

PARK WATCH



NATURE IN THE NEXT TERM
PROTECTING CENTRAL WEST FORESTS
GREAT OCEAN ROAD LAND GRAB
RIVERSIDE RESCUE
RESPECTING GRASSLANDS
LANGWARRIN FLORA AND FAUNA RESERVE
LAUNCH OF LITTLE DESERT PODCAST

DECEMBER 2018 NO 275



VICTORIAN
NATIONAL PARKS
ASSOCIATION
Be part of nature



Be part of nature

PRESIDENT Bruce McGregor
DIRECTOR Matt Ruchel

Level 3, 60 Leicester St, Carlton, VIC 3053
ABN 34 217 717 593
Telephone: (03) 9341 6500
E-mail: vnpa@vnpa.org.au
Web: www.vnpa.org.au

OUR VISION

The Victorian National Parks Association vision is to ensure Victoria is a place with a diverse and healthy natural environment that is protected, respected and enjoyed by all.

Everyone can help in the conservation of Victoria's wild and beautiful places. To find out how you can help, visit www.vnpa.org.au/support or call us on (03) 9341 6500.

EDITOR
Meg Sobey

PUBLISHING POLICY

All advertisements should be compatible with VNPA policies. Publication of an advertisement does not imply endorsement by the VNPA Inc. of the advertised product or service. The VNPA reserves the right to refuse any advertisement at any time.

Park Watch may be quoted without permission provided that acknowledgement is made. The opinions of contributors are not necessarily those of the VNPA Inc.

GUIDELINES FOR CONTRIBUTORS

You're always welcome to contact the editor to discuss ideas for articles. Phone the VNPA or email meg@vnpa.org.au

COPY DEADLINE for March 2019 *Park Watch* is 1 February 2019.

DESIGN Mary Ferlin **PRINTING** Adams Print

FRONT COVER

Wombat Forest supporters.
Photo by Sandy Scheltema.

Park Watch ISSN 1324-4361

Authorised by Matt Ruchel, Executive Director,
Victorian National Parks Association.
Level 3, 60 Leicester St, Carlton, VIC 3053.



CONTENTS

- 3 From the President
- 4-5 Updates
- 6-7 Nature in the next term
- 8-10 Let's protect it forever
- 11-12 A 'peak' of interest
- 13 Riverside rescue
- 14-15 Great Ocean Road national parks land grab
- 16-17 Evidence should rule
- 18-19 A change of course
- 20 -21 Respect, protect and reconnect Melbourne's grasslands
- 22 International award for Wilsons Promontory Marine National Park
- 23 Pleased as a platypus
- 24 -25 In Parks: Langwarrin Flora and Fauna Reserve
- 26-27 An ode to the green grocer cicada
- 28-29 Meeting Maisie
- 30-31 Special species: Port Jackson shark
- 32 NatureWatch stagwatching evenings
- 33 Wild Families: What's under the sea?
- 34-35 Wild Families: Discovering Port Phillip Bay



From the President

As this is my first column as President, let me introduce myself.

Growing up in western Victoria near the Grampians introduced me to nature. My father shared his love of birds, growing native plants, and the frogs and insects that inhabited our back yard. My appreciation of nature grew with participation in Scouts; and camping and bushwalking became the focus for my vacations from childhood. Completing an Agricultural Science degree involved studies of botany, entomology, geology, soils and land management.

Since meeting my wife Ann, my understanding of nature and planning has deepened substantially.

My engagement in environmental activities has been through community organisations. In particular with the restoration, catchment management and improvement of nature-based recreation opportunities along the Merri Creek in northern Melbourne. I know how essential Friends groups are to NGOs and government agencies.

I first became part of the VNPA with the *'Elp save the Alps* campaign in the 1970s and have been engaged ever since. More recently I have been involved as a member of the Conservation and Campaigns Committee, in policy work and on VNPA Council.

I'd like to take this opportunity to thank Euan Moore for his passion, insights and hard work as President over the past three years, and for staying on Council and continuing to contribute.

We have a great deal of expertise on Council and the Committees, and I thank all Councillors and Committee members for serving VNPA.

I was absent at the recent AGM when elected as President due to our eldest daughter's wedding in Texas three days earlier. Visiting her allowed us to appreciate many state and national parks in unfamiliar ecosystems. The national parks movement began in the USA and has much to teach us about the design, management and appreciation of parks. The involvement of presidents, including LBJ and his wife Lady Bird Johnson was particularly important. Their love of Texas and its wildflowers ensured that natural areas were protected for future generations.

How many of our prime ministers and premiers have left such a legacy?

As one of my first official duties as President, I accompanied our Executive Director Matt Ruchel to the recent National Parks Associations Council (NPAC) meeting in Brisbane. NPAC formulates approaches for nature protection in Australia and though it does critical work, is severely under-resourced. We visited an Indigenous Protected Area being restored by passionate Traditional Owners, and a regeneration site hosted by a Friends group. It's great to see nature returning to degraded farmland – and to hear the catbirds showing their approval!

By the time you read this edition of *Park Watch*, the Victorian election will have been decided. Council and staff gave a lot of thought to the nature conservation initiatives we want the new government to enact. Matt and staff worked extremely hard to make our voice heard. Simply put, the state of Victoria needs to invest substantially more funding – two to three times more – into nature conservation, park planning and management.

Of course, none of this work would have been possible without the support and generosity of Donors and Members – so I thank you all for investing in VNPA and the future of our natural environment.

For VNPA to continue this important work, we must keep getting the message out. Our ability to produce the excellent reports and analyses that underlie our credibility will be strengthened by expanding our supporter base, and I encourage you to share this edition of *Park Watch* with those friends and family who love nature.

You may also consider making a donation – there's a form on the back cover.

After a hard-working year, we all need a good break to relax and recharge. There are no better places to do this than our magnificent national parks, beaches, mountains, rivers and walking tracks. These places are our natural heritage, unique to Victoria. • PW

Bruce McGregor, VNPA President

“

... none of this work would have been possible without the support and generosity of Donors and Members.

”

Thank you Colette

Many of you will know Colette Findlay, one of our dedicated volunteers. Colette and her husband Graydon joined as members in 1982 and were both involved in the bushwalking group. In 1987 Colette started volunteering at the VNPA. Ever since, Colette has come into the office at least once a week to perform reception, administrative duties, supporting and coordinating volunteers, and welcoming new members. Colette's skills and commitment were quickly recognised, and it wasn't long before Colette was invited to join the Council. Colette served on Council from 1988–1996 and also performed the role of Secretary from 1991–1996. Colette's valuable contribution was recognised with an Honorary Life Membership.

After being so generous with her time and skills for so many years, Colette has recently decided to finish her regular volunteer role to spend more time with her family. However she plans to join the *Park Watch* mailout team on future occasions.

We would like to acknowledge and thank Colette for performing her volunteer role with such incredible diligence and for being so kind and friendly to all staff, members, councillors, volunteers and supporters. Congratulations on your 36 years of service (so far!) protecting nature and national parks. • PW

Launch of our Little Desert Podcast!



Do you know about the significant role the beloved Little Desert National Park played in Victoria's environmental history?

Listen to our new four-part podcast series to hear how the campaign to protect the Little Desert and its diverse and beautiful flora and fauna from land clearing contributed dramatically to the changing of the political landscape in Victoria, by putting nature conservation and community consultation on the political agenda.

Listen on our website: www.vnpa.org.au/little-desert-podcast

Also available on Spotify or iTunes.

The podcast was produced by VNPA with support from Parks Victoria.

You can also look back on our previous article on the history and timeline on the Little Desert dispute in the March 2018 edition of *Park Watch*. • PW



PHOTO: PATRICK KAVANAGH, FLICKR CC

Members elect council at AGM

Thank you to all our Members who came along to the VNPA's Annual General Meeting on 9 October. Attendees heard from guest speaker Graham Atkinson, Chairperson of the Dhelkunya Dja Land Management Board who spoke about the recently adopted *Joint Management Plan for the Dja Dja Wurrung Parks*.

VNPA Members elected a new Council, and we welcome Bruce McGregor (President), Gerard McPhee (Vice-President), Michael Forster (Secretary), Gary Allan (Treasurer), Lara Bickford, Ann Birrell, Jan Hendrik Brueggemeier, Michael Feller, Deb Henry, Dianne Marshall, Euan Moore and new Council member Paul Strickland.

Special thanks to Euan Moore for his three years of outstanding service as Council President. It is wonderful that he is able to continue as a Council member.

Thanks also to James Thyer and Russell Costello who have retired from Council. James served on Council since 2014 and we thank him for his valuable contribution. Russell served on Council since 2010, during that time he performed the role of Vice-President and was also President from 2012–2014. Russell's enthusiasm and dedication is very much appreciated, and he will continue to play an important role as a member of the Conservation and Campaigns Committee.

To find out more about our dedicated volunteer Council visit: www.vnpa.org.au/about/council • PW

Thank you and Season's Greetings!

Sincerest thanks from all of us at the
Victorian National Parks Association
for your support, encouragement and generosity.

Whether you're a Donor, a Member, or a volunteer;
if you letter-boxed flyers, emailed your MP or
joined us at an event – we thank each and every one
of you for being part of the VNPA community.



HIBBERTIA SERICEA, MOUNT ARAPILES, VICTORIA. PHOTO: ED DUNENS, FLICKR CC

Welcome!

This year
we welcomed
almost 200 new Members
to the Victorian National
Parks Association
community!

This is a great boost to
our membership cohort,
and we'd like to thank
these new Members
for joining us in
standing up for
our natural
environment.



New to the VNPA community or want to learn more about our work?

Join us for a stroll to learn about the VNPA's work
protecting nature, taking adventures,
and our education programs.

Meet Council Members, volunteers and staff,
and enjoy a picnic dinner beside the Yarra River.

Thursday, 7 March 2019

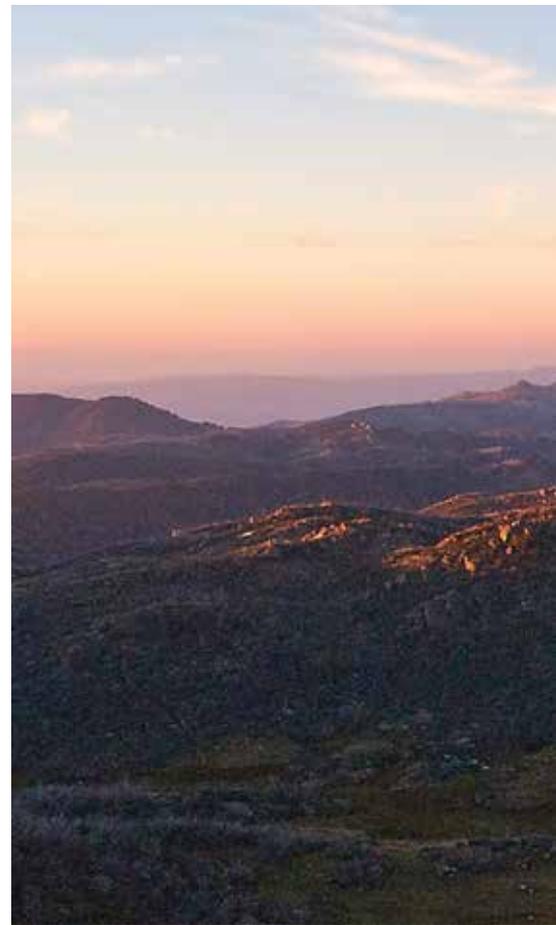
from 6:00–8:00pm

Yarra Bend Park, Loop Picnic area,
southern end of Yarra Bend Road.

RSVP is essential. Please RSVP to Amelia via
amelia@vnpa.org.au or on 9341 6500.

Nature IN THE next term

VNPA EXECUTIVE DIRECTOR **MATT RUCHEL**
REVIEWS ENVIRONMENTAL POLICY
IN THE STATE ELECTION.



Congratulations to the re-elected Andrews Government, with their massively improved majority in the lower house. While Labor made significant announcements on climate and renewable energy in the lead up to the state election, nature conservation commitments were few and narrowly focused.

