



Canberra Nature Map newsletter

Volume 2 Issue 2: June 2024



Exciting news for Canberra

Australia has another new butterfly! A second species of lycaenid butterfly has been discovered and described from southern Namadgi after the Spotted Trident-blue (*Cyprotides maculosus*) was described in 2023.

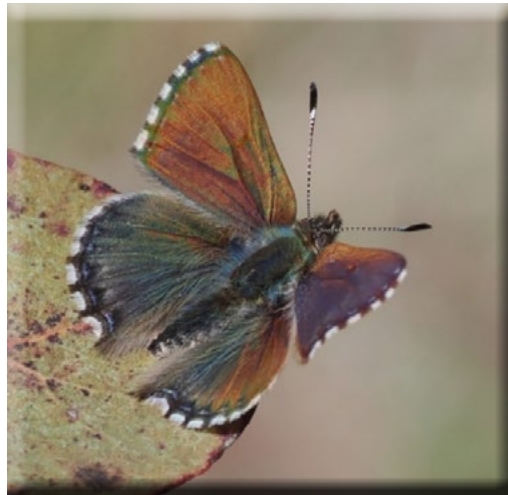
The new species is called the Violet Copper (*Paralucia crosbyi*), and it was discovered by local citizen scientist Susan Wishart in August 2021, when she photographed a small blue butterfly on a bushwalk in Namadgi, and later uploaded it to Canberra Nature Map.

This butterfly appeared to be very similar to the Purple/Bathurst Copper (*Paralucia spinifera*), which occurs in the Bathurst/Lithgow/Oberon area of NSW, but subsequent investigations and field work ascertained that the Namadgi butterfly was a different species.

The Violet Copper appears to be a narrow-range endemic butterfly. It is restricted to high altitudes in dry montane Eucalypt open woodland, where their larval food plants, Australian Blackthorn (*Bursaria spinosa* subsp. *lasiophylla*), grow and colonies of their attendant Black Cocktail Ant (*Anonchomyrma* sp.) exist. They fly from late July (!) to early October regardless of the temperature, but they can only fly in sunny conditions. So far their stronghold appears to be in Namadgi National Park but they have also been recorded from adjacent areas in NSW.

So if you happen see a small blue butterfly while you are bushwalking in Namadgi or high altitude areas of NSW from now through to October, please try to get photos and submit them to Canberra Nature Map Home – Canberra and Southern Tablelands (naturemapr.org) or [email](mailto:suzi@naturemapr.org) them to me.

Suzi Bond



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Meet the Mappers

Introducing the real people making important contributions to NatureMapr

GlossyGal

GlossyGal is a regular contributor to NatureMapr, having joined in July 2019, she now has over 1000 sightings from many different parts of Australia, and in particular from the Southern Highlands of NSW, where she lives. Having contributed so many stunning bird sightings, as well as butterflies, reptiles, plants, mammals and more, her love of the natural environment shines through. It was a pleasure to catch up with her recently to find out more.

Tell us about yourself and how you got involved with NatureMapr?

I live in the Southern Highlands of NSW. About 10 years ago I joined Birdlife Southern Highlands and started getting out into the bush with friends checking out and learning about the birds.

Over time I came to see that the bush I loved so much was at risk of being gobbled up by urban sprawl. So I started using NatureMapr to document what I was seeing out there in the hope that my records might contribute to the protection of special areas.

What do you like about contributing to NatureMapr?

There's a real sense of community among NatureMapr contributors and moderators. Moderators are generous with their time and often provide helpful hints about improving the scientific value of sightings. I now spend time in the bush with other NatureMapr contributors – they share my drive to investigate everything I see.

I love the sense that I'm contributing to a large database of information about the various species, their behaviour and their range.

Access to NatureMapr has inspired me to take my interest in nature beyond birds to many more species and to a broader understanding of the inter-relatedness of everything in nature. And I'm learning so much!

Do you have a favourite sighting?

I use the nickname 'Glossy Gal' because I have a special love for Glossy Black-Cockatoos. It's always exciting to be able to document sightings of glossies.

But as well as that, there's nothing like finding the first example of a species in your region. It's only happened to me a few times but the thrill of that first find continues to tantalise me.

And let's face it – it's nice sometimes to be able to show off a really good photo!

What other outcomes have resulted from your involvement with NatureMapr?

As well as broadening my understanding of nature and giving me access to new friends and moderators who are experts in their field, over time I've become an unofficial ambassador for NatureMapr. I was so enthusiastic about it that I felt compelled to spread the word!

In time my enthusiasm for understanding and protecting nature expressed itself as a radio show, podcast and YouTube channel that a friend and I produce. The show is called *Going Wild in the Highlands*. It's all about nature in the NSW Southern Highlands. We want locals to see the unique value of our surroundings here in this special part of the country.

