

Canberra Nature Map newsletter

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Schizophyllum commune: Photo by Trevor Preston

NatureMapr's third epic contributor

Congratulations to Trevor Preston on becoming just the third person to pass the 10,000 sightings barrier on NatureMapr, joining Alison Milton and Michael Bedingfield as epic contributors!

Trevor has contributed sightings from across Australia, including Canberra and Southern Tablelands, South Coast, North Coast, Southern Highlands, Greater Sydney, Greater Brisbane, Hunter Region, Riverina Murray, Gippsland and South Australia.

Trevor was featured in our first meet the mappers profile early last year. You can read more about his story on the <u>NatureMapr Facebook page</u>.

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Meet the Mappers

Introducing the real people making important contributions to NatureMapr

RodDeb

Anyone who has followed Canberra Nature Map over the past six years will be familiar with the sightings of RodDeb, a dynamic duo who have contributed over 8,000 sightings! Best known for their many incredible bird sightings from around Canberra and the ACT, they also have many significant sightings of insects and have contributed an extensive amount of audio recordings of bird calls. It was great to catch up with them recently to hear more about their journey with NatureMapr.

Tell us a bit about yourselves and how you discovered and then started using Canberra Nature Map?

We have both been fascinated by nature for as long as we can remember, particularly birds and animals. We found out about Canberra Nature Map (CNM) in 2017, first by seeing an item on a TV news about why Aaron started it, and then we chatted to John Bundock about it when we did a 'finding the Robins walk' with him at Tidbinbilla Nature Reserve. John recommended joining CNM for both submitting sightings for help with identification and to see what else other people were finding and where.

It's less than six years since you joined Canberra Nature Map and you have over 8,000 sightings, mostly birds and insects, but also plenty of reptiles and plants. Do you have a favourite place to visit to collect sightings?

We are very lucky in Canberra that there are so many places to go that are not too far away. A few favourite places are: Jerrabomberra Wetlands, Namadgi National Park, Tidbinbilla, various ponds in Tuggeranong and Lake Tuggeranong, to name a few. Even in our backyard we get beautiful birds visiting.

*Is it possible to name a favourite sighting or two?*There are too many special encounters with our beautiful wildlife to mention them all, but here are a few:

- Swift Parrots at Village Creek Lake Tuggeranong on 22 May 2021. A flock of around 30 birds in the trees and had the time to appreciate them.
- Intermediate Egrets at Jerrabomberra Wetlands in January 2017. There were 2 Intermediate Egrets that we watched for a least an hour from one of the hides. Both bathed in the water then preened, displayed their



gorgeous plumage and foraged around. We still talk about that day.

Gang-gangs at Tidbinbilla Nature Reserve in
December 2018. We had a close view of three Gang
Gangs eating Wattle seed. They were not bothered in the
least by us watching them and made lots of noise, totally
enjoying what they were eating.



 A Wedge-tailed Eagle at the Australian National Botanical Gardens in May 2018. We had a close encounter with a Wedge-tailed Eagle that had just caught a Ring-tailed Possum and was settling down in a nearby tree to eat it. A short time later we were joined by Tim Leach and we all watched this magical time and were in awe of the magnificence of the Wedge-tailed Eagle.



All of your Naturemapr contributions are on Canberra Nature Map. Do you have any plans to travel to other parts of Australia to explore wildlife?

Currently we do not have plans to travel to other parts of Australia.

What do you see as the greatest value in NatureMapr and would you recommend it to others who haven't used it before?

The greatest value of NatureMapr is in the volume of sightings, which covers such a vast range of Australian life and the knowledge and expertise of the moderators, which all help to educate and inform users. It is a great learning tool for lovers of wildlife and plants to gather information with others who also love our beautiful Australian nature in



all forms. We are so lucky here in Canberra to have nature right on our doorstep. NatureMapr also shows the value of looking after nature in places that are vulnerable. It can also show how things change in the years after fires, drought and floods. We have already recommended NatureMapr to others who have been after help with identifying their photos. Thank you to the volunteer moderators of NatureMapr who have helped us. We appreciate your time and help.

Thanks to Rod and Deb for sharing their story, you can see the <u>full collection</u> of all their Canberra Nature Map sightings on the web site.

Tina

Tina (username CSteele4) has contributed a stunning array of sightings in a very short time since joining NatureMapr in January 2021. Her love of our native flora is clearly evident in her incredible orchid photos, but she also takes stunning photos of insects, reptiles, mammals and birds. It is clear she has a very strong connection with the bushland near her home town of Captains Flat, NSW, even discovering the first ever record of the Bathurst or Purple Copper Butterfly there recently. It was a pleasure to interview Tina and find out more about her contributions to NatureMapr.



