

NPABulletin

Volume 48 Number 1 March 2011

National Parks Association of the Australian Capital Territory Inc





New wetlands for North Canberra



Cows back in Vic high country



It's the season to be walking

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

CONTENTS	A beginners paddle and walk12		
From the president	Adrienne Nicholson		
Rod Griffiths	Report on a bushwalk: Rendezvous Creek		
It's a national park, not a grazing paddock!	Esther Gallant		
Christine Goonrey	Book reviews: Exploring Namadgi on foot14		
Namadgi: a National Park for the National Capital4	Missing14		
Max Lawrence	Bushwalk report: Nungar Plains		
George Morrison, father of Alastair and5	Brian Slee		
walker extraordinaire Mike Bremers	A good book story: <i>The geology of Mount Kinabalu</i> 16 <i>Gerry Jacobson</i>		
Wetlands come to the aid of Sullivans Creek catchment6	Of birds, rodents and solar panels16		
Graeme Barrow	Breakthrough in efforts to save endangered frog in KNP17		
Common myths about climate change8	NSW NPWS Press release		
Ben Cubby, Sydney Morning Herald	PARKWATCH18-21		
Value of national parks confirmed	Selected by Hazel Rath		
Marina Kamenev, Australian Geographic	NPA notices		
NPA Christmas party 2010, in pictures9 Sabine Friedrich and Max Lawrence	Meeting and speaker information		
Report on a packwalk: Main Range	NPA information and contacts		

From the president

Brian Slee

Colleagues, welcome to the first edition of the Bulletin for 2011. It just seems such a short while ago that the NPA ACT was holding its Christmas party!

Held out at Orroral camping ground, the Christmas party was a great event. The weather was kind, the company convivial and the auction, the highlight of the party, was great fun. Thanks to all the members who donated auction items and to those who bid for them. There were some great bargains to be had. A special thanks must go to our auctioneer, David Large, whose enthusiasm contributes so much to the atmosphere of the auction.

The NPA ACT has continued to be busy over December and January. A submission was made on the Eastern Broadacre Study, highlighting key areas of conservation significance that require protection. Thanks to Clive Hurlstone for his coordination of the submission.

Many of the areas identified contain yellow box-red gum grassy woodlands and would be important additions to the areas identified in the NPA ACT's proposal for a new national park based on this significant ecosystem. The NPA ACT's proposal was also given coverage in the Canberra Times in January after Rosslyn Beeby interviewed me about potential cuts in ranger numbers. Fortunately, the proposed cuts were reversed through the efforts of a number of conservation organizations, and the NPA got important coverage for its new national park proposal. The NPA ACT's environment subcommittee continues to work on furthering the proposal.

One of the key roles of the president is to work on issues and concerns about our parks system as raised by our members. A recurring issue is members' concerns about the potential for overuse of our reserve system for recreational activities other than bushwalking and associated low-impact pastimes. This has prompted the NPA ACT's environment subcommittee to initiate action to get the ACT Government to develop an ACT-wide recreation strategy. The aim of this strategy would be to ensure adoption of a systematic approach to meeting the growing recreational needs of the ACT community without compromising the conservation values of our reserves. The

strategy should cover all public land and identify areas that may be utilised for recreational activities outside of the ACT's conservation reserves.

There are constant threats to conservation reserves throughout Australia. One of recent concern is the Victorian Government's proposal to re-open its alpine parks to grazing by cattle. In doing so the new Victorian Government would appear to be honouring an election promise to graziers. This will be a retrograde step as the cattle free status of Victoria's alpine parks was a hard-fought victory for the conservation movement. The Victorian Government's decision places pressure on the Federal Government to protect the significant environmental heritage of the alpine parks by implementing the provisions of the EPBC Act. The Commonwealth's failure to act would strengthen the resolve of state governments to act in their own self interest and weaken the protection status of conservation reserves. More on this development can be found in Christine Goonrey's article in this issue of the Bulletin.

There will be many similar challenges in the year ahead, during which organisations such as ours will continue to play a crucial role in reminding governments and the community of the importance of the natural environment. Here's to a successful year together.

It's a national park, not a grazing

paddock!

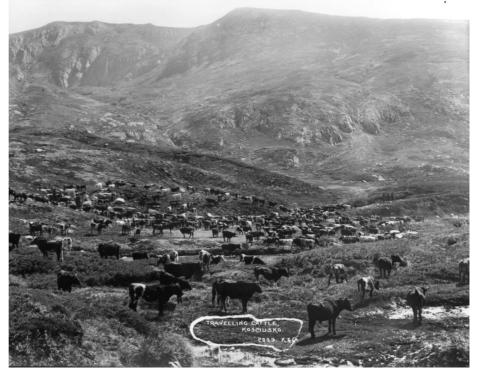
Environment and heritage groups have warned that the Victorian Government's 'scientific trial' of cattle grazing in the Alpine National Park could set a precedent that would open the gate for cattle grazing and other damaging activities in national parks around the country.

'Unless the Federal Government takes action to enforce national heritage provisions, and national environmental laws, other states and lobby groups could see this as a green light to try their own hare-brained schemes in some of our most precious natural areas. What will we see next? Scientific logging in the Daintree? Scientific grazing on Kosciuszko? Scientific oil drilling on the Great Barrier Reef?' said Matt Ruchel, Executive Director of the Victorian National Parks Association.

Fourteen leading international, national and state-based environment and heritage groups have released a statement calling on Federal Environment Minister, the Hon. Tony Burke, to use his powers under federal environment laws to halt the trial.

The National Parks Association of the ACT has signed up to the joint statement organised by the Victorian National Parks Association. Other signatories include the National Parks Australia Council, the National Parks Association of NSW, the Australian Conservation Foundation, WWF Australia, the National Trust, the Wilderness Society, Birds Australia, Bird Observation and Conservation Australia, Friends of the Earth, the Humane Society International, the Invasive Species Council and Environment Victoria.

Some 125 leading scientists have also raised concerns over the proposed methodology and have called for the Victorian Government's project to be assessed under national laws. In an article in the *Melbourne Age* (5/2/2011), the scientists said that they believed that



The bad old days in NSW. Travelling cattle, Kosciusko. From the Tyrell Photographic Collection Powerhouse Museum

grazing would damage areas of 'national environmental significance'. They called on Minister Burke to intervene and use his powers under the Commonwealth's *Environment Protection and Biodiversity Act* (EPBC Act) to stop grazing in the park. Victoria's Alpine National Park has high ecological significance and is one of the internationally renowned Australian Alps national parks.

The concerned scientists see a clear legal and scientific case for action. Failure by the Minister to exercise federal powers may create a precedent, for 'scientific grazing' or similar activities in a broad range of natural areas across Australia and undermine the integrity of our national environmental laws. The results of 60 years of scientific research show that cattle damage soils, trample moss beds and watercourses, threaten rare native flora and fauna, spread weeds, and reduce water quality

in streams and rivers fed by alpine headwaters. Since grazing was stopped in 2005 there has been a marked recovery of the areas in which cattle are no longer permitted.

Victoria's Alpine National Park contains endangered alpine sphagnum bogs and fens, and at least a dozen cattle-sensitive EPBC Act listed species. The Victorian Government's own data show declining records for EPBC Act listed Alpine Bogs, Alpine Tree Frogs, Spotted Tree Frogs, and three species of plants in grazing research plots. Recent on-site investigations have confirmed that the earlier introduction of cattle has already had a negative effect on EPBC-listed species.

Christine Goonrey

For more on this important topic see Parkwatch on page 19 of this Bulletin. Ed.

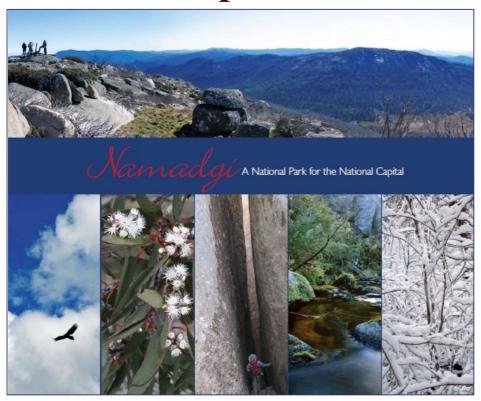
A serious threat to the alpine national parks



NSW authorities have put out a call for reporting of occurrences of this serious weed. If you see it, do not attempt to remove it—REPORT IT by phoning the NSW National Parks Office, at Khancoban on

02 6076 9373

Namadgi: A National Park for the National Capital



As this *Bulletin* goes to press, NPA ACT is in the final stages of producing what may well be one of the most important publications it has ever produced. *Namadgi: A National Park for the National Capital* is a glossy book of nearly 100 pages featuring some great photography produced almost exclusively by NPA's own members. It highlights the virtues and values of the wonderful national park that is uniquely Canberra's.

In his foreword to the book NPA President Rod Griffiths states that it has long been our ambition to publish a book celebrating the beauty and diversity of Namadgi National Park. Then President Christine Goonrey initiated the project to mark our 50th Anniversary in 2010, and Christine has played a major role as convenor of the working group and as author of much of the text. The book was made possible with assistance from an ACT Government Environment Grant.





Other members of the working group were Sonja Lenz (who as project manager kept the show on the rails), Clive Hurlstone, Kevin McCue, Adrienne Nicholson and Max Lawrence. More than twenty members contributed photographs to the project, and many more were involved in other capacities.

The graphic design for the book was done professionally by Mariana Rollgejser, who is well known for her work on other NPA publications. The result is a book that thrills us, and we hope will thrill you too. Even more importantly we hope it will bring members of the wider public to a better understanding and appreciation of the wonders of our precious park, and the need to protect and conserve its values for future generations.

