

PARK WATCH



AN END TO LOGGING?
WHAT ABOUT THE WEST?
PUBLIC ACCESS TO PUBLIC LAND
SNOWY 2.0
OTWAYS CUT UP
PROMISED GRASSLANDS OF THE NEVER NEVER
THE PROM AS A SANCTUARY

DECEMBER 2019 NO 279



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
Email: 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 2020 *Park Watch* 1 February 2020.

DESIGN Mary Ferlin **PRINTING** Adams Print

FRONT COVER

The Domino Trail, a well-loved local trail from Trentham to Lyonville in the Wombat Forest, would be included in the new proposed parks recommended for the Victoria's central west. Turn to page 7 to read about our campaign for these forests to be protected.
Photo: 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.

Park Watch
is printed on
FSC certified
paper.

CONTENTS

3	From the President
4	Updates
5-6	An end to logging of Victoria's native forests?
7-9	What about the west?
10	Ten years of protection for Cobboboonee forest
11	Wrong project in the wrong place
12-13	Common Heritage
14-15	Public access to public land: what's the game?
16-17	Otways cut up
18-19	The promised grasslands of the never never
20	Quiz: Rocky Reefs
21	Where is the government's answer to the deer invasion?
22-25	The Prom as a sanctuary
26-27	Special Species: Ornate Cowfish
28-29	Backyard Bandicoots
30-31	Tribute: David Blair
32-35	Melbourne's flying night gardeners
36	Member for Life
37	Quiz Answers
38-39	Wild Families: Wild artwork



From the President

After five years in office, the Andrews Government has done little to improve nature conservation in Victoria, or even to reverse some poor decisions of the previous government. Thus, the recent announcements on forests by the Andrews Government are welcome breakthroughs, but appear to be a mixed bag for the environment. This comes after a lot of hard (and frustrating) work carried out by environment organisations and many people who volunteer their time and resources freely to protect nature in our state. The announcements to improve protection of more of Victoria's forests over the next 10 years have not yet been enacted, and so the community will need to continue to work hard to ensure the commitments are delivered and the forests are permanently protected. Read our overview of the forest announcement on pages 5-6.

In recent months I attended the annual National Parks Australia Council (NPAC) meeting. NPAC is a national body that represents state and territory organisations concerned with protecting the natural environment and furthering national parks. See more at www.npac.org.au. NPAC has six member organisations, including the VNPA. It is great to meet with representatives from these organisations from across the country. We share many of the same challenges and threats to our natural heritage and protected areas, including underfunding, pest plants and animals, and various forms of encroachment by private tourism development.

One issue that affects many of the member groups is the Snowy 2.0 proposal. Framed as 'nation building', closer examination by the National Parks Association of NSW shows that Snowy 2.0 is really park and nature destroying and does little to help energy security. (See article on page 11).

Back in Victoria, VNPA continues to encourage the Andrews Government to accept the recommendations of the Victorian Environmental Assessment Council (VEAC) to better protect the forests of the central west region of Victoria. For 40 years VEAC (and their previous entities) has been a respected, independent and scientifically rigorous organisation, whose recommendations are in the main accepted by government. We believe that VEAC has again delivered a well-considered and thoroughly researched science-based final report on the central west, which should be accepted in full and implemented as soon as possible. Read more on our campaign on pages 7-9.

On behalf of Council, I extend a hearty thanks to all who have supported our ongoing central west campaign. The generosity of the VNPA community, and the trust this implies, is truly inspiring.

The state government has recently introduced into parliament the Melbourne Strategic Assessment (Environment Mitigation Levy) Bill 2019, which is largely about raising money from urban development. The Melbourne Strategic Assessment has been in place for almost 10 years, and promised to protect critically endangered grasslands and grassy woodlands, threatened by urban sprawl, particularly in the north and west of Melbourne. A flawed program designed to 'fast track' urban development, it has thus far failed to deliver on its own deadlines and promises, such as the establishment of western grassland reserves, which were supposed to have been in place by 2020. It now seems the government wants to legislate its way out of protecting these national heritage grasslands. (See article on pages 18-19).

We have heard a lot about good governance over the past 20 years, but time and time again the environment seems to be the victim of poor governance. The Snowy 2.0 proposal

has the appearance of a 'thought bubble' of the previous Prime Minister, without proper and thorough prior investigation by experts. The Melbourne Strategic Assessment appears as a deal struck between property developers and governments more focussed on avoiding their responsibilities to protect our natural heritage than implementing existing environmental legislation. Due process appears to have been gamed. One set of arbitrary decisions, like not protecting high quality grasslands with an area of less than 150 hectares, are now being followed by other arbitrary decisions. As no-one has yet created a complex native grassland with many species from a bare or weed-infested paddock, how is it that the government thinks it is okay to destroy the few remaining high-quality grasslands, even if they are in smaller patches?

All of these issues highlight the need for persistence and constant advocacy. There are many vested interests who want to use and abuse the natural world, but thanks to VNPA Members and supporters, we continue to speak up for nature.

I wish each and every one of you an enjoyable and nature-filled festive season.

• PW

Bruce McGregor, VNPA President

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

Join us for a stroll to learn about our work protecting nature, taking adventures, and our community learning programs. Meet VNPA Councillors, volunteers and staff, and enjoy a picnic dinner beside the Yarra River.

**Thursday 20 February 2020
6-8pm**

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

RSVP is essential.

Please RSVP to Amelia:

amelia@vnpa.org.au or 9341 6500

Members elect Council at AGM

Thank you to all our Members who attended our 67th Annual General Meeting on Tuesday 8 October.

Guest speaker Professor Susan Lawrence presented '*Common Heritage: the Gold Rush Origins of Public Land in central Victoria*', which gave us a fascinating and instructive look at the human and environmental impacts of settler colonisation and the Goldfields Commons in Central Victoria. A transcript of the presentation is on pages 12–13.

We also heard from a number of passionate speakers about the campaign to protect forests in Victoria's central west, which is a key focus for our work this year. Our many thanks to Gayle Osborne, from Wombat Forestcare, and Wendy Radford, from Wellsford Forest Conservation Alliance, for sharing their knowledge and experience of their beloved local forests, and also our Nature Conservation Campaigner Shannon Hurley for her contribution to the group presentation. To learn more about the campaign to create new national parks and reserves in the central west, turn to pages 7–9.

VNPA Members elected new Council Members Marilynne Crestias (Treasurer) and Rosemary Race (Secretary); and re-elected Bruce McGregor (President), Gerard McPhee (Vice-President), Lara Bickford, Ann Birrell, Jan Brueggemeier, Michael Feller, Deb Henry, Dianne Marshall, Euan Moore, and Paul Strickland.

Our many thanks to retiring Councillors Mike Forster and Gary Allan – we very much appreciate their dedication and service to VNPA in their roles as Secretary and Treasurer.

And finally, we are so very pleased that Libby Smith was awarded Honorary Life Membership, in recognition of her outstanding service to the Victorian National Parks Association (read profile on page 36).

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

This photo of *Thelymitra antennifera*, commonly known as Rabbit-eared Sun Orchid, was taken in the Pyrenees Ranges, in an area recommended for protection in a new Pyrenees Ranges National Park.

Thank you and Season's Greetings!

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

Whether you're a Donor, a Member, or a volunteer; if you emailed your MP, joined us at an event, signed a petition or took to the streets – we thank each and every one of you for being part of the VNPA community.

Our warmest wishes for a safe and nature-filled festive season.



PHOTO: ROB BLAKERS

The need to advocate for the protection of our wonderful forests will continue.

An end to logging of Victoria's native forests?

AN ANNOUNCEMENT BY THE ANDREWS GOVERNMENT IS A BREAKTHROUGH – OF SORTS – TOWARDS SECURING BETTER MANAGEMENT OF VICTORIA'S NATIVE FORESTS. OVERVIEW BY OUR EXECUTIVE DIRECTOR **MATT RUCHEL**.

On 7 November the Andrews Government announced it would immediately protect threatened species habitat and cease logging of old growth native forests in Victoria – and ultimately stop all logging across our state in 2030.

The Andrews Government is to be congratulated for announcing this first step. However, there will be major future political tests in ensuring full and timely delivery of the commitments.

Below are four key elements of the announcement.

1) Immediate protection areas for threatened species:

According to the Andrews Government:

“Harvesting will be immediately excluded from these areas to preserve important habitat for more than 35 forest dependent species, including the Greater Glider and Leadbeater's Possum”.

This applies to more than 96,000 hectares of high conservation value forest home to more than 35 forest-dependent species

through the creation of ‘Immediate Protection Areas’ in the state's east. This will be of real benefit in some areas, particularly for the forests of the Strathbogie Ranges. But there are still significant gaps in protection, particularly for the forests of the Central Highlands.

These ‘Immediate Protection Areas’ have no legislative basis as yet. They are a political commitment, which will need legislation or regulation to be properly secured into the future. A consultation process will commence early next year on “the best way to permanently protect the Immediate Protection Areas”.

Greater Glider populations have declined by 50 per cent in the last 20 years in East Gippsland, and up to 80 per cent in the Central Highlands. An Action Statement for the Greater Glider has also been released, but alarmingly it applies weaker ‘forestry rules’ to Greater Gliders than existing protections. Large areas of habitat for the critically endangered Leadbeater's Possum are missing from the plans.

Continued overleaf

Continued from previous page

In the Central Highlands, the proposed Immediate Protection Areas indicated include protecting the connection between Baw Baw and Yarra Ranges national parks; the Armstrong and Cement Creek catchments; reserve buffers around the Ada Tree; and some of the last parts of intact forest around Toolangi. But large areas of ash forest will continue to be heavily logged at least until 2024, raising concerns about this already depleted habitat and level of protection for Leadbeater's Possum.

Over half of the proposed Immediate Protection Areas are in East Gippsland, which expands protection for the Kuark forest, includes some areas which build on the Snowy River National Park, and extends protection south of the current boundary of Errinundra National Park. However, some of the most significant populations of Greater Glider around Bendoc and on the Errinundra Plateau are still under direct threat.

Around 17,000 hectares of Strathbogie forests is included in the proposed Immediate Protection Areas. This is a great result for the hard work by the Save Our Strathbogie Forest community campaign, which VNPA supported. Also proposed are further protection around areas of high local community interest near Mirboo North.

2) End to logging old growth:

According to the Andrews Government:

"Under the plan, 90,000 hectares of Victoria's remaining rare and precious old growth forest – aged up to 600 years old – will be protected immediately".

This is big commitment, but what is defined as 'old growth' will be based on computer modelling and will be implemented through 'forestry rules'. There are dangers with basing on-ground decisions on computer modelling, and using forestry rules to protect areas can be fraught. According to the announcement, "the boundaries of old growth forest stands will be marked in the field and timber harvesting operations will be excluded from working within those boundaries". The Andrews Government will need to be held to this commitment to immediately protect 90,000 hectares of old growth. Really, the only way to do this is to include these areas in permanent reserves, such as protection under the *National Parks Act 1975*.

3) New reserves:

A commitment for the "... biggest addition to our reserve system in over 20 years ...", however, there are no detailed timelines, and it is unclear what type of reserves these will be and whether or not they will be given the highest form of protection under the National Parks Act. It should be noted that the "biggest addition" is a questionable claim. In its seven years in office, the Bracks government created 224,962 hectares of parks under the National Parks Act, including the Great Otway (103,000 hectares), Box-Ironbark parks and marine national parks, as well

as thousands of hectares of forest parks. The Brumby government in its three years in office created about 129,000 hectares of new national parks, including Cobboboonee (see page 10) and River Red Gum national parks.

