

OBJECT: To foster an interest in nature

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JAMISON CENTRE ACT 2614

# FIELD NATURALIST

FIELD NATURALISTS' ASSOCIATION OF CANBERRA INC.

## MEETING—Thursday 7 October 2021 (Covid permitting)

7:30 pm Australian National University  
Jan Anderson Seminar Room, R. N. Robertson Building, Biology Place, ANU, ACT  
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## When will we see another good season for cicadas?

The summer of 2020/2021 was a great one for cicadas in Canberra. Redeye Cicadas, *Psaltoda moerens*, in particular, emerged in large numbers. After the very low numbers of the previous summers, it was great to once again hear the very loud chorus of the cicadas and to find so many empty shells from which the adults had emerged. Over a period of a couple of hours one night in November, we watched a Redeye Cicada adult emerge from the exoskeleton of the nymph that had crawled up onto our carport wall. We saw the split open lengthwise along its back, the adult then arched backwards out of this opening before uncurling its wings for the very first time.



*Emerging adult*



*Emerging adult arches backwards*

However, why were there so many cicadas last summer but very few the year before? Was it



*Wings unfurl*



*The next morning*

due to the very good winter and summer rainfall experienced in 2020? After another wet winter, will we see as many adults emerge this summer? These questions are not easily answered. Despite their loud song being one of the most familiar sounds of summer, there is surprisingly little known about the life cycle and ecology of Australian cicadas. The nymphs live underground feeding on sap from the roots of eucalypt and some exotic tree species but for how many years they do so, is a topic of scientific debate. Numbers between 4 and 10 years<sup>1</sup> have been suggested though this is likely to vary between species. And after so many years underground how do the nymphs know when the time is right to dig themselves out? What have other members observed? We would love to hear the insights and thoughts of others on these fascinating insects.

### Reference

1. Ann Jones (2015) Inside the life cycle of Australian cicadas, ABC Radio National Offtrack program, <https://www.abc.net.au/radionational/programs/offtrack/inside-the-lifecycle-of-australian-cicadas/6075298>

**Janet and John Stein**

*Editor: Stunning photos from John and Janet. Send your observations to [editor@fieldnatsact.com](mailto:editor@fieldnatsact.com)*

# Humane Australian breakthrough in feral pig control with poison bait, Hoggone

Landline / By Tim Lee

A newly released poison bait is being hailed as a major breakthrough in feral pig control.

Feral pigs roam across half the Australian continent and are expanding their range after recent good seasons.

Some estimates claim there are more than 24 million.

Pigs cause an estimated \$100 million damage annually to agriculture, and do untold environmental damage.

“The damage that they’re doing is increasing and they pose a huge disease risk for the human and animal populations, quite apart from the physical damage pigs do,” said Linton Staples, the founder of Animal Control Technologies Australia.

The company manufactures a wide range of poisons that target Australia’s suite of feral pests: everything from foxes, rabbits and cane toads to slugs, rats, and mice.

This year’s record mouse plague across the grain belt has, until recent weeks, seen the company’s Melbourne factory working around the clock to try and stem the tide of rodents.

## **Pigs their own worst enemy**

In January, the company launched its most long-awaited poison, Hoggone.

The bait targets feral pigs by exploiting a physical weakness in the pig’s physiology.

Pigs lack a protective enzyme to break down sodium nitrite, a kind of salt used to preserve food.

Eating it makes them susceptible to a condition called methemoglobinemia, which shuts down the function of their red blood cells, with fatal results.

“They take a mouth full or two of bait and say, ‘Oh that’s making me feel a bit woozy’, walk away to sort of snooze it off, and while they’re sleeping it off, they just go into a deeper and deeper slumber and die,” Dr Staples said.

The poison is fast-acting, humane and, importantly, unlike the commonly used 1080, leaves no environmental residue.

The bait is already being used on Kangaroo Island in a feral pig eradication program.

Authorities there believe it kills pigs quickly and humanely and has not killed any other species.

Exhaustive field trials in the USA proved it had no impact on non-target species, such as birds, or scavenging animals, like coyotes and raccoons.

That’s partly because of a brilliant bait station that exploits a pig’s feeding behaviour but excludes other animals.

The actual bait is a peanut-butter-like paste, coloured black, so there’s no mistaking it.

Pigs’ keen sense of smell and strong foraging behaviour means they quickly learn how to push

open the lid to gorge on the initial, harmless feed.

Then the poison bait is substituted.

The results so far have been extraordinary, with some landholders reporting close to a 100 per cent kill rate.

## **Overcoming the last scientific hurdle**

Getting commercial approval for any new poison requires an enormous amount of research and testing to guarantee it targets only the desired pest species and causes no environmental damage.

Dr Staples has several rooms and a corridor overflowing with scientific papers and regulatory documents.

The major hurdle in Hoggone’s development was the volatile nature of sodium nitrite.

“What we didn’t understand initially is that this chemical is horrendously unstable,” Dr Staples said.

The early trial baits broke down and when pigs got a whiff of the toxic substance, they shunned it.