The knowledge I continue to gain from NatureMapr has given me the confidence to aim to educate others.

Thank you to everyone at NatureMapr!

A huge thank you to GlossyGal for sharing her NatureMapr story. You can find all her NatureMapr sightings at: <https://naturemapr.org/users/sightings/21086>, as well as her [YouTube channel](#) and [Facebook page: Going Wild in the Highlands Podcast](#).

Interviewed by Matthew Frawley for FaceBook

Canberra Nature Map

(NatureMapr) is 10 years old!

Thank you to the thousands of Canberrans who've shared their plant and animal sightings over the last decade.

You've helped us to discover new plants, map and protect native species, and fight the spread of weeds across the ACT.

According to a new study, NatureMapr has helped uncover 126 new weed species in the ACT since 2014. Thanks to you, we've stopped the spread of many high-risk species.

This little local website has been so successful that it's now being rolled out nation-wide as Australia's expert-verified citizen science app. And it's all thanks to the amazing species-spotting skills of the Canberra community.

If you're new to NatureMapr, you're in for a treat! Check it out at <https://canberra.naturemapr.org/>

And for a list of priority weed species that we urge you to report, visit <https://canberra.naturemapr.org/species/lists/3>

Local events

Our Citizen Science Officer, Lewis Choy, had the pleasure of attending the Higgins Landcare Open Day where several of our users play a significant role in improving local biodiversity in the forested neighbourhood corridor!



A large focus of this event was to engage the local young kids with nature. It included a scavenger hunt to find certain native creatures and some pond water from Ginninderra Creek, where they could net and identify various water creatures.





This Higgins site has some rare native plants that the group are aiming to preserve.

Check out their Facebook page [Higgins Landcare Group](#). If you have a knack for nature and your community - it is definitely worth making it out to these events!

NatureMapr now national

Did you know that NatureMapr is now national, covering the whole of Australia! No matter where you are across the entire continent, even offshore on the Great Barrier Reef, you can collect sightings and upload them for identification: <https://naturemapr.org/>

At the bottom of the Canberra nature Map and all regional home pages is a very useful interactive map that allows you to easily select areas of Australia where you have recorded sightings. This saves you from having to know the local district names.

Explore Australia by region



Austracris guttulosa, the Spur-Throated Locust, an Immigrant from the North

Text and photo by Roger Farrow

Over the last few months, respondents to Canberra Nature Map have been regularly sighting this large grasshopper, in fact one of the largest species of grasshopper in Australia, only exceeded by the related *Valanga irregularis*. I have seen several myself, the most recent one being in Dalton cemetery on 10 June.

Austracris guttulosa breeds in the grasslands of tropical northern Australia in places like the Barkley Tablelands. Large numbers breed in wet years such as 2023–24 when there is an abundant food supply of green grasses for the nymphs. The adults emerge in late summer and often aggregate into swarms that move slowly across the savannah during winter, usually roosting and feeding in eucalypts overnight. These adults remain sexually immature till the start of the next rainy season.



Post-emergence, some adults undertake extensive nocturnal migrations at night on northerly airflows from the tropics, ending up in places like the Southern Tablelands, including the ACT. The last time such a big event occurred was in 1974–75 when a major plague of this species occurred, devastating crops in Central Queensland, and many specimens were seen in the ACT.

This behaviour takes this locust out of its normal breeding area and there is no evidence that any of those seen locally ever return north but will be killed by the cold of winter in the Southern Tablelands.

The term ‘spur-throated’ refers to the large prosternal process projecting from the underside of the thorax. It belongs to the sub-family Cyrtacanthacridinae that includes 5 species of *Austracris* and 7 of *Valanga* in Australia.

Saving Red Hill one weed at a time: how citizen engagement can make a difference

Paul Ratcliffe, from Red Hill Regenerators

Canberra's Red Hill forms the iconic backdrop to the Parliament House and to one of the major visual axes, which were envisaged by Walter Burley Griffin and his wife Marion Mahoney Griffin, when they set out the design for the new National Capital in 1911. One of the great views of Red Hill is to be experienced from the summit of Mount Ainslie, looking south over Anzac Parade, Lake Burley Griffin and Parliament House.



Red Hill forms part of an undulating north-south wildlife corridor running from Deakin in the north, through Davidson's Hill, across Hindmarsh Drive to Mount Mugga and south towards the ACT border and the Rob Roy Ranges.

Before European occupation of this area in the 1820s, the Red Hill ridge would have been covered by Yellow Box – Red Gum grassy woodland, along with much of south-eastern Australia, and actively managed by its indigenous inhabitants. European colonisation brought sheep, cattle, land clearing and rabbits. Much of Red Hill and Davidsons Hill were cleared for grazing, firewood and building materials, leaving large grassy areas on the ridges and a dusty, overgrazed landscape below.