The Greens released the most well-rounded package of policies, including on increasing parks funding; protecting nature; creating the Great Forest National Park; invasive species control; and river, marine and coastal protection, including creating new marine national parks.

Unfortunately, Labor chose to attack, quite successfully, the Greens party rather than competing on policy.

The Coalition released nothing resembling a comprehensive environmental policy, even though the opposition leader promised publicly to release a “comprehensive environmental statement before the election” (which would be the first in over a decade). There were a few small announcements, but nothing major materialised. Instead the

Coalition rejected creating the Great Forest National Park, and, according to *The Age*, made commitments to wind back protection for the Leadbeater’s possum.

There was a major effort by conservation groups, including VNPA, to highlight the impacts of native forest logging with an intensive letter-boxing effort in sandbelt and key inner-city marginal seats.

Just days before voters headed to the polls, an *ABC* investigation found that thousands of hectares of state forest appear to have been illegally logged or earmarked for logging – amounting to what some say is the mass “theft” by the state government-owned, for-profit logging company VicForests.

Latest statewide polling, commissioned by VNPA, shows that support for establishing new national parks is higher than ever. The majority of Victorians support parks and nature protection, with more than 70 per cent of people supporting both the comprehensive parks network, new national parks across the state, improved funding for parks, and threatened species management.

Over 80 per cent of people supported new marine national parks, yet Victoria hasn’t had a new marine park since 2002.

Over 45 per cent of Victorians agreed that they were more likely to vote for a political party which has a comprehensive nature conservation and national park policy.

At the time of writing, the upper house results were still unclear, but there is unlikely to be a clear majority for Labor, with possibly only one Greens MP, and a raft of micro parties holding sway.

Andrews Government commitments on nature

There was no comprehensive nature policy released by Labor, though there were some targeted announcements on camping infrastructure and regional metropolitan parks.

Many of the issues picked up in its 2014 policy – including riparian programs, threatened species reform, better biodiversity management – were neglected this time around. The big issues of forest protection and the



PHOTO: STEVE LACY, FLICKR CC

creation of the Great Forest National Park were also ignored.

Perhaps a strengthened Labor government will reverse the trend from its first term, improve its record on parks creation, and fill some of the gaps in the reserve system. New parks in central west Victoria would be a good place to start (see pages 8-12).

VNPA welcomed the Labor announcement to establish 6,500 hectares of new suburban parks, including the proposed 2,778-hectare park in the Upper Merri Creek, near Craigieburn, and the 1,000-hectare Jackson Creek Park near Sunbury, as well as additions to the urban park network along Kororoit Creek and Werribee River. While the announcement was light on detail and specific locations, many of the areas have significant ecological features, including critically endangered grasslands and woodlands, which should, where feasible, be included in the parks network.

VNPA also welcomed Labor's commitment to a significant

boost in investment to rebuild campgrounds in our parks system, funding for conservation volunteers, a new coastal park, and reduction of camping fees.

Some of the key features of package include:

- Invest \$105.6 million on campgrounds (30 existing campgrounds will be upgraded and 30 will be built from scratch) plus new walking tracks, canoeing facilities etc;
- Removing camping fees at 500 basic sites over 70 campgrounds in 19 parks across regional Victoria;
- \$4.3 million for building and upgrading paths in parks across the state;
- Halving all remaining camping fees in state and national parks;
- A new coastal park on the Bass Coast, linking existing parks and reserves dotted along the popular 40 kilometres of coastline from San Remo to Inverloch, including a \$10 million land purchase and \$9.6 million to build new campgrounds;

- \$4.5 million will go towards expanding conservation and volunteering programs.
- \$10.5 million to improve 4x4 drive tracks and rejuvenate Victoria's seven iconic 4x4 drive adventures.

While the investment package for facilities is welcome, still of concern is the lack of funding that park managers desperately need for core frontline capacity to deal with the many pressures placed on parks, particularly pest plants and animals.

There are still significant gaps in our reserve system, and we need commitments for new parks to protect our forests, woodlands, grasslands and marine areas in many parts of the state.

Alarmingly, both Labor and the Coalition supported the take-over of parks along the Great Ocean Road by a new tourism-focused body, which is in our view a significant and alarming step backward. Read more on pages 14-15. • PW



Let's protect it forever

WE ARE ONE STEP CLOSER TO PROTECTING VICTORIA'S CENTRAL WESTERN FORESTS, SAYS OUR NATURE CONSERVATION CAMPAIGNER **SHANNON HURLEY**.

VNPA has advocated for the protection of Victoria's forests in the central west of the state for almost a decade, starting with the release of our report *Better Protection for Special Places* in 2010.

Now a critical moment for protection is right in front of us, with the Victorian Environmental Assessment Council (VEAC) recommending a series of new parks to protect these significant forests.

These central west forests have incredible natural value. This includes

375 threatened species, such as the powerful owl and the sugar glider, and eleven significant headwaters of important rivers including the Moorabool, Werribee, Lerderdarg and Maribyrnong.

VNPA and local community groups believe that many of these special places are worthy of better protection under the *National Parks Act 1975*. If implemented, VEAC's draft recommendations would fill many significant gaps in Victoria's conservation estate and help us meet global biodiversity targets.

However, as always when new parks are proposed, there are those who voice their opposition. That's why it is so critical we all voice our support of parks to counter this together.

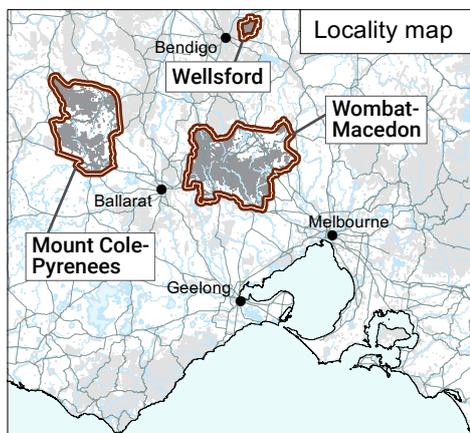
Countering misconceptions

Some people believe that parks are 'locked up' and the public is 'locked out', but in fact the opposite is the case.

To correct any misunderstanding, we have created *Exploring Victoria's Parks*, a guide to what you can and can't do in national parks: www.vnpa.org.au/wp-content/uploads/2016/05/Exploring-Victorias-National-Parks.pdf



IMAGE: SANDY SCHELTEMA



In most cases, national parks, state parks, regional parks, and conservation reserves are open 24/7, every day of the year, to the public. These types of protected areas allow

and accommodate almost all recreational uses – bushwalking, camping (including dispersed camping), mountain biking, and 4x4 driving. The rules for 4x4 driving are exactly the same as in state forests and any other public land – licenced vehicles are allowed on declared roads.

Some activities that are not permitted in the national and state parks can still be enjoyed in adjacent regional parks, including domestic firewood collection, dog walking and horse riding. Horse riding is allowed in some national parks, determined after public input in to the management planning process which happens once the park has been established.

The case for protection

Opposition to protecting Wombat Forest originated when the Bracks state government first committed to a VEAC investigation into the area in the late 1990s. VEAC's investigation, delayed until now, suffered stiff opposition. For 20 years there have been arguments that the forest should not be protected in a national park, to allow for a forestry management technique called 'thinning'. Allegedly for ecological restoration purposes, this often just defaults back into logging operations. Twenty years later, no coherent ecological restoration plan has been initiated for Wombat Forest.

We all agree parks need good management, and a dedicated conservation agency needs funding for a proper scientifically-informed management and restoration plan – not more forestry.

It's important to point out that while parks do need money to manage, they also generate many economic benefits. National park status can bring immense benefits to the state economy, increasing local tourism and jobs. According to the last Parks Victoria Annual Report, parks contribute directly over \$2 billion annually to the Victorian economy through tourism alone and create 20,000 jobs, many in regional areas.

Forestry on the other hand mostly costs taxpayers. The Victorian Government is actually paying for logging operations to continue in the western forests through a grant of \$678,000 per annum to its state funded logging agency VicForests.

Under the current lack of protection, industrial scale logging will return to many of these central west forests. There are approximately 50 planned logging coupes in the Wombat Forest alone. They are only on hold due to the Andrews Government pausing them while the VEAC inquiry is being held.

We need more parks

Victoria will need more parks now and into the future to meet demand from our growing population. Parks benefit people and nature by providing permanent protection for environments under threat from ever increasing urban expansion, and spaces for people to enjoy the great outdoors.

This is our chance to push Victoria towards being a leader once again in nature protection and parks creation, not a laggard.

We must ensure the Victorian Government implements VEAC's recommendations.

Thank you to our wonderful supporters who put in submissions before the due date of 10 December. Your voice has been critical to protect these special forests.

We now await the final VEAC recommendations which will be presented to the Victorian Government in March 2019. If the final recommendations are anything like those in the draft, we hope the state government accepts and implements these new parks.

We will certainly be continuing to work, with your support, to ensure this happens, to give our central western forests the protection they deserve.

Continued overleaf

Recap on proposed protections area by area

Wellsford Forest

Where: Just 15 kilometres north-east of the historic goldfields town of Bendigo.

VEAC draft recommendation: Wellsford Forest to include an addition of 3,950 hectares to the Bendigo Regional Parks, and the creation of a 3,160-hectare Wellsford Nature Reserve, covering almost half of the Wellsford Forest.

Biggest threat: Logging operations, with seven areas scheduled (including one with rare swift parrot records), and domestic firewood collection.

Why protect the Wellsford Forest?

- The Wellsford Forest provides habitat for key threatened species including the brush-tailed phascogale, pink-tailed worm-lizard, lace monitor, Ausfeld's and whirrakee wattles; and a range of woodland birds such as the swift parrot, brown treecreeper, hooded robin, speckled warbler and crested bellbird;
- Dominated by eucalypts, wattles and wildflowers, it is a place to explore and enjoy Victoria's box-ironbark forests as they recover from a long history of logging;
- The proposed nature reserve is important for protecting the last few remaining large trees in this block.

Wombat Forest

Where: Located between Daylesford, Woodend and Ballan.

VEAC draft recommendation: Wombat Forest to have significant additions, with an increase in size of 28,692 hectares making a new Wombat-Lerderderg National Park. Also a new regional park located in two parts, totalling 9,149 hectares. There is also a new Cobaw Conservation Park (2,453 hectares); Hepburn Conservation Park (2,714 hectares), and Long Forest Nature Reserve.

Biggest threat: Logging operations, with 50 areas scheduled, which will go ahead if not protected in a national park, and potential for commercial mining.

Why protect the Wombat Forest?

- The Wombat-Lerderderg National Park and new regional park if implemented would protect seven rivers – Loddon, Coliban and Campaspe, Moorabool, Werribee, Lerderderg and Maribyrnong;
- Its forests provide habitat for a diversity of flora and fauna, with 99 rare or threatened species recorded here, and a further eight species that form part of the threatened woodland bird community;
- There are many recent records of the threatened brush-tailed phascogale in the heathy dry forest north-west of Daylesford;
- There are good numbers of the greater glider recorded in the wetter forests of the central Wombat Ranges – the only population of this threatened species west of the Hume Highway. This species requires very extensive areas of forest to provide an adequate food source.

Pyrenees Forest

Where: 180 kilometres from Melbourne and 70 kilometres north-west of Ballarat in the popular wine region.

VEAC draft recommendation: Pyrenees Forest be upgraded to a new Pyrenees National Park of 16,076 hectares, and a new regional park of 4,160 hectares.

Biggest threat: Logging operations, with 18 areas scheduled (including one which includes powerful owl records).

Why protect the Pyrenees Forest?

- The Pyrenees gum is only known to be distributed in the eastern side of the Pyrenees Forest;
- Box-ironbark forest on the northern side of the Pyrenees Ranges provides habitat for species in the threatened Victorian temperate woodland birds community – including the painted honeyeater, black-chinned honeyeater, diamond firetail and brown treecreeper;
- The endangered swift parrot relies heavily on flowering box-ironbark forests in autumn and winter, and has been recorded at the Landsborough end of the park.