Tell us a bit about yourself and how you discovered and then started using Canberra Nature Map?

I grew up in Canada, in a very outdoorsy family, and have always been big into bushwalking and exploring. I moved to Australia in 2006, so I've mostly seen the country in drought. I have been foraging since I was a kid, so had a decent knowledge of introduced edible plants and fungi, but when the big rains came after the fires of 2019/2020, and all of these incredible new native plants and fungi started emerging, I really wanted to know what all of it was! I started taking photos and asking a friend, who is a



biologist, and he put me onto a few apps like iNaturalist and some Lucid ID apps. I started collecting pressed samples of local flora for a book on his suggestion, and talking to other plant-mad people like Rainer Rehwinkel, and soon found out about NatureMapr. It took me a while to start using it regularly, but I soon came to prefer it over iNaturalist. I've since gone back to the university degree I paused in 2015, a Bachelor of Environmental Science, and changed my major to Conservation Ecology with a minor in Botany.

You have so many stunning orchid sightings, particularly sun orchids. What's your secret to finding them?

I think because I'm an artist, I'm good at spotting irregularities in the landscape, like seeing a little dot of blue or pink among the grasses, where an orchid is hiding. I also tend to scan the ground as I walk as I'm quite clumsy, so I see things lower down than others might!



Do you have a favourite or most memorable sighting?

My favourite at the moment is definitely the *Paralucia spinifera* (Purple Copper Butterfly) sighting! I especially love that one because it has sparked an intense interest for me in butterflies and moths, and it was purely accidental! I was walking the dogs with my partner, who casually mentioned the 'pretty butterfly' feeding a few feet in front of us, so I snapped a couple of quick shots. I had no idea it was anything important until I uploaded it and Suzi Bond weighed in! I've spent the past two months trying to get another sighting, here is hoping I can find another before their season ends!



It's very clear you have a very good knowledge of the plants in your local area. Have you considered also becoming a moderator for Captains Flat?

I would absolutely love to become a moderator! I've spent the past nearly four years learning all of the plants growing around me here and compiling a specimen book of all of the plants (those that aren't protected, of course), within 20 kms of the village. I'm very proud of the diversity of our little patch!

When you are out in the fields collecting sightings, what photographic equipment do you use?

This one is actually a little embarrassing, because I just have a really good phone camera – a Samsung Galaxy s23 Ultra. I'm looking at learning how to use a real camera though, as some of the moths I've been photographing are tiny and it can be tricky to get the phone camera to focus on them!

What do you see as the greatest value in NatureMapr and would you recommend it to others who haven't used it before?

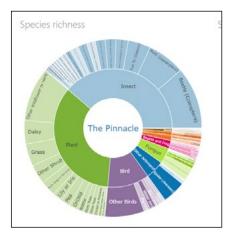
I think it is an incredible resource! I love that it is moderated, so you can trust the accuracy of the sightings (unlike other similar apps/websites). It's also fantastic to be able to pull up a map before you visit somewhere new and get an idea of what you may find there! The more people who contribute, the more we know, and I think the value of citizen scientists is just extraordinary.

Thanks to Tina for sharing her story, you can see the <u>full</u> <u>collection</u> of all her NatureMapr sightings on the web site.

Species richness rankings

For those paying attention, you may have noticed the new Species richness rankings!

The chart gives a breakdown of each species group.



Out in front is the vast Queanbeyan—Palerang Regional Council.

Also listed are the locations with the least survey effort and while some of those currently have no public access, some do. So if you want somewhere new to explore take note of these lessor surveyed sites and get out there and give them some love.

NatureMapr implementations

The NatureMapr Team have implemented quite a few enhancements in the past three months!

The species richness rankings has already been mentioned but the feature I really love is the map of Australia on the home page showing all the various NatureMapr regions. For those who have done any interstate travel, this is a very handy way of accessing the regions to upload sightings, especially if you are not aware of the name of the region. It is also very useful for Moderators to check regions for unidentified sightings.

We recently presented NatureMapr to the Threatened Species Commissioner and are having discussions with potential partner organisations.

The team also had the following announcements.

Many thanks to Steve Taylor for his presentation to the NSW Government regarding NatureMapr data's integration with Esri ArcGIS and Field Maps.

A recent presentation to the NatureArt Lab - Art Classes group.