The Griffins' plan for Canberra included a landscaping concept described as 'painting' the hillsides using plantations of different coloured flowering plants. Red Hill was selected for red flowering plants, to be planted between 1917 and 1921, along the ridge line between Red Hill summit and the Red Hill cafe. About 4,000 *Callistemon lanceolatus* and *C. rigidus* were planted just below the cafe, where about 700 remain flourishing more than a century later. At the Red Hill summit *Grevillea rosmarinifolia* were planted and have now spread through the adjacent bushland. Close by, pink flowering Darling Pea (*Swainsona galegifolia*) were also planted, of which only three plants remain. All plants, while not endemic to Red Hill, are now protected following heritage listing in 2018, a century after their planting.

The construction of Canberra from early 20th century, brought renewed pressure on the hillsides and ridge line, with increased demand for firewood and building materials, more grazing, and importation of European plants in nearby housing and landscaping.

It was only because of the foresight of the Griffin Canberra Plan, which protected 'hills and ridges' from development, that road and house building stopped at the foothills of the Red Hill/Davidson's Hill ridge. While being protected from development, the ridge was seen as vacant land, useful for dumping rubbish, installing water tanks and stringing power lines. Little attention was given to the proliferation of exotic weeds or to the ecological value of the landscape until the arrival of Dr Michael Mulvaney, with a vision to restore its natural values.

Born and raised on the edges of the ridge, young Michael was familiar with this bushland, and spent time exploring, and learning about the ecological value of the remnant native vegetation, which was struggling to survive ever-encroaching weeds.

In 1988, citizen Michael took action by establishing one of Canberra's first volunteer led and managed bushland care groups, naming it the Red Hill Regenerators. It was not until 1993, five years later, that the recently independent ACT Government recognised the value of this endangered bushland, by designating 293ha to create the Red Hill Nature Reserve, as part of a wider Canberra Nature Park.

The boundaries of Red Hill Nature Reserve enclose Red Hill, Davidson's Hill, and its associated ridge line, from Hindmarsh Drive, north to the edge of the Deakin suburb. The Nature Reserve wraps around the Federal Golf Course, forming a natural boundary between South Canberra and Woden Valley. From the perspective of space (or Google Maps), the reserve outline appears like a monster slug, lunging towards the Curtin suburb, with Red Hill Lookout for an eye and four strategically placed water tanks for nostrils.

With his hardy band of volunteers, the Regenerators set about dealing with hectares of saffron thistles along the old cleared and overgrazed hilltops, together with gullies choked by Firethorn, Cotoneaster and Blackberries. Hundreds of thousands of woody weeds have been removed and there have been exponential reductions in the extent of thistles, *Verbascum* and Paterson's Curse. St John's Wort is still a challenge. In 1988, weeds dominated over 50% of the reserve, now reduced to less than 10%. In 1988, there were 21 ha of high-quality woodland, now there is over 150 ha.

Once weed cover began to be reduced, and with help from Canberra Nature Map (CNM) and its panel of experts, it became easier for citizens to locate and identify many of the 250 plant species, including 15 threatened or rare species. In addition, CNM has helped us to discover and record rare fauna such as the Perunga grasshopper and Small Ant-Blue Butterfly. Using CNM we have also established Red Hill as the Gang-gang capital, with more recorded nest trees than anywhere else on the planet. Without CNM, it would have been difficult to accumulate in one readily accessible place, almost 8,000 flora and fauna sightings, their locations and identities. This invaluable database has guided the Regenerators' efforts to assist in the protection of important ecosystems and species.



Thirty-six years on from its optimistic beginnings, the Regenerators continue to devote the bulk of their efforts dealing with weeds. With an average of a dozen volunteers who meet on Red Hill twice per month, and with increasing assistance from grants, donated equipment from government, and school and business group visits, the Reserve now has a significantly improved environment. Many of the grazed areas are being rehabilitated through a decade of tube stock planting and weed eradication. A 'Red Hill Regenerators 40th anniversary' project has recently been initiated to raise funds from (tax deductible) donations and government grants, to rehabilitate the remaining 'low value' bushland.



In order for the Regenerators reach their goal in 2028, there will need to be continued ongoing citizen and government engagement to manage the Nature Reserve, deal with weeds, control rabbits and kangaroos, and add species to CNM. We encourage others to join our endeavours.

Red Hill Regenerators website: <https://redhillregenerators.org.au/>



The Eastern Wallaroo, *Osphranter robustus robustus*, a large but shy Kangaroo

Michael Bedingfield

The Eastern Grey Kangaroo, *Macropus giganteus*, is very familiar to us. But its close relative, the Wallaroo, is not a common sight. When I moved to Conder in 1992, the suburb was relatively undeveloped, and I was surrounded by lots of open space, but with Tuggeranong Hill and the foothills to Mount Rob Roy forming a long arc to the north and east. I spent a lot of time exploring those hills, and I occasionally saw a solitary Wallaroo, and less often two or three together. When the suburbs of Lanyon Valley were only partly built, they would occasionally come down out of the hills to graze in the open valley. They are still living in those steep hills, and I have seen them only a few hundred metres from the houses. It is common to see them in the hills near Tharwa Sandwash in the Gigerline Nature Reserve, in the late afternoon during the cooler months. I have also seen them on the lower slopes of Mt Tennant.

