



Canberra Nature Map newsletter

Volume 2 Issue 3: September 2024



*There has been a bit of excitement about the visit of a Forest Kingfisher in the past few weeks.
Photo by ChristineD*

Contents

Editor's note	2
Meet the Mappers	2
LisaH	2
Gang-gang Cockatoo nesting research project	3
Nesting research	3
What is citizen science?	4
Urambi Hills and St John's Wort - (a sign of things) coming to a grassland near you!!	4
Thoughts and action	4
Reference	5
Raspy or tree cricket, <i>Paragryllacris</i> species, and watching 'ecdysis'	5
CNM Committee	6
Become a moderator?	6



Editor's note

Hi NatureMaprs

This newsletter is a little late as I was overseas until early October and had several other commitments on my return.

I trust you enjoy this newsletter and encourage you all to send any contributions for future newsletters. Contributions are open to all and may consist of anything you like: perhaps a favourite sighting; a local area of interest; favourite photo, be it your own or one that has been posted by someone else that you particularly like.

Perhaps you have explored a new area, by yourself, or with a friend or two and would like to comment on the experience. I'm sure readers would love to share your experiences and perhaps encourage them to explore new areas also.

I myself have been out of action for a while due to several reasons but I know I am itching to get out there again and explore my familiar areas, but also looking for new hunting grounds, so to speak.

Alison Milton
Editor

Meet the Mappers

Introducing the real people making important contributions to NatureMapr

LisaH

LisaH joined NatureMapr back in March 2018 and has contributed close to 5,000 sightings, mostly in the Canberra and Southern Tablelands region and the adjoining South Coast of NSW. Her sightings showcase some stunning photography, ranging from birds, plants, insects and fungi, as well as mammals, spiders, reptiles and frogs. Among all these gems she has found quite a lot of significant sightings along the way. It was a real treat to interview Lisa and find out her story.

Tell us how you first discovered NatureMapr and why it appealed to you?

I enjoyed walking around our local nature reserve, and occasionally took some snaps of interesting plants or animals. For months, a friend (JackyF) encouraged me to submit the photos to NatureMapr, pointing out how important it was to record what existed in our own backyard. I resisted and resisted – it was all too difficult, too much time. Until one day I sat down, and in just minutes I had set up a profile and submitted a couple of sightings. Then . . . the sightings were identified, and verified by an expert. That was it – I was hooked!

I get so much from NatureMapr. (Confidentially, I think it's a bit of an addiction). I love the fact that belonging to this platform has opened my eyes to what I'd never paid attention to, but which has always existed. There is the frisson of excitement after I post sightings – what have I seen? Has it been seen in this area before? Then (and not as often as I should), I look up the species and learn a bit about that animal/plant/insect/bird/fungus/fish/reptile. I enjoy writing stories to go with some of my photos – especially if there is some nature

drama happening. The stories don't really fit the science vibe – but I haven't been asked to stop... yet.

For me, an important aspect of NatureMapr is the community. I look forward to the newsletter, I've reached out to people via NM message, and everyone has been generous with their time and knowledge. I've participated in research projects where scientists and citizens (like me) share their enthusiasm equally as we contribute to knowledge of our environment.

Do you have a favourite place to collect wildlife sightings?

Interesting question. I have three favourite places. Red Hill in Canberra – a cornucopia of birdlife (particularly parrots), plant life, insects etc. I am also fortunate to have access to a couple of small blocks owned by family members near Braidwood and Moruya (NSW). I find it fascinating to document each of those areas, recording what I can – knowing there is so much I still haven't noticed. I'm now discovering the seasons, and then seasons over the years, which is adding a whole layer of interest to my observations. Will that orchid flower this year, and what month? Will I see a Rose Robin in winter? Is it time to look out for the Glossy Black Cockatoos or the Gang-gangs to exhibit nesting behaviour?



You've got a lot of significant sightings, is there one that stands out for you?

Oh gee, that's a difficult question. Can I just say 'everything'? Also – hands up – I never know if what I've seen is significant. I just think that this is something I haven't seen before, post it, and am stoked if it is noted as significant. I was stunned when I saw *Chondropyga olliffiana* (Ollif's flower scarab) near Moruya, and I am excited each time I see the orchid *Calochilus sp. aff. gracillimus* flower. A life-time memory is my feeling of awe, when I was privileged to be taken to the secret location of one of the Mongarlowe Mallees.

Your sightings include some stunning photos, tell us a bit about the photography equipment you use?

Thank you. I feel a bit of 'imposter syndrome' around my photography – I notice something, focus the Canon R7 camera, then click. My favourite lens (now retired) was the Tamron 18–400 mm.



