



NPA *Bulletin*

Volume 51 Number 1 March 2014

National Parks Association of the Australian Capital Territory Inc



**Progress towards
new national parks**



**NPA's new bird
book launched**



**Feral horses
rampant**

Articles by contributors may not necessarily reflect association opinion or objectives.

CONTENTS

From the President2 <i>Rod Griffiths</i>	Sandalwood: ‘liquid gold’15 <i>Liz Teather</i>
Protection, not destruction3 <i>Judy Kelly</i>	Vale Alam Ray15 <i>Max Lawrence</i>
Letter to the editor, <i>Canberra Times</i>3 <i>Rod Griffiths</i>	Bushwalks. Teddys Hut.....16 <i>Brian Slee</i>
A new national park for the ACT4 <i>Rod Griffiths</i>	One Tree Hill.....17 <i>Brian Slee</i>
Field guide to the birds of the ACT.....6 <i>Book launch</i>	Molonglo Valley.....18 <i>Esther Gallant</i>
Visiting the horses7 <i>Di Thompson</i>	PARKWATCH19 <i>Compiled by Hazel Rath</i>
The Murrumbidgee–Ginninderra Gorges National Park.....8 <i>Doug Finlayson</i>	NPA notices.....22
Bushwalk. Ettrema–Tullyangela11 <i>Eric Pickering</i>	Meetings and speaker information.....23
The Bs of bushwalking — the Bibbulmun Track.....12 <i>Judith Webster</i>	NPA information and contacts23

From the President

Welcome to 2014, and what a year for environmental celebrations it is going to be. The Canberra Ornithologists Group is celebrating its 50th anniversary, the Australian Landcare movement will be 25 years old and, importantly for the NPA ACT, it's the 30th anniversary of the gazettal of Namadgi National Park. On 3 October 1984, Namadgi came into existence and how it has grown since then. Keep your eye out for a number of events that the NPA ACT will hold to celebrate Namadgi's birthday.

I was really pleased to welcome a goodly turnout to the recent launch of the new edition of the NPA ACT's *Field Guide to Birds of the ACT*. Launched by Mick Gentleman MLA, this field guide is a tribute to the many people involved in its development. Well done all. It was also great to see that both McComas Taylor and Nicolas Day, the author and illustrator of the first edition, were able to attend. If you haven't seen the new edition, it's ripper with nine new bird species described, complemented by Nicolas Day's wonderful illustrations.

Recently, I went on one of the NPA ACT's walks from Hall to One Tree Hill on the Centenary Trail. This is a popular section for both walkers and cyclists, but some parts of the track are probably too narrow to allow easy passing of a walker and a cyclist without one of them having to either stop or get off the track. Given that some parts of the trail are cut

into the hillside it can be difficult to get off safely and I fear that it is only a matter of time before someone gets hurt. I was impressed with the courtesy of the majority of the cyclists we met on our walk but it takes only one user of the trail to do the wrong thing to cause an incident. The NPA ACT has already started to raise its concerns about safety on the Centenary Trail with TAMS.

The start of the year has been busy for the NPA ACT, with a submission made on the ACT Trails Strategy, work done on the proposed changes to the Nature Conservation Act and involvement in the ACT Centenary Time Capsule Project. In the time capsule to the residents of Canberra in 2113, the NPA ACT has placed a letter describing the wonderful campaign for the creation of Namadgi National Park.

Looking forward to a great year together.

Rod Griffiths



2014 is the 30th anniversary of the gazettal of Namadgi National Park

Protection, not destruction

In *The Canberra Times* on Tuesday 4 February, Jenna Price wrote an article 'Green shoots of Abbott ire' about a resident of regional NSW who has had enough of the present federal regime and is organising events in March. They are peaceful non-partisan grass roots rallies, assemblies, and citizens' marches at Federal Parliament and around Australia 'to protest against government decisions that are against the common good of our nations'.

Craig Batty, an educational designer, is the spokesman; he has never been an activist or party member but 'he's had enough'. On Monday 17 March, Batty will be marching in Canberra from 10:00 am. People interested in the march can see further details on the group's website at <https://www.facebook.com/MarchinMarchCanberra>

Haven't we all had enough?

Haven't we all had enough, especially when it comes to repealing legislation meant to protect the natural environment? We've read about the planned dumping of harbour dredgings in the Great Barrier Reef, and the removal of Tasmanian forest from the protection of its World Heritage Area.

As we bake under a heatwave, spirits, along with trees and plants, droop. How many more exhortations do we have to see to sign a petition, write a letter, lobby a politician, donate to some worthy environmental fund or cause?

Part of the answer might be persistence

Perhaps part of the answer is persistence whether it be tree planting, keeping the garden alive as a mini oasis, or going on a work party, weather permitting. Persistence is also needed in keeping our politicians

Letter to the Editor, *The Canberra Times*

S. Gerrard and Dr Nick Abel detail the Coalition Government's proposed incursions into Tasmania's World Heritage Area and the Great Barrier Reef (Letters, Feb 5) but these are just part of many governmental failures to protect the environment.

The Federal Government is transferring its powers under the Environment Protection and Biodiversity Conservation Act to the States and Territories, giving them greater freedom to exploit our natural resources. The Abbott government is about to cut its funding to all Environmental Defenders Offices (EDO). The EDO has given invaluable legal advice to volunteer conservation groups, including the National Parks Association of the ACT (NPA ACT), in their efforts to protect the natural environment.

Feral horses in Kosciuszko National Park (KNP) are now estimated to number between 11,000 –14,000, increasing at 20% per year. They are trampling creeks, eroding banks, polluting the water, and braiding water courses, causing increased evaporation. While feral horse numbers escalate, horse riders are being granted access to wilderness areas in KNP and will further contribute to the damage of fragile areas. NPA ACT has a link to members' photos of feral horse damage on its website at <http://www.npaact.org.au/news.php?id=232>.

Our national parks and reserve systems are vital refuges for plants and animals but they are being neglected because of populist policies and lack of resources and staff.

Our conservation reserves have suffered neglect from both major parties but now the situation is growing steadily worse. Concerned readers should lobby their federal representatives to protect, not destroy, our natural environment.

**Rod Griffiths,
President, NPA ACT**

informed, and in informing ourselves. There are always escape routes via a book, outdoor concert, bushwalk, picnic, film, nature ramble or a visit to an exhibition in one of our cool national institutions. Humour helps and the pick of the best political cartoons showing at Old Parliament House is a tonic. Our politicians are reduced to the ridiculous under the cartoonists' pens.

NPA ACT expressed its concerns in a letter published in the *Canberra Times* on 7 February 2014.

Mail, email or call your elected representatives

The main points mentioned in the letter can be incorporated in a letter or email to federal politicians and Opposition representatives. Have a look at the damage that feral horses in Kosciuszko National Park are inflicting on the fragile alpine environment via the link on NPA ACT's website showing photos that members took on a recent walk that Di Thompson led to the Snowies in November 2013: <http://www.npaact.org.au/news.php?id=232>.

The federal Minister for the Environment is Greg Hunt:
Greg.Hunt.MP@aph.gov.au,
(02) 6277 7920.

The Shadow Minister for Environment, Climate Change and Water is Mark Butler:
Mark.Butler.MP@aph.gov.au,
(02) 6277 4089.

Make a few points, using NPA's letter and ask each what he will do to stop the destruction of the natural environment. You can also write to both at Parliament House, PO Box 6022, House of Representatives, Parliament House, Canberra ACT 2600.

Judy Kelly

An addendum to Julie Henry's obituary in the December 2013 *Bulletin*

From the NPA News of NPA Queensland, February 2014

Julia Henry (1917–2013) — Julia (Julie) passed away in Sydney in October 2013 after almost a lifetime of involvement in, and organisation of, conservation and bushwalking groups.

Having moved from Sydney to Brisbane in 1948, she was one of the

founders of the Brisbane Bushwalkers Club, and joined NPAQ in 1949. Julie became a NPAQ life member in 1960, and attended many weekend and extended outings.

Julie served as an NPAQ Councillor from 1955 until she moved to Canberra in 1960, but maintained her contacts with many NPAQ friends. [In Canberra] she

was involved in the establishment of the NPA ACT, and as a committee member for a number of years, before she retired and returned to Sydney. There she put her organisational skills to excellent effect as the residents' rep-representative on her retirement village board.

A new national park for the ACT

It is now more than four years since the NPA ACT raised with Jon Stanhope, then the ACT's Chief Minister, a proposal for a new national park for the ACT. The new national park was to amalgamate and add to existing reserves across the northern border of the ACT. Its purpose was to create a single reserve that captured and celebrated key remnants of the ACT's lowland grassy woodlands.

Over the following couple of years the issue progressed with articles in the *Canberra Times* and the *NPA ACT Bulletin*, a positive Commissioner for the Environment report on the potential for a new national park, and discussions with bureaucrats and the ACT Natural Resource Management Committee. Then things went quiet.

