National Parks Association of the Australian Capital Territory Inc.



- Taking stock 60th anniversary forum and beyond
- Nature in winter photos from NPA members
- Tidbinbilla Nature Reserve thriving at 50
- Connecting to Country: engaging with Indigenous culture

conservation education protection

December 2021 – Volume 58 – Number 4

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conservation education protection

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The *NPA Bulletin* provides the association's members with news on activities and developments in environmental and heritage conservation, education and protection, particularly as bearing on the Australian Capital Territory and adjacent regions. The *Bulletin*, our association's signature publication and prime source of information about NPA ACT, is published quarterly, in print and online, compliant with the NPA's aims and objectives. The *NPA Bulletin*:

- keeps readers informed of NPA Committee and Subcommittee deliberations and decisions, and NPA events such as social gatherings, outings, work parties and research projects,
- provides a forum for members and invited guests to express views on matters of interest and concern to NPA ACT,
- fulfils an educational role on conservation and outdoor recreation issues, and
- accepts paid advertising, where appropriate. The editor of the *Bulletin* is bound to observe the foregoing.

Contributions of articles (up to 1,000 words), letters, poems, drawings and photos are welcome. Longer articles will be considered. Photos should be free of embedded information such as dates and names.

All items accepted for publication may be subject to editing. In making contributions, authors acknowledge that the editor retains the right of final decision on content and presentation. The *Bulletin* is also published on the NPA website where items may include extra text or photos.

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Contributions and advertisements

Send all items to the Bulletin Team, email admin@npaact.org.au.

Contact the NPA office for information and rates for advertisements.

Deadline for contributions to the March issue is 31 January 2022.

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Printed by

Instant Colour Press, Belconnen, ACT. ISSN 0727-8837 (printed copy) ISSN 2209-6256 (digital copy)

Cover photos

Front cover: *NPA Honours scholarship winner Shoshana Rapley measuring a Bush Stone-curlew at Mulligans Flat Woodland Sanctuary* by Brittany Brockett. See article pp. 31–32.

Back (top): Camping under the stars at Gooandra Hut by Mike Bremers. See article p. 25.

Back (bottom): *Gum trees dancing in the mist* by Stefan De Montis

From the President

Spotlight on Kosciuszko National Park

First, congratulations to John Brickhill, who has recently been appointed to the ACT Bushfire Council. John is not 'representing NPA' but we are sure glad that he has a seat on the Council. He has extensive experience in both park management and bushfire fighting from his long career with NSW NPWS and is a most appropriate council member.

Our most ambitious activity was our online webinar on 'Threats to Kosciuszko National Park' organised and hosted by Cynthia Burton and attended by over 100. Guest speakers were Invasive Species Council Indigenous Ambassador Richard Swain and NPA NSW Executive Officer Gary Dunnett.

Key points discussed:

- Snowy 2.0 is an unprecedentedly destructive hydrodevelopment.
 NPA NSW will, through legal channels, be challenging plans to install destructive overhead transmission lines.
- Massive commercial tourism development proposed under the draft Snowy Mountains Special Activation Precinct Master Plan (SAP-MP) undermines the Park's Plan of Management (PoM), giving economic development top priority. Over 2,100 public submissions to the NSW Government, mostly in opposition, resulted in some elements of the plan already being dropped or revised.
- The key to protection and restoration of Kosciuszko National Park (KNP) is effective control of feral animals such as horses, deer and pigs. Whenever culls have occurred, regrowth and other positive landscape changes have resulted.
- Better connections of Indigenous and other community voices with government decision-making processes are crucial to KNP protection. Listen to country!
- Write to local members of the NSW parliament and relevant ministers at every opportunity, so that they are made aware of community concerns about the future of KNP.
- Submissions were encouraged on the NSW KNP Wild Horse PoM as well as any future NSW Government initiatives detrimental to the future of KNP.

If you missed the webinar and would like to see it, go to www.npaact.org.au/index.php/news/1034-web on the NPA ACT web page.

We have been keeping in touch with allied interstate organisations online, including:

- National Parks Australia Council (Kevin McCue, Rosemary Hollow and I): two meetings to discuss tourism in national parks and polling of community opinions on national parks
- Reclaim Kosci (Cynthia Burton, Annette Smith, Di Thompson and I): various meetings related to feral horse issues
- NPA NSW (Di, Cynthia and I): multiple issues concerning KNP and the raising of the wall of Warragamba Dam.

In my June report, I said we were returning to normal meetings and activities – if only! Let's hope this time the return to new normal lasts considerably longer. We have now restarted work parties, bushwalks, camping trips and nature walks. Check the website or ask to be added to the 'short notice' email list. The Christmas party is scheduled for the Namadgi Visitor Centre on 12 December (see notice p. 37).

Happy Christmas and New Year to all from the NPA ACT management committee.

Esther Gallant

Ministers outline environment plans

At a general meeting in June, ACT ministers Shane Rattenbury and Rebecca Vassarotti addressed NPA members on government plans to protect the ACT's natural environment.

As Minister for Water, Energy and Emissions Reduction, Mr Rattenbury spoke about the challenges of climate change to the ACT and the challenge to Canberra's water quality resulting from the 2020 Orroral bushfire. Without the early work on water runoff by the Parks and Conservation Service, the effects could have been greater. Mr Rattenbury believed the ACT would be better served by having one dedicated 'Office for Water' instead of the present situation where several agencies have responsibilities for water management.

Ms Vassarotti said that, as Minister for the Environment and Heritage, she saw the environment as being important for people's physical and mental wellbeing and that her biggest challenge was getting Canberrans to care about the ACT's national park and nature reserves.

An important element in protecting threatened and endangered species in the territory was improving connectivity between natural areas. The government was using analytical modelling to ascertain what resources were needed to protect endangered species such as the Glossy Black-Cockatoo and the Gang-gang Cockatoo.

Ms Vassarotti said she had discussed feral horses, especially their presence in the border region, with the NSW Environment Minister and hoped NSW would improve its oversight (see p. 4). She also outlined how thermal imaging was being used to locate pest animals such as deer and pigs (See 'Sambar Deer in Namadgi: monitoring and control', NPA Bulletin, Sept. 2021).

High on her list of priorities was increasing the professional resources and training available to environmental volunteers.



From the Environment Subcommittee

Opportunity for input to key climate survey disappointing

The Environment Subcommittee has been involved in many public consultations over the years and in recent months it has seen one of the poorest examples of public consultation and one of the region's most important.

The Federal Department of Agriculture, Water and the Environment's survey on the National Climate Resilience and Adaptation Strategy is obviously dealing with a significant issue but the survey itself was poorly designed and contained only three substantive questions. The survey is the first step in updating the existing strategy, and it offered little opportunity to provide substantive input. The NPA expects to see further consultation on this topic (see p. 5).

In contrast, the NPA's recent submission to the Draft Kosciuszko National Park Wild Horse Heritage Management Plan provided a considered response to this vexed question. The NPA clearly recognises that the proposed target of maintaining a population of 3,000 feral horses would still cause considerable damage to the natural environment of Kosciuszko National Park (KNP). But after years of inaction, it is a starting point and the NPA urged the meeting of this target well before the proposed date of June 2027. This would have the following benefits:

- the number of horses needing to be removed to reach the target will be lower, as a shorter period reduces population increase due to reproduction
- reductions in costs due to having to remove fewer horses
- reaching the target quickly allows more time to analyse the effect on KNP's natural values resulting from maintaining this still large number of horses, and will therefore help guide the reassessment of the draft plan in 2027.

The NPA noted that the draft plan proposes that nearly one-third of KNP, or approximately 220,000 hectares, is kept as wild horse protection areas. This area includes highly significant natural assets and represents

a direct threat to their conservation, undercutting the primary rationale for the establishment and maintenance of a national park.



There are many flaws in the draft plan, but action is urgently required to reduce this evergrowing threat. See the NPA's website for the full submission.

In recent months, the NPA has also been involved in the public consultation on the future of the Tidbinbilla Nature Reserve's visitor centre. The current visitor centre is seeing the emergence of structural faults, and the layout limits any expansion for better visitor experiences. However, due to budget constraints it is likely that only minor improvements will occur.

October saw the NPA involved in the first Biodiversity Consultation Forum. This is a bimonthly opportunity for environmental stakeholders to discuss and workshop biodiversity issues with the ACT Government. The forum has the potential to be a key initiative in the protection of the ACT's natural environment and the NPA welcomes its establishment.

Rod Griffiths Convener, Environment Subcommittee

Action ramps up on feral horses

It's been a busy few months, with considerable progress in campaigns to reduce numbers of destructive feral horses in the Australian Alps. The most notable was the release on 2 November of a new stronger plan by the Victorian Government to control feral horses in the Alpine National Park (www.parks.vic.gov.au/projects/feral-horse-action-plan-2021). If implemented, the plan will help protect native Australian wildlife and ecosystems for future generations.

The Victorian National Parks Association has been a strong advocate for more effective feral horse control, noting that it was pleased to see such a 'comprehensive, evidence-based approach to protecting our alpine treasures'.

Invasive Species Council conservation director James Trezise said the new plan would see horses removed entirely from the Bogong High Plains and a significant reduction in the size of the eastern Alps population.

'Victoria and the ACT are leading the way on the management of feral horses in the Australian Alps,' he said. 'In contrast, the NSW Government has proposed to retain a large population of feral horses in Kosciuszko, including along the Victorian border.

'We need consistent and strong feral animal management across the Australian Alps. Horse, deer and pig numbers need to be brought down to help save our native wildlife.' (See 'Sambar Deer in Namadgi: monitoring and control', *NPA Bulletin*, p. 13, Sept. 2021)

The Victorian plan sets out a suite of control measures to reduce the number of horses in the High Country, including aerial shooting by professionals in limited circumstances, and according to strict animal welfare standards.

The NSW Government finally released in October its much-delayed Draft Kosciuszko National Park Wild Horse Heritage Management Plan for community feedback. NPA President Esther Gallant observed that, while the plan was inadequate in many respects, implementation of its actions to remove feral horses from the Park should commence immediately.

'Simultaneously, it is critically important to repeal the 2018 Kosciuszko Wild Horse Heritage Act so the numbers of feral horses can eventually be reduced much further,' she said. NPA ACT lodged a submission on the draft plan, as did the ACT Government. The Minister for Land Management, Mick Gentleman, has called for a 'connected' approach between the ACT and NSW governments, and with Victoria. 'Feral horses don't belong in national parks,' he said.

 On 24 November, NSW environment minister Matt Kean adopted a feral horse plan for Kosciuszko National Park that promises a significant reduction in feral horses but leaves one-third of the park overrun by this damaging invasive animal. Further information at https://bit.ly/3r9ha2n

Cynthia Burton

Advocacy



seen as areas for future development'

Proposal sets dangerous precedent, NPA argues

The NSW Government's plan to create business and investment opportunities and drive year-round tourism in the Snowy Mountains should not include any part of Kosciuszko National Park (KNP), NPA ACT has argued.

In a submission commenting on a draft amendment to the KNP Plan of Management (PoM): Snowy Mountains Special Activation Precinct (SMSAP), NPA ACT says the draft Master Plan for the precinct must be completed before any 'National parks are primarily for the amendments to the KNP PoM are proposed.

The KNP PoM must remain the prime document for the management of KNP, the submission says.

'The overlay of the PoM with a future State

Environmental Planning Policy sets a dangerous precedent whereby the environmental management principles in the PoM can be overruled by a planning decision. National parks are primarily for the conservation of nature and should not be seen as areas for future development.'

NPA ACT said it believed the draft amendment to the KNP PoM significantly threatened the ability of the PoM to deliver on its overarching principle to 'maintain or improve the condition of the natural and cultural values that together make the park a special place'.

'KNP faces many current and emerging threats to its ecological communities, with increasing weed and feral animal pressures and the changes occurring through human-induced climate change. Already the effects of climate change can be seen through extreme weather events, changes in rainfall patterns and the impacts of bushfires that are becoming more intense and frequent.'

The submission said management of these pressures on KNP would become harder if the SMSAP was extended to include the national park as it would introduce further developmental and recreational pressures and override the safeguards in the current planning processes for KNP.

'The proposals fail to take account of the conservation of nature and should not be medium to long-term viability of the snow industry in Australia as

> that industry becomes increasingly affected by climate change. Proposals for significant increases in accommodation and associated infrastructure will lead to stranded assets in future years as snow levels decline.

'Current proposals for increased accommodation would also indicate pressure to increase the area of land in KNP covered by ski runs and associated infrastructure, further compromising the fragile alpine environment,' the submission says.

The NSW Government will make the final master plan and government investment decision in the first half of 2022.

NPA calls for national approach on climate

NPA ACT has called on the federal government to convene a national cabinet style approach to Australia's climate adaptation and mitigation activities.