Not so long ago I had an interesting encounter with a pair of males close to the Molonglo River near Denman Prospect. A solitary male was casually hopping along when a second male came bursting out of the shrubbery making a loud ‘woofing’ noise. They fought vigorously and it was a fierce encounter with much grunting. After a while they had a rest. Then they had another go until one decided he had had enough. He left with the victor following and adding some more loud woofing for emphasis. I was only 30 metres away from the altercation, which I recorded on [CNM](#).

Wallaroos are much shyer than kangaroos, and they usually see me before I see them. When disturbed the big males often make a loud exhalation of their breath. Perhaps this is in preparation for flight or fight, but it alerts me to their presence. They will bound off slowly and heavily, until they are at a safe distance, or until they disappear into the trees or over a hill. The smaller females and young ones move more quickly and lightly.

The most widespread of the Wallaroos is the Common Wallaroo, *Osphranter robustus*, which occurs throughout the continent. It was previously called *Macropus robustus*, but the genus has been revised. There are four subspecies for *Osphranter robustus*. The local ones are called the Eastern Wallaroo and their scientific name is *Osphranter robustus robustus*. They inhabit both sides of the length of the Great Dividing Range. Males and females differ in appearance, but they both have thick shaggy fur. The males are dark grey in colour, with paler grey or white on their front. The females are much smaller than the males, being only half as heavy, and their colouring is much lighter than the males. This subspecies is slightly smaller than the Eastern Grey Kangaroo, but has a stockier build.

To the west of the Great Dividing Range on the open plains, and all the way to the west coast of the continent, Common Wallaroos have shorter fur, are reddish brown in colour, and are known as the Euro, *O. r. erubescens*. The subspecies *O. r. woodwardi* lives in the Kimberleys and NT. None of these three subspecies is considered to be under threat. The fourth is *O. r. isabellinus*, which is restricted to Barrow Island, is comparatively small, and is considered to be vulnerable.

The Red Kangaroo, the largest of all kangaroos, is called *Osphranter rufus*.

Wallaroos live in a variety of habitats, including dry desert grasslands, grassy woodlands and open forest. They are largely nocturnal, emerging to graze in open grassy areas in the late afternoon or early evening. They retreat to rocky hillsides or dense vegetation for shelter during the day. They have a preference for rocky hills and rugged terrain and tend to be secretive. Their feet are adapted to cope with a rocky landscape. They are mostly solitary, but do form small groups of two or three. The Euro is adapted to arid conditions and doesn't have to drink, obtaining all necessary water from its food and night dew.

I have provided three photographs of the Eastern Wallaroo, of an adult male, a young dark coloured male, and a female showing her much lighter colours. Since they are nocturnal and shy it can be hard to get close enough to get really good photos, especially in the fading light. It took some time to get a good one of the larger male, but eventually I saw one before it saw me! I have become quite fond of seeing them, perhaps because of their elusive nature.





My references include the book *A Photographic Guide to Mammals of Australia* by Ronald Strahan and the Australian Museum (1997), and the websites:-

https://en.wikipedia.org/wiki/Common_wallaroo

<https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/e29ab738-af2b-438a-80cf-675a37616ba9>

This essay has been revised from one published in the News of Friends of Grasslands, March–April 2015.



Better mapping for weed incursions

NatureMapr - a valuable tool for helping citizens find new high risk weed incursions, and for better mapping the extent of weeds present.

Dr Michael Mulvaney, NatureMapr

As of 6 February 2024 around 16,000 image sightings of exotic plants had been recorded via NatureMapr, within the Australian Capital Territory (10 years of sightings) A few thousand records are of planted species, but 13,343 of the records are of weeds. Moderators were able to identify the species in 12,470 (93%) of the image records and identified 642 different weed species.

A weed plant is defined as a species that is not indigenous to the ACT region and is one that has established away from plantings (in a non-garden setting), if a horticultural species, or was recorded as being present if a non-cultivated species. This is a broad definition and includes some species planted in public open space or reserves where self seeding/propagation may only have spread a few meters from parent planting.

NatureMapr <https://naturemapr.org/> is now being used nationwide, but for the purposes of this report it is useful to refer to the NatureMapr sightings for the ACT region as Canberra Nature Map sightings <https://canberra.naturemapr.org/>

Canberra Nature Map (CNM) sightings were the first record for 126 weed species within the ACT.