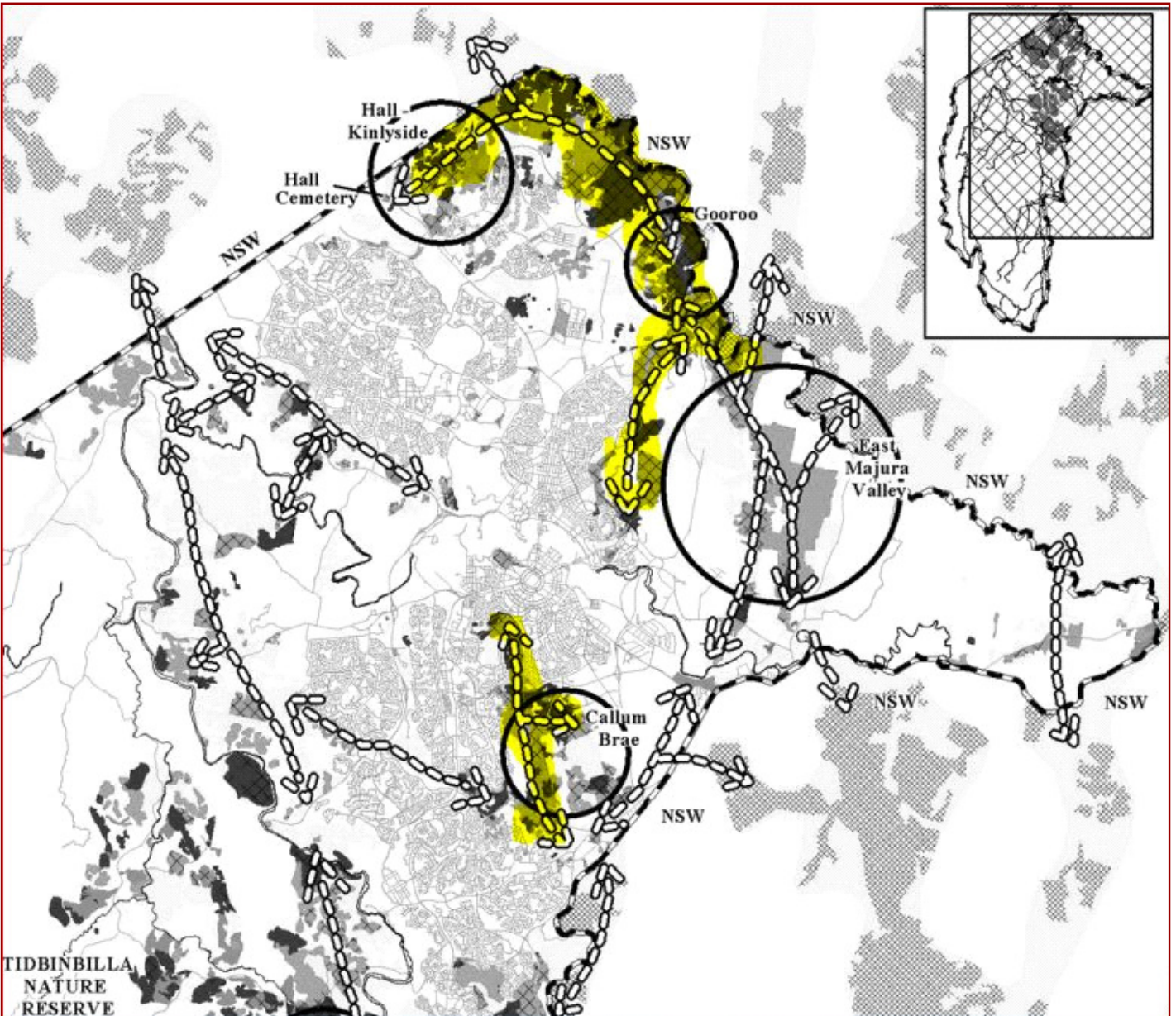
This was due to the development of a strategic environmental assessment (SEA) by the Commonwealth that covered all of Gungahlin. As part of an agreed approach between the NPA ACT and the Conservation Council, a focus was placed on ensuring that this SEA delivered the best positive outcomes possible for Gungahlin. If this could be achieved then there would be a much better platform to mount a case for the creation of a national park. While the SEA was being developed, however, a campaign for a national park was deemed to be a possible distraction.

The Gungahlin SEA has resulted in a number of important future additions to the ACT's reserve system, so now is the time to return to the campaign for a new national park.

If much of the area is going to be in reserve anyway, why do we need a national park?

The term 'national park' is recognised throughout the world as a description of the epitome of a conservation reserve. The creation of a new national park will highlight for the ACT and Australian community the importance of the ACT lowland grassy woodlands. Considerable work is being done throughout the ACT, but particularly in the Gungahlin region, to engage the citizens of the ACT with the natural wonders on their doorstep. Projects like *Bush on the Boundary*, the *Centenary Trail* and *Landcare* groups are bringing the ACT community even

(continued next page)



Approximate area for a new national park and associated rural lease areas. Note potential to extend in the east Majura Valley. Arrows denote habitat connectivity for wildlife movement. (Map from the ACT Lowland Grassy Woodlands Strategy)

A new national park for the ACT *(continued)*

closer to the natural environment. The creation of a national park would build on this community engagement and emphasise the importance of the ACT's wonderful lowland grassy woodlands.

The creation of a national park would help raise the profile of one of the ACT's most important research programs, the sanctuary project located at Mulligans Flat and would also facilitate greater attention for the work of the ACT's Woodlands and Wetlands Trust.

The consolidation of all the key northern ACT lowland grassy woodlands reserves into a single national park, supported by conservation agreements with neighbouring rural lessees, will focus the management of these important ecosystems. Currently, the relevant reserves are administered under the Canberra Nature Park management plan, which has to identify management strategies for a wide range of ecosystems. Having a single national park with its own plan of management means that tailored strategies can be adopted to the ACT's lowland grassy woodlands. This offers benefits to the environment and can improve the administrative costs of managing these areas.

National parks should protect ecosystems of national importance. Namadgi National Park is a fine example of this. The ACT's lowland grassy woodlands also easily meet this criterion and their national importance should be properly recognised.



View eastwards from One Tree Hill. Photo Max Lawrence

So where to now?

Despite the early achievements there is still a lot of work to be done. There is a need to build community support for the proposal, to engage the neighbouring rural lessees and to convince decision-makers of the proposal's importance. The work with the rural lessees will be particularly important as the ACT lacks the conservation covenant tools in place in the states.

2014 is the year Australia hosts the World Parks Congress, a gathering of many of world's leading conservationists and land managers. A new national park in the ACT would be a significant announcement to complement this event.

Rod Griffiths



Canberra Centenary Trail

In this photograph, taken on Brian Slee's NPA walk to One Tree Hill (see page 17) we see President Rod Griffiths checking out the ACT's northern lowland grassy woodlands to the east and south of One Tree Hill. Also shown is the junction where the footpad to the summit lookout joins the main benched Canberra Centenary Trail.

Photo Max Lawrence

Field Guide to the *Birds of the ACT*



NPA launches the second edition



Bird Book author McComas Taylor with Brett McNamara, ACT Parks Service



Muriel Edwards, NPA, with Nicolas Day, the artist who produced the beautiful images in our book, and NPA President Rod Griffiths



Mick Gentleman MLA and NPA member, with Kevin McCue, NPA, and Clare Henderson, Executive Director of the Conservation Council of the ACT



Shane Rattenbury MLA, Minister for Territory and Municipal Services, with Steve Hill, NPA member



Esther Gallant, NPA Committee member, with Mariana Rollgejser, designer of the NPA Bird Book

For those who couldn't come—we had a very successful launch of the second edition of the *Field Guide to the Birds of the ACT*, with approximately 60 members and guests attending. The speeches were short and to the point and the opportunity for social interaction between members, the author and the illustrator, the designer, politicians (Minister Shane Rattenbury and Mick Gentleman MLA) and other guests over a cuppa and a sandwich was gladly taken.

Thank you to everyone who came, to the NPA speakers Rod and Phil, to the helpers Chris, Kevin, and Judy, the photographer Max and to everyone who bought a book or two, and to Jan who brought a homemade cake.

Sonja Lenz

Visiting the horses

Last November I led a nine-day nine-member NPA packwalk into the beautiful sub-alpine areas of southern Kosciuszko National Park and northern Alpine National Park — in other words around the headwaters of the Murray River along the New South Wales–Victorian border. Our team comprised myself and Gary, Mike and Annette Smith, Clive Hurlstone, Esther Gallant, Tim Walsh, Cathy Saw and Sue Hunter.

We knew beforehand that the place was infested with horses, but we were shocked at the extent to which numbers had grown in recent years, and the extent of the environmental degradation so caused. During our walk we came across several other walking groups, all of whom shared our concern. We were all having trouble getting clean drinking water, with our water filters becoming clogged even before we got to the ‘bad parts’. There was evidence of damage and dung virtually within ten metres of anywhere we went, including off track locations.

So our team decided to take a few photographs. In fact we took more than just a few and we decided to share them with the rest of you so that the public generally can be aware of this blight on one of our most fragile and precious landscapes. Then maybe the Powers That Be will do something about it.

To view the photo sets and summary of the scientific data on Flickr go to: <http://www.flickr.com/91914657@N08/sets/>

One of the other walkers encountered by our team was Simon House, a farmer from Kojonup, Western

Two time-separated views of the Murray River headwaters at Cowombat Flat.

Below (then). In 1999, photo Max Lawrence. Below right (now). Di Thompson's 2013 photo.



Cowombat Flat, Upper Murray River. The difference between inside the enclosure (where the feral horses cannot go) and outside (subject to the impact of steadily increasing horse numbers) is obvious, Photo Di Thompson

Australia. Mr House was walking the Australian Alps Walking Track, and subsequently communicated with the Nature Conservation Council of NSW in the following terms:

“The sooner the horses are taken out of the area the greater the chance of total restoration of these environmentally sensitive areas. Whilst at the Cowombat flats we had a look at the fenced exclusion zones and the difference is very obvious, meaning that where the horses couldn't graze or trample made for a healthy soil that retained water and supported the natural vegetation. The removal of the horses from these areas is a

must, and the sooner the better. The question has to be asked, if they removed the grazing rights and all domestic livestock were removed, why are the horses allowed to stay and breed up? Surely they are damaging the environment as much, if not more so, because they are not controlled.”

The Nature Conservation Council has written to the Premier of NSW advocating the eradication of the ‘pest horses’. The above quotation from Mr House is included in the letter.

Di Thompson



The Murrumbidgee–Ginninderra Gorges National Park: a long time in the making but action required now

Ever since earliest colonial explorers made forays into what we now call the Canberra region, the Ginninderra Creek catchment area has been an important link between the 19th century settlements around Yass and Lake George to the north, and the Limestone Plains and Monaro regions to the south. The catchment was first sighted by Charles Throsby in 1820 on a reconnaissance expedition from the Lake George area. In 1824, the ‘King’s Botanist’ Allan Cunningham reported valuable sheep pastures and a large river winding to the north-northeast, and in 1825 James Ainslie brought a flock of sheep into the catchment area on his way from Bathurst via Yass to establish the Robert Campbell pastoral property in the Pialligo area on the Molonglo River, which eventually became Duntroon.

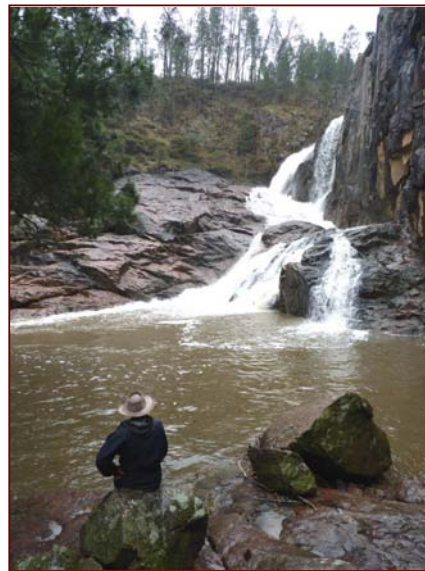
Between 1830 and 1836, the colonial surveyor Robert Hoddle made several visits to the district, to survey property boundaries. Hoddle is perhaps better known for his survey work in and around Melbourne where the central city street layout is often referred to as the ‘Hoddle grid’. Hoddle was also an accomplished artist and the Ginninderra Falls in his 1835 sketch are instantly recognisable today.