Would you recommend NatureMapr to others?

An emphatic yes! I talk about NatureMapr all the time – to any work colleagues who might enjoy their nature walks, or just mention the word 'bird'; to the people at the camera stores when I get my lenses cleaned; to people I see walking along the track. I drop the NatureMapr link into Facebook pages that I might belong to; or text live radio and reference NatureMapr etc. In fact, I think my family feel a bit abandoned because of my fondness for all things NatureMapr.

Thank you Lisa for giving us this insight into your NatureMapr journey thus far.

You can find all her sightings on the [Canberra Nature Map web site](#).

As interviewed by Matthew Frawley

Editor

I have omitted in previous newsletters, that all Meet the mappers interviews have been conducted by Matthew.

Gang-gang Cockatoo nesting research project

Mostly led by Michael Mulvaney, the Gang-gang nesting project has now run for several years and has provided more information of on the nesting behaviours than previously gathered. The project continues with this season's nesting period. The report on the previous season is summarised below.

The full report is published on the [NatureMapr](#) web site.

It is important to continue monitoring this species so please report any nesting sites to the NatureMapr site in your area.

Nesting research

Thanks for contributing to the Gang-gang nest hollow project. In total we have now identified 60 nests (52 in Canberra, 2 in Campbelltown, 2 in Wombat State forest (Vic) and one near or in Moruya, Cooma, Tumbarumba and East Melbourne). We continue to learn much about Gang-gang nesting ecology and behaviour. We have 5 years of good data from Canberra but would like to compare what we are finding here with that elsewhere. Gang-gang hollow checking is increasing as we approach breeding season and we ask that you keep posting sightings of where you observe Gangs-gangs looking into hollows, but particularly in remote or rural areas away from Canberra.

Highlights of last season's research include:

- * A further 25 nest hollows have been identified across much of the Gang-gang's range. Hollow dimension data has been collected from most of the hollows as has fledging success rate, fledging sex ratio (0.7 females to 1 male) and timing of fledging. A significant relationship was found between fledge time and altitude. Low altitude sites, such as Campbelltown (50m) may have a breeding period 2 months in advance of that at high altitude locations, like Cooma (1000m).

- * 216 of the hollows in the Canberra, Cooma and Tumbarumba areas that were of interest to Gang-gangs, were closely monitored. Of these we found:

- 46% empty
- 9% Gang-gang nest hollow
- 10% empty but with chewed bark
- 12% Brushtailed Possum
- 5% leaf-lined suggesting possum or perhaps Galah use
- 9% Flooded (Gang-gang water source)
- 4% Bees
- 3% Australian Wood Duck
- 3% Sulphur-crested Cockatoo
- 1% Galah
- 1% Crimson Rosella, Boobook Owl

These results possibly suggest that at least in the Canberra area hollows are not a limiting factor and that competition from other hollow nesting birds such as cockatoos and parrots is not a major factor. There is an on-going project in Canberra to help determine whether sites are limiting. Brushtail Possums are the major hollow competitor. The rate of predation is unknown but the project confirmed Brushtail Possums as a significant predator of eggs and chicks.

Michael Mulvaney



What is citizen science?

I have been a contributor to a socio-scientific paper that attempts to define what is actually meant by the term 'citizen science'. There are 15 contributors from around the world and I was lucky enough to be asked to put my two bobs worth in.

The Journal (*Springer Nature*) is a reputable one so I expect this paper to be cited in relation to CS definitions and practice in the future.

You can access the [article online](#) if you are interested. It is open access so everyone should have access free of charge.

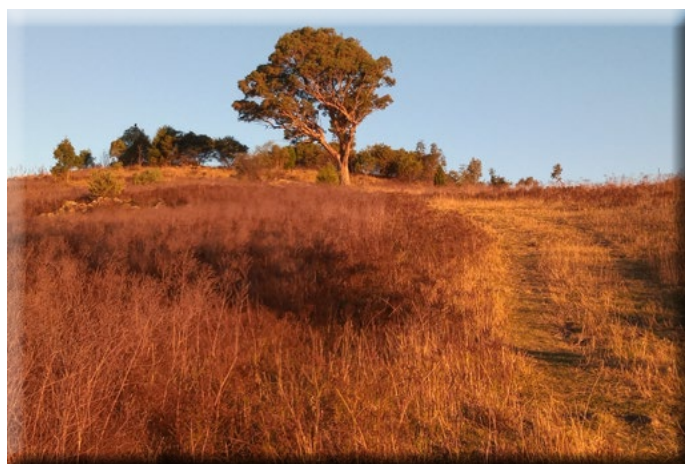
Stuart Harris

Urambi Hills and St John's Wort - (a sign of things) coming to a grassland near you!!