Responding to an online survey by the of Department of Agriculture, Water and the Environment's National Climate Resilience and Adaptation Strategy Taskforce, NPA ACT acknowledges the national government's leadership role in progressing Australia's response to the international climate change emergency.

'This role must include the coordination of both mitigation and adaptation strategies, including the setting of clear targets for reducing the nation's carbon emissions and the development of comprehensive actions for national climate adaptation,' the response says.

The taskforce is preparing a new National Climate Resilience and Adaption Strategy to replace the one issued in 2015. The first stage is to seek community responses via a short online survey on the roles and responsibilities for the community and governments in developing climate resilience and adaptation.

One of the survey questions asks how the federal government could improve delivery of its roles and responsibilities.

In its response, NPA ACT particularly notes the Commonwealth's key role to work with other tiers of government and the community to ensure that

Australia's unique ecosystems can adapt to climate change.

'NPA ACT strongly agrees with the need for all tiers of government to work together on this climate emergency,' the response said. 'It particularly regrets that past ideological positions from all sides of politics have held back the Commonwealth from adopting a wholehearted approach for a nationally coordinated response to climate change.

'In addition, to take leadership on this issue, the federal government needs to clearly and convincingly express its belief in the reality of "climate change" and the urgency and importance of addressing it now.'

See: Roles and Responsibilities for Climate Change Adaptation in Australia. At https://bit.ly/3jMnw3s

Reports by Environment Subcommittee

Taking stock - 60th anniversary forum and beyond

Since NPA ACT's 60th anniversary members' forum, how far have we come, what have we achieved and what still needs to be done? Allan Sharp looks at the record.

More than 30 NPA ACT members and guests from other conservation groups and ACT government organisations took part in the forum in April 2019 to discuss future directions to ensure the long-term viability of NPA ACT as an advocate for effective environmental protection.

The forum discussed threats, not only to the environmental and cultural values of many national parks and conservation reserves but, in some cases, even to their very existence. These include poor land and water resource management, tolerance of invasive plants and animals and, most significantly, climate change. Growing pressures to commercialise national parks, particularly for 'higher end' nature

tourism markets, were seen as a serious emerging concern.

Since the forum, severe fires have devastated most of Namadgi National Park for the second time in less than 20 years. The UN climate science panel recently warned that extreme weather and rising seas are hitting faster than expected, and climate adaptation was discussed by world leaders at last month's COP26 talks in Glasgow. Proposals are currently under consideration for disturbing levels of commercial development in national parks in our region, such as Kosciuszko and Ben Boyd, as well as further afield in Victoria's Alpine NP and Tasmania's south-west.

The forum identified priorities and needs for NPA ACT to respond to. These included increasing the number, age range and cultural

'The program is moderately strong and improving, with a level of enthusiasm among new participants that has not been seen for years'

diversity of our stagnating membership; developing new, appealing ways to engage with and educate the community about nature and responsible recreation in 'the Bush'; and promoting a culture of 'climate readiness' in the ACT's parks and reserves among interested parties.

A bird-spotting walk at McQuoids Hill, Kambah, led by Michael Robbins. Short, guided nature walks are proving popular. Photo by Esther Gallant





A working group at the 2019 forum. Photo by Rod Griffith

So, what has been achieved since then? Are we on track?

Membership: Our membership is rising. In the past 2 years we have signed up more than 150 new members, representing around 40 per cent of total membership. It has been encouraging to see younger members in the 35 – 55 and under 35 age group joining. Actions to achieve this outcome include:

Social and other media: Since late 2019, we have focussed on building our social media presence. Our revitalised Facebook page has over 4000 followers and our following on our new Instagram and Twitter accounts is growing. Many new members indicate that they found us on social media. An online membership application process introduced in early 2020 has made joining NPA ACT easier.

The Bulletin has been revamped with a vibrant new design and layout and expanded editorial input – readers have applauded the changes. Our website continues to evolve.

Special events: To raise our profile with younger age groups, in 2020 we held a successful environmental photography competition for 15 to 35-year-olds that attracted about 80 entrants and more than 200 photographs. It received extensive local media coverage and boosted our social media following. Winners were offered a year's free NPA ACT membership, several of them taking it up.

Outreach: We have strengthened direct outreach to new members through a newly created member liaison position and follow-up by activity conveners to encourage them to become active. This has been particularly effective in attracting new participants to work parties.

Opportunities to engage directly with the public through open days and other events were curtailed for much of this year and last because of COVID-19 restrictions. We have a new set of

materials, including custom-designed marquee and banners, ready for when normal festival and open-day activity resumes.

Outings and work party programs: Our outings program includes an expanded range of NPA's popular guided nature walks and cultural excursions. Efforts to recruit a new generation of walks leaders are also starting to pay off, and our outings list is expanding.

Work parties are drawing in new and some younger participants, with the 2020 bushfires appearing to be the catalyst for some who want to do their bit to restore Namadgi. The program is moderately strong and improving, with a level of enthusiasm among new participants that has not been seen for years. The call for new leaders has started and new members appear keen to fill any looming shortages in the general program.

Speakers: Our program of monthly speakers and an increased focus on engaging with Indigenous culture have attracted new members and growing audiences including non-members. Feedback indicates that they are learning useful and important environmental and cultural information. Advertising some talks on social media has helped.

Environmental advocacy and education: Support for environmental and education campaigns includes current efforts to save the North Lawson Grasslands from a housing development, and for

the Invasive Species Council's Reclaim Kosci and NPA NSW's opposition to proposed increased commercialisation of Kosciuszko National Park. We are making significant scientific contributions through activities such as the Rosenberg's Goanna project.

Fence removal. Work parties are attracting enthusiastic newcomers. Photo by Rupert Barnett

We continue to build and maintain productive relationships with ACT politicians. The practice has been to seek, after each ACT election, meetings with new and returning ministers and Opposition members with environmental responsibilities. These meetings help establish our environmental credentials and build influential relationships with key

> MLAs and ministers. Most respond readily to our invitation to join us on a short, guided walk in Namadai.

We have begun updating our policies to reflect our changing

world in areas including climate change, fire management, Indigenous reserve management, and environmental offsets - and will engage members in the process. Our social media platforms are an opportunity to inform and educate members and supporters on environmental matters and, through a mix of entertaining posts and articles about issues in our region, to promote an appreciation of nature.

We need to continually identify and mentor potential new leaders to secure the future of the organisation'

Searching for butterflies in the Aranda bushland. Photo by Esther Gallant



What still needs to be done

Another issue raised at the forum is future leadership. Many of our current leaders have been contributing for many years. We need to continually identify and mentor potential new leaders and recruit them to the management committee to secure the future of the organisation.

Overall, we can take pride in some impressive gains since the 2019 forum. But we cannot afford to ease off. We need to be open to new ideas and to continue to develop new experiences to retain our current members and attract new ones.

But most of all, we need to be hard-headed in continuing to look at what we do and how we do it if we are to remain relevant, effective and influential in protecting our national parks, wilderness areas and natural spaces for future generations.

Esther Gallant and Cynthia Burton contributed to the preparation of this article.

Nature in winter

Lockdown claims photo competition

These photographs by NPA ACT members have been selected from entries received for the proposed *Nature in Winter* exhibition.

Unfortunately, the exhibition had to be cancelled because fewer submissions than expected were received – most likely attributable to the COVID-19 lockdown in the ACT and NSW.

NPA photographers were invited to submit two images on the theme of 'Nature in Winter'. The most popular images were to have been chosen by an online poll of all NPA members.

'While there were many fine images among the submissions, there were not enough to make "judging" by members or public exhibition practicable or worthwhile,' co-organiser of the event Ed Highley said. 'We thank all our members who contributed images and who gave the project their best shot.

'We are extremely disappointed at how things turned out but it seems that circumstances were against us.'









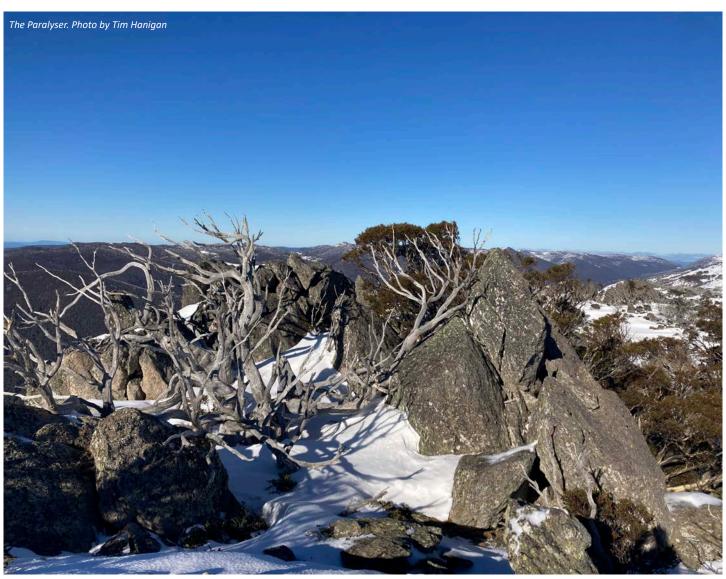
















Tidbinbilla Nature Reserve turns 50

After surviving fires, floods and a pandemic, Tidbinbilla Nature Reserve turns 50 and is ready for whatever the future holds, says John McRae.

Fifty years ago, on 11 November 1971, Tidbinbilla Nature Reserve was gazetted under the *Public Parks Act (1928)*. It feels like a long time ago and most of the current staff would not have been born then (I was).

Tidbinbilla Valley has a rich history steeped in far deeper time. That sweeping

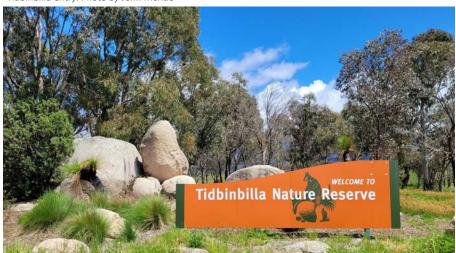
arc of mountains strewn with granite tors has taken nearly 500 million years to forge. It was once under the ocean. Two million years ago, megafauna like the fabled Diprotodon would have grazed the river flats. Aboriginal

'The last two years have been the strangest and most challenging of the 50 for those of us who work at Tidbinbilla'

occupation dates back at least 25,000 years and European colonisation began around 200 years ago. Tidbinbilla Nature Reserve is just the latest chapter in a very long story that is still being written.

Aerial photos from 1971 show visible fence-lines, vehicle tracks, old farm dams, orchards and a few scattered houses. Over the years, a visitor centre, an education centre, a works depot and some staff houses were built. Artificial wetlands were constructed. Walking tracks and wildlife breeding facilities were developed. Without farming, trees replaced pastures and wildlife returned in abundance. Nature was reclaiming the land. Eagles were reclaiming the sky.

Tidbinbilla entry. Photo by John McRae



Gibraltar Peak – a popular destination for walkers.

Photo by Allan Sharp

Canberra well remembers the devastating bushfires of 2003. That firestorm burnt, melted and roasted everything in its path. Tidbinbilla Nature Reserve took a direct hit. All that was left when the smoke cleared was a black landscape, white bones and memories. All those years of developing

facilities and nurturing the landscape, seemingly gone in a day. Nature is an irresistible force of renewal and destruction that operates on a scale beyond any

plan of management. There were green shoots within a week as there always are.

The past 2 years have been the strangest and most challenging of the 50 for those of us who work at Tidbinbilla. Towards the end of 2019 we were in a severe drought. The reserve was closed to the public because of smoke blowing in from bushfires along the east coast. The wetlands were dustbowls, and the platypus were evacuated to safe havens. Then more bushfires started to the west, and we evacuated more animals: bettongs, koalas, Corroboree Frogs and Brush-tailed Rock Wallabies.

We prepared the Reserve as best we could for the coming flames. There was a moment when it looked like we'd dodged the bullet. A little bit of rain, some fair winds and great work by firefighters in NSW. Then a military helicopter landed in the Orroral Valley and set fire to Namadgi. That was the fire that eventually came for Tidbinbilla. Another huge effort by firefighters slowed its progress. A torrential downpour put it out. The fire season and the drought ended in the same week. It hasn't stopped raining since.



In early 2020 we started to bring the animals back and preparing to open the park. There was a huge sense of relief that most of Tidbinbilla had escaped the fire. It would be a vital refuge for wildlife from surrounding areas and a sanctuary for the people of Canberra. Then came the floods and one of the wettest years in a decade. Super-cell storms flattened fences and washed away roads. Rain and gravity are still shaping this landscape as they have done forever. Then COVID-19 arrived! We'd barely opened the gates and we had to slam them shut again. The pandemic has dominated our days ever since. Lockdowns and quarantine and COVID tests and masks. We cancelled the events we'd planned for our 50th. Maybe we'll hold a 51st in 2022. Maybe

TNR manager John McRae. Photo by John McRae

there'll be a meteor strike and it'll be cancelled. Who knows?