The book will be printed during March, and will have a recommended retail price of \$25, with a special price to NPA members of \$20.

Max Lawrence





These photos, and those on the facing page, are a small selection of those contained in the NPA's new Namadgi book.



George Morrison, father of Alastair and walker extraordinaire

Many NPA ACT members who knew Alastair Morrison (1915–2009) as a fellow member, life member and generous benefactor of the association, are aware that his father George Morrison (1862–1920) was a famous Peking based correspondent to *The Times* from 1897–1912 and subsequently a political advisor to the Chinese Government. However, fewer may know about George's adventures in his younger years. For most people any one of these early adventures would be considered the achievement of a lifetime.

George Morrison was born in Geelong in 1862. When he completed his final year at school he walked from Geelong to Adelaide (960km). He then medicine at Melbourne University and during the vacation at the end of his first year he paddled a canoe down the Murray River from Albury to the mouth (2 200km). In doing so he may have become the first person to paddle down the Murray. After reaching the Murray mouth he walked back to Geelong. He wrote articles for the Leader for each of these journeys. In later years, after becoming a famous journalist, George was dismissive of these early articles stating 'I fear that the journey was more interesting and less tedious than the account thereof'. He went on to say that the editor repeatedly assured him that everyone was tired of it, it was wearisome and monotonous. However, the proprietor of the paper did invest substantial funds in future Morrison projects.

After failing an exam at the end of his second year of medicine, George travelled to North Queensland and the South Sea Islands to investigate the Kanaka trade, which journeys resulted in more articles for *The Age* and the *Leader*. He then walked from Normanton on the Gulf of Carpenteria to Melbourne roughly following Burke and Wills' route of 20 years earlier. He completed this journey of 3 270km in 123 days. He travelled alone and was unarmed. During the journey he turned 21! I quote here from the *Australian Dictionary of Biography*:

'He wrote to his mother that it was "no feat of endurance—only a pleasant excursion" The Argus, hostile to him as an Age cub, decried this as the curious and purposeless feat of a swagman; his future employer The Times, however, praised it as "one of the most remarkable of pedestrian achievements", which it surely was'.

George then returned to New Guinea to explore inland but received several serious spear wounds. A spearhead was eventually surgically removed in Edinburgh where he resumed his medical studies, graduating in 1887. Many more journeys followed, including one of three months which took him 4 800km across China and into Burma. In 1895 he was introduced to the editor of *The Times* who appointed him special correspondent to the east.

Mike Bremers



References:

Peter Thompson and Robert Macklin, The Life and Adventures of Morrison of China, Allen & Unwin, 2007

J S Gregory, 'Morrison, George Ernest (Chinese) (1862 – 1920)', Australian Dictionary of Biography, Online Edition, Copyright 2006, updated continuously, ISSN 1833-7538, published by Australian National University

http://www.adb.online.anu.edu.au/biogs/A100579b.htm

http://en.wikipedia.org/wiki/ George_Ernest_Morrison











Wetlands come to the aid of Sullivans Creek catchment

The ugly, utilitarian Dickson stormwater channel starts in bushland behind Duffy Street in Ainslie, collecting stormwater and run-off from the foothills of Mt Ainslie and water from suburban drains. A concrete-lined channel with sloping sides and a concrete base, it travels under Majura Avenue, bends left at Dickson College and then begins an almost straight run to the Dickson shops. There's nothing to impede the flow of water until the channel Northbourne Avenue where a grille traps rubbish that is periodically collected. After that, the channel runs under Northbourne and feeds into another concrete-lined stormwater channel in Lyneham. From here the flow shortly joins Sullivans Creek (at this point yet another man-made channel) and eventually ends up in Lake Burley Griffin.

On stormy days water can rush at a furious pace down the Dickson channel-it's said that the velocity of water in such channels around Canberra can attain 40 km per hour, threatening the very lives of anyone silly or unlucky enough to find themselves caught up in such a ferocious torrent. While on occasions the water level has almost lapped the top of the channel, I have yet to see it overflow (which is not to say it has not happened), testimony to the skills of engineers who, many years ago, devised this solution to stormwater problems in suburban areas of Canberra and the possibility of flooding.

Wetland to tame the Dickson torrent

However, by mid 2011 this mostly unimpeded run of stormwater from Ainslie to Dickson and beyond will be interrupted for good when a new wetland, one of six built, under construction or planned in Canberra's north, begins to fill on the southern side of the channel. It is being built on what used to be Hawdon Oval off Hawdon Street, Dickson, and a concrete cricket pitch, playing fields and some trees have been sacrificed in its making. A section of a popular bike path, parallel to the channel, is being re-routed past the wetland.

When this article was written the site was a place of gigantic holes gouged out of the earth, mounds of dirt, and stockpiled concrete pipes. Earthmoving



Banksia Street wetland in O'Connor under development. Graeme Barrow

machines prowled about and trucks came and went. On the approved plan, the pond to be created will form a U shape with a tongue of land down the middle. Paths will be built, seats provided. Native grasses will eliminate some, but not all, mowing, and there will be wetland plants, groundcovers, trees and shrubs, all species being native to the ACT region. The bleak channel on the northern side of the wetland will remain to handle high flows, but the concrete sides will be removed, regraded, and replaced with rocks and plants to soften its stark appearance.

Wetlands in Lyneham and O'Connor

The Dickson project has a twin in that, simultaneously, the ACT Government is building another wetland adjacent to Goodwin Street in Lyneham. Once again what used to be a brutish stormwater channel is being transformed into a wetland, although it will be different in appearance to Dickson in that the pond will run east-west and have an island towards the eastern side, classed as a wildlife refuge on the plan. There will be a boardwalk and, as with Dickson, the existing bike path is being re-routed, paths built and seats provided. Plantings will be similar to Dickson's. In both projects the water depth will reach two metres

There are two other wetlands in this general area, although both are smaller than those under construction in Dickson and Lyneham at a cost of almost \$14 million. The first, in David Street, O'Connor, was established a decade ago after five O'Connor residents formed the still active Sullivans Creek Catchment Group to improve the environmental health of the catchment in north Canberra. Private enterprise donated funds, native grasses, trees and shrubs to enable construction and planting of the wetland and today its centrepiece is a serene 800 square metre pond, encircled by reeds and mature trees, its role being to filter pollutants from stormwater before releasing it back into the Sullivans Creek channel. Pelicans and black swans have been seen there, part of a 'diverse array' of birds attracted to the pond.

The other wetland, in Banksia Street, also in O'Connor, is what the planners call 'Canberra's first retrofitted urban wetland to incorporate an ephemeral section [about 30 cm deep] which dries out in summer'. According to a brochure, such wetlands have spiky sedges, native grasses and broad leaf plants that adapt to both wet and dry conditions. Banksia Street, which is but a year old and has many, as yet, immature plantings, will reduce pollutants from stormwater flows and,

(continued next page)

Wetlands come to the aid of Sullivans Creek catchment (continued from page 6)



Lush vegetation at the David Street, O'Connor, wetland. Graeme Barrow

like David Street, provide habitat for water birds, turtles, yabbies and frogs.

Flemington Ponds, Mitchell

The fifth of the wetlands, Flemington Ponds in Mitchell, was created in 2008–09 at a cost of \$5.4 million. These ponds will accept water from Dickson and Lyneham pumped via underground pipes and stored at Mitchell before being pumped elsewhere to irrigate sports fields. As a result, each year up to 600 megalitres of potable water, which sounds a lot, will be saved rather than sprayed on parks and sportsgrounds.

Plans for Gungahlin

Creation of wetlands in Canberra's north will not stop when Dickson and Lyneham are completed because the government has provided \$6.5 million in 2010–12 for the design and construction of the Valley Ponds in Gungahlin. Pipes connected to the Gungahlin Town Centre will feed stormwater into three large ponds and once again it will be harvested for irrigation. The filtering system provided by the wetlands will reduce pollutants and thus improve water quality downstream of the ponds.

'Wetlands for our suburbs'. This sign, at the David Street, O'Connor wetland site, explains the system planned. Graeme Barrow The development of ponds and wetlands in Canberra should be a source of justifiable pride for the Sullivans Creek Catchment Group and the ACT Government, which has received Commonwealth funding for its projects as well as kicking in substantial funds itself. Apart from the benefits already listed, they are changing lifeless concrete channels into living systems and will improve flood protection by

detaining water and releasing it slowly. The value of properties adjoining wetlands should rise.

The Catchment Group and the Australian and ACT governments won't be able to bring the creek back to what it was, an 11 km tributary of the Molonglo River with ponds, flood plains and rocky gullies. But I predict that in years to come what is being done and planned will be reckoned one of the wonders of the national capital.

There have been criticisms of the various projects: the loss of mature trees and habitat in the construction phase; the overall cost (exceeding \$25 million); the fear that children will fall into the ponds and drown; and that the ponds will be breeding sites for mosquitos. In response the government says more trees will be planted than have been lost and stagnant pockets where mosquitos breed will not be allowed to form; mosquito predators will be encouraged.

It can also be said that there will always be debate over government spending and in my experience most parents do take responsibility for their children; in any case children with an urge to reach water should be deterred by plantings around the ponds and the sides of the wetlands have gentle gradients to help ensure safety.

Graeme Barrow



Common myths about climate change

Is climate change real and is it caused by human activity? Ben Cubby (of the Sydney Morning Herald), analyses the issues.

The world has been cooling since 1998

Temperatures have been going up and down slightly, but the clear trend is upwards. Since regular temperature records began in 1850, 13 of the past 15 years have been the hottest on record. Air samples from bubbles trapped in ancient ice, and cross-checked with other samples, show temperatures are rising faster than at any time since modern humans appeared.