Margaret Ning (username brunonia)

Over the last three years Friends of Grassland (FOG) members have watched in dismay the march of St John's Wort (SJW) over huge areas of our local environment, whether in grassland reserves, Canberra Nature Park (CNP), or paddocks in general.

I have been aware of the rapid spread of SJW in north side areas of Canberra, but recently FOG was invited to check out an area of Urambi Hills Nature Reserve (NR) in the Kambah area where local FOG member, Michael Bedingfield, has seen an avalanche of SJW take over in only eight years. Michael's before and after images illustrate the reasons for his concern, showing how an area of Red-leg Grass (*Bothriochloa macra*) grassland was transformed within that time.



Five FOG members visited Urambi Hills NR on Saturday 27 April, and were subjected to some rather horrifying scenes. See the reddish-brown patches. The first two photos are Michael's before and after images, 25 April 2016 and 26 March 2024. The following two photos show the shocking views more broadly and are by Andrew Zelnik. These were taken on the day of our visit.



Other than the weather, the high points during the afternoon were the grand view of the mountains to the west and a pair of flame robins that flitted by! We saw clearly the extent of the problem, and it wasn't difficult to get an idea of what we may have to face in future years if SJW is not controlled.

Thoughts and action

At the very least we must keep SJW out of the remaining nice areas that we have left in Canberra's grasslands and CNP. These areas must be identified and dealt with. Given SJW will never take a backward step, slowly but surely our precious grassland wildflowers and herbs will be outcompeted and die under the yellow canopy that consumes them.

Michael Bedingfield has created a Collection on CNM of SJW sightings with landscape images of large infestations. He has called it "St. John's Wort - Major infestations". See: <https://canberra.naturemapr.org/collections/sightings/12356>

We would like to have the assistance of Canberra Nature Mappers to record on CNM any infestations of SJW, large and small. We are especially interested in large patches that show graphically the damage the weed is doing. Please include a landscape view photo of the patch of weeds and add large infestations to Michael's collection. This is a simple exercise in citizen science that we hope will create important data for the public and government officials to see. We wish to show the full extent of the problem. Then hopefully, appropriate action will be taken to control the weed.



This essay is an edited version of one that was published in the *Friends of Grassland Newsletter* for July-August 2024.

Reference

The [ACT Weeds Manual](#), free download:

Also a [report by the NSW Department of Primary Industries](#):

Raspy or tree cricket, *Paragryllacris* species, and watching 'ecdysis'

Michael Bedingfield

Late one night a few summers ago, when all the sounds of the world had settled down and it was very quiet, I went out into my garden with a torch to see if I would see anything unusual. After a short while I found what looked like a misshapen

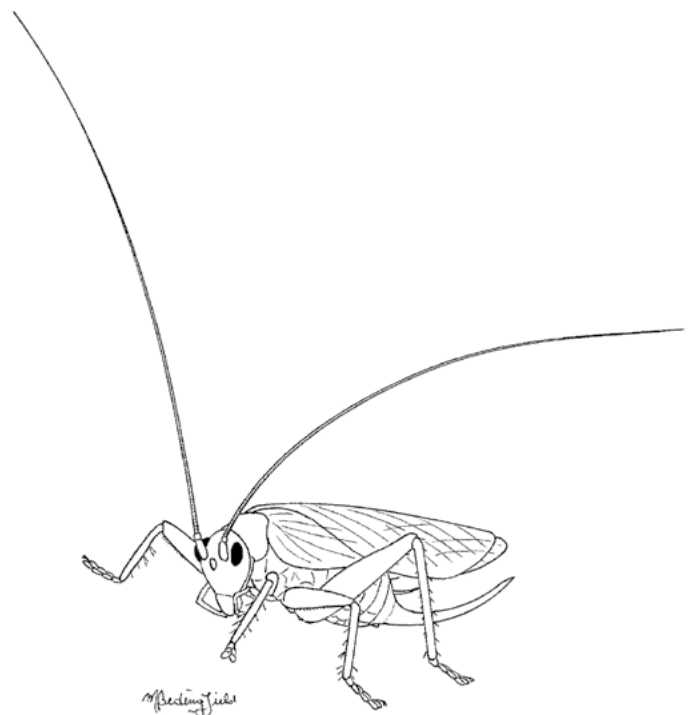


insect, partially emerged from a wizened replica of itself and hanging off the slender branch of the native Vanilla Lily, *Arthropodium milleflorum*. It was a Raspy or Tree Cricket, in the midst of the very delicate process of shedding the external skin or exoskeleton. The exoskeleton is the rigid external covering of an insect's body and the moulting process is known as 'ecdysis'. Like many other insects, Raspy Crickets have a relatively inelastic outer skin that is shed at intervals during growth. They emerge with a larger body and a more mature version of themselves. As well as allowing growth of the individual, ecdysis can regenerate damaged tissue and sometimes partially or fully restore missing limbs.