After five years in office, the Andrews Government has still not created any large new national parks, and is now playing catch-up. Legislation has recently been introduced into Parliament to enshrine in law greater protections for the Yellingbo Landscape Conservation Area; add a 3220 hectare-area of the Kuark Forest to the Errinundra National Park; and create the integrated Yallock-Bulluk Marine and Coastal Park between San Remo and Inverloch. If implemented properly, the new announcement will help this record, but after five years in office, they still need to be delivered.

4) Logging industry transition:

All logging in native forests across the state is to be stopped by 2030, starting with an initial step down in 2024. The writing has been on the wall for the declining logging industry for many years, and the admission by the state government that native forest logging is 'unsustainable' is refreshing. Government support for industry and worker transition is fair and a useful political move, but no payments will be available for industry buy-out until 2024, which will make it hard for industry and workers to look to transition sooner than later.

We are deeply concerned that logging will dramatically increase in the next five years – that whatever *can* be logged *will* be logged, particularly in the mountain ash forests, which make up 70 per cent of the logging industry (up to 80 per cent of which is used for pulp).

Announcements aside, most of the Central Highlands mountain and alpine ash forests still face a bleak future. Due to fire and over-logging, well over one-third of Victoria's ash forests are juvenile trees unable to set seed, and much of the remainder is under 40 years old. In the ash forests of the Central Highlands, there are simply not enough trees left to last if logging continues for another 10 years.

2030 is a long time away and much can happen in that period, including changes of state government. In the meantime, will every last available tree be logged?

A new Timber Release Plan, which shows the location of proposed logging coupes, is understood to be released soon for consultation by VicForests, and could likely tell a different story to the announcement.

The principle to cease logging in important native forest areas is certainly positive, but this plan needs to be more than an aspiration. Significant political leadership and action is still necessary to ensure real-world benefits for our native forests. As always, nature needs more than just temporary solutions.

The Andrews Government's announcement is a start in the right direction, but we will need to continue to work hard to ensure these commitments are actually delivered. • PW

What about the west?

THE ANDREWS GOVERNMENT SHOULD IMMEDIATELY CEASE LOGGING WITHIN PROPOSED NEW NATIONAL PARKS AND RESERVES IN VICTORIA'S CENTRAL WEST, SAYS VNPA'S NATURE CONSERVATION CAMPAIGNER **SHANNON HURLEY**.

The announcement to end native forest logging across the state by 2030 can't come soon enough for the forests of the central west.

Consider this: the total revenue generated from by VicForests' Community Forestry operations in 2018–19 in western Victoria was approximately \$700,000. This was supported by taxpayers through a grant from the Victorian Environment Department of \$678,000. Which actually means that they generated a net surplus of only \$22,000. This paltry revenue highlights that these areas would be far better off as national parks and reserves, with the associated tourism economic benefits, not to mention the value of the water, carbon storage and wildlife protected.

There is still no decision by the Andrews Government about creating national parks and reserves in Victoria's central west – and in fact some of the maps released in its recent forest announcement (see previous pages) show these areas will still be open for logging, including in Wombat (near Daylesford), Wellsford (near Bendigo), Pyrenees Ranges (near Ararat) and Mount Cole (near Ballarat) forests.

Part of the Andrews Government's motivation for the establishment of 'Immediate Protection Areas' in the east of the state (see previous pages) as part of its forest announcement is to protect Greater Gliders and other forest-dependent threatened species.

The forests of the central west are rich in biodiversity, with 380 rare or threatened species. A statewide analysis showed the proposed Wombat-Lerderderg National Park "... to be among the most important for Victoria's biodiversity..." and is also an important refuge for Greater Gliders, representing the western limit of their range as well as being the only population west of the Hume Highway. Nearby to Wombat Forest, Greater Gliders appear to have disappeared from Hanging Rock and have not been seen at Mount Macedon for many decades. Wombat Forestcare has been surveying the Wombat Forest for a number of years for Greater Gliders and have entered over 200 recorded sightings. In some areas the densities have been impressive, for example, eleven gliders observed in 250 metres.

For this reason alone, these areas should be worthy of 'Immediate Protection Areas' designation, and ultimately permanent protection in national parks.

Continued overleaf

Locals and visitors alike love Wombat Forest in Victoria's central west.

PHOTO: SANDY SCHELEWA

Continued from previous page

The forests of Mount Cole are also in dire need of higher protection. Most Victorians would not know that clearfell logging still occurs in the west of the state. But this is the unfortunate reality for the forests of Mount Cole, just two hours' drive north-west of Melbourne, where snow gums tower on its peaks, at least 130 different species of native birds make their home, the only place in the world the Mount Cole Grevillea grows (see box), and visitors enjoy the popular Beeripmo Walk.

Although Mount Cole is the only place where clearfell logging continues in western Victoria, there are also 89 coupes scheduled for various other types of logging within the proposed new national parks and reserves in the central west, including the Wombat, Wellsford and Pyrenees Ranges forests.

With Victorian Environment Assessment Council's (VEAC) recommendations for new national parks and reserves for these central west forests currently under the state government's consideration – we believe a commitment from the Environment Minister to rule out logging within the proposed new park boundaries is warranted.

Victoria's latest threatened species

Following a nomination by the Victorian National Parks Association (see September 2019 *Park Watch*), the Victorian Scientific Advisory Committee (SAC) has made a final recommendation to list Mount Cole Grevillea as a threatened species under the *Flora and Fauna Guarantee Act 1988* (FFG Act). Under existing arrangements, a joint decision by the Victorian Environment Minister and the Agriculture Minister is required to add the species to the threatened species list. Thankfully, the Ministers reached a decision to support the listing of the Mount Cole Grevillea on 25 October 2019.

Ruling out logging in the interim and ultimately creating new national parks at Mount Cole will increase chances for survival for this endemic species.



PHOTO: DAVID TATNALL

A Mount Cole Grevillea flowering this spring. It has been recorded in logging coupes at Mount Cole.

Ruling out logging in parts of these forests is not a unusual concept – in fact it occurred as recently as August this year, when the Wellsford Forest Conservation Alliance received confirmation that VicForests (the state's logging agency) would not log within particular areas of Wellsford Forest, particularly in the areas where the few remaining "big trees" are located. Similarly, a "no sawlog harvesting" commitment has been in place in the Wombat Forest since June 2017, due much to community pressure.

Many of the scheduled logging coupes within the proposed national parks and reserves contain records of threatened and rare species, including the below:

Forest destroyed by logging in Mount Cole.

Wombat Forest

Number of logging coupes within proposed new park: 59

Number of coupes not yet logged: 43

Values: Coupes have records of threatened species including the Powerful Owl, and the rare Wombat Bush-pea, Yarra Gum and the Wiry Bossiaea.

Wellsford Forest

Number of logging coupes within proposed new park: 7

Number of coupes not yet logged: at least 3

Values: Most coupes have records of threatened species including the Swift Parrot, Brolga and the Growling Grass Frog.

Pyrenees Ranges Forest

Number of logging coupes within proposed new park: 9

Number of coupes not yet logged: 6

Values: Records of the threatened Powerful Owl.

Mount Cole Forest

Number of logging coupes within proposed new park: 14

Number of coupes not yet logged: 9

Coupes scheduled for clearfell (even stand management): 5

Values: Coupes have records of threatened species including the Regent Honeyeater, Powerful Owl, Candy Spider-orchid, and the rare Mount Cole Grevillea.

PHOTO: VNPA

Now is the time

This is a once in a generation opportunity to secure some of Victoria's precious forests in our national parks network.

We must act now to ensure these special areas are protected for the future.

You can help create these much-needed new parks by donating to power our campaign.

In the middle of this edition of *Park Watch* you will find a postage-paid donation coupon. You can also donate by calling the team on 03 9341 6500 or visit www.vnpa.org.au/new-parks

Snowgums at Mount Cole are worthy of better protection.

While native forest logging is in decline in the west of the state, there remains a VicForests and logging industry ambition to continue to develop logging for commercial firewood and speciality uses.

In one of their submissions to VEAC, VicForests stated: "the Wombat State Forest could sustain an ongoing sawlog yield of over 10,000 cubic metres per annum." This would equate to approximately 3,500 large trees a year. The subsequent regrowth would have a significant impact on water yield. VicForests state in their final submission that "while only firewood is currently produced, VicForests has been approached to supply a small quantity of sawlog for a local sawmill as well as another high value adding business".

Ruling out logging in these central west forests, or at least establishing 'Immediate Protection Areas' like those announced in the east, while the VEAC recommendations are still under consideration is important for the short-term protection of a number of threatened species and their habitats – many of which would eventually be permanently protected if the Andrews Government agrees to create the new parks. But better protection needs to begin now, not later.

Future process for new parks

Once the Andrews Government agrees to create the new parks (this needs to be done by the end of February 2020, depending on parliamentary sitting days), legislation will need to be drafted and then passed by both houses of parliament. Declaration of a new park is usually associated with an implementation funding package to build appropriate infrastructure (such as signage, campgrounds and picnic areas), conduct urgent pest control, employ park rangers, and develop a park management plan. This can take some years to complete, and the sooner the resources are available, the better.

We are urging the Andrews Government to:

1. Publicly support all of the final VEAC recommendations.
2. Move quickly to create the new national parks and reserves, well within this term of government.
3. Provide appropriate resources for park establishment and management, including:
 - new staff/park rangers and existing staff transition;
 - parks infrastructure, such as relevant signage, campgrounds, tracks, and picnic areas;
 - park planning and ecological management, such as fox and deer control;
 - regional marketing and promotion; and
 - support for logging industry transition if necessary.

TAKE ACTION

VNPA and local community groups have requested the Environment Minister make a commitment to rule out logging in planned coupes within the proposed new national parks and reserves in Wombat, Wellsford, Pyrenees Ranges and Mount Cole while the state government considers VEAC's recommendations.

Supporting the new national parks and reserves is the most important thing you can do to help protect these unique forests.

The Andrews Government needs to make the decision to create these new parks by February.

Hard copy letters are currently gaining the most attention in the Premier's office. Enclosed with this issue of *Park Watch* is a letter to the Victorian Premier, calling on him to approve these proposed parks.

Please fill in your details on the enclosed letter, seal it and put it in the post. And please tell your friends and family to do the same by visiting our website, where they can find a copy of the letter to print at www.vnpa.org.au/central-west-forests

Ten years of protection for Cobboboonee forest

CELEBRATING THE ANNIVERSARY OF THE INCLUSION OF THIS SPECIAL FOREST INTO VICTORIA'S NATIONAL PARKS SYSTEM – THANKS TO A DEDICATED COMMUNITY CAMPAIGN TO HAVE IT PROTECTED.

The Cobboboonee National Park and Cobboboonee Forest Park are situated north-west of Portland in south-western Victoria and protect approximately 27,000 hectares of forest. It is the most western tract of wet sclerophyll forest in Australia, and consists mainly of stringybark, riparian vegetation, and melaleuca swamps which provide the headwaters for the Fitzroy and Surrey rivers.

The various Ecological Vegetation Classes within the national park provide habitat for threatened species such as the Powerful Owl, Spotted Quail-thrush, Yellow-bellied Glider and Long-nosed Potoroo. There are many interesting and rare plant species, including Lizard Orchid (pictured) and Wrinkled Cassinia, that are protected by the national park status.

However, before it received this formal and permanent protection in 2009, the forest was suffering from the significant loss of high conservation value forests and the decline of forests-dependent wildlife due to logging.

Members of the Portland Field Naturalists' Club led by Conservation Officer Doug Phillips recognised the ecological significance of the Cobboboonee forest, then designated as State Forest, prior to the first South West Victorian Regional Forest Agreement process.



PHOTO: RICHARD WHITE, WIKIMEDIA CC

Beautiful Lizard Orchids are protected in the Cobboboonee National Park.