Mount Cole Forest

(see next page)

A 'peak' of interest

WINDING THROUGH TEMPERATE FORESTED PEAKS AND GULLIES IN VICTORIA'S CENTRAL WEST IS ONE OF OUR STATE'S MOST-LOVED AND ACCESSIBLE BUSHWALKS, THE BEERIPMO WALK.

Walkers there enjoy sharing the trail with more than 130 species of birdlife and the possibility of spotting the Mount Cole grevillea, which is only found in this area.

What they do not expect to encounter is bare, recently logged forests.

Despite the public appreciation and its high conservation values, Mount Cole Forest has 47 coupes scheduled for intensive logging. Seventeen of these, covering 330 hectares, are flagged as 'even-aged management' – in other words, clearfell industrial logging. Some have already fallen to this fate.

Mount Cole Forest may be relatively small in size (in total around 12,000 hectares – currently 2,498 hectares in Mount Buangor State Park and 8,909 hectares in Mount Cole State Forest) compared to those in the east. But Mount Cole has significance of its own kind.

Identified as having high conservation values under the VNPA's *Small Parks Project* in 2010, Mount Cole has in its rich forests the most western extent of mountain brushtail possum, and many threatened species, including the nationally endangered regent honey-eater, the endangered growling grass frog, and the aforementioned likely-endangered Mount Cole grevillea.

VEAC's investigation into the central west forests states: "Some areas that the analyses identified as high-ranking areas of rare and threatened species habitat are recommended to remain state forest. These areas include parts of the Mount Cole, Musical Gully-Camp Hill and Trawalla-Andrews state forests. These areas are relatively



PHOTO: VNPA

small and dispersed and would be difficult to capture in protected areas without either adding the entire area to protected areas or establishing a network of smaller protected areas throughout the broader area."

VNPA disagrees with the recommendation for Mount Cole to remain in state forest, where 70 per cent would remain open to intensive logging.

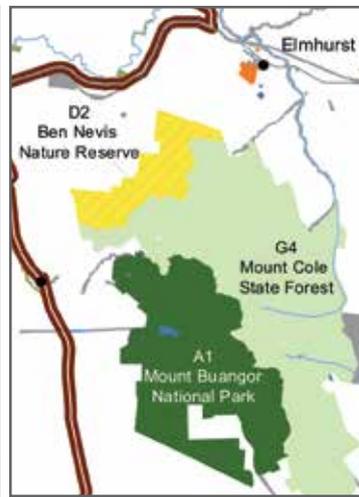
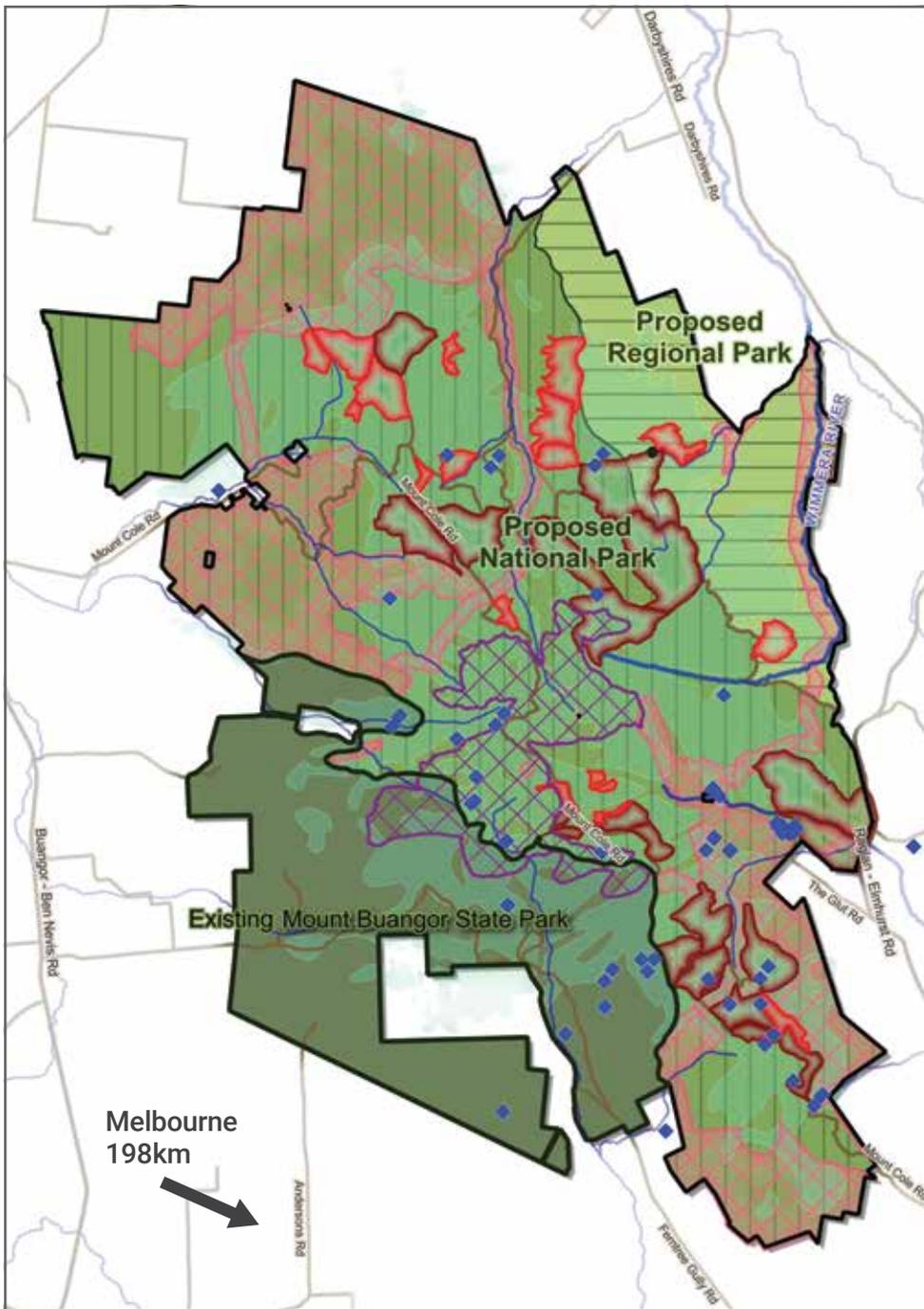
We believe there are additional significant natural values that need to be considered in the VEAC investigation process. When looking on a finer scale, we have found a picture emerges that warrants better protection in an expanded national and regional park. VNPA has captured this in an 'alternative reserve design' using the following unique or important ecological features of Mount Cole as criteria:

- **Montane Plateau vegetation type** – Isolated montane patches, specifically snow gums on Mount Cole, are rare in the west of the state, and will be critical in acting as an important climate change refuge to the eastern for moving species. They are a significant biogeographic connection to the eastern Alps, and one of the few suitable sites for translocation of *Ballantinia* – a threatened plant species.
- **Herb-rich Foothill Forest vegetation type** – VEAC has identified a 12,021 hectare shortfall in formal protection for this forest type in the Central Victorian Uplands Bioregion. Yet there are large areas left unprotected. They sit outside of the

proposed draft recommendations for a small extension of national park and new nature reserve. VNPA's alternative reserve design would pick up an additional 4,182 hectares in national park and 561 hectares in regional park, to reduce the Herb-rich Foothill Forest shortfall by more than a third.

- **Headwaters of the Wimmera River** – Headwaters for rivers in other parts of the investigation area, such as the Moorabool and the Maribyrnong, have been recommended to gain protection in new parks, yet sadly the Wimmera headwaters have missed out. There is concern down river about the health of platypus populations, and protecting these significant headwaters could help improve stream conditions throughout the river. If not included in parks, the Wimmera and some of the other tributaries should be considered for listing under the *Heritage Rivers Act 1992* (similarly to other areas farther downstream).
- **Recreational assets** – Sections of the much-loved Beeripmo Walk and camping areas are adjacent to logging sites. Protecting against logging will retain the future integrity of the walk's high tourism value.
- **Special Protection Zones (SPZ)** – The map overleaf shows a series of SPZs throughout Mount Cole, which are excluded from logging activities to protect significant powerful owl habitat and scenic features. These areas, which cover a significant area of Mount Cole, would benefit from inclusion into parks to protect the powerful owl, and for ease of management.

Continued overleaf



Map (far left): VNPA's alternative reserve design for part national, part regional park for Mount Cole Forest.
 Map (inset): VEAC's recommendations for Mount Buangor State Park to be expanded into a national park, and a new nature reserve.



Continued from previous page

Also worth recognising are important ecological communities and ecosystems that have been identified in the area, including:

- Small areas of grassy woodland dominated by yellow box, including the critically endangered 'White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland' community listed under the *Environment Protection and Biodiversity Conservation Act 1999*;
- 'Groundwater Dependent' or 'Spring Soak Wetland/Woodland' ecosystems very closely aligned to communities recently recognised under the *Flora and Fauna Guarantee Act 1988*. A detailed survey should be undertaken.

VNPA's alternative reserve design aims to protect these natural values in a national park, whilst still allowing for recreational uses in an adjacent regional park. In our draft design, one single connected protected area would allow for much simpler management. While our preference is for the entirety of Mount Cole to be protected in a national park under the *National Parks Act 1975*, this revised reserve design is the next best option to accommodate broader recreational uses.

Not only will this alternative reserve design protect Mount Cole's significant natural values from the threats it faces, it would push Victoria closer to achieving international biodiversity benchmarks across the state.

Looking ahead, better protection for Mount Cole becomes even more critical. It has among the highest condition native vegetation in the area and rises almost 1,000 meters from a relatively flat plain. This will make it an important climate change refuge for species movement and survival.

Now, with the public submission period closed, we await to see the final recommendations for Mount Cole. We hope better protection for this special forest is considered in VEAC's final recommendations to the Victorian Government.

More information on Mount Cole here: www.vnpa.org.au/logging-to-impact-one-of-victorias-most-popular-bush-walks-at-mount-cole • PW



PHOTO: JOHN PEARSON

Riverside Rescue

RIPARIAN ACTION PROGRESS
NEEDS TO CONTINUE ACCORDING
TO MATT RUCHEL.

Riparian land – land which runs along river, creek, wetlands and estuaries – is critical for healthy waterways. Healthy riparian land is important for habitat for native animals, providing a connection between areas of remnant vegetation, and as a filter for nutrients and sediments from catchment run-off.

Of the estimated 170,000 kilometres of river frontage in Victoria, about 30,000 kilometres are Crown land (about 100,000 hectares). The remaining riparian land is a mix of privately owned and other types of public land (e.g. in national parks). At present, about 17,000 kilometres are managed by the adjacent landholders, under about 10,000 agricultural licences.

A key state government program over the last four years has been the the Regional Riparian Action Plan. It has been successful in working with landholders to manage these areas and has been delivering tangible improvement to public and privately-owned riversides.

One of our calls on all political parties in the lead up to the state election was to continue to fund and implement the plan. A program that is good for both the environment and good for regional jobs needs to continue into the next term of government.

The Andrews Government allocated \$10 million in 2015/16 and a further \$30 million from 2016/17 to 2019/20 to implement the plan. This funding

is for on-ground riparian works such as stock management fencing, revegetation, weed management and provision of infrastructure to support off-stream stock watering. See: www.water.vic.gov.au/waterways-and-catchments/regional-riparian-action-plan

Nine regional Victorian Catchment Management Authorities (CMAs) worked with just over 1,000 landholders and farmers and about 200 Traditional Owners, Landcare, angling, school and other community groups.

After the first three years of the action plan's implementation – 2015 to 2018 – the key outcomes achieved include the protection and improvement of:

- nearly 2,300 kilometres of riparian land (92 per cent of the five-year action plan target) – that's almost the distance from Melbourne to Cairns, and;
- 33,000 hectares of riparian land (117 per cent of the five-year target) – that's more than three times the size of Phillip Island.