As I write, Tidbinbilla is open. People are back in droves. The creeks are full, and the mountains are calling. Spring is a fabulous time in the valley. A feast for the senses. After 50 years, Canberra's most beloved destination is thriving and ready for whatever the future holds.

John McRae is manager at Tidbinbilla Nature Reserve (TNR)

Historic homestead Nil Desperandum. Photo by Allan Sharp





Tidbinbilla: nature for all ages

It would not have been too many years after Tidbinbilla Nature Reserve opened that we made the first of our many visits there. The early trips were invariably family affairs with friends and young children, taking in short walks before picnicking on the flat below where the adventure playground now stands. Even without a playground, there was plenty of adventure for the kids in those days too, close up with the resident kangaroos, emus, echidnas, lizards and other bush denizens.

Emblazoned in my memory is the day on which an emu emerged from the scrub and made off with the ball that

the kids were playing with. They were nonplussed by this, maybe their first encounter with 'real' wildlife. Likewise the emu, I guess, when the 'egg' refused to hatch.

In more recent times, we have introduced our grandchildren to the joys of Tidbinbilla and it has become a destination familiar to them. For my own part, I well remember the several NPA and other walks I've taken in the reserve, perhaps the most memorable being, for a range of reasons, that to the summit of Mount Domain. So, three generations of my mob are thankful – along with tens of thousands of others I'm sure – for that day in November 1971 that saw Tidbinbilla open its gates.

Ed Highley

'A new way of working together'

From controversial beginnings, the Ginninderry Conservation Trust is working to create a community based on conservation values. Allan Sharp reports.

Reconciling the demands of a huge housing development with the need to protect an environmentally sensitive area is a challenge that David Maxwell has taken on with enthusiasm.

As project manager for Riverview Developments ACT, David's role is to coordinate the needs of the urban and conservation areas of the Ginninderry Joint Venture.

The Ginninderry development is a joint venture between Riverview Developments and the ACT Government to develop residential suburbs on the western edge of Belconnen and into adjacent land in New South Wales.

In a presentation to NPA ACT's general meeting in September, David outlined the work of the development and Trust and their plans.

After conceiving the Ginninderry project in 2006, David said Riverview developed a vision to create a model sustainable community that respected local, global and environmental principles.

Using the Green Building Council of Australia community star rating system, the project is assessed every 5 years. On its latest audit it scored a 6-star rating for World Leadership and 84 points. Six-star ratings are awarded for projects that achieve 75+ points and are the highest rating awarded.

Conservationists have argued that the project, which will eventually have 11,500 homes - 6,500 in the ACT and a further 5,000 on the NSW side - is a threat to the flora and fauna of the area, which is bordered by the Murrumbidgee River and Ginninderra Creek.

Because part of the development site contained endangered species, the development also needed Commonwealth approval under the Environment Protection and Biodiversity Act. A condition of approval was a requirement for a land management governance regime. This ultimately resulted in the creation of the Ginninderry Conservation Trust as a separate, not-for-profit organisation. Its role is to oversee a 590-hectare corridor of land set aside for conservation along both the ACT and NSW eastern sides of the Murrumbidgee River.

This decision also resulted from the Ginninderra Falls Association's aspiration to have the area declared a national park. Although the NSW Government did not support the idea, it recognised the area's high conservation values and suggested that it be managed through a conservation trust or conservation agreement..

Trust staff share office space with Riverview, ensuring a lot of crossfertilisation of ideas, David said. As well as the staff, the Trust has an 11-member board comprising four community representatives, three from the ACT Government, two from the Ginninderry Aboriginal Advisory Group (GAAG), one from the Yass Valley Council, and one from the Joint Venture.

Developing and managing the conservation corridor requires ongoing research and compliance with changing bushfire management standards. Through GAAG, there is also consultation with local Indigenous communities on cultural and heritage values, and with the ANU on European heritage in the corridor.



Venture assists and funds the Trust to undertake infrastructure works such as tracks, trails, a visitor centre and other facilities to ensure the Trust can operate in perpetuity.

The Trust recently opened its first walking trail, a 3 km walk the length of Ginninderry, across the top of the escarpment and down to Shepherds Lookout.

A Trust research group meets quarterly to consider submissions for citizen science projects. Projects already occurring include water quality monitoring and restoration of waterways; monitoring of the vulnerable Pink-Tailed Lizard and Little Eagle; fox management; snake relocation; DNA studies; and experimenting with native grasses for resowing.

'Consultation has been a big part of the project, and we work with community organisations,' David said. 'Ginninderry is a new way of working together, and it's interesting that many people are moving there because of the sustainability vision.'

A milestone project will be to have the Trust re-open and manage Ginninderra Falls, which is within the NSW section of the corridor, by 2025. This popular scenic spot has been closed to the public since 2004 following liability concerns.

Dr Jason Cumming, CEO Ginninderry Conservation Trust, with Greening Australia.



Snake monitoring: from L to R: Millie Sutherland-Saines (Woodlands and Wetlands Trust), Rachel Eland and Tyson Powell (Ginninderry Conservation Trust), and Gavin Smith (Canberra Snake Tracking Project). Photos supplied by Ginninderry Conservation Trust



NPA Bulletin - Vol. 58, No. 4 - December 2021

NPA people

My 20 years as an NPA volunteer

The amount of unpaid work waiting to be done is enormous, and there are many ways to volunteer. Brian Slee reflects on his 20 years as a volunteer with the NPA.

I planned to begin volunteering when I retired in 2001 but drifted into it earlier through the ACT NPA.

The NPA was involved with the Gudgenby Bush Regeneration Group's project to rehabilitate Boboyan Pine

Forest after it was clear-felled, burnt and reseeded with native species. The effort to rid it of pine wildings took ages but we had a clear objective, the work was good exercise, and we enjoyed each other's

decades in lovely Gudgenby

As wilding numbers dwindled, our attention turned to other exotics such as briars, blackberries and hawthorns. Additional activities have included tree planting, erosion control and fence removal.

company every month for

'For me volunteering is essentially

about physical activity, doing

something useful in the environment

rather than complaining about neglect'

Following the 2003 bushfires, the NPA revived its program of work parties. Under government direction, we have been involved in numerous monthly outings in a variety of projects of short and long duration. These include Blundells Flat, where hundreds of large pines and thousands of poplars were lopped; Upper



Double protection: Brian on a quad at Dananbilla Nature Reserve. Photo: Rupert Barnett

Cotter valley; Naas Valley; Glendale, where large areas were cleared of briars; Rendezvous Creek valley, where many kilometres of fencing were removed; several arboreta, where both native and exotic species were controlled; and south of Brayshaws Hut, where a continuing battle is waged against invasive broom.

A separate program, led by NPA's Col McAlister, concerned the restoration of Glenburn historical precinct, east of Kowen Forest. Stretching over many years until 2018, I attended most of the four work parties per year. Memorable activities included mortaring to stabilise a ruin and construction of walking tracks.

In 2013 the NSW Parks Service sought NPA assistance in restoring endangered grassy woodlands in Dananbilla, Illunie and Koorawatha

Nature Reserves, north of Boorowa. I attended the 19 work parties (51 days, and continuing) in which we initially removed farm fences but later seeded areas, planted trees and undertook erosion control.

In addition to volunteering for work parties, it has given me pleasure to lead NPA walks for the past 22 years and to contribute regularly to the NPA Bulletin, including as one of its editors.

Apart from organised volunteering, since 2001 I have undertaken activities in a Canberra suburb to eliminate graffiti, collect rubbish, free paths from obstructions, and remove weeds. It occupies many hours a week.

Learning from others

Volunteers never stop learning. Rangers are invariably knowledgeable, competent and affable. Similarly, the work attracts fellow volunteers with practical skills and often with scientific or technical qualifications related to the environment. Volunteers also pick up practical skills when organising for work, particularly in remote areas, in tackling off-road driving or preparing to camp out.

For me volunteering is essentially about physical activity, doing something useful in the environment rather than complaining about neglect. With any task I persist until I finish or accept that there is either no end or the end is not worth pursuing. Then I start something else. Fortunately, there are many like-minded, easy-to-get-along-with people willing to share chores and pool talents.

The is an edited version of a contribution Brian made to an ACT government website to promote volunteering in the environment.

Scorecards aim to boost health of national parks

A world-leading ecological program aimed to boost the health of national parks was launched in September by NSW Environment Minister Matt Kean. The program will use scorecards to provide the public with regular databased reports on the health of major national parks by tracking key ecological indicators.

Minister Kean said the \$10 million program was a critical investment in the science required to develop a world-leading framework of the largest ever systematic program of ecological survey and monitoring for the NSW national parks estate.

'We need to know if the measures we are undertaking, whether feral pest and weed control or the management of fire, are improving outcomes for our native plants and animals, many of which are threatened with extinction,' he said.

The scorecards initiative will start with the design of an initial monitoring framework for Kosciuszko National Park and the Royal National Park. Teams led by renowned conservation ecologists, ANU's Professor David Lindenmayer and UNSW's Professor Richard Kingsford, will help design the framework. The first four-year phase of the program will cover 30 per cent of the NSW national park estate, including also the Greater Blue Mountains World Heritage Area, Macquarie Marshes, Myall Lakes, the Pilliga, part of the Gondwana Rainforests World Heritage Area and the Sturt-Narriearra Caryapundy Swamp National Park complex.

When fully implemented, the scorecards will enable everyone to track the health of their favourite national park, Mr Kean said. The initial scorecards are expected to be published in late 2022.

Connecting to Country

Gamilaroi man Aaron Chatfield owns and operates Dreamtime Connections, a company connecting schools and community groups to Indigenous culture. He presented to an NPA ACT general meeting earlier this year. He talks to NPA Bulletin about his work.

Can you tell us about your early days?

I grew up in Narrabundah, Canberra, with most of my family, who had all moved from Yass in the 80s, close by. Before the Chatfields settled in Yass between the mid 60s and mid 80s we came from Gamilaroi country, Gulargambone and Coonabarabran. We were descendants of 'Queenie' Mary Jane Cain who started the Aboriginal reserve 'Burrabeedee' in 1892 after writing to Queen Victoria, who granted her the land on which many other Aboriginal families in the area settled.

When did your interest in bush foods and other aspects of your culture start?

I've always had a strong sense of pride in my culture and learnt many things off the elders in my family but not nearly as much as I know now and have learnt, especially over the past 7 or 8 years.

After finishing school, I got a job as a road worker, but decided it wasn't for me. I was seeing the cool things my dad was doing working with ACT Parks with the Murrumbung Rangers, like working in the bush and going up in helicopters and fighting fires. I thought that's something I'd like to do, not knowing how much Indigenous cultural techniques

would be implemented, such as traditional fire and plant knowledge.

'Schools seem to have finally embraced Indigenous culture and are teaching it through all the subjects now'

My dad encouraged me to enrol in the Land Conservation and Management course at Bruce CIT. Greening Australia ACT gave me a job as a casual tree planter and I slowly gained more roles and responsibilities. I was working with Adam Shipp, another Indigenous bush tucker guru in the ACT, who taught me a lot. Greening Australia then employed me full-time as an Indigenous engagement and training officer as well as a project officer in the Yass Area.

At Greening Australia, I worked in many places around the ACT and NSW seeing and learning about different landscapes and Indigenous culture. What I'm doing now, running cultural workshops in schools, was something my father was doing back in 2000–01. Schools seem to have finally embraced Indigenous culture and are teaching it through all the subjects now, from art to cooking class to geography and sports.



Aaron showing a visitor a stringy bark tree at Mulligans Creek

How useful was winning the ACT Youth NAIDOC Award for Environment to creating wider interest in your work?

When I won the award, I was pretty much the only Indigenous youth working in the environmental sector in the ACT. It might be a little harder now because there are so many Indigenous youth embracing their culture and working on Country. The interest in my work comes from my work in schools. Word of mouth travels fast in the school community. Kids go home

and tell their parents and siblings about the awesome stuff they've learnt from my workshops. Teachers tell other teachers in other schools.



Aaron Chatfield: 'I've always had a strong sense of pride in my culture.' Photos by Belco Arts Group

What inspired you to start Dreamtime Connections?

The plan was for my father and I to go into business together but unfortunately he passed away in May of 2019. I started the business just before he passed as a bit of a final wish for him and to begin a new journey for me.