PHOTO: GEOFF DURHAM

For many years this area had been subjected to forestry practices of logging and silviculture treatment (ring-barking and killing of non-commercial species and old hollow-bearing trees) as well as fire management practices, which were all detrimental to the long-term viability of the biodiversity of the forest.

To prevent future degradation of this forest, a political solution was needed. Thus commenced a decade-long community campaign to protect the Cobboboonee forest through legislation, culminating in the declaration of a 18,000-hectare National Park and 9,000 hectare Forest Park under the *National Parks Act 1975* in November 2008 by the Brumby government.

Locals held a celebration of 10-year anniversary of the park in early November, with a memorial picnic setting at the Surry Ridge Campground dedicated to the Late Doug Phillips (see *Park Watch* June 2019 for his tribute). • PW

The dedication of the Portland Field Naturalists' Club, and especially Doug Phillips to fight for the creation of the Cobboboonee National Park was supported by the Victorian National Parks Association and other state and national conservation groups. It was part of the almost 130,000 hectares of new parks created under the Brumby government between 2007–2010, which built on the excellent record of the previous Bracks government creation of almost 225,000 hectares of new parks between 1999–2007. After five years in office, the Andrews Government has the lowest rate of new parks creation in the last 60 years.

Wrong project in the wrong place

GARY DUNNETT,
EXECUTIVE OFFICER OF
THE NATIONAL PARKS
ASSOCIATION OF NSW,
EXPLAINS WHY SNOWY 2.0
DOESN'T STACK UP
ECONOMICALLY OR
ENVIRONMENTALLY.



Thredbo River in winter.

PHOTO: GARY DUNNETT

The Snowy 2.0 pumped hydro storage project is a truly massive infrastructure project that will substantially and permanently damage 10,000 hectares of Kosciuszko National Park – one of Australia's most iconic and precious natural areas.

It will wipe out rare and irreplaceable alpine and mountain areas, including 1,000 hectares of threatened species habitat.

We strongly support climate action and building capacity in the renewable sector. But Snowy 2.0 should have never been considered.

It would be truly perverse to sacrifice the precious habitats we are striving to protect.

We know there are far better alternatives for renewable energy storage, ones with a much smaller environmental impact that also offer better economic and network outcomes.

We find it shameful that the Australian Government, the sole shareholder of Snowy Hydro, did not analyse these alternatives. Instead we now have a power company with unprecedented access treating Kosciuszko National Park as an industrial site.

The National Parks Association of NSW has produced a comprehensive research paper on the project *Snowy 2.0 Doesn't Stack Up* (visit www.npansw.org/snowy-2-0).

When announced in 2017, Snowy 2.0 was to cost \$2 billion, take four years to construct by 2021, and be fully funded by Snowy Hydro – none of which has turned out to be anywhere near correct. The cost has soared to \$10 billion, the construction time has more than doubled to 2027, and the Commonwealth Government has kicked in \$1.4 billion (with more likely to be needed).

Sticking a hip 2.0 moniker on it and invoking the nation-building romance of the original Snowy Scheme cannot change the fact that this is environmental vandalism and economic folly, carried out in the name of pretending it's a silver bullet for an energy policy.

In addition to its environmental impacts, the benefits of Snowy 2.0 are overstated:

- There are far better renewable energy alternatives that will cost less to taxpayers, electricity consumers, and the environment.
- Snowy 2.0 will consume more energy than it produces. Worse still, for at least the next several years, most of that energy will come from burning coal.
- Snowy 2.0 is shaping up as a multi-billion dollar drain on Australian taxpayers that will increase energy costs.

The National Parks Association of NSW is not opposed to pumped hydro storage schemes as such – additional electricity storage, including pumped hydro, is definitely needed as renewable generation expands. But there are literally hundreds of alternative opportunities for energy storage – pumped hydro, batteries, demand response etc. – Snowy 2.0 is one of the most destructive and expensive.

The fact that Snowy 2.0 has been approved, contracts awarded (\$5.1 billion) and construction commenced well before the environmental impacts have assessed defies belief and the law of the land.

And this is even more reprehensible as the project will be so destructive to one of Australia's iconic natural places.

The Commonwealth shareholding Ministers should revoke the approval of the Business Case on the grounds of inadequate estimation of the costs and projected returns of the project to the Australian public. And the NSW Minister for Planning should refuse approval for the Environmental Impact Statement on the grounds of inconsistency between the enormous scale of the project and the national park status of the proposed development site.

Ultimately it will be the Australian public that bears the costs and Kosciuszko National Park that bears the scars. • PW



GOLD DIGGINGS, ARARAT, C.1858, BY EDWIN ROPER LOFTUS STOCOUELER.

Common heritage

SUSAN LAWRENCE AND PETER DAVIES, FROM THE DEPARTMENT OF ARCHAEOLOGY AND HISTORY AT LA TROBE UNIVERSITY, STUDY THE GOLD RUSH ORIGINS OF PUBLIC LAND IN VICTORIA.

As Mark Twain pointed out, land is something that they aren't making any more. Land is scarce, and that is even truer of public land.

But whether we are alarmed about proposed land sales or campaigning for more national parks, we take it for granted that there *is* public land to sell or to protect. It is worth stopping to ask, how is it that we have public land at all?

This is an even more relevant question when it comes to western Victoria. The western half of the state is arguably some of the best land in Australia for agriculture – well-watered, with a mild climate and gently rolling topography. It is truly the 'Australia Felix' ('happy' or 'blessed' Australia) described by Major Thomas Mitchell in 1836.

The first settler-pastoralists certainly thought it was. Within just a few years of Mitchell's report they had seized almost every square inch of

western Victoria from the Traditional Owners – and the government quietly acquiesced.

So, why indeed is there any public land at all? Why isn't all the land still privately owned?

The answer lies with the gold rush.

As the rush waned, the demand for land grew. After an intense populist campaign, the Victorian government passed a series of Land Acts in the 1860s that gradually converted the immense pastoral runs into smaller farms.

There was a problem, though – the gold rush was over but the mining industry was still going strong. And it needed land too.

Geological knowledge of Victoria was still in its infancy. There was a very real possibility that more gold remained to be found. If all the land was sold off, the government ran the risk of missing out on a future golden bonanza.

Then there was the issue of the goldfields towns. Thousands of people, 40 per cent of Victoria's population, lived in the mining districts. All of them needed water supplies, firewood, and land for grazing horses, sheep and dairy cows.

The solution lay in Goldfields Commons, which would allow private access to land while retaining public ownership. They enabled the government to hedge its bets on mining while also opening land for sale.

The first Goldfields Commons were declared in 1860. Eventually there were more than 80 across Victoria, from Stawell in the west to Omeo in the east, although most were concentrated in the central goldfields districts. They ranged from only 200 hectares to over 33,000 hectares in area, but the majority were between 2800 and 4000 hectares.

Goldfields Commons had many uses. For Traditional Owners they were invaluable places of refuge from the destruction and upheaval of the land and the mining towns. Carters grazed their bullocks on the Commons and dairy cows were numerous. Cultivation licences, which gave leasehold title to 20-acre (8-hectare) plots, were eagerly taken up by orchardists and market gardeners.

The Commons also gave access to timber and water, both highly sought after by the mines and the mining towns. Timber was used for mine props and fed steam engines and cooking fires. Water was sourced in the uplands and carried through extensive networks of open channels.

The mines dumped their waste on the Commons too, in large mullock heaps next to the shafts and by discharging semi-liquid tailings into the streams.

The Goldfields Commons were managed by the local Boards of Mines, and this hints at their greatest value. The principal beneficiaries of the Commons were the holders of a Miner's Right. This was essentially a prospecting licence, but it came bundled together with an assortment of other privileges.

For five shillings a year, those with a Miner's Right could legally prospect on the Commons, stake a mining claim, and operate a small gold working. They could vote in local and general elections, and graze animals, keeping a dairy cow or a few goats. They could also cut timber, and take water from the open channels built for the mines.

As well, a Miner's Right entitled the holder to claim a quarter of an acre of land on the Commons on which to build a house. Families invested in permanent housing and small gardens. Eventually, both cultivation licences and residence licences were allowed to be converted to freehold title. This was the basis for the great wave of home ownership that characterised Australia for generations.

But private ownership also contributed to the demise of the Goldfields Commons. As the economic importance of mining diminished, the need for the Commons faded away. Only a few tenacious ones held on into the 20th century - such as Wedderburn, which lasted until 1941.

Many Commons were converted to timber reserves. As early as the 1880s



A detail of Sandhurst Goldfields Common, Public Record Office Victoria, VPRS 242/P0/105

the government had realised the need to manage Victoria's forests sustainably. It declared part of the Creswick Goldfields Common a timber reserve, and appointed John La Gerche as the government's first forester.

Other former Goldfields Commons followed a similar path. By the 1950s the land that had once been managed for gold was now being managed for timber.

In some ways the Goldfields Commons are a case study of the 'Tragedy of the Commons' described by Garrett Hardin in 1968. They were owned by none but abused by many, suffering from over-grazing and weed infestations, and from depredations by feral animals including rabbits and goats.

Yet Goldfields Commons were created for a particular purpose in Victoria, and arguably for that purpose they functioned well. The commons offered a 'middle way' of land management, between exclusive state control on the one hand and complete private ownership on the other. They were an important stage in the process of establishing settler domination of the land.

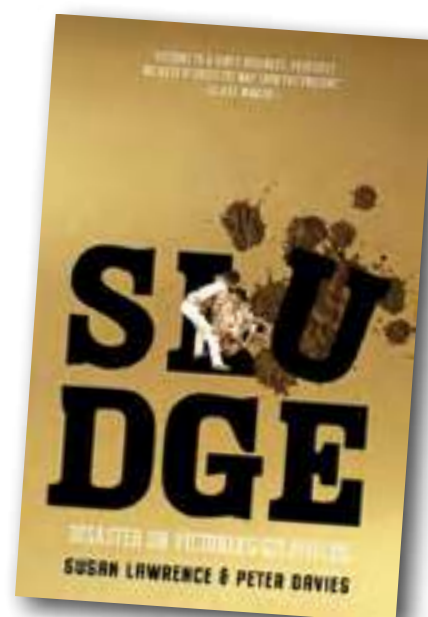
The Commons were contested places, where competing interests from mining, forestry and pastoralism struggled for control. They were also places of refuge for Aboriginal people and a haven for fringe dwellers, including Chinese market gardeners and the subsistence mining families who hung on in the bush for several generations.


The former common lands continue to be contested places today, valued for biodiversity but still for their potential resources of timber, water and gold, and as places for human respite and recreation. The old Commons are also crucial places for Traditional Owners, who are increasingly co-managing public land in central Victoria.

Debates about how this land should be used will continue, but the fact remains that Goldfields Commons have left a rich legacy of public land across central Victoria.

This article is a transcript of an presentation given by Professor Lawrence at the VNPA Annual General Meeting on 8 October 2019. • PW

Further reading: You can read more in the authors' recent publication *Sludge – disaster on Victoria's goldfields* (2019).





Our parks, like Mount Buffalo National Park here, are the last refuge for tens of thousands of native species. Visitor access is important, but it must take second place to habitat protection.

Public access to public land: what's the game?

PHOTO: PHIL INGAMIELLS

THERE IS LITTLE COMMUNITY UNDERSTANDING OF OUR 'RIGHTS' TO ACCESS DIFFERENT TYPES OF PUBLIC LAND, ESPECIALLY NATIONAL PARKS. IT'S AN INCREASING PROBLEM AND DESERVES CLARITY, WRITES VNPA'S PARKS PROTECTION CAMPAIGNER **PHIL INGAMIELLS**.

As an old saying, slightly localised, goes: "The law locks up the person who steals the parrot from the park, but lets the greater villain loose who steals the park from the parrot".

