

PARK WATCH



RESCUE OUR PARKS!
VICNATURE 2050
GREAT VICTORIAN FISH COUNT
LEADBEATER'S PLAN
'PLACES YOU LOVE' ALLIANCE
WE'RE LISTENING FOR NATURE
VICTORIA'S BEST WALKS

MARCH 2016 NO 264



VICTORIAN
NATIONAL PARKS
ASSOCIATION
Be part of nature

NEW!

BUSHWALKING
AND ACTIVITIES
PROGRAM
AUTUMN 2016



Be part of nature

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VNPA'S VISION

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

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- become a regular giver or member
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You're always welcome to contact the editor to discuss ideas for articles. Phone the VNPA or email michaelh@vnpa.org.au. Articles may be submitted by email, on disk or as hard copy. Include your contact details and brief biographical information. Photos, maps and drawings are needed too. Digital photos should be 300dpi and around 8cm by 12cm.

COPY DEADLINE for June 2016 *Park Watch* is 25 April 2016.

DESIGN Mary Ferlin **PRINTING** Adams Print

FRONT COVER

Places we love: a student from the Department of Education & Training Leadership School (Alpine School at Dinner Plain) photographs wildflowers at JB Plain in the Alpine National Park. Photograph by David Tatnall.

BACK COVER

Seal Bay, Croajingolong NP. Photograph by David Tatnall.

Park Watch ISSN 1324-4361



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From the President

Christmas 2015 came a few days early with news about a successful grant application to enable VNPA to extend the 'Caught on Camera' project to include sound recording.

The new project, in conjunction with the Museum of Victoria, is called 'Communities Listening for Nature'. See story on p. 22. Congratulations and thanks to Caitlin Griffith and Christine Connelly for their work in obtaining the grant.

1 February saw the launch of the **VicNature 2050** website, which summarises output from the October symposium 'Managing Victoria's Biodiversity under Climate Change' which the VNPA jointly organised with the Royal Society of Victoria and the University of Melbourne's Bio21 Institute. See story on p. 4.

While talking about our online presence, I should mention that the redevelopment and modernisation of the VNPA website are well underway. The new website should be available in the second half of the year.

We're also reviewing our current website and bringing the content up to date, and there's a new section with a lot of material relevant to the school curriculum. See p. 17.

Moving to parks on the ground, while on holiday in December I visited six national parks in New Zealand. Each had information centres with displays about the fauna, flora and geology of the park as well as about walks and other activities. One small park had *three* centres, one at each entrance!

The centres were all staffed by Department of Conservation staff who had detailed knowledge of the area. Maps and other printed information were available, sometimes for a small charge.

We encountered rangers and other DoC staff during every visit to a national

park. Some were working on tracks or feral animal control, or carrying out research, while others enhanced the visitor experience by talking to people.

This is in stark contrast to Victoria, where staffing levels are so much reduced that in most parks you have to search for a ranger if you want to get more information - and you still might not be successful.

Few of our parks have adequate information centres, and there is excessive reliance on web-based information.

We need people working in our parks to show that as a community, we care about the parks. The staff who work in parks care about 'their' parks, and are also the

front line in dealing with the public, and with threats such as invasive species.

The human presence in parks helps make visitors feel welcome. Talking to rangers increases people's appreciation of the park, and makes them want to protect it. It's also likely to increase the length of their stay, bringing a financial return to nearby communities.

This decline has resulted from the poor levels of funding for managing our national parks, which was made significantly worse by recent cuts in core funding. It's time for our parks to receive the field staff and funding they need for proper management. That is a major theme of this *Park Watch*. • PW

Euan Moore, VNPA President



PHOTO: DOROTHY HOWES

From the Editor

Welcome to the first *Park Watch* for 2016!

The need for more funding for parks is the theme of this issue, and there's also a range of articles on VNPA activities, conservation topics and bushwalking. A big thank-you to all our contributors, with special thanks to David Tatnall for the great photos in this and many other *Park Watch* editions over the years.

Speaking of years, I'm sorry to say that this will be my last *Park Watch* as editor, after 12 years and some 46 issues. It's been an amazing journey and a privilege and pleasure to edit the magazine and meet, or at least read articles (and see photos) from, so many interesting and committed people. I can't name you all personally but please take this thank-you as applying to you! It's also been a privilege to work with such a great team of VNPA staff and volunteers.

Dorothy and I feel it's time to try things like longer walks and other travelling and volunteering, and we're also helping to look after Thomas (see photo), Australia's cutest baby and our first grandchild. But I won't say a final good-bye, rather an *au revoir*. It could be a Dame Nellie Melba farewell as I hope to return to help with *Park Watch* (if invited) and maybe, with more time available, take part in some BWAG walks!

And many thanks to our members and readers. Without you there wouldn't be a *Park Watch*! I hope you enjoy the magazine, and I wish you all the very best. • PW

Michael Howes

Vicnature 2050

OUR CLIMATE IS CHANGING, AND THIS WILL AFFECT OUR BIODIVERSITY. PHIL INGAMELLS OUTLINES A COOPERATIVE EFFORT TO HELP NATURE ADAPT TO A NEW CLIMATE.

Climate change will hit Victoria's natural areas quite hard, but there are many things we can do to help.

This is the message from a symposium held last year, when some 200 scientists, land managers and other community members put their heads together to help nature ride out the tricky years ahead of us.

The symposium was jointly held by the VNPA, the Royal Society of Victoria and the University of Melbourne's Bio21 Institute, and was sponsored by the Department of Environment, Land, Water and Planning, and Parks Victoria.

Under current carbon emissions, the predictions for nature in the year 2050 are dire. Some plants and animals will do well, but many will struggle and decline and many parts of Victoria will look quite different. Average temperatures will be between 1.2°C and 2.5°C warmer, with fewer frosts and more heat waves.

Sweltering days over 40°C, when fires burn and birds fall from trees, will be two to four times more common. There will be more intense summer storms, but less rain in winter and spring, and less winter snow. Sea levels will have risen, perhaps by 25 cm, and low-lying coastal areas will flood more often.

There were many suggestions and ideas about what we can do to help our great natural heritage survive this situation. The main recommendations were compiled



Top: Even once-common birds like kookaburras are suffering a decrease in numbers across Victoria.

Bottom: Snow Myrtle, Grampians National Park.

by ecologist Dr Ian Lunt, and appear on the website www.vicnature2050.org. They are summarised in the box on this page.

We must also, of course, reduce our carbon emissions.

What's next?

Critical to sensible action by individuals, communities and government in the years ahead will be **improving our understanding, and acting in sympathy with natural changes.**

We are planning a series of further discussions, continuing to bring scientists, land managers and community volunteers together so we can do our best for nature.

The next event will be a day of talks and discussions at La Trobe University in June, tackling the tricky problem of what to plant where, when we are rehabilitating and linking landscapes (see nos. 6 and 9 in the box). Sign up at www.vicnature2050.org for information about new events. • PW

TO HELP NATURE ADAPT TO A NEW CLIMATE:

- 1 We are working together, so we support each other and keep learning.
- 2 We accept that natural areas will change, and that new ecosystems that may emerge are also valuable.
- 3 We are protecting our parks and reserves, as they are the most important refuges for native species as the climate changes – places where species can move around and/or evolve to accommodate changes.
- 4 We are working to remove existing threats, such as weeds and feral animals, and further clearing of native bushland.
- 5 We are understanding and using natural processes like fire and flood to promote diversity.
- 6 We are connecting landscapes using 'climate-ready' plants, especially along riversides and watercourses.
- 7 We are welcoming nature into our towns and cities.
- 8 We are watching our local areas, and recording changes.
- 9 We are promoting diversity in all we do, and encouraging genetic diversity in nature.
- 10 We are keeping positive, informed and engaged, knowing that every small action can inspire another.

PHOTO: JENNY BARNETT

PHOTO: PHIL INGAMELLS

IT'S TIME TO REVIVE OUR PARKS

*Tidal River at
Wilson's Promontory
National Park. Victorians
overwhelmingly support increased
funding for our parks and reserves.*

PHOTO: PHIL INGAMELLS

IN THIS AND THE FOLLOWING SIX PAGES, PARK PROTECTION CAMPAIGNER PHIL INGAMELLS LOOKS AT A NUMBER OF ASPECTS OF PARK MANAGEMENT IN VICTORIA IN WHICH FUNDING SHORTFALLS ARE HAVING AN ADVERSE IMPACT.

It's been abundantly clear for decades now that national parks and our other nature conservation reserves don't get anything like the funding they need and deserve.

Fortunately, however, we have a state government that has come into power promising that it is "committed to the creation of a world class system of national and marine parks for all Victorians to enjoy, and will invest in those parks."

Further, it has promised to "build a stronger park management agency and ensure direct reporting to the Minister for the Environment".

I'm not sure any previous Victorian government has come to power with that sort of commitment to support the management of our natural heritage.

So a chance to fix things is here at last. But what does the problem look like?

For a start, funding has actually *decreased* over the last four or five years. In the year 2011-12, the government

allocated \$122 million to manage Victoria's park system, but by 2014-15 that had fallen to below \$77 million.*

Importantly, that huge decrease in funding was taken from an already low base – Parks Victoria was seriously inadequately funded back in 2012.

Today, many crucial management programs don't exist at all, and others have had their funding cut, sometimes to zero.

And while Parks Victoria has some remarkably skilled and dedicated staff, it doesn't have the breadth of expertise it needs across the state for the significant challenges it faces.

A couple of hundred years of land clearing and exploitation, accompanied by an ever-increasing cavalcade of invasive plants and animals, have put the condition of many (most?) of Victoria's surviving natural areas in a slow downward spiral. And now we have the added stress of climate change and its many insidious impacts.

The VNPA has asked the Victorian Government, as a start, to return funding for park management to its 2011-12 level in the next budget, and then to continue to build the agency's resource and skill base in the years ahead.

It's more than a fair ask, given that an independent survey commissioned by the VNPA showed that 96% of Victorians recognise the importance of national parks for conserving nature and protecting wildlife, and 81% support increased funding for parks.

And further research by Victoria's environment department has put the annual economic benefit of the park estate to Victorians at around \$1.5 billion!

In the following pages we look at some of the problems our parks face, and some possible solutions at hand. • PW

*Adding in other income, primarily the Parks and Reserves Trust funding from Melbourne's water bills, gives a total expenditure for Parks Victoria of around \$250 million in 2011-12, down to \$210 million by 2014-15.

RESCUE *our parks*

THE PESTS IN OUR MIDST

PEST PLANTS AND ANIMALS ARE AMONG THE BIGGEST PROBLEMS AFFECTING OUR NATURAL AREAS.

Feral horses don't always have a good time in the Alpine National Park: snow, drought and fire cause great suffering. Effective control of horses is supported by the RSPCA, but action has stalled, and is largely unfunded.

The impact of invasive species has been growing in Australia since the First Fleet arrived, and it's increasing rapidly with the worldwide expansion of trade and migration.

The threat these invaders pose to our native habitats and species has, for some time now, been voiced loudly in international treaties, national and state laws, and endless plans and strategies.

Some of our most insidious invasives have been with us for generations: English and Cape Broom, rabbits, goats, pigs, deer and horses, gorse ... the list goes on.

They are being joined daily by enthusiastic newcomers like Crazy Ants, Myrtle Rust and a host of garden escapes and new nursery imports.

So far, we are losing the struggle.

It's not as if there aren't things we can do. A Victorian Auditor-General's report on managing weeds in our national parks made very clear recommendations to Parks Victoria: long-term planning and funding, increased skills and knowledge, landscape-scale objectives, and the need to understand and manage the ecosystem, not just the weed.

Long-term commitment to programs is absolutely essential in pest management, to avoid a resurgence of the invader and a wasted effort over previous years.

But currently, Parks Victoria's budget is so poor in most regions that it has become standard for staff to spend large amounts of time applying for grants from other organisations.

Take this case. A volunteer group, the Friends of Sassafras Creek, helps Parks

Victoria manage a beautiful reserve winding through the Dandenongs. It harbours some listed rare species: the elegant Slender Tree-fern and freshwater invertebrates.

But the reserve is choked in places with a host of garden escapes like ivy, tradescantia, and even European trees sprouting high in the trunks and crowns of tree-ferns.

Much of the work was beyond the scope of the volunteers. A budget-less Parks Victoria put in a modest application for a DELWP threatened species management grant. They failed.

Failure in pest management isn't inevitable. Some high-profile problems have been funded regularly, and their management is showing real results.

PHOTO: FEDERATION TRAINING STUDENTS

Feral horses: park management's biggest failure

Currently, about half of the total area of Victoria's prized Alpine National Park, and the most vulnerable part at that, has been seriously, perhaps irrevocably, damaged by feral horses.

The most significant damage has been to wetlands and moss-beds, which occur not just on the fabled high plains, but extensively throughout the more remote eastern area of the park, around the Davies Plains and Cobberas areas and the NSW border.

There has also been great damage to the White Box woodlands further east around Suggan Buggan.

There was hope a few years ago when Parks Victoria brought the various 'interest groups' together, as well as alpine ecologists, to resolve horse issues and come up with a strategy.

But it all fell in a heap when the environment minister for the previous state government quaked at the knees, promising no one was going to shoot a horse. This despite clear approval from the RSPCA for carefully planned aerial shooting, and the knowledge that horses in the high country suffer greatly in snow, drought and fire.

Perhaps Parks Victoria's problem is that it seems to surrender to 'community expectations', rather than taking unambiguous responsibility for its role in protecting nature, and engaging in a strong program of community education.

Under its governing legislation, Parks Victoria is required to 'exterminate or control exotic fauna' in the park.

There are no horses in the ACT's Namadgi National Park, where there has been a carefully managed shooting program for a decade or more.

In the Alpine National Park, a family of dandelion-like Hawkweeds have the capacity to smother the grasslands and grassy woodlands, choking everything.

But a concerted program, using volunteers, contractors and ongoing research and monitoring has so far kept the invaders at bay.

It's critical that the program has secure, ongoing funding.

Another high country program has been dealing with the invasion of Grey Sallow Willow seedlings that appeared in the tens of thousands in the exposed peat beds after the 2003 fire. This emergence of a weed tree invading the treeless high

plains sparked sufficient alarm to, again, secure ongoing funding.

We are yet, however, to see the systematic removal of the seed trees downstream, often outside the national park, and the funding is dwindling.

Many other programs remain sporadically funded or not resourced at all.