Version 1 of our Biodiversity Dashboard for maps has been introduced.

Site navigation has been simplified and species list formats improved.

A new page listing all sightings reported to priority species lists has been added.

New sighting impact notifications are now sent to users when they report a priority species that increases the SRS of a location.

Category experts now display a green verified tick, which acknowledges their qualifications, experience or proven track record in their area of expertise.

Extremely rare orchid spotted in the ACT!

The Leafless Beard Orchid (*Calochilus saprophyticus*) has only been recorded twice in the ACT, and not since 2010.

Thought to only live in NSW, Victoria and Tasmania this rare and elusive species self-pollinates, and therefore its flower hardly ever opens.





Hughes Garran Woodland

Bill and Ruth Kerruish

The Woodland is an eight-hectare amenity park — not a nature park — largely hidden by surrounding houses. When the suburbs were built in the mid sixty's, the area was a sheep paddock with only three mature trees. In 1965 much of the area was planted up to a mix of local eucalypts (mostly yellow and apple box). Over the next 38 years the area was often burnt and many of the trees damaged. An under-story of tall wattles and garden escapes developed, and people walked around the park, not through it.

Volunteer work started in 2003. Walking tracks were established, and the garden escapes and some wattles removed to open up the park. The 2007 onwards drought and conflict within the group as to the direction to be taken, prompted the preparation of a plan to guide the group.

The Hughes Garran Management Plan

A small Government grant enabled three local consultants to work with the volunteers on a plan. The aim was to move the parkland towards its original red gum, yellow box grassy woodland structure, within the constraints imposed by the urban setting and the needs of the community. The park was divided into five separate 'blocks', each managed to accommodate the different landscapes and goals. Care is taken to preserve the natural beauty of the bush. Details are in the online booklet, *Looking after the Land*.

The woodland's plant and wildlife

Volunteers have worked with Canberra Nature Map to identify and record more than 1,000 species of plants and animals. That sounds a lot, but there are still many insects, reptiles and fungi to be discovered! Much of this material has been circulated to members over the years as 'flyers' and more recently, *Native and Exotic Plants and Animals in Hughes Garran Woodland* has been placed online to encourage children at the four adjacent schools and two scout clubs, to take an interest in the Woodland.



Apple box trees in the foreground and Kangaroo Grass ripening in the middle ground

Volunteers

Most volunteers live near the park and come with a wide range of skills and abilities. Weekend working parties are irregularly arranged 6 to 8 times a year and involve major plantings, weed control, and track up-keep. The work varies

during the year. In a hot summer little is done apart from watering, and little happens in midwinter. A smaller group works every Wednesday morning, largely on maintenance. Watering and weed control are often done by individuals during the week.

Enabling the volunteers to make full use of their skills and abilities; to be productive and rewarded for their efforts, is an important part of volunteering.



Volunteers putting up the sign

It is disappointing that insurance considerations place constraints on tools that can be used by well skilled volunteers.

Plantings

Only plants native to the ACT (and NSW) and some cultivars of these are planted. Species should be hardy to at least -7° C frost, not susceptible to drought, wet feet or major pests or diseases. Plants selected include those for animal shelters and sources of food.

Weeds

Grass weeds are a major problem and new ones are constantly appearing, the latest being Panic Veldt Grass (*Ehrharta erecta*). It is unlikely that the park will ever be clear of grass weeds, so they are contained. Some unsightly broadleaved weeds such as Prickly Lettuce and Thistles are removed. Noxious weeds are controlled.

Where to now?

It's 10 years since the Hughes Garran Management Plan was produced and it is due to be updated. Twenty years of experience and changes to the weather pattern have influenced our choice of species and changed our thinking about weed control. Increasing use of the park by dog walkers, school visits, walking, orienteering and cycling clubs, has implications for our path network. There is probably scope for further tree planting in some of the open areas and replacement planting of shrubs and under-story.

The documents are available under Resources on the Southern ACT Catchment Group's web site.



Native Blackthorn, an ecologically important native shrub

Michael Bedingfield

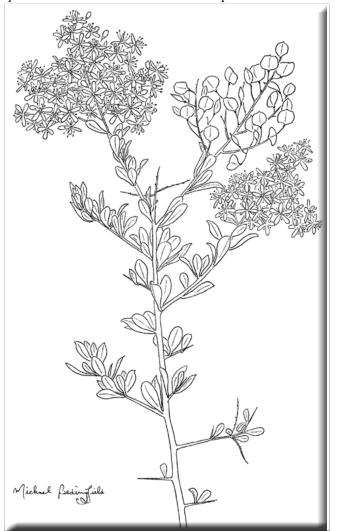
Native Blackthorn *Bursaria spinosa*, is important ecologically because it attracts such a variety of invertebrate life. Earlier this year I created a 'Collection' on Canberra Nature Map entitled 'Insects and spiders on *Bursaria spinosa* – a research project'.