Ultimately, the company devised a means of coating and disguising the sodium nitrite granules.

Though the use of poison is sometimes controversial, it remains a key weapon in the war against pest species.

For this new, effective pig bait, an old aphorism rings especially true: the weakest part of a pig is its stomach.

## Major victory for Lithgow's Gardens of Stone

The Colong Foundation is celebrating a significant victory with its campaign partners. After two decades of campaign with the Blue Mountains Conservation Society and Lithgow Environment Group, one of Australia's most spectacular natural landscapes is much closer to being protected for good.

Mining company, Centennial Coal, have scaled back their plan for a mine extension in the sensitive area

of Angus Place; scrapping their initial plan to extract 135 million tonnes by 2053 and submitting instead a revised proposal to dig up 12 million tonnes of coal over an eight-year period.

They now plan to adopt bord and pillar mining in the future operations in the area, which is less damaging than the long-wall mining that they had initially favoured.

These significant wins are a sensible outcome for the community and nature—a critical step in the community-based campaign run with partners at the Lithgow Environment Group and Blue Mountains Conservation Society. They follow up Centennial Coal's support for the tourism and conservation reserve plan called Destination Pagoda.

## The National Rock Garden is going places!

Brad Pillans, Director, National Rock Garden

On Friday 4 June, after more than 12 months of behind-the-scenes negotiations, an agreement was signed with the ACT Government to relocate the National Rock Garden (NRG) to a new site within the National Arboretum Canberra (NAC).

STEP, the Southern Tablelands Ecosystem Park. STEP has a garden (Forest 20) adjacent to the proposed NRG site (Forest 13).

The partnership between the two national organisations, the NAC and the NRG, will build on the natural synergies between geology and biology,

and provide an important link for increased visitor engagement. Diversifying storylines of geology and flora will help visitors to better understand that trees, soil, water and rocks are all essential and inter-dependent elements of the living world.

Forest 13, within the NAC, is about one hectare in area and is located on Forest Drive (the main access road in NAC), just 100 metres north of the NAC visitor centre and car parks. To complement the NRG display of large iconic rocks from around Australia, Weeping Wilga (*Geijera parviflora*) trees will be planted in an indigenous pattern in Forest 13.

## Woodlands and Wetlands in lockdown times

The Woodlands and Wetlands Trust are promoting their [social media content](https://www.woodlandsandwetlands.org.au/about) during this time of lockdown (<https://www.woodlandsandwetlands.org.au/about>).

Sanctuary Ecologist Millie was lucky enough to come across an echidna train of FOUR animals one day on a walk in Mulligans. Other sightings you may find are: Yellow-tailed Black Cockatoos roosting in the woodland areas at both Mulligans Flat and Jerrabomberra Wetlands, Quoll pups will soon be gallivanting around Mulligans Flat alongside the Eastern Bettongs who can be reliably seen every night in the sanctuary. If you're very lucky you may even see some juvenile Bush Stone-curlews strutting around on their slender legs.

The infamous Latham's Snipe has returned to Jerrabomberra Wetlands!

The Trust asks anyone who takes a snap of the Snipe, to email the photos! They are keeping an eye out for bands on their legs. Send your photos through to: [education@woodlandsandwetlands.org.au](mailto:education@woodlandsandwetlands.org.au)

Here are three things that might make things slightly easier during lockdown:

1. A complete, self-guided learning Online Classroom Package for kids aged 3–17. Fun and informative learning that is in line with the Australian Curriculum. Learn more about it: [Jerrabomberra Wetlands](#) or [Mulligans Flat](#)
2. A guide for getting your daily dose of nature: <https://www.woodlandsandwetlands.org.au/news/daily-dose-of-nature>
3. Audio tours! A free app where you can be taken on a guided walk around Mulligans and Jerra. Download them here: [Jerra app](#) / [Mulligans app](#)

Wildbark learning centre update:

The new visitor centre in Throsby is progressing. The walls are up, the floors are laid, the roof is on and the windows are going in! After walking through an enticing tunnel, you are greeted by a fantastic panoramic view of Mulligans Flat.

*Editor: While this article suggests some outdoor activities, keep in mind that our one hour of exercise is meant to be within our local area, so perhaps you could keep these in mind for when we are out of lockdown if these areas are not nearby to you.*

## Activities

### Conservation Council ACT Region 40th anniversary project

This year marks the 40th Anniversary of the Conservation Council ACT Region.

In recognition of the time and energy given by Field Natters to fight for environmental protection in the ACT, the Council taking the opportunity to collate this history as a means to recognise and celebrate these efforts.

Dr Ruth Morgan, environmental historian and Associate Professor at the ANU College of Arts and Social Sciences, will be assisting on this project. Ruth has a particular interest in the histories of Environment, Science, Climate and Water, and Environmental Humanities. She was previously based at Monash University (2012–2020), and completed her doctoral studies at the University of Western Australia.

Assisting Ruth will be the Council's Communications Manager, Madeleine, and volunteer Leo. Leo will be helping by liaising with contributors and organising interviews with Ruth.