Robert Hoddle sketch of Ginninderra Falls, 1835 (National Library of Australia)

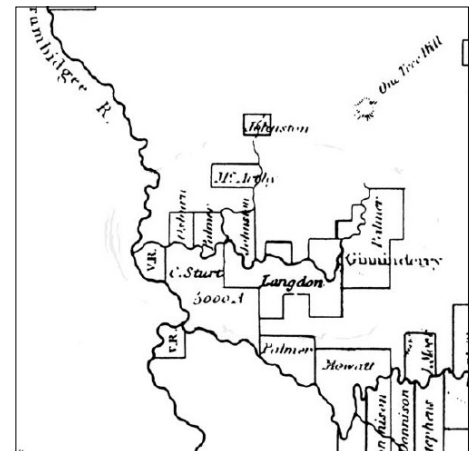
The Ginninderra Gorge has ... been recognised as a place of natural beauty for at least 180 years

The Ginninderra Gorge has thus been recognised as a place of natural beauty for at least 180 years. The Ginninderra Creek, and the Murrumbidgee River into which it flows, have been a recreational drawcard for tourists and visitors ever since the early colonial settlement of the region.



Middle Ginninderra Falls.
Photo Doug Finlayson, 2013

The early colonists were, of course, guided to the region from the Weereewa (Lake George) area by Aboriginal families that had been living in the area for millennia. The Gubur Dhaura traditional site in the Gungahlin suburb of Franklin, the ochre site on Gossan Hill near the University of Canberra, the stone artefacts found at the archaeological site on the terrace above the Murrumbidgee River just south of Ginninderra Creek, and axe-grinding grooves in rocks in Ginninderra Creek at Latham are lasting testimony to the Aboriginal community’s recognition of the rich wildlife and other natural resources across the catchment. The 1828 census reported 400–500 Aboriginal people living in the region and only 15 European settlers living in the Ginninderra catchment.



Part of the Robert Dixon property map, published 1837 (National Library of Australia).

The first European to take up a selection in the Ginninderra Creek catchment was George Thomas Palmer, who established ‘Palmerville’ in about 1826. By the time the map of surveyor Robert Dixon was published in 1837, many blocks of land had been claimed along Ginninderra Creek and the local Aboriginal families were effectively being denied access to the significant parts of their traditional river corridors; public access was slowly being strangled. In 1840, Thomas and Eliza Southwell and their two children settled on ‘Palmerville’. In 1854, Thomas purchased more land and renamed the property ‘Parkwood’. The homestead is still occupied today.

Settlers engaged in the ‘sport’ of hunting native wildlife, thus killing off the native fauna

Surveyor William Govett, writing in a London publication in 1836, described how, in the space of 12 years, the whole of the county had gone from beautiful virgin country to one where ‘the tide of civilized population had already swarmed into the county’. Settlers engaged in the ‘sport’ of hunting native wildlife, thus killing off the native fauna and replacing it with sheep and cattle. Aboriginal families had to move elsewhere to engage in traditional hunting.

Fast forward over 180 years and the beautiful countryside around the

(continued next page)

The Murrumbidgee–Ginninderra Gorges National Park *(continued)*



Upper Ginninderra Falls. Photo Doug Finlayson, 2013.



Willow Tree Waterhole on the Murrumbidgee River looking south towards the confluence with Ginninderra Creek (flowing from the left of the photo in the distance). Photo Doug Finlayson, 2013.

Ginninderra Falls and adjacent Murrumbidgee River in NSW is still not accessible by the general public. Well-intentioned attempts by landowners to create a wildlife park and walking trails around the Ginninderra Falls on the south side of the creek during the 1960s to 1990s eventually failed because of the escalating running costs associated with public liability insurance. Older members of the community may remember hot days swimming under the Ginninderra Creek waterfalls and canoeing on the Murrumbidgee River.

The Ginninderra Falls Association has proposed a national park model that will ensure public access in perpetuity

Over the past two years, the Ginninderra Falls Association (GFA), a community organisation that grew out of groups in

Belconnen, Gungahlin and neighbouring NSW, has been making representations to the ACT and NSW governments, the Yass Valley Council and interested supportive associations aimed at restoring public access to the Ginninderra Gorge and adjacent Murrumbidgee River corridor in NSW. The Association has proposed a national park model that will ensure public access in perpetuity.

Because of the private land ownership within the desirable boundaries of the national park, many cross-border issues have to be dealt with, not the least being possible rezoning of land currently under environmental management, and pressures from urban and semi-rural development spilling over from the ACT, and from current quarrying interests and rural industries.

Two major recent developments that help progress the national park proposal are, first, the publication in December 2013, of the NSW Government nine-month-long evaluation of the national park proposal, and second, the workshop held by the Riverview Group during December, 2013, that advanced the detailed design for their West Belconnen urban plan in both the ACT and neighbouring NSW.

... the area ‘contains significant scenic as well as natural and heritage values’

The NSW Government evaluation, although not currently allocating any funding, did say that the area

Land boundaries in the Yass Valley Shire on the border with the ACT together with proposed boundaries for the Murrumbidgee–Ginninderra Gorges National Park.

‘contains significant scenic as well as natural and heritage values’ and that the area ‘could see in excess of 50 000 visitors per year’.

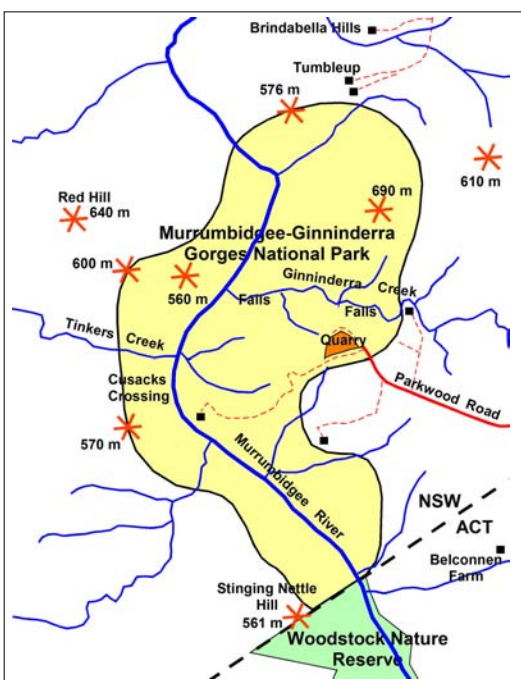
The Riverview Group urban design foresees a significant Murrumbidgee River corridor in some places, but there is some urban housing subdivision far too close to natural heritage features in other places. The GFA believes that some renegotiation and reallocation of urban housing should be possible with no adverse financial outcome. The December 2013 publicity documents put out by the Riverview Group for the West Belconnen area did envisage ‘reopening Ginninderra Falls and allow public access to the Murrumbidgee River’ and creating ‘a national park centred on Ginninderra Gorge’.

The GFA believes that a significant buffer zone is required between suburban housing and the lower Ginninderra Creek gorge area. This will enable the maintenance of significant ecological values across the proposed national park area and the restoration of areas degraded by grazing and gravel mining.

The International Union for the Conservation of Nature guidelines (2000) for a national park indicate the area should be an area of land designated to

- protect the ecological integrity of one or more ecosystems for present and future generations,
- exclude exploitation or occupation inimical to the purposes of designation of the area, and
- provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

(continued on page 10)



The Murrumbidgee–Ginninderra Gorges National Park *(continued from page 9)*



Riverview Group proposed suburban housing development subdivision for West Belconnen and neighbouring NSW, December 2013 (Riverview Group publicity document).

The GFA is endeavouring to ensure that these guidelines are built into developments for the Murrumbidgee–Ginninderra Gorges National Park.

... now is the time to get the political leaders ... to sit down around a table and thrash out land use issues for the long-term future

Because of the complex planning issues associated with the long-term development and management of a national park, now is the time to get the political leaders from state, territory, federal and local governments to sit

down around a table and thrash out land use issues for the long-term future. Private landowners must obviously be drawn into the process of creating a national park. The long-term goal is to ensure public access in perpetuity. In this process several business models can be considered for the long-term viability of a national park.

The Murrumbidgee and Ginninderra gorges are natural features of the landscape of such beauty that the opportunity for creating a national park should not be missed because of a lack of foresight by our political leaders. Urban and

small acreage land development north of the ACT border is inevitable, given that the regional population is likely to reach 500 000 in the foreseeable future. So now is the time to quarantine, for future access and use by the public, the land within the proposed boundaries of the national park.

Doug Finlayson

Come and see on

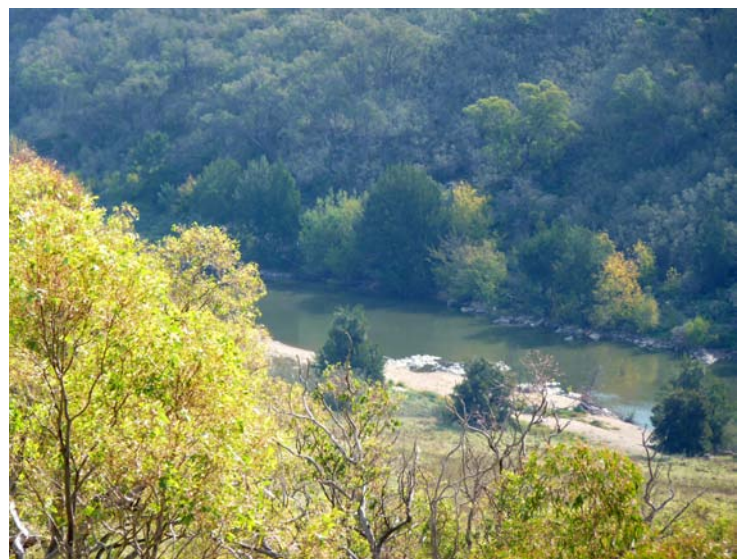
23 March

Because the land in Yass Valley Shire just north of the ACT border with NSW is all privately owned there are few opportunities for members of the public to view the natural heritage of the area. However, a get-together to get a glimpse of the area's beauty has been organised by the Ginninderra Falls Association for Sunday 23 March 2014, from 2:00 to 4:00 pm.

Meet at the Brindabella Hills Winery, 156 Woodgrove Close, Wallaroo. This is along the Wallaroo Road, which turns off the Barton Highway near Hall. A pleasant afternoon of sightseeing and discussion is anticipated.



Heritage listed 'Belconon' homestead built by Charles Campbell in 1850. That house on 'Belconnen Farm' within the ACT still stands today. Photo Doug Finlayson.



Murrumbidgee River near Brindabella Hills Winery. Photo Doug Finlayson.

Bushwalk

Ettrema–Tullyangela

Walk: Five day pack walk
[23] 24–28 January 2014

Participants: Eric and Pat Pickering (leaders), Rupert Barnett, Dave Kelly, PJ Larson from the USA, Jan Moore, Barrie Ridgway and Mike Smith.

Ettrema Wilderness in Morton National Park is situated west of Nowra and is part of the sandstone plateau that includes the Budawangs farther south. Access to the Ettrema Wilderness is provided by a north-tracking unsealed road linking Nerriga with the private properties Quiera, Tullyangela and Tolwong, all located within the national park.