The world is getting warmer but we don't know the real cause

The causes of global warming are not absolutely certain, but the overwhelming majority of researchers, working independently in different parts of the world and using different models, have been coming to the same conclusions for two decades. The Intergovernmental Panel on Climate Change has reached the conclusion that it is "very likely" that human activity is the main cause of climate change; that is, there is a certainty "greater than 90 per cent". Few scientific theories approach that level of certainty.

Climate change is caused by solar activity Changes in radiation from the sun affect Earth's climate, as do oscillations in the Earth's orbit. But since the 1970s, when temperatures increasingly rose beyond norms, both the sun's energy output and the Earth's orbit have been stable. In any case, changing patterns of solar activity are included in climate models.

There is no consensus among scientists

There is clear and growing consensus in the world scientific community, and in Australia, that human activity is the main driver of climate change, and that cutting greenhouse gas emissions is the only way of slowing it. This is now the view of all the world's leading national science academies and institutes. This does not constitute a unanimous view, however, with a small minority of scientists in relevant fields believing it is too early to be sure

Why believe long-term predictions when meteorologists cannot even say if it will rain next week?

Climatology takes a step back from dayto-day weather prediction and looks at longer-term patterns. Numerous independent studies have concluded that carbon dioxide and other heat-trapping gases put into the atmosphere by humans are the new variable causing climate change. Climate models have been repeatedly tested and shown to accurately simulate climate scenarios.

Human emissions are smaller than natural emissions, so cannot be blamed for climate change

Rotting vegetation releases far more

greenhouse gases than does human activity, but those emissions are absorbed by an equal amount of growing vegetation and by the oceans. The new element in this closed system is the extra carbon humans are removing from underground coal, oil and gas reserves and putting into the atmosphere.

Scientists are worried about losing funding, so they toe the government line

There is no evidence that undertaking research on climate change leads to government funding being cut or boosted. In Australia, the system is relatively transparent, with public funding for climate-change work being assessed alongside all other research work, and grants made based on quality of research, not on conclusions. When research is funded by private industry, the process can be less transparent. Much university research does not receive any outside funding.

Climate sceptics are being silenced

Advocates of this claim are yet to come up with evidence. Many Australian scientific researchers on climate change have told the Herald that the views of "climate sceptics" are given more prominence in the media than their numbers and arguments merit.

Ben Cubby Environment Editor. Sydney Morning Herald February 25, 2011

Value of national parks confirmed

National parks are one of few strategies actively helping to save species from extinction, says a new study.

National parks are one of Australia's biggest tourism draws, bringing in \$19 billion annually. Recent studies have questioned the role they play in saving endangered species, but a new report says that evidence is stacking up for the conservation benefits.

More than 70 per cent of Australia's threatened species are in decline; these include the Carpentarian rock-rat (*Zyzomys palatalis*) and the yellow-spotted bell frog (*Litoria castanea*), says the report from WWF Australia and the University of Queensland.

However, it also reveals that species with habitats in national parks are more than twice as likely to be stable or recovering than species living in habitats not protected by national parks.

Growing scepticism

"There has been growing scepticism about the value of national parks for biodiversity" says co-author Professor Hugh Possingham at UQ in Brisbane. "This is one of the few papers in the world to show that national parks really deliver outcomes."

Not only are they saving species, but national parks and other strictly protected areas seem to be the only effective strategy to do so, he adds.

"Other recovery measures didn't alleviate the rates of decline," says co-author Dr Martin Taylor, WWF's protected areas policy manager, based in Sydney. "There

have been huge investments in natural resource management and recovery activities like feral pest and weed controls, but we were unable to detect any consistent ... association with population stability or recovery for these activities."

The researchers analysed data which mapped the population trends of 841 threatened terrestrial species: 698 plants and 143 animals. They then juxtaposed them with four different measures of conservation effort. These included a total of 7,632 "natural resource management" tactics, such as using national parks.

Overall, 641 species were found to be dwindling, but the populations of those living in national parks were significantly more likely to be recovering.

(continued next page)

NPA Christmas party 2010







Pictures clockwise from left Ranger Ollie Orgill with President Rod Griffiths

Sonja Lenz and KevinMcCue discuss the many pictures to be auctioned Mike Smith with refreshments for Francis Lawrence

Joan Goodrum, and Judy Kelly prepared for toasts

Gary Thompson, Tim Walsh and Chris Emery studying the ... auction catalogue?

The auction in full swing.

Photos by Sabine Friedrich, except panorama by Max Lawrence. (See also page 21)







Value of national parks confirmed (continued from page 8)

Best option

One of the species saved by a protected area is the northern hairy-nosed wombat (Lasiorhinus krefftii), a marsupial with a distinctive muzzle and backwards-facing pouch, which is also the world's largest burrowing herbivore. The population was rapidly declining until 1971 when the Epping Forest National Park, Queensland, was created to save the last 30 individuals. Today a colony of 140 wombats is found there.

Martin says that the report should make the government re-evaluate where threatened-species funding is invested: "National parks look like the best option for threatened species recovery in this analysis. Anything else which doesn't change the basic land use doesn't have strong empirical support."

Land clearing, primarily to make pasture for livestock, is the largest threat to species. The three States that have suffered the most land clearing—Queensland, NSW and Tasmania—were also those with the largest numbers of declining threatened species. "We have to locate the critical habitats of these species and make sure it is completely protected," he says.

Land clearing

"This is a valuable study, showing important conservation outcomes for Australia's National Reserve System," comments Peter Cochrane, the director

of national parks, at Parks Australia in Canberra. "The Australian Government is committed to extending the National Reserve System to protect representative examples of our ecosystems and habitats across our remarkable continent."

Today, Australia has 71.9 million hectares of strictly protected areas (mostly national park), but this is likely to increase. The Federal Government has promised to add 25 million hectares to the National Reserve System by 2013.

The findings are published in the journal *Biodiversity and Conservation*.

Marina Kamenev Australian Geographic February 1, 2011

Report on a packwalk: Main Range



Phil Gatenby, Jan Gatenby, David Large, Judith Webster, Brian Slee and Tim Walsh on Mt Tate. Photo Barrie Ridgway.

Walk: Main Range pack 17-19 January 2011

Participants: Brian Slee (leader), Barrie Ridgway. Tim Walsh. Jan Gatenby. Judith Webster, Philip Gatenby, David

Weather: Fine; long warm days; strong winds at first, breezy later; cold moonlit nights.

comments: Leader's The Snowy Mountains are winter magic. Sometimes good rain will match this in summer with floral exuberance. What a joy when it happens.

Day 1. We had gathered at Macarthur at 7:00am, after collecting bodies around Canberra, and coalesced Commodore and a Falcon for the journey south. Unfortunately, it was discovered at Sawpit Creek KNP Entrance Station that the radiator coolant chamber in the Large's Falcon had sprung a leak. So while David and Tim spent frustrating hours organising repairs at Leesville, the rest of us proceeded to Guthega. Holden 1, Ford 0.

March flies looked like being a problem but were kept in the air by a

stronger than forecast. clambered up Guthega Ridge to where it levels off, stopping for morning tea amid a field of flowers encircled by snowgums in various stages of ruin.

To the camp at Consett Stephen

From here a clear footpad once led: burnt bare in 2003, the area has regrassed (seedheads bending in the wind) but humanity has yet to agree on the way forward. We kept east of the Guthega trig, climbed it through massed daisies and billy buttons, then descended to a cosy knoll for lunch in the grass. Eventually we completed the descent to Consett Stephen Pass; after scratching about for a campsite (contemplating flies, ants, wind, water) tents rose in the east, above Guthega River.

Thoughts of a walk to Dicky Cooper Bogong were blown away by the wind and our general situation, but there was a pleasant afternoon stroll to blossoming snowgums and viewpoints on Tate West Ridge—from where Tim and David were spied descending to the tents just before 6:00pm. Joyous reunion followed. Their journey to Guthega had been completed in a hired Festiva (Ford claws back a $\frac{1}{2}$ point).

Wind and flies stilled; Judith read a poem before bedtime. Through the night pipits chirped to each other; ravens thankfully do not share the habit.

Tate and Anderson conquered

Day 2 began with a light frost. We set off soon after 8:00 and, although misled onto the low path, two short climbs soon had us snapping group photos on Mt Tate (2 068 m), our highest point. Sun, breeze, views; a pair of raptors soared. We were happy.

Morning tea was delayed till we rounded Mann Bluff and found a low platform arranged with boulders, overlooking valleys of billy buttons, eyebrights and yellow daisies; casual refreshment in style. Afterwards, we continued on a faint track south and west until the way between Mt Anderson and its eastern protrusion became obvious. next campsite, Anton-Anderson saddle, was just below and proved ideal: running water, wind protected, alpine grass, panoramic views, no ants. We were blissfully happy.

(continued on page 11)

Billy buttons to Watsons Crags; approaching Consett Stephen Pass: Photo Barrie Ridgway





The Main Range in bloom.

Photo Phil and Jan Gatenby

In the afternoon we climbed Anderson, home to sunrays, and some proceeded further north on easy ground to the unnamed peak (c. 1950 m) west of Mt Tate. Few go there. A broadening ridge stretched further north and west, providing marvellous views of Watsons Crags and the Geehi Valley. We stopped short of the trig point marked on the map but noted that its marker had toppled down the hill. Goodenia loves this place, weedy sorrel splashes it red. The return to camp was low level, encountering an ever richer floral carpet on the way. Like Tasmania.