Weed control is much more likely to be successful and cost effective the earlier a new weed incursion is located, and control undertaken. NZ Department of Conservation data shows it is 40 times more expensive to do late control compared with early control (Harris & Timmins 2009).

The CNM 'first' sighting records were nearly all low numbers of plants, where early or rapid control was possible. For many, early control has been successful. Of the 126 new weed species, Downey and Taylor (2022 & 2023) estimated the following weed risk assessment:

- Extreme - 1 species
- Very High – 6 Species
- High – 15 species
- Moderate – 22 species
- Low/Negligible – 42
- Unassessed – 40

On 20 occasions, where an unassessed species is of the same form as an assessed species in the same genus, I have assumed the same rating.

The main determinate of whether a weed species had not previously been recorded in the ACT was if the species was listed in the 2019 (Version 4/1) of the ACT Census of Vascular Plants. As CNM started in 2013 the date of record description provided in the Census was used to determine whether a CNM sighting from 2013-2019 preceded that of a record indicated in the Census. Atlas of Living Australia records were also checked for any recorded sightings prior to those of CNM.

It is remarkable, and suggests a high yearly rate of new incursions, that 126 weeds new to the ACT have been recognised on the CNM platform, which has been operating for 10 years.

Seven and half per cent of all sightings were of three species listed as Weeds of National Significance, while 406 sightings were made of 21 species on a priority list of species of concern to ACT Parks & Conservation and ACT Biosecurity Officers.

Table 1 details the number of species and sightings made in each of the Downey and Taylor (2022 & 2023) categories. Eight thousand nine hundred and twenty-five individual sightings have been of 313 species rated as a moderate or higher weed risk.

Table 1 Risk significance of reported weed species

Weed Classification	No. of species	No. of sightings
Weeds of national significance	3	1,018
ACT priority weeds (ACT biosecurity list)	21	406
Downey and Taylor weed risk rating		
Extreme	3	118
Very High	41	2,541
High	59	1,226
Moderate	210	5,040
Low/negligible	264	3,391

Source: NatureMapr sightings

NatureMaprs have not only been good at finding new weed incursions early in the invasive process, but their sightings have also provided much information on the extent of weed species already present in the ACT. This information is proving valuable in prioritising weed control and controlling new incursions within particular conservation reserves, prior to them becoming locally abundant.

As detailed in Table 2, NatureMaprs have made 1,497 sightings of high risk or above weed species at a new location: 411 of these were a new weed location within a conservation reserve. A new location was defined as being at least 200 m from any other electronic record of that species. Databases searched included the Atlas of Living Australia, previous records within CNM (NatureMapr) and the ACT Government ArcGIS Online – Field Maps (formerly Collector) mapping of both treated and untreated

Table 2 Risk rating of CNM weed sightings

Risk assessment rating	No. new ACT locations	No of New Conservation Reserve Locations
Extreme	42	6
Very high	808	218
High	647	187
Moderate	631	587
Total	2,128	998

Source: NatureMapr

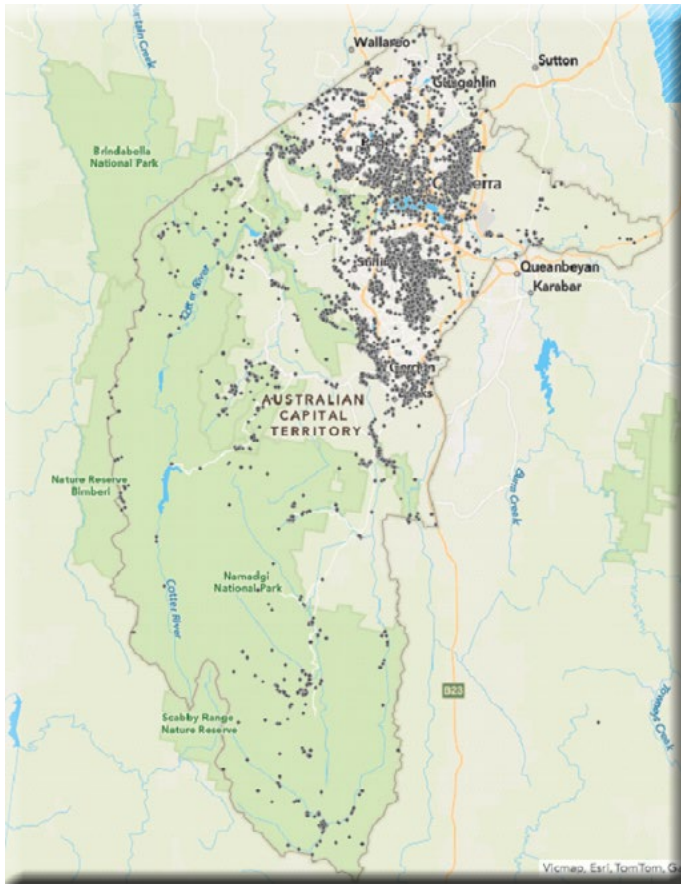


Weeds, each year since 2014. This is the year the mapping begun.