The state government's main environmental research agency Arthur Rylah Institute for Environmental Research has started a long term Riparian Intervention Monitoring Program (RIMP). The initial results from a fairly small number of sites are promising. They show that where works were undertaken the following significant changes in vegetation condition attributes were found:

- total native vegetation cover increased ~2-fold;
- native species richness increased ~1.5-fold;
- planted and natural woody recruits increased ~9-fold;
- woody weed abundance decreased to almost zero at most sites;
- bare ground cover did not increase as found in unmanaged sites.

See: www.ari.vic.gov.au/research/rivers-and-estuaries/riparian-intervention-monitoring-program

Some important progress has been made in the last three years, with around 15 per cent leased Crown land frontages being targeted for works. But there is still more work to be done. At the current rate of implementation and funding it will still take a further 20 years to complete works for eligible land. But these type of programs require steady implementation. We have suggested ongoing funding of at least \$15 million per year for the next four years, plus new work looking at systematically reviewing and identifying freshwater areas (refugia) likely to facilitate survival of organisms under threat from climate change.

While no election commitment was forthcoming, let's hope the success of the program gets the support it needs in the next state budget.

More information on riparian land www.vnpa.org.au/riverside-riparian-land • PW

Great Ocean Road national parks land grab

A RECENTLY ANNOUNCED PROPOSAL FOR A NEW GREAT OCEAN ROAD AUTHORITY WILL WEAKEN NATIONAL PARK PROTECTION SAYS MATT RUCHEL AND PARK PROTECTION CAMPAIGNER PHIL INGAMELLS.

As first raised in our September 2018 *Park Watch* article 'Great Ocean Road threatened?', VNPA continues to be alarmed at proposals to change the purpose of national parks along the Great Ocean Road.

Recent announcements of plans to hand over some of our most iconic national parks to a new tourism-focused management authority is an alarming backwards step in nature conservation.

The proposal could see significant changes in the management of national parks such as Port Campbell National Park and Twelve Apostles Marine National Park. Under new legislation, planning and decision-making responsibility in the parks would be given to a new 'Great Ocean Road Coast and Parks Authority.'

According to the *Great Ocean Road Action Plan*, released on 12 October and adopted by the Andrews

Government, the intention is to create: "A new, dedicated, marine and coastal parks authority with the primary purpose of managing and protecting the land and seascapes of the Great Ocean Road, to manage visitation and to coordinate delivery of associated government investment projects."

The plan states that: "This will not alter the underlying management tenure and conservation objectives of any national parks areas for which the new authority assumes responsibility".

This might seem innocuous, but it doesn't make much sense – it is either a completely unnecessary duplication of responsibility, or the intention is to manage the areas under revised objectives, such as to facilitate tourist infrastructure.

The plan also states: "The new authority will work closely with Parks Victoria who retain responsibility

for broad-acre parks management – including for most of the Great Otway National Park – and who will provide parks management services to the new authority for its field operations to ensure environmental conservation objectives are met".

This plan proposes to change the management prescriptions for Parks Victoria's parks, then sub-contract Parks Victoria back to manage them. It's a bit like selling your home from under you, then leasing it back to you to make a set of renovations.

This is a national parks land grab. It seeks to fundamentally change time-honoured protections under the *National Parks Act 1975*, and effectively fragments Victoria's national park estate.

Parks and reserves likely to be impacted include at least 15,000 hectares of national parks, coastal parks, marine national parks and sanctuaries along the Great Ocean Road, including:



PHOTO: CLAUDIO ACCHERI, FLICKR CC

improve land use planning. But if there is no intention to change the high level of protection offered to national parks, then there is no need to transfer management control of parks to a new Act.

Of the almost \$1 billion in economic benefit already generated in the region, much can be attributed to the natural beauty and integrity of the landscape and the ecology of the region, of which the vast majority is managed by Parks Victoria. It currently receives only basic funding from the state to maintain, manage and enhance these natural drawcards. That should change, but creating a new and unnecessary layer of management control is not the answer, particularly not one with competing objectives.

The National Parks Act has served us well for generations and protected tourism icons such as the Twelve Apostles and Great Otway National Park. Introducing new overriding legislation will inevitably strip protections and weaken the integrity of our parks estate.

It's a window-dressed land grab by tourism bodies, and it sets a terrible precedent for environmental management across the state.

VNPA is also deeply disturbed by the community consultation carried out by the Victorian Government's Great Ocean Road Taskforce. A key document titled the 'Governance of the Great Ocean Road Region Issues Paper', which discussed the proposed governance arrangements, reports to have consulted with VNPA and other community and conservation groups. On closer investigation, we were not consulted on these substantive issues – rather a brief conversation was held with a state government consultant about a single visitor centre. We have since requested that VNPA's name be removed from the document, which the environment department has agreed to.

We are calling on the state government to rule out any changes to the core purpose of national parks, including any changes to the control, legislation, tenure and/or management of national parks or other conservation reserves along the Great Ocean Road, or anywhere else in the state. Any proposed aims can be achieved without these changes.

We must protect our irreplaceable natural heritage for generations to come. • PW

- Port Campbell National Park (1,830 hectares)
- Point Addis Marine National Park (4,600 hectares)
- Twelve Apostles Marine National Park (7,500 hectares)
- Arches Marine Sanctuary (45 hectares)
- Bay of Islands Coastal Park (950 hectares)
- Unspecified parts of Great Otway National Park, but including the Otway Lighthouse and camping areas.

In all, there is around 110,000 hectares of public land within five kilometres of the coast (land and sea) between Geelong and Warrnambool. The bulk of this, about 87 per cent, is managed by Parks Victoria, of which just under 80 per cent is protected under the National Parks Act (75,000 hectares of terrestrial parks and

12,000 hectares of marine national parks and sanctuaries. The rest consists of range of smaller coastal reserves, bushland and nature conservation reserves protected under the *Crown Land (Conservation) Act 1978*.

The other public land managers include the Department of Environment, Land, Water and Planning (DELWP), who control 9,771 hectares, much of it Otway Forest Park, but also a range of coastal reserves such as Bells Beach Coastal Reserve and various river frontages.

A large number of smaller areas (over 70) ranging from coastal reserves to tennis clubs are managed by Committees of Management, either community-based, local council or sometimes other government departments, covering about 4,000 hectares widely dispersed over the area.

The plan purports to aim to improve coordination for the great range of crown land managers in the region and



PHOTO: ROB BLAKERS

Silver snow daisies 40 years after cattle were removed from Kosciuszko National Park, and shortly before feral horses took over.

Evidence should rule

THE NSW NATIONAL PARKS AND WILDLIFE SERVICE BANNED ITS ECOLOGISTS FROM ATTENDING A NOVEMBER CONFERENCE ON THE IMPACTS OF KOSCIUSZKO'S FERAL HORSES. THAT DIDN'T COMPROMISE THE GROUNDBREAKING EVENT, REPORTS **PHIL INGAMELLS**.

Pity the frail hatchlings of the stocky galaxias. The last refuge on earth for this critically endangered native fish is just three kilometres of a small mountain stream, above a trickling waterfall in the headwaters of Tantangara Creek in Kosciuszko National Park.

Many native fish lay their eggs in clear spaces between the stones in a healthy creek's rocky bottom, sometimes fanning the eggs to remove any silt and increase available oxygen. But galaxias species are inattentive parents, and a long incubation period leaves the eggs particularly vulnerable.

Feral horses are now abundant in the Tantangara Creek catchment, with many well-entrenched horse crossings in the critical three-kilometre stretch of this stream. The bank structure is damaged, and

fine gravels and silt have filled the gaps in the cobbles and boulders of the stream substrate, especially downstream of each crossing.

It's not just the eggs that suffer, as the adult fish also shelter in gaps between the rocks. Their habitat is now seriously degraded by horses.

This tale of the stocky galaxias emerged from work by a University of Canberra team. It featured in one of 20 remarkable presentations at a recent gathering of alpine scientists brought together by the Australian Academy of Science with Deakin University and the Australian National University (ANU).

The conference was triggered by the NSW government's extraordinary decision to give Kosciuszko's feral horse population heritage protection under state legislation, ignoring decades of scientific evidence.

The ten-hour event showcased the remarkable assemblage of evidence pointing to the damage inflicted by horses in the Australian Alps National Parks – a grouping of all mainland Australia's alpine parks, including Kosciuszko and our Alpine National Park.

While much of the research was done and dusted decades ago, and it has long been established that all hard-hooved invaders – deer, goats, pigs, cattle and horses – have damaged the high country, many presentations opened new insights.

Drones are now employed by the University of NSW to produce high resolution 3D digital models to accurately monitor streambank erosion by horses along the Ingeegoodbee River in the Pilot Wilderness area of Kosciuszko. So far this research has shown that



Above: Critically endangered stocky galaxias.

Left: Tantangara Creek, siltation downstream of horse crossing

PHOTO: MARK LINTERMANS

PHOTO: HUGH ALLAN

streambank erosion by horses can release as much as 3.5 tonnes of sediment annually from just a 50 metre stretch of that river.

This gave added credence to a presentation from both ANU and Charles Sturt University. The Australian Alps produce about 29 per cent of the total water yield of the Murray-Darling Basin's one million square kilometres, even though the alpine region occupies just 1 per cent of the basin area. Feral horse trampling and selective grazing exposes alpine soils to frost heave and erosion, and opens channels through moss beds and peat bogs, drying them and leaving them vulnerable to fire and further erosion.

This in turn reduces the water-holding capacity of the high plains, producing heavier, pulsed run-offs.

In the 1960s cattle were removed from Kosciuszko so the Snowy Hydro Scheme's infrastructure would not face siltation problems. The rapidly growing horse population is now a re-introduced threat to that original infrastructure and, of course, to the planned Snowy Hydro 2 development.

Two presentations on the spectacular, and also critically endangered, northern corroboree frog drew a clear line between hope and despair.

This remarkable animal has been seriously affected by that curse of many frogs – chytrid fungus – but a couple of highly successful off-site breeding programs are now working well. And a long-standing feral horse culling program in the ACT's Namadgi National park has allowed the regeneration of mossbeds and their elevated pools, the essential habitat for the frog and an ideal place for their re-introduction.

Over the border in NSW, however, horses have significantly trashed the adjacent peat beds, compromising the re-establishment of frog populations there. Frustratingly, the horse protection regime in NSW is causing headaches for the ACT park agency, as they allocate more and more resources to control cross-border invaders.

Importantly, not all horse impacts were logged in the high elevation areas. A group of ANU researchers looked at impacts in the white cypress pine/white box dry woodlands along

the Snowy River around the border between NSW and Victoria. They demonstrated rapidly growing damage from horses and deer – but mainly, so far, from horses.

Other research pointed out that similar horse impacts were recognised globally. Many other papers were also presented, but two came from interesting social perspectives.

Alpine geographer Deidre Slattery pointed out that it's only in recent years that any sizeable support for the 'brumby heritage' idea has surfaced. Indeed throughout the 19th century, high country horses were a pest to be eliminated, largely because they were a threat to cattle and sheep grazing.

And well-seasoned alpine ecologist Dick Williams said that in the tradition of Alec Costin, pretty much the undisputed father of alpine ecology, scientists should hold governments and agencies to account when they act contrary to clear evidence. Science "can, and should, be activist".

This event held to that great tradition. The *Kosciuszko Science Accord* was enthusiastically endorsed by the conference. Google it. • PW

A change of course

MATT RUCHEL AND SHANNON HURLEY TRACK THE TWISTS AND TURNS IN THE BATTLE FOR BELFAST COASTAL RESERVE.

Commercial racehorse training has been found illegal under the Warrnambool planning scheme – and therefore on Levys Beach, one of the horse racing industry’s main training locations in the Belfast Coastal Reserve.

But it is no straight forward matter.

A brief recap

VNPA, along with local groups, have been fighting commercial racehorse training at the Belfast Coastal Reserve between Warrnambool and Port Fairy since 2015.