The focus of the business is to connect people to the Dreamtime or to Country and Culture. I work a lot in schools and with young people where I think I can really make a change. When I was at school there was hardly any learning about my culture or on Country. Everything was in class and the taste of culture we got each year was around NAIDOC Week where we might have a bit of kangaroo and do a bit of Aboriginal art or watch an Indigenousthemed movie. Now I'm running programs for Indigenous and non-indigenous kids together, going out on Country once a week using traditional Indigenous knowledge to learn about land management and conservation. Requests from schools, community groups, businesses and the community in general to learn more about our Indigenous heritage are growing significantly. And I believe all schools around Australia are starting to embrace it.

How can organisations like the NPA ACT engage more closely with our Indigenous culture?

By working and walking with us. By engaging with local, small Indigenous businesses like mine and with other local Indigenous community groups wherever you can. Hear and learn our stories, invite us to your outings on Country and hear and act on the voices of the Ngunnawal people, especially when it comes to sacred sites and conserving them.

NPA outings program

Bushwalk grading guide December 2021 – March 2022

Distance grading (per day) Terrain grading

1 up to 10 kmA Road, fire trail or trackE Rock scrambling2 10 km to 15 kmB Open forestF Exploratory

3 15 km to 20 km C Light scrub

4 above 20 km D Patches of thick scrub, regrowth

Day walksCarry lunch and snacks, drinks, protective clothing, a first aid kit and any required medication. **Pack walks**Two or more days. Carry all food and camping requirements. CONTACT LEADER EARLY.

Car camps Facilities often limited. Vehicles taken to site can be used for camping. CONTACT LEADER EARLY.

Work parties Carry items as for day walks plus work gloves and any tools required. Work party details and location sometimes

change, check NPA website, www.npaact.org.au, for any last minute changes.

Other activities include ski trips, canoe trips, nature rambles and environment or field guide studies.

Short notice walks To volunteer to lead a short notice walk, or to have your name added to the short notice walks alert list, email outings@npaact.org.au

Wednesday walks (WW) Medium or somewhat harder walks arranged on a joint NPA, BBC (Brindabella Bushwalking Club) and CBC

(Canberra Bushwalking Club) basis for fit and experienced club walkers. Notification and details are only emailed to members registered for WW. Only NPA-hosted WW are shown in this program. For WW email registration, contact the

Outings Convener, outings@npaact.org.au.

Transport The NPA suggests a passenger contribution to transport costs of **40 cents per kilometre** for the distance driven divided

by the number of occupants of the car including the driver, rounded to the nearest dollar. The amount may be varied at the discretion of the leader. Drive and walk distances shown in the program are approximate for return journeys.

NPA ACT members undertaking walks or other activities in this program are advised they should have **PRIVATE HEALTH INSURANCE** or, at least, **AMBULANCE COVER** in case of an accident requiring evacuation by ambulance or helicopter.

Points to note:

Please help keep our outings program alive by volunteering to lead outings. New leaders are welcome. The *Outings Convener* is happy to suggest locations suitable for a walk if you do not have something in mind. Feel free to send in suggestions for outings with a suggested date to the Outings Convener by email to outings@npaact.org.au.

All persons joining an outing of the *National Parks Association of the ACT* do so as volunteers in all respects and as such accept responsibility for any injury howsoever incurred and the National Parks Association of the ACT, its office bearers and appointed leaders, are absolved from any liability in respect of injury or damage suffered whilst engaged in any such outing.

In voluntarily participating in these activities conducted by the NPA ACT, participants should be aware that they could be exposed to risks that could lead to injury, illness or death or to loss of or damage to property. These risks could include but are not limited to: slippery and/or uneven surfaces, rocks being dislodged, falling at edges of cliffs or drops or elsewhere, risks associated with crossing creeks, hypothermia, heat exhaustion and the risks associated with any of the Special Hazards listed on the *Attendance Record and Risk Waiver Form* provided by the leader at the activity.

To minimise these risks participants should endeavour to ensure that the activity is within their capabilities and that they are carrying food, water, equipment, clothing and footwear appropriate to the activity. Participants should advise the leader if they are taking any medication or have any physical or other limitation that might affect their participation in the activity. Participants should make every effort to remain with the rest of the party during the activity and accept the instructions of the leader. By signing the Attendance Record and Risk Waiver Form participants agree that they understand these requirements and have considered the risks before choosing to sign the form and waiver any claim for damages arising from the activity that they might have against the association, the leader or any other participants in tort or contract.

Children under 18 years of age are welcome to come on NPA ACT activities provided they are accompanied by a parent, guardian or close relative who will be required to sign a specific Risk Waiver for a Child form.

Check-in/Emergency contact:

Leaders can borrow the NPA's Personal Locator Beacon (PLB) from Brian Slee, 6281 0719, brianslee@iprimus.com.au. In the event that an outing party returns late, the first point of contact for concerned family members is NPA's Check-in/Emergency Contact Officer, not the police or National Parks service.

To check the status of an overdue walk, contact Mike Bremers, 0428 923 408, outings@npaact.org.au or Brian Slee (contact as above). Leaders should check in by contacting the Check-in Officer (text or email will suffice) at completion of outing. Leaders should also email their signed ATTENDANCE RECORD AND RISK WAIVER FORM to Brian as above.

COVID-19 arrangements:

The following information sets out the current arrangements for outings in the NPA ACT walks program under restrictions on community activities introduced by the ACT Government aimed at reducing the risk of transmission of the COVID-19 virus. Walk descriptions will not always contain a meeting place or time, with this information being made available by contacting the leader. Walkers wishing to participate in a walk need to read these arrangements and the risk waiver on the Attendance and Risk Waiver form available at https://www.npaact.org.au//res/File/2017/Attendance%20Form(2017).pdf, then contact the leader to register, providing their name and a contact phone number.

Walkers are advised that they should not register with the leader (or attend the walk) if they have or have had flu-like symptoms such as a fever with a cough, sore throat or shortness of breath in the previous 2 weeks. For further information see the ACT Government COVID-19 website (https://www.covid19.act.gov.au/). Walkers are reminded that social distancing requirements will be in force on the walk and they are expected to practise good hygiene.

Participation in the walk will be considered acceptance of these arrangements and the risk waiver.



NPA outings program December 2021 – March 2022 (page 2 of 4) 4-5 December Talbingo canoe trip Maps: Ravine, Yarrangobilly Paddle 4 km from 'Sue City' (O'Hares Rest Area) to campsite on 1:25,000 Canoe trip Talbingo Reservoir. Options for afternoon and next morning Grading: Easy flatwater include swimming or paddling (down reservoir or into Drive: 480 km, \$192 per car Yarrangobilly Arm). Beautiful location suitable for beginners. BYO Leader: Mike Bremers canoe or kayak. Contact leader by 1 December. Contact: 0428 923 408 or mcbremers@gmail.com **5 December** The Border and Settlers Track Map: Cotter Dam 1:25,000 Sunday walk Meet at Kambah Village Shops car park at 8:30 am. A walk Grading: 1A/B/C following the southern ACT border from Boboyan Road to Scabby Drive: 170 km, \$68 per car Range Nature Reserve and returning mostly on the Settlers Track. Leader: Steven Forst Partly on track with a few off-track link ups. Contact: 0428 195 236 or steven.forst@iinet.net.au 11 December **Gudgenby Bush Regeneration Group** Leader: Doug Brown Saturday work Control (cutting and dabbing) of woody weeds in the vicinity of Contact: 6247 0239 or party and Gudgenby Cottage and Homestead (to be followed by Christmas kambalda@tpg.com.au **Christmas** Party at the cottage). Car-pooling available for the journey there and tools will be provided. Meet at Namadgi Visitor Centre at **Party** 9am. Contact leader for registration arrangements. 12 December **NPA Christmas Party** Sunday At Namadgi Visitor Centre we are planning to have an outside Contact: picnic beginning 11:30 am. Bring your own picnic lunch, drinks Sonja Lenz 6251 1291 and a chair if possible. Please check website or Burning Issues for (if you need a lift) any changes and more details closer to the date. 18-19 **Horse Gully Hut** Map: Colinton 1:25,000 An easy overnight bike packing ride on fire trail through Naas Grading: 1A **December** Valley starting from Mount Clear Campground. Ride will start Leader: Mike Bremers Pack ride/walk Saturday afternoon with a return to cars Sunday morning. Drive Contact: 0428 923 408 or yourself to start point. The ride is 8.5 km one way, 100-150 m mcbremers@gmail.com climb. Suitable for mountain bikes or similar. Walkers also welcome if numbers allow. Contact leader by Friday 17 December. **Late December Short Notice Walks** We hope to offer some short notice walks in this period. Email into January outings@npaact.org.au to join the short notice/weekly outings email list. **TBA January** Snowy Flat bog work Drive: 130 km, \$52 per car The NPA conducted a work party at this site in January 2021. Work party Leader: Michaela Popham However, the work was not completed. This work party will Contact: 0413 537 333 continue the task under the guidance of PCS staff. All materials will be provided, just bring gloves. The date of the work party will be confirmed closer to the event and advised per the short notice system. Meet at Dillon Close, Weston (across Namatjira Drive

from McDonald's) at 7:30 am.



walk

Kama Woodlands

A morning walk in one of the ACT's woodland reserves where there is usually lots of bird activity. Stroll down towards the Molonglo to visit the nearby heritage listed limestone outcrop above the river. 8 am start to avoid potential summer heat. Meet at Kama Woodlands car park off the northern (Hawker) side of William Hovell Drive.



Contact leader, preferably by email, to register by Friday 7 January.

Map: Canberra 1:25,000 Grading: 1A/B Leader: Rod Griffiths Contact: 0410 875 731 or rod.blackdog@gmail.com





Big Brassy, Bar Ridge and beyond

Walk starts from Guthega Power Station and will explore the area east of Gungartan, including Finns Swamp, Bar Ridge, Dead Horse Creek and the Brassy Mountains. Mostly off-track, rock scrambling and patches of regrowth to negotiate. Suitable for experienced off-track pack walkers. Limit of 8.

Contact leader, preferably by email, by Friday 7 January.

Maps: Geehi Dam, Jagungal

1:25,000

Grading: 2A/D/E/F

Drive: 420 km, \$168 per car Leader: Philip Gatenby Contact: 0401 415 446 or philip.gatenby@gmail.com

NPA outings program December 2021 – March 2022 (page 3 of 4)				
15 January Saturday walk	Butterfly walk Suzi Bond will lead a butterfly walk for NPA. Meeting time and place will be supplied closer to the date. Limit of 10 participants.	Leader: Suzi Bond Contact: Sonja Lenz sonjalenz67@gmail.com		
16 January Sunday morning walk	Circumnavigating Mount Mugga Mugga Meet 8:30 am Callemonda Rise, O'Malley, near intersection with Akame Circuit (UBD map 78, Q2). After quick look at Scrivener Hill, climb east over Isaacs Ridge and descend towards Mugga Lane. Continue north and climb west, parallel to Hindmarsh Drive, with great views over Canberra. 6 km, a couple of steep climbs. Brunch Mawson. Will only proceed if forecast max is below 29°C.	Map: Canberra 1:25,000 Grading: 1A/B/C Leader: Brian Slee Contact: 6281 0719 or brianslee@iprimus.com.au		
23 January Sunday walk	Glendale to Orroral Valley Meet at Kambah Village shops for 8:30 am departure. A walk into Orroral Valley from Glendale picnic area near Glendale Crossing. The walk follows Orroral River through to Orroral Valley picnic area then into the large open Orroral Valley, returning via the heritage trail and site of the Orroral camping ground. Walk is mainly off-track and includes a couple of river crossings. 14 km, 260 m climb.	Map: Rendezvous Creek 1:25,000 Grading: 2B/E/F Drive: 82 km, \$32 per car Leader: Steven Forst Contact: 0428 195 236 or steven.forst@iinet.net.au		
6 February Sunday walk	Enchanted Hill Meet at electricity substation off Callister Cres, Theodore, at 9 am. A partly on-track, off-track 12 km walk with about 350 m of climb. The route will follow a management trail, cross Monaro Highway and the railway track (ACT/NSW border) then climb to top of Enchanted Hill for lunch. Return via railway track to railway memorial, Tuggeranong Creek, the Aboriginal axe grinding grooves then back to cars by the Theodore Management Track. Limit of 12, book with leader 5 days prior to event.	Map: Tuggeranong 1:25,000 Grading: 2A/B Leader: Mike S Contact: 0412 179 907 or msmith@netspeed.com.au		
12 February Saturday work party	Gudgenby Bush Regeneration Group Control (cutting and dabbing) of woody weeds at site to be determined in Gudgenby Valley. Car-pooling available for journey there and tools will be provided. Meet at Namadgi Visitor Centre at 9 am. Contact leader for registration arrangements. NB: Work party is dependent on weather being suitable for control activities and is subject to cancellation.	Leader: Doug Brown Contact: 6247 0239 or kambalda@tpg.com.au		
12 February Saturday walk	Monga Nature Reserve Park near entrance to Nature Reserve then walk along 2 km of forest road, ascend through a flora reserve with old tree ferns, then about 2.5 km of fire trails, and descend through what is hoped will be recovering <i>Euchryphia</i> rainforest. Good walk for February since it is well shaded. Probably 4 patches of thick scrub on the way, lasting about 15 minutes each. Some steep rubbly slopes. About 8 km all up, main climb and descent 200 vertical metres. Limit of 12.	Map: Monga 1:25,000 Grading: 1D Drive: 230 km, \$92 per car Leader: Linda Groom Contact: 6281 4917 or lbgroom@gmail.com		
20 February Sunday morning walk	Brown Trig Meet 8:30 am at Uriarra Road, 4.5 km NW of Opperman Ave (park south of road, opposite Spring Valley turnoff) (822923 on Canberra 1:25,000). Follow tracks south around Mount Stromlo to Brown Hill for fine views west. Return lower route. Morning tea Denman Prospect. 9 km, gentle climbs. Will only proceed if forecast max is below 29°C.	Maps: Canberra, Cotter Dam 1:25,000 Grading: 1A/B Leader: Brian Slee Contact: 6281 0719 or brianslee@iprimus.com.au		
26-27 February Work party	Upper Cotter Briar Rose control NPA has not worked in this area since 2018. The activity will concentrate on briar and broom control in the vicinity of Cotter Hut and the adjacent flats – details to be confirmed. The work party will involve an overnight stay, so numbers are limited by the in-hut accommodation. Call leader by 23 February for bookings and meeting arrangements.	Drive: 94 km, \$38 per car Leader: Martin Chalk Contact: 0411 161 056		