It is likely that a lot of these "new" locations were known to land managers but not recorded and that this knowledge is largely lost when there are changes to staff (i.e. Rangers & Biosecurity Officers).

As indicated in Map 1, below, sightings have been concentrated in the Canberra urban area, but the whole of the Territory has been sampled to some extent, with only the Kowen area, active rural leases, and the remoter parts of Namadgi under sampled.

Map 1: Locations of all Canberra Nature Map weed sightings

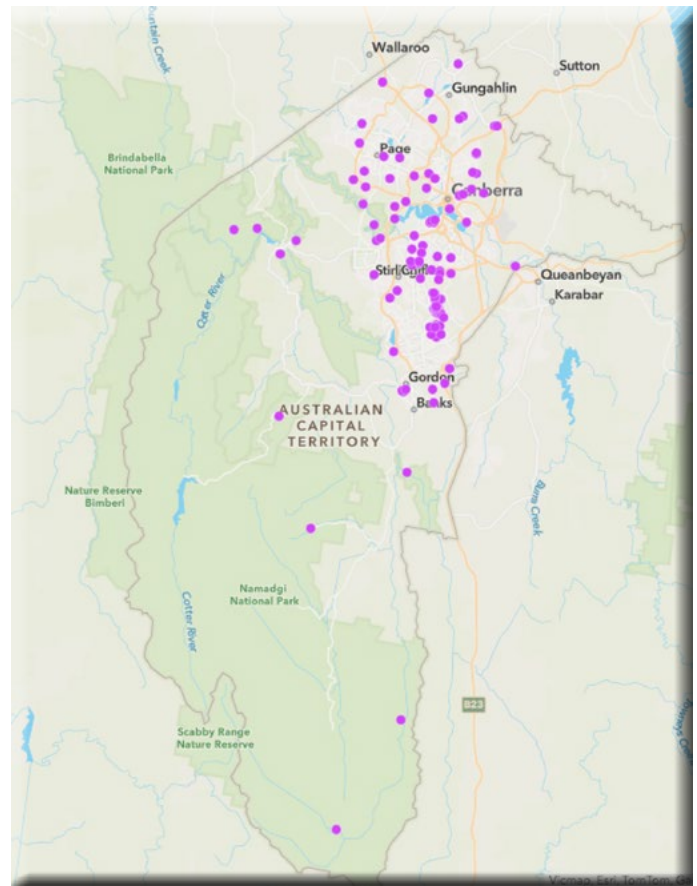


Map 2 illustrates that new weeds have been found across the Territory and underscores the importance of having many eyes out there observing as much of the Territory as possible.

References

1. Downey, P.O. and Taylor, S. (2022) *A list of Alien Plant Species Naturalised in the Australian Capital Territory - A list of problematic native plant species for potential management*. Unpublished report prepared for the Act Government Canberra.

Map 2 Locations of first time reports of a species 'wild' in the ACT



2. Downey, P.O. and Taylor, S. (2023). *Native Plant Invaders in the Australian Capital Territory - A list of problematic native plant species for potential management*. Unpublished report prepared for the ACT Government Canberra.
3. Harris, S. and Timmins S.M. (2009) Estimating the benefit of early control of all newly naturalised plants. *Science for Conservation* 292. NZ Department of Conservation.
4. Lepschi, B. G, Cargill, D.C, Albrecht D E and Monro A M (editors). (2019) *Census of the Flora of the Australian Capital Territory*. Version 4.1 (30 August 2019) . Australian National Herbarium. <https://www.anbg.gov.au/cpbr/ACT-census/index.html>

Mystery silken bags – What are they, we asked?

This article was published in the June Field Naturalists of Canberra newsletter.

There are 12 reports of this caterpillar on NatureMapr but the egg bags have only been reported in the Albury/Wodonga area.

*No sightings have been reported on Canberra Nature Map under the species name *Ochrogaster lunifer* but there are six reports of *Thaumetopoeinae* (subfamily) (Bag-shelter Moths, Processionary Caterpillars).*

This article is therefore of interest as it may alert nature mappers that happen to spot these bags to be able to identify them, whether they find them within the Canberra Nature map area or elsewhere.

Editor

At the April 2024 FNAC meeting I shared the first photo taken by Janet Hume, a member of the Murrumbidgee Field Naturalists (MFN) from Wagga, to ask members if they knew what creatures could have made it. Janet had seen several similar bags hanging in the canopies of *Eucalyptus* trees nearby. She was uncertain of their size when she sent me the photo, so I couldn't pass that on at the meeting.