Most of our so-called 'public land' goes by the more pompous name of 'Crown Land' and appears to belong to Her Majesty, enthroned on the far side of our precariously spinning planet.

But according to our federal and state constitutions, authority over the Crown's estate hereabouts belongs to the people of Victoria, and administration of that authority has been the job of the people's representative, our state government. Over many years successive governments have, with the community's blessing, attached conditions on what can and can't be done on that land.

In a recent, welcome move, large areas of public land in Victoria are being returned to the land's Traditional Owners in a process facilitated by the Victorian Government under a new law, the *Traditional Owner Settlement Act 2010*. It gives specific management and/or co-management rights to Aboriginal communities, without generally changing existing land categories and the laws that govern them, or significantly altering public access.

Historically, some small bits of land, like disused road reserves, have been under 'peppercorn' leasehold since the 19th century. Other bits, like caravan parks and sports fields, have been regulated by the Department of Environment, Land, Water and Planning (DELWP) and/or local councils, but are actually looked after by delegated committees of management.

A great slice of Victoria's public land is state forest managed by DELWP, and a good slice of that is currently under the control of commercialised state-owned body VicForests, which manages land primarily for production of saw-logs and woodchips.

Most areas of public land restrict activities in some way: take Melbourne's MCG or Botanic Gardens, for example. But it's not well understood that national and state parks actually have a far higher level of protection than either the MCG or the Botanic Gardens. National parks are strongly protected by a range of Victorian laws, as well as federal law and an international convention.

National Parks

Prime among these laws is Victoria's very own *National Parks Act 1975*. While the Act clearly allows public access to parks, it makes it clear that Parks Victoria must act for the "protection and preservation of indigenous flora and

If our parks aren't managed well, currently secure but uncommon species, like this Daddy Long-legs orchid in Little Desert National Park, can end up on a threatened list.



PHOTO: PHIL INGAMIELLS

fauna [not just threatened species] and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks". Parks Victoria must also consider "all classes of management actions that may be implemented for the purposes of maintaining and improving the ecological function of the park" and is obliged to prepare a management plan for each park that can fulfil those obligations.

Laws protecting parks are there for good reason. Victoria's natural heritage includes around 100,000 native species. About 675 are vertebrate animals (mammals, birds, fish, reptiles etc.), and over 4300 are vascular plants; most of the rest are insects, other invertebrates, and fungi. Over 2,000 of Victoria's plants and close to 300 animals are listed as rare or threatened in the state; it's a list that is now under revision and growing larger. Parks are one of the few conservation mechanisms that protect whole ecosystems.

Most of our ecosystems are in decline, and reversing that decline will require well-resourced management and cooperation from the whole community. Many Aboriginal cultural sites are also threatened.

Unfortunately there is a notion among some that managing visitor activities in parks is "a ridiculous state of affairs" because a park is public land. It's just bush, after all, and it's everyone's bush. It's an understandable view, because a generation or so ago that was the state of affairs.

But these days that view just doesn't work.

Many of our parks are becoming increasingly fragmented and knocked about. Irresponsible mountain bikers are making new trails all over the place without asking the park's managers or co-managers, let alone putting in a planning proposal. Rock climbers are also making strong inroads in places like Grampians National Park. Then there's the "What's wrong with walking my dog here?" crew, the firewood collector, prospector etc.

From time to time, unlimited access advocates link up; this is the case with the Bush User Groups United (BUGU), currently opposing not only new parks in central west Victoria, but also opposing Traditional Owner co-management and even the Environment Minister herself. There is often debate about new national parks; some concerns are driven by changes in commercial arrangements, some are ideological, others simply fuelled by misinformation. But that debate generally fades when parks are proclaimed.

It's understandable that many people don't comprehend the conservation predicament (though a good government education program would help here). Less understandable is the behaviour of the tourism industry.

The rolling claim for tourism developments

The words 'national park', as a brand, pretty much matches the world-wide recognition level of another brand, 'Coca Cola'. (Indeed, they've both been around since the 19th century!) In the case of national parks, that creates a magnetic attraction for anyone proposing a tourism development.

A 2017 so-called "community driven vision" for Mount Buffalo National Park enthusiastically proposed a couple of bars, a spa hotel, wedding venue, skating rink, as well as a dining venue suspended above the picturesque Buffalo Gorge. That bizarre developers' proposal should have been knocked off its presumptuous perch straight away. But the state government's tourism arm allocated \$200,000 to the Alpine Shire Council to assess the scheme, even though neither the shire nor the Tourism Minister had any authority over or responsibility for the park. Fortunately, the whole crazy dream fell in a heap.

And recently, a 'Destination Gippsland' tourism strategy proposed a series of accommodation dreams for Gippsland's parks, with little acknowledgement of park legislation or planning obligations and processes.

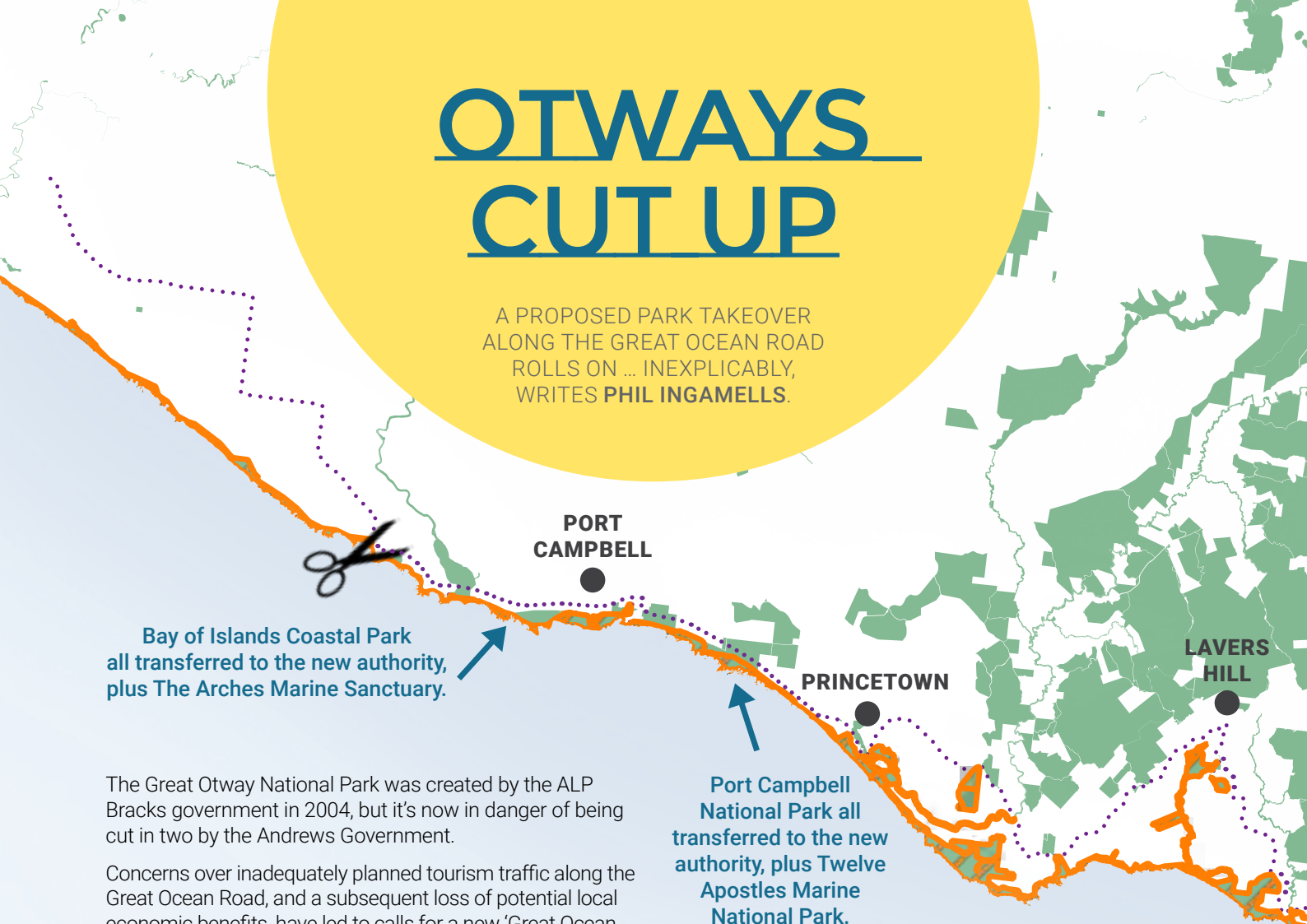
Park development proposals like that generally just waste everyone's time. On the other hand, planning a tourism development outside but adjacent to a national park or in a nearby town is a far more sensible thing to aim for, and allows for possible expansion of a successful enterprise. And it helps contribute to the long-term protection of our remaining natural and cultural assets.

It's time to change this situation.

Everyone will benefit if park legislation, and the reasons for such high levels of protection, are clearly acknowledged, well understood, and respected both within government departments and across the broad community. • PW

OTWAYS CUT UP

A PROPOSED PARK TAKEOVER
ALONG THE GREAT OCEAN ROAD
ROLLS ON ... INEXPLICABLY,
WRITES PHIL INGAMELLS.



Bay of Islands Coastal Park
all transferred to the new authority,
plus The Arches Marine Sanctuary.

The Great Otway National Park was created by the ALP Bracks government in 2004, but it's now in danger of being cut in two by the Andrews Government.

Concerns over inadequately planned tourism traffic along the Great Ocean Road, and a subsequent loss of potential local economic benefits, have led to calls for a new 'Great Ocean Road Authority' to fix the situation. Currently there are multiple managers along the famous stretch of road: local councils and various committees of management handle some 70 odd parcels of public land, including camp grounds, parking areas, and some embarrassingly inadequate toilet blocks.

But somewhere along the way, the idea to simplify and coordinate the multiple management of the road's problematic facilities took a great territorial leap. It sucked up management of the national parks along this coastline as well, even though no problems have been identified with the parks (other than the usual issue of inadequate government funding).

There are many claims being made about why we need a new Great Ocean Road Authority, but there is very little clarity in regard to its ambition to control national parks. At best it can be described as an unnecessary duplication of responsibilities for the parks along the road – at worst it's a land grab by tourism interests.

Those 70 odd parcels of public land, problematically managed by a multitude of players, total just 4,000 hectares of public land along the Great Ocean Road. The far bigger area of national parks is managed by a single government body, Parks Victoria. Rather than being a problem, the parks are what actually brings people to the area. But for reasons undeclared, there is a fixation on grabbing control of large parts of them.

To date we have been told that the proposed authority will, at least, take control of all Parks Victoria managed land seawards of the Great Ocean Road, from Point Impossible near Anglesea to the Bay of Islands Coastal Park just past Port Campbell (as well as areas of the ocean itself: Point Addis and Twelve Apostles Marine National Parks

PORT
CAMPBELL

Port Campbell
National Park all
transferred to the new
authority, plus Twelve
Apostles Marine
National Park.