... there are areas of dense rain forest with coachwood, sassafras, backhousia and thick vines

Vegetation on the plateau varies from open forest, head-high tea-tree, banksia, mountain devils etc., to rock platforms with a variety of mosses and lichens and some patches of sedge. In the gorges there are areas of dense rain forest with coachwood, sassafras, backhousia and thick vines. Ettrema Creek carves a gigantic gorge up to 400 metres deep through this plateau, starting near Sassafras on the Nowra Road and ending near Burrier–Nowra on the Shoalhaven River. Nearby, Tullyangela Creek, part of which is known as Dungeon Canyon, tumbles into Ettrema Creek. The formation of Tullyangela Creek must have been a savage natural event as most of its 400 metre fall into Ettrema is in the last five kilometres, starting from Dungeon Canyon. The creek bed is steep and choked with large boulders and block-ups which form permanent pools of deep water surrounded by near vertical cliffs.

Our five-day walk started near Quiera Clearing, which provides access to Pardon Point, four kilometres away through the bush and Transportation Spur which took us 400 metres down to Ettrema Creek; but only after a bit of scrambling and pack passing through the upper cliff-line. Exciting stuff!!

As predicted, there was some rain in the afternoon and evening of the first day but thereafter the weather was fine and perfect for walking. We rock-hopped downstream admiring the magnificent scenery of Ettrema, with occasional pools and cliffs towering above us. One evening, the local goanna wandered



*Tullyangela Creek; after first compulsory swim. Rugged country, rugged people.
Photo Eric Pickering*

through our camp closely inspecting each tent, before giving us the thumbs up.

... the magnificent scenery of Ettrema, with occasional pools and cliffs towering above us

On the third day we entered the south-flowing Tullyangela Creek and made our way steeply upwards through the giant boulders, and ancient and recent landslides, wading, rock scrambling, climbing, pack passing, and three compulsory swims with packs to awkward landing spots.

Rupert, Dave and Mike were of great help in finding routes through the boulders and steep-sided gorges. Just when I had almost given up hope of finding a campsite in the narrowing gorge and was looking for a flat, riverbed rock site, Rupert spotted a place a few metres up one side of the gorge where, in a small stand of dark rainforest, among forest litter, trees and vines, were sufficient flat spots for our six tents. Next day was more of the same rock and boulder hopping with the added challenge of finding an exit from the gorge. The going through Dungeon Canyon was somewhat easier than the previous day. (Someone suggested the name meant you could get in but not out!) Fortunately, we found an exit route, which took us steeply through the first cliff-line to a second, which looked impassable until Barrie spotted a narrow rocky staircase embedded in the cliff-face, which took us up to the plateau.

Someone suggested the name [Dungeon Canyon] meant you could get in but not out!

We camped beside Tullyangela Creek, after a 180° turn at its northernmost point. Next day Dave navigated us across the plateau, through rock platforms, heath land, scrub and finally open forest to our waiting car near Tullyangela Clearing. Quiera Clearing, our starting point, where the second car was parked was just a 20-minute drive away!

This was a challenging walk. PJ, our American guest, used to track walking in the States, was impressed that the walk was entirely off-track! I have found in such remote area walks that camaraderie develops within the group through the sharing of a unique experience to which no one else in the world is privy. For the five days of the walk, our party of nine walkers were the only people in the remote world of the Ettrema–Tullyangela wilderness where self-reliance and reliance on each other are paramount. This party was one of the most harmonious and happy I have been associated with.

Eric Pickering

Footnote

There are many Canberra walkers, including yours truly, who are very thankful to the Pickerings for introducing them to the wonders (and terrors) of Ettrema. And at four score plus they're still doing it!! Legends.

Ed.



The Bs of bushwalking — the Bibbulmun Track

Judith Webster and Mark Hopkins have been walking the Bibbulmun Track in West Australia in sections over the last few years. In October 2012 they did the section between Balingup and Northcliffe. Judith has sent us this free verse account of their 216 km journey.

The Bs of Bushwalking – The Bibbulmun Track

As any good Boy Scout would know
— though I was in the Girls Brigade —
The motto is **to be prepared**
So better have **A** check list
But mine was very much a **B** list.
Boots, of course, and beanie
Those blessed socks with toes.
For blisters there are *Bandaids*, *Betadine* and balm
Bushmans to keep at bay bites of every sort
Bandages (the *crepey* kind)
Should red-bellied Black attack – though Heaven forBid!
Sleeping bag and tea bags
In fact all kinds of dilly bags
For those biscuit basics — *Vita-Weats*, I mean
And muesli too —
Oh bother, I forgot the powdered milk.
Then *Backcountry* tucker is a must
but does become a bore.
The billy and the stove
Butane/propane in cylinder
Bottles for the beverages.
Guide Book — the Bible of the Bibbulmun
Compass, batteries, whistle, maps
All these must fit in my pack
A sleeping mat and so forth; are we ready yet?

Then let us begin.
Balingup to Blackwood 17.7 km — a warm-up for the trek
Whilst Gregory Brook keeps up the theme of Bs.
I blow and huff on all steep hills
And back begins to ache.
The heat is on so thanks and glory be!
For a brief break at DRV (Donnelly River Village)
In comfort of old loggers cottage.
In the night it rains
Friendly `roos take shelter on our porch
And by the light of morning
A daddy emu leads his brood of stripy chicks
Around the cottage gardens.
It's on to Tom Road shelter —
Beside a boulder bordered brook
Which offers chance for bracing bathe.
It must be said, here,
Mark and I walk to a different beat
Always he before me goes.
Then waits at designated time —
for this old tortoise to catch up but
One day the system failed.
No sight or sound of my companion
Sitting doing crosswords by the track.
Where had he gone; why did he not wait?
I soldiered on — keeping true to my Track name
Of *Persevering Plodder*.

An hour passed and still no sign.
We were beyond the range of mobile phone.
No contact and no telepathic insight could provide a clue
The track was clear — the **Waugals*** there.
Two hours had gone
Was he before me still or yet behind me now?
Bemused I sat, and hadn't waited long when,
head down, a lonely bushwalker hove into view
“G'day and am I glad to see you”
Expressed our mutual feeling of relief.
His sorry tale goes like this —
Whilst strolling with his thoughts elsewhere
(In a *brown study* you might say)
He missed a marker and walked a kilometre or more
Before realising the error he had made.
Backtracking, whistle blowing and bellowing he, like me,
Knew not whether he was ahead or behind.



The mighty Karri.

Thus far, about the bush I've little said.
The marri and the karri trees so elegant and bold
Reaching to the blue of sun-bright sky
While beneath their lofty canopy
Grew soap bush — a froth of springtime green
Bull banksias and parrot bush
And blooms of many flowers,
Leschenaultia of cornflower hue
Shiny enamel orchid, pimelea, clematis,
Flame pea and tassel bush
To name but just a few.

Cockatoos flew overhead, the red and white-tailed black
We glimpsed the brilliance of splendid wren.
Birdsong abounded.

(continued next page)

Walk leader

Easter. A transalpine crossing. I was the walk leader. This freshette really wanted to come. But she had to go to a wedding in Sale on Good Friday. Would be a day late. Bloody nuisance. But I decided to be helpful. Was it the hazel eyes?

So I carried my pack in with the group the first day. Left them setting up camp at some old gold diggings. Then I walked back out to the roadhead to meet her. We started to walk back in at dusk. Slept a few hours by a bubbling stream. I woke once and saw her sitting by the river in the moonlight. Why? Who was she? At dawn we walked on and caught up with the others. They were just leaving the camp site and wondering where their walk leader was.

Wonnangatta valley, 1962.

for better
for worse ... sometimes richer
often poorer
often rough ... sometimes smooth
never plain sailing

Gerry Jacobson

The Bs of Bushwalking *(continued)*

Bygone days were brought to mind
In naming of the shelters —
Boarding House, the site of one in early timber-getting times
Then Beavis — and Beedelup.
At Beavis a froggy choir tried our sleep to steal.
Solos of “crik, crik, crik” and off-beat syncopated choruses
Persisted, unrelenting, through the night.
At first hint of dawn came a suspicious lull!
The cue it seemed for the cackling, raucous mirth of
kookaburras
To splinter the air.
All these sights and sounds of Nature
Were the pleasures of the way
Interspersed with long quiet stretches — to meditate alone
Or meet and chat to other hardy walkers; share a yarn or two.
I began to fantasize of scrambled eggs for brekky
So when we reached a welcome rest at Pemberton
To the Millhouse Café we made tracks:
Fantasy became reality —
And generous serve of bacon, eggs and mushrooms
filled me with bonhomie.

Three parts more to our trek remained.
20 km to Warren and to Schafer 21 —
Leaving a mere 14 km
for the final bash to Northcliffe.
The site of Schafer campsite was a delight
Beside a pretty dam; wrapped all about by forest.
Oh! How I wished to linger there
Take a cool dip and savour the ambience.
But that 14 km for tomorrow (a cinch you think)
Became a challenge much discussed.
A challenge due to time constraints.
Our booking on a bus — before 11am.
Before we boarded that bus to Bunbury
Mark declared a shower was a must
To banish all the bush BO,
Whilst I knew — all too well —
the limitations of my pace...
So how to beat the clock?
“We must be up at 4 am” I was so bold as to suggest.
“Oh B..... that” bemoaned my friend
“Let’s do some more today.
Get more *clicks* under our belts
And bivvy on the track”.

With last wistful, backward glance to Schafer
We were off again at 3 pm ...
The track was flat, the going easy.
“Why not keep on and on?” I blithely said
And so we did ...
The forest faded and the light too drained away.
To sandy open heath we came
Then broad and bounteous pastures
And cow pat strewn lanes that led to sheds
That throbbed with milking machines.
My feet throbbed too and felt on fire, until at last —
Just after dark we stood beneath a lamp post on the bitumen
of road —
and wondered if, with a blink of eye, we’d missed the little
town of Northcliffe?
But found somewhere to lay our heads
And proudly boast 35 kilometres in one day.
So on a high we left the track — for this year, anyway.
But more of Bibbulmun beckons; beckons ...
Yea ... it beckons ...

Judith Webster

* A **Waugal** is the official sign for the track. It is a stylised rainbow serpent.

Judith did another section in May 2013 and hopes to finish the track in 2014.



Old trestle bridge
Photos Judith Webster

Sandalwood: 'liquid gold'

What is the world's most valuable tree? A strong case can be made for those species of sandalwood (genus *Santalum*) that yield oil. Today, Western Australia's native *Santalum spicatum* provides 40 per cent of the world's supply of sandalwood (Forest Products Commission, no date). My interest in sandalwood was sparked by a visit to a small tourist venture in Vanuatu based on locally grown sandalwood. Australia has long been deeply involved in the sandalwood trade, and NPA members might find the current situation regarding sandalwood as intriguing as I do.