After Janet visited the site again, the MFNs had more information about the bag but still no idea of what had made it. The facts we knew about the silken bag in the photo were confusing, being their large size (approx. 30 cm long), their location high in eucalyptus trees, the large silken lumps inside them and the absence of any animal seen inside or nearby. The clean appearance of the bag and its contents was also a baffling clue, appearing that they were newly built. After a week or more Janet noticed a creature crawling on the outside of one of the bags, as seen in the second photo, as well as the extraordinary protrusions from the silken lumps inside the bag.



Photo: Janet Hume

We could see then that the bags belong to Processionary or Bag-moth Caterpillars (*Ochrogaster lunifer*). Further west in the Riverina these communal nests are typically seen in acacias, particularly Boree (*Acacia pendula*) and are often smaller in size. Published information records only one species of the genus in Australia.

The second photo shows a few caterpillars inside the bag in the process of shedding their skins inside the silken bundles. These would be later instars of the caterpillars, possibly in a newly constructed bag or in a refurbished one that has increased greatly in size as the caterpillars have grown. The large caterpillar that is photographed crawling across the bag would have recently moulted for the sixth or seventh time. The skins, or exuviae, remain intact inside the communal bag from the third to the eighth instars.



Photo: Janet Hume

The first instars of Processionary Caterpillars are reported as staying within an egg mass, of between 150–500 eggs. The adult female lays the eggs in October–November somewhere on a food tree in a mass and covers them with long deciduous tail scales as protection. The first instars remain at the site of the egg mass and do not eat until after they moult.

Second instar caterpillars are reported to feed during the day, eating newly formed leaves of the food plant. They return to the site of the egg mass to rest during the night at this stage. Caterpillars from the third to the eighth instars feed at night only and make a silken bag to shelter in during the day. They increase the size and strength of the bag as they grow and accumulate more exuviae and other waste. They also grow the long hairs for which this species is noted.

Much can be read online about the potential dangers of these hairs, which are made up of many setae (microscopic barbed hairs) that multiply in number after each moult. General advice is 'Don't touch' the egg mass, caterpillars, pupae, adults or the silken bags and keep pets and domestic animals away from them. *The Journal of Applied Ecology* reference states that Pallid Cuckoos eat *O. lunifer*; so it's curious that they survive the meal with the reported urticating qualities of the hairs.

Caterpillars of this species produce large quantities of silk. They leave a silken thread behind them everywhere they crawl



(to enable their return to the bag shelter), they enlarge the silken bag as they grow, they make a new communal silken bag when they move to another food tree and each individual caterpillar makes a small silken cocoon in which to pupate.

The [Butterfly House \(Coffs Harbour\) website](#) suggests that there could be more than one species of the *Ochrogaster* genus in Australia due to differences in behaviour, e.g. whether the bag shelter is at the base of the trunk or in the tree canopy. There are also marked differences in the colour of adult moths (wingspan 5.5 cm), which are best viewed online.



Due to their nocturnal habits, most of us in the Riverina have probably never seen an adult *O. lunifer* let alone significant numbers of them to compare wing markings. By chance, adult moths could be spotted at ground level when emerging from their underground pupal cases. Mature caterpillars leave the food tree in a procession and travel up to 200 m away where they disperse from May to September and stay beneath the soil or leaf litter in a pre-pupal diapause. Individuals then pupate in the ground and emerge as adults in October to start the year-long cycle of the next generation. Adult females don't eat and die soon after mating and egg laying, which happens quickly after emerging.

Such a notorious and familiar caterpillar in acacias between Narrandera and Griffith had us fooled in the context of eucalypts further east around Wagga. They are noted in research papers as occurring in all Australian states and territories but they are certainly not numerous in the ACT. They are often stated as mainly occurring in coastal NSW, but perhaps that reflects the density of humans there who report them.

References

1. A Guide to Australian Moths by Paul Zborowsky and Ted Edwards, CSIRO 2007.
2. [Coffs Harbour Moth House web site.](#)
3. Wikipedia.org
4. Habitat structure and egg distribution in the Processionary Caterpillar *Ochrogaster lunifer*: lessons for conservation and management by Graham J Floater and Myron P Zalucki, *Journal of Applied Ecology*, Vol 37 (2000) pp 87-99.

Margaret Strong

Editorial comment

Adult moths have been reported on the South Coast and Greater Brisbane NatureMapr sites.



Photo: PJH123 – Greater Brisbane NatureMapr

As a lay person, I'm not sure of the difference between *Ochrogaster lunifer*, reported in Albury/Wodonga, South Coast and Greater Brisbane, and the Thaumetopoeinae (subfamily) reported in the Canberra region.