In many places the threat would be easily manageable with a modest program of recurrent funding, such as dealing with Coast Wattle, a bully of a native, and out-of-place in the heathlands of Port Campbell National Park.

Our most alarming invasive problems, however, are the big two: horses and deer.

The management of feral horses in the Alpine National Park is a sad tale of high ambition and low courage (see box).

The story of deer is harder. We have many species to deal with. Red Deer are currently causing havoc in one of our most loved national parks, Grampians/ Gariwerd. Hog Deer have been out of control at the Prom for a long time.

But Sambar Deer, rampant throughout the whole of eastern Victoria, are an issue on another scale. Still protected under archaic legislation, they have been trashing rainforest areas and wetlands for decades now, and browsing on some of our more unusual and rare trees and shrubs.

We need long-term strategic programs to deal with deer, and many other problematic species. Part of that must involve a significant (but potentially very cost-efficient!) boost for research into biological controls.

And we can save a vast amount of management funds in the future if the states work with the Commonwealth Government to introduce a 'permitted' list of plant and animal imports to Australia, not the current 'prohibited' list, which allows the importation of countless new species without requiring any proof that they aren't a problem. • PW

Weed invasion including monbretia, ivy and blackberry at Sassafras Creek Reserve in the Dandenongs.



PHOTO: PHIL INGAMELLS

RESCUE *our parks*

Burning question

ANOTHER OF THE MAJOR ISSUES FACING OUR PARKS TODAY IS THE MANAGEMENT OF FIRE.

Fire has been part of Victoria's natural history pretty much since the beginning of evolutionary time.

That might be why Victoria's National Parks Act doesn't ask for parks to be protected from fire, but 'protected from *injury* by fire'. I imagine '*injury*' was a word added after some very careful thought, and it's a word deserving of equally careful consideration now.

Since Black Saturday, and the Victorian Bushfires Royal Commission, fuel reduction burning has been taking place in most of Victoria's parks at an unprecedented rate. And despite the clear objectives of Victoria's Code of Fire Practice, to protect life and property and to protect the environment, the environment has been given very short shrift in burn planning.

Fortunately, the Commission's annual 5% burn target has now been dropped, and there is mounting evidence that fuel reduction burns aren't the hoped-for answer to saving lives in times of extreme fire weather. This is particularly the case for burns some distance from towns.

Though the burn juggernaut currently rolls on, it's time for a thorough reassessment of fire management in our parks.

First, and most fundamentally, there are no clear ecological objectives set for fire management.

Fire planners and ecologists should set a clear aspirational range of age classes for each habitat type across the state, allowing for 'spare' patches in the older age classes to cover for loss in future unplanned fires.



PHOTO: MARY CHANDLER

Many fuel reduction burns have been unnecessarily hot and damaging, without being very useful for public safety. This burn was in Murray-Sunset National Park.

A combination of increased wildfire over the last decade or so, and attempts to reach the 390,000 ha target, have resulted in a situation where we now have very few areas of long-unburnt bushland in the state.

In ecological terms, that is potentially disastrous. Our many different native plants and animals need many different habitat 'age classes', some needing access to several different age classes at a given time. Things like seed and nectar production, fungi growth, hollow formation and shelter requirements vary with any particular habitat's fire history.

Equally worrying is the way many burns have been performed. In remote areas, a planned burn is often contained within perimeter roads, and manually lit from this perimeter to burn towards the centre.

Weather and moisture levels have to be dry enough to allow the fire to carry to the centre of the burn area. That almost inevitably leads to extensive scorching or removal of the tree canopy, and an encircling blaze from which wildlife can't escape.

In a further complication, safety concerns for burn crews have meant that all potentially dangerous trees

are removed from the perimeter of the burn. Many thousands of old hollow-bearing trees have been removed in this process across Victoria, and continue to disappear at an alarming rate.

There are better ways to do things.

One option, if a burn is deemed essential in a remote area, is to drop aerial incendiaries from helicopters. That may sound alarming, but if performed at times of relatively high moisture levels, the incendiaries can start a trickle fire which soon dies out. A very patchy burn of low-intensity fire can be achieved, leaving a mosaic of age classes and refuges for wildlife and avoiding damage to the tree canopy. And areas of high fire sensitivity within a burn area (such as rainforest patches) can be avoided.

Moreover, this process avoids the need to fell the vast numbers of deemed 'hazardous' trees, the very trees many of our wildlife species sorely need.

Good planning will still include management burns in parks, but should, unequivocally, mean matching burns to ecological needs as well as safety objectives. There is an urgent need to resource this planning process.

See also article on p. 20. • PW

The climate changes everything

The need for increased funding for our parks is pressing enough, but the impacts of climate change take the need for more resources to a new level.

For a start, if we can act seriously to reduce current impacts of feral animals and weeds, we'll give natural systems a bit more resilience to tough out changes in climate.

Then there's the major issue of increased severe fire weather. That means more frequent fire in the landscape, and the subsequent threat to public safety means a likelihood of more fuel-reduction burning. We already have a serious lack of long-unburnt areas in the state.

And changes along our coast, including sea level rises and increased storm surges, will affect coastal infrastructure as well as critical low-lying habitat like coastal salt marshes.

We also need to invest in research, if we are to be clever enough to build connectivity with an increased genetic diversity for local species, and the



PHOTO: EUAN MOORE

Wetlands in Barmah NP. Managing wetlands will need a lot of expertise, and resources, as our climate changes.

possible introduction of 'new' climate-ready species. Importantly, these sorts of interventions must be geared to helping natural systems evolve and adapt to changes, and this requires a good understanding of ecosystems.

Part of that understanding will come from monitoring, and while that can involve local communities in a volunteer capacity, it also requires professional input and well-resourced co-ordination. • PW

More at www.vicnature2050.org

RESCUE our parks

Sign our petition!

Urge the Victorian Government to give our parks the funding they deserve by signing the petition enclosed with this *Park Watch*. Share it with your friends!

Expertise in park planning

When Victoria's Alpine National Park was first proclaimed in 1989, a planning team of five experienced park managers was appointed to develop a plan to guide the management of the park.

By 1992 a remarkably detailed and well-informed series of four plans was tabled in Parliament.

But when a new plan was proposed in 2008, there were apparently no park managers available to tackle the job. The plan (now including all the parks in the alpine region) faltered through a lack of expertise for years, and was pushed around by various interest groups before a flawed draft was released last year. It will hopefully be finalised soon, some seven years after planning started.



PHOTO: PHIL INGAMILLS

Inspecting wetland damaged by feral horses in the Cobberas area of the Alpine National Park. But where's the funded plan to fix this?

A lack of resources has led to a lack of confident and consistent planning processes in Parks Victoria (and within DELWP), and the clumping together of parks into slim multi-park plans. A proposed second level of park planning, the development of detailed three-year implementation plans, so far remains an unfulfilled promise.

While there are skilled and experienced people within Parks Victoria, there aren't nearly enough of them, and they don't have the breadth of skills our parks need. There is not, for example, a single entomologist or mycologist in Parks Victoria, despite the fact that invertebrates and fungi make up the great majority of the 100,000-odd native species in our parks, and play critical roles in ecological systems. • PW

RESCUE *our parks*

People in parks

PEOPLE VISITING OUR PARKS ARE INCREASINGLY NOTICING THAT THEIR CONDITION, FACILITIES AND SERVICES ARE DECLINING.

It's good to have people visiting parks, for many reasons.

Endless research shows that both spending time in nature, and plenty of exercise, have the capacity to transform a person's physical and mental wellbeing.

That's scarcely a surprising conclusion for anyone accustomed to spending time in the wild. But governments have been slow to understand that encouraging the use of parks by the broad community can lead to a cohesively functioning society, with impressive long-term economic benefits.

Parks Victoria has trumpeted its 'Healthy Parks, Healthy People' mantra for many years now, yet there is still no cohesive program for getting people into parks, especially aimed at disadvantaged youth – the very people who can most benefit from park experiences.

And there is almost no visitor information available in languages other than English, a situation that propagates the false notion that the appreciation of nature is largely an 'Anglo' indulgence.

Instead, we have pushes aimed at high-end tourism, and the marketing of 'icon experiences' (see next page).

Parks certainly benefit tourism (to the tune of \$1.5 billion annually in Victoria alone), and there's room for that to grow. But it's an investment in access for the broad community that will bring lasting benefits.

Currently, visitor infrastructure is at a low ebb in Victoria's parks.

Signage in many places is old, damaged or missing completely. Walking tracks, other than those on the major tourist



PHOTO: PHIL INGAMIELLS

Above: Many rock faces and information signs in Werribee Gorge State Park are covered in graffiti. A well-resourced park service would remove any graffiti immediately.



PHOTO: PHIL INGAMIELLS

Left: Illegal trailbike track in Chiltern-Mount Pilot NP. Informal tracks and trails are increasing in Victoria's parks. We need a good planning process for tracks for trail bikes, fat bikes and other vehicles, including options outside the parks system.

Hattah-Kulkyne, Organ Pipes, Point Nepean and Lower Glenelg national parks, and the Orbost Rainforest Centre. Most of those have been long closed, or now offer displays so lacking in information that they occupy a visitor's attention for a few minutes at most.

The most important visitor service, the presence of

park rangers, is also in critical decline. It can be hard to find a ranger during a park visit these days, particularly during prime visitor times over the weekend. This is a missed opportunity to help visitors enjoy their excursion. And the resulting absence of enforcement of park regulations brings an increase in dogs in parks, vandalism, and even more problematic behaviour such as summer campfires. • PW

routes, are often in poor repair, and illegal roads and tracks are being made by trail-bike riders, or prospectors keen to get to a new bit of river. Visitor education is also at a low ebb. Around 25 years ago, there were comprehensive information centres operating at the Grampians, Wilsons Promontory, Mt Buffalo, Wyperfeld,



PHOTO: DAVID TATNALL

The Falls to Hotham 'icon' walk Desecrating Mount Feathertop

*Mount Feathertop and
The Razorback from near
The Cross, Mount Hotham Resort.
A proposed group of cabins just
below the summit would be highly
intrusive and visible from Hotham,
and many parts of the Alpine NP.*

The walk from Falls Creek to Hotham has long been one of the favourites among the bushwalking community, but is it worth spending \$10-20 million on, to make it an 'icon' of Victorian tourism?

We think not, for the following reasons.

- Mount Feathertop is Victoria's only free-standing mountain of any substance, and should be left undeveloped. The introduction of privately operated cabins or lodges on the eastern slope of Mount Feathertop (or anywhere else associated with the walk) would be a retrograde step in management of the Alpine National Park, and should be abandoned. The cabins would be highly visible from many parts of the Alpine National Park, and from the Hotham resort.
- Any cabins on the side of Feathertop would, under current fire regulations, require large-scale clearing of native vegetation around them. And a privately operated lease arrangement would mean cabin infrastructure would inevitably grow.
- The walk is poorly conceived and planned, and does not take into account a number of alternatives that would far better serve the national park, the associated alpine resorts and regional tourism. The resorts, and the surrounding high plains region, are best suited to the promotion of a great range of day walks.
- The walk is not targeted at the sections of the Victorian population most in need of memorable and challenging outdoor experiences.
- The walk as promoted is dangerous, as it entices inexperienced walkers into a very challenging climb, potentially trapping them there in life-threatening weather.
- The proposed walk does not adequately serve the prime purpose of the Alpine National Park – nature conservation. • PW

Counting on variety

THE 2015 GREAT
VICTORIAN FISH COUNT
PRODUCED SOME
INTERESTING RESULTS,
SAYS COORDINATOR
TILLY REYNOLDS.

The recent summer season started with a splash as divers and snorkellers took to the water for the 2015 Great Victorian Fish Count.

It was the eleventh year of the Count, which ran from 21 November to 6 December last year. Some 350 participants from 23 separate groups were involved, and they surveyed a highly impressive 44 different sites.

Results summary

The 2015 Great Victorian Fish Count report was released in February, summarising the results and giving a snapshot of the unique marine life to be found in Victorian waters. It's available on the VNPA website.

It was encouraging to note that a number of species of conservation interest were observed over the survey period.

- Two juvenile Eastern Blue Groper (a protected species) were recorded at Mushroom Reef Marine Sanctuary. One participant reported that 20 juveniles were observed a few days later at the same site, indicating successful breeding in the area and a promising future for this once over-fished species.
- Western Blue Groper (also protected) continued to show up since their rediscovery in Victoria during the 2011 Fish Count. This year they were recorded at Portsea Pier, Wilsons Promontory, and Popes Eye in Port Phillip Heads MNP.

- The unique Southern Blue Devil was recorded at two survey sites in Port Phillip Bay (Castle Rock and Popes Eye), as well as at Cape Woolamai and Wilsons Promontory.
- The Common (or Weedy) Seadragon, Victoria's marine emblem, was observed in encouraging numbers at several different sites including Flinders and Portsea Piers, Warrnambool Breakwater, Merri Marine Sanctuary, Cape Woolamai and Castle Rock.

Fish on the Move

The 2015 Count had the theme 'Fish on the Move.' Participants were encouraged to keep a sharp lookout for species that might be new or unusual to the area, as well as for familiar locals.

A survey with local dive operator Ocean Divers at Blairgowrie Pier made an exciting discovery. A participant photographed a strange-looking species he hadn't seen before. Marine scientists at Museum Victoria have identified it as a Spinycoat Anglerfish, which was in unusually shallow waters.

The sighting has since been logged with Redmap (Range Extension and Database Mapping Project), a new partner for the 2015 Great Victorian Fish Count. Redmap is a national 'citizen science' program that captures data and maps marine species that may be extending their range in Australia in response to changes in the marine environment.

Thank you

We would like to thank our project partners Parks Victoria, Coastcare Victoria, Museum Victoria and Redmap Victoria, who gave invaluable support in helping to facilitate and promote the event.

We'd also like to say a huge thank-you to all the participating dive operators, dive clubs, Friends and marine care groups, university and school groups, and all the volunteers who joined them in the water.

Several groups participated for the first time in 2015. We'd like to acknowledge RMIT Underwater Club, Sea All Dolphin Swims, Warrnambool Sub Aqua Club and the Victorian Sub Aqua Club.

We're very pleased with the success of the Great Victorian Fish Count, which continues to be enthusiastically embraced by the marine monitoring community. It's a wonderful opportunity for everyone

The most common species observed were:

- Blue-throat Wrasse
- Dusky Morwong
- Horse-shoe Leatherjacket
- Magpie Perch
- Old Wife
- Silver Sweep
- Sea Sweep
- Senator Wrasse
- Six-spined Leatherjacket
- Victorian Scalyfin
- Zebrafish



PHOTO: NATALIE MANAHAN, RMIT UNDERWATER CLUB



PHOTO: CHARMAIN ALFORD

to learn together and allows scientists, marine managers, divers, snorkellers and community members to share their knowledge of local marine environments.