Back at base at 4:00pm, domestic chores took over. The glorious leader decided enough was not enough and climbed the 1 940 m eastern extension of Anderson. Kunzea and mint bush in flower. To the south Pounds Creek cuts a gorge and it became apparent that there was an opportunity next day to descend parallel valleys and cross Pounds on the way to the Snowy.

Views from Mt Anton inspire

During the night, fog blew in from the west. Golly, it was cold. The plan to begin *Day 3* on Mt Anton (c. 2 000 m) was placed on hold until we had packed; as often happens, the cloud tore apart then dissipated. So we spent an hour consorting with Charles Anton's mountain, which was relatively devoid of wildflowers but replete with inspiring views. Difficult to leave but back to our packs we went.

Above the treeline, creeks often provide easier going than shrubby ridges. It proved to be so the further we

descended east from the Anton–Anderson saddle. We stopped at a grove of healthy snowgums, surrounded by mountains and valleys. Trigger plants, ranunculus and candle heath made brief appearances: they had been rare in all the profusion. Zigzagging, we reached 'Gills Knob' creek and, after a delay for leek orchids, tiptoed across Pounds Creek and found more splendour in the grass at the confluence. We stayed and stayed.

The home run

Skeletons of snowgums lined our way forward, up and over a couple of ridges to Tim Lamble bridge. Here we encountered humans for the first time in three days. At least one plunged into the Snowy while we ate lunch on the east bank. We were back at Guthega soon after 2:00pm, crossing Farm Creek on the new bridge, next to the wretched flying fox.

Before gathering at Jindabyne's Sundance café for pies and pastries, there was a car to be collected from Leesville and one to be returned to Caltex, all completed with little fuss, and we were back in Canberra by about 6:00pm.

For the leader, whose previous offers of pack walks had failed to attract customers, or been cancelled by bad weather, it had been a nervous time so special thanks to everyone for their contribution. Tim and David to be mentioned in despatches.

Brian Slee

I Walk the Ridge

sweating uphill with sticky flies racing thoughts the breeze on the summit blows them all away

from the hilltop I watch clouds moving rain showers sweeping the land joy overflowing

cunning landscape hides our suburb in its folds hides our teenagers boredom ... pain ... anger

the hillside blushes mauve ... on my left pretty Salvation Jane and on my right ...noxious Paterson's Curse

in mist and rain
I walk the ridge
staring
at sodden kangaroos
staring at a lone walker

the sun goes down behind the Brindabellas dark ... grey ... brooding I feel this day passing into history

Gerry Jacobson



A beginners paddle and walk

The outing: January weekend Talbingo canoe/kayak paddle and walk.

Participants: Mike Bremers (leader), with a team of eight evenly divided between the genders.

A canoe paddling and walking outing suitable for beginners! That I read as 'not too hard', beginner or not. So I was persuaded to participate in this NPA/ Canberra Bushwalking Club joint venture as part-engine for a two-person canoe (I called it a Canadian canoe but was soon educated otherwise by Esther). Other participants paddled one or two-person kayaks (there was discussion about that name too!).

Launch on Talbingo

After an interesting drive (via Namadgi, Adaminaby and Kiandra) to launching site at O'Hares Rest Area on a very upper branch of Talbingo Reservoir, there was about 4 km to paddle to the camp site. The weather was fine and the water was calm; sometimes a slight head wind cooled the face a bit; we avoided all still-standing tree skeletons; sighted a water dragon basking on the shore; watched swallows skimming the water surface and resting in small groups along dead branches; and made a short diversion up a side creek, but were soon blocked by considerable sand deposits washed down by recent heavy rains.

Only a couple of fishermen and powerboats slightly interrupted the peace and sense of isolation.

Camp at Coonara

We set up camp and enjoyed lunch at the forested Coonara campsite, which affords fine views both ways along the



Mike Bremers and Mark eyeing off a passing powerboat out from the campsite.

water. Some of the group paddled further downstream in the afternoon, while others set out from camp on foot to see what could be seen nearby. (Yes, there were many orchids to be found, two species actually right among the tents.) No-one seriously ascended any of the surrounding hills (which looked more like mountains to me). Kayaking techniques were practised, to the amusement of this onlooker (after initial concern until I realised the frequent mishaps were purposeful). The water was great for bathing, sometimes known as swimming.

Various aperitifs and dinners were enjoyed, followed by toasted marshmallows for some—after all, a fire shouldn't be wasted altogether. The sunset reflected in the still water added to the atmosphere of this lovely place.

Sounds of the night

Night sounds included sudden bird screeches (awakening), persistent owl hootings (haunting), unidentified grass munchings near the tents (teasing), possum snarls and squeals (entertaining?), then rattles, thumps and crashes when the latter discovered a new and bountiful larder (disturbing), followed by human sounds and suppressed 'language' (memorable!).

Early next morning, some of the party paddled off to explore again; others, slow starters, didn't. A leisurely breakfast was topped off with pancakes by Janet, again avoiding wasting a good fire.

Bush-bash beaten by blackberries

After breakfast, we enjoyed a bush-bash and wildflower walk, but were eventually beaten back by blackberries as we attempted to reach the creek we had visited by water the previous day.

More pottering and playing around followed; then packing up. The canoeists set off for home first, at a very relaxed pace and using the return paddle to enjoy the clear, calm day, interesting plant and bird sightings, and the generally peaceful ambience of the surroundings. We had only just packed up before the kayakers also reached the sandy rest area where we had left the cars.

(continued on page 13)

A break at the campsite to decide the next activity (From left Esther, Annette, Karen, Mike, Janet and Mark).



Report on a bushwalk: Rendezvous Creek



Walk: Packwalk along Rendezvous Creek, 19–21 November 2010 Participants: Esther Gallant (Leader), Graham Muller, Adrienne Nicholson

'An absolutely perfect weekend'

We optimistically left Canberra on Friday morning under overcast skies with a forecast of rain. It was wrong. We enjoyed three days of sunny weather and temperatures perfect for pack walking. The Rendezvous Creek Valley was putting on a rare display of lush green grass, abundant wild flowers and flowing water. Shortly after leaving the car park we saw the first orchid and soon we spotted a pair of dingoes in what looked like a game of tag. Kangaroos were, of course, everywhere.

Our campsite on a slight ridge about 6 km up the valley proved to be

fortuitous for a group of flower lovers. We were right next to a meadow of sun orchids. Just down the slope was the creek with no worries about water this year and a small cascade as a bonus. On our first trip down to the creek we encountered a Blotched Blue-tongue Lizard which pretended we weren't there to the extent of allowing some stroking. Just up the slope is an Aboriginal art site, which we visited in the evening.

On day two we walked 5.5 km further up the valley to the large camping area at the crossover to Nursery Swamp. Many more orchids were spotted—at least 10 species including those at our campsite. Some off-track exploration led us to a lovely cascade on Rendezvous Creek and to remnants of an old foot track along the south-western side of the valley. In the evening we were surprised



by the howling of what seemed a large group of dingoes quite close. In the morning we heard them again from much further away, now two groups calling to each other.

Sunday morning, after a last round of orchid photography, the happy campers packed out under sunny skies. One last adventure just before we reached the new Rendezvous Creek trail—a very LARGE brown snake suddenly appeared in our midst (at least we all thought it was pretty large). The snake paused to look us over and wisely retreated. We reached the car just about lunchtime and headed back to Canberra.

Esther Gallant

Above left. Adrienne and Graham walking along the Rendezvous Creek valley Above right. Rendezvous Creek cascade Photos Esther Gallant

A beginners paddle and walk (continued)

Stormy retreat via Cooma

The weather forecasts before we left home had suggested possible exciting weather. The leader noted my comment that crashing thunder and flashing lightning while paddling on open water would not be my idea of 'suitable for beginners'. What an influential leader he was—all cars were packed and on the road for home before the clouds descended, then opened! By the time we reached Adaminaby, things looked very uninviting in the direction of Namadgi so we decided to travel home via Cooma.

Thanks Mike, I like beginners trips.

Adrienne Nicholson



Esther Gallant photographing one of the many Hyacinth Orchids around the camp.

Photos by Adrienne Nicholson

Book reviews

Exploring Namadgi on foot by Graeme Barrow

Dagraja Press, Canberra, 2010 96 pp., RRP \$24.95

Graeme Barrow's prolific output continues. Until he published Exploring Tidbinbilla on Foot in 2009, his many editions of walks in Tidbinbilla were always combined with walks in Namadgi National Park. So it was inevitable that he would publish this as a separate companion volume for Namadgi. Together with Walking Canberra's Hills and Rivers (2006), they complete a comprehensive set on ACT walks.

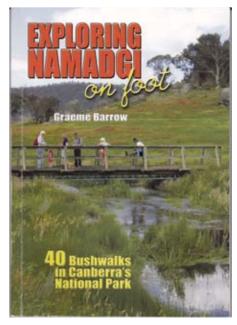
It is a handsome production. The author has continued the attractive devices, begun in 2006, of colour coordination and unified panoramic chapter headings and this latest book is perfect bound rather than saddlestitched. There are 22 clear maps, and they give 100-metre contours. The photos, more numerous than in the past, appear to have been carefully selected and perhaps cropped for effect. Many of them show huts and structures. The 'before' and 'after' shots of Brayshaws Hut (p 92) are fascinating. It is thus disappointing, with due respect to the photographer, that the cover photo (walkers on Bogong Creek bridge) lacks interest, unless it has unexplained significance.

Walks, 40 altogether, are graded 'easy', 'moderate' or 'hard'.