PRINCETOWN

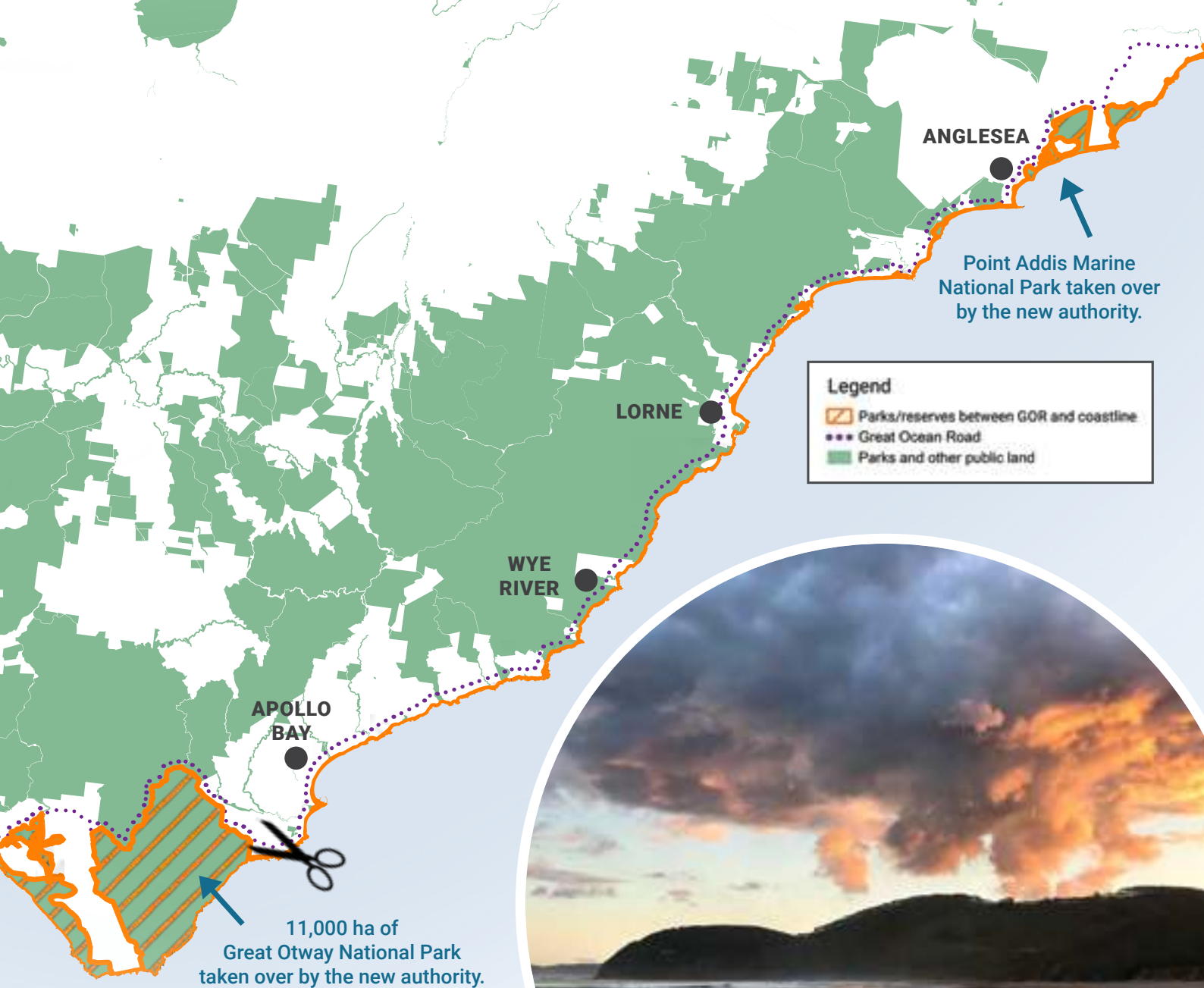
LAVERS
HILL

and The Arches Marine Sanctuary). This equates to about 14,000 hectares of Parks Victoria managed land, the largest chunk being 11,000 hectares of Great Otway National Park, plus the 12,000 hectares of marine parks. It will grab almost all of Port Campbell National Park. Roughly 26,000 hectares of national park land and sea is set to be handed over to the new authority.

There has been no fair dinkum public discussion of the degree of oversight that the proposed authority would have over management of the six terrestrial and marine parks involved, and the ongoing funding proposal for the authority is precarious at best.

These are some of the issues:

- There has been virtually no public discussion of the funding model for the authority, however it aims to be self-funded through camping fees, a possible toll on the road, and potential revenue from leases and licences on public land.
- Remarkably, there has been no cost-benefit analysis performed for this proposal, a situation that has proven politically scandalous in the history of large government projects such as freeways, but inexplicably not an issue in this case.
- There is no demonstrated benefit in duplicating management responsibilities for the parks already under Victoria's *National Parks Act 1975*, especially in regard to the specific obligations for managing native species and ecosystems, and the increasing threats they face.



Dark days for the Otways.

PHOTO: PHIL INGAMIELLS

That task is difficult, and is unlikely to be improved by management oversight from a precariously funded new government authority, whose prime objective is tourism management. This could create the context for a 'lawyer's picnic' if conflicts arise.

- We note that the Environment Minister's 'Obligations' for Parks Victoria, under the new *Parks Victoria Act 2018*, means PV must work effectively with "Traditional Owners, other land managers and the broader community, providing high quality opportunities for visitors to enjoy the parks and reserves and contributing to the state's visitor economy". We believe that obligation gives ample assurance that Parks Victoria would work well *with* a Great Ocean Road Authority, and that there is no need for that authority to have management oversight of Parks Victoria. A partnership, rather than a take-over, is far more sensible.
- The authority's responsibilities are many and onerous, and will require a budget of many tens of millions of dollars. And it is clear that the management priority for the authority is tourism. There is real concern that in exercising its considerable tasks it will come to depend on revenue from tourism developments in those areas of our national parks under its control.

Update: DELWP is now running a third round of public consultation on the Engage Victoria website, with submissions due by 25 December: go to www.engage.vic.gov.au/great-ocean-road

This time it's largely around the function and membership of local community advisory committees. However, DELWP has never invited genuine public discussion of the authority's national park management grab. Apparently that's seen as a *fait accompli*. • PW

The promised grasslands of the never never

IT HAS BEEN TEN YEARS SINCE THE STATE GOVERNMENT COMMITTED TO PROTECTING VICTORIA'S GRASSLANDS – BUT NOT MUCH HAS HAPPENED SINCE, SAYS **MATT RUCHEL**.



PHOTO: TIM RUDMAN FLICKR CC

Matted Flax-lily, a critically endangered grassland species.

Grasslands once covered almost a million hectares and spread from Melbourne's west to Portland. But since European settlement, 90-95 per cent of these grasslands have been destroyed, and as little as 1 per cent remains as high-quality habitat – much of it threatened by Melbourne's urban sprawl.

Decade-old Commonwealth and state government promises to protect them, such as by creating new large grassland reserves, have so far failed. The Andrews Government is now trying to legislate its way out of the commitment.

Grasslands and associated ecosystems, such as grassy woodlands, are listed as 'critically endangered' under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. They are home to 25 fauna species and 32 flora species listed as endangered or threatened.

These include the critically endangered Golden Sun Moth, the Plains Wanderer, Growling Grass Frog and Striped Legless Lizard, plus numerous important native plants such as the critically endangered Plains Rice-flower and Matted Flax-lily (pictured).

The remaining grasslands in and around Melbourne contain abundant native plants and animals – in many ways they are like an ecological Noah's Ark. What remains is due in part to historical land banking by property developers and in part due to the dryer and rocky terrains.

In the south east of Melbourne there are no grasslands, but at least one significant population of Southern Brown Bandicoots exists around the Cranbourne Botanic Gardens. (Read article on pages 28–29).

In 2009, in an attempt to fast track urban development and cut so-called 'green tape' the state and Commonwealth Governments commenced a 'Strategic Assessment' under the national environment laws. A previously little-used provision, this is basically a government-funded assessment of national significant species and communities in the Melbourne Growth Areas, with the aim to speed up urban approvals.

The Victorian National Parks Association worked with 20 local and regional conservation groups to provide detailed input to both state and federal agencies. We were disappointed at the overall results. Almost a decade on, there have been dozens of specific program reports, sub-strategies, and protocols which create an exceedingly a complex labyrinth of documents and approvals.

The resulting 'Melbourne Strategic Assessment' (MSA) agreed to deliver on a series of outputs to protect some of the most ecologically endangered communities and species in Australia in the face of rapid urban development.

Covering about 43,000 hectares in total, of which about 24,000 hectares was considered suitable for urban development, it is essentially an offset scheme. It allows the clearing of around 4000–5000 hectares of high-quality grasslands and other habitat within the Urban Growth Boundary, on the condition of the establishment of a series of large conservation reserves to offset the loss, mostly outside the urban area, paid for through levies on urban development.

This was strongly debated and disputed by many conservation groups and ecologists. There was and remains concern that the large conservation reserves outside the urban areas did not contain the same natural values as what was being lost within – that it was not an equal 'replacement' and that it was far better to keep some of the smaller areas of high-quality grassland and other habitat within the urban areas. Most of these concerns were ignored or dismissed, in the rush to cut green tape and make Melbourne boom.

In the end the Commonwealth approved:

- A 15,000-hectare 'western grassland reserve' established and managed between Werribee and Melton.
- A network of conservation areas (36 areas covering over 4000 hectares) within the Urban Growth Boundary.
- A 1200-hectare grassy eucalypt woodland reserve is protected and managed in the north around Donnybrook.

- 80 per cent of grassy eucalypt woodland containing, golden sun moth, spiny rice-flower and matted flax-lily is protected and managed within the Urban Growth Boundary.
- Important landscape and habitat areas for southern brown bandicoot are protected and managed.

The total cost of the program was estimated to be just under \$1 billion (\$986,154,518) funded by fees collected over 10–40 year period. The program promised to "... increase the extent of protection of Natural Temperate Grassland of the Victorian Volcanic Plain from two per cent to 20 per cent". And according to the main approval document "The Department of Sustainability and Environment will be the acquiring authority and will acquire all freehold land (excluding quarries) and reserve it by 2020".

All these promises and commitments have so far failed. The last publicly-available update in 2017 revealed that since commencement, the program has received approximately less than 5% of total budget – \$72.6 million in revenue and expended approximately \$46.4 million on program implementation activities.

- About \$35 million of this has been spent on acquiring grassland reserves (1,244 hectares acquired to date or about 10 per cent of total). This is about 7 per cent of the total expected lifetime expenditure for this purpose.
- About \$7.5 million or 13 per cent has been on program delivery e.g. government staff, almost double the proportion that which has been spent on purchase of grassland reserves.
- Only \$1.4 million has been spent on on-ground management, or less than 1 per cent of costs.

The project may be working for property developers, with almost 3,000 hectares of land approved for urban development, and according to the government, a saving of almost \$500 million in costs for developers.

Deeply flawed from the start, the conservation outcomes of the scheme seem to be the lowest priority.

The Andrews Government is now trying to legislate its way out of the commitment, and has recently introduced into parliament the Melbourne Strategic Assessment (Environment Mitigation Levy) Bill 2019. If the Bill is passed it will hardwire the levy scheme into legislation, allow the government to increase the fees as the land is now more expensive, and provide some improved oversight and scrutiny of program, such as a two year progress report from the Commissioner of Environmental Sustainability tabled in parliament.