The Council is asking members if you have a story to share, and whether they can be in contact with you again in the next few weeks to hear about it. The small stories that people share are often the most engaging, as they provide colour and life to the factual stories that many of us know. However, you may perhaps have a longer more detailed story to share as well. Either way, the Council is keen to document them to provide a recent reference point of the organisation's history.

If you have a story to share, please email [Madeleine](mailto:madeleinegisz@conservationcouncil.org.au) ([madeleinegisz@conservationcouncil.org.au](mailto:madeleinegisz@conservationcouncil.org.au)) with some details, including how you would like to be contacted.

### Lockdown challenge

Hopefully, the ACT lockdown will end as scheduled in two weeks, but in the meantime we are not meant to venture too far from home. The good news however, is that spring is fast approaching and insects are beginning to emerge and snakes and lizards are coming out of their winter hibernation. Moths have also begun loitering around my porch light. Therefore I'd like to pose the challenge for members to have a look around your local surrounds/gardens (and possibly a little further afield on your exercise excursions) to see what you can find and submit a little story on your findings for the next newsletter. Accompanying photos are great but not essential. You can send your findings to [editor@fieldnatsact.com](mailto:editor@fieldnatsact.com)

### Sunday 5 December: Visit to John and Janet's property at Yaouk

Join John and Janet at their 44 ha property on the Yaouk Road on the south-western border of the ACT to explore sub-alpine grassy woodlands, forests and wetlands. See the landscape transformation that resulted from the 2019/2020 summer bushfires and subsequent flooding and erosion events and the ongoing recovery as forests regenerate and the deposited sediments are revegetated.

There is easy access from the road to explore the open grassy woodlands and the wetlands fed by Bradleys Creek and for those more adventurous, a walk up through large granite tors to the regenerating ash forests on the ridge line that marks the ACT border and the boundary of Namadgi National Park.

The property is about 100 km south of the GPO. Travel time is less than 2 hours from the city and just over 1 hour from Tharwa via the Boboyan Road including about 30 km of good gravel road. More details including carpooling options and a call for expressions of interest will follow closer to the date (COVID travel restrictions permitting).

## Recommended reading

The latest issue of the Friends of the ANBG magazine Fronds has several articles of general ecological interest as well as an account of Superb Fairy Wrens' infidelities.

Roger Farrell's article on the ANBG: a natural functioning ecosystem as exemplified by its insect fauna is a treasure trove of invertebrate natural history!!

The magazine is available [on-line](https://friendsanbg.org.au/sites/default/files/pdf/Fronds_98_August_2021.pdf): ([https://friendsanbg.org.au/sites/default/files/pdf/Fronds\\_98\\_August\\_2021.pdf](https://friendsanbg.org.au/sites/default/files/pdf/Fronds_98_August_2021.pdf))



Field Naturalists' Association of Canberra Inc.

### Who are the Field Naturalists?

The Field Naturalists' Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities are advertised in our monthly newsletter. We emphasise informality and the enjoyment of nature. New members are always welcome. If you wish to join FNAC, please fill in the member application below and send it in with your subscription to the FNAC Treasurer at the address below.

**President:** Rosemary Blemings I

[president@fieldnatsact.com](mailto:president@fieldnatsact.com)

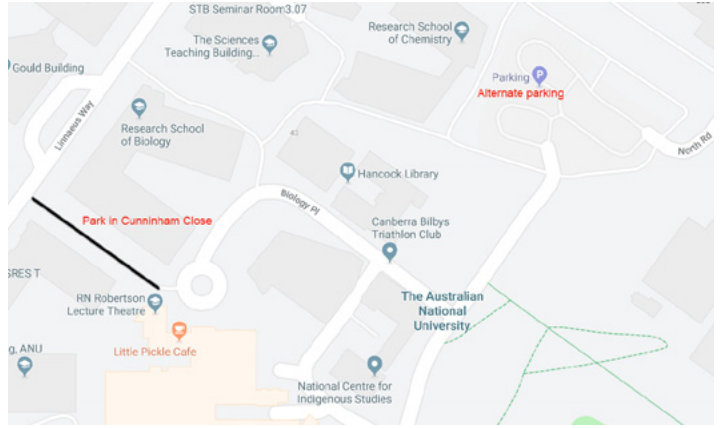
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**Monthly meeting venue:** Jan Anderson Seminar Room, R. N. Robertson Building, Biology Place, Australian National University

**Field Naturalists' Association of Canberra**  
**GPO Box 708**  
**Jamison Centre ACT 2614**



### Membership application or renewal

Surname: ..... First name: .....

If a family membership, please include the first names of other members of the family:

.....

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How did you hear about FNAC? Please circle: Friend

Other Please specify: .....

Subscription (Single/Family \$25) Donation: \$.....

*Subscription renewals are due on 1 July each year*

**Pay by post** (include completed form)

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**Bank transfer** (renewals only: form not needed)

Account name: Field Nats  
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