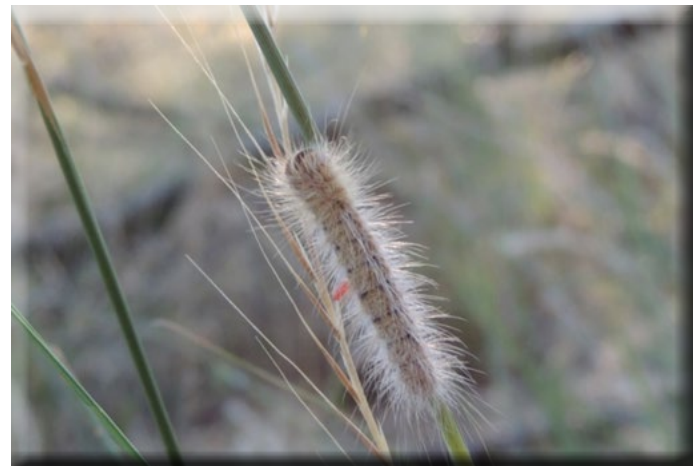


Photo: Michael Beddingfield – Canberra Nature Map

Maybe one of the moth experts could provide an answer.

Alison Milton
Editor



Photographic Competition Exhibition at CSIRO

Twenty-three framed photographs of the competition winners and finalists were on display at the CSIRO Discovery Centre from 22 May until 27 June 2024. There was also a poster display on what NatureMapr has achieved.

The Winners and Finalists:

You can find all the winners and finalists on the [CNM web site](#)

The [Riotact](#) also had a write-up of the competition winners. Trevor Rix rightly took out most of the awards with his stunning photos.

Category winners

Overall winner: Tawny Frogmouth by Trevor Rix (trevsci)

Anne O’Hehir, curator of photographs at the Australian National Gallery selected Trevor’s Tawny Frogmouth photograph as the best image entered in the competition.

Not only was Trevor the overall winner, his Yellow-footed Antechinus image was the people’s choice of best image. He also won or was a finalist in several of the categories.

Best image by a youth (18 year old or younger): Summer Leek Orchid by Ciaran Ernst-Russell (tapirlord)

Since about the age of 14 Ciaran has been identifying the plant images lodged by others on Canberra Nature Map. At first he was mentored by long-term botanists Betty Wood and Michael Mulvaney but his expertise grew rapidly and he is now the major plant moderator and authority.

Best vertebrate image: Yellow Footed Antechinus (Antechinus flavipes) by Trevor Rix

NatureMapr provides access to 66,000 animal vertebrate image sightings and 1.5 million vertebrate records. These include over 1million records from the Canberra Garden Bird Survey.

Best invertebrate image: Blue Banded Bee (Amegilla sp.) by Amie Lording (amiessmacro)

The Blue Banded Bee (Amegilla sp.) pictured by Amie Lording is a buzz pollinator. Certain plants like Hibbertia and tomatoes hide pollen in capsules. Blue Banded Bees open these capsules by transferring vibrations through their body via rapid contraction of their indirect flight muscles.

Best fungi or cryptogam image: Ghost fungus (Omphalotus nidiformis) by Trevor Rix (trevsci)

Fungi consist of a network of thread like mycelium spreading through soil or wood. This network periodically bears a fruiting body, such as a mushroom, and it is the fruit body that is photographed and identified in sightings.

Trevor Rix’s Ghost Fungus (Omphalotus nidiformis) is named after its soft ghostly glow that it emits most of the time, but is best seen in the dark. It is unknown why this fruit body glows but experiments suggest it is not to attract insects.

Best plant image: Alpine Sunray (Leucochrysum alpinum) by Trevor Rix (trevsci)

The winning image by Trevor Rix reflects the name of the plant depicted.

Images of highest conservation significance: Angled Heath (Erica quadrangularis) by Sharon Woods (Shazw)

An image of conservation significance is one whose posting brings about management action or greatly increases our wildlife knowledge. Canberra Nature Map receives a significant sighting daily. The power of having many eyes reporting what they see has transformed conservation within our region.

Best habitat image: Eastern Rosella in Hollow by Chris Blunt

Chris Blunt’s image of an Eastern Rosella nesting in a tree hollow reminds us that habitat diversity at the microscale is crucial and tree hollows are a big part of that.

Best image taken as part of the Pollinator Study: Mantis with butterfly by Helen Cross

As part of the Canberra Urban Biodiversity Study, NatureMaprs recorded 2800 insect visitations to flowers at 45 specified points across Canberra.

Urbanisation can have significant impacts on native insect pollinators. As Canberra grows and native vegetation is cleared for development, pollinator populations may decline due to habitat fragmentation, diminishing resources, and pesticide exposure. This can reduce pollination services and genetic diversity in plant and pollinator populations. The study is collecting data to better understand and redress the issue.

Analysis is underway, but 47% of all sightings were on yellow daisies and 24% on native white flowering shrubs, which is a clear guide to plantings, that will aid pollinators.

CNM Committee

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