Demand for sandalwood

Since Buddhism originated in the 6th century BCE, aromatic sandalwood has been constantly in demand for ritual purposes. A market opened in China after Buddhism was introduced there six centuries later, and was initially supplied by *S. album* sandalwood from India. When Magellan reached Timor in 1522, he found a Chinese junk exchanging goods for sandalwood (Gunn 1999). Centuries later, Australian traders began to participate in the sandalwood trade because it was a valuable cargo that they could exchange in China for tea. By the early 19th century, tea had become a preferred beverage throughout the English-speaking world (Shineberg 1965). As early as 1844, Western Australia began to export powdered sandalwood to China from its stands of *S. spicatum*. At that time, the value of sandalwood exports was higher than that of wheat (Forest Products Commission no date).

World demand for logs and oil remains very strong — so strong, indeed, that illegal harvesting is a serious problem. It is one of two reasons why India is unable to rely on a constant local supply (the other being Spike disease). In Western Australia, wild trees are being illegally logged, posing a difficult problem for police because of the remoteness of the areas involved (Bell 2013). There is a strictly controlled, ongoing exploitation of WA's wild stands of *S. spicatum*, largely in Aboriginal hands, a limit of 2 000 tonnes being exported annually, worth AU\$1.5 million (exports from private plantings are not subject to this control).

Australian and Pacific sources of sandalwood

Santalum species are widespread throughout the Pacific but their



Young sandalwood plantation at The Summit, Vanuatu. Uncleared forest at rear, with one remaining mature native tree dominating this view. Young sandalwoods with host trees in right foreground. Photo Liz Teather

distribution is incomplete, with the reasons for this obscure (Brennan and Merlin 1993). *Santalum austrocaledonicum* grows wild in New Caledonia and Vanuatu. Sandalwood produced in Fiji is *S. album*, also known as Indian sandalwood. It is likely to have been introduced. *Santalum lanceolatum* is indigenous to Queensland and is exploited today to a limited extent. Sandalwood reserves in the Pacific islands were ruthlessly stripped by American and European traders, beginning in Fiji (*S. yasi*), then the Marquesas and Hawaii (*S. ellipticum*). The New Hebrides (now Vanuatu), the Isle of Pines, the Loyalty Islands and New Caledonia, were at first avoided because of their fearsome reputation as the homes of aggressive warriors and cannibalism. Australian traders moved into this area after 1841, systematically exploiting sandalwood resources. Today, efforts are being made to re-establish sandalwood in the islands and I will explore Vanuatu's example below.

In Western Australia, the small scale establishment of 'tree farms' of *S. spicatum* in the wheat belt is being encouraged, to diversify farm income and help counter salinity brought about by shallow-rooted crops such as wheat and pasture grasses. But much larger initiatives are afoot. The government of Western Australia is predicting 50 000 ha of sandalwood plantings by 2020 (Australian Sandalwood Network Inc. 2008). Indeed, what is believed to be one of the world's largest sandalwood plantations, 5 million trees on 2 200 ha,

was established in 2011 (Anon. 2012). In the Ord River Irrigation Area, a recent increase in plantation *S. album* brings the total there to 3 500 ha, or 60 per cent of the total (Anon. 2013). It will be crucial to the sandalwood industry to see whether prices will continue to rise at recent rates (12 per cent per annum) after the arrival on the market of plantation timber from 2015.

Only the heartwood and roots of a sandalwood tree contain the oil, so when a tree is harvested the plant is destroyed. It takes at least 15 years for a tree to grow to the size at which it is worth harvesting.

Growing sandalwood in the islands: the case of Vanuatu

With cash in short supply to island villagers, raising a few sandalwood trees makes a lot of sense. In Vanuatu, the price for heartwood has risen 10 per cent each year since 1990, considerably outstripping the inflation rate. In 2012, the Australian Centre for International Agricultural Research (ACIAR) produced two publications on sandalwood, one of them a pocket-sized handbook for potential small-scale growers. Both documents are available on line ((ACIAR 2102a,b). For those interested in the growing process, the handbook is fascinating. One of the tricky problems is that sandalwood is semi-parasitic, and selecting an appropriate host tree is crucial. The managers of the small plantation I visited in 2013 at The Summit, near Port Vila,

(continued on next page)

Sandalwood: 'liquid gold' (continued)

had decided to change the host tree. After trialling several species, *Calliandra surinamensis*, the 'Tassel tree', is now the selected host, and earlier hosts, cassia (*Leucaena leucocephala*) and the local 'Bluwota' (*Pterocarpus indicus*) are being replaced.

In this tropical climate, vine growth is a major problem. For small-scale growers, with a few trees in the garden they regularly visit for the day's vegetable supply, this can be controlled. What I have not clarified is how the ownership of trees is sorted out. Customary ownership of land is widespread. With trees being so valuable, who benefits from a tree's sale is a crucial issue, as is the potential for thieving.

The sandalwood trade is strictly controlled by the Vanuatu Government and only a few licences are made available during the open season when sandalwood can be bought and exported. There is a minimum price set for heartwood each year by the Vanuatu Department of Forests. Buyers often offer more, and will collect the wood and pay for it on the farm (ACIAR 2012a). 'Four sacks of sandalwood in the back of a ute are worth a packet' said one of my local informants. A single tree can pay for a child's overseas college education, and I have heard of one local school that has established a small plantation that will be a useful long-term source of income if properly managed. The tiny percentage of world production (about one per cent) from Vanuatu nevertheless represents a disproportionately large contribution to Vanuatu's village economy.

Conclusion

The investments in sandalwood rely on prices remaining high. There is a steady demand for oil, which has a wide variety of uses. The major producer of sandalwood oil in Australia is based in

Albany, and supplies European producers of cosmetics. The pharmaceutical industry also uses sandalwood oil. After extraction of oil, exhausted sandalwood powder is used for incense. Synthetic sandalwood is not favoured by traditional consumers and appears not to be a serious challenge to the current trade. What will happen to world prices when plantation timber comes on line is yet to be seen. Logs can be safely stored to await rising prices.

If you happen to be in Vanuatu, you can visit a small plantation and watch powdered sandalwood chips being distilled at The Summit, a 15-minute taxi ride from Port Vila. The oil is used in the small-scale manufacture of The Summit's own cosmetics and candles. The Summit is an interesting example of a small-scale, sustainable enterprise exploiting a niche market, value-adding to their own raw product, and employing and training local people. The Summit has magnificent landscaped gardens, and distils essence from several other plants that it grows. I have in my purse a roll-on fragrance made from ginger and lime. Lemongrass and tamanu oil (*Calophyllum inophyllum*) are some of the other ingredients.

Acknowledgment

I thank the ni-Vanuatu staff member from The Summit who drove me round the plantation, and the Port Vila sandalwood trader who discussed with me the Vanuatu trade. The Summit's website is at www.thesummitvanuatu.com.

Liz Teather

References

ACIAR 2012a. Opportunities for the smallholder sandalwood industry in Vanuatu. ACIAR Technical Report No. 79. Canberra. Australian Centre for International Agricultural Research: Canberra.

ACIAR 2012b. Vanuatu sandalwood. Growers' guide for sandalwood production in Vanuatu. ACIAR Monograph No. 151. Australian Centre for International Agricultural Research: Canberra.

Anon. 2012. World's largest sandalwood plantation established in Western Australia. *Daily Timber News*, at [https://www.timberbiz.com.au/dtn/det](https://www.timberbiz.com.au/dtn/details.asp?ID=725)ails.asp?ID=725, accessed 4 Jan. 2014.

Anon. 2013. 'Sandalwood plantations a disaster for the Ord River. *Green Left Weekly*, at <https://www.greenleft.org.au/node/53962>, accessed 4 Jan. 2014.

Australian Sandalwood Network Inc. and Forest Products Commission of Western Australia 2008. Western Australian Sandalwood Industry Development Plan 2008–2020, no place of publication provided.

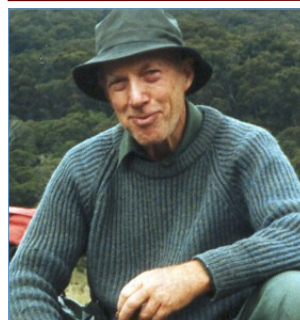
Bell S. (updated Dec. 27 2013) Illegal loggers tap Australian prize. *Wall Street Journal*, accessed online, 4 Jan. 2014.

Brennan P. and Merlin M. 1993. Biogeography and traditional use of *Santalum* in the Pacific region. In 'Sandalwood in the Pacific Region'. ed. by F.H. McKinnell. Proceedings of a Symposium held on 2 June 1991 at the XVII Pacific Science Congress, Honolulu, Hawaii. ACIAR Proceedings No. 49. Australian Centre for International Agricultural Research: Canberra.

Forest Products Commission no date. At <http://www.fao.org/docrep/v5350e/v5350e08.htm>, accessed 10 Jan. 2014

Gunn G.C. 1999. Timor Loro Sae. Livros do Oriente: Macau.

Shineberg D. 1965. They came for sandalwood: a study of the sandalwood trade in the SW Pacific, 1830–65. Cambridge University Press: Cambridge, UK.



Vale Alan Ray

It is with sadness that we report the passing of Alan Ray, long term member and friend of NPA. Alan used to come on pack and day walks with us in the 1990s (and probably before!), and was very well known as one of nature's gentlemen. He was also a

familiar and very welcome face at our functions and General Meetings until not so long ago.

Alan was something of a legend in Aussie Rules circles, and in a very nice tribute in the Canberra Times the Ainslie Football Club declared him to be their 'Godfather'. So it was fitting that his memorial function (which was huge) should have been held in the club. At the function it was announced that Ainslie Oval will be officially renamed The Alan Ray Oval in his honour. Alan will also be

missed by NPA, which was represented at his farewell.

Alan's wife Pam was also involved with us, and I well remember her leading an NPA history outing to the Yass cemetery, where indeed many of my own kin are planted.



Max Lawrence

Bushwalks

Teddys Hut

Walk: Sunday 12 January 2014

Participants: Brian Slee (Leader), Peter Anderson-Smith, Chris Paterson, Margaret Power

Weather: Clear sky, occasional breeze, temperatures mid-20s.

Leader's comments: *Climate change hits the High Country* the headline might read. In summer we have relied on altitude to quell the heat and allow for comfortable walking but we may need to be more cautious in future.

All went well until mid-afternoon. We had met at Calwell at 6:30 am and drove on an empty road to Dead Horse Gap, arriving shortly before 9:00 am. Forecast max for Thredbo was 20° so we took what we thought would be adequate water. The problem seemed to be flies but they were found to be not much of a nuisance.

The walk began on Cascade Trail and, having reached the bridge, we then followed a clear footpad next to Thredbo River. After a long dry period in Canberra, it was surprising to find puddles in green country. Piled horse dung everywhere. At Boggy Plain we stopped for a break on rocks free of biting ants. From there the track



Teddys Hut among the speedwell and snowgums.

diminished and, after a brief struggle with vegetation around Mt Leo, we topped the rise, turned left at noon and found Teddy in his isolated magnificence.