While it might be good for revenue, the Bill does nothing directly to ensure or speed up the protection of grasslands or deliver the promised conservation outcomes. With a recently released Commonwealth review of national environmental laws, and flurry of media about how terrible so-called 'green tape' is, perhaps it is time the Commonwealth ensured that what was promised is delivered, and the threatened grasslands are not left to the never never. • PW

ROCKY REEFS

- 1** A unique-looking cartilaginous fish with silvery, iridescent reflections and dark spots, blotches and broad bands along the sides of its body. It has venomous dorsal-fin spines and an unusual hoe-shaped snout. This fish lives along the Victorian coastline in sandy, muddy bottoms at depths of up to 200 metres.
- 2** This iconic species is a master of disguise, living in shallow kelp forests, reef edges and seagrass beds in southern Australia's temperate waters. Its leaf-shaped appendages and cryptic colouration allow it to hunt small crustaceans, which it snatches up in its long, pipe-like snout. Females of this species lay their eggs on a specialised patch on the male's tail, and he will carry the eggs until they hatch.
- 3** Found throughout south-eastern Australia, this fish usually inhabits deep exposed rocky reefs down to 160 metres, feeding on crustaceans and molluscs. This fish is sexually dimorphic and can change from female to male throughout its lifetime. Females and juveniles are greenish to brown-ish, and develop a dark band as they mature. Males have a rounded snout and are brown to bluish-grey, with a blue head and chin.
- 4** This bony fish is orange-brown to dark brown above and pale below. Adults have a forked caudal tail, two hornlike bumps in front of the eyes and large fleshy lips. They live on reefs down to 30-metre depths and are found throughout eastern Victoria. It is often seen resting on the seafloor, perching on its pectoral fins.
- 5** This slow-moving fish is encased in a rigid, box-like carapace with spines along its back and above the eyes. Males have a distinctive hump on the snout and are brightly coloured with blue-black, yellow and orange stripes and spots. Females are brown and white with complex patterns. This carnivorous fish is often seen in sheltered seagrass meadows in the shallow coastal waters of southern Australia.
- 6** Often mistaken for fish number 5, males of this species are brightly coloured with blue lines and spots while females are a pale orange to brown with white wavy lines. Both also sport spines along their backs and a hard carapace of fused scales, although the male of this species does not have a humped snout. They feed on benthic invertebrates by blowing jets of water onto the sediment to expose them.

Answers: see page 37.

Whether you scored 0 or 6, you can always learn more about our marine life by joining the Great Victorian Fish Count. Find out more on www.vnpa.org.au/fish-count

Where is the government's answer to the deer invasion?

INACTION ISN'T A SOLUTION,
SAYS **PHIL INGAMELLS**.

It is now over a year since the Victorian government received the community's responses to its 2018 Draft Deer Management Strategy. But despite increasing numbers of deer gambolling around in their destructive game, the government seems frozen in indecision.

The draft was widely seen to be an inadequate response to the deer invasion.

Indeed Victoria is now the only mainland state that hasn't listed deer as a pest animal, even though we almost certainly have the largest deer population (over a million and growing!), and suffer the greatest impacts. They are still protected here under Victoria's *Wildlife Act 1975*.

The strategy got off to a bad start. It was originally framed as a 'Sustainable Hunting Strategy', aiming to maintain the recreational hunting into the future, even though hunting is about the only thing that *isn't* threatened.

As such, the draft made no assessment of the considerable economic impact on agriculture, downplayed the enormous impacts on national parks and the broader environment and made little mention of growing road safety issues. Critically, it aimed at 'containment', rather than significantly reducing deer numbers.

We know the public wants strong action on deer. In May this year, for example, around 100 Landcare groups across the state, winegrowers and environmental scientists sent an impassioned public plea via an open letter to the two ministers involved, asking for an "integrated, large-scale, adequately-resourced program" to manage this out-of-control feral animal.



PHOTO: TOM CROOK

Deer-ravaged warm temperate rainforest at Lake Bunga, East Gippsland. Deer are increasingly causing canopy loss in rainforests.

This letter, curated by the Victorian National Parks Association, was partly generated because the promised public release of a summary of the community's responses to last year's draft had not (and still hasn't) happened.

Maybe the framing of the final strategy is difficult because the agriculture department, which has obligations to protect farmers, also has perceived obligations nurtured by the Game Management Authority to protect the hunting 'resource'. But decades ago, when deer were given their legal protection, the state-wide population was tiny and the impacts were negligible. Maybe the difficulty has been in balancing the obligations of the two ministers responsible for the strategy:

one for agriculture and one for the environment. Or maybe an effective strategy is just too inconveniently expensive for a government to sign up to. But every delay, of course, makes control ever more costly.

Meanwhile our most valuable natural areas, from Gippsland's rainforests to alpine wetlands, from coastal woodlands to the Grampians, are being seriously trashed.

And orchardists, vignerons and even suburban gardeners are forced to invest in expensive deer-proof fences to stay functional. It's time this problem was squarely faced, and the rampant abundance of this highly destructive feral animal was brought under control. • **PW**

I ONCE FOUND MYSELF IN THE STEAMY TROPICAL forests of Silent Valley National Park, in southern India's Nilgiri Hills. It was an unusual park in many ways: it was drenched by an annual rainfall of 8-10 metres; it was rugged, with no known history of human habitation; and visitors were rare and required a permit.

But the thing that intrigued me most was that I was being guided around the ancient buttressed trees and dangling

lianes by one of the park's many resident research biologists. Nearly every person I met at Silent Valley was involved in research projects. That doesn't generally happen in Victoria's park system.

But I'll have to leave the luxury of reminiscing, because I want to talk about a rare chance we have to help a greatly-loved park in Victoria – a chance that might be slipping away from us.

THE PROM AS A SANCTUARY

IT'S TIME FOR THE BEST MANAGEMENT PROPOSAL
OUR PARKS HAVE EVER SEEN, SAYS VNPA'S **PHIL INGAMELLS**.



The Prom

There is probably no national park in Victoria as well loved as the Prom. It's certainly the only one to be widely known by its nickname.

Wilson's Promontory became a national park in 1898 (before Australia became a nation!) It wasn't given protection primarily for its scenery or for

tourism, as most other parks were in those early days. Indeed, the Prom was quite difficult to access then.

The passionate plea to protect it came from scientists in the Field Naturalists Club of Victoria and the Royal Society of Victoria. They had been documenting its many wonders: the ocean migrant birds, the heathland orchids, the tall forests and a host of animals.

Continued overleaf



One reason for the Prom's fascination is that, while it is clearly attached to the Australian mainland, it pretty much belongs to a chain of granite islands stretching across Bass Strait to Tasmania.

Around 20,000 years ago, towards the end of the last ice age when sea levels were much lower, those islands were just the peaks of the last land bridge between the mainland and the island state. There are still a number of plants to be found at the Prom, such as Crimson Berry (*Leptecophylla juniperina*), that really belong in Tasmania.

The first sanctuary idea

In the early 1900s field naturalists, already aware that many Victorian species were endangered by extensive land clearing, had the notion that the Prom could act as a sanctuary for them. In 1912 alone they planted seeds and seedlings of nearly fifty plants native to other regions of Victoria. Animals arrived too; Mallee Fowl were brought in all the way from Victoria's dry northwest. Most introductions failed but some, like East Gippsland's Cabbage Fan Palms, struggled on.

Our knowledge advances by trial and error, and by careful observation. We now understand that protection of the complete range of Victoria's habitats is crucial to the survival of the vast number of native species (around 100,000) in the state. Animals are generally dependent on specific plants and habitat structures, and plants depend on the climate and aspect of a given place, the soils, fungi and insects, as well as rates of disturbance by both Aboriginal burning and wildfire.

Protection of Victoria's natural heritage became a battle to protect habitats: we had to reserve as much as we could of the extent of each ecosystem in the state, and understand how to restore landscape integrity.



Big changes

The Prom remains an astonishingly beautiful place and it's an invaluable refuge for any weary soul, but it's been knocked around a lot over the last century or so.

When renowned ecologist and radio broadcaster Crosbie Morrison visited the Prom in 1946, he was astonished by its degradation. The army had taken over the park for commando training during the war and, combined with the effects of fires, drought, rabbits and ongoing stock grazing, much of the Promontory's vegetation and fauna had been damaged or depleted. His very public concern triggered the formation of the Victorian National Parks Association and subsequently Victoria's first park management agency, the National Parks Authority (now Parks Victoria).

Dedicated management of the park has improved many things, but some impacts remained and others grew.

Historical logging and large, high intensity fires in close succession have transformed the landscape so much that the towering old forests that once covered much of the park are now very diminished in age and extent. Feral animals like foxes, cats and deer continue to affect things in many ways, particularly by reducing the abundance of small mammals and reptiles. And there are growing visitor impacts.

The most striking change has taken place on the Yanakie Isthmus, that sandy neck of land connecting the Prom's granite slopes to the mainland. Anyone driving today through the first 17 kilometres from the park entrance will see an apparently endless landscape of impenetrable tea-tree, but it wasn't always like that.

Our first European visual and written records of the Prom show the isthmus to have been open country



Above: The open grassy woodland seen from the Prom's entrance road in about 1960.

Right: Taken in 2008, the same area has become tea-tree scrub.



PHOTOS COURTESY PARKS VICTORIA



MITCHELL LIBRARY, STATE LIBRARY OF NSW

The Prom's western coast and islands from Shellback Island, painted in the 1870s by JB Henderson. The islands are important habitat for ocean birds, seals and other creatures. They will get increased management attention from the Prom Sanctuary plan.



MITCHELL LIBRARY, STATE LIBRARY OF NSW

The open grassy woodland of the Yanakie Isthmus, painted in the 1870s by JB Henderson. The pale areas east and west in the mid ground are sea mist. In the distance are the Prom's granite peaks.

where coast banksias, drooping sheoaks and the occasional eucalypt were scattered across rolling dunes of native grasses and wildflowers. A visitor arriving in April or May might have caught the mass of tiny flowers on a male sheoak glowing deep amber in the afternoon sun.

By the early 1980s the trees were still there, but tea-tree scrub had taken over the grassy understorey. And then, almost suddenly, the wonderfully gnarled old banksias and many of the sheoaks just died.

The loss of the Yanakie isthmus banksias was to be a mystery for nearly three decades, but research has now confirmed that a moderate but long drought was enough to kill them. They might normally have survived the dry spell, but the thirsty invading tea-tree scrub had sucked up most of the remaining soil moisture.

The tea-tree invasion, it seems, was a product of changed fire regimes and changed grazing patterns by both introduced and native grazers over many years. The invasion is still growing.

Now however, guided by several years of experimental burning patterns, and the monitoring of a range of feral and native grazing exclusion plots, it's become clear that the once great sweep of coastal grassy woodlands on the isthmus can be restored.

The new Prom Sanctuary plan

Parks Victoria has been developing a proposal to invest in a revolutionary plan to restore the habitat integrity of the Prom; the park would at last become the ecological 'centre of excellence' promised in its 2002 management plan. The Prom has always attracted scientific research, but it has largely been generated by the enthusiasm of research institutions, rather than being a consistent priority for the park's managers.

All of the actions needed to benefit from that knowledge are consistent with its excellent 2017 Conservation Action Plan:

- First, an 11-kilometre predator-proof fence would be constructed across the isthmus at the park's entrance, allowing effective management of pest animals like cats, foxes and deer.
- Fire management, weed control, and marine management would be substantially resourced.
- The long-planned restoration of the coastal grassy woodlands of the isthmus would swing into action.
- Animals now rare or actually missing from the Prom, such as ground parrots, dingos, quolls, bandicoots, swamp-rats and New-Holland mice could be re-introduced.
- The Prom's many islands would get increased attention.
- And the park's still useful but dilapidated research station would be revamped as a modern research facility, supporting and encouraging the desperately needed research required to better understand the significant challenges we face in restoring the Prom's ecological balance. This would be a program strongly guided by evidence.

The plan will cost around \$22 million over five years. It's not a lot of money for a government to spend restoring an ecological treasure, seriously caring for a park cherished by so many Victorians.

And the time is right. If we don't act soon, the experienced and knowledgeable Prom staff best equipped to set the course for this great program might have left the room.

Why India can afford to equip Silent Valley National Park with a top-ranking residential research station, while we seem to accept habitat decline as inevitable, is a mystery.

It's time to rethink that. The Prom is a place where we can demonstrate that it's possible to manage a great park really well. • PW



The warning signs for the Prom's managers have been around for some time. This 1991 article in *The Age* tells of the Prom's missing coast banksias, and the missing birdsong they brought.

ORNATE COWFISH

The aptly named Ornate Cowfish (*Aracana ornata*) is a beautiful species of boxfish found only in southern Australia.