With all of these pooled skills, knowledge and experience, we can gain a better understanding of what is in Victoria's coastal waters and how we can work together to ensure its adequate protection. • **PW**



Fish Count participants surveying by snorkel at Eagle Rock Marine Sanctuary, Aireys Inlet. Inset: Spinycoat Anglerfish at Blairgowrie Pier. It is rarely found in such shallow water.

PHOTO: PARKS VICTORIA

Fossils or bay filling at Beaumaris?

The high sandstone cliff and adjoining seabed at Beaumaris on Port Phillip Bay have become a new battleground against inappropriate and excessive coastal development.

The fossils found along this shoreline are famous and have allowed scientists to create a picture of the area's marine life from six million years ago.

Giant penguins, dugongs, whales, sharks, corals, sea urchins, crabs and seals were then all part of the local marine environment. In 2014, the discovery of sea turtle fossils filled a huge gap in the history of Australian reptiles.

The Beaumaris Cliff and its offshore reefs make up Australia's richest marine animal fossil site, and also contain the remains of terrestrial animals washed down the ancient Yarra River. This rare mix is famous around the world.

You'd think that such an important site would have been protected years ago.

Not so. The richest part of the site has already been covered by a hectare of filling.

Now Beaumaris Motor Yacht Squadron Ltd has much more grandiose plans.

It has applied to build a 120-berth all-weather marina, an 88-metre long storage



Beaumaris Bay will be further damaged by the yacht squadron's grandiose plans.

PHOTO COURTESY GEOFFREY GOODE

shed for power boats next to and as high as the Cliff, a replacement club house, more parking and more boat ramps, burying much more of this unique fossil site under tonnes of filling.

The local community, and scientists from around the world, continue to voice their concerns about this plan, but it just won't go away.

Such a ludicrous proposal should never have been allowed to advance this far. It shows the environmental risks created when self-interested groups are given control over what is publicly-owned foreshore and seabed.

The Victorian Government should reject the company's massive expansion plans, and at the same time announce that any

renewal of the 21-year lease expiring in 2018 must entail a binding timetable to phase out its occupancy. It should also support the community's recent nomination for Beaumaris Bay to be added to Australia's National Heritage List.

The Beaumaris Fossil Site has enormous potential for a fossil museum, on-site or nearby, that would appeal to visitors from around the world.

Scientists have already shared such a vision. All it needs now is a government with the political will and commitment to realise it. • **PW**

For more information, see www.bcs.asn.au

Chris Smyth, Geoffrey Goode

Mountain Ash: exploring the book

IN DECEMBER *PARK WATCH* WE PUBLISHED A SHORT REVIEW OF THIS BOOK. THE FOLLOWING ARTICLE BY VNPA VOLUNTEER EVELYN FELLER IS A MORE DETAILED DISCUSSION OF THE BOOK.

After 25 years of intensive research in the montane ash forests of Central Victoria, the researchers who wrote this book saw the forests devastated by the 2009 Black Saturday fires.

They continued their research in the area as soon as they could, and a year later published the book *Forest Phoenix*, in which they detailed how the plants and animals were responding a year after the fires, and their predictions about future responses.

In *Mountain Ash*, the researchers discuss what had happened to the montane ash ecosystem six years after the fires. The often unexpected research results led to a broadening of the research to considering carbon storage and the combined effects of the fires and logging.

The book presents compelling scientific arguments as to why these forests should be restored and protected.

Within each of the chapters describing the research, key questions are clearly stated, and management implications, knowledge gaps and future research directions are discussed.

The second chapter explains how the researchers realised that fire behaviour and severity are much more complex factors than they estimated. They also document how logging can increase the fire risk in these forests.



PHOTO: DAVID BLAIR

Salvage harvesting is clearfelling following wildfire. This means these areas are subject to two major disturbances in rapid succession, extensively changing their flora.

The next two chapters describe the flora of the forests, outline the arguments around how to define 'old growth', and examine the impacts of fires and droughts on large old hollow-bearing trees. The relationship between such trees and threatened possum populations has been a key emphasis for the researchers.

A chapter on carbon stocks and fire and logging impacts follows, and then four chapters summarising the responses to fire of different animal populations (possums and gliders, small terrestrial animals, birds and invertebrates).

Chapter 10 discusses how montane ash forests can be protected and restored, and in the final chapter the authors discuss the benefits of continued research and monitoring to give the best scientific information for sound management.

Most importantly, they present a vision of how protecting these forests in a Great Forests National Park would bring much greater economic and social benefits than timber production.

Text boxes challenge some of the prevalent myths about managing these forests.

The book's photography is outstanding, capturing the wonder of the Mountain

Ash forests and their plants and animals, and the captions broaden the reader's understanding of the concepts under discussion. The photos illustrate how threatened these forests are and why wanton destruction by logging practices must stop.

Key findings

Some of the research results, especially the four listed here, were highly unexpected.

- There was much greater big-tree mortality than anticipated, even on unburned sites, because of the impact of the droughts in the 2000s.
- Logging practices actually made the Mountain Ash forests much more prone to high-severity fires, especially young dense post-logging forests aged 7-40 years.
- Animals such as Leadbeater's Possum were much more sensitive to fires than expected. Possum populations declined even when their homes were not burned but the surrounding forest areas were.
- In spite of the fire's severity, carbon losses were not great. On the other hand, research showed that carbon losses from logging 4100 hectares are about a third of the total emissions from a major coal power plant.



PHOTOS: DAVID BLAIR

(Left) Dead Mountain Ash in December 2009, following the Black Saturday fires. This area of old-growth forest burned at high severity but the young forest that regenerated (right, in March 2014) is growing rapidly – six metres in four years.

Some other key findings were as follows.

- It's vital to allow the next cohort of Mountain Ash to mature and reach the hollow-bearing stage, to guarantee habitat for species that depend on these hollows.
- Leadbeater's Possum is highly sensitive to fire, but other species such as Brush-tail Possums are much more resilient and moved back quickly into burnt areas.
- There was an initial severe decline in small animal species such as bush rats and antechinuses, but these populations recovered and dispersed in different ways.
- Bird species declined in number and species diversity after the fires, except for Flame Robins, whose numbers rose spectacularly. Crimson Rosella and Striated Pardalote numbers remained largely unchanged after the fires.
- Beetle numbers remained about the same in the study sites, but different species became dominant.

Myth-busting

Some of the myths debunked in the book are:

- *'Fuel reduction burning should be done in montane ash forests.'* This shows a complete ignorance of these ecosystems and their generally

wet nature. Frequent burning of the forests will result in their replacement by wattle scrub.

- *'Aborigines managed these forests using fire.'* There is little evidence of Aboriginal use of these forests (pace Gammage), and besides, if burnt the forests would not convert to open grassy woodlands, which presumably would have been a major aim of Aboriginal burning.
- *'Nest boxes will work as a substitute for hollow-bearing trees.'* Research shows that the effectiveness of nest boxes to help conserve Leadbeater's Possum is very limited.
- *'Logging impacts are benign because only a small portion of the forest is logged every year.'* The annual logging area might be small, but the cumulative effect of forest loss over a number of years is very significant.

Lindenmayer *et al* reiterate management prescriptions for protecting and restoring the montane ash forests. These involve conserving and restoring existing plant and animal populations and key structural elements like hollow-bearing trees and riparian areas.

Ecosystem processes like natural fire regimes and old-growth recruitment should also be restored.

This information has been given to the Victorian government but is clearly not being followed, given the number of loaded logging trucks heading out of the Central Highlands.

If the authors' prescriptions to restore montane ash forests are followed there will be less logging in these forests, and the industry will need to transition to plantation wood supplies.

By protecting the forests in a Great Forest National Park, other economic benefits from tourism, water supply protection and carbon storage may greatly exceed those from forestry.

Given that only 1.16 % of our original montane ash forest estate is left, the road to recovery needs to start today!

Mountain Ash is a compelling book and very readable for a wide audience. I commend it to all *Park Watch* readers. • PW

Mountain Ash: Fire, logging and the future of Victoria's giant forests by David Lindenmayer, David Blair, Lachlan McBurney, Sam Banks.

CSIRO Publishing, November 2015. RRP \$59.95.

New plan for Leadbeater's

STEVE MEACHER, PRESIDENT,
FRIENDS OF LEADBEATER'S POSSUM,
REPORTS ON DEVELOPMENTS IN
PROTECTING THIS SPECIES.

The Commonwealth Environment Department has drafted a new Recovery Plan for Leadbeater's Possum to replace the 1997 plan currently in effect.

The new plan was called for as part of the Australian Government's Threatened Species Strategy, and follows the moving of the species last April from 'Endangered' to 'Critically Endangered'. This was widely seen as confirmation of the failure of previous conservation policies, hamstrung by the unwillingness of governments to curtail logging in the montane ash forests.

The Commonwealth plan may not be directly enforceable, as the EPBC Act allows logging in areas subject to a Regional Forest Agreement (RFA), including the Victorian Central Highlands.

However, the RFAs themselves are almost twenty years old and due for review. The Central Highlands RFA expires in two years; its consistency with the new Recovery Plan will need to be considered.

The Victorian Government has been engaged in the development of the draft, and it's expected that the plan will be reflected in a projected reworking of its Action Statement for Leadbeater's Possum. The revised Statement will replace the compromised version adopted in the dying days of the Coalition Government, based on the recommendations of its Leadbeater's Possum Advisory Group (LPAG).

This group was heavily influenced by industry, and its findings were limited

by logging-friendly, government-imposed terms of reference.

The current Action Statement's lack of ambition is shown by its limiting of buffer zones around identified possum colonies to a minimal, and scientifically indefensible, 200 metres. Even LPAG itself assessed the impact of this measure as 'low to medium'. These buffers could have been a positive innovation if the 1000 metres supported by scientists had been adopted.

The draft Recovery Plan notes that 'current levels of protection do not provide the maximum possible conservation security' and calls for an 'increase in the buffer size and other protective mechanisms around known colonies'.

The draft plan contains a useful, comprehensive and up-to-date snapshot of the current state of knowledge on Leadbeater's ecology and conservation. At just over 100 pages it is a substantial read, but you have time – it's available for public comment until 20 May.

Park Watch readers are encouraged to prepare submissions supporting a robust and effective recovery plan. A number of conservation groups are working to assist members compiling submissions, and writing workshops are being planned.

All submissions will be presented to the federal minister, together with the final recommendation of the Threatened Species Scientific Committee, so it is important to ensure he receives strong support for adoption of an effective plan.

A useful summary of the draft by Jesse Graham, with comments from Prof. Lindenmayer, the Threatened Species Commissioner and Victorian Environment Minister Lisa Neville, was published by *Mountain Views Mail*. The full plan can be downloaded from the Environment Department's website. • PW



PHOTO: STEVE KUITER (WILDLIFE PHOTOGRAPHICS)



PHOTO: GECO

Citizen science survey protects gliders

The Greater Glider is Australia's largest gliding marsupial.

VicForests has been forced to abandon planned logging operations in forest on the Errinundra plateau in east Gippsland after a citizen science survey recorded a large population of protected Greater Gliders there.

The Goongerah Environment Centre (GEC) conducted a late-night survey in forest where logging had just started, recording 15 Greater Gliders in just 800 metres.

The survey took place in late January and was verified by the Environment Department in February. The Department will now create a protection zone for the species.

The logging rules require a 100 hectare protected area to be zoned where more than ten Greater Gliders are detected in a 1km survey transect.

See also article on p. 18. • PW

Biodiversity Strategy under way

VNPA EXECUTIVE DIRECTOR
MATT RUCHEL REPORTS

The Victorian Government is delivering on its election commitment to develop a new Biodiversity Strategy to help us build a greater understanding of the complex interactions within and between our marine, terrestrial and freshwater environments and the millions of plants and animals that call Victoria home.

The Biodiversity Strategy is being developed alongside a review of the Flora and Fauna Guarantee Act 1988, and the Native Vegetation Regulations in Victoria. It builds on previous work, including the Land and Biodiversity White Paper, and will recognise the importance of a healthy environment in bringing benefits to all Victorians and underpinning our way of life and economic prosperity.

The strategy aims to establish a long-term 20-year vision for biodiversity in Victoria, outlining key directions, approaches and priorities to deliver real environmental outcomes on the ground that will benefit Victorians now and in the future.

A draft strategy outlining proposed directions based on stakeholder consultation will be available by mid-2016.

A stakeholder reference group with 18 representatives, including the VNPA, has been established to gather the views of groups involved in biodiversity management and conservation.

The VNPA welcomes the development of a state-wide biodiversity strategy. It's long overdue, the last strategy having been formally adopted in 1997.

A new Victorian biodiversity strategy should:

1. **Have a truly state-wide focus** which considers all of our natural heritage, including terrestrial, marine, coastal and freshwater.
2. **Recognise the key role of national parks** and other conservation reserves in preserving and protecting biodiversity.

3. **Specifically address existing threats**, especially pest plant and animal invasions.
4. **Address climate change impacts on nature**, including increased fire, flood and drought, higher temperatures and subsequent impacts on ecosystems.
5. **Enhance the role of and support for private protected areas** such as Trust for Nature covenants and privately owned reserves like Ned's Corner.
6. **Re-establish the state government's key leadership** role in nature protection.
7. **Propose some big ideas** with realistic targets and timelines for delivery, such as landscape-scale biolinks.
8. **Engage the community** and facilitate new or innovative approaches to conservation of our natural heritage.
9. **Highlight the need for excellence in park and conservation management**, and leverage the necessary skills and resources to achieve that.
10. **Strengthen institutions and laws** to better protect our unique natural heritage.

The VNPA will be actively responding to the draft strategy when it's released, and we'll update you at that time.

If you'd like to register to receive updates, including information about the process and opportunities to provide input, email your details to biodiversity.strategy@delwp.vic.gov.au • PW



PHOTO: DAVID TATNALL

Check our website for school resources!

It's now much easier for students and teachers of VCE Outdoor and Environmental Studies, Geography and Environmental Science to study the VNPA and its work.

All the material relevant to these subjects that the VNPA has produced over the past five years has been brought together in a special section of our website.

These resources are also useful for all secondary school teachers and students (years 7-12) studying a range of topics and units.