North of the hut were banks of mauve speedwell, brightening what had been a meagre

display of wildflowers. getting into some pants, replacing the nuisance from flies on our last excursion here, in 2006. Margaret's thermometer was showing 26° and it slowly sank in that this was a true reading.

From Brindle Bull it was meant to be easy: pick up the track, round a few hills, get onto the ridge and descend neatly to the car park. We kept on and on what I thought was the track without getting to the ridge, so after expending considerable energy, it was decided to descend south-west to Cascade Trail. This was onerous and we were saved from distress by gulping the beautiful cool water flowing in the stream that we were following down. We eventually joined up with the Trail about 1 km from the car park. Fortunately, only 20 minutes had been added to the schedule.

But we were exhausted by the time we were at the car. The usual reviver at Sundance in Jindabyne worked wonders and we were back at Calwell at 7:15 pm. Paddy Rushs, last visited by NPA in 2002, looks enticing for the future. Carrying more water!

Brian Slee



Margaret, Chris and Peter at Teddys Hut. Photos Brian Slee

One Tree Hill

Walk: Sunday 19 January 2014

Participants: Brian Slee (Leader), Cynthia Breheny, Mike Bremers, Rod Griffiths, Steve Hill, Max Lawrence, Colin McAlister, Michaela Popham

Weather: Very warm, fine but smoky sky, cool wind at upper levels.

Leader's comments: Canberra Centenary Trail opened last November as an enduring memorial to the city's naming in 1913. It forms a 145 km circular track linking established paths in Canberra with mostly pre-existing tracks through the surrounding hills. The Hall–One Tree Hill section is new however, as there has been no public access to the grazing land it crosses. Already it is regarded as one of the most scenic parts of the Trail.

We met at Hall Post Office at 8:30 am and repositioned the cars under shade trees outside the former school in Hoskins Street. The Trail begins at the end of the street, where it meets Hall Street. The first 200 metres are on an existing road connecting to the water tank. From there walkers step through a gate and find themselves in a 30 metre wide corridor bound on either side by new wire fences, festooned with 'Keep Out' signs.

The 'corridor' is east of, and below, the line of hills forming the ACT–NSW border. A track has been bobcatted through the corridor and rises 200 metres steadily over 4 km before a short, steep footpad separates off and leads up to One Tree Hill. Initially the track crosses open paddocks, recently planted with trees, and then passes through frequent small forests of young trees. There is a crudeness about its construction: parts are undrained and lopped vegetation lies about like on a building site. Many briars and other exotics left behind have since been eliminated by voluntary effort. At two points the corridor disappears, allowing movement of cattle between upper and lower paddocks. No cattle were seen. But a raptor hovered above the dry grassland.

Cyclists also use the Trail and those descending from the north can take walkers by surprise. Caution is necessary. Given its popularity with cyclists — we encountered about 20 — the track needs widening.

*Climbing the footpad to the summit.
Photos Max Lawrence.*



One Tree Hill Lookout.

The final climb is through magnificent mature eucalypts — the original 'One Tree' has companions. On the summit, the centenary is celebrated by a squared steel frame arch, which is fenced off from a trig marker and fire tower in NSW. Views north and west are somewhat restricted but south and east are panoramic. Atmospheric smoke muted the scenic drama. A fruit and nut panforte was shared out while we sat and talked and sat some more in the refreshing breeze, doubly welcome following a four-day heatwave.

We returned the way we came, this time facing the view. Oddly, the only other walkers seen all morning, a father

and son, passed by. Within an hour we were back in town. Most stayed for lunch at Gumnut Cafe where we finished 1:00 pm. Possible winter walk: leave car either end and follow Trail from Forde to Hall.

Brian Slee



Bushwalk

Molonglo Valley

Walk: Sunday 10 November 2013

Participants: Esther Gallant (leader), Carol Anderson, Rupert Barnett, Sonja Lenz, Kevin McCue

Leader's comments Molonglo Valley proved yet again to be an interesting walking location in spite of the dreary weather. At 9:00 am in the Kama carpark there was a bit of drizzle, ominous black clouds to the north, temperature 12°C and falling. The weather forecast was for developing rain. Cautious leader made a decision to change from an end-to-end walk to a loop walk to facilitate retreat to cars if required.

The underpass from the carpark to the Kama Nature Reserve track was being decorated by a young man with multiple spray cans so we hurried on past. The walk through the reserve started well with sightings of Superb Parrots and a hovering kestrel. We followed a track past the dam (unoccupied) and along the west side of the reserve to the ACTEW access road, then shortly climbed a knoll for early morning tea with a view over the misty valley. Rain held off, but the cold wind prompted us to move on after only a brief stop.

We soon dropped off the road to head for the river near a previous Wedge-tailed Eagle's nesting sites. As we approached the river we saw an old nest across the river. There appeared to be a black object on the nest which we cautiously called a 'stick eagle' as it did not appear to move. When we finally reached the river bank, the eagle turned its head. We were all delighted. This is the third nest the eagles have recently used along this section of river having wisely moved from one further upstream and adjacent to the new suburb

construction. Farther downstream we passed the nest recently occupied by the eagles in a tree now without its top and an even older derelict nest.

Near the old nests there was evidence of lots of wombat home remodelling, with one burrow looking likely to soon become an indoor swimming pool. There were small hoof tracks in the fresh earth. The park rangers must have not yet been able to get rid of all the feral goats in the area. Later in the day we encountered another wombat burrow with impressive deep claw marks in the entrance to the burrow.

An animal track along a low ridge above the river led us to an echidna burrowing into the path. A second echidna was sighted later in the day as it scurried into the cover of a small bush. We examined the shiny black beetles devouring St John's Wort flowers — there are not nearly enough of them to do the enormous job.

A descent down a stony slope took us to a sandy beach in a rocky alcove for lunch along the Molonglo. A pair of Wedgies soared in the distance and insects skittered across the water. The geologists in the group inspected some interesting rocks for possible ripple marks left by wind or lapping water in the sand before it was buried and turned into a sedimentary rock. Rain drops on the river encouraged us to move on.

We continued parallel to the river along a high ridge until we were above the old sand quarry and the start of the



Interesting limestone outcrop.

road back towards Coppins Crossing. Before heading back through Kama Nature Reserve we stopped to investigate a limestone reef that Kevin pointed out. Due to weathering, some of the rocks had delicate fluted ridges along the uppermost edge.

Crossing the nature reserve on the east track we admired some very large old trees and one tree completely embracing a second, dead tree. We arrived back at the cars about 3:40 pm just in time to avoid the downpour. Lucky timing! A splendid walk for many reasons.

Esther Gallant



Very fresh wombat renovations. Photos Kevin McCue

Emails following the walk

Thanks Esther

Even the rain couldn't dampen our spirits, an excellent outing.

I have attached a couple of photos, highlights for me.

Cheers

Kevin

*ps Rupert, the limestone is of Silurian age, ~425 Million years old and the fossils we **didn't** see are crinoid, coral, bryozoan ... The weathering pattern is rillenkarrren.*

pps please feel free to pass on

ppps I still think the eagle is a plastic cutout!

PARKWATCH

Edited extracts from recent journals and newsletters

Who's living on my land?

Using motion-detecting infra-red cameras is a non-invasive and cost-effective method to survey and monitor a variety of animal species. By using the infra-red cameras, one can discover the identity of the many native species that are sharing and using the land, thus providing a snapshot of the current biodiversity level. In addition to this, it can help to uncover the presence of pest species such as foxes, pigs or goats. The initial phase of this project to use infra-red cameras as a monitoring tool was started by Dr Grainne Cleary through a NPA [NSW] Citizen Science project funded by a grant from the Great Eastern Ranges Initiative. The initial trial phase of the project proved to be highly successful with much positive feedback received from landholders. The use of infra-red cameras led many landholders to better understand their land and initiate coordinated pest control measures.

Native species such as the bowerbird, echidna, Swamp Wallaby, lyrebird and gliders were also captured by the cameras, creating a lot of excitement among the landholders. Apart from the amazing images of native species, another notable discovery was made. Lures in the PVC bait station were sometimes found missing. The camera showed a number of native species and foxes investigating the bait station with curiosity. It was found that the foxes that were visiting the bait stations were not indulging in any effort to get to the lures. Instead, it was mostly the Bush Rat *Rattus fuscipes* or Black Rats *Rattus rattus* (introduced species) that were chewing through the PVC bait covers to remove the lures. Without this knowledge, the tracks left by the visiting foxes, along with missing lures, might have led to false assumptions that the foxes were indeed taking the lures laid out for them. This could affect the measurement of outcomes when engaging in an operational pest-control program.

The next phase is to extend this project in the Great Eastern Ranges regions of Illawarra to Shoalhaven and Kananga-Boyd to Wyangala. Foxes are a major concern in the Illawarra region, while goats, deer and pigs are more prominent in the latter region. This phase of the project hopes to engage more landholders in these regions to use the infra-red cameras to investigate what is

living on their land. It is hoped that this phase of the project will strengthen conservation efforts and increase the uptake of pest control measures, helping to maintain the precious biodiversity of these regions.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

Bushwalkers should take extra care with fire

A recent fire on Mt Namadgi provided a timely reminder for bushwalkers and campers about the importance of properly extinguishing fire in the bush.

A campfire (which is a restricted activity within Namadgi National Park) had been carefully covered with soil to prevent it re-igniting. However, the fire spread underground and flared up some time later a significant distance away from the original campfire.

Although water is extremely precious when camping in remote areas, it is worth dousing a fire with water, rather than burying fire, to make sure all possibility of re-ignition is extinguished.

**Christine Goonrey, member of the
ACT Bushfire Council and NPA
Committee member**

Bushwalking and bushfires

I can't imagine anything more terrifying than a bushfire bearing down on me on a hot and windy day. On such a day the firefront can throw hot embers many kilometres, starting new fires and causing the main fire to spread rapidly. The radiant heat from this fire would be so intense that even 100 m away it would be unbearable and cause serious burns. There is no jumping in a creek or wombat hole to avoid this fire. The only way to be ensuring your survival is to be somewhere else. All this on a day that is only halfway up the fire danger rating scale; it can get very ugly.

As bushwalkers we love to get out and explore. It is very hard to call off a walk because of a potential risk—especially when there is no actual fire. We have been reminded again this year that devastating fires can sneak up on communities, even in spring. We need to be particularly mindful of bushfire risk in spring, summer and early autumn. The Rural Fire Service (RFS) is the lead agency on bushfires in NSW. It says that

'Severe, Extreme and Catastrophic Fire Danger Ratings mean a fire will be unpredictable, uncontrollable and very fast moving. This means that you may have little or no warning about the threat of a bushfire'.