They are commonly seen hunting for benthic (bottom-dwelling) invertebrates in shallow seagrass beds or algal forests of sheltered bays and estuaries.

Boxfish have an unusual hexagon pattern of scales that are fused together to create a hard shell, or carapace, from which the eyes, mouth and fins protrude. This carapace provides protection, but it comes at the cost of movement – ornate cowfish are a relatively slow swimming species of fish.

As an extra defence, this species secretes toxins from its skin to ward off predators.

This species is sexually dimorphic, meaning males and females have distinct colours and physical features in addition to different reproductive organs. Males are yellow with blue stripes and spots, an orange tail and a distinct hump on their snout. Females are mostly dark brown and covered with a white or yellowish-white pattern of stripes and wavy lines. Both males and females have stout spines over their eyes and along their backs. The first set of spines look very much like horns, hence the name 'cowfish'. They grow to about 15 centimetres long.

This Ornate Cowfish is the 'face' of the 2019 Great Victorian Fish Count. These colourful temperate fish remind us our southern seascapes are home to many unique, fantastic marine species. Joining our 2019 Great Victorian Fish Count is a great way to explore your local coastal environment while contributing to Victoria's largest marine citizen science event. Visit www.vnpa.org.au/fish-count • PW



NATURE
WATCH

Backyard Bandicoots



NATUREWATCH COORDINATOR **SERA BLAIR** INTRODUCES US TO OUR NATIVE NEIGHBOURS.



This summer our NatureWatch program's new project 'Backyard Bandicoots' will begin in residential neighbourhoods adjacent to the Royal Botanic Gardens Cranbourne (RBGC). We are working with the local community, Friends of the Bandicoot, and the RBGC to monitor the local population of endangered Southern Brown Bandicoots on public land and in private backyards!

Southern Brown Bandicoots (*Isodon obesulus obesulus*) are medium-sized marsupials that can be mistaken for possums or rats in urban areas. They have lost a lot of their natural habitat in Victoria, but they are adaptable little creatures that can survive in highly modified landscapes, including suburban backyards.

They are actually quite nice neighbours to have. They won't eat the garden, though they may nibble on pet food. They forage by digging small holes, which they may do in lawns, but this helps increase nutrient cycling – so a win-win!

A key population of Southern Brown Bandicoots live at the RBGC, which is fenced to reduce predation from foxes and cats. Rapid residential development has replaced farmland with a maze of new houses, roads and fences that disrupt the ability of bandicoots to disperse into new habitat areas beyond the botanic gardens. As a result, homeowners in the area are now effectively habitat managers for this endangered species. This provides us with an interesting opportunity to work with this community to monitor the local bandicoot population and to increase awareness and acceptance of bandicoots as neighbours.

New residential developments in this area were approved under the Victorian Government's Melbourne Strategic Assessment (MSA) which considered the impact of the developments on remaining bandicoot populations and habitat. The MSA's Southern Brown Bandicoot program endorses the creation of bandicoot-friendly suburbs, improving scientific understanding of the bandicoots, creating a habitat connectivity network and to development of a genetic rescue strategy for the species. It released a draft *Sub-regional Species Strategy for the Southern Brown Bandicoot* for consultation in 2011. The strategy championed the retention of bandicoot habitat corridors as a key conservation management action. The Victorian National Parks Association contributed to the development of this strategy, highlighting the need to protect threatened species habitat in areas of urban growth boundary expansion, and supported the retention of 'bandicoot biolink' habitat corridors (see our *Melbourne's Urban Expansion – Threatened Species on Our Doorstep* on our website).

However, after consultation, the Victorian Baillieu government released the final strategy in 2014 that revealed a new cost-benefit approach to conservation actions, favouring integrated predator control

across a larger management area and devalued habitat corridors. As a result, a large proportion of the habitat corridors were removed from the final plan, and new restrictions on cat ownership were added to new residential developments within 1.5 kilometres of the RBGC.

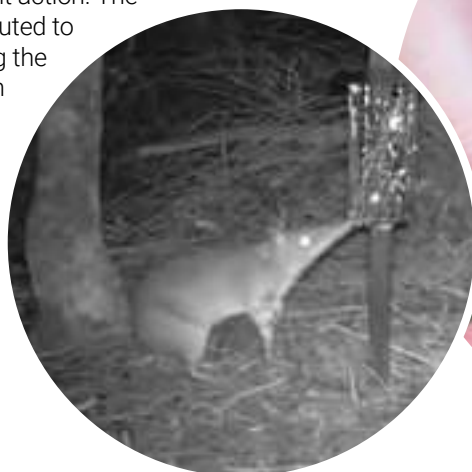
For our new Backyard Bandicoots project, we have a fantastic set of partners to work with in the local community to improve bandicoot identification, teach online reporting, and highlight bandicoot habitat needs. We will be conducting evening spotlighting walks to look for bandicoots in residential areas, recording sightings and noting habitat use as we go. Later in the year we will be recruiting ten households to place motion-detection cameras in their backyard to monitor for bandicoot visits and beneficial garden habitat values.

Our partners at the RBGC include Dr Terry Coates, experienced bandicoot scientist, and Charlotte Fletcher, Bandicoot Outreach Officer. We will also be assisted by bandicoot experts Dr Sarah Maclagan (Deakin University) and David Nicholls (Bandicoot Recovery Group).

If you live in a neighbourhood around the RBGC (e.g. Botanic Ridge, Brookland Greens, Settlers Run, Junction Village) and you would like to be involved in spotlighting events or to volunteer your backyard for camera monitoring, please get in touch with Sera at sera@vnpa.org.au or (03) 9341 6510 or visit www.vnpa.org.au/naturewatch • PW



PHOTOS: SARAH MACLAGAN



Caught on camera monitoring.



A baby bandicoot.

PHOTO: SARAH MACLAGAN

A man with a beard and mustache, wearing a red jacket, black shorts, and a large red backpack, stands on a rocky mountain trail. He is looking towards the camera. The background features a lush green valley with a small lake, several waterfalls cascading down steep, rocky cliffs, and a misty mountain peak in the distance.

Tribute

DAVID BLAIR

On 30 August this year the world of forest conservation in Victoria lost a valuable ally. Esteemed forest ecologist Dr David Blair died in a backcountry skiing accident on Mount Bogong. Dave was only 48 years old and is survived by two teenage sons, Leo and Jasper, and his wife Sera, VNPA's NatureWatch Coordinator.



protect Leadbeater's Possum habitat, and he was part of the Forest Stewardship Council's standards development group that wrote the national standard for Australia in 2018. Dave strongly supported the creation of the Great Forest National Park. Such was Dave's stature in forest conservation that tributes to him were read out in both the Victorian and Federal parliaments.

A celebration of his life was held among his beloved wet eucalypt forests in Toolangi. It was attended by hundreds of people from his professional, personal and community life. Dave contributed to so much in his life. He loved nature, loved studying it and recreating in it, and was extremely knowledgeable about both flora and fauna, birds as well as mammals – a true ecologist.

As an ecologist working on a team with Professor David Lindenmayer at the Australian National University's Fenner School of Environmental and Society, Dave significantly increased our knowledge of how the critically endangered mountain ash forests function and how they should be protected. Professor Lindenmayer described Dave as one of the best forest botanists in Victoria, and one who also knew the complete natural history of large parts of Victoria incredibly well.

Only six weeks before his death, Dave received his PhD which focused on how the mountain ash forests responded to disturbance from logging and fires. He completed his PhD while also working full-time, which is considered to be an incredible feat in his field of study. Dave was passionate about his scientific work and how it should be positively used to manage forests. He authored numerous scientific papers and reports, including new proposed management guidelines to

Dave devoted a lot of time to educating others, from students to politicians, about the ecosystems he loved. This included VNPA NatureWatch participants who took part in stagwatching in mountain ash forests last summer.

Dave was a natural outdoor adventurer. He lived life to the fullest. He was a very experienced skier, bushwalker, rock climber and mountain bike rider. Dave also loved caring for his home on a bush block in Healesville, where he couldn't resist keeping data sheets on the local plants and wildlife. For many years Dave was an inspirational Scout leader in Healesville, revitalising the group where both of his sons attended, and leading the scouts on many bushwalking adventures in Victoria and Tasmania. He loved to share his passion for the wilderness and wanted to pass on the skills for outdoor adventures to the next generation of adventurers. By all accounts Dave was an amazing man who gave of himself to many groups and causes and was an exemplary citizen. Above all, he was a family man, being a dedicated husband and father to two boys, for whom he was always there.

David will be sorely missed. He leaves behind a legacy of hard work, passion and kindness. He truly helped to make our world a better place. • PW

Written by Michael Feller with Sera Blair

At Dave's memorial, Sera shared with us Dave's formula for a happy and valuable life; it is well worth consideration.

Be kind. Dave truly was an all-round nice guy.

Work hard. Participate fully in your life.

Take on the hills, don't just stick to the flats because they are easier.

Stand up for what you believe in. Use your voice.

Head for the top of the mountain but enjoy the effort of getting there and the route along the way.

Be part of nature. Learn about it, be in awe of it, spend time really in it.

Get into the wilderness. Fill your lungs with fresh air and take in the view.

Have fun! Never grow up entirely.

Get dirty. Build a massive rope swing and give yourself a thrill.

Stay fit and healthy. Keep moving. Dig lots of holes.

See the world. Embrace diversity.

Empathise with people less fortunate than yourself.

Get to know people from all walks of life.

Get involved in your community. Pitch in.

Create opportunities for everyone to thrive.

Love your work. Do something that makes you proud.

Surround yourself with people who help you grow and succeed.

Get up early and make the most of each day.

Love your children. Spend as much time with them as you can. Teach them to look after themselves and to be good people. Encourage them, cuddle them, make them feel safe and supported always.

Find someone to share your life with who helps you to grow, who supports your passions and who lets you be you. Bring them cups of tea and pancakes in bed.

Find happiness in making others happy.

Don't wait. Make things happen.



Melbourne's flying night gardeners

DOUG GIMESY (CONSERVATION AND WILDLIFE PHOTOGRAPHER) AND **HEATHER KILEY** (CONSERVATION BIOLOGIST) OPEN OUR EYES TO THE LIVES OF GREY-HEADED FLYING-FOXES.

As the sun sets

As the sun finally slips below the horizon, the small crowd that had gathered on a hill just off Yarra Boulevard to see a glorious Melbourne summer sunset, slowly starts to drift away. If only they had waited another 15 or 20 minutes, they would have witnessed something much more spectacular, unique and memorable than just another sunset over a big city – the daily exodus of up to 50,000 Grey-headed Flying-foxes making their way from their urban sanctuary of Yarra Bend Park, to the suburbs of Melbourne and beyond.

But why do they fly out each night and where are they going? Like many Melbournians, they are heading out for a meal. But these residents are hoping to feed on the nectar of our flowering eucalypts and native hardwoods (such as banksias and melaleucas). Of course, you can't always get the meal you desire. Their preferred native trees and plants are not as plentiful as they used to be, and so flying-foxes will also resort to eating the 'exotic' introduced fruits commonly found in our gardens. It's when they drop in for a bite to eat that most people get their first close-up encounter with these amazing flying mammals.



PHOTO: DOUG GIMESY

Grey-headed Flying-foxes are important pollinators for our native vegetation.

The great night gardeners

While an incredible spectacle to witness, this daily nocturnal excursion also plays a vital role in the health of our native forests.

Travelling on average around 20 kilometres a night to feed before returning home means that they help disperse pollen and seeds, and in doing so contribute to the reproductive and evolutionary processes of forest communities. In fact, they are our most effective long-

distance native pollinators and seed dispersers – at least as important as other well-known pollinators such as birds and bees, who are often given all the credit for this role. Indeed Grey-headed Flying-foxes have been recorded travelling between Melbourne and Sydney in just two days – that's 880 kilometres.