In these units, students explore issues including understanding, enjoying and exploring the outdoors, changes in land use and conflicts in land management.

Students and teachers can also find resources on topics like Victorian biodiversity and parks, the benefits of nature for physical and mental health and wellbeing, the impacts of urbanisation on human health and a history of the VNPA.

These resources highlight the broad and interesting range of materials that the VNPA has produced in recent years.

They can be found at <http://vnpa.org.au/page/publications/school-resources>

We hope that teachers and students find this material useful and engaging. If you know any teachers or students in these areas, please tell them about our resources! • PW

Camping is free at many park campgrounds with basic facilities, like this one near Tawonga Huts in the Alpine NP which has pit toilets only.

Legal action forces VicForests to survey for wildlife

Action taken by Environment East Gippsland and its lawyers, Environmental Justice Australia, resulted in early February in VicForests agreeing to halt logging and survey for rare wildlife and plants in an East Gippsland forest rich in threatened species.

This is the Kuark forest, about 30km NE of Orbost. The species recorded were the Long-footed Potoroo, Yellow-bellied Glider, a new species of galaxias fish only found in Kuark, an as yet undescribed species of crayfish, and two rare plants that should have 250 metre Special Management Zones applied.

"Sadly, since mid-January, and while negotiations were going on, VicForests continued to clearfell this amazing forest," said Jill Redwood from EEG.

"So much was destroyed in this time, in an area that clearly should have been surveyed by trained biologists before the chainsaws moved in."

"You have to wonder what gems we've lost over the years because the state government's logging company calls the shots on whether or not an area should have a survey before it is clearfelled and burnt," Jill said.

"Sadly, the Environment Department consistently refuses to order VicForests to survey for rare and threatened flora and fauna before logging, so it's left up to community groups to engage lawyers," said Felicity Millner of Environmental Justice Australia.

"We welcome this belated action by VicForests in this instance," she said.

"We will be watching closely how their actions are carried out and are leaving our options open at this stage," said Jill Redwood. • PW

Park camping fees reduced

The VNPA welcomed the December reductions in camping fees at 55 camp grounds across the state, including national parks such as the Grampians and Great Otway.

People who had already paid the original higher price for summer camp site bookings received a refund.

At 48 'mid-level' camp grounds (i.e. with pit or composting toilets and no showers) the cost per site per day was cut from \$38.90 to \$28, and at seven boat-based camp grounds in Gippsland Lakes Coastal Park the charge fell to \$21.

Fees have not changed at camp grounds considered to be 'high' or 'very high' level. These may have gas or electric barbecues, showers, flush toilets, designated campsites and treated drinking water.

Environment Minister Lisa Neville said the reductions would make camping more affordable and encourage more people to try the outdoors.

"We're very confident that this will lead to greater visitations, that more people will feel they're able to afford it, including school groups."

Ms Neville said that reducing the fees would on paper lower revenue by about \$1.1 million per year, but she predicted that greater visitor numbers would almost make up the gap.

"We have some of the best parks in the country and we will continue to make sure they are accessible and affordable," she said.

"It's important Victorian families can have an affordable holiday and get a chance to experience Victoria's amazing parks," she added.

Ms Neville said there were 680 camp grounds in 133 Victorian parks, and that fees applied at only 17% of the camp grounds.

Fees have dropped in popular parks, including Cape Liptrap Coastal Park, Hattah-Kulkyne NP, Cathedral Range State Park, Gippsland Lakes Coastal Park and Lower Glenelg NP.

Parks Victoria CEO Bradley Fauteux said that making camping accessible and affordable for school groups was important.

"They're our next generation of campers and advocates for parks in Victoria," he said.

Chuck Berger, from Outdoors Victoria, welcomed the lower prices. "This is great news for holiday campers. But just as importantly, it's good economic and social policy. Cost can be a real barrier for families and school groups getting into our parks," he said.

"When people do go camping, we know that they spend money in regional Victoria on gear, food, transport and other expenditures. So by making it easier for people to enjoy our parks, we're getting more economic activity into regional Victoria."

A user-pays fee structures for camping in Victoria's parks and reserves was introduced in July 2014, applying to 197 out of 680 campsites in Victoria's national, state and coastal parks and reserves. • PW

PHOTO: MARY FERLIN

The 'Places You Love' alliance

GLEN KLATOVSKY, DIRECTOR OF THE ALLIANCE, WRITES ABOUT DEFENDING WHAT WE HAVE AND LOOKING TO A BETTER FUTURE.

Over the last few years we have seen the ascendancy of the resources sector in Australia, and a strong anti-conservation political push.

Conservative governments in several states and in Canberra have attempted to roll back conservation gains we have all fought hard for over many decades.

In the context of this assault, an alliance of conservation organisations began by defending existing laws and has moved now to focus on improving the current system.

The Places You Love alliance has 42 member organisations, including the VNPA.

Our first joint campaign was to stop the Gillard and then Abbott governments from gutting federal environment law by handing decision-making to the state and territory governments. Together, we have halted this so-called 'one-stop shop' policy, and there's little prospect of it being enacted during this term.

Last year the alliance led a joint response to attempts by the Abbott Government to remove the tax-deductibility status of environmental organisations undertaking advocacy work. A House of Representatives committee was established and the government's intentions were made clear.

Together we marshalled over 650 quality submissions to the Inquiry, worked with the sector during hearings across the country, and helped ensure there was a united front against the government's intentions. We're still awaiting the committee's report, but we galvanised our sector in a way not seen for a long time, if ever.



PHOTO: DAVID TATNALL

In addition, we brought together broader civil society organisations that had also been attacked under conservative governments. Together we released an excellent report written by the Human Rights Law Centre and launched by over a dozen major organisations including the Australian Council of Social Services, the ACTU, Save the Children, Amnesty and the National Press Club.

Again in 2015 the federal Attorney General launched a campaign against the legal standing rights in the federal environment law. He stated his belief that environmental organisations were waging 'lawfare' against development.

Once again our alliance worked with other allies, and this government proposal appears to be dead as well.

Over this period, of course, we have also seen conservative Victorian and Queensland governments removed, as well as a Prime Minister, and the resources sector weakened by falling demand.

So our work to defend our existing laws has been effective.

However, we acknowledge that current laws and institutions are failing us. We all know that, at best, we are managing the decline of the natural world in Australia.

In late 2014, the Places You Love alliance released a comprehensive assessment of the state of nature in Australia in our report *The Australia We Love* (www.placesyoulove.org/australiawelove). This drew from State of Environment reports and a range of conservative national and international materials.

What we found was that most environmental indicators in Australia are declining, and that there is a serious lack of data to inform us of what is happening and how we can best resolve the problems.

So, we've started a new project looking at how to fix these fundamental problems.

We've begun with a group of environmental law experts advising us on improving the legal and regulatory system in Australia. We're also reaching out to environmentalists across the country to be involved in compiling experiences, expertise and stories about what is failing and how we can improve the system.

We invite all of you to become involved. Our project includes public workshops and online engagement. Please visit our website www.placesyoulove.org or contact me directly if you have any questions (glen.klatovsky@placesyoulove.org).

Thank you! • PW

This hollow old Victorian Blue Gum was one of many killed by the March 2015 fuel reduction burn in the Strathbogies.

Planned burn disaster

BERTRAM LOBERT FROM THE STRATHBOGIE SUSTAINABLE FORESTS GROUP SAYS THE GROUP IS CALLING FOR AN END TO LARGE-SCALE FUEL REDUCTION BURNING IN THE STRATHBOGIES.

A significant proportion of the old-growth elements in part of the Strathbogie State Forest that have survived 150+ years of logging and fires have been destroyed by a recent (March 2015) planned burn.

It is clear that at least some parts of the 520ha burn area experienced a high intensity fire that severely scorched large parts of the tree canopy, incinerated areas of understorey vegetation to mineral earth and killed a number of the last large, mature trees in parts of the forest.

The Strathbogie State Forest is home to a number of forest-dependent species that are vulnerable to the impact of planned burns: the Powerful Owl, Brush-tailed Phascogale, Greater Glider, Yellow-bellied Glider and Koala.

Indeed, Koalas were killed by the fire and corpses were found after the burn.

Victoria's FFG Act lists three Potentially Threatening Processes that planned burning contributes to:

- inappropriate fire regimes causing disruption to sustainable ecosystem processes and resultant loss of biodiversity
- loss of coarse woody debris from Victorian native forests and woodlands
- loss of hollow-bearing trees from Victorian native forests.

But these environmental issues are given low priority by DELWP Regional Services staff in the context of planned burns.

In view of the reluctance of DELWP Regional staff to accept the anecdotal



PHOTO: MICHAEL FLATT

evidence for the impact of planned burns, the Strathbogie Sustainable Forests Group (SSFG) undertook detailed on-ground surveys to quantify the impact of the 2015 burn on the health and survival of trees, to encourage informed decision-making.

Impact on hollow-bearing trees

A total of 273 trees with a diameter of 70 cm or more were measured and assessed for planned burn impact. They were Narrow-leaf Peppermints, Victorian Blue Gums and Manna Gums.

The survey results showed that:

- half of all stags (70 cm+ in diameter) affected by the burn were destroyed by it
- 25% of all trees (70+ cm diameter) affected by the burn were killed by it
- 47% of the largest trees in the forest (100 cm+ diameter) in areas affected by the burn were killed by it
- the four biggest trees in the survey area (between 1.5 and 1.9 metres in diameter) were all killed and felled by the planned burn.

Extrapolation of these results beyond the survey area suggests that this planned burn has seriously degraded the ecological condition and resilience of the forest, and is likely to have caused significant population crashes, if not local extinctions, of several species of hollow-dependent fauna.

These results call into serious question DELWP's program of planned burning in the Strathbogie forests. The level of tree death and loss of hollow-bearing trees is completely unacceptable and flies in the face of threatening processes listed under the Flora and Fauna Guarantee Act.

To continue with the scheduled program of planned burns would be ecologically irresponsible and most probably not necessary, given the government's shift to a risk-based planned burning target.

Whilst the burn killed/felled many more trees than 'expected', the pattern observed is not unique in the State. There are a number of examples in recent years where 'low-intensity' planned burns have caused significant ecological damage, such as at Phillip Island, Langi Ghiran State Park, the Warby Ranges and Mt Alexander.

In the absence of routine quantitative assessment of the impact of planned burns by DELWP, the ecological impact of planned burns is very poorly understood. None the less, it seems clear that planned burning can have devastating effects on the ecological resilience and conservation values of forests and their resident fauna.

The considerable community concern about the burn and a proposed 3000 ha burn scheduled for autumn 2016 has been communicated to DELWP's Regional Director. For further information and to download the survey report: <https://strathbogie-sustainable-forests.wordpress.com/> - 'Planned burning decimates old-growth trees'. • PW

*Kids enjoying
nature – and not
a screen in sight.*

Coming soon: Nature Play Week!

RUNNING THIS YEAR FROM
6 TO 17 APRIL, NATURE PLAY
WEEK PROMOTES ACTIVITIES
THAT RECONNECT KIDS WITH
NATURE. CAITLIN GRIFFITH
REPORTS.

Nature Play Week is an annual event set up by the Kids in Nature Network that celebrates initiatives to reconnect kids with nature and the outdoors.

The event is now in its third year and the VNPA is pleased to be participating for the first time.

The joy of outdoor adventures is as a child is something many of us remember fondly. Discovering bugs, racing up bushwalking tracks with friends, climbing trees and watching lines of ants are some of my own favourite nature-based memories.

Unstructured outdoor play doesn't require rules, competitions or even special equipment.

Nature Play Week is a fabulous initiative to encourage this simple way of learning and experiencing the outdoors. It calls on us as a society to consider how we can remove barriers to people experiencing our great outdoors.

The benefits of unstructured nature-based play for children are broad: development of gross motor skills, skills in enquiry, developing a lifelong passion for nature, developing a good imagination and improved mental health, both short- and long-term.

Nature Play Week 2015 featured 88 events hosted by 44 organisations across Victoria and beyond. Some 6000 kids and parents took part.

The VNPA acknowledges the great benefits of childhood and family-



PHOTOS: SAM FORD

based nature play. We look forward to connecting with families interested in nature and hope this will become a great platform for us to improve our work with family groups into the future.

VNPA will be present as a supporting partner at a number of events hosted by Parks Victoria, including a free Family Fun Day at the Rhododendron Gardens, Olinda, on **Tuesday 5 April**. Other events will be advertised closer to the time.

At these events we will be running bug/pollinator counts, setting up an 'animals in the dark' marquee to show and talk about images of local wildlife from our 'Caught on Camera' project, and supplying pictures of local wildlife for colouring in.

Activities are also being run by local community groups, schools and other organisations. These activities can all be found at www.natureplayweek.org.au.

In addition, some of our bushwalking leaders are hosting family-based walks and activities during or outside Nature

Play Week. These may be family-friendly or specifically for families. Check our new BWAG program for details of these walks and activities, including how to book. Activities include:

- **25-28 March:** annual Forests Forever Easter camp at Goongerah, East Gippsland, with walks, tours, talks and family-friendly activities.
- **Saturday 16 April:** Mt. Cobbler 4WD trip including King River Hut and Dandongdale Falls. Joint trip with Land Rover Owners Club of Victoria.
- **Sunday 8 May:** Jells Park Family Walk, 4km bushwalk in Dandenong Creek Valley.
- **Sunday 22 May:** Walk, Talk and Gawk Nature Nippers, Sherbrooke Falls. 3km bushwalk in Dandenong Ranges NP.

If you have children, grandchildren, nieces or nephews, or just friends with kids, these activities are a great opportunity to share the outdoors with children! • PW

A close-up photograph of a small, fluffy bird, identified as a female Superb Fairy-wren, perched on a dark, thin branch. The bird has a brownish-grey head and back, with a lighter, almost white, underbelly. Its beak is open, and it appears to be in the middle of a song. The background is a soft, out-of-focus blue sky with some dark, blurry branches.

We're listening for nature

**KAREN ROWE OF MUSEUM VICTORIA
AND THE VNPA'S CHRISTINE CONNELLY
REPORT ON A NEW COMMUNITY-BASED
MONITORING PROGRAM.**

*Female Superb
Fairy-wren singing.
These wrens are
very vocal birds.*

PHOTO: MUSEUM VICTORIA/DAVID PAUL

Communities Listening for Nature, a joint Museum Victoria – VNPA program, aims to use recent advances in acoustic recording and automated sound recognition to improve detection of Victoria's vocalising animal species for conservation and land management.