Commercial racehorse trainers essentially invaded the reserve after the successful 2015 Melbourne Cup winner credited training racehorses on these beaches as being part of that success. Up to 260 racehorses per day were training in the reserve.

VNPA has long argued that this was inconsistent with the purpose of the reserve to protect the natural, cultural and recreational values of this significant coastal area. It also threatens fragile vegetation and vulnerable wildlife such as the nationally threatened hooded plover, a tiny shorebird known fondly as ‘hoodies’ that breed and nest on these beaches, and are no match for thoroughbred hooves.

The state government seemed to go out of its way to accommodate the horse racing industry. The release of the final *Belfast Coastal Reserve Management Plan* in July 2018 reduced racehorses permitted to train on the beach to 175 horses or more – still far too many thundering along the sand every day.

Often campaigns like this one seem like a David and Goliath battle – where

community groups are up against a state government and a powerful private interest, in this case the horseracing industry. Elitism and profit was prioritised over the right of Victorians to safely enjoy our public beaches.

Levys Beach is one of the four sites where commercial racehorse training could take place within the Belfast Coastal Reserve. Levys and Hoon Hill beaches are the two commercial sites, and Killarneys and Rutledges Cutting beaches are the two historical racehorse training sites. The sites differ in who manages them, ranging from state government to local council. Levys Beach is managed primarily by the Warrnambool City Council.

Our legal advice

With advice from our legal partners Environmental Justice Australia, VNPA had a review of Warrnambool’s planning



scheme undertaken. This legal advice found commercial racehorse training to be illegal at Levys Beach.

In mid-September, VNPA wrote to the CEO of Warrnambool City Council highlighting the clear inconsistency with allowing commercial racehorse training on its beaches. After we sought a meeting to discuss this further, the matter was referred to the Council's planning department.

In the meantime, the Warrnambool Racing Club was required, under the *Belfast Coastal Management Plan*, to issue and manage licences to individual horse trainers. As part of the deal, Warrnambool Racing Club was to give Warrnambool City Council \$400,000 to build a car park at Lady Bay. A special meeting of the Council was called in early October to authorise the grant from the racing club and approve commercial racehorse training back onto Levys Beach. The Council approved both of these items.

But it became apparent due to questions by at least one of the Councillors that the fact that all this was inconsistent with the Council's own planning scheme had not

been considered. Shortly after, the story broke in the local media and the Council's planning department confirmed that, as per VNPA's legal advice, commercial racehorse training at Levys Beach is a prohibited use.

Uproar ensues

It became a high-profile local story with almost hourly updates in the local *The Standard* news outlet. A number of Councillors asked why they hadn't been properly informed, and argued for a second special council meeting on the Friday night of 26 October. In an unprecedented move, the Council voted unanimously to rescind their earlier motion – resulting in a Council decision for no commercial racehorse training to occur at Levys Beach indefinitely.

Although there are still the three other sites open to commercial racehorse training, Levys Beach by far had the largest number of horses.

No commercial racehorses ploughing up and down this beach is good news for our hoodies and other shorebirds, and the safety of beachgoers and the local community.

For commercial racehorse training to occur at Levys beach, the Council would have to change the planning scheme. This can be done via normal consultation process, undertaken by the Council, which can take months if not a year.

Or alternatively it can be 'called in' and fast tracked by the state planning minister. VNPA and others moved quickly to call on the Victorian Planning Minister Richard Wynne to refrain from intervening. Just prior to the caretaker period, the matter was referred back to Council to make planning changes.

This could potentially all shift again once the dust has settled now the state election has passed, and depending on how desperate the Victorian Government is to back the horse racing industry.

VNPA's campaign to protect other beaches in the Belfast Coastal Reserve from commercial racehorse training continues. But this latest development is a fantastic result and testament to our wonderful supporters who have taken action, and to the Belfast Coastal Action Group (BCRAG) for their tireless efforts to protect their local beaches. • PW



Respect, protect and reconnect Melbourne's grasslands

BEN COURTICE REPORTS BACK ON A CONFERENCE ABOUT ONE OF VICTORIA'S MOST THREATENED NATURAL ENVIRONMENTS.

Werribee lies in the heart of Melbourne's western grassy plains, a region that is home to critically endangered native grasslands, yet also amid one of Melbourne's fastest growing suburbs.

This was the setting for the inaugural conference of the new Grassy Plains Network exploring the theme *Respect, Protect, Reconnect Melbourne's Grassy Plains*. Hundreds of participants crowded the Wyndham Council offices in Werribee for the Grassy Plains Conference on 12-13 October. The enthusiasm for the environments of the grassy plains, and the desire to better understand and protect them, was undeniable among conference participants.

VNPA sponsored the conference, and Executive Director Matt Ruchel presented on this important issue of nature conservation in Victoria.

Native grasslands, dazzling in their diversity of wildflower species, are found on the volcanic plains that stretch from Melbourne right across the west of the state. Since European settlement this fertile land has a long history of being used for agriculture and, more recently, urban expansion. The grasslands have now been reduced to less than 1 per cent of their original extent.

Grasslands, or flowerlands?

The backdrop to the conference was the iconic *Volcano Dreaming* exhibition, a 12-panel photo-collage depicting the beauty, detail and stories of the whole Victorian volcanic plain. Creators Peter Haffenden and Kerrie Poliness told the story of their journey of learning about the volcanic plain in order to create this endearing and enduring piece of work.

"We had a museum background and initially couldn't see the natural beauty that the experts talked about. It seemed to live in their minds," said Peter Haffenden. "Eventually we visited hundreds of sites, and had our own eureka moments. Really, these grasslands should be called 'flowerlands' to grab people's attention."

Overdevelopment still a threat

Immediate concerns for conservation raised at the conference were that many remnant grasslands are still being lost slowly to weed invasion, overgrazing, and other poor management practices. At the same time, a few remaining high-quality grassland patches within existing development areas are at risk of being lost in a few scrapes of an excavator.

The conference heard that a private developer has applied to the federal government to destroy part of a grassland reserve originally set aside to compensate for development impacts within the Williams Landing development in Wyndham City. This would put hundreds of endangered plants, including the endangered spiny rice flower, and also possibly endangered striped legless lizards, at risk.



The practices of private developers and land bankers pose a significant threat to the remnant grasslands of the area, as they are either developed or left to deteriorate.

Yet the potential to turn neglected remnants into vibrant nature reserves was tangible to conference participants, with hard work from government and private conservation organisations also highlighted.

Broadening the knowledge base

Traditional Owners Uncle Dave Wandin from the Wurundjeri Council and Reg Abrahams from the Wathaurong Aboriginal Cooperative were strongly supported in calling for including and learning from Traditional Owners in grassland management. An example of this would be roles on technical advisory groups for grassland conservation and restoration that have been proposed to be established.

"The ecology shaped our culture and we shaped the ecology", Uncle Dave said. "We'd like to see our land management supported with federally funded Indigenous land and sea rangers, something that is common in most other states. Let's walk country together."

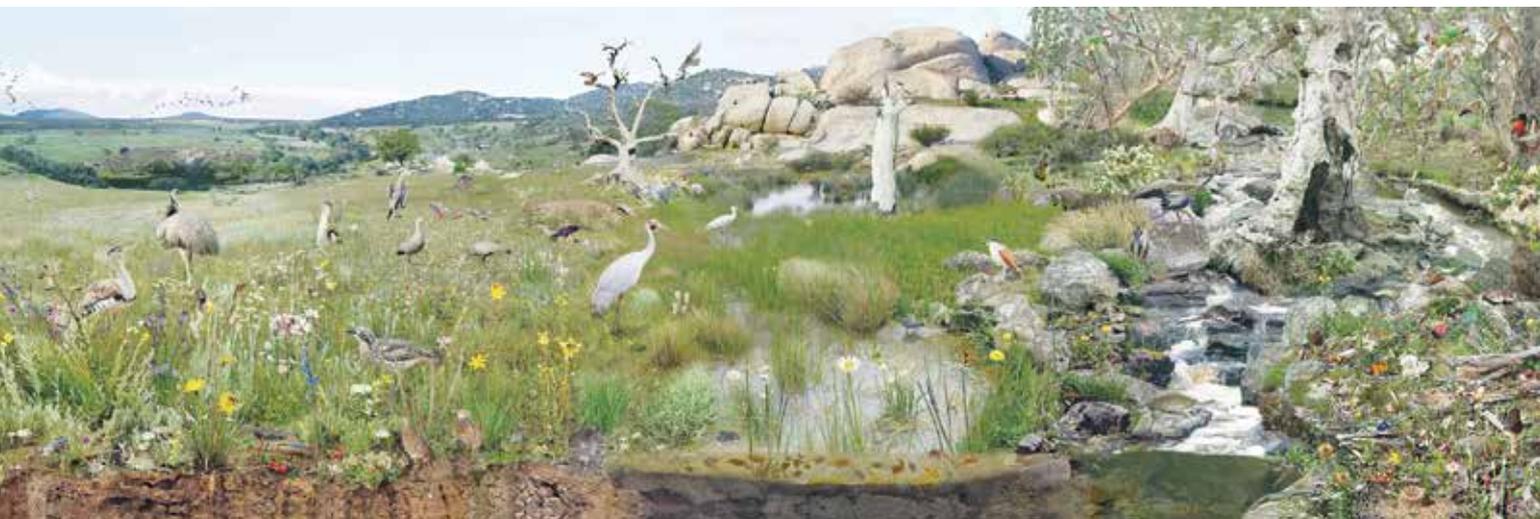
Colleen Miller, Secretary of NatureWest, presented the beginnings of an online interactive map to show the locations of protected and unprotected grasslands to the public. The tool could allow the fragmented organisations that manage grasslands, and community supporters, to create a shared knowledge around management history and actions. This improved collaboration is important for improving conservation outcomes on the plains.

Grassy Plains Declaration

Across the two days a *Grassy Plains Declaration* was drafted. Reflecting the conference themes, it asks that Melbourne's grassy plains be known, valued and conserved. The Western Grassland Reserves areas, designated by the Victorian Government to protect endangered grasslands outside the Urban Growth Boundary, are currently expected to be slowly acquired between now and 2040. The declaration recommends that the areas should be immediately purchased and managed upfront, along with a number of valuable grassland areas currently owned by developers within the existing urban area. A commitment to actively manage the reserves and turn around the slow process of fragmentation, degradation and the legacy of past damage is an essential part of this. • PW

You can read the declaration at www.grassyplains.org.au. Anyone interested in this new group is encouraged to get in touch by email: grassyplainsnetwork@gmail.com

The *Volcano Dreaming* panorama (below) is the work of Inherit Earth (Kerrie Poliness and Peter Haffenden) and includes images by many other photographers – see www.volcanodreaming.com.au



International award for Wilsons Promontory Marine National Park

OUR BELOVED WILSONS PROMONTORY MARINE NATIONAL PARK HAS BEEN RECOGNISED WITH A GLOBAL OCEAN REFUGE PLATINUM AWARD BY THE MARINE CONSERVATION INSTITUTE.

A fur seal at
Wilsons Promontory.



This international award is the first to be given to Australia, and one of only six in the world! It recognises Wilsons Promontory Marine National Park as an area of outstanding marine biodiversity, that as a protected area contributes significantly to global marine conservation efforts.

It also honours the work that has been done to protect its extensive kelp forests, colourful marine life, coral-encrusted underwater caves, one of the largest Australian fur seal breeding colonies, large populations of seabirds and the endangered great white shark, and migratory pathways for southern right whales and humpback whales.

Parks Victoria have developed an amazing video which can be viewed at:
<https://youtu.be/QI01RfhEuQI> • PW

PHOTO: PARKSVICTORIA

Walk the Cape to Cape Track or Bibbulmun Track in Comfort

on a pack free, lodge accommodated, small group walking tour!



Walk the spectacular coastal **Cape to Cape Track (8 day end to end tour or 5 day highlights tour)** or the iconic **Bibbulmun Track in WA (7 sections available)**, returning to comfortable lodge style accommodation each evening with Inspiration Outdoors. Enjoy pack free hiking, knowledgeable guides, healthy and scrumptious meals and a small group of fellow like minded hikers. Let us take care of everything so you can just walk and relax!

