only Brambuk ones. 'Like most park shops, the majority of items were imported [and] had little or no relevance to the park'. The Pinnacle Track has 'some of the best stonework I've seen' and Wonderland was 'a wonderful walk [and] excellent track'.

Port Campbell NP: faded and incomplete interpretive signs. At the Twelve Apostles, such signs were small and low and not many people read them. "I would replace the silly kiosk [there] with a staffed centre and high-quality display."

Yarra Flats: display shelter had too much text, too few photos and no map.

Mornington Peninsula NP: three display panels at Sorrento Back Beach "were so rusty they were illegible. Judging by the grubby rotunda and information display, Mornington Peninsula was not a 'Healthy Park'".

Wilsons Promontory NP: Tidal River visitor centre staff were 'friendly and efficient'.

Parks Victoria loses staff

Parks Victoria has fewer employees now than it had when the Coalition Government came to power in 2010-11. PV annual reports have shown figures of actual employees and full-time equivalents (FTE) since 2006-07.

The decrease has been about 6-7% each year, a total of 18.1% by 2013-14. The area of the parks estate remained fairly constant over this period at 4.1 million hectares, so the ratio of employees to parks area has fluctuated as employee numbers rose and fell.

When PV was created in 1996 there was about one employee per 4,000 hectares of park. The ratio fell to one per 3,700 ha from 2008 to 2011, then rose dramatically to one per 4,540 ha last year.

The decrease in FTE staff is just on 200 (18%) of the 1103 employed in 2011, or 22.2% of the current level of 903 FTE. • **P**W

Figures courtesy Robert Bender

NEW FROM CSIRO PUBLISHING

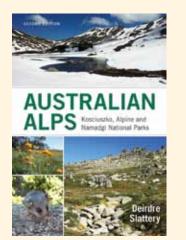
Australian Alps

Kosciuszko, Alpine and Namadgi National Parks

by Deirdre Slattery. CSIRO Publishing, Dec. 2015. Paperback, 300 pages. RRP \$45.00.

Whether you have just a passing interest in the High Country of south eastern Australia, or you think you already know everything there is to know about the Australian Alps National Parks, this is a book you will pick up again and again.

Deirdre Slattery, a geographer, environmental educator and past VNPA councillor, has garnered information from a wide range of scientific and historical sources to put together the extraordinary tale of one



of Australia's most treasured, and most contested, natural areas.

This volume is a revision of the first edition of her Australian Alps field guide (1998), but it has been so thoroughly revised and enlarged that it's really a new

Mountain Ash

Fire, logging and the future of Victoria's Giant Forests

By David Lindenmayer, David Blair, Lachlan McBurney, Sam Banks. CSIRO Publishing, Nov. 2015. Paperback, 200 pages. RRP \$59.95.

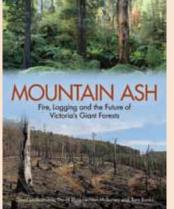
In *Mountain Ash* the authors present a compelling case for scientific evidencebased forest management and policy.

The book should be compulsory reading for all members of Victoria's Forest Industry Taskforce as they negotiate policies for Victoria's future forest industry, which is heavily concentrated in our Central Highlands Mountain Ash forests.

It's also an extremely valuable resource for people battling to protect these forests in a Great Forests National Park, because in this one book are detailed many of the key arguments for protecting the forests.

Lindenmayer's research teams from the ANU have been conducting rigorous and extensive research on the ecology of Mountain Ash forests for over 30 years. When they continued their research after the devastating 2009 Black Saturday fires, they had a solid scientific data base for it.

Mountain Ash is concise and engagingly written as it presents the results of the post-fire ecological recovery research in the forests. The text is accompanied by superb clear photos and informative captions.



As well as covering the response of plants and animals to the 2009 fires and the complexities of fire research, Lindenmayer et al studied how factors such as logging and slash burning influence these responses. There were many unexpected findings, and the researchers felt it was vital to make the public aware, for example, that past logging practices can make these forests more fire-prone.

Based on their findings, the authors outline how to protect and restore the Mountain Ash forests, and discuss future research directions and forest scenarios. They also explain their research methods and effectively debunk many forest management myths.

An outstanding publication! • PW

Review by Evelyn Feller

book. With an eye and ear for the heroic, the tragic and the humorous, Deirdre takes us on an authoritative journey through the geology, the plants and animals, Aboriginal occupation, pastoralism, gold mining, water, the road to conservation and, finally, a useful visitor's guide.

The journey is peppered with intriguing quotes from remarkable characters, and illustrated with well-chosen photographs, many of them historical. Midway there is a chapter on *Science in the Alps* contributed by Linden Gillbank, but Deirdre pays due homage to the wealth of alpine science, and the scientists, throughout the volume.

This is a very readable book, full of interesting anecdotes: a remarkable story told with genuine respect. • **P**W

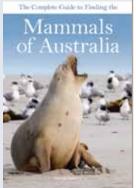
Review by Phil Ingamells

The complete guide to finding the Mammals of Australia

By David Andrew. CSIRO Publishing, Dec 2015. Paperback, 448 pages. RRP \$49.95.

This comprehensive guidebook is a must for anyone wanting to see Australia's rich and unique array of mammals.

David Andrew is no stranger to producing wildlife guides and information. He co-wrote a number of travel guides for

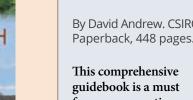


Lonely Planet, including their *Watching Wildlife* titles.

In this guide he describes Australia's best mammal-watching sites, and includes a complete annotated taxonomic list, sections on travel and logistics, and hints on photographing mammals. There are also regional maps with featured wildlife sites clearly indicated.