Regular and ongoing monitoring of animals in their natural environments provides critical data on where they are present, how they are using habitats, and patterns of movement across the landscape.

Repeated efforts at detecting where species are present are even more important as global climate change and other environmental challenges continue to rewrite our understanding of how species use habitats and where they will move when conditions change.

This is an enormous amount of work, and researchers cannot achieve it alone. Citizen scientists play an important role in helping researchers monitor where animals are over large areas of land.

For birds, traditional survey methods require volunteers counting all the birds they see and hear in a specific location for a known amount of time. This process relies heavily on the availability of expert birders who are able to identify species correctly in a short period of time.

However, with the development of new technologies to record animals in their natural environments, citizen scientists can now help with the collection of sound data at many sites simultaneously and for longer periods than traditional observational surveys allow.

These recorders can be used to detect a variety of animal groups that vocalise, including birds, frogs and some mammals, and (with some modifications) even ultrasonic bats. We'll concentrate on birds first, but once the project is established we may include other animal groups.

The recorders can be automated to record vocalising animals at set times during the day, such as during the

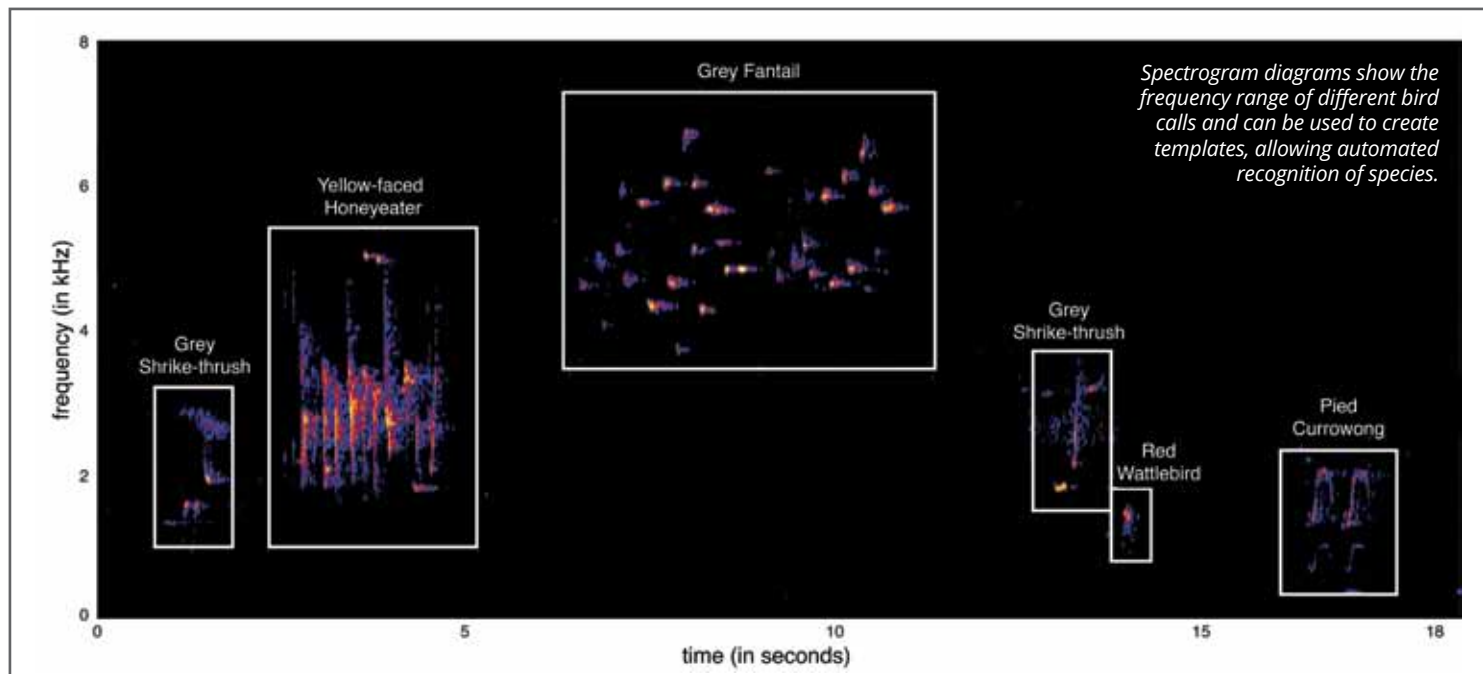
dawn chorus or through the night for nocturnal species.

Sorting through the vast amounts of sound data collected by the automated recorders can be a very time-consuming process. However, progress in sound recognition technology allows for the automatic recognition of species.

Sounds can be visualised using a *spectrogram*, which shows the range of frequencies recorded over time. Each species has a unique spectrogram 'signature', which can be used to identify the species visually as well as aurally.

Using a specially-designed software program, we can create a spectrogram signature 'template' for each species of interest, using known calls and songs obtained from digital sound libraries.

Once the template has been created, field recordings can be scanned quickly by the computer to find matches between the template and sounds in the recordings. This process dramatically reduces the time it takes to identify whether the species of interest is present.



Karen Rowe (left) and Bentley Bird set up an automated recorder in the Gippsland Lakes area.



Two Brolgas call while walking near a pond at the Western Treatment Plant, Werribee.

Harnessing these technological breakthroughs, Museum Victoria and the VNPA have developed the 'Communities Listening for Nature' project, which will be supported by funding from the Hugh

D. T. Williamson Foundation and the Helen Macpherson Smith Trust.

Community groups will be provided with the resources and training to

carry out their own acoustic monitoring projects, building knowledge and understanding of Victoria's bird species. In turn, the acoustic data collected by the groups will be made available to the public digitally via Museum Victoria's online collections database.

How to get involved

We are starting the exciting new NatureWatch project 'Communities Listening for Nature' in 2016. Building on our successes with Reef Watch, we are delighted to be again partnering with Museum Victoria in another important citizen science project.

'Communities Listening for Nature' complements the VNPA's existing NatureWatch project 'Caught on Camera', in which we monitor mammals using motion-sensing cameras. Adding sound recorders

will allow us to monitor a greater variety of species and give us a more complete picture of how wildlife responds to the issues we are investigating.

If you'd like to be part of this exciting new project, sign up for NatureWatch email updates at naturewatch.vnpa.org.au to be the first to find out about what's happening. Or for more information, contact NatureWatch Coordinator Christine Connolly on 9341 6510 or christinec@vnpa.org.au.

For now, the data collected will be used to investigate locally-relevant questions, such as whether a threatened species is present in an area, how a key fire-response species is responding to planned burning, and whether there is a difference in bird diversity in particular vegetation types.

As this digital data provides a permanent record of the species found in a particular place and time, it can also help researchers, land managers and government bodies address conservation and management issues in Victoria now and into the future. • PW

Sub-adult female Growling Grass Frog from Botanica Park wetland in Bundoora. A dedicated wetland for Growlers was built here in 2002 and the frogs are still there 13 years later, showing that constructed wetlands with the right characteristics can be important habitats.

Finding safe havens

FROG RESEARCHER
GEOFF HEARD HAS A
POSITIVE STORY ABOUT
AN ICONIC SPECIES.

I must admit to a hefty bias, but I think most people would agree that the Growling Grass Frog (*Litoria raniformis*) is one of Victoria's most spectacular native animals. Big, green and loud, 'Growlers' are the archetypal frog.

And yet they are an enigma as well. Once abundant and widespread, these frogs disappeared from many places across southern Australia in the 1970s and 80s.

What we now know is that years of habitat change and drought, and the arrival of the infamous frog-killing chytrid fungus, were the culprits. But ongoing research reveals that the tenacious Growler is hanging on in some rather strange spots, including the urban fringe of Melbourne.

My first Growler sighting, when I was 16, was in a disused bluestone quarry in the Plenty Gorge Park at South Morang. It was under a rock on the banks of a spring-fed and slightly salty wetland. There were many Growlers dotted around the wetland that day, some taking shelter under rocks, others sunning themselves in a patch of bulrush.

It struck me as odd at the time. I'd already spent an unhealthy proportion of my childhood knee-deep in Melbourne's wetlands, but hadn't seen a one. So why were they doing so well in the old quarry?

Our latest research, which draws together 11 years of monitoring data from across northern Melbourne, not only answers this question but gives new hope for conserving remaining Growler populations.



Young Growling Grass Frog from Merri Creek at Donnybrook on Melbourne's northern outskirts.



PHOTOS: GEOFF HEARD

We knew from previous work that Growlers' susceptibility to chytrid fungus infections declines with increasing water temperature and salinity, because chytrid is quite sensitive to both, but our new study shows that these relationships have important implications for the persistence of Growler populations.

Warmer and saltier

Put simply, the monitoring data reveals that populations inhabiting warmer, saltier wetlands have a significantly higher chance of persisting through time, because the prevalence of infections is low, and hence frog survival rates are higher.

Moreover, our data suggest that these refuges from chytrid often 'prop up' surrounding populations, and can underpin the persistence of entire networks of Growler populations across the landscape.

What do these warm and salty wetlands look like? Quarries at low elevations are the prime examples in northern Melbourne, including bluestone quarries and brick pits in sedimentary soil.

Let's start with the role of elevation. Even north of Melbourne, where our lowest site was only 250 metres downhill from our highest, elevation had an important effect on water temperatures, low elevation sites being considerably warmer.

At the site level, quarry wetlands also tend to be large and deep, and have minimal bankside vegetation. These features bolster water temperatures. Bigger wetlands have greater thermal inertia and stay warmer over winter, while open banks allow more sunlight to penetrate the water surface.



PHOTOS: GEOFF HEARD

Left: The City of Whittlesea Quarry in Epping has been reserved as high-quality Growling Grass Frog habitat and is being monitored by VNPA members annually. We hope this site will make a significant contribution to Growler conservation in the middle Merri Creek catchment.

Inset: Adult male Growler floating among Water Ribbons in a Merri Creek pool at Donnybrook. He and his Fishing Spider offside are hunting aquatic insects.

In relation to water chemistry, quarrying often punctures shallow aquifers, and hence quarry wetlands frequently have groundwater seepages. This water is typically a little saline, and is also alkaline (up to pH 10), which chytrid doesn't like either.

But quarries aren't the only examples of refugia for Growlers. The species persists in sections of some of our local streams, including the Darebin, Merri, Moonee Ponds and Kororoit Creeks, and can also do well in farm dams and water treatment ponds.

Our data suggest the survival factors in these locations are consistent with those in quarries; while other factors are important, they fundamentally need to offer warm microclimates and/or slightly saline conditions to mitigate the impacts of chytrid.

Wetland networks

At the landscape scale, an important additional benefit of chytrid refuges is large wetland networks. Our work across northern Melbourne shows that regions with clusters of wetlands close together can sustain Growler populations even when strong refugia from chytrid aren't present.

Our conclusion is that Growler populations show enough independence to enable them rescue one another from permanent extinction.

Local Growler extinctions will tend to be independent in space and time. This means that when a population succumbs there is a good chance that one or more of its neighbours persists, and can fire off migrants to recolonise the now vacant wetland.

Maybe next year the roles of the rescued and the rescuer will reverse, but the population network can forge on.

And with that, back to the Plenty Gorge Park. What of those frogs today? Well, sadly, they are no more – Growlers haven't been recorded in the park since 2008.

Fundamentally, the population network was just too small. Populations persisted doggedly in two quarries after chytrid arrived, but disappeared one after the other when severe drought added an extra layer of stress.

Without reinforcements from more fortunate neighbours, permanent extinction was the only possible outcome. And so it went.

But this is not a doom and gloom story. In fact, it's a very positive one, because what we now know about chytrid dynamics for Growlers (and other threatened frogs) is shovel-ready information.

Enhancing wetlands

Consider the possibilities for enhancing wetlands. They can be increased

in size and depth to maximize their thermal inertia, and overhead canopy and emergent rushes can be trimmed to reduce shading. This is particularly desirable when the offending vegetation is exotic (such as willows, elms and hawthorn) or invasive emergents such as Common Reed. When suitable groundwater is available, bores could be sunk to achieve favourable water chemistry.

Furthermore, we can increase the viability of remaining populations by increasing the number and connectivity of wetlands in the landscape. Growlers are adept at colonising wetlands created for them, and we now have a clear sense of the types of wetlands they require. Placed intelligently, these new wetlands could make a significant contribution to conserving remnant populations.

Together, initiatives such as these give us a chance to fight the impacts of chytrid fungus and wetland degradation, and may, in time, allow Growlers to be returned to many a former haunt in SE Australia. • PW

Geoff Heard is a Postdoctoral Fellow in the Quantitative and Applied Ecology Group at the University of Melbourne. He has been conducting research on the ecology and conservation of Growling Grass Frogs since 2001.

NatureWatch frog monitoring

Since 2011, VNPA NatureWatch volunteers have monitored Growling Grass Frogs every summer, including at a disused quarry in Epping. The quarry is a likely refuge near Merri Creek and is being regenerated by the City of Whittlesea to help the Growlers.

If you'd like to learn more, or volunteer with NatureWatch, see naturewatch.vnpa.org.au or contact our NatureWatch Coordinator, Christine Connelly, via christinec@vnpa.org.au or 9341 6510.

Parks in the ground

IT'S SURPRISING WHAT
YOU CAN DO WITH AN
OLD QUARRY, SAYS
GEOFF DURHAM.

What do you do with holes in the ground when extraction ceases? In our refuse-rich throwaway society they have great economic value as rubbish dumps; they can be filled, covered and built on (if you are prepared to run the risk of subsidence).

Alternatively, they can be converted into parklands.

This article looks at three very different parks in Metropolitan Melbourne of similar size. Two are old basalt quarries, and the other a former sand pit.

They have conservation values with attractive water features and provide valuable open space and passive recreation areas. Each has a lake, though swimming is not permitted. Each deserves a visit, and entry is free. And each has a Friends Group which would welcome participation in its activities.

Wikipedia says 'basalt is a common extrusive igneous (volcanic) rock formed from the rapid cooling of basaltic lava exposed at or very near the surface'. As 'bluestone', it is Melbourne's signature building stone - St Patrick's Cathedral, the Victoria Barracks and the Arts Centre are prime examples. It is the material of cobblestones, kerbings and pavings, and is crushed for road metal.

The two basalt quarry park conversions are very different in concept, and particularly in revegetation.

Wilson Botanic Park

To the east of Melbourne, the 36 ha Wilson Botanic Park off the Princes



Blue Lake occupies an old quarry next to the Plenty River in Plenty Gorge Park.