Explanation of the gradings is embedded in the Introduction (p 6), whereas such details might usefully have been colocated with the overview map at the front of the book. 'Very hard' off-track walks to places such as Mt Gudgenby are not described: aspirants are wisely urged to join bushwalking groups before heading for such destinations. Namadgi & Tidbinbilla Classics (2000) appears to have been Graeme's farewell to the tough stuff.

Like a book of poetry, this is a publication to dip into. It has a practical purpose that it fulfils with plainspeaking, authoritative prose. On p 37, for example, we can read Barrow at his best as he discusses the diverse names applied to Orroral Ridge and the complications of investigating various paths to the ridge. The new work is in all, what we have come to expect from his books, and fully up to date. He can be circumspect: following the 2003 bushfires, the ruins of Reads Hut were innocently demolished by an NPA workparty but later rebuilt, in indignation but with little sympathy for the original structure, by the Kosciuszko Huts Association. The author avoids this controversy (p 23).

Barrow is a prodigious researcher and this is reflected in the new text. For example, in relation to Yankee Hat (p 59), he clarifies which peak is which and refers readers to a detailed article on



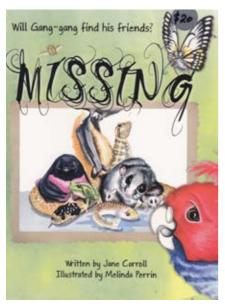
the subject published in an earlier NPA *Bulletin*. He has examined the coroner's report into the fatal 1991 light plane crash near Smokers Gap and reveals that the plane was on its fourth passage through the valley before its 'controlled flight into terrain' (p 57). And again, he has consulted a 2005 conservation plan for Bendora Arboretum, surrounded as it is by national park, whereby exotic trees could be replaced when they die or are removed (p 12). Similarly, he has reviewed claims about the origins of the Yankee Hat art site (p 60).

Buy the book and be informed.

Brian Slee

Missing by Jane Carroll, illustrated by Melinda Perrin

Published by the South East Arts Region (SEAR) and the NSW National



Parks and Wildlife Service (Kosciuszko National Park), 2009. 32 pages, \$20

'Gang-gang, the forest ranger, was worried. His file on missing creatures bulged.'

So starts *Missing*, an engagingly written and beautifully illustrated book that highlights for children the plight of endangered species of mammals, birds, reptiles and amphibians in the southern Monaro and Snowy Mountains region.

Ranger Gang-gang goes searching for one of his friends, Pink Robin, whom he has not seen for a long time. He puts up a sign: 'Missing. Have you seen this bird?'

It's a desperate search. Six other signs are placed in different habitats and finally he makes the plea 'Please help to save them before its too late'.

(continued on page 15)



Bushwalk report: Nungar Plains



Martin Chalk, Rod Griffiths and Peter Anderson-Smith at SMA trig.above Nungar Plain. Photo Brian Slee

Walk: Nungar Plain Huts Ruins, 21 November 2010

Participants: (4) Brian Slee (Leader), Rod Griffiths, Peter Anderson-Smith, Martin Chalk.

Weather: Warm; clear sky at first, partly cloudy by afternoon, slight breeze.

Leader's comments: This was a repeat of a May 2009 walk, providing a contrast between autumn drought and a brilliant spring.

We departed Kambah Village at 7:20 am in Martin's 4WD, taking Boboyan Road to Adaminaby, passing the racecourse where things were winding up after the previous day's cup meeting, then headed west to Kosciuszko National Park.

After parking at the locked gate on Boundary Trail, where we encountered our first babbling brook, we walked north and, after half an hour, leapt across a second, Goorudee Rivulet. Beautiful, clear, cool water. Then it was a trudge up the hill onto Nungar Plain, which was green, but not startlingly so: unlikely that it ever could be. Goodenia and violets on the track, egg and bacon shrubs beginning to flower under the trees, ranunculus here and there.

Gavels Hut had several ponds in front, full of tadpoles. For the first time it was obvious why there is a water diversion channel on its western side. Apart from a frog's croak, it was lovely and quiet for morning tea: not more than a dozen groups had registered in the logbook since May.

Soon after 11 am we were encountering golden moth orchids (*Diuris sp.*), each with four brilliant yellow petals, on the grassy track that took us north.

Small purple pea shrubs were scattered about. The first right angle turn in the track was a signal to head east where the ruins of Crowes Hut were soon found. It has a nice westerly view of the mountains and plain, and water nearby, but do not make bookings; it is a footprint with scattered galvanised iron and a flattened door. Beer bottle dated 1956.

Climbing further east to the SMA trig (1 470 m), we began encountering white *Caladenia* orchids. Lunch was near the summit just after noon. It was clouding over, keeping us cool.

The return to Nungar Plain was a short descent north-east through

Rod Griffiths in hollow tree near SMA trig. Photo Brian Slee

tall, quite massive, eucalypts, a magnificent forest not seen before. A couple of kilometres along Gavels Trail we had a break at the ruins of New Hut which is considerably richer in building materials than Crowes but just as unusable. No snakes, but a blue tongue gaped and threatened, worse than a naughty child.

From there it was a short climb to Circuits Shortcut Trail, a long descent through open, unburnt forest to Goorudee and back to the car.

We stopped at Adaminaby cafe at 4 pm for a snack and returned to Canberra via Billilingra Road to avoid the jarring rocks on Boboyan Road. Back at Kambah at 6:20 pm.

Brian Slee



Missing by Jane Carroll, illustrated by Melinda Perrin (continued)

Thankfully, Ranger Gang-gang's search is rewarded: 'Pink Robin, thank goodness I found you! How's the family?'

'Safe for now', chirped Pink Robin, snapping up a butterfly to eat. He looked around and lowered his voice. 'The machines are coming. They gobble up the forest.'

Pink Robin is just one of 33 threatened species listed in *Missing*. Many of them have the same status closer to home in our region.

Parents and teachers will find *Missing* a valuable resource for informing children about the irreversible damage that human activities can cause to biodiversity and the environment. Production of the book was funded by the Southern Rivers Catchment Management Authority and the Regional Arts Fund.

Cost \$20. I purchased my copy of the book at the Gallery in Cooma but the Kosciuszko National Park Visitor Centre at Jindabyne would also sell it.

Fiona MacDonald Brand

[The book can also be purchased through SEAR Arts and Cultural Development Officer Heidi Kunz: email hkunz@sear.org.au

Ed.

A good book story

The geology of Mount Kinabalu by Robert Hall, Michael Cottam and others

Sabah Parks Publication No. 13, 2008, 76 pp Price unstated, 210 x 148 mm.

The phone rang. A former colleague checking if I were was still alive! Apparently, a professor in London wanted to talk to me about some work I'd done on Mount Kinabalu. Oh my God! I thought, someone is proving me wrong after 40 years, and I don't really want to know!

So I did nothing! But the London professor (Robert Hall) did get in touch. He had spent years

searching for G Jacobson, the author of the original (1970) geological map of the mountain. But he had assumed that this ancient pioneering geologist was a George Jacobson, and George proved untraceable.

I was pleasantly surprised—Robert wasn't trying to prove me wrong, he wanted to congratulate me on the accuracy of my mapping. He also wanted to know how I'd done it in such rugged terrain in days before GPS, and how I'd come to be involved in the project. There followed a meal with his associate Mike Cottam at the Yarralumla Chinese restaurant. I showed him old and faded black-and-white photos of a young Australian geologist with a flowing



beard. Later they took me for a very pleasant lunch at an olde English village pub near their university in Surrey.

Where is Mount Kinabalu? it's in old photos in new emails it's in my heart ... my pen

So their beautifully crafted little book on the geology of Mount Kinabalu contains my geological map, but with a considerable amount of re-interpretation. This is based on recent research with sophisticated rock-dating tools, some done, including work by Mike Cottam, at the ANU in Canberra. The precision of the rock-dating is staggering for a geologist of my vintage!

Mount Kinabalu is a dramatic, awesome mountain that rises to 4 100 m out of equatorial rainforest and has an amazing altitudinal zonation. It is the highest mountain in Southeast Asia, between the end of the Himalayan chain and Irian Jaya. It is the dominant feature of the Kinabalu National Park, and became Malaysia's first UNESCO World Heritage Site in 2000.

Mount Kinabalu is a layered granite intrusion of about 7 million years ago, and a detailed story

of the phases of intrusion has emerged. The summit was glaciated in the Pleistocene. The book contains a clear and well-illustrated exposition of the complex geology of Sabah and of the history of the intrusion. It is also a detailed field guide to the tracks up the mountain. There is a glossary of geological terms and an extensive bibliography.

Highly recommended! I know many Australians visit Sabah, and many climb the mountain or delight in the rainforest and its unique and wonderful flora. I am not aware of a geological field guide of comparable quality in Australia.

One for the traveller's rucksack!

Gerry Jacobson

Of birds, rodents and solar panels

NPA ACT has held its monthly general meetings in various locations. including the old Griffin Centre in the Forestry School at Yarralumla and the Uniting Church Hall in Weston. For several years the venue has been the hall next to the Church in Uniting O'Connor. Members may recall that during 2010 the hall was renovated and while this was going on at least one of our meetings was held in the church itself. Around that time a very interesting pattern of solar panels appeared on the side of the church.

What follows is an edited extract from an article appearing in the Church's November newsletter. It provides some background to these goings-on.

Earlier in the year there had been a demanding time associated with much needed renovations. The hall and kitchen had been looking very tired ... 30 years since the last update. An ACT community grant assisted with these, and a number of community activities use these facilities each week.

We were surprised and delighted to receive a further ACT grant to erect solar panels on the church roof. The church building, being an A frame structure with one north facing roof/wall, was the ideal space for solar panels.