What is a bushfire danger rating? It is a forecast of a potential fire's behaviour, the difficulty of suppressing a fire and the potential impact on the community should a bushfire occur on a particular day. The rating ranges from low-moderate for days where fires are likely to be slow moving and easy to control, to catastrophic for those days where a fire will be unbelievably hot, fast moving and uncontrollable (think Canberra 2003 and Victoria 2009).

What is a total fire ban day? It is a day where open fires are banned by the RFS. The ban is put in place to limit the number of fires that escape and threaten life, property and the environment. This means that it is illegal to use a portable camping stove on a bushwalk. Fire danger rating and total fire bans are usually announced at about 5pm the day before they come into effect. Park managers may not get closure information for several hours after the announcement, if at all. We need to be proactive about our safety and chase the information we need to make a decision, not leaving it up to chance. As a bushwalker, it is safest to first assume you will cancel your walk on days of total fire ban as well as on severe, extreme or catastrophic fire danger rating. Many park managers will close tracks and trails in parks covered by a total fire ban (although picnic areas may remain open). Since a fire danger rating covers large areas some parks will have lower risks, but it is nevertheless 'important that we seek advice from the park managers who have a broader knowledge of the conditions, fuel loads and other activities in the park'.

On longer multiday trips this obviously becomes more challenging. Carry non-cook meals and water purification systems that do not require a stove. Always register your walking plan with the local police or NPWS office. If there is a significant risk of fire during your walk and it is possible to leave the walk early, then this is the safest option. If leaving the bushfire-prone area is not possible then ensure you consider the safest areas for retreat and possible shelter from radiant heat. Stay alert to weather conditions and keep an eye out for any sign of fire. Check the RFS

(continued on page 20)

PARKWATCH *(continued from page 19)*

website if you are in a mobile phone range or monitor local ABC radio stations for emergency broadcasts. Phone for help or use your PLB if there is a threat of grave and imminent danger. If you are in doubt — play it safe, there are another 51 weekends in the year. Equally, don't let his scare you off — pick the days and have alternative activities planned during fire season. Wild places by their nature present risks — let's take them seriously but still enjoy these amazing places at the right times.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

The Southern Myotis

Myotis macropus, the Southern Myotis, weighs just 12 grams and is the size of a 20 cent coin. It belongs to the family Vespertilionidae (Evening Bats). This species was previously thought to be the Large-footed Myotis but, as a result of recent genetic studies, taxonomists have now classified it as the Southern Myotis. This amazing creature forages like none other: the Southern Myotis is Australia's only fishing microbat! They use echolocation to detect ripples on the surface of the water caused by small fish, tadpoles and insect larvae, which it preys on. The bat's unusually large feet act as a built-in fishing mechanism. The toes are about 8 mm long, flattened and widely spaced, looking rather like a miniature rake! It is this amazing design that helps its feet to slice smoothly through the water to catch its prey. The ends of the toes are curled and act as hooks. Another incredible feature is the bat's large tail membrane, which extends from the ankle and up to the tip of the tail, functioning as a handy 'basket' to scoop and store the prey when fishing. The prey is often carried back to the roost site and consumed later or eaten in mid-air out of its 'basket'.

The Southern Myotis is known to occur from north-west Western Australia around the north and east coasts to south-east South Australia. All their roost sites are carefully selected near permanent still water sources for their fishing needs. This species' common roost sites include caves, abandoned mines, under bridges and tree hollows. At each site, 10–15 adults will typically roost together. In NSW, populations of Southern Myotis are found in rainforest and dry sclerophyll forest habitat in the Royal National Park. Another small population was found in 2007 roosting in the Otford–Stanwell Park railway tunnel.

Male adults form a harem consisting of between 3–6 females during the breeding seasons. Once the harem is formed, it is defended by the dominant male. Adults in NSW breed only once a year, producing a single pup, while their counterparts occurring further north breed twice a year.

In NSW, the Southern Myotis is listed as 'vulnerable' under the *Threatened Species Conservation Act 1995*. The main threats to the long-term survival of this species are habitat clearing for urban development and poor water quality caused by pesticide run-off and pollution. The Office of Environment and Heritage has identified 15 priority actions to aid the recovery of this species in NSW. Some of the priority actions include retention of tree hollows, promoting roosting habitats in man-made structures (e.g. concrete bridges) and regulation of pollution levels in waterways.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

IUCN World Parks Congress Sydney 2014

The International Union for the Conservation of Nature (IUCN) has chosen Australia to host the 6th World Parks Congress in November 2014. The congress is the world's largest gathering of environmental and protected area experts. Held just once every 10 years, this landmark event brings together around 3,000 participants from 160 nations to set the agenda, direction and trends in contemporary protected area management for the following decade. After a competitive bid process, Sydney was selected to host the next congress, which will take place at Sydney Olympic Park from 12–19 November 2014.

The IUCN has applauded Australia for its history of commitment to protected areas. It was in the late 1800s that Australia's first national park, and the world's second, Royal National Park, was created in Sydney. Since then, NSW alone has established more than 860 parks and reserves spanning a diversity of landscapes and habitats.

The congress will be more than just a gathering for protected area professionals. It's an opportunity for government and non-government organisations, Indigenous people and youth — the future leaders of tomorrow and the wider community who care about the health of our planet and society — to work together on a sustainable plan for the next 10 years. The congress program

will be further developed over the next few months, and ambassadors and champions will be chosen to lead the Congress. To keep up to date on these developments, please register at: www.worldparkscongress.org

Nature NSW, Vol. 57,
No. 4 (summer 2013)

Murray River's 'threatened' listing may be repealed by the federal government

The listing of the Murray River as a threatened ecological community may be overturned, with Environment Minister Greg Hunt undertaking a review of the listing process. In the last days of the previous Labor government, then-environment minister Mark Butler approved adding the 'River Murray and associated wetlands, floodplains and groundwater systems, from the junction of the Darling River to the sea' and the 'wetlands and inner floodplains of the Macquarie Marshes' to Australia's list of threatened ecological communities. The former government's independent Threatened Species Scientific Committee considered the nomination, and opened it to interested parties for their views.

The committee's final recommendation that they be included on the threatened list as 'critically endangered' was adopted by Mr Butler in August. However, the listings angered the National Irrigators Council. Its chief executive, Tom Chesson, says the organisation was never consulted about the listings. NSW Primary Industries Minister Katrina Hodgkinson said she also was not consulted. According to environment law in Australia, Mr Butler's decision to include the Murray River on the threatened list may be overturned. Parliamentary Secretary to the Minister for Environment, Simon Birmingham, said that the government is 'looking very closely at this listing'.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

Native Game Birds

The Game Act allows the Minister for Primary Industries to add native bird species to the list of 'game'. This is one of the most philosophically repugnant aspects of the Act. It's such a wrong process and really suspends the entire history of NSW nature protection and assessment we had in place for native birds and animals. NPA [NSW] will continue to advocate for the removal of native birds from the Game and Feral Animal Control acts and encourage the

(continued next page)

PARKWATCH (continued)

government to explore alternative non-lethal strategies to discourage native birds from feeding on crops.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

Forest Watch

The Humane Society International is a proud supporter of Wildlife SOS's critical work in India, with two recent examples of its vital Forest Watch program demonstrating why.

Two sloth bear cubs have been seized from poachers. Destined for Nepal's cruel dancing-bear trade, they were rescued in a night-long raid by police, the Forest Department and Wildlife SOS. With intelligence provided by Wildlife SOS, the 18-month old female and 24-month old male were saved. This success was followed by a landmark judgment from the Karnataka High Court when eight tiger poachers were sentenced to 3 years' jail. The poachers had been arrested with their jaw traps while in the BRT Tiger Reserve in the Kollegal district of Karnataka.

*Humane Society International
Campaign Report 2013*

Celebrating 15 years of service

Since 1998 Snowy Hydro SouthCare has been the local rescue helicopter for the ACT and south-eastern NSW. On Tuesday 1 October, the Snowy Hydro SouthCare Helicopter celebrated 15 years of service. Over these years, Snowy Hydro SouthCare has performed over 5,300 missions, saving lives and benefiting countless communities across the region. The quality of service and care provided is a testament to the highly trained and skilled flight and medical crew. Several of the members have been with the service since 1998. Memorable missions include Snowy Hydro SouthCare's role in the 1998 Sydney to Hobart Yacht race, when patients were winched to safety from high seas and, in 2003, the retrieval of the pilot of a helicopter that had crashed into Bendora Dam. There are also the missions every day that go unreported. Few people realise that the service performs an average of two helicopter missions per day.

Many past patients have thanked the service and its crew for providing them a 'second chance at life', and they say 'where would we be without this service?' The helicopter service has come a long way since its beginning in 1998 when it was based at the Canberra Airport with no helicopter hangar or dedicated crew facilities. The crew, including a pilot, aircrew men, intensive

care paramedic and doctor are now on duty 24/7, 365 days per year at the service's base on the Monaro Highway, Canberra.

Rotor Wrap Snowy Hydro SouthCare,
Vol. 13, Edition 3

Grazing in Queensland national parks update

In October, NPAQ wrote to Minister Dickson expressing its concern that cattle grazing in national parks and national reserve system lands, bought with the sole purpose of being gazetted as national parks, may continue beyond 31 December 2013.

In parliament, and on public radio, Minister Dickson has reiterated that cattle will be removed from all 13 sites by the end of the calendar year. As this edition of *NPA News* reaches your mailbox, livestock are spreading weeds, trampling the habitat of rare native animals, and destroying waterways in our national parks and future parks. Furthermore, many graziers have communicated to NPAQ that the program is highly inequitable, benefiting only 30 landholders in the immediate vicinity of these sites, and penalising the vast majority of graziers who continue to proactively manage their stock. Currently, access to national parks for grazing is primarily for fodder; i.e. the government could have provided fodder handouts to the same value as they have spent on hardship grazing, and the cattle could have stayed at home.

NPA News (Qld), Vol. 83,
Issue 10 (November 2013)

Understanding the science of climate change

Eggleton, Tony (2013). *A short introduction to climate change*. Cambridge University Press: Melbourne.

After a working life as an academic geologist specialising in the weathering of rocks, Professor Tony Eggleton of the Australian National University approached climate change with an open mind. As a retirement project, he has written a very readable book about the science, organising his enquiry around key questions: What can change the climate? How has the climate changed in the past? Is the climate changing now? And, if the climate is changing now, is the rate of change normal? What's causing this change? What can be done about it?

Searching for answers, Eggleton takes us on a guided tour through many topics: seasonal changes in animals and plants; temperature records and their accuracy; records of rainfall, storms,

droughts and floods; behaviour of mountain glaciers, arctic permafrost, polar sea-ice and icecaps, storage of heat in the oceans; sea level; ocean acidity; geological evidence of temperatures and chemical composition of the atmosphere over millions of years; chemical and physical properties of greenhouse gases; solar radiation, sunspots and much more.