PHOTO: GEOFF DURHAM

Highway at Berwick (Melway map 110 B6) is managed by the City of Casey. The quarry was operated from 1859 until 1976 by the Wilson family, who donated the nucleus of the park to the Shire of Berwick.

It is believed to be partly inspired by the spectacularly colourful Butchart Gardens on Vancouver Island, Canada, but not on the same lavish scale and without the extensive flower beds. The park is on the side of a pine-covered hill. Revegetation has involved an eclectic mix of species, and some plants are labelled.

Entry to the park is along an oak avenue to a car park and visitor centre. Nearby are a small rose garden, waterlily pond, playground and barbecue shelters.

There are two lakes. In Anniversary Lake are two massive concrete pillars, the former base of a crusher plant, and it is overlooked by a large amphitheatre with bluestone tiers - the site of 'Sunset Cinemas'.

The smaller Basalt or Upper Lake has a sheer rock face on its eastern edge, a bird hide, and a boardwalk along its western edge. Walking tracks range from flat and easy to steep and hilly. It is 750 metres around Anniversary Lake, 1.5 km around both lakes and 3 km around the outer circuit. Dogs are permitted on leads.

The park is a popular venue for family gatherings. It's open from 7.00 am to 6.00 pm (9.00 pm during daylight saving). The Friends Group contact is Margaret Rossell - phone 9707 1750.

Newport Lakes Park

South-west of the city is the 33 ha Newport Lakes Park (Melway map 55 G3), managed by Hobsons Bay Council. The easy-to-miss entrance off Mason Street leads to a car park open from 7.30 am to dusk. Next to the car park is the privately operated Newport Lakes Native Nursery where you can buy local indigenous plants.

The park is bisected by a closed bitumen road. To the west are toilets, a picnic area with shelters and electric barbecues, playgrounds and two large grassed fields (capped quarries) separated by an arboretum featuring conifers. Dogs are permitted off-lead on the northern field.

To the east is the no-dogs conservation zone that has been successfully revegetated with indigenous plants. The centre-piece is a large bore-water-fed lake crossed by stepping stones, and there are wetlands in a natural amphitheatre. There is easy walking along a selection of wide gravel tracks with mosaics of birds mounted on basalt boulders.

The Friends group has an excellent website; the contact is Mary Burbidge, phone 9391 5758.



PHOTO: GEOFF DURHAM

Clockwise from top left: Karkarook lookout; Wilson Botanic Park – Upper Lake bird hide; Karkarook's information shelter has the form of a dragonfly; wetlands at Newport Lakes could be miles from anywhere.

Karkarook Park

South of the city, Karkarook Park is different again. In 1997 Parks Victoria agreed to extraction of sand and rehabilitation of wetlands and parkland at no cost to the community. The name 'Karkarook' is Aboriginal for 'a sandy place'.

The park is at the intersection of Warrigal Rd and South Rd, Moorabbin (Melway map 78 D7) with vehicle entry opposite Bunnings off Fairchild Street.

The 40 ha park features a central 15 ha lake maintained by bore water. Wetlands along the Warrigal Rd boundary are fed by storm water. A litter trap removes rubbish, and as the water moves through a series of ponds it is filtered and cleansed before exiting to Port Phillip Bay.

The park has been revegetated with indigenous plants and is excellent waterbird habitat.

It is also accessible for people with limited mobility. There are 6 km of walking tracks around the lake and wetlands – the lake circuit is 1.8 km. Fishing for Rainbow Trout or Redfin, and unpowered small boats, are permitted. Dogs must be on-lead except in an off-leash area.

The park is open all the time. It has good picnic and playground facilities, rotundas and a dragonfly-inspired lookout and very informative information shelter. The Friends of Karkarook operate a community nursery; contact is Ann Tamhane, phone 9557 2562.

More quarries

Wilson Botanic Park, Newport Lakes Park and Karkarook are three examples of successful conversion to parkland, but many parks have old quarries or sand and gravel pits within them. A prime example is the sandstone

Heatherlie Quarry off the Halls Gap – Mt Zero Road in Grampians National Park, once used for stone for Melbourne public buildings.

Closer to Melbourne, in Werribee Gorge State Park, a quarry where stone was extracted to build the Western Freeway has been converted to the Quarry picnic area.

Blue Lake, an old quarry next to the Plenty River (Melway map 183 F5) is a dramatic feature of the Yellowgum Recreation Area in Plenty Gorge Park.

Lysterfield Lake Park (Melway maps 82-83) has a small quarry where granite was extracted for the dam wall. A walking track from the western end of the wall follows the old tramline route to the quarry.

Full appreciation of any park requires an understanding of its history. For many parks, extraction activity is part of that history. • PW

Dingo and wild dog carcasses 'displayed' near Benambra in the 1980s-90s.

Inset: Dingo pups at Wire Plain, Mt Hotham.

You bloody dingo!

BIOLOGIST IAN MANSERGH ARGUES THAT DINGOES CAN RESTORE OUR ECOLOGICAL BALANCE.

Of the expressions that arose from our colonial era, 'You bloody dingo' stands out as one of contempt and a perception of deceitfulness. It embeds a loathing of the original landscape and of this unique predator.

A replacement predator – the fox – has also been regarded as cunning, but this slyness brought begrudging respect rather than utter contempt.

Perhaps this demonising of dingoes was the inevitable cost as we rode the sheep's back to wealth and prosperity.

But new insights and science about the dingo and its key place in landscape health and balance suggests that our view should evolve to become more Koori-like, appreciating the dingo, its place in the landscape and in our minds. A symbol of balance, not of derision.

After uncertain beginnings, European settlement of Australia eventually became reliant on the staples of wheat and sheep. As apex predators, dingoes exploited sheep as an easily accessible food source, threatening the economic viability of the pastoral industry.

Persecution

Persecution by baiting, trapping and shooting led to the dingo's extinction in more settled areas, and the national psyche demanded a dingo fence stretching across the continent.

In Victoria, its range was reduced to the remoter regions of the alps and surrounds, the fringes of the Big Desert, and East Gippsland, where official persecution (in the form of government dingo trappers) continued into the 1980s.

But with the rise of community interest and concern over conservation, the



PHOTO COURTESY GEORGINA BOARDMAN, MT HOTHAM ALPINE RESORT BOARD

PHOTO COURTESY NEIL BARR

place of the dingo was questioned. Was it a native or a 4,000-12,000 year old 'introduction'?

Although genetically and behaviourally different, dingoes can inter-breed with the continual supply of feral domestic dogs, and the official Victorian rhetoric morphed from dingoes to 'wild dogs', conveniently blurring the public debate as persecution continued.

Pure-breed dingoes persisted in the remoter parts of the Australian Alps as national parks were progressively established over the region. As the wool boom ended, sheep numbers declined in the 1990s, and marginal operations, such as those surrounding most of the Alpine NP, changed to other pursuits.

Economically sustainable sheep grazing, at a regional level, became more distant from the remaining dingoes. Over recent decades, the socio-economy of many landscapes moved from pastoral to amenity landscapes, as shown by agricultural researcher Neil Barr.

At the same time, ecological science undertaken across the globe has shown

that removal of apex predators can produce a cascading effect across the ecosystem (e.g. wolves in Europe and USA).

Their removal has set in train a variety of ecological processes, including meso-predator release (medium-sized predators become more abundant), changed abundance of grazers (and grazing regimes) and consequent changes to vegetation regeneration and distribution.

Out of balance

In Australia, unchecked by the apex predator (and native meso-predators like quolls), foxes and cats brought extinction many small to medium-sized native mammals. As some marginal Victorian leasehold grazing land became national parks (e.g. in the Mallee) conservation management had to deal with the consequences of over-abundant grazers both native (kangaroos) and exotic (rabbits), causing land degradation and inhibiting habitat regeneration.

Absence of a natural predator regime exacerbated these problems, and control methods have proven to be expensive and not without ethical dilemmas for park management.

I remember participating in the 'herding' of kangaroos at Hattah-Kulkyne NP, a trial that had to be worked through before more humane, 'effective' yet still expensive methods of population control could be adopted.

There is an urgent need to reflect on how we view 'an operative natural ecosystem', particularly as we seek to make natural

environments more resilient to present and future climate change.

Currently, with the few remnant dingoes unable to perform fully as apex predators, the Alpine NP facilitates the expansion of feral grazers such as horses, deer and pigs. Dingoes may not be able to eliminate these problem animals completely, but it seems illogical and expensive to actively work against this natural regulatory capacity (by persecuting and disrupting dingo populations).

In the 1980s, Alan Newsome (CSIRO) showed that alpine dingoes suppressed foxes. A healthy population of dingoes would also protect the small and medium-sized mammals that hang on habitats in the alps and surrounds.

Further, evidence now suggests that disruption of dingo populations and their social organisation (e.g. removal of dominant individuals) may only increase stock losses and speed up the erosion of their genetic base. Instead, management should facilitate wild dingoes in re-establishing their ecological function in the natural environment.

Most of the current arguments against the dingo can be sheeted back to old colonial fear and loathing, and discount ecological insights from science. For example, it's claimed that the alps' gene pool of the dingo has been irretrievably mixed with domestic dogs, yet Newsome found pure breeds in the 1980s. Persecution rather than respect inhibits extant populations from 'breeding back'.

Adverse

In the long term, there may be some adverse consequences from dingo restoration, such as occasional lamb predation in adjacent properties. But given the land-use changes (above), the scale of these consequences is diminishing. In any case they could be accommodated, for example by conversion to cattle grazing, compensation for proven kills, or fencing assistance.

It takes a deep-seated cultural bias to allow the persistence of expensive management that has perverse outcomes! We need to re-think.

Victoria is behind other states in this area of research, assisted by the policy deception: "They're all wild dogs".

The Dingo Debate Origins, behaviour and conservation

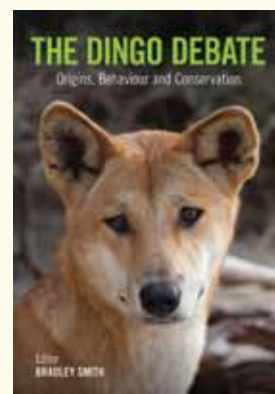
Edited by Bradley Smith. CSIRO Publishing, August 2015. Paperback, 336 pages. RRP \$39.95.

This new book describes how dingoes made their way to Australia, their subsequent relationship with Indigenous Australians, their successful adaptation to the Australian landscape and their constant battle against the agricultural industry.

During these events, the dingo has demonstrated an unparalleled intelligence and adaptable nature seen in few species.

The book concludes with a discussion of what the future of the dingo in Australia might look like, what we can learn from our past relationship with dingoes and how this can help to allow a peaceful co-existence.

We plan to have a comprehensive review of the book in a future *Park Watch*.



This is also probably linked to our relative tardiness in broaching the broader need for ecological restoration and re-establishment of native mammal populations.

It is a sad irony that the dingo (*Ngooran* in Kurnai /Gurnai) is one of the three major totems of the Koori peoples of the alpine region (draft Management plan) yet we now only 'see' wild dogs.

Respect

A new respect for the dingo and its key place in the health of our natural environment would guide management to actively protect and nurture this apex predator.

The Alpine NP (and Alpine Resorts) would appear to be a good starting point to nurture dingo populations back to functionality. Indeed, a breeding pair of dingoes at the Mt Hotham Resort could be a beacon for better policy. Ironically perhaps, the resorts can lead the path to better landscape conservation!

If this is too much for Parks Victoria's policy makers, there are other places where dingoes could be re-introduced as part of an adaptive management strategy for over-grazing control.

Although it would be better to do this in intact landscapes with extant populations, two non-park Victorian

candidates stand out: the Puckapunyal Defence area in central Victoria, a fenced area of 440 square kilometres, and the old grazing property Ned's Corner in the Mallee (managed by Trust for Nature).

Both these properties have problems of over-grazing by kangaroos and other animals, and could benefit from a natural process that improves future management by restoring the natural balance.

Of course, if either of these land managers were to consider and adopt such a policy, the support of an informed Victorian community would be very helpful, if not critical.

So, *Park Watch* readers, do you want to be part of restoring the balance? If so, perhaps you could consider putting Ngooran/dingoes on your 'most wanted' list – not to be hunted down, but to be welcomed back! • **PW**

Ian acknowledges David Cheal's constructive assistance with this article.

The VNPA does not currently have a policy on the ecological role or re-introduction of dingoes, but one is being developed. Contact the Association for more information.

Wildlife welcome!

IN 2013 TWO LIKE-MINDED FAMILIES BOUGHT A 350 ACRE FORMER GRAZING PROPERTY NEAR VIOLET TOWN IN NORTH-EAST VICTORIA. LIBBY, STEVE, TED AND SUE EXPLAIN HOW THEY ARE ENCOURAGING WILDLIFE ON THE PROPERTY.

Declining woodland birds were the main focus in the choice of property, and in our ongoing restoration work, but we have been very excited to find that many native reptiles and mammals are also present and appear to be increasing.

We have regular visits from 16 of the 24 species that make up the threatened Temperate Woodland Bird Community, and 15 of these have been captured on video (many are resident on our property).

Our restoration focus has been sixfold.

- **Constant fox baiting** has allowed our Bush Stone-curlews to breed successfully for two years (young raised to adults) and has had the wonderful bonus of bringing an increase in young Lace Monitors and other reptiles.
- **Weed control** has allowed the areas of native grass to increase and improved the habitat for many threatened species. For example, Hooded Robins prefer sites with a mixture of shrubs, trees and open spaces. Open spaces should be at least 20m wide and not weed-infested. Weed invasion of remnant patches makes it harder for the birds to see their prey and reduces the quantity of prey.
- **Rabbit baiting and gassing**, and burrow collapsing, have been conducted carefully. Bait stations are used in summer when there is little other feed. Movement cameras on the bait stations confirm that only rabbits take the bait. Collapsing and

gassing of burrows is done in winter when it is less likely that reptiles will be using them.

- **Planting:** so far we have put in over 3000 plants of 33 different species, and six (mostly grasses) have been direct seeded. Our planting includes many small species such as saltbush and Dianella. Diamond Firetails like to feed on the berries of saltbushes in the autumn as a protein source when they are moulting. Bush Stone-curlews and Bearded Dragons also include berries in their diet.
- **Natural regeneration** of native grasses by excluding kangaroos. Large areas of native grass were previously so heavily grazed by kangaroos that they never went to seed. There are now three kangaroo exclusion areas and a fourth being constructed. Having native grasses go to seed greatly increases the number and diversity of small birds.
- **Thinning regeneration** to maintain or create woodland. All regeneration has to be managed so it does not become too dense.