Transfers from Perth included. Prolific wildflower displays during Spring departures.

Call us today for a brochure or check out our website for other guided walking and cycling tours around Australia.

Pleased as a platypus



WE ARE PLEASED TO BE ABLE
TO INFORM PARK WATCH READERS
OF AN EXCELLENT UPDATE.

You may recall the feature article in our March 2018 edition 'How can we allow platypuses to drown in Victoria?' (pages 8-9) It revealed the plight of platypus, as well as other air-breathing animals such as turtles and rakali (native water rats), being killed by enclosed yabby traps in Victorian waterways.

After dedicated awareness raising and campaigning by the Victorian Alliance for Platypus-Safe Yabby Traps, the Victorian Government announced a ban on enclosed nets coming into effect on 1 July 2019.

Through direct engagement the Alliance was also able to ensure these enclosed traps were removed from sale from all major retailers and online channels, including Kmart, Big W, Aussie Disposals and eBay, nearly 12 months ahead of this ban.

If you were one of the over 20,000 people who signed their Change.org petition calling for urgent action on this issue – thank you!

For all their work in achieving this, the Alliance was recently awarded a Community Environment Award by Environment Victoria for groups who demonstrated outstanding

contribution and courage, strategy and community in their work to protect the environment.

Doug Gimsey from the Alliance said, "We are really pleased with the outcome we achieved in a little over 12 months, and hope that this sends a great message of hope to others who care about the environment and our wildlife. A message that when a passionate group of people form an alliance and work together on an issue, they really can make a difference".

The Victorian Fisheries Authority (VFA) is currently running a 'yabby net swap program' for trading in opera house nets for free open-top lift nets that enable air-breathing animals to escape. These open-top lift nets will be legal in both public and private waters. Launched a few months ago, the program was so successful that tackle shops quickly ran out of the first several thousand nets due to overwhelming demand, but they are now back in stock. Learn more at www.vfa.vic.gov.au/yabbynetswap • PW

If you are ever lucky enough to see a platypus in the wild, please register the sighting using the platypusSPOT app available at www.platypusspot.org. The more we know about their distribution the better.

Langwarrin Flora and Fauna Reserve

**GEOFF DURHAM TAKES A WALK
THROUGH THE INTRIGUING
HISTORY OF THIS RESERVE.**

Above: Dune heathland in the reserve. Inset: Red beak orchids,



PHOTOS BY LEON COSTERMANS

Parks Victoria manages our national, marine and other parks, but less appreciated is its responsibility for managing more than 2,700 conservation reserves and natural features, which are particularly important for retaining the state's biodiversity. One of these reserves is the 214-hectare Langwarrin Flora and Fauna Reserve, located five kilometres east of Frankston and 42 kilometres south-east of Melbourne. How it has survived as bushland is an unusual and interesting story.

This is Boonwurrung country, and would have been a food source. There may have been periodical deliberate burns and as well as the occasional wild fire. Aboriginal occupation is evidenced by stone scatters.

European intrusion began in the 1840s. Les Blake in *Place names of Victoria* (1977) says of Langwarrin: "...in 1843 station first held by Scot William Willoby named Longwaring, i.e. long waiting (to obtain his run)". The land now included in the reserve was probably grazed but not cleared because of mostly poor soils and drainage.

In the 1880s, when the Victorian state government became concerned

about possible invasion, the area was resumed as a Defence Reserve and training ground for Victoria colonial militia, and 49 hectares on the western side was cleared of trees and shrubs.

From 1887, Easter encampments were held – the largest in 1906 involved 3,890 men and 880 horses. From 1888 the Stony Point railway provided access.

After Federation in 1901 the Australian government took control. From 1900 to 1902 both Victorian and Commonwealth Contingents trained here before departing to the Boer War. Training continued until 1913.

After the outbreak of the First World War in 1914, 900 people of German, Austrian and Turkish descent were interned here until moved to Holsworthy in NSW in August 1915.

In that year a venereal disease hospital was set up in detention barracks. Soldiers who contracted VD in Egypt and France were re-shipped back to here. About 7,500 were treated. In 1916 the original bell tents were replaced with buildings, including properly equipped hospital wards. There were recreation halls, a post office, and even

a bandstand and fountain.

When the hospital closed in 1921 the structures were dismantled and the land was licensed to local graziers including Sir Keith Murdoch of the nearby Cruden Farm. The Langwarrin and District Progress Association had a sports oval on the site of the general parade ground with a concrete cricket pitch laid in 1922.

The reserve was used by the army and air force during the Second World War and for occasional training until late 1974 when it came under control of the Balcombe Military Camp for the training of Army Reserve and school cadets until 1980.

There was much controversy as to the future of the reserve, with fears it could be sold for development. The Langwarrin Reserve Conservation Committee, led by neighbouring property owner Colonel Peter Chance, urged retention as a conservation reserve. In 1982 it was purchased from the Commonwealth by the Victorian Government for \$330,000, proclaimed a Flora and Fauna Reserve in 1985,



Clockwise from right:

The Friends group removing woody weeds.
Wedding bush.
The base of the fountain (pictured above) remains.
The garden, rotunda, and fountain built by the patients in the military hospital during WWI, 1916.
Flying duck orchids.



Friends of Langwarrin Flora and Fauna Reserve

The group has supported the reserve for 30 years. It meets on the first Sunday of every month (except January) at 1pm, and everyone is welcome and free to come and go at times that suit them. The group has occasional special events and social occasions.

Contact: Leon Costermans on **9783 5015**

PHOTOS* BY LEON COSTERMANS (FOUNTAIN PHOTO BY GEOFF DURHAM)

and listed as an 'Other Park' under the National Parks Act.

Parks Victoria's Management Plan is dated July 2002. Its focus is protection of natural values and military relics. The reserve is to remain largely undeveloped, with facilities for passive recreation focussed at the former hospital site. Facilities are minimal. There are no picnic tables, fireplaces or water. A toilet built as proposed in the management plan was removed because of vandalism.

Most of the terrain is relatively flat. There are ephemeral wetlands but no perennial stream. A sand dune on a north-west to south-east axis runs diagonally across the reserve with the highest point in the north-west 117 metres above sea level and about 15 metres above the lowest part of the reserve. Conservation values are high, with over 300 indigenous flora species, about 60 orchid species and uncommon remnant woodland and sand heath communities. The swift parrot and the swamp skink are listed as vulnerable, and the southern brown bandicoot and the New Holland mouse, listed as endangered, have not been sighted for many years, presumably because of predation. Bird species number 98, including the rare southern emu-wren.

Recently a pair of powerful owls has been sighted.

The reserve is very popular with locals for walking and jogging. Cycling is permitted on the management vehicle tracks. Dogs are not permitted.

The main entry is from a car park on McClelland Drive (Melway Map 103; D 10). From here a wide 1.75 kilometres west-to-east fire break and gravel track run cross the centre of the reserve. There are various side tracks, with opportunities to devise easy return walks of various lengths.

The Langwarrin Historical Trail (three kilometres, one hour return from the information shelter just inside the car park entrance) takes in the hospital site with the remains of its fountain, the rifle range butts and target pits and the stone reservoir with nearby pump-well. Along the way are five very informative interpretation signs, but unfortunately the trail is not well signposted so you need to study the map at the information shelter or download the one from the Visitor Guide on the Parks Victoria website.

The Owen Dawson Track, named after a local naturalist and foundation

member of Friends of Langwarrin, meanders through various vegetation communities and takes in the old stop butts and target pits.

The Dune Track in the north-west leads up and along the sand dune. In early October this year the heathland had a great show of white-flowering heath (silky) tea-tree and wedding bush. The wide perimeter slashed fire breaks are particularly rich in orchids in summer.

A horse riding trail runs along the southern and eastern boundary to an alternative entry point in the north from the end of Aldershot Road (Melway Map 103, G9).

Since 1988 the Friends group has made much progress in removing from about two-thirds of the reserve invasive sawtooth wattle, coast tea-tree, pittosporum, and Pinus pinaster planted in the military period.

For the military history of the reserve I recommend two books, *Australian Aldershot – Langwarrin Military Reserve Victoria 1886-1980* (1987) by Winty Calder, and *The Secrets of the Anzacs – the untold story of venereal disease in the Australian Army 1914-1919* by Baden Dunbar (2014). • PW

AN ODE TO THE GREEN GROCER CICADA

VNPA MEMBER
JOHN KOTSIARIS
PAYS TRIBUTE
TO A LEGENDARY
AUSTRALIAN INSECT.



PHOTO: JOHN KOTSIARIS

Green grocer cicada nymph molting.

'Twas a warm summer night last December, while I was relaxing on park lawns at Carols by Candlelight in South Yarra, when carolers were joined by a chorus of song from the tree-tops of the surrounding gum trees. It was the green grocer cicada; the sound of Christmas in south-eastern Australia.

Bright green and adorned with a golden crown of jewel-like ocelli, the green grocer cicada is among the loudest insects in the world, and for millions of Australians its mating song heralds the beginning of summer and a time for picnics, beach and fun in the sun.

Cyclochila australasiae is a unique part of Australia's natural and cultural heritage. I couldn't help but write a little something to give the species some much deserved recognition.

Biology

After seven years of living underground in darkness drinking from the roots of trees, the humble green grocer cicada nymph emerges at night from a hole in the ground, climbs up the trunk of a tree and then completes its final ecdysis of its exoskeleton to become a fully grown winged adult.

The nymphs usually emerge from late October to early December, and as adults they can live for up to six weeks or more. Being a relatively large cicada, the moulted exoskeletons of green grocer nymphs left clinging on the trees are quite conspicuous. Many Aussie kids collect these 'cicada shells' as a summer pass time.

One of my favourite childhood bug-catching memories was excitedly catching a large yellow adult cicada randomly sitting on a telegraph pole. It was the cicada I knew and loved but it was... yellow? Bizarrely, adult *Cyclochila australasiae* cicadas come in different colour forms. The forms from most common to most rare are: green grocer (green), yellow monday (yellow), masked devil (orange with black markings), chocolate soldier (dark tan), and blue moon (turquoise).

During the day the adult green grocer spends its time feeding in the canopy using its straw-like rostrum to suck sap from small branches. On warm nights at dusk the males will sing loudly to attract females, buzzing in chorus for up to an hour or more. They sing using large sound producing structures called tymbals at the base of their rather hollow abdomen.

As the season progresses they may occasionally sing during the day, but this is usually only on hot days and when there are many individuals around to sing in chorus (probably to throw off predators from their individual locations). Sometimes if it is hot enough the cicadas will also sing in the depths of the night – which I find very soothing on a hot sleepless night – though others might disagree!

After mating, females use a spear-like ovipositor to cut slits into branches and lay their eggs. Green grocer eggs take about 120 days to hatch and produce tiny white nymphs with black eyes. The nymphs drop to the ground and quickly dig down into the soil among the roots of the tree. In suburbia many different tall trees are used as food plants including most eucalypts but they also seem to like various exotic species such as poplars, oaks, European ash and jacarandas.



PHOTO: JOHN KOTSIARIS

Special wings

Cicada wings are surprisingly hardy. You may have noticed them lying around in your garden long after the rest of the cicada has disappeared. Australian nanoscientists have recently discovered that the green grocer and other cicadas have a series of tiny spike-like bumps on their wings that puncture the cell walls of bacteria! Scientists are now hoping to engineer anti-microbial nanosurfaces based on the amazing structure of cicada and dragonfly wings (which have similar properties).

Threats

While the green grocer cicada has adapted well to suburban landscapes, the ongoing presence of suitable mature trees is important for its survival. Unfortunately, Victoria is no longer 'the garden state'. Over recent decades older homes on large blocks are often sold, demolished, all vegetation is removed, and then multiple dwellings are erected in their place. This urban deforestation and increase in concrete is certain to be impacting on cicadas, and over the years I have noticed a decline in cicadas around some parts of Melbourne.