NPA outings program December 2021 – March 2022 (page 4 of 4)

27 February Sunday morning walk

Australian National University sculptures

An easy stroll through the ANU grounds to view some of the wonderful sculptures. A leisurely 3 hours with optional lunch at conclusion. Meet 9 am outside the Street Theatre in Childers Street. Contact leader, preferably by email, to register for walk and optional lunch by Friday 25 February.

Leader: Rosemary Hollow Contact: 0413 977 708 or rosiehollow@gmail.com

5 March Saturday walk

Corang circuit

From Wog Wog entrance to Morton National Park we follow track to Corang Peak for great views, and then scramble down Conglomerate Slope to Canowie Brook and continue to Many Rock Ribs on Corang River. Return to Wog Wog downstream from here. The walk, which will take about 8 hours, is mostly on track or footpad, some of which may be overgrown. Distance 25 km and total climb about 650 m. Early start essential. Limit: 8. Contact leader, preferably by email, by Thursday 3 March.

Drive: 220 km, \$88 per car Map: Corang 1:25,000 Grading: 4/A/D/E Leader: Philip Gatenby Contact: 0401 415 446 or philip.gatenby@gmail.com

6 March Sunday walk

Tuggeranong Hill

A walk in two parts, sort of. Initially from the electricity substation off Callister Cres, Theodore, climb NW up and over Tuggeranong Hill and return to substation on the management track around back of Conder. About 5 km with 160 m climb, mostly on track or rocky footpad. From substation then travel NE, climb about 100 m to another unnamed summit and continue off-track to the aboriginal axe grinding grooves near Monaro Highway at the northern extent of Theodore. Return to cars via the management track at the back of the houses. Meet at electricity substation off Callister Cres, Theodore, at 9 am. Limit of 12, book with leader 5 days prior to event.

Map: Tuggeranong 1:25,000 Grading: 2A/C Leader: Mike S

Contact: 0412 179 907 or msmith@netspeed.com.au

12 March Saturday work party

Gudgenby Bush Regeneration Group

Control (cutting and dabbing) of woody weeds at site to be determined in Gudgenby Valley. Car-pooling available for the journey there and tools will be provided. Meet at Namadgi Visitor Centre at 9 am. Contact leader for registration arrangements.

Leader: Doug Brown Contact: 6247 0239 or kambalda@tpg.com.au

12-14 March Pack walk

Broken Dam Hut

A two-night pack walk into Broken Dam Hut with possible visits to the site of Four Mile Hut (destroyed by fire) and Tabletop Mountain.

Maps: Cabramurra, Denison 1:25,000 Grading: 2A/B Drive: 428 km, \$42 pp Leader: Steven Forst Contact: 0428195236 or steven.forst@iinet.net.au

19 March Saturday walk

Blundells Flat to Mount Coree

A walk up the south-eastern spur of Mount Coree, following the old route described in CBC's 1974 book, *Bushwalking Near Canberra*. 650 m of climbing, first on fire trail, then off-track. Some scrub. Morning tea with great views from Mount Coree. Descend via ACT/NSW border to Curries Road to head back to starting point. Contact leader, preferably by email, for meeting place and time by Friday 17 March.

Map: Cotter Dam 1:25,000 Grading: 2A/D/E/F Drive: 60 km, \$24 per car (if car-pooling is in place) Leader: Rod Griffiths Contact: 0410 875 731 or rod.blackdog@gmail.com

20 March Sunday morning walk

Exploring Parliament House surrounds

Remnant vegetation, historic remains and roses: exploring the surrounds of Parliament House. 3-4 hours, 8 km. Optional lunch at conclusion. Meet at 9 am on left hand side of front forecourt of Parliament House. Contact leader, preferably by email, to register for walk and optional lunch by Friday 18 March.

Leader: Rosemary Hollow Contact: 0413 977 708 or rosiehollow@gmail.com

26 March Work party

Pryors Hut area Pine control

The NPA last visited this site in 2014. The old pine arboretum adjacent to Pryors Hut continues to be a source of wilding pines. This work party will locate and/or remove the wildings (depending on size of individual trees). Hand saw and loppers will be provided, just bring gloves. Meet at Dillon Close, Weston (across Namatjira Drive from McDonald's) at 8 am.

Drive: 130 km, \$52 per car Leader: Brian Slee Contact: 6281 0719 or brianslee@iprimus.com.au



Last winter, when we were still able to venture into neighbouring parts of NSW from the ACT, I decided to make a socially distanced project of visiting nature reserves within 100 km of home. After wandering around google maps with my curser, I discovered Mundoonen Nature Reserve and the nearby Bango Nature Reserve.

One wintry morning, we set off for Mundoonen, with only the dimmest idea of what was in store. We headed for Yass, then turned right towards Goulburn along the Hume Highway. Around 9 km after this turn, with Mount Mundoonen on the left hand side, we took the turn into Sheldrick's Lane on the left. This is actually part of the old Hume Highway. A few hundred metres along, there is an underpass for animals moving through the reserve, through which it is possible to access the southern and largest part of the Mundoonen Nature Reserve.

The reserve covers 1,485 hectares, and lies about 70 km north of Canberra. It was gazetted as a nature reserve in 1970 to conserve a remnant of Southern Tableland dry sclerophyll forest, with associated animal and plant communities. A management plan was approved in mid 2005. It is mostly surrounded by cleared land, although some forested land abuts the reserve.

The forest provides habitat for a variety of native animals including the vulnerable Koala and Powerful Owl. Sites of historical significance in the reserve include some charcoal burning pits dating from the 1930s and remnants of the Old Gap Road (the first route of the Hume Highway) constructed in the 1830s on the southern boundary.

On the map, the Mundoonen Nature Reserve has a vaguely sea-horse-like shape, with the Hume Highway splitting it in two at the 'neck'. The reserve covers the Mundoonen Range and has two high points, Margules Trig (792 m) and Gap Range (757 m). The terrain is mostly steep ridges and gullies, with the Mundoonen Range forming the watershed between the Yass and Lachlan rivers. Much of the Mundoonen Nature Reserve is flanked by open forests and woodland in private ownership, bringing the total forested area to around 3,000 ha, with additional pockets of forest along the range to the south. The southernmost corner is quite close to the Yass River.

The Mundoonen Nature Reserve preserves drier vegetation communities on steep, timbered ridges and gullies. Scribbly Gum (*Eucalyptus rossii*) and Red Stringybark

(E. macrorhyncha) are the dominant canopy species, with scrubby understorey species, including Bossiaea and Hibbertia, and some stands of Xanthorrhoea. As with most dry sclerophyll forest, much of the year things may look drab to some eyes. But in the spring, peas, orchids and lilies brighten the forest floor. The Australian Native Plants Society records sightings of Creamy Candles (Stackhousia monagyna), Blue Caladenia orchids (Caladenia caerulea) and many species of peas, daisies and heath in the understorey of the forest. Even in the colder months, I was able to find a species of greenhood orchid. Many species of fungi provide colour and interest in wetter seasons.

Koala sightings in the reserve have been very intermittent, and it seems that their numbers are very much reduced. This is partly due to the direct and indirect effects of a wildfire in 1979 which burnt a significant portion of the reserve. The fire changed the vegetation structure, creating dense thickets of regrowth and possibly reducing the carrying capacity of the reserve for Koalas. The reserve is also home to an estimated 55 species of birds, including the elusive ground-nesting Spotted Quail-thrush. Local citizens have joined with scientists and rangers in a citizen-science project to find out more about the welfare of the populations of Koalas and the Spotted



Charcoal pit - part of Mundoonen's surprising history

Quail-thrush. These species and the general biodiversity of the reserve are at risk from more frequent fires associated with climate change, as well as threats from feral and domestic animal and plant species.

The reserve is not set up to support recreational use, although walkers can traverse several fire trails. A Google search revealed some walking blogs with details of possible walks. Mount Mundoonen is just outside the reserve (817 m)

on its northwest flanks. It is topped by communications towers, accessed by a management road which is not open to the public for vehicular access, but can be used by walkers to climb the 2.8 km to the summit.

The Mundoonen region has some surprising history. We stumbled across the remains of the charcoal pits on one of the ridges not far from the highway. The pits inspired Jane Barker to write a short poem capturing the rough work of charcoal burning at Mundoonen, using timber from the forest in the closed pits. The pits produced charcoal in response to the rationing of petrol during WWII, when it was used to provide an alternative fuel for trucks.

Once produced, the charcoal was stored and transported in disused grain stacks, with a sack of charcoal weighing about 18 kg. The charcoal was used by those who had fitted a charcoal gas producing unit to their vehicle. The charcoal was placed in a box at the rear which in turn produced gas power to the vehicle. There are however many stories of poor performance using charcoal, particularly a loss of power.1

Another interesting piece of local history relates to the opening of the nearby Mundoonen Aboriginal School in 1911. It was established to educate Aboriginal children at the Edgerton Reserve or Edgerton Aboriginal Station, 10 miles from Yass. The reserve was established in 1910 under powers granted to the Aborigines Protection Board to prohibit Aboriginal people from living close to towns and to remove them to reserves outside towns. Aboriginal families living in Yass were relocated to the Edgerton Reserve. The project ultimately failed and the families moved back to fringe-dwelling in Yass. The Mundoonen School was closed in June 1916.² Once back in Yass, Aboriginal families faced discrimination and an ongoing saga of difficulties in the local public school.³

On the northwest slopes of Mount Mundoonen, the not-for-profit cooperative, Crossroads, purchased a property in 1994 on which to establish a model European medieval village. A medieval guildhall was constructed on the site. The site provided a venue for medieval reenactments and events and Easter festivals. The hall was moved and the property was sold in 2018.4

The Mundoonen Nature Reserve is a quietly fascinating place to visit, despite not being developed for recreation use. It has a wild and rugged charm, and its dense forests provide an opportunity to imagine the region's landscape before settlement.

Boronia Halstead

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Left: Calachillus paludosus, or Red Beard Orchid Tetratheca ciliata, commonly known as Pink Bells

Thysanotus tuberosus, or Common Fringe Lily



NPA Bulletin – Vol. 58, No. 4 – December 2021



Cold comfort at Gooandra Hut

Gooandra, Tantangara Plain, Witzes huts

Date: 20-22 June 2021

Participants: Max Smith (leader), Mike Bremers, Stephen Marchant,

Brian Slee

Weather: Cloud cleared first evening for two cold nights; on day three,

high cloud moderated temperatures; occasional breezes.

Poor snow coverage, pandemic restrictions and nervousness about travel made 2020 generally a non-event for snowshoeing. The 2021 season started with good snow but it quickly disappeared, and pandemic concerns re-emerged. Max was still keen to camp in the high country, so it was decided to avoid crowds and head for Kiandra.

Having arrived in Max's Outback at Eucumbene River at 2 pm on winter solstice eve, 6 km north of Kiandra and a km from the highway, what was our situation? Well, almost immediately it was confirmed by a passing walker that Gooandra Hut was unoccupied. SnowyHydro has hardened Gooandra Fire Trail with aggregate so it was apparent that the 4 km walk to the hut would be a stroll. The only snow visible was on the highest peaks.