We felt frustrated because our visits to the property were taken up doing all this work, which we found very fulfilling, but which did not allow us time to survey the threatened species and to learn more about our native wildlife.

Also, we are not skilled birdwatchers and felt constrained because our knowledge of calls and identifying features was often not good enough to tell species apart.

So we developed a strategy to identify and monitor the wildlife.

We bought a few small plastic ponds, placed them in various sites around the property and put some newer and better movement-sensing cameras on them.

The results greatly exceeded our expectations.

We think that others on similar restoration journeys might be interested in our stories, and might find our experiences helpful in their own situations. We've therefore put together an article explaining how to set up the ponds: www.victoriannativeseed.com.au/using-small-ponds-to-survey-wildlife/

We have had most of our ponds up and running for over a year now and have also had cameras on two dams. We now have videos of 99 species of native birds, seven of native reptiles and 16 of native and introduced mammals (mostly from ponds and a few from dams). There are links to some of these videos in the article mentioned above, or you may like to go to our Youtube channel: youtube.com/channel/UChjbj4y_MroPLr47ckh6-8Q

Benefits of using ponds and cameras to survey wildlife

- Wildlife is surveyed all day every day and all night every night.
- Gives amazingly detailed information for some species, and helps to educate both the landholders concerned and the wider public.



PHOTO COURTESY LIBBY WOODWARD



PHOTOS COURTESY LIBBY WOODWARD

Clockwise from top left: Can you see the six Grey-crowned Babbler at the pond?; a range of native plants was put in on the edge of the dam in June 2013; close-up of Lace Monitor; Flame Robins brighten the scene; a striking Diamond Firetail finch.

- Gives permanent evidence of any sightings of rare species and allows help to be obtained to confirm identifications and breeding. For example our Squirrel Glider, Barking Owl and immature Bush Stone-curlew videos were all confirmed by experts.
- Provides a safer drinking place for small birds such as Diamond Firetails and Red-capped Robins, which are much more exposed to birds of prey at dams that have no cover.
- Different species use different ponds, and we are learning which species are resident in the property and whether they are successfully breeding. We learn which species prefer which habitats and see species that only visit the property for a short time.
- We can monitor the effectiveness of our environmental work. Rabbits are no longer seen in some areas, foxes are greatly reduced and the numbers of small reptiles and ground nesting birds have increased.
- We can see if groups of resident threatened species (like the Grey-

crowned Babbler) are increasing in size over time. This works well when the whole group visits the ponds at the same time (which happens for many species) or when individuals can be recognised (as with Lace Monitors).

Possible issues and problems

- Feral bees love water and can compete with hollow-nesting wildlife for hollows.
- Macropods are attracted to water and will mostly need to be excluded.
- The water must be kept clean and ponds need to be kept fairly full so that the water plants stay healthy.
- You need to be careful that wildlife can safely exit the water and that no individual drowns.
- Noisy Miners and other aggressive birds (and cats) could respond positively to water sources and stay in areas longer than they otherwise would.

Before our creek became badly eroded it might well have been a chain of

ponds. So we may just be replacing what was there for much of the year.

We are excluding macropods and making sure that the water stays clean.

If we develop a problem with aggressive birds or bees or predators we will endeavour to remove this problem. We got a permit and culled 90 Noisy Miners, and we would remove bee hives if they developed.

A feral cat has only visited a pond once. We set our cat trap but the cat has not returned so far. If we have a problem with any other aggressive native birds or with predators we will see that this is happening and we can just temporarily or permanently remove or re-position the pond.

This is the benefit of the ponds being small and portable. • PW

We have had a fantastic response to our observations and it is already helping many people to be more enthusiastic about their native wildlife. See our Facebook page for the great reaction we have been getting: [facebook.com/pages/Victorian-Natives/867592356651038](https://www.facebook.com/pages/Victorian-Natives/867592356651038)

Closing the gate on extinctions?

VNPA MEMBER LYNN
GUNNING IS AN ACCREDITED
EXERCISE PHYSIOLOGIST
WHO IS PASSIONATE ABOUT
PRESERVING WHAT'S LEFT OF
AUSTRALIA'S BUSH.

Feral-proof pockets of native wildlife are set to be created across NSW as part of an historic partnership between the Australian Wildlife Conservancy (AWC) and the NSW Government.

The initiative will see fauna currently extinct in NSW returned to the state's national parks. Mammals such as the Bridled Nail-tail Wallaby, Brush-tailed Bettong, Western Barred Bandicoot, Western Quoll, Bilby and Numbats are earmarked for reintroduction.

The AWC has significant experience in creating and managing feral herbivore- and carnivore-free sites. The organisation's aim is simple – to reverse the tide of mammal extinctions.

AWC currently maintains three feral predator-free areas on mainland Australia, including the country's largest fox- and cat-free area of 8,000 hectares at Scotia, on the NSW/SA border.

Chief executive Atticus Fleming says AWC has a two-pronged approach: to manage feral-free areas and to develop strategies that work in unfenced areas.

Feral-free

"AWC is the only organisation with multiple large feral-free areas. There are at least half a dozen mammals that only survive in feral-free sites," he says.

Australia has the worst mammal extinction record in the world. Currently, only 1,000 Numbats remain in Australia, so it's critical to

provide sanctuaries where populations can re-establish.

"Fencing is an essential component of an overall strategy, and so is developing an effective strategy for open landscape," says Fleming. "Comparatively, fencing is a great ecological investment."

He cites the Bridled Nail-tail Wallaby as a great example.

"Over a million dollars has been invested in the last 15 years in unfenced Queensland national parks, and numbers have fallen from 1000 to 200. Meanwhile, over the same time, Scotia's population has risen from a small released population to over 3000."

The large feral cat- and fox-free areas to be established in NSW will provide a secure refuge. Each specifically designed conservation fence will enclose an area large enough to support wild, self-sustaining populations of reintroduced mammals.

Strategies

In the longer term, additional strategies will be developed to establish threatened mammal populations outside these core areas and across national parks.

So will Victoria follow suit and put significant resources into creating predator-free sanctuaries within our national parks?

The establishment of fenced feral-free areas is often seen as the only option to

ensure the safe reintroduction of highly endangered mammals. Techniques such as baiting and shooting are not currently able to reduce cat or fox numbers to a level that will allow the reintroductions of native mammals, and without fences, re-infestation can occur rapidly.

Andrew Cox, CEO of the Invasive Species Council, doesn't think fencing is the answer.

"You can't fence all of the reserves. It's a costly form of pest control," he says.

"Victoria lacks a systematic approach to threatened species and lacks the funding needed to recover threatened species from their current state."

Oisín Sweeney from the National Parks Association of NSW has been following the proposed rollout of the fenced areas in NSW and is cautious about the initiative.

"We can't seem to look after the species we've got, let alone ones that are extinct in the wild," he said.

"I've been to Scotia and seen the potential, but the risk is that we protect just those fenced areas, while abstaining from managing the broader landscape."

He suggests there are other options available to influence cat and fox numbers.

"We don't want to take our eye off other opportunities like bringing back apex predators, such as the dingo. This would allow management over a much wider area," Sweeney said.



PHOTO W. LAWLER, COPYRIGHT AUSTRALIAN WILDLIFE CONSERVANCY - WM



Top: Numbat at Yookamurra.
Bottom: A camera trap captures a feral cat that has killed a small native mammal.

PHOTO W. LAWLER, COPYRIGHT AWC – WM



PHOTO COPYRIGHT WM AWC

“Bandicoots need to hone their skills to survive and learn how to evade predators. Providing a safe haven over a reasonably large area enables them to thrive and develop self-sustaining populations.

“All these things give us the opportunity to reverse the decline of species and build them up with effective management of feral animals. It also enables us to study a species,” she notes.

Even though the program commenced in 2002, they haven’t reached the capacity of the area, so overpopulation has not been a concern.

some species, it doesn’t address the wider issue of reducing feral species and the devastating impact they have on native fauna.

The need for a comprehensive management plan is a given. Fencing is a complementary strategy, but more resources need to be put into invasive species management to find sustainable solutions for the protection of our rare and highly vulnerable mammals. • PW

For more information:

Mt Rothwell Biodiversity Interpretation Centre
www.mtrothwell.com.au

Conservation Volunteers – Woodlands
www.conservationvolunteers.com.au/what-we-do/threatened-species/eastern-barred-bandicoot

Australian Wildlife Conservancy
www.australianwildlife.org

Invasive Species Council
www.invasives.org.au

Conflict

He acknowledges the conflict that this can cause in farming areas. However, there were similar concerns about this in North America and Europe with the reintroduction of wolves, yet over time community attitudes have been changing.

“It also raises the ethical question of what you do with a recovered [mammal] population,” he said. Is it ethical to put them outside [the fence] with the near certainty that they’re not going to make it?”

Victoria has a handful of small feral-proof refuges in operation.

Mount Rothwell is a 420-hectare private conservation reserve west of Melbourne. Its electrified fence keeps out foxes, cats and other feral threats. Threatened species including rock wallabies, quolls and Eastern Barred Bandicoots are thriving in the protected surrounds.

Safe haven

Jackie Young from Mount Rothwell sees fenced reserves as a safe haven for threatened species.

“It’s not an end solution, but a critical step to preserve species,” she says.

The bandicoots are one of Victoria’s most critically endangered species, and a breeding program involving captive populations was established in 1993 with 19 wild bandicoots from Hamilton. The program is supported by the Hamilton Community Parklands, Mooramong, Mount Rothwell, Werribee Open Range Zoo, Woodlands Historic Park, Melbourne Zoo and French Island.

Woodlands

Parks Victoria has taken initial steps in this area. The Eastern Barred Bandicoot Revival Program at Woodlands Historic Park north of Melbourne is a joint initiative between Parks Victoria and Conservation Volunteers Australia.

The program has seen the 47 bandicoots released into the 280 hectare fenced reserve grow to 110 individuals in the last count. It has shown that populations can be reintroduced and has also spawned a highly successful volunteer program.

An added benefit of multiple small populations is that if a bushfire destroys one area, there are other populations to help in the recovery.

Although creating fenced areas appears to help turn the tide on extinctions for

National Parks Australia Council policy

The NPAC is the peak body representing the state National Parks Associations. Its policy on fencing says that fenced exclusion zones provide sanctuary and are an important tool for the conservation of threatened animals. It states that:

“The creation of fenced exclusion zones on mainland Australia is generally agreed to be an important recovery action for many threatened mammal species. For example, the Senate enquiry into the *Effectiveness of Threatened Species and Ecological Communities’ Protection in Australia* (August 2013) recognised that predator-proof sanctuaries can assist in the recovery of threatened species and recommended to the Federal Government that more consideration be given to ‘greater use of predator exclusion fences and other forms of ‘mainland island sanctuaries’ for threatened species’.”

For the complete policy see www.npac.org.au.

Finding Victoria's best walks

VNPA MEMBER BRETT
HEDGER DISCOVERS VICTORIA,
AND HIMSELF, BY WALKING.

**If you could only go on one walk in
Victoria, where would it be?**

Would you take someone with you or
would you go alone? Would you leave
early to catch the sunrise or stay late to
enjoy the sunset?

In which season would you complete
this walk and what type of weather
would you prefer? Would you choose
river, rainforest, coastal, grassland,
desert or alpine?

Where in fact is the best walk in
Victoria? This last question is the most
common one that I've been asked in the
past three years.

In 2012 I dusted off a copy of the
book *150 Walks in Victoria* by Tyrone
Thomas and Andrew Close. At the time
I was looking to add some adventure
to my life, and decided that I would
complete every walk in the book.

Challenge

This challenge would combine my
love of the bush, keeping fit and living
sustainably. I also wanted to learn more
about Victorian history and see for
myself the condition of our rivers,
land and parks in general.

I hope this article gives you some
insight into what I discovered about
myself and my land.

To complete this challenge on my
terms, I established the following
ground rules:

- all walks to be completed within
three years
- I would only use public transport,
bicycle and walking to get to and
from the walks



PHOTO: BRETT HEDGER

- I would carry everything that I
needed on my back
- I would not purchase anything
(other than train and bus tickets)
or produce any waste.

I didn't know it at the time, but these
rules meant that I would be doing all
the walks by myself.

I started the challenge in October
2012 with a walk out to the Lerderderg
Gorge near Bacchus Marsh. I soon
discovered that weekend V/Line train
and bus timetables would become a very
important part of my challenge.

If I were to miss a train or bus by a few
minutes, I might be waiting two or more
hours for the next one.

Once I ran for 5 km with my pack on
to avoid a very long wait for a bus on a
Sunday in Daylesford.

As time passed, I also became a keen
listener and observer – a nature
detective, if you like.

I wanted to know if I could spend the
rest of my life in my native Victoria,
never again leaving its boundaries.

Probably the hardest part of the
challenge was the bike riding,
particularly along narrow country
highways into headwinds and up long
hills with all my equipment and supplies
on my back.

I've learnt a lot about bushwalking by
getting into all kinds of situations and in
most types of weather. I have been stuck,
stranded, out of water and food, way off
track, totally drenched, exhausted, frozen
and fried.

Apart from snow, I've been through
all manner of weather conditions and
carried all kinds of weight on my back
through all kinds of terrain, from
beautiful early morning beach walks to
crawling and hacking my way through
impenetrable scrub.

I was also injured three times, twice
tearing muscles that required extended
recovery periods. The third time was a
downhill bike crash in which I was very
lucky not to break more than my helmet.

I've been driven back by flies, and
numerous snake sightings have meant that
sometimes I haven't actually seen much
more than the ground in front of me.

Time to think

Being by myself, I've had a lot of time to
think and reflect, and this has helped in
other parts of my life. At times, I found
myself thinking deeply, with empathy,
about what it would have been like to be
here before all the roads and 'development.'

I particularly enjoyed discovering the
various Indigenous connections to
country, local tribal groups, languages,
words and stories. I believe that our

Storm at sunset, Pink Lakes,
Murray-Sunset NP.



PHOTO: BRETT HEDGER

ignorance of Indigenous culture and our ongoing lack of respect for the Indigenous people contribute to the poor condition of our environment.

I was also challenged mentally and emotionally on a number of fronts, but in particular by the destructive period we now know as 'the gold rush.'

Similarly, I still can't understand why the high country was used for anything other than water collection and filtration. It would have been so much easier and less destructive to run cattle and horses on the low flat lands rather than up in the mountains.