Some insects feed on the flowers, especially the nectar and pollen, and others prey on the insects. Pollinators, predators and parasites all visit this plant. At the time of writing in November we have accumulated over 130 species of insects and spiders in the field guide for the collection.

The following paragraphs are adapted from an article by myself in the Friends of Grasslands News, Jan-Feb 2000.

Native Blackthorn has thorny branches and often has a black fungus growing on those branches, sometimes covering them extensively. Its other common name of Sweet Bursaria is very appropriate and in the summer months it flowers profusely giving off a very sweet fragrance. It is a common shrub in grassy woodlands on the Southern Tablelands. Many insects are attracted to feed on the nectar-laden flowers including the Fiddler Beetle, the Spotted Flower Chafer and pintail beetles.

Native Blackthorn goes by the scientific name of *Bursaria spinosa*. The flowers are white with five petals and the leaves



are grey-green, up to 40 mm long and 3–12 mm wide. The fruits are shaped like a tiny purse and thus the species name. My drawing of the plant shows all of these features. When the fruits have dried out they open upwards with the seeds resting loosely inside the seed-pods waiting for something to give the branches a shake and catapult the seeds away from the parent plant.

The Fiddler Beetle *Eupoecila australasiae* is a large flower chafer. Flower chafers are scarab beetles belonging to the subfamily Cetoniinae from the family Scarabaeidae. They often have striking enamelled or metallic colours. The Fiddler Beetle is glossy dark brown in colour with very distinctive bright lime green to yellow markings. The pattern on its back resembles the shape of a violin. The body length is about 20 mm. I have provided a photo of the beetle feeding among the Bursaria flowers for illustration.



After breeding in summer or autumn the females lay their eggs in rotting logs or in the soil or debris near them. The eggs hatch into larvae that are white grubs. The grubs feed on the rotting timber and when mature enough they pupate in a cocoon-like chamber within the rotting wood.

The adults emerge in summer and feed on flower nectar and pollen and may browse the petals. They are common in eucalypt woodlands and heath in the Australian states of NSW, Queensland and Victoria and in south-eastern South Australia.

The Spotted Flower Chafer *Neorrhina punctatum* is also known as the Punctate Flower Chafer. The wing covers and



thorax are brownish-yellow with large black spots and red or brown legs. It occurs in woodlands and other habitats in eastern Australia from north Queensland to southern Victoria. It is 14–20 mm in body length and has similar habits to the Fiddler Beetle.

There are lots of other insects that are attracted to the Sweet Bursaria when it is flowering, including other beetles. I've found two species of Pintail or Tumbling beetles feeding on the flower nectar, *Mordella dumbrelli* and *Hoshihananomia leucosticta*. These are small beetles about 10 mm long with black and white colouring and an interesting pointed tail. They also feed on the Sweet Bursaria flowers. When alarmed Pintail beetles curl up and tumble to the ground to hide.

Another beetle I've found is the Tiger Longicorn Beetle *Aridaeus thoracicus*, which is black and orange in colour and has antennae that are very long, about the same length as its body, which is about 20 mm. I've mentioned these species of beetles because they are relatively easy to identify.



Wasps are also attracted to the fragrant flowers to eat the nectar, including the Two-spot Hairy Flower Wasp, *Laeviscolia frontalis*, and Orange Spider Wasps, *Cryptocheilus bicolor*. But even when the shrub is not flowering there may be insects to find. If you look closely you may also see the Blackthorn Felted Scale *Phacelococcus bursaria* clinging to the branches. The Banded Sugar Ant *Camponotus consobrinus* sometimes comes along and may be seen attending to the scale insects.

On one occasion I also saw several Black-headed Bull Ants *Myrmecia nigriceps* waiting around to ambush the sugar ants. They were capturing the smaller ants in their large jaws and carrying them off to their nest.

All the species mentioned here can be viewed on Canberra Nature Map. You can find them by keying in the species name to the 'Quick Search' box. The Native Blackthorn is ecologically important and I have found it to be an interesting subject to investigate. When I take a closer look I am sometimes surprised at what I find.