Less obvious was that the forecast temperature would be severely undercut. The hut has a well-designed chimney which shares its heat with the room. Stephen's bottle of Margaret River red kept us going. But draped in multiple layers inside our cold country sleeping bags, our water bottles froze overnight suggesting it reached about minus 8°C. Hoar frost reached the treetops. Mike had somehow emerged at 3 am to take time-lapse photos of the hut below the Milky Way.

Reclaim Kosci had "commissioned" Mike to gather photographic evidence of feral horse damage, so this was a focus of our outing on day two, a 14 km circuit of Tantangara Plain, crossing Tantangara Creek on a new bridge at its northern end, lunching at Witzes Hut and contouring across slopes on a return southern route. Good walking country.

Horse numbers were significantly down: perhaps mobs had dispersed in response to recent aerial campaigns against pigs and deer. The cumulative damage they cause, however, was stark – trodden streams and embankments, wallows, dung piles – throwing into guestion the very

Feral horses on Snowy Mountains Highway near Klandra

status of Kosciuszko National Park. Several foxes were seen, as were their usual prey, rabbits. Maybe foxes have also deleted hut rodents from the area. SnowyHydro 2 appears set to further damage the national park. Their project was sold as low impact, carefully inserting itself beneath the landscape. However, survey markers suggest multiple surface intrusions are imminent – sheds, pylons, new tracks.

Our second night was less freezing, allowing for better sleep. On the way out we followed the trail before diverting into open country at

Gooandra Creek. A falcon rose into the air. The area is recovering from the 2020 fires; Dossy Carrs Hut, which we came across near the Eucumbene, was unaffected as it had already collapsed.

Despite having a new battery, the car refused

to start until finally responding to Max's portable jump starter an hour later. Hallelujah lithium! We were underway at 11:30 am, only stopping for yummy egg and bacon rolls at Adaminaby Bakery. SnowyHydro is returning vitality to the town.

Brian Slee

Above: Mike Bremers emerged at 3am to take time-lapse photos of the hut below the Milky Way Below: Frozen landscape. Hoar frost reached the treetops







Guthega Ridge

Date: Thursday, 22 July 2021

Participants: Max Smith (leader), Mike

Bremers, Brian Slee

Weather: Cold air; blue sky clouding over in afternoon; occasional breeze.

With parts of Sydney locked down and early snow disappearing, a second successive snowshoe season looked threatened. But following a dump mid-July, we mulled over Max's suggestion for a quick "no touch" excursion and somehow coalesced for the day. An easy 8 km walk on Guthega Ridge, north of the Pondage, was the outcome.

Considering it was minus 8°C at Perisher, a slip-slidey descent to Diggers Creek was anticipated but the Outback held firm and Guthega car park was all sun and snow when we arrived about 9:15 am. Having not settled on a destination, Mike proposed we check out a new area on a track west of the Snowy, downstream from the dam.

While the crevices provided occasional fall-throughs, the surface was squashy firm. The track was mostly level and took us a couple of km north, providing a different perspective on the village and mountains. The riverbed, deprived of water, was a sad mosaic of snow-capped boulders. Eventually the track narrowed beneath a cliff and ended at some sort of Snowy Hydro mini-dam (above Adit Camp on Perisher Valley 1:25,000 map).

After morning tea in a sunny spot, we retraced our steps, climbing to the weather station above the dam before turning right onto the well-trodden track up Guthega Ridge. At 1766 metres, lunch was declared under an

increasingly cloudy sky but in still air. A couple of back country travellers passed by.

The Guthega River side of the ridge had several delights, namely the views from it, particularly over the pondage to Perisher Range, and the

'... a slip-slidey descent to Diggers Creek was anticipated but the Outback held firm' subsequent descent towards the lowlevel bridge. Excited skiers and boarders were dropping from Gills Knobs. Two of us followed the river half a km upstream, checking the best route down and around the choke point [cross to west bank and

return east at bridge]. An olive-green tent occupied a river bend with a lovely view downstream.

The car park was still half full when we returned about 2:30 pm, despite the chairlift being closed all day. Apart from changing drivers at Berridale, we did not stop on the return trip. Traffic in the towns was what might have been expected during non-pandemic times and Monaro Highway was busy. Back at 5:30 pm after a good day in the snow. May there be more to come.

Guthega pondage. Photo by Mike Bremers

Brian Slee



Work party report

Praise for major fence removal effort

Accolades have been flowing for a huge fence-clearing effort by NPA work party volunteers adjacent to Brandy Flat Fire Trail in Namadgi National Park. Senior Ranger Nathan Kay called the effort 'a great result for wildlife and the Park in general', while NPA President Esther Gallant congratulated the teams for clearing a 'mind-blowing amount of fencing'. Work Party Coordinator Martin Chalk reports on the project.

During an NPA work party in 2018 to tackle the briars on Reedy Creek, one of the participants remarked on the unsightly and derelict fences that ran adjacent to the Brandy Flat Fire Trail. They should be removed was his take-home message.

That comment resonated with me, so I took an afternoon to walk the fences to assess their condition and accurately locate the turn points. I was surprised to find that the fences formed an enclosure of some 15 ha, which encompassed woodland and grassland in almost equal measures. I was also surprised by the mixture of materials and styles used to construct the fence. (See Figure 1 for details.)

The centre of the enclosure is located some 600 m south-east of Glendale Depot, so I contacted the ranger for that area to discuss a removal program. In February 2019 six NPA members were on-scene with wire cutters and post puller to start the process. Fortunately, it was an unusually cool day, which permitted a cracking pace to be set in the grassland sections, from which 890 m of fencing were removed (green lines in Figure 1).

With some 980 m of fence still in place, a return visit was on the cards. However, park closures due to recovery from the 2020 bushfires and COVID-19 lockdowns in 2021 prevented a return until October 2021. On this occasion a team of eight NPA members tackled the timbered section to the east of the enclosure and removed 480 m of fencing material, much of which was tangled in fallen timber and other vegetation (blue lines on Figure 1). Mercifully, backs were saved when Simon Buckpitt offered to use his vehicle to pull the mesh out of the ground.

The red lines in Figure 1 represent the remaining fence (some 500 m). The north-easterly 180 m is in good condition and is constructed in a style similar to the sections now removed. However, the other two remaining sections are of an unusual construction and are largely dilapidated. They also show sign of reconstruction in the past. The removal of these last sections has been programmed for the second half of 2022.

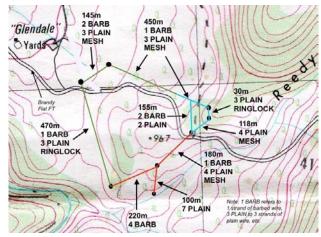
Note: Work parties in July to September were cancelled due to wet weather and COVID-19 park closure.

Martin Chalk



Fence removal in the Glendale area, October 2021.

Photo by Martin Chalk . Below: Figure 1







Paddling in paradise

Against the odds, Mike Bremers escapes Canberra to embark on a tropical kayaking trip.

In the first week of August 2021, Kevin Frawley and I took part in a 7day guided sea kayak trip in North Queensland

Our plans to do this trip in May 2020 were interrupted by COVID-19 so, in late 2020, we rebooked for a time when surely vaccines would have been rolled out and COVID a distant memory - wrong! Against the odds, with the Delta variant sweeping through NSW, the ACT/Qld border remained open, which allowed us to fly to Cairns.



Rounding Hillock Point for a view of Mount Bowen

The kayak trip started from Lucinda. We paddled along the eastern side of Hinchinbrook Island, with the final 2 nights on Goold and Wheeler islands before finishing at Mission Beach.

Hinchinbrook Island is a national park. It includes mountains, often cloud covered, of up to 1,121 m, rainforest and a mangrove-lined and croc-infested channel on the western side. The east coast, where we were paddling, comprises bays and headlands with sandy beaches.

The weather was perfect with sunny days and light to moderate prevailing south-easterlies propelling us towards our destination each day. Usually by lunchtime we had reached our campsite on an idyllic beach which allowed us to relax, swim or do a walk in the afternoon. One of the highlights was a walk up Nina Peak (312 m) with

spectacular views over the northern part of Hinchinbrook. Another highlight was a walk to Zoe Falls and a swim in its beautiful plunge

The trip was run by Coral Sea Kayaking which is based in Mission Beach. The total distance paddled was 90 km with the biggest daily distance being 18 km, which took only 3 hours. Often, we would see green turtles and on one occasion we saw a dugong. Our guides, Michelle and Paul, were very competent both on and off the water, including preparing sumptuous meals.

The trip is suitable for beginners and I can highly recommend it. There were 11 paying customers all of whom were good company, including six of us from the ACT. One of these six is now a new NPA ACT member. Welcome Gabriela!

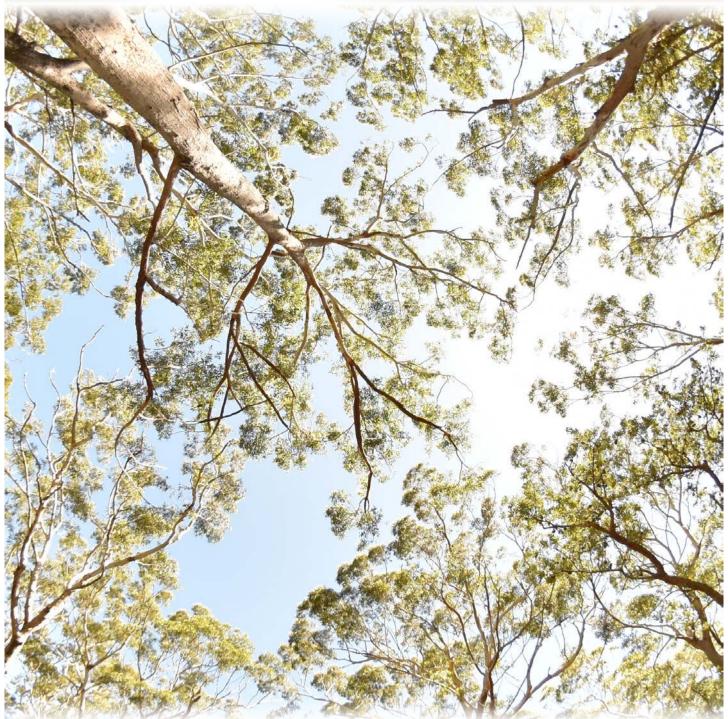
On returning to civilisation, COVID made its impact. I had been identified as a close contact on my flight to Cairns, so I had to immediately get tested and quarantine at Mission Beach for another 5 days. Kevin caught the bus to Cairns just in time for a 3-day lockdown and by the time we had all returned home, Canberra was in lockdown.

Mike Bremers is a veteran long-distance kayaker and with daughter Angela is the author of Murray-Darling Journeys.

Mike on final stretch to Mission Beach



NPA science



Canopy of Eucalyptus pilularis. Photo by Dr Claire Foster

Does past fire increase the flammability of fuel?

A fascination with the complicated relationship between fire and fuel led Margot Schneider to look more closely at the chemical composition of leaves and litter.

With climate change increasing the frequency and intensity of bushfires, examining past fire regimes could help us predict how ecosystems will respond to future fire.

Knowledge of the influence of fire regimes on flammability and its role in shaping future fire regimes exists mostly at species composition and ecosystem levels. The effect of fire regimes on fuel at the chemical level is under-researched.

I explored leaf chemical composition as a fuel element, which is known to influence flammability. Fire regimes, like other environmental factors, can alter leaf chemistry and hence flammability. Does past fire increase the flammability of fuel?

My study was conducted in Booderee National Park on pre-established field sites with a factorial combination of Time Since Fire and Fire Frequency classifications. Both fresh leaves and litter from *Eucalyptus pilularis* were sampled.

Litter is often solely studied, yet both canopy and surface litter contribute to flammability, with differences in chemical characteristics primarily generated in fresh leaves.

I quantified common nutrients in leaves known to affect plant flammability: nitrogen, potassium and phosphorus. The effect of variable fire history on soil nutrients¹ influences these elements. Additionally, I quantified terpenes, a chemical element in leaves known to be influenced intraspecifically by stressors, such as heat and herbivory.² While increased quantities of nutrients reduce leaf flammability, terpenes are thought to increase it.

The lack of literature on the effects of fire on terpenes and the large amount of variation detected made it difficult to interpret the laboratory results. Fire explained some of the variation in the terpene composition, yet a substantial amount of variation was unexplained.

Fire mainly affected the composition of terpenes, not overall yield. However, a total of 87 different terpenes were identified – the first account of the terpene profile in *Eucalyptus pilularis* since 1920³. The nutrient results were more conclusive: *E. pilularis* leaves from high Fire Frequency sites had lower nitrogen, potassium and phosphorus than those from low Fire Frequency sites. Differences between fire frequencies were more pronounced in litter, where nutrient levels overall were lower. This can be explained by *E. pilularis* 'ability to reabsorb nutrients before leaf senescence. Low nutrient levels in senesced leaves are an evolutionary adaptation to minimise nutrient loss.