The long curved ovipositor at the rear of the body showed that the insect was a female. She was extremely vulnerable and not able to move away or do anything else until the process was complete. In the earlier stages of life this cricket has no wings, so she was about to enter the adult stage of life while undergoing a sort of rebirth. I watched patiently, occasionally taking a photograph, for a half an hour or more. At first she was positioned with her head below while the rear part of her body was still encased in the old skin. Gradually her body slid out of the old skin and the extraordinarily long antennae emerged from their curved position above the body. She then turned around to be in an upright position as shown in the photo and grasped the discarded skin with her forelegs.

Slowly the wings unfolded from their crumpled state to be open and properly formed. In that position she waited for the body and wings and to harden and become strong enough for activity.

Ecdysis may take several hours to be complete. The body is very soft at the beginning and gradually hardens until the exoskeleton is firm and all body parts and limbs becoming fully functional. While waiting the insect is virtually immobile and unable to defend itself or escape from predators. The photo series can be viewed on Canberra Nature Map.^a The process of ecdysis is described in detail at the Wikipedia reference.^b The drawing provided is also of a female when active and of the same genus.



Paragryllacris are a genus of Raspy or Tree Cricket and belong to the family Gryllacrididae. They are nocturnal, omnivorous and have strong back legs but do not hop. They have an annual life cycle. The young nymphs emerge in spring and grow to adulthood by a series of moults. When mature they mate and create the next generation. Using her long ovipositor, the female lays her eggs in the soil, which overwinter there. They get their name 'raspy' from the sound they make when threatened. The specimens I saw had a body length without the ovipositor of 25 to 30 mm.

These crickets are related to the Canberra Raspy Cricket, *Cooraboorama canberrae*, which is a flightless grassland species endemic to the Canberra region. It is now quite rare as a result of overgrazing and the fragmentation of its habitat and only occurs in small isolated populations.

In his poem 'Miracles',^c 19th century American poet Walt Whitman wrote: "As to me I know of nothing else but miracles". To further quote from him:

"Whether I walk the streets of Manhattan,...
"Or watch honey-bees busy around the hive of a summer forenoon,
Or animals feeding in the fields,
Or birds, or the wonderfulness of insects in the air,
Or the wonderfulness of the sundown, or of stars shining so quiet and bright,
Or the exquisite delicate thin curve of the new moon in spring;
These with the rest, one and all, are to me miracles,
The whole referring, yet each distinct and in its place."

Miracle or magic, certainly mystery and wonderfulness, it was for me a precious glimpse into the private life of a fascinating wild creature.

This article was previously published in the News of Friends of Grasslands, Jan-Feb 2019.

References

- a <https://canberra.naturemapr.org/sightings/3402371>
- b <https://en.wikipedia.org/wiki/Ecdysis>
- c <https://www.amblesideonline.org/poet-whitman#07>

Become a moderator?

It's really not that scary. If you feel you have a general understanding of a particular category, you can apply to be a moderator for that category, either at the higher level or a very limited area.

You will not be alone. There will be a mentor to help you along and you may only Suggest a species at first if you are unsure before progressing to Verifying a species. This is how I started.

I have no scientific qualifications but I learned enough through my own sightings that I was head-hunted to be a Moderator and I have learned so much more since.

My limitations however, are that I've learned my local species but don't always know the wider variations. It would therefore be great to have members from the wider community to volunteer as moderators for their own regional areas, where species may differ from those closer to Canberra. There are experts with experience with species outside of the Canberra district to give you some assistance.

I've found that it is a very rewarding experience and expanded my knowledge in so many ways.

Alison Milton

CNM Committee

[Emma Collins \(convenor\)](#)
[Ian Baird](#)
[Michael Bedingfield](#)
[Yumi Callaway](#)
[Ciaran Ernst-Russell](#)
[Stuart Harris](#)
[Michael Mulvaney](#)
[Kim Pullen](#)
[Mary Webb](#)

Editor

[Alison Milton](#)

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

Editorial team

Michael Bedingfield

Canberra Nature Map was co-founded by [Aaron Clausen](#) and Michael Mulvaney

Follow Canberra Nature Map on