One member had the inspired idea to have the panels placed in the shape of a cross. The building is clearly visible to all who travel along the busy Brigalow Street of inner north Canberra. What a great witness to our faith in Jesus Christ!

All was going well until the electricians decided it was time to link up the new with the old. As soon as they looked under the roof at the existing electrical wiring they called the inspectors. The inspector took one look and shut off the electricity supply!

To our dismay we discovered that a combination of birds and rodents in the roof space had stripped away the insulation. Bare copper wire was exposed and in close proximity to the steel supporting beams. In fact the inspector was amazed that the church was still standing. A major electrical fire was definitely ready to happen.

During the next five weeks we faced further challenges. Apart from funding a major rewire there was the difficult task

(continued next page)

Breakthrough in efforts to save endangered frog in Kosciuszko NP

The Department of Environment, Climate Change and Water (DECCW) has confirmed a major breakthrough in efforts to save one of the State's most endangered frogs which in 1998 was reduced to a single adult male found in a creek in Kosciuszko National Park.

Following a decade long effort to reverse the decline of the Spotted Tree Frog the DECCW has confirmed that a successful captive breeding and release program has resulted in a population of approximately one hundred frogs now breeding in the wild.

DECCW frog expert and program manager, Dr David Hunter, said today that confirmation that the frogs, which were first released initially as Juveniles back into a stream in Kosciuszko National Park, were now breeding was 'big news'.

'The Spotted Tree Frog in NSW was very nearly lost for good. We found the last adult [NSW] male in 1998 and captured it. Gerry Marantelli from the Amphibian Research Centre in Melbourne took the male, since nicknamed 'Dirk', and mated him with four females from a similarly endangered Victorian population,' Dr Hunter said.

Victorian population,' Dr Hunter said.

'It took several years before the Amphibian Research Centre was able to produce tadpoles from Dirk and the girls but finally we were able to release the first frogs in 2005. We continued to release about 150–200 juvenile frogs bred in captivity over the next four summers.

'We strongly believe that the species' rapid decline was caused by the chytrid fungus which has been implicated in the demise of many other frog species around the world over the past 30 years.

'It's possible that Dirk, and the females from a Victorian stream, have some resilience to the fungus and their legacy has been passing on those genes to offspring. This is the primary strategy for reducing the impact of the chytrid fungus.

'Field monitoring has confirmed that the Juvenile frogs released in 2005 are now successfully breeding in the wild, and that their progeny has survived to one year of age'.

'Dirk's grandkids have been observed along nine separate sections of stream'.

'Around the world captive breeding and release of endangered frogs has been tried with limited success. Nevertheless, these types of programs will be required to save dozens of frog species across the planet that face extinction as a result of the Chytrid Fungus. It's very much a last resort but this program has shown that it can achieve significant results.

'It's demonstrated that we can reestablish endangered frog populations after a major crash given time and resources.



'Will this population continue to thrive? This is a waiting game. It remains to be seen whether this population will survive into the future, but this latest news is very exciting and gives us plenty to be optimistic about.

'All frogs play a critical role in the ecosystem and ensuring their long term survival is very important. Unfortunately the Spotted Tree Frog is only one of a large number of native plants and animals which are currently listed as endangered and the focus of serious efforts by the department to reverse their decline,' Dr Hunter said.

NSW NPWS News Release

Of birds, rodents and solar panels (continued)



of finding someone who would tackle the pigeons. These had been roosting in the roof for some months, no doubt getting access because of cockatoo damage to vents high in the wall.

So after dealing with the pigeons and rewiring, we are now back using this building. Apart from being a lot safer it's much quieter. And on Sundays the preacher no longer has to compete with the pigeons!

Story provided by Jan Thomas, O'Connor to Presbytery News, Uniting Church in Australia, Presbytery of Canberra Region, Vol 16, Issue 78, November 2010

PARKWATCH

Mountain biking in national parks

The NSW National Parks and Wildlife Service has just released a discussion paper on 'Cycling policy review and sustainable mountain biking strategy, 2010'.

The Colong Foundation supports the use of bikes (including mountain bikes) on roads, including fire trails that are approved for such purpose, through a reserve plan of management. Through careful consideration, cycling can be compatible with public safety, protection of property and park assets, the appropriate enjoyment of the park by other members of the public—and the conservation of the heritage and natural values of our reserves, the prime objective of our reserve system.

But what is proposed is the facilitation of the **sport** of mountain biking, which is graphically described in the paper, through the provision of 'mountain bike experiences' including:

- cross-country, which may include 'technical challenges' suiting a wide range of skill levels
- all-mountain riding that can include advanced technical challenges and steeper hill sections
- · downhill riding
- free riding involving riding tracks and/or 'stunts' that require more skill and technical features than cross-country
- dirt jumping involving hopping over shaped mounds
- trails involving 'hopping and jumping bikes over obstacles'.

What is particularly galling about the proposals to 'provide legal opportunities for mountain bike riding on single-track' is that this will—by spending scarce resources on the construction of new, exclusive bike tracks currently used by walkers—reward the very people who have continued to engage in mountain bike riding that involves the use and creation of illegal tracks.

The NPWS has arranged a number of public forums, and it is surprising to learn the so-called 'independent' facilitator, Mr Anthony Burton, is an advocate for the mountain bike lobby, with an interest in track construction. It is clear that the NPWS is determined to push through this policy, which is opposed by all the peak conservation bodies in NSW. Mountain biking is the first cab off the rank in taking advantage of the recent amendments to the NPW Act. Who will go next?

The shooters' lobby is bound to have another try for access to our national parks, as will horse riders. The NPWS is already unable to control bush bashing and illegal use of management trails by trail bikes and 4-wheel drive vehicles.

Is this the thin edge of the wedge?

Colong Bulletin, No. 238

November 2010

Victoria's 'Thirsty 13' are dying for a drink

The VNPA has joined forces with Environment Victoria to call on the ... Government to recover environmental water for our new River Red Gum parks.

Many threatened species are being put in further danger by drying and dying red gum wetland forests and, despite the recent rainfalls, leadership is needed to secure the future of our red gum parks. To make our point, we've produced a report focusing on 12 flood-dependent species that are under real threat from the lack of action by the Victorian Government

To remain healthy, red gum forests and wetlands, and their plants and animals, need a drink every few years. To ensure this, the next Victorian Government must deliver high-security guaranteed water entitlements. Without strong leadership and action, the 'Thirsty 13' species, and countless others, may not survive.

The 'Thirsty 13' are:

- 1. Murray Cod
- 2. Inland Carpet Python
- 2. Brolga
- 4. Blue-billed duck
- 5. Plumed Egret
- 6. Giant Banjo Frog
- 7. Squirrel Glider
- 8. Superb Parrot
- 9. Moira Grass
- 10. White-bellied Sea-eagle
- 11. Broad-shelled Turtle
- 12. Sliver Perch
- 13. Mueller Daisy

Nature's Voice, VNPA newsletter Number 6. Oct–Nov 2010

Survival needs of forest species must be assessed

The VNPA and other environment groups have called for a comprehensive assessment of the survival need of forest-dependent species before a decision is made on amendments to the East Gippsland Forest Management Zones, which could allow for forestry activities. They say that the levels of research

knowledge available, and the monitoring being applied to forest management, are inadequate to meet the state government's obligations on flora and fauna protection.

The impacts of climate change, fire, weeds and feral animals, and logging, plus changing demographics and community attitudes to forest management, all point to the need for a major independent assessment and overhaul of current logging arrangements. Forest values for carbon storage, water production, ecosystem services, habitat protection, local amenity and tourism potential all need to be broadly assessed and considered against the current bias towards logging and pulp-log production.

The groups believe that the proposed rezoning process is seriously flawed. They want East Gippsland's conservation values comprehensively reassessed before any further attempts to change the zoning scheme are made.

Nature's Voice, VNPA newsletter Number 6, Oct–Nov 2010

Victoria's burn target tripled to 385,000 ha

The Victorian Government has accepted the Bushfires Royal Commission's recommendation to triple the state's annual prescribed burn target from 130,000 to 385,000 hectares. The plan is to increase burning rates gradually, building up to 275,000 ha/year by the 2013-14 season, after which there will be a thorough review of the program. The commission has also recommended annual reporting on the effectiveness of burns for fuel reduction and their impacts on biodiversity. That can't be done without effective comprehensive monitoring.

The government has allocated \$6 million to a fire ecology program and a further \$2 million to a 'risk and adaptive management' program. That's a big improvement on the negligible monitoring of previous years, but funding has to be boosted considerably to achieve the levels of accountability the commission has asked for.

The VNPA would like to see a \$40 million ecological research and monitoring program established over four years to:

- monitor the state-wide impacts of the fuel-reduction burn program on biodiversity
- implement a science-based

(continued on page 19)

PARKWATCH (continued from page 18)

program to refine local burn targets and programs

 establish a national centre for bushfire research.

This amount is around 10% of the existing \$400 million fuel management budget allocation. But money is not the only problem. Victoria has few reliable baseline data for natural areas. Most of our data on Victorian flora and fauna, compiled in the 1970s, are now unreliable. Another big problem is that our management agencies are short of skilled staff. There are no entomologists or mycologists (fungi specialists) in Parks Victoria. Botanists, zoologists and ecologists are also thin on the ground.

The VNPA will be working to ensure that the Royal Commission's call for accountability in fire and biodiversity management is honoured.

Nature's Voice, VNPA newsletter, Number 6, Oct–Nov 2010

Stop press

Four parcels of land acquired through the Dunphy Fund were protected under the Wilderness Act in November, including the large Greed Gully addition to the Macleay Gorges. Several other Dunphy Fund acquisitions are expected to be protected shortly.