Margot holding a Eucalyptus pilularis branch. Photo by Christopher MacGregor



The large differences between fresh leaves and litter are attributed to the low-nutrient environment of Booderee. When nutrient availability is low, plants invest more resources in nutrient reabsorption as it becomes energetically less costly than absorbing nutrients from the soil.4

The relationship between fresh leaves and litter allowed us to deduce that frequent fire is decreasing soil nutrient content with *E. pilularis* trees increasing their nutrient reabsorption before senescence to minimise nutrient loss. Booderee's sandy soils exacerbate these results – nutrients leach easily post-fire.

With data on how fire regimes impact leaf chemistry, I was interested to understand how this would affect ecosystem flammability. The decreased nutrient content could increase the flammability of *E. pilularis* leaves. As the presence of nutrients favours the formation of char in fuel, this takes energy away from flaming combustion. Terpene yield did not change, yet compositional differences could affect flammability.

Possible future research could quantitatively test how terpene and nutrient content affects the flammability of Eucalytpus. Even small changes in the flammability of a system could result in significant differences in total area burnt.

The effect of fire history on leaf chemistry is likely to be highly variable depending on the environment, study species, and fire regime. As soil nutrient content, fire and leaf chemistry are intrinsically linked, the low nutrient environment of Booderee National Park is likely a large driver of the results of this study. *E. pilularis* is adept at dealing with both fire and low nutrient availability; another species might respond differently.

I am excited to expand my research to other species and in other environments to better understand the chemical building blocks of ecology. Litter bed and shoot-level flammability tests could contribute to a fuller understanding of the effect of changing fire regimes on flammability.

Margot Schneider, from the ANU Fenner School, was the 2020 winner of NPA ACT's Honours Scholarship in Biodiversity Management in National Parks and Nature Reserves.

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Heeding the curlew's call

Cultural sensitivity warning for Aboriginal people and Torres Strait Islanders: this story contains images of Bush Stonecurlews.

Extinct in the ACT for nearly 50 years, the Bush Stone-curlew is making a local comeback, reports Shoshana Rapley.

Bush Stone-curlews are an iconic bird of woodlands and grasslands, best known for their eerie call. Their spooky nocturnal wailing has been likened to a screaming woman, giving them their nickname 'murderbird', and the calls have also been referred to as 'glee concerts' and 'whistling parties'.

Curlews have an important cultural presence – for many Indigenous Nations they are a messenger bird, and often an ominous one – hence the warning at the start of this piece. They are also known for being masters of disguise. They seem unlikely candidates for a vanishing act, given they stand 50cm tall and have massive yellow eyes. Take a look at the picture below - see if you can spot all three:



Sitting **c**urlew. Photo by Shoshana Rapley



Any luck? They camouflage with leaf litter and woody debris due to the colour of their feathers. They come in two colour forms. In Ngunnawal language the rufous is *Warabin* and the grey is *Mulyara*.

Bush Stone-curlews used to be found across nearly all the Australian continent, except the most arid areas. But, in an all too familiar story, they have disappeared from much of their former range and continue to decline. Their population is now concentrated around Darwin and from Brisbane to Townsville. They are either extinct or rare across southern Australia. Their decline is a combination of threats: invasive predators (primarily foxes) and loss of habitat. Without stands of native vegetation, curlews cannot camouflage and are left vulnerable to predators. The practice of 'tidying up' in agricultural landscapes by burning woody debris has massively reduced the remnant shelter for curlews.

However, Bush Stone-curlews are making a comeback in south-eastern Australia. In 2014 curlews were reintroduced at Mulligans Flat Woodland Sanctuary, having been extinct in the ACT for nearly 50 years. The translocation was a success, and more cohorts of curlews arrived in 2015, 2016 and 2018. Curlews are now a rare but familiar sight in the sanctuary and the adjacent suburb of Forde. You might even see them on a guided spotlighting 'Twilight Tour'.

The success of the Bush Stone-curlew reintroduction at Mulligans Flat is an opportunity to learn more about these birds. In July 2019, with the support of an NPA Scholarship, I started my Honours project on the Mulligans Flat curlews. I released another cohort of 12 Bush Stone-curlews into Mulligans Flat. But, unlike previous years, these birds were released with a difference: GPS backpacks.

Only in recent years have GPS devices become small enough to fit to birds – 20~g complete with solar panel. My supervisor, Dr Heather McGinness from CSIRO, developed a backpack to attach transmitters to birds, and she uses a similar design on ibis and spoonbills in the Murray-Darling Basin. I developed a way to catch them, so I could fit backpacks to birds born in the sanctuary.

The backpacks on these birds have allowed major breakthroughs in understanding their ecology and reintroduction biology. Using GPS data, I modelled the habitat these birds require for successful establishment and studied their movement behaviours. The most exciting development I found was curlews spend half their nights *outside* the fenced sanctuary. They forage in parks and gardens in Forde and Bonner, and on agricultural properties in NSW. We had seen





birds over the fence occasionally in Forde, but we had no idea how consistent this behaviour was. This is huge news because they are sharing these landscapes with foxes. My project was also an academic success and I was awarded the University Medal.

I have now started my PhD continuing this project. The next step for me is a new reintroduction project of Bush Stone-curlews to a brand-new sanctuary called Orana, near Bendigo. Restoring them is important for ecosystems because they are a mesopredator; curlews are a 'farmers friend' that eat agricultural pests such as mice and locusts. Their return also brings them back on Country - the Dja Dja Wurrung are anticipating their return to Orana. Hopefully in future we can return the chilling calls of these birds across south-eastern Australia.

Shoshana Rapley, from the ANU Fenner School, was the 2019 winner of NPA ACT's Honours Scholarship in Biodiversity Management in National Parks and Nature

Col's sculpture odyssey

Col McAlister's tours of Canberra's urban artworks will be greatly missed, writes Max Lawrence

After the best part of two decades of sharing his interest in the urban outdoor artworks of our fair city with his NPA fellows, Col McAlister has decided to call it a day.

This decision has been brought on by an age-related deterioration of the McAlister undercarriage, namely his right knee, and by other circumstances beyond his control, namely weather and pandemic. Most recently, Col offered a walk through the wonderful sculptures of the ANU in the March 2021 walks program, but this was rained out big time. Then the same walk was rescheduled for September. That time we were in lockdown. Meanwhile Col's knee wasn't improving, so he has decided not to reschedule yet again.

Col's sculpture walks have been a very popular feature of our walks program, offering an interesting, attractive and somewhat less strenuous alternative to NPA's more usual fare of bushwalks. They were always well attended, including by folk more usually seen out there walking in the bush or on work parties. Col himself was a leader of NPA bushwalks in the not too distant past, and was a keen participant in walks led by others. He was also the driving force in the now discontinued Friends of Glenburn, set up within the Parkcare system to help protect the heritage values of the Glenburn precinct in the eastern ACT.

The walk around the wonderful sculptures of the ANU was perhaps the most popular of Col's sculpture walks, and this has featured on the NPA Outings Program several times over the years. However, other walks he has led include Public Art in Civic West and New Acton, Public Art in Civic East, Art in the Parliamentary Triangle, Art in Reconciliation Place, Art in the War Memorial Sculpture Garden and Anzac Parade, and walks around the heritage sites at Glenburn.

Col has put a lot of time and effort into researching the locations, origins, history and features of Canberra's public outdoor artworks. However, he has found that it is becoming increasingly difficult to access such details as the city grows, the number of commercial players increases, and the role of government changes. Col is happy to share the results of his research with other members who may wish to carry on leading NPA sculptures walks.

Using his research material, Rosemary Hollows has scheduled a walk on the ANU sculptures for 27 February 2022, and another one later for Parliament House.

Photos by Max Lawrence Sculpture, Enlighten festival, Canberra Centre

Saltambique, New Acton Precinct, artist Tim Kyle



Above: Longitude, Civic, artist Mathew Harding Below: Icarus, Civic, artist Jan Brown





Above: Little Big Man, Civic, artist Dean Bowen Canberra Times Fountain, Civic, artist Robert Woodward









David Lindenmayer, AO would be a familiar name to members of NPA ACT, as he is based at the ANU Fenner School of Environment and Society, and he gave the address at NPA ACT's 60th birthday celebration. He is a world-leading expert in natural resource management, conservation science and biodiversity conservation.

Steven Kuiter specialises in photographing rare and hard-to-find animal species, most of which are nocturnal. Sarah Rees specialises in drone and macro-photography and has lived and worked in the forests of Victoria for more than 25 years. Chris Taylor is also at the Fenner School, and has published on fire, logging and biodiversity in these forests. He succeeds in capturing and sharing his own sublime experience of the landscape – the sense of feeling so insignificant amid the grandeur and age of this land.

David has worked in the forests of the Central Highlands of Victoria for many years, and the depth of his understanding of this area shows in his concise text. The book explores the forest from the ground up, with chapters on the landscapes, geology, rainforest, Mountain Ash forests and the understorey. It then progresses into a description of the major forest processes, with chapters on cycling of water, impacts of fire, wildlife conservation and logging. The last chapter is a plea for the future of the forests: Lindenmayer argues that conservation of the forests will provide greater economic value in carbon storage and a quality water supply to Melbourne than their value from wood production.

The book is outstanding in its acknowledgement of the three Indigenous groups whose land lies in the Central Highlands, and whose country was never ceded to the government. The book starts with a Statement of Sovereignty of the Indigenous people of the forests and landscapes of the Central Highlands, by Lidia Thorpe, the first Aboriginal Senator for Victoria, on behalf of Elders and Traditional Owners of Gunnai, Taungurung and Wurundjeri Countries of eastern Victoria. Indigenous names for places, plants, animals and landscape features of the forest are explained and used extensively throughout the book.

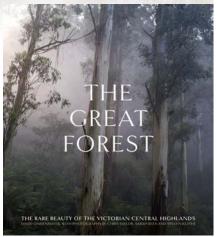
While David Lindenmayer is acknowledged as an outstanding scientist, a delightful feature of this book is the small vignettes of personal experiences in the forest that are transcendent moments. In a fallen tree blocking the road, he finds a nest with four endangered Wollerts (Leadbeater's Possum) still alive, and when disturbed, they race off into the forest. In another moment, a spotted pardalote continues to call loudly almost within touching distance, only for him to find a large tiger snake a step away.

At first glance this book may appear to be one like so many others with hundreds of high-quality photographs of the natural world. However, the big difference is that here

the location of every photograph is detailed using the name of the country of the relevant Indigenous group. All photos have extensive captions explaining the features photographed,

Left: View on Taungurung Country in the Victorian Alps looking towards the Central Highlands. Photo by Chris Taylor

> Right: Young Wollert (Leadbeater's Possum) on Taungurung Country. Photo by Steven Kuiter



and these captions are as important as the main text in explaining the values of those features and the ongoing natural processes that have shaped them.

While the main text has the scientific details of the forest, the photos illustrate the outstanding beauty of these forests and their wildlife. In 1982, the outstanding photo by Peter Dombrovskis, Morning Mist, Rock Island Bend, Franklin River spearheaded the 'No Dams' campaign to save the Franklin River. It is my hope that, in the same way, the beauty of the forests illustrated in this book, will provoke the emotional response required to galvanise the actions necessary to save these wondrous forests.

John Brickhill is a wildlife biologist who worked with the National Parks and Wildlife Service in western NSW for 38 years.





PARKWATCH

Historic Kosciuszko huts to be rebuilt

When the 2019–20 bushfires swept through the NSW and ACT alpine region, they took a slice of Snowy Mountains history with them. Twelve of the iconic galvanised iron and timber huts across the high country were destroyed, despite the efforts of firefighters to save them. The huts — constructed by cattlemen, prospectors, and Snowy Mountains Scheme workers in the 1800s and 1900s — help paint a picture of survival in the Snowy Mountains region during that time. They also continue to be a welcome refuge for bushwalkers and cross country skiers.

Now, the NSW National Park and Wildlife Services has announced plans to rebuild 10 of the historic structures, destroyed during the 2019–20 bushfires. National Parks will set up a special team to lead the reconstruction project, with the aim of rebuilding the huts similar to their original form. National Parks is also encouraging anyone with information about the buildings prior to their destruction to get involved.

At https://ab.co/2ZtEkFr

Wishing, waiting

VNPA says it is delighted by the Victorian Government's latest announcement of the establishment process for Immediate Protection Areas (IPAs) to remove logging in a number of forests important for Greater Glider conservation, including the entire Strathbogie Forest. After VicForests announced its plan to significantly expand logging in the Strathbogie Forest in 2013, hundreds of volunteers helped survey the diverse habitats of the 24,000-hectare forest, including that of the threatened Greater Gliders.