The other main threat to the green grocer, in my view, is the Indian myna bird; a very cunning and aggressive invasive species which was introduced into Melbourne in 1862 to control insects in market gardens. When male green grocer cicadas are attacked by a bird you will know about it. He will let out a long, loud buzzing "eeeeeeeeeeeeeee!" I have found that almost always the cicada will be in the beak of an Indian myna.

My immediate neighbourhood has been plagued by Indian mynas for many years now, and the ability for the green grocer to persist in the local trees now seems to be very brief as the Indian mynas quickly pick off the adult cicadas as they emerge. Although native birds like magpies and Australian mynas also prey on the green grocer, the Indian mynas are far more abundant and appear to be very proficient at seeking out the adult cicadas.

To prevent further decline of the green grocer cicada in Melbourne, we must seriously start addressing the city's Indian myna problem. We must also discourage the practice of completely removing all vegetation during residential re-development.

Thankfully there are various parts of Melbourne where the green grocer still appears to be doing well, such as along the Yarra, in old large parks and reserves, and in the remaining well-treed green pockets of the eastern suburbs. So put on your Santa hats and your singlets, shorts and thongs, and let us cherish the green grocer cicada, the wonderful sound of a summer Christmas in south-eastern Australia.

I would like to end with a translation of a quaint ancient Greek poem of unknown authorship dedicated to the cicada.

*We bless you, cicada,
when on the tree tops
having drunk a little dew
like a king you are singing;
for yours are those things all,
all that you see in the fields,
all that the woods nourish.*

*You are respected by mankind,
sweet prophet of summer.*

*The Muses love you,
and Phoebus himself loves you,
and he gave you a sweet voice.*

*Old age doesn't wear you,
wise one, earth-born, music-lover,
passionless, with bloodless flesh,
you are almost equal to the gods.*

Meeting Maisie



Maisie on her horse in the Bogong High Plains, 1949.

VNPA RECENTLY OBTAINED A COPY OF MAISIE FAWCETT'S DIARIES, TRANSCRIBED BY RELATIVE (AND VNPA MEMBER) DR MARION MANIFOLD. WHILE RESEARCHING WITH THE DIARIES, IT OCCURRED TO VNPA MEMBER **EVELYN FELLER** THAT MANY OF OUR MEMBERS MAY NOT HAVE HEARD OF MAISIE AND THAT IT WAS WORTH INTRODUCING HER TO THEM.

Many of us would have first heard of Maisie Fawcett (1912-1988) while hiking in the High Plains, where her fenced-off study areas are often pointed out. 'Maisie's plots' are famous because they were a benchmark to show the impact of cattle grazing on alpine plant communities. The results of her research have been used many times in battles to protect the High Country.

Maisie was a successful academic botanist with an outstanding publication record at a time when there were few women academics. Her studies in the alpine area came about by chance in the 1940s, when an accident prevented her from using microscopes and she was persuaded to take a job with the Soil Conservation Board. She was sent to investigate the causes of the extensive soil erosion in the Alps which threatened to silt up the dams that would form part of the proposed Kiewa hydro-electricity scheme.

In order to conduct her research she moved from Melbourne to Omeo and explored the High Country on horseback with many of the local people, including cattlemen. Documents relating to these journeys, such as her unpublished reports based on her diaries, are included

in *A Book for Maisie*, written by her husband, Professor D. J. Carr. (Maisie is also known as Stella Carr.) The diaries cover a wide range of topics, with notes on both native and introduced vegetation in the High Country, geology and early Victorian exploration and settlement, as well as many interviews with pioneering families. She was trying to collect evidence of what the High Country was like before European settlement, how the area had been used since, and what impact fire and grazing practices had on land degradation.

She acknowledges that one has to be cautious about the accuracy of many of the settlers' anecdotes, but includes some classic quotes about burning and grazing practices. Following are examples illustrating how the land was 'managed'.

"Breenie had a contract, which meant [he had to] to light a bushfire. The contract was with [match company] Bryant and May because the bush needed a good cooking."

"Asked Bill Parkes about this. He says people burn because they get a good flush of grass for the cattle but scrub too which necessitates further burning. He considers that

burning ruins the bush, says it is a habit or mania with these cattle blokes to burn. Family convinced that cattle industry can be continued without burning.”

“High Plains has deteriorated since he knew it. Herbs have disappeared – wild carrot, blue snowgrass – due to overstocking.”

“Old bush free of bogs, every little stream ran – admittedly less in the summer but they were still creeks.”

“On morass below Penderscourt beasts bogged out of sight when they went in for a drink. It was said that ‘you could stand on the back of a bogged beast, poke a stick down and feel the one underneath.’ (This refers to the impact cattle trampling had on boggy areas.)

Maisie documents the first appearance of rabbits on the High Plains and the efforts to control them.

“First rabbit appeared on the Hall Paddock in 1890. Jack and others had been over on Big River cutting track and had seen rabbits at Tawonga. Were accused of having brought rabbit with them – but by 1900-1901 had assumed plague proportions.”

“Rabbits so thick they were dying of starvation – put the dog on them and they’d just run a little, squat and squeal.”

In her interviews with early settlers there are many accounts of the struggle for existence of many impoverished families and the difficulties of getting any education. Much of this material would be useful for researchers of social history in this era.

What is remarkable about Maisie’s work is that she was quite young when she did her research in the High Country. It was her first job after university. The diaries were hand-written at a time before tape recorders or photocopiers were available. Entries show Maisie’s many interests ranging from geology to pasture improvements and early history.

Maisie had a good sense of humour and the ability to win the trust and friendship of many of the farming families in the High Country. She was also a gifted scientist and pioneering ecologist who made important contributions to the Stretton Royal Commission, which abolished the practice of burning on the High Plains.

Her work was important scientific evidence in the process that led to the creation of the Alpine National Park, and it continues to be used today.

I can definitely recommend making or renewing acquaintance with Maisie Fawcett through her diaries or in *A Book for Maisie* (copies available at the VNPA office). Her diaries are available in the Heritage Reading Room at the State Library. • PW



PHOTO: NOEL RYAN

Maisie Fawcett’s Pretty Valley cattle exclusion plot, in 2002, some 55 years after it was set up and monitored. The difference between the cattle-grazed area outside, and the ungrazed area inside, is marked.

PORT JACKSON SHARK

Port Jackson sharks are often referred to as the 'puppies of the ocean' due to their friendly, curious nature.

They are found throughout southern Australia, from southern Queensland down to Tasmania and right around to the central coast of Western Australia. In Victoria, they are a common sight in coastal waters, including Port Phillip Bay.

Heterodontus portusjacksoni are a small, bottom dwelling shark, growing up to 1.65 metres long.

They have a distinct, harness-like pattern running down their back and across their body and a blunt head with arched ridges that give the appearance of horns. Adding to their unusual features are the curled nostrils attached to their mouth.

They use their sharp, spiny front teeth to latch on to prey such as crabs, lobsters, octopuses, or sea urchins. They use their broad, flat back teeth to crush and grind their catch.

Unlike most shark species, Port Jackson sharks can eat and breathe at the same time, and don't need to be moving to allow enough water to flow over their gills to breathe. Instead, they can pump water into their first, large gill slit and out through the other four gill slits.

This feature means that they can spend a long time lying on the ocean floor, waiting for their prey, or waiting for mates during the breeding season.

They are oviparous, meaning they lay eggs. A female shark will take her egg in her mouth and wedge it in a rock ledge. Between choosing a good hiding spot and the egg's outward appearance of brown seaweed, this gives the baby shark (called a 'pup') the best chance of survival over the 10-12 months it needs before it is ready to hatch.

Port Jackson sharks have complex social interactions, returning to the same sites to breed and preferring to spend their time with individuals of the same gender and size. Researchers have identified that they have distinct personalities, form long term relationships with other Port Jackson sharks, and many make the long journey from their feeding grounds to their breeding grounds in large migratory groups.

Port Jackson shark are the feature species for our 2018 Great Victorian Fish Count which runs until 16 December – so there is still time to get in the water! Visit: www.vnpa.org.au/fish-count • PW





PHOTO COURTESY OF AUSTRALIAN NATIONAL UNIVERSITY

NatureWatch stagwatching evenings

HELP CONSERVATION SCIENCE WHILE EXPLORING VICTORIA'S AMAZING MOUNTAIN ASH FORESTS.

Our NatureWatch program is partnering with Professor David Lindenmayer's research team from the Australian National University to take part in upcoming stagwatching events. NatureWatch volunteers will contribute to over thirty years of ecological research investigating the possums and gliders of these forests, and the decades of impacts from timber harvesting and bushfire. They will also learn about the ecology of the Central Highlands forests, their ten years of recovery since the Black Saturday bushfires, and their future within the Great Forest National Park. The stagwatch events will be lead by the team's forest ecologist, Dave Blair, who specialises in forest disturbance, recovery after fire, and the conservation of Leadbeater's possum habitat.

What is a stagwatch?

Stags are old trees that provide essential tree-hollows for native possums and gliders who emerge each night to forage. Stagwatching involves sitting or lying on the forest floor and looking up to the silhouette

of the stag tree against the night's sky to watch for emerging animals. Training is provided so you can identify if you are seeing a greater glider preen on a top branch before gracefully gliding between trees, or a mountain brushtail possum lumbering down the trunk. You may even get lucky and see the critically endangered Leadbeater's possum springing from their tree hollow into neighbouring wattle tree canopy, seeking tree saps and insects for a night-time feast.

Other animals that may be present include:

- Yellow-bellied gliders, feathertail gliders, sugar gliders
- Ringtail possums, eastern pygmy possums
- Powerful owls, southern boobook, sooty owls,
- Lyrebirds, tawny frogmouths, Australian owllet-nightjars
- Wombats, wallabies, antechinus, forest bats

Please see the Summer BWAG program for details on upcoming stagwatching events. • PW

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

Are you curious about the natural world? Imagine immersing yourself in nature while we share our love and knowledge of the environment with you.



Let us arrange the accommodation, the driving, the walks and talks. Even your meals appear like magic. Enjoy the companionship of a small group of like-minded nature lovers and return home refreshed, informed and invigorated.