The Wilderness Assessment Report for the Curracabundi Wilderness is expected to be released for public comment shortly. It will be the first wilderness assessment exhibited since Yengo in November 2001. The Curracabundi Wilderness is 40 km west of Gloucester.

Wilderness assessment had been stymied for over 10 years but assessments are now progressing following intervention by Environment Minister Frank Sartor.

> Colong Bulletin, No. 238 November 2010

Point Cook Marine Sanctuary a 'failure'.

People in some quarters have recently declared the Point Cook Marine Sanctuary a 'failure'. Where are the data and information that this harsh statement is based on?

My own personal observation could not be more different. Frequent snorkelling trips there make me conclude that the biodiversity present is spectacular and well worth protecting. The sanctuary has at least six species of rays alone, and very large aggregations of Port Jackson Shark (more than 100 individuals) have been seen. Massive schools of Australian anchovies, Australian salmon, mullet, black bream and garfish are ample evidence that marine sanctuaries protect ecosystems, guaranteeing their preservation for future generations.

Then there's the enormous variety of small fauna such as worms and marine snails. Would the area be as rich in these if bait-pumping and similar activities were allowed? It's highly unlikely.

Bird life has always been abundant and diverse in the area, no doubt drawn by the rich fauna and flora. Surely our existing marine national parks and sanctuaries are worthy of continued protection and we need to investigate protecting other areas as well.

> Submitted by Andrew Christie NMIT Aquaculture Program and Marine Care, Point Cook group member in VNPA ParkwatchNo. 243 December 2010

State takes two steps back on conservation

Ted Baillieu said he would act swiftly on state Coalition's promises. Regrettably, the new government's first moves include some of its most regressive policies: restoration of cattle grazing in the Alpine National Park and the first full duck-hunting season in years. The Age has long objected to both practices because of the environmental harm and, in the case of ducks, cruelty. The covert start to 'scientific' trials of Commonwealth grazing, without approval as required by the Environment Protection and Biodiversity servation Act, is doubly objectionable.

The National Parks Association aptly describes the six-year study as 'the terrestrial version of Japan's scientific whaling'. Half a century of research disproves the claim that 'grazing reduces blazing'. That is because the key plants in fire spread are unpalatable to cattle. New South Wales ended grazing in Kosciuszko National Park in the late 1960s and the environmental benefits are plain to see. Research by CSIRO, La Trobe University and the NSW Department of Environment and Conservation found alpine grazing had no significant influence on bushfires. In his report on the 2003 bushfires, Emergency Services Commissioner Bruce Esplin also concluded that decisions on alpine grazing 'should not be based on the argument that grazing

prevents blazing'.

When the Bracks' government closed the national park to cattle in 2005, its decision drew on 60 years of research. The Alpine Grazing Taskforce was advised by its scientific advisory panel that cattle damaged the environment, which had been degraded for decades. Cattle posed a significant threat to at least 25 plant and 7 animal species listed as rare, vulnerable or threatened with extinction. These delicate catchments and their unique flora and fauna have noticeably recovered since 2005. The reality, as taskforce member Tony Lupton wrote in The Age last month, is that alpine grazing 'proved to be a lucrative form of public subsidy for a small number of privileged licence holders' and the significant damaging impacts' greatly outweighed any modest benefits from grazing up to 8,000 cattle in the park. Since the ban, the park has achieved National Heritage listing. The federal government should act on its legal obligation to protect this great natural asset.

The decision on grazing is purely political, as is the licensing of duck hunting long after Western Australia, NSW and Queensland banned it. Even in Victoria, the bastion of duck hunters in Australia, the 95,000 licence holders in 1986 have dwindled to a few thousand active shooters. A 'clean kill' is possible with a rifle—hunters help to cull feral animals—but hunting flocks of wildfowl with a shotgun is unavoidably cruel, and rare species are killed. Studies show that for every duck retrieved, a wounded bird flies off, often suffering a lingering death. Studies of tens of thousands of wild waterfowl found almost one in five birds of some target species has shot lodged in its body.

Most Victorians oppose duck hunting and its suspension from 2006 to 2009 was an opportunity to make the ban permanent. After recommendation by the state's animal welfare advisory committee to end duck hunting, this newspaper lamented: 'We did not expect to have to restate the case for a ban in the 21st century'. Now the season will run for a full 12 weeks and hunting will be allowed in much of the new Murray River Park. The new government has made some wellfounded changes in other policy areas, so it is sad to see it make such ill-advised environmental decisions.

The Age, 14 January 2011 (continued on page 20)

PARKWATCH (continued)

Two projects in the life of the Gudgenby Bush Regeneration Group, or

How we learned to live with barbed wire and coring

In August and September last year, the group focused on two main projects. In the first project we wanted to investigate whether peat was present in the Hospital Creek Swamp, to assess whether the swamp could be rehabilitated. Under the guidance of rangers, we used a manual peat corer to examine the soil composition. Three holes were sunk, the deepest being 1.44 metres. At 0.9 metres this hole looked promising as the core looked peaty but at 1.0 metre it was clay again and it stayed so for the rest of the core sample. We were disappointed with the result, which indicates the swamp may not contain peat, but we will take samples in other areas.

The depths may not seem great but coring into clay was no easy task for the hardworking corer brigade. However, given the muddy conditions, it was a great deal of fun for onlookers. One member sat on the peat corer while two other members pulled the handle around. The major lesson leant was that we should have had a normal soil corer as well as a peat corer on the day.

The second project involved removal of barbed wire fencing near the Old Bobovan Road at the turnoff to Frank and Jacks Hut. These fences are no longer necessary since the removal of the pine plantation, and constitute a real danger to the local fauna. We took down the barbed wire, the three strands of wire and the chicken wire from the old fence line between the [ex]pine plantation and the existing bush. Star pickets were removed where they pulled out easily but some were so deeply embedded we had to leave them. The wire and pickets were carried down to the Old Bobovan Road and piled there. We estimate that the group dismantled up to 800 metres of the full fence and took the barbed wire off another 100 metres or so to just above Frank and Jacks Hut.

We learned that while barbed wire is not a friendly medium to work with, there is enormous satisfaction in seeing it bundled up at the side of the road waiting for collection. We thank the Namadgi rangers for their continuing support. They provided the corer and set up the trailer for us, but then had the thankless task of taking away the pile of barbed wire and fencing.

The Scribbly Gum, Spring 2010

Plight of the Little Penguins

The Penguin Centre on Granite Island is situated 85 km south of Adelaide. Despite the Island being an important breeding colony for the Little Penguin, many sick and injured penguins have needlessly died because no accessible support had been in place for them.

This changed in 2003, when Dorothy and Keith Longden decided to turn a disused building and garden into an area where these lovely birds could recover from sickness and injury before returning to the wild. Since then, hundreds of Little Penguins have been nursed back to health. Not all are strong enough to be released and 10 birds now call the centre home. Dorothy is the main carer, and her husband Keith and three other volunteers provide much needed support.

There were once more than 2,000 penguins inhabiting the Granite Island's colony, but sadly their numbers have fallen since 2001 when the first count was taken. Although sleek and fast in the ocean, the Little Penguins are clumsy on land where they are vulnerable to injury from dogs or cats. This year's count shows only 146 Little Penguins left on the island.

For the past five years the committed team at the Penguin Centre has been advocating for the small flightless birds, which could vanish from Granite Island. The Penguin Centre is trying to raise awareness about the Little Penguins and offers an 'Adopt a Penguin' program.

For more information visit www.penguincentre.com.au

Trust News Australia, Vol. 3, No. 2, November 2010

Threatened Ecological Communities Nomination Program

Humane Society International's Threatened Ecological Communities nomination program, now running under the wing of the Wildlife Land Trust, is in full force at the moment with several nominations currently under preparation for submission to both State and Commonwealth legislation. An ecological community is a naturally occurring group of plants, animals and other organisms that interact in a unique habitat.

Last issue we reported that we'd just received notice from the NSW Scientific Committee that preliminary determinations had been made to list four nominations under the *Threatened Species Conservation Act* 1995 (NSW).

... three of these have been officially listed under this legislation as 'critically endangered communities'. They are:

- Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion
- Mallee and Mallee–Broombrush dominated woodland and shrubland in the NSW Southwestern Slopes Bioregion
- Porcupine Grass-Red Mallee-Gum Coolabah hummock grassland/low sparse woodland in the Broken Hill Bioregion.

This listing indicates and recognises that there is an extremely high risk of these communities becoming extinct in the immediate future. It affords them legal protection and allows government intervention in developments and activities that may affect them.

Wildlifelands Newsletter Humane Society International's Wildlife Land Trust, Issue 7, 2010

WildEyre

In the past year, the Nature Conservation Society of South Australia (NCSSA) has continued as a partner in the *WildEyre* project. *WildEyre* aims to protect the complex and unique habitat areas of the western Eyre Peninsula through collaborative landscape-scale conservation planning and action.

Collaborators in the *WildEyre* project include Greening Australia, The Wilderness Society, the Department of Environment and Natural Resources, the Eyre Peninsula Natural Resources Management Board and the NCSSA. We are extremely pleased with the outcomes of this project, with over \$400,000 for on-ground works in the region being sourced in the past two years.