In November 2019, the government released its Greater Glider Action Statement and announced IPAs, but within months of the announcement, the devastating Black Summer bushfires burnt much of eastern Victoria, including extensive Greater Glider habitat. Until the latest announcement, there had been no clear indication of the next steps. VNPA says its one remaining concern is that the process be completed well before the next election so that the forests get actual permanent protection and not just another promise.

Park Watch (VNPA), September 2021

NPA opposes raising of Warragamba Dam

NPA NSW has condemned confirmation of the NSW Government's plans to damage the Greater Blue Mountains World Heritage Area by raising the Warragamba Dam wall. NPA NSW President, Dr Grahame Douglas, said it was shocking that the government released the plans on the same day as committing to emission reduction targets to help Australia meet international standards.

'Protecting biodiverse natural habitats, including those of the Greater Blue Mountains, is one of the most effective and practical ways of sequestering carbon,' Dr Douglas said. 'It is not a matter of climate action or conservation; we need both.'

NPA will work with biodiversity and protected area experts to demonstrate that the exhibited EIS massively understates the impacts on the World Heritage Area.

At https://bit.ly/3vQquZr





Happy Hut before the fires ... and after. One of the huts to be rebuilt.

Photos by Stefan De Montis

Upgrade for Heysen Trail and Fleurieu Peninsula parks

The creation of the Wild South Coast Way on the Heysen Trail connects the parks that run along South Australia's breathtaking southern coastline and is a beacon for locals and tourists alike, driving sustainable economic growth in the region, says NPWS SA. The project includes upgrading sections of the iconic Heysen Trail from Cape Jervis to Victor Harbor to create a 5-day, 4-night hike and other high-quality, trail-based experiences. NPWS SA reports the visitor experience at Deep Creek Conservation Park is being enhanced and expanded to include new picnic areas, a universally accessible walking trail, new walk-in only campgrounds, and an upgrade to existing Trig

Campground. It's expected work will be complete by 2023, with

At https://bit.ly/2ZuJBfi

Tyndall range 'iconic walk' study released

aspects opening in stages since late 2020.

Parks and Wildlife Service (Tasmania) has released the feasibility study for its 'next iconic walk', proposed to be constructed in the Tyndall Range – a 3-day walk that is a continuation of the Three Capes model. Total cost of construction is estimated at \$37 million.

TNPA previously raised concerns about both the concept and the process for selecting and designing the walk, arguing that the west coast weather makes it irresponsible to encourage inexperienced walkers into the area. The proposed route does not include the alpine plateau, the most environmentally sensitive part of the range. However, it does allow far easier access to areas high on the eastern side of the range, which is likely to result in an increase in trampling impacts in an extremely sensitive area.

At https://bit.ly/3mmw6az

\$3 million funding boost for Swan Canning Riverpark

The Swan Canning Riverpark will continue to receive a healthy boost, with the WA Government investing \$3 million towards projects that aim to protect and enhance the Swan and Canning rivers. The funding will be distributed among four programs: Healthy Catchments, Rivers and Estuaries Science, Riverbank and Community Engagement. The overall aim is to enhance environmental, recreational and cultural values in the Swan Canning Riverpark. This funding will ensure the programs can continue to operate successfully for many years to come.

At https://bit.ly/3BntTjF

Call for vigilance to protect wilderness

VNPA's Park Watch reports on the growing challenges to parks, especially from the tourist industry. Parks Victoria's own figures show that (pre-COVID) tourists were spending \$2.1 billion each year associated with their visits to Victoria's parks and were generating 20,000 jobs. Parks have been contributing far more to the economy than they cost to manage. But instead of expressing gratitude, the tourist industry wants to build on its success with greater access to parks, especially to bring in the big spenders – the 'comfort in nature' market.

Beyond Victoria the situation is more worrying, Park Watch reports. Since 2014 the Tasmanian Government has been inviting expressions of Interest for 'tourism Investment opportunities' and associated infrastructure on reserved land, with no clear requirement to comply with management plans.

Park Watch (VNPA), September 2021

WWF welcomes NSW zero-extinction target

WWF-Australia has welcomed the NSW Government's Threatened Species Day announcement of a zero-extinction target in the state's national parks. WWF-Australia also commended the declaration of more than 200 sites as Assets of Intergenerational Significance.

'This is a good start to help regenerate Australia following unprecedented bushfires,' said WWF-Australia Chief Conservation Officer Rachel Lowry. 'With global negotiations underway to secure 30 per cent land and seascape protection by 2030, NSW could play a key role in helping Australia meet those targets through the expansion of their national park footprint, which is especially important after the bushfires.'

At https://bit.ly/3pOucld

New focus on KNP Corroboree Frog group

A Senior Threatened Species Officer with NSW Department of Planning, Industry and Environment is focusing on a fresh, post-fire-affected group of Northern Corroboree Frogs in northern Kosciuszko National Park. Dave Hunter is working with NSW Parks to protect this population's habitat in the wild, and from chytrid fungus (*Batrachochytrium dendrobatidis*) which kills many species of amphibians worldwide, including Corroboree Frogs.



'Years of learning about how best to breed Corroboree Frogs have given us a set of husbandry protocols that work – thanks to the zoo partnerships that have been on board for the long haul,' Dave said. 'Taronga Zoo, Zoos Victoria and Tidbinbilla Nature Reserve, supported by a collection of partners, all run active quarantined

breeding programs, safe from the chytrid threat. Together they produce enough offspring to allow for annual releases into wild settings.'

News from the Alps E-Blast #74

Planned fire regimes key to conserving endangered rodent?

The mysterious Heath Mouse (*Pseudomys shortridgei*), also known as the Dayang, was once widespread but is now listed as endangered nationally. It now occurs in two patchy, isolated regions of Australia – south-western Victoria (eastern population) and Western Australia (western

population). Reasons for its significant decline are uncertain, but fire regimes may play a role in the protection and survival of the Heath Mouse. Latest research has found that the indirect effect of fire on dense shrub cover is of most importance for the species. Planned fire regimes that promote dense shrub regeneration may be an effective strategy to conserve this endangered animal.

Park Watch (VNPA), September 2021

More national parks for NSW

Over 165,000 hectares of land in far-western NSW have been acquired by the State Government to expand the NPWS estate. The government has purchased Avenel Station, near Broken Hill, and Koonaburra Station between Ivanhoe and Cobar. Avenel is the second largest purchase by national parks in the state's history and home to 30 threatened plant and animal species including the Eastern Fat-tailed Gecko and the Dusky Hopping-mouse. Environment Minister, Matt Kean said the two purchases take the total additions to the parks estate to 520,000 hectares since August 2019.

At https://ab.co/3vUhxyn

Saving threatened flora on Lord Howe Island

UNESCO World Heritage listed Lord Howe Island (LHI) supports a diverse array of habitat types and distinctive flora groups: 241 species of flora have been recorded on the island, of which 113 (47 per cent) are endemic and are found nowhere else in the world. Sadly, there are at least 60 threatened species of flora and fauna on the island. Since 2016, Saving our Species in partnership with the LHI Board has managed a targeted, threatened flora conservation project that has reduced the risk of extinction faced by 10 species. With an investment of \$1.5 million, the project has focused on three key areas: weed management, translocations and monitoring.

At https://bit.ly/3190AmG

Spectacular Flannel Flower bloom after fires and floods

Flannel Flowers burst into bloom in huge numbers in a bushfire-affected landscape, reaching towering and unexpected heights. They normally grow from about 30 to 70 cm, but some in the Lake Innes reserve are well beyond that. NPWS senior project officer Geoffrey James says it's rare to see Flannel Flowers so tall. Named for their soft, woolly feel, Flannel Flowers grow along Australia's east coast, from the NSW south coast, up into south-east Queensland and out to Narrabri in NSW's central west. Mr James said this year's display near Port Macquarie was the combined result of the drought, followed by a severe bushfire in late 2019, and then heavy rainfall, which led to flooding in many areas earlier this year.

At abc.net.au/news/flannel flowers bloom/17/09/21

Compiled by Hazel Rath

Corroboree Frog.
Photo by E. Beaton,
Environment ACT
Right: Flannel
flowers: reaching
towering and
unexpected
heights. Photo by

Emma Siossian,

ABC News

Left: Northern



NPA bulletin board

NPA ACT welcomes the following new members:

Tim Hanigan
Aeshlyn Geer
Brian & Sally Hawkins & family
Gabriela Samcewicz
Wendy & Peter Lockley
Trevor Costa
Hannah Windley
Linda Johnston & Craig Grant
Lee Brennan
Luke Mulders & Lorena Nesa
Andrew Scholten
Victoria Schmettow
Joyce O'Brien

Volunteers needed

We look forward to seeing you

at NPA activities.

We always need new volunteers to take over from members who have volunteered for a long time and need a break. Please consider putting your name forward for any jobs you think you can spend some time on for the good of NPA. It can be to lead walks or work parties, set up the meeting room for our general meetings, sell our books at public events, or by joining a subcommittee to spread the load.

If you can help please email admin@npaact.org.au or leave a message on the office phone (02) 6229 3201.

GBRG Christmas party at Gudgenby Cottage

Saturday 11 December after a morning work party

A festive lunch at Gudgenby Cottage. Please see the outings program, but check the website closer to the date for possible changes.

NPA Christmas party

Sunday 12 December at Namadgi Visitor Centre

This is an opportunity to meet up with your NPA friends again!

Weather permitting we are having an outside picnic with a sausage sizzle (and some options for vegetarians) at the Namadgi Visitor Centre from 11:30 on. Should it rain we will move inside for our picnic.

Bring your own picnic lunch and glass or cup as well as a chair and picnic table if possible. Some drinks and desserts will be provided. Please check the website for any changes closer to the date.

NPA U3A presentations

NPA ACT has organised a short U3A course called 'Protecting the ACT's unique natural environment'. This course, over two sessions, is for those interested in the ACT's natural environment and may be looking to become more actively involved in conservation activities. The first session will be on **29 March 2022** at the **Cook Community Hub** and will consist of 4 presentations over 2 hours on the work of NPA and on how to get more involved in conservation. The second session, on **12 April 2022**, will entail a visit to the **Namadgi Visitor Centre** and, for those interested, **sites near Glendale** that NPA volunteers have been restoring. For details contact Allan Sharp: sharpaw4@gmail.com

Butterfly walk

Suzi Bond will lead a butterfly walk for NPA on 15 January 2022.

Meeting time and place will be supplied closer to the date. Limit of 10 participants.

Contact: Sonja Lenz, sonjalenz67@gmail.com





General meetings

Third Thursday of the month,

7:30 pm, Uniting Church hall, 56 Scrivener Street, O'Connor

Meetings might have to be held online. Please refer to Burning Issues or the website closer to the date.

Note: The speaker for the meeting in February has not yet been confirmed at the time of printing the *Bulletin*.

Full speaker program planned for 2022

There will be no general meeting in December and January. However, we are planning a full program of speakers for our monthly general meetings in 2022. Details will be published in the NPA Bulletin, our members' newsletter Burning Issues, and on our social media sites. General meetings are open to members and the public.



More for your calendar	December	January	February	March
Committee meetings	Tuesday 7 th	-	Tuesday 1st	Tuesday 1st

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	Esther Gallant
Vice President	Rosemary Hollow
Secretary	Sonja Lenz
Treasurer	Jan Gatenby

Committee members

Cynthia Burton (Membership liaison)	Mike Bremers
Chris Emery	Kevin McCue
Rod Griffiths (Immediate Past President)	Allan Sharp
Debbie Worner (Minutes Secretary)	

Conveners

Bulletin Working Group	Allan Sharp
Cultural Subcommittee	Rosemary Hollow
Environment Subcommittee	Rod Griffiths
Outings Subcommittee	Mike Bremers
Publications Subcommittee	Kevin McCue
Promotion and Outreach Subcommittee	Allan Sharp
Work Party Co-ordinator	Martin Chalk

Membership subscription rates (1 July to 30 June)

The subscription rate is \$22, which includes a digital copy of our *Bulletin*.

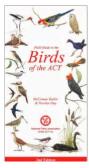
If you want to receive a printed copy of the *Bulletin*, the subscription rates are:

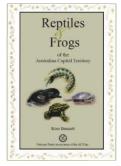
Household membership \$44 Single members \$38.50 Corporate membership \$33 Full-time student/Pensioner \$22

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

NPA books are available from some bookshops (e.g. ANBG), or contact the association office.

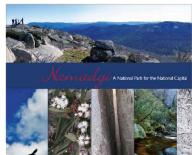
















For information on NPA ACT activities, please visit our **website:** http://www.npaact.org.au and follow us: **Instagram:** https://www.instagram.com/npa_act/

Twitter: https://twitter.com/Lovenature321

Facebook: www.facebook.com/NationalParksAssociationOfTheACT