Wounded

I found that our land is still open and wounded, in much the same way as the rivers and creeks are fouled and polluted. And I believe that most of us are no longer directly or deeply connected with the Earth.

Despite this, I think the threads for these connections are still intact and lie deep within our hearts.

But Nature's biggest problem relates directly to the way we've been trained to think. This, together with our inability to keep our minds open and be ready for challenge and change, means we are destroying more than we are saving.

Since 2012 I have completed around 200 walks. For me, the best were about 'moments'.

I walked up near Mt Kooyoora and came over a ridge top to be confronted with the majesty of

a Wedge-tailed Eagle up close. Another time, around dusk at the Cathedral Ranges, I was treated to a choir of lyrebirds working through their full repertoire.

These are the moments that turn average walks into amazing walks.

For me, there is no best place and no best time. We are so very lucky to have what we have.

We need to be continually watchful and wary about what is going on out there, for we are the guardians of the future and our parks are now isolated and vulnerable.

I'm betting your next walk could well be the best walk in Victoria. • PW

You can read more about Brett's walks at www.lifeinharmony.com.au/stories.html

Brett Hedger is a passionate advocate for living in harmony with the Earth. First involved with the VNPA when he helped Jason Doyle with the Box-Ironbark campaign, he now works for the City of Port Phillip in its sustainability team. He has also attended all but one of the Hindmarsh tree plantings and is the captain of The Crack Team.

Brett is also involved in 'side projects' such as divestment, climate change and community solar. His next bushwalk challenge is to climb every peak in Victoria over 1000 metres.

Rock formations at The Fortress,
Grampians NP (Gariwerd).

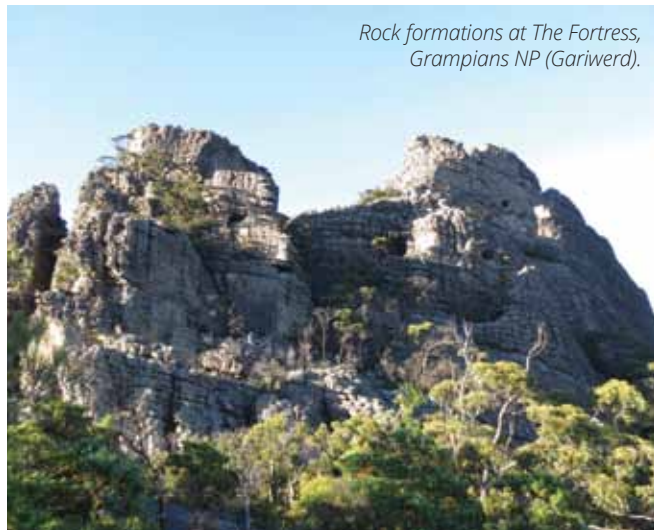


PHOTO: BRETT HEDGER



Kangaroos at Wyperfeld NP.

PHOTO: BRETT HEDGER

Bushwalking grows

Findings from Roy Morgan Research show that between October 2010 and September 2015, the proportion of the population over the age of 14 who reported going bushwalking at least occasionally has almost doubled from 15.6% to 27.3% – a total of 5.3 million Australians.

Since we are now talking about nearly 30% of the population participating in bushwalking (more than in golf, competitive sports and cycling) it's time to start doing some solid research.

South Australia saw the greatest increase in bushwalkers over the period, while Tasmania has the highest rates of participation overall.

When it comes to regular bushwalking and hiking, two very different age groups stand out for their elevated participation rate: young Aussies aged 20-24 and older folks between 60 and 64. They are also likely to be from the wealthier end of the socio-economic spectrum.

Bushwalking and Activities Program

As from this edition, the VNPA Bushwalking and Activities Program will appear quarterly with *Park Watch*, rather than twice a year as previously. This is a more economical and (we hope) more attractive way of presenting the program. Monthly email updates will still be issued – you can subscribe on our website.



Members of Nhill's Karen community (from Burma) take part in Project Hindmarsh plantings.

Come to Project Hindmarsh, 25-26 June 2016!

Greening Australia and the Hindmarsh Landcare Network will again team up for the 2016 Project Hindmarsh plant-out weekend.

This year, the plant-out will be on the weekend of **25-26 June** instead of the traditional third weekend in August. This is to give the trees more time (and hopefully more moisture) to establish before summer.

The planting will be at Murray Robinson's property on the northern edge of Lake Hindmarsh, adjacent to Outlet Creek. We will plant 15,000 trees over 20 hectares.

The original aim of Project Hindmarsh was to reconnect the Big and Little Deserts with indigenous vegetation, improving habitats and protecting soils.

Over 100 km of roadside reserve, and many hectares of farmland, have been planted with indigenous species, creating a biolink corridor with uninterrupted vegetation between the two deserts, from the Wimmera River to the South Australian border.

This landscape-scale project was the inspiration for the far bigger vision called Habitat 141°, which aims to connect and develop native vegetation on both private and public land from Broken Hill to the sea on either side of the Victoria – SA border. Project Hindmarsh and other projects will contribute to the Habitat 141 vision of assisting our flora and fauna in adapting to climate change.

We hope once again to attract some 200 volunteers to help plant, guard and water the plants. It's a great opportunity for VNPA members and friends to have a fabulous time mixing with local families while helping the environment.

The weekend will be hosted by the Rainbow community. All food and entertainment will be provided free.

Ace Radio 3WM is again the weekend's major sponsor. Through Greening Australia's Alcoa One Million Trees program, and with assistance from the state and federal governments, we are able to fund all the on-ground works necessary.

The weekend will also assist many local businesses following a year when drought again put enormous stress on our communities. • **PW**

For enquiries, email hln@hindmarshlandcare.org.au or phone Darryl Argall on 0428 344 764.

Steve Hemphill, Coordinator

Grow West 2016

The Grow West 2016 Community Planting Day will be on **Sunday 17 July** at Western Water Surbiton Park, Melton. The event is being funded by the Australian Government's 20 Million Trees Program (part of the National Landcare Program), and VNPA is one of the project partners. For more information see www.growwest.com.au • **PW**

A walk to Genoa Peak

VNPA MEMBERS FRANCIS REISS AND JUNE ORFORD SENT US DETAILS AND PHOTOS OF A BEAUTIFUL SHORT WALK IN FAR EAST GIPPSLAND.

After a week at the beach in Mallacoota, Genoa Peak, 488 metres above sea level, seemed like a good place to visit.

The easy to medium 1.5 km walk there is beautiful, through virtually pristine forest. The impression is that it's never been logged, although of course it has.

Parks Victoria has built a track that's a pleasure, starting off easily on a carpet of casuarina needles and becoming steeper and rockier as it nears the peak.

On a second visit this year there were no other people on the track, but a lyrebird and a monitor were perfect company.

To get there, take the C617 out of Mallacoota to Genoa, where you head west on the Princes Highway west towards Cann River.

But wait a while! The Genoa Hotel/Motel is worth a look. The strikingly long bar, offering a great variety of beers, tends to be propped up by folks in their senior years, ready for a good chat.

The hotel doubles as a post office, and as Genoa's entire population at the last census was only 171 and declining, you won't feel crowded out.

About 5km along the Princes Highway, the 7 km dirt road starts on the left. It's single track, so take care.

At the road's end is a small clearing where, clearly signposted, is the track to the Peak itself.

There's a picnic area with barbecues there, but no camping site or toilets.



Centre left: Monitor beside the track. Centre right: Visitors approach the Peak viewing platform.
Bottom: Cherry Ballart veils the sun.

The nearest PV campsite is Shipwreck Creek near Mallacoota, and you can find free shire-operated camping at Genoa.

Arriving at the Peak, there's a reward. PV has built an excellent steel viewing platform on the granite outcrop. On a clear day you can see Gabo Island, some 20 km away.

You can't help wondering how the heavy platform got to the Peak. Some of it was definitely carried in by hand; the rest, you hope, came by helicopter.

While you're in the area, try and fit in Captain John Gerard's Wilderness Tours from Gipsy Point. On his boat *The Gypsy Princess*, John visits many interesting places, and there is much wildlife to be seen. • PW

The Invention of Nature

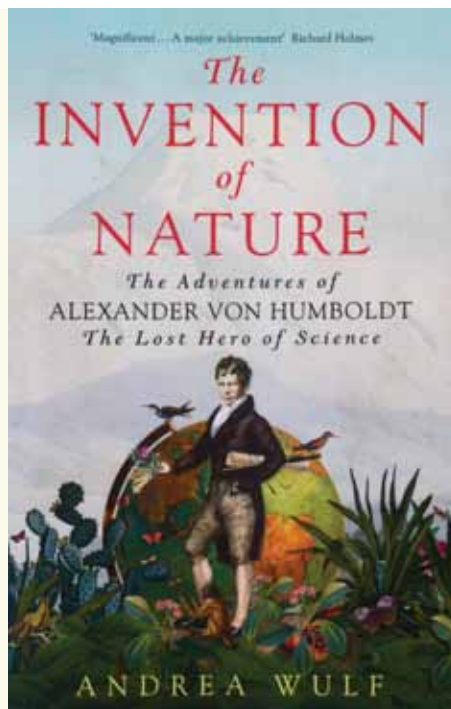
The adventures of Alexander von Humboldt, the Lost Hero of Science

By Andrea Wulf. John Murray, 2015. RRP \$35.00 (paperback).

In 1834 Alexander von Humboldt re-defined the word 'cosmos' (Greek for 'beauty' and 'order') to describe the inter-relatedness of all nature, from the stars to a lowly worm.

But that word has been unable to shake off its stellar scale. It was to be one of his disciples, Ernst Haeckel, who came up with the word we use today: 'ecology'.

In her wonderful biography, Andrea Wulf takes us through the fortunately long life



(1769-1859) of this Prussian aristocrat who changed our understanding of the earth and the life it supports.

Humboldt travelled adventurously and observed widely, measuring changes in air and ocean temperature, magnetism,

even the colour of the sky. He saw that volcanos were interconnected, recognised the similarity of plants at high altitudes in far distant mountain ranges, and established that our planet was far, far older than most people then believed.

He set the scene for Charles Darwin, advised Thomas Jefferson and inspired John Muir. He showed that nature's wellbeing was connected to trade and politics, and each was dependent on the other.

His observations of how land clearing could deplete soil and change weather, his respect for the land management practices of Indigenous people and his abhorrence of slavery encouraged Simon Bolivar to liberate South America from the Spanish.

Collaborative science was his key to understanding nature, but he also

Laughing Waters Road

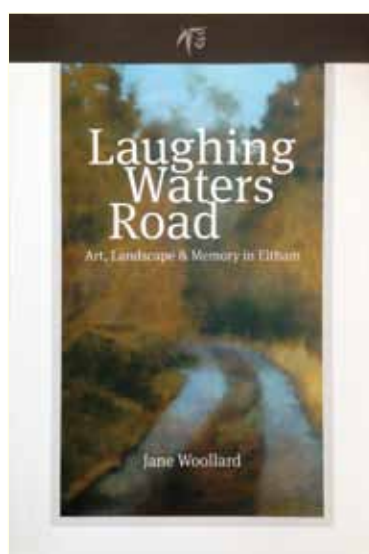
Art, Landscape & Memory in Eltham

By Jane Woollard. Designed by Rankin Design Group, published by Nillumbik Shire Council, 2016. Paperback, 264 pages. RRP \$35.00.

This delightfully named road runs through an environmentally, culturally and historically significant area of bushland, much of it managed by Parks Victoria.

Laughing Waters (Garrambi Baan to the Woi-wurrung) was an important fishing site for the Wurundjeri people. An ancient eel trap is still there, and a new ceremonial ground created by the Wurundjeri Council celebrates the revival of Wurundjeri cultural practice.

The area has inspired many artists and designers, in a natural extension of the dynamic art and lifestyle movement that began at Montsalvat in the 1930s.



Since 2001 more than 100 artists have participated in the Laughing Waters Artist in Residence Program hosted by Nillumbik Shire Council and Parks Victoria.

In *Laughing Waters Road*, Jane Woollard, who was managing the program in 2011, weaves the artists' experiences and works together with Wurundjeri, European and local family histories to create an evocative account.

A grant from the federal Department of Environment helped fund the creation of the book and accompanying exhibition, which were also supported by Nillumbik Shire Council.

The book is dedicated to ranger Cam Beardsell OAM of Parks Victoria, who taught Jane to be "passionate about the environment of this special place" (p. 260). Friends of Warrandyte State Park members Val Polley and Ken Crook contributed to the content and photos.

David Wandin, Wurundjeri Elder, officially launched the book on 30 January. Jane Woollard outlined how she came to write it and read out the last paragraph, which focuses on reconciliation and shared culture.

Jane declares in her preface that the book "has been formed by attending to the connection between rivulets of memories, creeks of hearsay, rivers of tales, the meanders of local legend and the deep, still pools of the archive."

Copies are available from Montsalvat Barn Gallery, 7 Hillcrest Ave, Eltham, or contact Nillumbik Shire Council: 9433 3359 or artsinfo@nillumbik.vic.gov.au. • PW

Review by Clare Leporati and Lynda Gilbert.

respected the ways in which poets and artists saw the land.

Humboldt's books were widely read and loved, and in 1869 the centenary of his birth was celebrated around the world. There were fireworks in Egypt, festivities in Moscow, and 15,000 people joined a mile long march in Syracuse. Speeches and dinners were held in his honour in Buenos Aires, Mexico City and Melbourne.

In an extraordinary exercise of global scholarship, Andrea Wulf has brought this largely forgotten hero back to life. Don't be put off by the 100-odd pages of references – this is an eye-opening account of the beginnings of western understanding of ecology, and a ripping yarn! • PW

Review by Phil Ingamells.

Australia Day awards 2016

The VNPA congratulates the following people who support the Association or are working (or have worked) in related areas.

Anne Kantor AO, Kew

For distinguished service to the community through philanthropic support for a range of environmental, social welfare, arts and educational organisations, and to psychotherapy.

Annette McGeachy OAM, Belmont

For service to conservation and the environment, particularly to botanic gardens.

Gib Wettenhall OAM, Mollonghip

For service to conservation and the environment.

(The late) Helen Margaret Curtis OAM, Wangaratta

For service to wetland conservation and urban landcare.

AO – Officer of the Order of Australia

OAM – Medal of the Order of Australia



Ecotours and walking in the High Country, East Gippsland and beyond

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nature and letting us share our love and
knowledge of the environment with you.

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For full details of the current program
visit the website or contact Jenny

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