As the book develops, the author summarises the 'work in progress' that we accept as scientific knowledge. The evidence is inescapable. Not only is the earth's climate getting hotter, but the distribution of rainfall is changing, polar ice is melting, sea level is rising and the oceans are becoming more acidic. Eggleton records that many factors can initiate and contribute to climate change, and have in the past ages done so. But the climate is now changing much faster than at any time during the past 2 million years (when *Homo sapiens* first appeared). This exceptionally rapid change is due to a single cause: the emission of greenhouse gases resulting from human activity.

Eggleton searched diligently for scientific evidence and theory that might support contrary views. As a distinguished scientist, he knows what to look for and where to look. He was shocked to find nothing of substance, and demonstrates that the case espoused by those who deny climate change is flimsy indeed. Eggleton concludes that global warming risks triggering changes that are likely to exacerbate the problem to catastrophic proportions.

Nature NSW, Vol. 57,
No. 4 (summer 2013)

Protecting the Pink-eared Duck

In November 2012, the NSW Government passed a piece of legislation from the Shooters and Fishers Party that allowed 11 species of native duck to be hunted on private land, supposedly to prevent them from damaging rice crops. However, this legislation included the Pink-eared Duck, which does not even eat rice, but is actually a farmer's friend, preying on insects that are major rice pests. NPA has provided the evidence for a private member's Bill calling for Pink-eared Ducks to be removed from the list of 'native game birds'. However, despite clear evidence that the decision to hunt this species is fatally flawed, government would not support this Bill. Sadly, this perfectly illustrates the politically motivated decision-making that is currently threatening the NSW environment.

NPA NSW Annual Report 2013

Compiled by Hazel Rath

NPA notices



National Parks Association Calendar

	March	April	May	June
Public holidays	Mon 10	Fri 18–Mon 21 Fri 25	—	Mon 9
General meetings	Thur 20	— ¹	Thur 15	Thur 19
Committee meetings	Tues 4	Tues 1	Tues 6	Tues 3
Gudgeny Bush Regeneration ²	Sat 8	Sat 12	Sat 10	Sat 14
Further details: 1. No April general meeting due to Easter holidays. Instead there will be special 'Heritage Week' event at the Namadgi Visitor Centre. See notice below. 2. GBRG. Meet at Namadgi Visitor Centre 9:15am, or Yankee Hat car park 10:00am.				

New members of the association

The NPA ACT welcomes the following new members:

Geoffrey Crossley
Jennifer Manning and
John Olle

We look forward to seeing everyone at NPA activities.

This *Bulletin* was prepared by:

Editor, Max Lawrence;
Sub-editor, Ed Highley;
Presentation, Adrienne Nicholson

Namadgi National Park is officially 30 years old this year

Honorary Life Membership

The committee is calling for nominations for Honorary Life Membership of the National Parks Association of the ACT Inc. If you think that a member has done something very special for our association and is worthy of this recognition, please send a confidential nomination to the secretary Sonja Lenz by mid-April (signed by yourself and another member who seconds the nomination). Further information on what to put into the nomination can be found on the NPA website or by contacting Kevin McCue on 6251 1291 or email mccue.kevin@gmail.com.

'Heritage Outings'

The TrailRider will feature at the Namadgi Visitor Centre during Heritage Week celebrations. There will be an outing suitable for mobility-impaired people, taking in the bushland at the NVC in April. Check *Burning Issues* for information.

There are two other NPA outings in April of heritage-associated interest, The Settlers Track (in Namadgi National Park) and the Glenburn Historical site (Kowen Forest area). See Outings Program for details.

Association Office

Lena Karmel Lodge Unit 14, 26 Barry Drive, Acton
The NPA ACT office is at Lena Karmel Lodge in Acton. Co-located with the Conservation Council office, it is on the ground floor, between Marcus Clarke and Kingsley Streets, fronting Barry Drive.

World Parks Congress

Sydney November 2014

For details see PARKWATCH, page 20

To keep up to date with developments,
register at

www.worldparkscongress.org

Cover photographs

Front cover

Main photo. Footpad leading to One Tree Hill summit lookout from the Canberra Centenary Trail. Photo Max Lawrence

Insets. Left. View from One Tree Hill (see pages 4 and 17). Photo Max Lawrence

Centre. Mick Gentleman, MLA launching the new edition of the NPA's 'Bird book' (see page 6). Photo Max Lawrence

Right. Watercourse damage by feral horses (see page 7). Photo Di Thompson

Back cover

Main photo. View from One Tree Hill, south to Black Mountain and beyond. Photo Max Lawrence

General Meetings

Third Thursday of the month, (not December or January)
8:00pm, Uniting Church hall, 56 Scrivener Street, O'Connor



Thursday 20 March

Australia's nature: there is more still to be discovered

Jo Harding

Manager, Bush Blitz Program,
Australian Biological Resources Study
(ABRS)

Bush Blitz is an innovative, continent-wide, biodiversity discovery partnership between the Australian Government (through the ABRS), BHP Billiton and Earthwatch Australia.

Since it commenced in late 2009, the Bush Blitz program has successfully completed 18 'snapshot' species discovery surveys on over 65 National Reserve System properties. These surveys have involved 140 scientists from 20 of Australia's leading scientific organisations.

Thursday 17 April

There will be no General Meeting in April 2014 (Easter). Instead, there will be a special NPA event for those with impaired mobility. See Notices on opposite page (Please check NPA ACT website or *Burning Issues* close to the time)

Thursday 15 May

Caribou on the move!

Esther Gallant

NPA ACT member

Migrations of great herds of herbivores still occur in the North American Arctic. Rafting down an arctic river is the perfect way to observe the migrating caribou as well as other arctic mammals and birds. There are interesting places to hike and wildflowers as well. This 12-day trip involved travel by float plane and tundra plane as well as oar-powered raft in a remote uninhabited part of the Canadian Arctic.

National Parks Association of the ACT Incorporated

Inaugurated 1960

Aims and objectives of the Association

- Promotion of national parks and of measures for the protection of fauna and flora, scenery, natural features and cultural heritage in the Australian Capital Territory and elsewhere, and the reservation of specific areas.
- Interest in the provision of appropriate outdoor recreation areas.
- Stimulation of interest in, and appreciation and enjoyment of, such natural phenomena and cultural heritage by organised field outings, meetings or any other means.
- Cooperation with organisations and persons having similar interests and objectives.
- Promotion of, and education for, conservation, and the planning of landuse to achieve conservation.

Office-bearers

<i>President</i>	Rod Griffiths	6288 6988 (h)
	rod.blackdog@gmail.com	
<i>Vice-President</i>	Vacant	
<i>Secretary</i>	Sonja Lenz	6251 1291 (h)
	sonjalenz67@gmail.com	
<i>Treasurer</i>	Chris Emery	6249 7604 (h)
	chris.emery@optusnet.com.au	

Committee members

Steven Forst	6251 6817 (h)	steven.forst@acma.gov.au
Esther Gallant	6161 4514 (h)	galla001@umn.edu
Christine Goonrey (Immediate Past President)	6231 8395 (h)	cgoonrey@grapevine.com.au
George Heinsohn	6278 6655 (h)	george.heinsohn@gmail.com
Judy Kelly	6253 1859 (h)	judy.kelly@tpg.com.au
Max Lawrence	6288 1370 (h)	mlawrence@netspeed.com.au
Bernard Morvell	0401 679 254 (mob)	bernard.morvell@daff.gov.au
Graham Scully	6230 3352 (h)	scullymob@southernphone.com.au
Mike Smith	6286 2984 (h)	msmith@netspeed.com.au

Conveners

<i>Outings Sub-committee</i>	Mike Smith	6286 2984 (h)	msmith@netspeed.com.au
<i>Environment Sub-committee</i>	Rod Griffiths	6288 6988 (h)	rod.blackdog@gmail.com
<i>Publications Sub-committee</i>	Kevin McCue	6251 1291 (h)	mccue.kevin@gmail.com
<i>Bulletin Working Group</i>	Max Lawrence	6288 1370 (h)	mlawrence@netspeed.com.au
<i>Promotion and Engagement Sub-committee</i>	Graham Scully	6230 3352 (h)	scullymob@southernphone.com.au

The NPA ACT office is in Unit 14 / 28 Lena Karmel Lodge, Barry Drive, Acton, together with the Conservation Council. It is staffed by volunteers on an irregular basis. Callers may leave phone or email messages at any time and they will be attended to. The post office mail box is cleared daily.

Phone:	(02) 6229 3201	(mob) 0410 875 731 (if urgent)
Website:	www.npaact.org.au	
Email:	admin@npaact.org.au	
Address:	GPO Box 544, Canberra ACT 2601	

Subscription rates (1 July to 30 June)

Household membership	\$44	Single members	\$38.50
Corporate membership	\$33	<i>Bulletin</i> only	\$33
Full-time student/Pensioner	\$22		

All the above subscription categories reduce to \$11 if a donation of \$100 or more is made.

Advertising

The *Bulletin* accepts advertisements and inserts. Contact the Editor for information and rates.

NPA Bulletin

Contributions of articles, letters, drawings and photographs are always welcome. Items accepted for publication will be subject to - editing and may also be published on the NPA website. Send all items to The *Bulletin* Team, admin@npaact.org.au, or the postal address above.

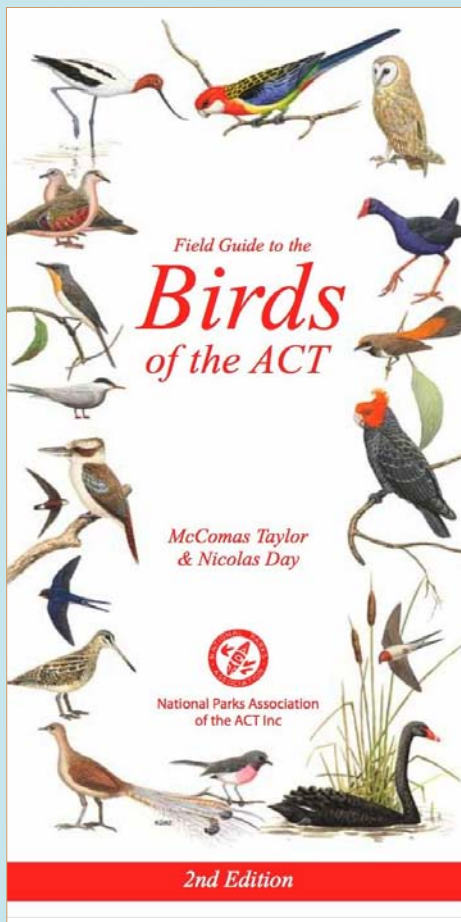
Deadline for the June 2014 issue: 30 April 2014.

Printed by Instant Colour Press, Belconnen, ACT.

ISSN 0727-8837



14 December 2013



The ‘NPA bird book’: second edition now available

The great range of NPA field guides and a beautiful book about Namadji National Park are available from the NPA office and selected bookshops.



For information on NPA ACT activities, please visit our website <http://www.npaact.org.au>