Xanthopus, Nature Conservation Society of South Australia Inc. newsletter Vol. 28, Part 3, Spring 2010

Murray-Darling Basin waterholes

We were contracted by the SA Murray Darling Basin NRM Board to collect baseline biological data at eight permanent water sites on the eastern flanks of the northern Mount Lofty Ranges. There was only patchy information about the state and function of these waterways, which include the Burra, Baldina, Brady and Newikie creeks

Some 374 indigenous plant species and 158 introduced plant species were found during the survey, including

(continued on page 21)

PARKWATCH (continued)

106 species, or 28%, of some conservation significance. In terms of indigenous fauna, there were 5 species of mammals, 2 species of frogs, 85 bird species (including 3 of conservation significance) and 40 species of macroinvertebrates recorded. The data indicated that these permanent waterholes provide significant refuge value for water-dependent species.

The results of the survey are reported in Moise, D. and Milne, T. (eds) 2010. A biological survey of permanent water sites within the South Australian Murray Darling Basin rangelands. Nature Conservation Society of South Australia, Adelaide.

Xanthopus, Nature Conservation Society of South Australia Inc. newsletter Vol. 28, Part 3, Spring 2010

Native vegetation clearance and safety on public roads

The Nature Conservation Society of South Australia has provided feedback to the Native Vegetation Council Secretariat about the development of a framework for native vegetation clearance for safety on public roads. As it currently stands, the framework could allow for the clearance of a substantial amount of native vegetation on the state's road network, in many cases without the requirement for a Significant Environmental Benefit offset.

We are concerned that the draft framework that has been developed to provide guidance on native vegetation clearance has not been based on a sound and objective evaluation of the risks for biodiversity and the risks and benefits for road safety. The decisions have been made and guidelines developed without any modelling or investigation to evaluate their potential impact on the extent and quality of native vegetation on roadsides.

By removing the requirement for a Significant Environmental Benefit offset when vegetation is cleared for roadsafety purposes, the disincentive for vegetation clearance is removed. This makes it more likely that vegetation clearance will become the cheapest option and preferred over more expensive measures such as the installation of safety barriers. The draft framework does not require road managers to exhaust all other potential mitigation measures before instigating clearance.

We are also extremely concerned that the membership of the working group that has been developing this framework

has been restricted to staff of the Department of Environment and Natural Resources, local councils and the Department of Energy, Transport and Infrastructure. The latter two bodies have a clear motivation to minimise costs and accountability and maximise the amount of clearance that would not require offsetting. These bodies should have been kept at arms-length from the process, rather than oversee framework development. We are seeking far greater involvement of conservation interests and, at the time of printing, had been invited to participate in developing the framework.

Xanthopus, Nature Conservation Society of South Australia Inc. newsletter Vol. 28, Part 3, Spring 2010

Reeves Plains biological survey

The 2009 Nature Conservation Society of South Australia volunteer survey was of the remnant flora of eight remnant vegetation sites within the area known as Reeves Plains, north of Gawler in the Adelaide Mount Lofty Ranges region. The work was undertaken to fill knowledge gaps in baseline data on vegetation that is at risk from sand mining. Fourteen keen volunteers helped to gather data over two days in September 2009.

Some 155 species were found in the vegetation survey quadrats in the eight sites. Of these, 104 were native and 51 were introduced. Of the native species, one was vulnerable at state level and 34 were rated as significant at regional level, made up of 1 endangered, 6 vulnerable, 16 rare and 11 uncommon species. While there was a relatively large proportion of weeds at most sites, the survey revealed a significant diversity of native species remains in the Reeves Plains area. Many species of conservation significance were also noted.

Given the closeness of this area to highly denuded Adelaide city, and the fact that only 3% of native vegetation remains in the Mallala region, these remnants should be accorded high priority for protection. This survey was done in conjunction with the Gawler Environment and Heritage Association Inc.

Xanthopus, Nature Conservation Society of South Australia Inc. newsletter Vol. 28, Part 3, Spring 2010

Compiled by Hazel Rath



NPA Christmas party 2010. Chris Emery, David Large and Tim Walsh, the superb auction team which encouraged us to contribute around \$1000 to the NPA coffers at the Christmas party. Photo Esther Gallant

NPA notices

National Parks Association Calendar				
	March	April	May	June
Public holidays	Mon 14	Fri 22 to Tue 26	_	Mon 13
General meetings	Thurs 17	Nil ¹	Thurs 19	Thurs 16
Committee meetings	Tues 1	Tues 5	Tues 3	Tues 7
Gudgengy Bush Regeneration ²	Sat 12	Sat 9	Sat 14	Sat 11

Further details: 1. Because of Easter there will be no General Meeting in April.

2. GBRG. Meet Namadgi Visitor Centre 9:15am or Yankee Hat car park 10:00am.

NPA ACT Heritage

A request to all members

After the successful Nostalgia Night at our February general meeting the committee urges members to go through their historic photos and slides that depict NPA activities in years gone by and donate some of them to the association.

These images will complement the documents that are deposited with the ACT Heritage Library and help keep the history of the association alive in years to come.

Going bush? Take NPA Field Guides



Out of print but now available

Colin McAlister's monograph on the Glenburn and Burbong areas, no longer available in print, is now available in pdf format on the NPA website

www.npaact.org.au



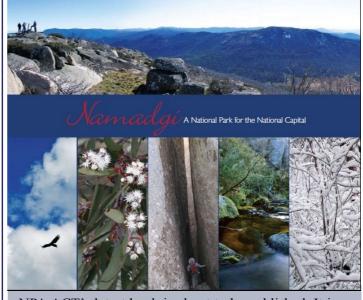
New members of the association

The NPA ACT welcomes the following new members:

Phillip Starr Meryl Joyce Patricia Heffernan Caroline Lemerle David Dedenczuk Tralie Kimlin Craig Wainwright and Rachelle Hayward.

We look forward to seeing everyone at NPA activities.

This Bulletin was prepared by
Editor: Max Lawrence
Sub-editor: Ed Highley
Presentation: Adrienne Nicholson



NPA ACT's latest book is about to be published. It is a celebration of our national park with wonderful photos supplied by members. See page 4 of this *Bulletin*.

Front cover photographs

Main photo. Tantangara daisies, January 2011.

Photo by Max Lawrence

Insets. Left. The well established David Street wetlands (article page 6)
Photo by Graeme Barrow

Centre. Historic photo of cattle in the high country national parks (article page 3)

Right. Graham Muller on the Rendezvous Creek beginners packwalk last November(article page13). Photo by Esther Gallant

Back cover

Boulders and rocky outcrops: a selection from members' photographs in Namadgi and nearby.

General Meeting

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



Thursday 17 March

Wild weather (nature throws a tantrum).

Mr Clem Davis

Visiting fellow at the ANU Fenner School of Environment and Society (Formerly Officer in Charge of the Canberra Meteorological Office)

When Clem Davis spoke to us in February 2010, members were fascinated by his explanations of why our weather is generally like it is. This time he will deal with some wild weather events and what happens when Nature throws a tantrum.

April

No General Meeting will be held in April. The usual third Thursday (21 April) is the evening before Easter

Thursday 19 May

Iceland and Greenland: Vikings and Inuit.

Esther Gallant

NPA member

These two geographically close islands are vastly different in size, climate and culture. Both were settled by the Vikings, but the Norsemen only stayed permanently in Iceland. In the dispersed population of Iceland, old Norse language and traditions are retained while Greenland's Inuit people still have a hunting and fishing subsistence culture.

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

President Rod Griffiths 6288 6988 (h)

blackdog@cyberone.com.au

Vice-President Vacant

Secretary Sonja Lenz 6251 1291 (h)

sonjalenz67@gmail.com

Treasurer Chris Emery 6249 7604 (h)

chris.emery@optusnet.com.au

Committee members

Mike Bremers 6292 3408 (h)

mcbremers@optusnet.com.au

Sabine Friedrich 6249 7604 (h)

sabine.canberra@gmail.com

Christine Goonrey (Immediate Past President) 6231 8395 (h)

cgoonrey@grapevine.com.au

George Heinsohn 6278 6655 (h)

george.heinsohn@gmail.com

Clive Hurlstone 6288 7592 (h) 0407 783 422 (mob)

cjhurls@bigpond.net.au

Mike Huson 0429 150 250 (mob)

speerwah@gmail.com

Max Lawrence 6288 1370 (h)

mlawrence@netspeed.com.au

Kevin McCue 6251 1291 (h)

mccue.kevin@gmail.com

Conveners

Outings Sub-committee

Publications Sub-committee

Bulletin Working Group

Mike Smith 6286 2984 (h) msmith@netspeed.com.au

Sabine Friedrich 6249 7604 (h) sabine.canberra@gmail.com
Max Lawrence 6288 1370 (h) mlawrence@netspeed.com.au

The NPA ACT office is in the Conservation Council building, Childers Street, City. It is staffed by volunteers but not on a regular 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 0412 071 382

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 Bulletin 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.

The NPA ACT website is hosted by our generous sponsor, Encode.



NPA Bulletin

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

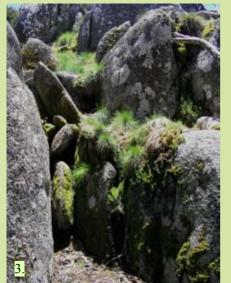
Deadline for the June 2011 issue: 30 April 2011.

Printed by Instant Colour Press, Belconnen, ACT.

ISSN 0727-8837







Rocks and rocky outcrops

- 1. Outcrops at the edge of Rendezvous Creek grasslands Christine Goonrey
- 2. Mossy rocks and snow gums at altitude Steve Hill
- 3. Snow grasses and rock crevices on Mt Gingera Christine Goonrey
- 4. Boulder by track near Honeysuckle campground Sabine Friedrich
- 5. Ferny waterfall Philip Gatenby
- 6. Granite blocks of the Square Rock formation Adrienne Nicholson







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