Gippsland High Country Tours

Phone (03) 5157 5556

www.gippslandhighcountrytours.com.au

Advanced Ecotourism Certification. Est. 1987

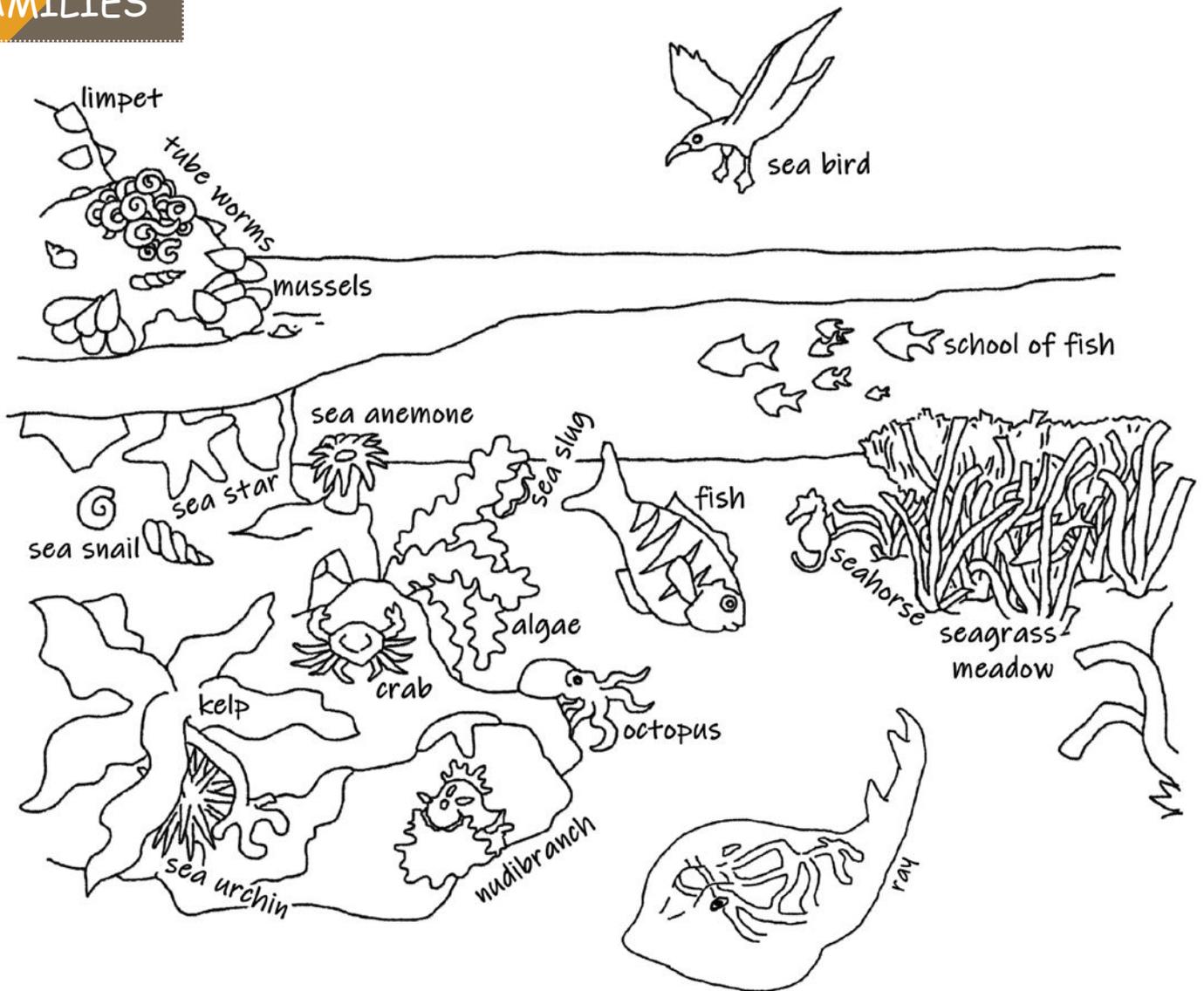


ILLUSTRATION: NICOLE MERTENS

What's under the sea?

Did you know 80 per cent of the marine species in south-eastern Australia live nowhere else in the world?

Snorkelling in Victoria gives you the chance to experience unique marine life in seagrass beds, kelp forests, rocky reefs and sponge gardens.

Book a snorkel experience with a snorkel tour guide

If snorkelling is new to your family, going with one of the many snorkel tour operators in Victoria is the best option. They provide you with gear, expertise and training, and often share amazing stories and facts about the local marine life. Parks Victoria has a list of registered snorkel tour operators at www.parkweb.vic.gov.au/explore/guided-tours/operators-by-activity

Self-guided snorkel adventure

Here are some tips for families who are competent and keen to try their own snorkelling adventure:

1. Research the best and safest snorkelling spots in Victoria, as well as safe snorkelling practices.
2. Choose calm conditions as you will be safer and the water will be clearer.
3. Choose days where there is minimal wind so that everyone feels comfortable above the water.
4. Hire some equipment from a reputable supplier if you don't have your own.
5. Practice using the mask and snorkel in a pool or bath.
6. Use fins to propel yourself through the water and for easy return to shore.
7. Keep your mask tightly fitted to your face to stop it from leaking.
8. Defog it by rubbing toothpaste in the mask and washing it out before you leave home, and don't forget to spit in it and rinse it out before putting it on.
9. Look at and enjoy our extraordinary wildlife, but don't handle them as it is stressful for the animals and they can be poisonous.

Always remember to consider safety on family adventures. Make sure the activities are suitable to your family's abilities, ensure competent supervision at all times, use a tour operator if you are not comfortable taking your tribe for a dip in the deep blue, and don't forget to check local conditions.

Thanks to Bayplay for providing support in developing this activity sheet.

Wild Place - Port Phillip Bay

Port Phillip Bay is an extraordinary place to enjoy nature adventures. There are many different habitats to explore, including colourful sponge gardens, rocky reefs teeming with fish, seagrass meadows, kelp forests, open water and the sandy plains.

There are many wildlife species that call Port Phillip Bay home, including burrunan dolphins, bottlenose dolphins, a resident Australian fur seal population, weedy seadragons, zebra fish, seastars, decorator crabs, and even southern right whales have been known to visit.

Check out our map for some of the wonderful places your family could visit and some of the fascinating creatures you can experience there.

Ways to meet wildlife in Port Phillip Bay (see illustrated map for locations) include:

1. Make friends with a western blue groper at Port Phillip Heads Marine National Park, including Pope's Eye (this requires a tour operator to take you out). The blue groper changes colour through its lifetime, and can even change from female to male.
2. Spot a nudibranch in the rockpools at Point Lonsdale. Nudibranchs are a type of marine snail which can be very brightly coloured. They are called nudibranchs because they are nude. This is because they don't have a shell.
3. Glide along under St Leonard's Pier and keep an eye out for the big-belly seahorse. Seahorses aren't horses at all – they are fish! They have long, curly tails that they use to hold on tight to seaweed.
4. Meet a banjo shark at Point Cook. Banjo sharks belong to a group of rays called guitarfish (because of they are shaped like the instrument) and have features of both rays and sharks.
5. Experience schools of zebrafish at Jawbone Marine Sanctuary. Zebrafish are stripey, just like real zebras.
6. Experience the rocky reef and seagrass beds of Ricketts Point and look out for the friendly Port Jackson shark. They have both tiny sharp teeth for grabbing food, and large, flat teeth for crushing shells like crabs and snails.
7. Enjoy the Octopus's Garden Trail with underwater interpretive signs underneath Rye Pier, and learn more about the marine life in this environment.
8. Spot all of the colours of the rainbow in the sponge gardens under Blairgowrie Pier.
9. Search for Victoria's marine emblem, the weedy seadragon, at Portsea Pier. The male seadragon carries the eggs on his tail until the babies are ready to hatch. • PW



Grandma and grandson join a Wild Families Great Victorian Fish Count activity.

PHOTO BY KADE MILLS

PHOTO BY CAITLIN GRIFFITH

DISCOVERING PORT PHILLIP BAY

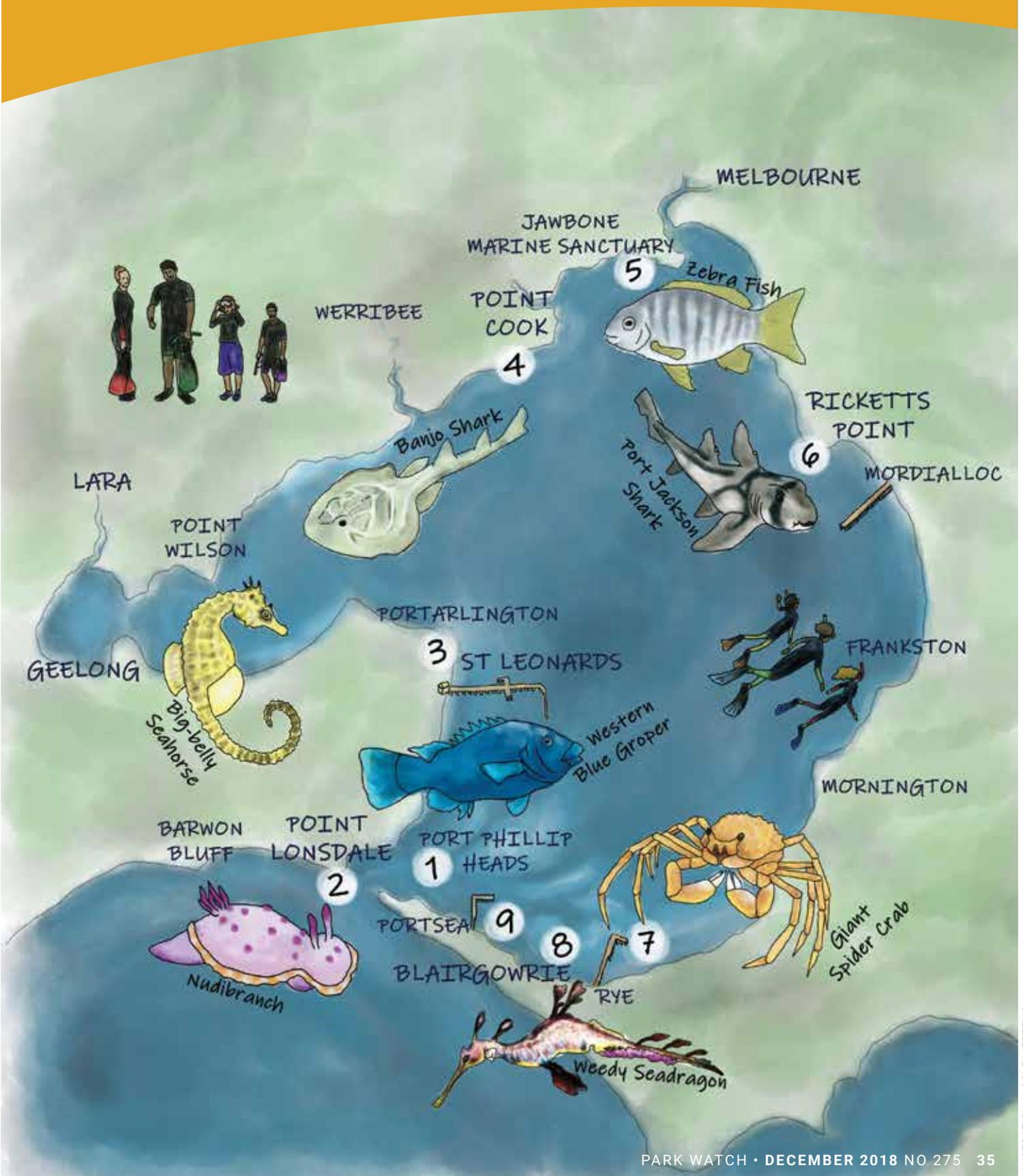




PHOTO: JUDITH DELAND

Thank you for being an important part of the Victorian National Parks Association community

Thank you for being an important part of the Victorian National Parks Association community.

Without you – our community of donors, Members, volunteers and other supporters – we cannot defend our forests and parks. We cannot stand up for our beaches and unique species. We cannot protect nature. In fact, without you, we simply would not exist.

Thanks to you, 2018 has been a big year for protecting nature – and we're ready to make 2019 even better for our natural environment.

Supporting the Victorian National Parks Association makes a statement about what's important to you – about the kind of world you want to live in. Please consider making a gift today.

I'd like to make a tax-deductible gift of:

\$20 \$50 \$100 \$550 \$_____
 My choice

Please make this a monthly donation by credit card*

My contact details

Dr/Mr/Mrs/Ms/Other _____ First name _____ Surname _____

Address _____

Suburb/Town _____ State _____ Postcode _____ Gender F M

Phone _____ Email _____ Date of birth ____ / ____ / ____

Payment method

Cheque/money order payable to 'Victorian National Parks Association' is enclosed.

Credit card Visa MasterCard

Card no _____ / _____ / _____ / _____ Expiry Date ____ / ____

Cardholder name _____ Signature _____

Please post with payment to Victorian National Parks Association, Level 3, 60 Leicester St, Carlton VIC 3053, call us on **03 9341 6500** or visit **vnpa.org.au/donate**

* Donations will be automatically deducted from your credit card or direct debit arrangement on the 28th day of each month. You will receive a tax receipt at the end of each financial year, and you can alter your donations at any time. Minimum gift is \$15/month. All donations over \$2 are tax-deductible. ABN 34 217 717 593

Authorised by Matt Ruchel, Executive Director, Victorian National Parks Association.
Level 3, 60 Leicester St, Carlton VIC 3053 | **PH:** 03 9341 6500 | **EMAIL:** vnpa@vnpa.org.au | **WEB:** vnpa.org.au