The spreading of pollen and seeds isn't just limited to the area around an established camp, however. The trees that flying-foxes rely on for food tend to flower at different times in different parts of the Australian landscape, so local nectar and pollen supplies are generally not stable enough for many bats to base themselves in a single place for the entire year. As winter approaches in Victoria, many of our grey-headed flying-foxes will leave the safety of their Melbourne camp and move up the east coast in search of large flowering events to help them get through the lean colder months. During this time the Melbourne grey-headed flying-fox population that can swell to nearly 50,000 over summer will drop to between just 2,000 and 5,000. According to the Australasian Bat Society, "Camps are more like backpacker hostels than stable households, housing a constantly changing clientele that comes to visit local attractions. Camps are connected into large networks through which flying-foxes move in response to changes in local food resources."

Seeing up to 50,000 flying foxes venture out across the Melbourne sky can give the impression that this species is doing well. Unfortunately, that is not the case, and the national population is now estimated to be just a small fraction of what it once was. Population decline and continued threats mean they are now listed as vulnerable to extinction. The decline not only impacts them directly but also our forests.

Heading out can be dangerous

Leaving the safety of their homes at Yarra Bend Park in search of food can be extremely dangerous for flying-foxes. Natural predators include large birds of prey such as powerful owls, large snakes and goannas. But human-driven impacts, such as entanglement in fruit tree netting and barbed wire, as well as electrocution on power lines, can take a terrible toll. In January this year, it was estimated that at least 100 flying-foxes were entangled in inappropriate fruit-tree netting and barbed wire in Victoria alone. Tragically the majority of these were either not rescued in time, or didn't survive after rescue.

But these are not the only threats they face. Habitat destruction, shooting in orchards, attacks from some domestic animals like dogs, climate change induced heat stress events, and camp disturbance by some locals, developers and councils, continues to impact heavily on flying-fox numbers.

Continued overleaf

We can all help

There are many simple things we can all do to help our Grey-headed Flying-foxes.

Protect their homes

They are already running out of space and places to live and eat, so reject any 'development' or 'works' that encroaches on or disturbs their homes (i.e. established colonies or camp sites) or impacts our native forests.

Increase their food supply

Plant flowering gums and nectar-bearing native trees and shrubs – and ask your local council to do the same.

Do not disturb

If you are visiting a colony or camp, or are lucky enough to find a bat or two enjoying a meal of fruit or nectar somewhere, keep noise to a minimum, keep your distance and keep pets away.

Welcome them

If they visit your garden, welcome them for dinner – you're pretty lucky to have them, and it's always nice to have guests pop over.



Use only wildlife friendly fruit-tree netting

Ideally, fruit tree netting should not be used at all. But if it must, ensure it is wildlife-friendly. This means:

- It should not have a gap size of more than five millimetres when taut. If you can put your little finger through it, it is too big.
- Avoid using black or monofilament types.



Manage any barbed wire

Avoid using barbed wire if you can, as it can maim and kill many species, not just bats.

If you must, paint the top strand fluoro or white as this allows them to see it more easily at night. Also consider covering any wire with bags or plastic pipes near trees where flying-foxes may feed. And if you have barbed wire that no longer has any purpose, get it removed.

Get help immediately if you find an injured grey-headed flying-fox

A bat found alone during daylight hours is most likely in trouble. If you see one tangled in fruit tree netting, on power lines or caught on barbed wire, it is definitely in trouble and in need of urgent care. The longer they are trapped, the more damage they will do to themselves and the more stress they suffer. Also in the breeding season (late September–December) keep an eye out for possible babies with electrocuted mothers on power lines. Sometimes the mother will be dead but the baby is still alive.

Immediately call Wildlife Victoria on 03 8400 7300, or your local wildlife group for assistance, who will arrange for a trained, vaccinated volunteer to attend.

Never touch a bat if you find one

Immediately call your local wildlife group for assistance.

Bring your friends and enjoy the view

And finally, if you want to show your friends a glorious summer sunset over Melbourne's city skyline, head to the hills near Yarra Bend Park and wait a few minutes longer after the sun has set. If you do, you'll have a good chance of witnessing something spectacular and unique – up to 50,000 flying mammals heading out for a meal, which in turn helps provide a vital service to our native forests and ecosystems.

MELBOURNE GREY-HEADED FLYING-FOX CALENDAR

Summer

Summer is when the colony is at its largest.

Early in summer new mothers will be carrying their young as they head out to feed at night. Later pups will be left in 'crèche' trees. At this time young ones also learn to fly and start to make their first trips to nearby flowering trees.

In late summer, there may be over 50,000 individuals roosting along the river, with maximum numbers reached around February.

Summer is also the season when bats are most vulnerable to overheating. On exceptionally hot days you may see them 'dipping' their bellies while in full flight to cool down and grab a drink by licking the water of their belly fur.

Autumn

Autumn is mating season.

Last year's pups are now weaned, and the females are ready to become pregnant again, and mating starts.

In late autumn thousands of nomads will also start to migrate northwards, looking for anything flowering.

Winter

Winter in Melbourne is when the colony is at its smallest.

Most females have left, and colony numbers drop to between 2,000 and 5,000 (or less than 10 per cent of the colony's peak size).

It is unclear why some stay when all the other bats are migrating across eastern Australia. It might be that they enjoy the lack of competition when foraging across the city, or the winter bats may be juveniles not yet brave enough to venture away from their birthplace, or some males don't want to give up their territories. This is one of the questions scientists are still trying to unravel about these fascinating creatures.

Spring

Spring sees the return of the nomadic bats and the colony size swells.

Most of the adult females come back ready to give birth to a single pup, which they breastfeed for two to three months over summer.

It has been estimated that the majority of all births occur in October, and if you are visiting the Melbourne colony in spring you have a high chance of seeing a pup.

Grey-headed Flying-foxes in motion.





THE VNPA COUNCIL AWARD HONORARY LIFE MEMBERSHIP TO PEOPLE WHO HAVE PERFORMED MERITORIOUS SERVICE TO VNPA. **LIBBY SMITH** IS THE LATEST RECIPIENT.

Libby Smith has been a Member of the Victorian National Parks Association since 2005, as well as a generous supporter.

Libby was a principal of a consultancy specialising in market and social research for business and government. She also worked on projects related to communications development in the not-for-profit sector, and particularly for environment groups.

Given this wealth of experience, which also included serving on the board of Bush Heritage Australia (1999–2006), Libby was a very welcome addition to the VNPA Council in 2006. Her passion for the environment, bushwalking, as well as spending time in national parks in Australia and around the world meant Libby really understands the significance of VNPA's vision for "Victoria to be a place with diverse and healthy natural environment protected, respected and enjoyed by all". Not to mention her grasp of how important it is to communicate our work effectively to attract more supporters.

Libby served as a valuable member of Council 2006–2015 and was Vice-President 2007–2010. Libby was also Convenor of the Marketing and Community Engagement Committee (which has had various different names over

the years) 2007–2015, and she continued to serve on this Committee until 2018.

As an experienced market research consultant, Libby gave extensive pro-bono advice and support to the VNPA over the years for many different projects, including the Victoria Naturally Alliance (an alliance of 10 environment groups hosted by VNPA) and our Wild Families program.

Libby also helped develop and implement a new 'marketing and fundraising strategy' in 2009 which led to an investment in fundraising and marketing, new staff and many improvements. This included work on a new brand for VNPA which was rolled out in 2012. As convenor of the marketing committee Libby was a key driver of the brand project. She also provided in-depth pro-bono support and personally moderated focus groups for the new brand which was very valuable for testing options for logos, messaging and also brand awareness of VNPA.

Council, committee members, staff, Members, supporters and volunteers find Libby a pleasure to work with. She is always calm and professional, friendly and warm. She has performed her various roles with the VNPA with utmost dedication and commitment. Thank you Libby for your 13 years of wonderful service to VNPA. • **PW**

QUIZ ANSWERS

(From page 20)

- 1 Elephantfish / Australian Ghost Shark (*Callorhinchus milii*)
- 2 Weedy Seadragon (*Phyllopteryx taeniolatus*)
- 3 Blue Throat Wrasse (*Notolabrus tetricus*)
- 4 Red morwong (*Morwong fuscus*)
- 5 Ornate Cowfish (*Aracana ornata*)
- 6 Shaw's Cowfish (*Aracana aurita*)

ILLUSTRATIONS BY NICOLE MERTENS

1



2



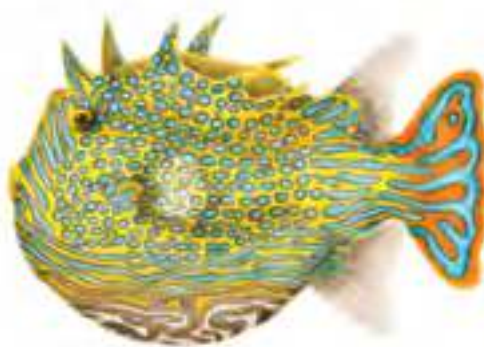
3



4



5



6



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

Wild artwork

2019 has been a big year for children and teenagers taking the lead in standing up for our environment. A recent 'Threatened Species Children's Art Competition' run by the Kids in Nature Network in Victoria certainly provided a very real and valuable message of the youth's depth of care for nature.

Here we share some of the artwork and stories created by the hundreds of young artists. You can also view the Victorian finalists online at www.hsi.org.au/artcomp/category/vic-finalists-gallery

We were truly saddened to see the young artists' concern and worry about the plight of their chosen threatened species. But we were also inspired by the way they showcased how lucky we are to have such precious plants and animals across our state and country. • PW

The Victorian National Parks Association offered a Wild Families prize pack as a proud prize sponsor of this competition.



Ayla Johnston
Aged 11

The Helmeted Honeyeater brings joy and wonder to anyone who sees them and its quite sad and upsetting to know that this beautiful species is endangered. I would miss them forever if they didn't exist anymore. I will do anything to protect them.



Tilly Murray
Aged 7

For my painting, I did the Baw Baw frog. We are both from Victoria. Baw Baw frogs are dying from a fungus. My heart feels sad to know there aren't very many left in the world. I hope scientists can find a way to help these tiny guys. In the painting, he is the last of his kind. He calls out to no one.

Rhiannon Truscott
Aged 9

The Leadbeater Possum is small in my art work to represent how tiny the possum is and I've tried to make her blend into the artwork, as they do in real life. The Leadbeater Possum is endangered due to logging and the Black Saturday fires of 2009 destroyed 45% of its habitat.



Amelie Harper
Aged 8

The reason why the Thick-lip Spider-orchid is threatened is because its habitat has been destroyed in lots of places. I chose this orchid because I love visiting Wilson's Promontory National Park where I have seen it in the wild and I like how they are protecting it there.





PHOTO: MARY FERLIN

☒ I'd like to gift a Victorian National Parks Association Membership

Give a gift that counts by gifting Membership. You'll be helping protect Victoria's national parks, natural places and wildlife – and giving your loved one the opportunity to actively enjoy Victoria's inspiring natural landscapes.

- ☐ Individual Membership – \$65/year ☐ Concession Membership (Pensioner/Student) – \$40/year
☐ Household/Family Membership – \$90/year

This is a gift for _____

(Name of gift recipient)

Recipient's address _____

Suburb/Town _____ State _____ Postcode _____

Email _____

☐ Please include a 'Wild Families' activities pack, designed for families with children under 12.

A card acknowledging your gift, along with their Membership card and welcome pack, can be posted directly to the recipient.
A receipt will be sent to you.

My contact details

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

Address _____

Suburb/Town _____ State _____ Postcode _____

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 _____

NB:

To ensure pre-Christmas delivery, please call the office on 03 9341 6500 – with your credit card in hand!