The book will be of interest to mammal enthusiasts, biological field workers and volunteers, tourists, and anyone wanting to observe or photograph Australian mammals in the wild. A perfect gift for any wildlife seeker! • **P**W

Review by Tilly Reynolds



Environmentalist of the Year



lill Redwood and Bob Brown at the presentation.

Jill Redwood, coordinator of Environment East Gippsland and one of Australia's most committed and inspiring environmental campaigners who has worked tirelessly to protect the region's forests and wildlife, was named Environmentalist of the Year by the Bob Brown Foundation in September.

She has lived in Goongerah, East Gippsland for more than 30 years on a self-sufficient property she built herself, and also runs an eco-tourism cottage on her property.

You can visit the property and the forests next year on the VNPA's annual Forests Forever Easter Ecology Camp – see advert on back cover.

Bob Brown said that Jill is a woman of enormous courage and integrity, sometimes standing alone against a powerful timber industry in the East Gippsland forests.

Often threatened but never bowed, she continues to be a strong voice for the protection of our remaining native forests and the native animals that depend on them.

Earlier this year Jill's work with Environment East Gippsland helped win a reprieve for 2000 hectares of forest habitat for three threatened species of owls.

The VNPA congratulates Jill on this well-deserved award. • PW

Best Friend Awards

This year the Victorian Environmental Friends Network has presented Best Friend awards to six people in recognition of their great contributions over many years. The work of five of them is outlined below; that of Les Smith of Friends of the Little Desert was described in September Park Watch.

Ann and Bruce McGregor, Friends of Merri Creek

Ann and Bruce are Honorary Life Members of the Friends, helping form the group in 1989 and continuing to be extremely active members.

They are also long-standing VNPA members. Bruce is a member of the VNPA Council and currently Convenor of the Conservation and Campaigns Committee.

Since 1976, Ann and Bruce have been absolutely crucial in the restoration of Merri Creek.

They were both closely involved in the fantastic exhibition Merri Creek: from wasteland to parklands, currently showing at municipal libraries in the Merri Creek catchment.

They gave a wonderful presentation at the exhibition launch at Brunswick Library on 15 October, where they also received their Best Friend awards much to their surprise!

Kay Johnston and Trevor Phillips, Friends of Gardiners Creek Valley

Kay has been a very active member of the Friends group since its foundation in 1991, and often writes inspiring articles for the group's newsletters.

Over the past 23 years she has documented the progress of the Glenburn Bend Park area. Her photographs show its transformation from a weed-infested wasteland to an oasis of indigenous trees, shrubs and other vegetation.

Trevor has been a member of the Friends for 11 years and President for the past ten. He plans, organises and leads all their working bees and tree-planting days.

Kay's and Trevor's leadership has helped transform an uninteresting area into wonderful urban bushland. Bird life is increasing and native plants are regenerating. It has become a haven in which the community can gain much pleasure and inspiration.

Morris Maxwell, Friends of Margaret Lewis Reserve

This reserve is a 15 ha bushland and recreation area in Coldstream, formerly part of a farm owned by Margaret Lewis and donated by her in 1981 to Coldstream residents for passive recreational use. Since then it has been maintained and cared for by the Friends group, led by Morris Maxwell. Morris received his Best Friend award in Lilydale on 19 November. • PW

Vale **Russell Best**

VNPA member, field botanist and passionate Macedon Ranges local Russell Best died from cancer on 14 October.

Russell's environmental achievements included:

- developing Natureshare, a valuable local recording database for sightings of flora and fauna
- campaigning to protect the valuable plant and animal communities of the Barrm Birrm area
- surveys of unique and threatened plants, and discovery of several threatened species in the region
- co-authoring Macedon Range Flora, an invaluable guide to local plants.

Russell was also central to the flora survey work undertaken as part of Macedon Ranges Shire Council's bushland reserve management plans.

His passion, positive attitude and expert botanical knowledge will be greatly missed. • PW



WALK

After 30 years of remote walking tours, Russell Willis turns his gaze towards the future.

This is my 30th year of running bushwalking tours as Willis's Walkabouts. For me, this is even greater motivation to ensure 2016 is extra special.

For 30 years, I have been blessed in earning a living doing something I love. I visited many wonderful places and met many wonderful people. I have lived a life that many only dream about.

Unfortunately, the price for continuing to run this business has been an increasing amount of office work. I've had enough. It's time to concentrate on the things I truly enjoy rather than paperwork.

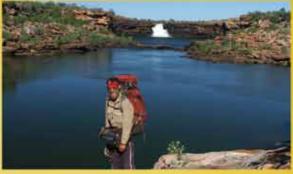
Times change and so must Willis's Walkabouts. To begin with, this will be the last print advert I run. As such, I'd like to say thanks to all the *Park Watch* readers who have supported us along the way.

The next phase is to consider what next. To celebrate 30 years, I have created a list of the trips I most want to do and will focus on running these over the next few years. I welcome any expressions of interest from those who would like to join me. The best way to find out about those trips is to sign up for my free newsletter using the contact button on the website.

After that there's the matter of succession. While Willis's Walkabouts will definitely continue to exist, it will need to do so with far less of my involvement in the office work. I will, however, continue to lead walks for as long as I continue to enjoy it. And, of course, other walks will continue to be led by my small, select team of guides.

Yours, Russell Willis

Russel Willis





Kakadu, Kimberley, Pilbara, Central Australia – our bushwalking tours cover them all. Treks from three days to six weeks, easy, hard or in between. Our overseas trips are different to anything else on offer anywhere: Patagonia, Scandinavia, southern Africa, Madagascar & more. Check out the trip lists on our website and see for yourself.

Visit the Willis's Walkabouts website or enquire for more information about our upcoming tours today. www.bushwalkingholidays.com.au

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www.vnpa.org.au