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A new online book for Canberra *ACT Weeds Manual*

By Michael Bedingfield

On 31 October 2023 we had the launch of a new online book that has been prepared especially for Canberra's environment. It is the *ACT Weeds Manual*, and was a collaborative effort between a number of environment groups in conjunction with ACT Parks and Conservation. Vera Kurz, was the driving force behind its creation.





Sahara Lauren Verak

Vera Kurz

It is a very useful online book containing excellent photos taken mostly by CNM members. It is something of which the many CNM contributors can be proud.

By having the book as an online resource it can be updated easily and kept up-to-date.

You can view or download your copy from the web site.

Weed sightings are important

Did you know that all of your weed sightings submitted to Canberra Nature Map feed directly to the ACT Government invasive plant control area?

This means that a weed reported today can potentially be eradicated tomorrow, thus helping curb the spread of invasive species and in turn protecting our natural biodiversity. This is possible because NatureMapr has the ability to integrate seamlessly with Esri ArcGIS, the largest geospatial mapping software in the world, used by many councils around Australia.

Therefore, don't think, 'This is a weed so I won't report it to Canberra Nature Map'. Your weed reports are important.

You can read more about ACT invasive plants on the ACT government web site.



Pollinator surveys

Moderators in particular, would be aware of the Monitoring Pollinator Survey. Instigated by the ACT Government and overseen by Emma Collins, members of the Canberra Nature Map (CNM) community have been recruited to conduct the survey over 47 sites across the ACT.

This has meant a lot more work for CNM moderators but the results will be important.

Surveyors monitor a set location for 30 minutes at least once a month. When reporting sightings the survey point rather than the camera GPS setting is used.

These hints help surveyors on how they should record sightings, particularly to ease the burden on moderators:

Each sighting record will be limited to one pollinator species.

- If you are familiar with the 'Collections' feature, this could be a useful way to copy multiple sighting links into your survey.
- If you have multiple of the same species, on the same flower, this is considered one sighting. Include as many photos as you are able to help moderators identify the insect.
- If you identify the same species, on a different flower, please list this as a separate sighting.
- Abundance can be used to record multiple instances of the one species.

Emma has recently sent out the first report and newsletter summarising the results so far.

A quick summary is:

As of 7 December, 731 photographic insect sightings have been lodged. This included 202 different insect taxa and 500 distinctive records. Only five taxa occurred at more than 10 different points, these are European Bee, Lasioglossum bee unidentified group, Soft bodied flower beetle, Common Blue Butterfly and Lasinglossum (Chilalictus) lanarium (11%–25%).

A few taxa such as an Australian Fruit Fly Austrotepritis pella and a pintail beetle Mordella limbata were recorded for the first time on Canberra Nature Map as part of this survey.

If we just look at the distribution of the major insect groups among the distinctive records, beetles make up 25% of the records and flies and bees around 20% each.

A suburban survey

Out in my garden I observed several species on veggies that I had let go to seed so decided to conduct a survey of my veggie garden. I decided to include all visitors, not just pollinators and I was surprised by the results.

Over a couple of days I recorded an incredible 42 species, which is far more than I have recorded at my pollinator site.

Not photographed is the larvae of the White Cabbage Butterfly. I'm afraid I removed the larvae before taking photos and also a jumping spider.

While I reported the Green Potato Bug as alive and healthy, that wasn't for long if I could catch them as they attack and destroy my tomatoes. (A few got away.)

A quick summary is:

Thirty pollinators and 12 non-pollinators, though some of these are possible pollinators, just not seen on flowers at the time.

Pollinator species

One butterfly, 1 cicada, 1 ant, 1 shield bug, 2 wasps, 4 bees, 6 flies, and 14 beetles. Of the beetles, I found all species of the pin tail beetle recorded on CNM.

Non-pollinator species

One shield bug, 1 butterfly (larvae), 1 wasp, 1 fly, 4 spiders, and 4 beetles.

The results can be seen in my garden collection.

If you are not involved in the pollinator survey (or even if you are), you may be interested in seeing what is happening in your own back yard.

Alison Milton

CNM Committee

Emma Collins (convenor) Ian Baird

Michael Bedingfield Yumi Callaway

Ciaran Ernst-Russell

Matthew Frawley

Stuart Harris Michael Mulvaney

Kim Pullen

Editor

Alison Milton

Contributions can be sent to the Editor at apm56@optusnet.com.au

Editorial team

Michael Bedingfield

Lisa Bradley

Canberra Nature Map was co-founded by <u>Aaron Clausen</u> and Michael Mulvaney



